

EIS LED flat-field intensity levels

Once a month the EIS LEDs are switched on and short exposures (one second duration) are taken. The intensity levels of these exposures are compared - any significant change (e.g. a decrease in intensity level) could indicate that contamination levels have increased on the detectors. Results to date show that the sensitivity levels have not changed significantly (Figure 1), suggesting that there is only negligible (if any) contamination on the CCDs and that any contamination is on the other optical components (e.g. mirror).

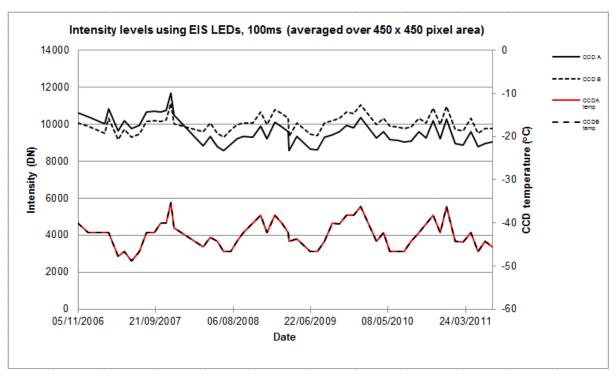


Figure 1: The flat-field intensity levels (since launch) for the EIS detectors using EIS LEDs (averaged over a 450×450 pixel area). The upper two lines represent the intensity levels for the long (CCD A) and short (CCD B) wavelength detectors. The lower line represents the CCD temperature. It can be seen that the variations in the intensity levels coincide with temperature fluctuations.