**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S01 | 0 | MAG | Segment | 2004-135T18:40 | 14-May | Fri | --- | 28 | 227 | MAG_000_PrePhoebe (27d); Early Rev 0 prior to Phoebe |
| S01 | 0 | S1 Begins | | 2004-135T18:40 | 14-May | Fri | --- | 28 | 227 | S1 Sequence. Duration = 36 d |
| S01 | 0 | START OF PRIME MISSION | | 2004-135T18:40 | 14-May | Fri | --- | 28 | 227 | Start of prime mission (2004-2008) |
| S01 | 0 | TCM-20 | Phoebe targ | 2004-148T16:25 | 27-May | Thu | --- | 15 | 240 | Phoebe targeting maneuver, 34 m/s. D/L start, burn ~6h later. |
| S01 | 0 | SOST | Segment | 2004-163T04:02 | 11-Jun | Fri | --- | 1 | 14 | SOST_000PH (2d); SOST Rev 00 Targeted Phoebe |
| S01 | 0 | 00PH (t) P1 | PHOEBE | 2004-163T19:33 | 11-Jun | Fri | --- | 137 | 15 | Inbound 2068.1 km flyby, v = 6.4 km/s, phase = 24 deg |
| S01 | 0 | MAG | Segment | 2004-164T22:32 | 12-Jun | Sat | 1 | 136 | 16 | MAG_000_PreSOI (18d); Rev 0 after Phoebe before SOI |
| S01 | 0 | TCM-21 | Phoebe c/u | 2004-168T15:07 | 16-Jun | Wed | 5 | 132 | 20 | Phoebe cleanup maneuver, 4 m/s. D/L start, burn ~6h later. |
| S02 | 0 | S2 Begins | | 2004-171T21:52 | 19-Jun | Sat | 8 | 129 | 3 | S2 Sequence. Duration = 41 d |
| S02 | 0 | 00PO (nt) | POLYDEUCES | 2004-182T20:56 | 30-Jun | Wed | 19 | 118 | 14 | Inbound 67982.5 km flyby, v = 13.3 km/s, phase = 90 deg |
| S02 | 0 | 00CP (nt) | CALYPSO | 2004-182T22:26 | 30-Jun | Wed | 19 | 118 | 14 | Inbound 52094.4 km flyby, v = 14.1 km/s, phase = 92 deg |
| S02 | 0 | 00ME (nt) | METHONE | 2004-183T00:16 | 01-Jul | Thu | 19 | 118 | 14 | Inbound 51214.0 km flyby, v = 12.9 km/s, phase = 96 deg |
| S02 | 0 | 00MI (nt) | MIMAS | 2004-183T00:30 | 01-Jul | Thu | 19 | 118 | 14 | Inbound 76487.7 km flyby, v = 22.3 km/s, phase = 80 deg |
| S02 | 0 | Dust Hazard | G_ring | 2004-183T00:45 | 01-Jul | Thu | 19 | 118 | 14 | Egress @ 2004-183T00:47 (2 min) \| Protection: HGA to Dust-Ram |
| S02 | 0 | Ring CRX | Ascending | 2004-183T00:46 | 01-Jul | Thu | 19 | 118 | 14 | r = 2.628 Rs ( 158524 km) |
| S02 | 0 | Dust Hazard | JE_ring | 2004-183T00:49 | 01-Jul | Thu | 19 | 118 | 14 | Egress @ 2004-183T00:50 (1 min) \| Protection: HGA to Dust-Ram |
| S02 | 0 | SOI Start | | 2004-183T01:12 | 01-Jul | Thu | 19 | 118 | 14 | SOI burn start, DV= 626 m/s, duration = 01:36:20 (hh:mm:ss) |
| S02 | 0 | 00PA (nt) | PANDORA | 2004-183T01:15 | 01-Jul | Thu | 19 | 118 | 0 | Inbound 89836.1 km flyby, v = 26.8 km/s, phase = 89 deg |
| S02 | 0 | Earth OCC | RING | 2004-183T01:35 | 01-Jul | Thu | 19 | 118 | 0 | Duration = 166 min; egress = 2004-183T04:21:37 |
| S02 | 0 | Sun OCC | RING | 2004-183T01:35 | 01-Jul | Thu | 19 | 118 | 0 | Duration = 166 min; egress = 2004-183T04:21:38 |
| S02 | 0 | 00JA (nt) | JANUS | 2004-183T01:51 | 01-Jul | Thu | 19 | 118 | 0 | Inbound 67683.9 km flyby, v = 12.8 km/s, phase = 106 deg |
| S02 | 0 | 00AN (nt) | ANTHE | 2004-183T02:27 | 01-Jul | Thu | 19 | 118 | 0 | Inbound 122530.9 km flyby, v = 16.7 km/s, phase = 101 deg |
| S02 | 0 | Periapse | | 2004-183T02:38 | 01-Jul | Thu | 19 | 118 | 0 | R = 1.330 Rs, lat = 17 deg, phase = 94 deg |
| S02 | 0 | SOI End | | 2004-183T02:48 | 01-Jul | Thu | 19 | 118 | 0 | SOI burn end |
| S02 | 0 | SOI | Segment | 2004-183T03:07 | 01-Jul | Thu | 19 | 118 | 0 | SOI_000 (1d); SOI TWT |
| S02 | 0 | Earth OCC | SATURN | 2004-183T03:33 | 01-Jul | Thu | 19 | 117 | 0 | Duration = 36 min; egress = 2004-183T04:09:27 |
| S02 | 0 | Sun OCC | SATURN | 2004-183T03:36 | 01-Jul | Thu | 19 | 117 | 0 | Duration = 32 min; egress = 2004-183T04:08:36 |
| S02 | 0 | 00PM (nt) | PROMETHEUS | 2004-183T03:56 | 01-Jul | Thu | 19 | 117 | 0 | Outbound 107420.6 km flyby, v = 28.5 km/s, phase = 91 deg |
| S02 | 0 | 00PN (nt) | PAN | 2004-183T04:02 | 01-Jul | Thu | 19 | 117 | 0 | Outbound 57683.6 km flyby, v = 22.8 km/s, phase = 88 deg |
| S02 | 0 | 00AG (nt) | AEGAEON | 2004-183T04:20 | 01-Jul | Thu | 19 | 117 | 0 | Outbound 112875.8 km flyby, v = 26.0 km/s, phase = 94 deg |
| S02 | 0 | Dust Hazard | JE_ring | 2004-183T04:29 | 01-Jul | Thu | 19 | 117 | 0 | Egress @ 2004-183T04:31 (1 min) \| Protection: HGA to Dust-Ram |
| S02 | 0 | Dust Hazard | G_ring | 2004-183T04:32 | 01-Jul | Thu | 19 | 117 | 0 | Egress @ 2004-183T04:35 (2 min) \| Protection: HGA to Dust-Ram |
| S02 | 0 | Ring CRX | Descending | 2004-183T04:33 | 01-Jul | Thu | 19 | 117 | 0 | r = 2.632 Rs ( 158781 km) |
| S02 | 0 | TOST | Segment | 2004-184T01:06 | 02-Jul | Fri | 20 | 117 | 1 | TOST_000TI_T0 (2d); TOST 000TI T0 |
| S02 | 0 | 00TI (nt) | TITAN | 2004-184T09:28 | 02-Jul | Fri | 21 | 116 | 1 | Outbound 339123.1 km flyby, v = 8.3 km/s, phase = 67 deg |
| S02 | 0 | OTM-001 | SOI c/u | 2004-185T14:06 | 03-Jul | Sat | 22 | 115 | 3 | SOI cleanup. D/L start, burn ~6h later. Backup D/L 186T14:06 |
| S02 | 0 | MAG | Segment | 2004-185T23:06 | 03-Jul | Sat | 22 | 115 | 0 | MAG_000_PostTitan (34d); Rev 0 after Titan |
| S02 | 0 | SEP = 3.0 deg | Conjunction | 2004-187T04:20 | 05-Jul | Mon | 23 | 113 | 2 | Commanding must not be required below 3.0 deg |
| S02 | 0 | SEP = 2.0 deg | Conjunction | 2004-188T10:12 | 06-Jul | Tue | 25 | 112 | 3 | Plan no SSR playback below 2.0 deg |
| S02 | 0 | SEP = 1.0 deg | Conjunction | 2004-189T16:27 | 07-Jul | Wed | 26 | 111 | 4 | Require no DSN passes below 1.0 deg |
| S02 | 0 | SEP = 1.0 deg | Conjunction | 2004-192T01:04 | 10-Jul | Sat | 28 | 109 | 6 | Require no DSN passes below 1.0 deg |
| S02 | 0 | SEP = 2.0 deg | Conjunction | 2004-193T07:11 | 11-Jul | Sun | 29 | 107 | 8 | Plan no SSR playback below 2.0 deg |
| S02 | 0 | SEP = 3.0 deg | Conjunction | 2004-194T12:51 | 12-Jul | Mon | 31 | 106 | 9 | Commanding must not be required below 3.0 deg |
| S02 | 0 | OTM-001A | SOI c/u | 2004-199T13:21 | 17-Jul | Sat | 36 | 101 | 14 | SOI cleanup. D/L start, burn ~6h later. Backup D/L 200T13:21 |
| S03 | 0 | S3 Begins | | 2004-212T21:32 | 30-Jul | Fri | 49 | 88 | 13 | S3 Sequence. Duration = 44 d |
| S03 | 0 | SATURN | Segment | 2004-219T13:37 | 06-Aug | Fri | 56 | 81 | 20 | Saturn_000_00A (80d); Atmosphere Segment - Rev 0-A |
| S03 | 0 | OTM-002 | PRM | 2004-236T09:53 | 23-Aug | Mon | 73 | 64 | 37 | Periapsis raise. D/L start, burn ~6h later. Backup D/L 237T09:38 |
| S03 | 1 | Apoapse | | 2004-240T08:56 | 27-Aug | Fri | 77 | 60 | 4 | Per = 124.1 d, inc = 17.6 deg, r = 150.767 Rs, phase = 87 deg |
| S03 | A | OTM-003 | PRM c/u | 2004-251T10:30 | 07-Sep | Tue | 88 | 49 | 15 | Periapsis raise clean up. D/L start, burn ~6h later. Backup D/L 252T10:25 |
| S04 | 1 | S4 Begins | | 2004-256T11:35 | 12-Sep | Sun | 93 | 44 | 5 | S4 Sequence. Duration = 36 d |
| S05 | 1 | S5 Begins | | 2004-292T09:30 | 18-Oct | Mon | 129 | 8 | 41 | S5 Sequence. Duration = 28 d |
| S05 | A | OTM-004 | ATI-3 | 2004-297T00:16 | 23-Oct | Sat | 133 | 4 | 46 | D/L start, burn ~6h later. Backup D/L 298T00:01 |
| S05 | A | TOST | Segment | 2004-299T16:31 | 25-Oct | Mon | 136 | 1 | 3 | TOST_00ATI_TA (2d); TOST Segment for 00ATI (TA) |
| S05 | 1 | 0ATI (t) TA | TITAN | 2004-300T15:30 | 26-Oct | Tue | 137 | 48 | 4 | Inbound 1174.0 km flyby, v = 6.1 km/s, phase = 91 deg |
| S05 | 1 | Ring CRX | Ascending | 2004-300T16:53 | 26-Oct | Tue | 0 | 48 | 4 | r = 19.506 Rs (1176780 km) |
| S05 | A | RINGS | Segment | 2004-301T09:16 | 27-Oct | Wed | 1 | 47 | 4 | RINGS_REV_A (5d); Rings REV A Segment |
| S05 | 1 | Periapse | | 2004-302T10:20 | 28-Oct | Thu | 2 | 46 | 5 | R = 6.170 Rs, lat = 12 deg, phase = 104 deg |
| S05 | 1 | Ring CRX | Descending | 2004-302T20:01 | 28-Oct | Thu | 2 | 46 | 6 | r = 8.082 Rs ( 487589 km) |
| S05 | A | OTM-005 | ATI+3 | 2004-303T00:15 | 29-Oct | Fri | 2 | 45 | 6 | D/L start, burn ~6h later. Backup D/L 304T00:30 |
| S05 | A | MAG | Segment | 2004-306T10:45 | 01-Nov | Mon | 6 | 42 | 3 | MAG_00A_00B (32d); Rev A/B |
| S06 | 1 | S6 Begins | | 2004-320T07:49 | 15-Nov | Mon | 20 | 28 | 17 | S6 Sequence. Duration = 31 d |
| S06 | A | OTM-006 | APO | 2004-325T23:00 | 20-Nov | Sat | 25 | 23 | 23 | D/L start, burn ~6h later. Backup D/L 326T23:00 |
| S06 | 2 | Apoapse | | 2004-326T08:41 | 21-Nov | Sun | 26 | 22 | 0 | Per = 47.9 d, inc = 13.8 deg, r = 78.090 Rs, phase = 77 deg |
| S06 | B | SATURN | Segment | 2004-338T15:36 | 03-Dec | Fri | 38 | 10 | 13 | Saturn_00Ba (7d); Saturn Rev B - a (Inbound) |
| S06 | B | OTM-007 | BTI-3 | 2004-344T21:06 | 09-Dec | Thu | 44 | 4 | 19 | D/L start, burn ~6h later. Backup D/L 345T21:05 |
| S06 | B | TOST | Segment | 2004-345T06:06 | 10-Dec | Fri | 45 | 3 | 0 | TOST_00BTI_TB (4d); TOST Segment for 00BTI (TB) |
| S06 | 2 | 0BTI (t) TB | TITAN | 2004-348T11:38 | 13-Dec | Mon | 48 | 32 | 4 | Inbound 1192.2 km flyby, v = 6.1 km/s, phase = 102 deg |
| S06 | 2 | Sun OCC | TITAN | 2004-348T11:51 | 13-Dec | Mon | 0 | 32 | 4 | Duration = 23 min; egress = 2004-348T12:15:06 |
| S06 | 2 | Ring CRX | Ascending | 2004-348T14:57 | 13-Dec | Mon | 0 | 32 | 4 | r = 18.860 Rs (1137794 km) |
| S06 | B | SATURN | Segment | 2004-349T07:52 | 14-Dec | Tue | 1 | 31 | 4 | Saturn_00Bb (2d); Saturn Rev B - b (Periapse) |
| S06 | 2 | 0BDI (nt) | DIONE | 2004-350T01:40 | 15-Dec | Wed | 2 | 30 | 5 | Inbound 72056.5 km flyby, v = 5.3 km/s, phase = 84 deg |
| S06 | 2 | 0BMI (nt) | MIMAS | 2004-350T05:01 | 15-Dec | Wed | 2 | 30 | 5 | Inbound 106743.4 km flyby, v = 1.6 km/s, phase = 90 deg |
| S06 | 2 | 0BAG (nt) | AEGAEON | 2004-350T05:43 | 15-Dec | Wed | 2 | 30 | 5 | Inbound 121062.1 km flyby, v = 1.0 km/s, phase = 108 deg |
| S06 | 2 | Periapse | | 2004-350T05:51 | 15-Dec | Wed | 2 | 30 | 5 | R = 4.764 Rs, lat = 4 deg, phase = 108 deg |
| S06 | 2 | Ring CRX | Descending | 2004-350T11:03 | 15-Dec | Wed | 2 | 30 | 6 | r = 5.750 Rs ( 346895 km) |
| S07 | B | MAG | Segment | 2004-351T13:22 | 16-Dec | Thu | 3 | 29 | 7 | MAG_00B (15d); Rev B |
| S07 | 2 | S7 Begins | | 2004-351T13:22 | 16-Dec | Thu | 3 | 29 | 7 | S7 Sequence. Duration = 37 d |
| S07 | B | OTM-008 | PTM | 2004-351T19:22 | 16-Dec | Thu | 3 | 29 | 7 | Probe targeting. D/L start, burn ~6h later. Backup D/L 352T19:22 |
| S07 | B | OTM-009 | PTM c/u | 2004-357T18:52 | 22-Dec | Wed | 9 | 23 | 6 | Probe targeting cleanup. D/L start, burn ~6h later. Backup D/L 358T18:52 |
| S07 | B | PROBE RELEASE | | 2004-360T02:00 | 25-Dec | Sat | 12 | 20 | 2 | At entry interface - 20.3 d |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S07 | B | OTM-010 | ODM | 2004-362T18:37 | 27-Dec | Mon | 14 | 18 | 5 | Orbit deflection. D/L start, burn ~6h later. Backup D/L 363T18:38 |
| S07 | B | SOST | Segment | 2004-366T01:30 | 31-Dec | Fri | 18 | 14 | 3 | SOST_00CIA (2d); SOST segment early in Rev C (Iapetus) |
| S07 | 2 | Apoapse | | 2004-366T07:02 | 31-Dec | Fri | 18 | 14 | 4 | Per = 31.9 d, inc = 5.3 deg, r = 59.651 Rs, phase = 72 deg |
| S07 | 2 | 0CIA (nt) | IAPETUS | 2004-366T18:49 | 31-Dec | Fri | 18 | 14 | 4 | Inbound 123388.6 km flyby, v = 2.0 km/s, phase = 94 deg |
| S07 | C | MAG | Segment | 2005-002T04:38 | 02-Jan | Sun | 20 | 12 | 5 | MAG_00C (13d); MAG TWT Rev C |
| S07 | C | OTM-010A | ODM c/u | 2005-003T17:38 | 03-Jan | Mon | 21 | 11 | 7 | D/L start, burn ~6h later. Backup D/L 004T17:38 |
| S07 | C | PROBE ENTRY | | 2005-014T09:06 | 14-Jan | Fri | 32 | 0 | 11 | Entry interface alt=1270 km, Tc c/a -2.1 h |
| S07 | 2 | 0CTI (t) TC | TITAN | 2005-014T11:11 | 14-Jan | Fri | 32 | 32 | 11 | Inbound 60007.0 km flyby, v = 5.4 km/s, phase = 93 deg |
| S07 | 2 | Ring CRX | Ascending | 2005-014T17:05 | 14-Jan | Fri | 0 | 32 | 11 | r = 18.359 Rs (1107576 km) |
| S07 | C | SOST | Segment | 2005-015T12:00 | 15-Jan | Sat | 1 | 31 | 12 | SOST_00C (3d); SOST segment in Rev C (non-targeted satellites) |
| S07 | C | OTM-011 | CTI+2 | 2005-016T03:20 | 16-Jan | Sun | 2 | 30 | 12 | D/L start, burn ~6h later. Backup D/L 017T03:30 |
| S07 | 2 | 0CME (nt) | METHONE | 2005-016T04:58 | 16-Jan | Sun | 2 | 30 | 0 | Inbound 113130.3 km flyby, v = 1.8 km/s, phase = 78 deg |
| S07 | 2 | 0CMI (nt) | MIMAS | 2005-016T06:07 | 16-Jan | Sun | 2 | 30 | 0 | Inbound 107622.6 km flyby, v = 1.3 km/s, phase = 100 deg |
| S07 | 2 | Periapse | | 2005-016T06:25 | 16-Jan | Sun | 2 | 30 | 0 | R = 4.824 Rs, lat = 4 deg, phase = 106 deg |
| S07 | 2 | 0CPL (nt) | PALLENE | 2005-016T07:26 | 16-Jan | Sun | 2 | 30 | 0 | Outbound 90823.3 km flyby, v = 2.4 km/s, phase = 138 deg |
| S07 | 2 | Ring CRX | Descending | 2005-016T11:57 | 16-Jan | Sun | 2 | 30 | 0 | r = 5.905 Rs ( 356225 km) |
| S07 | C | MAG | Segment | 2005-018T10:00 | 18-Jan | Tue | 4 | 28 | 2 | MAG_00C_003 (17d); Mag Rev C/3 |
| S08 | 2 | S8 Begins | | 2005-022T10:38 | 22-Jan | Sat | 8 | 24 | 6 | S8 Sequence. Duration = 36 d |
| S08 | C | OTM-012 | ~APO | 2005-028T01:08 | 28-Jan | Fri | 14 | 18 | 12 | D/L start, burn ~6h later. Backup D/L 029T01:08 |
| S08 | 3 | Apoapse | | 2005-032T03:25 | 01-Feb | Tue | 18 | 14 | 4 | Per = 31.8 d, inc = 5.2 deg, r = 59.250 Rs, phase = 74 deg |
| S08 | 3 | SATURN | Segment | 2005-035T11:07 | 04-Feb | Fri | 21 | 11 | 7 | Saturn_003 (10d); Saturn Rev 3 Inbound |
| S08 | 3 | OTM-013 | 3TI-3 | 2005-043T00:07 | 12-Feb | Sat | 29 | 3 | 15 | D/L start, burn ~6h later. Backup D/L 043T16:37 |
| S08 | 3 | TOST | Segment | 2005-045T09:07 | 14-Feb | Mon | 31 | 1 | 2 | TOST_003TI_T3 (2d); TOST Segment 003TI (T3) |
| S08 | 3 | 03TI (t) T3 | TITAN | 2005-046T06:57 | 15-Feb | Tue | 32 | 2 | 3 | Inbound 1578.7 km flyby, v = 6.0 km/s, phase = 99 deg |
| S08 | 3 | SOST | Segment | 2005-047T08:59 | 16-Feb | Wed | 1 | 1 | 4 | SOST_003 (2d); SOST segment in Rev 3 (Enceladus non-targeted) |
| S08 | 3 | Dust Hazard | E_ring_lg | 2005-047T22:38 | 16-Feb | Wed | 2 | 0 | 5 | Egress @ 2005-048T00:09 (90 min) \| Protection: None |
| S08 | 3 | 03PA (nt) | PANDORA | 2005-047T23:02 | 16-Feb | Wed | 2 | 0 | 5 | Inbound 102613.7 km flyby, v = 1.6 km/s, phase = 62 deg |
| S08 | 3 | Dust Hazard | Pallene | 2005-048T00:03 | 17-Feb | Thu | 2 | 0 | 5 | Egress @ 2005-048T01:51 (108 min) \| Protection: None |
| S08 | 3 | 03EP (nt) | EPIMETHEUS | 2005-048T00:10 | 17-Feb | Thu | 2 | 0 | 5 | Inbound 73453.7 km flyby, v = 2.9 km/s, phase = 78 deg |
| S08 | 3 | 03AT (nt) | ATLAS | 2005-048T00:23 | 17-Feb | Thu | 2 | 0 | 5 | Inbound 76933.8 km flyby, v = 1.6 km/s, phase = 96 deg |
| S08 | 3 | 03CP (nt) | CALYPSO | 2005-048T00:35 | 17-Feb | Thu | 2 | 0 | 5 | Inbound 83226.3 km flyby, v = 6.9 km/s, phase = 67 deg |
| S08 | 3 | Ring CRX | Ascending | 2005-048T00:49 | 17-Feb | Thu | 2 | 0 | 5 | r = 3.499 Rs ( 211084 km) |
| S08 | 3 | Periapse | | 2005-048T00:57 | 17-Feb | Thu | 2 | 0 | 5 | R = 3.498 Rs, lat = 0 deg, phase = 115 deg |
| S08 | 3 | 03AG (nt) | AEGAEON | 2005-048T01:22 | 17-Feb | Thu | 2 | 0 | 5 | Outbound 107572.3 km flyby, v = 8.3 km/s, phase = 157 deg |
| S08 | 3 | Dust Hazard | E_ring_lg | 2005-048T01:45 | 17-Feb | Thu | 2 | 0 | 5 | Egress @ 2005-048T03:01 (75 min) \| Protection: None |
| S08 | 3 | 03EN (t) E0 | ENCELADUS | 2005-048T03:30 | 17-Feb | Thu | 2 | 20 | 5 | Outbound 1264.8 km flyby, v = 6.7 km/s, phase = 113 deg |
| S08 | 3 | Earth OCC | ENCELADUS | 2005-048T03:37 | 17-Feb | Thu | 0 | 20 | 5 | Duration = 1 min; egress = 2005-048T03:38:31 |
| S08 | 3 | 03PO (nt) | POLYDEUCES | 2005-048T08:47 | 17-Feb | Thu | 0 | 20 | 5 | Outbound 6451.0 km flyby, v = 8.6 km/s, phase = 121 deg |
| S08 | 3 | OTM-014 | 3TI+3 | 2005-049T00:00 | 18-Feb | Fri | 1 | 19 | 6 | D/L start, burn ~6h later. Backup D/L 049T23:36 |
| S08 | 3 | XD | Segment | 2005-049T08:43 | 18-Feb | Fri | 1 | 19 | 0 | XD_003_004 (18d); Cross Discipline Segment Outbound 3-Inbound 4 |
| S08 | 3 | Ring CRX | Descending | 2005-057T04:14 | 26-Feb | Sat | 9 | 11 | 8 | r = 43.971 Rs (2652789 km) * |
| S09 | 3 | S9 Begins | | 2005-058T00:36 | 27-Feb | Sun | 10 | 10 | 9 | S9 Sequence. Duration = 41 d |
| S09 | 4 | Apoapse | | 2005-058T06:19 | 27-Feb | Sun | 10 | 10 | 9 | Per = 20.5 d, inc = 0.4 deg, r = 44.303 Rs, phase = 65 deg |
| S09 | 4 | OTM-015 | ~APO | 2005-060T22:50 | 01-Mar | Tue | 13 | 7 | 12 | D/L start, burn ~6h later. Backup D/L 061T22:50 |
| S09 | 4 | OTM-016 | 4EN-3 | 2005-064T22:35 | 05-Mar | Sat | 17 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 065T22:20 |
| S09 | 4 | SOST | Segment | 2005-067T07:35 | 08-Mar | Tue | 19 | 1 | 2 | SOST_004EN (2d); SOST Rev 04 Targeted Enceladus |
| S09 | 4 | 04HE (nt) | HELENE | 2005-068T04:32 | 09-Mar | Wed | 20 | 0 | 3 | Inbound 74483.1 km flyby, v = 6.5 km/s, phase = 67 deg |
| S09 | 4 | Dust Hazard | E_ring_lg | 2005-068T08:05 | 09-Mar | Wed | 20 | 0 | 3 | Egress @ 2005-068T10:53 (168 min) \| Protection: HGA to Dust-Ram |
| S09 | 4 | 04EN (t) E1 | ENCELADUS | 2005-068T09:08 | 09-Mar | Wed | 20 | 22 | 3 | Inbound 498.1 km flyby, v = 6.6 km/s, phase = 43 deg |
| S09 | 4 | Dust Hazard | Pallene | 2005-068T10:47 | 09-Mar | Wed | 0 | 22 | 4 | Egress @ 2005-068T12:32 (104 min) \| Protection: MEA Cvr. Closure |
| S09 | 4 | Ring CRX | Ascending | 2005-068T10:47 | 09-Mar | Wed | 0 | 22 | 4 | r = 3.559 Rs ( 214703 km) |
| S09 | 4 | 04AT (nt) | ATLAS | 2005-068T11:28 | 09-Mar | Wed | 0 | 22 | 4 | Inbound 73849.0 km flyby, v = 1.6 km/s, phase = 108 deg |
| S09 | 4 | Periapse | | 2005-068T11:39 | 09-Mar | Wed | 0 | 22 | 4 | R = 3.502 Rs, lat = 0 deg, phase = 115 deg |
| S09 | 4 | 04TE (nt) | TETHYS | 2005-068T11:44 | 09-Mar | Wed | 0 | 22 | 4 | Outbound 82865.2 km flyby, v = 6.9 km/s, phase = 64 deg |
| S09 | 4 | Dust Hazard | E_ring_lg | 2005-068T12:25 | 09-Mar | Wed | 0 | 22 | 4 | Egress @ 2005-068T15:13 (167 min) \| Protection: MEA Cvr. Closure |
| S09 | 4 | XD | Segment | 2005-069T07:26 | 10-Mar | Thu | 1 | 22 | 4 | XD_004_005 (18d); Cross Discipline Segment Outbound 4 - Inbound 5 |
| S09 | 4 | OTM-017 | 4EN+3 | 2005-070T21:20 | 11-Mar | Fri | 3 | 20 | 6 | D/L start, burn ~6h later. Backup D/L 072T20:49 |
| S09 | 4 | Ring CRX | Descending | 2005-073T16:39 | 14-Mar | Mon | 5 | 17 | 3 | r = 36.898 Rs (2226084 km) |
| S09 | 4 | OTM-018 | ~APO | 2005-078T12:19 | 19-Mar | Sat | 10 | 12 | 8 | D/L start, burn ~6h later. Backup D/L 079T12:19 |
| S09 | 5 | Apoapse | | 2005-078T17:34 | 19-Mar | Sat | 10 | 12 | 0 | Per = 20.5 d, inc = 0.2 deg, r = 44.390 Rs, phase = 65 deg |
| S09 | 5 | OTM-019 | 5TI-3 | 2005-086T20:00 | 27-Mar | Sun | 18 | 4 | 8 | D/L start, burn ~6h later. Backup D/L 087T19:17 |
| S09 | 5 | MAG | Segment | 2005-087T05:09 | 28-Mar | Mon | 19 | 4 | 0 | MAG_005 (3d); Mag Rev 5 |
| S09 | 5 | 05TE (nt) | TETHYS | 2005-088T18:46 | 29-Mar | Tue | 20 | 2 | 2 | Inbound 108643.8 km flyby, v = 12.2 km/s, phase = 124 deg |
| S09 | 5 | Dust Hazard | E_ring_lg | 2005-088T20:03 | 29-Mar | Tue | 20 | 2 | 2 | Egress @ 2005-088T22:50 (166 min) \| Protection: MEA Cvr. Closure |
| S09 | 5 | 05EN (nt) | ENCELADUS | 2005-088T20:32 | 29-Mar | Tue | 20 | 2 | 2 | Inbound 55571.8 km flyby, v = 9.7 km/s, phase = 134 deg |
| S09 | 5 | 05PL (nt) | PALLENE | 2005-088T21:48 | 29-Mar | Tue | 21 | 2 | 2 | Inbound 30586.0 km flyby, v = 7.0 km/s, phase = 137 deg |
| S09 | 5 | 05AT (nt) | ATLAS | 2005-088T22:01 | 29-Mar | Tue | 21 | 2 | 2 | Inbound 97314.3 km flyby, v = 1.4 km/s, phase = 68 deg |
| S09 | 5 | Dust Hazard | Pallene | 2005-088T22:43 | 29-Mar | Tue | 21 | 2 | 2 | Egress @ 2005-089T00:32 (108 min) \| Protection: MEA Cvr. Closure |
| S09 | 5 | Ring CRX | Ascending | 2005-088T22:58 | 29-Mar | Tue | 21 | 2 | 2 | r = 3.531 Rs ( 213016 km) |
| S09 | 5 | 05EP (nt) | EPIMETHEUS | 2005-088T23:24 | 29-Mar | Tue | 21 | 2 | 2 | Inbound 62014.1 km flyby, v = 2.3 km/s, phase = 102 deg |
| S09 | 5 | Periapse | | 2005-088T23:37 | 29-Mar | Tue | 21 | 2 | 2 | R = 3.498 Rs, lat = 0 deg, phase = 114 deg |
| S09 | 5 | Dust Hazard | E_ring_lg | 2005-089T00:26 | 30-Mar | Wed | 21 | 2 | 2 | Egress @ 2005-089T02:33 (127 min) \| Protection: MEA Cvr. Closure |
| S09 | 5 | 05ME (nt) | METHONE | 2005-089T00:50 | 30-Mar | Wed | 21 | 2 | 2 | Outbound 52682.0 km flyby, v = 7.4 km/s, phase = 82 deg |
| S09 | 5 | 05TL (nt) | TELESTO | 2005-089T01:32 | 30-Mar | Wed | 21 | 2 | 2 | Outbound 74531.1 km flyby, v = 6.5 km/s, phase = 61 deg |
| S09 | 5 | 05PO (nt) | POLYDEUCES | 2005-089T05:59 | 30-Mar | Wed | 21 | 2 | 2 | Outbound 104018.7 km flyby, v = 6.0 km/s, phase = 59 deg |
| S09 | 5 | TOST | Segment | 2005-090T05:50 | 31-Mar | Thu | 22 | 1 | 3 | TOST_005TI_T4 (2d); TOST Segment 005TI (T4) |
| S09 | 5 | 05TI (t) T4 | TITAN | 2005-090T20:05 | 31-Mar | Thu | 22 | 16 | 4 | Outbound 2403.6 km flyby, v = 5.9 km/s, phase = 66 deg |
| S09 | 5 | Ring CRX | Descending | 2005-090T22:06 | 31-Mar | Thu | 0 | 16 | 4 | r = 21.275 Rs (1283513 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S09 | 5 | XD | Segment | 2005-092T00:22 | 02-Apr | Sat | 1 | 15 | 5 | XD_005_006 (10d); Cross Discipline Segment Outbound 5 - Inbound 6 |
| S09 | 5 | OTM-020 | 5TI+3 | 2005-093T20:22 | 03-Apr | Sun | 3 | 13 | 7 | D/L start, burn ~6h later. Backup D/L 094T16:22 |
| S09 | 6 | Apoapse | | 2005-096T23:32 | 06-Apr | Wed | 6 | 10 | 3 | Per = 16.0 d, inc = 7.4 deg, r = 37.956 Rs, phase = 72 deg |
| S10 | 6 | S10 Begins | | 2005-099T05:15 | 09-Apr | Sat | 8 | 8 | 5 | S10 Sequence. Duration = 35 d |
| S10 | 6 | OTM-021 | ~APO | 2005-099T20:00 | 09-Apr | Sat | 9 | 7 | 6 | D/L start, burn ~6h later. Backup D/L 100T16:00 |
| S10 | 6 | RINGS | Segment | 2005-102T06:30 | 12-Apr | Tue | 11 | 5 | 2 | RINGS_6 (2d); RINGS Rev 6 |
| S10 | 6 | OTM-022 | 6TI-3 | 2005-103T20:40 | 13-Apr | Wed | 13 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 105T02:14 |
| S10 | 6 | SATURN | Segment | 2005-104T05:55 | 14-Apr | Thu | 13 | 3 | 0 | Saturn_006 (2d); Saturn Rev 6 Periapse |
| S10 | 6 | 06PL (nt) | PALLENE | 2005-104T20:30 | 14-Apr | Thu | 14 | 2 | 1 | Inbound 119294.8 km flyby, v = 16.6 km/s, phase = 115 deg |
| S10 | 6 | 06ME (nt) | METHONE | 2005-104T20:52 | 14-Apr | Thu | 14 | 2 | 1 | Inbound 50427.8 km flyby, v = 12.3 km/s, phase = 118 deg |
| S10 | 6 | Dust Hazard | G_ring | 2005-104T22:14 | 14-Apr | Thu | 14 | 2 | 1 | Egress @ 2005-104T22:18 (3 min) \| Protection: HGA to Dust-Ram |
| S10 | 6 | Ring CRX | Ascending | 2005-104T22:16 | 14-Apr | Thu | 14 | 2 | 1 | r = 2.734 Rs ( 164960 km) |
| S10 | 6 | Periapse | | 2005-104T23:16 | 14-Apr | Thu | 14 | 2 | 1 | R = 2.594 Rs, lat = 3 deg, phase = 108 deg |
| S10 | 6 | Earth OCC | RING | 2005-104T23:48 | 14-Apr | Thu | 14 | 2 | 1 | Duration = 117 min; egress = 2005-105T01:45:53 |
| S10 | 6 | Sun OCC | RING | 2005-104T23:58 | 14-Apr | Thu | 14 | 2 | 1 | Duration = 122 min; egress = 2005-105T02:00:31 |
| S10 | 6 | 06EP (nt) | EPIMETHEUS | 2005-105T00:13 | 15-Apr | Fri | 14 | 2 | 1 | Outbound 46188.8 km flyby, v = 9.8 km/s, phase = 80 deg |
| S10 | 6 | 06MI (nt) | MIMAS | 2005-105T01:25 | 15-Apr | Fri | 14 | 2 | 1 | Outbound 82477.7 km flyby, v = 14.0 km/s, phase = 94 deg |
| S10 | 6 | 06CP (nt) | CALYPSO | 2005-105T04:21 | 15-Apr | Fri | 14 | 2 | 1 | Outbound 70534.9 km flyby, v = 12.5 km/s, phase = 115 deg |
| S10 | 6 | TOST | Segment | 2005-106T06:25 | 16-Apr | Sat | 15 | 1 | 2 | TOST_006TI_T5 (2d); TOST Segment 006TI (T5) |
| S10 | 6 | 06TI (t) T5 | TITAN | 2005-106T19:11 | 16-Apr | Sat | 16 | 89 | 3 | Outbound 1027.4 km flyby, v = 6.1 km/s, phase = 127 deg |
| S10 | 6 | Earth OCC | TITAN | 2005-106T19:11 | 16-Apr | Sat | 0 | 89 | 3 | Duration = 7 min; egress = 2005-106T19:18:52 |
| S10 | 6 | Sun OCC | TITAN | 2005-106T19:12 | 16-Apr | Sat | 0 | 89 | 3 | Duration = 8 min; egress = 2005-106T19:20:28 |
| S10 | 6 | Ring CRX | Descending | 2005-106T19:58 | 16-Apr | Sat | 0 | 89 | 3 | r = 20.890 Rs (1260307 km) |
| S10 | 6 | XD | Segment | 2005-107T21:25 | 17-Apr | Sun | 1 | 88 | 4 | XD_006_007 (12d); Cross Discipline Segment Outbound 6 - Inbound 7 |
| S10 | 6 | OTM-023 | 6TI+3 | 2005-109T18:59 | 19-Apr | Tue | 3 | 86 | 6 | D/L start, burn ~6h later. Backup D/L 110T18:44 |
| S10 | 7 | Apoapse | | 2005-113T23:30 | 23-Apr | Sat | 7 | 82 | 4 | Per = 18.2 d, inc = 21.7 deg, r = 40.629 Rs, phase = 65 deg |
| S10 | 7 | OTM-024 | ~APO | 2005-118T18:58 | 28-Apr | Thu | 12 | 77 | 9 | D/L start, burn ~6h later. Backup D/L 119T18:28 |
| S10 | 7 | RINGS | Segment | 2005-120T04:13 | 30-Apr | Sat | 13 | 76 | 1 | RINGS_7 (5d); RINGS Rev 7 |
| S10 | 7 | 07HE (nt) | HELENE | 2005-122T19:19 | 02-May | Mon | 16 | 73 | 4 | Inbound 114175.3 km flyby, v = 9.9 km/s, phase = 107 deg |
| S10 | 7 | 07TE (nt) | TETHYS | 2005-122T21:47 | 02-May | Mon | 16 | 73 | 4 | Inbound 51868.0 km flyby, v = 9.3 km/s, phase = 110 deg |
| S10 | 7 | 07EP (nt) | EPIMETHEUS | 2005-122T23:02 | 02-May | Mon | 16 | 73 | 4 | Inbound 118464.8 km flyby, v = 6.2 km/s, phase = 46 deg |
| S10 | 7 | Dust Hazard | E_ring_lg | 2005-122T23:33 | 02-May | Mon | 16 | 73 | 4 | Egress @ 2005-122T23:39 (5 min) \| Protection: MEA Cvr. Closure |
| S10 | 7 | Ring CRX | Ascending | 2005-122T23:36 | 02-May | Mon | 16 | 73 | 4 | r = 3.895 Rs ( 234996 km) |
| S10 | 7 | Periapse | | 2005-123T01:42 | 03-May | Tue | 16 | 73 | 4 | R = 3.590 Rs, lat = 12 deg, phase = 115 deg |
| S10 | 7 | Earth OCC | RING | 2005-123T02:55 | 03-May | Tue | 16 | 73 | 4 | Duration = 343 min; egress = 2005-123T08:38:29 |
| S10 | 7 | Sun OCC | RING | 2005-123T03:23 | 03-May | Tue | 16 | 73 | 4 | Duration = 361 min; egress = 2005-123T09:24:37 |
| S10 | 7 | Earth OCC | SATURN | 2005-123T04:39 | 03-May | Tue | 16 | 73 | 4 | Duration = 144 min; egress = 2005-123T07:03:10 |
| S10 | 7 | Sun OCC | SATURN | 2005-123T05:10 | 03-May | Tue | 16 | 73 | 4 | Duration = 153 min; egress = 2005-123T07:43:31 |
| S10 | 7 | 07TL (nt) | TELESTO | 2005-123T06:15 | 03-May | Tue | 16 | 73 | 4 | Outbound 108303.7 km flyby, v = 8.3 km/s, phase = 98 deg |
| S10 | 7 | 07TI (nt) | TITAN | 2005-124T05:37 | 04-May | Wed | 17 | 72 | 5 | Outbound 864241.0 km flyby, v = 10.3 km/s, phase = 154 deg |
| S10 | 7 | SATURN | Segment | 2005-124T20:30 | 04-May | Wed | 18 | 71 | 6 | Saturn_007 (1d); Saturn Rev 7 Outbound |
| S10 | 7 | Ring CRX | Descending | 2005-125T02:07 | 05-May | Thu | 18 | 71 | 6 | r = 21.422 Rs (1292364 km) |
| S10 | 7 | XD | Segment | 2005-126T03:40 | 06-May | Fri | 19 | 70 | 7 | XD_007_008 (12d); Cross Discipline Segment Outbound 7-Inbound 8 |
| S10 | 8 | Apoapse | | 2005-132T03:52 | 12-May | Thu | 25 | 64 | 13 | Per = 18.2 d, inc = 21.9 deg, r = 40.608 Rs, phase = 65 deg |
| S11 | 8 | S11 Begins | | 2005-134T02:50 | 14-May | Sat | 27 | 62 | 15 | S11 Sequence. Duration = 35 d |
| S11 | 8 | RINGS | Segment | 2005-138T03:00 | 18-May | Wed | 31 | 58 | 19 | RINGS_Rev_8 (5d); RINGS_Rev_8 |
| S11 | 8 | Dust Hazard | E_ring_lg | 2005-141T03:51 | 21-May | Sat | 34 | 55 | 22 | Egress @ 2005-141T03:57 (5 min) \| Protection: MEA Cvr. Closure |
| S11 | 8 | Ring CRX | Ascending | 2005-141T03:53 | 21-May | Sat | 34 | 55 | 22 | r = 3.903 Rs ( 235468 km) |
| S11 | 8 | Periapse | | 2005-141T06:01 | 21-May | Sat | 34 | 55 | 22 | R = 3.591 Rs, lat = 12 deg, phase = 114 deg |
| S11 | 8 | 08AT (nt) | ATLAS | 2005-141T06:29 | 21-May | Sat | 34 | 55 | 22 | Outbound 99859.3 km flyby, v = 6.7 km/s, phase = 145 deg |
| S11 | 8 | 08PM (nt) | PROMETHEUS | 2005-141T06:47 | 21-May | Sat | 34 | 55 | 22 | Outbound 107594.0 km flyby, v = 6.9 km/s, phase = 153 deg |
| S11 | 8 | Earth OCC | RING | 2005-141T07:20 | 21-May | Sat | 35 | 55 | 23 | Duration = 347 min; egress = 2005-141T13:07:48 |
| S11 | 8 | Sun OCC | RING | 2005-141T07:46 | 21-May | Sat | 35 | 55 | 23 | Duration = 362 min; egress = 2005-141T13:48:03 |
| S11 | 8 | 08EN (nt) | ENCELADUS | 2005-141T08:12 | 21-May | Sat | 35 | 54 | 23 | Outbound 101965.0 km flyby, v = 8.8 km/s, phase = 86 deg |
| S11 | 8 | Earth OCC | SATURN | 2005-141T09:05 | 21-May | Sat | 35 | 54 | 23 | Duration = 146 min; egress = 2005-141T11:31:32 |
| S11 | 8 | Sun OCC | SATURN | 2005-141T09:32 | 21-May | Sat | 35 | 54 | 23 | Duration = 154 min; egress = 2005-141T12:06:40 |
| S11 | 8 | SATURN | Segment | 2005-142T19:00 | 22-May | Sun | 36 | 53 | 24 | Saturn_008 (1d); Saturn Rev 8 Outbound |
| S11 | 8 | Ring CRX | Descending | 2005-143T05:44 | 23-May | Mon | 36 | 53 | 24 | r = 21.229 Rs (1280731 km) |
| S11 | 8 | XD | Segment | 2005-144T02:42 | 24-May | Tue | 37 | 52 | 25 | XD_008_009 (12d); Cross Discipline Segment Outbound 8 - Inbound 9 |
| S11 | 9 | Apoapse | | 2005-150T08:21 | 30-May | Mon | 44 | 45 | 32 | Per = 18.2 d, inc = 21.9 deg, r = 40.626 Rs, phase = 66 deg |
| S11 | 9 | RINGS | Segment | 2005-156T02:00 | 05-Jun | Sun | 49 | 40 | 37 | RINGS_Rev_9 (5d); RINGS_Rev_9 |
| S11 | 9 | 09TI (nt) | TITAN | 2005-157T19:05 | 06-Jun | Mon | 51 | 38 | 39 | Inbound 425568.7 km flyby, v = 5.8 km/s, phase = 83 deg |
| S11 | 9 | Dust Hazard | E_ring_lg | 2005-159T08:23 | 08-Jun | Wed | 53 | 36 | 41 | Egress @ 2005-159T08:28 (5 min) \| Protection: MEA Cvr. Closure |
| S11 | 9 | Ring CRX | Ascending | 2005-159T08:25 | 08-Jun | Wed | 53 | 36 | 41 | r = 3.914 Rs ( 236127 km) |
| S11 | 9 | 09PL (nt) | PALLENE | 2005-159T09:57 | 08-Jun | Wed | 53 | 36 | 41 | Inbound 64544.9 km flyby, v = 7.0 km/s, phase = 56 deg |
| S11 | 9 | 09CP (nt) | CALYPSO | 2005-159T10:23 | 08-Jun | Wed | 53 | 36 | 41 | Inbound 97707.7 km flyby, v = 7.8 km/s, phase = 64 deg |
| S11 | 9 | Periapse | | 2005-159T10:36 | 08-Jun | Wed | 53 | 36 | 41 | R = 3.591 Rs, lat = 12 deg, phase = 114 deg |
| S11 | 9 | Earth OCC | RING | 2005-159T12:02 | 08-Jun | Wed | 53 | 36 | 41 | Duration = 352 min; egress = 2005-159T17:54:44 |
| S11 | 9 | Sun OCC | RING | 2005-159T12:23 | 08-Jun | Wed | 53 | 36 | 41 | Duration = 362 min; egress = 2005-159T18:26:08 |
| S11 | 9 | Earth OCC | SATURN | 2005-159T13:48 | 08-Jun | Wed | 53 | 36 | 41 | Duration = 149 min; egress = 2005-159T16:17:25 |
| S11 | 9 | Sun OCC | SATURN | 2005-159T14:10 | 08-Jun | Wed | 53 | 36 | 41 | Duration = 155 min; egress = 2005-159T16:44:41 |
| S11 | 9 | SATURN | Segment | 2005-160T17:21 | 09-Jun | Thu | 54 | 35 | 42 | Saturn_009 (2d); Saturn Rev 9 Outbound |
| S11 | 9 | Ring CRX | Descending | 2005-161T09:08 | 10-Jun | Fri | 55 | 34 | 43 | r = 20.903 Rs (1261062 km) |
| S11 | 9 | XD | Segment | 2005-163T01:25 | 12-Jun | Sun | 56 | 33 | 44 | XD_009_010 (11d); Cross Discipline Segment Outbound 9 - Inbound 10 |
| S11 | 10 | Apoapse | | 2005-168T13:11 | 17-Jun | Fri | 62 | 27 | 50 | Per = 18.2 d, inc = 21.8 deg, r = 40.663 Rs, phase = 66 deg |
| S12 | 10 | S12 Begins | | 2005-169T01:34 | 18-Jun | Sat | 62 | 27 | 50 | S12 Sequence. Duration = 44 d |
| S12 | 10 | 10TI (nt) | TITAN | 2005-173T12:37 | 22-Jun | Wed | 67 | 22 | 55 | Inbound 920613.8 km flyby, v = 3.7 km/s, phase = 65 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S12 | 10 | RINGS | Segment | 2005-174T01:30 | 23-Jun | Thu | 67 | 22 | 55 | RINGS_Rev_10 (5d); RINGS_Rev_10 |
| S12 | 10 | 10TI (nt) | TITAN | 2005-177T07:10 | 26-Jun | Sun | 70 | 19 | 59 | Inbound 874592.4 km flyby, v = 7.7 km/s, phase = 111 deg |
| S12 | 10 | Dust Hazard | E_ring_lg | 2005-177T13:26 | 26-Jun | Sun | 71 | 18 | 59 | Egress @ 2005-177T13:32 (5 min) \| Protection: MEA Cvr. Closure |
| S12 | 10 | Ring CRX | Ascending | 2005-177T13:29 | 26-Jun | Sun | 71 | 18 | 59 | r = 3.934 Rs ( 237361 km) |
| S12 | 10 | 10PN (nt) | PAN | 2005-177T14:23 | 26-Jun | Sun | 71 | 18 | 59 | Inbound 94954.7 km flyby, v = 6.2 km/s, phase = 84 deg |
| S12 | 10 | 10TL (nt) | TELESTO | 2005-177T14:48 | 26-Jun | Sun | 71 | 18 | 59 | Inbound 87052.4 km flyby, v = 8.0 km/s, phase = 64 deg |
| S12 | 10 | Periapse | | 2005-177T15:42 | 26-Jun | Sun | 71 | 18 | 59 | R = 3.603 Rs, lat = 12 deg, phase = 113 deg |
| S12 | 10 | Earth OCC | RING | 2005-177T17:20 | 26-Jun | Sun | 71 | 18 | 59 | Duration = 358 min; egress = 2005-177T23:17:57 |
| S12 | 10 | Sun OCC | RING | 2005-177T17:34 | 26-Jun | Sun | 71 | 18 | 59 | Duration = 364 min; egress = 2005-177T23:38:07 |
| S12 | 10 | Earth OCC | SATURN | 2005-177T19:06 | 26-Jun | Sun | 71 | 18 | 59 | Duration = 152 min; egress = 2005-177T21:38:47 |
| S12 | 10 | Sun OCC | SATURN | 2005-177T19:20 | 26-Jun | Sun | 71 | 18 | 59 | Duration = 156 min; egress = 2005-177T21:56:12 |
| S12 | 10 | SATURN | Segment | 2005-179T00:30 | 28-Jun | Tue | 72 | 17 | 60 | Saturn_010 (1d); Saturn Rev 10 Outbound |
| S12 | 10 | Ring CRX | Descending | 2005-179T13:44 | 28-Jun | Tue | 73 | 16 | 61 | r = 20.762 Rs (1252547 km) |
| S12 | 10 | XD | Segment | 2005-180T01:25 | 29-Jun | Wed | 73 | 16 | 61 | XD_010_011 (13d); Cross Discipline Segment Outbound 10-Inbound 11 |
| S12 | 11 | Apoapse | | 2005-186T18:57 | 05-Jul | Tue | 80 | 9 | 68 | Per = 18.3 d, inc = 21.8 deg, r = 40.748 Rs, phase = 67 deg |
| S12 | 11 | OTM-025 | 11EN-6 | 2005-189T14:37 | 08-Jul | Fri | 83 | 6 | 71 | D/L start, burn ~6h later. Backup D/L 190T14:37 |
| S12 | 11 | SATURN | Segment | 2005-192T23:30 | 11-Jul | Mon | 86 | 3 | 3 | Saturn_011_In (1d); Saturn Rev 11 Inbound |
| S12 | 11 | SOST | Segment | 2005-193T23:30 | 12-Jul | Tue | 87 | 2 | 4 | SOST_011EN (3d); SOST Rev 11 Targeted Enceladus |
| S12 | 11 | 11PM (nt) | PROMETHEUS | 2005-195T19:31 | 14-Jul | Thu | 89 | 0 | 6 | Inbound 122153.7 km flyby, v = 6.1 km/s, phase = 51 deg |
| S12 | 11 | Dust Hazard | E_ring_lg | 2005-195T19:53 | 14-Jul | Thu | 89 | 0 | 6 | Egress @ 2005-195T19:58 (5 min) \| Protection: MEA Cvr. Closure |
| S12 | 11 | 11EN (t) E2 | ENCELADUS | 2005-195T19:55 | 14-Jul | Thu | 89 | 39 | 6 | Inbound 166.3 km flyby, v = 8.2 km/s, phase = 64 deg |
| S12 | 11 | Ring CRX | Ascending | 2005-195T19:55 | 14-Jul | Thu | 0 | 39 | 6 | r = 3.947 Rs ( 238116 km) |
| S12 | 11 | 11ME (nt) | METHONE | 2005-195T20:47 | 14-Jul | Thu | 0 | 39 | 6 | Inbound 36708.9 km flyby, v = 7.6 km/s, phase = 110 deg |
| S12 | 11 | 11EP (nt) | EPIMETHEUS | 2005-195T20:55 | 14-Jul | Thu | 0 | 38 | 6 | Inbound 76764.5 km flyby, v = 6.3 km/s, phase = 84 deg |
| S12 | 11 | Periapse | | 2005-195T22:10 | 14-Jul | Thu | 0 | 38 | 6 | R = 3.609 Rs, lat = 13 deg, phase = 113 deg |
| S12 | 11 | 11AG (nt) | AEGAEON | 2005-195T22:11 | 14-Jul | Thu | 0 | 38 | 6 | Outbound 118570.9 km flyby, v = 11.1 km/s, phase = 163 deg |
| S12 | 11 | Earth OCC | RING | 2005-196T00:01 | 15-Jul | Fri | 0 | 38 | 6 | Duration = 363 min; egress = 2005-196T06:04:27 |
| S12 | 11 | Sun OCC | RING | 2005-196T00:06 | 15-Jul | Fri | 0 | 38 | 6 | Duration = 364 min; egress = 2005-196T06:11:09 |
| S12 | 11 | Earth OCC | SATURN | 2005-196T01:47 | 15-Jul | Fri | 0 | 38 | 6 | Duration = 155 min; egress = 2005-196T04:22:58 |
| S12 | 11 | Sun OCC | SATURN | 2005-196T01:52 | 15-Jul | Fri | 0 | 38 | 6 | Duration = 157 min; egress = 2005-196T04:28:52 |
| S12 | 11 | SATURN | Segment | 2005-196T23:30 | 15-Jul | Fri | 1 | 37 | 7 | Saturn_011_Out (2d); Saturn Rev 11 Outbound |
| S12 | 11 | Ring CRX | Descending | 2005-197T19:43 | 16-Jul | Sat | 2 | 37 | 8 | r = 20.630 Rs (1244592 km) |
| S12 | 11 | XD | Segment | 2005-198T23:20 | 17-Jul | Sun | 3 | 35 | 9 | XD_011_012 (12d); Cross Discipline Segment Outbound 11-Inbound 12 |
| S12 | 11 | SEP = 3.0 deg | Conjunction | 2005-201T04:30 | 20-Jul | Wed | 5 | 33 | 12 | Commanding must not be required below 3.0 deg |
| S12 | 11 | SEP = 2.0 deg | Conjunction | 2005-202T09:58 | 21-Jul | Thu | 7 | 32 | 13 | Plan no SSR playback below 2.0 deg |
| S12 | 11 | SEP = 1.0 deg | Conjunction | 2005-203T15:48 | 22-Jul | Fri | 8 | 31 | 14 | Require no DSN passes below 1.0 deg |
| S12 | 12 | Apoapse | | 2005-205T01:57 | 24-Jul | Sun | 9 | 29 | 15 | Per = 18.3 d, inc = 21.8 deg, r = 40.827 Rs, phase = 67 deg |
| S12 | 12 | SEP = 1.0 deg | Conjunction | 2005-205T23:07 | 24-Jul | Sun | 10 | 28 | 16 | Require no DSN passes below 1.0 deg |
| S12 | 12 | SEP = 2.0 deg | Conjunction | 2005-207T04:44 | 26-Jul | Tue | 11 | 27 | 18 | Plan no SSR playback below 2.0 deg |
| S12 | 12 | SEP = 3.0 deg | Conjunction | 2005-208T09:48 | 27-Jul | Wed | 13 | 26 | 19 | Commanding must not be required below 3.0 deg |
| S12 | 12 | SATURN | Segment | 2005-210T21:30 | 29-Jul | Fri | 15 | 23 | 21 | Saturn_012_In (2d); Saturn Rev 12 Inbound |
| S13 | 12 | S13 Begins | | 2005-212T22:00 | 31-Jul | Sun | 17 | 21 | 23 | S13 Sequence. Duration = 30 d |
| S13 | 12 | SOST | Segment | 2005-212T22:00 | 31-Jul | Sun | 17 | 21 | 23 | SOST_012MI (3d); SOST Rev 12 Non-targeted Mimas |
| S13 | 12 | Dust Hazard | E_ring_lg | 2005-214T03:29 | 02-Aug | Tue | 18 | 20 | 25 | Egress @ 2005-214T03:35 (5 min) \| Protection: MEA Cvr. Closure |
| S13 | 12 | Ring CRX | Ascending | 2005-214T03:32 | 02-Aug | Tue | 18 | 20 | 25 | r = 3.948 Rs ( 238184 km) |
| S13 | 12 | 12DA (nt) | DAPHNIS | 2005-214T03:57 | 02-Aug | Tue | 18 | 20 | 25 | Inbound 102508.1 km flyby, v = 6.1 km/s, phase = 68 deg |
| S13 | 12 | 12MI (nt) | MIMAS | 2005-214T04:21 | 02-Aug | Tue | 18 | 20 | 25 | Inbound 61149.0 km flyby, v = 6.1 km/s, phase = 58 deg |
| S13 | 12 | 12PM (nt) | PROMETHEUS | 2005-214T05:17 | 02-Aug | Tue | 18 | 20 | 25 | Inbound 84971.3 km flyby, v = 6.3 km/s, phase = 111 deg |
| S13 | 12 | 12AN (nt) | ANTHE | 2005-214T05:27 | 02-Aug | Tue | 18 | 20 | 25 | Inbound 102253.0 km flyby, v = 8.2 km/s, phase = 57 deg |
| S13 | 12 | Periapse | | 2005-214T05:48 | 02-Aug | Tue | 18 | 20 | 25 | R = 3.604 Rs, lat = 13 deg, phase = 112 deg |
| S13 | 12 | 12CP (nt) | CALYPSO | 2005-214T07:47 | 02-Aug | Tue | 18 | 20 | 25 | Outbound 106190.7 km flyby, v = 7.1 km/s, phase = 73 deg |
| S13 | 12 | Sun OCC | RING | 2005-214T07:47 | 02-Aug | Tue | 18 | 20 | 25 | Duration = 365 min; egress = 2005-214T13:52:32 |
| S13 | 12 | Earth OCC | RING | 2005-214T07:54 | 02-Aug | Tue | 18 | 20 | 25 | Duration = 367 min; egress = 2005-214T14:00:36 |
| S13 | 12 | Sun OCC | SATURN | 2005-214T09:32 | 02-Aug | Tue | 19 | 20 | 25 | Duration = 157 min; egress = 2005-214T12:09:48 |
| S13 | 12 | Earth OCC | SATURN | 2005-214T09:37 | 02-Aug | Tue | 19 | 20 | 25 | Duration = 158 min; egress = 2005-214T12:16:27 |
| S13 | 12 | 12TI (nt) | TITAN | 2005-214T15:55 | 02-Aug | Tue | 19 | 20 | 25 | Outbound 939763.3 km flyby, v = 6.5 km/s, phase = 35 deg |
| S13 | 12 | OTM-026 | NEARP | 2005-215T05:50 | 03-Aug | Wed | 19 | 19 | 26 | D/L start, burn ~6h later. Backup D/L 216T13:20 |
| S13 | 12 | SATURN | Segment | 2005-215T14:50 | 03-Aug | Wed | 20 | 19 | 0 | Saturn_012_Out (1d); Saturn Rev 12 Outbound |
| S13 | 12 | Ring CRX | Descending | 2005-216T02:39 | 04-Aug | Thu | 20 | 18 | 1 | r = 20.428 Rs (1232409 km) |
| S13 | 12 | XD | Segment | 2005-216T22:20 | 04-Aug | Thu | 21 | 17 | 2 | XD_012_013 (13d); Cross Discipline Segment Outbound 12 - Inbound 13 |
| S13 | 12 | 12TI (nt) | TITAN | 2005-218T12:33 | 06-Aug | Sat | 23 | 16 | 3 | Outbound 837687.8 km flyby, v = 3.8 km/s, phase = 62 deg |
| S13 | 12 | OTM-027 | ~APO | 2005-222T07:21 | 10-Aug | Wed | 26 | 12 | 7 | D/L start, burn ~6h later. Backup D/L 223T12:52 |
| S13 | 13 | Apoapse | | 2005-223T08:29 | 11-Aug | Thu | 28 | 11 | 1 | Per = 18.2 d, inc = 21.9 deg, r = 40.691 Rs, phase = 68 deg |
| S13 | 13 | RINGS | Segment | 2005-229T18:00 | 17-Aug | Wed | 34 | 5 | 7 | RINGS_Rev_13 (4d); Rings Rev 13 segment |
| S13 | 13 | OTM-028 | 13TI-3 | 2005-230T05:00 | 18-Aug | Thu | 34 | 4 | 8 | D/L start, burn ~6h later. Backup D/L 231T05:00 |
| S13 | 13 | 13TE (nt) | TETHYS | 2005-232T07:02 | 20-Aug | Sat | 36 | 2 | 2 | Inbound 122851.0 km flyby, v = 12.4 km/s, phase = 123 deg |
| S13 | 13 | Dust Hazard | E_ring_lg | 2005-232T08:57 | 20-Aug | Sat | 37 | 2 | 2 | Egress @ 2005-232T09:03 (5 min) \| Protection: MEA Cvr. Closure |
| S13 | 13 | Ring CRX | Ascending | 2005-232T09:00 | 20-Aug | Sat | 37 | 2 | 2 | r = 3.930 Rs ( 237122 km) |
| S13 | 13 | Periapse | | 2005-232T11:15 | 20-Aug | Sat | 37 | 2 | 2 | R = 3.585 Rs, lat = 13 deg, phase = 112 deg |
| S13 | 13 | 13TL (nt) | TELESTO | 2005-232T12:12 | 20-Aug | Sat | 37 | 2 | 2 | Outbound 105274.4 km flyby, v = 7.8 km/s, phase = 67 deg |
| S13 | 13 | Sun OCC | RING | 2005-232T13:17 | 20-Aug | Sat | 37 | 2 | 2 | Duration = 365 min; egress = 2005-232T19:22:13 |
| S13 | 13 | Earth OCC | RING | 2005-232T13:36 | 20-Aug | Sat | 37 | 2 | 2 | Duration = 368 min; egress = 2005-232T19:45:07 |
| S13 | 13 | Sun OCC | SATURN | 2005-232T15:01 | 20-Aug | Sat | 37 | 2 | 2 | Duration = 158 min; egress = 2005-232T17:38:49 |
| S13 | 13 | Earth OCC | SATURN | 2005-232T15:16 | 20-Aug | Sat | 37 | 2 | 2 | Duration = 161 min; egress = 2005-232T17:57:38 |
| S13 | 13 | TOST | Segment | 2005-233T21:20 | 21-Aug | Sun | 38 | 0 | 4 | TOST_013TI_T6 (2d); TOST Segment 013TI (T6) |
| S13 | 13 | Ring CRX | Descending | 2005-234T07:30 | 22-Aug | Mon | 38 | 0 | 4 | r = 20.270 Rs (1222887 km) |
| S13 | 13 | 13TI (t) T6 | TITAN | 2005-234T08:53 | 22-Aug | Mon | 39 | 16 | 4 | Outbound 3660.2 km flyby, v = 5.9 km/s, phase = 44 deg |
| S13 | 13 | XD | Segment | 2005-235T13:42 | 23-Aug | Tue | 1 | 15 | 5 | XD_013_014 (10d); Cross Discipline Segment Outbound 13 - Inbound 14 |
| S13 | 13 | OTM-029 | 13TI+3 | 2005-237T11:08 | 25-Aug | Thu | 3 | 13 | 7 | D/L start, burn ~6h later. Backup D/L 238T10:59 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S13 | 14 | Apoapse | | 2005-240T12:01 | 28-Aug | Sun | 6 | 10 | 3 | Per = 16.0 d, inc = 15.6 deg, r = 37.798 Rs, phase = 75 deg |
| S13 | 14 | OTM-030 | ~APO | 2005-242T12:43 | 30-Aug | Tue | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 243T10:38 |
| S14 | 14 | S14 Begins | | 2005-242T21:43 | 30-Aug | Tue | 9 | 7 | 0 | S14 Sequence. Duration = 39 d |
| S14 | 14 | RINGS | Segment | 2005-245T20:00 | 02-Sep | Fri | 11 | 5 | 3 | RINGS_Rev_14 (4d); Rings Rev 14 Segment |
| S14 | 14 | OTM-031 | 14TI-3 | 2005-246T11:30 | 03-Sep | Sat | 12 | 4 | 4 | D/L start, burn ~6h later. Backup D/L 247T10:30 |
| S14 | 14 | Dust Hazard | G_ring | 2005-248T10:37 | 05-Sep | Mon | 14 | 2 | 2 | Egress @ 2005-248T10:39 (2 min) \| Protection: MEA Cvr. Closure |
| S14 | 14 | Ring CRX | Ascending | 2005-248T10:38 | 05-Sep | Mon | 14 | 2 | 2 | r = 2.928 Rs ( 176674 km) |
| S14 | 14 | 14AG (nt) | AEGAEON | 2005-248T10:47 | 05-Sep | Mon | 14 | 2 | 2 | Inbound 8509.1 km flyby, v = 8.1 km/s, phase = 115 deg |
| S14 | 14 | 14PA (nt) | PANDORA | 2005-248T11:31 | 05-Sep | Mon | 14 | 2 | 2 | Inbound 51932.8 km flyby, v = 7.0 km/s, phase = 57 deg |
| S14 | 14 | 14PM (nt) | PROMETHEUS | 2005-248T11:32 | 05-Sep | Mon | 14 | 2 | 2 | Inbound 102389.2 km flyby, v = 14.6 km/s, phase = 151 deg |
| S14 | 14 | Periapse | | 2005-248T11:51 | 05-Sep | Mon | 14 | 2 | 2 | R = 2.748 Rs, lat = 8 deg, phase = 105 deg |
| S14 | 14 | Sun OCC | RING | 2005-248T12:37 | 05-Sep | Mon | 14 | 2 | 2 | Duration = 316 min; egress = 2005-248T17:53:37 |
| S14 | 14 | Earth OCC | RING | 2005-248T12:51 | 05-Sep | Mon | 14 | 2 | 2 | Duration = 330 min; egress = 2005-248T18:21:58 |
| S14 | 14 | 14ME (nt) | METHONE | 2005-248T13:56 | 05-Sep | Mon | 14 | 2 | 2 | Outbound 63015.0 km flyby, v = 10.2 km/s, phase = 91 deg |
| S14 | 14 | 14AN (nt) | ANTHE | 2005-248T14:13 | 05-Sep | Mon | 14 | 2 | 2 | Outbound 105000.4 km flyby, v = 14.3 km/s, phase = 91 deg |
| S14 | 14 | Sun OCC | SATURN | 2005-248T14:37 | 05-Sep | Mon | 14 | 2 | 2 | Duration = 136 min; egress = 2005-248T16:53:17 |
| S14 | 14 | Earth OCC | SATURN | 2005-248T14:53 | 05-Sep | Mon | 14 | 2 | 2 | Duration = 147 min; egress = 2005-248T17:19:41 |
| S14 | 14 | TOST | Segment | 2005-249T20:30 | 06-Sep | Tue | 15 | 0 | 3 | TOST_014TI_T7 (2d); TOST Segment 014TI (T7) |
| S14 | 14 | Ring CRX | Descending | 2005-250T06:46 | 07-Sep | Wed | 16 | 0 | 4 | r = 20.225 Rs (1220203 km) |
| S14 | 14 | 14TI (t) T7 | TITAN | 2005-250T08:11 | 07-Sep | Wed | 16 | 19 | 4 | Outbound 1074.6 km flyby, v = 6.1 km/s, phase = 85 deg |
| S14 | 14 | XD | Segment | 2005-251T12:46 | 08-Sep | Thu | 1 | 18 | 5 | XD_014_015 (14d); Cross Discipline Segment Outbound 14-Inbound 15 |
| S14 | 14 | OTM-032 | 14TI+3 | 2005-253T11:09 | 10-Sep | Sat | 3 | 16 | 7 | D/L start, burn ~6h later. Backup D/L 254T09:30 |
| S14 | 15 | Apoapse | | 2005-257T16:49 | 14-Sep | Wed | 7 | 11 | 4 | Per = 18.4 d, inc = 0.3 deg, r = 41.471 Rs, phase = 74 deg |
| S14 | 15 | OTM-033 | ~APO | 2005-262T10:40 | 19-Sep | Mon | 12 | 7 | 9 | D/L start, burn ~6h later. Backup D/L 263T10:15 |
| S14 | 15 | SATURN | Segment | 2005-265T18:43 | 22-Sep | Thu | 15 | 3 | 3 | Saturn_015 (3d); Saturn Rev 15 Periapse |
| S14 | 15 | OTM-034 | 15HY-3 | 2005-266T01:45 | 23-Sep | Fri | 16 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 267T10:20 |
| S14 | 15 | Ring CRX | Ascending | 2005-266T17:10 | 23-Sep | Fri | 16 | 2 | 1 | r = 4.514 Rs ( 272341 km) |
| S14 | 15 | Dust Hazard | E_ring_lg | 2005-266T17:30 | 23-Sep | Fri | 16 | 2 | 1 | Egress @ 2005-266T19:12 (101 min) \| Protection: HGA to Dust-Ram |
| S14 | 15 | 15CP (nt) | CALYPSO | 2005-266T18:50 | 23-Sep | Fri | 16 | 2 | 1 | Inbound 91042.6 km flyby, v = 7.0 km/s, phase = 83 deg |
| S14 | 15 | Dust Hazard | Pallene | 2005-266T19:09 | 23-Sep | Fri | 16 | 2 | 1 | Egress @ 2005-266T19:22 (12 min) \| Protection: MEA Cvr. Closure |
| S14 | 15 | 15AN (nt) | ANTHE | 2005-266T19:26 | 23-Sep | Fri | 16 | 2 | 1 | Inbound 121100.3 km flyby, v = 15.4 km/s, phase = 128 deg |
| S14 | 15 | 15MI (nt) | MIMAS | 2005-266T19:39 | 23-Sep | Fri | 16 | 2 | 1 | Inbound 70027.1 km flyby, v = 11.8 km/s, phase = 133 deg |
| S14 | 15 | Periapse | | 2005-266T21:35 | 23-Sep | Fri | 17 | 2 | 1 | R = 2.999 Rs, lat = 0 deg, phase = 107 deg |
| S14 | 15 | 15PM (nt) | PROMETHEUS | 2005-266T22:26 | 23-Sep | Fri | 17 | 2 | 1 | Outbound 98000.0 km flyby, v = 7.6 km/s, phase = 159 deg |
| S14 | 15 | Dust Hazard | E_ring_lg | 2005-266T23:59 | 23-Sep | Fri | 17 | 2 | 1 | Egress @ 2005-267T01:41 (101 min) \| Protection: MEA Cvr. Closure |
| S14 | 15 | 15TE (nt) | TETHYS | 2005-267T02:42 | 24-Sep | Sat | 17 | 2 | 1 | Outbound 1492.9 km flyby, v = 9.0 km/s, phase = 68 deg |
| S14 | 15 | Ring CRX | Descending | 2005-267T07:27 | 24-Sep | Sat | 17 | 2 | 1 | r = 7.444 Rs ( 449096 km) |
| S14 | 15 | 15TI (nt) | TITAN | 2005-267T22:47 | 24-Sep | Sat | 18 | 1 | 2 | Outbound 911726.7 km flyby, v = 10.7 km/s, phase = 149 deg |
| S14 | 15 | SOST | Segment | 2005-268T13:40 | 25-Sep | Sun | 18 | 1 | 2 | SOST_015HY (1d); SOST Rev 15 Targeted Hyperion |
| S14 | 15 | 15HY (t) H1 | HYPERION | 2005-269T02:24 | 26-Sep | Mon | 19 | 16 | 3 | Outbound 466.4 km flyby, v = 5.6 km/s, phase = 49 deg |
| S14 | 15 | XD | Segment | 2005-269T19:20 | 26-Sep | Mon | 1 | 15 | 4 | XD_015_016 (14d); Cross Discipline Segment Outbound 15 - Inbound 16 |
| S14 | 15 | OTM-035 | 15HY+3 | 2005-271T10:11 | 28-Sep | Wed | 2 | 13 | 5 | D/L start, burn ~6h later. Backup D/L 272T10:00 |
| S14 | 15 | OTM-036 | ~APO | 2005-274T08:26 | 01-Oct | Sat | 5 | 10 | 3 | D/L start, burn ~6h later. Backup D/L 275T11:00 |
| S14 | 16 | Apoapse | | 2005-275T23:33 | 02-Oct | Sun | 7 | 9 | 2 | Per = 18.2 d, inc = 0.3 deg, r = 41.173 Rs, phase = 74 deg |
| S14 | 16 | OTM-037 | 16DI-3 | 2005-281T03:30 | 08-Oct | Sat | 12 | 4 | 7 | D/L start, burn ~6h later. Backup D/L 282T09:12 |
| S15 | 16 | S15 Begins | | 2005-281T12:30 | 08-Oct | Sat | 12 | 3 | 0 | S15 Sequence. Duration = 35 d |
| S15 | 16 | SOST | Segment | 2005-283T18:27 | 10-Oct | Mon | 15 | 1 | 3 | SOST_016DI (3d); SOST Rev 16 Targeted Dione |
| S15 | 16 | 16TI (nt) | TITAN | 2005-283T22:22 | 10-Oct | Mon | 15 | 1 | 3 | Inbound 776295.6 km flyby, v = 9.7 km/s, phase = 65 deg |
| S15 | 16 | 16DI (t) D1 | DIONE | 2005-284T17:52 | 11-Oct | Tue | 16 | 16 | 4 | Inbound 498.3 km flyby, v = 9.1 km/s, phase = 66 deg |
| S15 | 16 | 16TL (nt) | TELESTO | 2005-284T20:25 | 11-Oct | Tue | 0 | 16 | 4 | Inbound 9517.6 km flyby, v = 8.7 km/s, phase = 63 deg |
| S15 | 16 | Ring CRX | Ascending | 2005-284T20:37 | 11-Oct | Tue | 0 | 16 | 4 | r = 4.766 Rs ( 287511 km) |
| S15 | 16 | Dust Hazard | E_ring_lg | 2005-284T21:25 | 11-Oct | Tue | 0 | 16 | 4 | Egress @ 2005-284T23:07 (101 min) \| Protection: MEA Cvr. Closure |
| S15 | 16 | 16PL (nt) | PALLENE | 2005-284T22:48 | 11-Oct | Tue | 0 | 16 | 4 | Inbound 50440.2 km flyby, v = 10.8 km/s, phase = 125 deg |
| S15 | 16 | Dust Hazard | Pallene | 2005-284T23:05 | 11-Oct | Tue | 0 | 16 | 4 | Egress @ 2005-284T23:06 (1 min) \| Protection: MEA Cvr. Closure |
| S15 | 16 | OTM-038 | 16DI+1 | 2005-284T23:57 | 11-Oct | Tue | 0 | 16 | 4 | D/L start, burn ~6h later. Backup D/L 286T10:40 |
| S15 | 16 | Periapse | | 2005-285T01:31 | 12-Oct | Wed | 0 | 16 | 0 | R = 3.002 Rs, lat = 0 deg, phase = 106 deg |
| S15 | 16 | 16AT (nt) | ATLAS | 2005-285T01:54 | 12-Oct | Wed | 0 | 16 | 0 | Outbound 55655.4 km flyby, v = 4.0 km/s, phase = 143 deg |
| S15 | 16 | 16EN (nt) | ENCELADUS | 2005-285T03:03 | 12-Oct | Wed | 0 | 16 | 0 | Outbound 49078.5 km flyby, v = 6.8 km/s, phase = 73 deg |
| S15 | 16 | Dust Hazard | E_ring_lg | 2005-285T04:51 | 12-Oct | Wed | 0 | 16 | 0 | Egress @ 2005-285T05:36 (45 min) \| Protection: MEA Cvr. Closure |
| S15 | 16 | Ring CRX | Descending | 2005-285T09:57 | 12-Oct | Wed | 1 | 16 | 0 | r = 6.687 Rs ( 403441 km) |
| S15 | 16 | XD | Segment | 2005-286T19:55 | 13-Oct | Thu | 2 | 14 | 2 | XD_016_017 (14d); Cross-Discipline Segment 16 Outbound-17 Inbound |
| S15 | 17 | Apoapse | | 2005-293T23:59 | 20-Oct | Thu | 9 | 7 | 9 | Per = 17.9 d, inc = 0.4 deg, r = 40.697 Rs, phase = 74 deg |
| S15 | 17 | OTM-039 | ~APO | 2005-294T08:58 | 21-Oct | Fri | 10 | 7 | 9 | D/L start, burn ~6h later. Backup D/L 295T01:29 |
| S15 | 17 | OTM-040 | 17TI-3 | 2005-298T01:14 | 25-Oct | Tue | 13 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 299T01:14 |
| S15 | 17 | TOST | Segment | 2005-300T18:29 | 27-Oct | Thu | 16 | 0 | 3 | TOST_017TI_T8 (2d); TOST Segment 017TI (T8) |
| S15 | 17 | 17TI (t) T8 | TITAN | 2005-301T04:15 | 28-Oct | Fri | 16 | 30 | 3 | Inbound 1352.7 km flyby, v = 5.9 km/s, phase = 105 deg * |
| S15 | 17 | Earth OCC | TITAN | 2005-301T04:23 | 28-Oct | Fri | 0 | 30 | 3 | Duration = 17 min; egress = 2005-301T04:41:05 |
| S15 | 17 | SATURN | Segment | 2005-302T09:49 | 29-Oct | Sat | 1 | 29 | 4 | Saturn_017 (2d); Saturn Rev 17 Periapse |
| S15 | 17 | Ring CRX | Ascending | 2005-302T21:24 | 29-Oct | Sat | 2 | 28 | 5 | r = 4.699 Rs ( 283491 km) |
| S15 | 17 | 17ME (nt) | METHONE | 2005-302T21:37 | 29-Oct | Sat | 2 | 28 | 5 | Inbound 98872.1 km flyby, v = 2.1 km/s, phase = 57 deg |
| S15 | 17 | Periapse | | 2005-302T22:56 | 29-Oct | Sat | 2 | 28 | 5 | R = 4.596 Rs, lat = 0 deg, phase = 92 deg |
| S15 | 17 | 17CP (nt) | CALYPSO | 2005-303T02:50 | 30-Oct | Sun | 2 | 28 | 5 | Outbound 107877.1 km flyby, v = 9.4 km/s, phase = 66 deg |
| S15 | 17 | OTM-041 | 17TI+3 | 2005-304T07:59 | 31-Oct | Mon | 3 | 27 | 6 | D/L start, burn ~6h later. Backup D/L 305T08:30 |
| S15 | 17 | XD | Segment | 2005-304T17:14 | 31-Oct | Mon | 4 | 26 | 0 | XD_017_018 (25d); Cross Discipline Segment Outbound 17-Inbound 18 |
| S15 | 17 | Ring CRX | Descending | 2005-309T17:09 | 05-Nov | Sat | 9 | 21 | 5 | r = 44.338 Rs (2674907 km) |
| S16 | 17 | S16 Begins | | 2005-316T17:01 | 12-Nov | Sat | 16 | 14 | 12 | S16 Sequence. Duration = 35 d |
| S16 | 18 | Apoapse | | 2005-317T04:57 | 13-Nov | Sun | 16 | 14 | 13 | Per = 28.5 d, inc = 0.4 deg, r = 55.088 Rs, phase = 88 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S16 | 18 | OTM-042 | ~APO | 2005-317T08:02 | 13-Nov | Sun | 16 | 14 | 13 | D/L start, burn ~6h later. Backup D/L 318T08:02 |
| S16 | 18 | OTM-043 | 18RH-3 | 2005-327T07:03 | 23-Nov | Wed | 26 | 4 | 10 | D/L start, burn ~6h later. Backup D/L 328T07:03 |
| S16 | 18 | SOST | Segment | 2005-329T15:48 | 25-Nov | Fri | 28 | 1 | 2 | SOST_018RH (4d); SOST Rev 18 Targeted Rhea |
| S16 | 18 | 18RH (t) R1 | RHEA | 2005-330T22:37 | 26-Nov | Sat | 30 | 30 | 4 | Inbound 503.6 km flyby, v = 7.3 km/s, phase = 87 deg |
| S16 | 18 | Ring CRX | Ascending | 2005-331T09:17 | 27-Nov | Sun | 0 | 29 | 4 | r = 4.762 Rs ( 287283 km) |
| S16 | 18 | 18EN (nt) | ENCELADUS | 2005-331T10:24 | 27-Nov | Sun | 0 | 29 | 4 | Inbound 107848.6 km flyby, v = 7.5 km/s, phase = 134 deg |
| S16 | 18 | Periapse | | 2005-331T11:21 | 27-Nov | Sun | 1 | 29 | 4 | R = 4.576 Rs, lat = 0 deg, phase = 92 deg |
| S16 | 18 | 18HE (nt) | HELENE | 2005-331T14:36 | 27-Nov | Sun | 1 | 29 | 4 | Outbound 86431.0 km flyby, v = 5.5 km/s, phase = 87 deg |
| S16 | 18 | OTM-044 | 18RH+1 | 2005-331T22:15 | 27-Nov | Sun | 1 | 29 | 5 | D/L start, burn ~6h later. Backup D/L 333T06:33 |
| S16 | 18 | XD | Segment | 2005-333T15:33 | 29-Nov | Tue | 3 | 27 | 2 | XD_018_019 (23d); Cross Discipline Segment Outbound 18-Inbound 19 |
| S16 | 18 | Ring CRX | Descending | 2005-336T04:43 | 02-Dec | Fri | 5 | 25 | 4 | r = 36.609 Rs (2208645 km) |
| S16 | 19 | Apoapse | | 2005-345T04:26 | 11-Dec | Sun | 14 | 16 | 13 | Per = 27.4 d, inc = 0.4 deg, r = 53.563 Rs, phase = 89 deg |
| S16 | 19 | OTM-045 | ~APO | 2005-345T05:35 | 11-Dec | Sun | 14 | 16 | 13 | D/L start, burn ~6h later. Backup D/L 346T05:35 |
| S17 | 19 | S17 Begins | | 2005-351T14:21 | 17-Dec | Sat | 21 | 9 | 6 | S17 Sequence. Duration = 41 d |
| S17 | 19 | MAG | Segment | 2005-356T14:21 | 22-Dec | Thu | 26 | 4 | 11 | MAG_019 (4d); Rev 19 |
| S17 | 19 | OTM-046 | 19TI-3 | 2005-357T06:25 | 23-Dec | Fri | 26 | 4 | 12 | D/L start, burn ~6h later. Backup D/L 358T04:40 |
| S17 | 19 | Ring CRX | Ascending | 2005-358T19:18 | 24-Dec | Sat | 28 | 2 | 2 | r = 4.761 Rs ( 287213 km) |
| S17 | 19 | 19EN (nt) | ENCELADUS | 2005-358T20:28 | 24-Dec | Sat | 28 | 2 | 2 | Inbound 94051.2 km flyby, v = 6.7 km/s, phase = 133 deg |
| S17 | 19 | Periapse | | 2005-358T21:23 | 24-Dec | Sat | 28 | 2 | 2 | R = 4.572 Rs, lat = 0 deg, phase = 91 deg |
| S17 | 19 | 19PL (nt) | PALLENE | 2005-358T22:25 | 24-Dec | Sat | 28 | 2 | 2 | Outbound 107287.6 km flyby, v = 4.4 km/s, phase = 142 deg |
| S17 | 19 | 19TL (nt) | TELESTO | 2005-359T00:44 | 25-Dec | Sun | 28 | 2 | 2 | Outbound 19270.5 km flyby, v = 5.9 km/s, phase = 70 deg |
| S17 | 19 | 19HE (nt) | HELENE | 2005-359T01:45 | 25-Dec | Sun | 28 | 2 | 2 | Outbound 74712.6 km flyby, v = 5.4 km/s, phase = 90 deg |
| S17 | 19 | TOST | Segment | 2005-360T06:59 | 26-Dec | Mon | 29 | 1 | 3 | TOST_019TI_T9 (1d); TOST Segment 019TI (T9) |
| S17 | 19 | 19TI (t) T9 | TITAN | 2005-360T18:59 | 26-Dec | Mon | 30 | 20 | 4 | Outbound 10410.9 km flyby, v = 5.6 km/s, phase = 67 deg |
| S17 | 19 | XD | Segment | 2005-361T13:34 | 27-Dec | Tue | 1 | 19 | 4 | XD_019_020 (18d); Cross Discipline Segment Outbound 19 - Inbound 20 |
| S17 | 19 | OTM-047 | 19TI+3 | 2005-363T20:47 | 29-Dec | Thu | 3 | 17 | 7 | D/L start, burn ~6h later. Backup D/L 365T04:07 |
| S17 | 19 | Ring CRX | Descending | 2005-363T21:55 | 29-Dec | Thu | 3 | 17 | 0 | r = 37.034 Rs (2234232 km) |
| S17 | 19 | OTM-048 | ~APO | 2006-002T20:22 | 02-Jan | Mon | 7 | 13 | 4 | D/L start, burn ~6h later. Backup D/L 004T04:17 |
| S17 | 20 | Apoapse | | 2006-005T14:08 | 05-Jan | Thu | 10 | 10 | 3 | Per = 23.4 d, inc = 0.4 deg, r = 48.276 Rs, phase = 94 deg |
| S17 | 20 | OTM-049 | 20TI-3 | 2006-012T03:23 | 12-Jan | Thu | 16 | 3 | 9 | D/L start, burn ~6h later. Backup D/L 013T03:23 |
| S17 | 20 | TOST | Segment | 2006-014T13:38 | 14-Jan | Sat | 19 | 1 | 2 | TOST_020TI_T10 (2d); TOST Segment 020TI (T10) |
| S17 | 20 | 20TI (t) T10 | TITAN | 2006-015T11:41 | 15-Jan | Sun | 20 | 43 | 3 | Inbound 2042.8 km flyby, v = 5.8 km/s, phase = 120 deg |
| S17 | 20 | Earth OCC | TITAN | 2006-015T11:48 | 15-Jan | Sun | 0 | 43 | 3 | Duration = 14 min; egress = 2006-015T12:03:23 |
| S17 | 20 | Sun OCC | TITAN | 2006-015T11:49 | 15-Jan | Sun | 0 | 43 | 3 | Duration = 13 min; egress = 2006-015T12:03:06 |
| S17 | 20 | SOST | Segment | 2006-016T12:05 | 16-Jan | Mon | 1 | 42 | 4 | SOST_020 (3d); SOST Rev 20 |
| S17 | 20 | Ring CRX | Ascending | 2006-017T06:24 | 17-Jan | Tue | 2 | 41 | 5 | r = 5.590 Rs ( 337262 km) |
| S17 | 20 | Periapse | | 2006-017T06:58 | 17-Jan | Tue | 2 | 41 | 5 | R = 5.580 Rs, lat = 0 deg, phase = 73 deg |
| S17 | 20 | OTM-050 | 20TI+3 | 2006-018T02:37 | 18-Jan | Wed | 3 | 40 | 6 | D/L start, burn ~6h later. Backup D/L 019T02:45 |
| S17 | 20 | XD | Segment | 2006-019T11:59 | 19-Jan | Thu | 4 | 39 | 1 | XD_020_021 (36d); Cross Discipline Segment Outbound 20 - Inbound 21 |
| S18 | 20 | S18 Begins | | 2006-027T04:03 | 27-Jan | Fri | 12 | 31 | 9 | S18 Sequence. Duration = 43 d |
| S18 | 20 | OTM-051 | ~APO | 2006-033T01:53 | 02-Feb | Thu | 18 | 25 | 15 | D/L start, burn ~6h later. Backup D/L 034T01:38 |
| S18 | 20 | Ring CRX | Descending | 2006-033T09:10 | 02-Feb | Thu | 18 | 25 | 0 | r = 66.710 Rs (4024598 km) |
| S18 | 21 | Apoapse | | 2006-036T20:57 | 05-Feb | Sun | 21 | 21 | 4 | Per = 39.2 d, inc = 0.4 deg, r = 68.151 Rs, phase = 107 deg |
| S18 | 21 | OTM-052 | 21TI-2 | 2006-055T00:26 | 24-Feb | Fri | 40 | 3 | 22 | D/L start, burn ~6h later. Backup D/L 055T16:05 |
| S18 | 21 | SATURN | Segment | 2006-055T09:22 | 24-Feb | Fri | 40 | 3 | 0 | Saturn_021 (2d); Saturn Rev 21 Periapse |
| S18 | 21 | 21HE (nt) | HELENE | 2006-056T04:47 | 25-Feb | Sat | 41 | 2 | 1 | Inbound 67543.7 km flyby, v = 7.1 km/s, phase = 92 deg |
| S18 | 21 | Ring CRX | Ascending | 2006-056T10:20 | 25-Feb | Sat | 41 | 2 | 1 | r = 5.587 Rs ( 337075 km) |
| S18 | 21 | Periapse | | 2006-056T10:55 | 25-Feb | Sat | 41 | 2 | 1 | R = 5.577 Rs, lat = 0 deg, phase = 72 deg |
| S18 | 21 | TOST | Segment | 2006-057T09:06 | 26-Feb | Sun | 42 | 1 | 2 | TOST_021TI_T11 (2d); TOST Segment 021TI (T11) |
| S18 | 21 | 21TI (t) T11 | TITAN | 2006-058T08:25 | 27-Feb | Mon | 43 | 20 | 3 | Outbound 1812.0 km flyby, v = 5.9 km/s, phase = 92 deg |
| S18 | 21 | XD | Segment | 2006-059T08:51 | 28-Feb | Tue | 1 | 19 | 4 | XD_021_022 (18d); Cross Discipline Segment Outbound 21 - Inbound 22 |
| S18 | 21 | OTM-053 | 21TI+3 | 2006-060T23:51 | 01-Mar | Wed | 3 | 17 | 6 | D/L start, burn ~6h later. Backup D/L 061T16:21 |
| S18 | 21 | OTM-054 | ~APO | 2006-064T23:36 | 05-Mar | Sun | 7 | 13 | 4 | D/L start, burn ~6h later. Backup D/L 065T15:51 |
| S18 | 22 | Apoapse | | 2006-068T03:34 | 09-Mar | Thu | 10 | 10 | 3 | Per = 23.3 d, inc = 0.4 deg, r = 48.363 Rs, phase = 122 deg |
| S19 | 22 | S19 Begins | | 2006-070T00:35 | 11-Mar | Sat | 12 | 8 | 5 | S19 Sequence. Duration = 42 d |
| S19 | 22 | Ring CRX | Descending | 2006-071T15:07 | 12-Mar | Sun | 13 | 6 | 7 | r = 45.465 Rs (2742929 km) |
| S19 | 22 | OTM-055 | 22TI-3 | 2006-074T22:50 | 15-Mar | Wed | 17 | 3 | 10 | D/L start, burn ~6h later. Backup D/L 075T22:50 |
| S19 | 22 | TOST | Segment | 2006-077T07:49 | 18-Mar | Sat | 19 | 1 | 2 | TOST_022TI_T12 (2d); TOST Segment 022TI (T12) |
| S19 | 22 | Sun OCC | TITAN | 2006-078T00:04 | 19-Mar | Sun | 20 | 0 | 3 | Duration = 15 min; egress = 2006-078T00:19:12 |
| S19 | 22 | 22TI (t) T12 | TITAN | 2006-078T00:05 | 19-Mar | Sun | 20 | 43 | 3 | Inbound 1949.2 km flyby, v = 5.8 km/s, phase = 148 deg |
| S19 | 22 | Earth OCC | TITAN | 2006-078T00:05 | 19-Mar | Sun | 0 | 43 | 3 | Duration = 14 min; egress = 2006-078T00:19:59 |
| S19 | 22 | SATURN | Segment | 2006-079T00:04 | 20-Mar | Mon | 1 | 42 | 4 | Saturn_022 (2d); Saturn Rev 22 Periapse (and SOST) |
| S19 | 22 | Periapse | | 2006-079T20:04 | 20-Mar | Mon | 2 | 41 | 5 | R = 5.477 Rs, lat = -0 deg, phase = 46 deg |
| S19 | 22 | Ring CRX | Ascending | 2006-079T22:42 | 20-Mar | Mon | 2 | 41 | 5 | r = 5.691 Rs ( 343344 km) |
| S19 | 22 | 22RH (nt) | RHEA | 2006-080T07:15 | 21-Mar | Tue | 2 | 41 | 5 | Outbound 82010.6 km flyby, v = 5.3 km/s, phase = 137 deg |
| S19 | 22 | OTM-056 | 22TI+3 | 2006-080T22:19 | 21-Mar | Tue | 3 | 40 | 6 | D/L start, burn ~6h later. Backup D/L 081T22:19 |
| S19 | 22 | XD | Segment | 2006-081T07:19 | 22-Mar | Wed | 3 | 40 | 0 | XD_022_023 (36d); Cross Discipline Segment Outbound 22 - Inbound 23 |
| S19 | 22 | OTM-057 | ~APO | 2006-095T21:32 | 05-Apr | Wed | 18 | 25 | 15 | D/L start, burn ~6h later. Backup D/L 096T21:17 |
| S19 | 23 | Apoapse | | 2006-099T10:05 | 09-Apr | Sun | 21 | 21 | 4 | Per = 39.2 d, inc = 0.4 deg, r = 68.250 Rs, phase = 135 deg |
| S20 | 23 | S20 Begins | | 2006-112T05:15 | 22-Apr | Sat | 34 | 9 | 16 | S20 Sequence. Duration = 42 d |
| S20 | 23 | Ring CRX | Descending | 2006-112T15:39 | 22-Apr | Sat | 35 | 8 | 17 | r = 45.195 Rs (2726590 km) |
| S20 | 23 | OTM-058 | 23TI-3 | 2006-116T19:59 | 26-Apr | Wed | 39 | 4 | 21 | D/L start, burn ~6h later. Backup D/L 117T19:59 |
| S20 | 23 | SATURN | Segment | 2006-117T04:59 | 27-Apr | Thu | 39 | 4 | 0 | Saturn_023 (3d); Saturn Rev 23 Periapse |
| S20 | 23 | Periapse | | 2006-118T23:59 | 28-Apr | Fri | 41 | 2 | 2 | R = 5.470 Rs, lat = -0 deg, phase = 44 deg |
| S20 | 23 | Ring CRX | Ascending | 2006-119T02:43 | 29-Apr | Sat | 41 | 2 | 2 | r = 5.701 Rs ( 343951 km) |
| S20 | 23 | TOST | Segment | 2006-120T04:44 | 30-Apr | Sun | 42 | 1 | 3 | TOST_023TI_T13 (2d); TOST Segment 023TI (T13) |
| S20 | 23 | 23TI (t) T13 | TITAN | 2006-120T20:58 | 30-Apr | Sun | 43 | 20 | 4 | Outbound 1855.8 km flyby, v = 5.8 km/s, phase = 121 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S20 | 23 | Sun OCC | TITAN | 2006-120T21:05 | 30-Apr | Sun | 0 | 20 | 4 | Duration = 16 min; egress = 2006-120T21:21:30 |
| S20 | 23 | Earth OCC | TITAN | 2006-120T21:10 | 30-Apr | Sun | 0 | 20 | 4 | Duration = 7 min; egress = 2006-120T21:17:48 |
| S20 | 23 | XD | Segment | 2006-121T21:14 | 01-May | Mon | 1 | 19 | 5 | XD_023_024 (18d); Cross Discipline Segment Outbound 23 - Inbound 24 |
| S20 | 23 | OTM-059 | 23TI+3 | 2006-123T19:28 | 03-May | Wed | 3 | 17 | 7 | D/L start, burn ~6h later. Backup D/L 124T20:58 |
| S20 | 23 | OTM-060 | ~APO | 2006-127T19:13 | 07-May | Sun | 7 | 13 | 4 | D/L start, burn ~6h later. Backup D/L 128T11:43 |
| S20 | 24 | Apoapse | | 2006-130T16:30 | 10-May | Wed | 10 | 10 | 3 | Per = 23.3 d, inc = 0.4 deg, r = 48.416 Rs, phase = 148 deg |
| S20 | 24 | OTM-061 | 24TI-3 | 2006-137T18:41 | 17-May | Wed | 17 | 3 | 10 | D/L start, burn ~6h later. Backup D/L 138T18:41 |
| S20 | 24 | TOST | Segment | 2006-139T19:56 | 19-May | Fri | 19 | 1 | 2 | TOST_024TI_T14 (2d); TOST Segment 024TI (T14) |
| S20 | 24 | Ring CRX | Descending | 2006-140T05:26 | 20-May | Sat | 19 | 0 | 2 | r = 22.722 Rs (1370834 km) |
| S20 | 24 | Sun OCC | TITAN | 2006-140T12:10 | 20-May | Sat | 20 | 0 | 3 | Duration = 14 min; egress = 2006-140T12:24:38 |
| S20 | 24 | Earth OCC | TITAN | 2006-140T12:11 | 20-May | Sat | 20 | 0 | 3 | Duration = 14 min; egress = 2006-140T12:25:32 |
| S20 | 24 | 24TI (t) T14 | TITAN | 2006-140T12:18 | 20-May | Sat | 20 | 43 | 3 | Inbound 1879.0 km flyby, v = 5.8 km/s, phase = 163 deg |
| S20 | 24 | SATURN | Segment | 2006-141T19:56 | 21-May | Sun | 1 | 42 | 4 | Saturn_024 (2d); Saturn Rev 24 Periapse |
| S20 | 24 | Periapse | | 2006-142T09:00 | 22-May | Mon | 2 | 41 | 5 | R = 5.452 Rs, lat = -0 deg, phase = 21 deg |
| S20 | 24 | 24PO (nt) | POLYDEUCES | 2006-142T14:53 | 22-May | Mon | 2 | 41 | 5 | Outbound 64078.3 km flyby, v = 6.9 km/s, phase = 19 deg |
| S20 | 24 | Ring CRX | Ascending | 2006-142T15:14 | 22-May | Mon | 2 | 41 | 5 | r = 6.537 Rs ( 394387 km) |
| S20 | 24 | OTM-062 | 24TI+3 | 2006-143T10:41 | 23-May | Tue | 3 | 40 | 6 | D/L start, burn ~6h later. Backup D/L 144T18:11 |
| S20 | 24 | XD | Segment | 2006-143T19:41 | 23-May | Tue | 3 | 40 | 0 | XD_024_025 (35d); Cross-Discipline Segment Outbound 24 - Inbound 25 |
| S21 | 24 | S21 Begins | | 2006-154T02:39 | 03-Jun | Sat | 14 | 29 | 11 | S21 Sequence. Duration = 44 d |
| S21 | 24 | OTM-063 | ~APO | 2006-158T17:24 | 07-Jun | Wed | 18 | 25 | 15 | D/L start, burn ~6h later. Backup D/L 159T17:09 |
| S21 | 25 | Apoapse | | 2006-161T23:07 | 10-Jun | Sat | 21 | 21 | 3 | Per = 39.2 d, inc = 0.4 deg, r = 68.286 Rs, phase = 159 deg |
| S21 | 25 | SATURN | Segment | 2006-179T01:07 | 28-Jun | Wed | 39 | 4 | 20 | Saturn_025 (4d); Saturn Rev 25 Periapse |
| S21 | 25 | OTM-064 | 25TI-3 | 2006-179T16:07 | 28-Jun | Wed | 39 | 4 | 21 | D/L start, burn ~6h later. Backup D/L 180T08:37 |
| S21 | 25 | Ring CRX | Descending | 2006-180T01:37 | 29-Jun | Thu | 40 | 3 | 0 | r = 17.579 Rs (1060542 km) |
| S21 | 25 | Periapse | | 2006-181T13:05 | 30-Jun | Fri | 41 | 2 | 2 | R = 5.437 Rs, lat = -0 deg, phase = 20 deg |
| S21 | 25 | Ring CRX | Ascending | 2006-181T20:53 | 30-Jun | Fri | 41 | 2 | 2 | r = 7.050 Rs ( 425323 km) |
| S21 | 25 | TOST | Segment | 2006-182T17:22 | 01-Jul | Sat | 42 | 1 | 3 | TOST_025TI_T15 (2d); TOST Segment 025TI (T15) |
| S21 | 25 | Sun OCC | TITAN | 2006-183T09:19 | 02-Jul | Sun | 43 | 0 | 4 | Duration = 15 min; egress = 2006-183T09:34:25 |
| S21 | 25 | 25TI (t) T15 | TITAN | 2006-183T09:20 | 02-Jul | Sun | 43 | 20 | 4 | Outbound 1905.9 km flyby, v = 5.8 km/s, phase = 148 deg |
| S21 | 25 | Earth OCC | TITAN | 2006-183T09:20 | 02-Jul | Sun | 0 | 20 | 4 | Duration = 15 min; egress = 2006-183T09:35:02 |
| S21 | 25 | XD | Segment | 2006-184T17:22 | 03-Jul | Mon | 1 | 18 | 5 | XD_025_026 (17d); Cross Discipline Segment Outbound 25 - Inbound 26 |
| S21 | 25 | OTM-065 | 25TI+3 | 2006-186T15:36 | 05-Jul | Wed | 3 | 16 | 7 | D/L start, burn ~6h later. Backup D/L 187T15:36 |
| S21 | 25 | OTM-066 | ~APO | 2006-191T15:21 | 10-Jul | Mon | 8 | 11 | 5 | D/L start, burn ~6h later. Backup D/L 192T15:21 |
| S21 | 26 | Apoapse | | 2006-193T05:18 | 12-Jul | Wed | 10 | 10 | 2 | Per = 23.3 d, inc = 0.4 deg, r = 48.376 Rs, phase = 164 deg |
| S22 | 26 | S22 Begins | | 2006-198T00:06 | 17-Jul | Mon | 15 | 5 | 6 | S22 Sequence. Duration = 34 d |
| S22 | 26 | OTM-067 | 26TI-3 | 2006-199T14:51 | 18-Jul | Tue | 16 | 3 | 8 | D/L start, burn ~6h later. Backup D/L 200T14:51 |
| S22 | 26 | TOST | Segment | 2006-201T23:51 | 20-Jul | Thu | 19 | 1 | 2 | TOST_025TI_T16 (2d); TOST Segment 026TI (T16) |
| S22 | 26 | 26TI (t) T16 | TITAN | 2006-203T00:25 | 22-Jul | Sat | 20 | 48 | 3 | Inbound 949.9 km flyby, v = 6.0 km/s, phase = 105 deg |
| S22 | 26 | Ring CRX | Descending | 2006-203T02:35 | 22-Jul | Sat | 0 | 48 | 3 | r = 20.126 Rs (1214220 km) |
| S22 | 26 | RINGS | Segment | 2006-203T23:36 | 22-Jul | Sat | 1 | 47 | 4 | RINGS_Rev_26 (4d); Rings Rev 26 |
| S22 | 26 | 26TE (nt) | TETHYS | 2006-204T17:17 | 23-Jul | Sun | 2 | 46 | 5 | Inbound 119805.5 km flyby, v = 9.9 km/s, phase = 29 deg |
| S22 | 26 | Periapse | | 2006-204T21:47 | 23-Jul | Sun | 2 | 46 | 5 | R = 4.192 Rs, lat = -10 deg, phase = 8 deg |
| S22 | 26 | 26AG (nt) | AEGAEON | 2006-204T22:46 | 23-Jul | Sun | 2 | 46 | 5 | Outbound 93380.0 km flyby, v = 3.8 km/s, phase = 16 deg |
| S22 | 26 | Ring CRX | Ascending | 2006-205T01:14 | 24-Jul | Mon | 2 | 46 | 5 | r = 4.773 Rs ( 287948 km) |
| S22 | 26 | 26TL (nt) | TELESTO | 2006-205T01:57 | 24-Jul | Mon | 2 | 46 | 5 | Outbound 44793.4 km flyby, v = 8.6 km/s, phase = 39 deg |
| S22 | 26 | OTM-068 | 26TI+3 | 2006-205T14:30 | 24-Jul | Mon | 3 | 45 | 6 | D/L start, burn ~6h later. Backup D/L 206T14:30 |
| S22 | 26 | XD | Segment | 2006-207T23:21 | 26-Jul | Wed | 5 | 43 | 2 | XD_026_027 (18d); Cross Discipline Segment Outbound 26 - Inbound 27 |
| S22 | 26 | OTM-069 | ~APO | 2006-213T14:05 | 01-Aug | Tue | 11 | 37 | 8 | D/L start, burn ~6h later. Backup D/L 214T14:05 |
| S22 | 26 | SEP = 3.0 deg | Conjunction | 2006-215T23:59 | 03-Aug | Thu | 13 | 35 | 2 | Commanding must not be required below 3.0 deg |
| S22 | 27 | Apoapse | | 2006-216T21:21 | 04-Aug | Fri | 14 | 34 | 3 | Per = 24.0 d, inc = 14.9 deg, r = 48.960 Rs, phase = 172 deg |
| S22 | 27 | SEP = 2.0 deg | Conjunction | 2006-217T06:46 | 05-Aug | Sat | 14 | 34 | 4 | Plan no SSR playback below 2.0 deg |
| S22 | 27 | SEP = 1.0 deg | Conjunction | 2006-218T18:34 | 06-Aug | Sun | 16 | 32 | 5 | Require no DSN passes below 1.0 deg |
| S22 | 27 | SEP = 1.0 deg | Conjunction | 2006-220T05:41 | 08-Aug | Tue | 17 | 31 | 7 | Require no DSN passes below 1.0 deg |
| S22 | 27 | SEP = 2.0 deg | Conjunction | 2006-221T17:26 | 09-Aug | Wed | 19 | 29 | 8 | Plan no SSR playback below 2.0 deg |
| S22 | 27 | SEP = 3.0 deg | Conjunction | 2006-223T00:08 | 11-Aug | Fri | 20 | 28 | 9 | Commanding must not be required below 3.0 deg |
| S22 | 27 | SATURN | Segment | 2006-225T22:12 | 13-Aug | Sun | 23 | 25 | 12 | Saturn_027 (6d); Saturn_027 Inclined |
| S22 | 27 | Ring CRX | Descending | 2006-227T02:13 | 15-Aug | Tue | 24 | 24 | 14 | r = 19.960 Rs (1204176 km) |
| S22 | 27 | Periapse | | 2006-228T20:53 | 16-Aug | Wed | 26 | 22 | 15 | R = 4.180 Rs, lat = -10 deg, phase = 8 deg |
| S22 | 27 | Ring CRX | Ascending | 2006-229T00:20 | 17-Aug | Thu | 26 | 22 | 15 | r = 4.766 Rs ( 287518 km) |
| S22 | 27 | 27HE (nt) | HELENE | 2006-229T03:28 | 17-Aug | Thu | 26 | 22 | 16 | Outbound 48727.7 km flyby, v = 7.7 km/s, phase = 122 deg |
| S22 | 27 | 27TI (nt) | TITAN | 2006-230T17:50 | 18-Aug | Fri | 28 | 20 | 17 | Outbound 339767.9 km flyby, v = 4.8 km/s, phase = 121 deg |
| S23 | 27 | S23 Begins | | 2006-231T22:06 | 19-Aug | Sat | 29 | 19 | 18 | S23 Sequence. Duration = 32 d |
| S23 | 27 | XD | Segment | 2006-231T22:06 | 19-Aug | Sat | 29 | 19 | 18 | XD_027_028 (18d); Cross Discipline Segement Outbound 27 - Inbound 28 |
| S23 | 28 | Apoapse | | 2006-240T19:15 | 28-Aug | Mon | 38 | 10 | 27 | Per = 23.9 d, inc = 14.9 deg, r = 48.821 Rs, phase = 172 deg |
| S23 | 28 | OTM-070 | 28TI-3 | 2006-247T12:21 | 04-Sep | Mon | 44 | 3 | 34 | D/L start, burn ~6h later. Backup D/L 248T12:06 |
| S23 | 28 | TOST | Segment | 2006-249T21:06 | 06-Sep | Wed | 47 | 1 | 2 | TOST_028TI_T17 (2d); TOST 028TI (T17) Flyby |
| S23 | 28 | 28TI (t) T17 | TITAN | 2006-250T20:16 | 07-Sep | Thu | 48 | 16 | 3 | Inbound 999.5 km flyby, v = 6.0 km/s, phase = 45 deg |
| S23 | 28 | Ring CRX | Descending | 2006-250T21:22 | 07-Sep | Thu | 0 | 16 | 3 | r = 20.463 Rs (1234524 km) |
| S23 | 28 | RINGS | Segment | 2006-251T21:06 | 08-Sep | Fri | 1 | 15 | 4 | RINGS_Rev_28A (3d); Rings Rev 28 Peri |
| S23 | 28 | 28AT (nt) | ATLAS | 2006-252T17:32 | 09-Sep | Sat | 2 | 14 | 5 | Inbound 119810.6 km flyby, v = 15.0 km/s, phase = 47 deg |
| S23 | 28 | Periapse | | 2006-252T17:42 | 09-Sep | Sat | 2 | 14 | 5 | R = 2.957 Rs, lat = -12 deg, phase = 7 deg |
| S23 | 28 | Dust Hazard | Methone | 2006-252T19:06 | 09-Sep | Sat | 2 | 14 | 5 | Egress @ 2006-252T19:06 (0 min) \| Protection: None |
| S23 | 28 | Ring CRX | Ascending | 2006-252T19:06 | 09-Sep | Sat | 2 | 14 | 5 | r = 3.162 Rs ( 190756 km) |
| S23 | 28 | 28ME (nt) | METHONE | 2006-252T19:16 | 09-Sep | Sat | 2 | 14 | 5 | Outbound 15117.9 km flyby, v = 10.2 km/s, phase = 62 deg |
| S23 | 28 | 28CP (nt) | CALYPSO | 2006-252T19:24 | 09-Sep | Sat | 2 | 14 | 5 | Outbound 107227.5 km flyby, v = 9.7 km/s, phase = 162 deg |
| S23 | 28 | 28EN (nt) | ENCELADUS | 2006-252T20:06 | 09-Sep | Sat | 2 | 14 | 5 | Outbound 39935.4 km flyby, v = 10.4 km/s, phase = 111 deg |
| S23 | 28 | OTM-071 | 28TI+3 | 2006-253T12:00 | 10-Sep | Sun | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 254T12:00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S23 | 28 | SATURN | Segment | 2006-254T21:00 | 11-Sep | Mon | 4 | 12 | 1 | Saturn_028 (1d); Saturn 028 Inclined |
| S23 | 28 | MAG | Segment | 2006-255T21:00 | 12-Sep | Tue | 5 | 11 | 2 | MAG_028 (2d); MAGTWT Rev 28 |
| S23 | 28 | OTM-072 | ~APO | 2006-257T04:07 | 14-Sep | Thu | 6 | 10 | 4 | D/L start, burn ~6h later. Backup D/L 257T10:22 |
| S23 | 28 | Sun OCC | RING | 2006-257T17:53 | 14-Sep | Thu | 7 | 9 | 1 | Duration = 1429 min; egress = 2006-258T17:42:47 |
| S23 | 28 | RINGS | Segment | 2006-257T19:22 | 14-Sep | Thu | 7 | 9 | 1 | RINGS_Rev_28B (3d); RINGS Rev 28 APO |
| S23 | 28 | Sun OCC | SATURN | 2006-258T08:28 | 15-Sep | Fri | 8 | 8 | 1 | Duration = 900 min; egress = 2006-258T23:29:04 |
| S23 | 28 | Earth OCC | RING | 2006-258T18:20 | 15-Sep | Fri | 8 | 8 | 2 | Duration = 1613 min; egress = 2006-259T21:13:08 |
| S23 | 28 | Earth OCC | SATURN | 2006-259T06:10 | 16-Sep | Sat | 8 | 8 | 2 | Duration = 1149 min; egress = 2006-260T01:19:33 |
| S23 | 28 | XD | Segment | 2006-260T14:07 | 17-Sep | Sun | 10 | 6 | 3 | XD_028_029 (5d); Cross Discipline Segment Outbound 28 - Inbound 29 |
| S23 | 29 | Apoapse | | 2006-260T17:10 | 17-Sep | Sun | 10 | 6 | 4 | Per = 16.0 d, inc = 24.5 deg, r = 37.571 Rs, phase = 173 deg |
| S23 | 29 | OTM-073 | 29TI-3 | 2006-263T10:32 | 20-Sep | Wed | 13 | 3 | 6 | D/L start, burn ~6h later. Backup D/L 264T11:22 |
| S24 | 29 | S24 Begins | | 2006-263T20:22 | 20-Sep | Wed | 13 | 3 | 0 | S24 Sequence. Duration = 32 d |
| S24 | 29 | TOST | Segment | 2006-265T20:07 | 22-Sep | Fri | 15 | 1 | 2 | TOST_029TI_T18 (2d); TOST Segment 029TI (T18) |
| S24 | 29 | 29TI (t) T18 | TITAN | 2006-266T18:58 | 23-Sep | Sat | 16 | 16 | 3 | Inbound 959.8 km flyby, v = 6.0 km/s, phase = 90 deg |
| S24 | 29 | Ring CRX | Descending | 2006-266T19:54 | 23-Sep | Sat | 0 | 16 | 3 | r = 20.534 Rs (1238800 km) |
| S24 | 29 | RINGS | Segment | 2006-267T20:00 | 24-Sep | Sun | 1 | 15 | 4 | RINGS_Rev_29 (4d); RINGS Rev 29 |
| S24 | 29 | Periapse | | 2006-268T19:41 | 25-Sep | Mon | 2 | 14 | 5 | R = 3.983 Rs, lat = -21 deg, phase = 7 deg |
| S24 | 29 | 29AG (nt) | AEGAEON | 2006-268T20:19 | 25-Sep | Mon | 2 | 14 | 5 | Outbound 107424.2 km flyby, v = 11.8 km/s, phase = 29 deg |
| S24 | 29 | 29ME (nt) | METHONE | 2006-268T21:44 | 25-Sep | Mon | 2 | 14 | 5 | Outbound 63838.0 km flyby, v = 10.1 km/s, phase = 39 deg |
| S24 | 29 | Dust Hazard | E_ring_lg | 2006-268T22:17 | 25-Sep | Mon | 2 | 14 | 5 | Egress @ 2006-268T22:18 (0 min) \| Protection: None |
| S24 | 29 | Ring CRX | Ascending | 2006-268T22:19 | 25-Sep | Mon | 2 | 14 | 5 | r = 4.350 Rs ( 262432 km) |
| S24 | 29 | OTM-074 | 29TI+3 | 2006-269T11:30 | 26-Sep | Tue | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 270T11:30 |
| S24 | 29 | XD | Segment | 2006-271T19:53 | 28-Sep | Thu | 5 | 11 | 2 | XD_029_030 (10d); Cross Discipline Segment Outbound 29 - Inbound 30 |
| S24 | 29 | OTM-075 | ~APO | 2006-274T03:08 | 01-Oct | Sun | 7 | 9 | 5 | D/L start, burn ~6h later. Backup D/L 275T10:38 |
| S24 | 30 | Apoapse | | 2006-276T19:03 | 03-Oct | Tue | 10 | 6 | 3 | Per = 15.9 d, inc = 37.6 deg, r = 36.521 Rs, phase = 173 deg |
| S24 | 30 | OTM-076 | 30TI-3 | 2006-279T10:24 | 06-Oct | Fri | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 280T10:24 |
| S24 | 30 | TOST | Segment | 2006-281T19:24 | 08-Oct | Sun | 15 | 1 | 2 | TOST_030TI_T19 (2d); TOST 030TI (T19) Flyby |
| S24 | 30 | 30TI (t) T19 | TITAN | 2006-282T17:30 | 09-Oct | Mon | 16 | 16 | 3 | Inbound 979.7 km flyby, v = 6.0 km/s, phase = 81 deg |
| S24 | 30 | Ring CRX | Descending | 2006-282T18:09 | 09-Oct | Mon | 0 | 16 | 3 | r = 20.616 Rs (1243734 km) |
| S24 | 30 | SATURN | Segment | 2006-283T19:00 | 10-Oct | Tue | 1 | 15 | 4 | Saturn_030 (1d); Saturn 030 Inbound |
| S24 | 30 | RINGS | Segment | 2006-284T19:09 | 11-Oct | Wed | 2 | 14 | 5 | RINGS_Rev_30 (4d); RINGS Rev 30 |
| S24 | 30 | Periapse | | 2006-284T22:58 | 11-Oct | Wed | 2 | 14 | 6 | R = 5.507 Rs, lat = -29 deg, phase = 14 deg |
| S24 | 30 | Ring CRX | Ascending | 2006-285T04:13 | 12-Oct | Thu | 2 | 13 | 6 | r = 6.184 Rs ( 373081 km) |
| S24 | 30 | OTM-077 | 30TI+3 | 2006-285T10:10 | 12-Oct | Thu | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 286T09:55 |
| S24 | 30 | XD | Segment | 2006-288T18:55 | 15-Oct | Sun | 6 | 10 | 3 | XD_030_031 (8d); Cross Discipline Segment Outbound 30 - Inbound 31 |
| S24 | 30 | OTM-078 | ~APO | 2006-290T09:40 | 17-Oct | Tue | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 291T02:10 |
| S24 | 31 | Apoapse | | 2006-292T22:17 | 19-Oct | Thu | 10 | 6 | 3 | Per = 15.9 d, inc = 46.6 deg, r = 34.980 Rs, phase = 166 deg |
| S24 | 31 | OTM-079 | 31TI-3 | 2006-295T09:26 | 22-Oct | Sun | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 296T01:56 |
| S25 | 31 | S25 Begins | | 2006-295T18:26 | 22-Oct | Sun | 13 | 3 | 0 | S25 Sequence. Duration = 33 d |
| S25 | 31 | TOST | Segment | 2006-296T10:56 | 23-Oct | Mon | 14 | 2 | 1 | TOST_031TI_T20 (3d); TOST_031TI (T20) Flyby |
| S25 | 31 | 31TI (t) T20 | TITAN | 2006-298T15:58 | 25-Oct | Wed | 16 | 48 | 3 | Inbound 1029.5 km flyby, v = 6.0 km/s, phase = 25 deg |
| S25 | 31 | Ring CRX | Descending | 2006-298T16:19 | 25-Oct | Wed | 0 | 48 | 3 | r = 20.688 Rs (1248126 km) |
| S25 | 31 | RINGS | Segment | 2006-299T14:56 | 26-Oct | Thu | 1 | 47 | 4 | RINGS_Rev_31 (3d); RINGS Rev 31 |
| S25 | 31 | Periapse | | 2006-301T00:10 | 28-Oct | Sat | 2 | 45 | 6 | R = 4.656 Rs, lat = -26 deg, phase = 16 deg |
| S25 | 31 | Ring CRX | Ascending | 2006-301T03:09 | 28-Oct | Sat | 2 | 45 | 6 | r = 4.972 Rs ( 299940 km) |
| S25 | 31 | SATURN | Segment | 2006-302T10:42 | 29-Oct | Sun | 4 | 44 | 7 | Saturn_031 (2d); Saturn 031 Outbound |
| S25 | 31 | XD | Segment | 2006-304T17:57 | 31-Oct | Tue | 6 | 42 | 9 | XD_031_032 (5d); Cross Discipline Segment Outbound 31 - Inbound 32 |
| S25 | 32 | Apoapse | | 2006-307T00:04 | 03-Nov | Fri | 8 | 39 | 12 | Per = 12.0 d, inc = 55.0 deg, r = 28.836 Rs, phase = 164 deg |
| S25 | 32 | RINGS | Segment | 2006-309T17:42 | 05-Nov | Sun | 11 | 37 | 14 | RINGS_Rev_32 (5d); RINGS Rev 32 |
| S25 | 32 | Ring CRX | Descending | 2006-310T15:55 | 06-Nov | Mon | 12 | 36 | 15 | r = 20.721 Rs (1250080 km) |
| S25 | 32 | Periapse | | 2006-313T00:00 | 09-Nov | Thu | 14 | 33 | 18 | R = 4.662 Rs, lat = -26 deg, phase = 16 deg |
| S25 | 32 | 32EN (nt) | ENCELADUS | 2006-313T01:47 | 09-Nov | Thu | 14 | 33 | 18 | Outbound 90225.4 km flyby, v = 14.0 km/s, phase = 26 deg |
| S25 | 32 | Ring CRX | Ascending | 2006-313T02:59 | 09-Nov | Thu | 14 | 33 | 18 | r = 4.977 Rs ( 300288 km) |
| S25 | 32 | 32CP (nt) | CALYPSO | 2006-313T03:44 | 09-Nov | Thu | 14 | 33 | 18 | Outbound 116097.3 km flyby, v = 11.7 km/s, phase = 111 deg |
| S25 | 32 | OTM-080 | ~PERI | 2006-313T08:28 | 09-Nov | Thu | 15 | 33 | 18 | D/L start, burn ~6h later. Backup D/L 314T00:58 |
| S25 | 32 | SATURN | Segment | 2006-314T09:58 | 10-Nov | Fri | 16 | 32 | 1 | Saturn_032 (2d); Saturn 032 Outbound |
| S25 | 32 | XD | Segment | 2006-316T17:13 | 12-Nov | Sun | 18 | 30 | 3 | XD_032_033 (5d); Cross Discipline Segment Outbound 32 - Inbound 33 |
| S25 | 33 | Apoapse | | 2006-318T23:30 | 14-Nov | Tue | 20 | 28 | 6 | Per = 12.0 d, inc = 55.0 deg, r = 28.779 Rs, phase = 164 deg |
| S25 | 33 | RINGS | Segment | 2006-321T16:59 | 17-Nov | Fri | 23 | 25 | 8 | RINGS_Rev_33 (7d); RINGS Rev 33 |
| S25 | 33 | Ring CRX | Descending | 2006-322T15:10 | 18-Nov | Sat | 24 | 24 | 9 | r = 20.669 Rs (1246977 km) |
| S25 | 33 | Periapse | | 2006-324T23:02 | 20-Nov | Mon | 26 | 22 | 12 | R = 4.654 Rs, lat = -26 deg, phase = 16 deg |
| S25 | 33 | Ring CRX | Ascending | 2006-325T02:00 | 21-Nov | Tue | 26 | 21 | 12 | r = 4.969 Rs ( 299769 km) |
| S25 | 33 | 33DI (nt) | DIONE | 2006-325T02:28 | 21-Nov | Tue | 26 | 21 | 12 | Outbound 74999.8 km flyby, v = 12.2 km/s, phase = 147 deg |
| S25 | 33 | 33TI (nt) | TITAN | 2006-325T13:35 | 21-Nov | Tue | 27 | 21 | 12 | Outbound 973181.9 km flyby, v = 8.0 km/s, phase = 78 deg |
| S26 | 33 | S26 Begins | | 2006-328T16:30 | 24-Nov | Fri | 30 | 18 | 15 | S26 Sequence. Duration = 42 d |
| S26 | 33 | XD | Segment | 2006-328T16:30 | 24-Nov | Fri | 30 | 18 | 15 | XD_033_034 (5d); Cross Discipline Segment Outbound 33 - Inbound 34 |
| S26 | 33 | 33TI (nt) | TITAN | 2006-329T13:28 | 25-Nov | Sat | 31 | 17 | 16 | Outbound 925037.2 km flyby, v = 4.5 km/s, phase = 115 deg |
| S26 | 33 | OTM-081 | ~APO | 2006-330T07:15 | 26-Nov | Sun | 32 | 16 | 17 | D/L start, burn ~6h later. Backup D/L 331T07:15 |
| S26 | 34 | Apoapse | | 2006-330T22:19 | 26-Nov | Sun | 32 | 16 | 1 | Per = 11.9 d, inc = 55.0 deg, r = 28.754 Rs, phase = 164 deg |
| S26 | 34 | RINGS | Segment | 2006-333T16:16 | 29-Nov | Wed | 35 | 13 | 3 | RINGS_Rev_34in (2d); RINGS Rev 34-inbound |
| S26 | 34 | Ring CRX | Descending | 2006-334T13:44 | 30-Nov | Thu | 36 | 12 | 4 | r = 20.673 Rs (1247201 km) |
| S26 | 34 | SATURN | Segment | 2006-335T08:31 | 01-Dec | Fri | 37 | 11 | 5 | Saturn_034 (1d); Saturn 034 Inbound |
| S26 | 34 | RINGS | Segment | 2006-336T08:31 | 02-Dec | Sat | 38 | 10 | 6 | RINGS_Rev_34out (4d); RINGS Rev 34-periapsis and outbound |
| S26 | 34 | Periapse | | 2006-336T21:38 | 02-Dec | Sat | 38 | 10 | 7 | R = 4.655 Rs, lat = -26 deg, phase = 15 deg |
| S26 | 34 | 34TI (nt) | TITAN | 2006-336T23:16 | 02-Dec | Sat | 38 | 10 | 7 | Outbound 945244.5 km flyby, v = 12.2 km/s, phase = 159 deg |
| S26 | 34 | Ring CRX | Ascending | 2006-337T00:37 | 03-Dec | Sun | 38 | 9 | 7 | r = 4.970 Rs ( 299813 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S26 | 34 | 34TL (nt) | TELESTO | 2006-337T01:19 | 03-Dec | Sun | 38 | 9 | 7 | Outbound 102503.7 km flyby, v = 12.1 km/s, phase = 111 deg |
| S26 | 34 | XD | Segment | 2006-340T15:47 | 06-Dec | Wed | 42 | 6 | 10 | XD_034_035 (5d); Cross Discipline Segment Outbound 34 - Inbound 35 |
| S26 | 35 | Apoapse | | 2006-342T21:01 | 08-Dec | Fri | 44 | 4 | 13 | Per = 12.0 d, inc = 55.0 deg, r = 28.757 Rs, phase = 165 deg |
| S26 | 35 | OTM-082 | 35TI-3 | 2006-343T06:32 | 09-Dec | Sat | 45 | 3 | 13 | D/L start, burn ~6h later. Backup D/L 344T06:32 |
| S26 | 35 | TOST | Segment | 2006-345T15:17 | 11-Dec | Mon | 47 | 1 | 2 | TOST_035TI_T21 (2d); TOST Segment 035TI (T21) |
| S26 | 35 | 35TI (t) T21 | TITAN | 2006-346T11:41 | 12-Dec | Tue | 48 | 16 | 3 | Inbound 1000.0 km flyby, v = 5.9 km/s, phase = 125 deg |
| S26 | 35 | Ring CRX | Descending | 2006-346T12:09 | 12-Dec | Tue | 0 | 16 | 3 | r = 20.713 Rs (1249590 km) |
| S26 | 35 | SATURN | Segment | 2006-347T12:18 | 13-Dec | Wed | 1 | 15 | 4 | Saturn_035 (1d); Saturn 035 Inbound |
| S26 | 35 | RINGS | Segment | 2006-348T06:28 | 14-Dec | Thu | 2 | 14 | 5 | RINGS_Rev_35 (4d); RINGS Rev 35 |
| S26 | 35 | Periapse | | 2006-349T00:01 | 15-Dec | Fri | 3 | 13 | 6 | R = 7.606 Rs, lat = -37 deg, phase = 23 deg |
| S26 | 35 | OTM-083 | 35TI+3 | 2006-349T06:03 | 15-Dec | Fri | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 350T05:45 |
| S26 | 35 | Ring CRX | Ascending | 2006-349T10:34 | 15-Dec | Fri | 3 | 13 | 0 | r = 8.802 Rs ( 531024 km) |
| S26 | 35 | XD | Segment | 2006-352T15:03 | 18-Dec | Mon | 6 | 10 | 3 | XD_035_036 (9d); Cross Discipline Segment Outbound 35 - Inbound 36 |
| S26 | 35 | OTM-084 | ~APO | 2006-354T05:48 | 20-Dec | Wed | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 355T05:49 |
| S26 | 36 | Apoapse | | 2006-356T23:09 | 22-Dec | Fri | 10 | 5 | 3 | Per = 15.9 d, inc = 52.8 deg, r = 32.888 Rs, phase = 157 deg |
| S26 | 36 | OTM-085 | 36TI-3 | 2006-359T05:34 | 25-Dec | Mon | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 360T05:19 |
| S26 | 36 | TOST | Segment | 2006-361T14:19 | 27-Dec | Wed | 15 | 1 | 2 | TOST_036TI_T22 (2d); TOST Segment 036TI (T22) |
| S26 | 36 | 36TI (t) T22 | TITAN | 2006-362T10:05 | 28-Dec | Thu | 16 | 16 | 3 | Inbound 1296.8 km flyby, v = 5.9 km/s, phase = 62 deg |
| S26 | 36 | Ring CRX | Descending | 2006-362T10:30 | 28-Dec | Thu | 0 | 16 | 3 | r = 20.686 Rs (1247986 km) |
| S26 | 36 | RINGS | Segment | 2006-363T06:49 | 29-Dec | Fri | 1 | 15 | 4 | RINGS_Rev_36 (6d); RINGS Rev 36 |
| S26 | 36 | OTM-086 | 36TI+3 | 2006-365T05:05 | 31-Dec | Sun | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 001T05:05 |
| S26 | 36 | Periapse | | 2006-365T05:17 | 31-Dec | Sun | 3 | 13 | 0 | R = 9.811 Rs, lat = -44 deg, phase = 31 deg |
| S26 | 36 | Ring CRX | Ascending | 2006-365T23:56 | 31-Dec | Sun | 4 | 12 | 1 | r = 11.605 Rs ( 700136 km) |
| S26 | 36 | XD | Segment | 2007-004T13:50 | 04-Jan | Thu | 7 | 9 | 4 | XD_036_037 (8d); Cross-Discipline Outbound 36 - Inbound 37 |
| S26 | 36 | OTM-087 | ~APO | 2007-005T04:50 | 05-Jan | Fri | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 006T04:35 |
| S27 | 36 | S27 Begins | | 2007-005T13:50 | 05-Jan | Fri | 8 | 8 | 0 | S27 Sequence. Duration = 43 d |
| S27 | 37 | Apoapse | | 2007-008T04:38 | 08-Jan | Mon | 11 | 5 | 3 | Per = 15.9 d, inc = 56.6 deg, r = 30.692 Rs, phase = 149 deg |
| S27 | 37 | OTM-088 | 37TI-3 | 2007-010T04:20 | 10-Jan | Wed | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 011T04:21 |
| S27 | 37 | TOST | Segment | 2007-012T13:34 | 12-Jan | Fri | 15 | 1 | 2 | TOST_037TI_T23 (2d); TOST Segment 037TI (T23) |
| S27 | 37 | 37TI (t) T23 | TITAN | 2007-013T08:38 | 13-Jan | Sat | 16 | 16 | 3 | Inbound 1000.3 km flyby, v = 6.0 km/s, phase = 53 deg |
| S27 | 37 | Ring CRX | Descending | 2007-013T08:58 | 13-Jan | Sat | 0 | 16 | 3 | r = 20.714 Rs (1249680 km) |
| S27 | 37 | SATURN | Segment | 2007-014T13:34 | 14-Jan | Sun | 1 | 15 | 4 | Saturn_037 (1d); Saturn 037 Inbound |
| S27 | 37 | RINGS | Segment | 2007-015T05:36 | 15-Jan | Mon | 2 | 14 | 5 | RINGS_Rev_37 (6d); RINGS Rev 37 |
| S27 | 37 | OTM-089 | 37TI+3 | 2007-015T20:36 | 15-Jan | Mon | 2 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 017T03:51 |
| S27 | 37 | Periapse | | 2007-016T12:59 | 16-Jan | Tue | 3 | 13 | 1 | R = 12.527 Rs, lat = -51 deg, phase = 39 deg |
| S27 | 37 | Ring CRX | Ascending | 2007-017T21:00 | 17-Jan | Wed | 5 | 11 | 2 | r = 14.867 Rs ( 896899 km) |
| S27 | 37 | OTM-090 | ~APO | 2007-021T03:36 | 21-Jan | Sun | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 022T03:36 |
| S27 | 37 | XD | Segment | 2007-021T12:36 | 21-Jan | Sun | 8 | 8 | 0 | XD_037_038 (7d); Cross Discipline Segment Outbound 37 - Inbound 38 |
| S27 | 38 | Apoapse | | 2007-024T12:19 | 24-Jan | Wed | 11 | 5 | 3 | Per = 16.0 d, inc = 59.2 deg, r = 27.987 Rs, phase = 140 deg |
| S27 | 38 | OTM-091 | 38TI-3 | 2007-026T03:21 | 26-Jan | Fri | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 027T03:21 |
| S27 | 38 | TOST | Segment | 2007-028T12:12 | 28-Jan | Sun | 15 | 1 | 2 | TOST_038TI_T24 (2d); TOST Segment 038TI (T24) |
| S27 | 38 | 38TI (t) T24 | TITAN | 2007-029T07:15 | 29-Jan | Mon | 16 | 24 | 3 | Inbound 2631.2 km flyby, v = 5.8 km/s, phase = 72 deg |
| S27 | 38 | Ring CRX | Descending | 2007-029T07:38 | 29-Jan | Mon | 0 | 24 | 3 | r = 20.708 Rs (1249323 km) |
| S27 | 38 | SATURN | Segment | 2007-030T12:12 | 30-Jan | Tue | 1 | 23 | 4 | Saturn_038 (7d); Saturn_038 |
| S27 | 38 | OTM-092 | 38TI+3 | 2007-032T02:52 | 01-Feb | Thu | 3 | 21 | 6 | D/L start, burn ~6h later. Backup D/L 033T19:22 |
| S27 | 38 | Periapse | | 2007-032T09:57 | 01-Feb | Thu | 3 | 21 | 0 | R = 15.572 Rs, lat = -58 deg, phase = 58 deg |
| S27 | 38 | Ring CRX | Ascending | 2007-035T01:08 | 04-Feb | Sun | 6 | 18 | 3 | r = 19.612 Rs (1183213 km) |
| S27 | 38 | 38TI (nt) | TITAN | 2007-036T07:42 | 05-Feb | Mon | 7 | 17 | 4 | Outbound 910072.3 km flyby, v = 5.9 km/s, phase = 114 deg |
| S27 | 38 | XD | Segment | 2007-037T11:37 | 06-Feb | Tue | 8 | 16 | 5 | XD_038_039 (8d); Cross Discipline Outbound 38 - Inbound 39 |
| S27 | 38 | OTM-093 | ~APO | 2007-038T02:37 | 07-Feb | Wed | 9 | 15 | 6 | D/L start, burn ~6h later. Backup D/L 039T02:22 |
| S27 | 39 | Apoapse | | 2007-041T10:53 | 10-Feb | Sat | 12 | 12 | 3 | Per = 18.1 d, inc = 58.8 deg, r = 28.492 Rs, phase = 121 deg |
| S27 | 39 | RINGS | Segment | 2007-045T09:45 | 14-Feb | Wed | 16 | 8 | 7 | RINGS_Rev_39 (7d); RINGS Rev 39 |
| S27 | 39 | 39TI (nt) | TITAN | 2007-046T03:09 | 15-Feb | Thu | 17 | 7 | 8 | Inbound 867510.3 km flyby, v = 5.5 km/s, phase = 128 deg |
| S27 | 39 | Ring CRX | Descending | 2007-047T09:45 | 16-Feb | Fri | 18 | 6 | 9 | r = 20.677 Rs (1247447 km) |
| S28 | 39 | S28 Begins | | 2007-048T10:52 | 17-Feb | Sat | 19 | 5 | 10 | S28 Sequence. Duration = 39 d |
| S28 | 39 | OTM-094 | 39TI-3 | 2007-050T01:37 | 19-Feb | Mon | 21 | 3 | 12 | D/L start, burn ~6h later. Backup D/L 051T01:37 |
| S28 | 39 | Periapse | | 2007-050T11:49 | 19-Feb | Mon | 21 | 3 | 0 | R = 15.577 Rs, lat = -58 deg, phase = 59 deg |
| S28 | 39 | TOST | Segment | 2007-052T10:37 | 21-Feb | Wed | 23 | 1 | 2 | TOST_039TI_T25 (2d); TOST Segment 039TI (T25) |
| S28 | 39 | Earth OCC | TITAN | 2007-053T03:01 | 22-Feb | Thu | 24 | 0 | 3 | Duration = 16 min; egress = 2007-053T03:17:07 |
| S28 | 39 | Sun OCC | TITAN | 2007-053T03:01 | 22-Feb | Thu | 24 | 0 | 3 | Duration = 16 min; egress = 2007-053T03:17:06 |
| S28 | 39 | 39TI (t) T25 | TITAN | 2007-053T03:12 | 22-Feb | Thu | 24 | 16 | 3 | Outbound 1000.4 km flyby, v = 6.2 km/s, phase = 161 deg |
| S28 | 39 | Ring CRX | Ascending | 2007-053T03:17 | 22-Feb | Thu | 0 | 16 | 3 | r = 19.654 Rs (1185737 km) |
| S28 | 39 | XD | Segment | 2007-054T10:11 | 23-Feb | Fri | 1 | 15 | 4 | XD_039_040 (7d); Cross-Discipline Outbound 39 - Inbound 40 |
| S28 | 39 | OTM-095 | 39TI+3 | 2007-056T01:22 | 25-Feb | Sun | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 057T01:06 |
| S28 | 40 | Apoapse | | 2007-058T07:46 | 27-Feb | Tue | 5 | 11 | 2 | Per = 16.0 d, inc = 58.6 deg, r = 28.363 Rs, phase = 97 deg |
| S28 | 40 | OTM-096 | ~APO | 2007-061T00:51 | 02-Mar | Fri | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 062T00:51 |
| S28 | 40 | SATURN | Segment | 2007-061T09:51 | 02-Mar | Fri | 8 | 8 | 0 | Saturn_040 (7d); Saturn_040 Early and Mid Inclined |
| S28 | 40 | Ring CRX | Descending | 2007-064T21:02 | 05-Mar | Mon | 12 | 4 | 4 | r = 14.993 Rs ( 904503 km) |
| S28 | 40 | OTM-097 | 40TI-3 | 2007-065T17:06 | 06-Mar | Tue | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 067T00:21 |
| S28 | 40 | Periapse | | 2007-066T07:09 | 07-Mar | Wed | 13 | 3 | 1 | R = 12.145 Rs, lat = -54 deg, phase = 83 deg |
| S28 | 40 | TOST | Segment | 2007-068T09:21 | 09-Mar | Fri | 15 | 1 | 3 | TOST_040TI_T26 (2d); TOST Segment 040TI (T26) |
| S28 | 40 | Sun OCC | TITAN | 2007-069T01:36 | 10-Mar | Sat | 16 | 0 | 3 | Duration = 16 min; egress = 2007-069T01:52:14 |
| S28 | 40 | Earth OCC | TITAN | 2007-069T01:37 | 10-Mar | Sat | 16 | 0 | 3 | Duration = 15 min; egress = 2007-069T01:52:14 |
| S28 | 40 | 40TI (t) T26 | TITAN | 2007-069T01:49 | 10-Mar | Sat | 16 | 16 | 3 | Outbound 980.6 km flyby, v = 6.2 km/s, phase = 150 deg |
| S28 | 40 | Ring CRX | Ascending | 2007-069T01:54 | 10-Mar | Sat | 0 | 16 | 3 | r = 19.657 Rs (1185891 km) |
| S28 | 40 | XD | Segment | 2007-070T02:47 | 11-Mar | Sun | 1 | 15 | 4 | XD_040_041 (8d); Cross Discipline Segment Outbound 40 - Inbound 41 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S28 | 40 | OTM-098 | 40TI+3 | 2007-072T00:06 | 13-Mar | Tue | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 073T00:06 |
| S28 | 41 | Apoapse | | 2007-074T12:36 | 15-Mar | Thu | 5 | 10 | 3 | Per = 15.9 d, inc = 56.0 deg, r = 30.793 Rs, phase = 88 deg |
| S28 | 41 | OTM-099 | ~APO | 2007-076T23:50 | 17-Mar | Sat | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 077T23:35 |
| S28 | 41 | RINGS | Segment | 2007-078T08:35 | 19-Mar | Mon | 9 | 7 | 1 | RINGS_Rev_41 (6d); RINGS Rev 41 |
| S28 | 41 | OTM-100 | 41TI-3 | 2007-081T14:30 | 22-Mar | Thu | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 082T23:20 |
| S28 | 41 | Ring CRX | Descending | 2007-081T15:45 | 22-Mar | Thu | 13 | 3 | 0 | r = 11.823 Rs ( 713289 km) |
| S28 | 41 | Periapse | | 2007-082T11:57 | 23-Mar | Fri | 13 | 3 | 1 | R = 9.710 Rs, lat = -47 deg, phase = 92 deg |
| S28 | 41 | TOST | Segment | 2007-084T08:20 | 25-Mar | Sun | 15 | 1 | 3 | TOST_041TI_T27 (2d); TOST Segment 041TI_T27 |
| S28 | 41 | Sun OCC | TITAN | 2007-085T00:08 | 26-Mar | Mon | 16 | 0 | 3 | Duration = 17 min; egress = 2007-085T00:25:47 |
| S28 | 41 | Earth OCC | TITAN | 2007-085T00:09 | 26-Mar | Mon | 16 | 0 | 3 | Duration = 16 min; egress = 2007-085T00:25:44 |
| S28 | 41 | 41TI (t) T27 | TITAN | 2007-085T00:23 | 26-Mar | Mon | 16 | 16 | 3 | Outbound 1009.9 km flyby, v = 6.2 km/s, phase = 144 deg |
| S28 | 41 | Ring CRX | Ascending | 2007-085T00:27 | 26-Mar | Mon | 0 | 16 | 3 | r = 19.661 Rs (1186142 km) |
| S28 | 41 | XD | Segment | 2007-086T07:22 | 27-Mar | Tue | 1 | 15 | 5 | XD_041_042 (9d); Cross Discipline Outbound 41 - Inbound 42 |
| S29 | 41 | S29 Begins | | 2007-087T08:04 | 28-Mar | Wed | 2 | 14 | 6 | S29 Sequence. Duration = 38 d |
| S29 | 41 | OTM-101 | 41TI+3 | 2007-087T14:49 | 28-Mar | Wed | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 088T22:49 |
| S29 | 42 | Apoapse | | 2007-090T17:01 | 31-Mar | Sat | 6 | 10 | 3 | Per = 15.9 d, inc = 52.3 deg, r = 32.939 Rs, phase = 80 deg |
| S29 | 42 | OTM-102 | ~APO | 2007-092T22:34 | 02-Apr | Mon | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 093T22:33 |
| S29 | 42 | SATURN | Segment | 2007-095T07:33 | 05-Apr | Thu | 10 | 6 | 2 | Saturn_042 (3d); Saturn_042 Early and Mid Inclined |
| S29 | 42 | OTM-103 | 42TI-3 | 2007-097T14:48 | 07-Apr | Sat | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 098T22:18 |
| S29 | 42 | RINGS | Segment | 2007-097T23:48 | 07-Apr | Sat | 13 | 3 | 0 | RINGS_Rev_42 (2d); RINGS Rev 42 |
| S29 | 42 | Ring CRX | Descending | 2007-098T04:56 | 08-Apr | Sun | 13 | 3 | 1 | r = 8.954 Rs ( 540178 km) |
| S29 | 42 | Periapse | | 2007-098T16:21 | 08-Apr | Sun | 14 | 2 | 1 | R = 7.565 Rs, lat = -39 deg, phase = 100 deg |
| S29 | 42 | TOST | Segment | 2007-100T07:03 | 10-Apr | Tue | 15 | 1 | 3 | TOST_042TI_T28 (2d); TOST Segment 042TI (T28) |
| S29 | 42 | Sun OCC | TITAN | 2007-100T22:39 | 10-Apr | Tue | 16 | 0 | 3 | Duration = 20 min; egress = 2007-100T22:59:22 |
| S29 | 42 | Earth OCC | TITAN | 2007-100T22:40 | 10-Apr | Tue | 16 | 0 | 3 | Duration = 18 min; egress = 2007-100T22:59:26 |
| S29 | 42 | 42TI (t) T28 | TITAN | 2007-100T22:58 | 10-Apr | Tue | 16 | 16 | 3 | Outbound 990.9 km flyby, v = 6.2 km/s, phase = 137 deg |
| S29 | 42 | Ring CRX | Ascending | 2007-100T23:01 | 10-Apr | Tue | 0 | 16 | 3 | r = 19.666 Rs (1186420 km) |
| S29 | 42 | XD | Segment | 2007-102T05:57 | 12-Apr | Thu | 1 | 15 | 5 | XD_042_043 (9d); Cross Discipline Segment Outbound 42 - Inbound 43 |
| S29 | 42 | OTM-104 | 42TI+3 | 2007-103T21:47 | 13-Apr | Fri | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 104T21:47 |
| S29 | 43 | Apoapse | | 2007-106T20:40 | 16-Apr | Mon | 6 | 10 | 3 | Per = 15.9 d, inc = 46.9 deg, r = 34.766 Rs, phase = 73 deg |
| S29 | 43 | OTM-105 | ~APO | 2007-108T21:32 | 18-Apr | Wed | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 109T21:32 |
| S29 | 43 | RINGS | Segment | 2007-111T06:16 | 21-Apr | Sat | 10 | 6 | 2 | RINGS_Rev_43 (5d); RINGS Rev 43 |
| S29 | 43 | OTM-106 | 43TI-3 | 2007-113T21:16 | 23-Apr | Mon | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 114T21:01 |
| S29 | 43 | Earth OCC | RING | 2007-114T09:04 | 24-Apr | Tue | 13 | 3 | 0 | Duration = 82 min; egress = 2007-114T10:26:51 |
| S29 | 43 | Sun OCC | RING | 2007-114T09:47 | 24-Apr | Tue | 13 | 2 | 1 | Duration = 99 min; egress = 2007-114T11:26:36 |
| S29 | 43 | Ring CRX | Descending | 2007-114T13:52 | 24-Apr | Tue | 14 | 2 | 1 | r = 6.570 Rs ( 396381 km) |
| S29 | 43 | 43DI (nt) | DIONE | 2007-114T14:51 | 24-Apr | Tue | 14 | 2 | 1 | Inbound 114238.0 km flyby, v = 11.4 km/s, phase = 69 deg |
| S29 | 43 | 43TL (nt) | TELESTO | 2007-114T15:59 | 24-Apr | Tue | 14 | 2 | 1 | Inbound 107378.6 km flyby, v = 11.1 km/s, phase = 99 deg |
| S29 | 43 | Periapse | | 2007-114T20:02 | 24-Apr | Tue | 14 | 2 | 1 | R = 5.738 Rs, lat = -32 deg, phase = 107 deg |
| S29 | 43 | TOST | Segment | 2007-116T06:01 | 26-Apr | Thu | 15 | 1 | 2 | TOST_043TI_T29 (2d); TOST Segment 043TI (T29) |
| S29 | 43 | Sun OCC | TITAN | 2007-116T21:10 | 26-Apr | Thu | 16 | 0 | 3 | Duration = 22 min; egress = 2007-116T21:33:13 |
| S29 | 43 | Earth OCC | TITAN | 2007-116T21:12 | 26-Apr | Thu | 16 | 0 | 3 | Duration = 21 min; egress = 2007-116T21:33:20 |
| S29 | 43 | 43TI (t) T29 | TITAN | 2007-116T21:32 | 26-Apr | Thu | 16 | 16 | 3 | Outbound 980.8 km flyby, v = 6.2 km/s, phase = 130 deg |
| S29 | 43 | Ring CRX | Ascending | 2007-116T21:35 | 26-Apr | Thu | 0 | 16 | 3 | r = 19.670 Rs (1186667 km) |
| S29 | 43 | XD | Segment | 2007-117T22:33 | 27-Apr | Fri | 1 | 15 | 4 | XD_043_044 (9d); Cross Discipline Segment Outbound 43 - Inbound 44 |
| S29 | 43 | OTM-107 | 43TI+3 | 2007-119T20:45 | 29-Apr | Sun | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 120T20:45 |
| S29 | 44 | Apoapse | | 2007-122T23:23 | 02-May | Wed | 6 | 10 | 3 | Per = 15.9 d, inc = 39.1 deg, r = 36.222 Rs, phase = 67 deg |
| S29 | 44 | OTM-108 | ~APO | 2007-124T13:00 | 04-May | Fri | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 125T20:29 |
| S30 | 44 | S30 Begins | | 2007-124T22:00 | 04-May | Fri | 8 | 8 | 0 | S30 Sequence. Duration = 37 d |
| S30 | 44 | RINGS | Segment | 2007-127T05:14 | 07-May | Mon | 10 | 6 | 3 | RINGS_Rev_44 (3d); RINGS Rev 44 |
| S30 | 44 | OTM-109 | 44TI-3 | 2007-128T20:14 | 08-May | Tue | 12 | 4 | 4 | D/L start, burn ~6h later. Backup D/L 129T20:14 |
| S30 | 44 | SATURN | Segment | 2007-130T05:14 | 10-May | Thu | 13 | 3 | 1 | Saturn_044 (2d); Saturn_044 |
| S30 | 44 | Earth OCC | SATURN | 2007-130T14:33 | 10-May | Thu | 14 | 2 | 2 | Duration = 124 min; egress = 2007-130T16:37:07 |
| S30 | 44 | Earth OCC | RING | 2007-130T15:18 | 10-May | Thu | 14 | 2 | 2 | Duration = 154 min; egress = 2007-130T17:52:28 |
| S30 | 44 | Sun OCC | SATURN | 2007-130T15:21 | 10-May | Thu | 14 | 2 | 2 | Duration = 135 min; egress = 2007-130T17:36:56 |
| S30 | 44 | Sun OCC | RING | 2007-130T16:13 | 10-May | Thu | 14 | 2 | 2 | Duration = 124 min; egress = 2007-130T18:17:17 |
| S30 | 44 | Ring CRX | Descending | 2007-130T19:30 | 10-May | Thu | 14 | 2 | 2 | r = 4.757 Rs ( 287007 km) |
| S30 | 44 | Periapse | | 2007-130T22:46 | 10-May | Thu | 14 | 2 | 2 | R = 4.285 Rs, lat = -24 deg, phase = 114 deg |
| S30 | 44 | TOST | Segment | 2007-132T04:59 | 12-May | Sat | 15 | 1 | 3 | TOST_044TI_T30 (2d); TOST Segment 044TI_T30 |
| S30 | 44 | Sun OCC | TITAN | 2007-132T19:42 | 12-May | Sat | 16 | 0 | 4 | Duration = 27 min; egress = 2007-132T20:08:51 |
| S30 | 44 | Earth OCC | TITAN | 2007-132T19:43 | 12-May | Sat | 16 | 0 | 4 | Duration = 25 min; egress = 2007-132T20:09:07 |
| S30 | 44 | 44TI (t) T30 | TITAN | 2007-132T20:09 | 12-May | Sat | 16 | 16 | 4 | Outbound 959.2 km flyby, v = 6.2 km/s, phase = 122 deg |
| S30 | 44 | Ring CRX | Ascending | 2007-132T20:11 | 12-May | Sat | 0 | 16 | 4 | r = 19.673 Rs (1186897 km) |
| S30 | 44 | XD | Segment | 2007-133T21:13 | 13-May | Sun | 1 | 15 | 5 | XD_044_045 (10d); Cross Discipline Segment Outbound 44 - Inbound 45 |
| S30 | 44 | OTM-110 | 44TI+3 | 2007-135T19:43 | 15-May | Tue | 3 | 13 | 7 | D/L start, burn ~6h later. Backup D/L 136T19:43 |
| S30 | 45 | Apoapse | | 2007-139T01:03 | 19-May | Sat | 6 | 10 | 3 | Per = 15.9 d, inc = 28.2 deg, r = 37.277 Rs, phase = 61 deg |
| S30 | 45 | OTM-111 | ~APO | 2007-140T19:27 | 20-May | Sun | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 141T11:42 |
| S30 | 45 | SATURN | Segment | 2007-144T04:12 | 24-May | Thu | 11 | 5 | 3 | Saturn_045 (2d); Saturn_045 |
| S30 | 45 | OTM-112 | 45TI-3 | 2007-145T19:12 | 25-May | Fri | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 146T09:57 |
| S30 | 45 | SOST | Segment | 2007-146T04:12 | 26-May | Sat | 13 | 3 | 0 | SOST_045 (2d); SOST segment in rev 45 (non-targeteds) |
| S30 | 45 | Earth OCC | RING | 2007-146T18:42 | 26-May | Sat | 14 | 2 | 1 | Duration = 187 min; egress = 2007-146T21:49:43 |
| S30 | 45 | Earth OCC | SATURN | 2007-146T19:02 | 26-May | Sat | 14 | 2 | 1 | Duration = 146 min; egress = 2007-146T21:27:31 |
| S30 | 45 | Sun OCC | RING | 2007-146T19:36 | 26-May | Sat | 14 | 2 | 1 | Duration = 146 min; egress = 2007-146T22:01:58 |
| S30 | 45 | Sun OCC | SATURN | 2007-146T19:39 | 26-May | Sat | 14 | 2 | 1 | Duration = 137 min; egress = 2007-146T21:56:15 |
| S30 | 45 | 45TE (nt) | TETHYS | 2007-146T20:46 | 26-May | Sat | 14 | 2 | 1 | Inbound 102788.0 km flyby, v = 12.0 km/s, phase = 78 deg |
| S30 | 45 | Dust Hazard | Pallene | 2007-146T22:39 | 26-May | Sat | 14 | 2 | 1 | Egress @ 2007-146T22:42 (3 min) \| Protection: None |
| S30 | 45 | Ring CRX | Descending | 2007-146T22:40 | 26-May | Sat | 14 | 2 | 1 | r = 3.508 Rs ( 211649 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S30 | 45 | 45EP (nt) | EPIMETHEUS | 2007-146T23:13 | 26-May | Sat | 14 | 2 | 1 | Inbound 58285.6 km flyby, v = 8.7 km/s, phase = 148 deg |
| S30 | 45 | Periapse | | 2007-147T00:28 | 27-May | Sun | 14 | 2 | 1 | R = 3.236 Rs, lat = -15 deg, phase = 119 deg |
| S30 | 45 | TOST | Segment | 2007-148T03:56 | 28-May | Mon | 15 | 1 | 2 | TOST_045TI_T31 (2d); TOST Segment 045TI (T31) |
| S30 | 45 | Sun OCC | TITAN | 2007-148T18:09 | 28-May | Mon | 16 | 0 | 3 | Duration = 32 min; egress = 2007-148T18:41:11 |
| S30 | 45 | Earth OCC | TITAN | 2007-148T18:10 | 28-May | Mon | 16 | 0 | 3 | Duration = 32 min; egress = 2007-148T18:42:28 |
| S30 | 45 | Ring CRX | Ascending | 2007-148T18:35 | 28-May | Mon | 16 | 0 | 3 | r = 19.590 Rs (1181865 km) |
| S30 | 45 | 45TI (t) T31 | TITAN | 2007-148T18:51 | 28-May | Mon | 16 | 16 | 3 | Outbound 2298.6 km flyby, v = 6.1 km/s, phase = 114 deg |
| S30 | 45 | XD | Segment | 2007-149T21:21 | 29-May | Tue | 1 | 15 | 4 | XD_045_046 (10d); Cross Discipline Segment Outbound 45 - Inbound 46 |
| S30 | 45 | OTM-113 | 45TI+3 | 2007-151T18:41 | 31-May | Thu | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 152T18:41 |
| S30 | 46 | Apoapse | | 2007-155T01:16 | 04-Jun | Mon | 6 | 10 | 3 | Per = 16.0 d, inc = 18.0 deg, r = 37.779 Rs, phase = 58 deg |
| S30 | 46 | OTM-114 | ~APO | 2007-156T10:55 | 05-Jun | Tue | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 157T18:25 |
| S30 | 46 | SATURN | Segment | 2007-160T03:10 | 09-Jun | Sat | 11 | 5 | 4 | Saturn_046 (2d); Saturn_046 |
| S30 | 46 | OTM-115 | 46TI-3 | 2007-161T18:10 | 10-Jun | Sun | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 162T09:10 |
| S31 | 46 | RINGS | Segment | 2007-162T03:10 | 11-Jun | Mon | 13 | 3 | 0 | RINGS_Rev_46 (2d); RINGS Rev 46 |
| S31 | 46 | S31 Begins | | 2007-162T03:10 | 11-Jun | Mon | 13 | 3 | 0 | S31 Sequence. Duration = 33 d |
| S31 | 46 | Earth OCC | RING | 2007-162T19:23 | 11-Jun | Mon | 14 | 2 | 1 | Duration = 209 min; egress = 2007-162T22:52:55 |
| S31 | 46 | Sun OCC | RING | 2007-162T20:04 | 11-Jun | Mon | 14 | 2 | 1 | Duration = 177 min; egress = 2007-162T23:01:31 |
| S31 | 46 | Earth OCC | SATURN | 2007-162T20:44 | 11-Jun | Mon | 14 | 2 | 1 | Duration = 122 min; egress = 2007-162T22:47:09 |
| S31 | 46 | Sun OCC | SATURN | 2007-162T21:07 | 11-Jun | Mon | 14 | 2 | 1 | Duration = 119 min; egress = 2007-162T23:06:41 |
| S31 | 46 | 46MI (nt) | MIMAS | 2007-162T23:03 | 11-Jun | Mon | 14 | 2 | 1 | Inbound 111983.7 km flyby, v = 16.7 km/s, phase = 95 deg |
| S31 | 46 | Dust Hazard | G_ring | 2007-162T23:29 | 11-Jun | Mon | 14 | 2 | 1 | Egress @ 2007-162T23:30 (1 min) \| Protection: HGA to Dust-Ram |
| S31 | 46 | Ring CRX | Descending | 2007-162T23:29 | 11-Jun | Mon | 14 | 2 | 1 | r = 2.938 Rs ( 177240 km) |
| S31 | 46 | 46AT (nt) | ATLAS | 2007-163T00:11 | 12-Jun | Tue | 14 | 2 | 1 | Inbound 34019.6 km flyby, v = 7.5 km/s, phase = 117 deg |
| S31 | 46 | 46PM (nt) | PROMETHEUS | 2007-163T00:18 | 12-Jun | Tue | 14 | 2 | 1 | Inbound 69720.6 km flyby, v = 11.7 km/s, phase = 79 deg |
| S31 | 46 | Periapse | | 2007-163T00:45 | 12-Jun | Tue | 14 | 2 | 1 | R = 2.745 Rs, lat = -9 deg, phase = 123 deg |
| S31 | 46 | 46EP (nt) | EPIMETHEUS | 2007-163T00:58 | 12-Jun | Tue | 14 | 2 | 1 | Outbound 80606.0 km flyby, v = 10.6 km/s, phase = 144 deg |
| S31 | 46 | 46ME (nt) | METHONE | 2007-163T02:26 | 12-Jun | Tue | 14 | 2 | 1 | Outbound 61698.3 km flyby, v = 9.0 km/s, phase = 100 deg |
| S31 | 46 | TOST | Segment | 2007-164T02:54 | 13-Jun | Wed | 15 | 1 | 2 | TOST_046TI_T32 (2d); TOST Segment 046TI (T32) |
| S31 | 46 | Earth OCC | TITAN | 2007-164T17:01 | 13-Jun | Wed | 16 | 0 | 3 | Duration = 40 min; egress = 2007-164T17:41:45 |
| S31 | 46 | Sun OCC | TITAN | 2007-164T17:02 | 13-Jun | Wed | 16 | 0 | 3 | Duration = 39 min; egress = 2007-164T17:40:46 |
| S31 | 46 | Ring CRX | Ascending | 2007-164T17:42 | 13-Jun | Wed | 16 | 0 | 3 | r = 19.665 Rs (1186390 km) |
| S31 | 46 | 46TI (t) T32 | TITAN | 2007-164T17:46 | 13-Jun | Wed | 16 | 16 | 3 | Outbound 964.9 km flyby, v = 6.2 km/s, phase = 107 deg |
| S31 | 46 | XD | Segment | 2007-165T20:47 | 14-Jun | Thu | 1 | 15 | 4 | XD_046_047 (12d); Cross Discipline Segment Outbound 46 - Inbound 47 |
| S31 | 46 | OTM-116 | 46TI+3 | 2007-167T17:39 | 16-Jun | Sat | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 168T17:39 |
| S31 | 47 | Apoapse | | 2007-171T01:09 | 20-Jun | Wed | 6 | 10 | 3 | Per = 16.0 d, inc = 2.1 deg, r = 38.086 Rs, phase = 54 deg |
| S31 | 47 | OTM-117 | ~APO | 2007-172T17:23 | 21-Jun | Thu | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 173T17:23 |
| S31 | 47 | OTM-118 | 47TI-3 | 2007-177T17:08 | 26-Jun | Tue | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 178T08:10 |
| S31 | 47 | SOST | Segment | 2007-178T02:08 | 27-Jun | Wed | 13 | 3 | 0 | SOST_047 (2d); SOST segment in rev 47 (untargeted Tethys) |
| S31 | 47 | 47TE (nt) | TETHYS | 2007-178T19:42 | 27-Jun | Wed | 14 | 2 | 1 | Inbound 18418.6 km flyby, v = 10.6 km/s, phase = 116 deg |
| S31 | 47 | Earth OCC | SATURN | 2007-178T22:03 | 27-Jun | Wed | 14 | 2 | 1 | Duration = 80 min; egress = 2007-178T23:23:41 |
| S31 | 47 | Sun OCC | SATURN | 2007-178T22:10 | 27-Jun | Wed | 14 | 2 | 1 | Duration = 90 min; egress = 2007-178T23:40:16 |
| S31 | 47 | 47ME (nt) | METHONE | 2007-178T22:23 | 27-Jun | Wed | 14 | 2 | 1 | Inbound 22632.1 km flyby, v = 10.9 km/s, phase = 114 deg |
| S31 | 47 | 47MI (nt) | MIMAS | 2007-178T22:47 | 27-Jun | Wed | 14 | 2 | 1 | Inbound 102922.8 km flyby, v = 17.0 km/s, phase = 110 deg |
| S31 | 47 | 47AG (nt) | AEGAEON | 2007-178T23:13 | 27-Jun | Wed | 14 | 2 | 1 | Inbound 15451.1 km flyby, v = 9.4 km/s, phase = 107 deg |
| S31 | 47 | Dust Hazard | G_ring | 2007-178T23:55 | 27-Jun | Wed | 14 | 2 | 1 | Egress @ 2007-179T00:00 (4 min) \| Protection: HGA to Dust-Ram |
| S31 | 47 | Dust Hazard | JE_ring | 2007-179T00:00 | 28-Jun | Thu | 14 | 2 | 1 | Egress @ 2007-179T00:21 (21 min) \| Protection: HGA to Dust-Ram |
| S31 | 47 | Ring CRX | Descending | 2007-179T00:00 | 28-Jun | Thu | 14 | 2 | 1 | r = 2.584 Rs ( 155891 km) |
| S31 | 47 | 47EN (nt) | ENCELADUS | 2007-179T00:51 | 28-Jun | Thu | 14 | 2 | 1 | Inbound 88670.7 km flyby, v = 9.3 km/s, phase = 54 deg |
| S31 | 47 | Periapse | | 2007-179T00:53 | 28-Jun | Thu | 14 | 2 | 1 | R = 2.462 Rs, lat = -1 deg, phase = 126 deg |
| S31 | 47 | 47PM (nt) | PROMETHEUS | 2007-179T01:42 | 28-Jun | Thu | 14 | 2 | 1 | Outbound 35160.3 km flyby, v = 9.1 km/s, phase = 153 deg |
| S31 | 47 | 47EP (nt) | EPIMETHEUS | 2007-179T02:07 | 28-Jun | Thu | 14 | 2 | 1 | Outbound 86632.1 km flyby, v = 15.7 km/s, phase = 153 deg |
| S31 | 47 | 47AN (nt) | ANTHE | 2007-179T02:41 | 28-Jun | Thu | 14 | 2 | 1 | Outbound 32193.5 km flyby, v = 7.6 km/s, phase = 49 deg |
| S31 | 47 | 47RH (nt) | RHEA | 2007-179T12:00 | 28-Jun | Thu | 15 | 1 | 2 | Outbound 104380.5 km flyby, v = 10.7 km/s, phase = 105 deg |
| S31 | 47 | TOST | Segment | 2007-180T02:05 | 29-Jun | Fri | 15 | 1 | 2 | TOST_047TI_T33 (2d); TOST Segment 047TI (T33) |
| S31 | 47 | 47TI (t) T33 | TITAN | 2007-180T16:59 | 29-Jun | Fri | 16 | 19 | 3 | Outbound 1932.6 km flyby, v = 6.2 km/s, phase = 96 deg |
| S31 | 47 | XD | Segment | 2007-182T02:35 | 01-Jul | Sun | 1 | 18 | 4 | XD_047_048 (17d); Cross Discipline Segment Outbound 47 - Inbound 48 |
| S31 | 47 | Ring CRX | Ascending | 2007-183T14:22 | 02-Jul | Mon | 3 | 16 | 6 | r = 35.556 Rs (2145089 km) |
| S31 | 47 | OTM-119 | 47TI+3 | 2007-184T16:37 | 03-Jul | Tue | 4 | 15 | 7 | D/L start, burn ~6h later. Backup D/L 185T09:07 |
| S31 | 47 | OTM-120 | ~APO | 2007-189T16:22 | 08-Jul | Sun | 9 | 10 | 5 | D/L start, burn ~6h later. Backup D/L 190T08:52 |
| S31 | 48 | Apoapse | | 2007-190T10:07 | 09-Jul | Mon | 10 | 10 | 1 | Per = 22.8 d, inc = 0.4 deg, r = 47.803 Rs, phase = 64 deg |
| S32 | 48 | S32 Begins | | 2007-195T01:06 | 14-Jul | Sat | 14 | 5 | 5 | S32 Sequence. Duration = 29 d |
| S32 | 48 | OTM-121 | 48TI-3 | 2007-196T16:06 | 15-Jul | Sun | 16 | 3 | 7 | D/L start, burn ~6h later. Backup D/L 197T15:51 |
| S32 | 48 | TOST | Segment | 2007-199T00:51 | 18-Jul | Wed | 18 | 1 | 2 | TOST_048TI_T34 (2d); TOST_048TI (T34) Flyby |
| S32 | 48 | 48TI (t) T34 | TITAN | 2007-200T01:11 | 19-Jul | Thu | 19 | 43 | 3 | Inbound 1331.8 km flyby, v = 6.2 km/s, phase = 34 deg |
| S32 | 48 | SATURN | Segment | 2007-201T00:36 | 20-Jul | Fri | 1 | 42 | 4 | Saturn_048 (2d); Saturn_048 |
| S32 | 48 | Ring CRX | Descending | 2007-201T15:00 | 20-Jul | Fri | 2 | 42 | 5 | r = 6.258 Rs ( 377529 km) |
| S32 | 48 | 48HE (nt) | HELENE | 2007-201T17:17 | 20-Jul | Fri | 2 | 42 | 5 | Inbound 38264.0 km flyby, v = 4.7 km/s, phase = 55 deg |
| S32 | 48 | 48TE (nt) | TETHYS | 2007-201T18:16 | 20-Jul | Fri | 2 | 42 | 5 | Inbound 95187.1 km flyby, v = 6.5 km/s, phase = 94 deg |
| S32 | 48 | Periapse | | 2007-201T20:30 | 20-Jul | Fri | 2 | 41 | 5 | R = 5.357 Rs, lat = -0 deg, phase = 130 deg |
| S32 | 48 | OTM-122 | 48TI+3 | 2007-202T15:36 | 21-Jul | Sat | 3 | 41 | 6 | D/L start, burn ~6h later. Backup D/L 203T15:36 |
| S32 | 48 | XD | Segment | 2007-203T00:36 | 22-Jul | Sun | 3 | 40 | 0 | XD_048_049 (37d); Cross Discipline Segment Outbound 48 - Inbound 49 |
| S32 | 48 | Ring CRX | Ascending | 2007-204T04:07 | 23-Jul | Mon | 4 | 39 | 2 | r = 24.103 Rs (1454111 km) |
| S32 | 48 | OTM-123 | ~APO | 2007-217T14:35 | 05-Aug | Sun | 18 | 26 | 15 | D/L start, burn ~6h later. Backup D/L 218T14:35 |
| S32 | 49 | Apoapse | | 2007-221T16:46 | 09-Aug | Thu | 22 | 22 | 4 | Per = 39.7 d, inc = 0.3 deg, r = 69.031 Rs, phase = 49 deg |
| S33 | 49 | S33 Begins | | 2007-223T23:20 | 11-Aug | Sat | 24 | 19 | 6 | S33 Sequence. Duration = 42 d |
| S33 | 49 | SEP = 3.0 deg | Conjunction | 2007-230T13:45 | 18-Aug | Sat | 31 | 13 | 13 | Commanding must not be required below 3.0 deg |
| S33 | 49 | SEP = 2.0 deg | Conjunction | 2007-231T23:18 | 19-Aug | Sun | 32 | 11 | 14 | Plan no SSR playback below 2.0 deg |
| S33 | 49 | SEP = 2.0 deg | Conjunction | 2007-235T17:58 | 23-Aug | Thu | 36 | 8 | 18 | Plan no SSR playback below 2.0 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S33 | 49 | SEP = 3.0 deg | Conjunction | 2007-237T03:40 | 25-Aug | Sat | 37 | 6 | 20 | Commanding must not be required below 3.0 deg |
| S33 | 49 | OTM-124 | 49TI-3 | 2007-239T13:20 | 27-Aug | Mon | 40 | 4 | 22 | D/L start, burn ~6h later. Backup D/L 240T13:20 |
| S33 | 49 | SOST | Segment | 2007-239T22:20 | 27-Aug | Mon | 40 | 3 | 0 | SOST_049RH (3d); SOST Rhea segment in Rev 49 |
| S33 | 49 | Ring CRX | Descending | 2007-241T07:23 | 29-Aug | Wed | 41 | 2 | 2 | r = 6.301 Rs ( 380155 km) |
| S33 | 49 | 49TE (nt) | TETHYS | 2007-241T11:14 | 29-Aug | Wed | 41 | 2 | 2 | Inbound 55392.2 km flyby, v = 4.8 km/s, phase = 102 deg |
| S33 | 49 | Periapse | | 2007-241T13:02 | 29-Aug | Wed | 41 | 2 | 2 | R = 5.351 Rs, lat = -0 deg, phase = 132 deg |
| S33 | 49 | 49RH (nt) | RHEA | 2007-242T01:19 | 30-Aug | Thu | 42 | 1 | 2 | Outbound 5728.3 km flyby, v = 6.7 km/s, phase = 46 deg |
| S33 | 49 | TOST | Segment | 2007-242T17:34 | 30-Aug | Thu | 43 | 1 | 3 | TOST_049TI_T35 (2d); TOST_049TI (T35) Flyby |
| S33 | 49 | 49TI (t) T35 | TITAN | 2007-243T06:32 | 31-Aug | Fri | 43 | 10 | 4 | Outbound 3324.2 km flyby, v = 6.1 km/s, phase = 87 deg |
| S33 | 49 | XD | Segment | 2007-244T16:20 | 01-Sep | Sat | 1 | 9 | 5 | XD_049 (7d); Cross Discipline Segment 49 |
| S33 | 49 | OTM-125 | 49TI+2 | 2007-245T05:35 | 02-Sep | Sun | 2 | 8 | 6 | D/L start, burn ~6h later. Backup D/L 246T13:05 |
| S33 | 49 | OTM-126 | 49IA-5 | 2007-248T12:50 | 05-Sep | Wed | 5 | 5 | 3 | D/L start, burn ~6h later. Backup D/L 249T05:20 |
| S33 | 49 | OTM-127 | 49IA-2 | 2007-251T12:50 | 08-Sep | Sat | 8 | 2 | 3 | D/L start, burn ~6h later. Backup D/L 252T12:45 |
| S33 | 49 | SOST | Segment | 2007-251T21:50 | 08-Sep | Sat | 9 | 2 | 0 | SOST_049IA (4d); SOST rev 49 targeted Iapetus |
| S33 | 49 | 49IA (t) I1 | IAPETUS | 2007-253T14:15 | 10-Sep | Mon | 10 | 22 | 2 | Outbound 1617.9 km flyby, v = 2.4 km/s, phase = 59 deg |
| S33 | 49 | XD | Segment | 2007-255T21:35 | 12-Sep | Wed | 2 | 19 | 4 | XD_049_050 (16d); Cross Discipline Segment Outbound 49 - Inbound 50 |
| S33 | 49 | OTM-128 | 49IA+3 | 2007-256T12:20 | 13-Sep | Thu | 3 | 19 | 5 | D/L start, burn ~6h later. Backup D/L 257T12:21 |
| S33 | 50 | Apoapse | | 2007-257T11:37 | 14-Sep | Fri | 4 | 18 | 1 | Per = 32.0 d, inc = 6.1 deg, r = 59.736 Rs, phase = 42 deg |
| S33 | 50 | OTM-129 | 49IA+7 | 2007-260T12:21 | 17-Sep | Mon | 7 | 15 | 4 | D/L start, burn ~6h later. Backup D/L 261T04:51 |
| S34 | 50 | S34 Begins | | 2007-265T20:51 | 22-Sep | Sat | 12 | 9 | 5 | S34 Sequence. Duration = 39 d |
| S34 | 50 | OTM-130 | 50TI-3 | 2007-271T11:36 | 28-Sep | Fri | 18 | 4 | 11 | D/L start, burn ~6h later. Backup D/L 272T04:06 |
| S34 | 50 | SOST | Segment | 2007-271T20:36 | 28-Sep | Fri | 18 | 3 | 0 | SOST_050 (3d); SOST segment in rev 50 (non-targeteds) |
| S34 | 50 | 50DI (nt) | DIONE | 2007-273T05:47 | 30-Sep | Sun | 20 | 2 | 2 | Inbound 43420.6 km flyby, v = 5.7 km/s, phase = 49 deg |
| S34 | 50 | Ring CRX | Ascending | 2007-273T06:05 | 30-Sep | Sun | 20 | 2 | 2 | r = 5.776 Rs ( 348456 km) |
| S34 | 50 | Earth OCC | SATURN | 2007-273T07:09 | 30-Sep | Sun | 20 | 2 | 2 | Duration = 99 min; egress = 2007-273T08:48:59 |
| S34 | 50 | Sun OCC | SATURN | 2007-273T07:15 | 30-Sep | Sun | 20 | 2 | 2 | Duration = 56 min; egress = 2007-273T08:10:47 |
| S34 | 50 | 50EN (nt) | ENCELADUS | 2007-273T10:51 | 30-Sep | Sun | 20 | 2 | 2 | Inbound 101478.4 km flyby, v = 6.5 km/s, phase = 95 deg |
| S34 | 50 | Periapse | | 2007-273T11:28 | 30-Sep | Sun | 20 | 2 | 2 | R = 4.701 Rs, lat = 5 deg, phase = 138 deg |
| S34 | 50 | 50TL (nt) | TELESTO | 2007-273T15:08 | 30-Sep | Sun | 20 | 2 | 2 | Outbound 75921.5 km flyby, v = 7.7 km/s, phase = 163 deg |
| S34 | 50 | TOST | Segment | 2007-274T12:51 | 01-Oct | Mon | 21 | 1 | 3 | TOST_050TI_T36 (2d); TOST_050TI (T36) Flyby |
| S34 | 50 | Ring CRX | Descending | 2007-274T22:49 | 01-Oct | Mon | 21 | 0 | 3 | r = 17.690 Rs (1067234 km) |
| S34 | 50 | 50TI (t) T36 | TITAN | 2007-275T04:42 | 02-Oct | Tue | 22 | 48 | 4 | Outbound 973.0 km flyby, v = 6.3 km/s, phase = 67 deg |
| S34 | 50 | Ring CRX | Ascending | 2007-275T15:08 | 02-Oct | Tue | 0 | 47 | 4 | r = 22.856 Rs (1378879 km) |
| S34 | 50 | XD | Segment | 2007-276T14:19 | 03-Oct | Wed | 1 | 46 | 5 | XD_50 (3d); XD rev 50 before CDS V10 |
| S34 | 50 | OTM-131 | 50TI+3 | 2007-278T11:22 | 05-Oct | Fri | 3 | 45 | 7 | D/L start, burn ~6h later. Backup D/L 279T11:07 |
| S34 | 50 | V10 | Segment | 2007-279T20:07 | 06-Oct | Sat | 5 | 43 | 1 | V10_Transition (12d); CDS V10 upload |
| S34 | 51 | Apoapse | | 2007-285T09:51 | 12-Oct | Fri | 10 | 38 | 7 | Per = 23.8 d, inc = 5.0 deg, r = 49.165 Rs, phase = 36 deg |
| S34 | 51 | XD | Segment | 2007-291T19:38 | 18-Oct | Thu | 17 | 31 | 13 | XD_51 (4d); XD rev 51 post CDS V10 |
| S34 | 51 | 51HY (nt) | HYPERION | 2007-294T15:01 | 21-Oct | Sun | 19 | 28 | 16 | Inbound 121760.8 km flyby, v = 4.9 km/s, phase = 116 deg |
| S34 | 51 | 51TI (nt) | TITAN | 2007-295T01:12 | 22-Oct | Mon | 20 | 28 | 17 | Inbound 438394.2 km flyby, v = 4.2 km/s, phase = 30 deg |
| S34 | 51 | RINGS | Segment | 2007-295T19:23 | 22-Oct | Mon | 21 | 27 | 17 | RINGS_Rev_51 (3d); RINGS Rev 51 |
| S34 | 51 | 51HE (nt) | HELENE | 2007-297T00:33 | 24-Oct | Wed | 22 | 26 | 19 | Inbound 23944.8 km flyby, v = 7.7 km/s, phase = 76 deg |
| S34 | 51 | Sun OCC | SATURN | 2007-297T05:05 | 24-Oct | Wed | 22 | 26 | 19 | Duration = 73 min; egress = 2007-297T06:18:07 |
| S34 | 51 | Earth OCC | SATURN | 2007-297T05:14 | 24-Oct | Wed | 22 | 26 | 19 | Duration = 94 min; egress = 2007-297T06:48:06 |
| S34 | 51 | Dust Hazard | E_ring_lg | 2007-297T05:15 | 24-Oct | Wed | 22 | 26 | 19 | Egress @ 2007-297T05:40 (24 min) \| Protection: None |
| S34 | 51 | Ring CRX | Descending | 2007-297T05:27 | 24-Oct | Wed | 22 | 26 | 19 | r = 4.184 Rs ( 252413 km) |
| S34 | 51 | 51PM (nt) | PROMETHEUS | 2007-297T06:29 | 24-Oct | Wed | 22 | 26 | 19 | Inbound 104600.1 km flyby, v = 1.5 km/s, phase = 166 deg |
| S34 | 51 | Periapse | | 2007-297T07:56 | 24-Oct | Wed | 22 | 26 | 19 | R = 3.807 Rs, lat = -3 deg, phase = 145 deg |
| S34 | 51 | XD | Segment | 2007-298T19:09 | 25-Oct | Thu | 24 | 24 | 20 | XD_051_052 (20d); Cross Discipline Segment Outbound 51 - Inbound 52 |
| S34 | 51 | Ring CRX | Ascending | 2007-299T10:28 | 26-Oct | Fri | 24 | 24 | 21 | r = 22.606 Rs (1363809 km) |
| S35 | 51 | S35 Begins | | 2007-304T18:40 | 31-Oct | Wed | 30 | 18 | 26 | S35 Sequence. Duration = 44 d |
| S35 | 51 | OTM-132 | ~APO | 2007-305T09:40 | 01-Nov | Thu | 30 | 18 | 27 | D/L start, burn ~6h later. Backup D/L 306T09:40 |
| S35 | 52 | Apoapse | | 2007-309T07:53 | 05-Nov | Mon | 34 | 14 | 4 | Per = 24.0 d, inc = 5.0 deg, r = 49.390 Rs, phase = 35 deg |
| S35 | 52 | SOST | Segment | 2007-318T17:56 | 14-Nov | Wed | 44 | 4 | 13 | SOST_052 (2d); SOST segment in rev 52 (non-targeteds) |
| S35 | 52 | OTM-133 | 52TI-3 | 2007-319T08:56 | 15-Nov | Thu | 44 | 4 | 14 | D/L start, burn ~6h later. Backup D/L 321T08:42 |
| S35 | 52 | RINGS | Segment | 2007-320T17:41 | 16-Nov | Fri | 46 | 2 | 1 | RINGS_Rev_52 (2d); RINGS Rev 52 |
| S35 | 52 | 52RH (nt) | RHEA | 2007-320T19:42 | 16-Nov | Fri | 46 | 2 | 1 | Inbound 91625.7 km flyby, v = 9.3 km/s, phase = 150 deg |
| S35 | 52 | Sun OCC | SATURN | 2007-321T05:02 | 17-Nov | Sat | 46 | 2 | 2 | Duration = 76 min; egress = 2007-321T06:18:25 |
| S35 | 52 | Dust Hazard | E_ring_lg | 2007-321T05:09 | 17-Nov | Sat | 46 | 2 | 2 | Egress @ 2007-321T05:33 (24 min) \| Protection: None |
| S35 | 52 | Earth OCC | SATURN | 2007-321T05:14 | 17-Nov | Sat | 46 | 2 | 2 | Duration = 98 min; egress = 2007-321T06:52:09 |
| S35 | 52 | Ring CRX | Descending | 2007-321T05:21 | 17-Nov | Sat | 46 | 2 | 2 | r = 4.191 Rs ( 252865 km) |
| S35 | 52 | 52AG (nt) | AEGAEON | 2007-321T06:14 | 17-Nov | Sat | 46 | 2 | 2 | Inbound 99705.0 km flyby, v = 3.3 km/s, phase = 150 deg |
| S35 | 52 | 52PA (nt) | PANDORA | 2007-321T06:59 | 17-Nov | Sat | 46 | 2 | 2 | Inbound 93410.6 km flyby, v = 1.6 km/s, phase = 163 deg |
| S35 | 52 | Periapse | | 2007-321T07:51 | 17-Nov | Sat | 46 | 2 | 2 | R = 3.801 Rs, lat = -3 deg, phase = 145 deg |
| S35 | 52 | 52PN (nt) | PAN | 2007-321T08:05 | 17-Nov | Sat | 46 | 2 | 2 | Outbound 96661.8 km flyby, v = 1.3 km/s, phase = 138 deg |
| S35 | 52 | 52EP (nt) | EPIMETHEUS | 2007-321T09:20 | 17-Nov | Sat | 46 | 2 | 2 | Outbound 99461.7 km flyby, v = 1.9 km/s, phase = 102 deg |
| S35 | 52 | 52CP (nt) | CALYPSO | 2007-321T12:34 | 17-Nov | Sat | 46 | 2 | 2 | Outbound 87977.0 km flyby, v = 10.5 km/s, phase = 147 deg |
| S35 | 52 | TOST | Segment | 2007-322T10:12 | 18-Nov | Sun | 47 | 1 | 3 | TOST_052TI_T37 (2d); TOST_052TI (T37) Flyby |
| S35 | 52 | 52TI (t) T37 | TITAN | 2007-323T00:47 | 19-Nov | Mon | 48 | 16 | 4 | Outbound 999.5 km flyby, v = 6.3 km/s, phase = 51 deg |
| S35 | 52 | Ring CRX | Ascending | 2007-323T04:36 | 19-Nov | Mon | 0 | 16 | 4 | r = 20.832 Rs (1256782 km) |
| S35 | 52 | XD | Segment | 2007-324T09:57 | 20-Nov | Tue | 1 | 15 | 5 | XD_052_053 (5d); Cross Discipline Segment Outbound 52 - Inbound 53 |
| S35 | 52 | OTM-134 | 52TI+3 | 2007-326T00:57 | 22-Nov | Thu | 3 | 13 | 7 | D/L start, burn ~6h later. Backup D/L 327T08:28 |
| S35 | 53 | Apoapse | | 2007-329T07:54 | 25-Nov | Sun | 6 | 10 | 3 | Per = 16.0 d, inc = 12.0 deg, r = 38.004 Rs, phase = 25 deg |
| S35 | 53 | MAG | Segment | 2007-329T17:13 | 25-Nov | Sun | 7 | 9 | 4 | MAG_053_A (3d); MAG rev 53 doy 329 |
| S35 | 53 | OTM-135 | ~APO | 2007-331T00:43 | 27-Nov | Tue | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 332T07:58 |
| S35 | 53 | RINGS | Segment | 2007-332T16:58 | 28-Nov | Wed | 10 | 6 | 2 | RINGS_Rev_53in (4d); RINGS Rev 53in |
| S35 | 53 | OTM-136 | 53TI-2 | 2007-336T07:44 | 02-Dec | Sun | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 337T09:10 |
| S35 | 53 | MAG | Segment | 2007-336T16:44 | 02-Dec | Sun | 14 | 2 | 0 | MAG_053_B (2d); MAG rev 53 doy 336 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S35 | 53 | Sun OCC | RING | 2007-337T04:55 | 03-Dec | Mon | 14 | 2 | 1 | Duration = 89 min; egress = 2007-337T06:24:43 |
| S35 | 53 | Earth OCC | RING | 2007-337T05:15 | 03-Dec | Mon | 14 | 2 | 1 | Duration = 75 min; egress = 2007-337T06:30:29 |
| S35 | 53 | 53TL (nt) | TELESTO | 2007-337T05:23 | 03-Dec | Mon | 14 | 2 | 1 | Inbound 119567.3 km flyby, v = 8.9 km/s, phase = 20 deg |
| S35 | 53 | 53MI (nt) | MIMAS | 2007-337T05:25 | 03-Dec | Mon | 14 | 2 | 1 | Inbound 84271.2 km flyby, v = 15.0 km/s, phase = 139 deg |
| S35 | 53 | 53AG (nt) | AEGAEON | 2007-337T06:02 | 03-Dec | Mon | 14 | 2 | 1 | Inbound 81119.9 km flyby, v = 15.0 km/s, phase = 131 deg |
| S35 | 53 | Sun OCC | SATURN | 2007-337T06:10 | 03-Dec | Mon | 14 | 2 | 1 | Duration = 83 min; egress = 2007-337T07:33:00 |
| S35 | 53 | Earth OCC | SATURN | 2007-337T06:21 | 03-Dec | Mon | 14 | 2 | 1 | Duration = 86 min; egress = 2007-337T07:47:21 |
| S35 | 53 | Dust Hazard | G_ring | 2007-337T06:40 | 03-Dec | Mon | 14 | 2 | 1 | Egress @ 2007-337T06:43 (2 min) \| Protection: None |
| S35 | 53 | Ring CRX | Descending | 2007-337T06:41 | 03-Dec | Mon | 14 | 2 | 1 | r = 2.672 Rs ( 161217 km) |
| S35 | 53 | 53EP (nt) | EPIMETHEUS | 2007-337T06:51 | 03-Dec | Mon | 14 | 2 | 1 | Inbound 9181.0 km flyby, v = 7.6 km/s, phase = 141 deg |
| S35 | 53 | Periapse | | 2007-337T07:39 | 03-Dec | Mon | 14 | 2 | 1 | R = 2.535 Rs, lat = -6 deg, phase = 155 deg |
| S35 | 53 | TOST | Segment | 2007-338T09:14 | 04-Dec | Tue | 15 | 1 | 2 | TOST_053TI_T38 (2d); TOST_053TI (T38) Flyby |
| S35 | 53 | 53TI (t) T38 | TITAN | 2007-339T00:06 | 05-Dec | Wed | 16 | 16 | 3 | Outbound 1298.3 km flyby, v = 6.3 km/s, phase = 70 deg |
| S35 | 53 | Ring CRX | Ascending | 2007-339T02:17 | 05-Dec | Wed | 0 | 16 | 3 | r = 20.329 Rs (1226454 km) |
| S35 | 53 | RINGS | Segment | 2007-340T09:29 | 06-Dec | Thu | 1 | 15 | 4 | RINGS_Rev_53out (2d); RINGS Rev 53out |
| S35 | 53 | OTM-137 | 53TI+3 | 2007-342T00:00 | 08-Dec | Sat | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 343T07:30 |
| S35 | 53 | MAG | Segment | 2007-342T09:00 | 08-Dec | Sat | 3 | 13 | 0 | MAG_53_54 (6d); MAG rev 53/54 |
| S35 | 54 | Apoapse | | 2007-345T05:33 | 11-Dec | Tue | 6 | 10 | 3 | Per = 16.0 d, inc = 26.0 deg, r = 37.492 Rs, phase = 30 deg |
| S35 | 54 | OTM-138 | ~APO | 2007-347T01:10 | 13-Dec | Thu | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 348T07:00 |
| S36 | 54 | S36 Begins | | 2007-348T16:00 | 14-Dec | Fri | 10 | 6 | 2 | S36 Sequence. Duration = 39 d |
| S36 | 54 | SATURN | Segment | 2007-348T16:00 | 14-Dec | Fri | 10 | 6 | 2 | Saturn_054 (6d); Saturn_054 |
| S36 | 54 | OTM-139 | 54TI-3 | 2007-351T23:16 | 17-Dec | Mon | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 353T06:46 |
| S36 | 54 | Sun OCC | RING | 2007-353T02:03 | 19-Dec | Wed | 14 | 2 | 1 | Duration = 70 min; egress = 2007-353T03:13:45 |
| S36 | 54 | Earth OCC | RING | 2007-353T02:29 | 19-Dec | Wed | 14 | 2 | 1 | Duration = 50 min; egress = 2007-353T03:20:03 |
| S36 | 54 | Sun OCC | SATURN | 2007-353T03:06 | 19-Dec | Wed | 14 | 2 | 1 | Duration = 76 min; egress = 2007-353T04:22:09 |
| S36 | 54 | Earth OCC | SATURN | 2007-353T03:23 | 19-Dec | Wed | 14 | 2 | 1 | Duration = 76 min; egress = 2007-353T04:39:20 |
| S36 | 54 | Ring CRX | Descending | 2007-353T03:35 | 19-Dec | Wed | 14 | 2 | 1 | r = 3.241 Rs ( 195514 km) |
| S36 | 54 | Periapse | | 2007-353T05:04 | 19-Dec | Wed | 14 | 2 | 1 | R = 3.023 Rs, lat = -13 deg, phase = 150 deg |
| S36 | 54 | TOST | Segment | 2007-354T08:16 | 20-Dec | Thu | 15 | 1 | 2 | TOST_054TI_T39 (2d); TOST_054TI (T39) Flyby |
| S36 | 54 | 54TI (t) T39 | TITAN | 2007-354T22:57 | 20-Dec | Thu | 16 | 16 | 3 | Outbound 969.5 km flyby, v = 6.3 km/s, phase = 61 deg |
| S36 | 54 | Ring CRX | Ascending | 2007-355T00:15 | 21-Dec | Fri | 0 | 16 | 3 | r = 20.062 Rs (1210335 km) |
| S36 | 54 | MAG | Segment | 2007-356T08:57 | 22-Dec | Sat | 1 | 15 | 4 | MAG_54_55 (10d); MAG rev 54/55 |
| S36 | 54 | OTM-140 | 54TI+3 | 2007-357T23:02 | 23-Dec | Sun | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 359T06:17 |
| S36 | 55 | Apoapse | | 2007-361T01:28 | 27-Dec | Thu | 6 | 10 | 3 | Per = 15.9 d, inc = 37.7 deg, r = 36.521 Rs, phase = 37 deg |
| S36 | 55 | OTM-141 | ~APO | 2007-363T06:02 | 29-Dec | Sat | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 364T06:02 |
| S36 | 55 | SATURN | Segment | 2008-001T15:03 | 01-Jan | Tue | 12 | 4 | 3 | Saturn_055 (4d); Saturn_055 Periapse |
| S36 | 55 | OTM-142 | 55TI-3 | 2008-002T22:18 | 02-Jan | Wed | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 004T07:18 |
| S36 | 55 | 55DI (nt) | DIONE | 2008-003T20:13 | 03-Jan | Thu | 14 | 2 | 1 | Inbound 121814.0 km flyby, v = 11.1 km/s, phase = 76 deg |
| S36 | 55 | Sun OCC | RING | 2008-003T20:27 | 03-Jan | Thu | 14 | 2 | 1 | Duration = 57 min; egress = 2008-003T21:24:38 |
| S36 | 55 | Earth OCC | RING | 2008-003T20:54 | 03-Jan | Thu | 14 | 2 | 1 | Duration = 40 min; egress = 2008-003T21:34:16 |
| S36 | 55 | 55PL (nt) | PALLENE | 2008-003T21:52 | 03-Jan | Thu | 14 | 2 | 1 | Inbound 105663.5 km flyby, v = 9.4 km/s, phase = 120 deg |
| S36 | 55 | Ring CRX | Descending | 2008-003T22:05 | 03-Jan | Thu | 14 | 2 | 1 | r = 4.361 Rs ( 263075 km) |
| S36 | 55 | 55JA (nt) | JANUS | 2008-003T22:11 | 03-Jan | Thu | 14 | 2 | 1 | Inbound 118142.0 km flyby, v = 10.1 km/s, phase = 154 deg |
| S36 | 55 | 55DA (nt) | DAPHNIS | 2008-003T22:50 | 03-Jan | Thu | 14 | 2 | 1 | Inbound 119015.5 km flyby, v = 10.4 km/s, phase = 157 deg |
| S36 | 55 | 55PM (nt) | PROMETHEUS | 2008-003T23:11 | 03-Jan | Thu | 14 | 2 | 1 | Inbound 112566.5 km flyby, v = 10.5 km/s, phase = 152 deg |
| S36 | 55 | 55PA (nt) | PANDORA | 2008-004T00:33 | 04-Jan | Fri | 14 | 2 | 1 | Inbound 123132.4 km flyby, v = 11.3 km/s, phase = 119 deg |
| S36 | 55 | Periapse | | 2008-004T00:47 | 04-Jan | Fri | 14 | 2 | 1 | R = 3.970 Rs, lat = -22 deg, phase = 143 deg |
| S36 | 55 | TOST | Segment | 2008-005T05:48 | 05-Jan | Sat | 15 | 1 | 2 | TOST_055TI_T40 (2d); TOST_055TI (T40) Flyby |
| S36 | 55 | 55TI (t) T40 | TITAN | 2008-005T21:30 | 05-Jan | Sat | 16 | 48 | 3 | Outbound 1014.0 km flyby, v = 6.3 km/s, phase = 38 deg |
| S36 | 55 | Ring CRX | Ascending | 2008-005T22:20 | 05-Jan | Sat | 0 | 48 | 3 | r = 19.934 Rs (1202591 km) |
| S36 | 55 | MAG | Segment | 2008-007T07:26 | 07-Jan | Mon | 1 | 46 | 4 | MAG_55_56 (6d); MAG rev 55/56 |
| S36 | 56 | Apoapse | | 2008-009T22:55 | 09-Jan | Wed | 4 | 44 | 7 | Per = 12.0 d, inc = 46.6 deg, r = 30.201 Rs, phase = 31 deg |
| S36 | 56 | RINGS | Segment | 2008-013T14:04 | 13-Jan | Sun | 8 | 40 | 11 | RINGS_Rev_56 (6d); RINGS Rev 56 |
| S36 | 56 | Sun OCC | RING | 2008-015T19:59 | 15-Jan | Tue | 10 | 38 | 13 | Duration = 50 min; egress = 2008-015T20:49:11 |
| S36 | 56 | Earth OCC | RING | 2008-015T20:13 | 15-Jan | Tue | 10 | 38 | 13 | Duration = 38 min; egress = 2008-015T20:52:07 |
| S36 | 56 | Sun OCC | SATURN | 2008-015T20:33 | 15-Jan | Tue | 10 | 38 | 13 | Duration = 60 min; egress = 2008-015T21:33:43 |
| S36 | 56 | Earth OCC | SATURN | 2008-015T20:55 | 15-Jan | Tue | 10 | 38 | 13 | Duration = 43 min; egress = 2008-015T21:38:08 |
| S36 | 56 | Ring CRX | Descending | 2008-015T21:04 | 15-Jan | Tue | 10 | 38 | 13 | r = 3.451 Rs ( 208171 km) |
| S36 | 56 | 56ME (nt) | METHONE | 2008-015T21:11 | 15-Jan | Tue | 10 | 38 | 13 | Inbound 15612.4 km flyby, v = 13.7 km/s, phase = 142 deg |
| S36 | 56 | 56AN (nt) | ANTHE | 2008-015T21:31 | 15-Jan | Tue | 10 | 38 | 13 | Inbound 99967.9 km flyby, v = 16.8 km/s, phase = 108 deg |
| S36 | 56 | OTM-143 | 55TI+P | 2008-015T22:15 | 15-Jan | Tue | 10 | 38 | 13 | D/L start, burn ~6h later. Backup D/L 016T21:19 |
| S36 | 56 | 56PA (nt) | PANDORA | 2008-015T22:19 | 15-Jan | Tue | 10 | 38 | 0 | Inbound 95190.3 km flyby, v = 16.2 km/s, phase = 116 deg |
| S36 | 56 | Periapse | | 2008-015T22:36 | 15-Jan | Tue | 10 | 38 | 0 | R = 3.257 Rs, lat = -21 deg, phase = 149 deg |
| S36 | 56 | Ring CRX | Ascending | 2008-017T21:15 | 17-Jan | Thu | 12 | 36 | 2 | r = 19.825 Rs (1196062 km) |
| S36 | 56 | MAG | Segment | 2008-019T13:49 | 19-Jan | Sat | 14 | 34 | 4 | MAG_56_57 (5d); MAG rev 56/57 |
| S36 | 57 | Apoapse | | 2008-021T21:42 | 21-Jan | Mon | 16 | 32 | 6 | Per = 11.9 d, inc = 46.6 deg, r = 30.120 Rs, phase = 31 deg |
| S37 | 57 | S37 Begins | | 2008-022T13:35 | 22-Jan | Tue | 17 | 31 | 7 | S37 Sequence. Duration = 25 d |
| S37 | 57 | 57TI (nt) | TITAN | 2008-022T21:22 | 22-Jan | Tue | 17 | 31 | 7 | Inbound 855499.5 km flyby, v = 4.5 km/s, phase = 69 deg |
| S37 | 57 | RINGS | Segment | 2008-024T13:20 | 24-Jan | Thu | 19 | 29 | 9 | RINGS_Rev_57 (7d); RINGS Rev 57 |
| S37 | 57 | 57TI (nt) | TITAN | 2008-027T12:32 | 27-Jan | Sun | 22 | 26 | 12 | Inbound 985542.3 km flyby, v = 9.4 km/s, phase = 60 deg |
| S37 | 57 | Sun OCC | RING | 2008-027T18:10 | 27-Jan | Sun | 22 | 26 | 12 | Duration = 48 min; egress = 2008-027T18:59:25 |
| S37 | 57 | Earth OCC | RING | 2008-027T18:21 | 27-Jan | Sun | 22 | 26 | 12 | Duration = 40 min; egress = 2008-027T19:01:27 |
| S37 | 57 | Sun OCC | SATURN | 2008-027T18:47 | 27-Jan | Sun | 22 | 26 | 12 | Duration = 57 min; egress = 2008-027T19:43:58 |
| S37 | 57 | Earth OCC | SATURN | 2008-027T19:03 | 27-Jan | Sun | 22 | 26 | 12 | Duration = 43 min; egress = 2008-027T19:46:36 |
| S37 | 57 | Ring CRX | Descending | 2008-027T19:14 | 27-Jan | Sun | 22 | 26 | 12 | r = 3.452 Rs ( 208244 km) |
| S37 | 57 | 57AT (nt) | ATLAS | 2008-027T19:15 | 27-Jan | Sun | 22 | 26 | 12 | Inbound 75201.6 km flyby, v = 13.6 km/s, phase = 151 deg |
| S37 | 57 | 57EP (nt) | EPIMETHEUS | 2008-027T20:16 | 27-Jan | Sun | 22 | 26 | 12 | Inbound 89733.7 km flyby, v = 16.2 km/s, phase = 116 deg |
| S37 | 57 | 57PM (nt) | PROMETHEUS | 2008-027T20:17 | 27-Jan | Sun | 22 | 26 | 12 | Inbound 82361.6 km flyby, v = 15.4 km/s, phase = 125 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S37 | 57 | 57PA (nt) | PANDORA | 2008-027T20:45 | 27-Jan | Sun | 22 | 26 | 12 | Inbound 114395.3 km flyby, v = 17.3 km/s, phase = 109 deg |
| S37 | 57 | Periapse | | 2008-027T20:46 | 27-Jan | Sun | 22 | 26 | 12 | R = 3.257 Rs, lat = -21 deg, phase = 149 deg |
| S37 | 57 | Ring CRX | Ascending | 2008-029T19:10 | 29-Jan | Tue | 24 | 24 | 14 | r = 19.764 Rs (1192385 km) |
| S37 | 57 | MAG | Segment | 2008-031T12:50 | 31-Jan | Thu | 26 | 22 | 16 | MAG_57_58 (6d); MAG rev 57/58 |
| S37 | 58 | Apoapse | | 2008-033T20:08 | 02-Feb | Sat | 28 | 20 | 18 | Per = 11.9 d, inc = 46.5 deg, r = 30.150 Rs, phase = 31 deg |
| S37 | 58 | OTM-144 | ~APO | 2008-036T20:06 | 05-Feb | Tue | 31 | 17 | 21 | D/L start, burn ~6h later. Backup D/L 038T03:36 |
| S37 | 58 | SATURN | Segment | 2008-037T05:06 | 06-Feb | Wed | 31 | 17 | 0 | Saturn_058 (6d); Saturn_058 |
| S37 | 58 | Sun OCC | RING | 2008-039T16:50 | 08-Feb | Fri | 34 | 14 | 3 | Duration = 47 min; egress = 2008-039T17:37:58 |
| S37 | 58 | Earth OCC | RING | 2008-039T16:56 | 08-Feb | Fri | 34 | 14 | 3 | Duration = 43 min; egress = 2008-039T17:39:01 |
| S37 | 58 | 58EP (nt) | EPIMETHEUS | 2008-039T16:59 | 08-Feb | Fri | 34 | 14 | 3 | Inbound 116975.3 km flyby, v = 13.4 km/s, phase = 121 deg |
| S37 | 58 | Sun OCC | SATURN | 2008-039T17:23 | 08-Feb | Fri | 34 | 14 | 3 | Duration = 60 min; egress = 2008-039T18:23:05 |
| S37 | 58 | Earth OCC | SATURN | 2008-039T17:33 | 08-Feb | Fri | 34 | 14 | 3 | Duration = 51 min; egress = 2008-039T18:24:23 |
| S37 | 58 | Ring CRX | Descending | 2008-039T17:52 | 08-Feb | Fri | 34 | 14 | 3 | r = 3.461 Rs ( 208811 km) |
| S37 | 58 | 58AN (nt) | ANTHE | 2008-039T18:13 | 08-Feb | Fri | 34 | 14 | 3 | Inbound 70355.1 km flyby, v = 15.6 km/s, phase = 108 deg |
| S37 | 58 | 58PA (nt) | PANDORA | 2008-039T19:23 | 08-Feb | Fri | 34 | 14 | 3 | Inbound 114439.1 km flyby, v = 17.3 km/s, phase = 110 deg |
| S37 | 58 | Periapse | | 2008-039T19:24 | 08-Feb | Fri | 34 | 14 | 3 | R = 3.273 Rs, lat = -21 deg, phase = 149 deg |
| S37 | 58 | 58AT (nt) | ATLAS | 2008-039T19:26 | 08-Feb | Fri | 34 | 14 | 3 | Outbound 114717.8 km flyby, v = 17.2 km/s, phase = 110 deg |
| S37 | 58 | Ring CRX | Ascending | 2008-041T19:02 | 10-Feb | Sun | 36 | 12 | 5 | r = 20.073 Rs (1211032 km) |
| S37 | 58 | MAG | Segment | 2008-043T12:06 | 12-Feb | Tue | 38 | 10 | 7 | MAG_58_59 (6d); MAG rev 58/59 |
| S37 | 59 | Apoapse | | 2008-045T19:23 | 14-Feb | Thu | 40 | 8 | 9 | Per = 12.0 d, inc = 47.0 deg, r = 30.236 Rs, phase = 30 deg |
| S38 | 59 | S38 Begins | | 2008-047T11:51 | 16-Feb | Sat | 42 | 6 | 11 | S38 Sequence. Duration = 36 d |
| S38 | 59 | SATURN | Segment | 2008-049T11:36 | 18-Feb | Mon | 44 | 4 | 13 | Saturn_059 (4d); Saturn_059 |
| S38 | 59 | OTM-145 | 59TI-3 | 2008-050T02:36 | 19-Feb | Tue | 44 | 4 | 13 | D/L start, burn ~6h later. Backup D/L 052T02:36 |
| S38 | 59 | Sun OCC | RING | 2008-051T16:50 | 20-Feb | Wed | 46 | 2 | 2 | Duration = 46 min; egress = 2008-051T17:36:47 |
| S38 | 59 | Earth OCC | RING | 2008-051T16:51 | 20-Feb | Wed | 46 | 2 | 2 | Duration = 46 min; egress = 2008-051T17:36:47 |
| S38 | 59 | Sun OCC | SATURN | 2008-051T17:25 | 20-Feb | Wed | 46 | 2 | 2 | Duration = 56 min; egress = 2008-051T18:21:49 |
| S38 | 59 | Earth OCC | SATURN | 2008-051T17:28 | 20-Feb | Wed | 46 | 2 | 2 | Duration = 53 min; egress = 2008-051T18:21:11 |
| S38 | 59 | 59PN (nt) | PAN | 2008-051T17:50 | 20-Feb | Wed | 46 | 2 | 2 | Inbound 79784.4 km flyby, v = 13.8 km/s, phase = 152 deg |
| S38 | 59 | Ring CRX | Descending | 2008-051T17:50 | 20-Feb | Wed | 46 | 2 | 2 | r = 3.459 Rs ( 208703 km) |
| S38 | 59 | 59PM (nt) | PROMETHEUS | 2008-051T18:19 | 20-Feb | Wed | 46 | 2 | 2 | Inbound 65855.2 km flyby, v = 14.2 km/s, phase = 152 deg |
| S38 | 59 | 59PA (nt) | PANDORA | 2008-051T18:29 | 20-Feb | Wed | 46 | 2 | 2 | Inbound 66343.4 km flyby, v = 14.5 km/s, phase = 145 deg |
| S38 | 59 | 59JA (nt) | JANUS | 2008-051T19:08 | 20-Feb | Wed | 46 | 2 | 2 | Inbound 110346.9 km flyby, v = 17.3 km/s, phase = 111 deg |
| S38 | 59 | Periapse | | 2008-051T19:22 | 20-Feb | Wed | 46 | 2 | 2 | R = 3.269 Rs, lat = -21 deg, phase = 150 deg |
| S38 | 59 | TOST | Segment | 2008-053T03:51 | 22-Feb | Fri | 47 | 1 | 3 | TOST_059TI_T41 (2d); TOST_059TI (T41) Flyby |
| S38 | 59 | 59TI (t) T41 | TITAN | 2008-053T17:32 | 22-Feb | Fri | 48 | 19 | 4 | Outbound 999.7 km flyby, v = 6.3 km/s, phase = 30 deg |
| S38 | 59 | Ring CRX | Ascending | 2008-053T18:22 | 22-Feb | Fri | 0 | 19 | 4 | r = 19.908 Rs (1201039 km) |
| S38 | 59 | SATURN | Segment | 2008-055T11:21 | 24-Feb | Sun | 2 | 17 | 5 | Saturn_059_060 (4d); Saturn Rev 59 Apoapsis |
| S38 | 60 | Apoapse | | 2008-056T22:03 | 25-Feb | Mon | 3 | 16 | 7 | Per = 10.6 d, inc = 56.1 deg, r = 27.074 Rs, phase = 31 deg |
| S38 | 60 | RINGS | Segment | 2008-059T10:51 | 28-Feb | Thu | 6 | 13 | 9 | RINGS_Rev_60 (2d); RINGS_Rev_60 |
| S38 | 60 | MAG | Segment | 2008-061T10:51 | 01-Mar | Sat | 8 | 11 | 11 | MAG_60 (5d); MAG rev 60 |
| S38 | 60 | OTM-146 | 59TI+P | 2008-061T16:56 | 01-Mar | Sat | 8 | 11 | 12 | D/L start, burn ~6h later. Backup D/L 063T01:36 |
| S38 | 60 | Earth OCC | RING | 2008-062T02:07 | 02-Mar | Sun | 8 | 11 | 0 | Duration = 46 min; egress = 2008-062T02:53:25 |
| S38 | 60 | Sun OCC | RING | 2008-062T02:12 | 02-Mar | Sun | 8 | 11 | 0 | Duration = 42 min; egress = 2008-062T02:54:35 |
| S38 | 60 | Earth OCC | SATURN | 2008-062T02:59 | 02-Mar | Sun | 8 | 11 | 0 | Duration = 14 min; egress = 2008-062T03:13:22 |
| S38 | 60 | Dust Hazard | E_ring_lg | 2008-062T03:12 | 02-Mar | Sun | 8 | 11 | 0 | Egress @ 2008-062T03:15 (2 min) \| Protection: MEA Cvr. Closure |
| S38 | 60 | Ring CRX | Descending | 2008-062T03:13 | 02-Mar | Sun | 8 | 11 | 0 | r = 3.943 Rs ( 237911 km) |
| S38 | 60 | 60DA (nt) | DAPHNIS | 2008-062T03:44 | 02-Mar | Sun | 8 | 11 | 0 | Inbound 97744.4 km flyby, v = 15.8 km/s, phase = 155 deg |
| S38 | 60 | 60PM (nt) | PROMETHEUS | 2008-062T04:15 | 02-Mar | Sun | 8 | 11 | 0 | Inbound 99682.1 km flyby, v = 16.3 km/s, phase = 141 deg |
| S38 | 60 | Periapse | | 2008-062T05:03 | 02-Mar | Sun | 8 | 11 | 1 | R = 3.747 Rs, lat = -23 deg, phase = 149 deg |
| S38 | 60 | Ring CRX | Ascending | 2008-064T08:33 | 04-Mar | Tue | 11 | 8 | 3 | r = 19.987 Rs (1205796 km) |
| S38 | 60 | RINGS | Segment | 2008-066T10:21 | 06-Mar | Thu | 13 | 6 | 5 | RINGS_Rev_60_61 (6d); RINGS Rev 60/61 |
| S38 | 60 | OTM-147 | ~APO | 2008-067T01:21 | 07-Mar | Fri | 13 | 6 | 5 | D/L start, burn ~6h later. Backup D/L 068T01:21 |
| S38 | 61 | Apoapse | | 2008-067T13:00 | 07-Mar | Fri | 14 | 5 | 0 | Per = 10.7 d, inc = 56.1 deg, r = 27.222 Rs, phase = 31 deg |
| S38 | 61 | OTM-148 | 61EN-3 | 2008-070T01:06 | 10-Mar | Mon | 16 | 3 | 3 | D/L start, burn ~6h later. Backup D/L 071T01:06 |
| S38 | 61 | 61TI (nt) | TITAN | 2008-070T19:49 | 10-Mar | Mon | 17 | 2 | 1 | Inbound 918311.1 km flyby, v = 6.3 km/s, phase = 124 deg |
| S38 | 61 | SOST | Segment | 2008-072T02:36 | 12-Mar | Wed | 18 | 1 | 2 | SOST_061EN (1d); SOST segment in Rev 61 (targeted Enceladus) |
| S38 | 61 | Earth OCC | RING | 2008-072T17:57 | 12-Mar | Wed | 19 | 0 | 3 | Duration = 48 min; egress = 2008-072T18:45:07 |
| S38 | 61 | Sun OCC | RING | 2008-072T18:06 | 12-Mar | Wed | 19 | 0 | 3 | Duration = 41 min; egress = 2008-072T18:47:35 |
| S38 | 61 | Earth OCC | SATURN | 2008-072T18:43 | 12-Mar | Wed | 19 | 0 | 3 | Duration = 26 min; egress = 2008-072T19:09:21 |
| S38 | 61 | Dust Hazard | E_ring_lg | 2008-072T19:04 | 12-Mar | Wed | 19 | 0 | 3 | Egress @ 2008-072T19:07 (2 min) \| Protection: MEA Cvr. Closure |
| S38 | 61 | Earth OCC | ENCELADUS | 2008-072T19:05 | 12-Mar | Wed | 19 | 0 | 3 | Duration = 0 min; egress = 2008-072T19:06:20 |
| S38 | 61 | Sun OCC | ENCELADUS | 2008-072T19:05 | 12-Mar | Wed | 19 | 0 | 3 | Duration = 0 min; egress = 2008-072T19:06:19 |
| S38 | 61 | 61EN (t) E3 | ENCELADUS | 2008-072T19:06 | 12-Mar | Wed | 19 | 13 | 3 | Inbound 47.3 km flyby, v = 14.4 km/s, phase = 137 deg |
| S38 | 61 | Ring CRX | Descending | 2008-072T19:06 | 12-Mar | Wed | 0 | 13 | 3 | r = 3.948 Rs ( 238198 km) |
| S38 | 61 | 61DA (nt) | DAPHNIS | 2008-072T20:15 | 12-Mar | Wed | 0 | 13 | 3 | Inbound 104053.0 km flyby, v = 16.4 km/s, phase = 139 deg |
| S38 | 61 | Periapse | | 2008-072T20:56 | 12-Mar | Wed | 0 | 13 | 3 | R = 3.751 Rs, lat = -23 deg, phase = 149 deg |
| S38 | 61 | RINGS | Segment | 2008-073T09:51 | 13-Mar | Thu | 1 | 12 | 3 | RINGS_Rev_61_62 (12d); RINGS Rev 61/62 |
| S38 | 61 | OTM-149 | 61EN+1 | 2008-073T17:21 | 13-Mar | Thu | 1 | 12 | 4 | D/L start, burn ~6h later. Backup D/L 075T00:51 |
| S38 | 61 | Ring CRX | Ascending | 2008-075T00:15 | 15-Mar | Sat | 2 | 11 | 1 | r = 19.937 Rs (1202817 km) |
| S38 | 61 | OTM-150 | ~APO | 2008-078T00:35 | 18-Mar | Tue | 5 | 8 | 4 | D/L start, burn ~6h later. Backup D/L 079T00:35 |
| S38 | 62 | Apoapse | | 2008-078T04:33 | 18-Mar | Tue | 5 | 7 | 0 | Per = 10.6 d, inc = 56.2 deg, r = 27.168 Rs, phase = 31 deg |
| S38 | 62 | OTM-151 | 62TI-3 | 2008-082T16:50 | 22-Mar | Sat | 10 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 084T00:20 |
| S39 | 62 | S39 Begins | | 2008-083T01:50 | 23-Mar | Sun | 10 | 3 | 0 | S39 Sequence. Duration = 27 d |
| S39 | 62 | Earth OCC | RING | 2008-083T09:08 | 23-Mar | Sun | 11 | 2 | 1 | Duration = 50 min; egress = 2008-083T09:58:16 |
| S39 | 62 | Sun OCC | RING | 2008-083T09:21 | 23-Mar | Sun | 11 | 2 | 1 | Duration = 40 min; egress = 2008-083T10:01:43 |
| S39 | 62 | 62AN (nt) | ANTHE | 2008-083T09:23 | 23-Mar | Sun | 11 | 2 | 1 | Inbound 124572.9 km flyby, v = 14.4 km/s, phase = 110 deg |
| S39 | 62 | Earth OCC | SATURN | 2008-083T09:51 | 23-Mar | Sun | 11 | 2 | 1 | Duration = 33 min; egress = 2008-083T10:24:28 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S39 | 62 | Dust Hazard | E_ring_lg | 2008-083T10:18 | 23-Mar | Sun | 11 | 2 | 1 | Egress @ 2008-083T10:21 (2 min) \| Protection: MEA Cvr. Closure |
| S39 | 62 | Ring CRX | Descending | 2008-083T10:19 | 23-Mar | Sun | 11 | 2 | 1 | r = 3.945 Rs ( 238020 km) |
| S39 | 62 | 62PL (nt) | PALLENE | 2008-083T10:36 | 23-Mar | Sun | 11 | 2 | 1 | Inbound 32685.8 km flyby, v = 15.0 km/s, phase = 135 deg |
| S39 | 62 | 62EP (nt) | EPIMETHEUS | 2008-083T10:54 | 23-Mar | Sun | 11 | 2 | 1 | Inbound 84175.5 km flyby, v = 15.6 km/s, phase = 152 deg |
| S39 | 62 | 62ME (nt) | METHONE | 2008-083T11:24 | 23-Mar | Sun | 11 | 2 | 1 | Inbound 102766.3 km flyby, v = 17.0 km/s, phase = 114 deg |
| S39 | 62 | Periapse | | 2008-083T12:10 | 23-Mar | Sun | 11 | 2 | 1 | R = 3.747 Rs, lat = -23 deg, phase = 149 deg |
| S39 | 62 | TOST | Segment | 2008-085T01:35 | 25-Mar | Tue | 12 | 1 | 2 | TOST_062TI_T42 (2d); TOST_062TI (T42) Flyby |
| S39 | 62 | 62TI (t) T42 | TITAN | 2008-085T14:27 | 25-Mar | Tue | 13 | 48 | 3 | Outbound 999.4 km flyby, v = 6.3 km/s, phase = 21 deg |
| S39 | 62 | Ring CRX | Ascending | 2008-085T15:09 | 25-Mar | Tue | 0 | 48 | 3 | r = 19.859 Rs (1198064 km) |
| S39 | 62 | SATURN | Segment | 2008-087T01:20 | 27-Mar | Thu | 1 | 46 | 4 | Saturn_062 (4d); Saturn_062/063 Apo |
| S39 | 63 | Apoapse | | 2008-088T01:22 | 28-Mar | Fri | 2 | 45 | 5 | Per = 9.6 d, inc = 63.1 deg, r = 24.525 Rs, phase = 31 deg |
| S39 | 63 | RINGS | Segment | 2008-091T08:34 | 31-Mar | Mon | 6 | 42 | 9 | RINGS_Rev_63_64 (13d); RINGS Rev 63/64 |
| S39 | 63 | 63TI (nt) | TITAN | 2008-092T15:52 | 01-Apr | Tue | 7 | 41 | 10 | Inbound 973782.7 km flyby, v = 12.9 km/s, phase = 36 deg |
| S39 | 63 | Earth OCC | RING | 2008-092T16:48 | 01-Apr | Tue | 7 | 41 | 10 | Duration = 51 min; egress = 2008-092T17:39:36 |
| S39 | 63 | Sun OCC | RING | 2008-092T17:06 | 01-Apr | Tue | 7 | 41 | 10 | Duration = 38 min; egress = 2008-092T17:45:09 |
| S39 | 63 | 63PL (nt) | PALLENE | 2008-092T17:19 | 01-Apr | Tue | 7 | 41 | 10 | Inbound 104464.4 km flyby, v = 14.8 km/s, phase = 123 deg |
| S39 | 63 | Ring CRX | Descending | 2008-092T18:09 | 01-Apr | Tue | 7 | 41 | 10 | r = 4.490 Rs ( 270898 km) |
| S39 | 63 | 63AG (nt) | AEGAEON | 2008-092T18:16 | 01-Apr | Tue | 7 | 41 | 10 | Inbound 103555.0 km flyby, v = 15.9 km/s, phase = 157 deg |
| S39 | 63 | 63JA (nt) | JANUS | 2008-092T19:09 | 01-Apr | Tue | 7 | 41 | 10 | Inbound 117132.1 km flyby, v = 16.6 km/s, phase = 148 deg |
| S39 | 63 | Periapse | | 2008-092T20:16 | 01-Apr | Tue | 7 | 41 | 10 | R = 4.305 Rs, lat = -23 deg, phase = 149 deg |
| S39 | 63 | Ring CRX | Ascending | 2008-095T04:56 | 04-Apr | Fri | 10 | 38 | 13 | r = 19.866 Rs (1198508 km) |
| S39 | 64 | Apoapse | | 2008-097T15:14 | 06-Apr | Sun | 12 | 36 | 15 | Per = 9.6 d, inc = 63.1 deg, r = 24.533 Rs, phase = 30 deg |
| S39 | 64 | OTM-152 | 62TI+3d | 2008-101T19:04 | 10-Apr | Thu | 16 | 32 | 19 | D/L start, burn ~6h later. Backup D/L 102T22:48 |
| S39 | 64 | Earth OCC | RING | 2008-102T06:42 | 11-Apr | Fri | 17 | 31 | 0 | Duration = 52 min; egress = 2008-102T07:34:50 |
| S39 | 64 | Sun OCC | RING | 2008-102T07:04 | 11-Apr | Fri | 17 | 31 | 1 | Duration = 37 min; egress = 2008-102T07:41:20 |
| S39 | 64 | Ring CRX | Descending | 2008-102T08:05 | 11-Apr | Fri | 17 | 31 | 1 | r = 4.493 Rs ( 271035 km) |
| S39 | 64 | 64MI (nt) | MIMAS | 2008-102T09:28 | 11-Apr | Fri | 17 | 31 | 1 | Inbound 106544.3 km flyby, v = 17.1 km/s, phase = 129 deg |
| S39 | 64 | Periapse | | 2008-102T10:12 | 11-Apr | Fri | 17 | 31 | 1 | R = 4.307 Rs, lat = -23 deg, phase = 150 deg |
| S39 | 64 | SATURN | Segment | 2008-104T07:48 | 13-Apr | Sun | 19 | 29 | 3 | Saturn_064 (6d); Saturn_064/065 Apo |
| S39 | 64 | Ring CRX | Ascending | 2008-104T18:44 | 13-Apr | Sun | 19 | 29 | 3 | r = 19.830 Rs (1196316 km) |
| S39 | 65 | Apoapse | | 2008-107T04:56 | 16-Apr | Wed | 22 | 26 | 5 | Per = 9.6 d, inc = 63.1 deg, r = 24.493 Rs, phase = 30 deg |
| S40 | 65 | RINGS | Segment | 2008-110T07:18 | 19-Apr | Sat | 25 | 23 | 9 | RINGS_Rev_65_66 (14d); RINGS Rev 65/66 |
| S40 | 65 | S40 Begins | | 2008-110T07:18 | 19-Apr | Sat | 25 | 23 | 9 | S40 Sequence. Duration = 42 d |
| S40 | 65 | Earth OCC | RING | 2008-111T20:07 | 20-Apr | Sun | 26 | 22 | 10 | Duration = 53 min; egress = 2008-111T21:00:54 |
| S40 | 65 | Sun OCC | RING | 2008-111T20:32 | 20-Apr | Sun | 26 | 22 | 10 | Duration = 36 min; egress = 2008-111T21:08:04 |
| S40 | 65 | 65MI (nt) | MIMAS | 2008-111T20:44 | 20-Apr | Sun | 26 | 22 | 10 | Inbound 116387.6 km flyby, v = 15.6 km/s, phase = 135 deg |
| S40 | 65 | Ring CRX | Descending | 2008-111T21:31 | 20-Apr | Sun | 26 | 22 | 10 | r = 4.487 Rs ( 270725 km) |
| S40 | 65 | 65TL (nt) | TELESTO | 2008-111T21:47 | 20-Apr | Sun | 26 | 22 | 10 | Inbound 77610.4 km flyby, v = 15.5 km/s, phase = 88 deg |
| S40 | 65 | 65EP (nt) | EPIMETHEUS | 2008-111T22:33 | 20-Apr | Sun | 26 | 21 | 10 | Inbound 119101.9 km flyby, v = 16.8 km/s, phase = 148 deg |
| S40 | 65 | Periapse | | 2008-111T23:39 | 20-Apr | Sun | 26 | 21 | 10 | R = 4.301 Rs, lat = -23 deg, phase = 150 deg |
| S40 | 65 | Ring CRX | Ascending | 2008-114T08:05 | 23-Apr | Wed | 29 | 19 | 13 | r = 19.816 Rs (1195506 km) |
| S40 | 66 | Apoapse | | 2008-116T18:16 | 25-Apr | Fri | 31 | 17 | 15 | Per = 9.6 d, inc = 63.1 deg, r = 24.485 Rs, phase = 30 deg |
| S40 | 66 | OTM-153 | ~apo | 2008-116T21:47 | 25-Apr | Fri | 31 | 17 | 15 | D/L start, burn ~6h later. Backup D/L 117T21:47 |
| S40 | 66 | 66TI (nt) | TITAN | 2008-117T18:56 | 26-Apr | Sat | 32 | 16 | 1 | Inbound 780171.4 km flyby, v = 5.5 km/s, phase = 94 deg |
| S40 | 66 | Earth OCC | RING | 2008-121T09:20 | 30-Apr | Wed | 36 | 12 | 4 | Duration = 54 min; egress = 2008-121T10:13:34 |
| S40 | 66 | Sun OCC | RING | 2008-121T09:46 | 30-Apr | Wed | 36 | 12 | 4 | Duration = 35 min; egress = 2008-121T10:21:16 |
| S40 | 66 | 66TL (nt) | TELESTO | 2008-121T10:26 | 30-Apr | Wed | 36 | 12 | 5 | Inbound 35752.9 km flyby, v = 14.5 km/s, phase = 45 deg |
| S40 | 66 | Ring CRX | Descending | 2008-121T10:44 | 30-Apr | Wed | 36 | 12 | 5 | r = 4.480 Rs ( 270265 km) |
| S40 | 66 | 66PL (nt) | PALLENE | 2008-121T11:50 | 30-Apr | Wed | 36 | 12 | 5 | Inbound 93069.3 km flyby, v = 16.4 km/s, phase = 123 deg |
| S40 | 66 | Periapse | | 2008-121T12:51 | 30-Apr | Wed | 36 | 12 | 5 | R = 4.294 Rs, lat = -23 deg, phase = 150 deg |
| S40 | 66 | Ring CRX | Ascending | 2008-123T21:15 | 02-May | Fri | 38 | 10 | 7 | r = 19.816 Rs (1195508 km) |
| S40 | 66 | SATURN | Segment | 2008-124T06:16 | 03-May | Sat | 39 | 9 | 7 | Saturn_066 (6d); Saturn_066/067 Apo |
| S40 | 67 | Apoapse | | 2008-126T07:31 | 05-May | Mon | 41 | 7 | 9 | Per = 9.6 d, inc = 63.1 deg, r = 24.496 Rs, phase = 30 deg |
| S40 | 67 | OTM-154 | 67TI-3d | 2008-129T21:00 | 08-May | Thu | 44 | 4 | 13 | D/L start, burn ~6h later. Backup D/L 130T12:00 |
| S40 | 67 | RINGS | Segment | 2008-130T06:00 | 09-May | Fri | 45 | 3 | 0 | RINGS_REV_67 (3d); RINGS_Rev_67 |
| S40 | 67 | Earth OCC | RING | 2008-130T22:41 | 09-May | Fri | 45 | 2 | 1 | Duration = 53 min; egress = 2008-130T23:34:30 |
| S40 | 67 | Sun OCC | RING | 2008-130T23:08 | 09-May | Fri | 45 | 2 | 1 | Duration = 34 min; egress = 2008-130T23:42:30 |
| S40 | 67 | 67ME (nt) | METHONE | 2008-130T23:35 | 09-May | Fri | 45 | 2 | 1 | Inbound 95837.5 km flyby, v = 15.2 km/s, phase = 138 deg |
| S40 | 67 | Ring CRX | Descending | 2008-131T00:04 | 10-May | Sat | 45 | 2 | 1 | r = 4.478 Rs ( 270164 km) |
| S40 | 67 | 67JA (nt) | JANUS | 2008-131T00:05 | 10-May | Sat | 45 | 2 | 1 | Inbound 120786.2 km flyby, v = 16.3 km/s, phase = 156 deg |
| S40 | 67 | 67AN (nt) | ANTHE | 2008-131T00:20 | 10-May | Sat | 45 | 2 | 1 | Inbound 71277.4 km flyby, v = 15.4 km/s, phase = 156 deg |
| S40 | 67 | Periapse | | 2008-131T02:12 | 10-May | Sat | 45 | 2 | 1 | R = 4.292 Rs, lat = -23 deg, phase = 150 deg |
| S40 | 67 | TOST | Segment | 2008-132T22:30 | 11-May | Sun | 47 | 0 | 3 | TOST_067TI_T43 (2d); TOST_067TI (T43) Flyby |
| S40 | 67 | 67TI (t) T43 | TITAN | 2008-133T10:01 | 12-May | Mon | 48 | 16 | 4 | Outbound 1001.4 km flyby, v = 6.3 km/s, phase = 36 deg |
| S40 | 67 | Ring CRX | Ascending | 2008-133T10:30 | 12-May | Mon | 0 | 16 | 4 | r = 19.798 Rs (1194415 km) |
| S40 | 67 | RINGS | Segment | 2008-134T22:14 | 13-May | Tue | 2 | 14 | 5 | RINGS_REV_67_68 (3d); RINGS_Rev_67_68 |
| S40 | 68 | Apoapse | | 2008-135T00:19 | 14-May | Wed | 2 | 14 | 5 | Per = 8.0 d, inc = 69.3 deg, r = 22.293 Rs, phase = 24 deg |
| S40 | 68 | OTM-155 | 67TI+5d | 2008-137T19:20 | 16-May | Fri | 4 | 12 | 8 | D/L start, burn ~6h later. Backup D/L 139T13:44 |
| S40 | 68 | SATURN | Segment | 2008-138T04:20 | 17-May | Sat | 5 | 11 | 0 | Saturn_068 (10d); Saturn_068_069 |
| S40 | 68 | Earth OCC | SATURN | 2008-138T22:07 | 17-May | Sat | 6 | 10 | 1 | Duration = 72 min; egress = 2008-138T23:19:30 |
| S40 | 68 | Earth OCC | RING | 2008-138T22:08 | 17-May | Sat | 6 | 10 | 1 | Duration = 45 min; egress = 2008-138T22:53:28 |
| S40 | 68 | Sun OCC | RING | 2008-138T22:26 | 17-May | Sat | 6 | 10 | 1 | Duration = 30 min; egress = 2008-138T22:56:20 |
| S40 | 68 | Sun OCC | SATURN | 2008-138T22:43 | 17-May | Sat | 6 | 10 | 1 | Duration = 30 min; egress = 2008-138T23:13:13 |
| S40 | 68 | 68CP (nt) | CALYPSO | 2008-138T23:03 | 17-May | Sat | 6 | 10 | 1 | Inbound 111500.0 km flyby, v = 18.4 km/s, phase = 52 deg |
| S40 | 68 | Ring CRX | Descending | 2008-138T23:03 | 17-May | Sat | 6 | 10 | 1 | r = 3.270 Rs ( 197266 km) |
| S40 | 68 | 68ME (nt) | METHONE | 2008-138T23:35 | 17-May | Sat | 6 | 10 | 1 | Inbound 78917.6 km flyby, v = 20.1 km/s, phase = 105 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S40 | 68 | Periapse | | 2008-138T23:55 | 17-May | Sat | 6 | 10 | 1 | R = 3.210 Rs, lat = -16 deg, phase = 156 deg |
| S40 | 68 | 68EP (nt) | EPIMETHEUS | 2008-139T00:05 | 18-May | Sun | 6 | 10 | 1 | Outbound 98915.0 km flyby, v = 21.5 km/s, phase = 118 deg |
| S40 | 68 | Ring CRX | Ascending | 2008-141T09:44 | 20-May | Tue | 8 | 8 | 4 | r = 19.808 Rs (1195035 km) |
| S40 | 68 | OTM-156 | ~apo | 2008-142T20:13 | 21-May | Wed | 9 | 7 | 5 | D/L start, burn ~6h later. Backup D/L 143T19:58 |
| S40 | 69 | Apoapse | | 2008-142T23:31 | 21-May | Wed | 10 | 6 | 0 | Per = 8.0 d, inc = 69.3 deg, r = 22.291 Rs, phase = 24 deg |
| S40 | 69 | OTM-157 | 69TI-3d | 2008-145T19:58 | 24-May | Sat | 12 | 4 | 3 | D/L start, burn ~6h later. Backup D/L 147T19:43 |
| S40 | 69 | Earth OCC | RING | 2008-146T21:20 | 25-May | Sun | 13 | 2 | 1 | Duration = 44 min; egress = 2008-146T22:05:09 |
| S40 | 69 | Earth OCC | SATURN | 2008-146T21:21 | 25-May | Sun | 13 | 2 | 1 | Duration = 70 min; egress = 2008-146T22:30:54 |
| S40 | 69 | Sun OCC | RING | 2008-146T21:38 | 25-May | Sun | 13 | 2 | 1 | Duration = 30 min; egress = 2008-146T22:08:02 |
| S40 | 69 | 69AG (nt) | AEGAEON | 2008-146T21:55 | 25-May | Sun | 13 | 2 | 1 | Inbound 52198.6 km flyby, v = 19.0 km/s, phase = 119 deg |
| S40 | 69 | Sun OCC | SATURN | 2008-146T21:59 | 25-May | Sun | 13 | 2 | 1 | Duration = 23 min; egress = 2008-146T22:22:19 |
| S40 | 69 | 69PL (nt) | PALLENE | 2008-146T22:05 | 25-May | Sun | 14 | 2 | 1 | Inbound 28257.1 km flyby, v = 18.3 km/s, phase = 51 deg |
| S40 | 69 | 69AT (nt) | ATLAS | 2008-146T22:14 | 25-May | Sun | 14 | 2 | 1 | Inbound 60523.3 km flyby, v = 19.9 km/s, phase = 155 deg |
| S40 | 69 | Ring CRX | Descending | 2008-146T22:15 | 25-May | Sun | 14 | 2 | 1 | r = 3.270 Rs ( 197262 km) |
| S40 | 69 | 69JA (nt) | JANUS | 2008-146T22:49 | 25-May | Sun | 14 | 2 | 1 | Inbound 63865.9 km flyby, v = 20.4 km/s, phase = 134 deg |
| S40 | 69 | Periapse | | 2008-146T23:06 | 25-May | Sun | 14 | 2 | 1 | R = 3.211 Rs, lat = -16 deg, phase = 156 deg |
| S40 | 69 | TOST | Segment | 2008-148T04:43 | 27-May | Tue | 15 | 1 | 2 | TOST_069TI_T44 (3d); TOST_069TI (T44) Flyby |
| S40 | 69 | 69TI (t) T44 | TITAN | 2008-149T08:24 | 28-May | Wed | 16 | 64 | 4 | Outbound 1400.0 km flyby, v = 6.3 km/s, phase = 21 deg |
| S40 | 69 | Ring CRX | Ascending | 2008-149T08:57 | 28-May | Wed | 0 | 64 | 4 | r = 19.802 Rs (1194684 km) |
| S40 | 70 | Apoapse | | 2008-150T09:16 | 29-May | Thu | 1 | 63 | 5 | Per = 7.1 d, inc = 74.7 deg, r = 20.985 Rs, phase = 22 deg |
| S40 | 70 | RINGS | Segment | 2008-150T21:12 | 29-May | Thu | 2 | 62 | 5 | RINGS_REV_70 (2d); RINGS_Rev_70 |
| S41 | 70 | S41 Begins | | 2008-152T04:27 | 31-May | Sat | 3 | 61 | 6 | S41 Sequence. Duration = 32 d |
| S41 | 70 | OTM-158 | 69TI+4d | 2008-152T18:27 | 31-May | Sat | 3 | 60 | 7 | D/L start, burn ~6h later. Backup D/L 154T11:57 |
| S41 | 70 | MAG | Segment | 2008-153T03:27 | 01-Jun | Sun | 4 | 60 | 0 | MAG_70 (3d); MAG rev 70 |
| S41 | 70 | Earth OCC | SATURN | 2008-153T21:32 | 01-Jun | Sun | 5 | 59 | 1 | Duration = 74 min; egress = 2008-153T22:47:09 |
| S41 | 70 | Earth OCC | RING | 2008-153T21:43 | 01-Jun | Sun | 5 | 59 | 1 | Duration = 39 min; egress = 2008-153T22:22:44 |
| S41 | 70 | Sun OCC | SATURN | 2008-153T21:53 | 01-Jun | Sun | 5 | 59 | 1 | Duration = 53 min; egress = 2008-153T22:46:32 |
| S41 | 70 | Sun OCC | RING | 2008-153T21:57 | 01-Jun | Sun | 5 | 59 | 1 | Duration = 26 min; egress = 2008-153T22:23:47 |
| S41 | 70 | 70PL (nt) | PALLENE | 2008-153T22:01 | 01-Jun | Sun | 5 | 59 | 1 | Inbound 115590.7 km flyby, v = 21.4 km/s, phase = 66 deg |
| S41 | 70 | 70JA (nt) | JANUS | 2008-153T22:13 | 01-Jun | Sun | 5 | 59 | 1 | Inbound 32921.0 km flyby, v = 22.1 km/s, phase = 109 deg |
| S41 | 70 | Dust Hazard | G_ring | 2008-153T22:26 | 01-Jun | Sun | 5 | 59 | 1 | Egress @ 2008-153T22:27 (0 min) \| Protection: MEA Cvr. Closure |
| S41 | 70 | Ring CRX | Descending | 2008-153T22:26 | 01-Jun | Sun | 5 | 59 | 1 | r = 2.731 Rs ( 164772 km) |
| S41 | 70 | Periapse | | 2008-153T22:51 | 01-Jun | Sun | 5 | 59 | 1 | R = 2.710 Rs, lat = -10 deg, phase = 158 deg |
| S41 | 70 | RINGS | Segment | 2008-156T04:11 | 04-Jun | Wed | 7 | 57 | 3 | RINGS_REV_70_71 (4d); RINGS_Rev_70_71 |
| S41 | 70 | Ring CRX | Ascending | 2008-156T12:24 | 04-Jun | Wed | 7 | 57 | 4 | r = 19.836 Rs (1196682 km) |
| S41 | 71 | Apoapse | | 2008-157T12:30 | 05-Jun | Thu | 8 | 56 | 5 | Per = 7.1 d, inc = 74.7 deg, r = 20.991 Rs, phase = 22 deg |
| S41 | 71 | MAG | Segment | 2008-160T02:45 | 08-Jun | Sun | 11 | 53 | 7 | MAG_71 (2d); MAG rev 71 |
| S41 | 71 | 71PN (nt) | PAN | 2008-161T00:43 | 09-Jun | Mon | 12 | 52 | 8 | Inbound 116077.7 km flyby, v = 23.6 km/s, phase = 103 deg |
| S41 | 71 | Earth OCC | SATURN | 2008-161T00:52 | 09-Jun | Mon | 12 | 52 | 8 | Duration = 73 min; egress = 2008-161T02:05:08 |
| S41 | 71 | Earth OCC | RING | 2008-161T01:02 | 09-Jun | Mon | 12 | 52 | 8 | Duration = 38 min; egress = 2008-161T01:40:45 |
| S41 | 71 | Sun OCC | SATURN | 2008-161T01:12 | 09-Jun | Mon | 12 | 52 | 8 | Duration = 51 min; egress = 2008-161T02:03:59 |
| S41 | 71 | Sun OCC | RING | 2008-161T01:15 | 09-Jun | Mon | 12 | 52 | 8 | Duration = 26 min; egress = 2008-161T01:41:47 |
| S41 | 71 | 71AN (nt) | ANTHE | 2008-161T01:38 | 09-Jun | Mon | 12 | 52 | 8 | Inbound 34934.7 km flyby, v = 21.2 km/s, phase = 18 deg |
| S41 | 71 | Dust Hazard | G_ring | 2008-161T01:44 | 09-Jun | Mon | 12 | 52 | 8 | Egress @ 2008-161T01:45 (0 min) \| Protection: MEA Cvr. Closure |
| S41 | 71 | Ring CRX | Descending | 2008-161T01:44 | 09-Jun | Mon | 12 | 52 | 8 | r = 2.730 Rs ( 164708 km) |
| S41 | 71 | Periapse | | 2008-161T02:09 | 09-Jun | Mon | 12 | 52 | 8 | R = 2.710 Rs, lat = -10 deg, phase = 158 deg |
| S41 | 71 | 71PA (nt) | PANDORA | 2008-161T02:16 | 09-Jun | Mon | 12 | 52 | 8 | Outbound 64065.2 km flyby, v = 23.5 km/s, phase = 119 deg |
| S41 | 71 | RINGS | Segment | 2008-162T02:50 | 10-Jun | Tue | 13 | 51 | 9 | RINGS_REV_71_72 (5d); RINGS_Rev_71_72 |
| S41 | 71 | Ring CRX | Ascending | 2008-163T15:55 | 11-Jun | Wed | 14 | 49 | 11 | r = 19.855 Rs (1197859 km) |
| S41 | 72 | Apoapse | | 2008-164T15:44 | 12-Jun | Thu | 15 | 48 | 12 | Per = 7.1 d, inc = 74.7 deg, r = 20.985 Rs, phase = 22 deg |
| S41 | 72 | 72TI (nt) | TITAN | 2008-165T04:28 | 13-Jun | Fri | 16 | 48 | 12 | Inbound 364575.2 km flyby, v = 5.8 km/s, phase = 88 deg |
| S41 | 72 | SATURN | Segment | 2008-167T03:40 | 15-Jun | Sun | 18 | 46 | 14 | Saturn_072 (7d); Saturn_072_073 |
| S41 | 72 | Earth OCC | SATURN | 2008-168T04:00 | 16-Jun | Mon | 19 | 45 | 15 | Duration = 71 min; egress = 2008-168T05:11:24 |
| S41 | 72 | Earth OCC | RING | 2008-168T04:10 | 16-Jun | Mon | 19 | 45 | 15 | Duration = 37 min; egress = 2008-168T04:47:06 |
| S41 | 72 | Sun OCC | SATURN | 2008-168T04:19 | 16-Jun | Mon | 19 | 45 | 15 | Duration = 50 min; egress = 2008-168T05:09:54 |
| S41 | 72 | Sun OCC | RING | 2008-168T04:22 | 16-Jun | Mon | 19 | 45 | 15 | Duration = 25 min; egress = 2008-168T04:48:01 |
| S41 | 72 | Dust Hazard | G_ring | 2008-168T04:50 | 16-Jun | Mon | 19 | 45 | 15 | Egress @ 2008-168T04:51 (0 min) \| Protection: MEA Cvr. Closure |
| S41 | 72 | Ring CRX | Descending | 2008-168T04:50 | 16-Jun | Mon | 19 | 45 | 15 | r = 2.713 Rs ( 163704 km) |
| S41 | 72 | 72EP (nt) | EPIMETHEUS | 2008-168T04:59 | 16-Jun | Mon | 19 | 45 | 15 | Inbound 23103.4 km flyby, v = 22.5 km/s, phase = 127 deg |
| S41 | 72 | 72PM (nt) | PROMETHEUS | 2008-168T05:02 | 16-Jun | Mon | 19 | 45 | 15 | Inbound 31848.9 km flyby, v = 22.8 km/s, phase = 142 deg |
| S41 | 72 | Periapse | | 2008-168T05:14 | 16-Jun | Mon | 19 | 45 | 15 | R = 2.694 Rs, lat = -10 deg, phase = 158 deg |
| S41 | 72 | 72ME (nt) | METHONE | 2008-168T05:19 | 16-Jun | Mon | 19 | 45 | 15 | Outbound 113234.2 km flyby, v = 23.3 km/s, phase = 100 deg |
| S41 | 72 | 72AN (nt) | ANTHE | 2008-168T05:19 | 16-Jun | Mon | 19 | 45 | 15 | Outbound 118784.0 km flyby, v = 23.3 km/s, phase = 100 deg |
| S41 | 72 | Ring CRX | Ascending | 2008-170T19:09 | 18-Jun | Wed | 21 | 42 | 18 | r = 19.875 Rs (1199066 km) |
| S41 | 73 | Apoapse | | 2008-171T18:47 | 19-Jun | Thu | 22 | 41 | 19 | Per = 7.1 d, inc = 74.7 deg, r = 20.989 Rs, phase = 22 deg |
| S41 | 73 | MAG | Segment | 2008-174T03:09 | 22-Jun | Sun | 25 | 39 | 21 | MAG_73 (2d); MAG rev 73 |
| S41 | 73 | OTM-159 | ~apo | 2008-175T00:24 | 23-Jun | Mon | 26 | 38 | 22 | D/L start, burn ~6h later. Backup D/L 175T09:24 |
| S41 | 73 | Earth OCC | SATURN | 2008-175T07:06 | 23-Jun | Mon | 26 | 38 | 0 | Duration = 70 min; egress = 2008-175T08:16:30 |
| S41 | 73 | Earth OCC | RING | 2008-175T07:16 | 23-Jun | Mon | 26 | 38 | 0 | Duration = 36 min; egress = 2008-175T07:52:11 |
| S41 | 73 | Sun OCC | SATURN | 2008-175T07:26 | 23-Jun | Mon | 26 | 38 | 0 | Duration = 48 min; egress = 2008-175T08:14:22 |
| S41 | 73 | Sun OCC | RING | 2008-175T07:28 | 23-Jun | Mon | 26 | 38 | 0 | Duration = 25 min; egress = 2008-175T07:53:03 |
| S41 | 73 | Dust Hazard | G_ring | 2008-175T07:55 | 23-Jun | Mon | 26 | 38 | 0 | Egress @ 2008-175T07:56 (0 min) \| Protection: MEA Cvr. Closure |
| S41 | 73 | Ring CRX | Descending | 2008-175T07:55 | 23-Jun | Mon | 26 | 38 | 0 | r = 2.711 Rs ( 163573 km) |
| S41 | 73 | 73ME (nt) | METHONE | 2008-175T08:05 | 23-Jun | Mon | 26 | 38 | 0 | Inbound 55482.9 km flyby, v = 21.9 km/s, phase = 76 deg |
| S41 | 73 | 73PN (nt) | PAN | 2008-175T08:18 | 23-Jun | Mon | 26 | 38 | 0 | Inbound 48789.1 km flyby, v = 23.3 km/s, phase = 132 deg |
| S41 | 73 | Periapse | | 2008-175T08:19 | 23-Jun | Mon | 26 | 38 | 0 | R = 2.692 Rs, lat = -10 deg, phase = 158 deg |
| S41 | 73 | SATURN | Segment | 2008-175T18:24 | 23-Jun | Mon | 26 | 37 | 1 | Saturn_073 (6d); Saturn_073_074 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S41 | 73 | Ring CRX | Ascending | 2008-177T21:40 | 25-Jun | Wed | 29 | 35 | 3 | r = 19.705 Rs (1188785 km) |
| S41 | 74 | Apoapse | | 2008-178T20:44 | 26-Jun | Thu | 30 | 34 | 4 | Per = 7.0 d, inc = 74.7 deg, r = 20.785 Rs, phase = 22 deg |
| S41 | 74 | 74TI (nt) | TITAN | 2008-180T15:58 | 28-Jun | Sat | 31 | 32 | 6 | Inbound 729791.7 km flyby, v = 7.9 km/s, phase = 107 deg |
| S41 | 74 | MAG | Segment | 2008-181T19:08 | 29-Jun | Sun | 32 | 31 | 7 | MAG_74 (2d); MAG rev 74 |
| S41 | 74 | Earth OCC | SATURN | 2008-182T07:59 | 30-Jun | Mon | 33 | 31 | 7 | Duration = 67 min; egress = 2008-182T09:06:23 |
| S41 | 74 | Earth OCC | RING | 2008-182T08:07 | 30-Jun | Mon | 33 | 31 | 7 | Duration = 34 min; egress = 2008-182T08:42:18 |
| S41 | 74 | 74PM (nt) | PROMETHEUS | 2008-182T08:15 | 30-Jun | Mon | 33 | 31 | 7 | Inbound 65574.3 km flyby, v = 22.6 km/s, phase = 106 deg |
| S41 | 74 | Sun OCC | SATURN | 2008-182T08:17 | 30-Jun | Mon | 33 | 31 | 7 | Duration = 46 min; egress = 2008-182T09:03:51 |
| S41 | 74 | Sun OCC | RING | 2008-182T08:18 | 30-Jun | Mon | 33 | 31 | 7 | Duration = 24 min; egress = 2008-182T08:43:05 |
| S41 | 74 | Dust Hazard | G_ring | 2008-182T08:45 | 30-Jun | Mon | 33 | 31 | 7 | Egress @ 2008-182T08:46 (0 min) \| Protection: MEA Cvr. Closure |
| S41 | 74 | Ring CRX | Descending | 2008-182T08:45 | 30-Jun | Mon | 33 | 31 | 7 | r = 2.708 Rs ( 163395 km) |
| S41 | 74 | 74EN (nt) | ENCELADUS | 2008-182T08:46 | 30-Jun | Mon | 33 | 31 | 7 | Inbound 83739.2 km flyby, v = 21.1 km/s, phase = 49 deg |
| S41 | 74 | 74JA (nt) | JANUS | 2008-182T08:57 | 30-Jun | Mon | 33 | 31 | 7 | Inbound 29620.4 km flyby, v = 22.6 km/s, phase = 124 deg |
| S41 | 74 | 74ME (nt) | METHONE | 2008-182T09:05 | 30-Jun | Mon | 33 | 31 | 7 | Inbound 84860.2 km flyby, v = 22.5 km/s, phase = 92 deg |
| S41 | 74 | Periapse | | 2008-182T09:09 | 30-Jun | Mon | 33 | 31 | 7 | R = 2.689 Rs, lat = -10 deg, phase = 158 deg |
| S41 | 74 | 74AG (nt) | AEGAEON | 2008-182T09:20 | 30-Jun | Mon | 33 | 31 | 7 | Outbound 95514.9 km flyby, v = 23.7 km/s, phase = 107 deg |
| S41 | 74 | 74AT (nt) | ATLAS | 2008-182T09:22 | 30-Jun | Mon | 33 | 31 | 7 | Outbound 73454.1 km flyby, v = 24.0 km/s, phase = 119 deg |
| S42 | 74 | END OF PRIME MISSION | | 2008-183T19:08 | 01-Jul | Tue | 34 | 29 | 9 | End of prime mission / start of Equinox mission (2008-2010) |
| S42 | 74 | RINGS | Segment | 2008-183T19:08 | 01-Jul | Tue | 34 | 29 | 9 | RINGS_REV_74_75 (8d); Rings Rev 74/75 |
| S42 | 74 | S42 Begins | | 2008-183T19:08 | 01-Jul | Tue | 34 | 29 | 9 | S42 Sequence. Duration = 40 d |
| S42 | 74 | Ring CRX | Ascending | 2008-184T22:44 | 02-Jul | Wed | 36 | 28 | 10 | r = 19.728 Rs (1190165 km) |
| S42 | 75 | Apoapse | | 2008-185T21:33 | 03-Jul | Thu | 37 | 27 | 11 | Per = 7.0 d, inc = 74.8 deg, r = 20.783 Rs, phase = 22 deg |
| S42 | 75 | Earth OCC | SATURN | 2008-189T08:49 | 07-Jul | Mon | 40 | 24 | 14 | Duration = 65 min; egress = 2008-189T09:54:47 |
| S42 | 75 | 75JA (nt) | JANUS | 2008-189T08:57 | 07-Jul | Mon | 40 | 24 | 14 | Inbound 81938.2 km flyby, v = 22.6 km/s, phase = 94 deg |
| S42 | 75 | Earth OCC | RING | 2008-189T08:57 | 07-Jul | Mon | 40 | 24 | 14 | Duration = 33 min; egress = 2008-189T09:30:55 |
| S42 | 75 | Sun OCC | SATURN | 2008-189T09:07 | 07-Jul | Mon | 40 | 24 | 14 | Duration = 44 min; egress = 2008-189T09:51:51 |
| S42 | 75 | Sun OCC | RING | 2008-189T09:07 | 07-Jul | Mon | 40 | 24 | 14 | Duration = 24 min; egress = 2008-189T09:31:39 |
| S42 | 75 | Dust Hazard | G_ring | 2008-189T09:33 | 07-Jul | Mon | 40 | 24 | 14 | Egress @ 2008-189T09:34 (0 min) \| Protection: MEA Cvr. Closure |
| S42 | 75 | Ring CRX | Descending | 2008-189T09:33 | 07-Jul | Mon | 40 | 24 | 14 | r = 2.707 Rs ( 163287 km) |
| S42 | 75 | 75PA (nt) | PANDORA | 2008-189T09:38 | 07-Jul | Mon | 40 | 24 | 14 | Inbound 22898.8 km flyby, v = 22.6 km/s, phase = 159 deg |
| S42 | 75 | Periapse | | 2008-189T09:57 | 07-Jul | Mon | 40 | 24 | 14 | R = 2.688 Rs, lat = -10 deg, phase = 158 deg |
| S42 | 75 | 75ME (nt) | METHONE | 2008-189T10:03 | 07-Jul | Mon | 40 | 24 | 14 | Outbound 116261.1 km flyby, v = 23.4 km/s, phase = 102 deg |
| S42 | 75 | Ring CRX | Ascending | 2008-191T23:46 | 09-Jul | Wed | 43 | 21 | 17 | r = 19.751 Rs (1191552 km) |
| S42 | 75 | SATURN | Segment | 2008-192T02:07 | 10-Jul | Thu | 43 | 21 | 17 | Saturn_076 (10d); Saturn_075_076_077 |
| S42 | 76 | Apoapse | | 2008-192T22:21 | 10-Jul | Thu | 44 | 20 | 18 | Per = 7.0 d, inc = 74.8 deg, r = 20.784 Rs, phase = 22 deg |
| S42 | 76 | Earth OCC | SATURN | 2008-196T09:41 | 14-Jul | Mon | 47 | 17 | 21 | Duration = 62 min; egress = 2008-196T10:43:23 |
| S42 | 76 | Earth OCC | RING | 2008-196T09:48 | 14-Jul | Mon | 47 | 17 | 21 | Duration = 31 min; egress = 2008-196T10:19:51 |
| S42 | 76 | Sun OCC | RING | 2008-196T09:57 | 14-Jul | Mon | 47 | 17 | 21 | Duration = 23 min; egress = 2008-196T10:20:30 |
| S42 | 76 | Sun OCC | SATURN | 2008-196T09:57 | 14-Jul | Mon | 47 | 17 | 21 | Duration = 42 min; egress = 2008-196T10:39:58 |
| S42 | 76 | 76DA (nt) | DAPHNIS | 2008-196T10:06 | 14-Jul | Mon | 47 | 17 | 21 | Inbound 44005.8 km flyby, v = 22.6 km/s, phase = 119 deg |
| S42 | 76 | 76PM (nt) | PROMETHEUS | 2008-196T10:13 | 14-Jul | Mon | 47 | 17 | 21 | Inbound 32622.3 km flyby, v = 22.5 km/s, phase = 127 deg |
| S42 | 76 | Dust Hazard | G_ring | 2008-196T10:22 | 14-Jul | Mon | 47 | 17 | 21 | Egress @ 2008-196T10:23 (0 min) \| Protection: MEA Cvr. Closure |
| S42 | 76 | Ring CRX | Descending | 2008-196T10:22 | 14-Jul | Mon | 47 | 17 | 21 | r = 2.707 Rs ( 163313 km) |
| S42 | 76 | 76PL (nt) | PALLENE | 2008-196T10:36 | 14-Jul | Mon | 47 | 17 | 21 | Inbound 91902.6 km flyby, v = 22.1 km/s, phase = 84 deg |
| S42 | 76 | Periapse | | 2008-196T10:46 | 14-Jul | Mon | 47 | 17 | 21 | R = 2.689 Rs, lat = -10 deg, phase = 158 deg |
| S42 | 76 | 76TI (nt) | TITAN | 2008-197T21:26 | 15-Jul | Tue | 49 | 15 | 23 | Outbound 542890.5 km flyby, v = 8.4 km/s, phase = 127 deg |
| S42 | 76 | Ring CRX | Ascending | 2008-199T00:51 | 17-Jul | Thu | 50 | 14 | 24 | r = 19.779 Rs (1193262 km) |
| S42 | 77 | Apoapse | | 2008-199T23:12 | 17-Jul | Thu | 51 | 13 | 25 | Per = 7.0 d, inc = 74.7 deg, r = 20.790 Rs, phase = 22 deg |
| S42 | 77 | RINGS | Segment | 2008-202T01:21 | 20-Jul | Sun | 53 | 11 | 27 | RINGS_REV_77 (4d); Rings Rev 77 |
| S42 | 77 | Earth OCC | SATURN | 2008-203T10:37 | 21-Jul | Mon | 54 | 10 | 28 | Duration = 59 min; egress = 2008-203T11:36:38 |
| S42 | 77 | Earth OCC | RING | 2008-203T10:43 | 21-Jul | Mon | 54 | 10 | 28 | Duration = 30 min; egress = 2008-203T11:13:33 |
| S42 | 77 | Sun OCC | RING | 2008-203T10:51 | 21-Jul | Mon | 54 | 10 | 28 | Duration = 23 min; egress = 2008-203T11:14:08 |
| S42 | 77 | Sun OCC | SATURN | 2008-203T10:53 | 21-Jul | Mon | 54 | 10 | 28 | Duration = 40 min; egress = 2008-203T11:32:43 |
| S42 | 77 | 77PL (nt) | PALLENE | 2008-203T11:06 | 21-Jul | Mon | 54 | 10 | 28 | Inbound 59392.3 km flyby, v = 21.0 km/s, phase = 26 deg |
| S42 | 77 | 77AG (nt) | AEGAEON | 2008-203T11:11 | 21-Jul | Mon | 54 | 10 | 28 | Inbound 12254.3 km flyby, v = 21.8 km/s, phase = 61 deg |
| S42 | 77 | Dust Hazard | G_ring | 2008-203T11:16 | 21-Jul | Mon | 54 | 10 | 28 | Egress @ 2008-203T11:17 (0 min) \| Protection: MEA Cvr. Closure |
| S42 | 77 | Ring CRX | Descending | 2008-203T11:16 | 21-Jul | Mon | 54 | 10 | 28 | r = 2.709 Rs ( 163459 km) |
| S42 | 77 | 77AT (nt) | ATLAS | 2008-203T11:23 | 21-Jul | Mon | 54 | 10 | 28 | Inbound 28113.2 km flyby, v = 22.7 km/s, phase = 155 deg |
| S42 | 77 | 77AN (nt) | ANTHE | 2008-203T11:35 | 21-Jul | Mon | 54 | 10 | 28 | Inbound 86704.8 km flyby, v = 22.5 km/s, phase = 92 deg |
| S42 | 77 | Periapse | | 2008-203T11:39 | 21-Jul | Mon | 54 | 10 | 28 | R = 2.692 Rs, lat = -10 deg, phase = 158 deg |
| S42 | 77 | 77DA (nt) | DAPHNIS | 2008-203T12:00 | 21-Jul | Mon | 54 | 10 | 28 | Outbound 85397.0 km flyby, v = 24.4 km/s, phase = 118 deg |
| S42 | 77 | 77PN (nt) | PAN | 2008-203T12:04 | 21-Jul | Mon | 54 | 10 | 28 | Outbound 90509.7 km flyby, v = 24.6 km/s, phase = 118 deg |
| S42 | 77 | SATURN | Segment | 2008-206T01:21 | 24-Jul | Thu | 57 | 7 | 31 | Saturn_078 (3d); Saturn_077_078 |
| S42 | 77 | Ring CRX | Ascending | 2008-206T02:02 | 24-Jul | Thu | 57 | 7 | 31 | r = 19.806 Rs (1194897 km) |
| S42 | 78 | Apoapse | | 2008-207T00:08 | 25-Jul | Fri | 58 | 6 | 32 | Per = 7.0 d, inc = 74.7 deg, r = 20.794 Rs, phase = 22 deg |
| S42 | 78 | RINGS | Segment | 2008-209T01:06 | 27-Jul | Sun | 60 | 4 | 34 | RINGS_REV_78 (3d); Rings Rev 78 |
| S42 | 78 | OTM-160 | 78TI-3d | 2008-209T08:36 | 27-Jul | Sun | 60 | 4 | 34 | D/L start, burn ~6h later. Backup D/L 210T17:00 |
| S42 | 78 | 78PN (nt) | PAN | 2008-210T11:25 | 28-Jul | Mon | 61 | 3 | 1 | Inbound 97258.0 km flyby, v = 23.3 km/s, phase = 102 deg |
| S42 | 78 | Earth OCC | SATURN | 2008-210T11:39 | 28-Jul | Mon | 61 | 3 | 1 | Duration = 55 min; egress = 2008-210T12:34:14 |
| S42 | 78 | Earth OCC | RING | 2008-210T11:43 | 28-Jul | Mon | 61 | 3 | 1 | Duration = 28 min; egress = 2008-210T12:11:52 |
| S42 | 78 | Sun OCC | RING | 2008-210T11:49 | 28-Jul | Mon | 61 | 3 | 1 | Duration = 22 min; egress = 2008-210T12:12:18 |
| S42 | 78 | Sun OCC | SATURN | 2008-210T11:53 | 28-Jul | Mon | 61 | 3 | 1 | Duration = 37 min; egress = 2008-210T12:29:57 |
| S42 | 78 | Dust Hazard | G_ring | 2008-210T12:14 | 28-Jul | Mon | 61 | 3 | 1 | Egress @ 2008-210T12:15 (0 min) \| Protection: MEA Cvr. Closure |
| S42 | 78 | Ring CRX | Descending | 2008-210T12:14 | 28-Jul | Mon | 61 | 3 | 1 | r = 2.709 Rs ( 163457 km) |
| S42 | 78 | 78PM (nt) | PROMETHEUS | 2008-210T12:18 | 28-Jul | Mon | 61 | 3 | 1 | Inbound 24670.1 km flyby, v = 22.6 km/s, phase = 160 deg |
| S42 | 78 | Periapse | | 2008-210T12:37 | 28-Jul | Mon | 61 | 3 | 1 | R = 2.692 Rs, lat = -10 deg, phase = 158 deg |
| S42 | 78 | 78EP (nt) | EPIMETHEUS | 2008-210T13:01 | 28-Jul | Mon | 61 | 3 | 1 | Outbound 107124.5 km flyby, v = 24.6 km/s, phase = 113 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S42 | 78 | TOST | Segment | 2008-212T07:20 | 30-Jul | Wed | 63 | 1 | 3 | TOST_78_79_T45 (2d); Titan Flyby T45 |
| S42 | 78 | 78TI (t) T45 | TITAN | 2008-213T02:13 | 31-Jul | Thu | 64 | 12 | 4 | Outbound 1613.8 km flyby, v = 6.2 km/s, phase = 49 deg |
| S42 | 78 | Ring CRX | Ascending | 2008-213T03:01 | 31-Jul | Thu | 0 | 12 | 4 | r = 19.792 Rs (1194062 km) |
| S42 | 79 | Apoapse | | 2008-213T19:51 | 31-Jul | Thu | 1 | 11 | 4 | Per = 7.4 d, inc = 74.5 deg, r = 20.317 Rs, phase = 22 deg |
| S42 | 79 | RINGS | Segment | 2008-214T00:50 | 01-Aug | Fri | 1 | 11 | 5 | RINGS_79_80 (10d); RINGS_79_80 |
| S42 | 79 | OTM-162 | 78TI+4d | 2008-216T16:15 | 03-Aug | Sun | 4 | 8 | 7 | D/L start, burn ~6h later. Backup D/L 218T08:05 |
| S42 | 79 | 79MI (nt) | MIMAS | 2008-217T10:27 | 04-Aug | Mon | 4 | 7 | 1 | Inbound 121889.0 km flyby, v = 19.0 km/s, phase = 110 deg |
| S42 | 79 | Earth OCC | RING | 2008-217T11:09 | 04-Aug | Mon | 4 | 7 | 1 | Duration = 30 min; egress = 2008-217T11:39:01 |
| S42 | 79 | Sun OCC | RING | 2008-217T11:17 | 04-Aug | Mon | 4 | 7 | 1 | Duration = 24 min; egress = 2008-217T11:40:57 |
| S42 | 79 | Dust Hazard | E_ring_lg | 2008-217T11:51 | 04-Aug | Mon | 4 | 7 | 1 | Egress @ 2008-217T11:54 (2 min) \| Protection: MEA Cvr. Closure |
| S42 | 79 | Ring CRX | Descending | 2008-217T11:52 | 04-Aug | Mon | 4 | 7 | 1 | r = 3.962 Rs ( 239026 km) |
| S42 | 79 | Periapse | | 2008-217T12:31 | 04-Aug | Mon | 4 | 7 | 1 | R = 3.942 Rs, lat = -9 deg, phase = 158 deg |
| S42 | 79 | 79EP (nt) | EPIMETHEUS | 2008-217T12:48 | 04-Aug | Mon | 4 | 7 | 1 | Outbound 102117.5 km flyby, v = 19.9 km/s, phase = 143 deg |
| S42 | 79 | Ring CRX | Ascending | 2008-220T12:21 | 07-Aug | Thu | 7 | 4 | 4 | r = 19.783 Rs (1193517 km) |
| S42 | 80 | Apoapse | | 2008-221T05:08 | 08-Aug | Fri | 8 | 4 | 5 | Per = 7.4 d, inc = 74.4 deg, r = 20.302 Rs, phase = 22 deg |
| S42 | 80 | OTM-163 | E4-3d | 2008-221T15:20 | 08-Aug | Fri | 9 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 222T15:20 |
| S43 | 80 | S43 Begins | | 2008-224T00:20 | 11-Aug | Mon | 11 | 1 | 2 | S43 Sequence. Duration = 34 d |
| S43 | 80 | SOST | Segment | 2008-224T00:20 | 11-Aug | Mon | 11 | 1 | 2 | SOST_80 (2d); E4 Flyby |
| S43 | 80 | Earth OCC | RING | 2008-224T20:25 | 11-Aug | Mon | 12 | 0 | 3 | Duration = 28 min; egress = 2008-224T20:53:02 |
| S43 | 80 | Sun OCC | RING | 2008-224T20:31 | 11-Aug | Mon | 12 | 0 | 3 | Duration = 23 min; egress = 2008-224T20:54:29 |
| S43 | 80 | 80ME (nt) | METHONE | 2008-224T20:41 | 11-Aug | Mon | 12 | 0 | 3 | Inbound 60452.3 km flyby, v = 18.4 km/s, phase = 127 deg |
| S43 | 80 | Dust Hazard | E_ring_lg | 2008-224T21:05 | 11-Aug | Mon | 12 | 0 | 3 | Egress @ 2008-224T21:07 (2 min) \| Protection: MEA Cvr. Closure |
| S43 | 80 | 80EN (t) E4 | ENCELADUS | 2008-224T21:06 | 11-Aug | Mon | 12 | 59 | 3 | Inbound 49.7 km flyby, v = 17.7 km/s, phase = 110 deg |
| S43 | 80 | Ring CRX | Descending | 2008-224T21:06 | 11-Aug | Mon | 0 | 59 | 3 | r = 3.961 Rs ( 238973 km) |
| S43 | 80 | Periapse | | 2008-224T21:44 | 11-Aug | Mon | 0 | 59 | 3 | R = 3.941 Rs, lat = -9 deg, phase = 158 deg |
| S43 | 80 | 80MI (nt) | MIMAS | 2008-224T21:48 | 11-Aug | Mon | 0 | 59 | 3 | Outbound 81521.8 km flyby, v = 19.1 km/s, phase = 137 deg |
| S43 | 80 | 80DA (nt) | DAPHNIS | 2008-224T21:55 | 11-Aug | Mon | 0 | 59 | 3 | Outbound 110004.0 km flyby, v = 20.3 km/s, phase = 149 deg |
| S43 | 80 | RINGS | Segment | 2008-226T00:04 | 13-Aug | Wed | 1 | 58 | 4 | RINGS_80_82 (10d); RINGS_80_82 |
| S43 | 80 | Ring CRX | Ascending | 2008-227T21:32 | 14-Aug | Thu | 3 | 56 | 6 | r = 19.758 Rs (1192007 km) |
| S43 | 81 | Apoapse | | 2008-228T14:08 | 15-Aug | Fri | 4 | 55 | 7 | Per = 7.4 d, inc = 74.5 deg, r = 20.269 Rs, phase = 22 deg |
| S43 | 81 | 81TI (nt) | TITAN | 2008-228T20:47 | 15-Aug | Fri | 4 | 55 | 7 | Inbound 302281.8 km flyby, v = 5.9 km/s, phase = 85 deg |
| S43 | 81 | Earth OCC | RING | 2008-232T05:09 | 19-Aug | Tue | 7 | 52 | 11 | Duration = 25 min; egress = 2008-232T05:34:29 |
| S43 | 81 | Sun OCC | RING | 2008-232T05:12 | 19-Aug | Tue | 7 | 52 | 11 | Duration = 22 min; egress = 2008-232T05:35:18 |
| S43 | 81 | Dust Hazard | E_ring_lg | 2008-232T05:45 | 19-Aug | Tue | 7 | 52 | 11 | Egress @ 2008-232T05:48 (2 min) \| Protection: MEA Cvr. Closure |
| S43 | 81 | Ring CRX | Descending | 2008-232T05:46 | 19-Aug | Tue | 7 | 52 | 11 | r = 3.935 Rs ( 237403 km) |
| S43 | 81 | 81PL (nt) | PALLENE | 2008-232T06:10 | 19-Aug | Tue | 7 | 52 | 11 | Inbound 43655.0 km flyby, v = 18.4 km/s, phase = 134 deg |
| S43 | 81 | Periapse | | 2008-232T06:24 | 19-Aug | Tue | 7 | 52 | 11 | R = 3.915 Rs, lat = -9 deg, phase = 158 deg |
| S43 | 81 | 81PN (nt) | PAN | 2008-232T06:44 | 19-Aug | Tue | 7 | 52 | 11 | Outbound 114580.0 km flyby, v = 20.5 km/s, phase = 146 deg |
| S43 | 81 | Ring CRX | Ascending | 2008-235T06:08 | 22-Aug | Fri | 10 | 49 | 14 | r = 19.763 Rs (1192320 km) |
| S43 | 81 | OTM-164 | E4+11d | 2008-235T20:49 | 22-Aug | Fri | 11 | 48 | 14 | D/L start, burn ~6h later. Backup D/L 236T20:49 |
| S43 | 82 | Apoapse | | 2008-235T22:42 | 22-Aug | Fri | 11 | 48 | 0 | Per = 7.4 d, inc = 74.5 deg, r = 20.272 Rs, phase = 23 deg |
| S43 | 82 | MAG | Segment | 2008-236T05:49 | 23-Aug | Sat | 11 | 48 | 0 | MAG_82_84 (22d); MAG_82_84 |
| S43 | 82 | Earth OCC | RING | 2008-239T13:58 | 26-Aug | Tue | 15 | 44 | 4 | Duration = 23 min; egress = 2008-239T14:22:02 |
| S43 | 82 | Sun OCC | RING | 2008-239T14:00 | 26-Aug | Tue | 15 | 44 | 4 | Duration = 22 min; egress = 2008-239T14:22:19 |
| S43 | 82 | 82AT (nt) | ATLAS | 2008-239T14:07 | 26-Aug | Tue | 15 | 44 | 4 | Inbound 107605.7 km flyby, v = 19.9 km/s, phase = 149 deg |
| S43 | 82 | Dust Hazard | E_ring_lg | 2008-239T14:32 | 26-Aug | Tue | 15 | 44 | 4 | Egress @ 2008-239T14:35 (2 min) \| Protection: MEA Cvr. Closure |
| S43 | 82 | Ring CRX | Descending | 2008-239T14:33 | 26-Aug | Tue | 15 | 44 | 4 | r = 3.973 Rs ( 239700 km) |
| S43 | 82 | Periapse | | 2008-239T15:12 | 26-Aug | Tue | 15 | 44 | 4 | R = 3.954 Rs, lat = -9 deg, phase = 157 deg |
| S43 | 82 | Ring CRX | Ascending | 2008-242T15:19 | 29-Aug | Fri | 18 | 41 | 7 | r = 19.774 Rs (1192970 km) |
| S43 | 83 | Apoapse | | 2008-243T07:40 | 30-Aug | Sat | 18 | 40 | 7 | Per = 7.4 d, inc = 74.5 deg, r = 20.268 Rs, phase = 23 deg |
| S43 | 83 | 83TI (nt) | TITAN | 2008-244T13:13 | 31-Aug | Sun | 20 | 39 | 9 | Inbound 603197.9 km flyby, v = 6.9 km/s, phase = 97 deg |
| S43 | 83 | SEP = 3.0 deg | Conjunction | 2008-245T03:19 | 01-Sep | Mon | 20 | 39 | 9 | Commanding must not be required below 3.0 deg |
| S43 | 83 | SEP = 2.0 deg | Conjunction | 2008-246T18:48 | 02-Sep | Tue | 22 | 37 | 11 | Plan no SSR playback below 2.0 deg |
| S43 | 83 | Sun OCC | RING | 2008-246T22:56 | 02-Sep | Tue | 22 | 37 | 11 | Duration = 21 min; egress = 2008-246T23:17:41 |
| S43 | 83 | Earth OCC | RING | 2008-246T22:57 | 02-Sep | Tue | 22 | 37 | 11 | Duration = 21 min; egress = 2008-246T23:17:57 |
| S43 | 83 | Dust Hazard | E_ring_lg | 2008-246T23:27 | 02-Sep | Tue | 22 | 37 | 11 | Egress @ 2008-246T23:30 (2 min) \| Protection: MEA Cvr. Closure |
| S43 | 83 | 83JA (nt) | JANUS | 2008-246T23:28 | 02-Sep | Tue | 22 | 37 | 11 | Inbound 86929.1 km flyby, v = 19.4 km/s, phase = 156 deg |
| S43 | 83 | Ring CRX | Descending | 2008-246T23:28 | 02-Sep | Tue | 22 | 37 | 11 | r = 3.966 Rs ( 239239 km) |
| S43 | 83 | Periapse | | 2008-247T00:06 | 03-Sep | Wed | 22 | 37 | 11 | R = 3.946 Rs, lat = -9 deg, phase = 157 deg |
| S43 | 83 | 83ME (nt) | METHONE | 2008-247T00:26 | 03-Sep | Wed | 22 | 37 | 11 | Outbound 90502.0 km flyby, v = 19.2 km/s, phase = 128 deg |
| S43 | 83 | 83AN (nt) | ANTHE | 2008-247T00:34 | 03-Sep | Wed | 22 | 37 | 11 | Outbound 101544.6 km flyby, v = 19.3 km/s, phase = 124 deg |
| S43 | 83 | SEP = 2.0 deg | Conjunction | 2008-249T09:22 | 05-Sep | Fri | 25 | 34 | 14 | Plan no SSR playback below 2.0 deg |
| S43 | 83 | Ring CRX | Ascending | 2008-250T00:17 | 06-Sep | Sat | 25 | 34 | 14 | r = 19.779 Rs (1193238 km) |
| S43 | 84 | Apoapse | | 2008-250T16:32 | 06-Sep | Sat | 26 | 33 | 15 | Per = 7.4 d, inc = 74.5 deg, r = 20.267 Rs, phase = 23 deg |
| S43 | 84 | SEP = 3.0 deg | Conjunction | 2008-251T00:36 | 07-Sep | Sun | 26 | 33 | 15 | Commanding must not be required below 3.0 deg |
| S43 | 84 | Sun OCC | RING | 2008-254T07:49 | 10-Sep | Wed | 29 | 29 | 18 | Duration = 21 min; egress = 2008-254T08:10:32 |
| S43 | 84 | Earth OCC | RING | 2008-254T07:52 | 10-Sep | Wed | 29 | 29 | 18 | Duration = 19 min; egress = 2008-254T08:11:23 |
| S43 | 84 | 84AN (nt) | ANTHE | 2008-254T08:05 | 10-Sep | Wed | 29 | 29 | 18 | Inbound 50318.4 km flyby, v = 18.3 km/s, phase = 132 deg |
| S43 | 84 | Dust Hazard | E_ring_lg | 2008-254T08:20 | 10-Sep | Wed | 29 | 29 | 18 | Egress @ 2008-254T08:22 (2 min) \| Protection: MEA Cvr. Closure |
| S43 | 84 | Ring CRX | Descending | 2008-254T08:21 | 10-Sep | Wed | 29 | 29 | 18 | r = 3.963 Rs ( 239099 km) |
| S43 | 84 | 84AG (nt) | AEGAEON | 2008-254T08:44 | 10-Sep | Wed | 29 | 29 | 18 | Inbound 74412.4 km flyby, v = 19.2 km/s, phase = 156 deg |
| S43 | 84 | 84EP (nt) | EPIMETHEUS | 2008-254T08:51 | 10-Sep | Wed | 29 | 29 | 19 | Inbound 91304.2 km flyby, v = 19.6 km/s, phase = 155 deg |
| S43 | 84 | Periapse | | 2008-254T08:59 | 10-Sep | Wed | 29 | 29 | 19 | R = 3.944 Rs, lat = -9 deg, phase = 157 deg |
| S43 | 84 | Ring CRX | Ascending | 2008-257T09:13 | 13-Sep | Sat | 33 | 26 | 22 | r = 19.782 Rs (1193442 km) |
| S44 | 84 | RINGS | Segment | 2008-257T22:19 | 13-Sep | Sat | 33 | 26 | 22 | RINGS_84_87 (15d); RINGS_84_87 |
| S44 | 84 | S44 Begins | | 2008-257T22:19 | 13-Sep | Sat | 33 | 26 | 22 | S44 Sequence. Duration = 35 d |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S44 | 85 | Apoapse | | 2008-258T01:23 | 14-Sep | Sun | 33 | 26 | 22 | Per = 7.4 d, inc = 74.5 deg, r = 20.265 Rs, phase = 23 deg |
| S44 | 85 | 85TI (nt) | TITAN | 2008-259T23:39 | 15-Sep | Mon | 35 | 24 | 24 | Inbound 902600.6 km flyby, v = 8.7 km/s, phase = 99 deg |
| S44 | 85 | 85AG (nt) | AEGAEON | 2008-261T16:07 | 17-Sep | Wed | 37 | 22 | 26 | Inbound 108852.4 km flyby, v = 19.2 km/s, phase = 121 deg |
| S44 | 85 | 85PA (nt) | PANDORA | 2008-261T16:36 | 17-Sep | Wed | 37 | 22 | 26 | Inbound 106170.8 km flyby, v = 19.7 km/s, phase = 144 deg |
| S44 | 85 | Sun OCC | RING | 2008-261T16:39 | 17-Sep | Wed | 37 | 22 | 26 | Duration = 20 min; egress = 2008-261T16:59:54 |
| S44 | 85 | Earth OCC | RING | 2008-261T16:44 | 17-Sep | Wed | 37 | 22 | 26 | Duration = 17 min; egress = 2008-261T17:01:21 |
| S44 | 85 | 85MI (nt) | MIMAS | 2008-261T16:49 | 17-Sep | Wed | 37 | 22 | 26 | Inbound 61153.4 km flyby, v = 18.3 km/s, phase = 139 deg |
| S44 | 85 | Dust Hazard | E_ring_lg | 2008-261T17:09 | 17-Sep | Wed | 37 | 22 | 26 | Egress @ 2008-261T17:12 (2 min) \| Protection: MEA Cvr. Closure |
| S44 | 85 | Ring CRX | Descending | 2008-261T17:10 | 17-Sep | Wed | 37 | 22 | 26 | r = 3.962 Rs ( 239034 km) |
| S44 | 85 | 85CP (nt) | CALYPSO | 2008-261T17:18 | 17-Sep | Wed | 37 | 22 | 26 | Inbound 60876.6 km flyby, v = 17.5 km/s, phase = 45 deg |
| S44 | 85 | Periapse | | 2008-261T17:47 | 17-Sep | Wed | 37 | 22 | 26 | R = 3.943 Rs, lat = -8 deg, phase = 157 deg |
| S44 | 85 | 85DA (nt) | DAPHNIS | 2008-261T17:55 | 17-Sep | Wed | 37 | 22 | 26 | Outbound 108591.5 km flyby, v = 20.2 km/s, phase = 151 deg |
| S44 | 85 | OTM-164A | E4+40 | 2008-264T12:49 | 20-Sep | Sat | 40 | 19 | 29 | D/L start, burn ~6h later. Backup D/L 265T12:49 |
| S44 | 85 | Ring CRX | Ascending | 2008-264T18:10 | 20-Sep | Sat | 40 | 19 | 0 | r = 19.790 Rs (1193908 km) |
| S44 | 86 | Apoapse | | 2008-265T10:12 | 21-Sep | Sun | 41 | 18 | 1 | Per = 7.4 d, inc = 74.5 deg, r = 20.265 Rs, phase = 23 deg |
| S44 | 86 | 86TE (nt) | TETHYS | 2008-269T01:23 | 25-Sep | Thu | 44 | 15 | 5 | Inbound 109902.9 km flyby, v = 17.5 km/s, phase = 50 deg |
| S44 | 86 | Sun OCC | RING | 2008-269T01:30 | 25-Sep | Thu | 44 | 15 | 5 | Duration = 19 min; egress = 2008-269T01:49:54 |
| S44 | 86 | Earth OCC | RING | 2008-269T01:37 | 25-Sep | Thu | 44 | 15 | 5 | Duration = 15 min; egress = 2008-269T01:51:54 |
| S44 | 86 | 86AT (nt) | ATLAS | 2008-269T01:41 | 25-Sep | Thu | 44 | 15 | 5 | Inbound 105075.4 km flyby, v = 19.9 km/s, phase = 150 deg |
| S44 | 86 | Dust Hazard | E_ring_lg | 2008-269T01:59 | 25-Sep | Thu | 44 | 15 | 5 | Egress @ 2008-269T02:01 (2 min) \| Protection: MEA Cvr. Closure |
| S44 | 86 | Ring CRX | Descending | 2008-269T02:00 | 25-Sep | Thu | 44 | 15 | 5 | r = 3.963 Rs ( 239067 km) |
| S44 | 86 | 86PN (nt) | PAN | 2008-269T02:13 | 25-Sep | Thu | 44 | 15 | 5 | Inbound 105262.0 km flyby, v = 20.1 km/s, phase = 157 deg |
| S44 | 86 | Periapse | | 2008-269T02:37 | 25-Sep | Thu | 44 | 15 | 5 | R = 3.944 Rs, lat = -8 deg, phase = 157 deg |
| S44 | 86 | 86PL (nt) | PALLENE | 2008-269T03:11 | 25-Sep | Thu | 44 | 15 | 5 | Outbound 115318.6 km flyby, v = 19.3 km/s, phase = 118 deg |
| S44 | 86 | Ring CRX | Ascending | 2008-272T03:05 | 28-Sep | Sun | 47 | 12 | 8 | r = 19.795 Rs (1194244 km) |
| S44 | 87 | Apoapse | | 2008-272T19:02 | 28-Sep | Sun | 48 | 11 | 8 | Per = 7.4 d, inc = 74.5 deg, r = 20.265 Rs, phase = 23 deg |
| S44 | 87 | MAG | Segment | 2008-272T21:20 | 28-Sep | Sun | 48 | 11 | 8 | MAG_87 (7d); MAG_87 |
| S44 | 87 | OTM-165 | E5-7d | 2008-276T04:19 | 02-Oct | Thu | 51 | 8 | 12 | D/L start, burn ~6h later. Backup D/L 277T04:35 |
| S44 | 87 | Sun OCC | RING | 2008-276T10:21 | 02-Oct | Thu | 52 | 7 | 0 | Duration = 19 min; egress = 2008-276T10:40:20 |
| S44 | 87 | Earth OCC | RING | 2008-276T10:30 | 02-Oct | Thu | 52 | 7 | 0 | Duration = 13 min; egress = 2008-276T10:42:57 |
| S44 | 87 | Dust Hazard | E_ring_lg | 2008-276T10:49 | 02-Oct | Thu | 52 | 7 | 0 | Egress @ 2008-276T10:52 (2 min) \| Protection: MEA Cvr. Closure |
| S44 | 87 | Ring CRX | Descending | 2008-276T10:50 | 02-Oct | Thu | 52 | 7 | 0 | r = 3.964 Rs ( 239130 km) |
| S44 | 87 | 87TE (nt) | TETHYS | 2008-276T11:03 | 02-Oct | Thu | 52 | 7 | 0 | Inbound 78710.4 km flyby, v = 17.6 km/s, phase = 70 deg |
| S44 | 87 | Periapse | | 2008-276T11:27 | 02-Oct | Thu | 52 | 7 | 0 | R = 3.946 Rs, lat = -8 deg, phase = 157 deg |
| S44 | 87 | 87TI (nt) | TITAN | 2008-277T23:03 | 03-Oct | Fri | 53 | 6 | 2 | Outbound 780531.7 km flyby, v = 9.3 km/s, phase = 125 deg |
| S44 | 87 | RINGS | Segment | 2008-279T11:05 | 05-Oct | Sun | 55 | 4 | 3 | RINGS_87_88 (3d); RINGS_87_88 |
| S44 | 87 | Ring CRX | Ascending | 2008-279T11:51 | 05-Oct | Sun | 55 | 4 | 3 | r = 19.753 Rs (1191672 km) |
| S44 | 88 | Apoapse | | 2008-280T03:34 | 06-Oct | Mon | 55 | 4 | 4 | Per = 7.3 d, inc = 74.5 deg, r = 20.212 Rs, phase = 23 deg |
| S44 | 88 | OTM-166 | E5-3d | 2008-280T12:05 | 06-Oct | Mon | 56 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 281T11:50 |
| S44 | 88 | SOST | Segment | 2008-282T20:50 | 08-Oct | Wed | 58 | 1 | 2 | SOST_88 (2d); E5 Flyby |
| S44 | 88 | Sun OCC | RING | 2008-283T18:38 | 09-Oct | Thu | 59 | 0 | 3 | Duration = 18 min; egress = 2008-283T18:56:26 |
| S44 | 88 | 88TL (nt) | TELESTO | 2008-283T18:46 | 09-Oct | Thu | 59 | 0 | 3 | Inbound 67251.7 km flyby, v = 17.2 km/s, phase = 22 deg |
| S44 | 88 | Earth OCC | RING | 2008-283T18:48 | 09-Oct | Thu | 59 | 0 | 3 | Duration = 11 min; egress = 2008-283T18:59:36 |
| S44 | 88 | 88JA (nt) | JANUS | 2008-283T18:55 | 09-Oct | Thu | 59 | 0 | 3 | Inbound 89529.8 km flyby, v = 19.4 km/s, phase = 151 deg |
| S44 | 88 | Dust Hazard | E_ring_lg | 2008-283T19:05 | 09-Oct | Thu | 59 | 0 | 3 | Egress @ 2008-283T19:08 (2 min) \| Protection: MEA Cvr. Closure |
| S44 | 88 | 88EN (t) E5 | ENCELADUS | 2008-283T19:06 | 09-Oct | Thu | 59 | 22 | 3 | Inbound 25.2 km flyby, v = 17.7 km/s, phase = 113 deg |
| S44 | 88 | Earth OCC | ENCELADUS | 2008-283T19:06 | 09-Oct | Thu | 0 | 22 | 3 | Duration = 0 min; egress = 2008-283T19:06:43 |
| S44 | 88 | Ring CRX | Descending | 2008-283T19:06 | 09-Oct | Thu | 0 | 22 | 3 | r = 3.964 Rs ( 239163 km) |
| S44 | 88 | Sun OCC | ENCELADUS | 2008-283T19:06 | 09-Oct | Thu | 0 | 22 | 3 | Duration = 0 min; egress = 2008-283T19:06:43 |
| S44 | 88 | Periapse | | 2008-283T19:43 | 09-Oct | Thu | 0 | 22 | 3 | R = 3.946 Rs, lat = -8 deg, phase = 157 deg |
| S44 | 88 | RINGS | Segment | 2008-284T20:50 | 10-Oct | Fri | 1 | 21 | 4 | RINGS_88_89 (8d); RINGS_88_89 |
| S44 | 88 | OTM-167 | E5+3d | 2008-286T17:51 | 12-Oct | Sun | 3 | 19 | 6 | D/L start, burn ~6h later. Backup D/L 287T11:36 |
| S44 | 88 | Ring CRX | Ascending | 2008-286T20:05 | 12-Oct | Sun | 3 | 19 | 0 | r = 19.731 Rs (1190354 km) |
| S44 | 89 | Apoapse | | 2008-287T11:41 | 13-Oct | Mon | 4 | 18 | 1 | Per = 7.3 d, inc = 74.5 deg, r = 20.183 Rs, phase = 23 deg |
| S44 | 89 | Sun OCC | RING | 2008-291T02:33 | 17-Oct | Fri | 7 | 15 | 4 | Duration = 18 min; egress = 2008-291T02:51:25 |
| S44 | 89 | Earth OCC | RING | 2008-291T02:45 | 17-Oct | Fri | 7 | 15 | 4 | Duration = 10 min; egress = 2008-291T02:55:07 |
| S44 | 89 | 89PL (nt) | PALLENE | 2008-291T02:57 | 17-Oct | Fri | 7 | 15 | 4 | Inbound 28938.1 km flyby, v = 18.1 km/s, phase = 141 deg |
| S44 | 89 | Dust Hazard | E_ring_lg | 2008-291T03:00 | 17-Oct | Fri | 7 | 15 | 4 | Egress @ 2008-291T03:02 (2 min) \| Protection: MEA Cvr. Closure |
| S44 | 89 | Ring CRX | Descending | 2008-291T03:01 | 17-Oct | Fri | 7 | 15 | 4 | r = 3.956 Rs ( 238643 km) |
| S44 | 89 | OTM-168 | ~apo | 2008-291T03:10 | 17-Oct | Fri | 7 | 15 | 4 | D/L start, burn ~6h later. Backup D/L 291T08:25 |
| S44 | 89 | Periapse | | 2008-291T03:37 | 17-Oct | Fri | 7 | 15 | 0 | R = 3.938 Rs, lat = -8 deg, phase = 156 deg |
| S44 | 89 | 89EP (nt) | EPIMETHEUS | 2008-291T04:22 | 17-Oct | Fri | 7 | 15 | 0 | Outbound 118996.5 km flyby, v = 20.3 km/s, phase = 136 deg |
| S45 | 89 | RINGS | Segment | 2008-292T20:21 | 18-Oct | Sat | 9 | 13 | 2 | RINGS_89_91 (12d); RINGS_89_91 |
| S45 | 89 | S45 Begins | | 2008-292T20:21 | 18-Oct | Sat | 9 | 13 | 2 | S45 Sequence. Duration = 39 d |
| S45 | 89 | 89TI (nt) | TITAN | 2008-293T05:24 | 19-Oct | Sun | 9 | 12 | 2 | Outbound 397700.1 km flyby, v = 7.1 km/s, phase = 125 deg |
| S45 | 89 | Ring CRX | Ascending | 2008-294T03:49 | 20-Oct | Mon | 10 | 12 | 3 | r = 19.665 Rs (1186411 km) |
| S45 | 90 | Apoapse | | 2008-294T19:07 | 20-Oct | Mon | 11 | 11 | 4 | Per = 7.3 d, inc = 74.5 deg, r = 20.104 Rs, phase = 24 deg |
| S45 | 90 | 90JA (nt) | JANUS | 2008-298T09:13 | 24-Oct | Fri | 15 | 7 | 7 | Inbound 108130.9 km flyby, v = 19.5 km/s, phase = 132 deg |
| S45 | 90 | Sun OCC | RING | 2008-298T09:37 | 24-Oct | Fri | 15 | 7 | 7 | Duration = 17 min; egress = 2008-298T09:54:30 |
| S45 | 90 | Earth OCC | RING | 2008-298T09:50 | 24-Oct | Fri | 15 | 7 | 7 | Duration = 8 min; egress = 2008-298T09:58:40 |
| S45 | 90 | Dust Hazard | E_ring_lg | 2008-298T10:03 | 24-Oct | Fri | 15 | 7 | 7 | Egress @ 2008-298T10:05 (2 min) \| Protection: MEA Cvr. Closure |
| S45 | 90 | Ring CRX | Descending | 2008-298T10:04 | 24-Oct | Fri | 15 | 7 | 7 | r = 3.965 Rs ( 239184 km) |
| S45 | 90 | 90PN (nt) | PAN | 2008-298T10:07 | 24-Oct | Fri | 15 | 7 | 7 | Inbound 105460.1 km flyby, v = 20.1 km/s, phase = 156 deg |
| S45 | 90 | 90MI (nt) | MIMAS | 2008-298T10:24 | 24-Oct | Fri | 15 | 7 | 7 | Inbound 57286.6 km flyby, v = 18.3 km/s, phase = 155 deg |
| S45 | 90 | Periapse | | 2008-298T10:40 | 24-Oct | Fri | 15 | 7 | 7 | R = 3.947 Rs, lat = -8 deg, phase = 156 deg |
| S45 | 90 | Ring CRX | Ascending | 2008-301T11:03 | 27-Oct | Mon | 18 | 4 | 10 | r = 19.677 Rs (1187122 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S45 | 91 | Apoapse | | 2008-302T02:15 | 28-Oct | Tue | 18 | 4 | 11 | Per = 7.3 d, inc = 74.5 deg, r = 20.109 Rs, phase = 24 deg |
| S45 | 91 | OTM-169 | 91TI-4d or TBD | 2008-303T10:37 | 29-Oct | Wed | 20 | 2 | 12 | D/L start, burn ~6h later. Backup D/L 304T10:37 |
| S45 | 91 | SOST | Segment | 2008-304T19:37 | 30-Oct | Thu | 21 | 1 | 1 | SOST_91 (3d); E6 Flyby |
| S45 | 91 | 91ME (nt) | METHONE | 2008-305T16:02 | 31-Oct | Fri | 22 | 0 | 2 | Inbound 116148.4 km flyby, v = 18.8 km/s, phase = 102 deg |
| S45 | 91 | 91PA (nt) | PANDORA | 2008-305T16:30 | 31-Oct | Fri | 22 | 0 | 2 | Inbound 111470.6 km flyby, v = 19.8 km/s, phase = 138 deg |
| S45 | 91 | Sun OCC | RING | 2008-305T16:48 | 31-Oct | Fri | 22 | 0 | 2 | Duration = 16 min; egress = 2008-305T17:05:10 |
| S45 | 91 | Earth OCC | RING | 2008-305T17:03 | 31-Oct | Fri | 22 | 0 | 2 | Duration = 7 min; egress = 2008-305T17:09:52 |
| S45 | 91 | 91DA (nt) | DAPHNIS | 2008-305T17:13 | 31-Oct | Fri | 22 | 0 | 2 | Inbound 102873.3 km flyby, v = 19.9 km/s, phase = 155 deg |
| S45 | 91 | Dust Hazard | E_ring_lg | 2008-305T17:13 | 31-Oct | Fri | 22 | 0 | 2 | Egress @ 2008-305T17:16 (2 min) \| Protection: MEA Cvr. Closure |
| S45 | 91 | 91EN (t) E6 | ENCELADUS | 2008-305T17:14 | 31-Oct | Fri | 22 | 3 | 2 | Inbound 169.9 km flyby, v = 17.7 km/s, phase = 110 deg |
| S45 | 91 | Ring CRX | Descending | 2008-305T17:14 | 31-Oct | Fri | 0 | 3 | 2 | r = 3.965 Rs ( 239191 km) |
| S45 | 91 | Periapse | | 2008-305T17:50 | 31-Oct | Fri | 0 | 3 | 2 | R = 3.948 Rs, lat = -8 deg, phase = 156 deg |
| S45 | 91 | 91AT (nt) | ATLAS | 2008-305T18:10 | 31-Oct | Fri | 0 | 3 | 2 | Outbound 112316.5 km flyby, v = 20.3 km/s, phase = 147 deg |
| S45 | 91 | 91EP (nt) | EPIMETHEUS | 2008-305T18:35 | 31-Oct | Fri | 0 | 3 | 2 | Outbound 118913.8 km flyby, v = 20.3 km/s, phase = 136 deg |
| S45 | 91 | TOST | Segment | 2008-307T19:22 | 02-Nov | Sun | 2 | 1 | 4 | TOST_91_T46 (2d); Titan Flyby T46 |
| S45 | 91 | Earth OCC | TITAN | 2008-308T17:29 | 03-Nov | Mon | 3 | 0 | 5 | Duration = 15 min; egress = 2008-308T17:44:37 |
| S45 | 91 | Sun OCC | TITAN | 2008-308T17:29 | 03-Nov | Mon | 3 | 0 | 5 | Duration = 15 min; egress = 2008-308T17:44:10 |
| S45 | 91 | 91TI (t) T46 | TITAN | 2008-308T17:35 | 03-Nov | Mon | 3 | 16 | 5 | Outbound 1105.2 km flyby, v = 6.3 km/s, phase = 171 deg |
| S45 | 91 | Ring CRX | Ascending | 2008-308T18:08 | 03-Nov | Mon | 0 | 16 | 5 | r = 19.688 Rs (1187749 km) |
| S45 | 91 | RINGS | Segment | 2008-309T19:08 | 04-Nov | Tue | 1 | 15 | 6 | RINGS_91_93 (8d); RINGS_91_93 |
| S45 | 92 | Apoapse | | 2008-309T23:28 | 04-Nov | Tue | 1 | 15 | 7 | Per = 7.9 d, inc = 70.6 deg, r = 21.147 Rs, phase = 26 deg |
| S45 | 92 | OTM-170 | 91TI+5d | 2008-313T16:23 | 08-Nov | Sat | 5 | 11 | 10 | D/L start, burn ~6h later. Backup D/L 314T09:53 |
| S45 | 92 | Sun OCC | RING | 2008-313T20:48 | 08-Nov | Sat | 5 | 11 | 0 | Duration = 15 min; egress = 2008-313T21:03:29 |
| S45 | 92 | 92PO (nt) | POLYDEUCES | 2008-313T20:57 | 08-Nov | Sat | 5 | 11 | 0 | Inbound 120991.9 km flyby, v = 15.3 km/s, phase = 12 deg |
| S45 | 92 | Earth OCC | RING | 2008-313T21:05 | 08-Nov | Sat | 5 | 11 | 0 | Duration = 5 min; egress = 2008-313T21:10:21 |
| S45 | 92 | Dust Hazard | E_ring_lg | 2008-313T21:14 | 08-Nov | Sat | 5 | 11 | 0 | Egress @ 2008-313T21:17 (2 min) \| Protection: None |
| S45 | 92 | Ring CRX | Descending | 2008-313T21:16 | 08-Nov | Sat | 5 | 11 | 0 | r = 4.328 Rs ( 261106 km) |
| S45 | 92 | 92TL (nt) | TELESTO | 2008-313T21:27 | 08-Nov | Sat | 5 | 11 | 0 | Inbound 67088.9 km flyby, v = 16.4 km/s, phase = 85 deg |
| S45 | 92 | 92EN (nt) | ENCELADUS | 2008-313T21:48 | 08-Nov | Sat | 5 | 11 | 0 | Inbound 55274.7 km flyby, v = 16.9 km/s, phase = 127 deg |
| S45 | 92 | Periapse | | 2008-313T22:31 | 08-Nov | Sat | 5 | 11 | 0 | R = 4.263 Rs, lat = -15 deg, phase = 154 deg |
| S45 | 92 | Ring CRX | Ascending | 2008-316T16:48 | 11-Nov | Tue | 8 | 8 | 3 | r = 19.821 Rs (1195794 km) |
| S45 | 92 | OTM-171 | ~apo | 2008-317T16:09 | 12-Nov | Wed | 9 | 7 | 4 | D/L start, burn ~6h later. Backup D/L 318T16:09 |
| S45 | 93 | Apoapse | | 2008-317T22:29 | 12-Nov | Wed | 9 | 7 | 0 | Per = 8.0 d, inc = 70.6 deg, r = 21.287 Rs, phase = 26 deg |
| S45 | 93 | MAG | Segment | 2008-318T01:09 | 13-Nov | Thu | 9 | 7 | 0 | MAG_93 (6d); MAG_93 |
| S45 | 93 | OTM-172 | 93TI-3d | 2008-321T02:09 | 16-Nov | Sun | 12 | 4 | 3 | D/L start, burn ~6h later. Backup D/L 322T09:24 |
| S45 | 93 | Sun OCC | RING | 2008-321T20:41 | 16-Nov | Sun | 13 | 3 | 1 | Duration = 14 min; egress = 2008-321T20:55:25 |
| S45 | 93 | 93TE (nt) | TETHYS | 2008-321T20:42 | 16-Nov | Sun | 13 | 3 | 1 | Inbound 57649.1 km flyby, v = 15.9 km/s, phase = 41 deg |
| S45 | 93 | Earth OCC | RING | 2008-321T20:59 | 16-Nov | Sun | 13 | 3 | 1 | Duration = 4 min; egress = 2008-321T21:02:52 |
| S45 | 93 | Dust Hazard | E_ring_lg | 2008-321T21:06 | 16-Nov | Sun | 13 | 3 | 1 | Egress @ 2008-321T21:09 (2 min) \| Protection: None |
| S45 | 93 | Ring CRX | Descending | 2008-321T21:07 | 16-Nov | Sun | 13 | 3 | 1 | r = 4.333 Rs ( 261414 km) |
| S45 | 93 | Periapse | | 2008-321T22:23 | 16-Nov | Sun | 13 | 3 | 1 | R = 4.269 Rs, lat = -15 deg, phase = 154 deg |
| S45 | 93 | TOST | Segment | 2008-323T18:24 | 18-Nov | Tue | 15 | 1 | 3 | TOST_93_94_T47 (2d); Titan Flyby T47 |
| S45 | 93 | 93TI (t) T47 | TITAN | 2008-324T15:56 | 19-Nov | Wed | 16 | 16 | 4 | Outbound 1023.3 km flyby, v = 6.3 km/s, phase = 28 deg |
| S45 | 93 | Ring CRX | Ascending | 2008-324T16:32 | 19-Nov | Wed | 0 | 16 | 4 | r = 19.787 Rs (1193741 km) |
| S45 | 94 | Apoapse | | 2008-325T10:16 | 20-Nov | Thu | 1 | 15 | 4 | Per = 8.0 d, inc = 72.3 deg, r = 20.298 Rs, phase = 25 deg |
| S45 | 94 | RINGS | Segment | 2008-325T23:25 | 20-Nov | Thu | 1 | 15 | 5 | RINGS_94A (6d); RINGS_94A |
| S45 | 94 | OTM-173 | 93TI+5d | 2008-328T15:25 | 23-Nov | Sun | 4 | 12 | 8 | D/L start, burn ~6h later. Backup D/L 329T15:25 |
| S45 | 94 | Sun OCC | RING | 2008-329T08:12 | 24-Nov | Mon | 5 | 11 | 1 | Duration = 7 min; egress = 2008-329T08:20:07 |
| S45 | 94 | 94HE (nt) | HELENE | 2008-329T08:27 | 24-Nov | Mon | 5 | 11 | 1 | Inbound 65569.6 km flyby, v = 14.3 km/s, phase = 14 deg |
| S45 | 94 | Earth OCC | TETHYS | 2008-329T08:36 | 24-Nov | Mon | 5 | 11 | 1 | Duration = 1 min; egress = 2008-329T08:37:48 |
| S45 | 94 | Ring CRX | Descending | 2008-329T08:41 | 24-Nov | Mon | 5 | 11 | 1 | r = 5.245 Rs ( 316454 km) |
| S45 | 94 | 94TE (nt) | TETHYS | 2008-329T08:46 | 24-Nov | Mon | 5 | 11 | 1 | Inbound 23542.3 km flyby, v = 15.2 km/s, phase = 160 deg |
| S45 | 94 | Periapse | | 2008-329T09:53 | 24-Nov | Mon | 5 | 11 | 1 | R = 5.211 Rs, lat = -10 deg, phase = 155 deg |
| S46 | 94 | RINGS | Segment | 2008-331T17:55 | 26-Nov | Wed | 7 | 9 | 3 | RINGS_94B (1d); RINGS_94B |
| S46 | 94 | S46 Begins | | 2008-331T17:55 | 26-Nov | Wed | 7 | 9 | 3 | S46 Sequence. Duration = 44 d |
| S46 | 94 | OTM-174 | ~apo | 2008-332T15:10 | 27-Nov | Thu | 8 | 8 | 4 | D/L start, burn ~6h later. Backup D/L 333T08:56 |
| S46 | 94 | Ring CRX | Ascending | 2008-332T15:46 | 27-Nov | Thu | 8 | 8 | 0 | r = 19.788 Rs (1193811 km) |
| S46 | 94 | SATURN | Segment | 2008-333T00:10 | 28-Nov | Fri | 8 | 8 | 0 | SATURN_94_95 (7d); SATURN_094_095 |
| S46 | 95 | Apoapse | | 2008-333T09:31 | 28-Nov | Fri | 9 | 7 | 1 | Per = 8.0 d, inc = 72.3 deg, r = 20.297 Rs, phase = 25 deg |
| S46 | 95 | OTM-175 | 95TI-3d | 2008-336T14:56 | 01-Dec | Mon | 12 | 4 | 4 | D/L start, burn ~6h later. Backup D/L 337T14:56 |
| S46 | 95 | 95EN (nt) | ENCELADUS | 2008-337T06:36 | 02-Dec | Tue | 13 | 3 | 1 | Inbound 123745.4 km flyby, v = 15.7 km/s, phase = 115 deg |
| S46 | 95 | 95CP (nt) | CALYPSO | 2008-337T07:17 | 02-Dec | Tue | 13 | 3 | 1 | Inbound 69568.5 km flyby, v = 15.2 km/s, phase = 93 deg |
| S46 | 95 | Sun OCC | RING | 2008-337T07:30 | 02-Dec | Tue | 13 | 3 | 1 | Duration = 6 min; egress = 2008-337T07:36:23 |
| S46 | 95 | Ring CRX | Descending | 2008-337T07:57 | 02-Dec | Tue | 13 | 3 | 1 | r = 5.245 Rs ( 316441 km) |
| S46 | 95 | Periapse | | 2008-337T09:09 | 02-Dec | Tue | 13 | 3 | 1 | R = 5.211 Rs, lat = -10 deg, phase = 155 deg |
| S46 | 95 | TOST | Segment | 2008-339T17:26 | 04-Dec | Thu | 15 | 1 | 3 | TOST_95_96_T48 (2d); Titan Flyby T48 |
| S46 | 95 | 95TI (t) T48 | TITAN | 2008-340T14:25 | 05-Dec | Fri | 16 | 16 | 4 | Outbound 960.6 km flyby, v = 6.3 km/s, phase = 25 deg |
| S46 | 95 | Ring CRX | Ascending | 2008-340T14:56 | 05-Dec | Fri | 0 | 16 | 4 | r = 19.759 Rs (1192087 km) |
| S46 | 96 | Apoapse | | 2008-340T18:22 | 05-Dec | Fri | 0 | 16 | 4 | Per = 8.0 d, inc = 73.2 deg, r = 19.779 Rs, phase = 24 deg |
| S46 | 96 | RINGS | Segment | 2008-341T21:27 | 06-Dec | Sat | 1 | 15 | 5 | Rings_96_97 (7d); Rings_96_97 |
| S46 | 96 | OTM-176 | 95TI+4d | 2008-344T14:27 | 09-Dec | Tue | 4 | 12 | 8 | D/L start, burn ~6h later. Backup D/L 345T08:12 |
| S46 | 96 | Ring CRX | Descending | 2008-344T17:51 | 09-Dec | Tue | 4 | 12 | 0 | r = 5.762 Rs ( 347642 km) |
| S46 | 96 | Periapse | | 2008-344T18:09 | 09-Dec | Tue | 4 | 12 | 0 | R = 5.761 Rs, lat = -2 deg, phase = 155 deg |
| S46 | 96 | 96CP (nt) | CALYPSO | 2008-344T18:40 | 09-Dec | Tue | 4 | 12 | 0 | Outbound 74026.3 km flyby, v = 14.9 km/s, phase = 147 deg |
| S46 | 96 | OTM-177 | ~apo | 2008-348T14:13 | 13-Dec | Sat | 8 | 8 | 4 | D/L start, burn ~6h later. Backup D/L 349T07:58 |
| S46 | 96 | Ring CRX | Ascending | 2008-348T14:25 | 13-Dec | Sat | 8 | 8 | 0 | r = 19.729 Rs (1190228 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S46 | 97 | Apoapse | | 2008-348T17:47 | 13-Dec | Sat | 8 | 8 | 0 | Per = 8.0 d, inc = 72.9 deg, r = 19.746 Rs, phase = 25 deg |
| S46 | 97 | SATURN | Segment | 2008-348T23:13 | 13-Dec | Sat | 8 | 8 | 0 | Saturn_097 (7d); Saturn_097 |
| S46 | 97 | OTM-178 | 97TI-3d | 2008-352T13:58 | 17-Dec | Wed | 12 | 4 | 4 | D/L start, burn ~6h later. Backup D/L 353T23:58 |
| S46 | 97 | Ring CRX | Descending | 2008-352T17:10 | 17-Dec | Wed | 12 | 4 | 0 | r = 5.768 Rs ( 348004 km) |
| S46 | 97 | Periapse | | 2008-352T17:27 | 17-Dec | Wed | 12 | 4 | 0 | R = 5.767 Rs, lat = -2 deg, phase = 155 deg |
| S46 | 97 | TOST | Segment | 2008-355T16:29 | 20-Dec | Sat | 15 | 1 | 3 | TOST_97_98_T49 (2d); Titan Flyby T49 |
| S46 | 97 | 97TI (t) T49 | TITAN | 2008-356T12:59 | 21-Dec | Sun | 16 | 48 | 4 | Outbound 970.6 km flyby, v = 6.3 km/s, phase = 83 deg |
| S46 | 98 | Apoapse | | 2008-356T13:04 | 21-Dec | Sun | 0 | 48 | 4 | Per = 9.5 d, inc = 74.7 deg, r = 19.715 Rs, phase = 25 deg |
| S46 | 98 | Ring CRX | Ascending | 2008-356T13:34 | 21-Dec | Sun | 0 | 48 | 4 | r = 19.713 Rs (1189274 km) |
| S46 | 98 | RINGS | Segment | 2008-357T22:14 | 22-Dec | Mon | 1 | 46 | 5 | RINGS_98 (6d); RINGS_98 |
| S46 | 98 | OTM-179 | 97TI+3d | 2008-359T13:44 | 24-Dec | Wed | 3 | 45 | 7 | D/L start, burn ~6h later. Backup D/L 361T23:29 |
| S46 | 98 | Periapse | | 2008-361T05:14 | 26-Dec | Fri | 5 | 43 | 2 | R = 9.096 Rs, lat = 2 deg, phase = 154 deg |
| S46 | 98 | Ring CRX | Descending | 2008-361T05:54 | 26-Dec | Fri | 5 | 43 | 2 | r = 9.098 Rs ( 548870 km) |
| S46 | 98 | SATURN | Segment | 2008-363T16:00 | 28-Dec | Sun | 7 | 41 | 4 | SATURN_98_100 (12d); SATURN_098_100 |
| S46 | 99 | Apoapse | | 2008-366T00:09 | 31-Dec | Wed | 9 | 38 | 6 | Per = 9.6 d, inc = 69.0 deg, r = 19.731 Rs, phase = 26 deg |
| S46 | 99 | Ring CRX | Ascending | 2008-366T03:15 | 31-Dec | Wed | 10 | 38 | 7 | r = 19.721 Rs (1189776 km) |
| S46 | 99 | Periapse | | 2009-004T19:04 | 04-Jan | Sun | 14 | 34 | 11 | R = 9.100 Rs, lat = 2 deg, phase = 154 deg |
| S46 | 99 | Ring CRX | Descending | 2009-004T19:44 | 04-Jan | Sun | 14 | 34 | 11 | r = 9.102 Rs ( 549151 km) |
| S46 | 100 | Apoapse | | 2009-009T13:56 | 09-Jan | Fri | 19 | 29 | 16 | Per = 9.6 d, inc = 69.0 deg, r = 19.726 Rs, phase = 27 deg |
| S47 | 100 | RINGS | Segment | 2009-009T15:16 | 09-Jan | Fri | 19 | 29 | 16 | RINGS_100 (9d); RINGS_100 |
| S47 | 100 | S47 Begins | | 2009-009T15:16 | 09-Jan | Fri | 19 | 29 | 16 | S47 Sequence. Duration = 39 d |
| S47 | 100 | Ring CRX | Ascending | 2009-009T17:05 | 09-Jan | Fri | 19 | 29 | 16 | r = 19.715 Rs (1189436 km) |
| S47 | 100 | Periapse | | 2009-014T08:48 | 14-Jan | Wed | 24 | 24 | 21 | R = 9.099 Rs, lat = 2 deg, phase = 153 deg |
| S47 | 100 | 100TI (nt) | TITAN | 2009-014T09:28 | 14-Jan | Wed | 24 | 24 | 21 | Outbound 704002.6 km flyby, v = 9.3 km/s, phase = 25 deg |
| S47 | 100 | Ring CRX | Descending | 2009-014T09:29 | 14-Jan | Wed | 24 | 24 | 21 | r = 9.101 Rs ( 549056 km) |
| S47 | 100 | SATURN | Segment | 2009-018T14:32 | 18-Jan | Sun | 28 | 20 | 25 | SATURN_100_102 (12d); SATURN_100_102 |
| S47 | 101 | Apoapse | | 2009-019T03:41 | 19-Jan | Mon | 29 | 19 | 26 | Per = 9.6 d, inc = 69.0 deg, r = 19.726 Rs, phase = 27 deg |
| S47 | 101 | Ring CRX | Ascending | 2009-019T06:52 | 19-Jan | Mon | 29 | 19 | 26 | r = 19.715 Rs (1189427 km) |
| S47 | 101 | OTM-180 | ~apo | 2009-023T21:48 | 23-Jan | Fri | 33 | 14 | 30 | D/L start, burn ~6h later. Backup D/L 024T21:48 |
| S47 | 101 | Periapse | | 2009-023T22:32 | 23-Jan | Fri | 33 | 14 | 0 | R = 9.100 Rs, lat = 2 deg, phase = 153 deg |
| S47 | 101 | Ring CRX | Descending | 2009-023T23:14 | 23-Jan | Fri | 33 | 14 | 0 | r = 9.103 Rs ( 549155 km) |
| S47 | 102 | Apoapse | | 2009-028T17:05 | 28-Jan | Wed | 38 | 10 | 5 | Per = 9.5 d, inc = 69.0 deg, r = 19.674 Rs, phase = 27 deg |
| S47 | 102 | Ring CRX | Ascending | 2009-028T20:25 | 28-Jan | Wed | 38 | 10 | 5 | r = 19.663 Rs (1186244 km) |
| S47 | 102 | RINGS | Segment | 2009-030T06:18 | 30-Jan | Fri | 40 | 8 | 6 | RINGS_102 (7d); RINGS_102 |
| S47 | 102 | 102RH (nt) | RHEA | 2009-033T10:44 | 02-Feb | Mon | 43 | 5 | 10 | Inbound 98803.9 km flyby, v = 10.5 km/s, phase = 82 deg |
| S47 | 102 | Periapse | | 2009-033T11:40 | 02-Feb | Mon | 43 | 5 | 10 | R = 9.095 Rs, lat = 2 deg, phase = 153 deg |
| S47 | 102 | Ring CRX | Descending | 2009-033T12:22 | 02-Feb | Mon | 43 | 5 | 10 | r = 9.098 Rs ( 548873 km) |
| S47 | 102 | OTM-181 | 102TI-3d | 2009-035T04:34 | 04-Feb | Wed | 45 | 3 | 11 | D/L start, burn ~6h later. Backup D/L 036T04:19 |
| S47 | 102 | TOST | Segment | 2009-037T13:19 | 06-Feb | Fri | 47 | 1 | 2 | TOST_102_103_T50 (2d); Titan Flyby T50 |
| S47 | 102 | Earth OCC | TITAN | 2009-038T08:48 | 07-Feb | Sat | 48 | 0 | 3 | Duration = 10 min; egress = 2009-038T08:58:22 |
| S47 | 102 | Sun OCC | TITAN | 2009-038T08:48 | 07-Feb | Sat | 48 | 0 | 3 | Duration = 9 min; egress = 2009-038T08:57:32 |
| S47 | 102 | 102TI (t) T50 | TITAN | 2009-038T08:50 | 07-Feb | Sat | 48 | 48 | 3 | Outbound 966.8 km flyby, v = 6.3 km/s, phase = 136 deg |
| S47 | 102 | Ring CRX | Ascending | 2009-038T09:20 | 07-Feb | Sat | 0 | 48 | 3 | r = 19.671 Rs (1186765 km) |
| S47 | 103 | Apoapse | | 2009-039T02:28 | 08-Feb | Sun | 1 | 47 | 4 | Per = 11.9 d, inc = 65.3 deg, r = 19.828 Rs, phase = 26 deg |
| S47 | 103 | MAG | Segment | 2009-039T16:19 | 08-Feb | Sun | 1 | 47 | 4 | MAG_103 (9d); MAG_103 |
| S47 | 103 | OTM-182 | 102TI+3d | 2009-041T04:04 | 10-Feb | Tue | 3 | 45 | 6 | D/L start, burn ~6h later. Backup D/L 042T04:04 |
| S47 | 103 | Ring CRX | Descending | 2009-044T17:36 | 13-Feb | Fri | 6 | 41 | 4 | r = 13.647 Rs ( 823307 km) |
| S47 | 103 | 103TI (nt) | TITAN | 2009-044T18:26 | 13-Feb | Fri | 6 | 41 | 4 | Inbound 707038.9 km flyby, v = 7.7 km/s, phase = 98 deg |
| S47 | 103 | Periapse | | 2009-045T01:41 | 14-Feb | Sat | 7 | 41 | 4 | R = 13.573 Rs, lat = -14 deg, phase = 154 deg |
| S48 | 103 | MAG | Segment | 2009-048T12:35 | 17-Feb | Tue | 10 | 38 | 7 | MAG_103_104 (5d); MAG_103_104 |
| S48 | 103 | S48 Begins | | 2009-048T12:35 | 17-Feb | Tue | 10 | 38 | 7 | S48 Sequence. Duration = 37 d |
| S48 | 103 | Ring CRX | Ascending | 2009-050T07:51 | 19-Feb | Thu | 12 | 36 | 9 | r = 19.669 Rs (1186646 km) |
| S48 | 104 | Apoapse | | 2009-051T01:00 | 20-Feb | Fri | 13 | 35 | 10 | Per = 11.9 d, inc = 65.3 deg, r = 19.825 Rs, phase = 26 deg |
| S48 | 104 | RINGS | Segment | 2009-053T04:50 | 22-Feb | Sun | 15 | 33 | 12 | RINGS_104_105 (24d); RINGS_104_105 |
| S48 | 104 | Ring CRX | Descending | 2009-056T16:12 | 25-Feb | Wed | 18 | 30 | 16 | r = 13.657 Rs ( 823947 km) |
| S48 | 104 | Periapse | | 2009-057T00:15 | 26-Feb | Thu | 19 | 29 | 16 | R = 13.584 Rs, lat = -14 deg, phase = 154 deg |
| S48 | 104 | Ring CRX | Ascending | 2009-062T06:40 | 03-Mar | Tue | 24 | 24 | 21 | r = 19.686 Rs (1187655 km) |
| S48 | 105 | Apoapse | | 2009-062T23:45 | 03-Mar | Tue | 25 | 23 | 22 | Per = 12.0 d, inc = 65.3 deg, r = 19.841 Rs, phase = 26 deg |
| S48 | 105 | OTM-183 | ~apo | 2009-068T02:20 | 09-Mar | Mon | 30 | 18 | 27 | D/L start, burn ~6h later. Backup D/L 069T08:35 |
| S48 | 105 | Ring CRX | Descending | 2009-068T15:08 | 09-Mar | Mon | 30 | 18 | 1 | r = 13.659 Rs ( 824021 km) |
| S48 | 105 | Periapse | | 2009-068T23:08 | 09-Mar | Mon | 31 | 17 | 1 | R = 13.586 Rs, lat = -13 deg, phase = 153 deg |
| S48 | 105 | Ring CRX | Ascending | 2009-074T05:56 | 15-Mar | Sun | 36 | 12 | 6 | r = 19.737 Rs (1190742 km) |
| S48 | 106 | Apoapse | | 2009-074T22:49 | 15-Mar | Sun | 37 | 11 | 7 | Per = 12.0 d, inc = 65.3 deg, r = 19.889 Rs, phase = 27 deg |
| S48 | 106 | MAG | Segment | 2009-077T03:05 | 18-Mar | Wed | 39 | 9 | 9 | MAG_106 (8d); MAG_106 |
| S48 | 106 | 106TI (nt) | TITAN | 2009-080T11:50 | 21-Mar | Sat | 42 | 6 | 12 | Inbound 991548.9 km flyby, v = 8.0 km/s, phase = 63 deg |
| S48 | 106 | Ring CRX | Descending | 2009-080T14:36 | 21-Mar | Sat | 42 | 6 | 13 | r = 13.646 Rs ( 823279 km) |
| S48 | 106 | Periapse | | 2009-080T22:35 | 21-Mar | Sat | 43 | 5 | 13 | R = 13.574 Rs, lat = -13 deg, phase = 153 deg |
| S48 | 106 | OTM-184 | 106TI-3d | 2009-083T01:20 | 24-Mar | Tue | 45 | 3 | 15 | D/L start, burn ~6h later. Backup D/L 084T01:05 |
| S49 | 106 | S49 Begins | | 2009-085T10:05 | 26-Mar | Thu | 47 | 1 | 2 | S49 Sequence. Duration = 40 d |
| S49 | 106 | TOST | Segment | 2009-085T10:05 | 26-Mar | Thu | 47 | 1 | 2 | TOST_106_107_T51 (2d); Titan Flyby T51 |
| S49 | 106 | 106TI (t) T51 | TITAN | 2009-086T04:43 | 27-Mar | Fri | 48 | 8 | 3 | Outbound 962.7 km flyby, v = 6.3 km/s, phase = 84 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S49 | 107 | Apoapse | | 2009-086T04:51 | 27-Mar | Fri | 0 | 8 | 3 | Per = 16.5 d, inc = 65.2 deg, r = 19.723 Rs, phase = 29 deg |
| S49 | 107 | Ring CRX | Ascending | 2009-086T05:09 | 27-Mar | Fri | 0 | 8 | 3 | r = 19.722 Rs (1189837 km) |
| S49 | 107 | Periapse | | 2009-087T05:27 | 28-Mar | Sat | 1 | 7 | 4 | R = 19.668 Rs, lat = 21 deg, phase = 28 deg |
| S49 | 107 | MAG | Segment | 2009-087T16:50 | 28-Mar | Sat | 2 | 6 | 5 | MAG_107 (6d); MAG_107 |
| S49 | 107 | OTM-186 | 106TI+2d | 2009-088T07:05 | 29-Mar | Sun | 2 | 6 | 5 | D/L start, burn ~6h later. Backup D/L 089T00:50 |
| S49 | 107 | OTM-186A | T52-3d | 2009-091T00:35 | 01-Apr | Wed | 5 | 3 | 3 | D/L start, burn ~6h later. Backup D/L 091T17:05 |
| S49 | 107 | TOST | Segment | 2009-093T09:34 | 03-Apr | Fri | 7 | 1 | 2 | TOST_107_108_T52 (2d); Titan Flyby T52 |
| S49 | 108 | Apoapse | | 2009-094T01:29 | 04-Apr | Sat | 8 | 0 | 3 | Per = 16.8 d, inc = 63.3 deg, r = 20.921 Rs, phase = 151 deg |
| S49 | 108 | Earth OCC | TITAN | 2009-094T01:36 | 04-Apr | Sat | 8 | 0 | 3 | Duration = 10 min; egress = 2009-094T01:46:47 |
| S49 | 108 | Sun OCC | TITAN | 2009-094T01:38 | 04-Apr | Sat | 8 | 0 | 3 | Duration = 6 min; egress = 2009-094T01:45:08 |
| S49 | 108 | 108TI (t) T52 | TITAN | 2009-094T01:47 | 04-Apr | Sat | 8 | 16 | 3 | Inbound 4146.7 km flyby, v = 5.8 km/s, phase = 151 deg |
| S49 | 108 | Ring CRX | Descending | 2009-094T02:09 | 04-Apr | Sat | 0 | 16 | 3 | r = 20.914 Rs (1261738 km) |
| S49 | 108 | MAG | Segment | 2009-095T09:19 | 05-Apr | Sun | 1 | 15 | 4 | MAG_108_109 (14d); MAG_108_109 |
| S49 | 108 | OTM-188 | 108TI+3d | 2009-097T00:19 | 07-Apr | Tue | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 098T00:04 |
| S49 | 108 | Periapse | | 2009-098T23:40 | 08-Apr | Wed | 5 | 11 | 2 | R = 18.689 Rs, lat = -51 deg, phase = 76 deg |
| S49 | 108 | Ring CRX | Ascending | 2009-101T08:57 | 11-Apr | Sat | 7 | 9 | 4 | r = 19.418 Rs (1171491 km) |
| S49 | 108 | 108TI (nt) | TITAN | 2009-101T17:35 | 11-Apr | Sat | 8 | 8 | 5 | Outbound 326143.0 km flyby, v = 6.0 km/s, phase = 67 deg |
| S49 | 108 | OTM-189 | ~apo | 2009-102T06:04 | 12-Apr | Sun | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 102T23:49 |
| S49 | 109 | Apoapse | | 2009-106T23:06 | 16-Apr | Thu | 13 | 3 | 5 | Per = 16.0 d, inc = 61.7 deg, r = 21.811 Rs, phase = 104 deg |
| S49 | 109 | OTM-190 | 109TI-3d | 2009-106T23:33 | 16-Apr | Thu | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 107T23:33 |
| S49 | 109 | TOST | Segment | 2009-109T08:18 | 19-Apr | Sun | 15 | 1 | 2 | TOST_109_T53 (2d); Titan Flyby T53 |
| S49 | 109 | Earth OCC | TITAN | 2009-110T00:07 | 20-Apr | Mon | 16 | 0 | 3 | Duration = 13 min; egress = 2009-110T00:19:59 |
| S49 | 109 | Sun OCC | TITAN | 2009-110T00:09 | 20-Apr | Mon | 16 | 0 | 3 | Duration = 9 min; egress = 2009-110T00:18:30 |
| S49 | 109 | 109TI (t) T53 | TITAN | 2009-110T00:20 | 20-Apr | Mon | 16 | 16 | 3 | Inbound 3598.8 km flyby, v = 5.8 km/s, phase = 149 deg |
| S49 | 109 | Ring CRX | Descending | 2009-110T00:41 | 20-Apr | Mon | 0 | 16 | 3 | r = 20.894 Rs (1260530 km) |
| S49 | 109 | RINGS | Segment | 2009-111T10:18 | 21-Apr | Tue | 1 | 15 | 4 | RINGS_109 (5d); RINGS_109 |
| S49 | 109 | OTM-191 | 109TI+4d | 2009-112T23:03 | 22-Apr | Wed | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 113T23:03 |
| S49 | 109 | Periapse | | 2009-114T02:20 | 24-Apr | Fri | 4 | 12 | 1 | R = 16.943 Rs, lat = -55 deg, phase = 84 deg |
| S49 | 109 | TOST | Segment | 2009-116T00:33 | 26-Apr | Sun | 6 | 10 | 3 | TOST_109 (3d); Titan Non-Targeted Flyby |
| S49 | 109 | Ring CRX | Ascending | 2009-116T10:42 | 26-Apr | Sun | 6 | 10 | 3 | r = 18.663 Rs (1125916 km) |
| S49 | 109 | 109TI (nt) | TITAN | 2009-117T04:05 | 27-Apr | Mon | 7 | 9 | 4 | Outbound 694946.6 km flyby, v = 6.3 km/s, phase = 64 deg |
| S49 | 109 | OTM-192 | ~apo | 2009-118T05:02 | 28-Apr | Tue | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 119T05:02 |
| S49 | 109 | MAG | Segment | 2009-118T14:02 | 28-Apr | Tue | 9 | 7 | 0 | MAG_109_110 (7d); MAG_109_110 |
| S49 | 110 | Apoapse | | 2009-122T01:38 | 02-May | Sat | 12 | 4 | 4 | Per = 16.0 d, inc = 61.4 deg, r = 23.557 Rs, phase = 96 deg |
| S49 | 110 | OTM-193 | 110TI-3d | 2009-122T15:02 | 02-May | Sat | 13 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 123T14:46 |
| S50 | 110 | S50 Begins | | 2009-125T07:16 | 05-May | Tue | 15 | 1 | 3 | S50 Sequence. Duration = 39 d |
| S50 | 110 | TOST | Segment | 2009-125T07:16 | 05-May | Tue | 15 | 1 | 3 | TOST_110_T54 (2d); Titan Flyby T54 |
| S50 | 110 | Earth OCC | TITAN | 2009-125T22:38 | 05-May | Tue | 16 | 0 | 3 | Duration = 15 min; egress = 2009-125T22:53:17 |
| S50 | 110 | Sun OCC | TITAN | 2009-125T22:40 | 05-May | Tue | 16 | 0 | 3 | Duration = 12 min; egress = 2009-125T22:52:07 |
| S50 | 110 | 110TI (t) T54 | TITAN | 2009-125T22:54 | 05-May | Tue | 16 | 16 | 3 | Inbound 3242.4 km flyby, v = 5.8 km/s, phase = 146 deg |
| S50 | 110 | Ring CRX | Descending | 2009-125T23:13 | 05-May | Tue | 0 | 16 | 3 | r = 20.877 Rs (1259504 km) |
| S50 | 110 | MAG | Segment | 2009-127T07:16 | 07-May | Thu | 1 | 15 | 5 | MAG_110_111 (14d); MAG_110_111 |
| S50 | 110 | OTM-194 | 110TI+4d | 2009-128T22:01 | 08-May | Fri | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 129T22:01 |
| S50 | 110 | Periapse | | 2009-129T14:40 | 09-May | Sat | 4 | 12 | 1 | R = 15.074 Rs, lat = -54 deg, phase = 84 deg |
| S50 | 110 | Ring CRX | Ascending | 2009-131T12:48 | 11-May | Mon | 6 | 10 | 3 | r = 17.320 Rs (1044902 km) |
| S50 | 110 | OTM-195 | ~apo | 2009-134T04:00 | 14-May | Thu | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 135T03:45 |
| S50 | 111 | Apoapse | | 2009-137T13:47 | 17-May | Sun | 12 | 4 | 3 | Per = 15.9 d, inc = 60.7 deg, r = 25.429 Rs, phase = 96 deg |
| S50 | 111 | OTM-196 | 111TI-3d | 2009-138T13:45 | 18-May | Mon | 13 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 139T13:44 |
| S50 | 111 | TOST | Segment | 2009-141T06:14 | 21-May | Thu | 15 | 1 | 3 | TOST_111_T55 (2d); Titan Flyby T55 |
| S50 | 111 | Earth OCC | TITAN | 2009-141T21:11 | 21-May | Thu | 16 | 0 | 3 | Duration = 18 min; egress = 2009-141T21:29:09 |
| S50 | 111 | Sun OCC | TITAN | 2009-141T21:11 | 21-May | Thu | 16 | 0 | 3 | Duration = 17 min; egress = 2009-141T21:28:54 |
| S50 | 111 | 111TI (t) T55 | TITAN | 2009-141T21:26 | 21-May | Thu | 16 | 16 | 3 | Inbound 965.7 km flyby, v = 6.0 km/s, phase = 142 deg |
| S50 | 111 | Ring CRX | Descending | 2009-141T21:46 | 21-May | Thu | 0 | 16 | 3 | r = 20.819 Rs (1256018 km) |
| S50 | 111 | MAG | Segment | 2009-143T07:59 | 23-May | Sat | 1 | 15 | 5 | MAG_111_112 (14d); MAG_111_112 |
| S50 | 111 | OTM-197 | 111TI+4d | 2009-144T20:59 | 24-May | Sun | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 145T20:59 |
| S50 | 111 | Periapse | | 2009-145T01:26 | 25-May | Mon | 3 | 13 | 0 | R = 12.168 Rs, lat = -50 deg, phase = 80 deg |
| S50 | 111 | Ring CRX | Ascending | 2009-146T07:02 | 26-May | Tue | 4 | 12 | 1 | r = 14.400 Rs ( 868743 km) |
| S50 | 111 | OTM-198 | ~apo | 2009-150T02:58 | 30-May | Sat | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 151T12:58 |
| S50 | 112 | Apoapse | | 2009-153T00:47 | 02-Jun | Tue | 11 | 5 | 3 | Per = 15.9 d, inc = 58.8 deg, r = 28.335 Rs, phase = 100 deg |
| S50 | 112 | OTM-199 | 112TI-3d | 2009-154T12:42 | 03-Jun | Wed | 13 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 155T12:42 |
| S50 | 112 | TOST | Segment | 2009-157T05:12 | 06-Jun | Sat | 15 | 1 | 3 | TOST_112_T56 (2d); Titan Flyby T56 |
| S50 | 112 | Earth OCC | TITAN | 2009-157T19:40 | 06-Jun | Sat | 16 | 0 | 3 | Duration = 20 min; egress = 2009-157T20:01:18 |
| S50 | 112 | Sun OCC | TITAN | 2009-157T19:42 | 06-Jun | Sat | 16 | 0 | 3 | Duration = 19 min; egress = 2009-157T20:01:08 |
| S50 | 112 | 112TI (t) T56 | TITAN | 2009-157T20:00 | 06-Jun | Sat | 16 | 16 | 3 | Inbound 967.7 km flyby, v = 6.0 km/s, phase = 135 deg |
| S50 | 112 | Ring CRX | Descending | 2009-157T20:20 | 06-Jun | Sat | 0 | 16 | 3 | r = 20.799 Rs (1254791 km) |
| S50 | 112 | RINGS | Segment | 2009-159T06:57 | 08-Jun | Mon | 1 | 14 | 5 | RINGS_112 (5d); RINGS EQUINOX |
| S50 | 112 | Periapse | | 2009-160T14:48 | 09-Jun | Tue | 3 | 13 | 6 | R = 9.525 Rs, lat = -43 deg, phase = 75 deg |
| S50 | 112 | OTM-200 | 112TI+3d | 2009-161T02:12 | 10-Jun | Wed | 3 | 13 | 7 | D/L start, burn ~6h later. Backup D/L 162T02:11 |
| S50 | 112 | Ring CRX | Ascending | 2009-161T08:04 | 10-Jun | Wed | 4 | 12 | 0 | r = 11.214 Rs ( 676556 km) |
| S51 | 112 | MAG | Segment | 2009-164T04:41 | 13-Jun | Sat | 6 | 10 | 3 | MAG_112_113 (9d); MAG_112_113 |
| S51 | 112 | S51 Begins | | 2009-164T04:41 | 13-Jun | Sat | 6 | 10 | 3 | S51 Sequence. Duration = 41 d |
| S51 | 112 | OTM-201 | ~apo | 2009-165T19:26 | 14-Jun | Sun | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 166T19:26 |
| S51 | 113 | Apoapse | | 2009-168T14:09 | 17-Jun | Wed | 11 | 5 | 3 | Per = 16.0 d, inc = 55.8 deg, r = 30.975 Rs, phase = 104 deg |
| S51 | 113 | OTM-202 | 113TI-4d | 2009-170T11:40 | 19-Jun | Fri | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 171T11:40 |
| S51 | 113 | TOST | Segment | 2009-173T04:10 | 22-Jun | Mon | 15 | 1 | 3 | TOST_113_T57 (2d); Titan Flyby T57 |
| S51 | 113 | Earth OCC | TITAN | 2009-173T18:08 | 22-Jun | Mon | 16 | 0 | 3 | Duration = 24 min; egress = 2009-173T18:32:36 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S51 | 113 | Sun OCC | TITAN | 2009-173T18:10 | 22-Jun | Mon | 16 | 0 | 3 | Duration = 22 min; egress = 2009-173T18:32:36 |
| S51 | 113 | 113TI (t) T57 | TITAN | 2009-173T18:32 | 22-Jun | Mon | 16 | 16 | 3 | Inbound 955.1 km flyby, v = 6.0 km/s, phase = 128 deg |
| S51 | 113 | Ring CRX | Descending | 2009-173T18:53 | 22-Jun | Mon | 0 | 16 | 3 | r = 20.775 Rs (1253347 km) |
| S51 | 113 | RINGS | Segment | 2009-175T05:40 | 24-Jun | Wed | 1 | 14 | 5 | RINGS_113 (5d); RINGS EQUINOX |
| S51 | 113 | Periapse | | 2009-176T05:45 | 25-Jun | Thu | 2 | 13 | 6 | R = 7.213 Rs, lat = -36 deg, phase = 71 deg |
| S51 | 113 | Ring CRX | Ascending | 2009-176T15:06 | 25-Jun | Thu | 3 | 13 | 6 | r = 8.296 Rs ( 500507 km) |
| S51 | 113 | OTM-203 | 113TI+4d | 2009-177T01:09 | 26-Jun | Fri | 3 | 13 | 7 | D/L start, burn ~6h later. Backup D/L 178T01:09 |
| S51 | 113 | MAG | Segment | 2009-180T03:39 | 29-Jun | Mon | 6 | 10 | 3 | MAG_113_114 (9d); MAG_113_114 |
| S51 | 113 | OTM-204 | ~apo | 2009-181T18:24 | 30-Jun | Tue | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 182T18:24 |
| S51 | 114 | Apoapse | | 2009-184T05:05 | 03-Jul | Fri | 10 | 5 | 2 | Per = 15.9 d, inc = 51.2 deg, r = 33.287 Rs, phase = 109 deg |
| S51 | 114 | OTM-205 | 114TI-3d | 2009-186T10:38 | 05-Jul | Sun | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 187T10:38 |
| S51 | 114 | TOST | Segment | 2009-189T04:00 | 08-Jul | Wed | 15 | 1 | 3 | TOST_114_T58 (2d); Titan Flyby T58 |
| S51 | 114 | Earth OCC | TITAN | 2009-189T16:33 | 08-Jul | Wed | 16 | 0 | 3 | Duration = 29 min; egress = 2009-189T17:02:25 |
| S51 | 114 | Sun OCC | TITAN | 2009-189T16:35 | 08-Jul | Wed | 16 | 0 | 3 | Duration = 27 min; egress = 2009-189T17:02:28 |
| S51 | 114 | 114TI (t) T58 | TITAN | 2009-189T17:04 | 08-Jul | Wed | 16 | 16 | 3 | Inbound 965.8 km flyby, v = 6.0 km/s, phase = 120 deg |
| S51 | 114 | Ring CRX | Descending | 2009-189T17:27 | 08-Jul | Wed | 0 | 16 | 3 | r = 20.744 Rs (1251481 km) |
| S51 | 114 | RINGS | Segment | 2009-191T04:53 | 10-Jul | Fri | 1 | 14 | 5 | RINGS_114_115 (14d); RINGS EQUINOX |
| S51 | 114 | Periapse | | 2009-191T22:09 | 10-Jul | Fri | 2 | 14 | 5 | R = 5.309 Rs, lat = -28 deg, phase = 67 deg |
| S51 | 114 | Ring CRX | Ascending | 2009-192T02:58 | 11-Jul | Sat | 2 | 14 | 6 | r = 5.932 Rs ( 357864 km) |
| S51 | 114 | 114DI (nt) | DIONE | 2009-192T03:12 | 11-Jul | Sat | 2 | 14 | 6 | Outbound 86562.8 km flyby, v = 9.2 km/s, phase = 62 deg |
| S51 | 114 | OTM-206 | 114TI+4d | 2009-193T10:22 | 12-Jul | Sun | 4 | 12 | 7 | D/L start, burn ~6h later. Backup D/L 194T10:07 |
| S51 | 114 | OTM-207 | ~apo | 2009-198T09:52 | 17-Jul | Fri | 9 | 7 | 5 | D/L start, burn ~6h later. Backup D/L 199T09:52 |
| S51 | 115 | Apoapse | | 2009-199T21:29 | 18-Jul | Sat | 10 | 6 | 1 | Per = 15.9 d, inc = 44.6 deg, r = 35.191 Rs, phase = 112 deg |
| S51 | 115 | OTM-208 | 115TI-3d | 2009-202T09:36 | 21-Jul | Tue | 13 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 203T09:36 |
| S52 | 115 | S52 Begins | | 2009-204T21:51 | 23-Jul | Thu | 15 | 1 | 3 | S52 Sequence. Duration = 32 d |
| S52 | 115 | TOST | Segment | 2009-204T21:51 | 23-Jul | Thu | 15 | 1 | 3 | TOST_115_T59 (1d); Titan Flyby T59 |
| S52 | 115 | Earth OCC | TITAN | 2009-205T14:52 | 24-Jul | Fri | 16 | 0 | 3 | Duration = 38 min; egress = 2009-205T15:30:20 |
| S52 | 115 | Sun OCC | TITAN | 2009-205T14:56 | 24-Jul | Fri | 16 | 0 | 3 | Duration = 34 min; egress = 2009-205T15:30:31 |
| S52 | 115 | 115TI (t) T59 | TITAN | 2009-205T15:34 | 24-Jul | Fri | 16 | 16 | 3 | Inbound 956.2 km flyby, v = 6.0 km/s, phase = 112 deg |
| S52 | 115 | Ring CRX | Descending | 2009-205T16:04 | 24-Jul | Fri | 0 | 16 | 3 | r = 20.694 Rs (1248445 km) |
| S52 | 115 | RINGS | Segment | 2009-206T08:21 | 25-Jul | Sat | 1 | 15 | 4 | RINGS_115_116 (15d); RINGS EQUINOX |
| S52 | 115 | Periapse | | 2009-207T16:04 | 26-Jul | Sun | 2 | 14 | 5 | R = 3.866 Rs, lat = -19 deg, phase = 65 deg |
| S52 | 115 | 115PM (nt) | PROMETHEUS | 2009-207T16:18 | 26-Jul | Sun | 2 | 14 | 5 | Outbound 113396.8 km flyby, v = 10.4 km/s, phase = 79 deg |
| S52 | 115 | 115PA (nt) | PANDORA | 2009-207T16:48 | 26-Jul | Sun | 2 | 14 | 5 | Outbound 103588.7 km flyby, v = 10.1 km/s, phase = 66 deg |
| S52 | 115 | 115JA (nt) | JANUS | 2009-207T17:06 | 26-Jul | Sun | 2 | 14 | 5 | Outbound 94089.5 km flyby, v = 9.9 km/s, phase = 59 deg |
| S52 | 115 | 115TE (nt) | TETHYS | 2009-207T18:15 | 26-Jul | Sun | 2 | 14 | 5 | Outbound 68254.6 km flyby, v = 9.5 km/s, phase = 89 deg |
| S52 | 115 | Dust Hazard | E_ring_lg | 2009-207T18:28 | 26-Jul | Sun | 2 | 14 | 5 | Egress @ 2009-207T18:33 (4 min) \| Protection: None |
| S52 | 115 | Ring CRX | Ascending | 2009-207T18:30 | 26-Jul | Sun | 2 | 14 | 5 | r = 4.206 Rs ( 253759 km) |
| S52 | 115 | OTM-209 | 115TI+4d | 2009-209T09:21 | 28-Jul | Tue | 4 | 12 | 7 | D/L start, burn ~6h later. Backup D/L 210T09:06 |
| S52 | 115 | OTM-210 | ~apo | 2009-213T16:35 | 01-Aug | Sat | 8 | 8 | 4 | D/L start, burn ~6h later. Backup D/L 214T16:20 |
| S52 | 116 | Apoapse | | 2009-215T15:23 | 03-Aug | Mon | 10 | 6 | 2 | Per = 15.9 d, inc = 34.8 deg, r = 36.637 Rs, phase = 115 deg |
| S52 | 116 | OTM-211 | 116TI-3d | 2009-218T16:05 | 06-Aug | Thu | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 219T16:05 |
| S52 | 116 | TOST | Segment | 2009-221T01:05 | 09-Aug | Sun | 15 | 1 | 2 | TOST_116_T60 (1d); Titan Flyby T60 |
| S52 | 116 | Earth OCC | TITAN | 2009-221T13:02 | 09-Aug | Sun | 16 | 0 | 3 | Duration = 54 min; egress = 2009-221T13:56:25 |
| S52 | 116 | Sun OCC | TITAN | 2009-221T13:09 | 09-Aug | Sun | 16 | 0 | 3 | Duration = 48 min; egress = 2009-221T13:56:47 |
| S52 | 116 | 116TI (t) T60 | TITAN | 2009-221T14:03 | 09-Aug | Sun | 16 | 16 | 3 | Inbound 971.1 km flyby, v = 6.0 km/s, phase = 104 deg |
| S52 | 116 | Ring CRX | Descending | 2009-221T14:54 | 09-Aug | Sun | 0 | 16 | 3 | r = 20.579 Rs (1241517 km) |
| S52 | 116 | RINGS | Segment | 2009-222T02:05 | 10-Aug | Mon | 1 | 15 | 3 | RINGS_116_117 (15d); RINGS EQUINOX |
| S52 | 116 | N. VERNAL EQUINOX | | 2009-223T00:25 | 11-Aug | Tue | 1 | 15 | 4 | Northern vernal equinox (Sun passes northward through ring plane) |
| S52 | 116 | 116AT (nt) | ATLAS | 2009-223T11:26 | 11-Aug | Tue | 2 | 14 | 5 | Inbound 118906.0 km flyby, v = 14.4 km/s, phase = 117 deg |
| S52 | 116 | Periapse | | 2009-223T11:36 | 11-Aug | Tue | 2 | 14 | 5 | R = 2.933 Rs, lat = -11 deg, phase = 63 deg |
| S52 | 116 | 116AN (nt) | ANTHE | 2009-223T12:19 | 11-Aug | Tue | 2 | 14 | 5 | Outbound 35616.8 km flyby, v = 8.2 km/s, phase = 76 deg |
| S52 | 116 | Ring CRX | Ascending | 2009-223T12:58 | 11-Aug | Tue | 2 | 14 | 5 | r = 3.131 Rs ( 188889 km) |
| S52 | 116 | OTM-212 | 116TI+4d | 2009-225T15:49 | 13-Aug | Thu | 4 | 12 | 7 | D/L start, burn ~6h later. Backup D/L 226T15:34 |
| S52 | 116 | OTM-213 | ~apo | 2009-228T08:04 | 16-Aug | Sun | 7 | 9 | 3 | D/L start, burn ~6h later. Backup D/L 229T08:04 |
| S52 | 117 | Apoapse | | 2009-231T11:08 | 19-Aug | Wed | 10 | 6 | 3 | Per = 16.0 d, inc = 20.8 deg, r = 37.601 Rs, phase = 117 deg |
| S52 | 117 | OTM-214 | 117TI-3d | 2009-233T21:34 | 21-Aug | Fri | 12 | 4 | 6 | D/L start, burn ~6h later. Backup D/L 234T21:34 |
| S53 | 117 | S53 Begins | | 2009-237T00:04 | 25-Aug | Tue | 15 | 1 | 3 | S53 Sequence. Duration = 41 d |
| S53 | 117 | TOST | Segment | 2009-237T00:04 | 25-Aug | Tue | 15 | 1 | 3 | TOST_117_T61 (2d); Titan Flyby T61 |
| S53 | 117 | 117TI (t) T61 | TITAN | 2009-237T12:51 | 25-Aug | Tue | 16 | 48 | 4 | Inbound 960.7 km flyby, v = 6.0 km/s, phase = 86 deg |
| S53 | 117 | Ring CRX | Descending | 2009-237T14:55 | 25-Aug | Tue | 0 | 48 | 4 | r = 20.194 Rs (1218295 km) |
| S53 | 117 | RINGS | Segment | 2009-239T02:04 | 27-Aug | Thu | 2 | 46 | 5 | RINGS_117_118 (18d); RINGS EQUINOX |
| S53 | 117 | 117AG (nt) | AEGAEON | 2009-239T09:36 | 27-Aug | Thu | 2 | 46 | 6 | Inbound 107007.0 km flyby, v = 3.0 km/s, phase = 105 deg |
| S53 | 117 | Periapse | | 2009-239T10:32 | 27-Aug | Thu | 2 | 46 | 6 | R = 4.277 Rs, lat = -8 deg, phase = 76 deg |
| S53 | 117 | 117PL (nt) | PALLENE | 2009-239T11:03 | 27-Aug | Thu | 2 | 46 | 6 | Outbound 101280.0 km flyby, v = 7.5 km/s, phase = 119 deg |
| S53 | 117 | 117TL (nt) | TELESTO | 2009-239T13:10 | 27-Aug | Thu | 2 | 46 | 6 | Outbound 25193.1 km flyby, v = 5.8 km/s, phase = 86 deg |
| S53 | 117 | Ring CRX | Ascending | 2009-239T14:07 | 27-Aug | Thu | 2 | 46 | 6 | r = 4.878 Rs ( 294306 km) |
| S53 | 117 | OTM-215 | 117TI+4d | 2009-241T07:19 | 29-Aug | Sat | 4 | 44 | 7 | D/L start, burn ~6h later. Backup D/L 242T07:19 |
| S53 | 117 | OTM-216 | ~apo | 2009-247T20:48 | 04-Sep | Fri | 10 | 37 | 7 | D/L start, burn ~6h later. Backup D/L 248T20:48 |
| S53 | 118 | Apoapse | | 2009-251T10:11 | 08-Sep | Tue | 14 | 34 | 4 | Per = 24.0 d, inc = 12.1 deg, r = 48.888 Rs, phase = 104 deg |
| S53 | 118 | MAG | Segment | 2009-256T23:03 | 13-Sep | Sun | 19 | 28 | 9 | MAG_118 (6d); MAG_118 |
| S53 | 118 | SEP = 3.0 deg | Conjunction | 2009-258T00:02 | 15-Sep | Tue | 20 | 27 | 10 | Commanding must not be required below 3.0 deg |
| S53 | 118 | SEP = 2.0 deg | Conjunction | 2009-260T04:58 | 17-Sep | Thu | 23 | 25 | 12 | Plan no SSR playback below 2.0 deg |
| S53 | 118 | SEP = 2.0 deg | Conjunction | 2009-261T05:05 | 18-Sep | Fri | 24 | 24 | 13 | Plan no SSR playback below 2.0 deg |
| S53 | 118 | Ring CRX | Descending | 2009-261T14:49 | 18-Sep | Fri | 24 | 24 | 14 | r = 20.011 Rs (1207290 km) |
| S53 | 118 | RINGS | Segment | 2009-262T22:33 | 19-Sep | Sat | 25 | 22 | 15 | RINGS_118 (5d); RINGS EQUINOX |
| S53 | 118 | Periapse | | 2009-263T09:51 | 20-Sep | Sun | 26 | 22 | 16 | R = 4.270 Rs, lat = -8 deg, phase = 77 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S53 | 118 | 118PM (nt) | PROMETHEUS | 2009-263T10:09 | 20-Sep | Sun | 26 | 22 | 16 | Outbound 121149.5 km flyby, v = 2.7 km/s, phase = 73 deg |
| S53 | 118 | SEP = 3.0 deg | Conjunction | 2009-263T10:14 | 20-Sep | Sun | 26 | 22 | 16 | Commanding must not be required below 3.0 deg |
| S53 | 118 | Ring CRX | Ascending | 2009-263T13:28 | 20-Sep | Sun | 26 | 22 | 16 | r = 4.880 Rs ( 294391 km) |
| S53 | 118 | 118DI (nt) | DIONE | 2009-263T16:50 | 20-Sep | Sun | 26 | 22 | 16 | Outbound 97131.4 km flyby, v = 9.8 km/s, phase = 94 deg |
| S53 | 118 | 118TI (nt) | TITAN | 2009-265T06:53 | 22-Sep | Tue | 28 | 20 | 17 | Outbound 293865.5 km flyby, v = 4.8 km/s, phase = 113 deg |
| S53 | 118 | MAG | Segment | 2009-267T22:18 | 24-Sep | Thu | 30 | 17 | 20 | MAG_118_119 (10d); MAG_118_119 |
| S53 | 119 | Apoapse | | 2009-275T08:02 | 02-Oct | Fri | 38 | 10 | 27 | Per = 23.8 d, inc = 12.1 deg, r = 48.713 Rs, phase = 103 deg |
| S54 | 119 | MAG | Segment | 2009-278T04:03 | 05-Oct | Mon | 41 | 7 | 30 | MAG_119 (6d); MAG_119 |
| S54 | 119 | S54 Begins | | 2009-278T04:03 | 05-Oct | Mon | 41 | 7 | 30 | S54 Sequence. Duration = 40 d |
| S54 | 119 | OTM-217 | 119TI-3d | 2009-282T05:04 | 09-Oct | Fri | 45 | 3 | 34 | D/L start, burn ~6h later. Backup D/L 283T05:04 |
| S54 | 119 | TOST | Segment | 2009-284T13:49 | 11-Oct | Sun | 47 | 1 | 2 | TOST_119_T62 (2d); Titan Flyby T61 |
| S54 | 119 | Sun OCC | TITAN | 2009-285T07:38 | 12-Oct | Mon | 48 | 0 | 3 | Duration = 41 min; egress = 2009-285T08:19:44 |
| S54 | 119 | Earth OCC | TITAN | 2009-285T07:46 | 12-Oct | Mon | 48 | 0 | 3 | Duration = 36 min; egress = 2009-285T08:22:09 |
| S54 | 119 | 119TI (t) T62 | TITAN | 2009-285T08:36 | 12-Oct | Mon | 48 | 21 | 3 | Inbound 1299.5 km flyby, v = 6.0 km/s, phase = 99 deg |
| S54 | 119 | Ring CRX | Descending | 2009-286T05:50 | 13-Oct | Tue | 1 | 20 | 4 | r = 13.526 Rs ( 816016 km) |
| S54 | 119 | SATURN | Segment | 2009-286T13:49 | 13-Oct | Tue | 1 | 20 | 4 | SATURN_119_120 (19d); SATURN_119_120 |
| S54 | 119 | Sun OCC | SATURN | 2009-286T14:57 | 13-Oct | Tue | 1 | 20 | 4 | Duration = 277 min; egress = 2009-286T19:34:30 |
| S54 | 119 | Earth OCC | SATURN | 2009-286T15:48 | 13-Oct | Tue | 1 | 20 | 4 | Duration = 255 min; egress = 2009-286T20:03:38 |
| S54 | 119 | 119RH (nt) | RHEA | 2009-286T16:54 | 13-Oct | Tue | 1 | 20 | 4 | Inbound 40408.2 km flyby, v = 9.0 km/s, phase = 82 deg |
| S54 | 119 | 119ME (nt) | METHONE | 2009-287T03:18 | 14-Oct | Wed | 2 | 19 | 5 | Inbound 86115.3 km flyby, v = 11.8 km/s, phase = 39 deg |
| S54 | 119 | 119AT (nt) | ATLAS | 2009-287T04:19 | 14-Oct | Wed | 2 | 19 | 5 | Inbound 70651.2 km flyby, v = 2.9 km/s, phase = 114 deg |
| S54 | 119 | 119CP (nt) | CALYPSO | 2009-287T04:33 | 14-Oct | Wed | 2 | 19 | 5 | Inbound 100793.0 km flyby, v = 7.7 km/s, phase = 107 deg |
| S54 | 119 | Periapse | | 2009-287T05:10 | 14-Oct | Wed | 2 | 19 | 5 | R = 3.195 Rs, lat = -0 deg, phase = 70 deg |
| S54 | 119 | 119MI (nt) | MIMAS | 2009-287T06:32 | 14-Oct | Wed | 2 | 19 | 5 | Outbound 44049.6 km flyby, v = 7.9 km/s, phase = 102 deg |
| S54 | 119 | Dust Hazard | Pallene | 2009-287T06:57 | 14-Oct | Wed | 2 | 19 | 5 | Egress @ 2009-287T07:13 (16 min) \| Protection: None |
| S54 | 119 | Dust Hazard | E_ring_lg | 2009-287T07:10 | 14-Oct | Wed | 2 | 19 | 5 | Egress @ 2009-287T09:06 (115 min) \| Protection: MEA Cvr. Closure |
| S54 | 119 | Ring CRX | Ascending | 2009-287T07:51 | 14-Oct | Wed | 2 | 19 | 5 | r = 3.797 Rs ( 229046 km) |
| S54 | 119 | 119TE (nt) | TETHYS | 2009-287T10:10 | 14-Oct | Wed | 2 | 19 | 5 | Outbound 85101.7 km flyby, v = 11.9 km/s, phase = 76 deg |
| S54 | 119 | OTM-218 | 119TI+3d | 2009-288T18:34 | 15-Oct | Thu | 3 | 18 | 7 | D/L start, burn ~6h later. Backup D/L 289T18:19 |
| S54 | 119 | OTM-219 | ~apo | 2009-293T18:04 | 20-Oct | Tue | 8 | 13 | 5 | D/L start, burn ~6h later. Backup D/L 294T18:04 |
| S54 | 120 | Apoapse | | 2009-296T16:58 | 23-Oct | Fri | 11 | 10 | 3 | Per = 19.0 d, inc = 0.5 deg, r = 42.295 Rs, phase = 110 deg |
| S54 | 120 | OTM-220 | E7-3d | 2009-302T17:35 | 29-Oct | Thu | 17 | 4 | 9 | D/L start, burn ~6h later. Backup D/L 303T17:35 |
| S54 | 120 | SOST | Segment | 2009-305T12:35 | 01-Nov | Sun | 20 | 1 | 3 | SOST_120 (2d); E7 Flyby |
| S54 | 120 | Sun OCC | SATURN | 2009-305T14:34 | 01-Nov | Sun | 20 | 1 | 3 | Duration = 272 min; egress = 2009-305T19:06:22 |
| S54 | 120 | Ring CRX | Descending | 2009-305T15:05 | 01-Nov | Sun | 20 | 1 | 3 | r = 9.244 Rs ( 557677 km) |
| S54 | 120 | Earth OCC | SATURN | 2009-305T16:01 | 01-Nov | Sun | 20 | 1 | 3 | Duration = 229 min; egress = 2009-305T19:51:08 |
| S54 | 120 | 120TI (nt) | TITAN | 2009-305T23:57 | 01-Nov | Sun | 21 | 0 | 3 | Inbound 978757.5 km flyby, v = 9.9 km/s, phase = 73 deg |
| S54 | 120 | 120PL (nt) | PALLENE | 2009-306T02:07 | 02-Nov | Mon | 21 | 0 | 3 | Inbound 93537.6 km flyby, v = 12.6 km/s, phase = 46 deg |
| S54 | 120 | Periapse | | 2009-306T04:38 | 02-Nov | Mon | 21 | 0 | 3 | R = 3.201 Rs, lat = -0 deg, phase = 70 deg |
| S54 | 120 | 120EP (nt) | EPIMETHEUS | 2009-306T05:26 | 02-Nov | Mon | 21 | 0 | 3 | Outbound 105153.4 km flyby, v = 8.0 km/s, phase = 6 deg |
| S54 | 120 | Dust Hazard | E_ring_lg | 2009-306T06:38 | 02-Nov | Mon | 21 | 0 | 4 | Egress @ 2009-306T08:34 (116 min) \| Protection: MEA Cvr. Closure |
| S54 | 120 | 120CP (nt) | CALYPSO | 2009-306T06:55 | 02-Nov | Mon | 21 | 0 | 4 | Outbound 86772.5 km flyby, v = 6.9 km/s, phase = 117 deg |
| S54 | 120 | Earth OCC | ENCELADUS | 2009-306T07:28 | 02-Nov | Mon | 21 | 0 | 4 | Duration = 7 min; egress = 2009-306T07:35:24 |
| S54 | 120 | 120EN (t) E7 | ENCELADUS | 2009-306T07:41 | 02-Nov | Mon | 21 | 19 | 4 | Outbound 100.5 km flyby, v = 7.7 km/s, phase = 90 deg |
| S54 | 120 | Ring CRX | Ascending | 2009-306T08:35 | 02-Nov | Mon | 0 | 19 | 4 | r = 4.355 Rs ( 262715 km) |
| S54 | 120 | SATURN | Segment | 2009-307T12:35 | 03-Nov | Tue | 1 | 18 | 5 | SATURN_120_121 (10d); SATURN_120_121 |
| S54 | 120 | OTM-221 | E7+3d | 2009-309T03:20 | 05-Nov | Thu | 3 | 16 | 6 | D/L start, burn ~6h later. Backup D/L 310T03:21 |
| S54 | 121 | Apoapse | | 2009-315T16:57 | 11-Nov | Wed | 9 | 9 | 7 | Per = 19.0 d, inc = 0.5 deg, r = 42.367 Rs, phase = 110 deg |
| S54 | 121 | OTM-222 | ~apo | 2009-316T03:06 | 12-Nov | Thu | 10 | 9 | 7 | D/L start, burn ~6h later. Backup D/L 317T10:21 |
| S55 | 121 | S55 Begins | | 2009-317T19:21 | 13-Nov | Fri | 11 | 7 | 2 | S55 Sequence. Duration = 39 d |
| S55 | 121 | SATURN | Segment | 2009-317T19:21 | 13-Nov | Fri | 11 | 7 | 2 | SATURN_121 (7d); SATURN_121 |
| S55 | 121 | OTM-223 | E8-3d | 2009-321T16:37 | 17-Nov | Tue | 15 | 3 | 6 | D/L start, burn ~6h later. Backup D/L 322T16:37 |
| S55 | 121 | SOST | Segment | 2009-324T11:37 | 20-Nov | Fri | 18 | 1 | 3 | SOST_121 (2d); E8 Flyby |
| S55 | 121 | Ring CRX | Descending | 2009-324T15:10 | 20-Nov | Fri | 18 | 0 | 3 | r = 9.491 Rs ( 572585 km) |
| S55 | 121 | Sun OCC | SATURN | 2009-324T15:18 | 20-Nov | Fri | 18 | 0 | 3 | Duration = 267 min; egress = 2009-324T19:46:14 |
| S55 | 121 | Earth OCC | SATURN | 2009-324T17:14 | 20-Nov | Fri | 18 | 0 | 3 | Duration = 208 min; egress = 2009-324T20:41:57 |
| S55 | 121 | 121HE (nt) | HELENE | 2009-324T22:04 | 20-Nov | Fri | 19 | 0 | 3 | Inbound 82631.2 km flyby, v = 6.6 km/s, phase = 105 deg |
| S55 | 121 | 121EN (t) E8 | ENCELADUS | 2009-325T02:09 | 21-Nov | Sat | 19 | 21 | 3 | Inbound 1597.6 km flyby, v = 7.8 km/s, phase = 88 deg |
| S55 | 121 | 121PA (nt) | PANDORA | 2009-325T04:45 | 21-Nov | Sat | 0 | 21 | 4 | Inbound 59460.4 km flyby, v = 3.0 km/s, phase = 103 deg |
| S55 | 121 | Periapse | | 2009-325T05:15 | 21-Nov | Sat | 0 | 21 | 4 | R = 3.203 Rs, lat = -0 deg, phase = 70 deg |
| S55 | 121 | Dust Hazard | E_ring_lg | 2009-325T07:14 | 21-Nov | Sat | 0 | 21 | 4 | Egress @ 2009-325T09:10 (116 min) \| Protection: MEA Cvr. Closure |
| S55 | 121 | 121TI (nt) | TITAN | 2009-325T08:30 | 21-Nov | Sat | 0 | 21 | 4 | Outbound 965079.3 km flyby, v = 11.1 km/s, phase = 138 deg |
| S55 | 121 | Ring CRX | Ascending | 2009-325T09:06 | 21-Nov | Sat | 0 | 21 | 4 | r = 4.308 Rs ( 259897 km) |
| S55 | 121 | 121CP (nt) | CALYPSO | 2009-325T10:19 | 21-Nov | Sat | 0 | 21 | 4 | Outbound 37046.2 km flyby, v = 10.0 km/s, phase = 78 deg |
| S55 | 121 | 121RH (nt) | RHEA | 2009-325T17:35 | 21-Nov | Sat | 1 | 20 | 4 | Outbound 24452.2 km flyby, v = 8.7 km/s, phase = 58 deg |
| S55 | 121 | SATURN | Segment | 2009-326T01:22 | 22-Nov | Sun | 1 | 20 | 4 | SATURN_121_122 (19d); SATURN_121_122 |
| S55 | 121 | OTM-224 | E8+2d | 2009-326T16:22 | 22-Nov | Sun | 2 | 19 | 5 | D/L start, burn ~6h later. Backup D/L 327T16:07 |
| S55 | 122 | Apoapse | | 2009-334T17:36 | 30-Nov | Mon | 10 | 11 | 8 | Per = 19.0 d, inc = 0.5 deg, r = 42.380 Rs, phase = 109 deg |
| S55 | 122 | OTM-225 | ~apo | 2009-338T01:39 | 04-Dec | Fri | 13 | 8 | 11 | D/L start, burn ~6h later. Backup D/L 339T01:39 |
| S55 | 122 | OTM-226 | 122TI-3d | 2009-342T15:24 | 08-Dec | Tue | 18 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 343T01:24 |
| S55 | 122 | Ring CRX | Descending | 2009-343T15:26 | 09-Dec | Wed | 19 | 2 | 1 | r = 9.756 Rs ( 588568 km) |
| S55 | 122 | Sun OCC | SATURN | 2009-343T16:18 | 09-Dec | Wed | 19 | 2 | 1 | Duration = 262 min; egress = 2009-343T20:41:12 |
| S55 | 122 | Earth OCC | SATURN | 2009-343T18:31 | 09-Dec | Wed | 19 | 2 | 1 | Duration = 190 min; egress = 2009-343T21:42:21 |
| S55 | 122 | 122HE (nt) | HELENE | 2009-343T22:28 | 09-Dec | Wed | 19 | 2 | 1 | Inbound 31762.4 km flyby, v = 9.6 km/s, phase = 73 deg |
| S55 | 122 | 122PL (nt) | PALLENE | 2009-344T03:33 | 10-Dec | Thu | 19 | 2 | 2 | Inbound 111216.6 km flyby, v = 13.7 km/s, phase = 47 deg |
| S55 | 122 | Periapse | | 2009-344T06:04 | 10-Dec | Thu | 19 | 2 | 2 | R = 3.196 Rs, lat = -0 deg, phase = 71 deg |
| S55 | 122 | Dust Hazard | E_ring_lg | 2009-344T08:04 | 10-Dec | Thu | 19 | 2 | 2 | Egress @ 2009-344T10:00 (115 min) \| Protection: MEA Cvr. Closure |
| S55 | 122 | Ring CRX | Ascending | 2009-344T09:49 | 10-Dec | Thu | 19 | 2 | 2 | r = 4.260 Rs ( 256984 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S55 | 122 | TOST | Segment | 2009-345T10:10 | 11-Dec | Fri | 20 | 1 | 3 | TOST_122_T63 (3d); Titan Flyby T63 |
| S55 | 122 | 122TI (t) T63 | TITAN | 2009-346T01:03 | 12-Dec | Sat | 21 | 16 | 3 | Outbound 4847.5 km flyby, v = 5.7 km/s, phase = 124 deg |
| S55 | 122 | Ring CRX | Descending | 2009-346T16:22 | 12-Dec | Sat | 1 | 15 | 4 | r = 24.336 Rs (1468207 km) |
| S55 | 122 | MAG | Segment | 2009-348T10:10 | 14-Dec | Mon | 2 | 14 | 6 | MAG_122_123 (9d); MAG_122_123 |
| S55 | 122 | OTM-227 | 122TI+3d | 2009-349T00:55 | 15-Dec | Tue | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 350T00:55 |
| S55 | 123 | Apoapse | | 2009-352T05:55 | 18-Dec | Fri | 6 | 10 | 3 | Per = 16.0 d, inc = 4.9 deg, r = 37.963 Rs, phase = 104 deg |
| S55 | 123 | OTM-228 | ~apo | 2009-354T00:41 | 20-Dec | Sun | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 355T00:41 |
| S56 | 123 | RINGS | Segment | 2009-356T23:26 | 22-Dec | Tue | 11 | 5 | 3 | RINGS_123 (4d); RINGS_123 |
| S56 | 123 | S56 Begins | | 2009-356T23:26 | 22-Dec | Tue | 11 | 5 | 3 | S56 Sequence. Duration = 32 d |
| S56 | 123 | OTM-229 | 123TI-3d | 2009-358T14:26 | 24-Dec | Thu | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 359T07:57 |
| S56 | 123 | Earth OCC | RING | 2009-359T19:27 | 25-Dec | Fri | 14 | 2 | 1 | Duration = 480 min; egress = 2009-360T03:27:42 |
| S56 | 123 | Sun OCC | SATURN | 2009-359T20:41 | 25-Dec | Fri | 14 | 2 | 1 | Duration = 211 min; egress = 2009-360T00:12:25 |
| S56 | 123 | Earth OCC | SATURN | 2009-359T21:39 | 25-Dec | Fri | 14 | 2 | 1 | Duration = 203 min; egress = 2009-360T01:02:43 |
| S56 | 123 | 123TE (nt) | TETHYS | 2009-360T00:35 | 26-Dec | Sat | 14 | 2 | 1 | Inbound 52931.1 km flyby, v = 11.8 km/s, phase = 77 deg |
| S56 | 123 | 123AN (nt) | ANTHE | 2009-360T03:29 | 26-Dec | Sat | 14 | 2 | 2 | Inbound 12097.2 km flyby, v = 8.3 km/s, phase = 102 deg |
| S56 | 123 | Dust Hazard | G_ring | 2009-360T04:47 | 26-Dec | Sat | 14 | 2 | 2 | Egress @ 2009-360T04:52 (5 min) \| Protection: MEA Cvr. Closure |
| S56 | 123 | Ring CRX | Ascending | 2009-360T04:49 | 26-Dec | Sat | 14 | 2 | 2 | r = 2.692 Rs ( 162384 km) |
| S56 | 123 | 123PM (nt) | PROMETHEUS | 2009-360T05:01 | 26-Dec | Sat | 14 | 2 | 2 | Inbound 56469.6 km flyby, v = 10.5 km/s, phase = 36 deg |
| S56 | 123 | Periapse | | 2009-360T05:40 | 26-Dec | Sat | 14 | 2 | 2 | R = 2.590 Rs, lat = 2 deg, phase = 76 deg |
| S56 | 123 | TOST | Segment | 2009-361T09:12 | 27-Dec | Sun | 15 | 1 | 3 | TOST_123_T64 (3d); Titan Flyby T64 |
| S56 | 123 | 123TI (t) T64 | TITAN | 2009-362T00:16 | 28-Dec | Mon | 16 | 16 | 3 | Outbound 951.3 km flyby, v = 5.9 km/s, phase = 86 deg |
| S56 | 123 | Ring CRX | Descending | 2009-362T02:56 | 28-Dec | Mon | 0 | 16 | 4 | r = 21.038 Rs (1269206 km) |
| S56 | 123 | MAG | Segment | 2009-364T09:12 | 30-Dec | Wed | 2 | 14 | 6 | MAG_123_124 (7d); MAG_123_124 |
| S56 | 123 | OTM-230 | 123TI+3d | 2009-364T23:57 | 30-Dec | Wed | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 001T23:58 |
| S56 | 124 | Apoapse | | 2010-003T03:49 | 03-Jan | Sun | 6 | 10 | 3 | Per = 16.0 d, inc = 21.6 deg, r = 37.513 Rs, phase = 104 deg |
| S56 | 124 | OTM-231 | ~apo | 2010-004T23:43 | 04-Jan | Mon | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 005T23:43 |
| S56 | 124 | RINGS | Segment | 2010-006T08:43 | 06-Jan | Wed | 9 | 7 | 1 | RINGS_124 (6d); RINGS_124 |
| S56 | 124 | OTM-232 | 124TI-3d | 2010-009T13:29 | 09-Jan | Sat | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 010T06:59 |
| S56 | 124 | Ring CRX | Ascending | 2010-011T01:56 | 11-Jan | Mon | 14 | 2 | 2 | r = 3.210 Rs ( 193680 km) |
| S56 | 124 | 124PA (nt) | PANDORA | 2010-011T02:08 | 11-Jan | Mon | 14 | 2 | 2 | Inbound 73052.1 km flyby, v = 7.1 km/s, phase = 141 deg |
| S56 | 124 | 124ME (nt) | METHONE | 2010-011T02:25 | 11-Jan | Mon | 14 | 2 | 2 | Inbound 26904.2 km flyby, v = 8.0 km/s, phase = 145 deg |
| S56 | 124 | Periapse | | 2010-011T03:22 | 11-Jan | Mon | 14 | 2 | 2 | R = 3.000 Rs, lat = 11 deg, phase = 76 deg |
| S56 | 124 | 124EN (nt) | ENCELADUS | 2010-011T06:47 | 11-Jan | Mon | 14 | 2 | 2 | Outbound 105786.6 km flyby, v = 11.4 km/s, phase = 98 deg |
| S56 | 124 | 124CP (nt) | CALYPSO | 2010-011T08:17 | 11-Jan | Mon | 14 | 2 | 2 | Outbound 113037.6 km flyby, v = 8.0 km/s, phase = 102 deg |
| S56 | 124 | TOST | Segment | 2010-012T08:14 | 12-Jan | Tue | 15 | 1 | 3 | TOST_124_T65 (3d); Titan Flyby T65 |
| S56 | 124 | 124TI (t) T65 | TITAN | 2010-012T23:10 | 12-Jan | Tue | 16 | 16 | 3 | Outbound 1074.0 km flyby, v = 5.9 km/s, phase = 95 deg |
| S56 | 124 | Ring CRX | Descending | 2010-013T02:02 | 13-Jan | Wed | 0 | 16 | 4 | r = 21.098 Rs (1272834 km) |
| S56 | 124 | MAG | Segment | 2010-015T08:14 | 15-Jan | Fri | 2 | 14 | 6 | MAG_124_125 (8d); MAG_124_125 |
| S56 | 124 | OTM-233 | 124TI+3d | 2010-015T22:59 | 15-Jan | Fri | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 016T23:00 |
| S56 | 125 | Apoapse | | 2010-019T04:18 | 19-Jan | Tue | 6 | 10 | 3 | Per = 16.0 d, inc = 5.2 deg, r = 37.977 Rs, phase = 103 deg |
| S56 | 125 | OTM-234 | ~apo | 2010-020T22:45 | 20-Jan | Wed | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 021T22:45 |
| S57 | 125 | RINGS | Segment | 2010-023T15:00 | 23-Jan | Sat | 11 | 5 | 3 | RINGS_125 (5d); RINGS_125 |
| S57 | 125 | S57 Begins | | 2010-023T15:00 | 23-Jan | Sat | 11 | 5 | 3 | S57 Sequence. Duration = 37 d |
| S57 | 125 | OTM-235 | 125TI-3d | 2010-025T12:16 | 25-Jan | Mon | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 025T22:31 |
| S57 | 125 | Earth OCC | RING | 2010-026T17:59 | 26-Jan | Tue | 14 | 2 | 1 | Duration = 464 min; egress = 2010-027T01:43:30 |
| S57 | 125 | Sun OCC | SATURN | 2010-026T19:15 | 26-Jan | Tue | 14 | 2 | 1 | Duration = 213 min; egress = 2010-026T22:47:50 |
| S57 | 125 | Earth OCC | SATURN | 2010-026T20:05 | 26-Jan | Tue | 14 | 2 | 1 | Duration = 204 min; egress = 2010-026T23:29:16 |
| S57 | 125 | 125TL (nt) | TELESTO | 2010-027T00:30 | 27-Jan | Wed | 14 | 2 | 2 | Inbound 97067.1 km flyby, v = 7.2 km/s, phase = 91 deg |
| S57 | 125 | 125ME (nt) | METHONE | 2010-027T01:39 | 27-Jan | Wed | 14 | 2 | 2 | Inbound 72100.2 km flyby, v = 14.0 km/s, phase = 60 deg |
| S57 | 125 | Dust Hazard | G_ring | 2010-027T02:58 | 27-Jan | Wed | 14 | 2 | 2 | Egress @ 2010-027T03:03 (5 min) \| Protection: HGA to Dust-Ram |
| S57 | 125 | Ring CRX | Ascending | 2010-027T03:01 | 27-Jan | Wed | 14 | 2 | 2 | r = 2.740 Rs ( 165295 km) |
| S57 | 125 | Periapse | | 2010-027T04:06 | 27-Jan | Wed | 14 | 2 | 2 | R = 2.572 Rs, lat = 3 deg, phase = 77 deg |
| S57 | 125 | 125PN (nt) | PAN | 2010-027T04:31 | 27-Jan | Wed | 14 | 2 | 2 | Outbound 97941.6 km flyby, v = 14.8 km/s, phase = 123 deg |
| S57 | 125 | 125PM (nt) | PROMETHEUS | 2010-027T04:36 | 27-Jan | Wed | 14 | 2 | 2 | Outbound 32483.7 km flyby, v = 7.2 km/s, phase = 112 deg |
| S57 | 125 | 125AG (nt) | AEGAEON | 2010-027T05:18 | 27-Jan | Wed | 14 | 2 | 2 | Outbound 13312.6 km flyby, v = 7.4 km/s, phase = 97 deg |
| S57 | 125 | 125DI (nt) | DIONE | 2010-027T11:47 | 27-Jan | Wed | 15 | 1 | 2 | Outbound 45085.6 km flyby, v = 8.7 km/s, phase = 106 deg |
| S57 | 125 | TOST | Segment | 2010-028T07:16 | 28-Jan | Thu | 15 | 1 | 3 | TOST_125_T66 (3d); Titan Flyby T66 |
| S57 | 125 | Ring CRX | Descending | 2010-028T20:30 | 28-Jan | Thu | 16 | 0 | 3 | r = 19.636 Rs (1184669 km) |
| S57 | 125 | 125TI (t) T66 | TITAN | 2010-028T22:28 | 28-Jan | Thu | 16 | 33 | 3 | Outbound 7486.4 km flyby, v = 5.7 km/s, phase = 69 deg |
| S57 | 125 | SATURN | Segment | 2010-031T07:01 | 31-Jan | Sun | 2 | 30 | 6 | SATURN_125_127 (30d); SATURN_125_127 |
| S57 | 125 | OTM-236 | 125TI+3d | 2010-031T22:01 | 31-Jan | Sun | 3 | 30 | 6 | D/L start, burn ~6h later. Backup D/L 032T22:01 |
| S57 | 125 | Ring CRX | Ascending | 2010-032T04:20 | 01-Feb | Mon | 3 | 30 | 0 | r = 35.226 Rs (2125185 km) |
| S57 | 126 | Apoapse | | 2010-035T22:18 | 04-Feb | Thu | 7 | 26 | 4 | Per = 17.5 d, inc = 0.3 deg, r = 40.258 Rs, phase = 106 deg |
| S57 | 126 | Sun OCC | SATURN | 2010-044T05:57 | 13-Feb | Sat | 15 | 17 | 12 | Duration = 222 min; egress = 2010-044T09:39:35 |
| S57 | 126 | Earth OCC | SATURN | 2010-044T07:08 | 13-Feb | Sat | 15 | 17 | 12 | Duration = 184 min; egress = 2010-044T10:12:52 |
| S57 | 126 | 126CP (nt) | CALYPSO | 2010-044T11:44 | 13-Feb | Sat | 16 | 17 | 13 | Inbound 21303.9 km flyby, v = 10.1 km/s, phase = 72 deg |
| S57 | 126 | Dust Hazard | E_ring_lg | 2010-044T13:05 | 13-Feb | Sat | 16 | 17 | 13 | Egress @ 2010-044T14:22 (77 min) \| Protection: MEA Cvr. Closure |
| S57 | 126 | Dust Hazard | Pallene | 2010-044T14:20 | 13-Feb | Sat | 16 | 17 | 13 | Egress @ 2010-044T14:32 (11 min) \| Protection: MEA Cvr. Closure |
| S57 | 126 | Dust Hazard | G_ring | 2010-044T15:51 | 13-Feb | Sat | 16 | 17 | 13 | Egress @ 2010-044T17:08 (77 min) \| Protection: HGA to Dust-Ram |
| S57 | 126 | 126EP (nt) | EPIMETHEUS | 2010-044T16:16 | 13-Feb | Sat | 16 | 17 | 13 | Inbound 93252.8 km flyby, v = 12.4 km/s, phase = 30 deg |
| S57 | 126 | 126JA (nt) | JANUS | 2010-044T16:22 | 13-Feb | Sat | 16 | 17 | 13 | Inbound 115084.7 km flyby, v = 14.4 km/s, phase = 29 deg |
| S57 | 126 | Ring CRX | Descending | 2010-044T16:23 | 13-Feb | Sat | 16 | 17 | 13 | r = 2.940 Rs ( 177371 km) |
| S57 | 126 | Periapse | | 2010-044T16:54 | 13-Feb | Sat | 16 | 17 | 13 | R = 2.908 Rs, lat = -0 deg, phase = 74 deg |
| S57 | 126 | 126MI (nt) | MIMAS | 2010-044T17:22 | 13-Feb | Sat | 16 | 17 | 13 | Outbound 9544.4 km flyby, v = 5.8 km/s, phase = 99 deg |
| S57 | 126 | 126TE (nt) | TETHYS | 2010-044T18:15 | 13-Feb | Sat | 16 | 17 | 13 | Outbound 111978.0 km flyby, v = 8.2 km/s, phase = 114 deg |
| S57 | 126 | Dust Hazard | E_ring_lg | 2010-044T19:27 | 13-Feb | Sat | 16 | 17 | 13 | Egress @ 2010-044T19:51 (23 min) \| Protection: MEA Cvr. Closure |
| S57 | 126 | 126TI (nt) | TITAN | 2010-045T22:46 | 14-Feb | Sun | 17 | 16 | 14 | Outbound 650558.1 km flyby, v = 8.8 km/s, phase = 32 deg |
| S57 | 126 | Ring CRX | Ascending | 2010-049T13:33 | 18-Feb | Thu | 21 | 12 | 18 | r = 34.756 Rs (2096828 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S57 | 127 | Apoapse | | 2010-053T11:27 | 22-Feb | Mon | 25 | 8 | 22 | Per = 17.5 d, inc = 0.3 deg, r = 40.256 Rs, phase = 106 deg |
| S57 | 127 | OTM-237 | ~apo | 2010-054T10:33 | 23-Feb | Tue | 26 | 7 | 23 | D/L start, burn ~6h later. Backup D/L 055T10:18 |
| S57 | 127 | OTM-238 | R2-3d | 2010-058T10:19 | 27-Feb | Sat | 29 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 059T10:04 |
| S58 | 127 | S58 Begins | | 2010-060T19:04 | 01-Mar | Mon | 32 | 1 | 2 | S58 Sequence. Duration = 34 d |
| S58 | 127 | SOST | Segment | 2010-060T19:04 | 01-Mar | Mon | 32 | 1 | 2 | SOST_127 (2d); Rhea Flyby |
| S58 | 127 | 127RH (t) R2 | RHEA | 2010-061T17:40 | 02-Mar | Tue | 33 | 34 | 3 | Inbound 101.2 km flyby, v = 8.6 km/s, phase = 87 deg |
| S58 | 127 | Sun OCC | SATURN | 2010-061T19:11 | 02-Mar | Tue | 0 | 34 | 3 | Duration = 218 min; egress = 2010-061T22:49:06 |
| S58 | 127 | Earth OCC | SATURN | 2010-061T19:50 | 02-Mar | Tue | 0 | 34 | 3 | Duration = 199 min; egress = 2010-061T23:09:47 |
| S58 | 127 | Ring CRX | Descending | 2010-062T01:50 | 03-Mar | Wed | 0 | 34 | 4 | r = 4.372 Rs ( 263737 km) |
| S58 | 127 | Dust Hazard | E_ring_lg | 2010-062T01:53 | 03-Mar | Wed | 0 | 34 | 4 | Egress @ 2010-062T03:30 (97 min) \| Protection: MEA Cvr. Closure |
| S58 | 127 | Dust Hazard | Pallene | 2010-062T03:28 | 03-Mar | Wed | 0 | 34 | 4 | Egress @ 2010-062T03:40 (12 min) \| Protection: MEA Cvr. Closure |
| S58 | 127 | 127PN (nt) | PAN | 2010-062T04:38 | 03-Mar | Wed | 0 | 33 | 4 | Inbound 103801.1 km flyby, v = 6.0 km/s, phase = 149 deg |
| S58 | 127 | Periapse | | 2010-062T06:02 | 03-Mar | Wed | 1 | 33 | 4 | R = 2.915 Rs, lat = -0 deg, phase = 75 deg |
| S58 | 127 | Dust Hazard | E_ring_lg | 2010-062T10:01 | 03-Mar | Wed | 1 | 33 | 4 | Egress @ 2010-062T10:11 (10 min) \| Protection: MEA Cvr. Closure |
| S58 | 127 | 127CP (nt) | CALYPSO | 2010-062T11:03 | 03-Mar | Wed | 1 | 33 | 4 | Outbound 91764.6 km flyby, v = 12.8 km/s, phase = 77 deg |
| S58 | 127 | 127HE (nt) | HELENE | 2010-062T13:40 | 03-Mar | Wed | 1 | 33 | 4 | Outbound 1852.4 km flyby, v = 9.1 km/s, phase = 106 deg |
| S58 | 127 | Ring CRX | Ascending | 2010-062T15:17 | 03-Mar | Wed | 1 | 33 | 4 | r = 7.132 Rs ( 430250 km) |
| S58 | 127 | MAG | Segment | 2010-063T05:04 | 04-Mar | Thu | 1 | 32 | 5 | MAG_127_128 (15d); MAG_127_128 |
| S58 | 127 | OTM-239 | R2+8d | 2010-069T19:34 | 10-Mar | Wed | 8 | 26 | 11 | D/L start, burn ~6h later. Backup D/L 070T19:19 |
| S58 | 128 | Apoapse | | 2010-071T01:40 | 12-Mar | Fri | 9 | 25 | 1 | Per = 17.6 d, inc = 0.4 deg, r = 40.395 Rs, phase = 105 deg |
| S58 | 128 | RINGS | Segment | 2010-078T03:49 | 19-Mar | Fri | 16 | 18 | 8 | RINGS_128 (6d); RINGS_128 |
| S58 | 128 | 128TI (nt) | TITAN | 2010-078T14:36 | 19-Mar | Fri | 17 | 17 | 9 | Inbound 649737.3 km flyby, v = 8.9 km/s, phase = 119 deg |
| S58 | 128 | Sun OCC | SATURN | 2010-079T10:33 | 20-Mar | Sat | 18 | 16 | 10 | Duration = 212 min; egress = 2010-079T14:05:47 |
| S58 | 128 | Earth OCC | SATURN | 2010-079T10:36 | 20-Mar | Sat | 18 | 16 | 10 | Duration = 214 min; egress = 2010-079T14:10:19 |
| S58 | 128 | 128TL (nt) | TELESTO | 2010-079T16:16 | 20-Mar | Sat | 18 | 16 | 10 | Inbound 92972.4 km flyby, v = 12.8 km/s, phase = 72 deg |
| S58 | 128 | Ring CRX | Descending | 2010-079T17:01 | 20-Mar | Sat | 18 | 16 | 10 | r = 4.400 Rs ( 265480 km) |
| S58 | 128 | Dust Hazard | E_ring_lg | 2010-079T17:08 | 20-Mar | Sat | 18 | 16 | 10 | Egress @ 2010-079T18:45 (97 min) \| Protection: MEA Cvr. Closure |
| S58 | 128 | Dust Hazard | Pallene | 2010-079T18:43 | 20-Mar | Sat | 18 | 16 | 10 | Egress @ 2010-079T18:55 (11 min) \| Protection: MEA Cvr. Closure |
| S58 | 128 | 128AT (nt) | ATLAS | 2010-079T20:47 | 20-Mar | Sat | 18 | 16 | 10 | Inbound 101222.6 km flyby, v = 9.8 km/s, phase = 137 deg |
| S58 | 128 | 128PM (nt) | PROMETHEUS | 2010-079T21:10 | 20-Mar | Sat | 18 | 16 | 10 | Inbound 40883.5 km flyby, v = 3.9 km/s, phase = 101 deg |
| S58 | 128 | Periapse | | 2010-079T21:17 | 20-Mar | Sat | 18 | 16 | 10 | R = 2.913 Rs, lat = -0 deg, phase = 75 deg |
| S58 | 128 | 128DA (nt) | DAPHNIS | 2010-079T21:42 | 20-Mar | Sat | 18 | 16 | 10 | Outbound 65180.2 km flyby, v = 5.6 km/s, phase = 23 deg |
| S58 | 128 | 128ME (nt) | METHONE | 2010-079T23:28 | 20-Mar | Sat | 18 | 16 | 10 | Outbound 52091.2 km flyby, v = 10.9 km/s, phase = 99 deg |
| S58 | 128 | 128PL (nt) | PALLENE | 2010-080T00:02 | 21-Mar | Sun | 18 | 16 | 10 | Outbound 70671.9 km flyby, v = 12.5 km/s, phase = 94 deg |
| S58 | 128 | Dust Hazard | E_ring_lg | 2010-080T01:09 | 21-Mar | Sun | 18 | 16 | 10 | Egress @ 2010-080T01:26 (16 min) \| Protection: MEA Cvr. Closure |
| S58 | 128 | 128PO (nt) | POLYDEUCES | 2010-080T04:47 | 21-Mar | Sun | 18 | 15 | 10 | Outbound 30026.8 km flyby, v = 10.2 km/s, phase = 70 deg |
| S58 | 128 | Ring CRX | Ascending | 2010-080T06:21 | 21-Mar | Sun | 19 | 15 | 10 | r = 7.045 Rs ( 425020 km) |
| S58 | 128 | SATURN | Segment | 2010-084T03:34 | 25-Mar | Thu | 22 | 12 | 14 | SATURN_128_129 (11d); SATURN_128_129 |
| S58 | 128 | OTM-240 | ~apo | 2010-085T08:19 | 26-Mar | Fri | 24 | 10 | 16 | D/L start, burn ~6h later. Backup D/L 086T18:19 |
| S58 | 129 | Apoapse | | 2010-088T17:01 | 29-Mar | Mon | 27 | 7 | 3 | Per = 17.6 d, inc = 0.4 deg, r = 40.405 Rs, phase = 105 deg |
| S58 | 129 | OTM-241 | 129TI-3d | 2010-092T07:49 | 02-Apr | Fri | 31 | 3 | 7 | D/L start, burn ~6h later. Backup D/L 093T07:34 |
| S59 | 129 | S59 Begins | | 2010-095T02:49 | 05-Apr | Mon | 33 | 1 | 3 | S59 Sequence. Duration = 42 d |
| S59 | 129 | TOST | Segment | 2010-095T02:49 | 05-Apr | Mon | 33 | 1 | 3 | TOST_129_T67 (2d); Titan Flyby T67 |
| S59 | 129 | 129TI (t) T67 | TITAN | 2010-095T15:50 | 05-Apr | Mon | 34 | 2 | 3 | Inbound 7437.5 km flyby, v = 5.7 km/s, phase = 73 deg |
| S59 | 129 | SOST | Segment | 2010-096T16:34 | 06-Apr | Tue | 1 | 1 | 4 | SOST_129 (2d); Dione Flyby |
| S59 | 129 | Earth OCC | SATURN | 2010-097T00:17 | 07-Apr | Wed | 1 | 0 | 5 | Duration = 224 min; egress = 2010-097T04:01:49 |
| S59 | 129 | Sun OCC | SATURN | 2010-097T00:55 | 07-Apr | Wed | 1 | 0 | 5 | Duration = 200 min; egress = 2010-097T04:15:39 |
| S59 | 129 | 129DI (t) D2 | DIONE | 2010-097T05:16 | 07-Apr | Wed | 2 | 21 | 5 | Inbound 505.8 km flyby, v = 8.4 km/s, phase = 79 deg |
| S59 | 129 | Ring CRX | Descending | 2010-097T05:59 | 07-Apr | Wed | 0 | 21 | 5 | r = 5.900 Rs ( 355918 km) |
| S59 | 129 | 129CP (nt) | CALYPSO | 2010-097T08:00 | 07-Apr | Wed | 0 | 21 | 5 | Inbound 97929.8 km flyby, v = 11.7 km/s, phase = 69 deg |
| S59 | 129 | Dust Hazard | E_ring_lg | 2010-097T09:21 | 07-Apr | Wed | 0 | 21 | 5 | Egress @ 2010-097T10:13 (52 min) \| Protection: None |
| S59 | 129 | 129EP (nt) | EPIMETHEUS | 2010-097T12:45 | 07-Apr | Wed | 0 | 20 | 5 | Inbound 61711.3 km flyby, v = 2.4 km/s, phase = 89 deg |
| S59 | 129 | Periapse | | 2010-097T12:53 | 07-Apr | Wed | 0 | 20 | 5 | R = 3.525 Rs, lat = -0 deg, phase = 80 deg |
| S59 | 129 | 129JA (nt) | JANUS | 2010-097T13:43 | 07-Apr | Wed | 0 | 20 | 5 | Outbound 74604.8 km flyby, v = 2.8 km/s, phase = 40 deg |
| S59 | 129 | 129MI (nt) | MIMAS | 2010-097T13:46 | 07-Apr | Wed | 0 | 20 | 5 | Outbound 97431.3 km flyby, v = 10.3 km/s, phase = 124 deg |
| S59 | 129 | 129TE (nt) | TETHYS | 2010-097T14:58 | 07-Apr | Wed | 0 | 20 | 5 | Outbound 70783.0 km flyby, v = 6.4 km/s, phase = 103 deg |
| S59 | 129 | Ring CRX | Ascending | 2010-097T22:31 | 07-Apr | Wed | 1 | 20 | 6 | r = 7.270 Rs ( 438626 km) |
| S59 | 129 | MAG | Segment | 2010-098T10:04 | 08-Apr | Thu | 1 | 20 | 6 | MAG_129_130 (19d); MAG_129_130 |
| S59 | 129 | OTM-242 | D2+4d | 2010-100T17:19 | 10-Apr | Sat | 4 | 17 | 8 | D/L start, burn ~6h later. Backup D/L 101T17:19 |
| S59 | 130 | Apoapse | | 2010-107T17:20 | 17-Apr | Sat | 11 | 10 | 7 | Per = 20.4 d, inc = 0.3 deg, r = 44.159 Rs, phase = 100 deg |
| S59 | 130 | OTM-243 | ~apo | 2010-108T06:33 | 18-Apr | Sun | 11 | 10 | 8 | D/L start, burn ~6h later. Backup D/L 109T06:33 |
| S59 | 130 | OTM-244 | E9-3d | 2010-114T16:18 | 24-Apr | Sat | 17 | 3 | 6 | D/L start, burn ~6h later. Backup D/L 115T16:18 |
| S59 | 130 | Ring CRX | Descending | 2010-117T01:08 | 27-Apr | Tue | 20 | 1 | 2 | r = 12.256 Rs ( 739408 km) |
| S59 | 130 | SOST | Segment | 2010-117T07:47 | 27-Apr | Tue | 20 | 1 | 3 | SOST_130 (2d); E9 Flyby |
| S59 | 130 | Earth OCC | SATURN | 2010-117T08:30 | 27-Apr | Tue | 20 | 1 | 3 | Duration = 241 min; egress = 2010-117T12:31:38 |
| S59 | 130 | Sun OCC | SATURN | 2010-117T09:49 | 27-Apr | Tue | 20 | 1 | 3 | Duration = 198 min; egress = 2010-117T13:07:41 |
| S59 | 130 | 130PM (nt) | PROMETHEUS | 2010-117T20:38 | 27-Apr | Tue | 21 | 0 | 3 | Inbound 84500.5 km flyby, v = 1.6 km/s, phase = 116 deg |
| S59 | 130 | 130TL (nt) | TELESTO | 2010-117T20:45 | 27-Apr | Tue | 21 | 0 | 3 | Inbound 79610.3 km flyby, v = 6.7 km/s, phase = 97 deg |
| S59 | 130 | 130TI (nt) | TITAN | 2010-117T21:09 | 27-Apr | Tue | 21 | 0 | 3 | Inbound 989120.7 km flyby, v = 12.5 km/s, phase = 94 deg |
| S59 | 130 | Periapse | | 2010-117T21:40 | 27-Apr | Tue | 21 | 0 | 3 | R = 3.529 Rs, lat = -0 deg, phase = 81 deg |
| S59 | 130 | Dust Hazard | E_ring_lg | 2010-117T22:10 | 27-Apr | Tue | 21 | 0 | 3 | Egress @ 2010-118T01:12 (181 min) \| Protection: None |
| S59 | 130 | 130DA (nt) | DAPHNIS | 2010-117T22:41 | 27-Apr | Tue | 21 | 0 | 3 | Outbound 86252.3 km flyby, v = 1.4 km/s, phase = 47 deg |
| S59 | 130 | 130PA (nt) | PANDORA | 2010-117T23:05 | 27-Apr | Tue | 21 | 0 | 3 | Outbound 91534.0 km flyby, v = 1.8 km/s, phase = 34 deg |
| S59 | 130 | 130PL (nt) | PALLENE | 2010-117T23:46 | 27-Apr | Tue | 21 | 0 | 3 | Outbound 71197.0 km flyby, v = 9.7 km/s, phase = 112 deg |
| S59 | 130 | 130PN (nt) | PAN | 2010-117T23:52 | 27-Apr | Tue | 21 | 0 | 3 | Outbound 113811.3 km flyby, v = 0.5 km/s, phase = 24 deg |
| S59 | 130 | 130EN (t) E9 | ENCELADUS | 2010-118T00:10 | 28-Apr | Wed | 21 | 20 | 3 | Outbound 100.7 km flyby, v = 6.5 km/s, phase = 93 deg |
| S59 | 130 | Ring CRX | Ascending | 2010-118T01:21 | 28-Apr | Wed | 0 | 20 | 3 | r = 4.407 Rs ( 265866 km) |
| S59 | 130 | SATURN | Segment | 2010-119T01:03 | 29-Apr | Thu | 1 | 19 | 4 | SATURN_130_131 (19d); SATURN_130_131 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S59 | 130 | OTM-245 | E9+2d | 2010-119T05:47 | 29-Apr | Thu | 1 | 19 | 5 | D/L start, burn ~6h later. Backup D/L 120T05:47 |
| S59 | 131 | Apoapse | | 2010-128T03:04 | 08-May | Sat | 10 | 10 | 9 | Per = 20.5 d, inc = 0.3 deg, r = 44.287 Rs, phase = 99 deg |
| S59 | 131 | OTM-246 | ~apo | 2010-131T05:01 | 11-May | Tue | 13 | 7 | 12 | D/L start, burn ~6h later. Backup D/L 132T05:01 |
| S59 | 131 | OTM-247 | 131TI-4d or TBD | 2010-135T22:31 | 15-May | Sat | 18 | 2 | 5 | D/L start, burn ~6h later. Backup D/L 137T04:31 |
| S60 | 131 | S60 Begins | | 2010-137T13:31 | 17-May | Mon | 20 | 1 | 2 | S60 Sequence. Duration = 39 d |
| S60 | 131 | SOST | Segment | 2010-137T13:31 | 17-May | Mon | 20 | 1 | 2 | SOST_131 (2d); E10 Flyby |
| S60 | 131 | Earth OCC | SATURN | 2010-137T19:03 | 17-May | Mon | 20 | 0 | 2 | Duration = 246 min; egress = 2010-137T23:08:55 |
| S60 | 131 | Sun OCC | SATURN | 2010-137T20:56 | 17-May | Mon | 20 | 0 | 2 | Duration = 183 min; egress = 2010-137T23:59:33 |
| S60 | 131 | Ring CRX | Descending | 2010-138T04:00 | 18-May | Tue | 20 | 0 | 2 | r = 4.765 Rs ( 287473 km) |
| S60 | 131 | Dust Hazard | E_ring_lg | 2010-138T04:59 | 18-May | Tue | 20 | 0 | 2 | Egress @ 2010-138T07:54 (175 min) \| Protection: None |
| S60 | 131 | 131EN (t) E10 | ENCELADUS | 2010-138T06:04 | 18-May | Tue | 20 | 2 | 2 | Inbound 437.1 km flyby, v = 6.5 km/s, phase = 114 deg |
| S60 | 131 | 131ME (nt) | METHONE | 2010-138T08:20 | 18-May | Tue | 0 | 2 | 2 | Inbound 18326.7 km flyby, v = 4.3 km/s, phase = 75 deg |
| S60 | 131 | Periapse | | 2010-138T08:31 | 18-May | Tue | 0 | 2 | 2 | R = 3.518 Rs, lat = -0 deg, phase = 81 deg |
| S60 | 131 | Dust Hazard | E_ring_lg | 2010-138T09:08 | 18-May | Tue | 0 | 2 | 2 | Egress @ 2010-138T12:04 (175 min) \| Protection: None |
| S60 | 131 | 131AN (nt) | ANTHE | 2010-138T09:28 | 18-May | Tue | 0 | 2 | 2 | Outbound 26438.8 km flyby, v = 5.4 km/s, phase = 106 deg |
| S60 | 131 | Ring CRX | Ascending | 2010-139T00:08 | 19-May | Wed | 1 | 1 | 3 | r = 10.122 Rs ( 610655 km) |
| S60 | 131 | TOST | Segment | 2010-139T07:15 | 19-May | Wed | 1 | 1 | 3 | TOST_131_T68 (3d); Titan Flyby T68 |
| S60 | 131 | Sun OCC | TITAN | 2010-140T03:09 | 20-May | Thu | 2 | 0 | 4 | Duration = 4 min; egress = 2010-140T03:13:37 |
| S60 | 131 | 131TI (t) T68 | TITAN | 2010-140T03:24 | 20-May | Thu | 2 | 16 | 4 | Outbound 1397.6 km flyby, v = 5.9 km/s, phase = 112 deg |
| S60 | 131 | MAG | Segment | 2010-142T07:00 | 22-May | Sat | 2 | 14 | 6 | MAG_131_132 (7d); MAG_131_132 |
| S60 | 131 | OTM-248 | 131TI+3d | 2010-143T04:15 | 23-May | Sun | 3 | 13 | 7 | D/L start, burn ~6h later. Backup D/L 144T04:00 |
| S60 | 132 | Apoapse | | 2010-146T08:04 | 26-May | Wed | 6 | 10 | 3 | Per = 16.0 d, inc = 12.1 deg, r = 37.791 Rs, phase = 91 deg |
| S60 | 132 | OTM-249 | ~apo | 2010-148T03:44 | 28-May | Fri | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 149T03:44 |
| S60 | 132 | RINGS | Segment | 2010-149T12:44 | 29-May | Sat | 9 | 7 | 1 | RINGS_132 (6d); RINGS_132 |
| S60 | 132 | OTM-250 | 132TI-3d | 2010-152T13:44 | 01-Jun | Tue | 12 | 4 | 4 | D/L start, burn ~6h later. Backup D/L 153T13:44 |
| S60 | 132 | 132HE (nt) | HELENE | 2010-154T00:38 | 03-Jun | Thu | 14 | 2 | 1 | Inbound 114181.9 km flyby, v = 11.7 km/s, phase = 85 deg |
| S60 | 132 | 132CP (nt) | CALYPSO | 2010-154T06:10 | 03-Jun | Thu | 14 | 2 | 2 | Inbound 119921.8 km flyby, v = 8.9 km/s, phase = 80 deg |
| S60 | 132 | Dust Hazard | G_ring | 2010-154T06:23 | 03-Jun | Thu | 14 | 2 | 2 | Egress @ 2010-154T06:25 (2 min) \| Protection: MEA Cvr. Closure |
| S60 | 132 | Ring CRX | Descending | 2010-154T06:24 | 03-Jun | Thu | 14 | 2 | 2 | r = 2.950 Rs ( 177999 km) |
| S60 | 132 | 132PA (nt) | PANDORA | 2010-154T07:15 | 03-Jun | Thu | 14 | 2 | 2 | Inbound 97162.4 km flyby, v = 14.1 km/s, phase = 44 deg |
| S60 | 132 | Periapse | | 2010-154T07:43 | 03-Jun | Thu | 14 | 2 | 2 | R = 2.739 Rs, lat = -6 deg, phase = 89 deg |
| S60 | 132 | 132TE (nt) | TETHYS | 2010-154T12:56 | 03-Jun | Thu | 14 | 2 | 2 | Outbound 52566.6 km flyby, v = 9.6 km/s, phase = 99 deg |
| S60 | 132 | 132RH (nt) | RHEA | 2010-154T20:31 | 03-Jun | Thu | 15 | 1 | 2 | Outbound 69354.3 km flyby, v = 8.0 km/s, phase = 102 deg |
| S60 | 132 | TOST | Segment | 2010-155T12:13 | 04-Jun | Fri | 15 | 1 | 3 | TOST_132_T69 (4d); Titan Flyby T69 |
| S60 | 132 | Ring CRX | Ascending | 2010-155T21:43 | 04-Jun | Fri | 16 | 0 | 3 | r = 18.762 Rs (1131939 km) |
| S60 | 132 | 132TI (t) T69 | TITAN | 2010-156T02:26 | 05-Jun | Sat | 16 | 16 | 4 | Outbound 2042.5 km flyby, v = 5.8 km/s, phase = 87 deg |
| S60 | 132 | Ring CRX | Descending | 2010-158T04:39 | 07-Jun | Mon | 2 | 14 | 6 | r = 30.876 Rs (1862744 km) |
| S60 | 132 | OTM-251 | 132TI+3d | 2010-158T20:43 | 07-Jun | Mon | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 159T20:43 |
| S60 | 132 | MAG | Segment | 2010-159T05:43 | 08-Jun | Tue | 3 | 13 | 0 | MAG_132_133 (12d); MAG_132_133 |
| S60 | 133 | Apoapse | | 2010-162T07:28 | 11-Jun | Fri | 6 | 10 | 3 | Per = 16.0 d, inc = 2.0 deg, r = 37.903 Rs, phase = 91 deg |
| S60 | 133 | OTM-252 | ~apo | 2010-164T02:42 | 13-Jun | Sun | 8 | 8 | 5 | D/L start, burn ~6h later. Backup D/L 165T02:42 |
| S60 | 133 | OTM-253 | T70-3d | 2010-168T20:11 | 17-Jun | Thu | 13 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 169T12:41; complexes G/M |
| S60 | 133 | 133RH (nt) | RHEA | 2010-169T19:50 | 18-Jun | Fri | 14 | 2 | 1 | Inbound 120595.6 km flyby, v = 10.7 km/s, phase = 109 deg |
| S60 | 133 | Earth OCC | RING | 2010-169T21:08 | 18-Jun | Fri | 14 | 2 | 1 | Duration = 474 min; egress = 2010-170T05:03:12 |
| S60 | 133 | Earth OCC | SATURN | 2010-169T23:18 | 18-Jun | Fri | 14 | 2 | 1 | Duration = 197 min; egress = 2010-170T02:35:08 |
| S60 | 133 | Sun OCC | SATURN | 2010-170T00:16 | 19-Jun | Sat | 14 | 2 | 1 | Duration = 174 min; egress = 2010-170T03:10:31 |
| S60 | 133 | 133AN (nt) | ANTHE | 2010-170T04:34 | 19-Jun | Sat | 14 | 2 | 1 | Inbound 99459.8 km flyby, v = 15.6 km/s, phase = 74 deg |
| S60 | 133 | Dust Hazard | G_ring | 2010-170T06:21 | 19-Jun | Sat | 14 | 2 | 1 | Egress @ 2010-170T06:34 (12 min) \| Protection: HGA to Dust-Ram |
| S60 | 133 | Ring CRX | Ascending | 2010-170T06:27 | 19-Jun | Sat | 14 | 2 | 1 | r = 2.670 Rs ( 161098 km) |
| S60 | 133 | Periapse | | 2010-170T07:02 | 19-Jun | Sat | 14 | 2 | 1 | R = 2.623 Rs, lat = 1 deg, phase = 89 deg |
| S60 | 133 | 133PN (nt) | PAN | 2010-170T07:10 | 19-Jun | Sat | 14 | 2 | 1 | Outbound 29331.6 km flyby, v = 5.0 km/s, phase = 115 deg |
| S60 | 133 | 133PO (nt) | POLYDEUCES | 2010-170T14:08 | 19-Jun | Sat | 14 | 1 | 2 | Outbound 97484.9 km flyby, v = 12.4 km/s, phase = 79 deg |
| S60 | 133 | TOST | Segment | 2010-171T11:11 | 20-Jun | Sun | 15 | 1 | 3 | TOST_133_T70 (5d); Titan Flyby T70 |
| S60 | 133 | 133TI (t) T70 | TITAN | 2010-172T01:27 | 21-Jun | Mon | 16 | 16 | 3 | Outbound 878.1 km flyby, v = 5.9 km/s, phase = 82 deg |
| S60 | 133 | Ring CRX | Descending | 2010-172T04:15 | 21-Jun | Mon | 0 | 16 | 3 | r = 20.994 Rs (1266577 km) |
| S60 | 133 | OTM-254 | T70+3d | 2010-175T01:56 | 24-Jun | Thu | 3 | 13 | 6 | D/L start, burn ~6h later. Backup D/L 176T12:10; complexes C/M |
| S61 | 133 | MAG | Segment | 2010-176T21:10 | 25-Jun | Fri | 5 | 11 | 2 | MAG_133_134 (8d); MAG_133_134 |
| S61 | 133 | S61 Begins | | 2010-176T21:10 | 25-Jun | Fri | 5 | 11 | 2 | S61 Sequence. Duration = 35 d |
| S61 | 134 | Apoapse | | 2010-178T05:26 | 27-Jun | Sun | 6 | 10 | 3 | Per = 16.0 d, inc = 19.1 deg, r = 37.555 Rs, phase = 92 deg |
| S61 | 134 | OTM-255 | Apo | 2010-181T01:40 | 30-Jun | Wed | 9 | 7 | 6 | D/L start, burn ~6h later. Backup D/L 182T01:40; complexes C/C |
| S61 | 134 | OTM-256 | T71-3d | 2010-184T19:09 | 03-Jul | Sat | 13 | 3 | 4 | D/L start, burn ~6h later. Backup D/L 185T11:24; complexes G/M |
| S61 | 134 | RINGS | Segment | 2010-185T04:09 | 04-Jul | Sun | 13 | 3 | 0 | RINGS_134 (2d); Rings 134 periapse |
| S61 | 134 | 134CP (nt) | CALYPSO | 2010-186T00:34 | 05-Jul | Mon | 14 | 2 | 1 | Inbound 114679.7 km flyby, v = 12.7 km/s, phase = 70 deg |
| S61 | 134 | 134EN (nt) | ENCELADUS | 2010-186T02:02 | 05-Jul | Mon | 14 | 2 | 1 | Inbound 58191.7 km flyby, v = 11.4 km/s, phase = 58 deg |
| S61 | 134 | Ring CRX | Ascending | 2010-186T03:36 | 05-Jul | Mon | 14 | 2 | 1 | r = 3.174 Rs ( 191502 km) |
| S61 | 134 | 134DA (nt) | DAPHNIS | 2010-186T05:01 | 05-Jul | Mon | 14 | 2 | 1 | Inbound 72580.7 km flyby, v = 9.2 km/s, phase = 48 deg |
| S61 | 134 | Periapse | | 2010-186T05:01 | 05-Jul | Mon | 14 | 2 | 1 | R = 2.967 Rs, lat = 10 deg, phase = 88 deg |
| S61 | 134 | TOST | Segment | 2010-187T10:09 | 06-Jul | Tue | 15 | 1 | 3 | TOST_134_T71 (3d); Titan Flyby T71 |
| S61 | 134 | 134TI (t) T71 | TITAN | 2010-188T00:22 | 07-Jul | Wed | 16 | 38 | 3 | Outbound 1003.7 km flyby, v = 5.9 km/s, phase = 82 deg |
| S61 | 134 | Ring CRX | Descending | 2010-188T03:18 | 07-Jul | Wed | 0 | 38 | 3 | r = 21.057 Rs (1270382 km) |
| S61 | 134 | SATURN | Segment | 2010-190T10:09 | 09-Jul | Fri | 2 | 36 | 6 | SATURN_134_135 (17d); Saturn 134_135 apo and 135 peri |
| S61 | 134 | OTM-257 | T71+3d | 2010-191T00:53 | 10-Jul | Sat | 3 | 35 | 6 | D/L start, burn ~6h later. Backup D/L 192T00:53; complexes C/C |
| S61 | 135 | Apoapse | | 2010-196T04:18 | 15-Jul | Thu | 8 | 30 | 5 | Per = 19.9 d, inc = 4.5 deg, r = 43.516 Rs, phase = 97 deg |
| S61 | 135 | OTM-258 | Apo | 2010-199T00:37 | 18-Jul | Sun | 11 | 27 | 8 | D/L start, burn ~6h later. Backup D/L 200T00:22; complexes C/C |
| S61 | 135 | Sun OCC | RING | 2010-205T13:49 | 24-Jul | Sat | 18 | 20 | 7 | Duration = 423 min; egress = 2010-205T20:52:55 |
| S61 | 135 | Earth OCC | SATURN | 2010-205T14:41 | 24-Jul | Sat | 18 | 20 | 7 | Duration = 241 min; egress = 2010-205T18:42:36 |
| S61 | 135 | Sun OCC | SATURN | 2010-205T15:59 | 24-Jul | Sat | 18 | 20 | 7 | Duration = 225 min; egress = 2010-205T19:44:28 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S61 | 135 | Dust Hazard | E_ring_lg | 2010-206T01:06 | 25-Jul | Sun | 18 | 20 | 7 | Egress @ 2010-206T01:31 (24 min) \| Protection: None |
| S61 | 135 | Ring CRX | Ascending | 2010-206T01:18 | 25-Jul | Sun | 18 | 20 | 7 | r = 3.719 Rs ( 224357 km) |
| S61 | 135 | Periapse | | 2010-206T03:13 | 25-Jul | Sun | 18 | 20 | 7 | R = 3.438 Rs, lat = 3 deg, phase = 83 deg |
| S61 | 135 | 135PM (nt) | PROMETHEUS | 2010-206T03:29 | 25-Jul | Sun | 18 | 20 | 7 | Outbound 70069.1 km flyby, v = 2.2 km/s, phase = 70 deg |
| S61 | 135 | 135AT (nt) | ATLAS | 2010-206T04:31 | 25-Jul | Sun | 18 | 20 | 7 | Outbound 89554.3 km flyby, v = 2.1 km/s, phase = 37 deg |
| S61 | 135 | MAG | Segment | 2010-207T09:06 | 26-Jul | Mon | 19 | 19 | 8 | MAG_135 (4d); MAG apo 135_136 split at S61/S62 |
| S61 | 135 | Ring CRX | Descending | 2010-208T04:40 | 27-Jul | Tue | 20 | 18 | 9 | r = 22.097 Rs (1333098 km) |
| S62 | 135 | MAG | Segment | 2010-211T18:51 | 30-Jul | Fri | 24 | 14 | 13 | MAG_135_136 (14d); MAG apo 135_136 split at S61/S62 |
| S62 | 135 | S62 Begins | | 2010-211T18:51 | 30-Jul | Fri | 24 | 14 | 13 | S62 Sequence. Duration = 37 d |
| S62 | 136 | Apoapse | | 2010-216T02:12 | 04-Aug | Wed | 28 | 10 | 17 | Per = 19.9 d, inc = 4.7 deg, r = 43.524 Rs, phase = 97 deg |
| S62 | 136 | OTM-259 | E11-3d | 2010-222T16:35 | 10-Aug | Tue | 35 | 3 | 24 | D/L start, burn ~6h later. Backup D/L 223T16:35; complexes G/G |
| S62 | 136 | 136TI (nt) | TITAN | 2010-223T13:35 | 11-Aug | Wed | 36 | 2 | 1 | Inbound 417268.7 km flyby, v = 4.0 km/s, phase = 80 deg |
| S62 | 136 | Sun OCC | DIONE | 2010-225T03:13 | 13-Aug | Fri | 37 | 1 | 2 | Duration = 2 min; egress = 2010-225T03:16:13 |
| S62 | 136 | SOST | Segment | 2010-225T07:49 | 13-Aug | Fri | 37 | 1 | 3 | SOST_136 (2d); E11 Flyby |
| S62 | 136 | Earth OCC | RING | 2010-225T11:38 | 13-Aug | Fri | 37 | 0 | 3 | Duration = 470 min; egress = 2010-225T19:28:27 |
| S62 | 136 | Sun OCC | RING | 2010-225T12:26 | 13-Aug | Fri | 38 | 0 | 3 | Duration = 338 min; egress = 2010-225T18:05:02 |
| S62 | 136 | Earth OCC | SATURN | 2010-225T12:51 | 13-Aug | Fri | 38 | 0 | 3 | Duration = 240 min; egress = 2010-225T16:51:38 |
| S62 | 136 | Sun OCC | SATURN | 2010-225T13:54 | 13-Aug | Fri | 38 | 0 | 3 | Duration = 222 min; egress = 2010-225T17:36:16 |
| S62 | 136 | 136DI (nt) | DIONE | 2010-225T17:44 | 13-Aug | Fri | 38 | 0 | 3 | Inbound 108753.7 km flyby, v = 11.3 km/s, phase = 84 deg |
| S62 | 136 | 136CP (nt) | CALYPSO | 2010-225T20:30 | 13-Aug | Fri | 38 | 0 | 3 | Inbound 22699.2 km flyby, v = 7.4 km/s, phase = 99 deg |
| S62 | 136 | 136EN (t) E11 | ENCELADUS | 2010-225T22:30 | 13-Aug | Fri | 38 | 42 | 3 | Inbound 2555.3 km flyby, v = 6.8 km/s, phase = 85 deg |
| S62 | 136 | Dust Hazard | E_ring_lg | 2010-225T22:52 | 13-Aug | Fri | 0 | 42 | 3 | Egress @ 2010-225T23:17 (24 min) \| Protection: None |
| S62 | 136 | Ring CRX | Ascending | 2010-225T23:04 | 13-Aug | Fri | 0 | 42 | 3 | r = 3.753 Rs ( 226424 km) |
| S62 | 136 | 136EP (nt) | EPIMETHEUS | 2010-225T23:20 | 13-Aug | Fri | 0 | 42 | 3 | Inbound 101863.3 km flyby, v = 3.7 km/s, phase = 149 deg |
| S62 | 136 | 136AT (nt) | ATLAS | 2010-226T00:33 | 14-Aug | Sat | 0 | 42 | 3 | Inbound 74167.1 km flyby, v = 2.1 km/s, phase = 102 deg |
| S62 | 136 | Periapse | | 2010-226T01:03 | 14-Aug | Sat | 0 | 42 | 3 | R = 3.457 Rs, lat = 3 deg, phase = 83 deg |
| S62 | 136 | 136PA (nt) | PANDORA | 2010-226T01:07 | 14-Aug | Sat | 0 | 42 | 3 | Outbound 67745.4 km flyby, v = 2.3 km/s, phase = 78 deg |
| S62 | 136 | 136DA (nt) | DAPHNIS | 2010-226T01:25 | 14-Aug | Sat | 0 | 42 | 3 | Outbound 74365.7 km flyby, v = 2.0 km/s, phase = 68 deg |
| S62 | 136 | 136JA (nt) | JANUS | 2010-226T02:01 | 14-Aug | Sat | 0 | 42 | 3 | Outbound 79713.7 km flyby, v = 3.3 km/s, phase = 35 deg |
| S62 | 136 | 136PN (nt) | PAN | 2010-226T02:05 | 14-Aug | Sat | 0 | 42 | 3 | Outbound 86698.2 km flyby, v = 1.8 km/s, phase = 48 deg |
| S62 | 136 | 136TE (nt) | TETHYS | 2010-226T06:03 | 14-Aug | Sat | 0 | 42 | 4 | Outbound 38043.2 km flyby, v = 9.3 km/s, phase = 91 deg |
| S62 | 136 | XD | Segment | 2010-227T07:49 | 15-Aug | Sun | 1 | 40 | 5 | XD_136_137 (18d); XD 136_137 apo |
| S62 | 136 | Ring CRX | Descending | 2010-228T01:05 | 16-Aug | Mon | 2 | 40 | 5 | r = 21.694 Rs (1308802 km) |
| S62 | 136 | OTM-260 | E11+3d | 2010-228T22:34 | 16-Aug | Mon | 3 | 39 | 6 | D/L start, burn ~6h later. Backup D/L 229T22:34; complexes C/C |
| S62 | 137 | Apoapse | | 2010-236T01:24 | 24-Aug | Tue | 10 | 32 | 7 | Per = 20.0 d, inc = 4.6 deg, r = 43.691 Rs, phase = 97 deg |
| S62 | 137 | RINGS | Segment | 2010-245T00:18 | 02-Sep | Thu | 19 | 23 | 16 | RINGS_137 (2d); Rings 137 periapse |
| S62 | 137 | Earth OCC | RING | 2010-245T11:21 | 02-Sep | Thu | 20 | 22 | 17 | Duration = 478 min; egress = 2010-245T19:19:44 |
| S62 | 137 | Earth OCC | SATURN | 2010-245T13:55 | 02-Sep | Thu | 20 | 22 | 17 | Duration = 233 min; egress = 2010-245T17:47:43 |
| S62 | 137 | Sun OCC | RING | 2010-245T14:08 | 02-Sep | Thu | 20 | 22 | 17 | Duration = 225 min; egress = 2010-245T17:53:10 |
| S62 | 137 | Sun OCC | SATURN | 2010-245T14:35 | 02-Sep | Thu | 20 | 22 | 17 | Duration = 218 min; egress = 2010-245T18:13:58 |
| S62 | 137 | 137PO (nt) | POLYDEUCES | 2010-245T18:30 | 02-Sep | Thu | 20 | 22 | 17 | Inbound 66569.3 km flyby, v = 7.0 km/s, phase = 94 deg |
| S62 | 137 | 137TL (nt) | TELESTO | 2010-245T20:43 | 02-Sep | Thu | 20 | 22 | 17 | Inbound 71196.1 km flyby, v = 10.8 km/s, phase = 73 deg |
| S62 | 137 | OTM-261 | Peri | 2010-245T21:33 | 02-Sep | Thu | 20 | 22 | 17 | D/L start, burn ~6h later. Backup D/L 246T21:33; complexes C/C |
| S62 | 137 | Dust Hazard | E_ring_lg | 2010-245T23:26 | 02-Sep | Thu | 20 | 22 | 0 | Egress @ 2010-245T23:50 (24 min) \| Protection: None |
| S62 | 137 | Ring CRX | Ascending | 2010-245T23:38 | 02-Sep | Thu | 20 | 22 | 0 | r = 3.767 Rs ( 227271 km) |
| S62 | 137 | 137AN (nt) | ANTHE | 2010-246T00:14 | 03-Sep | Fri | 20 | 22 | 0 | Inbound 44820.7 km flyby, v = 7.5 km/s, phase = 51 deg |
| S62 | 137 | Periapse | | 2010-246T01:39 | 03-Sep | Fri | 20 | 22 | 0 | R = 3.462 Rs, lat = 3 deg, phase = 84 deg |
| S62 | 137 | 137AG (nt) | AEGAEON | 2010-246T01:50 | 03-Sep | Fri | 20 | 22 | 0 | Outbound 110696.1 km flyby, v = 9.3 km/s, phase = 27 deg |
| S62 | 137 | 137TI (nt) | TITAN | 2010-246T02:29 | 03-Sep | Fri | 20 | 22 | 0 | Outbound 985306.2 km flyby, v = 12.5 km/s, phase = 103 deg |
| S62 | 137 | 137EP (nt) | EPIMETHEUS | 2010-246T03:00 | 03-Sep | Fri | 20 | 22 | 0 | Outbound 93385.7 km flyby, v = 3.9 km/s, phase = 24 deg |
| S62 | 137 | 137DI (nt) | DIONE | 2010-246T09:15 | 03-Sep | Fri | 20 | 21 | 0 | Outbound 39035.2 km flyby, v = 9.2 km/s, phase = 83 deg |
| S62 | 137 | SATURN | Segment | 2010-247T06:33 | 04-Sep | Sat | 21 | 21 | 1 | SATURN_137 (2d); Saturn 137_138 apo split at S62/S63 |
| S62 | 137 | Ring CRX | Descending | 2010-248T00:48 | 05-Sep | Sun | 22 | 20 | 2 | r = 21.431 Rs (1292910 km) |
| S63 | 137 | S63 Begins | | 2010-249T06:33 | 06-Sep | Mon | 23 | 19 | 3 | S63 Sequence. Duration = 35 d |
| S63 | 137 | SATURN | Segment | 2010-249T06:33 | 06-Sep | Mon | 23 | 19 | 3 | SATURN_137_138 (18d); Saturn 137_138 apo, 138 peri |
| S63 | 138 | Apoapse | | 2010-256T00:46 | 13-Sep | Mon | 30 | 12 | 10 | Per = 19.9 d, inc = 4.6 deg, r = 43.543 Rs, phase = 96 deg |
| S63 | 138 | OTM-261a | Apo | 2010-258T20:47 | 15-Sep | Wed | 33 | 9 | 13 | D/L start, burn ~6h later. Backup D/L 259T20:47; complexes C/C |
| S63 | 138 | OTM-262 | T72-3d | 2010-264T06:47 | 21-Sep | Tue | 38 | 3 | 5 | D/L start, burn ~6h later. Backup D/L 264T20:32; complexes M/C |
| S63 | 138 | Earth OCC | SATURN | 2010-265T12:51 | 22-Sep | Wed | 40 | 2 | 1 | Duration = 219 min; egress = 2010-265T16:30:03 |
| S63 | 138 | Sun OCC | SATURN | 2010-265T13:04 | 22-Sep | Wed | 40 | 2 | 1 | Duration = 214 min; egress = 2010-265T16:38:49 |
| S63 | 138 | Earth OCC | RING | 2010-265T13:13 | 22-Sep | Wed | 40 | 2 | 1 | Duration = 136 min; egress = 2010-265T15:28:36 |
| S63 | 138 | Dust Hazard | E_ring_lg | 2010-265T21:44 | 22-Sep | Wed | 40 | 2 | 2 | Egress @ 2010-265T22:09 (24 min) \| Protection: None |
| S63 | 138 | Ring CRX | Ascending | 2010-265T21:56 | 22-Sep | Wed | 40 | 2 | 2 | r = 3.767 Rs ( 227263 km) |
| S63 | 138 | Periapse | | 2010-265T23:59 | 22-Sep | Wed | 40 | 2 | 2 | R = 3.455 Rs, lat = 3 deg, phase = 84 deg |
| S63 | 138 | 138EN (nt) | ENCELADUS | 2010-266T03:07 | 23-Sep | Thu | 40 | 2 | 2 | Outbound 112043.6 km flyby, v = 12.7 km/s, phase = 104 deg |
| S63 | 138 | 138CP (nt) | CALYPSO | 2010-266T04:54 | 23-Sep | Thu | 40 | 2 | 2 | Outbound 28936.5 km flyby, v = 8.4 km/s, phase = 86 deg |
| S63 | 138 | 138PO (nt) | POLYDEUCES | 2010-266T07:25 | 23-Sep | Thu | 40 | 1 | 2 | Outbound 100342.6 km flyby, v = 11.2 km/s, phase = 82 deg |
| S63 | 138 | TOST | Segment | 2010-267T05:17 | 24-Sep | Fri | 41 | 1 | 3 | TOST_138_T72 (2d); Titan Flyby T72 |
| S63 | 138 | 138TI (t) T72 | TITAN | 2010-267T18:38 | 24-Sep | Fri | 42 | 48 | 3 | Outbound 8177.7 km flyby, v = 5.7 km/s, phase = 60 deg |
| S63 | 138 | Ring CRX | Descending | 2010-267T23:33 | 24-Sep | Fri | 0 | 48 | 4 | r = 21.622 Rs (1304475 km) |
| S63 | 138 | XD | Segment | 2010-269T06:17 | 26-Sep | Sun | 1 | 46 | 5 | XD_138_139 (15d); XD 138_139 apo split at S63/S64 |
| S63 | 138 | OTM-263 | T72+3d | 2010-270T20:02 | 27-Sep | Mon | 3 | 45 | 7 | D/L start, burn ~6h later. Backup D/L 271T06:17; complexes C/M |
| S63 | 138 | SEP = 3.0 deg | Conjunction | 2010-271T11:24 | 28-Sep | Tue | 4 | 44 | 1 | Commanding must not be required below 3.0 deg |
| S63 | 138 | SEP = 3.0 deg | Conjunction | 2010-276T09:28 | 03-Oct | Sun | 9 | 39 | 6 | Commanding must not be required below 3.0 deg |
| S63 | 139 | Apoapse | | 2010-277T20:48 | 04-Oct | Mon | 10 | 38 | 7 | Per = 23.8 d, inc = 3.0 deg, r = 48.781 Rs, phase = 101 deg |
| S64 | 139 | END OF EQUINOX MISSION | | 2010-284T04:17 | 11-Oct | Mon | 16 | 31 | 13 | End of Equinox mission / start of Solstice mission (2010-2017) |
| S64 | 139 | S64 Begins | | 2010-284T04:17 | 11-Oct | Mon | 16 | 31 | 13 | S64 Sequence. Duration = 45 d |
| S64 | 139 | XD | Segment | 2010-284T04:17 | 11-Oct | Mon | 16 | 31 | 13 | XD_139 (4d) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S64 | 139 | 139TI (nt) | TITAN | 2010-287T17:06 | 14-Oct | Thu | 20 | 28 | 17 | Inbound 172784.3 km flyby, v = 4.8 km/s, phase = 80 deg |
| S64 | 139 | OTM-264 | Peri | 2010-287T19:02 | 14-Oct | Thu | 20 | 28 | 17 | D/L start, burn ~6h later. Backup D/L 288T18:20; complexes C/C |
| S64 | 139 | SOST | Segment | 2010-288T04:02 | 15-Oct | Fri | 20 | 27 | 0 | SOST_139 (3d); non-targ flyby |
| S64 | 139 | Sun OCC | SATURN | 2010-289T03:20 | 16-Oct | Sat | 21 | 26 | 1 | Duration = 192 min; egress = 2010-289T06:32:01 |
| S64 | 139 | Earth OCC | SATURN | 2010-289T04:03 | 16-Oct | Sat | 21 | 26 | 1 | Duration = 153 min; egress = 2010-289T06:36:28 |
| S64 | 139 | 139PO (nt) | POLYDEUCES | 2010-289T10:46 | 16-Oct | Sat | 22 | 26 | 2 | Inbound 116004.7 km flyby, v = 10.8 km/s, phase = 73 deg |
| S64 | 139 | Ring CRX | Ascending | 2010-289T14:41 | 16-Oct | Sat | 22 | 26 | 2 | r = 4.647 Rs ( 280360 km) |
| S64 | 139 | 139MI (nt) | MIMAS | 2010-289T17:31 | 16-Oct | Sat | 22 | 26 | 2 | Inbound 70139.5 km flyby, v = 2.4 km/s, phase = 101 deg |
| S64 | 139 | 139PL (nt) | PALLENE | 2010-289T17:57 | 16-Oct | Sat | 22 | 26 | 2 | Inbound 36108.5 km flyby, v = 3.5 km/s, phase = 82 deg |
| S64 | 139 | Periapse | | 2010-289T17:57 | 16-Oct | Sat | 22 | 26 | 2 | R = 4.100 Rs, lat = 2 deg, phase = 80 deg |
| S64 | 139 | 139TL (nt) | TELESTO | 2010-289T18:05 | 16-Oct | Sat | 22 | 26 | 2 | Outbound 48493.4 km flyby, v = 5.5 km/s, phase = 99 deg |
| S64 | 139 | 139ME (nt) | METHONE | 2010-289T18:38 | 16-Oct | Sat | 22 | 26 | 2 | Outbound 105265.7 km flyby, v = 5.8 km/s, phase = 23 deg |
| S64 | 139 | 139AG (nt) | AEGAEON | 2010-289T19:17 | 16-Oct | Sat | 22 | 26 | 2 | Outbound 96381.6 km flyby, v = 1.9 km/s, phase = 40 deg |
| S64 | 139 | 139DI (nt) | DIONE | 2010-290T01:04 | 17-Oct | Sun | 22 | 26 | 2 | Outbound 31419.4 km flyby, v = 6.8 km/s, phase = 91 deg |
| S64 | 139 | 139RH (nt) | RHEA | 2010-290T06:48 | 17-Oct | Sun | 23 | 25 | 2 | Outbound 38485.5 km flyby, v = 7.1 km/s, phase = 100 deg |
| S64 | 139 | XD | Segment | 2010-291T04:02 | 18-Oct | Mon | 23 | 24 | 3 | XD_139_140 (20d) |
| S64 | 139 | Ring CRX | Descending | 2010-291T13:16 | 18-Oct | Mon | 24 | 24 | 4 | r = 20.227 Rs (1220312 km) |
| S64 | 140 | Apoapse | | 2010-301T18:06 | 28-Oct | Thu | 34 | 14 | 14 | Per = 24.0 d, inc = 3.0 deg, r = 49.120 Rs, phase = 100 deg |
| S64 | 140 | SATURN | Segment | 2010-311T13:04 | 07-Nov | Sun | 44 | 4 | 24 | SATURN_140 (3d) |
| S64 | 140 | OTM-265 | T73-3d | 2010-312T03:49 | 08-Nov | Mon | 44 | 3 | 24 | D/L start, burn ~6h later. Backup D/L 313T11:19; complexes G/G |
| S64 | 140 | Sun OCC | SATURN | 2010-313T03:59 | 09-Nov | Tue | 45 | 2 | 1 | Duration = 175 min; egress = 2010-313T06:54:57 |
| S64 | 140 | Earth OCC | SATURN | 2010-313T05:58 | 09-Nov | Tue | 45 | 2 | 1 | Duration = 56 min; egress = 2010-313T06:54:24 |
| S64 | 140 | 140DI (nt) | DIONE | 2010-313T10:56 | 09-Nov | Tue | 46 | 2 | 1 | Inbound 99849.6 km flyby, v = 10.2 km/s, phase = 74 deg |
| S64 | 140 | Ring CRX | Ascending | 2010-313T14:58 | 09-Nov | Tue | 46 | 2 | 1 | r = 4.658 Rs ( 281042 km) |
| S64 | 140 | 140EN (nt) | ENCELADUS | 2010-313T16:22 | 09-Nov | Tue | 46 | 2 | 2 | Inbound 44989.7 km flyby, v = 6.5 km/s, phase = 50 deg |
| S64 | 140 | Periapse | | 2010-313T18:16 | 09-Nov | Tue | 46 | 2 | 2 | R = 4.099 Rs, lat = 2 deg, phase = 80 deg |
| S64 | 140 | TOST | Segment | 2010-314T20:19 | 10-Nov | Wed | 47 | 1 | 3 | TOST_T73 (2d); T73 flyby |
| S64 | 140 | Ring CRX | Descending | 2010-315T13:00 | 11-Nov | Thu | 48 | 0 | 3 | r = 20.053 Rs (1209816 km) |
| S64 | 140 | 140TI (t) T73 | TITAN | 2010-315T13:37 | 11-Nov | Thu | 48 | 19 | 3 | Outbound 7925.8 km flyby, v = 5.6 km/s, phase = 121 deg |
| S64 | 140 | XD | Segment | 2010-316T21:04 | 12-Nov | Fri | 1 | 18 | 5 | XD_140_141 (12d) |
| S64 | 140 | OTM-266 | T73+3d | 2010-318T17:19 | 14-Nov | Sun | 3 | 16 | 7 | D/L start, burn ~6h later. Backup D/L 319T17:19; complexes C/C |
| S64 | 141 | Apoapse | | 2010-324T01:57 | 20-Nov | Sat | 9 | 10 | 5 | Per = 20.6 d, inc = 0.0 deg, r = 44.522 Rs, phase = 95 deg * |
| S64 | 141 | OTM-267 | Apo | 2010-325T17:05 | 21-Nov | Sun | 10 | 9 | 7 | D/L start, burn ~6h later. Backup D/L 326T16:50; complexes C/C |
| S65 | 141 | S65 Begins | | 2010-328T19:35 | 24-Nov | Wed | 13 | 6 | 3 | S65 Sequence. Duration = 54 d |
| S65 | 141 | XD | Segment | 2010-328T19:35 | 24-Nov | Wed | 13 | 6 | 3 | XD_141 (3d) |
| S65 | 141 | OTM-268 | E12-3d | 2010-331T10:20 | 27-Nov | Sat | 16 | 3 | 6 | D/L start, burn ~6h later. Backup D/L 332T10:21; complexes G/G |
| S65 | 141 | SOST | Segment | 2010-331T19:20 | 27-Nov | Sat | 16 | 3 | 0 | SOST_141 (4d); E12 flyby |
| S65 | 141 | 141HY (nt) | HYPERION | 2010-332T03:29 | 28-Nov | Sun | 17 | 2 | 1 | Inbound 71868.2 km flyby, v = 4.9 km/s, phase = 73 deg |
| S65 | 141 | 141TI (nt) | TITAN | 2010-333T06:25 | 29-Nov | Mon | 18 | 1 | 2 | Inbound 926131.0 km flyby, v = 10.5 km/s, phase = 130 deg |
| S65 | 141 | Sun OCC | SATURN | 2010-333T23:57 | 29-Nov | Mon | 18 | 0 | 3 | Duration = 69 min; egress = 2010-334T01:07:09 |
| S65 | 141 | Dust Hazard | E_ring_lg | 2010-334T06:05 | 30-Nov | Tue | 19 | 0 | 3 | Egress @ 2010-334T13:01 (416 min) \| Protection: MEA Cvr. Closure |
| S65 | 141 | 141AT (nt) | ATLAS | 2010-334T07:17 | 30-Nov | Tue | 19 | 0 | 3 | Inbound 114376.2 km flyby, v = 0.7 km/s, phase = 144 deg |
| S65 | 141 | Ring CRX | Ascending | 2010-334T08:42 | 30-Nov | Tue | 19 | 0 | 3 | r = 3.619 Rs ( 218352 km) |
| S65 | 141 | Periapse | | 2010-334T09:32 | 30-Nov | Tue | 19 | 0 | 3 | R = 3.567 Rs, lat = 0 deg, phase = 86 deg |
| S65 | 141 | 141JA (nt) | JANUS | 2010-334T11:12 | 30-Nov | Tue | 19 | 0 | 3 | Outbound 95615.3 km flyby, v = 2.4 km/s, phase = 29 deg |
| S65 | 141 | 141EN (t) E12 | ENCELADUS | 2010-334T11:53 | 30-Nov | Tue | 19 | 21 | 3 | Outbound 45.8 km flyby, v = 6.3 km/s, phase = 78 deg |
| S65 | 141 | OTM-269 | E12+3d | 2010-335T02:36 | 01-Dec | Wed | 1 | 20 | 4 | D/L start, burn ~6h later. Backup D/L 335T16:21; complexes M/C |
| S65 | 141 | XD | Segment | 2010-336T01:21 | 02-Dec | Thu | 2 | 19 | 1 | XD_141_142 (18d) |
| S65 | 141 | Ring CRX | Descending | 2010-337T00:11 | 03-Dec | Fri | 3 | 18 | 2 | r = 25.533 Rs (1540414 km) |
| S65 | 141 | OTM-270 | Apo | 2010-342T16:07 | 08-Dec | Wed | 8 | 12 | 8 | D/L start, burn ~6h later. Backup D/L 343T15:52; complexes C/C |
| S65 | 142 | Apoapse | | 2010-344T16:15 | 10-Dec | Fri | 10 | 10 | 2 | Per = 20.6 d, inc = 0.1 deg, r = 44.403 Rs, phase = 94 deg |
| S65 | 142 | 142TI (nt) | TITAN | 2010-350T19:57 | 16-Dec | Thu | 16 | 4 | 8 | Inbound 848608.8 km flyby, v = 3.6 km/s, phase = 91 deg |
| S65 | 142 | OTM-271 | E13-3d | 2010-351T15:23 | 17-Dec | Fri | 17 | 3 | 9 | D/L start, burn ~6h later. Backup D/L 352T15:23; complexes C/C |
| S65 | 142 | SOST | Segment | 2010-354T00:23 | 20-Dec | Mon | 20 | 1 | 2 | SOST_142 (2d); E13 flyby |
| S65 | 142 | 142TI (nt) | TITAN | 2010-354T12:16 | 20-Dec | Mon | 20 | 1 | 3 | Inbound 893286.0 km flyby, v = 6.3 km/s, phase = 46 deg |
| S65 | 142 | Sun OCC | SATURN | 2010-354T13:35 | 20-Dec | Mon | 20 | 0 | 3 | Duration = 37 min; egress = 2010-354T14:12:53 |
| S65 | 142 | 142DI (nt) | DIONE | 2010-354T16:50 | 20-Dec | Mon | 20 | 0 | 3 | Inbound 100149.6 km flyby, v = 5.9 km/s, phase = 87 deg |
| S65 | 142 | Dust Hazard | E_ring_lg | 2010-354T19:22 | 20-Dec | Mon | 20 | 0 | 3 | Egress @ 2010-355T02:16 (414 min) \| Protection: MEA Cvr. Closure |
| S65 | 142 | 142PN (nt) | PAN | 2010-354T20:36 | 20-Dec | Mon | 20 | 0 | 3 | Inbound 115572.9 km flyby, v = 0.4 km/s, phase = 141 deg |
| S65 | 142 | 142PA (nt) | PANDORA | 2010-354T20:42 | 20-Dec | Mon | 20 | 0 | 3 | Inbound 109126.2 km flyby, v = 1.1 km/s, phase = 143 deg |
| S65 | 142 | Ring CRX | Ascending | 2010-354T21:00 | 20-Dec | Mon | 20 | 0 | 3 | r = 3.810 Rs ( 229839 km) |
| S65 | 142 | Periapse | | 2010-354T22:49 | 20-Dec | Mon | 20 | 0 | 3 | R = 3.578 Rs, lat = 0 deg, phase = 86 deg |
| S65 | 142 | 142DA (nt) | DAPHNIS | 2010-354T23:35 | 20-Dec | Mon | 20 | 0 | 3 | Outbound 85087.1 km flyby, v = 1.3 km/s, phase = 61 deg |
| S65 | 142 | 142AN (nt) | ANTHE | 2010-354T23:46 | 20-Dec | Mon | 20 | 0 | 3 | Outbound 33752.7 km flyby, v = 5.6 km/s, phase = 115 deg |
| S65 | 142 | 142EN (t) E13 | ENCELADUS | 2010-355T01:08 | 21-Dec | Tue | 21 | 21 | 3 | Outbound 48.3 km flyby, v = 6.2 km/s, phase = 89 deg |
| S65 | 142 | XD | Segment | 2010-356T02:23 | 22-Dec | Wed | 1 | 20 | 4 | XD_142_143 (18d) |
| S65 | 142 | Ring CRX | Descending | 2010-356T03:12 | 22-Dec | Wed | 1 | 20 | 4 | r = 15.321 Rs ( 924337 km) |
| S65 | 142 | OTM-272 | E13+3d | 2010-358T01:09 | 24-Dec | Fri | 3 | 18 | 6 | D/L start, burn ~6h later. Backup D/L 359T01:09; complexes M/M |
| S65 | 143 | Apoapse | | 2010-365T07:30 | 31-Dec | Fri | 10 | 11 | 7 | Per = 20.7 d, inc = 0.1 deg, r = 44.665 Rs, phase = 94 deg |
| S65 | 143 | OTM-273 | Apo | 2011-001T00:40 | 01-Jan | Sat | 11 | 10 | 8 | D/L start, burn ~6h later. Backup D/L 002T00:40; complexes M/M |
| S65 | 143 | OTM-274 | R3-3d | 2011-008T00:26 | 08-Jan | Sat | 18 | 3 | 7 | D/L start, burn ~6h later. Backup D/L 009T00:11; complexes M/M |
| S65 | 143 | SATURN | Segment | 2011-009T09:11 | 09-Jan | Sun | 19 | 2 | 1 | SATURN_143 R3 (3d) |
| S65 | 143 | Dust Hazard | E_ring_lg | 2011-010T12:46 | 10-Jan | Mon | 20 | 1 | 3 | Egress @ 2011-010T19:40 (413 min) \| Protection: MEA Cvr. Closure |
| S65 | 143 | Ring CRX | Ascending | 2011-010T13:17 | 10-Jan | Mon | 21 | 1 | 3 | r = 4.156 Rs ( 250716 km) |
| S65 | 143 | 143PA (nt) | PANDORA | 2011-010T14:43 | 10-Jan | Mon | 21 | 1 | 3 | Inbound 94723.5 km flyby, v = 1.5 km/s, phase = 133 deg |
| S65 | 143 | Periapse | | 2011-010T16:13 | 10-Jan | Mon | 21 | 1 | 3 | R = 3.578 Rs, lat = 0 deg, phase = 86 deg |
| S65 | 143 | 143AN (nt) | ANTHE | 2011-010T17:10 | 10-Jan | Mon | 21 | 0 | 3 | Outbound 33293.7 km flyby, v = 5.6 km/s, phase = 115 deg |
| S65 | 143 | 143ME (nt) | METHONE | 2011-010T17:22 | 10-Jan | Mon | 21 | 0 | 3 | Outbound 85748.2 km flyby, v = 9.4 km/s, phase = 127 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S65 | 143 | 143TI (nt) | TITAN | 2011-011T03:18 | 11-Jan | Tue | 21 | 0 | 3 | Outbound 838660.7 km flyby, v = 5.9 km/s, phase = 140 deg |
| S65 | 143 | Earth OCC | RHEA | 2011-011T04:39 | 11-Jan | Tue | 21 | 0 | 3 | Duration = 14 min; egress = 2011-011T04:52:57 |
| S65 | 143 | Sun OCC | RHEA | 2011-011T04:44 | 11-Jan | Tue | 21 | 0 | 3 | Duration = 8 min; egress = 2011-011T04:52:46 |
| S65 | 143 | 143RH (t) R3 | RHEA | 2011-011T04:53 | 11-Jan | Tue | 21 | 38 | 3 | Outbound 70.7 km flyby, v = 8.0 km/s, phase = 101 deg |
| S65 | 143 | XD | Segment | 2011-012T17:26 | 12-Jan | Wed | 2 | 37 | 5 | XD_143 (5d) |
| S65 | 143 | OTM-275 | R3+3d | 2011-014T07:27 | 14-Jan | Fri | 3 | 35 | 6 | D/L start, burn ~6h later. Backup D/L 015T07:27; complexes G/G |
| S65 | 143 | 143TI (nt) | TITAN | 2011-014T09:20 | 14-Jan | Fri | 3 | 35 | 0 | Outbound 772712.3 km flyby, v = 3.6 km/s, phase = 96 deg |
| S66 | 143 | S66 Begins | | 2011-017T08:42 | 17-Jan | Mon | 6 | 32 | 3 | S66 Sequence. Duration = 49 d |
| S66 | 143 | XD | Segment | 2011-017T08:42 | 17-Jan | Mon | 6 | 32 | 3 | XD_143_144 (12d) |
| S66 | 144 | Apoapse | | 2011-020T21:28 | 20-Jan | Thu | 10 | 29 | 7 | Per = 20.4 d, inc = 0.3 deg, r = 44.238 Rs, phase = 93 deg |
| S66 | 144 | SOST | Segment | 2011-029T15:29 | 29-Jan | Sat | 18 | 20 | 15 | SOST_144 (4d); non-targ flyby |
| S66 | 144 | Ring CRX | Descending | 2011-030T21:45 | 30-Jan | Sun | 20 | 19 | 17 | r = 5.038 Rs ( 303952 km) |
| S66 | 144 | Dust Hazard | E_ring_lg | 2011-030T23:21 | 30-Jan | Sun | 20 | 19 | 17 | Egress @ 2011-031T01:54 (153 min) \| Protection: None |
| S66 | 144 | 144EP (nt) | EPIMETHEUS | 2011-031T02:14 | 31-Jan | Mon | 20 | 19 | 17 | Inbound 68443.9 km flyby, v = 2.5 km/s, phase = 115 deg |
| S66 | 144 | Periapse | | 2011-031T02:50 | 31-Jan | Mon | 20 | 19 | 17 | R = 3.559 Rs, lat = -0 deg, phase = 87 deg |
| S66 | 144 | 144CP (nt) | CALYPSO | 2011-031T03:48 | 31-Jan | Mon | 20 | 19 | 17 | Outbound 77730.2 km flyby, v = 6.6 km/s, phase = 94 deg |
| S66 | 144 | 144PM (nt) | PROMETHEUS | 2011-031T04:46 | 31-Jan | Mon | 20 | 18 | 17 | Outbound 105559.8 km flyby, v = 1.1 km/s, phase = 33 deg |
| S66 | 144 | 144EN (nt) | ENCELADUS | 2011-031T05:51 | 31-Jan | Mon | 20 | 18 | 17 | Outbound 60153.6 km flyby, v = 9.6 km/s, phase = 111 deg |
| S66 | 144 | 144HE (nt) | HELENE | 2011-031T10:17 | 31-Jan | Mon | 20 | 18 | 17 | Outbound 27647.6 km flyby, v = 7.5 km/s, phase = 92 deg |
| S66 | 144 | Ring CRX | Ascending | 2011-031T17:03 | 31-Jan | Mon | 21 | 18 | 17 | r = 9.458 Rs ( 570606 km) |
| S66 | 144 | OTM-276 | Peri | 2011-031T22:44 | 31-Jan | Mon | 21 | 18 | 18 | D/L start, burn ~6h later. Backup D/L 032T22:44; complexes M/M |
| S66 | 144 | MAPS | Segment | 2011-033T07:44 | 02-Feb | Wed | 22 | 16 | 1 | MAPS_144_145 (16d) |
| S66 | 145 | Apoapse | | 2011-041T08:06 | 10-Feb | Thu | 30 | 8 | 9 | Per = 20.4 d, inc = 0.3 deg, r = 44.226 Rs, phase = 93 deg |
| S66 | 145 | OTM-277 | T74-3d | 2011-046T11:46 | 15-Feb | Tue | 35 | 3 | 15 | D/L start, burn ~6h later. Backup D/L 047T11:46; complexes C/C |
| S66 | 145 | TOST | Segment | 2011-048T20:31 | 17-Feb | Thu | 38 | 1 | 2 | TOST_T74 (2d); T74 flyby |
| S66 | 145 | 145TI (t) T74 | TITAN | 2011-049T16:04 | 18-Feb | Fri | 38 | 60 | 3 | Inbound 3651.1 km flyby, v = 5.8 km/s, phase = 62 deg |
| S66 | 145 | MAPS | Segment | 2011-050T20:31 | 19-Feb | Sat | 1 | 58 | 4 | MAPS_145 (2d) |
| S66 | 145 | Ring CRX | Descending | 2011-051T04:33 | 20-Feb | Sun | 2 | 58 | 5 | r = 7.228 Rs ( 436036 km) |
| S66 | 145 | Periapse | | 2011-051T13:43 | 20-Feb | Sun | 2 | 58 | 5 | R = 4.712 Rs, lat = -0 deg, phase = 97 deg |
| S66 | 145 | 145EN (nt) | ENCELADUS | 2011-051T14:02 | 20-Feb | Sun | 2 | 58 | 5 | Outbound 67917.3 km flyby, v = 4.2 km/s, phase = 134 deg |
| S66 | 145 | 145PL (nt) | PALLENE | 2011-051T14:48 | 20-Feb | Sun | 2 | 58 | 5 | Outbound 92213.5 km flyby, v = 2.7 km/s, phase = 56 deg |
| S66 | 145 | 145TE (nt) | TETHYS | 2011-051T17:12 | 20-Feb | Sun | 2 | 57 | 5 | Outbound 47672.7 km flyby, v = 6.7 km/s, phase = 124 deg |
| S66 | 145 | Ring CRX | Ascending | 2011-052T07:20 | 21-Feb | Mon | 3 | 57 | 6 | r = 10.791 Rs ( 651041 km) |
| S66 | 145 | OTM-278 | T74+3d | 2011-052T21:31 | 21-Feb | Mon | 3 | 56 | 6 | D/L start, burn ~6h later. Backup D/L 053T21:16; complexes M/M |
| S66 | 145 | SATURN | Segment | 2011-053T06:31 | 22-Feb | Tue | 4 | 56 | 0 | SATURN_145_146 (13d) |
| S66 | 145 | OTM-279 | Apo | 2011-061T04:17 | 02-Mar | Wed | 12 | 48 | 8 | D/L start, burn ~6h later. Backup D/L 062T04:17; complexes G/G |
| S66 | 146 | Apoapse | | 2011-065T12:39 | 06-Mar | Sun | 16 | 44 | 4 | Per = 27.9 d, inc = 0.4 deg, r = 54.127 Rs, phase = 83 deg |
| S67 | 146 | S67 Begins | | 2011-066T13:02 | 07-Mar | Mon | 17 | 43 | 5 | S67 Sequence. Duration = 49 d |
| S67 | 146 | SATURN | Segment | 2011-066T13:02 | 07-Mar | Mon | 17 | 43 | 5 | SATURN_146 (15d) |
| S67 | 146 | Ring CRX | Descending | 2011-079T02:38 | 20-Mar | Sun | 29 | 30 | 18 | r = 7.206 Rs ( 434742 km) |
| S67 | 146 | Periapse | | 2011-079T11:45 | 20-Mar | Sun | 30 | 30 | 18 | R = 4.717 Rs, lat = -0 deg, phase = 98 deg |
| S67 | 146 | 146TL (nt) | TELESTO | 2011-079T12:14 | 20-Mar | Sun | 30 | 30 | 18 | Outbound 10033.1 km flyby, v = 4.3 km/s, phase = 83 deg |
| S67 | 146 | Ring CRX | Ascending | 2011-080T05:32 | 21-Mar | Mon | 31 | 29 | 19 | r = 10.870 Rs ( 655806 km) |
| S67 | 146 | MAPS | Segment | 2011-081T04:33 | 22-Mar | Tue | 32 | 28 | 20 | MAPS_146_147 (27d) |
| S67 | 147 | Apoapse | | 2011-093T10:51 | 03-Apr | Sun | 44 | 16 | 32 | Per = 27.9 d, inc = 0.4 deg, r = 54.127 Rs, phase = 82 deg |
| S67 | 147 | OTM-280 | T75-3d | 2011-105T17:48 | 15-Apr | Fri | 56 | 3 | 45 | D/L start, burn ~6h later. Backup D/L 106T17:48; complexes M/M |
| S67 | 147 | Ring CRX | Descending | 2011-107T00:38 | 17-Apr | Sun | 57 | 2 | 1 | r = 7.210 Rs ( 435000 km) |
| S67 | 147 | 147AG (nt) | AEGAEON | 2011-107T09:12 | 17-Apr | Sun | 58 | 2 | 2 | Inbound 118151.3 km flyby, v = 0.6 km/s, phase = 109 deg |
| S67 | 147 | Periapse | | 2011-107T09:45 | 17-Apr | Sun | 58 | 2 | 2 | R = 4.711 Rs, lat = -0 deg, phase = 98 deg |
| S67 | 147 | 147HE (nt) | HELENE | 2011-107T13:39 | 17-Apr | Sun | 58 | 2 | 2 | Outbound 69499.1 km flyby, v = 5.2 km/s, phase = 81 deg |
| S67 | 147 | Ring CRX | Ascending | 2011-108T03:27 | 18-Apr | Mon | 58 | 1 | 2 | r = 10.827 Rs ( 653212 km) |
| S67 | 147 | TOST | Segment | 2011-108T10:18 | 18-Apr | Mon | 59 | 1 | 3 | TOST_T75 (3d); T75 flyby |
| S67 | 147 | 147TI (t) T75 | TITAN | 2011-109T05:00 | 19-Apr | Tue | 60 | 20 | 3 | Outbound 10052.9 km flyby, v = 5.6 km/s, phase = 101 deg |
| S67 | 147 | XD | Segment | 2011-111T10:03 | 21-Apr | Thu | 2 | 18 | 6 | XD_147 (4d) |
| S67 | 147 | OTM-281 | T75+3d | 2011-112T00:48 | 22-Apr | Fri | 3 | 17 | 6 | D/L start, burn ~6h later. Backup D/L 113T00:48; complexes G/G |
| S68 | 147 | S68 Begins | | 2011-115T16:03 | 25-Apr | Mon | 6 | 13 | 4 | S68 Sequence. Duration = 69 d |
| S68 | 147 | XD | Segment | 2011-115T16:03 | 25-Apr | Mon | 6 | 13 | 4 | XD_147_148 (13d) |
| S68 | 147 | OTM-282 | Apo | 2011-119T00:18 | 29-Apr | Fri | 10 | 10 | 7 | D/L start, burn ~6h later. Backup D/L 120T00:18; complexes G/G |
| S68 | 148 | Apoapse | | 2011-119T03:06 | 29-Apr | Fri | 10 | 10 | 0 | Per = 23.4 d, inc = 0.4 deg, r = 48.220 Rs, phase = 76 deg |
| S68 | 148 | OTM-283 | T76-3d | 2011-125T16:17 | 05-May | Thu | 16 | 3 | 7 | D/L start, burn ~6h later. Backup D/L 126T16:17; complexes M/M |
| S68 | 148 | TOST | Segment | 2011-128T08:47 | 08-May | Sun | 19 | 1 | 3 | TOST_T76 (2d); T76 flyby |
| S68 | 148 | 148TI (t) T76 | TITAN | 2011-128T22:53 | 08-May | Sun | 20 | 43 | 3 | Inbound 1872.7 km flyby, v = 5.9 km/s, phase = 47 deg |
| S68 | 148 | SATURN | Segment | 2011-130T10:32 | 10-May | Tue | 1 | 41 | 5 | SATURN_148 (3d) |
| S68 | 148 | Ring CRX | Descending | 2011-130T12:10 | 10-May | Tue | 2 | 41 | 5 | r = 7.535 Rs ( 454559 km) |
| S68 | 148 | Periapse | | 2011-130T20:43 | 10-May | Tue | 2 | 41 | 5 | R = 5.888 Rs, lat = -0 deg, phase = 118 deg |
| S68 | 148 | OTM-284 | T76+3d | 2011-131T23:32 | 11-May | Wed | 3 | 40 | 6 | D/L start, burn ~6h later. Backup D/L 132T23:32; complexes G/G |
| S68 | 148 | Ring CRX | Ascending | 2011-132T13:48 | 12-May | Thu | 4 | 39 | 1 | r = 19.236 Rs (1160537 km) |
| S68 | 148 | XD | Segment | 2011-133T08:32 | 13-May | Fri | 4 | 38 | 1 | XD_148_149 (35d) |
| S68 | 148 | OTM-285 | Apo | 2011-143T22:46 | 23-May | Mon | 15 | 28 | 12 | D/L start, burn ~6h later. Backup D/L 144T22:30; complexes G/G |
| S68 | 149 | Apoapse | | 2011-150T10:15 | 30-May | Mon | 21 | 21 | 6 | Per = 39.1 d, inc = 0.4 deg, r = 67.794 Rs, phase = 62 deg |
| S68 | 149 | OTM-286 | T77-3d | 2011-167T20:11 | 16-Jun | Thu | 39 | 4 | 24 | D/L start, burn ~6h later. Backup D/L 169T03:12; complexes M/C |
| S68 | 149 | RINGS | Segment | 2011-168T05:57 | 17-Jun | Fri | 39 | 4 | 0 | RINGS_149 (3d) |
| S68 | 149 | Ring CRX | Descending | 2011-169T15:23 | 18-Jun | Sat | 41 | 2 | 2 | r = 7.471 Rs ( 450746 km) |
| S68 | 149 | 149HE (nt) | HELENE | 2011-169T19:31 | 18-Jun | Sat | 41 | 2 | 2 | Inbound 6953.0 km flyby, v = 4.6 km/s, phase = 102 deg |
| S68 | 149 | 149TL (nt) | TELESTO | 2011-169T23:40 | 18-Jun | Sat | 41 | 2 | 2 | Inbound 61987.1 km flyby, v = 2.8 km/s, phase = 108 deg |
| S68 | 149 | Periapse | | 2011-169T23:45 | 18-Jun | Sat | 41 | 2 | 2 | R = 5.884 Rs, lat = -0 deg, phase = 119 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S68 | 149 | TOST | Segment | 2011-171T05:42 | 20-Jun | Mon | 42 | 1 | 3 | TOST_T77 (2d); T77 flyby |
| S68 | 149 | Ring CRX | Ascending | 2011-171T17:59 | 20-Jun | Mon | 43 | 0 | 4 | r = 19.629 Rs (1184232 km) |
| S68 | 149 | 149TI (t) T77 | TITAN | 2011-171T18:32 | 20-Jun | Mon | 43 | 83 | 4 | Outbound 1358.8 km flyby, v = 5.9 km/s, phase = 73 deg |
| S68 | 149 | XD | Segment | 2011-173T07:42 | 22-Jun | Wed | 2 | 82 | 5 | XD_149_150 (11d) |
| S68 | 149 | OTM-287 | T77+3d | 2011-175T02:42 | 24-Jun | Fri | 3 | 80 | 7 | D/L start, burn ~6h later. Backup D/L 176T02:42; complexes C/C |
| S68 | 150 | Apoapse | | 2011-180T19:55 | 29-Jun | Wed | 9 | 74 | 6 | Per = 21.7 d, inc = 0.4 deg, r = 45.646 Rs, phase = 45 deg |
| S69 | 150 | S69 Begins | | 2011-184T11:10 | 03-Jul | Sun | 13 | 71 | 9 | S69 Sequence. Duration = 66 d |
| S69 | 150 | XD | Segment | 2011-184T11:10 | 03-Jul | Sun | 13 | 71 | 9 | XD_150 (6d) |
| S69 | 150 | 150TI (nt) | TITAN | 2011-190T06:59 | 09-Jul | Sat | 19 | 65 | 15 | Inbound 627640.4 km flyby, v = 8.8 km/s, phase = 168 deg |
| S69 | 150 | SATURN | Segment | 2011-190T10:54 | 09-Jul | Sat | 19 | 65 | 15 | SATURN_150 (4d) |
| S69 | 150 | 150HE (nt) | HELENE | 2011-191T10:46 | 10-Jul | Sun | 20 | 64 | 16 | Inbound 92960.5 km flyby, v = 5.6 km/s, phase = 40 deg |
| S69 | 150 | Earth OCC | SATURN | 2011-191T11:16 | 10-Jul | Sun | 20 | 64 | 16 | Duration = 100 min; egress = 2011-191T12:56:54 |
| S69 | 150 | Sun OCC | SATURN | 2011-191T12:11 | 10-Jul | Sun | 20 | 64 | 16 | Duration = 57 min; egress = 2011-191T13:08:20 |
| S69 | 150 | Ring CRX | Descending | 2011-191T12:47 | 10-Jul | Sun | 20 | 64 | 16 | r = 4.575 Rs ( 275982 km) |
| S69 | 150 | Dust Hazard | E_ring_lg | 2011-191T13:37 | 10-Jul | Sun | 20 | 64 | 16 | Egress @ 2011-191T15:52 (134 min) \| Protection: None |
| S69 | 150 | 150JA (nt) | JANUS | 2011-191T15:44 | 10-Jul | Sun | 20 | 63 | 17 | Inbound 92985.7 km flyby, v = 1.0 km/s, phase = 141 deg |
| S69 | 150 | 150PN (nt) | PAN | 2011-191T15:50 | 10-Jul | Sun | 20 | 63 | 17 | Inbound 110203.9 km flyby, v = 0.1 km/s, phase = 138 deg |
| S69 | 150 | Periapse | | 2011-191T15:59 | 10-Jul | Sun | 20 | 63 | 17 | R = 4.039 Rs, lat = -0 deg, phase = 135 deg |
| S69 | 150 | 150PM (nt) | PROMETHEUS | 2011-191T17:15 | 10-Jul | Sun | 20 | 63 | 17 | Outbound 113123.1 km flyby, v = 0.2 km/s, phase = 108 deg |
| S69 | 150 | Ring CRX | Ascending | 2011-193T09:40 | 12-Jul | Tue | 22 | 62 | 18 | r = 19.548 Rs (1179316 km) |
| S69 | 150 | XD | Segment | 2011-194T10:39 | 13-Jul | Wed | 23 | 61 | 19 | XD_150_151 (17d) |
| S69 | 151 | Apoapse | | 2011-202T12:10 | 21-Jul | Thu | 31 | 53 | 27 | Per = 21.7 d, inc = 0.4 deg, r = 45.664 Rs, phase = 45 deg |
| S69 | 151 | SATURN | Segment | 2011-211T03:07 | 30-Jul | Sat | 39 | 44 | 36 | SATURN_151_152 (26d) |
| S69 | 151 | 151HE (nt) | HELENE | 2011-213T00:39 | 01-Aug | Mon | 41 | 42 | 38 | Inbound 76520.7 km flyby, v = 9.6 km/s, phase = 129 deg |
| S69 | 151 | Earth OCC | SATURN | 2011-213T03:40 | 01-Aug | Mon | 41 | 42 | 38 | Duration = 91 min; egress = 2011-213T05:11:14 |
| S69 | 151 | Sun OCC | SATURN | 2011-213T04:30 | 01-Aug | Mon | 41 | 42 | 38 | Duration = 49 min; egress = 2011-213T05:19:54 |
| S69 | 151 | Ring CRX | Descending | 2011-213T04:59 | 01-Aug | Mon | 41 | 42 | 38 | r = 4.584 Rs ( 276545 km) |
| S69 | 151 | Dust Hazard | E_ring_lg | 2011-213T05:52 | 01-Aug | Mon | 41 | 42 | 38 | Egress @ 2011-213T08:03 (131 min) \| Protection: None |
| S69 | 151 | 151TI (nt) | TITAN | 2011-213T07:08 | 01-Aug | Mon | 42 | 42 | 38 | Inbound 983662.2 km flyby, v = 11.2 km/s, phase = 37 deg |
| S69 | 151 | 151TL (nt) | TELESTO | 2011-213T08:10 | 01-Aug | Mon | 42 | 42 | 38 | Inbound 50584.8 km flyby, v = 5.6 km/s, phase = 45 deg |
| S69 | 151 | Periapse | | 2011-213T08:12 | 01-Aug | Mon | 42 | 42 | 38 | R = 4.045 Rs, lat = -0 deg, phase = 135 deg |
| S69 | 151 | 151ME (nt) | METHONE | 2011-213T08:41 | 01-Aug | Mon | 42 | 42 | 38 | Outbound 97387.8 km flyby, v = 5.8 km/s, phase = 81 deg |
| S69 | 151 | 151RH (nt) | RHEA | 2011-213T21:01 | 01-Aug | Mon | 42 | 41 | 39 | Outbound 5886.6 km flyby, v = 7.7 km/s, phase = 131 deg |
| S69 | 151 | Ring CRX | Ascending | 2011-215T01:07 | 03-Aug | Wed | 43 | 40 | 40 | r = 19.317 Rs (1165375 km) |
| S69 | 152 | Apoapse | | 2011-224T06:01 | 12-Aug | Fri | 52 | 31 | 49 | Per = 21.8 d, inc = 0.4 deg, r = 45.883 Rs, phase = 45 deg |
| S69 | 152 | OTM-288 | Peri | 2011-234T09:04 | 22-Aug | Mon | 63 | 21 | 59 | D/L start, burn ~6h later. Backup D/L 235T09:04; complexes M/M |
| S69 | 152 | Earth OCC | SATURN | 2011-234T23:41 | 22-Aug | Mon | 63 | 20 | 1 | Duration = 77 min; egress = 2011-235T00:57:51 |
| S69 | 152 | Sun OCC | SATURN | 2011-235T00:22 | 23-Aug | Tue | 63 | 20 | 1 | Duration = 40 min; egress = 2011-235T01:02:24 |
| S69 | 152 | Ring CRX | Descending | 2011-235T00:41 | 23-Aug | Tue | 63 | 20 | 1 | r = 4.600 Rs ( 277511 km) |
| S69 | 152 | Dust Hazard | E_ring_lg | 2011-235T01:36 | 23-Aug | Tue | 63 | 20 | 1 | Egress @ 2011-235T03:43 (126 min) \| Protection: None |
| S69 | 152 | 152EP (nt) | EPIMETHEUS | 2011-235T03:17 | 23-Aug | Tue | 63 | 20 | 1 | Inbound 95754.4 km flyby, v = 1.1 km/s, phase = 153 deg |
| S69 | 152 | Periapse | | 2011-235T03:57 | 23-Aug | Tue | 63 | 20 | 1 | R = 4.044 Rs, lat = -0 deg, phase = 136 deg |
| S69 | 152 | 152AT (nt) | ATLAS | 2011-235T05:29 | 23-Aug | Tue | 63 | 20 | 1 | Outbound 118657.3 km flyby, v = 0.1 km/s, phase = 104 deg |
| S69 | 152 | 152TI (nt) | TITAN | 2011-236T12:10 | 24-Aug | Wed | 65 | 19 | 2 | Outbound 585296.2 km flyby, v = 8.5 km/s, phase = 101 deg |
| S69 | 152 | Ring CRX | Ascending | 2011-236T20:37 | 24-Aug | Wed | 65 | 18 | 2 | r = 19.245 Rs (1161065 km) |
| S69 | 152 | XD | Segment | 2011-237T01:34 | 25-Aug | Thu | 65 | 18 | 3 | XD_152_153 (13d) |
| S69 | 152 | 152HY (nt) | HYPERION | 2011-237T16:47 | 25-Aug | Thu | 66 | 17 | 3 | Outbound 24638.9 km flyby, v = 5.1 km/s, phase = 107 deg |
| S69 | 152 | OTM-288a | Apo | 2011-244T16:03 | 01-Sep | Thu | 73 | 10 | 10 | D/L start, burn ~6h later. Backup D/L 245T16:03; complexes G/G |
| S69 | 153 | Apoapse | | 2011-246T01:47 | 03-Sep | Sat | 74 | 9 | 1 | Per = 21.8 d, inc = 0.4 deg, r = 45.868 Rs, phase = 44 deg |
| S70 | 153 | S70 Begins | | 2011-250T00:48 | 07-Sep | Wed | 78 | 5 | 5 | S70 Sequence. Duration = 70 d |
| S70 | 153 | XD | Segment | 2011-250T00:48 | 07-Sep | Wed | 78 | 5 | 5 | XD_153 (4d) |
| S70 | 153 | OTM-289 | T78-3d | 2011-251T21:48 | 08-Sep | Thu | 80 | 3 | 7 | D/L start, burn ~6h later. Backup D/L 252T21:47; complexes C/C |
| S70 | 153 | TOST | Segment | 2011-254T06:47 | 11-Sep | Sun | 83 | 1 | 2 | TOST_T78 (2d); T78 flyby |
| S70 | 153 | Earth OCC | TITAN | 2011-255T02:34 | 12-Sep | Mon | 83 | 0 | 3 | Duration = 14 min; egress = 2011-255T02:48:27 |
| S70 | 153 | Sun OCC | TITAN | 2011-255T02:35 | 12-Sep | Mon | 83 | 0 | 3 | Duration = 13 min; egress = 2011-255T02:49:19 |
| S70 | 153 | 153TI (t) T78 | TITAN | 2011-255T02:50 | 12-Sep | Mon | 83 | 19 | 3 | Inbound 5821.4 km flyby, v = 5.8 km/s, phase = 159 deg |
| S70 | 153 | SOST | Segment | 2011-256T07:32 | 13-Sep | Tue | 1 | 18 | 4 | SOST_153 (2d); 153 flyby |
| S70 | 153 | 153RH (nt) | RHEA | 2011-256T10:34 | 13-Sep | Tue | 1 | 18 | 5 | Inbound 25420.6 km flyby, v = 8.7 km/s, phase = 141 deg |
| S70 | 153 | 153TE (nt) | TETHYS | 2011-256T18:18 | 13-Sep | Tue | 2 | 18 | 5 | Inbound 32809.2 km flyby, v = 7.3 km/s, phase = 53 deg |
| S70 | 153 | Dust Hazard | E_ring_lg | 2011-256T19:06 | 13-Sep | Tue | 2 | 18 | 5 | Egress @ 2011-256T21:06 (119 min) \| Protection: MEA Cvr. Closure |
| S70 | 153 | Earth OCC | SATURN | 2011-256T19:25 | 13-Sep | Tue | 2 | 18 | 5 | Duration = 83 min; egress = 2011-256T20:48:54 |
| S70 | 153 | Sun OCC | SATURN | 2011-256T19:41 | 13-Sep | Tue | 2 | 18 | 5 | Duration = 73 min; egress = 2011-256T20:55:11 |
| S70 | 153 | Ring CRX | Descending | 2011-256T20:28 | 13-Sep | Tue | 2 | 18 | 5 | r = 3.760 Rs ( 226814 km) |
| S70 | 153 | Dust Hazard | Pallene | 2011-256T21:03 | 13-Sep | Tue | 2 | 18 | 5 | Egress @ 2011-256T21:20 (17 min) \| Protection: MEA Cvr. Closure |
| S70 | 153 | 153PA (nt) | PANDORA | 2011-256T22:36 | 13-Sep | Tue | 2 | 18 | 5 | Inbound 58092.3 km flyby, v = 2.7 km/s, phase = 154 deg |
| S70 | 153 | 153EN (nt) | ENCELADUS | 2011-256T22:49 | 13-Sep | Tue | 2 | 18 | 5 | Inbound 42225.5 km flyby, v = 6.3 km/s, phase = 51 deg |
| S70 | 153 | Periapse | | 2011-256T23:01 | 13-Sep | Tue | 2 | 18 | 5 | R = 3.231 Rs, lat = -0 deg, phase = 129 deg |
| S70 | 153 | 153JA (nt) | JANUS | 2011-256T23:09 | 13-Sep | Tue | 2 | 18 | 5 | Outbound 45588.5 km flyby, v = 3.5 km/s, phase = 109 deg |
| S70 | 153 | 153ME (nt) | METHONE | 2011-257T00:48 | 14-Sep | Wed | 2 | 18 | 5 | Outbound 119841.5 km flyby, v = 14.0 km/s, phase = 159 deg |
| S70 | 153 | 153PL (nt) | PALLENE | 2011-257T01:21 | 14-Sep | Wed | 2 | 18 | 5 | Outbound 25937.1 km flyby, v = 8.2 km/s, phase = 152 deg |
| S70 | 153 | 153TL (nt) | TELESTO | 2011-257T03:52 | 14-Sep | Wed | 2 | 17 | 5 | Outbound 23371.6 km flyby, v = 7.7 km/s, phase = 53 deg |
| S70 | 153 | Ring CRX | Ascending | 2011-258T01:07 | 15-Sep | Thu | 3 | 17 | 6 | r = 14.499 Rs ( 874754 km) |
| S70 | 153 | OTM-290 | T78+3d | 2011-258T07:47 | 15-Sep | Thu | 3 | 16 | 6 | D/L start, burn ~6h later. Backup D/L 258T21:32; complexes C/C |
| S70 | 153 | XD | Segment | 2011-258T16:47 | 15-Sep | Thu | 4 | 16 | 0 | XD_153_154 (15d) |
| S70 | 153 | 153HY (nt) | HYPERION | 2011-259T13:23 | 16-Sep | Fri | 4 | 15 | 1 | Outbound 58120.3 km flyby, v = 4.8 km/s, phase = 84 deg |
| S70 | 153 | OTM-291 | Apo | 2011-262T21:17 | 19-Sep | Mon | 8 | 12 | 5 | D/L start, burn ~6h later. Backup D/L 263T21:17; complexes C/C |
| S70 | 154 | Apoapse | | 2011-265T19:58 | 22-Sep | Thu | 11 | 9 | 3 | Per = 17.7 d, inc = 0.3 deg, r = 40.259 Rs, phase = 50 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S70 | 154 | 154TI (nt) | TITAN | 2011-271T03:22 | 28-Sep | Wed | 16 | 3 | 8 | Inbound 679827.3 km flyby, v = 3.7 km/s, phase = 43 deg |
| S70 | 154 | OTM-292 | E14-3d | 2011-271T07:02 | 28-Sep | Wed | 16 | 3 | 8 | D/L start, burn ~6h later. Backup D/L 272T07:02; complexes M/M |
| S70 | 154 | 154TI (nt) | TITAN | 2011-273T17:19 | 30-Sep | Fri | 19 | 1 | 2 | Inbound 835951.8 km flyby, v = 3.1 km/s, phase = 12 deg |
| S70 | 154 | SOST | Segment | 2011-273T23:17 | 30-Sep | Fri | 19 | 1 | 3 | SOST_154 (3d); E14 flyby |
| S70 | 154 | Ring CRX | Descending | 2011-274T12:20 | 01-Oct | Sat | 19 | 0 | 3 | r = 4.653 Rs ( 280741 km) |
| S70 | 154 | Dust Hazard | E_ring_lg | 2011-274T12:59 | 01-Oct | Sat | 19 | 0 | 3 | Egress @ 2011-274T15:00 (121 min) \| Protection: MEA Cvr. Closure |
| S70 | 154 | Earth OCC | SATURN | 2011-274T13:28 | 01-Oct | Sat | 19 | 0 | 3 | Duration = 74 min; egress = 2011-274T14:42:13 |
| S70 | 154 | Sun OCC | SATURN | 2011-274T13:34 | 01-Oct | Sat | 19 | 0 | 3 | Duration = 71 min; egress = 2011-274T14:45:43 |
| S70 | 154 | 154EN (t) E14 | ENCELADUS | 2011-274T13:52 | 01-Oct | Sat | 19 | 18 | 3 | Inbound 97.7 km flyby, v = 7.4 km/s, phase = 102 deg |
| S70 | 154 | Dust Hazard | Pallene | 2011-274T14:57 | 01-Oct | Sat | 0 | 18 | 3 | Egress @ 2011-274T15:15 (17 min) \| Protection: MEA Cvr. Closure |
| S70 | 154 | Periapse | | 2011-274T16:52 | 01-Oct | Sat | 0 | 18 | 3 | R = 3.250 Rs, lat = -0 deg, phase = 130 deg |
| S70 | 154 | 154EP (nt) | EPIMETHEUS | 2011-274T17:31 | 01-Oct | Sat | 0 | 18 | 3 | Outbound 67933.4 km flyby, v = 4.2 km/s, phase = 81 deg |
| S70 | 154 | Dust Hazard | E_ring_lg | 2011-274T18:45 | 01-Oct | Sat | 0 | 18 | 3 | Egress @ 2011-274T20:46 (121 min) \| Protection: MEA Cvr. Closure |
| S70 | 154 | 154CP (nt) | CALYPSO | 2011-274T21:46 | 01-Oct | Sat | 0 | 17 | 4 | Outbound 124823.2 km flyby, v = 13.3 km/s, phase = 136 deg |
| S70 | 154 | Ring CRX | Ascending | 2011-275T04:24 | 02-Oct | Sun | 1 | 17 | 4 | r = 8.208 Rs ( 495165 km) |
| S70 | 154 | XD | Segment | 2011-276T23:02 | 03-Oct | Mon | 2 | 15 | 6 | XD_154_155 (15d) |
| S70 | 154 | OTM-294 | E14+3d | 2011-277T20:17 | 04-Oct | Tue | 3 | 15 | 7 | D/L start, burn ~6h later. Backup D/L 278T20:16; complexes C/C |
| S70 | 154 | OTM-295 | Apo | 2011-282T20:01 | 09-Oct | Sun | 8 | 10 | 5 | D/L start, burn ~6h later. Backup D/L 283T20:01; complexes C/C |
| S70 | 155 | Apoapse | | 2011-283T14:40 | 10-Oct | Mon | 9 | 9 | 1 | Per = 17.8 d, inc = 0.2 deg, r = 40.357 Rs, phase = 50 deg |
| S70 | 155 | SEP = 3.0 deg | Conjunction | 2011-284T11:31 | 11-Oct | Tue | 10 | 8 | 2 | Commanding must not be required below 3.0 deg |
| S70 | 155 | SEP = 3.0 deg | Conjunction | 2011-289T03:32 | 16-Oct | Sun | 15 | 3 | 6 | Commanding must not be required below 3.0 deg |
| S70 | 155 | SOST | Segment | 2011-291T14:46 | 18-Oct | Tue | 17 | 1 | 9 | SOST_155 (2d); E15 flyby |
| S70 | 155 | 155TL (nt) | TELESTO | 2011-292T07:36 | 19-Oct | Wed | 18 | 0 | 9 | Inbound 25577.5 km flyby, v = 7.5 km/s, phase = 53 deg |
| S70 | 155 | Ring CRX | Descending | 2011-292T07:39 | 19-Oct | Wed | 18 | 0 | 9 | r = 4.750 Rs ( 286558 km) |
| S70 | 155 | Dust Hazard | E_ring_lg | 2011-292T08:30 | 19-Oct | Wed | 18 | 0 | 10 | Egress @ 2011-292T10:32 (122 min) \| Protection: MEA Cvr. Closure |
| S70 | 155 | Sun OCC | SATURN | 2011-292T09:07 | 19-Oct | Wed | 18 | 0 | 10 | Duration = 68 min; egress = 2011-292T10:15:21 |
| S70 | 155 | Earth OCC | SATURN | 2011-292T09:12 | 19-Oct | Wed | 18 | 0 | 10 | Duration = 62 min; egress = 2011-292T10:14:06 |
| S70 | 155 | 155EN (t) E15 | ENCELADUS | 2011-292T09:22 | 19-Oct | Wed | 18 | 18 | 10 | Inbound 1229.7 km flyby, v = 7.5 km/s, phase = 118 deg |
| S70 | 155 | Dust Hazard | Pallene | 2011-292T10:29 | 19-Oct | Wed | 0 | 18 | 10 | Egress @ 2011-292T10:48 (18 min) \| Protection: MEA Cvr. Closure |
| S70 | 155 | Periapse | | 2011-292T12:23 | 19-Oct | Wed | 0 | 18 | 10 | R = 3.258 Rs, lat = -0 deg, phase = 130 deg |
| S70 | 155 | Dust Hazard | E_ring_lg | 2011-292T14:14 | 19-Oct | Wed | 0 | 18 | 10 | Egress @ 2011-292T16:17 (122 min) \| Protection: MEA Cvr. Closure |
| S70 | 155 | 155AN (nt) | ANTHE | 2011-292T14:15 | 19-Oct | Wed | 0 | 18 | 10 | Outbound 52148.9 km flyby, v = 9.1 km/s, phase = 158 deg |
| S70 | 155 | Ring CRX | Ascending | 2011-292T23:52 | 19-Oct | Wed | 1 | 17 | 10 | r = 8.185 Rs ( 493826 km) |
| S70 | 155 | XD | Segment | 2011-293T04:31 | 20-Oct | Thu | 1 | 17 | 10 | XD_155_156 (17d) |
| S70 | 155 | OTM-296 | E15+3d | 2011-293T19:31 | 20-Oct | Thu | 1 | 16 | 11 | D/L start, burn ~6h later. Backup D/L 294T19:16; complexes C/C |
| S70 | 155 | OTM-297 | Apo | 2011-301T05:17 | 28-Oct | Fri | 9 | 9 | 7 | D/L start, burn ~6h later. Backup D/L 302T05:17; complexes M/M |
| S70 | 156 | Apoapse | | 2011-301T10:10 | 28-Oct | Fri | 9 | 9 | 0 | Per = 17.8 d, inc = 0.2 deg, r = 40.358 Rs, phase = 50 deg |
| S70 | 156 | OTM-298 | E16-3d | 2011-306T18:47 | 02-Nov | Wed | 14 | 3 | 6 | D/L start, burn ~6h later. Backup D/L 307T18:47; complexes C/C |
| S70 | 156 | SOST | Segment | 2011-309T21:17 | 05-Nov | Sat | 17 | 0 | 3 | SOST_156 (2d); E16 flyby |
| S70 | 156 | Ring CRX | Descending | 2011-310T03:11 | 06-Nov | Sun | 18 | 0 | 3 | r = 4.769 Rs ( 287736 km) |
| S70 | 156 | Dust Hazard | E_ring_lg | 2011-310T04:05 | 06-Nov | Sun | 18 | 0 | 3 | Egress @ 2011-310T06:07 (122 min) \| Protection: MEA Cvr. Closure |
| S70 | 156 | Sun OCC | SATURN | 2011-310T04:45 | 06-Nov | Sun | 18 | 0 | 3 | Duration = 64 min; egress = 2011-310T05:49:37 |
| S70 | 156 | 156EN (t) E16 | ENCELADUS | 2011-310T04:58 | 06-Nov | Sun | 18 | 36 | 3 | Inbound 496.8 km flyby, v = 7.4 km/s, phase = 73 deg |
| S70 | 156 | Earth OCC | SATURN | 2011-310T05:01 | 06-Nov | Sun | 0 | 36 | 3 | Duration = 48 min; egress = 2011-310T05:49:39 |
| S70 | 156 | Dust Hazard | Pallene | 2011-310T06:04 | 06-Nov | Sun | 0 | 36 | 3 | Egress @ 2011-310T06:23 (18 min) \| Protection: MEA Cvr. Closure |
| S70 | 156 | 156ME (nt) | METHONE | 2011-310T06:37 | 06-Nov | Sun | 0 | 36 | 3 | Inbound 19409.6 km flyby, v = 6.3 km/s, phase = 107 deg |
| S70 | 156 | Periapse | | 2011-310T07:58 | 06-Nov | Sun | 0 | 36 | 4 | R = 3.260 Rs, lat = -0 deg, phase = 130 deg |
| S70 | 156 | 156PA (nt) | PANDORA | 2011-310T08:58 | 06-Nov | Sun | 0 | 36 | 4 | Outbound 76336.8 km flyby, v = 3.2 km/s, phase = 81 deg |
| S70 | 156 | Dust Hazard | E_ring_lg | 2011-310T09:49 | 06-Nov | Sun | 0 | 36 | 4 | Egress @ 2011-310T11:51 (122 min) \| Protection: MEA Cvr. Closure |
| S70 | 156 | 156CP (nt) | CALYPSO | 2011-310T10:00 | 06-Nov | Sun | 0 | 36 | 4 | Outbound 86243.2 km flyby, v = 6.9 km/s, phase = 55 deg |
| S70 | 156 | Ring CRX | Ascending | 2011-310T19:16 | 06-Nov | Sun | 1 | 36 | 4 | r = 8.093 Rs ( 488271 km) |
| S70 | 156 | MAPS | Segment | 2011-312T03:32 | 08-Nov | Tue | 2 | 34 | 5 | MAPS_156_157 (8d) |
| S70 | 156 | OTM-299 | E16+3d | 2011-312T18:17 | 08-Nov | Tue | 3 | 34 | 6 | D/L start, burn ~6h later. Backup D/L 313T18:17; complexes C/C |
| S70 | 157 | Apoapse | | 2011-319T06:12 | 15-Nov | Tue | 9 | 27 | 6 | Per = 17.9 d, inc = 0.2 deg, r = 40.424 Rs, phase = 50 deg |
| S71 | 157 | MAPS | Segment | 2011-320T03:02 | 16-Nov | Wed | 10 | 26 | 7 | MAPS_157 (9d) |
| S71 | 157 | S71 Begins | | 2011-320T03:02 | 16-Nov | Wed | 10 | 26 | 7 | S71 Sequence. Duration = 70 d |
| S71 | 157 | 157HE (nt) | HELENE | 2011-327T21:05 | 23-Nov | Wed | 18 | 19 | 15 | Inbound 103223.0 km flyby, v = 11.4 km/s, phase = 134 deg |
| S71 | 157 | Ring CRX | Descending | 2011-327T22:48 | 23-Nov | Wed | 18 | 18 | 15 | r = 5.242 Rs ( 316235 km) |
| S71 | 157 | OTM-300 | Peri | 2011-327T23:18 | 23-Nov | Wed | 18 | 18 | 15 | D/L start, burn ~6h later. Backup D/L 329T03:33; complexes C+M/M |
| S71 | 157 | Dust Hazard | E_ring_lg | 2011-328T00:38 | 24-Nov | Thu | 18 | 18 | 0 | Egress @ 2011-328T02:40 (122 min) \| Protection: MEA Cvr. Closure |
| S71 | 157 | Sun OCC | SATURN | 2011-328T01:21 | 24-Nov | Thu | 18 | 18 | 0 | Duration = 61 min; egress = 2011-328T02:23:07 |
| S71 | 157 | Earth OCC | SATURN | 2011-328T01:50 | 24-Nov | Thu | 18 | 18 | 0 | Duration = 32 min; egress = 2011-328T02:22:33 |
| S71 | 157 | Dust Hazard | Pallene | 2011-328T02:37 | 24-Nov | Thu | 18 | 18 | 0 | Egress @ 2011-328T02:55 (18 min) \| Protection: MEA Cvr. Closure |
| S71 | 157 | 157EN (nt) | ENCELADUS | 2011-328T03:03 | 24-Nov | Thu | 18 | 18 | 0 | Inbound 34541.5 km flyby, v = 6.2 km/s, phase = 52 deg |
| S71 | 157 | Periapse | | 2011-328T04:31 | 24-Nov | Thu | 18 | 18 | 0 | R = 3.255 Rs, lat = -0 deg, phase = 130 deg |
| S71 | 157 | 157EP (nt) | EPIMETHEUS | 2011-328T04:44 | 24-Nov | Thu | 18 | 18 | 0 | Outbound 51226.9 km flyby, v = 3.5 km/s, phase = 103 deg |
| S71 | 157 | Dust Hazard | E_ring_lg | 2011-328T06:23 | 24-Nov | Thu | 18 | 18 | 0 | Egress @ 2011-328T08:25 (121 min) \| Protection: MEA Cvr. Closure |
| S71 | 157 | Ring CRX | Ascending | 2011-328T13:38 | 24-Nov | Thu | 18 | 18 | 1 | r = 6.993 Rs ( 421900 km) |
| S71 | 157 | 157TI (nt) | TITAN | 2011-328T15:00 | 24-Nov | Thu | 18 | 18 | 1 | Outbound 863138.1 km flyby, v = 6.1 km/s, phase = 97 deg |
| S71 | 157 | XD | Segment | 2011-329T12:33 | 25-Nov | Fri | 19 | 17 | 2 | XD_157_158 (15d) |
| S71 | 157 | 157TI (nt) | TITAN | 2011-331T23:51 | 27-Nov | Sun | 22 | 14 | 4 | Outbound 748405.4 km flyby, v = 3.8 km/s, phase = 52 deg |
| S71 | 157 | OTM-300a | Apo | 2011-335T17:04 | 01-Dec | Thu | 26 | 11 | 8 | D/L start, burn ~6h later. Backup D/L 336T16:49; complexes C/C |
| S71 | 158 | Apoapse | | 2011-337T03:13 | 03-Dec | Sat | 27 | 9 | 1 | Per = 17.9 d, inc = 0.2 deg, r = 40.497 Rs, phase = 49 deg |
| S71 | 158 | OTM-301 | T79-4d | 2011-343T02:49 | 09-Dec | Fri | 33 | 3 | 7 | D/L start, burn ~6h later. Backup D/L 344T02:50; complexes M/M |
| S71 | 158 | SOST | Segment | 2011-344T11:50 | 10-Dec | Sat | 34 | 2 | 1 | SOST_158 (3d); D3 flyby |
| S71 | 158 | Ring CRX | Descending | 2011-345T20:14 | 11-Dec | Sun | 36 | 1 | 3 | r = 5.261 Rs ( 317369 km) |
| S71 | 158 | Dust Hazard | E_ring_lg | 2011-345T22:06 | 11-Dec | Sun | 36 | 0 | 3 | Egress @ 2011-346T00:06 (120 min) \| Protection: MEA Cvr. Closure |
| S71 | 158 | Sun OCC | SATURN | 2011-345T22:54 | 11-Dec | Sun | 36 | 0 | 3 | Duration = 58 min; egress = 2011-345T23:53:12 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S71 | 158 | Earth OCC | SATURN | 2011-345T23:36 | 11-Dec | Sun | 36 | 0 | 3 | Duration = 11 min; egress = 2011-345T23:47:54 |
| S71 | 158 | Dust Hazard | Pallene | 2011-346T00:03 | 12-Dec | Mon | 36 | 0 | 3 | Egress @ 2011-346T00:21 (17 min) \| Protection: MEA Cvr. Closure |
| S71 | 158 | 158CP (nt) | CALYPSO | 2011-346T00:25 | 12-Dec | Mon | 36 | 0 | 3 | Inbound 91799.2 km flyby, v = 7.1 km/s, phase = 42 deg |
| S71 | 158 | Periapse | | 2011-346T02:00 | 12-Dec | Mon | 36 | 0 | 3 | R = 3.241 Rs, lat = -0 deg, phase = 131 deg |
| S71 | 158 | Dust Hazard | E_ring_lg | 2011-346T03:54 | 12-Dec | Mon | 36 | 0 | 3 | Egress @ 2011-346T05:54 (120 min) \| Protection: MEA Cvr. Closure |
| S71 | 158 | 158EN (nt) | ENCELADUS | 2011-346T04:26 | 12-Dec | Mon | 36 | 0 | 3 | Outbound 19909.7 km flyby, v = 6.5 km/s, phase = 41 deg |
| S71 | 158 | 158TE (nt) | TETHYS | 2011-346T07:04 | 12-Dec | Mon | 36 | 0 | 3 | Outbound 60604.1 km flyby, v = 10.8 km/s, phase = 139 deg |
| S71 | 158 | 158DI (t) D3 | DIONE | 2011-346T09:39 | 12-Dec | Mon | 36 | 1 | 3 | Outbound 100.7 km flyby, v = 8.7 km/s, phase = 49 deg |
| S71 | 158 | Ring CRX | Ascending | 2011-346T11:06 | 12-Dec | Mon | 0 | 1 | 3 | r = 6.988 Rs ( 421581 km) |
| S71 | 158 | TOST | Segment | 2011-347T04:05 | 13-Dec | Tue | 1 | 1 | 4 | TOST_T79 (3d); T79 flyby |
| S71 | 158 | 158TI (t) T79 | TITAN | 2011-347T20:11 | 13-Dec | Tue | 1 | 20 | 5 | Outbound 3583.0 km flyby, v = 5.8 km/s, phase = 100 deg |
| S71 | 158 | Ring CRX | Descending | 2011-348T14:08 | 14-Dec | Wed | 1 | 19 | 5 | r = 24.918 Rs (1503291 km) |
| S71 | 158 | XD | Segment | 2011-350T11:20 | 16-Dec | Fri | 3 | 17 | 7 | XD_158_159 (17d) |
| S71 | 158 | OTM-303 | T79+4d | 2011-351T02:20 | 17-Dec | Sat | 3 | 17 | 8 | D/L start, burn ~6h later. Backup D/L 352T02:21; complexes M/M |
| S71 | 158 | OTM-304 | Apo | 2011-356T15:51 | 22-Dec | Thu | 9 | 11 | 6 | D/L start, burn ~6h later. Backup D/L 357T15:51; complexes C/C |
| S71 | 159 | Apoapse | | 2011-357T19:13 | 23-Dec | Fri | 10 | 10 | 1 | Per = 23.5 d, inc = 0.9 deg, r = 48.124 Rs, phase = 58 deg |
| S71 | 159 | TOST | Segment | 2012-002T00:22 | 02-Jan | Mon | 19 | 1 | 10 | TOST_T80 (2d); T80 flyby |
| S71 | 159 | 159TI (t) T80 | TITAN | 2012-002T15:13 | 02-Jan | Mon | 20 | 28 | 11 | Inbound 29513.9 km flyby, v = 5.5 km/s, phase = 76 deg |
| S71 | 159 | SATURN | Segment | 2012-003T18:23 | 03-Jan | Tue | 1 | 27 | 12 | SATURN_159_160 (21d) |
| S71 | 159 | Ring CRX | Ascending | 2012-003T22:05 | 03-Jan | Tue | 1 | 27 | 12 | r = 9.645 Rs ( 581895 km) |
| S71 | 159 | 159HE (nt) | HELENE | 2012-004T05:37 | 04-Jan | Wed | 2 | 26 | 13 | Inbound 42114.0 km flyby, v = 8.1 km/s, phase = 112 deg |
| S71 | 159 | 159MI (nt) | MIMAS | 2012-004T11:16 | 04-Jan | Wed | 2 | 26 | 13 | Inbound 103445.5 km flyby, v = 2.0 km/s, phase = 161 deg |
| S71 | 159 | 159JA (nt) | JANUS | 2012-004T12:21 | 04-Jan | Wed | 2 | 26 | 13 | Inbound 117839.2 km flyby, v = 0.2 km/s, phase = 135 deg |
| S71 | 159 | Periapse | | 2012-004T13:02 | 04-Jan | Wed | 2 | 26 | 13 | R = 4.419 Rs, lat = 2 deg, phase = 123 deg |
| S71 | 159 | Ring CRX | Descending | 2012-004T21:51 | 04-Jan | Wed | 2 | 26 | 13 | r = 6.976 Rs ( 420836 km) |
| S71 | 159 | OTM-306 | Apo | 2012-016T00:39 | 16-Jan | Mon | 13 | 15 | 24 | D/L start, burn ~6h later. Backup D/L 017T00:25; complexes M/M |
| S71 | 160 | Apoapse | | 2012-016T15:46 | 16-Jan | Mon | 14 | 14 | 1 | Per = 24.2 d, inc = 1.6 deg, r = 49.116 Rs, phase = 57 deg |
| S72 | 160 | S72 Begins | | 2012-024T22:55 | 24-Jan | Tue | 22 | 6 | 9 | S72 Sequence. Duration = 73 d |
| S72 | 160 | SATURN | Segment | 2012-024T22:55 | 24-Jan | Tue | 22 | 6 | 9 | SATURN_160 (5d) |
| S72 | 160 | Ring CRX | Ascending | 2012-028T03:21 | 28-Jan | Sat | 26 | 2 | 12 | r = 9.728 Rs ( 586901 km) |
| S72 | 160 | Periapse | | 2012-028T18:29 | 28-Jan | Sat | 26 | 2 | 13 | R = 4.418 Rs, lat = 2 deg, phase = 124 deg |
| S72 | 160 | Ring CRX | Descending | 2012-029T03:12 | 29-Jan | Sun | 26 | 1 | 13 | r = 6.931 Rs ( 418119 km) |
| S72 | 160 | TOST | Segment | 2012-029T22:41 | 29-Jan | Sun | 27 | 1 | 14 | TOST_T81 (2d); T81 flyby |
| S72 | 160 | 160TI (t) T81 | TITAN | 2012-030T13:39 | 30-Jan | Mon | 28 | 20 | 15 | Outbound 31130.0 km flyby, v = 5.4 km/s, phase = 96 deg |
| S72 | 160 | XD | Segment | 2012-031T21:41 | 31-Jan | Tue | 1 | 18 | 16 | XD_160_161 (18d) |
| S72 | 160 | OTM-308 | T81+4d | 2012-033T23:27 | 02-Feb | Thu | 3 | 16 | 18 | D/L start, burn ~6h later. Backup D/L 034T23:27; complexes M/M |
| S72 | 161 | Apoapse | | 2012-040T12:16 | 09-Feb | Thu | 10 | 10 | 7 | Per = 23.5 d, inc = 1.4 deg, r = 48.111 Rs, phase = 55 deg |
| S72 | 161 | OTM-309 | Apo | 2012-041T06:28 | 10-Feb | Fri | 11 | 9 | 7 | D/L start, burn ~6h later. Backup D/L 042T06:28; complexes G/G |
| S72 | 161 | OTM-310 | T82-3d | 2012-046T22:43 | 15-Feb | Wed | 16 | 3 | 6 | D/L start, burn ~6h later. Backup D/L 047T22:29; complexes M/M |
| S72 | 161 | Ring CRX | Ascending | 2012-048T06:26 | 17-Feb | Fri | 18 | 2 | 1 | r = 32.582 Rs (1965661 km) |
| S72 | 161 | TOST | Segment | 2012-049T14:59 | 18-Feb | Sat | 19 | 1 | 3 | TOST_T82 (2d); T82 flyby |
| S72 | 161 | Sun OCC | TITAN | 2012-050T08:31 | 19-Feb | Sun | 20 | 0 | 3 | Duration = 5 min; egress = 2012-050T08:36:42 |
| S72 | 161 | 161TI (t) T82 | TITAN | 2012-050T08:43 | 19-Feb | Sun | 20 | 37 | 3 | Inbound 3802.9 km flyby, v = 5.8 km/s, phase = 143 deg |
| S72 | 161 | MAPS | Segment | 2012-051T07:44 | 20-Feb | Mon | 1 | 36 | 4 | MAPS_161_162 (18d) |
| S72 | 161 | 161PO (nt) | POLYDEUCES | 2012-051T22:32 | 20-Feb | Mon | 2 | 36 | 5 | Inbound 90779.2 km flyby, v = 6.3 km/s, phase = 59 deg |
| S72 | 161 | 161TL (nt) | TELESTO | 2012-052T01:14 | 21-Feb | Tue | 2 | 36 | 5 | Inbound 55046.3 km flyby, v = 6.6 km/s, phase = 64 deg |
| S72 | 161 | Dust Hazard | E_ring_lg | 2012-052T01:27 | 21-Feb | Tue | 2 | 36 | 5 | Egress @ 2012-052T03:27 (119 min) \| Protection: MEA Cvr. Closure |
| S72 | 161 | Ring CRX | Descending | 2012-052T01:37 | 21-Feb | Tue | 2 | 36 | 5 | r = 4.266 Rs ( 257351 km) |
| S72 | 161 | 161EN (nt) | ENCELADUS | 2012-052T02:00 | 21-Feb | Tue | 2 | 36 | 5 | Inbound 46667.6 km flyby, v = 10.1 km/s, phase = 100 deg |
| S72 | 161 | 161PL (nt) | PALLENE | 2012-052T02:55 | 21-Feb | Tue | 2 | 36 | 5 | Inbound 69228.6 km flyby, v = 11.0 km/s, phase = 92 deg |
| S72 | 161 | Dust Hazard | Pallene | 2012-052T03:24 | 21-Feb | Tue | 2 | 36 | 5 | Egress @ 2012-052T03:30 (6 min) \| Protection: MEA Cvr. Closure |
| S72 | 161 | Periapse | | 2012-052T05:22 | 21-Feb | Tue | 2 | 36 | 5 | R = 3.231 Rs, lat = -0 deg, phase = 117 deg |
| S72 | 161 | 161PA (nt) | PANDORA | 2012-052T05:51 | 21-Feb | Tue | 2 | 36 | 5 | Outbound 60382.4 km flyby, v = 2.9 km/s, phase = 87 deg |
| S72 | 161 | 161DI (nt) | DIONE | 2012-052T11:09 | 21-Feb | Tue | 2 | 35 | 6 | Outbound 119727.2 km flyby, v = 6.0 km/s, phase = 74 deg |
| S72 | 161 | 161RH (nt) | RHEA | 2012-052T17:16 | 21-Feb | Tue | 2 | 35 | 6 | Outbound 100497.4 km flyby, v = 9.9 km/s, phase = 104 deg |
| S72 | 161 | Ring CRX | Ascending | 2012-052T20:31 | 21-Feb | Tue | 2 | 35 | 6 | r = 9.941 Rs ( 599760 km) |
| S72 | 161 | OTM-311 | T82+4d | 2012-053T22:14 | 22-Feb | Wed | 4 | 34 | 7 | D/L start, burn ~6h later. Backup D/L 054T21:59; complexes M/M |
| S72 | 162 | Apoapse | | 2012-061T03:51 | 01-Mar | Thu | 11 | 27 | 7 | Per = 17.9 d, inc = 0.4 deg, r = 40.464 Rs, phase = 63 deg |
| S72 | 162 | 162TI (nt) | TITAN | 2012-066T07:50 | 06-Mar | Tue | 16 | 21 | 12 | Inbound 717758.2 km flyby, v = 3.7 km/s, phase = 56 deg |
| S72 | 162 | 162HY (nt) | HYPERION | 2012-068T01:31 | 08-Mar | Thu | 18 | 20 | 14 | Inbound 104077.2 km flyby, v = 5.5 km/s, phase = 148 deg |
| S72 | 162 | SOST | Segment | 2012-068T20:01 | 08-Mar | Thu | 18 | 19 | 15 | SOST_162 (2d); non-targ flyby |
| S72 | 162 | 162TI (nt) | TITAN | 2012-069T10:13 | 09-Mar | Fri | 19 | 18 | 15 | Inbound 863993.6 km flyby, v = 4.5 km/s, phase = 16 deg |
| S72 | 162 | 162HE (nt) | HELENE | 2012-069T18:48 | 09-Mar | Fri | 19 | 18 | 16 | Inbound 109912.3 km flyby, v = 11.6 km/s, phase = 121 deg |
| S72 | 162 | OTM-312 | Peri | 2012-069T21:01 | 09-Mar | Fri | 20 | 18 | 16 | D/L start, burn ~6h later. Backup D/L 070T21:01; complexes M/M |
| S72 | 162 | Dust Hazard | E_ring_lg | 2012-069T22:19 | 09-Mar | Fri | 20 | 18 | 0 | Egress @ 2012-070T00:20 (121 min) \| Protection: MEA Cvr. Closure |
| S72 | 162 | Ring CRX | Descending | 2012-069T22:25 | 09-Mar | Fri | 20 | 18 | 0 | r = 4.297 Rs ( 259249 km) |
| S72 | 162 | 162EN (nt) | ENCELADUS | 2012-069T23:22 | 09-Mar | Fri | 20 | 18 | 0 | Inbound 9072.2 km flyby, v = 7.0 km/s, phase = 75 deg |
| S72 | 162 | Dust Hazard | Pallene | 2012-070T00:17 | 10-Mar | Sat | 20 | 18 | 0 | Egress @ 2012-070T00:18 (1 min) \| Protection: MEA Cvr. Closure |
| S72 | 162 | Periapse | | 2012-070T02:13 | 10-Mar | Sat | 20 | 18 | 0 | R = 3.245 Rs, lat = -0 deg, phase = 117 deg |
| S72 | 162 | 162PM (nt) | PROMETHEUS | 2012-070T02:29 | 10-Mar | Sat | 20 | 18 | 0 | Outbound 58059.5 km flyby, v = 2.5 km/s, phase = 102 deg |
| S72 | 162 | 162EP (nt) | EPIMETHEUS | 2012-070T03:29 | 10-Mar | Sat | 20 | 18 | 0 | Outbound 111589.2 km flyby, v = 7.0 km/s, phase = 49 deg |
| S72 | 162 | 162CP (nt) | CALYPSO | 2012-070T06:35 | 10-Mar | Sat | 20 | 17 | 0 | Outbound 47399.0 km flyby, v = 6.8 km/s, phase = 63 deg |
| S72 | 162 | 162RH (nt) | RHEA | 2012-070T15:02 | 10-Mar | Sat | 20 | 17 | 1 | Outbound 41937.6 km flyby, v = 7.5 km/s, phase = 73 deg |
| S72 | 162 | Ring CRX | Ascending | 2012-070T17:11 | 10-Mar | Sat | 20 | 17 | 1 | r = 9.850 Rs ( 594242 km) |
| S72 | 162 | XD | Segment | 2012-071T06:01 | 11-Mar | Sun | 21 | 17 | 1 | XD_162_163 (16d) |
| S72 | 162 | OTM-312a | Apo | 2012-075T20:46 | 15-Mar | Thu | 26 | 12 | 6 | D/L start, burn ~6h later. Backup D/L 076T20:31; complexes M/M |
| S72 | 163 | Apoapse | | 2012-078T23:54 | 18-Mar | Sun | 29 | 9 | 3 | Per = 17.8 d, inc = 0.4 deg, r = 40.350 Rs, phase = 62 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S72 | 163 | OTM-313 | E17-3d | 2012-084T10:02 | 24-Mar | Sat | 34 | 3 | 9 | D/L start, burn ~6h later. Backup D/L 085T09:47; complexes C/C |
| S72 | 163 | SOST | Segment | 2012-086T18:47 | 26-Mar | Mon | 36 | 1 | 2 | SOST_163 (3d); E17 flyby |
| S72 | 163 | 163PO (nt) | POLYDEUCES | 2012-087T15:53 | 27-Mar | Tue | 37 | 0 | 3 | Inbound 118099.7 km flyby, v = 6.0 km/s, phase = 53 deg |
| S72 | 163 | Dust Hazard | E_ring_lg | 2012-087T17:38 | 27-Mar | Tue | 37 | 0 | 3 | Egress @ 2012-087T19:39 (121 min) \| Protection: MEA Cvr. Closure |
| S72 | 163 | Ring CRX | Descending | 2012-087T17:39 | 27-Mar | Tue | 37 | 0 | 3 | r = 4.331 Rs ( 261277 km) |
| S72 | 163 | Sun OCC | ENCELADUS | 2012-087T18:27 | 27-Mar | Tue | 37 | 0 | 3 | Duration = 2 min; egress = 2012-087T18:29:36 |
| S72 | 163 | Earth OCC | ENCELADUS | 2012-087T18:28 | 27-Mar | Tue | 37 | 0 | 3 | Duration = 2 min; egress = 2012-087T18:29:34 |
| S72 | 163 | 163EN (t) E17 | ENCELADUS | 2012-087T18:30 | 27-Mar | Tue | 37 | 18 | 3 | Inbound 73.3 km flyby, v = 7.5 km/s, phase = 105 deg |
| S72 | 163 | Dust Hazard | Pallene | 2012-087T19:37 | 27-Mar | Tue | 0 | 18 | 3 | Egress @ 2012-087T19:37 (0 min) \| Protection: MEA Cvr. Closure |
| S72 | 163 | 163PM (nt) | PROMETHEUS | 2012-087T21:01 | 27-Mar | Tue | 0 | 18 | 3 | Inbound 62911.1 km flyby, v = 2.5 km/s, phase = 145 deg |
| S72 | 163 | Periapse | | 2012-087T21:31 | 27-Mar | Tue | 0 | 18 | 3 | R = 3.253 Rs, lat = -0 deg, phase = 118 deg |
| S72 | 163 | 163JA (nt) | JANUS | 2012-087T21:33 | 27-Mar | Tue | 0 | 18 | 3 | Outbound 43863.0 km flyby, v = 3.2 km/s, phase = 116 deg |
| S72 | 163 | 163DI (nt) | DIONE | 2012-088T05:06 | 28-Mar | Wed | 0 | 17 | 4 | Outbound 43995.4 km flyby, v = 7.5 km/s, phase = 64 deg |
| S72 | 163 | Ring CRX | Ascending | 2012-088T12:08 | 28-Mar | Wed | 1 | 17 | 4 | r = 9.681 Rs ( 584067 km) |
| S72 | 163 | XD | Segment | 2012-089T18:32 | 29-Mar | Thu | 2 | 16 | 5 | XD_163_164 (8d) |
| S72 | 163 | OTM-314 | E17+4d | 2012-090T19:32 | 30-Mar | Fri | 3 | 15 | 6 | D/L start, burn ~6h later. Backup D/L 091T19:32; complexes M/M |
| S72 | 163 | OTM-315 | Apo | 2012-096T02:47 | 05-Apr | Thu | 8 | 9 | 5 | D/L start, burn ~6h later. Backup D/L 097T02:47; complexes G/G |
| S72 | 164 | Apoapse | | 2012-096T19:17 | 05-Apr | Thu | 9 | 9 | 1 | Per = 17.8 d, inc = 0.4 deg, r = 40.361 Rs, phase = 62 deg |
| S73 | 164 | S73 Begins | | 2012-097T11:47 | 06-Apr | Fri | 10 | 8 | 1 | S73 Sequence. Duration = 73 d |
| S73 | 164 | XD | Segment | 2012-097T11:47 | 06-Apr | Fri | 10 | 8 | 1 | XD_164 (7d) |
| S73 | 164 | OTM-316 | E18-3d | 2012-102T08:48 | 11-Apr | Wed | 15 | 3 | 6 | D/L Start, burn ~6h later. Backup D/L 103T08:33; complexes C/C |
| S73 | 164 | SOST | Segment | 2012-104T17:33 | 13-Apr | Fri | 17 | 1 | 2 | SOST_164 (3d); E18 flyby |
| S73 | 164 | 164HE (nt) | HELENE | 2012-105T09:36 | 14-Apr | Sat | 18 | 0 | 3 | Inbound 104850.7 km flyby, v = 11.5 km/s, phase = 121 deg |
| S73 | 164 | 164CP (nt) | CALYPSO | 2012-105T12:44 | 14-Apr | Sat | 18 | 0 | 3 | Inbound 48758.4 km flyby, v = 6.7 km/s, phase = 62 deg |
| S73 | 164 | Ring CRX | Descending | 2012-105T13:08 | 14-Apr | Sat | 18 | 0 | 3 | r = 4.356 Rs ( 262794 km) |
| S73 | 164 | Dust Hazard | E_ring_lg | 2012-105T13:09 | 14-Apr | Sat | 18 | 0 | 3 | Egress @ 2012-105T15:11 (121 min) \| Protection: MEA Cvr. Closure |
| S73 | 164 | Earth OCC | ENCELADUS | 2012-105T13:59 | 14-Apr | Sat | 18 | 0 | 3 | Duration = 1 min; egress = 2012-105T14:00:55 |
| S73 | 164 | Sun OCC | ENCELADUS | 2012-105T13:59 | 14-Apr | Sat | 18 | 0 | 3 | Duration = 1 min; egress = 2012-105T14:00:54 |
| S73 | 164 | 164EN (t) E18 | ENCELADUS | 2012-105T14:01 | 14-Apr | Sat | 18 | 18 | 3 | Inbound 73.6 km flyby, v = 7.5 km/s, phase = 104 deg |
| S73 | 164 | 164AN (nt) | ANTHE | 2012-105T15:08 | 14-Apr | Sat | 0 | 18 | 3 | Inbound 76691.7 km flyby, v = 10.9 km/s, phase = 88 deg |
| S73 | 164 | Dust Hazard | Pallene | 2012-105T15:08 | 14-Apr | Sat | 0 | 18 | 3 | Egress @ 2012-105T15:12 (4 min) \| Protection: MEA Cvr. Closure |
| S73 | 164 | 164PM (nt) | PROMETHEUS | 2012-105T15:15 | 14-Apr | Sat | 0 | 18 | 3 | Inbound 97617.6 km flyby, v = 2.4 km/s, phase = 166 deg |
| S73 | 164 | 164PA (nt) | PANDORA | 2012-105T15:43 | 14-Apr | Sat | 0 | 18 | 3 | Inbound 87229.2 km flyby, v = 3.3 km/s, phase = 167 deg |
| S73 | 164 | Periapse | | 2012-105T17:03 | 14-Apr | Sat | 0 | 18 | 3 | R = 3.253 Rs, lat = -0 deg, phase = 118 deg |
| S73 | 164 | 164TI (nt) | TITAN | 2012-105T18:44 | 14-Apr | Sat | 0 | 18 | 3 | Outbound 995032.0 km flyby, v = 12.5 km/s, phase = 78 deg |
| S73 | 164 | 164TE (nt) | TETHYS | 2012-105T22:05 | 14-Apr | Sat | 0 | 17 | 4 | Outbound 9059.3 km flyby, v = 8.7 km/s, phase = 126 deg |
| S73 | 164 | Ring CRX | Ascending | 2012-106T07:14 | 15-Apr | Sun | 1 | 17 | 4 | r = 9.488 Rs ( 572388 km) |
| S73 | 164 | XD | Segment | 2012-107T17:18 | 16-Apr | Mon | 2 | 16 | 5 | XD_164_165 (15d) |
| S73 | 164 | 164HY (nt) | HYPERION | 2012-107T21:30 | 16-Apr | Mon | 2 | 16 | 6 | Outbound 123185.5 km flyby, v = 5.7 km/s, phase = 87 deg |
| S73 | 164 | OTM-317 | E18+3d | 2012-108T18:18 | 17-Apr | Tue | 3 | 15 | 6 | D/L Start, burn ~6h later. Backup D/L 109T18:18; complexes M/M |
| S73 | 165 | Apoapse | | 2012-114T14:46 | 23-Apr | Mon | 9 | 9 | 6 | Per = 17.8 d, inc = 0.4 deg, r = 40.363 Rs, phase = 62 deg |
| S73 | 165 | OTM-318 | Apo | 2012-115T01:33 | 24-Apr | Tue | 9 | 8 | 6 | D/L Start, burn ~6h later. Backup D/L 116T01:32; complexes G/G |
| S73 | 165 | OTM-319 | E19-3d | 2012-120T01:17 | 29-Apr | Sun | 14 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 121T01:02; complexes G/G |
| S73 | 165 | SOST | Segment | 2012-122T10:02 | 01-May | Tue | 17 | 1 | 2 | SOST_165 (3d); E19 flyby |
| S73 | 165 | 165PO (nt) | POLYDEUCES | 2012-123T06:55 | 02-May | Wed | 18 | 0 | 3 | Inbound 117978.7 km flyby, v = 6.0 km/s, phase = 53 deg |
| S73 | 165 | Ring CRX | Descending | 2012-123T08:37 | 02-May | Wed | 18 | 0 | 3 | r = 4.359 Rs ( 262986 km) |
| S73 | 165 | Dust Hazard | E_ring_lg | 2012-123T08:39 | 02-May | Wed | 18 | 0 | 3 | Egress @ 2012-123T10:40 (121 min) \| Protection: MEA Cvr. Closure |
| S73 | 165 | 165EN (t) E19 | ENCELADUS | 2012-123T09:31 | 02-May | Wed | 18 | 20 | 3 | Inbound 73.3 km flyby, v = 7.5 km/s, phase = 100 deg |
| S73 | 165 | Dust Hazard | Pallene | 2012-123T10:37 | 02-May | Wed | 0 | 20 | 3 | Egress @ 2012-123T10:48 (10 min) \| Protection: MEA Cvr. Closure |
| S73 | 165 | Periapse | | 2012-123T12:33 | 02-May | Wed | 0 | 20 | 3 | R = 3.245 Rs, lat = -0 deg, phase = 118 deg |
| S73 | 165 | 165AT (nt) | ATLAS | 2012-123T13:53 | 02-May | Wed | 0 | 19 | 4 | Outbound 84793.4 km flyby, v = 2.5 km/s, phase = 65 deg |
| S73 | 165 | 165AN (nt) | ANTHE | 2012-123T14:29 | 02-May | Wed | 0 | 19 | 4 | Outbound 105864.2 km flyby, v = 13.0 km/s, phase = 147 deg |
| S73 | 165 | 165DI (nt) | DIONE | 2012-123T20:13 | 02-May | Wed | 0 | 19 | 4 | Outbound 8089.6 km flyby, v = 8.5 km/s, phase = 65 deg |
| S73 | 165 | 165TI (nt) | TITAN | 2012-124T01:17 | 03-May | Thu | 1 | 19 | 4 | Outbound 834460.3 km flyby, v = 5.2 km/s, phase = 111 deg |
| S73 | 165 | Ring CRX | Ascending | 2012-124T02:39 | 03-May | Thu | 1 | 19 | 4 | r = 9.449 Rs ( 570069 km) |
| S73 | 165 | MAPS | Segment | 2012-125T09:47 | 04-May | Fri | 2 | 18 | 5 | MAPS_165_166 (16d) |
| S73 | 165 | OTM-320 | E19+4d | 2012-127T00:47 | 06-May | Sun | 4 | 16 | 7 | D/L Start, burn ~6h later. Backup D/L 128T00:32; complexes G/G |
| S73 | 165 | 165TI (nt) | TITAN | 2012-127T03:41 | 06-May | Sun | 4 | 16 | 0 | Outbound 699995.3 km flyby, v = 3.7 km/s, phase = 65 deg |
| S73 | 166 | Apoapse | | 2012-132T09:28 | 11-May | Fri | 9 | 11 | 5 | Per = 17.8 d, inc = 0.4 deg, r = 40.267 Rs, phase = 62 deg |
| S73 | 166 | OTM-321 | Apo | 2012-135T00:01 | 14-May | Mon | 12 | 8 | 8 | D/L Start, burn ~6h later. Backup D/L 136T00:01; complexes G/G |
| S73 | 166 | OTM-322 | T83-3d | 2012-139T23:46 | 18-May | Fri | 17 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 140T16:16; complexes G/M |
| S73 | 166 | Ring CRX | Descending | 2012-140T19:17 | 19-May | Sat | 17 | 2 | 1 | r = 8.025 Rs ( 484165 km) |
| S73 | 166 | SOST | Segment | 2012-141T01:16 | 20-May | Sun | 18 | 2 | 1 | SOST_166 (1d); non-targ flyby |
| S73 | 166 | 166TE (nt) | TETHYS | 2012-141T02:15 | 20-May | Sun | 18 | 2 | 1 | Inbound 53803.8 km flyby, v = 6.6 km/s, phase = 62 deg |
| S73 | 166 | 166EN (nt) | ENCELADUS | 2012-141T03:03 | 20-May | Sun | 18 | 2 | 1 | Inbound 70351.0 km flyby, v = 11.4 km/s, phase = 102 deg |
| S73 | 166 | 166DA (nt) | DAPHNIS | 2012-141T03:59 | 20-May | Sun | 18 | 2 | 1 | Inbound 114334.4 km flyby, v = 1.4 km/s, phase = 161 deg |
| S73 | 166 | 166PM (nt) | PROMETHEUS | 2012-141T04:32 | 20-May | Sun | 18 | 2 | 1 | Inbound 100897.5 km flyby, v = 2.6 km/s, phase = 164 deg |
| S73 | 166 | 166PN (nt) | PAN | 2012-141T06:03 | 20-May | Sun | 18 | 2 | 1 | Inbound 63580.1 km flyby, v = 2.2 km/s, phase = 137 deg |
| S73 | 166 | Periapse | | 2012-141T06:26 | 20-May | Sun | 18 | 2 | 1 | R = 3.222 Rs, lat = -0 deg, phase = 119 deg |
| S73 | 166 | 166ME (nt) | METHONE | 2012-141T06:56 | 20-May | Sun | 18 | 2 | 1 | Outbound 1870.1 km flyby, v = 5.1 km/s, phase = 127 deg |
| S73 | 166 | 166MI (nt) | MIMAS | 2012-141T08:04 | 20-May | Sun | 18 | 2 | 1 | Outbound 113337.2 km flyby, v = 13.7 km/s, phase = 148 deg |
| S73 | 166 | Dust Hazard | E_ring_lg | 2012-141T08:23 | 20-May | Sun | 18 | 2 | 1 | Egress @ 2012-141T10:22 (118 min) \| Protection: MEA Cvr. Closure |
| S73 | 166 | 166PL (nt) | PALLENE | 2012-141T08:56 | 20-May | Sun | 18 | 2 | 1 | Outbound 75159.7 km flyby, v = 11.3 km/s, phase = 142 deg |
| S73 | 166 | Ring CRX | Ascending | 2012-141T11:09 | 20-May | Sun | 18 | 2 | 1 | r = 4.729 Rs ( 285320 km) |
| S73 | 166 | 166TL (nt) | TELESTO | 2012-141T11:30 | 20-May | Sun | 18 | 2 | 1 | Outbound 11015.0 km flyby, v = 8.9 km/s, phase = 128 deg |
| S73 | 166 | TOST | Segment | 2012-142T08:31 | 21-May | Mon | 19 | 1 | 2 | TOST_T83 (2d); T83 flyby |
| S73 | 166 | 166TI (t) T83 | TITAN | 2012-143T01:10 | 22-May | Tue | 20 | 16 | 3 | Outbound 953.5 km flyby, v = 5.9 km/s, phase = 71 deg |
| S73 | 166 | Ring CRX | Descending | 2012-143T03:58 | 22-May | Tue | 0 | 16 | 3 | r = 20.855 Rs (1258166 km) |
| S73 | 166 | XD | Segment | 2012-144T02:01 | 23-May | Wed | 1 | 15 | 4 | XD_166_167 (12d) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S73 | 166 | OTM-323 | T83+3d | 2012-145T23:16 | 24-May | Thu | 3 | 13 | 6 | D/L Start, burn ~6h later. Backup D/L 146T23:16; complexes G/G |
| S73 | 167 | Apoapse | | 2012-149T05:15 | 28-May | Mon | 6 | 10 | 3 | Per = 16.0 d, inc = 15.8 deg, r = 37.436 Rs, phase = 61 deg |
| S73 | 167 | OTM-324 | Apo | 2012-150T23:00 | 29-May | Tue | 8 | 8 | 5 | D/L Start, burn ~6h later. Backup D/L 151T23:00; complexes G/G |
| S73 | 167 | OTM-325 | T84-3d | 2012-155T15:15 | 03-Jun | Sun | 13 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 156T04:45; complexes M/C |
| S73 | 167 | RINGS | Segment | 2012-156T13:45 | 04-Jun | Mon | 14 | 2 | 1 | RINGS_167 (2d) |
| S73 | 167 | Earth OCC | RING | 2012-156T22:32 | 04-Jun | Mon | 14 | 2 | 1 | Duration = 225 min; egress = 2012-157T02:17:16 |
| S73 | 167 | Sun OCC | RING | 2012-156T22:49 | 04-Jun | Mon | 14 | 2 | 1 | Duration = 195 min; egress = 2012-157T02:04:45 |
| S73 | 167 | Earth OCC | SATURN | 2012-157T00:01 | 05-Jun | Tue | 14 | 2 | 1 | Duration = 134 min; egress = 2012-157T02:15:08 |
| S73 | 167 | Sun OCC | SATURN | 2012-157T00:29 | 05-Jun | Tue | 14 | 2 | 1 | Duration = 115 min; egress = 2012-157T02:24:55 |
| S73 | 167 | 167PL (nt) | PALLENE | 2012-157T02:32 | 05-Jun | Tue | 14 | 2 | 1 | Inbound 74864.0 km flyby, v = 12.1 km/s, phase = 93 deg |
| S73 | 167 | 167PM (nt) | PROMETHEUS | 2012-157T03:01 | 05-Jun | Tue | 14 | 2 | 1 | Inbound 99867.1 km flyby, v = 5.7 km/s, phase = 161 deg |
| S73 | 167 | Ring CRX | Ascending | 2012-157T03:21 | 05-Jun | Tue | 14 | 2 | 2 | r = 3.315 Rs ( 200015 km) |
| S73 | 167 | 167PA (nt) | PANDORA | 2012-157T04:22 | 05-Jun | Tue | 14 | 2 | 2 | Inbound 49953.6 km flyby, v = 5.5 km/s, phase = 126 deg |
| S73 | 167 | Periapse | | 2012-157T04:52 | 05-Jun | Tue | 14 | 2 | 2 | R = 3.098 Rs, lat = 8 deg, phase = 119 deg |
| S73 | 167 | 167MI (nt) | MIMAS | 2012-157T05:07 | 05-Jun | Tue | 14 | 2 | 2 | Outbound 43512.6 km flyby, v = 7.2 km/s, phase = 114 deg |
| S73 | 167 | 167DA (nt) | DAPHNIS | 2012-157T05:13 | 05-Jun | Tue | 14 | 2 | 2 | Outbound 76823.3 km flyby, v = 7.1 km/s, phase = 73 deg |
| S73 | 167 | 167AT (nt) | ATLAS | 2012-157T05:34 | 05-Jun | Tue | 14 | 2 | 2 | Outbound 100596.5 km flyby, v = 8.7 km/s, phase = 60 deg |
| S73 | 167 | TOST | Segment | 2012-158T07:29 | 06-Jun | Wed | 15 | 1 | 3 | TOST_167 (3d); T84 flyby |
| S73 | 167 | 167TI (t) T84 | TITAN | 2012-159T00:07 | 07-Jun | Thu | 16 | 48 | 3 | Outbound 959.0 km flyby, v = 5.9 km/s, phase = 75 deg |
| S73 | 167 | Ring CRX | Descending | 2012-159T01:30 | 07-Jun | Thu | 0 | 48 | 3 | r = 20.453 Rs (1233953 km) |
| S73 | 167 | XD | Segment | 2012-161T07:14 | 09-Jun | Sat | 2 | 46 | 6 | XD_167_168 (10d) |
| S73 | 167 | OTM-326 | T84+3d | 2012-162T04:29 | 10-Jun | Sun | 3 | 45 | 7 | D/L Start, burn ~6h later. Backup D/L 163T04:29; complexes C/C |
| S73 | 168 | Apoapse | | 2012-169T01:46 | 17-Jun | Sun | 10 | 38 | 7 | Per = 23.9 d, inc = 21.1 deg, r = 47.978 Rs, phase = 76 deg |
| S74 | 168 | S74 Begins | | 2012-170T22:58 | 18-Jun | Mon | 12 | 36 | 9 | S74 Sequence. Duration = 67 d |
| S74 | 168 | XD | Segment | 2012-170T22:58 | 18-Jun | Mon | 12 | 36 | 9 | XD_168 (9d) |
| S74 | 168 | OTM-327 | Apo | 2012-172T21:28 | 20-Jun | Wed | 14 | 34 | 11 | D/L Start, burn ~6h later. Backup D/L 173T21:27; complexes G/G |
| S74 | 168 | 168TI (nt) | TITAN | 2012-179T06:59 | 27-Jun | Wed | 20 | 28 | 6 | Inbound 458636.9 km flyby, v = 5.6 km/s, phase = 97 deg |
| S74 | 168 | RINGS | Segment | 2012-179T22:55 | 27-Jun | Wed | 21 | 27 | 7 | RINGS_168 (3d) |
| S74 | 168 | Earth OCC | RING | 2012-180T10:22 | 28-Jun | Thu | 21 | 26 | 8 | Duration = 295 min; egress = 2012-180T15:17:23 |
| S74 | 168 | Sun OCC | RING | 2012-180T10:33 | 28-Jun | Thu | 21 | 26 | 8 | Duration = 220 min; egress = 2012-180T14:13:39 |
| S74 | 168 | Earth OCC | SATURN | 2012-180T11:32 | 28-Jun | Thu | 21 | 26 | 8 | Duration = 210 min; egress = 2012-180T15:02:46 |
| S74 | 168 | Sun OCC | SATURN | 2012-180T13:07 | 28-Jun | Thu | 22 | 26 | 8 | Duration = 144 min; egress = 2012-180T15:31:33 |
| S74 | 168 | Ring CRX | Ascending | 2012-180T19:23 | 28-Jun | Thu | 22 | 26 | 8 | r = 5.881 Rs ( 354828 km) |
| S74 | 168 | 168TE (nt) | TETHYS | 2012-180T21:10 | 28-Jun | Thu | 22 | 26 | 8 | Inbound 67757.9 km flyby, v = 7.6 km/s, phase = 80 deg |
| S74 | 168 | Periapse | | 2012-181T00:28 | 29-Jun | Fri | 22 | 26 | 8 | R = 5.065 Rs, lat = 15 deg, phase = 104 deg |
| S74 | 168 | Ring CRX | Descending | 2012-182T23:36 | 30-Jun | Sat | 24 | 24 | 10 | r = 20.671 Rs (1247075 km) |
| S74 | 168 | MAPS | Segment | 2012-183T05:41 | 01-Jul | Sun | 24 | 24 | 10 | MAPS_168_169 (21d) |
| S74 | 169 | Apoapse | | 2012-192T23:45 | 10-Jul | Tue | 34 | 14 | 20 | Per = 24.0 d, inc = 21.2 deg, r = 48.046 Rs, phase = 76 deg |
| S74 | 169 | OTM-328 | 169TI-4d | 2012-203T01:38 | 21-Jul | Sat | 44 | 4 | 30 | D/L Start, burn ~6h later. Backup D/L 203T19:23; complexes C/G |
| S74 | 169 | RINGS | Segment | 2012-204T04:23 | 22-Jul | Sun | 45 | 3 | 1 | RINGS_169 (2d) |
| S74 | 169 | Earth OCC | RING | 2012-204T08:44 | 22-Jul | Sun | 45 | 2 | 1 | Duration = 296 min; egress = 2012-204T13:40:35 |
| S74 | 169 | Sun OCC | RING | 2012-204T09:18 | 22-Jul | Sun | 45 | 2 | 1 | Duration = 190 min; egress = 2012-204T12:29:09 |
| S74 | 169 | Earth OCC | SATURN | 2012-204T10:11 | 22-Jul | Sun | 45 | 2 | 1 | Duration = 206 min; egress = 2012-204T13:37:59 |
| S74 | 169 | Sun OCC | SATURN | 2012-204T11:56 | 22-Jul | Sun | 45 | 2 | 1 | Duration = 127 min; egress = 2012-204T14:02:52 |
| S74 | 169 | Ring CRX | Ascending | 2012-204T17:55 | 22-Jul | Sun | 46 | 2 | 2 | r = 5.890 Rs ( 355330 km) |
| S74 | 169 | 169HE (nt) | HELENE | 2012-204T21:19 | 22-Jul | Sun | 46 | 2 | 2 | Inbound 110799.3 km flyby, v = 6.0 km/s, phase = 92 deg |
| S74 | 169 | Periapse | | 2012-204T23:02 | 22-Jul | Sun | 46 | 2 | 2 | R = 5.064 Rs, lat = 15 deg, phase = 104 deg |
| S74 | 169 | TOST | Segment | 2012-205T20:38 | 23-Jul | Mon | 47 | 1 | 3 | TOST_169 (2d); T85 flyby |
| S74 | 169 | 169TI (t) T85 | TITAN | 2012-206T20:03 | 24-Jul | Tue | 48 | 64 | 4 | Outbound 1012.1 km flyby, v = 5.9 km/s, phase = 58 deg |
| S74 | 169 | Ring CRX | Descending | 2012-206T21:03 | 24-Jul | Tue | 0 | 64 | 4 | r = 20.359 Rs (1228286 km) |
| S74 | 169 | XD | Segment | 2012-208T06:38 | 26-Jul | Thu | 1 | 62 | 5 | XD_169_170 (17d) |
| S74 | 169 | OTM-329 | 169TI+3d | 2012-210T01:08 | 28-Jul | Sat | 3 | 61 | 7 | D/L Start, burn ~6h later. Backup D/L 211T01:08; complexes C/C |
| S74 | 170 | Apoapse | | 2012-215T10:51 | 02-Aug | Thu | 9 | 55 | 5 | Per = 21.2 d, inc = 32.2 deg, r = 43.261 Rs, phase = 78 deg |
| S74 | 170 | OTM-330 | ~Apo | 2012-220T00:36 | 07-Aug | Tue | 13 | 51 | 10 | D/L Start, burn ~6h later. Backup D/L 221T00:21; complexes C/C |
| S74 | 170 | RINGS | Segment | 2012-225T09:21 | 12-Aug | Sun | 19 | 45 | 5 | RINGS_170 (2d) |
| S74 | 170 | Earth OCC | SATURN | 2012-225T10:24 | 12-Aug | Sun | 19 | 45 | 5 | Duration = 183 min; egress = 2012-225T13:28:09 |
| S74 | 170 | Sun OCC | RING | 2012-225T10:24 | 12-Aug | Sun | 19 | 45 | 5 | Duration = 254 min; egress = 2012-225T14:38:05 |
| S74 | 170 | Sun OCC | SATURN | 2012-225T11:01 | 12-Aug | Sun | 19 | 45 | 5 | Duration = 213 min; egress = 2012-225T14:34:03 |
| S74 | 170 | Earth OCC | RING | 2012-225T11:32 | 12-Aug | Sun | 19 | 45 | 5 | Duration = 207 min; egress = 2012-225T14:59:41 |
| S74 | 170 | Ring CRX | Ascending | 2012-225T18:52 | 12-Aug | Sun | 19 | 45 | 6 | r = 6.748 Rs ( 407124 km) |
| S74 | 170 | 170TL (nt) | TELESTO | 2012-225T21:44 | 12-Aug | Sun | 19 | 45 | 6 | Inbound 93737.6 km flyby, v = 7.9 km/s, phase = 101 deg |
| S74 | 170 | Periapse | | 2012-226T01:28 | 13-Aug | Mon | 19 | 45 | 6 | R = 5.748 Rs, lat = 24 deg, phase = 103 deg |
| S74 | 170 | SATURN | Segment | 2012-227T19:20 | 14-Aug | Tue | 21 | 43 | 8 | SATURN_170_171 (10d) |
| S74 | 170 | Ring CRX | Descending | 2012-228T02:27 | 15-Aug | Wed | 21 | 43 | 8 | r = 20.424 Rs (1232166 km) |
| S74 | 171 | Apoapse | | 2012-236T16:36 | 23-Aug | Thu | 30 | 34 | 17 | Per = 21.3 d, inc = 32.2 deg, r = 43.312 Rs, phase = 77 deg |
| S74 | 171 | SATURN | Segment | 2012-237T18:34 | 24-Aug | Fri | 31 | 33 | 18 | SATURN_171 (11d) |
| S75 | 171 | S75 Begins | | 2012-237T18:56 | 24-Aug | Fri | 31 | 33 | 18 | S75 Sequence. Duration = 70 d |
| S75 | 171 | Sun OCC | RING | 2012-246T16:25 | 02-Sep | Sun | 40 | 24 | 27 | Duration = 254 min; egress = 2012-246T20:39:55 |
| S75 | 171 | Earth OCC | SATURN | 2012-246T16:34 | 02-Sep | Sun | 40 | 24 | 27 | Duration = 209 min; egress = 2012-246T20:03:34 |
| S75 | 171 | Earth OCC | RING | 2012-246T17:04 | 02-Sep | Sun | 40 | 24 | 27 | Duration = 234 min; egress = 2012-246T20:58:14 |
| S75 | 171 | Sun OCC | SATURN | 2012-246T17:17 | 02-Sep | Sun | 40 | 24 | 27 | Duration = 208 min; egress = 2012-246T20:45:40 |
| S75 | 171 | 171TI (nt) | TITAN | 2012-246T19:41 | 02-Sep | Sun | 40 | 24 | 27 | Inbound 784505.1 km flyby, v = 7.2 km/s, phase = 39 deg |
| S75 | 171 | Ring CRX | Ascending | 2012-247T00:59 | 03-Sep | Mon | 40 | 24 | 27 | r = 6.765 Rs ( 408153 km) |
| S75 | 171 | Periapse | | 2012-247T07:37 | 03-Sep | Mon | 40 | 23 | 27 | R = 5.759 Rs, lat = 24 deg, phase = 103 deg |
| S75 | 171 | XD | Segment | 2012-248T18:03 | 04-Sep | Tue | 42 | 22 | 29 | XD_171_172 (18d) |
| S75 | 171 | Ring CRX | Descending | 2012-249T08:38 | 05-Sep | Wed | 43 | 21 | 29 | r = 20.431 Rs (1232611 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S75 | 172 | Apoapse | | 2012-257T23:16 | 13-Sep | Thu | 51 | 13 | 38 | Per = 21.3 d, inc = 32.2 deg, r = 43.384 Rs, phase = 77 deg |
| S75 | 172 | RINGS | Segment | 2012-266T17:02 | 22-Sep | Sat | 60 | 4 | 47 | RINGS_172 (3d) |
| S75 | 172 | OTM-331 | 172TI-3d | 2012-267T07:47 | 23-Sep | Sun | 60 | 3 | 47 | D/L Start, burn ~6h later. Backup D/L 268T07:46; complexes M/M |
| S75 | 172 | Sun OCC | RING | 2012-267T23:41 | 23-Sep | Sun | 61 | 3 | 1 | Duration = 254 min; egress = 2012-268T03:55:31 |
| S75 | 172 | Earth OCC | RING | 2012-267T23:54 | 23-Sep | Sun | 61 | 3 | 1 | Duration = 253 min; egress = 2012-268T04:07:07 |
| S75 | 172 | Earth OCC | SATURN | 2012-268T00:11 | 24-Sep | Mon | 61 | 3 | 1 | Duration = 217 min; egress = 2012-268T03:48:17 |
| S75 | 172 | Sun OCC | SATURN | 2012-268T00:47 | 24-Sep | Mon | 61 | 3 | 1 | Duration = 202 min; egress = 2012-268T04:09:56 |
| S75 | 172 | Ring CRX | Ascending | 2012-268T08:19 | 24-Sep | Mon | 62 | 2 | 1 | r = 6.766 Rs ( 408188 km) |
| S75 | 172 | Periapse | | 2012-268T14:58 | 24-Sep | Mon | 62 | 2 | 1 | R = 5.754 Rs, lat = 24 deg, phase = 103 deg |
| S75 | 172 | TOST | Segment | 2012-270T00:16 | 26-Sep | Wed | 63 | 1 | 3 | TOST_172 (3d); T86 flyby |
| S75 | 172 | 172TI (t) T86 | TITAN | 2012-270T14:35 | 26-Sep | Wed | 64 | 48 | 3 | Outbound 956.2 km flyby, v = 5.9 km/s, phase = 47 deg |
| S75 | 172 | Ring CRX | Descending | 2012-270T15:19 | 26-Sep | Wed | 0 | 48 | 3 | r = 20.262 Rs (1222392 km) |
| S75 | 172 | XD | Segment | 2012-273T06:16 | 29-Sep | Sat | 3 | 45 | 6 | XD_172_173 (18d) |
| S75 | 172 | OTM-332 | 172TI+4d | 2012-273T21:16 | 29-Sep | Sat | 3 | 45 | 7 | D/L Start, burn ~6h later. Backup D/L 274T21:16; complexes C/C |
| S75 | 173 | Apoapse | | 2012-280T10:18 | 06-Oct | Sat | 10 | 38 | 7 | Per = 23.9 d, inc = 39.0 deg, r = 45.163 Rs, phase = 88 deg |
| S75 | 173 | OTM-333 | ~Apo | 2012-283T07:01 | 09-Oct | Tue | 13 | 35 | 9 | D/L Start, burn ~6h later. Backup D/L 284T06:46; complexes M/M |
| S75 | 173 | RINGS | Segment | 2012-290T23:00 | 16-Oct | Tue | 20 | 27 | 8 | RINGS_173 (3d) |
| S75 | 173 | Earth OCC | SATURN | 2012-291T04:58 | 17-Oct | Wed | 21 | 27 | 8 | Duration = 273 min; egress = 2012-291T09:31:57 |
| S75 | 173 | Sun OCC | SATURN | 2012-291T05:14 | 17-Oct | Wed | 21 | 27 | 8 | Duration = 276 min; egress = 2012-291T09:51:02 |
| S75 | 173 | Earth OCC | RING | 2012-291T05:19 | 17-Oct | Wed | 21 | 27 | 8 | Duration = 293 min; egress = 2012-291T10:11:54 |
| S75 | 173 | Sun OCC | RING | 2012-291T05:19 | 17-Oct | Wed | 21 | 27 | 8 | Duration = 295 min; egress = 2012-291T10:13:55 |
| S75 | 173 | Ring CRX | Ascending | 2012-291T18:41 | 17-Oct | Wed | 21 | 27 | 8 | r = 10.019 Rs ( 604417 km) |
| S75 | 173 | Periapse | | 2012-292T09:01 | 18-Oct | Thu | 22 | 26 | 9 | R = 7.869 Rs, lat = 34 deg, phase = 92 deg |
| S75 | 173 | XD | Segment | 2012-294T05:00 | 20-Oct | Sat | 24 | 24 | 11 | XD_173_174 (13d) |
| S75 | 173 | Ring CRX | Descending | 2012-294T12:36 | 20-Oct | Sat | 24 | 24 | 11 | r = 20.240 Rs (1221105 km) |
| S75 | 173 | SEP = 3.0 deg | Conjunction | 2012-296T23:21 | 22-Oct | Mon | 26 | 21 | 14 | Commanding must not be required below 3.0 deg |
| S75 | 173 | SEP = 3.0 deg | Conjunction | 2012-301T16:23 | 27-Oct | Sat | 31 | 17 | 18 | Commanding must not be required below 3.0 deg |
| S75 | 174 | Apoapse | | 2012-304T08:16 | 30-Oct | Tue | 34 | 14 | 21 | Per = 24.0 d, inc = 39.0 deg, r = 45.234 Rs, phase = 88 deg |
| S76 | 174 | S76 Begins | | 2012-307T14:30 | 02-Nov | Fri | 37 | 11 | 24 | S76 Sequence. Duration = 72 d |
| S76 | 174 | XD | Segment | 2012-307T14:30 | 02-Nov | Fri | 37 | 11 | 24 | XD_174 (7d) |
| S76 | 174 | OTM-334 | 174TI-4d | 2012-314T12:46 | 09-Nov | Fri | 44 | 4 | 31 | D/L Start, burn ~6h later. Backup D/L 315T12:31; complexes G/G |
| S76 | 174 | RINGS | Segment | 2012-314T21:46 | 09-Nov | Fri | 44 | 4 | 0 | RINGS_174 (3d) |
| S76 | 174 | Earth OCC | RING | 2012-315T03:04 | 10-Nov | Sat | 45 | 3 | 1 | Duration = 302 min; egress = 2012-315T08:06:52 |
| S76 | 174 | Sun OCC | RING | 2012-315T03:31 | 10-Nov | Sat | 45 | 3 | 1 | Duration = 300 min; egress = 2012-315T08:31:25 |
| S76 | 174 | Sun OCC | SATURN | 2012-315T03:51 | 10-Nov | Sat | 45 | 3 | 1 | Duration = 276 min; egress = 2012-315T08:28:07 |
| S76 | 174 | Earth OCC | SATURN | 2012-315T04:18 | 10-Nov | Sat | 45 | 3 | 1 | Duration = 256 min; egress = 2012-315T08:33:41 |
| S76 | 174 | Ring CRX | Ascending | 2012-315T17:07 | 10-Nov | Sat | 45 | 3 | 1 | r = 10.028 Rs ( 605007 km) |
| S76 | 174 | Periapse | | 2012-316T07:29 | 11-Nov | Sun | 46 | 2 | 2 | R = 7.870 Rs, lat = 34 deg, phase = 92 deg |
| S76 | 174 | TOST | Segment | 2012-317T14:01 | 12-Nov | Mon | 47 | 1 | 3 | TOST_174 (2d); T87 flyby |
| S76 | 174 | 174TI (t) T87 | TITAN | 2012-318T10:22 | 13-Nov | Tue | 48 | 16 | 4 | Outbound 973.5 km flyby, v = 5.9 km/s, phase = 68 deg |
| S76 | 174 | Ring CRX | Descending | 2012-318T10:49 | 13-Nov | Tue | 0 | 16 | 4 | r = 20.185 Rs (1217740 km) |
| S76 | 174 | SATURN | Segment | 2012-319T21:46 | 14-Nov | Wed | 1 | 14 | 5 | SATURN_174_175 (14d) |
| S76 | 174 | OTM-335 | 174TI+4d | 2012-321T18:31 | 16-Nov | Fri | 3 | 13 | 7 | D/L Start, burn ~6h later. Backup D/L 322T18:31; complexes C/C |
| S76 | 175 | Apoapse | | 2012-324T02:54 | 19-Nov | Mon | 6 | 10 | 2 | Per = 15.9 d, inc = 46.3 deg, r = 33.619 Rs, phase = 75 deg |
| S76 | 175 | OTM-336 | ~Apo | 2012-326T18:16 | 21-Nov | Wed | 8 | 8 | 5 | D/L Start, burn ~6h later. Backup D/L 327T18:16; complexes C/C |
| S76 | 175 | OTM-337 | 175TI-3d | 2012-330T18:01 | 25-Nov | Sun | 12 | 4 | 4 | D/L Start, burn ~6h later. Backup D/L 331T18:01; complexes C/C |
| S76 | 175 | Earth OCC | RING | 2012-331T08:56 | 26-Nov | Mon | 13 | 3 | 1 | Duration = 225 min; egress = 2012-331T12:41:35 |
| S76 | 175 | Sun OCC | SATURN | 2012-331T08:56 | 26-Nov | Mon | 13 | 3 | 1 | Duration = 200 min; egress = 2012-331T12:16:26 |
| S76 | 175 | Earth OCC | SATURN | 2012-331T09:01 | 26-Nov | Mon | 13 | 3 | 1 | Duration = 219 min; egress = 2012-331T12:40:45 |
| S76 | 175 | Sun OCC | RING | 2012-331T09:30 | 26-Nov | Mon | 13 | 3 | 1 | Duration = 206 min; egress = 2012-331T12:56:18 |
| S76 | 175 | Ring CRX | Ascending | 2012-331T17:24 | 26-Nov | Mon | 13 | 3 | 1 | r = 7.978 Rs ( 481293 km) |
| S76 | 175 | Periapse | | 2012-332T02:15 | 27-Nov | Tue | 14 | 2 | 1 | R = 6.894 Rs, lat = 33 deg, phase = 105 deg |
| S76 | 175 | TOST | Segment | 2012-333T20:32 | 28-Nov | Wed | 15 | 1 | 3 | TOST_175 (3d); T88 flyby |
| S76 | 175 | 175TI (t) T88 | TITAN | 2012-334T08:56 | 29-Nov | Thu | 16 | 80 | 4 | Outbound 1014.6 km flyby, v = 5.9 km/s, phase = 44 deg |
| S76 | 175 | Ring CRX | Descending | 2012-334T09:25 | 29-Nov | Thu | 0 | 80 | 4 | r = 20.179 Rs (1217429 km) |
| S76 | 175 | XD | Segment | 2012-337T02:47 | 02-Dec | Sun | 3 | 77 | 6 | XD_175_176 (6d) |
| S76 | 175 | OTM-338 | 175TI+4d | 2012-337T17:32 | 02-Dec | Sun | 3 | 76 | 7 | D/L Start, burn ~6h later. Backup D/L 338T17:32; complexes C/C |
| S76 | 176 | Apoapse | | 2012-338T10:58 | 03-Dec | Mon | 4 | 76 | 1 | Per = 13.3 d, inc = 53.0 deg, r = 28.413 Rs, phase = 70 deg |
| S76 | 176 | SATURN | Segment | 2012-343T02:17 | 08-Dec | Sat | 9 | 71 | 5 | SATURN_176 (4d) |
| S76 | 176 | Earth OCC | SATURN | 2012-344T08:56 | 09-Dec | Sun | 10 | 70 | 7 | Duration = 210 min; egress = 2012-344T12:26:28 |
| S76 | 176 | Earth OCC | RING | 2012-344T09:12 | 09-Dec | Sun | 10 | 70 | 7 | Duration = 206 min; egress = 2012-344T12:37:59 |
| S76 | 176 | Sun OCC | SATURN | 2012-344T09:29 | 09-Dec | Sun | 10 | 70 | 7 | Duration = 119 min; egress = 2012-344T11:28:15 |
| S76 | 176 | Sun OCC | RING | 2012-344T09:58 | 09-Dec | Sun | 10 | 70 | 7 | Duration = 173 min; egress = 2012-344T12:51:52 |
| S76 | 176 | Ring CRX | Ascending | 2012-344T17:12 | 09-Dec | Sun | 10 | 69 | 7 | r = 8.314 Rs ( 501603 km) |
| S76 | 176 | 176TI (nt) | TITAN | 2012-344T23:15 | 09-Dec | Sun | 11 | 69 | 7 | Inbound 906834.0 km flyby, v = 8.1 km/s, phase = 85 deg |
| S76 | 176 | Periapse | | 2012-345T02:15 | 10-Dec | Mon | 11 | 69 | 7 | R = 7.427 Rs, lat = 34 deg, phase = 110 deg |
| S76 | 176 | XD | Segment | 2012-347T02:03 | 12-Dec | Wed | 13 | 67 | 9 | XD_176_177 (10d) |
| S76 | 176 | Ring CRX | Descending | 2012-347T15:52 | 12-Dec | Wed | 13 | 66 | 10 | r = 20.174 Rs (1217106 km) |
| S76 | 176 | 176TI (nt) | TITAN | 2012-350T13:50 | 15-Dec | Sat | 16 | 64 | 13 | Outbound 899660.4 km flyby, v = 4.6 km/s, phase = 103 deg |
| S76 | 177 | Apoapse | | 2012-351T17:22 | 16-Dec | Sun | 17 | 62 | 14 | Per = 13.3 d, inc = 53.0 deg, r = 28.405 Rs, phase = 70 deg |
| S76 | 177 | SOST | Segment | 2012-357T01:34 | 22-Dec | Sat | 23 | 57 | 19 | SOST_177 (2d); non-targ flyby |
| S76 | 177 | Earth OCC | SATURN | 2012-357T15:18 | 22-Dec | Sat | 23 | 56 | 20 | Duration = 214 min; egress = 2012-357T18:52:48 |
| S76 | 177 | Earth OCC | RING | 2012-357T15:20 | 22-Dec | Sat | 23 | 56 | 20 | Duration = 210 min; egress = 2012-357T18:50:37 |
| S76 | 177 | Sun OCC | SATURN | 2012-357T15:37 | 22-Dec | Sat | 23 | 56 | 20 | Duration = 141 min; egress = 2012-357T17:58:26 |
| S76 | 177 | Sun OCC | RING | 2012-357T16:09 | 22-Dec | Sat | 23 | 56 | 20 | Duration = 178 min; egress = 2012-357T19:08:00 |
| S76 | 177 | 177TI (nt) | TITAN | 2012-357T17:27 | 22-Dec | Sat | 23 | 56 | 20 | Inbound 714549.9 km flyby, v = 8.1 km/s, phase = 31 deg |
| S76 | 177 | 177RH (nt) | RHEA | 2012-357T23:06 | 22-Dec | Sat | 24 | 56 | 20 | Inbound 22887.9 km flyby, v = 9.1 km/s, phase = 43 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S76 | 177 | Ring CRX | Ascending | 2012-357T23:28 | 22-Dec | Sat | 24 | 56 | 20 | r = 8.307 Rs ( 501150 km) |
| S76 | 177 | Periapse | | 2012-358T08:30 | 23-Dec | Sun | 24 | 56 | 21 | R = 7.424 Rs, lat = 34 deg, phase = 110 deg |
| S76 | 177 | XD | Segment | 2012-359T01:19 | 24-Dec | Mon | 25 | 55 | 21 | XD_177_178 (10d) |
| S76 | 177 | Ring CRX | Descending | 2012-360T22:13 | 25-Dec | Tue | 27 | 53 | 23 | r = 20.197 Rs (1218463 km) |
| S76 | 178 | Apoapse | | 2012-364T23:50 | 29-Dec | Sat | 31 | 49 | 27 | Per = 13.3 d, inc = 53.0 deg, r = 28.424 Rs, phase = 70 deg |
| S76 | 178 | SATURN | Segment | 2013-003T11:05 | 03-Jan | Thu | 35 | 45 | 32 | SATURN_178 (5d) |
| S76 | 178 | Earth OCC | RING | 2013-004T21:52 | 04-Jan | Fri | 37 | 43 | 33 | Duration = 212 min; egress = 2013-005T01:24:49 |
| S76 | 178 | Earth OCC | SATURN | 2013-004T22:06 | 04-Jan | Fri | 37 | 43 | 33 | Duration = 210 min; egress = 2013-005T01:35:46 |
| S76 | 178 | Sun OCC | SATURN | 2013-004T22:09 | 04-Jan | Fri | 37 | 43 | 33 | Duration = 158 min; egress = 2013-005T00:47:18 |
| S76 | 178 | Sun OCC | RING | 2013-004T22:42 | 04-Jan | Fri | 37 | 43 | 33 | Duration = 183 min; egress = 2013-005T01:45:16 |
| S76 | 178 | Ring CRX | Ascending | 2013-005T06:07 | 05-Jan | Sat | 37 | 43 | 34 | r = 8.317 Rs ( 501751 km) |
| S76 | 178 | Periapse | | 2013-005T15:10 | 05-Jan | Sat | 37 | 42 | 34 | R = 7.432 Rs, lat = 34 deg, phase = 111 deg |
| S76 | 178 | XD | Segment | 2013-008T00:21 | 08-Jan | Tue | 40 | 40 | 36 | XD_178_179 (6d) |
| S76 | 178 | Ring CRX | Descending | 2013-008T04:57 | 08-Jan | Tue | 40 | 40 | 36 | r = 20.208 Rs (1219131 km) |
| S76 | 179 | Apoapse | | 2013-012T06:43 | 12-Jan | Sat | 44 | 36 | 41 | Per = 13.3 d, inc = 52.9 deg, r = 28.446 Rs, phase = 69 deg |
| S77 | 179 | S77 Begins | | 2013-013T17:51 | 13-Jan | Sun | 45 | 34 | 42 | S77 Sequence. Duration = 72 d |
| S77 | 179 | XD | Segment | 2013-013T17:51 | 13-Jan | Sun | 45 | 34 | 42 | XD_179 (4d) |
| S77 | 179 | RINGS | Segment | 2013-017T17:37 | 17-Jan | Thu | 49 | 30 | 46 | RINGS_179 (4d) |
| S77 | 179 | Earth OCC | RING | 2013-018T04:53 | 18-Jan | Fri | 50 | 30 | 46 | Duration = 212 min; egress = 2013-018T08:25:47 |
| S77 | 179 | Sun OCC | SATURN | 2013-018T05:08 | 18-Jan | Fri | 50 | 30 | 46 | Duration = 173 min; egress = 2013-018T08:00:47 |
| S77 | 179 | Earth OCC | SATURN | 2013-018T05:20 | 18-Jan | Fri | 50 | 30 | 46 | Duration = 201 min; egress = 2013-018T08:41:46 |
| S77 | 179 | Sun OCC | RING | 2013-018T05:41 | 18-Jan | Fri | 50 | 30 | 47 | Duration = 187 min; egress = 2013-018T08:48:30 |
| S77 | 179 | Ring CRX | Ascending | 2013-018T13:12 | 18-Jan | Fri | 50 | 30 | 47 | r = 8.327 Rs ( 502370 km) |
| S77 | 179 | Periapse | | 2013-018T22:16 | 18-Jan | Fri | 51 | 29 | 47 | R = 7.440 Rs, lat = 34 deg, phase = 111 deg |
| S77 | 179 | XD | Segment | 2013-021T09:53 | 21-Jan | Mon | 53 | 27 | 50 | XD_179_180 (10d) |
| S77 | 179 | Ring CRX | Descending | 2013-021T12:07 | 21-Jan | Mon | 53 | 27 | 50 | r = 20.220 Rs (1219853 km) |
| S77 | 180 | Apoapse | | 2013-025T13:55 | 25-Jan | Fri | 57 | 23 | 54 | Per = 13.3 d, inc = 53.0 deg, r = 28.455 Rs, phase = 69 deg |
| S77 | 180 | OTM-339 | ~Peri | 2013-030T14:09 | 30-Jan | Wed | 62 | 17 | 59 | D/L Start, burn ~6h later. Backup D/L 031T00:24; complexes C/M |
| S77 | 180 | RINGS | Segment | 2013-031T09:24 | 31-Jan | Thu | 63 | 17 | 1 | RINGS_180 (4d) |
| S77 | 180 | Earth OCC | RING | 2013-031T12:09 | 31-Jan | Thu | 63 | 17 | 1 | Duration = 211 min; egress = 2013-031T15:40:02 |
| S77 | 180 | Sun OCC | SATURN | 2013-031T12:21 | 31-Jan | Thu | 63 | 17 | 1 | Duration = 184 min; egress = 2013-031T15:25:06 |
| S77 | 180 | Earth OCC | SATURN | 2013-031T12:45 | 31-Jan | Thu | 63 | 17 | 1 | Duration = 193 min; egress = 2013-031T15:58:32 |
| S77 | 180 | Sun OCC | RING | 2013-031T12:52 | 31-Jan | Thu | 63 | 17 | 1 | Duration = 191 min; egress = 2013-031T16:03:35 |
| S77 | 180 | Ring CRX | Ascending | 2013-031T20:28 | 31-Jan | Thu | 63 | 16 | 1 | r = 8.324 Rs ( 502194 km) |
| S77 | 180 | Periapse | | 2013-032T05:31 | 01-Feb | Fri | 64 | 16 | 2 | R = 7.438 Rs, lat = 34 deg, phase = 111 deg |
| S77 | 180 | Ring CRX | Descending | 2013-034T19:24 | 03-Feb | Sun | 66 | 13 | 4 | r = 20.227 Rs (1220313 km) |
| S77 | 180 | XD | Segment | 2013-034T22:55 | 03-Feb | Sun | 67 | 13 | 4 | XD_180_181 (8d) |
| S77 | 181 | Apoapse | | 2013-038T21:11 | 07-Feb | Thu | 71 | 9 | 8 | Per = 13.3 d, inc = 53.0 deg, r = 28.462 Rs, phase = 69 deg |
| S77 | 181 | RINGS | Segment | 2013-043T08:26 | 12-Feb | Tue | 75 | 5 | 13 | RINGS_181 (4d) |
| S77 | 181 | OTM-340 | 181TI-4d | 2013-043T23:26 | 12-Feb | Tue | 76 | 4 | 13 | D/L Start, burn ~6h later. Backup D/L 045T23:26; complexes M/M |
| S77 | 181 | Earth OCC | RING | 2013-044T19:29 | 13-Feb | Wed | 76 | 3 | 1 | Duration = 209 min; egress = 2013-044T22:59:11 |
| S77 | 181 | Sun OCC | SATURN | 2013-044T19:38 | 13-Feb | Wed | 76 | 3 | 1 | Duration = 192 min; egress = 2013-044T22:51:11 |
| S77 | 181 | Sun OCC | RING | 2013-044T20:07 | 13-Feb | Wed | 76 | 3 | 1 | Duration = 194 min; egress = 2013-044T23:21:54 |
| S77 | 181 | Earth OCC | SATURN | 2013-044T20:10 | 13-Feb | Wed | 76 | 3 | 1 | Duration = 188 min; egress = 2013-044T23:18:34 |
| S77 | 181 | Ring CRX | Ascending | 2013-045T03:47 | 14-Feb | Thu | 77 | 3 | 1 | r = 8.313 Rs ( 501510 km) |
| S77 | 181 | Periapse | | 2013-045T12:50 | 14-Feb | Thu | 77 | 3 | 2 | R = 7.426 Rs, lat = 34 deg, phase = 111 deg |
| S77 | 181 | TOST | Segment | 2013-047T08:26 | 16-Feb | Sat | 79 | 1 | 3 | TOST_181 (2d); T89 flyby |
| S77 | 181 | 181TI (t) T89 | TITAN | 2013-048T01:56 | 17-Feb | Sun | 80 | 21 | 4 | Outbound 1978.1 km flyby, v = 5.8 km/s, phase = 35 deg |
| S77 | 181 | Ring CRX | Descending | 2013-048T02:23 | 17-Feb | Sun | 0 | 21 | 4 | r = 20.171 Rs (1216910 km) |
| S77 | 181 | XD | Segment | 2013-049T08:11 | 18-Feb | Mon | 1 | 19 | 5 | XD_181_182 (5d) |
| S77 | 182 | Apoapse | | 2013-051T05:01 | 20-Feb | Wed | 3 | 18 | 7 | Per = 12.0 d, inc = 57.1 deg, r = 25.388 Rs, phase = 64 deg |
| S77 | 182 | SATURN | Segment | 2013-054T15:27 | 23-Feb | Sat | 7 | 14 | 11 | SATURN_182 (5d) |
| S77 | 182 | OTM-341 | ~Peri | 2013-055T06:12 | 24-Feb | Sun | 7 | 14 | 11 | D/L Start, burn ~6h later. Backup D/L 055T22:42; complexes G/M |
| S77 | 182 | Earth OCC | RING | 2013-056T10:52 | 25-Feb | Mon | 8 | 12 | 1 | Duration = 206 min; egress = 2013-056T14:18:01 |
| S77 | 182 | Earth OCC | SATURN | 2013-056T11:03 | 25-Feb | Mon | 8 | 12 | 1 | Duration = 208 min; egress = 2013-056T14:31:35 |
| S77 | 182 | Sun OCC | SATURN | 2013-056T11:05 | 25-Feb | Mon | 8 | 12 | 1 | Duration = 161 min; egress = 2013-056T13:46:21 |
| S77 | 182 | Sun OCC | RING | 2013-056T11:33 | 25-Feb | Mon | 8 | 12 | 1 | Duration = 182 min; egress = 2013-056T14:35:28 |
| S77 | 182 | 182TI (nt) | TITAN | 2013-056T17:26 | 25-Feb | Mon | 9 | 12 | 1 | Inbound 707431.5 km flyby, v = 8.4 km/s, phase = 41 deg |
| S77 | 182 | Ring CRX | Ascending | 2013-056T19:11 | 25-Feb | Mon | 9 | 12 | 2 | r = 8.752 Rs ( 528016 km) |
| S77 | 182 | Periapse | | 2013-057T04:25 | 26-Feb | Tue | 9 | 12 | 2 | R = 8.039 Rs, lat = 33 deg, phase = 116 deg |
| S77 | 182 | XD | Segment | 2013-059T21:13 | 28-Feb | Thu | 12 | 9 | 5 | XD_182_183 (8d) |
| S77 | 182 | Ring CRX | Descending | 2013-060T01:18 | 01-Mar | Fri | 12 | 9 | 5 | r = 20.203 Rs (1218824 km) |
| S77 | 182 | OTM-342 | ~Apo | 2013-060T22:28 | 01-Mar | Fri | 13 | 8 | 6 | D/L Start, burn ~6h later. Backup D/L 061T22:28; complexes M/M |
| S77 | 183 | Apoapse | | 2013-063T04:01 | 04-Mar | Mon | 15 | 6 | 2 | Per = 12.0 d, inc = 57.1 deg, r = 25.409 Rs, phase = 64 deg |
| S77 | 183 | OTM-343 | 183RH-3d | 2013-065T11:58 | 06-Mar | Wed | 17 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 066T11:59; complexes C/C |
| S77 | 183 | SOST | Segment | 2013-067T14:29 | 08-Mar | Fri | 20 | 1 | 2 | SOST_183 (2d); R4 flyby |
| S77 | 183 | Earth OCC | RING | 2013-068T10:05 | 09-Mar | Sat | 20 | 0 | 3 | Duration = 205 min; egress = 2013-068T13:29:56 |
| S77 | 183 | Sun OCC | SATURN | 2013-068T10:10 | 09-Mar | Sat | 20 | 0 | 3 | Duration = 173 min; egress = 2013-068T13:03:52 |
| S77 | 183 | Earth OCC | SATURN | 2013-068T10:13 | 09-Mar | Sat | 20 | 0 | 3 | Duration = 209 min; egress = 2013-068T13:42:30 |
| S77 | 183 | Sun OCC | RING | 2013-068T10:39 | 09-Mar | Sat | 20 | 0 | 3 | Duration = 185 min; egress = 2013-068T13:44:21 |
| S77 | 183 | 183RH (t) R4 | RHEA | 2013-068T18:17 | 09-Mar | Sat | 21 | 27 | 3 | Inbound 996.5 km flyby, v = 9.3 km/s, phase = 138 deg |
| S77 | 183 | Ring CRX | Ascending | 2013-068T18:22 | 09-Mar | Sat | 0 | 27 | 3 | r = 8.756 Rs ( 528253 km) |
| S77 | 183 | Periapse | | 2013-069T03:40 | 10-Mar | Sun | 0 | 27 | 4 | R = 8.032 Rs, lat = 33 deg, phase = 116 deg |
| S77 | 183 | XD | Segment | 2013-069T14:29 | 10-Mar | Sun | 1 | 26 | 4 | XD_183_184 (9d) |
| S77 | 183 | OTM-344 | 183RH+2d | 2013-070T21:44 | 11-Mar | Mon | 2 | 25 | 5 | D/L Start, burn ~6h later. Backup D/L 071T21:44; complexes M/M |
| S77 | 183 | Ring CRX | Descending | 2013-072T00:03 | 13-Mar | Wed | 3 | 24 | 1 | r = 20.132 Rs (1214592 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S77 | 184 | Apoapse | | 2013-075T03:13 | 16-Mar | Sat | 6 | 21 | 4 | Per = 12.0 d, inc = 57.0 deg, r = 25.405 Rs, phase = 64 deg |
| S77 | 184 | OTM-345 | ~Apo | 2013-075T21:30 | 16-Mar | Sat | 7 | 20 | 5 | D/L Start, burn ~6h later. Backup D/L 076T21:15; complexes M/M |
| S77 | 184 | MAPS | Segment | 2013-078T13:45 | 19-Mar | Tue | 10 | 17 | 3 | MAPS_184 (7d) |
| S77 | 184 | Sun OCC | SATURN | 2013-080T09:10 | 21-Mar | Thu | 12 | 16 | 4 | Duration = 184 min; egress = 2013-080T12:14:20 |
| S77 | 184 | Earth OCC | RING | 2013-080T09:12 | 21-Mar | Thu | 12 | 16 | 4 | Duration = 204 min; egress = 2013-080T12:36:23 |
| S77 | 184 | Earth OCC | SATURN | 2013-080T09:14 | 21-Mar | Thu | 12 | 16 | 4 | Duration = 212 min; egress = 2013-080T12:46:33 |
| S77 | 184 | Sun OCC | RING | 2013-080T09:38 | 21-Mar | Thu | 12 | 16 | 5 | Duration = 189 min; egress = 2013-080T12:47:00 |
| S77 | 184 | Ring CRX | Ascending | 2013-080T17:26 | 21-Mar | Thu | 12 | 15 | 5 | r = 8.762 Rs ( 528609 km) |
| S77 | 184 | Periapse | | 2013-081T02:45 | 22-Mar | Fri | 12 | 15 | 5 | R = 8.037 Rs, lat = 33 deg, phase = 116 deg |
| S77 | 184 | Ring CRX | Descending | 2013-083T23:11 | 24-Mar | Sun | 15 | 12 | 8 | r = 20.137 Rs (1214879 km) |
| S78 | 184 | S78 Begins | | 2013-085T13:15 | 26-Mar | Tue | 17 | 10 | 10 | S78 Sequence. Duration = 72 d |
| S78 | 184 | XD | Segment | 2013-085T13:15 | 26-Mar | Tue | 17 | 10 | 10 | XD_184_185 (5d) |
| S78 | 185 | Apoapse | | 2013-087T02:16 | 28-Mar | Thu | 18 | 9 | 11 | Per = 12.0 d, inc = 57.0 deg, r = 25.402 Rs, phase = 64 deg |
| S78 | 185 | RINGS | Segment | 2013-090T13:01 | 31-Mar | Sun | 22 | 5 | 15 | RINGS_185 (5d) |
| S78 | 185 | OTM-346 | 185TI-4d | 2013-091T10:16 | 01-Apr | Mon | 23 | 4 | 16 | D/L Start, burn ~6h later. Backup D/L 093T10:01; complexes C/C |
| S78 | 185 | Sun OCC | SATURN | 2013-092T08:10 | 02-Apr | Tue | 24 | 4 | 1 | Duration = 192 min; egress = 2013-092T11:22:44 |
| S78 | 185 | Earth OCC | SATURN | 2013-092T08:14 | 02-Apr | Tue | 24 | 4 | 1 | Duration = 213 min; egress = 2013-092T11:48:06 |
| S78 | 185 | Earth OCC | RING | 2013-092T08:20 | 02-Apr | Tue | 24 | 4 | 1 | Duration = 202 min; egress = 2013-092T11:42:36 |
| S78 | 185 | Sun OCC | RING | 2013-092T08:36 | 02-Apr | Tue | 24 | 4 | 1 | Duration = 192 min; egress = 2013-092T11:48:31 |
| S78 | 185 | Ring CRX | Ascending | 2013-092T16:28 | 02-Apr | Tue | 24 | 3 | 1 | r = 8.750 Rs ( 527897 km) |
| S78 | 185 | Periapse | | 2013-093T01:46 | 03-Apr | Wed | 24 | 3 | 2 | R = 8.024 Rs, lat = 33 deg, phase = 116 deg |
| S78 | 185 | TOST | Segment | 2013-095T05:01 | 05-Apr | Fri | 26 | 1 | 4 | TOST_185 (2d); T90 flyby |
| S78 | 185 | 185TI (t) T90 | TITAN | 2013-095T21:43 | 05-Apr | Fri | 27 | 48 | 4 | Outbound 1400.0 km flyby, v = 5.8 km/s, phase = 69 deg |
| S78 | 185 | Ring CRX | Descending | 2013-095T21:58 | 05-Apr | Fri | 0 | 48 | 4 | r = 20.107 Rs (1213045 km) |
| S78 | 185 | XD | Segment | 2013-097T07:01 | 07-Apr | Sun | 1 | 46 | 6 | XD_185_186 (3d) |
| S78 | 186 | Apoapse | | 2013-097T17:49 | 07-Apr | Sun | 2 | 46 | 6 | Per = 9.6 d, inc = 61.7 deg, r = 22.566 Rs, phase = 48 deg |
| S78 | 186 | OTM-347 | 185TI+3d | 2013-098T19:46 | 08-Apr | Mon | 3 | 45 | 7 | D/L Start, burn ~6h later. Backup D/L 099T19:46; complexes M/M |
| S78 | 186 | RINGS | Segment | 2013-100T04:46 | 10-Apr | Wed | 4 | 44 | 1 | RINGS_186 (5d) |
| S78 | 186 | Earth OCC | SATURN | 2013-102T03:45 | 12-Apr | Fri | 6 | 42 | 3 | Duration = 162 min; egress = 2013-102T06:28:05 |
| S78 | 186 | Sun OCC | SATURN | 2013-102T03:47 | 12-Apr | Fri | 6 | 42 | 3 | Duration = 148 min; egress = 2013-102T06:16:03 |
| S78 | 186 | 186TI (nt) | TITAN | 2013-102T03:48 | 12-Apr | Fri | 6 | 42 | 3 | Inbound 939353.8 km flyby, v = 10.1 km/s, phase = 50 deg |
| S78 | 186 | Earth OCC | RING | 2013-102T04:02 | 12-Apr | Fri | 6 | 42 | 3 | Duration = 151 min; egress = 2013-102T06:33:15 |
| S78 | 186 | Sun OCC | RING | 2013-102T04:07 | 12-Apr | Fri | 6 | 42 | 3 | Duration = 146 min; egress = 2013-102T06:34:06 |
| S78 | 186 | 186PO (nt) | POLYDEUCES | 2013-102T07:44 | 12-Apr | Fri | 6 | 41 | 3 | Inbound 115649.2 km flyby, v = 11.5 km/s, phase = 126 deg |
| S78 | 186 | Ring CRX | Ascending | 2013-102T08:52 | 12-Apr | Fri | 6 | 41 | 4 | r = 6.461 Rs ( 389812 km) |
| S78 | 186 | Periapse | | 2013-102T12:34 | 12-Apr | Fri | 7 | 41 | 4 | R = 6.243 Rs, lat = 22 deg, phase = 132 deg |
| S78 | 186 | XD | Segment | 2013-104T18:16 | 14-Apr | Sun | 9 | 39 | 6 | XD_186_187 (6d) |
| S78 | 186 | Ring CRX | Descending | 2013-105T11:28 | 15-Apr | Mon | 10 | 38 | 7 | r = 20.115 Rs (1213543 km) |
| S78 | 187 | Apoapse | | 2013-107T07:26 | 17-Apr | Wed | 11 | 36 | 8 | Per = 9.6 d, inc = 61.7 deg, r = 22.575 Rs, phase = 48 deg |
| S78 | 187 | MAPS | Segment | 2013-110T11:32 | 20-Apr | Sat | 15 | 33 | 12 | MAPS_187 (3d) |
| S78 | 187 | Earth OCC | RHEA | 2013-111T14:18 | 21-Apr | Sun | 16 | 32 | 13 | Duration = 1 min; egress = 2013-111T14:20:04 |
| S78 | 187 | Sun OCC | SATURN | 2013-111T17:28 | 21-Apr | Sun | 16 | 32 | 13 | Duration = 152 min; egress = 2013-111T20:00:34 |
| S78 | 187 | Earth OCC | SATURN | 2013-111T17:29 | 21-Apr | Sun | 16 | 32 | 13 | Duration = 158 min; egress = 2013-111T20:07:13 |
| S78 | 187 | Sun OCC | RING | 2013-111T17:47 | 21-Apr | Sun | 16 | 32 | 13 | Duration = 148 min; egress = 2013-111T20:15:36 |
| S78 | 187 | Earth OCC | RING | 2013-111T17:48 | 21-Apr | Sun | 16 | 32 | 13 | Duration = 148 min; egress = 2013-111T20:16:35 |
| S78 | 187 | Ring CRX | Ascending | 2013-111T22:34 | 21-Apr | Sun | 16 | 32 | 13 | r = 6.466 Rs ( 390103 km) |
| S78 | 187 | Periapse | | 2013-112T02:17 | 22-Apr | Mon | 16 | 32 | 13 | R = 6.247 Rs, lat = 22 deg, phase = 132 deg |
| S78 | 187 | XD | Segment | 2013-113T11:32 | 23-Apr | Tue | 18 | 30 | 15 | XD_187_188 (6d) |
| S78 | 187 | Ring CRX | Descending | 2013-115T01:12 | 25-Apr | Thu | 19 | 29 | 16 | r = 20.119 Rs (1213786 km) |
| S78 | 188 | Apoapse | | 2013-116T21:08 | 26-Apr | Fri | 21 | 27 | 18 | Per = 9.6 d, inc = 61.7 deg, r = 22.575 Rs, phase = 48 deg |
| S78 | 188 | SATURN | Segment | 2013-119T11:02 | 29-Apr | Mon | 24 | 24 | 21 | SATURN_188 (6d) |
| S78 | 188 | OTM-348 | ~Peri | 2013-120T02:02 | 30-Apr | Tue | 24 | 24 | 21 | D/L Start, burn ~6h later. Backup D/L 120T18:17; complexes G/M |
| S78 | 188 | Sun OCC | SATURN | 2013-121T07:09 | 01-May | Wed | 25 | 22 | 1 | Duration = 155 min; egress = 2013-121T09:44:46 |
| S78 | 188 | Earth OCC | SATURN | 2013-121T07:14 | 01-May | Wed | 25 | 22 | 1 | Duration = 151 min; egress = 2013-121T09:45:33 |
| S78 | 188 | Sun OCC | RING | 2013-121T07:28 | 01-May | Wed | 25 | 22 | 1 | Duration = 149 min; egress = 2013-121T09:57:21 |
| S78 | 188 | Earth OCC | RING | 2013-121T07:34 | 01-May | Wed | 25 | 22 | 1 | Duration = 145 min; egress = 2013-121T10:00:01 |
| S78 | 188 | Ring CRX | Ascending | 2013-121T12:16 | 01-May | Wed | 26 | 22 | 1 | r = 6.462 Rs ( 389872 km) |
| S78 | 188 | 188TI (nt) | TITAN | 2013-121T13:43 | 01-May | Wed | 26 | 22 | 1 | Inbound 900117.3 km flyby, v = 10.7 km/s, phase = 59 deg |
| S78 | 188 | Periapse | | 2013-121T15:59 | 01-May | Wed | 26 | 22 | 2 | R = 6.244 Rs, lat = 22 deg, phase = 132 deg |
| S78 | 188 | Ring CRX | Descending | 2013-124T14:53 | 04-May | Sat | 29 | 19 | 5 | r = 20.119 Rs (1213796 km) |
| S78 | 188 | XD | Segment | 2013-125T10:32 | 05-May | Sun | 30 | 18 | 5 | XD_188_189 (4d) |
| S78 | 189 | Apoapse | | 2013-126T10:48 | 06-May | Mon | 31 | 17 | 6 | Per = 9.6 d, inc = 61.7 deg, r = 22.576 Rs, phase = 48 deg |
| S78 | 189 | 189TI (nt) | TITAN | 2013-127T16:25 | 07-May | Tue | 32 | 16 | 8 | Inbound 908118.0 km flyby, v = 6.3 km/s, phase = 127 deg |
| S78 | 189 | RINGS | Segment | 2013-129T10:16 | 09-May | Thu | 34 | 14 | 9 | RINGS_189 (5d) |
| S78 | 189 | Sun OCC | SATURN | 2013-130T20:47 | 10-May | Fri | 35 | 13 | 11 | Duration = 158 min; egress = 2013-130T23:25:30 |
| S78 | 189 | Earth OCC | SATURN | 2013-130T20:56 | 10-May | Fri | 35 | 13 | 11 | Duration = 144 min; egress = 2013-130T23:19:42 |
| S78 | 189 | Sun OCC | RING | 2013-130T21:05 | 10-May | Fri | 35 | 13 | 11 | Duration = 150 min; egress = 2013-130T23:35:32 |
| S78 | 189 | Earth OCC | RING | 2013-130T21:17 | 10-May | Fri | 35 | 13 | 11 | Duration = 142 min; egress = 2013-130T23:39:49 |
| S78 | 189 | Ring CRX | Ascending | 2013-131T01:54 | 11-May | Sat | 35 | 13 | 11 | r = 6.459 Rs ( 389642 km) |
| S78 | 189 | Periapse | | 2013-131T05:37 | 11-May | Sat | 35 | 12 | 11 | R = 6.240 Rs, lat = 22 deg, phase = 132 deg |
| S78 | 189 | XD | Segment | 2013-134T02:16 | 14-May | Tue | 38 | 10 | 14 | XD_189_190 (4d) |
| S78 | 189 | Ring CRX | Descending | 2013-134T04:32 | 14-May | Tue | 38 | 10 | 14 | r = 20.125 Rs (1214153 km) |
| S78 | 190 | Apoapse | | 2013-136T00:30 | 16-May | Thu | 40 | 8 | 16 | Per = 9.6 d, inc = 61.7 deg, r = 22.584 Rs, phase = 48 deg |
| S78 | 190 | MAPS | Segment | 2013-138T09:31 | 18-May | Sat | 42 | 5 | 18 | MAPS_190 (5d) |
| S78 | 190 | OTM-349 | 190TI-4d | 2013-139T06:46 | 19-May | Sun | 43 | 4 | 19 | D/L Start, burn ~6h later. Backup D/L 141T06:46; complexes C/C |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S78 | 190 | Sun OCC | SATURN | 2013-140T10:31 | 20-May | Mon | 45 | 3 | 1 | Duration = 161 min; egress = 2013-140T13:12:37 |
| S78 | 190 | Earth OCC | SATURN | 2013-140T10:45 | 20-May | Mon | 45 | 3 | 1 | Duration = 134 min; egress = 2013-140T12:59:51 |
| S78 | 190 | Sun OCC | RING | 2013-140T10:48 | 20-May | Mon | 45 | 3 | 1 | Duration = 151 min; egress = 2013-140T13:20:12 * |
| S78 | 190 | Earth OCC | RING | 2013-140T11:06 | 20-May | Mon | 45 | 3 | 1 | Duration = 139 min; egress = 2013-140T13:26:01 |
| S78 | 190 | Ring CRX | Ascending | 2013-140T15:39 | 20-May | Mon | 45 | 3 | 1 | r = 6.455 Rs ( 389415 km) |
| S78 | 190 | Periapse | | 2013-140T19:22 | 20-May | Mon | 45 | 3 | 2 | R = 6.236 Rs, lat = 22 deg, phase = 132 deg |
| S78 | 190 | TOST | Segment | 2013-143T01:46 | 23-May | Thu | 47 | 1 | 4 | TOST_190 (3d); T91 flyby |
| S78 | 190 | 190TI (t) T91 | TITAN | 2013-143T17:32 | 23-May | Thu | 48 | 48 | 4 | Outbound 969.7 km flyby, v = 5.9 km/s, phase = 50 deg |
| S78 | 190 | Ring CRX | Descending | 2013-143T18:00 | 23-May | Thu | 0 | 48 | 4 | r = 20.096 Rs (1212370 km) |
| S78 | 191 | Apoapse | | 2013-146T07:38 | 26-May | Sun | 3 | 45 | 7 | Per = 12.0 d, inc = 59.4 deg, r = 23.189 Rs, phase = 63 deg |
| S78 | 191 | XD | Segment | 2013-146T09:01 | 26-May | Sun | 3 | 45 | 7 | XD_191 (3d) |
| S78 | 191 | OTM-350 | 190TI+4d | 2013-147T00:01 | 27-May | Mon | 3 | 45 | 8 | D/L Start, burn ~6h later. Backup D/L 148T00:01; complexes G/G |
| S78 | 191 | RINGS | Segment | 2013-149T15:01 | 29-May | Wed | 6 | 42 | 3 | RINGS_191 (5d) |
| S78 | 191 | Sun OCC | SATURN | 2013-151T06:00 | 31-May | Fri | 8 | 40 | 4 | Duration = 233 min; egress = 2013-151T09:54:01 |
| S78 | 191 | Sun OCC | RING | 2013-151T06:21 | 31-May | Fri | 8 | 40 | 4 | Duration = 222 min; egress = 2013-151T10:03:31 |
| S78 | 191 | Earth OCC | RING | 2013-151T07:17 | 31-May | Fri | 8 | 40 | 4 | Duration = 185 min; egress = 2013-151T10:22:17 |
| S78 | 191 | Earth OCC | SATURN | 2013-151T07:20 | 31-May | Fri | 8 | 40 | 4 | Duration = 62 min; egress = 2013-151T08:22:14 |
| S78 | 191 | 191TI (nt) | TITAN | 2013-151T13:54 | 31-May | Fri | 8 | 40 | 5 | Inbound 568244.3 km flyby, v = 7.6 km/s, phase = 27 deg |
| S78 | 191 | Ring CRX | Ascending | 2013-151T17:10 | 31-May | Fri | 8 | 40 | 5 | r = 10.980 Rs ( 662400 km) |
| S78 | 191 | Periapse | | 2013-152T07:01 | 01-Jun | Sat | 9 | 39 | 5 | R = 10.237 Rs, lat = 34 deg, phase = 117 deg |
| S78 | 191 | SATURN | Segment | 2013-154T14:45 | 03-Jun | Mon | 11 | 37 | 8 | SATURN_191 (3d) |
| S78 | 191 | Ring CRX | Descending | 2013-155T16:53 | 04-Jun | Tue | 12 | 36 | 9 | r = 20.110 Rs (1213220 km) |
| S79 | 191 | S79 Begins | | 2013-158T00:45 | 07-Jun | Fri | 14 | 34 | 11 | S79 Sequence. Duration = 68 d |
| S79 | 191 | SATURN | Segment | 2013-158T00:45 | 07-Jun | Fri | 14 | 34 | 11 | SATURN_191_192 (9d) |
| S79 | 192 | Apoapse | | 2013-158T06:29 | 07-Jun | Fri | 15 | 33 | 11 | Per = 12.0 d, inc = 59.4 deg, r = 23.192 Rs, phase = 63 deg |
| S79 | 192 | OTM-351 | ~Peri | 2013-162T15:14 | 11-Jun | Tue | 19 | 29 | 16 | D/L Start, burn ~6h later. Backup D/L 163T15:14; complexes M/M |
| S79 | 192 | Sun OCC | SATURN | 2013-163T04:56 | 12-Jun | Wed | 19 | 28 | 1 | Duration = 238 min; egress = 2013-163T08:54:03 |
| S79 | 192 | Sun OCC | RING | 2013-163T05:13 | 12-Jun | Wed | 19 | 28 | 1 | Duration = 224 min; egress = 2013-163T08:57:28 |
| S79 | 192 | Earth OCC | RING | 2013-163T06:22 | 12-Jun | Wed | 20 | 28 | 1 | Duration = 176 min; egress = 2013-163T09:18:56 |
| S79 | 192 | Ring CRX | Ascending | 2013-163T16:06 | 12-Jun | Wed | 20 | 28 | 1 | r = 10.986 Rs ( 662761 km) |
| S79 | 192 | Periapse | | 2013-164T05:58 | 13-Jun | Thu | 21 | 27 | 2 | R = 10.243 Rs, lat = 34 deg, phase = 117 deg |
| S79 | 192 | XD | Segment | 2013-166T13:59 | 15-Jun | Sat | 23 | 25 | 4 | XD_192_193 (7d) |
| S79 | 192 | Ring CRX | Descending | 2013-167T15:53 | 16-Jun | Sun | 24 | 24 | 5 | r = 20.116 Rs (1213597 km) |
| S79 | 193 | Apoapse | | 2013-170T05:34 | 19-Jun | Wed | 27 | 21 | 8 | Per = 12.0 d, inc = 59.4 deg, r = 23.201 Rs, phase = 63 deg |
| S79 | 193 | SATURN | Segment | 2013-173T13:28 | 22-Jun | Sat | 30 | 18 | 11 | SATURN_193 (6d) |
| S79 | 193 | Sun OCC | SATURN | 2013-175T04:06 | 24-Jun | Mon | 31 | 16 | 13 | Duration = 240 min; egress = 2013-175T08:06:48 |
| S79 | 193 | Sun OCC | RING | 2013-175T04:18 | 24-Jun | Mon | 31 | 16 | 13 | Duration = 226 min; egress = 2013-175T08:04:38 |
| S79 | 193 | Earth OCC | RING | 2013-175T05:37 | 24-Jun | Mon | 32 | 16 | 13 | Duration = 171 min; egress = 2013-175T08:28:08 |
| S79 | 193 | Ring CRX | Ascending | 2013-175T15:16 | 24-Jun | Mon | 32 | 16 | 13 | r = 10.989 Rs ( 662975 km) |
| S79 | 193 | Periapse | | 2013-176T05:09 | 25-Jun | Tue | 32 | 15 | 14 | R = 10.245 Rs, lat = 34 deg, phase = 117 deg |
| S79 | 193 | XD | Segment | 2013-179T06:43 | 28-Jun | Fri | 36 | 12 | 17 | XD_193_194 (6d) |
| S79 | 193 | Ring CRX | Descending | 2013-179T15:04 | 28-Jun | Fri | 36 | 12 | 17 | r = 20.115 Rs (1213517 km) |
| S79 | 194 | Apoapse | | 2013-182T04:39 | 01-Jul | Mon | 38 | 9 | 20 | Per = 12.0 d, inc = 59.4 deg, r = 23.192 Rs, phase = 63 deg |
| S79 | 194 | RINGS | Segment | 2013-185T06:12 | 04-Jul | Thu | 42 | 6 | 23 | RINGS_194 (6d) |
| S79 | 194 | Sun OCC | SATURN | 2013-187T03:09 | 06-Jul | Sat | 43 | 4 | 24 | Duration = 241 min; egress = 2013-187T07:10:54 |
| S79 | 194 | Sun OCC | RING | 2013-187T03:17 | 06-Jul | Sat | 43 | 4 | 25 | Duration = 227 min; egress = 2013-187T07:04:10 |
| S79 | 194 | Earth OCC | RING | 2013-187T04:40 | 06-Jul | Sat | 43 | 4 | 25 | Duration = 169 min; egress = 2013-187T07:29:06 |
| S79 | 194 | Ring CRX | Ascending | 2013-187T14:17 | 06-Jul | Sat | 44 | 4 | 25 | r = 10.976 Rs ( 662161 km) |
| S79 | 194 | OTM-352 | 194TI-3d | 2013-188T03:26 | 07-Jul | Sun | 44 | 3 | 26 | D/L Start, burn ~6h later. Backup D/L 189T03:26; complexes C/C |
| S79 | 194 | Periapse | | 2013-188T04:08 | 07-Jul | Sun | 44 | 3 | 0 | R = 10.231 Rs, lat = 34 deg, phase = 117 deg |
| S79 | 194 | TOST | Segment | 2013-190T22:26 | 09-Jul | Tue | 47 | 1 | 3 | TOST_194 (3d); T92 flyby |
| S79 | 194 | 194TI (t) T92 | TITAN | 2013-191T13:21 | 10-Jul | Wed | 48 | 16 | 3 | Outbound 963.5 km flyby, v = 5.9 km/s, phase = 46 deg |
| S79 | 194 | Ring CRX | Descending | 2013-191T13:44 | 10-Jul | Wed | 0 | 16 | 3 | r = 20.083 Rs (1211594 km) |
| S79 | 194 | SATURN | Segment | 2013-194T05:41 | 13-Jul | Sat | 3 | 13 | 6 | SATURN_194_195 (7d) |
| S79 | 194 | OTM-353 | 194TI+4d | 2013-194T20:40 | 13-Jul | Sat | 3 | 13 | 7 | D/L Start, burn ~6h later. Backup D/L 195T20:40; complexes G/G |
| S79 | 195 | Apoapse | | 2013-196T06:15 | 15-Jul | Mon | 5 | 11 | 1 | Per = 16.0 d, inc = 56.7 deg, r = 25.138 Rs, phase = 100 deg |
| S79 | 195 | OTM-354 | ~Apo | 2013-199T20:25 | 18-Jul | Thu | 8 | 8 | 5 | D/L Start, burn ~6h later. Backup D/L 200T12:40; complexes G/M |
| S79 | 195 | Sun OCC | RING | 2013-200T21:04 | 19-Jul | Fri | 9 | 7 | 1 | Duration = 322 min; egress = 2013-201T02:25:35 |
| S79 | 195 | RINGS | Segment | 2013-200T21:10 | 19-Jul | Fri | 9 | 7 | 1 | RINGS_195 (1d) |
| S79 | 195 | Sun OCC | SATURN | 2013-200T22:10 | 19-Jul | Fri | 9 | 7 | 1 | Duration = 289 min; egress = 2013-201T02:59:04 |
| S79 | 195 | Earth OCC | RING | 2013-201T00:07 | 20-Jul | Sat | 9 | 6 | 1 | Duration = 204 min; egress = 2013-201T03:31:02 |
| S79 | 195 | 195TI (nt) | TITAN | 2013-201T02:46 | 20-Jul | Sat | 10 | 6 | 1 | Inbound 889768.8 km flyby, v = 6.2 km/s, phase = 111 deg |
| S79 | 195 | SATURN | Segment | 2013-201T21:40 | 20-Jul | Sat | 10 | 6 | 2 | SATURN_195 (5d) |
| S79 | 195 | Ring CRX | Ascending | 2013-201T22:04 | 20-Jul | Sat | 10 | 6 | 2 | r = 18.174 Rs (1096450 km) |
| S79 | 195 | OTM-355 | 195TI-3d | 2013-204T02:24 | 23-Jul | Tue | 13 | 3 | 4 | D/L Start, burn ~6h later. Backup D/L 205T02:24; complexes C/C |
| S79 | 195 | Periapse | | 2013-204T05:40 | 23-Jul | Tue | 13 | 3 | 0 | R = 15.369 Rs, lat = 55 deg, phase = 80 deg |
| S79 | 195 | TOST | Segment | 2013-206T12:39 | 25-Jul | Thu | 15 | 1 | 2 | TOST_195 (3d); T93 flyby |
| S79 | 195 | 195TI (t) T93 | TITAN | 2013-207T11:56 | 26-Jul | Fri | 16 | 48 | 3 | Outbound 1399.4 km flyby, v = 5.8 km/s, phase = 58 deg |
| S79 | 195 | Ring CRX | Descending | 2013-207T12:16 | 26-Jul | Fri | 0 | 48 | 3 | r = 20.066 Rs (1210562 km) |
| S79 | 195 | SATURN | Segment | 2013-209T11:09 | 28-Jul | Sun | 2 | 46 | 5 | SATURN_195_196 (17d) |
| S79 | 195 | OTM-356 | 195TI+4d | 2013-211T01:53 | 30-Jul | Tue | 4 | 44 | 7 | D/L Start, burn ~6h later. Backup D/L 212T01:53; complexes C/C |
| S79 | 196 | Apoapse | | 2013-217T16:37 | 05-Aug | Mon | 10 | 38 | 7 | Per = 23.9 d, inc = 53.4 deg, r = 34.604 Rs, phase = 152 deg |
| S79 | 196 | OTM-357 | ~Apo | 2013-219T01:22 | 07-Aug | Wed | 12 | 36 | 8 | D/L Start, burn ~6h later. Backup D/L 220T01:22; complexes C/C |
| S79 | 196 | Earth OCC | RING | 2013-220T16:09 | 08-Aug | Thu | 13 | 35 | 2 | Duration = 371 min; egress = 2013-220T22:20:54 |
| S79 | 196 | Ring CRX | Ascending | 2013-223T00:05 | 11-Aug | Sun | 16 | 32 | 4 | r = 30.030 Rs (1811735 km) |
| S80 | 196 | S80 Begins | | 2013-226T09:51 | 14-Aug | Wed | 19 | 29 | 7 | S80 Sequence. Duration = 70 d |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S80 | 196 | XD | Segment | 2013-226T09:51 | 14-Aug | Wed | 19 | 29 | 7 | XD_196_197 (28d) |
| S80 | 196 | Periapse | | 2013-229T15:32 | 17-Aug | Sat | 22 | 26 | 11 | R = 18.472 Rs, lat = 38 deg, phase = 28 deg |
| S80 | 196 | Ring CRX | Descending | 2013-231T09:57 | 19-Aug | Mon | 24 | 24 | 12 | r = 20.105 Rs (1212906 km) |
| S80 | 197 | Apoapse | | 2013-241T14:47 | 29-Aug | Thu | 34 | 14 | 23 | Per = 23.9 d, inc = 53.4 deg, r = 34.613 Rs, phase = 152 deg |
| S80 | 197 | Earth OCC | SATURN | 2013-244T10:50 | 01-Sep | Sun | 37 | 11 | 25 | Duration = 494 min; egress = 2013-244T19:03:45 |
| S80 | 197 | Earth OCC | RING | 2013-244T11:37 | 01-Sep | Sun | 37 | 11 | 25 | Duration = 484 min; egress = 2013-244T19:40:41 |
| S80 | 197 | Ring CRX | Ascending | 2013-246T22:13 | 03-Sep | Tue | 39 | 8 | 28 | r = 30.060 Rs (1813520 km) |
| S80 | 197 | 197TI (nt) | TITAN | 2013-247T21:25 | 04-Sep | Wed | 40 | 7 | 29 | Inbound 531190.5 km flyby, v = 4.7 km/s, phase = 126 deg |
| S80 | 197 | OTM-358 | 197TI-3d | 2013-251T23:18 | 08-Sep | Sun | 44 | 3 | 33 | D/L Start, burn ~6h later. Backup D/L 252T23:18; complexes C/C |
| S80 | 197 | Periapse | | 2013-253T13:46 | 10-Sep | Tue | 46 | 2 | 2 | R = 18.468 Rs, lat = 37 deg, phase = 28 deg |
| S80 | 197 | TOST | Segment | 2013-254T08:03 | 11-Sep | Wed | 47 | 1 | 2 | TOST_197 (3d); T94 flyby |
| S80 | 197 | 197TI (t) T94 | TITAN | 2013-255T07:43 | 12-Sep | Thu | 48 | 32 | 3 | Outbound 1396.8 km flyby, v = 5.8 km/s, phase = 21 deg |
| S80 | 197 | Ring CRX | Descending | 2013-255T08:00 | 12-Sep | Thu | 0 | 32 | 3 | r = 20.087 Rs (1211869 km) |
| S80 | 197 | XD | Segment | 2013-257T08:03 | 14-Sep | Sat | 2 | 30 | 5 | XD_197_198 (28d) |
| S80 | 197 | OTM-359 | 197TI+4d | 2013-258T22:47 | 15-Sep | Sun | 4 | 28 | 7 | D/L Start, burn ~6h later. Backup D/L 259T22:47; complexes C/C |
| S80 | 198 | Apoapse | | 2013-270T15:02 | 27-Sep | Fri | 15 | 17 | 12 | Per = 31.9 d, inc = 51.9 deg, r = 44.473 Rs, phase = 173 deg |
| S80 | 198 | OTM-360 | ~Apo | 2013-272T22:01 | 29-Sep | Sun | 18 | 14 | 14 | D/L Start, burn ~6h later. Backup D/L 273T22:01; complexes C/C |
| S80 | 198 | Ring CRX | Ascending | 2013-273T19:22 | 30-Sep | Mon | 18 | 13 | 1 | r = 43.208 Rs (2606724 km) |
| S80 | 198 | OTM-361 | 198TI-3d | 2013-283T21:15 | 10-Oct | Thu | 29 | 3 | 11 | D/L Start, burn ~6h later. Backup D/L 284T21:15; complexes C/C |
| S80 | 198 | TOST | Segment | 2013-285T06:15 | 12-Oct | Sat | 30 | 2 | 1 | TOST_198 (4d); T95 flyby |
| S80 | 198 | Periapse | | 2013-286T13:40 | 13-Oct | Sun | 31 | 1 | 3 | R = 19.819 Rs, lat = 14 deg, phase = 7 deg |
| S80 | 198 | 198TI (t) T95 | TITAN | 2013-287T04:56 | 14-Oct | Mon | 32 | 48 | 3 | Outbound 960.8 km flyby, v = 5.9 km/s, phase = 25 deg |
| S80 | 198 | Ring CRX | Descending | 2013-287T05:10 | 14-Oct | Mon | 0 | 48 | 3 | r = 20.069 Rs (1210774 km) |
| S80 | 198 | XD | Segment | 2013-289T16:00 | 16-Oct | Wed | 2 | 45 | 6 | XD_198 (6d) |
| S80 | 198 | OTM-362 | 198TI+3d | 2013-290T07:15 | 17-Oct | Thu | 3 | 45 | 6 | D/L Start, burn ~6h later. Backup D/L 291T07:15; complexes M/M |
| S81 | 198 | S81 Begins | | 2013-295T23:15 | 22-Oct | Tue | 9 | 39 | 6 | S81 Sequence. Duration = 66 d |
| S81 | 198 | XD | Segment | 2013-295T23:15 | 22-Oct | Tue | 9 | 39 | 6 | XD_198_199 (37d) |
| S81 | 198 | OTM-363 | ~Apo | 2013-306T06:15 | 02-Nov | Sat | 19 | 29 | 16 | D/L Start, burn ~6h later. Backup D/L 307T06:14; complexes M/M |
| S81 | 198 | SEP = 3.0 deg | Conjunction | 2013-308T03:22 | 04-Nov | Mon | 21 | 27 | 2 | Commanding must not be required below 3.0 deg |
| S81 | 198 | Ring CRX | Ascending | 2013-309T19:01 | 05-Nov | Tue | 23 | 25 | 4 | r = 64.017 Rs (3862157 km) |
| S81 | 199 | Apoapse | | 2013-311T06:30 | 07-Nov | Thu | 24 | 24 | 5 | Per = 47.9 d, inc = 49.7 deg, r = 64.197 Rs, phase = 155 deg |
| S81 | 199 | SEP = 3.0 deg | Conjunction | 2013-312T20:14 | 08-Nov | Fri | 26 | 22 | 7 | Commanding must not be required below 3.0 deg |
| S81 | 199 | OTM-364 | 199TI-3d | 2013-331T18:45 | 27-Nov | Wed | 45 | 3 | 26 | D/L Start, burn ~6h later. Backup D/L 332T18:45; complexes C/C |
| S81 | 199 | TOST | Segment | 2013-333T03:45 | 29-Nov | Fri | 46 | 2 | 1 | TOST_199 (3d); T96 flyby |
| S81 | 199 | 199TI (t) T96 | TITAN | 2013-335T00:41 | 01-Dec | Sun | 48 | 32 | 3 | Inbound 1400.0 km flyby, v = 5.8 km/s, phase = 50 deg |
| S81 | 199 | Ring CRX | Descending | 2013-335T00:51 | 01-Dec | Sun | 0 | 32 | 3 | r = 20.064 Rs (1210433 km) |
| S81 | 199 | Periapse | | 2013-335T22:43 | 01-Dec | Sun | 1 | 31 | 4 | R = 19.523 Rs, lat = -19 deg, phase = 46 deg |
| S81 | 199 | XD | Segment | 2013-336T07:15 | 02-Dec | Mon | 1 | 31 | 5 | XD_199_200 (26d) |
| S81 | 199 | OTM-365 | 199TI+4d | 2013-338T12:01 | 04-Dec | Wed | 3 | 28 | 7 | D/L Start, burn ~6h later. Backup D/L 339T11:46; complexes G/G |
| S81 | 199 | Ring CRX | Ascending | 2013-347T08:41 | 13-Dec | Fri | 12 | 20 | 9 | r = 42.176 Rs (2544498 km) |
| S81 | 199 | OTM-366 | ~Apo | 2013-351T17:32 | 17-Dec | Tue | 17 | 15 | 13 | D/L Start, burn ~6h later. Backup D/L 352T17:32; complexes C/C |
| S81 | 200 | Apoapse | | 2013-351T21:23 | 17-Dec | Tue | 17 | 15 | 0 | Per = 31.9 d, inc = 51.3 deg, r = 44.774 Rs, phase = 134 deg |
| S82 | 200 | S82 Begins | | 2013-362T01:47 | 28-Dec | Sat | 27 | 5 | 10 | S82 Sequence. Duration = 76 d |
| S82 | 200 | XD | Segment | 2013-362T01:47 | 28-Dec | Sat | 27 | 5 | 10 | XD_200 (3d) |
| S82 | 200 | OTM-367 | 200TI-3d | 2013-363T16:48 | 29-Dec | Sun | 29 | 3 | 12 | D/L Start, burn ~6h later. Backup D/L 364T16:48; complexes C/C |
| S82 | 200 | TOST | Segment | 2013-365T01:48 | 31-Dec | Tue | 30 | 2 | 1 | TOST_200 (3d); T97 flyby |
| S82 | 200 | 200TI (t) T97 | TITAN | 2014-001T21:59 | 01-Jan | Wed | 32 | 32 | 3 | Inbound 1399.9 km flyby, v = 5.8 km/s, phase = 35 deg |
| S82 | 200 | Ring CRX | Descending | 2014-001T22:10 | 01-Jan | Wed | 0 | 32 | 3 | r = 20.064 Rs (1210451 km) |
| S82 | 200 | XD | Segment | 2014-003T05:48 | 03-Jan | Fri | 1 | 31 | 5 | XD_200_201 (29d) |
| S82 | 200 | Periapse | | 2014-003T11:33 | 03-Jan | Fri | 2 | 30 | 5 | R = 18.175 Rs, lat = -34 deg, phase = 66 deg |
| S82 | 200 | OTM-368 | 200TI+4d | 2014-005T10:03 | 05-Jan | Sun | 4 | 28 | 7 | D/L Start, burn ~6h later. Backup D/L 006T10:03; complexes G/G |
| S82 | 200 | 200TI (nt) | TITAN | 2014-009T10:01 | 09-Jan | Thu | 8 | 24 | 4 | Outbound 810262.5 km flyby, v = 4.3 km/s, phase = 169 deg |
| S82 | 200 | Ring CRX | Ascending | 2014-011T07:03 | 11-Jan | Sat | 9 | 23 | 6 | r = 37.258 Rs (2247773 km) |
| S82 | 201 | Apoapse | | 2014-019T10:10 | 19-Jan | Sun | 18 | 14 | 14 | Per = 31.9 d, inc = 50.1 deg, r = 46.121 Rs, phase = 114 deg |
| S82 | 201 | OTM-369 | ~Apo | 2014-025T08:51 | 25-Jan | Sat | 23 | 8 | 20 | D/L Start, burn ~6h later. Backup D/L 026T08:51; complexes G/G |
| S82 | 201 | OTM-370 | 201TI-3d | 2014-030T14:51 | 30-Jan | Thu | 29 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 031T14:51; complexes C/C |
| S82 | 201 | TOST | Segment | 2014-031T23:51 | 31-Jan | Fri | 30 | 2 | 1 | TOST_201 (3d); T98 flyby |
| S82 | 201 | 201TI (t) T98 | TITAN | 2014-033T19:12 | 02-Feb | Sun | 32 | 32 | 3 | Inbound 1235.5 km flyby, v = 5.9 km/s, phase = 44 deg |
| S82 | 201 | Ring CRX | Descending | 2014-033T19:21 | 02-Feb | Sun | 0 | 32 | 3 | r = 20.051 Rs (1209668 km) |
| S82 | 201 | RINGS | Segment | 2014-035T03:52 | 04-Feb | Tue | 1 | 31 | 5 | RINGS_201 (3d) |
| S82 | 201 | Periapse | | 2014-035T18:12 | 04-Feb | Tue | 2 | 30 | 5 | R = 16.243 Rs, lat = -42 deg, phase = 83 deg |
| S82 | 201 | OTM-371 | 201TI+3d | 2014-036T08:07 | 05-Feb | Wed | 3 | 29 | 6 | D/L Start, burn ~6h later. Backup D/L 037T08:07; complexes G/G |
| S82 | 201 | XD | Segment | 2014-037T17:07 | 06-Feb | Thu | 4 | 28 | 1 | XD_201_202 (27d) |
| S82 | 201 | Ring CRX | Ascending | 2014-040T19:01 | 09-Feb | Sun | 7 | 25 | 4 | r = 30.797 Rs (1858002 km) |
| S82 | 201 | 201TI (nt) | TITAN | 2014-041T13:04 | 10-Feb | Mon | 8 | 24 | 5 | Outbound 887458.0 km flyby, v = 4.1 km/s, phase = 134 deg |
| S82 | 201 | OTM-372 | ~Apo | 2014-048T07:24 | 17-Feb | Mon | 15 | 17 | 12 | D/L Start, burn ~6h later. Backup D/L 049T07:24; complexes G/G |
| S82 | 202 | Apoapse | | 2014-051T16:45 | 20-Feb | Thu | 18 | 14 | 3 | Per = 31.9 d, inc = 48.1 deg, r = 48.049 Rs, phase = 97 deg |
| S82 | 202 | OTM-373 | 202TI-3d | 2014-062T12:56 | 03-Mar | Mon | 29 | 3 | 14 | D/L Start, burn ~6h later. Backup D/L 063T12:56; complexes C/C |
| S82 | 202 | TOST | Segment | 2014-064T21:56 | 05-Mar | Wed | 31 | 1 | 2 | TOST_202 (2d); T99 flyby |
| S82 | 202 | 202TI (t) T99 | TITAN | 2014-065T16:26 | 06-Mar | Thu | 32 | 32 | 3 | Inbound 1499.7 km flyby, v = 5.8 km/s, phase = 53 deg |
| S82 | 202 | Ring CRX | Descending | 2014-065T16:34 | 06-Mar | Thu | 0 | 32 | 3 | r = 20.047 Rs (1209433 km) |
| S82 | 202 | RINGS | Segment | 2014-066T21:41 | 07-Mar | Fri | 1 | 31 | 4 | RINGS_202 (3d) |
| S82 | 202 | Periapse | | 2014-067T19:25 | 08-Mar | Sat | 2 | 30 | 5 | R = 14.240 Rs, lat = -44 deg, phase = 96 deg |
| S82 | 202 | OTM-374 | 202TI+4d | 2014-069T06:12 | 10-Mar | Mon | 4 | 28 | 7 | D/L Start, burn ~6h later. Backup D/L 070T06:12; complexes G/G |
| S82 | 202 | SATURN | Segment | 2014-069T15:12 | 10-Mar | Mon | 4 | 28 | 0 | SATURN_202 (3d) |
| S82 | 202 | Ring CRX | Ascending | 2014-071T01:25 | 12-Mar | Wed | 5 | 27 | 2 | r = 24.814 Rs (1497007 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S83 | 202 | S83 Begins | | 2014-072T21:12 | 13-Mar | Thu | 7 | 25 | 4 | S83 Sequence. Duration = 72 d |
| S83 | 202 | SATURN | Segment | 2014-072T21:12 | 13-Mar | Thu | 7 | 25 | 4 | SATURN_202_203 (24d) |
| S83 | 202 | OTM-375 | ~Apo | 2014-079T05:28 | 20-Mar | Thu | 14 | 18 | 10 | D/L Start, burn ~6h later. Backup D/L 080T05:28; complexes G/G |
| S83 | 203 | Apoapse | | 2014-083T18:01 | 24-Mar | Mon | 18 | 14 | 5 | Per = 31.9 d, inc = 45.5 deg, r = 50.059 Rs, phase = 84 deg |
| S83 | 203 | OTM-376 | 203TI-3d | 2014-094T04:29 | 04-Apr | Fri | 29 | 3 | 15 | D/L Start, burn ~6h later. Backup D/L 095T04:30; complexes G/G |
| S83 | 203 | TOST | Segment | 2014-096T19:45 | 06-Apr | Sun | 31 | 1 | 3 | TOST_203 (2d); T100 flyby |
| S83 | 203 | 203TI (t) T100 | TITAN | 2014-097T13:41 | 07-Apr | Mon | 32 | 40 | 3 | Inbound 963.3 km flyby, v = 5.9 km/s, phase = 60 deg |
| S83 | 203 | Ring CRX | Descending | 2014-097T13:49 | 07-Apr | Mon | 0 | 40 | 3 | r = 20.025 Rs (1208100 km) |
| S83 | 203 | SATURN | Segment | 2014-098T23:15 | 08-Apr | Tue | 1 | 39 | 5 | SATURN_203 (3d) |
| S83 | 203 | Periapse | | 2014-099T16:06 | 09-Apr | Wed | 2 | 38 | 5 | R = 12.373 Rs, lat = -41 deg, phase = 104 deg |
| S83 | 203 | OTM-377 | 203TI+4d | 2014-101T04:00 | 11-Apr | Fri | 4 | 37 | 7 | D/L Start, burn ~6h later. Backup D/L 102T04:00; complexes G/G |
| S83 | 203 | XD | Segment | 2014-101T13:00 | 11-Apr | Fri | 4 | 36 | 0 | XD_203_204 (32d) |
| S83 | 203 | Ring CRX | Ascending | 2014-101T21:25 | 11-Apr | Fri | 4 | 36 | 1 | r = 20.663 Rs (1246599 km) |
| S83 | 203 | OTM-378 | ~Apo | 2014-114T03:01 | 24-Apr | Thu | 17 | 24 | 13 | D/L Start, burn ~6h later. Backup D/L 115T03:01; complexes G/G |
| S83 | 204 | Apoapse | | 2014-117T13:47 | 27-Apr | Sun | 20 | 20 | 3 | Per = 35.8 d, inc = 40.7 deg, r = 57.090 Rs, phase = 77 deg |
| S83 | 204 | Ring CRX | Descending | 2014-133T09:11 | 13-May | Tue | 36 | 4 | 19 | r = 20.019 Rs (1207717 km) |
| S83 | 204 | MAPS | Segment | 2014-133T10:46 | 13-May | Tue | 36 | 4 | 19 | MAPS_204A (3d) |
| S83 | 204 | OTM-379 | 204TI-3d | 2014-134T01:46 | 14-May | Wed | 37 | 4 | 20 | D/L Start, burn ~6h later. Backup D/L 135T01:31; complexes G/G |
| S83 | 204 | Periapse | | 2014-135T11:29 | 15-May | Thu | 38 | 2 | 1 | R = 12.375 Rs, lat = -41 deg, phase = 103 deg |
| S83 | 204 | TOST | Segment | 2014-136T17:01 | 16-May | Fri | 39 | 1 | 3 | TOST_204 (3d); T101 flyby |
| S83 | 204 | Earth OCC | TITAN | 2014-137T16:10 | 17-May | Sat | 40 | 0 | 4 | Duration = 16 min; egress = 2014-137T16:26:38 |
| S83 | 204 | Sun OCC | TITAN | 2014-137T16:10 | 17-May | Sat | 40 | 0 | 4 | Duration = 16 min; egress = 2014-137T16:26:26 |
| S83 | 204 | 204TI (t) T101 | TITAN | 2014-137T16:12 | 17-May | Sat | 40 | 32 | 4 | Outbound 2991.7 km flyby, v = 5.7 km/s, phase = 158 deg |
| S83 | 204 | Ring CRX | Ascending | 2014-137T16:44 | 17-May | Sat | 0 | 32 | 4 | r = 20.651 Rs (1245852 km) |
| S83 | 204 | MAPS | Segment | 2014-139T16:46 | 19-May | Mon | 2 | 30 | 6 | MAPS_204B (5d) |
| S83 | 204 | OTM-380 | 204TI+4d | 2014-141T01:16 | 21-May | Wed | 3 | 29 | 7 | D/L Start, burn ~6h later. Backup D/L 142T01:16; complexes G/G |
| S84 | 204 | MAPS | Segment | 2014-144T10:01 | 24-May | Sat | 7 | 25 | 3 | MAPS_204_205 (24d) |
| S84 | 204 | S84 Begins | | 2014-144T10:01 | 24-May | Sat | 7 | 25 | 3 | S84 Sequence. Duration = 68 d |
| S84 | 205 | Apoapse | | 2014-151T08:36 | 31-May | Sat | 14 | 18 | 10 | Per = 31.9 d, inc = 44.3 deg, r = 50.831 Rs, phase = 72 deg |
| S84 | 205 | OTM-381 | ~Apo | 2014-154T00:15 | 03-Jun | Tue | 16 | 16 | 13 | D/L Start, burn ~6h later. Backup D/L 155T00:15; complexes G/G |
| S84 | 205 | Ring CRX | Descending | 2014-164T17:27 | 13-Jun | Fri | 27 | 5 | 11 | r = 21.972 Rs (1325591 km) |
| S84 | 205 | OTM-382 | 205TI-3d | 2014-166T05:44 | 15-Jun | Sun | 29 | 3 | 12 | D/L Start, burn ~6h later. Backup D/L 167T05:44; complexes C/C |
| S84 | 205 | Periapse | | 2014-167T07:14 | 16-Jun | Mon | 30 | 2 | 1 | R = 13.471 Rs, lat = -44 deg, phase = 108 deg |
| S84 | 205 | TOST | Segment | 2014-168T14:44 | 17-Jun | Tue | 31 | 1 | 2 | TOST_205 (2d); T102 flyby |
| S84 | 205 | Sun OCC | TITAN | 2014-169T13:24 | 18-Jun | Wed | 32 | 0 | 3 | Duration = 17 min; egress = 2014-169T13:41:30 |
| S84 | 205 | Earth OCC | TITAN | 2014-169T13:25 | 18-Jun | Wed | 32 | 0 | 3 | Duration = 17 min; egress = 2014-169T13:42:21 |
| S84 | 205 | 205TI (t) T102 | TITAN | 2014-169T13:28 | 18-Jun | Wed | 32 | 32 | 3 | Outbound 3658.6 km flyby, v = 5.6 km/s, phase = 165 deg |
| S84 | 205 | Ring CRX | Ascending | 2014-169T13:59 | 18-Jun | Wed | 0 | 32 | 3 | r = 20.649 Rs (1245770 km) |
| S84 | 205 | XD | Segment | 2014-170T14:29 | 19-Jun | Thu | 1 | 31 | 4 | XD_205_206 (27d) |
| S84 | 205 | OTM-383 | 205TI+4d | 2014-172T22:59 | 21-Jun | Sat | 3 | 28 | 7 | D/L Start, burn ~6h later. Backup D/L 173T22:59; complexes G/G |
| S84 | 206 | Apoapse | | 2014-183T06:52 | 02-Jul | Wed | 14 | 18 | 10 | Per = 31.9 d, inc = 46.5 deg, r = 49.378 Rs, phase = 64 deg |
| S84 | 206 | OTM-384 | ~Apo | 2014-185T21:58 | 04-Jul | Fri | 16 | 16 | 13 | D/L Start, burn ~6h later. Backup D/L 186T21:58; complexes G/G |
| S84 | 206 | Ring CRX | Descending | 2014-195T17:17 | 14-Jul | Mon | 26 | 6 | 10 | r = 25.720 Rs (1551704 km) |
| S84 | 206 | RINGS | Segment | 2014-197T12:41 | 16-Jul | Wed | 28 | 4 | 12 | RINGS_206 (3d) |
| S84 | 206 | OTM-385 | 206TI-3d | 2014-198T03:40 | 17-Jul | Thu | 29 | 3 | 12 | D/L Start, burn ~6h later. Backup D/L 199T03:40; complexes C/C |
| S84 | 206 | Periapse | | 2014-199T05:26 | 18-Jul | Fri | 30 | 2 | 1 | R = 14.923 Rs, lat = -45 deg, phase = 116 deg |
| S84 | 206 | TOST | Segment | 2014-200T12:26 | 19-Jul | Sat | 31 | 1 | 2 | TOST_206 (4d); T103 flyby |
| S84 | 206 | Sun OCC | TITAN | 2014-201T10:36 | 20-Jul | Sun | 32 | 0 | 3 | Duration = 17 min; egress = 2014-201T10:52:45 |
| S84 | 206 | Earth OCC | TITAN | 2014-201T10:37 | 20-Jul | Sun | 32 | 0 | 3 | Duration = 17 min; egress = 2014-201T10:54:10 |
| S84 | 206 | 206TI (t) T103 | TITAN | 2014-201T10:40 | 20-Jul | Sun | 32 | 32 | 3 | Outbound 5103.2 km flyby, v = 5.6 km/s, phase = 171 deg |
| S84 | 206 | Ring CRX | Ascending | 2014-201T11:11 | 20-Jul | Sun | 0 | 32 | 3 | r = 20.664 Rs (1246660 km) |
| S84 | 206 | XD | Segment | 2014-204T05:40 | 23-Jul | Wed | 3 | 29 | 6 | XD_206 (8d) |
| S84 | 206 | OTM-386 | 206TI+4d | 2014-204T20:40 | 23-Jul | Wed | 3 | 28 | 7 | D/L Start, burn ~6h later. Backup D/L 205T20:40; complexes G/G |
| S85 | 206 | S85 Begins | | 2014-212T05:09 | 31-Jul | Thu | 11 | 21 | 7 | S85 Sequence. Duration = 67 d |
| S85 | 206 | XD | Segment | 2014-212T05:09 | 31-Jul | Thu | 11 | 21 | 7 | XD_206_207 (17d) |
| S85 | 207 | Apoapse | | 2014-215T06:57 | 03-Aug | Sun | 14 | 18 | 10 | Per = 31.9 d, inc = 48.0 deg, r = 48.278 Rs, phase = 56 deg |
| S85 | 207 | OTM-387 | ~Apo | 2014-221T02:08 | 09-Aug | Sat | 20 | 12 | 16 | D/L Start, burn ~6h later. Backup D/L 222T02:08; complexes C/C |
| S85 | 207 | 207TI (nt) | TITAN | 2014-225T12:08 | 13-Aug | Wed | 24 | 8 | 4 | Inbound 958957.8 km flyby, v = 4.2 km/s, phase = 34 deg |
| S85 | 207 | Ring CRX | Descending | 2014-226T18:35 | 14-Aug | Thu | 25 | 7 | 6 | r = 28.976 Rs (1748151 km) |
| S85 | 207 | SATURN | Segment | 2014-229T10:37 | 17-Aug | Sun | 28 | 4 | 8 | SATURN_207 (3d) |
| S85 | 207 | OTM-388 | 207TI-3d | 2014-230T01:37 | 18-Aug | Mon | 29 | 3 | 9 | D/L Start, burn ~6h later. Backup D/L 231T01:37; complexes C/C |
| S85 | 207 | Periapse | | 2014-231T05:47 | 19-Aug | Tue | 30 | 2 | 1 | R = 15.942 Rs, lat = -44 deg, phase = 124 deg |
| S85 | 207 | TOST | Segment | 2014-232T10:21 | 20-Aug | Wed | 31 | 1 | 2 | TOST_207 (2d); T104 flyby |
| S85 | 207 | 207TI (t) T104 | TITAN | 2014-233T08:09 | 21-Aug | Thu | 32 | 32 | 3 | Outbound 964.0 km flyby, v = 5.8 km/s, phase = 12 deg |
| S85 | 207 | Ring CRX | Ascending | 2014-233T08:17 | 21-Aug | Thu | 0 | 32 | 3 | r = 20.455 Rs (1234035 km) |
| S85 | 207 | SATURN | Segment | 2014-234T13:21 | 22-Aug | Fri | 1 | 31 | 4 | SATURN_207_208 (27d) |
| S85 | 207 | OTM-389 | 207TI+4d | 2014-237T01:06 | 25-Aug | Mon | 4 | 28 | 7 | D/L Start, burn ~6h later. Backup D/L 238T01:06; complexes C/C |
| S85 | 208 | Apoapse | | 2014-247T01:17 | 04-Sep | Thu | 14 | 18 | 10 | Per = 31.9 d, inc = 44.6 deg, r = 50.808 Rs, phase = 73 deg |
| S85 | 208 | OTM-390 | ~Apo | 2014-250T00:19 | 07-Sep | Sun | 17 | 15 | 13 | D/L Start, burn ~6h later. Backup D/L 251T00:19; complexes C/C |
| S85 | 208 | Ring CRX | Descending | 2014-260T08:31 | 17-Sep | Wed | 27 | 5 | 10 | r = 22.265 Rs (1343265 km) |
| S85 | 208 | RINGS | Segment | 2014-261T08:18 | 18-Sep | Thu | 28 | 4 | 11 | RINGS_208 (3d) |
| S85 | 208 | OTM-391 | 208TI-3d | 2014-261T23:33 | 18-Sep | Thu | 29 | 3 | 12 | D/L Start, burn ~6h later. Backup D/L 262T23:33; complexes C/C |
| S85 | 208 | Periapse | | 2014-262T23:53 | 19-Sep | Fri | 30 | 2 | 1 | R = 13.484 Rs, lat = -44 deg, phase = 107 deg |
| S85 | 208 | TOST | Segment | 2014-264T08:17 | 21-Sep | Sun | 31 | 1 | 2 | TOST_208 (4d); T105 flyby |
| S85 | 208 | 208TI (t) T105 | TITAN | 2014-265T05:23 | 22-Sep | Mon | 32 | 32 | 3 | Outbound 1401.3 km flyby, v = 5.8 km/s, phase = 21 deg |
| S85 | 208 | Ring CRX | Ascending | 2014-265T05:29 | 22-Sep | Mon | 0 | 32 | 3 | r = 20.455 Rs (1234026 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S85 | 208 | XD | Segment | 2014-268T08:02 | 25-Sep | Thu | 3 | 29 | 6 | XD_208_209 (11d) |
| S85 | 208 | OTM-392 | 208TI+4d | 2014-268T23:02 | 25-Sep | Thu | 4 | 28 | 7 | D/L Start, burn ~6h later. Backup D/L 269T23:02; complexes C/C |
| S85 | 209 | Apoapse | | 2014-278T22:42 | 05-Oct | Sun | 14 | 18 | 10 | Per = 31.9 d, inc = 40.3 deg, r = 52.918 Rs, phase = 86 deg |
| S86 | 209 | S86 Begins | | 2014-279T01:01 | 06-Oct | Mon | 14 | 18 | 10 | S86 Sequence. Duration = 72 d |
| S86 | 209 | XD | Segment | 2014-279T01:01 | 06-Oct | Mon | 14 | 18 | 10 | XD_209 (14d) |
| S86 | 209 | OTM-393 | ~Apo | 2014-281T22:16 | 08-Oct | Wed | 17 | 15 | 13 | D/L Start, burn ~6h later. Backup D/L 282T22:16; complexes C/C |
| S86 | 209 | Ring CRX | Descending | 2014-293T06:09 | 20-Oct | Mon | 28 | 4 | 11 | r = 17.284 Rs (1042743 km) |
| S86 | 209 | SATURN | Segment | 2014-293T06:30 | 20-Oct | Mon | 28 | 4 | 11 | SATURN_209 (3d) |
| S86 | 209 | OTM-394 | 209TI-3d | 2014-293T21:30 | 20-Oct | Mon | 29 | 3 | 12 | D/L Start, burn ~6h later. Backup D/L 294T21:30; complexes C/C |
| S86 | 209 | Periapse | | 2014-294T21:22 | 21-Oct | Tue | 30 | 2 | 1 | R = 11.389 Rs, lat = -40 deg, phase = 94 deg |
| S86 | 209 | TOST | Segment | 2014-296T06:15 | 23-Oct | Thu | 31 | 1 | 2 | TOST_209 (3d); T106 flyby |
| S86 | 209 | 209TI (t) T106 | TITAN | 2014-297T02:40 | 24-Oct | Fri | 32 | 48 | 3 | Outbound 1013.0 km flyby, v = 5.8 km/s, phase = 31 deg |
| S86 | 209 | Ring CRX | Ascending | 2014-297T02:50 | 24-Oct | Fri | 0 | 48 | 3 | r = 20.488 Rs (1236033 km) |
| S86 | 209 | XD | Segment | 2014-299T06:00 | 26-Oct | Sun | 2 | 46 | 5 | XD_209_210 (42d) |
| S86 | 209 | OTM-395 | 209TI+4d | 2014-300T14:44 | 27-Oct | Mon | 4 | 44 | 7 | D/L Start, burn ~6h later. Backup D/L 301T14:44; complexes G/G |
| S86 | 210 | Apoapse | | 2014-318T23:04 | 14-Nov | Fri | 22 | 26 | 18 | Per = 47.9 d, inc = 33.1 deg, r = 73.340 Rs, phase = 88 deg |
| S86 | 210 | SEP = 3.0 deg | Conjunction | 2014-320T00:04 | 16-Nov | Sun | 23 | 25 | 19 | Commanding must not be required below 3.0 deg |
| S86 | 210 | SEP = 3.0 deg | Conjunction | 2014-324T23:45 | 20-Nov | Thu | 28 | 20 | 24 | Commanding must not be required below 3.0 deg |
| S86 | 210 | OTM-396 | ~Apo | 2014-325T19:44 | 21-Nov | Fri | 29 | 19 | 25 | D/L Start, burn ~6h later. Backup D/L 326T19:44; complexes C/C |
| S86 | 210 | MAPS | Segment | 2014-340T21:29 | 06-Dec | Sat | 44 | 4 | 15 | MAPS_210 (3d) |
| S86 | 210 | Ring CRX | Descending | 2014-341T06:36 | 07-Dec | Sun | 44 | 4 | 15 | r = 17.706 Rs (1068176 km) |
| S86 | 210 | OTM-397 | 210TI-3d | 2014-341T12:30 | 07-Dec | Sun | 44 | 3 | 16 | D/L Start, burn ~6h later. Backup D/L 342T12:30; complexes G/G |
| S86 | 210 | Periapse | | 2014-342T21:08 | 08-Dec | Mon | 46 | 2 | 1 | R = 10.911 Rs, lat = -33 deg, phase = 92 deg |
| S86 | 210 | TOST | Segment | 2014-344T03:30 | 10-Dec | Wed | 47 | 1 | 3 | TOST_210 (2d); T107 flyby |
| S86 | 210 | 210TI (t) T107 | TITAN | 2014-344T22:26 | 10-Dec | Wed | 48 | 32 | 3 | Outbound 980.2 km flyby, v = 5.8 km/s, phase = 56 deg |
| S86 | 210 | Ring CRX | Ascending | 2014-344T22:34 | 10-Dec | Wed | 0 | 32 | 3 | r = 20.504 Rs (1236988 km) |
| S86 | 210 | XD | Segment | 2014-346T05:00 | 12-Dec | Fri | 1 | 31 | 5 | XD_210 (5d) |
| S86 | 210 | OTM-398 | 210TI+3d | 2014-347T18:15 | 13-Dec | Sat | 3 | 29 | 6 | D/L Start, burn ~6h later. Backup D/L 348T18:15; complexes C/C |
| S87 | 210 | S87 Begins | | 2014-351T03:15 | 17-Dec | Wed | 6 | 26 | 3 | S87 Sequence. Duration = 67 d |
| S87 | 210 | XD | Segment | 2014-351T03:15 | 17-Dec | Wed | 6 | 26 | 3 | XD_210_211 (22d) |
| S87 | 211 | Apoapse | | 2014-358T19:16 | 24-Dec | Wed | 14 | 18 | 11 | Per = 31.9 d, inc = 28.6 deg, r = 56.150 Rs, phase = 107 deg |
| S87 | 211 | OTM-399 | ~Apo | 2014-363T17:31 | 29-Dec | Mon | 19 | 13 | 16 | D/L Start, burn ~6h later. Backup D/L 364T17:31; complexes C/C |
| S87 | 211 | RINGS | Segment | 2015-008T01:47 | 08-Jan | Thu | 28 | 4 | 9 | RINGS_211 (3d) |
| S87 | 211 | OTM-400 | 211TI-3d | 2015-008T16:47 | 08-Jan | Thu | 29 | 3 | 10 | D/L Start, burn ~6h later. Backup D/L 009T16:47; complexes C/C |
| S87 | 211 | Ring CRX | Descending | 2015-009T01:15 | 09-Jan | Fri | 29 | 3 | 0 | r = 10.910 Rs ( 658183 km) |
| S87 | 211 | Periapse | | 2015-009T17:54 | 09-Jan | Fri | 30 | 2 | 1 | R = 8.154 Rs, lat = -26 deg, phase = 72 deg |
| S87 | 211 | TOST | Segment | 2015-011T01:47 | 11-Jan | Sun | 31 | 1 | 2 | TOST_211 (3d); T108 flyby |
| S87 | 211 | 211TI (t) T108 | TITAN | 2015-011T19:48 | 11-Jan | Sun | 32 | 32 | 3 | Outbound 969.9 km flyby, v = 5.8 km/s, phase = 46 deg |
| S87 | 211 | Ring CRX | Ascending | 2015-011T19:56 | 11-Jan | Sun | 0 | 32 | 3 | r = 20.504 Rs (1236995 km) |
| S87 | 211 | XD | Segment | 2015-014T01:32 | 14-Jan | Wed | 2 | 30 | 5 | XD_211_212 (26d) |
| S87 | 211 | OTM-401 | 211TI+3d | 2015-014T16:32 | 14-Jan | Wed | 3 | 29 | 6 | D/L Start, burn ~6h later. Backup D/L 015T16:32; complexes C/C |
| S87 | 212 | Apoapse | | 2015-025T18:42 | 25-Jan | Sun | 14 | 18 | 11 | Per = 31.9 d, inc = 19.1 deg, r = 57.411 Rs, phase = 118 deg |
| S87 | 212 | OTM-402 | ~Apo | 2015-031T15:34 | 31-Jan | Sat | 20 | 12 | 17 | D/L Start, burn ~6h later. Backup D/L 032T15:34; complexes C/C |
| S87 | 212 | SATURN | Segment | 2015-040T00:06 | 09-Feb | Mon | 28 | 4 | 8 | SATURN_212 (3d) |
| S87 | 212 | OTM-403 | 212TI-3d | 2015-040T15:06 | 09-Feb | Mon | 29 | 3 | 9 | D/L Start, burn ~6h later. Backup D/L 041T15:06; complexes C/C |
| S87 | 212 | Ring CRX | Descending | 2015-041T06:09 | 10-Feb | Tue | 29 | 2 | 1 | r = 8.784 Rs ( 529957 km) |
| S87 | 212 | 212RH (nt) | RHEA | 2015-041T06:45 | 10-Feb | Tue | 29 | 2 | 1 | Inbound 46802.9 km flyby, v = 5.3 km/s, phase = 108 deg |
| S87 | 212 | Periapse | | 2015-041T17:16 | 10-Feb | Tue | 30 | 2 | 1 | R = 6.888 Rs, lat = -16 deg, phase = 62 deg |
| S87 | 212 | TOST | Segment | 2015-042T23:51 | 11-Feb | Wed | 31 | 1 | 2 | TOST_212 (2d); T109 flyby |
| S87 | 212 | 212TI (t) T109 | TITAN | 2015-043T17:08 | 12-Feb | Thu | 32 | 32 | 3 | Outbound 1199.7 km flyby, v = 5.8 km/s, phase = 55 deg |
| S87 | 212 | Ring CRX | Ascending | 2015-043T17:16 | 12-Feb | Thu | 0 | 32 | 3 | r = 20.518 Rs (1237847 km) |
| S87 | 212 | XD | Segment | 2015-045T03:51 | 14-Feb | Sat | 1 | 30 | 5 | XD_212 (8d) |
| S87 | 212 | OTM-404 | 212TI+3d | 2015-046T14:36 | 15-Feb | Sun | 3 | 29 | 6 | D/L Start, burn ~6h later. Backup D/L 047T14:36; complexes C/C |
| S88 | 212 | S88 Begins | | 2015-052T16:52 | 21-Feb | Sat | 9 | 23 | 6 | S88 Sequence. Duration = 69 d |
| S88 | 212 | XD | Segment | 2015-052T16:52 | 21-Feb | Sat | 9 | 23 | 6 | XD_212_213 (19d) |
| S88 | 213 | Apoapse | | 2015-057T17:14 | 26-Feb | Thu | 14 | 18 | 11 | Per = 31.9 d, inc = 8.5 deg, r = 58.093 Rs, phase = 126 deg |
| S88 | 213 | OTM-405 | ~Apo | 2015-063T13:39 | 04-Mar | Wed | 20 | 12 | 17 | D/L Start, burn ~6h later. Backup D/L 064T13:39; complexes C/C |
| S88 | 213 | RINGS | Segment | 2015-071T22:10 | 12-Mar | Thu | 28 | 4 | 8 | RINGS_213 (3d) |
| S88 | 213 | OTM-406 | 213TI-3d | 2015-072T13:10 | 13-Mar | Fri | 29 | 3 | 9 | D/L Start, burn ~6h later. Backup D/L 073T14:40; complexes C/C |
| S88 | 213 | Ring CRX | Descending | 2015-073T07:04 | 14-Mar | Sat | 30 | 2 | 1 | r = 7.721 Rs ( 465806 km) |
| S88 | 213 | 213HE (nt) | HELENE | 2015-073T11:08 | 14-Mar | Sat | 30 | 2 | 1 | Inbound 58275.5 km flyby, v = 5.4 km/s, phase = 80 deg |
| S88 | 213 | 213CP (nt) | CALYPSO | 2015-073T15:27 | 14-Mar | Sat | 30 | 2 | 1 | Inbound 101483.4 km flyby, v = 3.3 km/s, phase = 84 deg |
| S88 | 213 | Periapse | | 2015-073T15:49 | 14-Mar | Sat | 30 | 2 | 1 | R = 6.201 Rs, lat = -7 deg, phase = 54 deg |
| S88 | 213 | TOST | Segment | 2015-074T21:55 | 15-Mar | Sun | 31 | 1 | 2 | TOST_213 (2d); T110 flyby |
| S88 | 213 | Ring CRX | Ascending | 2015-075T14:12 | 16-Mar | Mon | 32 | 0 | 3 | r = 20.395 Rs (1230405 km) |
| S88 | 213 | 213TI (t) T110 | TITAN | 2015-075T14:29 | 16-Mar | Mon | 32 | 52 | 3 | Outbound 2274.5 km flyby, v = 5.7 km/s, phase = 70 deg |
| S88 | 213 | Ring CRX | Descending | 2015-076T04:06 | 17-Mar | Tue | 1 | 52 | 4 | r = 24.326 Rs (1467597 km) |
| S88 | 213 | XD | Segment | 2015-077T02:10 | 18-Mar | Wed | 1 | 51 | 5 | XD_213_214 (24d) |
| S88 | 213 | OTM-407 | 213TI+3d | 2015-078T12:41 | 19-Mar | Thu | 3 | 49 | 6 | D/L Start, burn ~6h later. Backup D/L 079T12:41; complexes C/C |
| S88 | 214 | Apoapse | | 2015-087T16:40 | 28-Mar | Sat | 12 | 40 | 9 | Per = 28.0 d, inc = 0.3 deg, r = 53.437 Rs, phase = 134 deg |
| S88 | 214 | SOST | Segment | 2015-100T20:13 | 10-Apr | Fri | 25 | 27 | 22 | SOST_214 (2d); non-targ flyby |
| S88 | 214 | Ring CRX | Ascending | 2015-101T11:50 | 11-Apr | Sat | 26 | 26 | 23 | r = 6.332 Rs ( 382000 km) |
| S88 | 214 | Periapse | | 2015-101T17:08 | 11-Apr | Sat | 26 | 26 | 23 | R = 5.582 Rs, lat = 0 deg, phase = 45 deg |
| S88 | 214 | 214TI (nt) | TITAN | 2015-101T17:55 | 11-Apr | Sat | 26 | 26 | 23 | Outbound 899005.0 km flyby, v = 8.8 km/s, phase = 132 deg |
| S88 | 214 | 214TE (nt) | TETHYS | 2015-101T17:57 | 11-Apr | Sat | 26 | 26 | 23 | Outbound 52821.6 km flyby, v = 3.5 km/s, phase = 32 deg |
| S88 | 214 | 214DI (nt) | DIONE | 2015-101T23:21 | 11-Apr | Sat | 26 | 26 | 23 | Outbound 110065.1 km flyby, v = 8.0 km/s, phase = 28 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S88 | 214 | XD | Segment | 2015-102T20:13 | 12-Apr | Sun | 27 | 25 | 24 | XD_214_215 (19d) |
| S88 | 214 | Ring CRX | Descending | 2015-104T07:49 | 14-Apr | Tue | 29 | 24 | 26 | r = 25.006 Rs (1508600 km) |
| S88 | 214 | OTM-408 | ~Apo | 2015-110T10:29 | 20-Apr | Mon | 35 | 18 | 32 | D/L Start, burn ~6h later. Backup D/L 111T10:29; complexes C/C |
| S88 | 215 | Apoapse | | 2015-115T17:46 | 25-Apr | Sat | 40 | 12 | 5 | Per = 28.1 d, inc = 0.3 deg, r = 53.454 Rs, phase = 135 deg |
| S89 | 215 | S89 Begins | | 2015-121T18:45 | 01-May | Fri | 46 | 6 | 11 | S89 Sequence. Duration = 73 d |
| S89 | 215 | XD | Segment | 2015-121T18:45 | 01-May | Fri | 46 | 6 | 11 | XD_215 (5d) |
| S89 | 215 | OTM-409 | 215TI-3d | 2015-124T09:30 | 04-May | Mon | 49 | 4 | 14 | D/L Start, burn ~6h later. Backup D/L 125T09:30; complexes C/C |
| S89 | 215 | TOST | Segment | 2015-127T04:15 | 07-May | Thu | 52 | 1 | 3 | TOST_T11 (2d); T111 flyby |
| S89 | 215 | 215TI (t) T111 | TITAN | 2015-127T22:50 | 07-May | Thu | 52 | 40 | 4 | Inbound 2722.1 km flyby, v = 5.7 km/s, phase = 34 deg |
| S89 | 215 | SOST | Segment | 2015-129T08:15 | 09-May | Sat | 1 | 38 | 5 | SOST_215 (2d); non-targ flyby |
| S89 | 215 | Ring CRX | Ascending | 2015-129T09:42 | 09-May | Sat | 1 | 38 | 5 | r = 6.638 Rs ( 400491 km) |
| S89 | 215 | 215AG (nt) | AEGAEON | 2015-129T16:51 | 09-May | Sat | 2 | 38 | 5 | Inbound 92544.0 km flyby, v = 1.6 km/s, phase = 28 deg |
| S89 | 215 | 215AN (nt) | ANTHE | 2015-129T17:28 | 09-May | Sat | 2 | 38 | 5 | Inbound 107953.2 km flyby, v = 6.2 km/s, phase = 25 deg |
| S89 | 215 | 215DA (nt) | DAPHNIS | 2015-129T17:28 | 09-May | Sat | 2 | 38 | 5 | Inbound 113302.8 km flyby, v = 0.1 km/s, phase = 44 deg |
| S89 | 215 | 215TL (nt) | TELESTO | 2015-129T17:53 | 09-May | Sat | 2 | 38 | 5 | Inbound 46446.4 km flyby, v = 5.3 km/s, phase = 126 deg |
| S89 | 215 | Periapse | | 2015-129T18:02 | 09-May | Sat | 2 | 38 | 5 | R = 4.113 Rs, lat = 0 deg, phase = 55 deg |
| S89 | 215 | 215PO (nt) | POLYDEUCES | 2015-130T01:12 | 10-May | Sun | 2 | 38 | 6 | Outbound 33996.4 km flyby, v = 6.6 km/s, phase = 130 deg |
| S89 | 215 | Ring CRX | Descending | 2015-130T06:38 | 10-May | Sun | 2 | 38 | 6 | r = 8.534 Rs ( 514851 km) |
| S89 | 215 | OTM-410 | 215TI+4d | 2015-131T09:00 | 11-May | Mon | 3 | 36 | 7 | D/L Start, burn ~6h later. Backup D/L 132T09:00; complexes C/C |
| S89 | 215 | SATURN | Segment | 2015-131T18:00 | 11-May | Mon | 4 | 36 | 0 | SATURN_215_216 (19d) |
| S89 | 216 | Apoapse | | 2015-139T04:31 | 19-May | Tue | 11 | 29 | 8 | Per = 18.9 d, inc = 0.3 deg, r = 41.198 Rs, phase = 125 deg |
| S89 | 216 | Ring CRX | Ascending | 2015-148T06:31 | 28-May | Thu | 20 | 20 | 17 | r = 6.651 Rs ( 401242 km) |
| S89 | 216 | 216TI (nt) | TITAN | 2015-148T10:24 | 28-May | Thu | 20 | 19 | 17 | Inbound 942021.6 km flyby, v = 9.3 km/s, phase = 147 deg |
| S89 | 216 | 216TL (nt) | TELESTO | 2015-148T14:09 | 28-May | Thu | 21 | 19 | 17 | Inbound 44728.9 km flyby, v = 5.3 km/s, phase = 127 deg |
| S89 | 216 | Periapse | | 2015-148T14:53 | 28-May | Thu | 21 | 19 | 17 | R = 4.125 Rs, lat = 0 deg, phase = 55 deg |
| S89 | 216 | Ring CRX | Descending | 2015-149T03:33 | 29-May | Fri | 21 | 19 | 18 | r = 8.567 Rs ( 516843 km) |
| S89 | 216 | XD | Segment | 2015-151T02:30 | 31-May | Sun | 23 | 17 | 20 | XD_216_217 (16d) |
| S89 | 216 | 216HY (nt) | HYPERION | 2015-151T13:35 | 31-May | Sun | 24 | 16 | 20 | Outbound 34250.8 km flyby, v = 4.3 km/s, phase = 70 deg |
| S89 | 217 | Apoapse | | 2015-158T01:49 | 07-Jun | Sun | 30 | 10 | 27 | Per = 18.9 d, inc = 0.3 deg, r = 41.261 Rs, phase = 126 deg |
| S89 | 217 | OTM-411 | ~Apo | 2015-159T07:00 | 08-Jun | Mon | 31 | 9 | 28 | D/L Start, burn ~6h later. Backup D/L 160T07:00; complexes C/C |
| S89 | 217 | OTM-412 | 217DI-3d | 2015-164T06:45 | 13-Jun | Sat | 36 | 4 | 5 | D/L Start, burn ~6h later. Backup D/L 165T06:45; complexes C/C |
| S89 | 217 | SOST | Segment | 2015-166T15:30 | 15-Jun | Mon | 39 | 1 | 2 | SOST_217 (3d); D4 flyby |
| S89 | 217 | Ring CRX | Ascending | 2015-167T04:23 | 16-Jun | Tue | 39 | 1 | 3 | r = 6.643 Rs ( 400761 km) |
| S89 | 217 | 217PO (nt) | POLYDEUCES | 2015-167T05:25 | 16-Jun | Tue | 39 | 1 | 3 | Inbound 34810.9 km flyby, v = 6.6 km/s, phase = 121 deg |
| S89 | 217 | 217ME (nt) | METHONE | 2015-167T11:39 | 16-Jun | Tue | 40 | 0 | 3 | Inbound 109540.3 km flyby, v = 5.3 km/s, phase = 26 deg |
| S89 | 217 | 217PN (nt) | PAN | 2015-167T11:56 | 16-Jun | Tue | 40 | 0 | 3 | Inbound 118206.3 km flyby, v = 0.3 km/s, phase = 41 deg |
| S89 | 217 | 217AT (nt) | ATLAS | 2015-167T12:29 | 16-Jun | Tue | 40 | 0 | 3 | Inbound 111250.0 km flyby, v = 0.0 km/s, phase = 49 deg |
| S89 | 217 | Periapse | | 2015-167T12:44 | 16-Jun | Tue | 40 | 0 | 3 | R = 4.124 Rs, lat = 0 deg, phase = 54 deg |
| S89 | 217 | 217JA (nt) | JANUS | 2015-167T13:37 | 16-Jun | Tue | 40 | 0 | 3 | Outbound 101444.6 km flyby, v = 0.8 km/s, phase = 72 deg |
| S89 | 217 | 217TL (nt) | TELESTO | 2015-167T13:39 | 16-Jun | Tue | 40 | 0 | 3 | Outbound 44152.8 km flyby, v = 5.3 km/s, phase = 127 deg |
| S89 | 217 | 217TI (nt) | TITAN | 2015-167T18:23 | 16-Jun | Tue | 40 | 0 | 3 | Outbound 957885.9 km flyby, v = 8.8 km/s, phase = 97 deg |
| S89 | 217 | 217DI (t) D4 | DIONE | 2015-167T20:11 | 16-Jun | Tue | 40 | 20 | 4 | Outbound 516.6 km flyby, v = 7.3 km/s, phase = 58 deg |
| S89 | 217 | Ring CRX | Descending | 2015-168T00:00 | 17-Jun | Wed | 0 | 20 | 4 | r = 7.945 Rs ( 479309 km) |
| S89 | 217 | MAPS | Segment | 2015-169T15:29 | 18-Jun | Thu | 2 | 19 | 5 | MAPS_217_218 (18d) |
| S89 | 217 | OTM-413 | 217DI+4d | 2015-171T06:14 | 20-Jun | Sat | 3 | 17 | 7 | D/L Start, burn ~6h later. Backup D/L 172T06:14; complexes C/C |
| S89 | 218 | Apoapse | | 2015-176T23:56 | 25-Jun | Thu | 9 | 11 | 6 | Per = 18.9 d, inc = 0.4 deg, r = 41.310 Rs, phase = 126 deg |
| S89 | 218 | OTM-414 | ~Apo | 2015-177T05:44 | 26-Jun | Fri | 9 | 11 | 6 | D/L Start, burn ~6h later. Backup D/L 178T05:44; complexes C/C |
| S89 | 218 | OTM-415 | 218TI-3d | 2015-185T05:13 | 04-Jul | Sat | 17 | 3 | 8 | D/L Start, burn ~6h later. Backup D/L 186T05:13; complexes C/C |
| S89 | 218 | Ring CRX | Ascending | 2015-186T01:58 | 05-Jul | Sun | 18 | 2 | 1 | r = 7.054 Rs ( 425567 km) |
| S89 | 218 | Periapse | | 2015-186T11:14 | 05-Jul | Sun | 19 | 2 | 1 | R = 4.112 Rs, lat = 0 deg, phase = 54 deg |
| S89 | 218 | 218PN (nt) | PAN | 2015-186T11:47 | 05-Jul | Sun | 19 | 2 | 1 | Outbound 115938.0 km flyby, v = 0.3 km/s, phase = 63 deg |
| S89 | 218 | 218TL (nt) | TELESTO | 2015-186T14:53 | 05-Jul | Sun | 19 | 2 | 1 | Outbound 14144.8 km flyby, v = 5.8 km/s, phase = 127 deg |
| S89 | 218 | Ring CRX | Descending | 2015-186T22:28 | 05-Jul | Sun | 19 | 1 | 2 | r = 7.931 Rs ( 478507 km) |
| S89 | 218 | TOST | Segment | 2015-187T11:32 | 06-Jul | Mon | 20 | 1 | 2 | TOST_T11 (2d); T112 flyby |
| S89 | 218 | 218TI (t) T112 | TITAN | 2015-188T08:09 | 07-Jul | Tue | 20 | 41 | 3 | Outbound 10952.5 km flyby, v = 5.6 km/s, phase = 78 deg |
| S89 | 218 | XD | Segment | 2015-189T11:24 | 08-Jul | Wed | 1 | 40 | 4 | XD_218 (5d) |
| S89 | 218 | OTM-416 | 218TI+3d | 2015-191T04:58 | 10-Jul | Fri | 3 | 39 | 6 | D/L Start, burn ~6h later. Backup D/L 192T04:43; complexes C/C |
| S90 | 218 | S90 Begins | | 2015-194T13:42 | 13-Jul | Mon | 6 | 35 | 3 | S90 Sequence. Duration = 70 d |
| S90 | 218 | XD | Segment | 2015-194T13:42 | 13-Jul | Mon | 6 | 35 | 3 | XD_218_219 (12d) |
| S90 | 219 | Apoapse | | 2015-197T08:19 | 16-Jul | Thu | 9 | 32 | 6 | Per = 21.8 d, inc = 0.5 deg, r = 45.173 Rs, phase = 122 deg |
| S90 | 219 | MAPS | Segment | 2015-206T12:56 | 25-Jul | Sat | 18 | 23 | 15 | MAPS_219 (3d) |
| S90 | 219 | 219TI (nt) | TITAN | 2015-206T22:36 | 25-Jul | Sat | 19 | 23 | 16 | Inbound 729189.9 km flyby, v = 9.2 km/s, phase = 31 deg |
| S90 | 219 | Ring CRX | Ascending | 2015-207T18:03 | 26-Jul | Sun | 19 | 22 | 17 | r = 8.217 Rs ( 495715 km) |
| S90 | 219 | 219DI (nt) | DIONE | 2015-208T00:56 | 27-Jul | Mon | 20 | 22 | 17 | Inbound 60598.9 km flyby, v = 5.1 km/s, phase = 120 deg |
| S90 | 219 | Periapse | | 2015-208T05:49 | 27-Jul | Mon | 20 | 22 | 17 | R = 4.698 Rs, lat = 0 deg, phase = 57 deg |
| S90 | 219 | 219EN (nt) | ENCELADUS | 2015-208T06:18 | 27-Jul | Mon | 20 | 22 | 17 | Outbound 111559.2 km flyby, v = 6.7 km/s, phase = 24 deg |
| S90 | 219 | Ring CRX | Descending | 2015-208T18:59 | 27-Jul | Mon | 20 | 21 | 18 | r = 8.804 Rs ( 531119 km) |
| S90 | 219 | XD | Segment | 2015-209T13:56 | 28-Jul | Tue | 21 | 20 | 18 | XD_219_220 (20d) |
| S90 | 220 | Apoapse | | 2015-219T03:41 | 07-Aug | Fri | 31 | 11 | 28 | Per = 21.8 d, inc = 0.5 deg, r = 45.220 Rs, phase = 123 deg |
| S90 | 220 | OTM-417 | ~Apo | 2015-221T02:54 | 09-Aug | Sun | 33 | 9 | 30 | D/L Start, burn ~6h later. Backup D/L 222T02:39; complexes C/C |
| S90 | 220 | OTM-418 | 220DI-3d | 2015-226T02:23 | 14-Aug | Fri | 38 | 4 | 5 | D/L Start, burn ~6h later. Backup D/L 227T02:23; complexes C/C |
| S90 | 220 | SOST | Segment | 2015-229T04:53 | 17-Aug | Mon | 41 | 1 | 3 | SOST_220 (2d); D5 flyby |
| S90 | 220 | Ring CRX | Ascending | 2015-229T13:38 | 17-Aug | Mon | 41 | 0 | 3 | r = 8.217 Rs ( 495724 km) |
| S90 | 220 | 220DI (t) D5 | DIONE | 2015-229T18:33 | 17-Aug | Mon | 41 | 42 | 4 | Inbound 478.6 km flyby, v = 6.4 km/s, phase = 67 deg |
| S90 | 220 | 220TE (nt) | TETHYS | 2015-229T21:56 | 17-Aug | Mon | 0 | 42 | 4 | Inbound 41886.7 km flyby, v = 6.3 km/s, phase = 82 deg |
| S90 | 220 | 220EN (nt) | ENCELADUS | 2015-230T01:17 | 18-Aug | Tue | 0 | 42 | 4 | Inbound 53163.9 km flyby, v = 3.3 km/s, phase = 78 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S90 | 220 | Periapse | | 2015-230T01:24 | 18-Aug | Tue | 0 | 42 | 4 | R = 4.704 Rs, lat = 0 deg, phase = 57 deg |
| S90 | 220 | 220ME (nt) | METHONE | 2015-230T01:34 | 18-Aug | Tue | 0 | 42 | 4 | Outbound 89815.7 km flyby, v = 1.6 km/s, phase = 61 deg |
| S90 | 220 | 220TI (nt) | TITAN | 2015-230T01:52 | 18-Aug | Tue | 0 | 42 | 4 | Outbound 960419.7 km flyby, v = 10.1 km/s, phase = 120 deg |
| S90 | 220 | 220HE (nt) | HELENE | 2015-230T08:33 | 18-Aug | Tue | 1 | 42 | 4 | Outbound 113517.2 km flyby, v = 9.4 km/s, phase = 46 deg |
| S90 | 220 | Ring CRX | Descending | 2015-230T12:42 | 18-Aug | Tue | 1 | 41 | 4 | r = 8.033 Rs ( 484602 km) |
| S90 | 220 | SATURN | Segment | 2015-231T04:53 | 19-Aug | Wed | 1 | 41 | 5 | SATURN_220_221 (20d) |
| S90 | 220 | OTM-419 | 220DI+4d | 2015-233T02:07 | 21-Aug | Fri | 3 | 39 | 7 | D/L Start, burn ~6h later. Backup D/L 234T01:52; complexes C/C |
| S90 | 221 | Apoapse | | 2015-240T23:28 | 28-Aug | Fri | 11 | 31 | 8 | Per = 21.9 d, inc = 0.4 deg, r = 45.265 Rs, phase = 123 deg |
| S90 | 221 | OTM-420 | ~Peri | 2015-251T00:50 | 08-Sep | Tue | 21 | 21 | 18 | D/L Start, burn ~6h later. Backup D/L 252T00:50; complexes C/C |
| S90 | 221 | Ring CRX | Ascending | 2015-251T08:01 | 08-Sep | Tue | 22 | 21 | 0 | r = 9.011 Rs ( 543642 km) |
| S90 | 221 | SOST | Segment | 2015-251T09:50 | 08-Sep | Tue | 22 | 20 | 0 | SOST_221 (3d); non-targ flyby |
| S90 | 221 | 221DI (nt) | DIONE | 2015-251T14:32 | 08-Sep | Tue | 22 | 20 | 1 | Inbound 41991.3 km flyby, v = 7.6 km/s, phase = 67 deg |
| S90 | 221 | Periapse | | 2015-251T21:41 | 08-Sep | Tue | 22 | 20 | 1 | R = 4.696 Rs, lat = 0 deg, phase = 56 deg |
| S90 | 221 | 221HE (nt) | HELENE | 2015-252T04:52 | 09-Sep | Wed | 22 | 20 | 1 | Outbound 82944.3 km flyby, v = 8.6 km/s, phase = 45 deg |
| S90 | 221 | Ring CRX | Descending | 2015-252T09:01 | 09-Sep | Wed | 23 | 20 | 1 | r = 8.039 Rs ( 485000 km) |
| S90 | 221 | 221TI (nt) | TITAN | 2015-253T06:21 | 10-Sep | Thu | 23 | 19 | 2 | Outbound 706971.4 km flyby, v = 9.1 km/s, phase = 89 deg |
| S90 | 221 | XD | Segment | 2015-254T03:20 | 11-Sep | Fri | 24 | 18 | 3 | XD_221_222 (10d) |
| S90 | 222 | Apoapse | | 2015-262T19:28 | 19-Sep | Sat | 33 | 9 | 12 | Per = 21.8 d, inc = 0.4 deg, r = 45.211 Rs, phase = 124 deg |
| S91 | 222 | S91 Begins | | 2015-264T02:48 | 21-Sep | Mon | 34 | 8 | 13 | S91 Sequence. Duration = 65 d |
| S91 | 222 | XD | Segment | 2015-264T02:48 | 21-Sep | Mon | 34 | 8 | 13 | XD_222 (6d) |
| S91 | 222 | OTM-421 | 222TI-4d | 2015-267T23:48 | 24-Sep | Thu | 38 | 4 | 17 | D/L Start, burn ~6h later. Backup D/L 268T23:33; complexes C/C |
| S91 | 222 | TOST | Segment | 2015-270T08:33 | 27-Sep | Sun | 41 | 2 | 2 | TOST_T11 (3d); T113 flyby |
| S91 | 222 | 222TI (t) T113 | TITAN | 2015-271T21:37 | 28-Sep | Mon | 42 | 16 | 4 | Inbound 1035.4 km flyby, v = 5.8 km/s, phase = 42 deg |
| S91 | 222 | Ring CRX | Ascending | 2015-272T22:39 | 29-Sep | Tue | 1 | 15 | 5 | r = 11.037 Rs ( 665891 km) |
| S91 | 222 | SATURN | Segment | 2015-273T04:17 | 30-Sep | Wed | 1 | 14 | 5 | SATURN_222 (2d) |
| S91 | 222 | 222DI (nt) | DIONE | 2015-273T08:40 | 30-Sep | Wed | 1 | 14 | 5 | Inbound 40807.0 km flyby, v = 10.1 km/s, phase = 63 deg |
| S91 | 222 | 222CP (nt) | CALYPSO | 2015-273T11:04 | 30-Sep | Wed | 2 | 14 | 5 | Inbound 43844.7 km flyby, v = 10.8 km/s, phase = 72 deg |
| S91 | 222 | 222AN (nt) | ANTHE | 2015-273T13:58 | 30-Sep | Wed | 2 | 14 | 6 | Inbound 95410.7 km flyby, v = 13.9 km/s, phase = 89 deg |
| S91 | 222 | 222MI (nt) | MIMAS | 2015-273T14:12 | 30-Sep | Wed | 2 | 14 | 6 | Inbound 64774.9 km flyby, v = 11.8 km/s, phase = 93 deg |
| S91 | 222 | Periapse | | 2015-273T16:17 | 30-Sep | Wed | 2 | 14 | 6 | R = 2.899 Rs, lat = 1 deg, phase = 69 deg |
| S91 | 222 | 222TE (nt) | TETHYS | 2015-273T16:58 | 30-Sep | Wed | 2 | 14 | 6 | Outbound 117360.6 km flyby, v = 8.5 km/s, phase = 106 deg |
| S91 | 222 | 222AG (nt) | AEGAEON | 2015-273T17:34 | 30-Sep | Wed | 2 | 14 | 6 | Outbound 79798.2 km flyby, v = 12.1 km/s, phase = 40 deg |
| S91 | 222 | Dust Hazard | Pallene | 2015-273T18:43 | 30-Sep | Wed | 2 | 14 | 6 | Egress @ 2015-273T18:55 (12 min) \| Protection: MEA Cvr. Closure |
| S91 | 222 | Ring CRX | Descending | 2015-273T18:48 | 30-Sep | Wed | 2 | 14 | 6 | r = 3.513 Rs ( 211965 km) |
| S91 | 222 | Dust Hazard | E_ring_lg | 2015-273T18:52 | 30-Sep | Wed | 2 | 14 | 6 | Egress @ 2015-273T20:20 (87 min) \| Protection: MEA Cvr. Closure |
| S91 | 222 | 222TL (nt) | TELESTO | 2015-273T21:15 | 30-Sep | Wed | 2 | 14 | 6 | Outbound 117978.2 km flyby, v = 13.7 km/s, phase = 68 deg |
| S91 | 222 | 222RH (nt) | RHEA | 2015-274T04:25 | 01-Oct | Thu | 2 | 13 | 6 | Outbound 57868.4 km flyby, v = 9.3 km/s, phase = 85 deg |
| S91 | 222 | OTM-422 | 222TI+2d | 2015-274T23:17 | 01-Oct | Thu | 3 | 12 | 7 | D/L Start, burn ~6h later. Backup D/L 275T23:17; complexes C/C |
| S91 | 222 | XD | Segment | 2015-275T08:17 | 02-Oct | Fri | 3 | 12 | 0 | XD_222_223 (11d) |
| S91 | 222 | OTM-423 | ~Apo | 2015-278T23:02 | 05-Oct | Mon | 7 | 8 | 4 | D/L Start, burn ~6h later. Backup D/L 279T23:02; complexes C/C |
| S91 | 223 | Apoapse | | 2015-280T15:12 | 07-Oct | Wed | 9 | 7 | 2 | Per = 13.9 d, inc = 0.6 deg, r = 34.070 Rs, phase = 111 deg |
| S91 | 223 | OTM-424 | 223EN-3d | 2015-283T22:46 | 10-Oct | Sat | 12 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 284T22:46; complexes C/C |
| S91 | 223 | 223TI (nt) | TITAN | 2015-286T12:42 | 13-Oct | Tue | 15 | 1 | 3 | Inbound 826286.5 km flyby, v = 10.1 km/s, phase = 31 deg |
| S91 | 223 | SOST | Segment | 2015-286T17:31 | 13-Oct | Tue | 15 | 1 | 3 | SOST_223 (3d); E20 flyby |
| S91 | 223 | Ring CRX | Ascending | 2015-286T23:53 | 13-Oct | Tue | 15 | 0 | 3 | r = 9.498 Rs ( 572990 km) |
| S91 | 223 | 223PO (nt) | POLYDEUCES | 2015-287T06:50 | 14-Oct | Wed | 15 | 0 | 3 | Inbound 115893.7 km flyby, v = 12.3 km/s, phase = 61 deg |
| S91 | 223 | 223EN (t) E20 | ENCELADUS | 2015-287T10:41 | 14-Oct | Wed | 16 | 14 | 3 | Inbound 1843.5 km flyby, v = 8.5 km/s, phase = 63 deg |
| S91 | 223 | 223ME (nt) | METHONE | 2015-287T11:53 | 14-Oct | Wed | 0 | 14 | 4 | Inbound 40002.3 km flyby, v = 9.9 km/s, phase = 89 deg |
| S91 | 223 | 223PM (nt) | PROMETHEUS | 2015-287T13:43 | 14-Oct | Wed | 0 | 14 | 4 | Inbound 121322.0 km flyby, v = 12.7 km/s, phase = 25 deg |
| S91 | 223 | Periapse | | 2015-287T14:06 | 14-Oct | Wed | 0 | 14 | 4 | R = 2.903 Rs, lat = 1 deg, phase = 69 deg |
| S91 | 223 | Dust Hazard | Pallene | 2015-287T16:31 | 14-Oct | Wed | 0 | 14 | 4 | Egress @ 2015-287T16:43 (12 min) \| Protection: MEA Cvr. Closure |
| S91 | 223 | Dust Hazard | E_ring_lg | 2015-287T16:41 | 14-Oct | Wed | 0 | 14 | 4 | Egress @ 2015-287T18:19 (98 min) \| Protection: MEA Cvr. Closure |
| S91 | 223 | Ring CRX | Descending | 2015-287T17:01 | 14-Oct | Wed | 0 | 14 | 4 | r = 3.702 Rs ( 223321 km) |
| S91 | 223 | 223HE (nt) | HELENE | 2015-287T20:59 | 14-Oct | Wed | 0 | 14 | 4 | Outbound 117069.1 km flyby, v = 6.0 km/s, phase = 102 deg |
| S91 | 223 | XD | Segment | 2015-289T07:31 | 16-Oct | Fri | 2 | 12 | 5 | XD_223_224 (12d) |
| S91 | 223 | OTM-426 | ~Apo | 2015-292T22:15 | 19-Oct | Mon | 5 | 9 | 9 | D/L Start, burn ~6h later. Backup D/L 293T22:00; complexes C/C |
| S91 | 224 | Apoapse | | 2015-294T13:00 | 21-Oct | Wed | 7 | 7 | 2 | Per = 13.9 d, inc = 0.6 deg, r = 34.070 Rs, phase = 111 deg |
| S91 | 224 | OTM-427 | 224EN-3d | 2015-297T22:00 | 24-Oct | Sat | 10 | 4 | 5 | D/L Start, burn ~6h later. Backup D/L 298T21:45; complexes C/C |
| S91 | 224 | Ring CRX | Ascending | 2015-300T21:21 | 27-Oct | Tue | 13 | 1 | 3 | r = 9.669 Rs ( 583341 km) |
| S91 | 224 | SOST | Segment | 2015-301T00:30 | 28-Oct | Wed | 14 | 1 | 3 | SOST_224 (2d); E21 flyby |
| S91 | 224 | 224PO (nt) | POLYDEUCES | 2015-301T04:11 | 28-Oct | Wed | 14 | 0 | 3 | Inbound 84406.1 km flyby, v = 7.0 km/s, phase = 116 deg |
| S91 | 224 | 224TL (nt) | TELESTO | 2015-301T07:18 | 28-Oct | Wed | 14 | 0 | 3 | Inbound 59627.0 km flyby, v = 6.9 km/s, phase = 113 deg |
| S91 | 224 | 224DA (nt) | DAPHNIS | 2015-301T11:26 | 28-Oct | Wed | 14 | 0 | 4 | Inbound 70257.5 km flyby, v = 6.0 km/s, phase = 26 deg |
| S91 | 224 | Periapse | | 2015-301T11:55 | 28-Oct | Wed | 14 | 0 | 4 | R = 2.903 Rs, lat = 1 deg, phase = 69 deg |
| S91 | 224 | 224PN (nt) | PAN | 2015-301T12:32 | 28-Oct | Wed | 14 | 0 | 4 | Outbound 64923.0 km flyby, v = 4.7 km/s, phase = 116 deg |
| S91 | 224 | Dust Hazard | Pallene | 2015-301T14:21 | 28-Oct | Wed | 14 | 0 | 4 | Egress @ 2015-301T14:33 (12 min) \| Protection: MEA Cvr. Closure |
| S91 | 224 | Dust Hazard | E_ring_lg | 2015-301T14:31 | 28-Oct | Wed | 14 | 0 | 4 | Egress @ 2015-301T16:09 (98 min) \| Protection: MEA Cvr. Closure |
| S91 | 224 | Ring CRX | Descending | 2015-301T14:49 | 28-Oct | Wed | 14 | 0 | 4 | r = 3.684 Rs ( 222269 km) |
| S91 | 224 | 224EN (t) E21 | ENCELADUS | 2015-301T15:22 | 28-Oct | Wed | 14 | 16 | 4 | Outbound 49.0 km flyby, v = 8.5 km/s, phase = 118 deg |
| S91 | 224 | Earth OCC | ENCELADUS | 2015-301T15:22 | 28-Oct | Wed | 0 | 16 | 4 | Duration = 1 min; egress = 2015-301T15:23:48 |
| S91 | 224 | Sun OCC | ENCELADUS | 2015-301T15:22 | 28-Oct | Wed | 0 | 16 | 4 | Duration = 1 min; egress = 2015-301T15:23:41 |
| S91 | 224 | 224HE (nt) | HELENE | 2015-301T19:25 | 28-Oct | Wed | 0 | 15 | 4 | Outbound 78802.0 km flyby, v = 11.1 km/s, phase = 77 deg |
| S91 | 224 | OTM-428 | 224EN+1d | 2015-301T21:45 | 28-Oct | Wed | 0 | 15 | 4 | D/L Start, burn ~6h later. Backup D/L 302T21:45; complexes C/C |
| S91 | 224 | 224TI (nt) | TITAN | 2015-302T14:04 | 29-Oct | Thu | 1 | 15 | 1 | Outbound 800210.6 km flyby, v = 10.0 km/s, phase = 112 deg |
| S91 | 224 | MAPS | Segment | 2015-303T06:45 | 30-Oct | Fri | 2 | 14 | 1 | MAPS_224_225 (13d) |
| S91 | 225 | Apoapse | | 2015-308T10:42 | 04-Nov | Wed | 7 | 9 | 7 | Per = 13.9 d, inc = 0.6 deg, r = 34.052 Rs, phase = 111 deg |
| S91 | 225 | OTM-429 | ~Apo | 2015-308T21:29 | 04-Nov | Wed | 7 | 8 | 7 | D/L Start, burn ~6h later. Backup D/L 309T21:14; complexes C/C |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S91 | 225 | OTM-430 | 225TI-3d | 2015-313T20:59 | 09-Nov | Mon | 12 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 314T20:59; complexes C/C |
| S91 | 225 | Ring CRX | Ascending | 2015-314T18:32 | 10-Nov | Tue | 13 | 2 | 1 | r = 9.840 Rs ( 593669 km) |
| S91 | 225 | 225CP (nt) | CALYPSO | 2015-315T07:20 | 11-Nov | Wed | 14 | 2 | 1 | Inbound 104426.1 km flyby, v = 7.5 km/s, phase = 122 deg |
| S91 | 225 | 225PN (nt) | PAN | 2015-315T07:22 | 11-Nov | Wed | 14 | 2 | 1 | Inbound 111449.4 km flyby, v = 3.6 km/s, phase = 29 deg |
| S91 | 225 | Periapse | | 2015-315T09:29 | 11-Nov | Wed | 14 | 2 | 2 | R = 2.898 Rs, lat = 0 deg, phase = 69 deg |
| S91 | 225 | 225PA (nt) | PANDORA | 2015-315T09:30 | 11-Nov | Wed | 14 | 2 | 2 | Outbound 109215.8 km flyby, v = 12.4 km/s, phase = 118 deg |
| S91 | 225 | 225AN (nt) | ANTHE | 2015-315T11:47 | 11-Nov | Wed | 14 | 2 | 2 | Outbound 107479.4 km flyby, v = 14.8 km/s, phase = 50 deg |
| S91 | 225 | Dust Hazard | Pallene | 2015-315T11:55 | 11-Nov | Wed | 14 | 2 | 2 | Egress @ 2015-315T12:07 (12 min) \| Protection: MEA Cvr. Closure |
| S91 | 225 | Dust Hazard | E_ring_lg | 2015-315T12:05 | 11-Nov | Wed | 14 | 2 | 2 | Egress @ 2015-315T13:43 (97 min) \| Protection: MEA Cvr. Closure |
| S91 | 225 | Ring CRX | Descending | 2015-315T12:19 | 11-Nov | Wed | 14 | 2 | 2 | r = 3.653 Rs ( 220385 km) |
| S91 | 225 | 225TE (nt) | TETHYS | 2015-315T14:42 | 11-Nov | Wed | 14 | 2 | 2 | Outbound 8406.6 km flyby, v = 8.8 km/s, phase = 100 deg |
| S91 | 225 | TOST | Segment | 2015-316T05:59 | 12-Nov | Thu | 15 | 1 | 2 | TOST_T11 (2d); T114 flyby |
| S91 | 225 | 225TI (t) T114 | TITAN | 2015-317T05:46 | 13-Nov | Fri | 16 | 37 | 3 | Outbound 11926.9 km flyby, v = 5.5 km/s, phase = 92 deg |
| S91 | 225 | XD | Segment | 2015-318T07:29 | 14-Nov | Sat | 1 | 35 | 4 | XD_225_226 (9d) |
| S91 | 225 | OTM-431 | 225TI+3d | 2015-319T20:29 | 15-Nov | Sun | 3 | 34 | 6 | D/L Start, burn ~6h later. Backup D/L 320T20:29; complexes C/C |
| S91 | 225 | Ring CRX | Ascending | 2015-321T11:35 | 17-Nov | Tue | 4 | 32 | 2 | r = 32.291 Rs (1948138 km) |
| S91 | 226 | Apoapse | | 2015-321T18:22 | 17-Nov | Tue | 5 | 32 | 2 | Per = 12.7 d, inc = 1.3 deg, r = 32.334 Rs, phase = 114 deg |
| S91 | 226 | SATURN | Segment | 2015-327T05:14 | 23-Nov | Mon | 10 | 27 | 7 | SATURN_226 (2d) |
| S91 | 226 | 226TE (nt) | TETHYS | 2015-327T21:57 | 23-Nov | Mon | 11 | 26 | 8 | Inbound 17532.3 km flyby, v = 9.2 km/s, phase = 113 deg |
| S91 | 226 | 226AT (nt) | ATLAS | 2015-328T02:33 | 24-Nov | Tue | 11 | 26 | 8 | Inbound 103601.7 km flyby, v = 16.4 km/s, phase = 102 deg |
| S91 | 226 | 226DA (nt) | DAPHNIS | 2015-328T02:34 | 24-Nov | Tue | 11 | 26 | 8 | Inbound 80736.7 km flyby, v = 13.5 km/s, phase = 104 deg |
| S91 | 226 | Dust Hazard | JE_ring | 2015-328T02:37 | 24-Nov | Tue | 11 | 26 | 8 | Egress @ 2015-328T03:47 (69 min) \| Protection: HGA to Dust-Ram |
| S91 | 226 | Ring CRX | Descending | 2015-328T03:10 | 24-Nov | Tue | 11 | 26 | 8 | r = 2.532 Rs ( 152770 km) |
| S91 | 226 | Periapse | | 2015-328T03:14 | 24-Nov | Tue | 11 | 26 | 8 | R = 2.532 Rs, lat = -0 deg, phase = 66 deg |
| S91 | 226 | 226ME (nt) | METHONE | 2015-328T05:45 | 24-Nov | Tue | 11 | 26 | 8 | Outbound 37754.9 km flyby, v = 11.6 km/s, phase = 56 deg |
| S92 | 226 | S92 Begins | | 2015-329T06:08 | 25-Nov | Wed | 12 | 24 | 9 | S92 Sequence. Duration = 74 d |
| S92 | 226 | XD | Segment | 2015-329T06:08 | 25-Nov | Wed | 12 | 24 | 9 | XD_226_227 (11d) |
| S92 | 226 | OTM-432 | ~Apo | 2015-329T20:13 | 25-Nov | Wed | 13 | 24 | 10 | D/L Start, burn ~6h later. Backup D/L 330T19:58; complexes C/C |
| S92 | 226 | SEP = 3.0 deg | Conjunction | 2015-331T06:14 | 27-Nov | Fri | 14 | 22 | 1 | Commanding must not be required below 3.0 deg |
| S92 | 226 | SEP = 2.0 deg | Conjunction | 2015-332T19:43 | 28-Nov | Sat | 16 | 21 | 3 | Plan no SSR playback below 2.0 deg |
| S92 | 226 | Ring CRX | Ascending | 2015-334T00:37 | 30-Nov | Mon | 17 | 20 | 4 | r = 32.200 Rs (1942598 km) |
| S92 | 226 | 226TI (nt) | TITAN | 2015-334T05:56 | 30-Nov | Mon | 17 | 19 | 4 | Outbound 753119.4 km flyby, v = 4.0 km/s, phase = 113 deg |
| S92 | 227 | Apoapse | | 2015-334T11:52 | 30-Nov | Mon | 17 | 19 | 5 | Per = 12.7 d, inc = 1.3 deg, r = 32.316 Rs, phase = 114 deg |
| S92 | 227 | SEP = 2.0 deg | Conjunction | 2015-335T08:05 | 01-Dec | Tue | 18 | 18 | 5 | Plan no SSR playback below 2.0 deg |
| S92 | 227 | SEP = 3.0 deg | Conjunction | 2015-336T21:06 | 02-Dec | Wed | 20 | 17 | 7 | Commanding must not be required below 3.0 deg |
| S92 | 227 | RINGS | Segment | 2015-340T04:29 | 06-Dec | Sun | 23 | 14 | 10 | RINGS_227 (1d) |
| S92 | 227 | Dust Hazard | JE_ring | 2015-340T19:54 | 06-Dec | Sun | 24 | 13 | 11 | Egress @ 2015-340T21:02 (68 min) \| Protection: HGA to Dust-Ram |
| S92 | 227 | Ring CRX | Descending | 2015-340T20:26 | 06-Dec | Sun | 24 | 13 | 11 | r = 2.531 Rs ( 152707 km) |
| S92 | 227 | Periapse | | 2015-340T20:31 | 06-Dec | Sun | 24 | 13 | 11 | R = 2.530 Rs, lat = -0 deg, phase = 66 deg |
| S92 | 227 | 227EP (nt) | EPIMETHEUS | 2015-340T20:38 | 06-Dec | Sun | 24 | 13 | 11 | Outbound 2640.8 km flyby, v = 5.5 km/s, phase = 65 deg |
| S92 | 227 | 227AT (nt) | ATLAS | 2015-340T20:56 | 06-Dec | Sun | 24 | 13 | 11 | Outbound 22063.7 km flyby, v = 6.0 km/s, phase = 45 deg |
| S92 | 227 | 227PM (nt) | PROMETHEUS | 2015-340T21:04 | 06-Dec | Sun | 24 | 13 | 11 | Outbound 23274.0 km flyby, v = 6.6 km/s, phase = 44 deg |
| S92 | 227 | XD | Segment | 2015-341T14:14 | 07-Dec | Mon | 24 | 12 | 12 | XD_227_228 (12d) |
| S92 | 227 | Ring CRX | Ascending | 2015-346T13:40 | 12-Dec | Sat | 29 | 7 | 17 | r = 32.108 Rs (1937104 km) |
| S92 | 228 | Apoapse | | 2015-347T05:22 | 13-Dec | Sun | 30 | 7 | 17 | Per = 12.7 d, inc = 1.3 deg, r = 32.335 Rs, phase = 114 deg |
| S92 | 228 | OTM-433 | 228EN-4d | 2015-349T18:44 | 15-Dec | Tue | 33 | 4 | 20 | D/L Start, burn ~6h later. Backup D/L 350T18:44; complexes C/C |
| S92 | 228 | 228TI (nt) | TITAN | 2015-351T13:23 | 17-Dec | Thu | 34 | 2 | 2 | Inbound 148598.8 km flyby, v = 4.7 km/s, phase = 130 deg |
| S92 | 228 | SOST | Segment | 2015-353T03:44 | 19-Dec | Sat | 36 | 1 | 3 | SOST_228 (2d); E22 flyby |
| S92 | 228 | 228AG (nt) | AEGAEON | 2015-353T12:59 | 19-Dec | Sat | 36 | 0 | 4 | Inbound 2527.4 km flyby, v = 6.9 km/s, phase = 84 deg |
| S92 | 228 | 228AN (nt) | ANTHE | 2015-353T13:16 | 19-Dec | Sat | 36 | 0 | 4 | Inbound 38895.0 km flyby, v = 7.3 km/s, phase = 114 deg |
| S92 | 228 | Dust Hazard | JE_ring | 2015-353T13:47 | 19-Dec | Sat | 36 | 0 | 4 | Egress @ 2015-353T14:31 (44 min) \| Protection: MEA Cvr. Closure |
| S92 | 228 | Ring CRX | Descending | 2015-353T14:00 | 19-Dec | Sat | 36 | 0 | 4 | r = 2.570 Rs ( 155033 km) |
| S92 | 228 | Periapse | | 2015-353T14:09 | 19-Dec | Sat | 36 | 0 | 4 | R = 2.566 Rs, lat = -0 deg, phase = 66 deg |
| S92 | 228 | 228EN (t) E22 | ENCELADUS | 2015-353T17:49 | 19-Dec | Sat | 37 | 27 | 4 | Outbound 4998.1 km flyby, v = 9.5 km/s, phase = 114 deg |
| S92 | 228 | 228CP (nt) | CALYPSO | 2015-353T19:10 | 19-Dec | Sat | 0 | 27 | 4 | Outbound 91835.0 km flyby, v = 13.4 km/s, phase = 69 deg |
| S92 | 228 | XD | Segment | 2015-355T07:44 | 21-Dec | Mon | 2 | 26 | 6 | XD_228_229 (10d) |
| S92 | 228 | OTM-434 | 228EN+3d | 2015-356T18:29 | 22-Dec | Tue | 3 | 24 | 7 | D/L Start, burn ~6h later. Backup D/L 357T18:29; complexes C/C |
| S92 | 228 | Ring CRX | Ascending | 2015-358T22:00 | 24-Dec | Thu | 5 | 22 | 2 | r = 31.875 Rs (1923017 km) |
| S92 | 229 | Apoapse | | 2015-360T00:24 | 26-Dec | Sat | 6 | 21 | 3 | Per = 12.9 d, inc = 1.3 deg, r = 32.509 Rs, phase = 114 deg |
| S92 | 229 | OTM-435 | ~Peri | 2015-363T18:00 | 29-Dec | Tue | 10 | 17 | 7 | D/L Start, burn ~6h later. Backup D/L 364T18:00; complexes C/C |
| S92 | 229 | MAPS | Segment | 2015-365T03:00 | 31-Dec | Thu | 11 | 16 | 1 | MAPS_229_230 (14d) |
| S92 | 229 | 229RH (nt) | RHEA | 2015-365T22:30 | 31-Dec | Thu | 12 | 15 | 2 | Inbound 24714.6 km flyby, v = 9.0 km/s, phase = 42 deg |
| S92 | 229 | 229AG (nt) | AEGAEON | 2016-001T08:58 | 01-Jan | Fri | 13 | 15 | 3 | Inbound 93760.8 km flyby, v = 15.7 km/s, phase = 88 deg |
| S92 | 229 | 229PN (nt) | PAN | 2016-001T10:13 | 01-Jan | Fri | 13 | 15 | 3 | Inbound 97198.9 km flyby, v = 14.7 km/s, phase = 107 deg |
| S92 | 229 | Dust Hazard | JE_ring | 2016-001T10:18 | 01-Jan | Fri | 13 | 15 | 3 | Egress @ 2016-001T11:00 (41 min) \| Protection: MEA Cvr. Closure |
| S92 | 229 | Ring CRX | Descending | 2016-001T10:30 | 01-Jan | Fri | 13 | 15 | 3 | r = 2.572 Rs ( 155175 km) |
| S92 | 229 | Periapse | | 2016-001T10:39 | 01-Jan | Fri | 13 | 15 | 3 | R = 2.569 Rs, lat = -0 deg, phase = 66 deg |
| S92 | 229 | 229PA (nt) | PANDORA | 2016-001T11:27 | 01-Jan | Fri | 13 | 15 | 3 | Outbound 106129.3 km flyby, v = 16.4 km/s, phase = 36 deg |
| S92 | 229 | 229ME (nt) | METHONE | 2016-001T12:09 | 01-Jan | Fri | 13 | 15 | 3 | Outbound 27874.5 km flyby, v = 7.1 km/s, phase = 120 deg |
| S92 | 229 | 229TE (nt) | TETHYS | 2016-001T15:52 | 01-Jan | Fri | 13 | 14 | 3 | Outbound 38733.8 km flyby, v = 11.3 km/s, phase = 68 deg |
| S92 | 229 | Ring CRX | Ascending | 2016-006T20:36 | 06-Jan | Wed | 18 | 9 | 8 | r = 31.961 Rs (1928211 km) |
| S92 | 230 | Apoapse | | 2016-007T20:47 | 07-Jan | Thu | 19 | 8 | 9 | Per = 12.8 d, inc = 1.3 deg, r = 32.493 Rs, phase = 114 deg |
| S92 | 230 | OTM-436 | 230TI-3d | 2016-012T17:16 | 12-Jan | Tue | 24 | 3 | 14 | D/L Start, burn ~6h later. Backup D/L 013T17:16; complexes C/C |
| S92 | 230 | 230CP (nt) | CALYPSO | 2016-014T02:01 | 14-Jan | Thu | 25 | 2 | 1 | Inbound 116044.1 km flyby, v = 14.3 km/s, phase = 61 deg |
| S92 | 230 | SOST | Segment | 2016-014T02:16 | 14-Jan | Thu | 25 | 2 | 1 | SOST_230 (1d); non-targ flyby |
| S92 | 230 | 230EN (nt) | ENCELADUS | 2016-014T03:18 | 14-Jan | Thu | 25 | 2 | 1 | Inbound 73429.8 km flyby, v = 13.4 km/s, phase = 70 deg |
| S92 | 230 | 230MI (nt) | MIMAS | 2016-014T06:01 | 14-Jan | Thu | 26 | 2 | 2 | Inbound 27022.3 km flyby, v = 7.0 km/s, phase = 104 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S92 | 230 | 230AT (nt) | ATLAS | 2016-014T06:18 | 14-Jan | Thu | 26 | 2 | 2 | Inbound 94087.1 km flyby, v = 14.8 km/s, phase = 103 deg |
| S92 | 230 | Dust Hazard | JE_ring | 2016-014T06:33 | 14-Jan | Thu | 26 | 2 | 2 | Egress @ 2016-014T07:19 (45 min) \| Protection: MEA Cvr. Closure |
| S92 | 230 | Ring CRX | Descending | 2016-014T06:46 | 14-Jan | Thu | 26 | 2 | 2 | r = 2.570 Rs ( 155035 km) |
| S92 | 230 | Periapse | | 2016-014T06:56 | 14-Jan | Thu | 26 | 2 | 2 | R = 2.566 Rs, lat = -0 deg, phase = 66 deg |
| S92 | 230 | 230DA (nt) | DAPHNIS | 2016-014T07:07 | 14-Jan | Thu | 26 | 2 | 2 | Outbound 20417.8 km flyby, v = 5.0 km/s, phase = 52 deg |
| S92 | 230 | 230TL (nt) | TELESTO | 2016-014T12:13 | 14-Jan | Thu | 26 | 2 | 2 | Outbound 15177.2 km flyby, v = 9.2 km/s, phase = 116 deg |
| S92 | 230 | TOST | Segment | 2016-015T12:01 | 15-Jan | Fri | 27 | 1 | 3 | TOST_T11 (2d); T115 flyby |
| S92 | 230 | 230TI (t) T115 | TITAN | 2016-016T02:20 | 16-Jan | Sat | 27 | 16 | 3 | Outbound 3547.8 km flyby, v = 5.7 km/s, phase = 104 deg |
| S92 | 230 | Ring CRX | Ascending | 2016-016T17:36 | 16-Jan | Sat | 1 | 15 | 4 | r = 23.767 Rs (1433891 km) |
| S92 | 230 | XD | Segment | 2016-017T04:01 | 17-Jan | Sun | 1 | 15 | 4 | XD_230_231 (11d) |
| S92 | 230 | OTM-437 | 230TI+3d | 2016-018T17:01 | 18-Jan | Mon | 3 | 13 | 6 | D/L Start, burn ~6h later. Backup D/L 019T17:01; complexes C/C |
| S92 | 231 | Apoapse | | 2016-022T05:32 | 22-Jan | Fri | 6 | 10 | 4 | Per = 15.9 d, inc = 4.1 deg, r = 36.989 Rs, phase = 106 deg |
| S92 | 231 | OTM-438 | ~Apo | 2016-023T16:47 | 23-Jan | Sat | 8 | 8 | 5 | D/L Start, burn ~6h later. Backup D/L 024T16:32; complexes C/C |
| S92 | 231 | RINGS | Segment | 2016-028T01:32 | 28-Jan | Thu | 12 | 4 | 4 | RINGS_231 (3d) |
| S92 | 231 | OTM-439 | 231TI-3d | 2016-028T13:52 | 28-Jan | Thu | 12 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 029T16:17; complexes C/C |
| S92 | 231 | Dust Hazard | E_ring_lg | 2016-030T03:05 | 30-Jan | Sat | 14 | 2 | 2 | Egress @ 2016-030T03:31 (26 min) \| Protection: None |
| S92 | 231 | Ring CRX | Descending | 2016-030T03:18 | 30-Jan | Sat | 14 | 2 | 2 | r = 3.678 Rs ( 221921 km) |
| S92 | 231 | Periapse | | 2016-030T04:51 | 30-Jan | Sat | 14 | 2 | 2 | R = 3.504 Rs, lat = -2 deg, phase = 73 deg |
| S92 | 231 | 231AN (nt) | ANTHE | 2016-030T06:18 | 30-Jan | Sat | 14 | 2 | 2 | Outbound 118713.1 km flyby, v = 12.2 km/s, phase = 45 deg |
| S92 | 231 | 231PN (nt) | PAN | 2016-030T07:22 | 30-Jan | Sat | 14 | 2 | 2 | Outbound 120349.3 km flyby, v = 0.9 km/s, phase = 132 deg |
| S92 | 231 | 231PO (nt) | POLYDEUCES | 2016-030T11:01 | 30-Jan | Sat | 14 | 2 | 2 | Outbound 107607.0 km flyby, v = 5.9 km/s, phase = 106 deg |
| S92 | 231 | TOST | Segment | 2016-031T11:02 | 31-Jan | Sun | 15 | 1 | 3 | TOST_T11 (2d); T116 flyby |
| S92 | 231 | 231TI (t) T116 | TITAN | 2016-032T01:00 | 01-Feb | Mon | 16 | 16 | 3 | Outbound 1398.0 km flyby, v = 5.8 km/s, phase = 121 deg |
| S92 | 231 | Earth OCC | TITAN | 2016-032T01:03 | 01-Feb | Mon | 0 | 16 | 3 | Duration = 28 min; egress = 2016-032T01:30:51 |
| S92 | 231 | Sun OCC | TITAN | 2016-032T01:03 | 01-Feb | Mon | 0 | 16 | 3 | Duration = 26 min; egress = 2016-032T01:29:08 |
| S92 | 231 | Ring CRX | Ascending | 2016-032T04:37 | 01-Feb | Mon | 0 | 16 | 4 | r = 20.925 Rs (1262381 km) |
| S92 | 231 | XD | Segment | 2016-033T06:03 | 02-Feb | Tue | 1 | 15 | 5 | XD_231 (5d) |
| S92 | 231 | OTM-440 | 231TI+3d | 2016-034T16:03 | 03-Feb | Wed | 3 | 13 | 6 | D/L Start, burn ~6h later. Backup D/L 035T16:03; complexes C/C |
| S93 | 231 | S93 Begins | | 2016-038T00:48 | 07-Feb | Sun | 6 | 10 | 3 | S93 Sequence. Duration = 72 d |
| S93 | 231 | XD | Segment | 2016-038T00:48 | 07-Feb | Sun | 6 | 10 | 3 | XD_231_232 (7d) |
| S93 | 232 | Apoapse | | 2016-038T03:08 | 07-Feb | Sun | 6 | 10 | 3 | Per = 16.0 d, inc = 17.6 deg, r = 36.652 Rs, phase = 102 deg |
| S93 | 232 | OTM-441 | ~Apo | 2016-039T15:49 | 08-Feb | Mon | 8 | 8 | 5 | D/L Start, burn ~6h later. Backup D/L 040T15:34; complexes C/C |
| S93 | 232 | OTM-442 | 232TI-3d | 2016-044T15:34 | 13-Feb | Sat | 13 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 045T15:19; complexes C/C |
| S93 | 232 | MAPS | Segment | 2016-045T00:34 | 14-Feb | Sun | 13 | 3 | 0 | MAPS_232 (2d) |
| S93 | 232 | 232PO (nt) | POLYDEUCES | 2016-045T20:02 | 14-Feb | Sun | 14 | 2 | 1 | Inbound 78922.1 km flyby, v = 8.2 km/s, phase = 94 deg |
| S93 | 232 | 232TL (nt) | TELESTO | 2016-045T23:33 | 14-Feb | Sun | 14 | 2 | 1 | Inbound 37059.1 km flyby, v = 6.9 km/s, phase = 102 deg |
| S93 | 232 | Dust Hazard | E_ring_lg | 2016-046T00:12 | 15-Feb | Mon | 14 | 2 | 1 | Egress @ 2016-046T00:19 (7 min) \| Protection: None |
| S93 | 232 | Ring CRX | Descending | 2016-046T00:15 | 15-Feb | Mon | 14 | 2 | 1 | r = 4.209 Rs ( 253947 km) |
| S93 | 232 | 232EP (nt) | EPIMETHEUS | 2016-046T00:30 | 15-Feb | Mon | 14 | 2 | 1 | Inbound 108705.5 km flyby, v = 4.8 km/s, phase = 34 deg |
| S93 | 232 | Periapse | | 2016-046T02:42 | 15-Feb | Mon | 14 | 2 | 1 | R = 3.873 Rs, lat = -10 deg, phase = 77 deg |
| S93 | 232 | 232EN (nt) | ENCELADUS | 2016-046T04:10 | 15-Feb | Mon | 14 | 2 | 2 | Outbound 82704.3 km flyby, v = 7.3 km/s, phase = 73 deg |
| S93 | 232 | TOST | Segment | 2016-047T10:04 | 16-Feb | Tue | 15 | 1 | 3 | TOST_232 (3d); T117 flyby |
| S93 | 232 | 232TI (t) T117 | TITAN | 2016-047T23:49 | 16-Feb | Tue | 16 | 48 | 3 | Outbound 1017.7 km flyby, v = 5.9 km/s, phase = 122 deg |
| S93 | 232 | Sun OCC | TITAN | 2016-047T23:51 | 16-Feb | Tue | 0 | 48 | 3 | Duration = 17 min; egress = 2016-048T00:08:09 |
| S93 | 232 | Earth OCC | TITAN | 2016-047T23:52 | 16-Feb | Tue | 0 | 48 | 3 | Duration = 13 min; egress = 2016-048T00:05:25 |
| S93 | 232 | Ring CRX | Ascending | 2016-048T01:47 | 17-Feb | Wed | 0 | 48 | 3 | r = 20.487 Rs (1236008 km) |
| S93 | 232 | XD | Segment | 2016-050T00:05 | 19-Feb | Fri | 2 | 46 | 5 | XD_232_233 (19d) |
| S93 | 232 | OTM-443 | 232TI+3d | 2016-050T15:05 | 19-Feb | Fri | 3 | 45 | 6 | D/L Start, burn ~6h later. Backup D/L 051T15:05; complexes C/C |
| S93 | 233 | Apoapse | | 2016-057T23:48 | 26-Feb | Fri | 10 | 38 | 7 | Per = 23.9 d, inc = 21.9 deg, r = 46.976 Rs, phase = 86 deg |
| S93 | 233 | 233TI (nt) | TITAN | 2016-068T08:20 | 08-Mar | Tue | 20 | 27 | 18 | Inbound 457539.8 km flyby, v = 6.3 km/s, phase = 77 deg |
| S93 | 233 | RINGS | Segment | 2016-068T22:52 | 08-Mar | Tue | 21 | 27 | 18 | RINGS_233 (3d) |
| S93 | 233 | Ring CRX | Descending | 2016-069T14:51 | 09-Mar | Wed | 22 | 26 | 19 | r = 7.299 Rs ( 440344 km) |
| S93 | 233 | Periapse | | 2016-069T22:37 | 09-Mar | Wed | 22 | 26 | 19 | R = 6.070 Rs, lat = -17 deg, phase = 94 deg |
| S93 | 233 | SATURN | Segment | 2016-071T22:53 | 11-Mar | Fri | 24 | 24 | 21 | SATURN_233_234 (20d) |
| S93 | 233 | Ring CRX | Ascending | 2016-071T22:57 | 11-Mar | Fri | 24 | 24 | 21 | r = 20.361 Rs (1228400 km) |
| S93 | 234 | Apoapse | | 2016-081T21:40 | 21-Mar | Mon | 34 | 14 | 31 | Per = 23.9 d, inc = 21.9 deg, r = 47.012 Rs, phase = 87 deg |
| S93 | 234 | OTM-444 | ~Apo | 2016-085T12:55 | 25-Mar | Fri | 38 | 10 | 35 | D/L Start, burn ~6h later. Backup D/L 086T12:55; complexes C/C |
| S93 | 234 | RINGS | Segment | 2016-091T15:11 | 31-Mar | Thu | 44 | 4 | 6 | RINGS_234 (3d) |
| S93 | 234 | OTM-445 | 234TI-3d | 2016-092T12:26 | 01-Apr | Fri | 45 | 3 | 7 | D/L Start, burn ~6h later. Backup D/L 093T12:26; complexes C/C |
| S93 | 234 | Ring CRX | Descending | 2016-093T13:04 | 02-Apr | Sat | 46 | 2 | 1 | r = 7.323 Rs ( 441786 km) |
| S93 | 234 | Periapse | | 2016-093T20:51 | 02-Apr | Sat | 46 | 2 | 1 | R = 6.104 Rs, lat = -17 deg, phase = 93 deg |
| S93 | 234 | TOST | Segment | 2016-094T14:26 | 03-Apr | Sun | 47 | 1 | 2 | TOST_234 (2d); T118 flyby |
| S93 | 234 | Earth OCC | TITAN | 2016-095T19:41 | 04-Apr | Mon | 48 | 0 | 3 | Duration = 21 min; egress = 2016-095T20:02:11 |
| S93 | 234 | Sun OCC | TITAN | 2016-095T19:41 | 04-Apr | Mon | 48 | 0 | 3 | Duration = 21 min; egress = 2016-095T20:01:51 |
| S93 | 234 | 234TI (t) T118 | TITAN | 2016-095T19:42 | 04-Apr | Mon | 48 | 32 | 3 | Outbound 989.9 km flyby, v = 5.9 km/s, phase = 139 deg |
| S93 | 234 | Ring CRX | Ascending | 2016-095T21:07 | 04-Apr | Mon | 0 | 32 | 3 | r = 20.343 Rs (1227316 km) |
| S93 | 234 | XD | Segment | 2016-096T21:11 | 05-Apr | Tue | 1 | 31 | 4 | XD_234_235 (13d) |
| S93 | 234 | OTM-446 | 234TI+3d | 2016-098T12:11 | 07-Apr | Thu | 3 | 29 | 6 | D/L Start, burn ~6h later. Backup D/L 099T12:11; complexes C/C |
| S93 | 235 | Apoapse | | 2016-109T18:01 | 18-Apr | Mon | 14 | 18 | 11 | Per = 31.9 d, inc = 28.8 deg, r = 55.967 Rs, phase = 72 deg |
| S94 | 235 | S94 Begins | | 2016-109T18:43 | 18-Apr | Mon | 14 | 18 | 11 | S94 Sequence. Duration = 69 d |
| S94 | 235 | XD | Segment | 2016-109T18:43 | 18-Apr | Mon | 14 | 18 | 11 | XD_235 (15d) |
| S94 | 235 | OTM-447 | ~Apo | 2016-113T11:13 | 22-Apr | Fri | 18 | 14 | 15 | D/L Start, burn ~6h later. Backup D/L 114T11:13; complexes C/C |
| S94 | 235 | OTM-448 | 235TI-3d | 2016-124T10:29 | 03-May | Tue | 29 | 3 | 11 | D/L Start, burn ~6h later. Backup D/L 125T10:29; complexes C/C |
| S94 | 235 | SATURN | Segment | 2016-124T19:29 | 03-May | Tue | 29 | 3 | 0 | SATURN_235 (2d) |
| S94 | 235 | Ring CRX | Descending | 2016-124T22:53 | 03-May | Tue | 29 | 3 | 1 | r = 11.256 Rs ( 679066 km) |
| S94 | 235 | Periapse | | 2016-125T16:34 | 04-May | Wed | 30 | 2 | 1 | R = 8.330 Rs, lat = -26 deg, phase = 108 deg |
| S94 | 235 | TOST | Segment | 2016-126T19:14 | 05-May | Thu | 31 | 1 | 2 | TOST_235 (3d); T119 flyby |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S94 | 235 | Earth OCC | TITAN | 2016-127T16:52 | 06-May | Fri | 32 | 0 | 3 | Duration = 17 min; egress = 2016-127T17:09:12 |
| S94 | 235 | Sun OCC | TITAN | 2016-127T16:52 | 06-May | Fri | 32 | 0 | 3 | Duration = 16 min; egress = 2016-127T17:08:29 |
| S94 | 235 | 235TI (t) T119 | TITAN | 2016-127T16:54 | 06-May | Fri | 32 | 32 | 3 | Outbound 968.8 km flyby, v = 5.9 km/s, phase = 139 deg |
| S94 | 235 | Ring CRX | Ascending | 2016-127T17:57 | 06-May | Fri | 0 | 32 | 3 | r = 20.236 Rs (1220817 km) |
| S94 | 235 | XD | Segment | 2016-129T19:14 | 08-May | Sun | 2 | 30 | 5 | XD_235_236 (26d) |
| S94 | 235 | OTM-449 | 235TI+3d | 2016-130T09:59 | 09-May | Mon | 3 | 29 | 6 | D/L Start, burn ~6h later. Backup D/L 131T09:59; complexes C/C |
| S94 | 236 | Apoapse | | 2016-141T13:11 | 20-May | Fri | 14 | 18 | 11 | Per = 31.9 d, inc = 36.0 deg, r = 54.251 Rs, phase = 63 deg |
| S94 | 236 | OTM-450 | ~Apo | 2016-143T09:00 | 22-May | Sun | 16 | 16 | 13 | D/L Start, burn ~6h later. Backup D/L 144T09:00; complexes C/C |
| S94 | 236 | MAPS | Segment | 2016-155T17:15 | 03-Jun | Fri | 28 | 4 | 12 | MAPS_236 (3d) |
| S94 | 236 | Ring CRX | Descending | 2016-156T07:09 | 04-Jun | Sat | 29 | 3 | 13 | r = 14.577 Rs ( 879422 km) |
| S94 | 236 | OTM-451 | 236TI-3d | 2016-156T08:15 | 04-Jun | Sat | 29 | 3 | 13 | D/L Start, burn ~6h later. Backup D/L 157T08:15; complexes C/C |
| S94 | 236 | Periapse | | 2016-157T11:45 | 05-Jun | Sun | 30 | 2 | 1 | R = 10.040 Rs, lat = -35 deg, phase = 117 deg |
| S94 | 236 | Earth OCC | RING | 2016-158T04:59 | 06-Jun | Mon | 31 | 1 | 2 | Duration = 312 min; egress = 2016-158T10:11:16 |
| S94 | 236 | Sun OCC | RING | 2016-158T05:03 | 06-Jun | Mon | 31 | 1 | 2 | Duration = 298 min; egress = 2016-158T10:00:52 |
| S94 | 236 | Earth OCC | SATURN | 2016-158T08:52 | 06-Jun | Mon | 31 | 1 | 2 | Duration = 34 min; egress = 2016-158T09:25:38 |
| S94 | 236 | TOST | Segment | 2016-159T02:45 | 07-Jun | Tue | 31 | 0 | 3 | TOST_236 (2d); T120 flyby |
| S94 | 236 | 236TI (t) T120 | TITAN | 2016-159T14:06 | 07-Jun | Tue | 32 | 48 | 3 | Outbound 974.4 km flyby, v = 5.8 km/s, phase = 125 deg |
| S94 | 236 | Earth OCC | TITAN | 2016-159T14:08 | 07-Jun | Tue | 0 | 48 | 3 | Duration = 2 min; egress = 2016-159T14:10:35 |
| S94 | 236 | Sun OCC | TITAN | 2016-159T14:08 | 07-Jun | Tue | 0 | 48 | 3 | Duration = 3 min; egress = 2016-159T14:11:01 |
| S94 | 236 | Ring CRX | Ascending | 2016-159T14:55 | 07-Jun | Tue | 0 | 48 | 3 | r = 20.160 Rs (1216254 km) |
| S94 | 236 | XD | Segment | 2016-161T10:30 | 09-Jun | Thu | 2 | 46 | 5 | XD_236_237 (17d) |
| S94 | 236 | OTM-452 | 236TI+4d | 2016-163T07:45 | 11-Jun | Sat | 4 | 44 | 7 | D/L Start, burn ~6h later. Backup D/L 164T07:45; complexes C/C |
| S94 | 237 | Apoapse | | 2016-169T05:46 | 17-Jun | Fri | 10 | 38 | 6 | Per = 23.9 d, inc = 43.0 deg, r = 42.312 Rs, phase = 65 deg |
| S95 | 237 | RINGS | Segment | 2016-178T15:44 | 26-Jun | Sun | 19 | 29 | 15 | RINGS_237 (4d) |
| S95 | 237 | S95 Begins | | 2016-178T15:44 | 26-Jun | Sun | 19 | 29 | 15 | S95 Sequence. Duration = 74 d |
| S95 | 237 | Ring CRX | Descending | 2016-179T21:33 | 27-Jun | Mon | 20 | 28 | 17 | r = 14.864 Rs ( 896759 km) |
| S95 | 237 | Periapse | | 2016-181T04:29 | 29-Jun | Wed | 22 | 26 | 18 | R = 10.725 Rs, lat = -41 deg, phase = 115 deg |
| S95 | 237 | Earth OCC | RING | 2016-182T01:44 | 30-Jun | Thu | 22 | 25 | 19 | Duration = 393 min; egress = 2016-182T08:17:55 |
| S95 | 237 | Sun OCC | RING | 2016-182T01:59 | 30-Jun | Thu | 22 | 25 | 19 | Duration = 395 min; egress = 2016-182T08:34:39 |
| S95 | 237 | Earth OCC | SATURN | 2016-182T02:32 | 30-Jun | Thu | 23 | 25 | 19 | Duration = 243 min; egress = 2016-182T06:35:31 |
| S95 | 237 | Sun OCC | SATURN | 2016-182T03:24 | 30-Jun | Thu | 23 | 25 | 19 | Duration = 254 min; egress = 2016-182T07:38:55 |
| S95 | 237 | XD | Segment | 2016-183T00:59 | 01-Jul | Fri | 23 | 24 | 20 | XD_237_238 (19d) |
| S95 | 237 | Ring CRX | Ascending | 2016-183T12:17 | 01-Jul | Fri | 24 | 24 | 20 | r = 20.169 Rs (1216783 km) |
| S95 | 238 | Apoapse | | 2016-193T03:50 | 11-Jul | Mon | 34 | 14 | 30 | Per = 24.0 d, inc = 42.9 deg, r = 42.386 Rs, phase = 65 deg |
| S95 | 238 | OTM-453 | ~Apo | 2016-199T05:13 | 17-Jul | Sun | 40 | 8 | 36 | D/L Start, burn ~6h later. Backup D/L 200T05:13; complexes C/C |
| S95 | 238 | SATURN | Segment | 2016-202T07:28 | 20-Jul | Wed | 43 | 5 | 3 | SATURN_238 (5d) |
| S95 | 238 | Ring CRX | Descending | 2016-203T20:10 | 21-Jul | Thu | 44 | 4 | 5 | r = 14.874 Rs ( 897335 km) |
| S95 | 238 | OTM-454 | 238TI-3d | 2016-204T04:42 | 22-Jul | Fri | 45 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 205T04:57; complexes C/C |
| S95 | 238 | Periapse | | 2016-205T03:09 | 23-Jul | Sat | 46 | 2 | 1 | R = 10.718 Rs, lat = -41 deg, phase = 115 deg |
| S95 | 238 | Earth OCC | RING | 2016-206T00:10 | 24-Jul | Sun | 46 | 1 | 2 | Duration = 386 min; egress = 2016-206T06:36:31 |
| S95 | 238 | Sun OCC | RING | 2016-206T00:41 | 24-Jul | Sun | 46 | 1 | 2 | Duration = 390 min; egress = 2016-206T07:11:16 |
| S95 | 238 | Earth OCC | SATURN | 2016-206T00:48 | 24-Jul | Sun | 46 | 1 | 2 | Duration = 226 min; egress = 2016-206T04:34:25 |
| S95 | 238 | Sun OCC | SATURN | 2016-206T02:18 | 24-Jul | Sun | 47 | 1 | 2 | Duration = 248 min; egress = 2016-206T06:25:58 |
| S95 | 238 | TOST | Segment | 2016-206T23:27 | 24-Jul | Sun | 47 | 0 | 3 | TOST_238 (3d); T121 flyby |
| S95 | 238 | 238TI (t) T121 | TITAN | 2016-207T09:58 | 25-Jul | Mon | 48 | 16 | 3 | Outbound 975.3 km flyby, v = 5.8 km/s, phase = 101 deg |
| S95 | 238 | Ring CRX | Ascending | 2016-207T10:37 | 25-Jul | Mon | 0 | 16 | 3 | r = 20.103 Rs (1212814 km) |
| S95 | 238 | XD | Segment | 2016-209T13:27 | 27-Jul | Wed | 2 | 14 | 5 | XD_238_239 (9d) |
| S95 | 238 | OTM-455 | 238TI+3d | 2016-210T04:27 | 28-Jul | Thu | 3 | 13 | 6 | D/L Start, burn ~6h later. Backup D/L 211T04:27; complexes C/C |
| S95 | 239 | Apoapse | | 2016-212T19:12 | 30-Jul | Sat | 5 | 11 | 3 | Per = 16.0 d, inc = 49.2 deg, r = 30.932 Rs, phase = 82 deg |
| S95 | 239 | OTM-456 | ~Apo | 2016-215T04:11 | 02-Aug | Tue | 8 | 8 | 5 | D/L Start, burn ~6h later. Backup D/L 216T04:11; complexes C/C |
| S95 | 239 | RINGS | Segment | 2016-218T12:56 | 05-Aug | Fri | 11 | 5 | 3 | RINGS_239 (4d) |
| S95 | 239 | Ring CRX | Descending | 2016-219T23:51 | 06-Aug | Sat | 13 | 3 | 5 | r = 11.485 Rs ( 692876 km) |
| S95 | 239 | OTM-457 | 239TI-3d | 2016-220T03:40 | 07-Aug | Sun | 13 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 221T03:40; complexes C/C |
| S95 | 239 | Periapse | | 2016-220T18:33 | 07-Aug | Sun | 13 | 3 | 1 | R = 9.568 Rs, lat = -40 deg, phase = 97 deg |
| S95 | 239 | Sun OCC | RING | 2016-221T22:17 | 08-Aug | Mon | 15 | 1 | 2 | Duration = 386 min; egress = 2016-222T04:43:20 |
| S95 | 239 | Sun OCC | SATURN | 2016-221T22:44 | 08-Aug | Mon | 15 | 1 | 2 | Duration = 228 min; egress = 2016-222T02:32:17 |
| S95 | 239 | Earth OCC | RING | 2016-221T23:16 | 08-Aug | Mon | 15 | 1 | 2 | Duration = 202 min; egress = 2016-222T02:37:56 |
| S95 | 239 | TOST | Segment | 2016-222T22:25 | 09-Aug | Tue | 16 | 0 | 3 | TOST_239 (2d); T122 flyby |
| S95 | 239 | 239TI (t) T122 | TITAN | 2016-223T08:30 | 10-Aug | Wed | 16 | 48 | 3 | Outbound 1698.2 km flyby, v = 5.8 km/s, phase = 88 deg |
| S95 | 239 | Ring CRX | Ascending | 2016-223T09:05 | 10-Aug | Wed | 0 | 48 | 3 | r = 20.077 Rs (1211218 km) |
| S95 | 239 | XD | Segment | 2016-224T12:25 | 11-Aug | Thu | 1 | 47 | 4 | XD_239_240 (6d) |
| S95 | 240 | Apoapse | | 2016-226T14:22 | 13-Aug | Sat | 3 | 45 | 6 | Per = 12.0 d, inc = 53.7 deg, r = 25.781 Rs, phase = 101 deg |
| S95 | 240 | OTM-458 | 239TI+4d | 2016-227T03:10 | 14-Aug | Sun | 4 | 44 | 7 | D/L Start, burn ~6h later. Backup D/L 228T03:09; complexes C/C |
| S95 | 240 | MAPS | Segment | 2016-230T12:09 | 17-Aug | Wed | 7 | 41 | 3 | MAPS_240 (4d) |
| S95 | 240 | OTM-459 | ~Peri | 2016-232T02:54 | 19-Aug | Fri | 9 | 39 | 5 | D/L Start, burn ~6h later. Backup D/L 233T02:54; complexes C/C |
| S95 | 240 | Ring CRX | Descending | 2016-232T05:15 | 19-Aug | Fri | 9 | 39 | 0 | r = 8.340 Rs ( 503125 km) |
| S95 | 240 | 240TI (nt) | TITAN | 2016-232T05:43 | 19-Aug | Fri | 9 | 39 | 0 | Inbound 816419.1 km flyby, v = 8.4 km/s, phase = 111 deg |
| S95 | 240 | Periapse | | 2016-232T13:46 | 19-Aug | Fri | 9 | 39 | 0 | R = 7.638 Rs, lat = -32 deg, phase = 78 deg |
| S95 | 240 | Sun OCC | RING | 2016-233T19:42 | 20-Aug | Sat | 10 | 37 | 2 | Duration = 334 min; egress = 2016-234T01:16:35 |
| S95 | 240 | XD | Segment | 2016-234T11:54 | 21-Aug | Sun | 11 | 37 | 2 | XD_240_241 (8d) |
| S95 | 240 | Ring CRX | Ascending | 2016-235T07:50 | 22-Aug | Mon | 12 | 36 | 3 | r = 20.081 Rs (1211503 km) |
| S95 | 241 | Apoapse | | 2016-238T13:11 | 25-Aug | Thu | 15 | 33 | 6 | Per = 12.0 d, inc = 53.7 deg, r = 25.785 Rs, phase = 102 deg |
| S95 | 241 | RINGS | Segment | 2016-242T11:23 | 29-Aug | Mon | 19 | 29 | 10 | RINGS_241 (6d) |
| S95 | 241 | 241TI (nt) | TITAN | 2016-243T13:26 | 30-Aug | Tue | 20 | 28 | 11 | Inbound 996791.6 km flyby, v = 8.1 km/s, phase = 90 deg |
| S95 | 241 | Ring CRX | Descending | 2016-244T04:05 | 31-Aug | Wed | 21 | 27 | 12 | r = 8.341 Rs ( 503210 km) |
| S95 | 241 | Periapse | | 2016-244T12:36 | 31-Aug | Wed | 21 | 27 | 12 | R = 7.639 Rs, lat = -32 deg, phase = 78 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S95 | 241 | Sun OCC | RING | 2016-245T18:28 | 01-Sep | Thu | 22 | 25 | 14 | Duration = 347 min; egress = 2016-246T00:15:30 |
| S95 | 241 | Ring CRX | Ascending | 2016-247T06:41 | 03-Sep | Sat | 24 | 24 | 15 | r = 20.089 Rs (1211972 km) |
| S95 | 241 | SATURN | Segment | 2016-248T10:52 | 04-Sep | Sun | 25 | 23 | 16 | SATURN_241_242 (4d) |
| S95 | 242 | Apoapse | | 2016-250T12:11 | 06-Sep | Tue | 27 | 21 | 18 | Per = 12.0 d, inc = 53.7 deg, r = 25.805 Rs, phase = 102 deg |
| S96 | 242 | S96 Begins | | 2016-252T10:36 | 08-Sep | Thu | 29 | 19 | 20 | S96 Sequence. Duration = 76 d |
| S96 | 242 | SATURN | Segment | 2016-252T10:36 | 08-Sep | Thu | 29 | 19 | 20 | SATURN_242 (8d) |
| S96 | 242 | Ring CRX | Descending | 2016-256T03:15 | 12-Sep | Mon | 33 | 15 | 24 | r = 8.349 Rs ( 503715 km) |
| S96 | 242 | Periapse | | 2016-256T11:48 | 12-Sep | Mon | 33 | 15 | 24 | R = 7.646 Rs, lat = -32 deg, phase = 78 deg |
| S96 | 242 | Sun OCC | RING | 2016-257T17:37 | 13-Sep | Tue | 34 | 13 | 26 | Duration = 359 min; egress = 2016-257T23:37:10 |
| S96 | 242 | Sun OCC | SATURN | 2016-257T18:43 | 13-Sep | Tue | 34 | 13 | 26 | Duration = 47 min; egress = 2016-257T19:30:23 |
| S96 | 242 | Ring CRX | Ascending | 2016-259T05:55 | 15-Sep | Thu | 36 | 12 | 27 | r = 20.092 Rs (1212175 km) |
| S96 | 242 | XD | Segment | 2016-260T10:05 | 16-Sep | Fri | 37 | 11 | 28 | XD_242_243 (6d) |
| S96 | 243 | Apoapse | | 2016-262T11:22 | 18-Sep | Sun | 39 | 9 | 30 | Per = 12.0 d, inc = 53.7 deg, r = 25.801 Rs, phase = 102 deg |
| S96 | 243 | RINGS | Segment | 2016-266T09:34 | 22-Sep | Thu | 43 | 5 | 34 | RINGS_243 (4d) |
| S96 | 243 | OTM-460 | 243TI-4d | 2016-267T00:34 | 23-Sep | Fri | 44 | 4 | 35 | D/L Start, burn ~6h later. Backup D/L 269T00:34; complexes C/C |
| S96 | 243 | Ring CRX | Descending | 2016-268T02:24 | 24-Sep | Sat | 45 | 3 | 1 | r = 8.338 Rs ( 503057 km) |
| S96 | 243 | 243PO (nt) | POLYDEUCES | 2016-268T03:35 | 24-Sep | Sat | 45 | 3 | 1 | Inbound 113267.2 km flyby, v = 9.5 km/s, phase = 53 deg |
| S96 | 243 | Periapse | | 2016-268T10:56 | 24-Sep | Sat | 45 | 3 | 1 | R = 7.635 Rs, lat = -32 deg, phase = 78 deg |
| S96 | 243 | Sun OCC | RING | 2016-269T16:38 | 25-Sep | Sun | 46 | 1 | 3 | Duration = 369 min; egress = 2016-269T22:46:59 |
| S96 | 243 | Sun OCC | SATURN | 2016-269T17:19 | 25-Sep | Sun | 46 | 1 | 3 | Duration = 120 min; egress = 2016-269T19:19:18 |
| S96 | 243 | TOST | Segment | 2016-270T09:19 | 26-Sep | Mon | 47 | 1 | 3 | TOST_243 (3d); T123 flyby |
| S96 | 243 | 243TI (t) T123 | TITAN | 2016-271T04:16 | 27-Sep | Tue | 48 | 48 | 4 | Outbound 1775.4 km flyby, v = 5.8 km/s, phase = 86 deg |
| S96 | 243 | Ring CRX | Ascending | 2016-271T04:50 | 27-Sep | Tue | 0 | 48 | 4 | r = 20.064 Rs (1210441 km) |
| S96 | 244 | Apoapse | | 2016-273T05:34 | 29-Sep | Thu | 2 | 46 | 6 | Per = 9.6 d, inc = 57.9 deg, r = 23.182 Rs, phase = 117 deg |
| S96 | 244 | MAPS | Segment | 2016-273T09:18 | 29-Sep | Thu | 2 | 46 | 6 | MAPS_244 (7d) |
| S96 | 244 | OTM-461 | 243TI+3d | 2016-274T00:03 | 30-Sep | Fri | 3 | 45 | 7 | D/L Start, burn ~6h later. Backup D/L 275T00:03; complexes C/C |
| S96 | 244 | 244TI (nt) | TITAN | 2016-277T17:06 | 03-Oct | Mon | 7 | 41 | 4 | Inbound 875365.8 km flyby, v = 10.4 km/s, phase = 144 deg |
| S96 | 244 | Ring CRX | Descending | 2016-277T21:04 | 03-Oct | Mon | 7 | 41 | 4 | r = 5.843 Rs ( 352537 km) |
| S96 | 244 | 244HE (nt) | HELENE | 2016-277T21:39 | 03-Oct | Mon | 7 | 41 | 4 | Inbound 117723.0 km flyby, v = 12.6 km/s, phase = 125 deg |
| S96 | 244 | Periapse | | 2016-278T00:18 | 04-Oct | Tue | 7 | 41 | 4 | R = 5.623 Rs, lat = -22 deg, phase = 62 deg |
| S96 | 244 | OTM-462 | ~Peri | 2016-278T23:48 | 04-Oct | Tue | 8 | 40 | 5 | D/L Start, burn ~6h later. Backup D/L 279T23:47; complexes C/C |
| S96 | 244 | Sun OCC | RING | 2016-279T04:00 | 05-Oct | Wed | 8 | 40 | 0 | Duration = 315 min; egress = 2016-279T09:14:45 |
| S96 | 244 | XD | Segment | 2016-280T08:47 | 06-Oct | Thu | 9 | 39 | 1 | XD_244_245 (6d) |
| S96 | 244 | Ring CRX | Ascending | 2016-280T18:18 | 06-Oct | Thu | 10 | 38 | 2 | r = 20.073 Rs (1210989 km) |
| S96 | 245 | Apoapse | | 2016-282T19:09 | 08-Oct | Sat | 12 | 36 | 4 | Per = 9.6 d, inc = 57.9 deg, r = 23.193 Rs, phase = 118 deg |
| S96 | 245 | RINGS | Segment | 2016-286T01:47 | 12-Oct | Wed | 15 | 33 | 7 | RINGS_245 (4d) |
| S96 | 245 | Ring CRX | Descending | 2016-287T10:45 | 13-Oct | Thu | 16 | 32 | 8 | r = 5.849 Rs ( 352852 km) |
| S96 | 245 | Periapse | | 2016-287T13:59 | 13-Oct | Thu | 16 | 31 | 9 | R = 5.628 Rs, lat = -22 deg, phase = 62 deg |
| S96 | 245 | Sun OCC | RING | 2016-288T17:36 | 14-Oct | Fri | 18 | 30 | 10 | Duration = 330 min; egress = 2016-288T23:06:43 |
| S96 | 245 | Ring CRX | Ascending | 2016-290T08:01 | 16-Oct | Sun | 19 | 29 | 11 | r = 20.074 Rs (1211076 km) |
| S96 | 245 | XD | Segment | 2016-290T08:01 | 16-Oct | Sun | 19 | 29 | 11 | XD_245_246 (6d) |
| S96 | 246 | Apoapse | | 2016-292T08:50 | 18-Oct | Tue | 21 | 27 | 13 | Per = 9.6 d, inc = 57.9 deg, r = 23.192 Rs, phase = 118 deg |
| S96 | 246 | SOST | Segment | 2016-296T01:01 | 22-Oct | Sat | 25 | 23 | 17 | SOST_246 (2d); non-targ flyby |
| S96 | 246 | Ring CRX | Descending | 2016-297T00:25 | 23-Oct | Sun | 26 | 22 | 18 | r = 5.843 Rs ( 352508 km) |
| S96 | 246 | 246TL (nt) | TELESTO | 2016-297T01:20 | 23-Oct | Sun | 26 | 22 | 18 | Inbound 67605.3 km flyby, v = 12.2 km/s, phase = 80 deg |
| S96 | 246 | Periapse | | 2016-297T03:40 | 23-Oct | Sun | 26 | 22 | 18 | R = 5.622 Rs, lat = -22 deg, phase = 62 deg |
| S96 | 246 | Sun OCC | RING | 2016-298T07:08 | 24-Oct | Mon | 27 | 21 | 19 | Duration = 343 min; egress = 2016-298T12:51:33 |
| S96 | 246 | XD | Segment | 2016-298T07:31 | 24-Oct | Mon | 27 | 21 | 19 | XD_246_247 (6d) |
| S96 | 246 | Ring CRX | Ascending | 2016-299T21:34 | 25-Oct | Tue | 29 | 19 | 21 | r = 20.060 Rs (1210246 km) |
| S96 | 247 | Apoapse | | 2016-301T22:25 | 27-Oct | Thu | 31 | 17 | 23 | Per = 9.6 d, inc = 57.9 deg, r = 23.185 Rs, phase = 118 deg |
| S96 | 247 | 247TI (nt) | TITAN | 2016-303T08:33 | 29-Oct | Sat | 32 | 16 | 24 | Inbound 863483.9 km flyby, v = 5.7 km/s, phase = 40 deg |
| S96 | 247 | RINGS | Segment | 2016-304T17:00 | 30-Oct | Sun | 34 | 14 | 26 | RINGS_247 (5d) |
| S96 | 247 | 247PO (nt) | POLYDEUCES | 2016-306T13:18 | 01-Nov | Tue | 35 | 12 | 28 | Inbound 95401.6 km flyby, v = 11.3 km/s, phase = 73 deg |
| S96 | 247 | 247TL (nt) | TELESTO | 2016-306T13:22 | 01-Nov | Tue | 35 | 12 | 28 | Inbound 93855.5 km flyby, v = 11.7 km/s, phase = 20 deg |
| S96 | 247 | Ring CRX | Descending | 2016-306T13:54 | 01-Nov | Tue | 35 | 12 | 28 | r = 5.838 Rs ( 352184 km) |
| S96 | 247 | Periapse | | 2016-306T17:08 | 01-Nov | Tue | 36 | 12 | 28 | R = 5.617 Rs, lat = -22 deg, phase = 62 deg |
| S96 | 247 | Sun OCC | RING | 2016-307T20:31 | 02-Nov | Wed | 37 | 11 | 29 | Duration = 355 min; egress = 2016-308T02:26:23 |
| S96 | 247 | Earth OCC | RING | 2016-307T21:27 | 02-Nov | Wed | 37 | 11 | 29 | Duration = 191 min; egress = 2016-308T00:38:25 |
| S96 | 247 | XD | Segment | 2016-309T07:00 | 04-Nov | Fri | 38 | 10 | 30 | XD_247_248 (5d) |
| S96 | 247 | Ring CRX | Ascending | 2016-309T11:01 | 04-Nov | Fri | 38 | 10 | 30 | r = 20.059 Rs (1210185 km) |
| S96 | 248 | Apoapse | | 2016-311T11:57 | 06-Nov | Sun | 40 | 7 | 33 | Per = 9.6 d, inc = 57.9 deg, r = 23.194 Rs, phase = 118 deg |
| S96 | 248 | MAPS | Segment | 2016-313T23:59 | 08-Nov | Tue | 43 | 5 | 35 | MAPS_248 (4d) |
| S96 | 248 | OTM-463 | 248TI-4d | 2016-314T21:29 | 09-Nov | Wed | 44 | 4 | 36 | D/L Start, burn ~6h later. Backup D/L 315T21:29; complexes C/C |
| S96 | 248 | Ring CRX | Descending | 2016-316T03:29 | 11-Nov | Fri | 45 | 3 | 1 | r = 5.836 Rs ( 352066 km) |
| S96 | 248 | 248TE (nt) | TETHYS | 2016-316T05:06 | 11-Nov | Fri | 45 | 3 | 1 | Inbound 114890.8 km flyby, v = 12.9 km/s, phase = 103 deg |
| S96 | 248 | Periapse | | 2016-316T06:44 | 11-Nov | Fri | 45 | 3 | 1 | R = 5.614 Rs, lat = -22 deg, phase = 62 deg |
| S96 | 248 | Sun OCC | RING | 2016-317T10:00 | 12-Nov | Sat | 46 | 2 | 3 | Duration = 366 min; egress = 2016-317T16:06:41 |
| S96 | 248 | Earth OCC | RING | 2016-317T10:25 | 12-Nov | Sat | 46 | 2 | 3 | Duration = 273 min; egress = 2016-317T14:58:15 |
| S96 | 248 | TOST | Segment | 2016-318T06:29 | 13-Nov | Sun | 47 | 1 | 3 | TOST_248 (3d); T124 flyby |
| S96 | 248 | 248TI (t) T124 | TITAN | 2016-318T23:55 | 13-Nov | Sun | 48 | 16 | 4 | Outbound 1585.0 km flyby, v = 5.8 km/s, phase = 78 deg |
| S96 | 248 | Ring CRX | Ascending | 2016-319T00:29 | 14-Nov | Mon | 0 | 16 | 4 | r = 20.048 Rs (1209506 km) |
| S96 | 249 | Apoapse | | 2016-320T09:06 | 15-Nov | Tue | 1 | 15 | 5 | Per = 8.0 d, inc = 61.4 deg, r = 21.877 Rs, phase = 129 deg |
| S96 | 249 | SATURN | Segment | 2016-321T06:14 | 16-Nov | Wed | 2 | 14 | 6 | SATURN_249 (7d) |
| S96 | 249 | OTM-464 | 248TI+3d | 2016-321T21:14 | 16-Nov | Wed | 3 | 13 | 7 | D/L Start, burn ~6h later. Backup D/L 322T21:14; complexes C/C |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S96 | 249 | 249MI (nt) | MIMAS | 2016-324T07:33 | 19-Nov | Sat | 5 | 11 | 2 | Inbound 44621.7 km flyby, v = 15.7 km/s, phase = 17 deg |
| S96 | 249 | Dust Hazard | E_ring_lg | 2016-324T07:40 | 19-Nov | Sat | 5 | 11 | 2 | Egress @ 2016-324T07:43 (2 min) \| Protection: None |
| S96 | 249 | Ring CRX | Descending | 2016-324T07:41 | 19-Nov | Sat | 5 | 11 | 2 | r = 3.676 Rs ( 221749 km) |
| S96 | 249 | 249AN (nt) | ANTHE | 2016-324T08:01 | 19-Nov | Sat | 5 | 11 | 2 | Inbound 41537.8 km flyby, v = 16.5 km/s, phase = 91 deg |
| S96 | 249 | 249DA (nt) | DAPHNIS | 2016-324T08:17 | 19-Nov | Sat | 5 | 11 | 2 | Inbound 87658.9 km flyby, v = 17.6 km/s, phase = 61 deg |
| S96 | 249 | 249ME (nt) | METHONE | 2016-324T08:21 | 19-Nov | Sat | 5 | 11 | 2 | Inbound 75663.3 km flyby, v = 17.2 km/s, phase = 104 deg |
| S96 | 249 | Periapse | | 2016-324T08:39 | 19-Nov | Sat | 5 | 11 | 2 | R = 3.620 Rs, lat = -14 deg, phase = 51 deg |
| S96 | 249 | 249PA (nt) | PANDORA | 2016-324T08:44 | 19-Nov | Sat | 5 | 11 | 2 | Outbound 98232.5 km flyby, v = 18.0 km/s, phase = 82 deg |
| S96 | 249 | Sun OCC | RING | 2016-325T05:29 | 20-Nov | Sun | 6 | 10 | 3 | Duration = 351 min; egress = 2016-325T11:19:39 |
| S96 | 249 | Earth OCC | RING | 2016-325T05:51 | 20-Nov | Sun | 6 | 10 | 3 | Duration = 270 min; egress = 2016-325T10:21:49 |
| S96 | 249 | OTM-465 | ~Apo | 2016-326T20:59 | 21-Nov | Mon | 8 | 8 | 5 | D/L Start, burn ~6h later. Backup D/L 327T20:43; complexes C/C |
| S96 | 249 | Ring CRX | Ascending | 2016-326T23:33 | 21-Nov | Mon | 8 | 8 | 0 | r = 20.054 Rs (1209843 km) |
| S97 | 249 | S97 Begins | | 2016-328T05:43 | 23-Nov | Wed | 9 | 7 | 1 | S97 Sequence. Duration = 72 d |
| **S97** | **249** | **SATURN** | **Segment** | **2016-328T05:43** | **23-Nov** | **Wed** | **9** | **7** | **1** | **SATURN_250 (3d)** |
| S97 | 250 | Apoapse | | 2016-328T08:16 | 23-Nov | Wed | 9 | 7 | 1 | Per = 8.0 d, inc = 61.4 deg, r = 21.886 Rs, phase = 129 deg |
| **S97** | **250** | **SOST** | **Segment** | **2016-331T05:43** | **26-Nov** | **Sat** | **12** | **4** | **4** | **SOST_250 (3d); non-targ flyby** |
| S97 | 250 | OTM-466 | 250TI-3d | 2016-331T20:28 | 26-Nov | Sat | 13 | 3 | 5 | D/L Start, burn ~6h later. Backup D/L 332T19:15; complexes C/C |
| S97 | 250 | 250EP (nt) | EPIMETHEUS | 2016-332T06:30 | 27-Nov | Sun | 13 | 3 | 0 | Inbound 84081.6 km flyby, v = 16.7 km/s, phase = 11 deg |
| S97 | 250 | 250EN (nt) | ENCELADUS | 2016-332T06:51 | 27-Nov | Sun | 13 | 3 | 0 | Inbound 20283.9 km flyby, v = 15.6 km/s, phase = 109 deg |
| S97 | 250 | Dust Hazard | E_ring_lg | 2016-332T06:55 | 27-Nov | Sun | 13 | 3 | 0 | Egress @ 2016-332T06:57 (2 min) \| Protection: None |
| S97 | 250 | Ring CRX | Descending | 2016-332T06:56 | 27-Nov | Sun | 13 | 3 | 0 | r = 3.677 Rs ( 221807 km) |
| S97 | 250 | Periapse | | 2016-332T07:53 | 27-Nov | Sun | 13 | 3 | 0 | R = 3.621 Rs, lat = -14 deg, phase = 51 deg |
| S97 | 250 | Sun OCC | RING | 2016-333T04:38 | 28-Nov | Mon | 14 | 2 | 1 | Duration = 364 min; egress = 2016-333T10:42:15 |
| S97 | 250 | Earth OCC | RING | 2016-333T04:43 | 28-Nov | Mon | 14 | 2 | 1 | Duration = 326 min; egress = 2016-333T10:10:11 |
| **S97** | **250** | **TOST** | **Segment** | **2016-334T05:28** | **29-Nov** | **Tue** | **15** | **1** | **2** | **TOST_250 (2d); T125 flyby** |
| S97 | 250 | 250TI (t) T125 | TITAN | 2016-334T22:14 | 29-Nov | Tue | 16 | 143 | 3 | Outbound 3158.6 km flyby, v = 5.7 km/s, phase = 81 deg |
| S97 | 250 | Ring CRX | Ascending | 2016-334T22:44 | 29-Nov | Tue | 0 | 143 | 3 | r = 20.050 Rs (1209646 km) |
| S97 | 251 | Apoapse | | 2016-335T23:31 | 30-Nov | Wed | 1 | 142 | 4 | Per = 7.2 d, inc = 63.7 deg, r = 21.277 Rs, phase = 135 deg |
| S97 | 251 | START OF F RING ORBITS | | 2016-335T23:34 | 30-Nov | Wed | 1 | 142 | 4 | Series of 20 orbits with periapses / ring crossings just outside F ring |
| **S97** | **251** | **SATURN** | **Segment** | **2016-336T07:28** | **01-Dec** | **Thu** | **1** | **142** | **4** | **Saturn_251 (3d)** |
| S97 | 251 | OTM-467 | 250TI+5d | 2016-339T06:58 | 04-Dec | Sun | 4 | 139 | 7 | D/L Start, burn ~6h later. Backup D/L 339T19:13; complexes M/C |
| S97 | 251 | 251PA (nt) | PANDORA | 2016-339T12:27 | 04-Dec | Sun | 5 | 139 | 0 | Inbound 121002.5 km flyby, v = 22.3 km/s, phase = 43 deg |
| S97 | 251 | 251ME (nt) | METHONE | 2016-339T13:04 | 04-Dec | Sun | 5 | 139 | 0 | Inbound 49458.8 km flyby, v = 19.5 km/s, phase = 116 deg |
| S97 | 251 | Dust Hazard | JE_ring | 2016-339T13:08 | 04-Dec | Sun | 5 | 139 | 0 | Egress @ 2016-339T13:10 (2 min) \| Protection: MEA Cvr. Closure |
| S97 | 251 | Ring CRX | Descending | 2016-339T13:09 | 04-Dec | Sun | 5 | 139 | 0 | r = 2.508 Rs ( 151296 km) |
| S97 | 251 | Periapse | | 2016-339T13:30 | 04-Dec | Sun | 5 | 139 | 0 | R = 2.490 Rs, lat = -9 deg, phase = 45 deg |
| S97 | 251 | 251PN (nt) | PAN | 2016-339T13:34 | 04-Dec | Sun | 5 | 139 | 0 | Outbound 61406.9 km flyby, v = 21.9 km/s, phase = 105 deg |
| **S97** | **251** | **XD** | **Segment** | **2016-339T14:58** | **04-Dec** | **Sun** | **5** | **139** | **0** | **XD_251_252 (11d)** |
| S97 | 251 | Earth OCC | RING | 2016-340T04:55 | 05-Dec | Mon | 5 | 138 | 1 | Duration = 367 min; egress = 2016-340T11:02:34 |
| S97 | 251 | Sun OCC | RING | 2016-340T04:58 | 05-Dec | Mon | 5 | 138 | 1 | Duration = 379 min; egress = 2016-340T11:17:20 |
| S97 | 251 | Ring CRX | Ascending | 2016-342T02:47 | 07-Dec | Wed | 7 | 136 | 3 | r = 20.076 Rs (1211167 km) |
| S97 | 251 | SEP = 3.0 deg | Conjunction | 2016-342T12:21 | 07-Dec | Wed | 8 | 136 | 3 | Commanding must not be required below 3.0 deg |
| S97 | 252 | Apoapse | | 2016-343T03:39 | 08-Dec | Thu | 8 | 135 | 4 | Per = 7.2 d, inc = 63.7 deg, r = 21.301 Rs, phase = 135 deg |
| S97 | 252 | SEP = 2.0 deg | Conjunction | 2016-343T20:24 | 08-Dec | Thu | 9 | 134 | 5 | Plan no SSR playback below 2.0 deg |
| S97 | 252 | 252PM (nt) | PROMETHEUS | 2016-346T16:50 | 11-Dec | Sun | 12 | 132 | 7 | Inbound 100677.9 km flyby, v = 21.6 km/s, phase = 44 deg |
| S97 | 252 | 252PL (nt) | PALLENE | 2016-346T17:24 | 11-Dec | Sun | 12 | 132 | 7 | Inbound 98155.8 km flyby, v = 20.4 km/s, phase = 131 deg |
| S97 | 252 | Dust Hazard | JE_ring | 2016-346T17:25 | 11-Dec | Sun | 12 | 132 | 7 | Egress @ 2016-346T17:27 (2 min) \| Protection: HGA to Dust-Ram |
| S97 | 252 | Ring CRX | Descending | 2016-346T17:26 | 11-Dec | Sun | 12 | 132 | 7 | r = 2.507 Rs ( 151276 km) |
| S97 | 252 | Periapse | | 2016-346T17:47 | 11-Dec | Sun | 12 | 132 | 7 | R = 2.490 Rs, lat = -9 deg, phase = 45 deg |
| S97 | 252 | SEP = 2.0 deg | Conjunction | 2016-347T04:43 | 12-Dec | Mon | 12 | 131 | 8 | Plan no SSR playback below 2.0 deg |
| S97 | 252 | Earth OCC | RING | 2016-347T09:01 | 12-Dec | Mon | 12 | 131 | 8 | Duration = 402 min; egress = 2016-347T15:43:00 |
| S97 | 252 | Sun OCC | RING | 2016-347T09:10 | 12-Dec | Mon | 12 | 131 | 8 | Duration = 392 min; egress = 2016-347T15:42:43 |
| S97 | 252 | SEP = 3.0 deg | Conjunction | 2016-348T12:24 | 13-Dec | Tue | 14 | 130 | 9 | Commanding must not be required below 3.0 deg |
| S97 | 252 | Ring CRX | Ascending | 2016-349T07:02 | 14-Dec | Wed | 14 | 129 | 10 | r = 20.071 Rs (1210885 km) |
| **S97** | **252** | **TOST** | **Segment** | **2016-350T04:36** | **15-Dec** | **Thu** | **15** | **128** | **11** | **TOST_253 (2d)** |
| S97 | 253 | Apoapse | | 2016-350T07:51 | 15-Dec | Thu | 15 | 128 | 11 | Per = 7.2 d, inc = 63.7 deg, r = 21.295 Rs, phase = 135 deg |
| S97 | 253 | 253TI (nt) | TITAN | 2016-350T21:52 | 15-Dec | Thu | 16 | 127 | 12 | Inbound 342352.8 km flyby, v = 5.3 km/s, phase = 58 deg |
| **S97** | **253** | **RINGS** | **Segment** | **2016-351T21:43** | **16-Dec** | **Fri** | **17** | **126** | **13** | **RINGS_253 (4d)** |
| S97 | 253 | 253EP (nt) | EPIMETHEUS | 2016-353T20:54 | 18-Dec | Sun | 19 | 124 | 15 | Inbound 123981.4 km flyby, v = 22.2 km/s, phase = 48 deg |
| S97 | 253 | 253AG (nt) | AEGAEON | 2016-353T21:11 | 18-Dec | Sun | 19 | 124 | 15 | Inbound 94173.5 km flyby, v = 20.7 km/s, phase = 61 deg |
| S97 | 253 | Dust Hazard | JE_ring | 2016-353T21:28 | 18-Dec | Sun | 19 | 124 | 15 | Egress @ 2016-353T21:30 (2 min) \| Protection: MEA Cvr. Closure |
| S97 | 253 | Ring CRX | Descending | 2016-353T21:29 | 18-Dec | Sun | 19 | 124 | 15 | r = 2.489 Rs ( 150134 km) |
| S97 | 253 | 253PA (nt) | PANDORA | 2016-353T21:36 | 18-Dec | Sun | 19 | 124 | 15 | Inbound 22116.9 km flyby, v = 20.6 km/s, phase = 100 deg |
| S97 | 253 | Periapse | | 2016-353T21:50 | 18-Dec | Sun | 19 | 124 | 15 | R = 2.471 Rs, lat = -9 deg, phase = 45 deg |
| S97 | 253 | 253JA (nt) | JANUS | 2016-353T22:03 | 18-Dec | Sun | 19 | 124 | 15 | Outbound 114420.0 km flyby, v = 23.8 km/s, phase = 109 deg |
| S97 | 253 | 253PN (nt) | PAN | 2016-353T22:08 | 18-Dec | Sun | 19 | 124 | 15 | Outbound 97727.1 km flyby, v = 23.6 km/s, phase = 107 deg |
| S97 | 253 | Earth OCC | RING | 2016-354T12:48 | 19-Dec | Mon | 20 | 124 | 15 | Duration = 430 min; egress = 2016-354T19:58:06 |
| S97 | 253 | Sun OCC | RING | 2016-354T13:00 | 19-Dec | Mon | 20 | 124 | 15 | Duration = 406 min; egress = 2016-354T19:45:54 |
| **S97** | **253** | **XD** | **Segment** | **2016-356T04:11** | **21-Dec** | **Wed** | **21** | **122** | **17** | **XD_253_254 (4d)** |
| S97 | 253 | Ring CRX | Ascending | 2016-356T10:55 | 21-Dec | Wed | 22 | 122 | 17 | r = 20.062 Rs (1210326 km) |
| S97 | 254 | Apoapse | | 2016-357T11:51 | 22-Dec | Thu | 23 | 121 | 18 | Per = 7.2 d, inc = 63.7 deg, r = 21.299 Rs, phase = 135 deg |
| S97 | 254 | OTM-468 | ~Apo | 2016-358T18:58 | 23-Dec | Fri | 24 | 119 | 20 | D/L Start, burn ~6h later. Backup D/L 359T18:58; complexes C/C |
| **S97** | **254** | **MAPS** | **Segment** | **2016-360T10:15** | **25-Dec** | **Sun** | **26** | **118** | **2** | **MAPS_254 (5d)** |
| S97 | 254 | 254EN (nt) | ENCELADUS | 2016-361T01:26 | 26-Dec | Mon | 26 | 117 | 2 | Inbound 89346.2 km flyby, v = 19.3 km/s, phase = 136 deg |
| S97 | 254 | 254MI (nt) | MIMAS | 2016-361T01:30 | 26-Dec | Mon | 26 | 117 | 2 | Inbound 40214.7 km flyby, v = 19.5 km/s, phase = 120 deg |
| S97 | 254 | Dust Hazard | JE_ring | 2016-361T01:30 | 26-Dec | Mon | 26 | 117 | 2 | Egress @ 2016-361T01:32 (2 min) \| Protection: MEA Cvr. Closure |
| S97 | 254 | Ring CRX | Descending | 2016-361T01:31 | 26-Dec | Mon | 26 | 117 | 2 | r = 2.487 Rs ( 150019 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S97 | 254 | 254AG (nt) | AEGAEON | 2016-361T01:36 | 26-Dec | Mon | 26 | 117 | 2 | Inbound 36629.7 km flyby, v = 20.4 km/s, phase = 136 deg |
| S97 | 254 | Periapse | | 2016-361T01:52 | 26-Dec | Mon | 26 | 117 | 2 | R = 2.469 Rs, lat = -9 deg, phase = 44 deg |
| S97 | 254 | Earth OCC | RING | 2016-361T16:45 | 26-Dec | Mon | 27 | 117 | 3 | Duration = 451 min; egress = 2016-362T00:16:15 |
| S97 | 254 | Sun OCC | RING | 2016-361T16:57 | 26-Dec | Mon | 27 | 117 | 3 | Duration = 417 min; egress = 2016-361T23:54:22 |
| S97 | 254 | Earth OCC | SATURN | 2016-361T17:38 | 26-Dec | Mon | 27 | 117 | 3 | Duration = 180 min; egress = 2016-361T20:37:52 |
| S97 | 254 | Ring CRX | Ascending | 2016-363T14:54 | 28-Dec | Wed | 29 | 115 | 5 | r = 20.056 Rs (1210007 km) |
| S97 | 255 | Apoapse | | 2016-364T15:50 | 29-Dec | Thu | 30 | 114 | 6 | Per = 7.2 d, inc = 63.7 deg, r = 21.294 Rs, phase = 136 deg |
| S97 | 255 | TOST | Segment | 2016-365T20:51 | 30-Dec | Fri | 31 | 112 | 7 | TOST_255 (2d) |
| S97 | 255 | 255TI (nt) | TITAN | 2016-366T12:19 | 31-Dec | Sat | 32 | 112 | 8 | Inbound 679042.1 km flyby, v = 7.2 km/s, phase = 29 deg |
| S97 | 255 | RINGS | Segment | 2017-001T13:14 | 01-Jan | Sun | 33 | 111 | 9 | RINGS_255_256 (10d) |
| S97 | 255 | Dust Hazard | JE_ring | 2017-002T05:26 | 02-Jan | Mon | 33 | 110 | 9 | Egress @ 2017-002T05:28 (2 min) \| Protection: HGA to Dust-Ram |
| S97 | 255 | Ring CRX | Descending | 2017-002T05:27 | 02-Jan | Mon | 33 | 110 | 9 | r = 2.483 Rs ( 149798 km) |
| S97 | 255 | Periapse | | 2017-002T05:48 | 02-Jan | Mon | 33 | 110 | 9 | R = 2.465 Rs, lat = -9 deg, phase = 44 deg |
| S97 | 255 | 255DA (nt) | DAPHNIS | 2017-002T06:07 | 02-Jan | Mon | 33 | 110 | 9 | Outbound 106433.1 km flyby, v = 23.9 km/s, phase = 107 deg |
| S97 | 255 | Earth OCC | RING | 2017-002T20:37 | 02-Jan | Mon | 34 | 109 | 10 | Duration = 467 min; egress = 2017-003T04:25:13 |
| S97 | 255 | Sun OCC | RING | 2017-002T20:49 | 02-Jan | Mon | 34 | 109 | 10 | Duration = 426 min; egress = 2017-003T03:55:36 |
| S97 | 255 | Earth OCC | SATURN | 2017-002T21:14 | 02-Jan | Mon | 34 | 109 | 10 | Duration = 261 min; egress = 2017-003T01:35:13 |
| S97 | 255 | Ring CRX | Ascending | 2017-004T18:47 | 04-Jan | Wed | 36 | 107 | 12 | r = 20.053 Rs (1209792 km) |
| S97 | 256 | Apoapse | | 2017-005T19:44 | 05-Jan | Thu | 37 | 106 | 13 | Per = 7.2 d, inc = 63.7 deg, r = 21.292 Rs, phase = 136 deg |
| S97 | 256 | 256AT (nt) | ATLAS | 2017-009T08:44 | 09-Jan | Mon | 40 | 103 | 17 | Inbound 101667.1 km flyby, v = 21.8 km/s, phase = 45 deg |
| S97 | 256 | 256EP (nt) | EPIMETHEUS | 2017-009T09:03 | 09-Jan | Mon | 40 | 103 | 17 | Inbound 66777.1 km flyby, v = 20.5 km/s, phase = 56 deg |
| S97 | 256 | Dust Hazard | JE_ring | 2017-009T09:19 | 09-Jan | Mon | 40 | 103 | 17 | Egress @ 2017-009T09:21 (2 min) \| Protection: MEA Cvr. Closure |
| S97 | 256 | Ring CRX | Descending | 2017-009T09:20 | 09-Jan | Mon | 40 | 103 | 17 | r = 2.481 Rs ( 149673 km) |
| S97 | 256 | Periapse | | 2017-009T09:41 | 09-Jan | Mon | 40 | 103 | 17 | R = 2.463 Rs, lat = -9 deg, phase = 44 deg |
| S97 | 256 | 256DA (nt) | DAPHNIS | 2017-009T09:44 | 09-Jan | Mon | 40 | 103 | 17 | Outbound 63442.3 km flyby, v = 22.0 km/s, phase = 106 deg |
| S97 | 256 | 256PM (nt) | PROMETHEUS | 2017-009T09:54 | 09-Jan | Mon | 40 | 103 | 17 | Outbound 95069.5 km flyby, v = 23.3 km/s, phase = 107 deg |
| S97 | 256 | Earth OCC | RING | 2017-010T00:31 | 10-Jan | Tue | 41 | 102 | 17 | Duration = 480 min; egress = 2017-010T08:30:37 |
| S97 | 256 | Sun OCC | RING | 2017-010T00:39 | 10-Jan | Tue | 41 | 102 | 17 | Duration = 435 min; egress = 2017-010T07:54:56 |
| S97 | 256 | Earth OCC | SATURN | 2017-010T01:02 | 10-Jan | Tue | 41 | 102 | 17 | Duration = 313 min; egress = 2017-010T06:15:58 |
| S97 | 256 | Sun OCC | SATURN | 2017-010T02:10 | 10-Jan | Tue | 41 | 102 | 17 | Duration = 62 min; egress = 2017-010T03:12:40 |
| S97 | 256 | SATURN | Segment | 2017-011T20:25 | 11-Jan | Wed | 43 | 100 | 19 | Saturn_257_258 (11d) |
| S97 | 256 | Ring CRX | Ascending | 2017-011T22:39 | 11-Jan | Wed | 43 | 100 | 19 | r = 20.050 Rs (1209611 km) |
| S97 | 257 | Apoapse | | 2017-012T23:37 | 12-Jan | Thu | 44 | 99 | 20 | Per = 7.2 d, inc = 63.7 deg, r = 21.291 Rs, phase = 136 deg |
| S97 | 257 | 257JA (nt) | JANUS | 2017-016T12:40 | 16-Jan | Mon | 48 | 96 | 24 | Inbound 113319.5 km flyby, v = 21.8 km/s, phase = 51 deg |
| S97 | 257 | 257AT (nt) | ATLAS | 2017-016T13:05 | 16-Jan | Mon | 48 | 96 | 24 | Inbound 24827.0 km flyby, v = 20.4 km/s, phase = 32 deg |
| S97 | 257 | 257PL (nt) | PALLENE | 2017-016T13:08 | 16-Jan | Mon | 48 | 96 | 24 | Inbound 65051.5 km flyby, v = 19.7 km/s, phase = 149 deg |
| S97 | 257 | Dust Hazard | JE_ring | 2017-016T13:11 | 16-Jan | Mon | 48 | 96 | 24 | Egress @ 2017-016T13:13 (2 min) \| Protection: MEA Cvr. Closure |
| S97 | 257 | Ring CRX | Descending | 2017-016T13:12 | 16-Jan | Mon | 48 | 96 | 24 | r = 2.482 Rs ( 149728 km) |
| S97 | 257 | 257DA (nt) | DAPHNIS | 2017-016T13:20 | 16-Jan | Mon | 48 | 96 | 24 | Inbound 22509.4 km flyby, v = 20.7 km/s, phase = 86 deg |
| S97 | 257 | Periapse | | 2017-016T13:33 | 16-Jan | Mon | 48 | 96 | 24 | R = 2.464 Rs, lat = -9 deg, phase = 44 deg |
| S97 | 257 | Earth OCC | RING | 2017-017T04:25 | 17-Jan | Tue | 48 | 95 | 24 | Duration = 489 min; egress = 2017-017T12:34:07 |
| S97 | 257 | Sun OCC | RING | 2017-017T04:29 | 17-Jan | Tue | 48 | 95 | 24 | Duration = 444 min; egress = 2017-017T11:54:03 |
| S97 | 257 | Earth OCC | SATURN | 2017-017T04:56 | 17-Jan | Tue | 48 | 95 | 24 | Duration = 352 min; egress = 2017-017T10:48:29 |
| S97 | 257 | Sun OCC | SATURN | 2017-017T05:32 | 17-Jan | Tue | 48 | 95 | 24 | Duration = 142 min; egress = 2017-017T07:54:24 |
| S97 | 257 | 257TI (nt) | TITAN | 2017-017T18:19 | 17-Jan | Tue | 49 | 94 | 25 | Outbound 722697.8 km flyby, v = 9.3 km/s, phase = 96 deg |
| S97 | 257 | Ring CRX | Ascending | 2017-019T02:32 | 19-Jan | Thu | 50 | 93 | 26 | r = 20.053 Rs (1209825 km) |
| S97 | 258 | Apoapse | | 2017-020T03:29 | 20-Jan | Fri | 51 | 92 | 27 | Per = 7.2 d, inc = 63.7 deg, r = 21.293 Rs, phase = 136 deg |
| S97 | 258 | MAPS | Segment | 2017-023T04:15 | 23-Jan | Mon | 54 | 89 | 30 | MAPS_258 (3d) |
| S97 | 258 | 258DA (nt) | DAPHNIS | 2017-023T16:56 | 23-Jan | Mon | 55 | 89 | 31 | Inbound 30566.0 km flyby, v = 20.4 km/s, phase = 35 deg |
| S97 | 258 | 258AN (nt) | ANTHE | 2017-023T16:58 | 23-Jan | Mon | 55 | 89 | 31 | Inbound 96480.0 km flyby, v = 20.0 km/s, phase = 84 deg |
| S97 | 258 | Dust Hazard | JE_ring | 2017-023T17:04 | 23-Jan | Mon | 55 | 89 | 31 | Egress @ 2017-023T17:06 (2 min) \| Protection: MEA Cvr. Closure |
| S97 | 258 | Ring CRX | Descending | 2017-023T17:05 | 23-Jan | Mon | 55 | 89 | 31 | r = 2.482 Rs ( 149747 km) |
| S97 | 258 | 258PA (nt) | PANDORA | 2017-023T17:14 | 23-Jan | Mon | 55 | 89 | 31 | Inbound 28102.7 km flyby, v = 20.8 km/s, phase = 102 deg |
| S97 | 258 | Periapse | | 2017-023T17:26 | 23-Jan | Mon | 55 | 89 | 31 | R = 2.464 Rs, lat = -9 deg, phase = 43 deg |
| S97 | 258 | 258AT (nt) | ATLAS | 2017-023T17:27 | 23-Jan | Mon | 55 | 89 | 31 | Outbound 58435.1 km flyby, v = 21.8 km/s, phase = 105 deg |
| S97 | 258 | Earth OCC | RING | 2017-024T08:22 | 24-Jan | Tue | 55 | 88 | 32 | Duration = 494 min; egress = 2017-024T16:36:48 |
| S97 | 258 | Sun OCC | RING | 2017-024T08:22 | 24-Jan | Tue | 55 | 88 | 32 | Duration = 452 min; egress = 2017-024T15:53:37 |
| S97 | 258 | Earth OCC | SATURN | 2017-024T08:56 | 24-Jan | Tue | 55 | 88 | 32 | Duration = 377 min; egress = 2017-024T15:14:07 |
| S97 | 258 | Sun OCC | SATURN | 2017-024T09:12 | 24-Jan | Tue | 55 | 88 | 32 | Duration = 187 min; egress = 2017-024T12:19:21 |
| S97 | 258 | SOST | Segment | 2017-025T19:45 | 25-Jan | Wed | 57 | 86 | 33 | SOST_258_259 (6d) |
| S97 | 258 | Ring CRX | Ascending | 2017-026T06:26 | 26-Jan | Thu | 57 | 86 | 33 | r = 20.056 Rs (1210008 km) |
| S97 | 259 | Apoapse | | 2017-027T07:24 | 27-Jan | Fri | 58 | 85 | 35 | Per = 7.2 d, inc = 63.7 deg, r = 21.297 Rs, phase = 137 deg |
| S97 | 259 | 259DA (nt) | DAPHNIS | 2017-030T20:34 | 30-Jan | Mon | 62 | 81 | 38 | Inbound 77639.1 km flyby, v = 21.1 km/s, phase = 45 deg |
| S97 | 259 | 259AN (nt) | ANTHE | 2017-030T20:59 | 30-Jan | Mon | 62 | 81 | 38 | Inbound 48002.8 km flyby, v = 19.7 km/s, phase = 148 deg |
| S97 | 259 | 259MI (nt) | MIMAS | 2017-030T21:01 | 30-Jan | Mon | 62 | 81 | 38 | Inbound 39816.7 km flyby, v = 19.7 km/s, phase = 117 deg |
| S97 | 259 | Dust Hazard | JE_ring | 2017-030T21:01 | 30-Jan | Mon | 62 | 81 | 38 | Egress @ 2017-030T21:03 (2 min) \| Protection: MEA Cvr. Closure |
| S97 | 259 | 259EP (nt) | EPIMETHEUS | 2017-030T21:02 | 30-Jan | Mon | 62 | 81 | 38 | Inbound 3566.2 km flyby, v = 20.2 km/s, phase = 116 deg |
| S97 | 259 | Ring CRX | Descending | 2017-030T21:02 | 30-Jan | Mon | 62 | 81 | 38 | r = 2.484 Rs ( 149830 km) |
| S97 | 259 | 259PM (nt) | PROMETHEUS | 2017-030T21:21 | 30-Jan | Mon | 62 | 81 | 38 | Inbound 51638.2 km flyby, v = 21.5 km/s, phase = 105 deg |
| S97 | 259 | Periapse | | 2017-030T21:23 | 30-Jan | Mon | 62 | 81 | 38 | R = 2.466 Rs, lat = -9 deg, phase = 43 deg |
| S97 | 259 | Sun OCC | RING | 2017-031T12:18 | 31-Jan | Tue | 63 | 81 | 39 | Duration = 459 min; egress = 2017-031T19:57:13 |
| S97 | 259 | Earth OCC | RING | 2017-031T12:24 | 31-Jan | Tue | 63 | 81 | 39 | Duration = 497 min; egress = 2017-031T20:41:58 |
| S97 | 259 | Sun OCC | SATURN | 2017-031T13:00 | 31-Jan | Tue | 63 | 81 | 39 | Duration = 225 min; egress = 2017-031T16:45:01 |
| S97 | 259 | Earth OCC | SATURN | 2017-031T13:04 | 31-Jan | Tue | 63 | 81 | 39 | Duration = 394 min; egress = 2017-031T19:38:16 |
| S97 | 259 | TOST | Segment | 2017-032T07:39 | 01-Feb | Wed | 63 | 80 | 40 | TOST_259 (2d) |
| S97 | 259 | 259TI (nt) | TITAN | 2017-032T19:52 | 01-Feb | Wed | 64 | 79 | 40 | Outbound 219437.1 km flyby, v = 6.3 km/s, phase = 90 deg |
| S97 | 259 | Ring CRX | Ascending | 2017-033T10:22 | 02-Feb | Thu | 65 | 79 | 41 | r = 20.063 Rs (1210419 km) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S98 | 259 | RINGS | Segment | 2017-034T07:05 | 03-Feb | Fri | 65 | 78 | 42 | RINGS_260 (7d) |
| S98 | 259 | S98 Begins | | 2017-034T07:05 | 03-Feb | Fri | 65 | 78 | 42 | S98 Sequence. Duration = 70 d |
| S98 | 260 | Apoapse | | 2017-034T11:33 | 03-Feb | Fri | 66 | 78 | 42 | Per = 7.2 d, inc = 63.5 deg, r = 21.323 Rs, phase = 137 deg |
| S98 | 260 | 260PN (nt) | PAN | 2017-038T00:49 | 07-Feb | Tue | 69 | 74 | 45 | Inbound 91583.5 km flyby, v = 21.4 km/s, phase = 44 deg |
| S98 | 260 | 260JA (nt) | JANUS | 2017-038T00:59 | 07-Feb | Tue | 69 | 74 | 45 | Inbound 87315.7 km flyby, v = 20.9 km/s, phase = 54 deg |
| S98 | 260 | Dust Hazard | JE_ring | 2017-038T01:24 | 07-Feb | Tue | 69 | 74 | 45 | Egress @ 2017-038T01:26 (2 min) \| Protection: MEA Cvr. Closure |
| S98 | 260 | Ring CRX | Descending | 2017-038T01:25 | 07-Feb | Tue | 69 | 74 | 45 | r = 2.503 Rs ( 151008 km) |
| S98 | 260 | 260AN (nt) | ANTHE | 2017-038T01:27 | 07-Feb | Tue | 69 | 74 | 45 | Inbound 93366.8 km flyby, v = 20.8 km/s, phase = 123 deg |
| S98 | 260 | 260ME (nt) | METHONE | 2017-038T01:28 | 07-Feb | Tue | 69 | 74 | 45 | Inbound 87360.3 km flyby, v = 20.8 km/s, phase = 124 deg |
| S98 | 260 | Periapse | | 2017-038T01:46 | 07-Feb | Tue | 69 | 74 | 45 | R = 2.485 Rs, lat = -9 deg, phase = 43 deg |
| S98 | 260 | Sun OCC | RING | 2017-038T16:44 | 07-Feb | Tue | 70 | 74 | 46 | Duration = 466 min; egress = 2017-039T00:30:38 |
| S98 | 260 | Earth OCC | RING | 2017-038T16:57 | 07-Feb | Tue | 70 | 74 | 46 | Duration = 498 min; egress = 2017-039T01:15:36 |
| S98 | 260 | Sun OCC | SATURN | 2017-038T17:20 | 07-Feb | Tue | 70 | 74 | 46 | Duration = 259 min; egress = 2017-038T21:39:30 |
| S98 | 260 | Earth OCC | SATURN | 2017-038T17:45 | 07-Feb | Tue | 70 | 74 | 46 | Duration = 402 min; egress = 2017-039T00:27:12 |
| S98 | 260 | Ring CRX | Ascending | 2017-040T14:50 | 09-Feb | Thu | 72 | 72 | 48 | r = 20.071 Rs (1210888 km) |
| S98 | 260 | SATURN | Segment | 2017-041T01:25 | 10-Feb | Fri | 72 | 71 | 48 | Saturn_261 (7d) |
| S98 | 261 | Apoapse | | 2017-041T16:02 | 10-Feb | Fri | 73 | 71 | 49 | Per = 7.2 d, inc = 63.5 deg, r = 21.329 Rs, phase = 137 deg |
| S98 | 261 | 261AG (nt) | AEGAEON | 2017-045T05:42 | 14-Feb | Tue | 76 | 67 | 52 | Inbound 72079.7 km flyby, v = 20.1 km/s, phase = 70 deg |
| S98 | 261 | 261ME (nt) | METHONE | 2017-045T05:50 | 14-Feb | Tue | 76 | 67 | 52 | Inbound 67904.8 km flyby, v = 19.6 km/s, phase = 98 deg |
| S98 | 261 | Dust Hazard | JE_ring | 2017-045T05:55 | 14-Feb | Tue | 76 | 67 | 52 | Egress @ 2017-045T05:58 (2 min) \| Protection: MEA Cvr. Closure |
| S98 | 261 | Ring CRX | Descending | 2017-045T05:56 | 14-Feb | Tue | 76 | 67 | 52 | r = 2.503 Rs ( 151031 km) |
| S98 | 261 | Periapse | | 2017-045T06:18 | 14-Feb | Tue | 76 | 67 | 52 | R = 2.485 Rs, lat = -9 deg, phase = 43 deg |
| S98 | 261 | Sun OCC | RING | 2017-045T21:15 | 14-Feb | Tue | 77 | 66 | 53 | Duration = 472 min; egress = 2017-046T05:07:12 |
| S98 | 261 | Earth OCC | RING | 2017-045T21:35 | 14-Feb | Tue | 77 | 66 | 53 | Duration = 496 min; egress = 2017-046T05:51:40 |
| S98 | 261 | Sun OCC | SATURN | 2017-045T21:48 | 14-Feb | Tue | 77 | 66 | 53 | Duration = 284 min; egress = 2017-046T02:32:27 |
| S98 | 261 | Earth OCC | SATURN | 2017-045T22:32 | 14-Feb | Tue | 77 | 66 | 53 | Duration = 401 min; egress = 2017-046T05:13:32 * |
| S98 | 261 | Ring CRX | Ascending | 2017-047T19:20 | 16-Feb | Thu | 79 | 64 | 55 | r = 20.068 Rs (1210705 km) |
| S98 | 261 | TOST | Segment | 2017-048T01:11 | 17-Feb | Fri | 79 | 64 | 55 | TOST_261 (2d) |
| S98 | 261 | 261TI (nt) | TITAN | 2017-048T13:10 | 17-Feb | Fri | 80 | 64 | 56 | Outbound 186790.7 km flyby, v = 5.1 km/s, phase = 78 deg |
| S98 | 262 | Apoapse | | 2017-048T20:24 | 17-Feb | Fri | 80 | 63 | 56 | Per = 7.2 d, inc = 63.7 deg, r = 21.321 Rs, phase = 137 deg |
| S98 | 262 | RINGS | Segment | 2017-049T18:01 | 18-Feb | Sat | 81 | 63 | 57 | RINGS_262 (5d) |
| S98 | 262 | 262PN (nt) | PAN | 2017-052T09:37 | 21-Feb | Tue | 83 | 60 | 60 | Inbound 69885.1 km flyby, v = 21.0 km/s, phase = 44 deg |
| S98 | 262 | 262PM (nt) | PROMETHEUS | 2017-052T09:39 | 21-Feb | Tue | 83 | 60 | 60 | Inbound 69043.7 km flyby, v = 20.8 km/s, phase = 49 deg |
| S98 | 262 | 262PL (nt) | PALLENE | 2017-052T10:00 | 21-Feb | Tue | 83 | 60 | 60 | Inbound 104861.4 km flyby, v = 19.8 km/s, phase = 93 deg |
| S98 | 262 | 262EP (nt) | EPIMETHEUS | 2017-052T10:00 | 21-Feb | Tue | 83 | 60 | 60 | Inbound 8025.4 km flyby, v = 20.2 km/s, phase = 90 deg |
| S98 | 262 | Dust Hazard | JE_ring | 2017-052T10:01 | 21-Feb | Tue | 83 | 60 | 60 | Egress @ 2017-052T10:04 (2 min) \| Protection: MEA Cvr. Closure |
| S98 | 262 | Ring CRX | Descending | 2017-052T10:02 | 21-Feb | Tue | 83 | 60 | 60 | r = 2.468 Rs ( 148906 km) * |
| S98 | 262 | 262AG (nt) | AEGAEON | 2017-052T10:10 | 21-Feb | Tue | 83 | 60 | 60 | Inbound 54428.9 km flyby, v = 20.8 km/s, phase = 123 deg |
| S98 | 262 | Periapse | | 2017-052T10:23 | 21-Feb | Tue | 84 | 60 | 60 | R = 2.450 Rs, lat = -9 deg, phase = 43 deg |
| S98 | 262 | Sun OCC | RING | 2017-053T01:05 | 22-Feb | Wed | 84 | 59 | 60 | Duration = 478 min; egress = 2017-053T09:03:53 |
| S98 | 262 | Earth OCC | RING | 2017-053T01:33 | 22-Feb | Wed | 84 | 59 | 60 | Duration = 494 min; egress = 2017-053T09:46:35 |
| S98 | 262 | Sun OCC | SATURN | 2017-053T01:37 | 22-Feb | Wed | 84 | 59 | 60 | Duration = 308 min; egress = 2017-053T06:45:48 |
| S98 | 262 | Earth OCC | SATURN | 2017-053T02:40 | 22-Feb | Wed | 84 | 59 | 60 | Duration = 395 min; egress = 2017-053T09:15:01 |
| S98 | 262 | OTM-468A | ~Apo | 2017-053T09:49 | 22-Feb | Wed | 84 | 59 | 61 | D/L Start, burn ~6h later. Backup D/L 055T15:34; complexes G/C |
| S98 | 262 | Ring CRX | Ascending | 2017-054T23:16 | 23-Feb | Thu | 86 | 57 | 2 | r = 20.067 Rs (1210639 km) |
| S98 | 262 | SATURN | Segment | 2017-055T02:34 | 24-Feb | Fri | 86 | 57 | 2 | Saturn_262_263 (4d) |
| S98 | 263 | Apoapse | | 2017-056T00:27 | 25-Feb | Sat | 87 | 56 | 3 | Per = 7.2 d, inc = 63.5 deg, r = 21.327 Rs, phase = 138 deg |
| S98 | 263 | MAPS | Segment | 2017-058T19:23 | 27-Feb | Mon | 90 | 53 | 5 | MAPS_263 (5d) |
| S98 | 263 | 263JA (nt) | JANUS | 2017-059T13:45 | 28-Feb | Tue | 91 | 53 | 6 | Inbound 89881.5 km flyby, v = 21.1 km/s, phase = 57 deg |
| S98 | 263 | 263PA (nt) | PANDORA | 2017-059T13:55 | 28-Feb | Tue | 91 | 53 | 6 | Inbound 48379.8 km flyby, v = 20.4 km/s, phase = 50 deg |
| S98 | 263 | Dust Hazard | JE_ring | 2017-059T14:09 | 28-Feb | Tue | 91 | 53 | 6 | Egress @ 2017-059T14:11 (2 min) \| Protection: MEA Cvr. Closure |
| S98 | 263 | Ring CRX | Descending | 2017-059T14:10 | 28-Feb | Tue | 91 | 53 | 6 | r = 2.467 Rs ( 148839 km) |
| S98 | 263 | Periapse | | 2017-059T14:31 | 28-Feb | Tue | 91 | 53 | 6 | R = 2.449 Rs, lat = -9 deg, phase = 42 deg |
| S98 | 263 | Sun OCC | RING | 2017-060T05:12 | 01-Mar | Wed | 91 | 52 | 7 | Duration = 482 min; egress = 2017-060T13:14:57 |
| S98 | 263 | Sun OCC | SATURN | 2017-060T05:43 | 01-Mar | Wed | 91 | 52 | 7 | Duration = 327 min; egress = 2017-060T11:10:10 |
| S98 | 263 | Earth OCC | RING | 2017-060T05:46 | 01-Mar | Wed | 91 | 52 | 7 | Duration = 490 min; egress = 2017-060T13:55:42 |
| S98 | 263 | Earth OCC | SATURN | 2017-060T07:04 | 01-Mar | Wed | 91 | 52 | 7 | Duration = 383 min; egress = 2017-060T13:27:09 |
| S98 | 263 | Ring CRX | Ascending | 2017-062T03:22 | 03-Mar | Fri | 93 | 50 | 9 | r = 20.063 Rs (1210377 km) |
| S98 | 264 | Apoapse | | 2017-063T04:32 | 04-Mar | Sat | 94 | 49 | 10 | Per = 7.2 d, inc = 63.5 deg, r = 21.323 Rs, phase = 138 deg |
| S98 | 264 | TOST | Segment | 2017-063T22:20 | 04-Mar | Sat | 95 | 48 | 11 | TOST_264 (2d) |
| S98 | 264 | 264TI (nt) | TITAN | 2017-064T11:53 | 05-Mar | Sun | 96 | 48 | 11 | Inbound 489882.2 km flyby, v = 5.9 km/s, phase = 42 deg |
| S98 | 264 | SATURN | Segment | 2017-065T20:35 | 06-Mar | Mon | 97 | 46 | 12 | SATURN_264 (3d) |
| S98 | 264 | 264MI (nt) | MIMAS | 2017-066T18:00 | 07-Mar | Tue | 98 | 46 | 13 | Inbound 100554.5 km flyby, v = 20.8 km/s, phase = 75 deg |
| S98 | 264 | 264PN (nt) | PAN | 2017-066T18:04 | 07-Mar | Tue | 98 | 46 | 13 | Inbound 22225.7 km flyby, v = 20.5 km/s, phase = 26 deg |
| S98 | 264 | Dust Hazard | JE_ring | 2017-066T18:09 | 07-Mar | Tue | 98 | 45 | 13 | Egress @ 2017-066T18:11 (2 min) \| Protection: MEA Cvr. Closure |
| S98 | 264 | Ring CRX | Descending | 2017-066T18:10 | 07-Mar | Tue | 98 | 45 | 13 | r = 2.457 Rs ( 148236 km) |
| S98 | 264 | Periapse | | 2017-066T18:30 | 07-Mar | Tue | 98 | 45 | 13 | R = 2.439 Rs, lat = -9 deg, phase = 42 deg |
| S98 | 264 | Sun OCC | RING | 2017-067T09:07 | 08-Mar | Wed | 98 | 45 | 14 | Duration = 486 min; egress = 2017-067T17:12:53 |
| S98 | 264 | Sun OCC | SATURN | 2017-067T09:38 | 08-Mar | Wed | 98 | 45 | 14 | Duration = 342 min; egress = 2017-067T15:20:26 |
| S98 | 264 | Earth OCC | RING | 2017-067T09:46 | 08-Mar | Wed | 98 | 45 | 14 | Duration = 485 min; egress = 2017-067T17:51:09 |
| S98 | 264 | Earth OCC | SATURN | 2017-067T11:15 | 08-Mar | Wed | 99 | 45 | 14 | Duration = 368 min; egress = 2017-067T17:22:46 |
| S98 | 264 | XD | Segment | 2017-068T23:43 | 09-Mar | Thu | 100 | 43 | 16 | XD_264_265 (5d) |
| S98 | 264 | Ring CRX | Ascending | 2017-069T07:13 | 10-Mar | Fri | 100 | 43 | 16 | r = 20.050 Rs (1209639 km) |
| S98 | 265 | Apoapse | | 2017-070T08:28 | 11-Mar | Sat | 101 | 42 | 17 | Per = 7.2 d, inc = 63.6 deg, r = 21.321 Rs, phase = 138 deg |
| S98 | 265 | MAPS | Segment | 2017-073T16:51 | 14-Mar | Tue | 105 | 39 | 20 | MAPS_265_267 (11d) |
| S98 | 265 | Dust Hazard | JE_ring | 2017-073T22:04 | 14-Mar | Tue | 105 | 38 | 21 | Egress @ 2017-073T22:06 (2 min) \| Protection: MEA Cvr. Closure |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S98 | 265 | Ring CRX | Descending | 2017-073T22:05 | 14-Mar | Tue | 105 | 38 | 21 | r = 2.455 Rs ( 148116 km) |
| S98 | 265 | 265EP (nt) | EPIMETHEUS | 2017-073T22:15 | 14-Mar | Tue | 105 | 38 | 21 | Inbound 39728.1 km flyby, v = 21.1 km/s, phase = 114 deg |
| S98 | 265 | Periapse | | 2017-073T22:26 | 14-Mar | Tue | 105 | 38 | 21 | R = 2.437 Rs, lat = -9 deg, phase = 42 deg |
| S98 | 265 | 265PA (nt) | PANDORA | 2017-073T22:44 | 14-Mar | Tue | 105 | 38 | 21 | Outbound 117362.4 km flyby, v = 24.4 km/s, phase = 103 deg |
| S98 | 265 | Sun OCC | RING | 2017-074T13:02 | 15-Mar | Wed | 106 | 38 | 21 | Duration = 489 min; egress = 2017-074T21:10:58 |
| S98 | 265 | Sun OCC | SATURN | 2017-074T13:33 | 15-Mar | Wed | 106 | 38 | 21 | Duration = 356 min; egress = 2017-074T19:29:33 |
| S98 | 265 | Earth OCC | RING | 2017-074T13:46 | 15-Mar | Wed | 106 | 38 | 21 | Duration = 480 min; egress = 2017-074T21:46:34 |
| S98 | 265 | Earth OCC | SATURN | 2017-074T15:26 | 15-Mar | Wed | 106 | 38 | 21 | Duration = 350 min; egress = 2017-074T21:16:14 |
| S98 | 265 | Ring CRX | Ascending | 2017-076T11:06 | 17-Mar | Fri | 108 | 36 | 23 | r = 20.046 Rs (1209392 km) |
| S98 | 266 | Apoapse | | 2017-077T12:22 | 18-Mar | Sat | 109 | 35 | 24 | Per = 7.2 d, inc = 63.6 deg, r = 21.318 Rs, phase = 138 deg |
| S98 | 266 | 266TI (nt) | TITAN | 2017-079T17:42 | 20-Mar | Mon | 111 | 33 | 26 | Inbound 870697.2 km flyby, v = 8.6 km/s, phase = 32 deg |
| S98 | 266 | 266JA (nt) | JANUS | 2017-081T01:45 | 22-Mar | Wed | 112 | 31 | 28 | Inbound 42963.7 km flyby, v = 20.2 km/s, phase = 67 deg |
| S98 | 266 | 266PL (nt) | PALLENE | 2017-081T01:54 | 22-Mar | Wed | 112 | 31 | 28 | Inbound 107733.9 km flyby, v = 20.8 km/s, phase = 122 deg |
| S98 | 266 | Dust Hazard | JE_ring | 2017-081T01:56 | 22-Mar | Wed | 112 | 31 | 28 | Egress @ 2017-081T01:58 (2 min) \| Protection: MEA Cvr. Closure |
| S98 | 266 | Ring CRX | Descending | 2017-081T01:57 | 22-Mar | Wed | 112 | 31 | 28 | r = 2.454 Rs ( 148079 km) |
| S98 | 266 | 266PN (nt) | PAN | 2017-081T02:18 | 22-Mar | Wed | 112 | 31 | 28 | Outbound 55725.6 km flyby, v = 21.9 km/s, phase = 100 deg |
| S98 | 266 | Periapse | | 2017-081T02:18 | 22-Mar | Wed | 112 | 31 | 28 | R = 2.437 Rs, lat = -9 deg, phase = 42 deg |
| S98 | 266 | Sun OCC | RING | 2017-081T16:54 | 22-Mar | Wed | 113 | 31 | 28 | Duration = 492 min; egress = 2017-082T01:06:10 |
| S98 | 266 | Sun OCC | SATURN | 2017-081T17:27 | 22-Mar | Wed | 113 | 31 | 28 | Duration = 367 min; egress = 2017-081T23:35:12 |
| S98 | 266 | Earth OCC | RING | 2017-081T17:43 | 22-Mar | Wed | 113 | 31 | 28 | Duration = 476 min; egress = 2017-082T01:38:51 |
| S98 | 266 | Earth OCC | SATURN | 2017-081T19:33 | 22-Mar | Wed | 113 | 30 | 28 | Duration = 331 min; egress = 2017-082T01:04:59 |
| S98 | 266 | 266TI (nt) | TITAN | 2017-082T00:14 | 23-Mar | Thu | 113 | 30 | 29 | Outbound 954529.9 km flyby, v = 11.3 km/s, phase = 96 deg |
| S98 | 266 | Ring CRX | Ascending | 2017-083T14:58 | 24-Mar | Fri | 115 | 29 | 30 | r = 20.047 Rs (1209429 km) |
| S98 | 267 | Apoapse | | 2017-084T16:13 | 25-Mar | Sat | 116 | 28 | 31 | Per = 7.2 d, inc = 63.6 deg, r = 21.318 Rs, phase = 138 deg |
| S98 | 267 | SATURN | Segment | 2017-084T22:45 | 25-Mar | Sat | 116 | 27 | 32 | Saturn_267 (9d) |
| S98 | 267 | 267EN (nt) | ENCELADUS | 2017-088T05:45 | 29-Mar | Wed | 119 | 24 | 35 | Inbound 94519.1 km flyby, v = 19.4 km/s, phase = 134 deg |
| S98 | 267 | Dust Hazard | JE_ring | 2017-088T05:47 | 29-Mar | Wed | 119 | 24 | 35 | Egress @ 2017-088T05:49 (1 min) \| Protection: MEA Cvr. Closure |
| S98 | 267 | Ring CRX | Descending | 2017-088T05:48 | 29-Mar | Wed | 119 | 24 | 35 | r = 2.453 Rs ( 147993 km) |
| S98 | 267 | 267MI (nt) | MIMAS | 2017-088T06:05 | 29-Mar | Wed | 119 | 24 | 35 | Inbound 121564.3 km flyby, v = 22.9 km/s, phase = 107 deg |
| S98 | 267 | Periapse | | 2017-088T06:09 | 29-Mar | Wed | 119 | 24 | 35 | R = 2.435 Rs, lat = -9 deg, phase = 42 deg |
| S98 | 267 | Sun OCC | RING | 2017-088T20:46 | 29-Mar | Wed | 120 | 23 | 35 | Duration = 494 min; egress = 2017-089T05:00:11 |
| S98 | 267 | Sun OCC | SATURN | 2017-088T21:21 | 29-Mar | Wed | 120 | 23 | 35 | Duration = 377 min; egress = 2017-089T03:38:33 |
| S98 | 267 | Earth OCC | RING | 2017-088T21:37 | 29-Mar | Wed | 120 | 23 | 35 | Duration = 472 min; egress = 2017-089T05:30:02 |
| S98 | 267 | Earth OCC | SATURN | 2017-088T23:37 | 29-Mar | Wed | 120 | 23 | 36 | Duration = 314 min; egress = 2017-089T04:52:09 |
| S98 | 267 | Ring CRX | Ascending | 2017-090T18:49 | 31-Mar | Fri | 122 | 21 | 37 | r = 20.045 Rs (1209322 km) |
| S98 | 268 | Apoapse | | 2017-091T20:05 | 01-Apr | Sat | 123 | 20 | 38 | Per = 7.2 d, inc = 63.6 deg, r = 21.318 Rs, phase = 139 deg |
| S98 | 268 | RINGS | Segment | 2017-093T15:39 | 03-Apr | Mon | 125 | 19 | 40 | RINGS_268 (5d) |
| S98 | 268 | 268AT (nt) | ATLAS | 2017-095T09:16 | 05-Apr | Wed | 126 | 17 | 42 | Inbound 71811.7 km flyby, v = 21.0 km/s, phase = 51 deg |
| S98 | 268 | 268PA (nt) | PANDORA | 2017-095T09:30 | 05-Apr | Wed | 126 | 17 | 42 | Inbound 33347.4 km flyby, v = 20.4 km/s, phase = 52 deg |
| S98 | 268 | Dust Hazard | JE_ring | 2017-095T09:39 | 05-Apr | Wed | 126 | 17 | 42 | Egress @ 2017-095T09:41 (2 min) \| Protection: MEA Cvr. Closure |
| S98 | 268 | Ring CRX | Descending | 2017-095T09:40 | 05-Apr | Wed | 126 | 17 | 42 | r = 2.454 Rs ( 148077 km) |
| S98 | 268 | Periapse | | 2017-095T10:01 | 05-Apr | Wed | 126 | 17 | 42 | R = 2.437 Rs, lat = -9 deg, phase = 41 deg |
| S98 | 268 | 268EP (nt) | EPIMETHEUS | 2017-095T10:10 | 05-Apr | Wed | 126 | 17 | 42 | Outbound 110703.7 km flyby, v = 23.8 km/s, phase = 103 deg |
| S98 | 268 | Sun OCC | RING | 2017-096T00:39 | 06-Apr | Thu | 127 | 16 | 43 | Duration = 496 min; egress = 2017-096T08:55:21 |
| S98 | 268 | Sun OCC | SATURN | 2017-096T01:17 | 06-Apr | Thu | 127 | 16 | 43 | Duration = 386 min; egress = 2017-096T07:42:53 |
| S98 | 268 | Earth OCC | RING | 2017-096T01:32 | 06-Apr | Thu | 127 | 16 | 43 | Duration = 469 min; egress = 2017-096T09:22:03 |
| S98 | 268 | Earth OCC | SATURN | 2017-096T03:41 | 06-Apr | Thu | 127 | 16 | 43 | Duration = 298 min; egress = 2017-096T08:39:44 |
| S98 | 268 | 268TI (nt) | TITAN | 2017-096T22:08 | 06-Apr | Thu | 128 | 15 | 44 | Outbound 477504.4 km flyby, v = 7.7 km/s, phase = 89 deg |
| S98 | 268 | Ring CRX | Ascending | 2017-097T22:41 | 07-Apr | Fri | 129 | 14 | 45 | r = 20.052 Rs (1209720 km) |
| S98 | 268 | XD | Segment | 2017-098T12:55 | 08-Apr | Sat | 130 | 14 | 45 | XD_268_269 (3d) |
| S98 | 269 | Apoapse | | 2017-099T00:00 | 09-Apr | Sun | 130 | 13 | 46 | Per = 7.2 d, inc = 63.5 deg, r = 21.328 Rs, phase = 139 deg |
| S98 | 269 | RINGS | Segment | 2017-101T22:14 | 11-Apr | Tue | 133 | 10 | 49 | RINGS_269 (3d) |
| S98 | 269 | 269MI (nt) | MIMAS | 2017-102T13:27 | 12-Apr | Wed | 134 | 10 | 49 | Inbound 98558.5 km flyby, v = 20.8 km/s, phase = 77 deg |
| S98 | 269 | 269AG (nt) | AEGAEON | 2017-102T13:36 | 12-Apr | Wed | 134 | 10 | 49 | Inbound 22249.6 km flyby, v = 19.9 km/s, phase = 121 deg |
| S98 | 269 | Dust Hazard | JE_ring | 2017-102T13:39 | 12-Apr | Wed | 134 | 10 | 49 | Egress @ 2017-102T13:41 (2 min) \| Protection: MEA Cvr. Closure |
| S98 | 269 | Ring CRX | Descending | 2017-102T13:39 | 12-Apr | Wed | 134 | 10 | 49 | r = 2.459 Rs ( 148340 km) |
| S98 | 269 | 269JA (nt) | JANUS | 2017-102T13:41 | 12-Apr | Wed | 134 | 10 | 49 | Inbound 8995.4 km flyby, v = 20.3 km/s, phase = 134 deg |
| S98 | 269 | 269AT (nt) | ATLAS | 2017-102T13:41 | 12-Apr | Wed | 134 | 10 | 49 | Inbound 10825.4 km flyby, v = 20.5 km/s, phase = 43 deg |
| S98 | 269 | Periapse | | 2017-102T14:00 | 12-Apr | Wed | 134 | 10 | 49 | R = 2.441 Rs, lat = -9 deg, phase = 41 deg |
| S98 | 269 | 269PM (nt) | PROMETHEUS | 2017-102T14:08 | 12-Apr | Wed | 134 | 10 | 49 | Outbound 82692.2 km flyby, v = 22.8 km/s, phase = 103 deg |
| S98 | 269 | Sun OCC | RING | 2017-103T04:42 | 13-Apr | Thu | 134 | 9 | 50 | Duration = 497 min; egress = 2017-103T12:58:49 |
| S98 | 269 | Sun OCC | SATURN | 2017-103T05:22 | 13-Apr | Thu | 134 | 9 | 50 | Duration = 392 min; egress = 2017-103T11:54:43 |
| S98 | 269 | Earth OCC | RING | 2017-103T05:35 | 13-Apr | Thu | 134 | 9 | 50 | Duration = 467 min; egress = 2017-103T13:22:36 |
| S98 | 269 | Earth OCC | SATURN | 2017-103T07:50 | 13-Apr | Thu | 134 | 9 | 50 | Duration = 286 min; egress = 2017-103T12:37:02 |
| S99 | 269 | S99 Begins | | 2017-104T14:55 | 14-Apr | Fri | 136 | 8 | 51 | S99 Sequence. Duration = 41 d |
| S99 | 269 | SATURN | Segment | 2017-104T14:55 | 14-Apr | Fri | 136 | 8 | 51 | Saturn_269_270 (4d) |
| S99 | 269 | Ring CRX | Ascending | 2017-105T02:43 | 15-Apr | Sat | 136 | 7 | 52 | r = 20.055 Rs (1209922 km) |
| S99 | 270 | Apoapse | | 2017-106T04:02 | 16-Apr | Sun | 137 | 6 | 53 | Per = 7.2 d, inc = 63.5 deg, r = 21.332 Rs, phase = 139 deg |
| S99 | 270 | OTM-469 | 270TI-4d | 2017-108T12:11 | 18-Apr | Tue | 140 | 4 | 55 | D/L Start, burn ~6h later. Backup D/L 109T12:11; complexes C/C |
| S99 | 270 | RINGS | Segment | 2017-108T21:12 | 18-Apr | Tue | 140 | 3 | 0 | RINGS_270 (3d) |
| S99 | 270 | 270AN (nt) | ANTHE | 2017-109T17:38 | 19-Apr | Wed | 141 | 3 | 1 | Inbound 119532.7 km flyby, v = 20.4 km/s, phase = 80 deg |
| S99 | 270 | Dust Hazard | JE_ring | 2017-109T17:43 | 19-Apr | Wed | 141 | 3 | 1 | Egress @ 2017-109T17:45 (2 min) \| Protection: MEA Cvr. Closure |
| S99 | 270 | Ring CRX | Descending | 2017-109T17:44 | 19-Apr | Wed | 141 | 3 | 1 | r = 2.460 Rs ( 148401 km) |
| S99 | 270 | 270ME (nt) | METHONE | 2017-109T17:46 | 19-Apr | Wed | 141 | 3 | 1 | Inbound 89125.3 km flyby, v = 20.9 km/s, phase = 120 deg |
| S99 | 270 | 270AG (nt) | AEGAEON | 2017-109T18:03 | 19-Apr | Wed | 141 | 3 | 1 | Inbound 110493.1 km flyby, v = 22.9 km/s, phase = 104 deg |
| S99 | 270 | Periapse | | 2017-109T18:05 | 19-Apr | Wed | 141 | 3 | 1 | R = 2.442 Rs, lat = -9 deg, phase = 41 deg |
| S99 | 270 | 270AT (nt) | ATLAS | 2017-109T18:09 | 19-Apr | Wed | 141 | 2 | 1 | Outbound 70389.4 km flyby, v = 22.3 km/s, phase = 102 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S99 | 270 | 270PA (nt) | PANDORA | 2017-109T18:24 | 19-Apr | Wed | 141 | 2 | 1 | Outbound 122101.4 km flyby, v = 24.6 km/s, phase = 101 deg |
| S99 | 270 | 270DA (nt) | DAPHNIS | 2017-109T18:28 | 19-Apr | Wed | 141 | 2 | 1 | Outbound 120493.3 km flyby, v = 24.8 km/s, phase = 101 deg |
| S99 | 270 | Sun OCC | RING | 2017-110T08:48 | 20-Apr | Thu | 141 | 2 | 2 | Duration = 497 min; egress = 2017-110T17:05:51 |
| S99 | 270 | Sun OCC | SATURN | 2017-110T09:32 | 20-Apr | Thu | 141 | 2 | 2 | Duration = 397 min; egress = 2017-110T16:09:25 |
| S99 | 270 | Earth OCC | RING | 2017-110T09:41 | 20-Apr | Thu | 141 | 2 | 2 | Duration = 466 min; egress = 2017-110T17:26:44 |
| S99 | 270 | Earth OCC | SATURN | 2017-110T11:59 | 20-Apr | Thu | 142 | 2 | 2 | Duration = 280 min; egress = 2017-110T16:39:18 |
| S99 | 270 | TOST | Segment | 2017-111T12:30 | 21-Apr | Fri | 143 | 1 | 3 | T126_270_TOST (4d) |
| S99 | 270 | 270TI (t) T126 | TITAN | 2017-112T06:08 | 22-Apr | Sat | 143 | 146 | 4 | Outbound 979.7 km flyby, v = 5.8 km/s, phase = 64 deg |
| S99 | 270 | Ring CRX | Ascending | 2017-112T06:59 | 22-Apr | Sat | 0 | 146 | 4 | r = 20.085 Rs (1211725 km) |
| S99 | 271 | Apoapse | | 2017-113T03:46 | 23-Apr | Sun | 1 | 145 | 5 | Per = 6.4 d, inc = 62.4 deg, r = 21.090 Rs, phase = 144 deg |
| S99 | 270 | START OF PROXIMAL ORBITS | | 2017-113T04:17 | 23-Apr | Sun | 1 | 145 | 5 | Series of 22 orbits with periapses / ring crossings between rings and planet |
| S99 | 271 | OTM-470 | 270TI+2d | 2017-114T11:52 | 24-Apr | Mon | 2 | 144 | 6 | D/L Start, burn ~6h later. Backup D/L 114T23:02; complexes C/M |
| S99 | 271 | SATURN | Segment | 2017-115T13:12 | 25-Apr | Tue | 3 | 143 | 1 | Saturn_271 (4d) |
| S99 | 271 | 271JA (nt) | JANUS | 2017-116T08:45 | 26-Apr | Wed | 4 | 142 | 2 | Inbound 112103.9 km flyby, v = 29.5 km/s, phase = 111 deg |
| S99 | 271 | 271AT (nt) | ATLAS | 2017-116T08:54 | 26-Apr | Wed | 4 | 142 | 2 | Inbound 79768.4 km flyby, v = 30.1 km/s, phase = 140 deg |
| S99 | 271 | 271DA (nt) | DAPHNIS | 2017-116T09:00 | 26-Apr | Wed | 4 | 142 | 2 | Inbound 74033.3 km flyby, v = 30.1 km/s, phase = 143 deg |
| S99 | 271 | Dust Hazard | D_ring | 2017-116T09:00 | 26-Apr | Wed | 4 | 142 | 2 | Egress @ 2017-116T09:00 (0 min) \| Protection: HGA to Dust-Ram |
| S99 | 271 | Earth OCC | RING | 2017-116T09:00 | 26-Apr | Wed | 4 | 142 | 2 | Duration = 27 min; egress = 2017-116T09:27:26 |
| S99 | 271 | Ring CRX | Descending | 2017-116T09:00 | 26-Apr | Wed | 4 | 142 | 2 | r = 1.050 Rs ( 63334 km) |
| S99 | 271 | Sun OCC | RING | 2017-116T09:00 | 26-Apr | Wed | 4 | 142 | 2 | Duration = 29 min; egress = 2017-116T09:29:05 |
| S99 | 271 | 271EP (nt) | EPIMETHEUS | 2017-116T09:03 | 26-Apr | Wed | 4 | 142 | 2 | Outbound 93633.0 km flyby, v = 30.0 km/s, phase = 128 deg |
| S99 | 271 | Periapse | | 2017-116T09:03 | 26-Apr | Wed | 4 | 142 | 2 | R = 1.047 Rs, lat = -5 deg, phase = 36 deg |
| S99 | 271 | 271AG (nt) | AEGAEON | 2017-116T09:09 | 26-Apr | Wed | 4 | 142 | 2 | Outbound 119855.0 km flyby, v = 29.6 km/s, phase = 113 deg |
| S99 | 271 | Sun OCC | RING | 2017-116T13:28 | 26-Apr | Wed | 4 | 142 | 2 | Duration = 502 min; egress = 2017-116T21:50:40 |
| S99 | 271 | Earth OCC | RING | 2017-116T14:00 | 26-Apr | Wed | 4 | 142 | 2 | Duration = 480 min; egress = 2017-116T22:00:36 |
| S99 | 271 | Sun OCC | SATURN | 2017-116T14:32 | 26-Apr | Wed | 4 | 142 | 2 | Duration = 401 min; egress = 2017-116T21:13:38 |
| S99 | 271 | Earth OCC | SATURN | 2017-116T16:01 | 26-Apr | Wed | 4 | 142 | 2 | Duration = 310 min; egress = 2017-116T21:11:28 |
| S99 | 271 | Ring CRX | Ascending | 2017-118T17:20 | 28-Apr | Fri | 6 | 140 | 4 | r = 20.071 Rs (1210861 km) |
| S99 | 272 | Apoapse | | 2017-119T14:22 | 29-Apr | Sat | 7 | 139 | 5 | Per = 6.4 d, inc = 62.3 deg, r = 21.095 Rs, phase = 144 deg |
| S99 | 272 | XD | Segment | 2017-119T20:35 | 29-Apr | Sat | 8 | 139 | 5 | XD_272_273 (7d) |
| S99 | 272 | 272DA (nt) | DAPHNIS | 2017-122T19:26 | 02-May | Tue | 11 | 136 | 8 | Inbound 101581.5 km flyby, v = 30.3 km/s, phase = 106 deg |
| S99 | 272 | 272PM (nt) | PROMETHEUS | 2017-122T19:32 | 02-May | Tue | 11 | 136 | 8 | Inbound 82957.8 km flyby, v = 30.1 km/s, phase = 137 deg |
| S99 | 272 | Dust Hazard | D_ring | 2017-122T19:38 | 02-May | Tue | 11 | 136 | 8 | Egress @ 2017-122T19:39 (0 min) \| Protection: MEA Cvr. Closure |
| S99 | 272 | Ring CRX | Descending | 2017-122T19:38 | 02-May | Tue | 11 | 136 | 8 | r = 1.049 Rs ( 63312 km) |
| S99 | 272 | Earth OCC | RING | 2017-122T19:39 | 02-May | Tue | 11 | 136 | 8 | Duration = 27 min; egress = 2017-122T20:06:01 |
| S99 | 272 | Sun OCC | RING | 2017-122T19:39 | 02-May | Tue | 11 | 136 | 8 | Duration = 28 min; egress = 2017-122T20:07:25 |
| S99 | 272 | Periapse | | 2017-122T19:42 | 02-May | Tue | 11 | 136 | 8 | R = 1.047 Rs, lat = -5 deg, phase = 36 deg |
| S99 | 272 | 272AG (nt) | AEGAEON | 2017-122T19:45 | 02-May | Tue | 11 | 136 | 8 | Outbound 113946.1 km flyby, v = 29.8 km/s, phase = 124 deg |
| S99 | 272 | 272JA (nt) | JANUS | 2017-122T19:56 | 02-May | Tue | 11 | 136 | 8 | Outbound 122425.3 km flyby, v = 28.5 km/s, phase = 92 deg |
| S99 | 272 | Sun OCC | RING | 2017-123T00:10 | 03-May | Wed | 11 | 135 | 9 | Duration = 498 min; egress = 2017-123T08:28:35 |
| S99 | 272 | Earth OCC | RING | 2017-123T00:41 | 03-May | Wed | 11 | 135 | 9 | Duration = 473 min; egress = 2017-123T08:34:21 |
| S99 | 272 | Sun OCC | SATURN | 2017-123T01:24 | 03-May | Wed | 11 | 135 | 9 | Duration = 393 min; egress = 2017-123T07:57:22 |
| S99 | 272 | Earth OCC | SATURN | 2017-123T03:00 | 03-May | Wed | 11 | 135 | 9 | Duration = 269 min; egress = 2017-123T07:29:05 |
| S99 | 272 | Ring CRX | Ascending | 2017-125T03:45 | 05-May | Fri | 13 | 133 | 11 | r = 20.047 Rs (1209406 km) |
| S99 | 273 | Apoapse | | 2017-126T00:59 | 06-May | Sat | 14 | 132 | 12 | Per = 6.4 d, inc = 62.3 deg, r = 21.091 Rs, phase = 145 deg |
| S99 | 273 | TOST | Segment | 2017-127T04:19 | 07-May | Sun | 15 | 131 | 13 | TOST_273_IN (2d) |
| S99 | 273 | 273TI (nt) | TITAN | 2017-127T20:32 | 07-May | Sun | 16 | 131 | 13 | Inbound 496013.5 km flyby, v = 7.2 km/s, phase = 31 deg |
| S99 | 273 | MAPS | Segment | 2017-128T18:13 | 08-May | Mon | 17 | 130 | 14 | MAPS_273 (4d) |
| S99 | 273 | 273PA (nt) | PANDORA | 2017-129T06:04 | 09-May | Tue | 17 | 129 | 15 | Inbound 91032.6 km flyby, v = 30.2 km/s, phase = 127 deg |
| S99 | 273 | Dust Hazard | D_ring | 2017-129T06:13 | 09-May | Tue | 17 | 129 | 15 | Egress @ 2017-129T06:13 (0 min) \| Protection: MEA Cvr. Closure |
| S99 | 273 | Earth OCC | RING | 2017-129T06:13 | 09-May | Tue | 17 | 129 | 15 | Duration = 27 min; egress = 2017-129T06:40:23 |
| S99 | 273 | Ring CRX | Descending | 2017-129T06:13 | 09-May | Tue | 17 | 129 | 15 | r = 1.046 Rs ( 63095 km) |
| S99 | 273 | Sun OCC | RING | 2017-129T06:13 | 09-May | Tue | 17 | 129 | 15 | Duration = 28 min; egress = 2017-129T06:41:42 |
| S99 | 273 | 273AG (nt) | AEGAEON | 2017-129T06:16 | 09-May | Tue | 17 | 129 | 15 | Inbound 108715.1 km flyby, v = 30.1 km/s, phase = 136 deg |
| S99 | 273 | Periapse | | 2017-129T06:16 | 09-May | Tue | 17 | 129 | 15 | R = 1.043 Rs, lat = -5 deg, phase = 35 deg |
| S99 | 273 | Sun OCC | RING | 2017-129T10:46 | 09-May | Tue | 17 | 129 | 15 | Duration = 492 min; egress = 2017-129T18:58:47 |
| S99 | 273 | Earth OCC | RING | 2017-129T11:15 | 09-May | Tue | 17 | 129 | 15 | Duration = 466 min; egress = 2017-129T19:01:13 |
| S99 | 273 | Sun OCC | SATURN | 2017-129T12:11 | 09-May | Tue | 17 | 129 | 15 | Duration = 377 min; egress = 2017-129T18:28:15 |
| S99 | 273 | Earth OCC | SATURN | 2017-129T13:54 | 09-May | Tue | 17 | 129 | 15 | Duration = 221 min; egress = 2017-129T17:35:24 |
| S99 | 273 | 273TI (nt) | TITAN | 2017-129T21:09 | 09-May | Tue | 18 | 129 | 15 | Outbound 966220.1 km flyby, v = 12.5 km/s, phase = 89 deg |
| S99 | 273 | OTM-471 | P2+1d | 2017-130T10:58 | 10-May | Wed | 18 | 128 | 16 | D/L Start, burn ~6h later. Backup D/L 134T21:29; complexes C/C |
| S99 | 273 | Ring CRX | Ascending | 2017-131T14:00 | 11-May | Thu | 19 | 127 | 1 | r = 20.011 Rs (1207263 km) |
| S99 | 274 | Apoapse | | 2017-132T11:30 | 12-May | Fri | 20 | 126 | 2 | Per = 6.4 d, inc = 62.4 deg, r = 21.084 Rs, phase = 145 deg |
| S99 | 274 | RINGS | Segment | 2017-132T19:51 | 12-May | Fri | 21 | 126 | 2 | RINGS_274 (6d) |
| S99 | 274 | 274EP (nt) | EPIMETHEUS | 2017-135T16:26 | 15-May | Mon | 23 | 123 | 5 | Inbound 114130.9 km flyby, v = 29.5 km/s, phase = 106 deg |
| S99 | 274 | 274PN (nt) | PAN | 2017-135T16:34 | 15-May | Mon | 23 | 123 | 5 | Inbound 83212.8 km flyby, v = 30.4 km/s, phase = 125 deg |
| S99 | 274 | 274PM (nt) | PROMETHEUS | 2017-135T16:36 | 15-May | Mon | 23 | 123 | 5 | Inbound 80455.7 km flyby, v = 30.2 km/s, phase = 141 deg |
| S99 | 274 | 274AG (nt) | AEGAEON | 2017-135T16:41 | 15-May | Mon | 23 | 123 | 5 | Inbound 105007.6 km flyby, v = 30.1 km/s, phase = 147 deg |
| S99 | 274 | Dust Hazard | D_ring | 2017-135T16:41 | 15-May | Mon | 23 | 123 | 5 | Egress @ 2017-135T16:42 (0 min) \| Protection: MEA Cvr. Closure |
| S99 | 274 | Earth OCC | RING | 2017-135T16:42 | 15-May | Mon | 23 | 123 | 5 | Duration = 27 min; egress = 2017-135T17:09:00 |
| S99 | 274 | Ring CRX | Descending | 2017-135T16:42 | 15-May | Mon | 23 | 123 | 5 | r = 1.045 Rs ( 63045 km) |
| S99 | 274 | Sun OCC | RING | 2017-135T16:42 | 15-May | Mon | 23 | 123 | 5 | Duration = 28 min; egress = 2017-135T17:10:09 |
| S99 | 274 | 274AT (nt) | ATLAS | 2017-135T16:45 | 15-May | Mon | 23 | 123 | 5 | Outbound 82817.0 km flyby, v = 30.2 km/s, phase = 126 deg |
| S99 | 274 | Periapse | | 2017-135T16:45 | 15-May | Mon | 23 | 123 | 5 | R = 1.042 Rs, lat = -5 deg, phase = 35 deg |
| S99 | 274 | 274PA (nt) | PANDORA | 2017-135T16:59 | 15-May | Mon | 23 | 123 | 5 | Outbound 116363.0 km flyby, v = 28.9 km/s, phase = 90 deg |
| S99 | 274 | Sun OCC | RING | 2017-135T21:19 | 15-May | Mon | 24 | 123 | 5 | Duration = 485 min; egress = 2017-136T05:24:29 |
| S99 | 274 | Earth OCC | RING | 2017-135T21:45 | 15-May | Mon | 24 | 123 | 5 | Duration = 459 min; egress = 2017-136T05:24:35 |
| S99 | 274 | Sun OCC | SATURN | 2017-135T22:59 | 15-May | Mon | 24 | 122 | 6 | Duration = 349 min; egress = 2017-136T04:48:13 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S99 | 274 | Earth OCC | SATURN | 2017-136T00:54 | 16-May | Tue | 24 | 122 | 6 | Duration = 155 min; egress = 2017-136T03:28:47 |
| S99 | 274 | Ring CRX | Ascending | 2017-138T00:16 | 18-May | Thu | 26 | 120 | 8 | r = 19.990 Rs (1206005 km) |
| S99 | 274 | SATURN | Segment | 2017-138T19:21 | 18-May | Thu | 27 | 120 | 8 | Saturn_275 (5d) |
| S99 | 275 | Apoapse | | 2017-138T21:59 | 18-May | Thu | 27 | 120 | 8 | Per = 6.4 d, inc = 62.4 deg, r = 21.085 Rs, phase = 146 deg |
| S99 | 275 | 275JA (nt) | JANUS | 2017-142T03:06 | 22-May | Mon | 30 | 116 | 12 | Inbound 88945.0 km flyby, v = 30.0 km/s, phase = 147 deg |
| S99 | 275 | 275AG (nt) | AEGAEON | 2017-142T03:07 | 22-May | Mon | 30 | 116 | 12 | Inbound 104520.2 km flyby, v = 30.1 km/s, phase = 150 deg |
| S99 | 275 | Dust Hazard | D_ring | 2017-142T03:11 | 22-May | Mon | 30 | 116 | 12 | Egress @ 2017-142T03:11 (0 min) \| Protection: MEA Cvr. Closure |
| S99 | 275 | Earth OCC | RING | 2017-142T03:11 | 22-May | Mon | 30 | 116 | 12 | Duration = 27 min; egress = 2017-142T03:38:03 |
| S99 | 275 | Ring CRX | Descending | 2017-142T03:11 | 22-May | Mon | 30 | 116 | 12 | r = 1.046 Rs ( 63093 km) |
| S99 | 275 | Sun OCC | RING | 2017-142T03:11 | 22-May | Mon | 30 | 116 | 12 | Duration = 28 min; egress = 2017-142T03:38:58 |
| S99 | 275 | Periapse | | 2017-142T03:14 | 22-May | Mon | 30 | 116 | 12 | R = 1.043 Rs, lat = -6 deg, phase = 34 deg |
| S99 | 275 | 275PN (nt) | PAN | 2017-142T03:19 | 22-May | Mon | 30 | 116 | 12 | Outbound 93691.2 km flyby, v = 30.1 km/s, phase = 105 deg |
| S99 | 275 | 275EP (nt) | EPIMETHEUS | 2017-142T03:25 | 22-May | Mon | 30 | 116 | 12 | Outbound 115562.9 km flyby, v = 29.1 km/s, phase = 100 deg |
| S99 | 275 | Sun OCC | RING | 2017-142T07:54 | 22-May | Mon | 30 | 116 | 12 | Duration = 476 min; egress = 2017-142T15:49:43 |
| S99 | 275 | Earth OCC | RING | 2017-142T08:17 | 22-May | Mon | 30 | 116 | 12 | Duration = 451 min; egress = 2017-142T15:48:18 |
| S99 | 275 | Sun OCC | SATURN | 2017-142T09:55 | 22-May | Mon | 30 | 116 | 12 | Duration = 303 min; egress = 2017-142T14:58:06 |
| S99 | 275 | TOST | Segment | 2017-143T12:14 | 23-May | Tue | 31 | 115 | 13 | TOST_275 (2d) |
| S99 | 275 | 275TI (nt) | TITAN | 2017-144T00:18 | 24-May | Wed | 32 | 114 | 14 | Outbound 117956.0 km flyby, v = 5.9 km/s, phase = 69 deg |
| S99 | 275 | Ring CRX | Ascending | 2017-144T10:29 | 24-May | Wed | 32 | 114 | 14 | r = 19.980 Rs (1205417 km) |
| S99 | 275 | N. SUMMER SOLSTICE | | 2017-144T21:32 | 24-May | Wed | 33 | 114 | 14 | Northern summer solstice (maximum Solar declination) |
| S99 | 276 | Apoapse | | 2017-145T08:50 | 25-May | Thu | 33 | 113 | 15 | Per = 6.5 d, inc = 62.0 deg, r = 21.134 Rs, phase = 146 deg |
| S100 | 276 | RINGS | Segment | 2017-145T08:57 | 25-May | Thu | 33 | 113 | 15 | RINGS_276 (4d) |
| S100 | 276 | S100 Begins | | 2017-145T08:57 | 25-May | Thu | 33 | 113 | 15 | S100 Sequence. Duration = 46 d |
| S100 | 276 | 276AG (nt) | AEGAEON | 2017-148T14:20 | 28-May | Sun | 36 | 110 | 18 | Inbound 103137.4 km flyby, v = 29.7 km/s, phase = 150 deg |
| S100 | 276 | 276PM (nt) | PROMETHEUS | 2017-148T14:21 | 28-May | Sun | 36 | 110 | 18 | Inbound 75048.2 km flyby, v = 29.7 km/s, phase = 149 deg |
| S100 | 276 | Dust Hazard | D_ring | 2017-148T14:22 | 28-May | Sun | 36 | 110 | 18 | Egress @ 2017-148T14:23 (0 min) \| Protection: HGA to Dust-Ram |
| S100 | 276 | Earth OCC | RING | 2017-148T14:22 | 28-May | Sun | 36 | 110 | 18 | Duration = 27 min; egress = 2017-148T14:49:24 |
| S100 | 276 | Ring CRX | Descending | 2017-148T14:22 | 28-May | Sun | 36 | 110 | 18 | r = 1.066 Rs ( 64302 km) |
| S100 | 276 | Sun OCC | RING | 2017-148T14:22 | 28-May | Sun | 36 | 110 | 18 | Duration = 27 min; egress = 2017-148T14:50:11 |
| S100 | 276 | Periapse | | 2017-148T14:26 | 28-May | Sun | 36 | 110 | 18 | R = 1.063 Rs, lat = -6 deg, phase = 34 deg |
| S100 | 276 | Sun OCC | RING | 2017-148T19:18 | 28-May | Sun | 37 | 110 | 18 | Duration = 461 min; egress = 2017-149T03:00:01 |
| S100 | 276 | Earth OCC | RING | 2017-148T19:38 | 28-May | Sun | 37 | 110 | 18 | Duration = 440 min; egress = 2017-149T02:58:04 |
| S100 | 276 | Sun OCC | SATURN | 2017-148T22:00 | 28-May | Sun | 37 | 110 | 18 | Duration = 211 min; egress = 2017-149T01:31:39 |
| S100 | 276 | SOST | Segment | 2017-149T11:59 | 29-May | Mon | 37 | 109 | 19 | SOST_276 (2d) |
| S100 | 276 | Ring CRX | Ascending | 2017-150T21:27 | 30-May | Tue | 39 | 108 | 20 | r = 19.958 Rs (1204049 km) |
| S100 | 276 | XD | Segment | 2017-151T18:22 | 31-May | Wed | 40 | 107 | 21 | XD_276_277 (3d) |
| S100 | 277 | Apoapse | | 2017-151T20:04 | 31-May | Wed | 40 | 107 | 21 | Per = 6.5 d, inc = 62.0 deg, r = 21.138 Rs, phase = 146 deg |
| S100 | 277 | RINGS | Segment | 2017-154T07:00 | 03-Jun | Sat | 42 | 104 | 24 | RINGS_277 (5d) |
| S100 | 277 | 277PA (nt) | PANDORA | 2017-155T01:36 | 04-Jun | Sun | 43 | 103 | 25 | Inbound 77610.1 km flyby, v = 29.7 km/s, phase = 150 deg |
| S100 | 277 | 277AG (nt) | AEGAEON | 2017-155T01:36 | 04-Jun | Sun | 43 | 103 | 25 | Inbound 103057.9 km flyby, v = 29.7 km/s, phase = 151 deg |
| S100 | 277 | Dust Hazard | D_ring | 2017-155T01:38 | 04-Jun | Sun | 43 | 103 | 25 | Egress @ 2017-155T01:39 (0 min) \| Protection: HGA to Dust-Ram |
| S100 | 277 | Earth OCC | RING | 2017-155T01:38 | 04-Jun | Sun | 43 | 103 | 25 | Duration = 27 min; egress = 2017-155T02:05:31 |
| S100 | 277 | Ring CRX | Descending | 2017-155T01:38 | 04-Jun | Sun | 43 | 103 | 25 | r = 1.066 Rs ( 64296 km) |
| S100 | 277 | Sun OCC | RING | 2017-155T01:38 | 04-Jun | Sun | 43 | 103 | 25 | Duration = 27 min; egress = 2017-155T02:06:02 |
| S100 | 277 | Periapse | | 2017-155T01:42 | 04-Jun | Sun | 43 | 103 | 25 | R = 1.062 Rs, lat = -6 deg, phase = 34 deg |
| S100 | 277 | 277DA (nt) | DAPHNIS | 2017-155T01:57 | 04-Jun | Sun | 43 | 103 | 25 | Outbound 114629.9 km flyby, v = 28.6 km/s, phase = 89 deg |
| S100 | 277 | Sun OCC | RING | 2017-155T06:40 | 04-Jun | Sun | 43 | 103 | 25 | Duration = 447 min; egress = 2017-155T14:08:02 |
| S100 | 277 | Earth OCC | RING | 2017-155T06:55 | 04-Jun | Sun | 43 | 103 | 25 | Duration = 432 min; egress = 2017-155T14:07:16 |
| S100 | 277 | Ring CRX | Ascending | 2017-157T08:25 | 06-Jun | Tue | 45 | 101 | 27 | r = 19.926 Rs (1202123 km) |
| S100 | 278 | Apoapse | | 2017-158T07:18 | 07-Jun | Wed | 46 | 100 | 28 | Per = 6.5 d, inc = 62.0 deg, r = 21.135 Rs, phase = 146 deg |
| S100 | 278 | TOST | Segment | 2017-159T06:46 | 08-Jun | Thu | 47 | 99 | 29 | TOST_278 (2d) |
| S100 | 278 | 278TI (nt) | TITAN | 2017-159T18:44 | 08-Jun | Thu | 48 | 99 | 29 | Inbound 367298.9 km flyby, v = 6.2 km/s, phase = 38 deg |
| S100 | 278 | SATURN | Segment | 2017-161T00:55 | 10-Jun | Sat | 49 | 97 | 31 | SATURN_278_279 (6d) |
| S100 | 278 | 278PN (nt) | PAN | 2017-161T12:36 | 10-Jun | Sat | 49 | 97 | 31 | Inbound 101548.5 km flyby, v = 30.4 km/s, phase = 96 deg |
| S100 | 278 | 278JA (nt) | JANUS | 2017-161T12:39 | 10-Jun | Sat | 49 | 97 | 31 | Inbound 98816.1 km flyby, v = 29.7 km/s, phase = 122 deg |
| S100 | 278 | 278AG (nt) | AEGAEON | 2017-161T12:48 | 10-Jun | Sat | 49 | 97 | 31 | Inbound 103576.5 km flyby, v = 29.8 km/s, phase = 151 deg |
| S100 | 278 | 278AT (nt) | ATLAS | 2017-161T12:49 | 10-Jun | Sat | 49 | 97 | 31 | Inbound 74707.6 km flyby, v = 29.9 km/s, phase = 148 deg |
| S100 | 278 | Dust Hazard | D_ring | 2017-161T12:49 | 10-Jun | Sat | 49 | 97 | 31 | Egress @ 2017-161T12:50 (0 min) \| Protection: MEA Cvr. Closure |
| S100 | 278 | Earth OCC | RING | 2017-161T12:49 | 10-Jun | Sat | 49 | 97 | 31 | Duration = 27 min; egress = 2017-161T13:16:23 |
| S100 | 278 | Ring CRX | Descending | 2017-161T12:49 | 10-Jun | Sat | 49 | 97 | 31 | r = 1.058 Rs ( 63825 km) |
| S100 | 278 | Sun OCC | RING | 2017-161T12:49 | 10-Jun | Sat | 49 | 97 | 31 | Duration = 27 min; egress = 2017-161T13:16:47 |
| S100 | 278 | 278DA (nt) | DAPHNIS | 2017-161T12:52 | 10-Jun | Sat | 49 | 97 | 31 | Inbound 79063.2 km flyby, v = 29.9 km/s, phase = 135 deg |
| S100 | 278 | Periapse | | 2017-161T12:53 | 10-Jun | Sat | 49 | 97 | 31 | R = 1.055 Rs, lat = -6 deg, phase = 34 deg |
| S100 | 278 | 278EP (nt) | EPIMETHEUS | 2017-161T12:54 | 10-Jun | Sat | 49 | 97 | 31 | Outbound 94628.6 km flyby, v = 29.7 km/s, phase = 133 deg |
| S100 | 278 | 278PM (nt) | PROMETHEUS | 2017-161T12:59 | 10-Jun | Sat | 49 | 97 | 31 | Outbound 98711.8 km flyby, v = 29.6 km/s, phase = 109 deg |
| S100 | 278 | Sun OCC | RING | 2017-161T17:52 | 10-Jun | Sat | 49 | 97 | 31 | Duration = 431 min; egress = 2017-162T01:04:02 |
| S100 | 278 | Earth OCC | RING | 2017-161T18:01 | 10-Jun | Sat | 49 | 97 | 31 | Duration = 424 min; egress = 2017-162T01:05:53 |
| S100 | 278 | Ring CRX | Ascending | 2017-163T19:04 | 12-Jun | Mon | 52 | 95 | 33 | r = 19.866 Rs (1198524 km) |
| S100 | 279 | Apoapse | | 2017-164T18:24 | 13-Jun | Tue | 53 | 94 | 34 | Per = 6.5 d, inc = 62.1 deg, r = 21.126 Rs, phase = 147 deg |
| S100 | 279 | MAPS | Segment | 2017-167T12:18 | 16-Jun | Fri | 55 | 91 | 37 | MAPS_279 (3d) |
| S100 | 279 | 279DA (nt) | DAPHNIS | 2017-167T23:45 | 16-Jun | Fri | 56 | 90 | 38 | Inbound 81556.4 km flyby, v = 30.0 km/s, phase = 127 deg |
| S100 | 279 | 279AG (nt) | AEGAEON | 2017-167T23:50 | 16-Jun | Fri | 56 | 90 | 38 | Inbound 103573.4 km flyby, v = 29.9 km/s, phase = 151 deg |
| S100 | 279 | Dust Hazard | D_ring | 2017-167T23:51 | 16-Jun | Fri | 56 | 90 | 38 | Egress @ 2017-167T23:52 (0 min) \| Protection: MEA Cvr. Closure |
| S100 | 279 | Earth OCC | RING | 2017-167T23:52 | 16-Jun | Fri | 56 | 90 | 38 | Duration = 27 min; egress = 2017-168T00:18:50 |
| S100 | 279 | Ring CRX | Descending | 2017-167T23:52 | 16-Jun | Fri | 56 | 90 | 38 | r = 1.057 Rs ( 63769 km) |
| S100 | 279 | Sun OCC | RING | 2017-167T23:52 | 16-Jun | Fri | 56 | 90 | 38 | Duration = 27 min; egress = 2017-168T00:19:04 |
| S100 | 279 | Periapse | | 2017-167T23:55 | 16-Jun | Fri | 56 | 90 | 38 | R = 1.054 Rs, lat = -6 deg, phase = 34 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S100 | 279 | 279PN (nt) | PAN | 2017-167T23:59 | 16-Jun | Fri | 56 | 90 | 38 | Outbound 88270.2 km flyby, v = 29.9 km/s, phase = 116 deg |
| S100 | 279 | Sun OCC | RING | 2017-168T05:02 | 17-Jun | Sat | 56 | 90 | 38 | Duration = 414 min; egress = 2017-168T11:55:54 |
| S100 | 279 | Earth OCC | RING | 2017-168T05:04 | 17-Jun | Sat | 56 | 90 | 38 | Duration = 417 min; egress = 2017-168T12:01:35 |
| S100 | 279 | Ring CRX | Ascending | 2017-170T05:50 | 19-Jun | Mon | 58 | 88 | 40 | r = 19.835 Rs (1196654 km) |
| S100 | 279 | XD | Segment | 2017-170T17:07 | 19-Jun | Mon | 58 | 88 | 40 | XD_279_280 (9d) |
| S100 | 280 | Apoapse | | 2017-171T05:26 | 20-Jun | Tue | 59 | 87 | 41 | Per = 6.5 d, inc = 62.1 deg, r = 21.126 Rs, phase = 147 deg |
| S100 | 280 | 280DA (nt) | DAPHNIS | 2017-174T10:32 | 23-Jun | Fri | 62 | 84 | 44 | Inbound 124034.1 km flyby, v = 30.1 km/s, phase = 72 deg |
| S100 | 280 | 280PA (nt) | PANDORA | 2017-174T10:37 | 23-Jun | Fri | 62 | 84 | 44 | Inbound 113223.9 km flyby, v = 29.9 km/s, phase = 88 deg |
| S100 | 280 | 280AG (nt) | AEGAEON | 2017-174T10:51 | 23-Jun | Fri | 62 | 84 | 44 | Inbound 103501.8 km flyby, v = 29.8 km/s, phase = 151 deg |
| S100 | 280 | Dust Hazard | D_ring | 2017-174T10:53 | 23-Jun | Fri | 62 | 84 | 44 | Egress @ 2017-174T10:54 (0 min) \| Protection: MEA Cvr. Closure |
| S100 | 280 | Earth OCC | RING | 2017-174T10:53 | 23-Jun | Fri | 62 | 84 | 44 | Duration = 27 min; egress = 2017-174T11:20:48 |
| S100 | 280 | Ring CRX | Descending | 2017-174T10:53 | 23-Jun | Fri | 62 | 84 | 44 | r = 1.058 Rs ( 63814 km) |
| S100 | 280 | Sun OCC | RING | 2017-174T10:53 | 23-Jun | Fri | 62 | 84 | 44 | Duration = 27 min; egress = 2017-174T11:20:49 |
| S100 | 280 | Periapse | | 2017-174T10:57 | 23-Jun | Fri | 62 | 84 | 44 | R = 1.054 Rs, lat = -6 deg, phase = 33 deg |
| S100 | 280 | Earth OCC | RING | 2017-174T16:08 | 23-Jun | Fri | 62 | 84 | 44 | Duration = 409 min; egress = 2017-174T22:56:43 |
| S100 | 280 | Sun OCC | RING | 2017-174T16:13 | 23-Jun | Fri | 62 | 84 | 44 | Duration = 392 min; egress = 2017-174T22:45:44 |
| S100 | 280 | 280TI (nt) | TITAN | 2017-175T22:28 | 24-Jun | Sat | 64 | 83 | 45 | Outbound 297956.8 km flyby, v = 6.9 km/s, phase = 67 deg |
| S100 | 280 | Ring CRX | Ascending | 2017-176T16:35 | 25-Jun | Sun | 64 | 82 | 46 | r = 19.813 Rs (1195341 km) |
| S100 | 281 | Apoapse | | 2017-177T16:35 | 26-Jun | Mon | 65 | 81 | 47 | Per = 6.5 d, inc = 61.9 deg, r = 21.145 Rs, phase = 147 deg |
| S100 | 281 | SATURN | Segment | 2017-179T16:25 | 28-Jun | Wed | 67 | 79 | 49 | Saturn_281 (4d) |
| S100 | 281 | 281JA (nt) | JANUS | 2017-180T21:50 | 29-Jun | Thu | 69 | 78 | 50 | Inbound 124151.0 km flyby, v = 28.9 km/s, phase = 86 deg |
| S100 | 281 | 281EP (nt) | EPIMETHEUS | 2017-180T22:06 | 29-Jun | Thu | 69 | 78 | 50 | Inbound 88936.9 km flyby, v = 29.6 km/s, phase = 147 deg |
| S100 | 281 | 281AG (nt) | AEGAEON | 2017-180T22:09 | 29-Jun | Thu | 69 | 78 | 50 | Inbound 103292.7 km flyby, v = 29.7 km/s, phase = 151 deg |
| S100 | 281 | Dust Hazard | D_ring | 2017-180T22:10 | 29-Jun | Thu | 69 | 78 | 50 | Egress @ 2017-180T22:10 (0 min) \| Protection: HGA to Dust-Ram w/ offset for CDA |
| S100 | 281 | Earth OCC | RING | 2017-180T22:10 | 29-Jun | Thu | 69 | 78 | 50 | Duration = 27 min; egress = 2017-180T22:37:12 |
| S100 | 281 | Ring CRX | Descending | 2017-180T22:10 | 29-Jun | Thu | 69 | 78 | 50 | r = 1.063 Rs ( 64152 km) |
| S100 | 281 | Sun OCC | RING | 2017-180T22:10 | 29-Jun | Thu | 69 | 78 | 50 | Duration = 27 min; egress = 2017-180T22:37:03 |
| S100 | 281 | Periapse | | 2017-180T22:14 | 29-Jun | Thu | 69 | 78 | 50 | R = 1.060 Rs, lat = -6 deg, phase = 33 deg |
| S100 | 281 | 281PA (nt) | PANDORA | 2017-180T22:24 | 29-Jun | Thu | 69 | 78 | 50 | Outbound 110496.6 km flyby, v = 29.0 km/s, phase = 102 deg |
| S100 | 281 | Earth OCC | RING | 2017-181T03:28 | 30-Jun | Fri | 69 | 77 | 51 | Duration = 398 min; egress = 2017-181T10:06:32 |
| S100 | 281 | Sun OCC | RING | 2017-181T03:41 | 30-Jun | Fri | 69 | 77 | 51 | Duration = 366 min; egress = 2017-181T09:48:28 |
| S100 | 281 | Ring CRX | Ascending | 2017-183T03:37 | 02-Jul | Sun | 71 | 75 | 53 | r = 19.785 Rs (1193621 km) |
| S100 | 281 | RINGS | Segment | 2017-183T16:07 | 02-Jul | Sun | 71 | 75 | 53 | RINGS_282 (5d) |
| S100 | 282 | Apoapse | | 2017-184T03:54 | 03-Jul | Mon | 72 | 74 | 54 | Per = 6.5 d, inc = 61.9 deg, r = 21.149 Rs, phase = 147 deg |
| S100 | 282 | 282PN (nt) | PAN | 2017-187T09:16 | 06-Jul | Thu | 75 | 71 | 57 | Inbound 106923.7 km flyby, v = 30.4 km/s, phase = 85 deg |
| S100 | 282 | 282AT (nt) | ATLAS | 2017-187T09:30 | 06-Jul | Thu | 75 | 71 | 57 | Inbound 74088.6 km flyby, v = 29.7 km/s, phase = 151 deg |
| S100 | 282 | 282AG (nt) | AEGAEON | 2017-187T09:31 | 06-Jul | Thu | 75 | 71 | 57 | Inbound 103977.8 km flyby, v = 29.7 km/s, phase = 151 deg |
| S100 | 282 | Dust Hazard | D_ring | 2017-187T09:31 | 06-Jul | Thu | 75 | 71 | 57 | Egress @ 2017-187T09:32 (0 min) \| Protection: HGA to Dust-Ram |
| S100 | 282 | Earth OCC | RING | 2017-187T09:31 | 06-Jul | Thu | 75 | 71 | 57 | Duration = 27 min; egress = 2017-187T09:58:15 |
| S100 | 282 | Ring CRX | Descending | 2017-187T09:31 | 06-Jul | Thu | 75 | 71 | 57 | r = 1.064 Rs ( 64163 km) |
| S100 | 282 | Sun OCC | RING | 2017-187T09:31 | 06-Jul | Thu | 75 | 71 | 57 | Duration = 26 min; egress = 2017-187T09:57:59 |
| S100 | 282 | Periapse | | 2017-187T09:35 | 06-Jul | Thu | 75 | 71 | 57 | R = 1.060 Rs, lat = -6 deg, phase = 33 deg |
| S100 | 282 | 282JA (nt) | JANUS | 2017-187T09:52 | 06-Jul | Thu | 75 | 71 | 57 | Outbound 124681.1 km flyby, v = 27.8 km/s, phase = 99 deg |
| S100 | 282 | Earth OCC | RING | 2017-187T14:50 | 06-Jul | Thu | 75 | 71 | 57 | Duration = 389 min; egress = 2017-187T21:19:30 |
| S100 | 282 | Sun OCC | RING | 2017-187T15:14 | 06-Jul | Thu | 75 | 71 | 57 | Duration = 338 min; egress = 2017-187T20:52:39 |
| S100 | 282 | MAPS | Segment | 2017-188T15:44 | 07-Jul | Fri | 76 | 70 | 58 | MAPS_282 (2d) |
| S100 | 282 | Ring CRX | Ascending | 2017-189T14:39 | 08-Jul | Sat | 77 | 69 | 59 | r = 19.748 Rs (1191401 km) |
| S100 | 283 | Apoapse | | 2017-190T15:13 | 09-Jul | Sun | 78 | 68 | 60 | Per = 6.5 d, inc = 62.0 deg, r = 21.145 Rs, phase = 147 deg |
| S101 | 283 | S101 Begins | | 2017-191T01:14 | 10-Jul | Mon | 79 | 67 | 61 | S101 Sequence. Duration = 67 d |
| S101 | 283 | TOST | Segment | 2017-191T01:14 | 10-Jul | Mon | 79 | 67 | 61 | TOST_283 (2d) |
| S101 | 283 | 283TI (nt) | TITAN | 2017-191T13:50 | 10-Jul | Mon | 79 | 67 | 61 | Inbound 264317.4 km flyby, v = 5.4 km/s, phase = 56 deg |
| S101 | 283 | RINGS | Segment | 2017-193T00:13 | 12-Jul | Wed | 81 | 65 | 63 | RINGS_283 (2d) |
| S101 | 283 | 283PM (nt) | PROMETHEUS | 2017-193T20:30 | 12-Jul | Wed | 82 | 65 | 63 | Inbound 103774.0 km flyby, v = 30.0 km/s, phase = 94 deg |
| S101 | 283 | 283MI (nt) | MIMAS | 2017-193T20:40 | 12-Jul | Wed | 82 | 65 | 63 | Inbound 123553.2 km flyby, v = 30.1 km/s, phase = 152 deg |
| S101 | 283 | 283AG (nt) | AEGAEON | 2017-193T20:44 | 12-Jul | Wed | 82 | 65 | 63 | Inbound 105326.2 km flyby, v = 29.9 km/s, phase = 151 deg |
| S101 | 283 | Dust Hazard | D_ring | 2017-193T20:44 | 12-Jul | Wed | 82 | 65 | 63 | Egress @ 2017-193T20:44 (0 min) \| Protection: MEA Cvr. Closure |
| S101 | 283 | Earth OCC | RING | 2017-193T20:44 | 12-Jul | Wed | 82 | 65 | 63 | Duration = 27 min; egress = 2017-193T21:11:11 |
| S101 | 283 | Ring CRX | Descending | 2017-193T20:44 | 12-Jul | Wed | 82 | 65 | 63 | r = 1.049 Rs ( 63294 km) |
| S101 | 283 | Sun OCC | RING | 2017-193T20:44 | 12-Jul | Wed | 82 | 65 | 63 | Duration = 27 min; egress = 2017-193T21:10:53 |
| S101 | 283 | Periapse | | 2017-193T20:48 | 12-Jul | Wed | 82 | 65 | 63 | R = 1.045 Rs, lat = -6 deg, phase = 33 deg |
| S101 | 283 | 283PN (nt) | PAN | 2017-193T20:50 | 12-Jul | Wed | 82 | 65 | 63 | Outbound 87816.2 km flyby, v = 29.9 km/s, phase = 121 deg |
| S101 | 283 | Earth OCC | RING | 2017-194T01:55 | 13-Jul | Thu | 82 | 64 | 64 | Duration = 378 min; egress = 2017-194T08:13:26 |
| S101 | 283 | Sun OCC | RING | 2017-194T02:28 | 13-Jul | Thu | 82 | 64 | 64 | Duration = 308 min; egress = 2017-194T07:36:48 |
| S101 | 283 | SATURN | Segment | 2017-195T00:59 | 14-Jul | Fri | 83 | 63 | 65 | Saturn_283_284 (9d) |
| S101 | 283 | Ring CRX | Ascending | 2017-196T01:10 | 15-Jul | Sat | 84 | 62 | 66 | r = 19.670 Rs (1186699 km) |
| S101 | 283 | OTM-472 | P10+1d | 2017-196T06:21 | 15-Jul | Sat | 84 | 62 | 66 | D/L Start, burn ~6h later. Backup D/L 198T06:06; complexes C/C |
| S101 | 284 | Apoapse | | 2017-197T02:21 | 16-Jul | Sun | 85 | 61 | 1 | Per = 6.5 d, inc = 61.9 deg, r = 21.142 Rs, phase = 147 deg |
| S101 | 284 | 284EP (nt) | EPIMETHEUS | 2017-200T07:40 | 19-Jul | Wed | 88 | 58 | 4 | Inbound 101710.6 km flyby, v = 29.7 km/s, phase = 116 deg |
| S101 | 284 | 284PA (nt) | PANDORA | 2017-200T07:50 | 19-Jul | Wed | 88 | 58 | 4 | Inbound 79010.8 km flyby, v = 29.9 km/s, phase = 151 deg |
| S101 | 284 | Dust Hazard | D_ring | 2017-200T07:50 | 19-Jul | Wed | 88 | 58 | 4 | Egress @ 2017-200T07:51 (0 min) \| Protection: MEA Cvr. Closure |
| S101 | 284 | Earth OCC | RING | 2017-200T07:50 | 19-Jul | Wed | 88 | 58 | 4 | Duration = 27 min; egress = 2017-200T08:17:54 |
| S101 | 284 | Ring CRX | Descending | 2017-200T07:50 | 19-Jul | Wed | 88 | 58 | 4 | r = 1.048 Rs ( 63239 km) |
| S101 | 284 | Sun OCC | RING | 2017-200T07:50 | 19-Jul | Wed | 88 | 58 | 4 | Duration = 27 min; egress = 2017-200T08:17:23 |
| S101 | 284 | 284AG (nt) | AEGAEON | 2017-200T07:51 | 19-Jul | Wed | 88 | 58 | 4 | Inbound 105444.5 km flyby, v = 30.0 km/s, phase = 151 deg |
| S101 | 284 | Periapse | | 2017-200T07:54 | 19-Jul | Wed | 88 | 58 | 4 | R = 1.044 Rs, lat = -6 deg, phase = 33 deg |
| S101 | 284 | Earth OCC | RING | 2017-200T13:04 | 19-Jul | Wed | 88 | 58 | 4 | Duration = 366 min; egress = 2017-200T19:10:39 |
| S101 | 284 | Sun OCC | RING | 2017-200T13:50 | 19-Jul | Wed | 88 | 58 | 4 | Duration = 270 min; egress = 2017-200T18:20:58 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S101 | 284 | Ring CRX | Ascending | 2017-202T11:57 | 21-Jul | Fri | 90 | 56 | 6 | r = 19.630 Rs (1184287 km) |
| S101 | 285 | Apoapse | | 2017-203T13:26 | 22-Jul | Sat | 91 | 55 | 7 | Per = 6.5 d, inc = 61.9 deg, r = 21.140 Rs, phase = 147 deg |
| S101 | 285 | MAPS | Segment | 2017-203T14:51 | 22-Jul | Sat | 91 | 55 | 7 | MAPS_285 (4d) |
| S101 | 285 | 285TI (nt) | TITAN | 2017-206T00:02 | 25-Jul | Tue | 94 | 52 | 10 | Inbound 949180.2 km flyby, v = 10.8 km/s, phase = 58 deg |
| S101 | 285 | 285PM (nt) | PROMETHEUS | 2017-206T18:50 | 25-Jul | Tue | 95 | 52 | 11 | Inbound 79134.4 km flyby, v = 30.0 km/s, phase = 135 deg |
| S101 | 285 | 285AG (nt) | AEGAEON | 2017-206T18:55 | 25-Jul | Tue | 95 | 52 | 11 | Inbound 105317.3 km flyby, v = 29.9 km/s, phase = 152 deg |
| S101 | 285 | Dust Hazard | D_ring | 2017-206T18:55 | 25-Jul | Tue | 95 | 52 | 11 | Egress @ 2017-206T18:55 (0 min) \| Protection: MEA Cvr. Closure |
| S101 | 285 | Earth OCC | RING | 2017-206T18:55 | 25-Jul | Tue | 95 | 52 | 11 | Duration = 27 min; egress = 2017-206T19:22:25 |
| S101 | 285 | Ring CRX | Descending | 2017-206T18:55 | 25-Jul | Tue | 95 | 52 | 11 | r = 1.049 Rs ( 63262 km) |
| S101 | 285 | Sun OCC | RING | 2017-206T18:55 | 25-Jul | Tue | 95 | 52 | 11 | Duration = 26 min; egress = 2017-206T19:21:47 |
| S101 | 285 | Periapse | | 2017-206T18:59 | 25-Jul | Tue | 95 | 52 | 11 | R = 1.045 Rs, lat = -7 deg, phase = 33 deg |
| S101 | 285 | 285JA (nt) | JANUS | 2017-206T19:02 | 25-Jul | Tue | 95 | 52 | 11 | Outbound 101977.7 km flyby, v = 29.7 km/s, phase = 129 deg |
| S101 | 285 | Earth OCC | RING | 2017-207T00:13 | 26-Jul | Wed | 95 | 51 | 11 | Duration = 352 min; egress = 2017-207T06:04:55 |
| S101 | 285 | Sun OCC | RING | 2017-207T01:15 | 26-Jul | Wed | 95 | 51 | 11 | Duration = 222 min; egress = 2017-207T04:57:57 |
| S101 | 285 | TOST | Segment | 2017-207T15:10 | 26-Jul | Wed | 95 | 51 | 11 | TOST_285_OUT (2d) |
| S101 | 285 | 285TI (nt) | TITAN | 2017-207T23:20 | 26-Jul | Wed | 96 | 50 | 12 | Outbound 494283.5 km flyby, v = 8.2 km/s, phase = 66 deg |
| S101 | 285 | Ring CRX | Ascending | 2017-208T22:43 | 27-Jul | Thu | 97 | 50 | 13 | r = 19.597 Rs (1182276 km) |
| S101 | 285 | XD | Segment | 2017-209T05:06 | 28-Jul | Fri | 97 | 49 | 13 | XD_286 (3d) |
| S101 | 286 | Apoapse | | 2017-210T00:33 | 29-Jul | Sat | 98 | 48 | 14 | Per = 6.5 d, inc = 61.8 deg, r = 21.147 Rs, phase = 147 deg |
| S101 | 286 | SOST | Segment | 2017-212T14:16 | 31-Jul | Mon | 100 | 46 | 16 | SOST_286 (3d) |
| S101 | 286 | 286PN (nt) | PAN | 2017-213T05:47 | 01-Aug | Tue | 101 | 45 | 17 | Inbound 115991.7 km flyby, v = 30.5 km/s, phase = 71 deg |
| S101 | 286 | 286AT (nt) | ATLAS | 2017-213T06:03 | 01-Aug | Tue | 101 | 45 | 17 | Inbound 74145.1 km flyby, v = 29.9 km/s, phase = 150 deg |
| S101 | 286 | 286AG (nt) | AEGAEON | 2017-213T06:05 | 01-Aug | Tue | 101 | 45 | 17 | Inbound 105539.1 km flyby, v = 29.9 km/s, phase = 152 deg |
| S101 | 286 | Dust Hazard | D_ring | 2017-213T06:05 | 01-Aug | Tue | 101 | 45 | 17 | Egress @ 2017-213T06:05 (0 min) \| Protection: MEA Cvr. Closure |
| S101 | 286 | Earth OCC | RING | 2017-213T06:05 | 01-Aug | Tue | 101 | 45 | 17 | Duration = 27 min; egress = 2017-213T06:32:09 |
| S101 | 286 | Ring CRX | Descending | 2017-213T06:05 | 01-Aug | Tue | 101 | 45 | 17 | r = 1.050 Rs ( 63375 km) |
| S101 | 286 | Sun OCC | RING | 2017-213T06:05 | 01-Aug | Tue | 101 | 45 | 17 | Duration = 26 min; egress = 2017-213T06:31:30 |
| S101 | 286 | Periapse | | 2017-213T06:09 | 01-Aug | Tue | 101 | 45 | 17 | R = 1.046 Rs, lat = -7 deg, phase = 33 deg |
| S101 | 286 | 286DA (nt) | DAPHNIS | 2017-213T06:17 | 01-Aug | Tue | 101 | 45 | 17 | Outbound 103093.2 km flyby, v = 29.5 km/s, phase = 110 deg |
| S101 | 286 | Earth OCC | RING | 2017-213T11:28 | 01-Aug | Tue | 101 | 45 | 17 | Duration = 335 min; egress = 2017-213T17:03:29 |
| S101 | 286 | Sun OCC | RING | 2017-213T12:54 | 01-Aug | Tue | 101 | 45 | 17 | Duration = 156 min; egress = 2017-213T15:31:15 |
| S101 | 286 | RINGS | Segment | 2017-215T07:12 | 03-Aug | Thu | 103 | 43 | 19 | RINGS_287 (4d) |
| S101 | 286 | Ring CRX | Ascending | 2017-215T09:36 | 03-Aug | Thu | 103 | 43 | 19 | r = 19.562 Rs (1180192 km) |
| S101 | 287 | Apoapse | | 2017-216T11:46 | 04-Aug | Fri | 104 | 42 | 20 | Per = 6.5 d, inc = 61.8 deg, r = 21.152 Rs, phase = 147 deg |
| S101 | 287 | MAPS | Segment | 2017-219T03:22 | 07-Aug | Mon | 107 | 39 | 23 | MAPS_287 (3d) |
| S101 | 287 | 287PA (nt) | PANDORA | 2017-219T17:07 | 07-Aug | Mon | 107 | 39 | 23 | Inbound 98899.5 km flyby, v = 29.9 km/s, phase = 100 deg |
| S101 | 287 | 287DA (nt) | DAPHNIS | 2017-219T17:19 | 07-Aug | Mon | 107 | 39 | 23 | Inbound 74556.2 km flyby, v = 29.9 km/s, phase = 152 deg |
| S101 | 287 | Dust Hazard | D_ring | 2017-219T17:19 | 07-Aug | Mon | 107 | 39 | 23 | Egress @ 2017-219T17:19 (0 min) \| Protection: MEA Cvr. Closure |
| S101 | 287 | Earth OCC | RING | 2017-219T17:19 | 07-Aug | Mon | 107 | 39 | 23 | Duration = 27 min; egress = 2017-219T17:46:09 |
| S101 | 287 | Ring CRX | Descending | 2017-219T17:19 | 07-Aug | Mon | 107 | 39 | 23 | r = 1.051 Rs ( 63403 km) |
| S101 | 287 | Sun OCC | RING | 2017-219T17:19 | 07-Aug | Mon | 107 | 39 | 23 | Duration = 26 min; egress = 2017-219T17:45:25 |
| S101 | 287 | 287AG (nt) | AEGAEON | 2017-219T17:20 | 07-Aug | Mon | 107 | 39 | 23 | Inbound 106326.7 km flyby, v = 29.9 km/s, phase = 151 deg |
| S101 | 287 | 287PM (nt) | PROMETHEUS | 2017-219T17:22 | 07-Aug | Mon | 107 | 39 | 23 | Inbound 84047.0 km flyby, v = 29.9 km/s, phase = 141 deg |
| S101 | 287 | 287PN (nt) | PAN | 2017-219T17:23 | 07-Aug | Mon | 107 | 39 | 23 | Outbound 81204.1 km flyby, v = 29.9 km/s, phase = 135 deg |
| S101 | 287 | Periapse | | 2017-219T17:23 | 07-Aug | Mon | 107 | 39 | 23 | R = 1.047 Rs, lat = -7 deg, phase = 33 deg |
| S101 | 287 | Earth OCC | RING | 2017-219T22:48 | 07-Aug | Mon | 108 | 39 | 24 | Duration = 315 min; egress = 2017-220T04:04:04 |
| S101 | 287 | Ring CRX | Ascending | 2017-221T20:31 | 09-Aug | Wed | 110 | 37 | 26 | r = 19.521 Rs (1177673 km) |
| S101 | 287 | TOST | Segment | 2017-222T15:11 | 10-Aug | Thu | 110 | 36 | 26 | TOST_288 (2d) |
| S101 | 288 | Apoapse | | 2017-222T22:56 | 10-Aug | Thu | 111 | 35 | 27 | Per = 6.5 d, inc = 62.0 deg, r = 21.147 Rs, phase = 147 deg |
| S101 | 288 | 288TI (nt) | TITAN | 2017-223T05:04 | 11-Aug | Fri | 111 | 35 | 27 | Inbound 194990.7 km flyby, v = 5.1 km/s, phase = 77 deg |
| S101 | 288 | SATURN | Segment | 2017-224T12:26 | 12-Aug | Sat | 112 | 34 | 28 | Saturn_288 (3d) |
| S101 | 288 | 288DA (nt) | DAPHNIS | 2017-226T04:08 | 14-Aug | Mon | 114 | 32 | 30 | Inbound 91318.1 km flyby, v = 30.3 km/s, phase = 103 deg |
| S101 | 288 | Dust Hazard | D_ring | 2017-226T04:18 | 14-Aug | Mon | 114 | 32 | 30 | Egress @ 2017-226T04:19 (0 min) \| Protection: MEA Cvr. Closure |
| S101 | 288 | Ring CRX | Descending | 2017-226T04:18 | 14-Aug | Mon | 114 | 32 | 30 | r = 1.031 Rs ( 62174 km) |
| S101 | 288 | 288JA (nt) | JANUS | 2017-226T04:19 | 14-Aug | Mon | 114 | 32 | 30 | Inbound 90303.0 km flyby, v = 30.2 km/s, phase = 153 deg |
| S101 | 288 | 288AG (nt) | AEGAEON | 2017-226T04:19 | 14-Aug | Mon | 114 | 32 | 30 | Inbound 106925.0 km flyby, v = 30.2 km/s, phase = 153 deg |
| S101 | 288 | Earth OCC | RING | 2017-226T04:19 | 14-Aug | Mon | 114 | 32 | 30 | Duration = 27 min; egress = 2017-226T04:46:27 |
| S101 | 288 | Sun OCC | RING | 2017-226T04:19 | 14-Aug | Mon | 114 | 32 | 30 | Duration = 27 min; egress = 2017-226T04:45:35 |
| S101 | 288 | Periapse | | 2017-226T04:23 | 14-Aug | Mon | 114 | 32 | 30 | R = 1.026 Rs, lat = -7 deg, phase = 34 deg |
| S101 | 288 | 288EP (nt) | EPIMETHEUS | 2017-226T04:32 | 14-Aug | Mon | 114 | 32 | 30 | Outbound 115875.2 km flyby, v = 29.3 km/s, phase = 119 deg |
| S101 | 288 | 288PA (nt) | PANDORA | 2017-226T04:39 | 14-Aug | Mon | 114 | 32 | 30 | Outbound 117866.1 km flyby, v = 28.2 km/s, phase = 103 deg |
| S101 | 288 | Earth OCC | RING | 2017-226T09:42 | 14-Aug | Mon | 114 | 32 | 30 | Duration = 294 min; egress = 2017-226T14:36:12 |
| S101 | 288 | RINGS | Segment | 2017-227T13:41 | 15-Aug | Tue | 115 | 31 | 31 | RINGS_288 (5d) |
| S101 | 288 | Ring CRX | Ascending | 2017-228T06:48 | 16-Aug | Wed | 116 | 30 | 32 | r = 19.440 Rs (1172836 km) |
| S101 | 289 | Apoapse | | 2017-229T09:52 | 17-Aug | Thu | 117 | 29 | 33 | Per = 6.5 d, inc = 61.7 deg, r = 21.150 Rs, phase = 146 deg |
| S101 | 289 | MAPS | Segment | 2017-232T02:52 | 20-Aug | Sun | 120 | 26 | 36 | MAPS_289 (6d) |
| S101 | 289 | Dust Hazard | D_ring | 2017-232T15:18 | 20-Aug | Sun | 120 | 26 | 36 | Egress @ 2017-232T15:19 (0 min) \| Protection: MEA Cvr. Closure |
| S101 | 289 | Earth OCC | RING | 2017-232T15:18 | 20-Aug | Sun | 120 | 26 | 36 | Duration = 27 min; egress = 2017-232T15:46:19 |
| S101 | 289 | Ring CRX | Descending | 2017-232T15:18 | 20-Aug | Sun | 120 | 26 | 36 | r = 1.030 Rs ( 62126 km) |
| S101 | 289 | Sun OCC | RING | 2017-232T15:18 | 20-Aug | Sun | 120 | 26 | 36 | Duration = 26 min; egress = 2017-232T15:45:26 |
| S101 | 289 | 289AG (nt) | AEGAEON | 2017-232T15:19 | 20-Aug | Sun | 120 | 26 | 36 | Inbound 106481.8 km flyby, v = 30.2 km/s, phase = 153 deg |
| S101 | 289 | Periapse | | 2017-232T15:23 | 20-Aug | Sun | 120 | 26 | 36 | R = 1.025 Rs, lat = -7 deg, phase = 34 deg |
| S101 | 289 | 289PM (nt) | PROMETHEUS | 2017-232T15:32 | 20-Aug | Sun | 120 | 26 | 36 | Outbound 107581.1 km flyby, v = 29.3 km/s, phase = 113 deg |
| S101 | 289 | Earth OCC | RING | 2017-232T20:51 | 20-Aug | Sun | 121 | 26 | 37 | Duration = 266 min; egress = 2017-233T01:17:39 |
| S101 | 289 | Ring CRX | Ascending | 2017-234T17:25 | 22-Aug | Tue | 122 | 24 | 38 | r = 19.388 Rs (1169700 km) |
| S101 | 290 | Apoapse | | 2017-235T20:50 | 23-Aug | Wed | 124 | 23 | 40 | Per = 6.5 d, inc = 61.7 deg, r = 21.144 Rs, phase = 146 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |

**CASSINI TOUR EVENTS SUMMARY | 180628RU Reconstructed Trajectory | v01** *DST/DTT = Days Since/To Trg. Flyby | DSM = Days Since Maneuver*

| Seq | Rev | Name | Event | Epoch (SCET) | Date | DOW | DST | DTT | DSM | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| S101 | 290 | SATURN | Segment | 2017-237T21:54 | 25-Aug | Fri | 126 | 21 | 42 | Saturn_290_291 (9d) |
| S101 | 290 | 290TI (nt) | TITAN | 2017-238T02:25 | 26-Aug | Sat | 126 | 20 | 42 | Inbound 791236.7 km flyby, v = 9.3 km/s, phase = 57 deg |
| S101 | 290 | 290AT (nt) | ATLAS | 2017-239T02:08 | 27-Aug | Sun | 127 | 19 | 43 | Inbound 78591.3 km flyby, v = 30.2 km/s, phase = 130 deg |
| S101 | 290 | 290AG (nt) | AEGAEON | 2017-239T02:13 | 27-Aug | Sun | 127 | 19 | 43 | Inbound 105797.8 km flyby, v = 30.2 km/s, phase = 153 deg |
| S101 | 290 | Dust Hazard | D_ring | 2017-239T02:13 | 27-Aug | Sun | 127 | 19 | 43 | Egress @ 2017-239T02:14 (0 min) \| Protection: MEA Cvr. Closure |
| S101 | 290 | Ring CRX | Descending | 2017-239T02:13 | 27-Aug | Sun | 127 | 19 | 43 | r = 1.029 Rs ( 62105 km) |
| S101 | 290 | Earth OCC | RING | 2017-239T02:14 | 27-Aug | Sun | 127 | 19 | 43 | Duration = 27 min; egress = 2017-239T02:41:22 |
| S101 | 290 | Sun OCC | RING | 2017-239T02:14 | 27-Aug | Sun | 127 | 19 | 43 | Duration = 26 min; egress = 2017-239T02:40:30 |
| S101 | 290 | Periapse | | 2017-239T02:18 | 27-Aug | Sun | 127 | 19 | 43 | R = 1.025 Rs, lat = -7 deg, phase = 34 deg |
| S101 | 290 | Earth OCC | RING | 2017-239T07:59 | 27-Aug | Sun | 127 | 19 | 43 | Duration = 230 min; egress = 2017-239T11:50:22 |
| S101 | 290 | 290TI (nt) | TITAN | 2017-240T01:05 | 28-Aug | Mon | 128 | 18 | 44 | Outbound 680519.4 km flyby, v = 9.6 km/s, phase = 65 deg |
| S101 | 290 | Ring CRX | Ascending | 2017-241T03:58 | 29-Aug | Tue | 129 | 17 | 45 | r = 19.340 Rs (1166793 km) |
| S101 | 291 | Apoapse | | 2017-242T07:45 | 30-Aug | Wed | 130 | 16 | 46 | Per = 6.5 d, inc = 61.7 deg, r = 21.144 Rs, phase = 146 deg |
| S101 | 291 | 291JA (nt) | JANUS | 2017-245T12:58 | 02-Sep | Sat | 133 | 13 | 49 | Inbound 100272.7 km flyby, v = 29.9 km/s, phase = 112 deg |
| S101 | 291 | 291PA (nt) | PANDORA | 2017-245T13:06 | 02-Sep | Sat | 133 | 13 | 49 | Inbound 79821.9 km flyby, v = 30.2 km/s, phase = 146 deg |
| S101 | 291 | 291PN (nt) | PAN | 2017-245T13:06 | 02-Sep | Sat | 133 | 13 | 49 | Inbound 71308.4 km flyby, v = 30.2 km/s, phase = 148 deg |
| S101 | 291 | 291AG (nt) | AEGAEON | 2017-245T13:07 | 02-Sep | Sat | 133 | 13 | 49 | Inbound 105326.1 km flyby, v = 30.2 km/s, phase = 151 deg |
| S101 | 291 | 291EP (nt) | EPIMETHEUS | 2017-245T13:08 | 02-Sep | Sat | 133 | 13 | 49 | Inbound 90026.1 km flyby, v = 30.3 km/s, phase = 152 deg |
| S101 | 291 | Dust Hazard | D_ring | 2017-245T13:08 | 02-Sep | Sat | 133 | 13 | 49 | Egress @ 2017-245T13:09 (0 min) \| Protection: MEA Cvr. Closure |
| S101 | 291 | Earth OCC | RING | 2017-245T13:08 | 02-Sep | Sat | 133 | 13 | 49 | Duration = 27 min; egress = 2017-245T13:36:06 |
| S101 | 291 | Ring CRX | Descending | 2017-245T13:08 | 02-Sep | Sat | 133 | 13 | 49 | r = 1.030 Rs ( 62124 km) * |
| S101 | 291 | Sun OCC | RING | 2017-245T13:08 | 02-Sep | Sat | 133 | 13 | 49 | Duration = 26 min; egress = 2017-245T13:35:09 |
| S101 | 291 | Periapse | | 2017-245T13:13 | 02-Sep | Sat | 133 | 13 | 49 | R = 1.025 Rs, lat = -7 deg, phase = 34 deg |
| S101 | 291 | Earth OCC | RING | 2017-245T19:13 | 02-Sep | Sat | 134 | 13 | 50 | Duration = 183 min; egress = 2017-245T22:17:01 |
| S101 | 291 | XD | Segment | 2017-246T15:38 | 03-Sep | Sun | 134 | 12 | 50 | XD_291_292 (5d) |
| S101 | 291 | Ring CRX | Ascending | 2017-247T14:32 | 04-Sep | Mon | 135 | 11 | 51 | r = 19.294 Rs (1164023 km) |
| S101 | 292 | Apoapse | | 2017-248T18:41 | 05-Sep | Tue | 137 | 10 | 53 | Per = 6.5 d, inc = 61.7 deg, r = 21.145 Rs, phase = 145 deg |
| S101 | 292 | SATURN | Segment | 2017-251T10:21 | 08-Sep | Fri | 139 | 7 | 55 | Saturn_292 (3d) |
| S101 | 292 | 292AG (nt) | AEGAEON | 2017-252T00:03 | 09-Sep | Sat | 140 | 6 | 56 | Inbound 105123.8 km flyby, v = 30.1 km/s, phase = 148 deg |
| S101 | 292 | Dust Hazard | D_ring | 2017-252T00:05 | 09-Sep | Sat | 140 | 6 | 56 | Egress @ 2017-252T00:05 (0 min) \| Protection: MEA Cvr. Closure |
| S101 | 292 | Earth OCC | RING | 2017-252T00:05 | 09-Sep | Sat | 140 | 6 | 56 | Duration = 27 min; egress = 2017-252T00:32:39 |
| S101 | 292 | Ring CRX | Descending | 2017-252T00:05 | 09-Sep | Sat | 140 | 6 | 56 | r = 1.030 Rs ( 62166 km) |
| S101 | 292 | Sun OCC | RING | 2017-252T00:05 | 09-Sep | Sat | 140 | 6 | 56 | Duration = 26 min; egress = 2017-252T00:31:44 |
| S101 | 292 | Periapse | | 2017-252T00:09 | 09-Sep | Sat | 140 | 6 | 56 | R = 1.026 Rs, lat = -7 deg, phase = 35 deg |
| S101 | 292 | Earth OCC | RING | 2017-252T06:44 | 09-Sep | Sat | 140 | 6 | 56 | Duration = 106 min; egress = 2017-252T08:29:54 |
| S101 | 292 | Ring CRX | Ascending | 2017-254T01:08 | 11-Sep | Mon | 142 | 4 | 58 | r = 19.245 Rs (1161077 km) |
| S101 | 292 | TOST | Segment | 2017-254T04:37 | 11-Sep | Mon | 142 | 4 | 58 | TOST_292 (2d) |
| S101 | 292 | 292TI (nt) | TITAN | 2017-254T19:04 | 11-Sep | Mon | 143 | 4 | 59 | Outbound 119732.7 km flyby, v = 5.1 km/s, phase = 86 deg |
| S101 | 293 | Apoapse | | 2017-255T05:27 | 12-Sep | Tue | 143 | 3 | 59 | Per = 6.4 d, inc = 61.8 deg, r = 21.137 Rs, phase = 145 deg |
| S101 | 293 | MAPS | Segment | 2017-256T12:25 | 13-Sep | Wed | 144 | 2 | 60 | MAPS_293 (2d) |
| S101 | 293 | 293AG (nt) | AEGAEON | 2017-258T10:32 | 15-Sep | Fri | 146 | 0 | 62 | Inbound 108084.6 km flyby, v = 30.5 km/s, phase = 137 deg |
| S101 | 293 | END OF MISSION | | 2017-258T10:32 | 15-Sep | Fri | 146 | 0 | 62 | Loss of S band carrier |
| S101 | 293 | 293SA (t) S1 | SATURN | 2017-258T10:33 | 15-Sep | Fri | 146 | --- | 62 | Inbound -60268 km flyinto, v = 34 km/s, phase 35 deg |

| | | | | | | |
|---|---|---|---|---|---|---|
| Seq. Start | Apoapse | Titan Flyby | N.T. Flyby | Dust Hzd. | Earth Occ | Sol. Conj. |
| Seg. Start | Periapse | Trg. Flyby | Mnvr. | Ring Xing | Sun Occ | Misc. |