Improved polarisation and radiometric calibration for SCIAMACHY

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The on-ground calibration data for SCIAMACHY were re-evaluated after 7 years of successful operations in orbit. With the behaviour of the instrument and data quality known from extensive validation activities, the on-ground calibration data can be analysed in a way which focuses on improving the remaining calibration issues. Driven in particular by user feedback, the radiometric and polarisation calibration accuracy were improved, while at the same time taking into consideration the instrument degradation as observed from launch to now. The new calibration key data and degradation description allow more accurate level 2 products and can account for spurious trends introduced by instrument degradation.