



# GSFC POD standards under development



| T/P POD model                 | GSFC POD Standard                                |   |
|-------------------------------|--|---|
|                               | PODPS (1995) GDR                                 | TVG(2006) re-processing                                     |
| Gravity (static)              | JGM-3 (70x70)                                    | GGM02C (120x120)  |
| Gravity (time-variable)       | C20dot, C21dot, S21dot                           | C20dot, C21dot, S21dot + 20x20 annual terms GRACE solutions |
| Atmospheric gravity           | Not applied                                      | NCEP, 50x50 @6 hrs  |
| Ocean Tides                   | Ray94 + GEMT3X                                   | GOT00.2 (20x20) (T/P-derived)                               |
| Solid Earth Tides             | $k_2 = 0.300$ ; $k_3 = 0.093$ (Wahr)             | IERS2003  |
| Albedo/IR                     | Knocke & Ries, 1988                              | same  |
| Atmospheric drag              | DTM  | MSIS86  |
| surface force                 | tuned 12-panel model                             | same  |
| Data                          | SLR /DORIS                                       | same  |
| Parameterization and arc span | Cd/8 hrs + opr along+cross track/day; 10-day arc | same dynamic<br>reduced-dynamic 5-day possible              |
| SLR/DORIS stations            | CSR95L02 (cycle 1-359)<br>ITRF2000 (360 ->)      | all ITRF2000  |
| precession                    | IAU1976  | IAU2000   |
| nutation                      | IAU1980+corrections                              | IAU2000   |



# NASA GSFC TOPEX/POSEIDON DORIS RMS (GDR vs. TVG Reprocessing)

