

THE ISO ATLAS OF NEAR-INFRARED STELLAR SPECTRA AND THE IR SPECTRAL
CLASSIFICATION OF LATE-TYPE STARS.

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After the liquid Helium depletion of the Infrared Space Observatory (ISO), the InSb band 1 detectors of the Short-Wavelength Spectrometer (SWS) could be operated in some timeslots available during the engineering test programme. This time was used to record spectra of stars between 2.36 and 4.05 μm at medium resolution ($\approx 1500 - 2000$). As the temperatures of the focal plane increased, changes in the position read-out of the grating assembly and changes in the response of the instrument could be seen. We will present the calibration of these changes and demonstrate the calibration accuracy of the resulting spectra.

The set of spectra obtained during the post-helium phase has been combined with all SWS spectra of stellar sources obtained during the nominal mission in the SWS AOT1 speed 4 observation mode. These spectra will be published together in a unique atlas of more than 300 stellar spectra between 2.36 and 4.05 μm covering the entire MK classification. We will present the atlas and discuss how it complements the effort on the atlas of the STARTYPE programme that covers a wider spectral range at lower spectral resolution.

We will also discuss the first results of the work on the near-infrared classification of late-type stars and show how spectral indices in the 3.36-4.05 μm region can be used to characterise stellar properties of cool stars.