

Events

De Wiki

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[Events](#)

First, as for maneuvers or attitude sequences, the user will have to select a reference date with two possibilities:

- “**custom**” : a specific date will be entered by the user
- “**external**” : in that case no modification of the date is available as it corresponds to the date defined in the initial orbit parameters (note that this date is automatically updated if the initial orbit date is modified).

Reference Date:

Date mode: custom external

External date: UTC

Then, the user will have access to a list of orbital events. These events will be stored in the output files.

Amount of events *

Event1 [Item +/-](#)

Type of Event *	<input type="text" value="RELATIVE_DATE"/>
<input checked="" type="checkbox"/> Display event config	
Relative Date Detector *	
Relative date: *	<input type="text" value="120.0"/> <input type="text" value="s"/>
<input type="checkbox"/> Display expert config	

Event2 [Item +/-](#)

Type of Event *	<input type="text" value="AOL"/>
<input checked="" type="checkbox"/> Display event config	
AOL Detector *	
AOL: *	<input type="text" value="180.0"/> <input type="text" value="deg"/>
Type: *	<input type="text" value="true"/>
Frame: *	<input type="text" value="GCRF"/>
Start at occurrence: *	<input type="text" value="2"/>
<input type="checkbox"/> Display expert config	

The available events to detect are:

- **Absolute date**
- **Recurrent Absolute date**: same as above but with possibilities of recurrent events (since V11.4).
- **Relative date**: defined with respect the reference date defined at the top of the events tab.
- **Recurrent Relative date**: same as above but with possibilities of recurrent events (since V11.4).
- **AOL**: argument of latitude defined by the angle value, the anomaly type (true, eccentric or mean) and the reference equator with respect the AOL is computed ([GCRF](#), [EME2000](#)) and [CIRF](#)).
- **Altitude**: permits to define a certain geodetic altitude.
- **Eclipse**: eclipse events either “entering the eclipse” or “exiting the eclipse” or both are registered.
- **Local time**: permits to define a certain local time.
- **Station visibility**: events entering the field of view or existing the field of view are registered. The station visibility is determined thanks to the station’s location (latitude, longitude and altitude).
- **Node**: ascending or descending ones (since V11.4).
- **Apside**: perigee or apogee events (since V11.4).

Warning : for events which allows distinguishing between "enter"/"exit" events (as eclipse or ground stations visibility), the fact to select "both" (see next figure), does not mean to select "enter" AND "exit" but "enter" OR "exit".

Event1 [Item +/-](#)

Event: *

Type *

Display event config

Visibility from Station Detector *

Ground station: *

Ground station: *

Name: *

Coordinates type: Geodetic Cartesian

Latitude: deg

Longitude: deg

Altitude: m

Display ellipsoid configuration

Half-aperture: deg

Event type: * Entry
 Exit
 Both

Triggering: * Single Multiple

At *

Display expert config

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