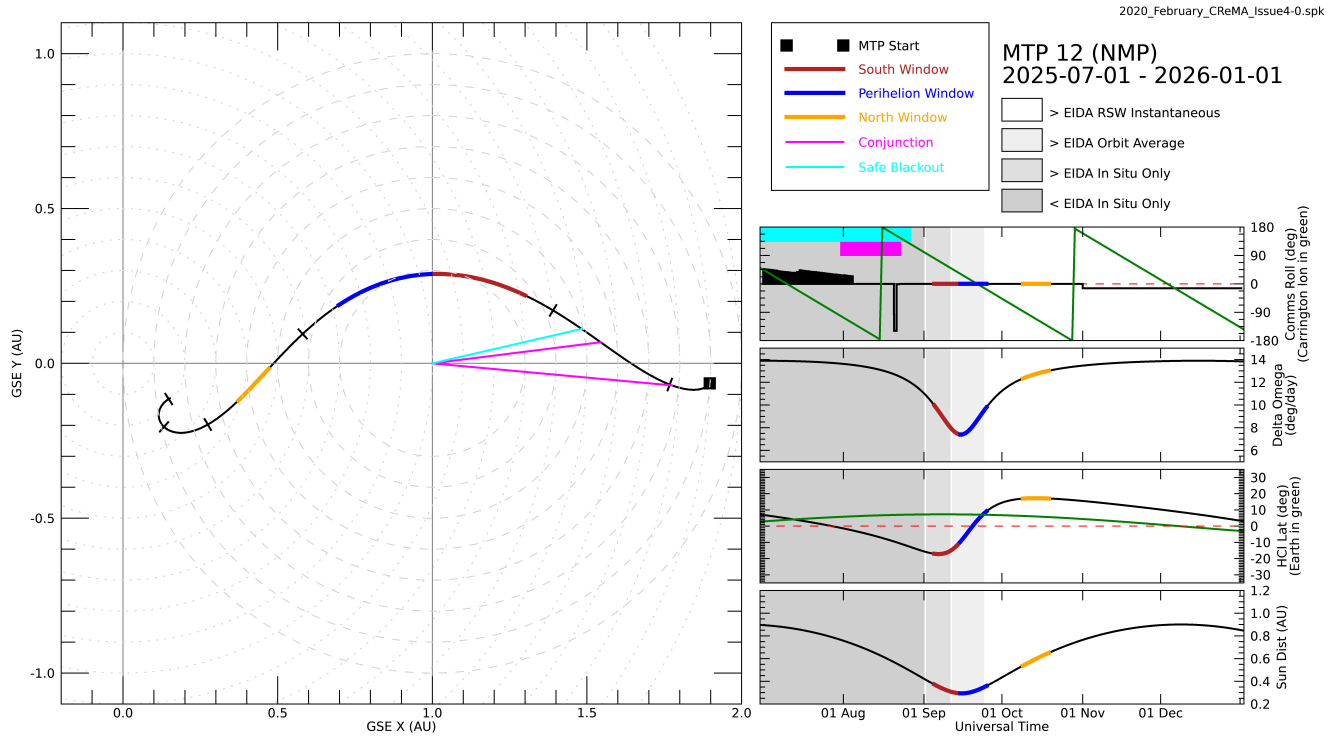


# LTP12 July 2025-Dec 2025

## Orbital context (default RSW placement)

Plots are in GSE (geocentric solar ecliptic) coordinates, so Earth is at [0,0], the Sun is at [1,0]. The plot is the projection of the orbit on the ecliptic plane.



New proposal for the grey shading representing downlink rates:

- white = maximum downlink rate at which you can empty the SSMM in ~10 days
- light-grey = empties with everyone operating
- mid-grey = fills within RSW (10 instruments operating) and empties outside RSW (IS-only breakeven rate < downlink rate < inside-RSW breakeven rate)
- dark-grey = fills with just IS operating (downlink rate < IS-only breakeven rate)

## RS window (default) placement

Period	Window /GAM	EXT Start	Start	End	Hcentric	Distance	Range	Hgraphic	Latitude	Range	SC-Sun-	Earth	Angle	Conjunction	Saf Moc Com Black
MTP 12	South														
MTP 12	Perihelion														
MTP 12	North														

## GAMs and conjunctions

- Superior conjunction from 2025-06-25 to 2025-08-27 (based on 5 deg, dates from CREMA - may need to be updated)
  - This is the longest conjunction(!) of the mission (64 days, with 5 deg constraint)
  - SSMM sizing (at time of writing these sentences, Nov 2021) does *not* cover this case
  - Some sketch of the intended operations through the conjunction is sensible *well before* the resizing opportunity of July 2025, otherwise the resizing will be heavily driven by the (probably inappropriate) assumption that all instruments run at full HK, LL throughout
- No GAM

## Science planning:

Example (from planning exercise SOWG#13):

- 5 days [PolarScience](#), offpointing (RSW 1)
- 15 days [Pole-to-Pole](#), disk centre (RSW 1+2)
- 10 days [SlowWindConnection](#), feature tracking (RSW 3)