

A Navigation Summary of OMM8 Performance

OMM8 was successfully implemented on 22 May 1995 at the scheduled burn centroid time of 22:03:00 UTC. The commanded V magnitude was 3.86164 mm/sec (tweak), compared to an ideal value of 3.86 mm/sec. This maneuver was designed to increase the mean semimajor axis by ~8.3 meters in order to reverse the satellite ground track drift westward to remain inside the ± 1 -km control band. Independent maneuver evaluation techniques used by the NAVT and the GSFC/FDF agreed very well, both determining that the achieved V magnitude was ~3.83 mm/sec, or ~0.8% low.

The NAVT recommends documenting details of the "tweak" maneuver design and implementation processes performed by the NAVT and the SPAT. Specifically, the ideal and commandable maneuver parameters and the corresponding expected changes in key orbital parameters should be documented just as they currently are for the pre-tweak design. It is further recommended that this documentation be separate from sequence products which may require updates as a result of a maneuver tweak.

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