



Two-point two-colour pyrometry using the REMS ground temperature sensor

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The REMS ground temperature sensor has two IR bands dedicated to the observation of the daily evolution of the ground temperature. One thermopile has a very good signal-to-noise ratio and provides a clean estimate of the brightness temperature. Here we use the information from the extra channel, during the hours of maximal temperatures, and compare the data of both channels (two-colour) at different acquisitions (two-point) to estimate the kinetic temperature and extract information about the averaged emissivity of each spectral band. This information is compared with emissivities from existing spectral data bases and satellite estimates of the landing area.