

Dear KP PIs,

As you know, up to now the officially announced absolute calibration has been $\pm 30\%$ (see the SPIRE Scan-Map AOT release note).

We have reviewed the calibration status in the light of observations of the primary standard Neptune. This analysis is not yet complete and but we have made an interim re-assessment of the calibration accuracy of current SPIRE maps (Level-2 products from HCSS V2).

We are pleased to announce that the overall absolute calibration accuracy is now estimated as within $\pm 15\%$.

Note that the correction factors presented in the SPIRE Instrument talk at the Madrid workshop should be applied as multiplicative factors to the SPIRE L-2 products to achieve this accuracy:

(1.02, 1.05, 0.94) at (250, 350, 500) microns

This figure of $\pm 15\%$ will be quoted in the SPIRE instrument and calibration papers (Griffin et al. and Swinyard et al.) in the A&A volume, and accordingly should be adopted for the A&A SD papers.

SPIRE flux densities are quoted for wavelengths of 250, 350 and 500 microns, based on the Herschel convention of an assumed source SED with flat $\nu \cdot S(\nu)$ (i.e., spectral index -1). Colour correction factors to convert to a different spectral index are small (a few %) and within the 15% overall error.

Further information on SPIRE performance and calibration will be documented in detail in the next edition of the SPIRE Observers' manual and will be described in the SPIRE papers in the A&A special issue.

Cheers,

Matt Griffin on behalf of the SPIRE ICC