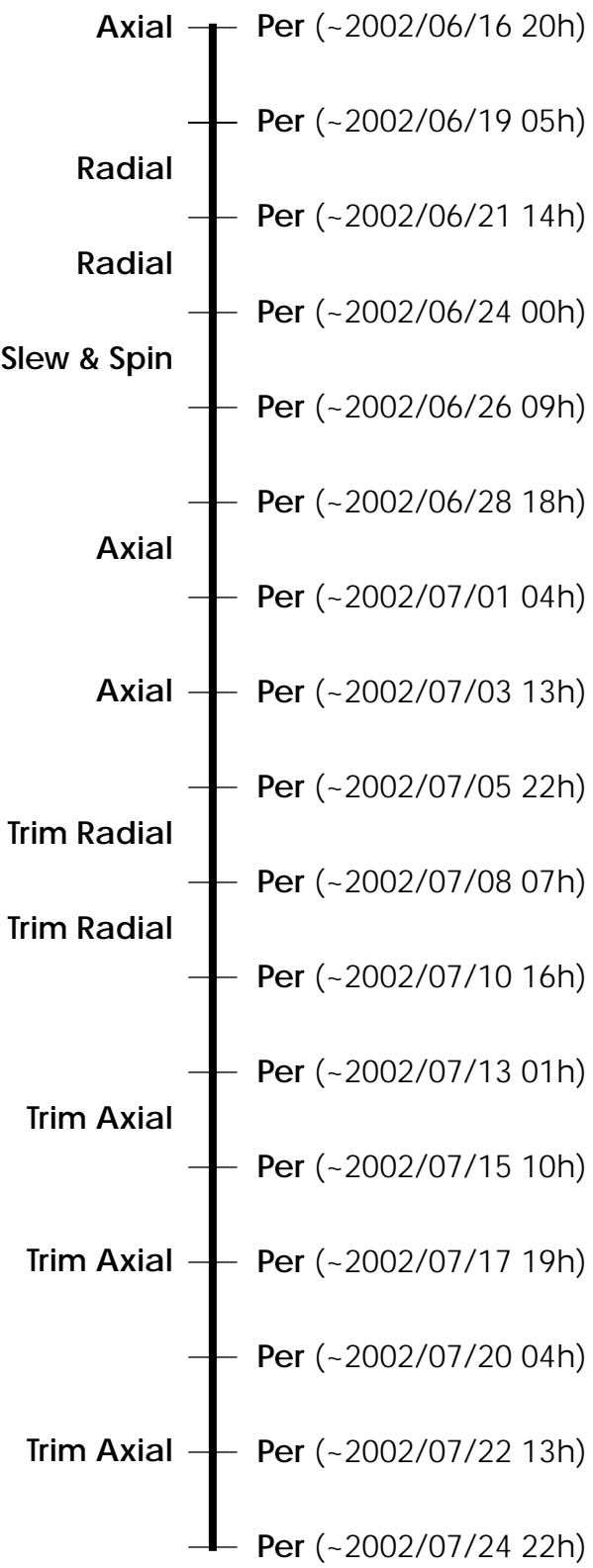


CLUSTER 2: 2nd Tail and 3rd Cusp crossing Constellation change manoeuvres (June-July 2002)



- This generic sequence applies to all 4 S/C
- Some manoeuvres may vanish

CLUSTER 2: 2nd Tail and 3rd Cusp crossing Constellation change manoeuvre (June-July 2002)

| TYPE | S/C 1 | | | S/C 2 | | | S/C 3 | | | S/C 4 | | |
|-------------|-------------------|-----------|-----------|-------------------|-----------|-----------|-------------------|-----------|-----------|-------------------|-----------|-----------|
| | Start epoch (UTC) | Tan (deg) | Dur (min) | Start epoch (UTC) | Tan (deg) | Dur (min) | Start epoch (UTC) | Tan (deg) | Dur (min) | Start epoch (UTC) | Tan (deg) | Dur (min) |
| Axial | 06/16 19:44 | 358 | 3 | 06/16 19:48 | 0 | 0 | 06/16 19:48 | 0 | 0 | 06/16 19:27 | 348 | 2 |
| Radial | 06/19 18:31 | 150 | 0 | 06/19 19:11 | 150 | 0 | 06/19 09:42 | 104 | 54 | 06/19 19:33 | 150 | 0 |
| Radial | 06/22 19:17 | 184 | 109 | 06/23 02:45 | 196 | 128 | 06/23 18:25 | 238 | 52 | 06/23 03:00 | 196 | 37 |
| Slew | 06/24 12-24 | | | 06/24 12-24 | | | 06/24 12-24 | | | 06/24 12-24 | | |
| Spin | 06/25 00-18 | | | 06/25 00-18 | | | 06/25 00-18 | | | 06/25 00-18 | | |
| Axial | 06/29 17:55 | 173 | 5 | 06/29 10:06 | 154 | 5 | 06/30 09:01 | 197 | 6 | 06/30 01:27 | 182 | 25 |
| Axial | 07/03 12:18 | 354 | 4 | 07/03 12:43 | 2 | 1 | 07/03 14:01 | 18 | 2 | 07/03 12:21 | 337 | 3 |
| Trim Radial | 07/06 12:41 | 150 | 0 | 07/06 12:11 | 150 | 0 | 07/06 12:50 | 150 | 0 | 07/06 11:44 | 150 | 0 |
| Trim Radial | 07/10 00:39 | 210 | 0 | 07/10 01:26 | 210 | 0 | 07/10 02:30 | 210 | 0 | 07/10 02:27 | 210 | 0 |
| Trim Axial | 07/14 05:25 | 180 | 0 | 07/14 05:34 | 180 | 0 | 07/14 06:26 | 180 | 0 | 07/14 05:51 | 180 | 0 |
| Trim Axial | 07/17 19:06 | 0 | 0 | 07/17 19:15 | 0 | 0 | 07/17 20:06 | 0 | 0 | 07/17 19:31 | 0 | 0 |
| Trim Axial | 07/22 13:16 | 0 | 0 | 07/22 13:25 | 0 | 0 | 07/22 14:16 | 0 | 0 | 07/22 13:41 | 0 | 0 |

- Orbit manoeuvre start times may be shifted by 15 min and duration extended by 5 min.