NH PDS REX Review Frank Centinello 11 Oct 2018

All FIT and SCI files were interrogated. ENG*FIT file data were calibrated and compared to SCI*FIT file data to a similar degree of fidelity to previous PDS reviews. The mean of differences between radiometer data in the SCI*FIT and the ENG*FIT files was 1.03e08 dBm, and the standard deviation was 1.17e-06 dBm. For the RCP data, these were μ =1.92e-08 dBm, and σ =1.17e-06, and for the LCP data μ =-4.50e-06 dBm, σ =1.18e-06 dBm. In-Phase and Quadrature data were also compared in this manner. The difference between raw and calibrated I and Q values was <4.0e-09 mV, with σ <2.1e-06 mV. Documentation was sufficient for the interrogation of the *FIT files, and calibration procedures remain well-described. All FITs files were able to be read programmatically.

It might still be applicable to include a spacecraft event kernel or event log along with the documentation, if one is not included in the SPICE packages for this time span.

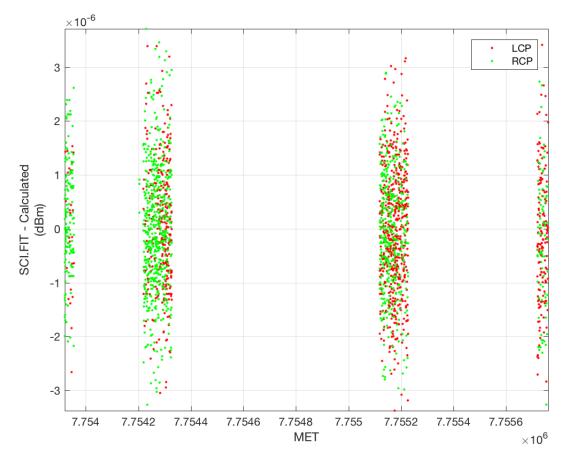


Figure 1 Differences between all SCI*FIT files' radiometer data and the calibrated radiometer data from ENG*FIT files.