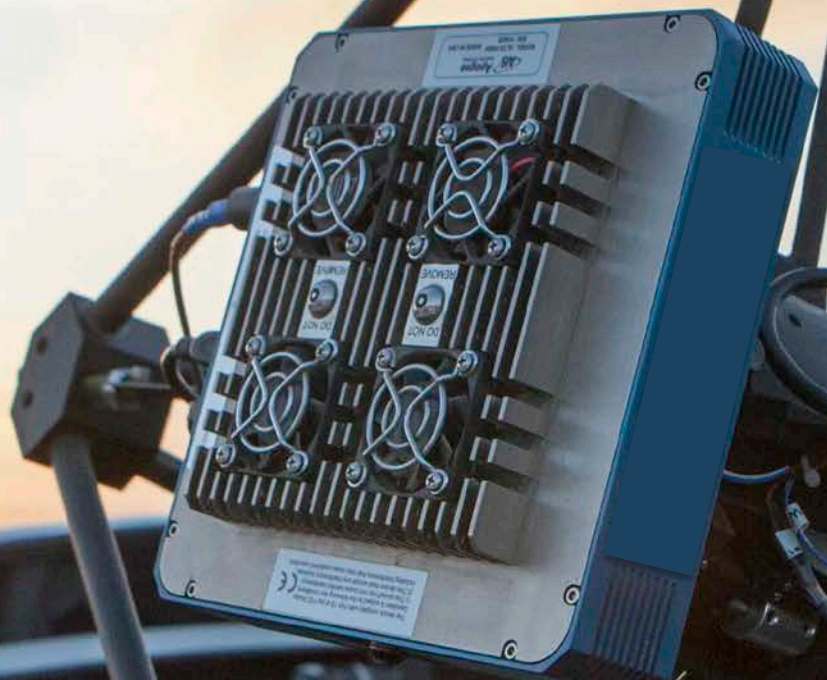


SST SERVICES FOR

ORBIT DETERMINATION

DEIMOS is offering a service for satellite operators to enhance the orbit determination based on optical observations



SUPPORT TO SATELLITE OPERATORS

DEIMOS provides support to satellite operators by contributing to the daily operational activities. This support includes:

- Provision of optical observations that can be processed by the satellite operators within the flight dynamics
- Computing, at our premises, the orbits from those observations, independently, or in combination with the ranging stations data
- Computing and calibrating the manoeuvres executed by the satellites
- Calibration of customers' antenna by independently estimating the ground delay

The accuracy of DeSS observations, and the capability to reach objects in LEO, MEO and GEO regimes, allow us to provide services to satellite operators in the communication, earth observation, science and other fields.



SUPPLEMENTARY SERVICES

CONJUNCTION ANALYSIS SUPPORT

DEIMOS conjunction analysis benefits from the operational fly4EO system, which integrates the screening of eventual conjunctions against objects in a catalogue, the detailed analysis of conjunction events and the evaluation of recommended avoidance manoeuvres.

The combination of this operational tool, with the capability of observing objects from DeSS for the sake of improving the orbital knowledge of both target and chaser, allows offering a complete service to minimise the impact of the conjunction events on missions.

DeSS observation capabilities can also be available for tracking the objects involved in a conjunction, in order to reduce the uncertainty of the orbit knowledge and supporting the decision to manoeuvre with the most accurate information.

CONTINGENCY AND OTHER SUPPORT

Mission support tasks that can be undertaken are related to:

- Orbital Information of the operators' satellite or other object in the vicinity when suspecting anomalous behavior of other satellites
- Evaluation of manoeuvre performance as per the support in flight dynamic operations
- Support in satellite decommissioning phases, or during reallocation activities, especially if no ranging activity is possible along those periods
- Evaluation in case of satellite failures
- Environment characterization under fragmentation event

