

FIRST TNR results from the EMD2 MEB

Run TNR in EM2 in order to re-produce time-stamp anomaly.

The same TNR-HFR configuration used in space has been settled on the EM2 model at the LESIA



6 tests:

Total duration about 20 h

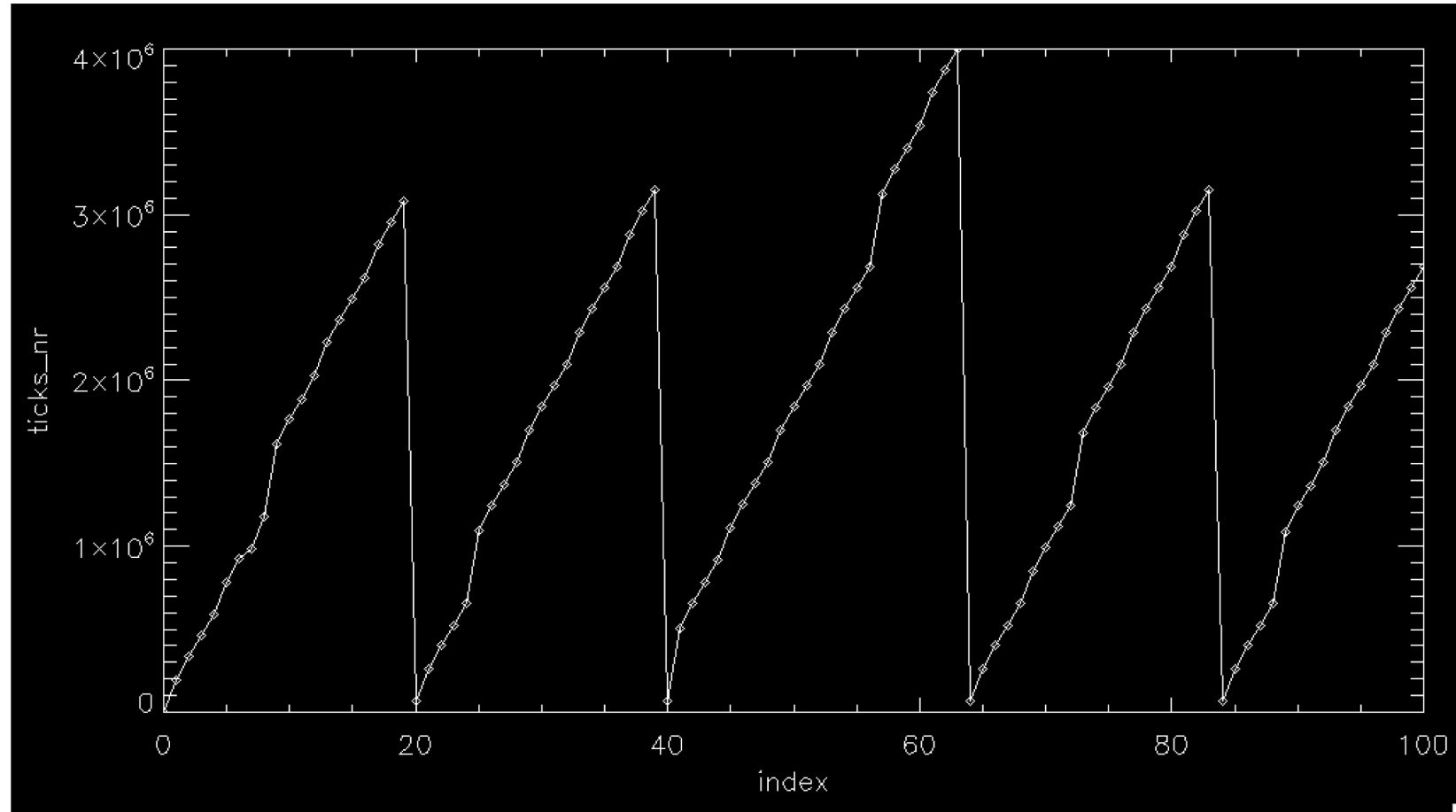
n. of integration 128

Time | TNR sample about 12s

Time | HFR sample about 12s

Ticks\_nr: Delta time: offset in ticks (15.258  $\mu$ s) between start analysis time and time analysis of the band

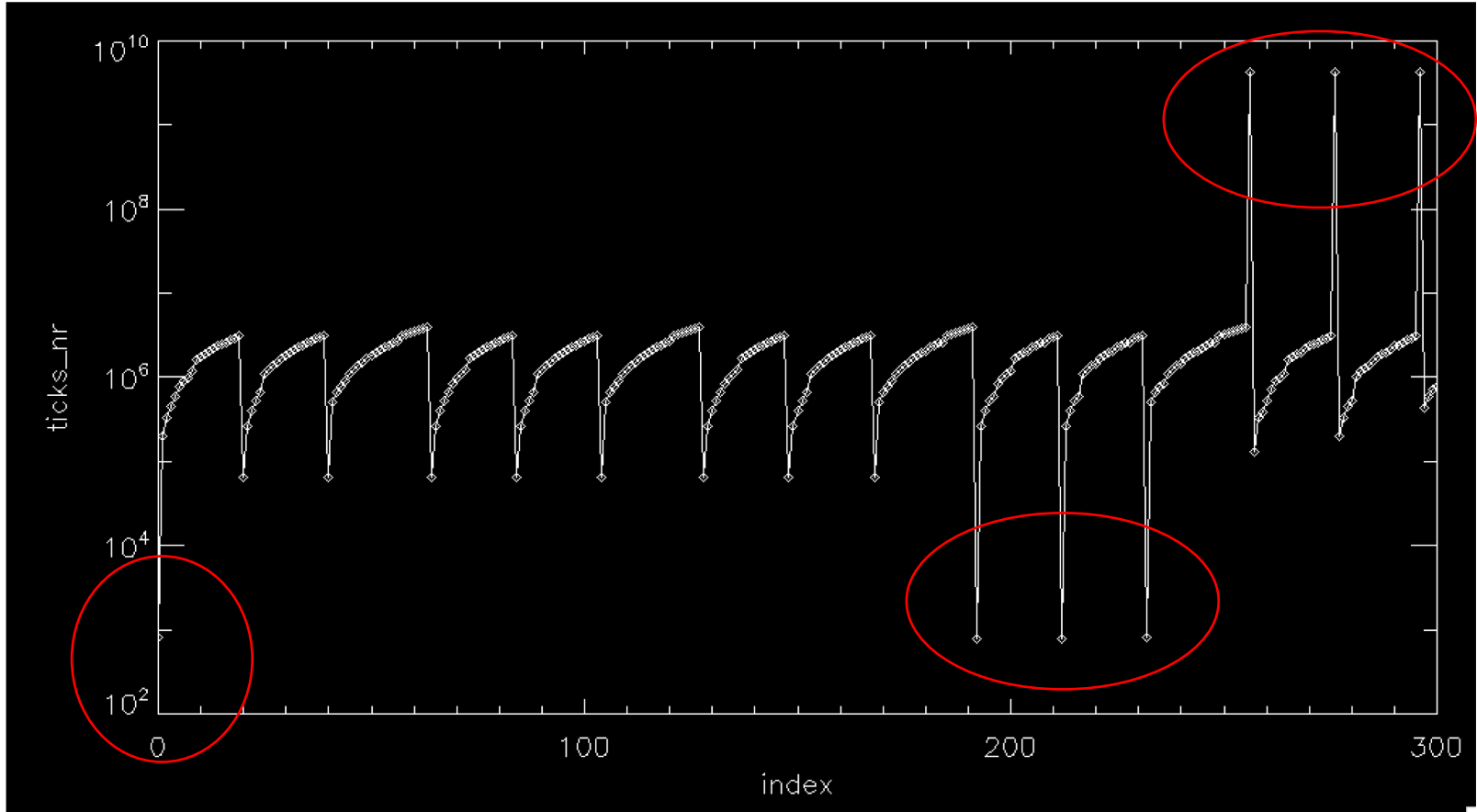
Delta time is encoded on 32 bit (unsigned)



Looking at the ticks\_nr behavior we can see the different raw TNR packets

Sometimes the value of Delta time is very close to the maximum encoding value ( $2^{32} = 4294967296$ )

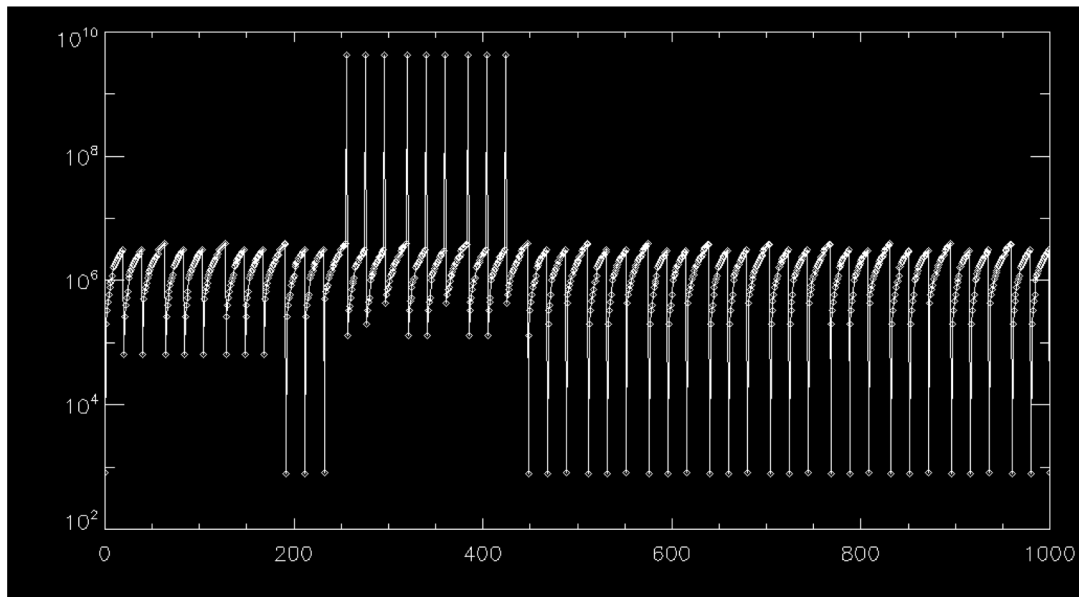
3 files over 6 show issue in the Delta time value



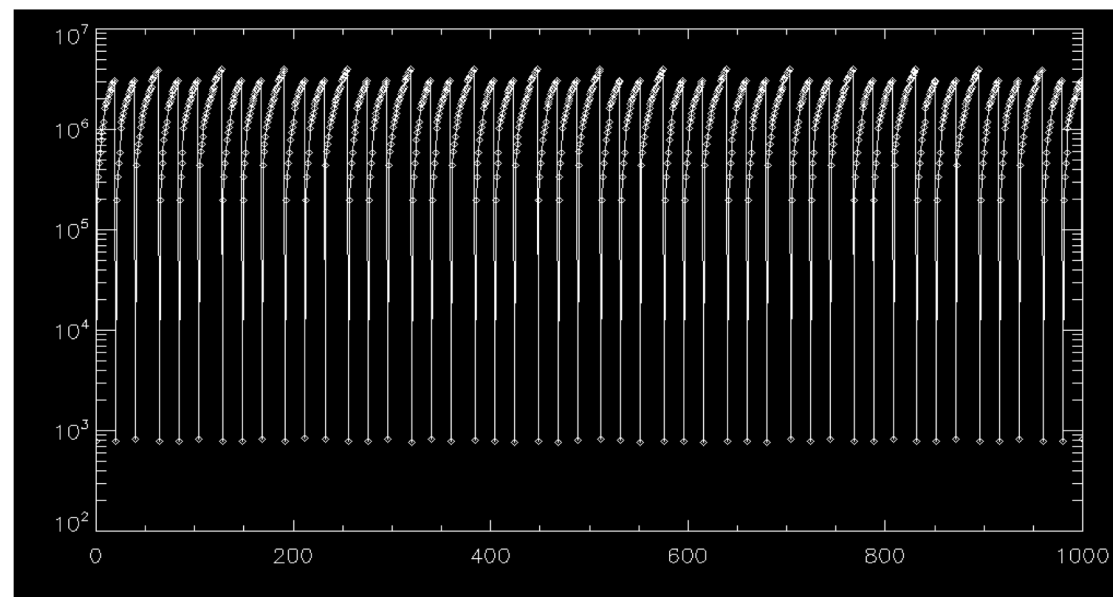
MIN	Usual MAX	MIN-MIN	MAX
65190	3146330	825	4294902586
		778	4294902538
		778	4294902539
		823	

ALL these points correspond to the TNR BAND A

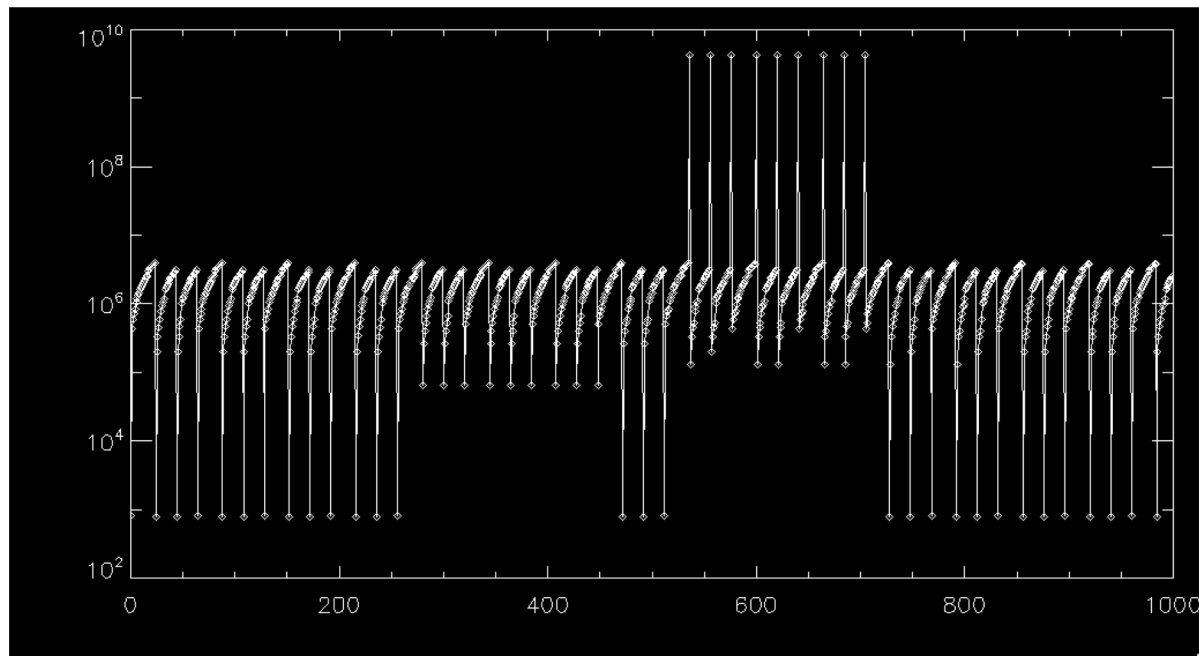
TEST 2



TEST 3



TEST 5



## Next steps:

- These data will be shared with Kamel, who accepted to help in updating the THR FSW
- In case, need to perform new test on the EM2 at Meudon by varying some parameters in the TNR configuratio (e.g. integration time).