



## RANDOM ATTENUATION CONTROL

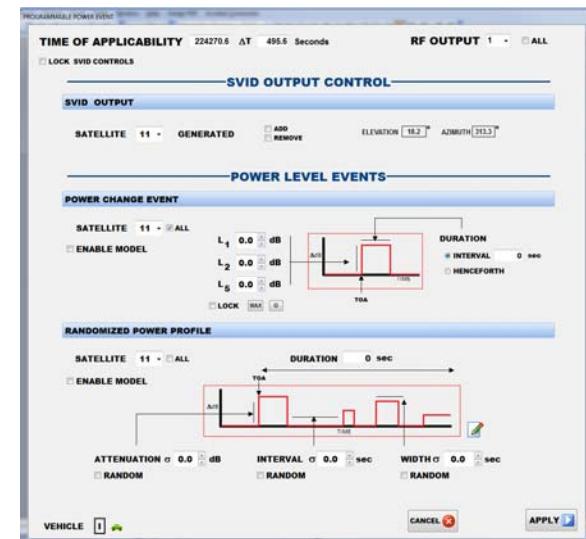
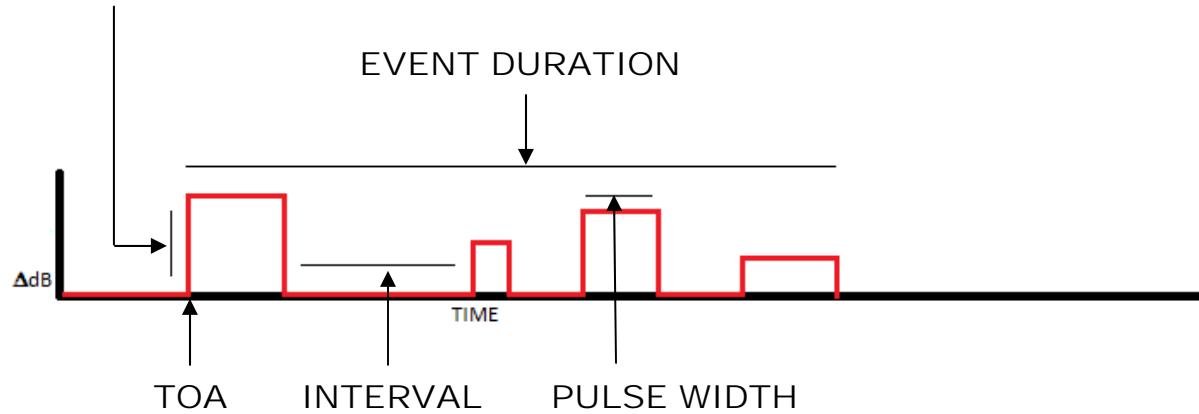
### RANDOMEVENT.SCN (RANDOMEVENT.TMP)

Use this model to simulate foliage or any random process that results in reduced power at the receiver-antenna. This effect applies in-addition-to other attenuation modeling such as multipath.

A RANDOM EVENT is a set of Periodic-Attenuation-Pulses with programmable Pulse-Duration ( WIDTH ), Inter-Pulse Separation ( INTERVAL ). The pulses terminates after the Event Duration following the Event Start Time (TIME OF APPLICABILITY-TOA). Parameters can be either deterministic or random. If Random is selected, the values specified are variances, otherwise specified parameters are used directly.

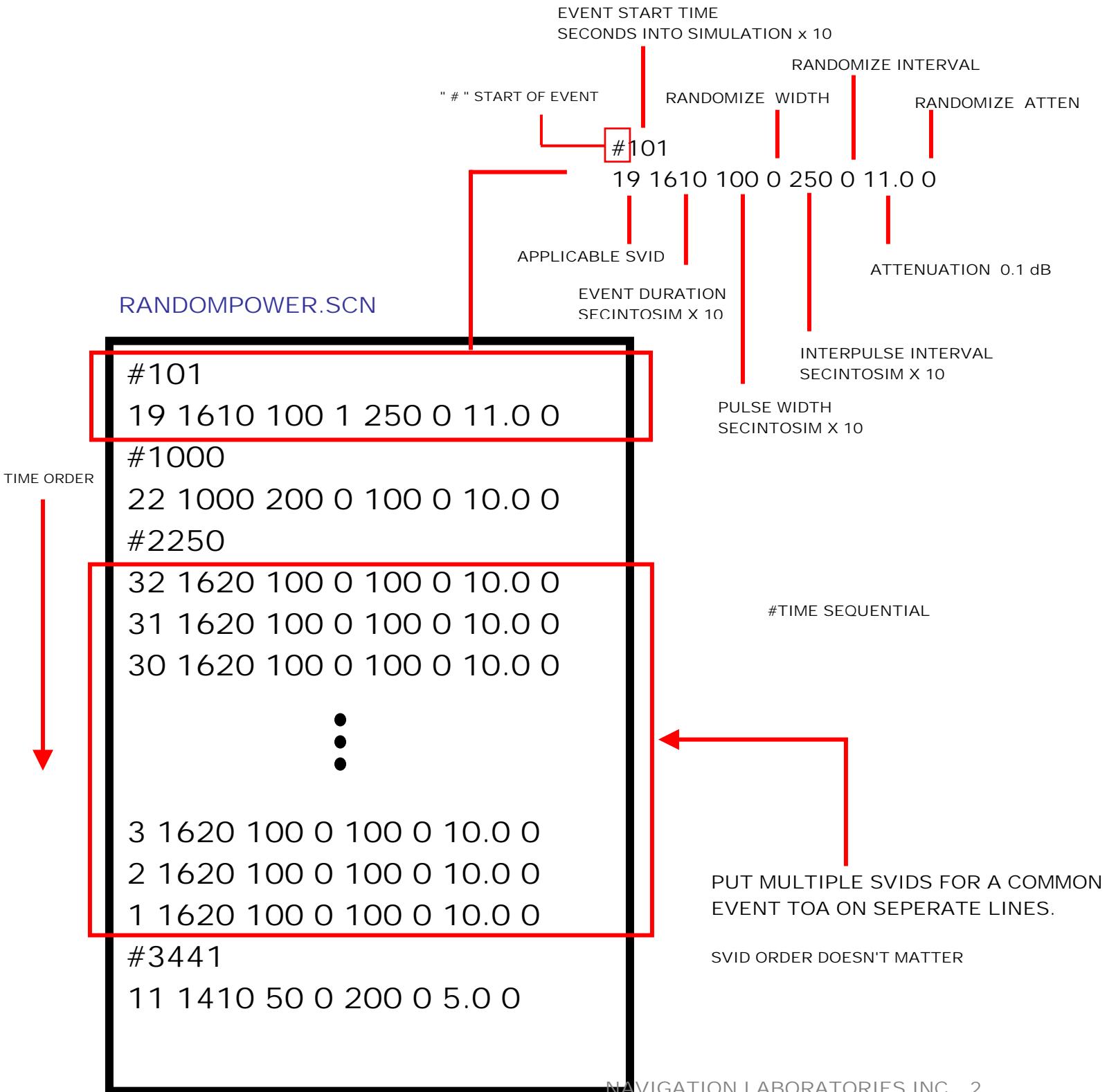
- **TIME OF APPLICABILITY ( EVENT START TIME - TOA )**
- **ATTENUATION VARIANCE (  $\sigma$  dB )**
- **INTER-PULSE INTERVAL VARIANCE (  $\sigma$  sec )**
- **ATTENUATION PULSE WIDTH VARIANCE (  $\sigma$  sec )**
- **EVENT DURATION ( Relative to TOA )**

#### ATTENUATION - PULSE HEIGHT



## RANDOM ATTENUATION CONTROL FILE

The model is controlled by a TEXT file within the Scenario folder. Following the usual TMP/SCN file convention, the details of the file are illustrated below.



## RANDOMPOWER.SCN

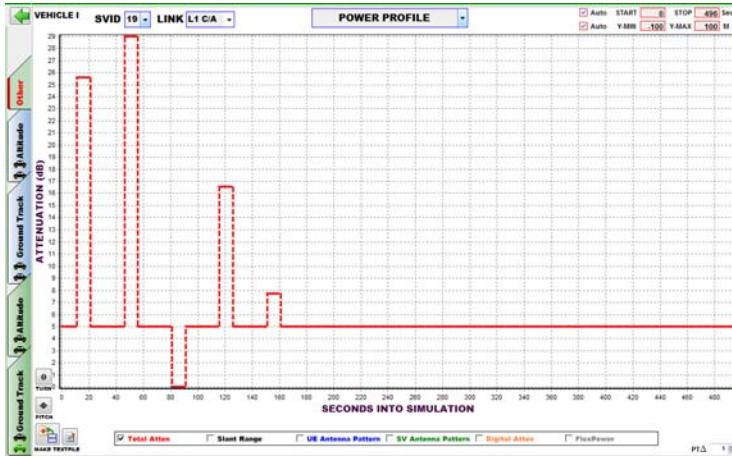
#101

19 1610 100 0 250 0 11.0 0



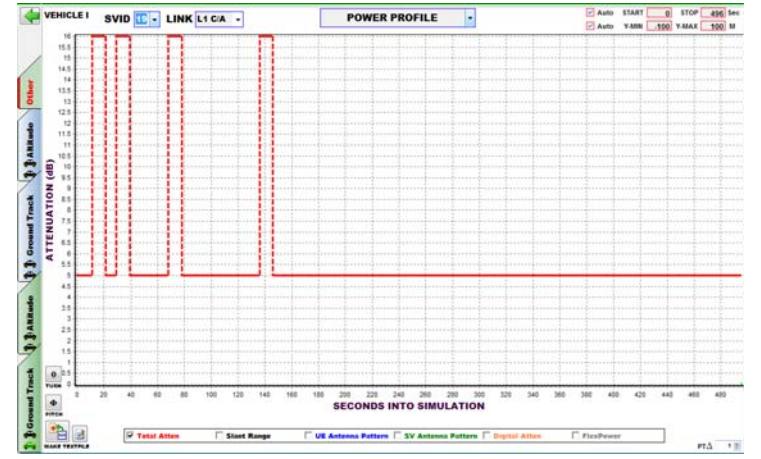
#101

19 1610 100 0 250 0 11.0 1



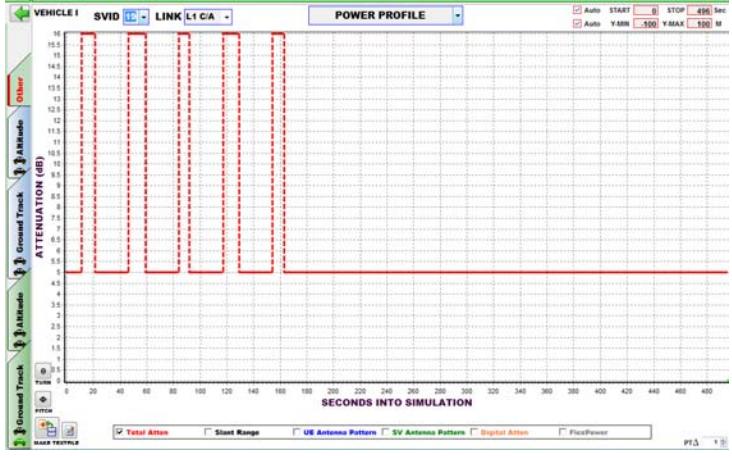
#101

19 1610 100 1 250 0 11.0 0



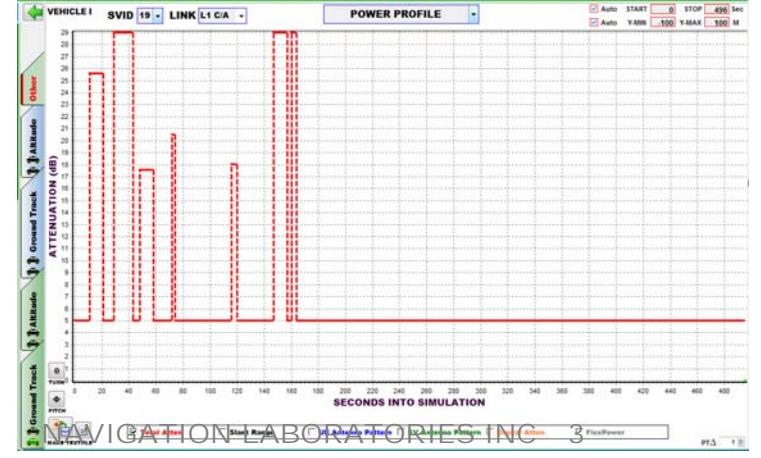
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19 1610 100 0 250 1 11.0 0

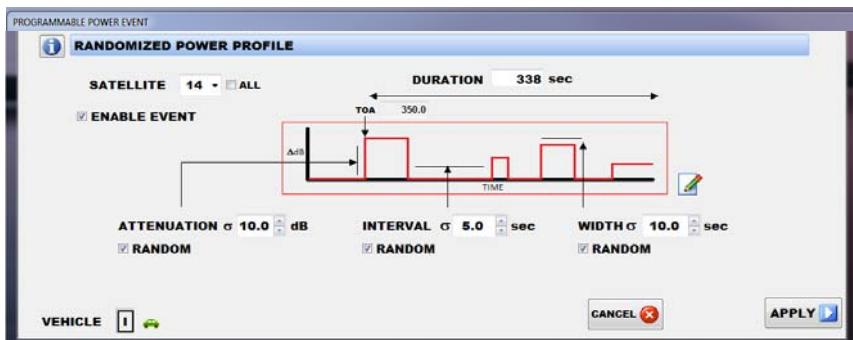


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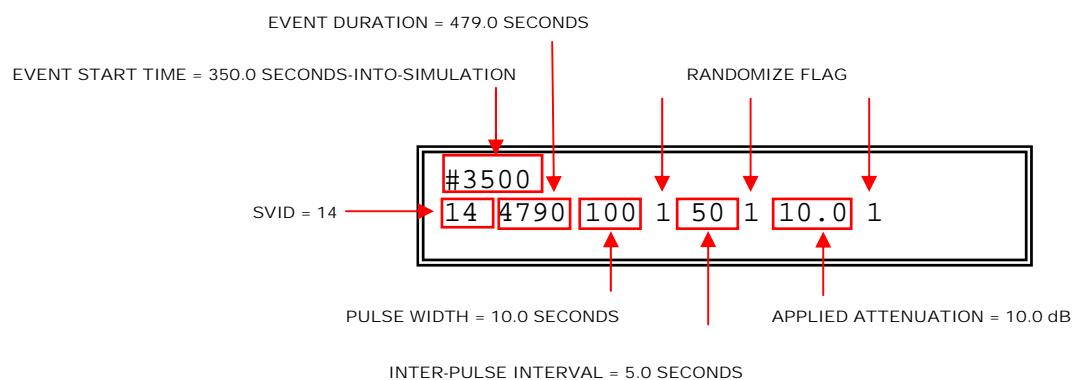
19 1610 100 1 250 1 11.0 1



## RANDOM\_POWER\_LEVELS



RANDOMPOWER.SCN



SVID 14

PROGRAMMED ATTENUATION

+ ATTEM [ DECREASE RCVR POWER ]

- ATTEM [ INCREASE RCVR POWER ]

RCVR POWER

