



RAIM SETUP AND CONTROL

Tapestry provides the capability of generation of a class of Ranging Errors suitable to test the Receiver Autonomous Integrity Monitoring implementation within the UE.

Using the form shown, you may enter events into the Simulation-Time-Line or edit the ASCII Schedule file directly.

EVENT EPOCH [TIME INTO SIMULATION]

ICON denotes RAIM active for this SVID

SATELLITE VISIBILITY PANEL

SVID	ELEV	AZ	PWR(dB)	EVENTS@TM
2	78.6	73.0	5.0	L1CA
4	57.0	51.8	5.0	
9	40.3	217.8	5.0	
10	24.1	138.2	5.0	

PROGRAMMABLE RAIM EVENT

RAIM EVENT SETUP

TIME 259670.7 SEC Δ 460.7 SEC INTO SIM

SATELLITE 1

ACTIVE EVENT TOA 380.7 SEC DURATION 108.0 SEC

CONSTRUCT RAIM EVENTS EVENTS APPLY ACROSS ALL RF OUTPUTS

RANGE RAMP

APPLIED RAMP 20.0 M/S DURATION Δ 108.0 SEC HENCEFORTH

RANGE STEP

APPLIED STEP 0.0 M

RANGE PULSE

APPLIED STEP 0.0 M DURATION Δ 0.0 SEC

TIME-RAIM

Δ ZCOUNT 0 NANOSEC DURATION Δ 108.0 SEC HENCEFORTH

RAMP: RATE + APPLIED RAMP
RANGE = INTEGRAL OF RAMP DURATION SPECIFIED

STEP: RANGE + STEP RATE NO EFFECT

PULSE: [STEP] THAT TERMINATES DURATION SPECIFIED

TRAIM: [TIME STEP] THAT TERMINATES DURATION SPECIFIED

MARKER WILL BE GREEN IF THE EVENT IS ACTIVELY AFFECTING SVID OUTPUT

MARKER WILL BE BLUE IF AN EVENT FOR THIS SVID IS UPCOMING

MARKER WILL BE GRAY IF AN EVENT FOR THIS SVID IS PAST THE ACTIVE SEGMENT

RANGE RAMP

APPLIED RAMP 20.0 M/S DURATION Δ 108.0 SEC HENCEFORTH

RANGE RAMP

APPLIED RAMP 20.0 M/S DURATION Δ 108.0 SEC HENCEFORTH

RANGE RAMP

APPLIED RAMP 20.0 M/S DURATION Δ 108.0 SEC HENCEFORTH



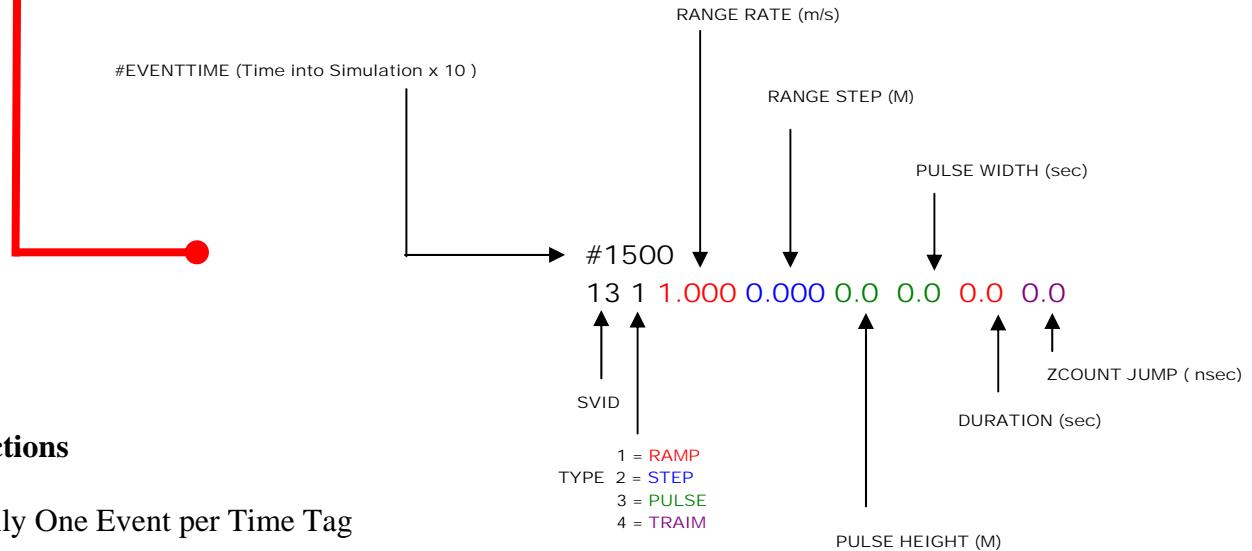
NOTE: THIS FILE IS CREATED ON THE
USERS BEHALF WHEN THE INSERT
BUTTONS ARE PRESSED. YOU SHOULD
NOT NEED TO EDIT THIS FILE.

RAIM EVENT FILE FORMAT

RaimEvents.tmp - Notepad

```
#1500
13 1 1.000 0.000 0.000 0.000 100.000
#8000
13 1 -1.000 0.000 0.000 0.000 100.000
```

RAIMEVENTS.SCN



Restrictions

- Only One Event per Time Tag
- Multiple events at the same time each must have their own #EVENTTIME record

for example: Event at 20.6 seconds for SVID 5 RAMP EVENT and also at 20.6 Seconds SVID 21 STEP EVENT

```
#206
5 1 -2.3 0.0 0.0 0.0 0.0 100.5 0.0
#206
21 2 0.0 6.5 0.0 0.0 0.0 0.0 0.0 0.0
```

- All five (5) values must be present even if not applicable.

- For **RAMP**: Enter the **RED** Range RAMP in m/s and Duration in seconds
For **STEP**: Enter the **BLUE** Range Step in meters. Event has infinite duration
For **PULSE**: Enter the **GREEN** Range Height in meters and Width in seconds.
For **TRAIM**: Enter the **PURPLE** Zcount jump in nanoseconds.