The Terma TRACK product provides accurate, real-time graphical visualisation and analysis of spacecraft or a fleet in orbit around the Earth and ground stations. It can show spacecraft orbits from TLE files as well as real-time sources (satellite control system or simulator). It can perform event determination such as station AOS/LOS or eclipses.

**INTERACTIVE 3D ENVIRONMENT**

- **3D Globe**: Interactive 3D Globe.
- **Flat Map**: Interactive Flat Map.
- **Digital Elevation Model support**: Support for DEM files representing the terrain of the body in both views.
- **Solar System**: Solar system overview for interplanetary missions.
- **Solar System Bodies**: Every major body of the solar system possible to navigate via globe or flat map.
- **Multiple Map Projection**: Support for most major map projections.

**SPACECRAFT VISUALIZATION**

- **Attitude**: Realistic representation of spacecraft attitude.
- **Solar-Panels**: Realistic representation of solar panel orientation.
- **Instrument FoV**: Field of View cones oriented with the spacecraft’s instruments (i.e. Antennas, Sensors, etc.).
- **Swath Path**: Swath path for instruments looking down from the orbiting body.
- **Animated Deployable**: Support for 3D models with animations to show deployment in real time.
- **Constellation Support**: Support for spacecraft constellation visualization.
- **S/C Relay Visualisation**: Graphical representation of spacecraft communication and relays.

**ORBIT VISUALIZATION AND PROPAGATION**

- **Orbit and Ground Track**: Track orbit and ground track of spacecraft.
- **Relay and Communication**: Visual representation of communication between ground and spacecraft.
- **Eclipse Determination**: Determination of eclipse conditions in orbit.
- **Manoeuvres**: Plan manoeuvres and burns.
- **Recording**: Orbit recording from live data sources.
- **Manipulation**: Orbit manipulation with real time feedback.
**GROUND ASSETS ACQUISITION/LOSS OF SIGNAL DETERMINATION**

Ground asset location and elevation masks (e.g. Ground Station). Determination of future AOS and LOS events.

**PRODUCT VISUALISATION**

Support for scientific product data visualization in a geographic 3D space.

**REALTIME MONITORING AND CONTROL**

If connected to a satellite control system, shows real-time telemetry data and alarms for a satellite or a constellation and provides commanding capability.

**ORBIT FILE FORMATS**

- **TLE**: Two-line element sets.
- **CCSDDS OEM**: Orbital Ephemeris Message.
- **STK**: Satellite Tool Kit.
- **SP3**: National Geodetic Survey.
- **SPK**: SPICE Ephemeris Format.

**SUPPORTED DATA SOURCES**

- **CCS5**: Terma Spacecraft Control System.
- **TEMU**: Terma Emulator.
- **ORBIT**: Terma Flight Dynamics suite.
- **SIMSAT**: ESA Simulator infrastructure.
- **SCOS-2000**: ESA Mission Control System.

**SPECIAL FEATURES**

- **3D Model Support**: Supports 3D models from several standards: COLLADA, 3DS, OBJ, etc.

**OPERATING SYSTEMS**

- **Windows®**: works on all recent versions.
- **Linux®**: works on all recent distributions.
- **MacOS®**: works on all recent distributions.

**SOFTWARE PLATFORM**

Java, based on NASA WorldWind and Orekit frameworks. IPR owned by Terma, no export restrictions.

**SUPPORT**

Standard license price includes 1 year warranty & email support. Standard training packages available on request.
WIKI and access to bug-tracking system available to licensed customers.