

## NH PDS REX KEM1 Review

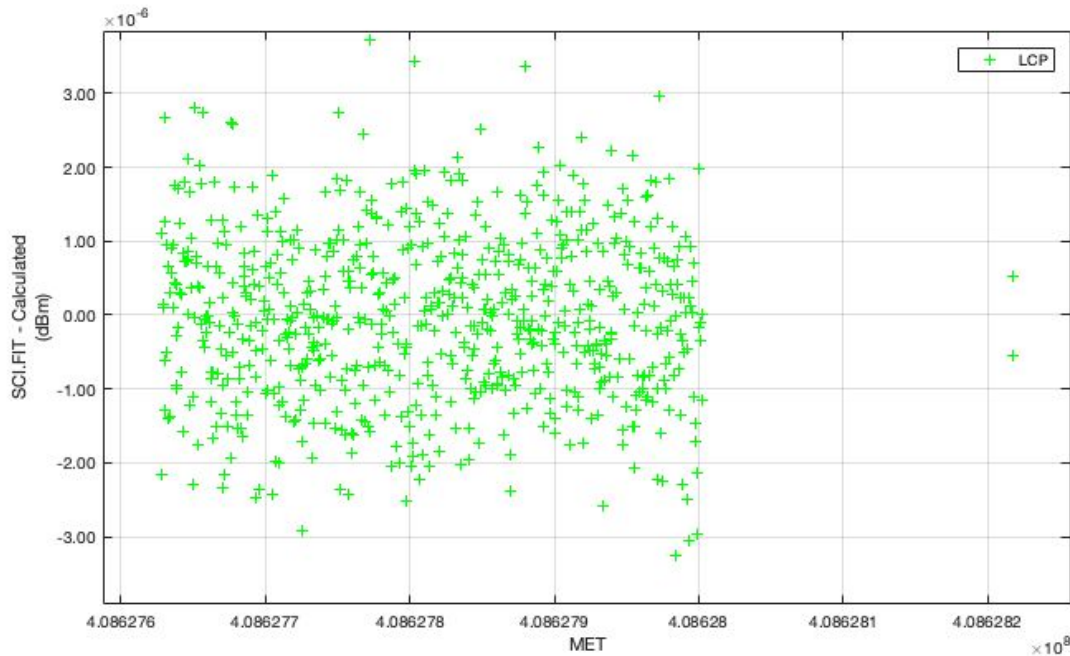
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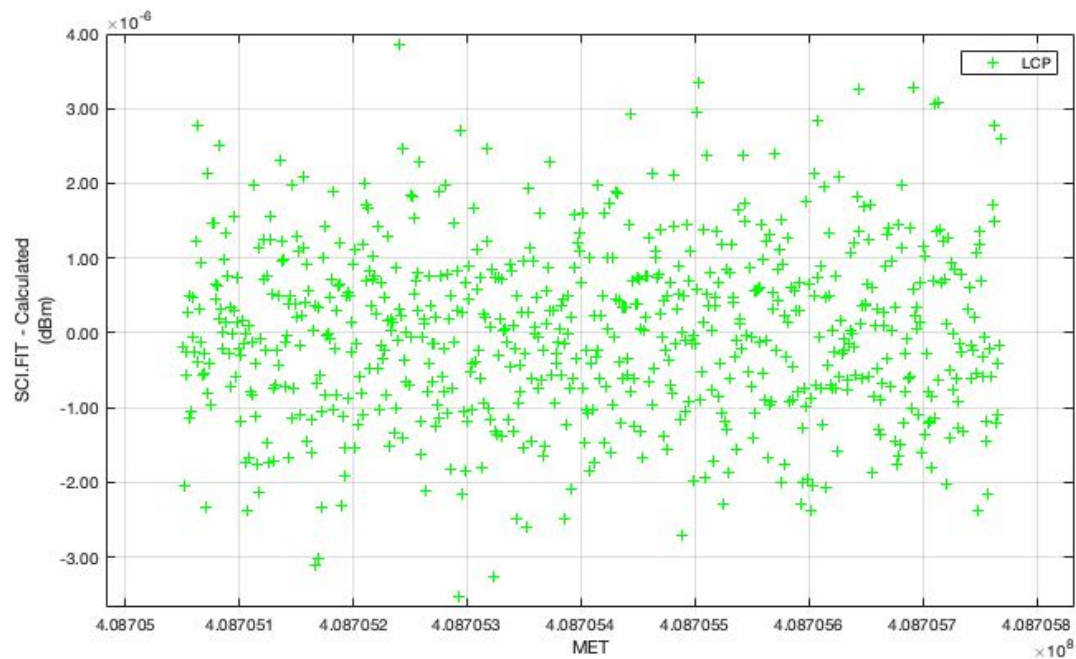
All science and engineering FIT files were interrogated without error. ENG\*FIT were compared to their respective SCI\*FIT via the documented calibration in Sec. 12.3.1.2 of the ICD (Ref. 1). The mean of the differences between SCI\*FIT and calibrated ENG\*FIT radiometer data was  $-5.2 \times 10^{-9}$  dBm, with a standard deviation of  $1.13 \times 10^{-6}$  dBm. Figures 1 and 2 show the differences computed from this comparison. No RCP values were plotted as a result of the dataset containing only LCP records.

In-Phase and Quadrature data were also compared through the calibration in Sec. 12.3.1.1 of Ref (1). The mean difference between engineering and science records for I and Q values was calculated to be less than  $-2 \times 10^{-10}$  mV.

Supporting documentation was sufficient for the interrogation of \*FIT files.



*Figure 1: Differences between SCI\*FIT files' radiometer data and the calibrated data from ENG\*FIT files (MET 408627628 to 408628218).*



*Figure 2: Differences between SCI\*FIT files' radiometer data and the calibrated data from ENG\*FIT files (MET 408705051 to 408705768).*

#### References:

- 1) Joe Peterson, et al., New Horizons SOC to instrument pipeline ICD, 2019, "soc\_inst\_icd.pdf"