N53a Building the Point Source Catalogue of the Near Infrared Spectrometer (NIRS) on the IRTS.

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We discuss the new point source (PS) catalogues of the Near Infrared Spectrometer (NIRS), a 24 channel absolute spectrophotometer covering the range between 1.4–4 μm, and an aperture size of $8' \times 8'$. The NIRS is one of four focal plane instruments on the Infrared Telescope in Space (IRTS) satellite, which surveyed 7% of the sky between 1.4 and 700 μm during its one month mission in the spring of 1995. The responsivity of the NIRS detectors was very stable to within a few % during the whole mission, allowing us to easily compare the in-flight, the pre-, and post-flight laboratory measurements to determine the beam-pattern and the absolute calibration of the NIRS. We estimate the total number of PSs (mostly stars) detected by the NIRS to be $\approx$ 50,000. We expect to ultimately achieve self-consistent absolute calibration uncertainties of $\approx$ 2%. This translates into a high reliability of our PS data, as well as the construction of new faint NIR cal! ibrators, with important implic