



## 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 ]

SATELLITE VISIBILITY PANEL

MENU

259670.7 SECONDS

460.7 SECONDS INTO SIMULATION

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



ICON denotes RAIM active for this SVID

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 INSERT

HENCEFORTH

RANGE STEP

APPLIED STEP 0.0 M INSERT

RANGE PULSE

APPLIED STEP 0.0 M DURATION Δ 0.0 SEC INSERT

TIME-RAIM

Δ ZCOUNT 0 NANOSEC DURATION Δ 108.0 SEC INSERT

HENCEFORTH

FINISHED

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 INSERT

HENCEFORTH

RANGE RAMP

APPLIED RAMP 20.0 M/S DURATION Δ 108.0 SEC INSERT

HENCEFORTH

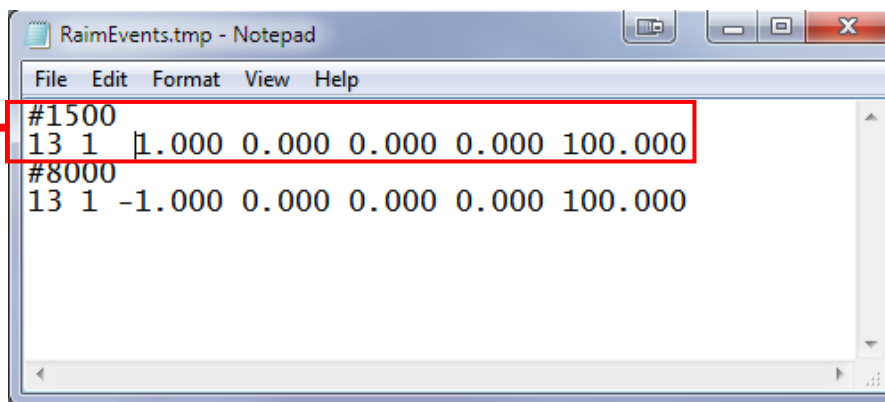
RANGE RAMP

APPLIED RAMP 20.0 M/S DURATION Δ 108.0 SEC INSERT

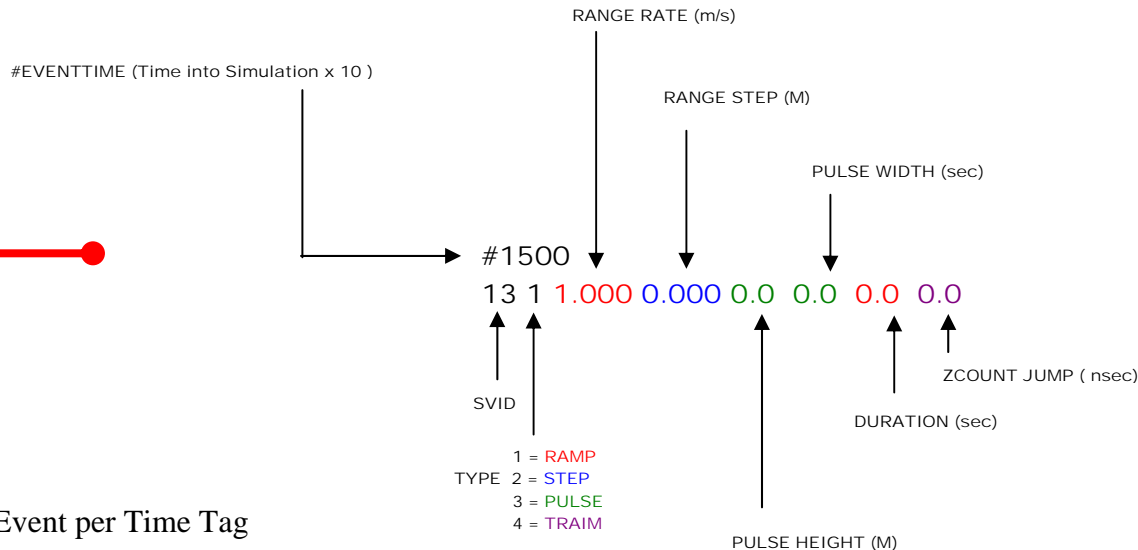
HENCEFORTH

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.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
```

- 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.