

Spectrometric Sounding of the Atmosphere

Missions and Sensors	92
ENVISAT/SCIAMACHY	92
ERS-2/GOME	95
MetOp/GOME-2	95
Sentinel-5 Precursor.....	95
Sentinel-4 and -5, CarbonSat.....	96
ADM-Aeolus.....	97
MERLIN.....	97
ENVISAT/MIPAS	98
TELIS.....	98
Generic Processing Systems.....	99
Universal Processor for Atmospheric Sensors – UPAS	99
Generic Calibration Processing System – GCAPS.....	100
Methods and Applications	101
Sensor Calibration Algorithms	101
Radiative Transfer	102
Inversion and Retrieval.....	104
Electromagnetic Scattering	106
Spectroscopic References.....	107
Long-term Observation of Ozone.....	108
Volcanic Sulphur Dioxide from Space.....	109
Tropospheric Nitrogen Dioxide and Air Quality	110
Atmospheres of Exoplanets	112