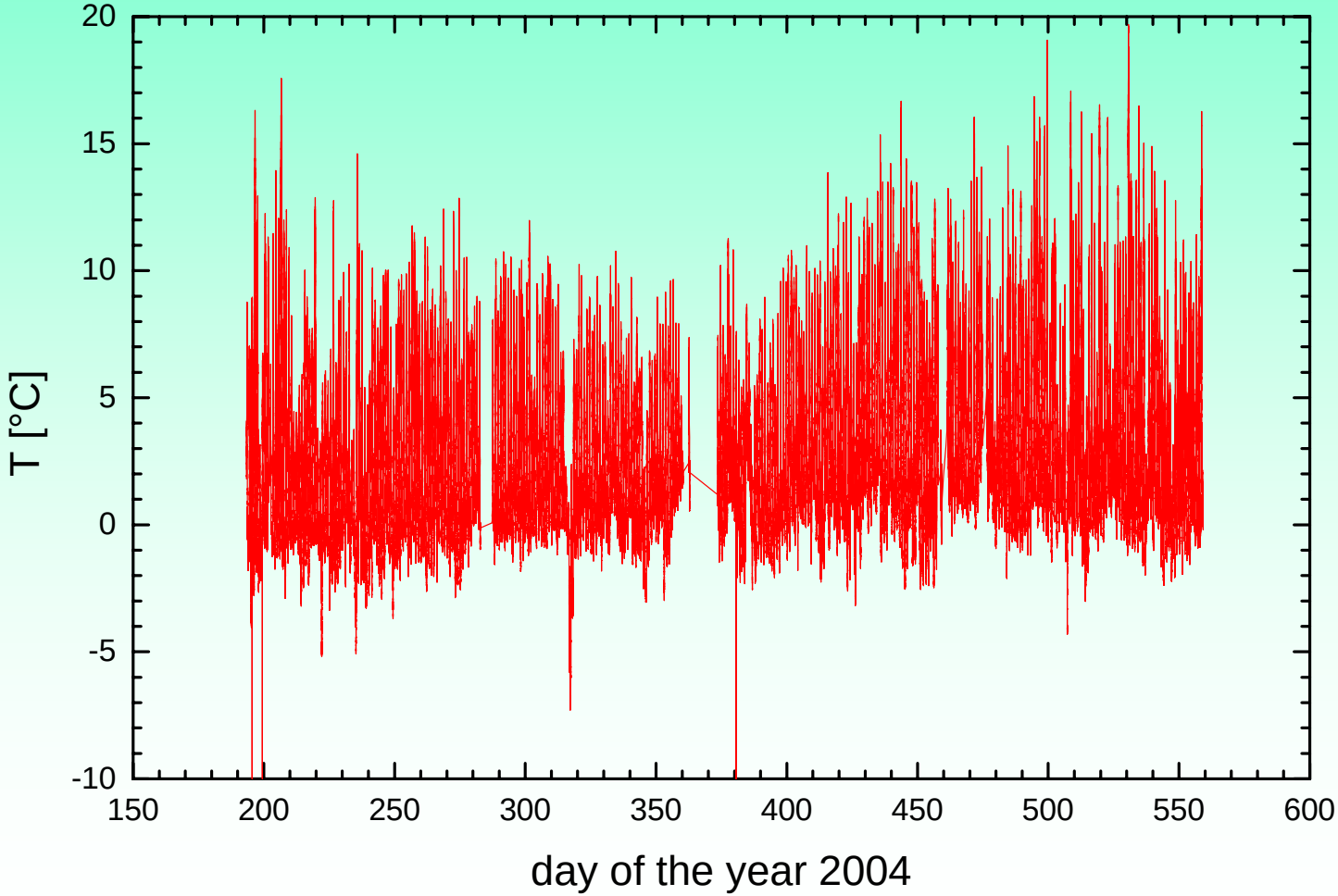
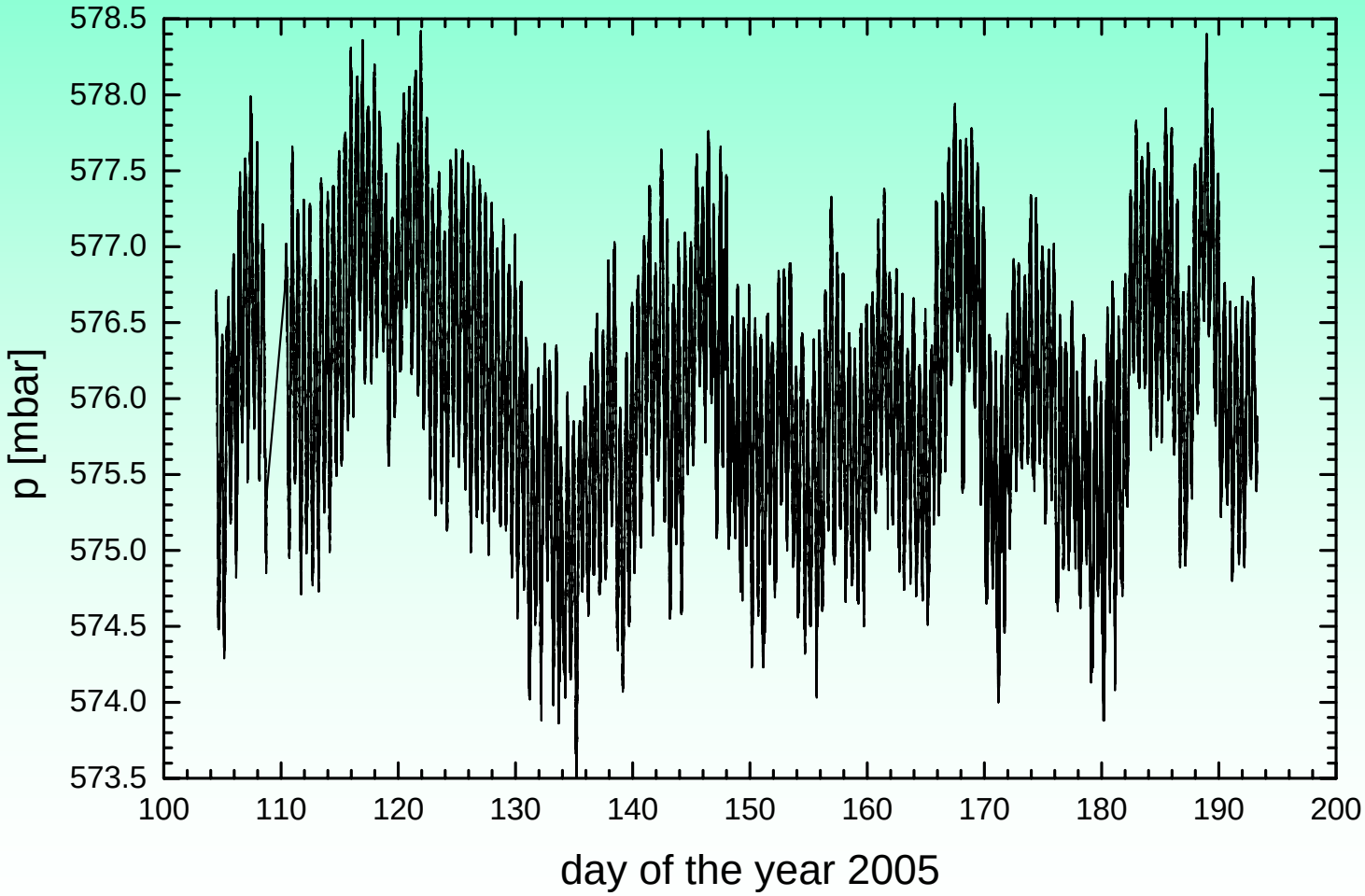
First Results of the Measurements on Pico Espejo

- the weather on Pico Espejo
- the tropospheric transmission
- Ozone over Mérida
- the other constituents

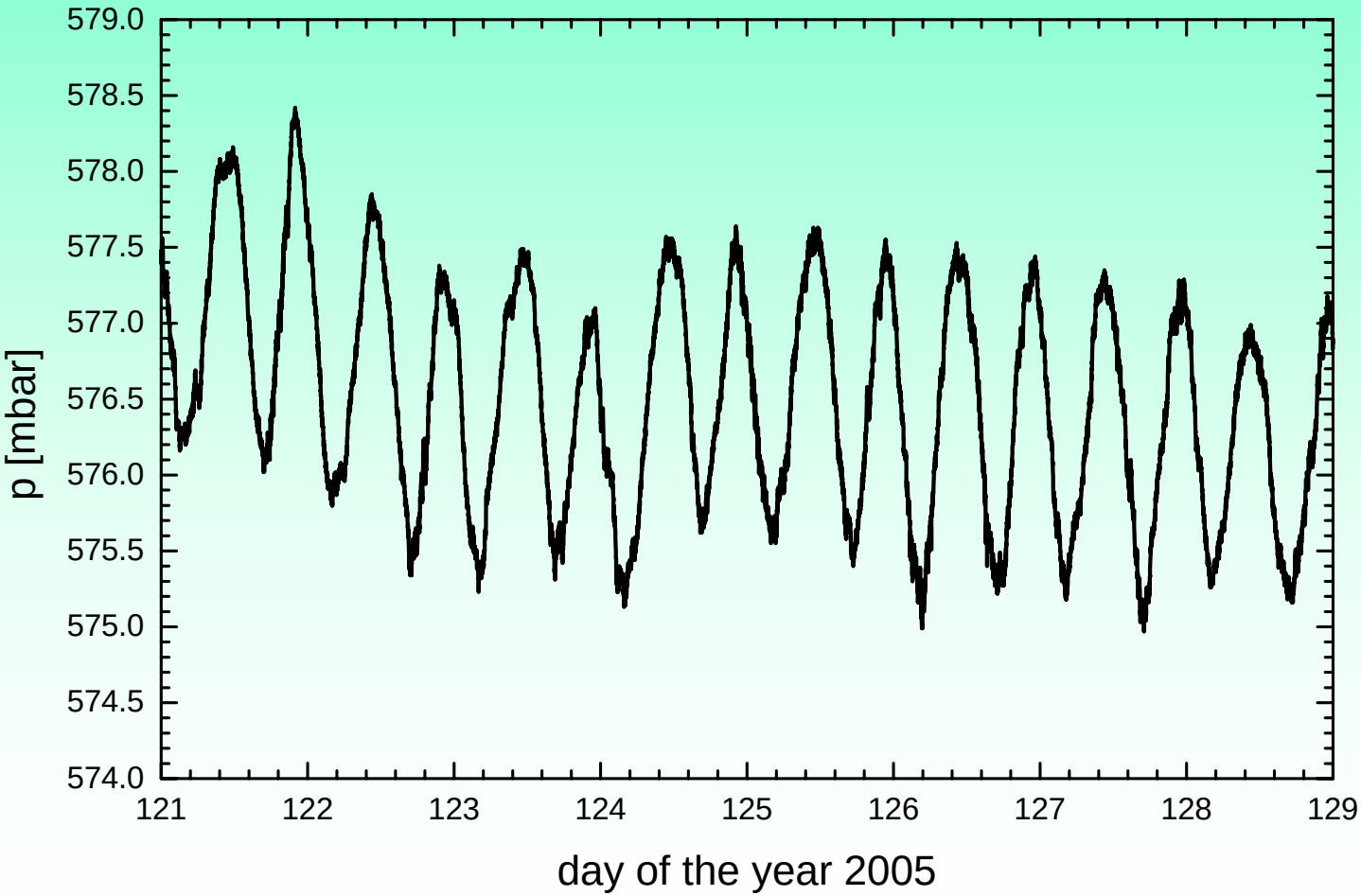
The Temperature on Pico Espejo from 11th July 2004 to 12th July 2005



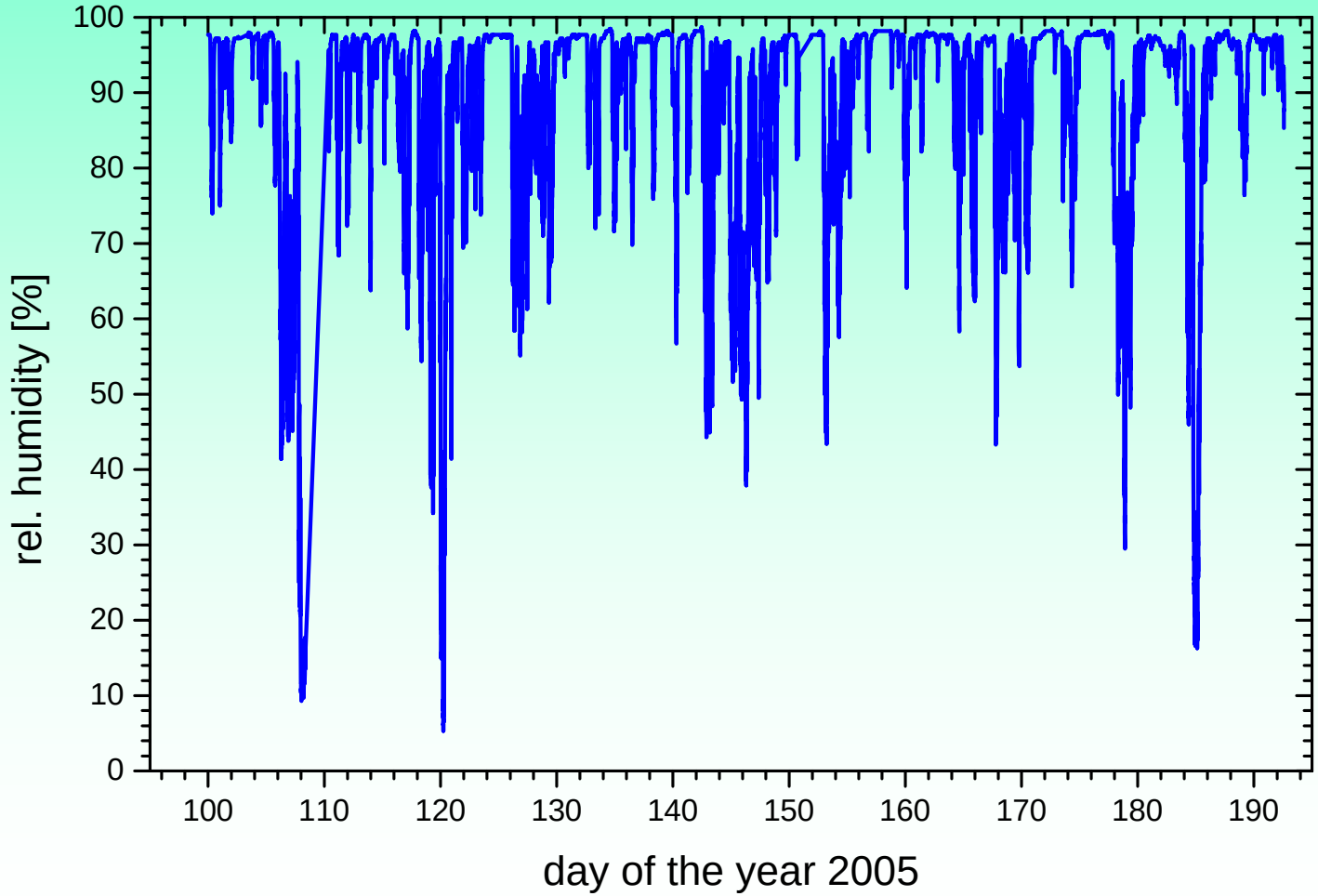
Air Pressure on Pico Espejo from 14th April 2005 to 12th July 2005



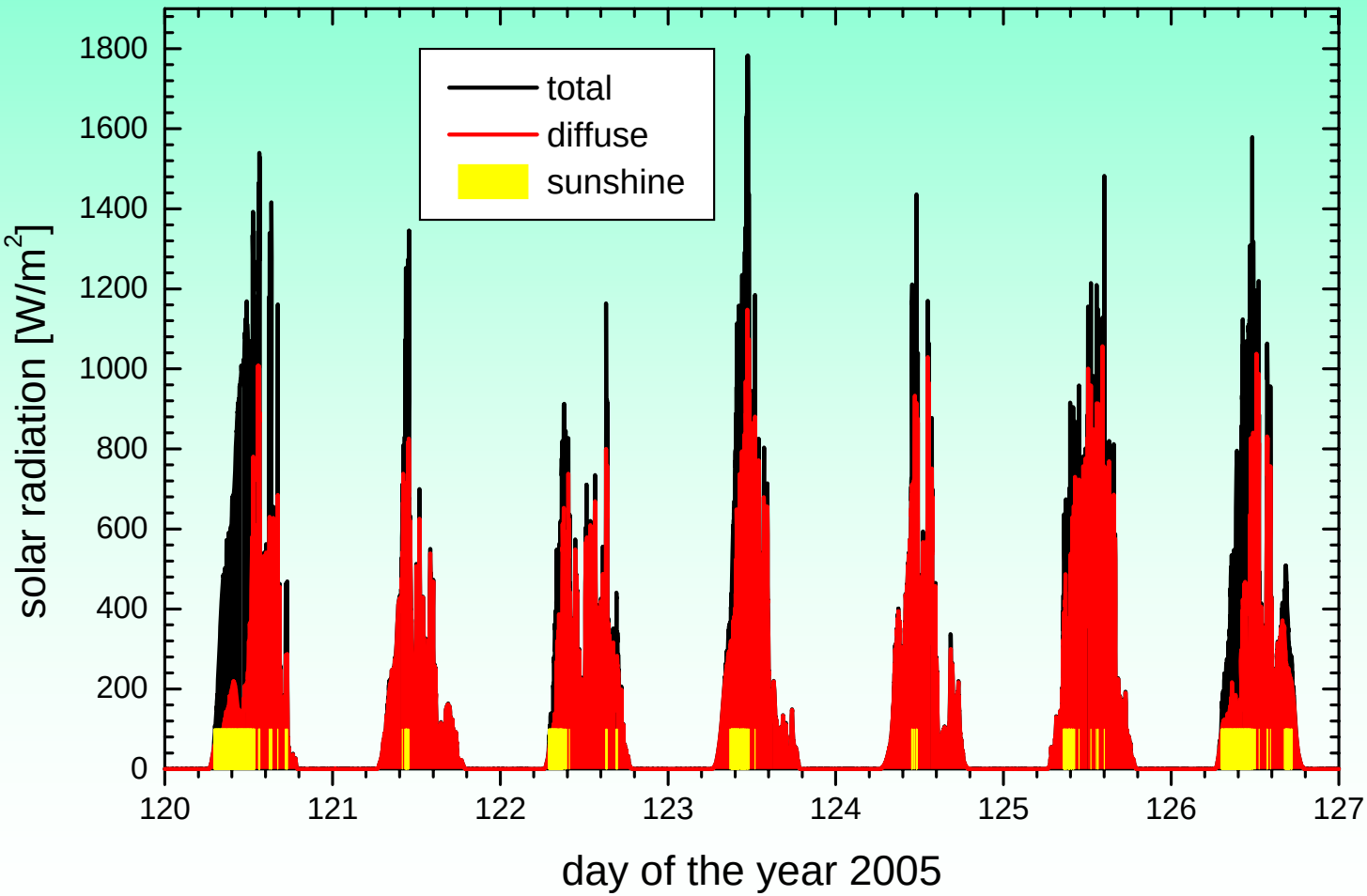
Air Pressure on Pico Espejo from 2nd May 2005 to 9th May 2005



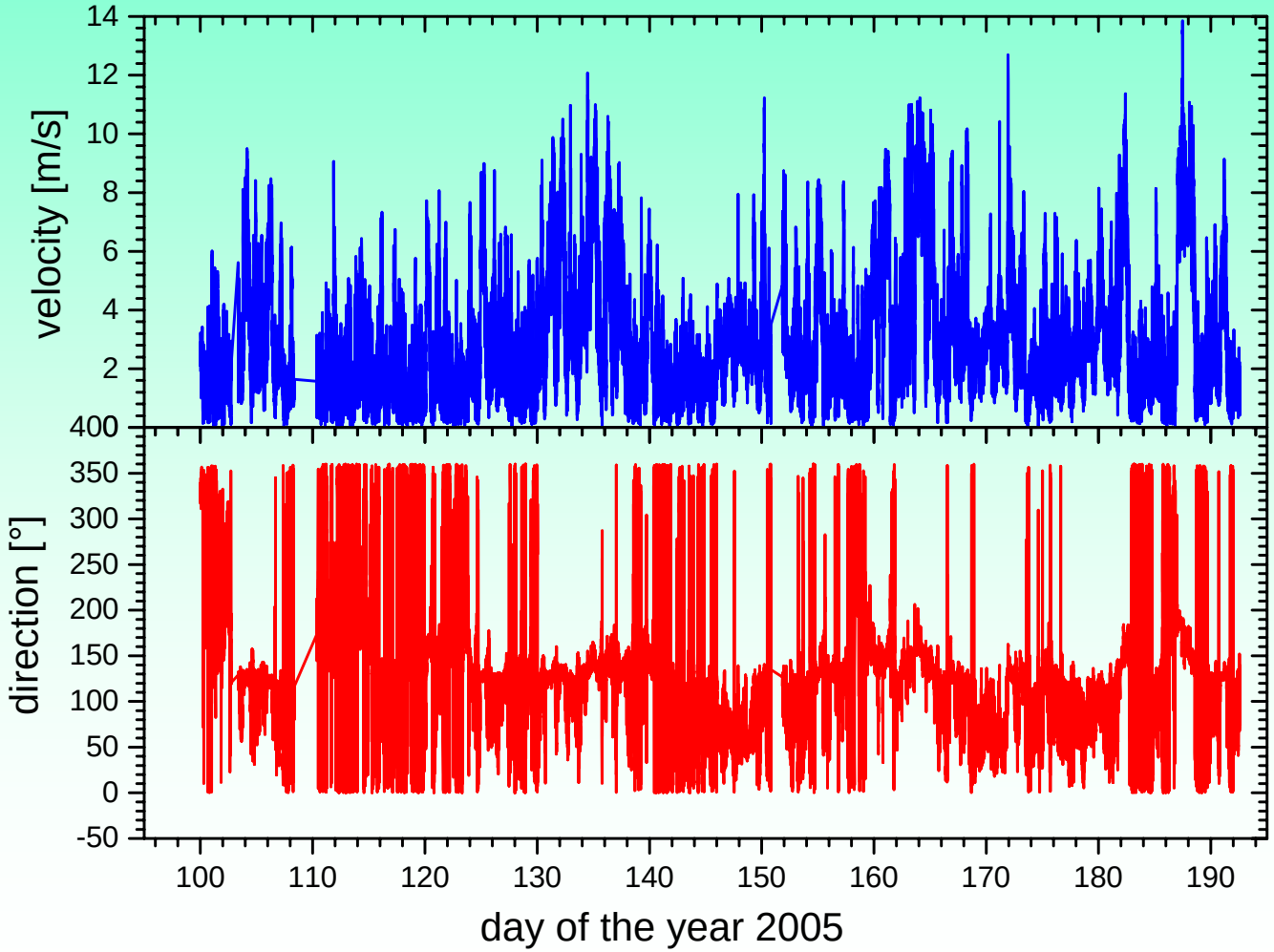
Relative Humidity on Pico Espejo from 10th April 2005 to 11th July 2005



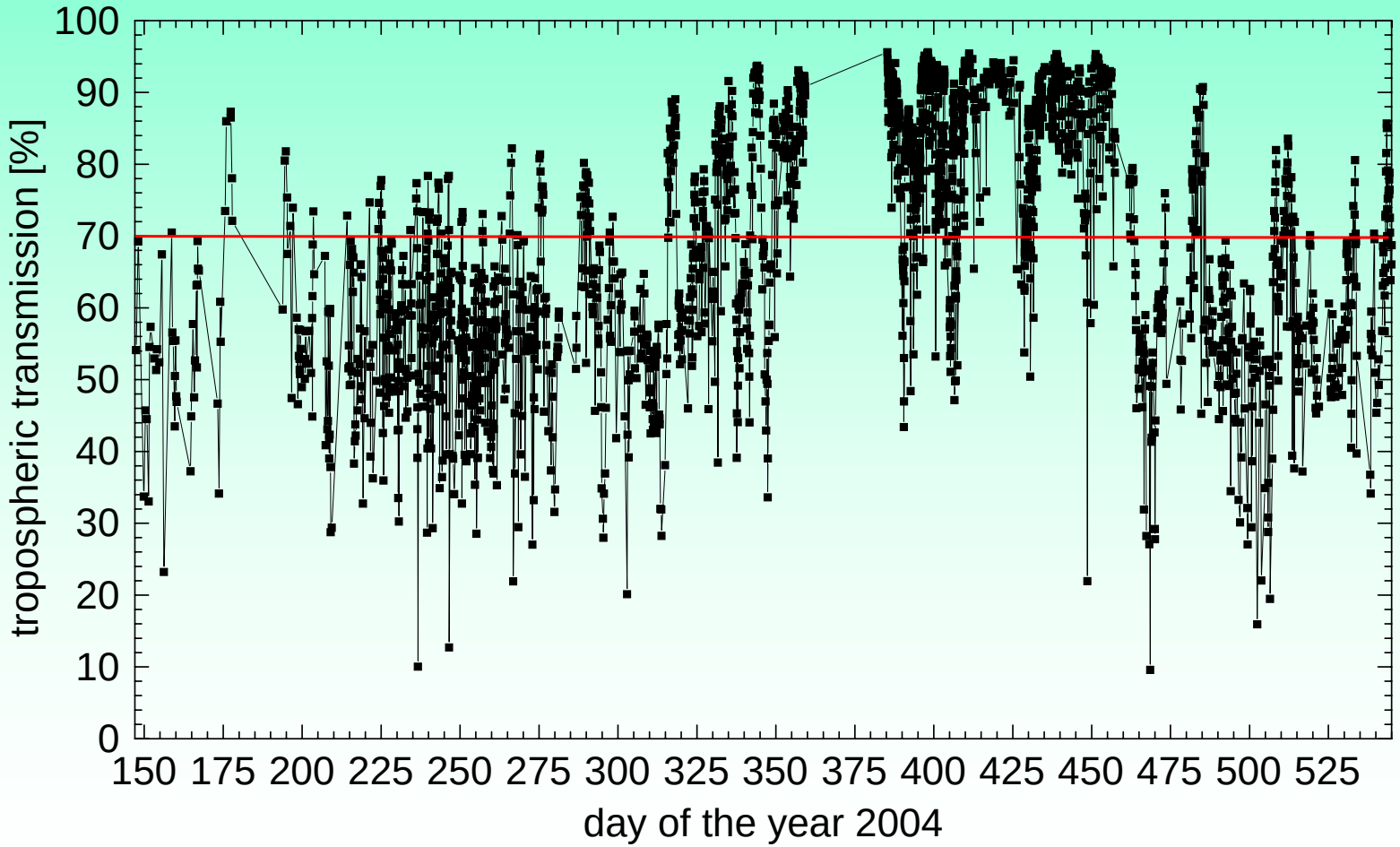
Global Radiation on Pico Espejo from 1st April 2005 to 7th April 2005



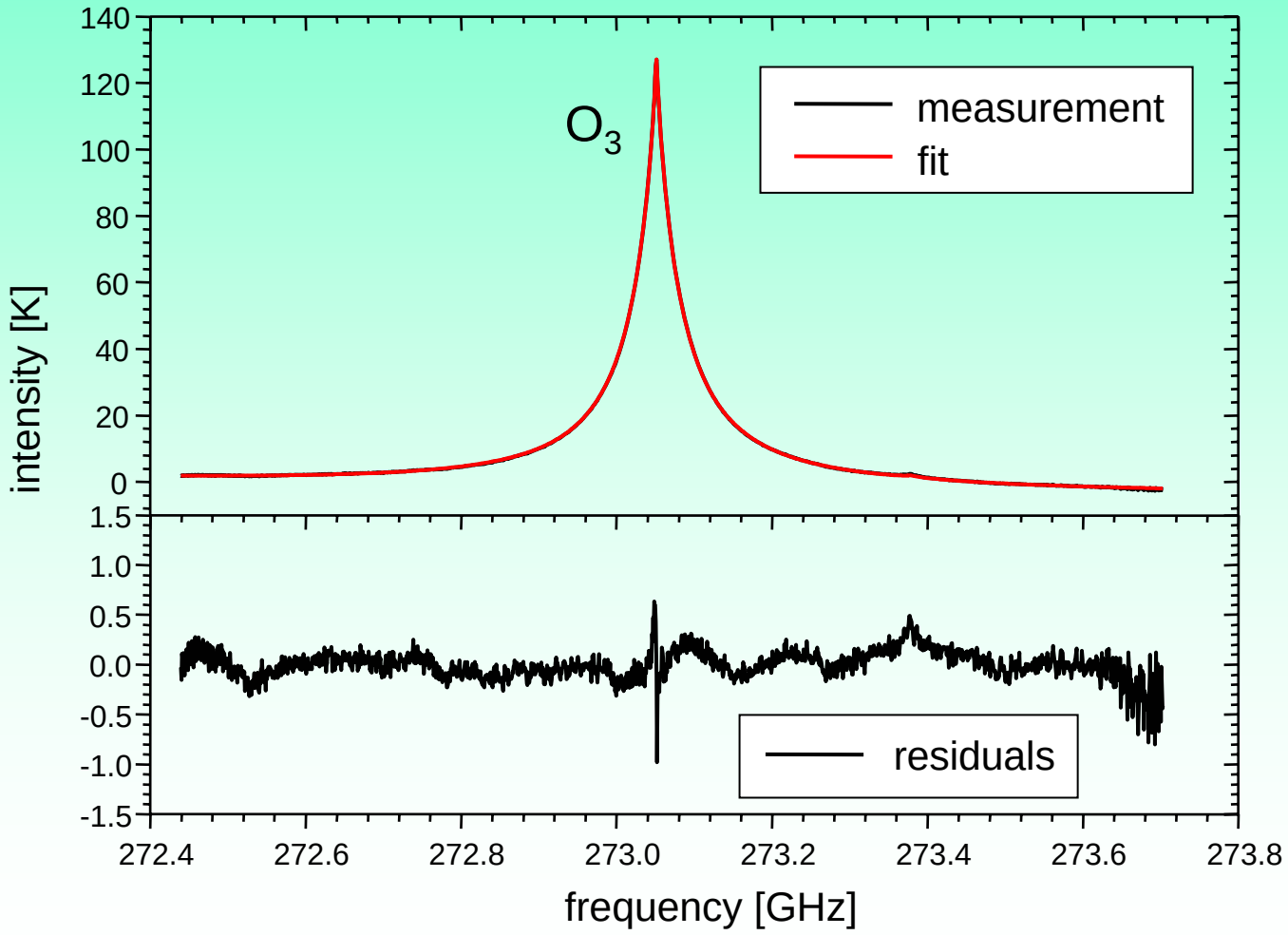
Wind on Pico Espejo from 10th April 2005 to 11th July 2005



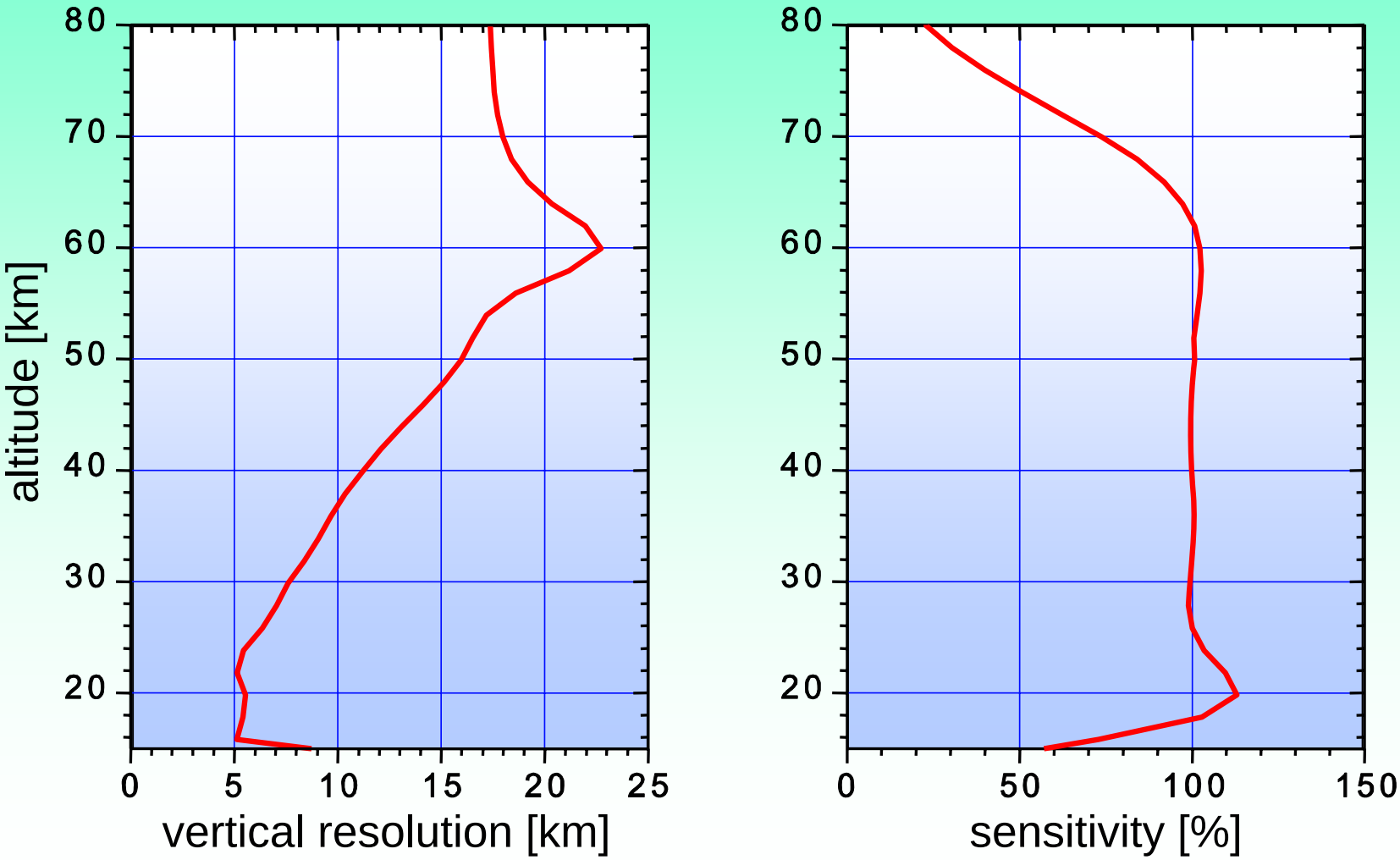
Tropospheric Transmission on Pico Espejo from 31st March 2004 to 28th June 2005



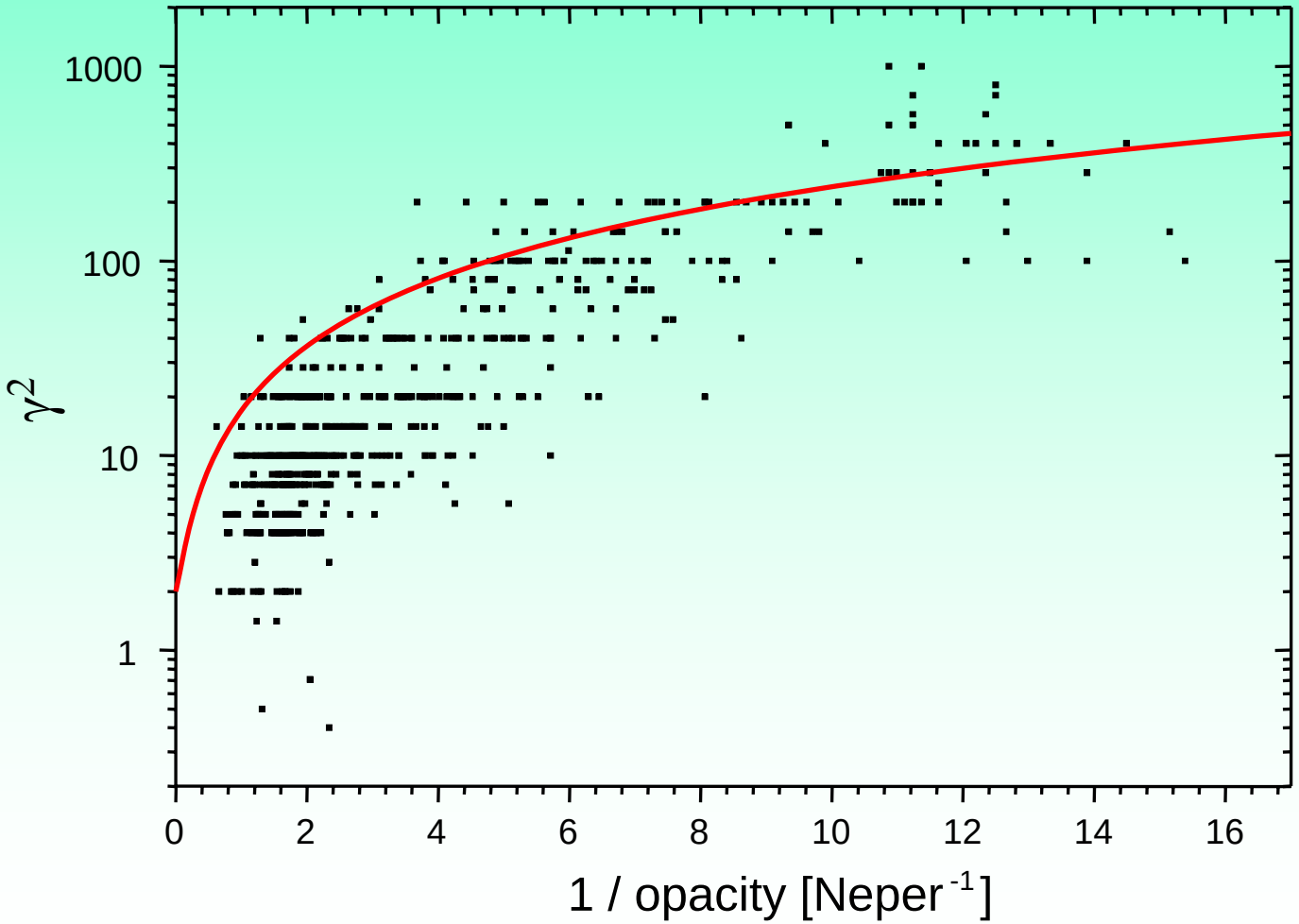
Spectrum of 26th January 2005



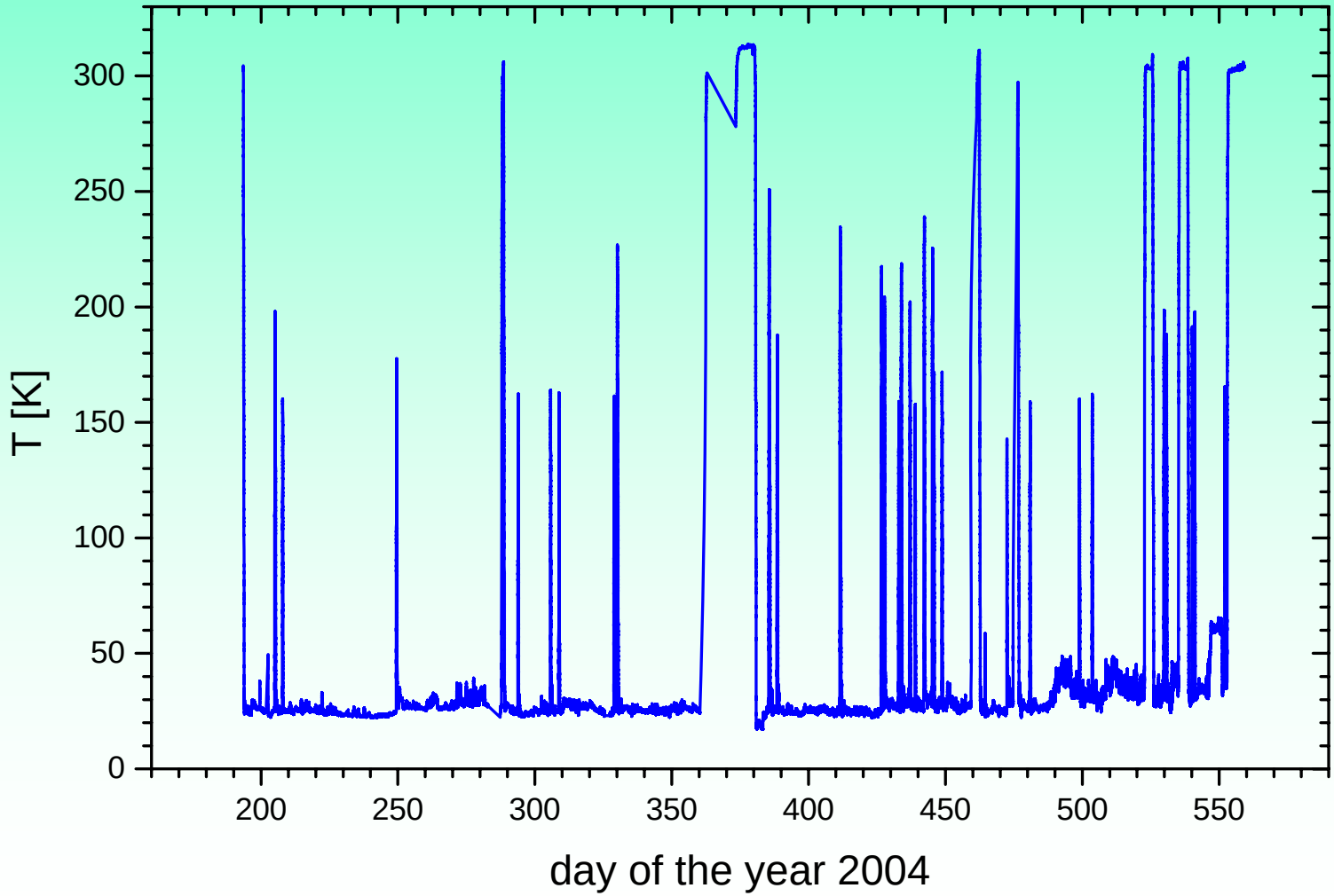
Vertical Resolution and Sensitivity of the measured Ozone Profile of 26th January 2005



Regularization Parameter γ^2 of the Ozone Measurements Depending from the Tropospheric Opacity



Temperature inside the MIRA-Dewar from 11th July 2004 to 12th July 2005



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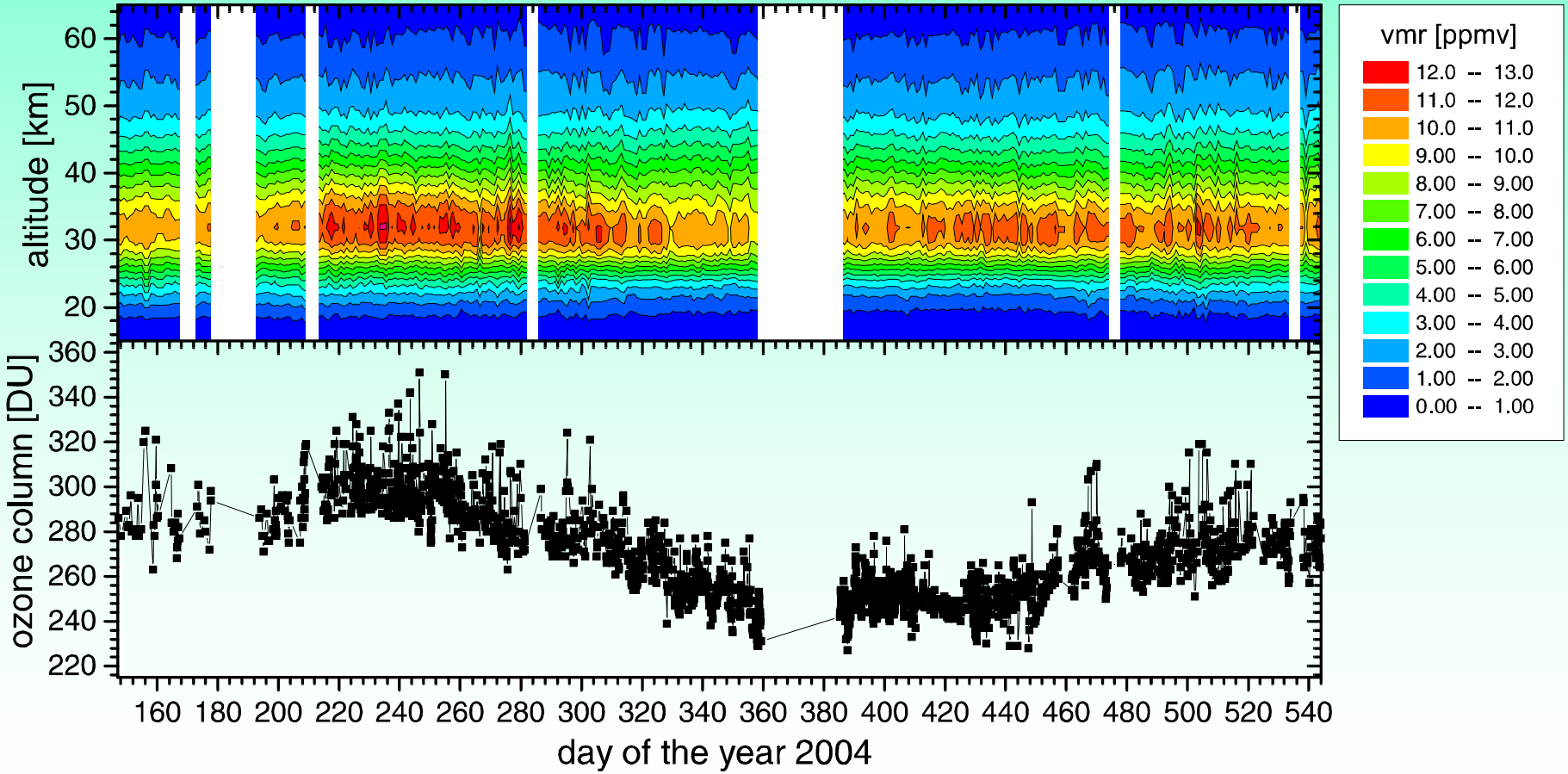
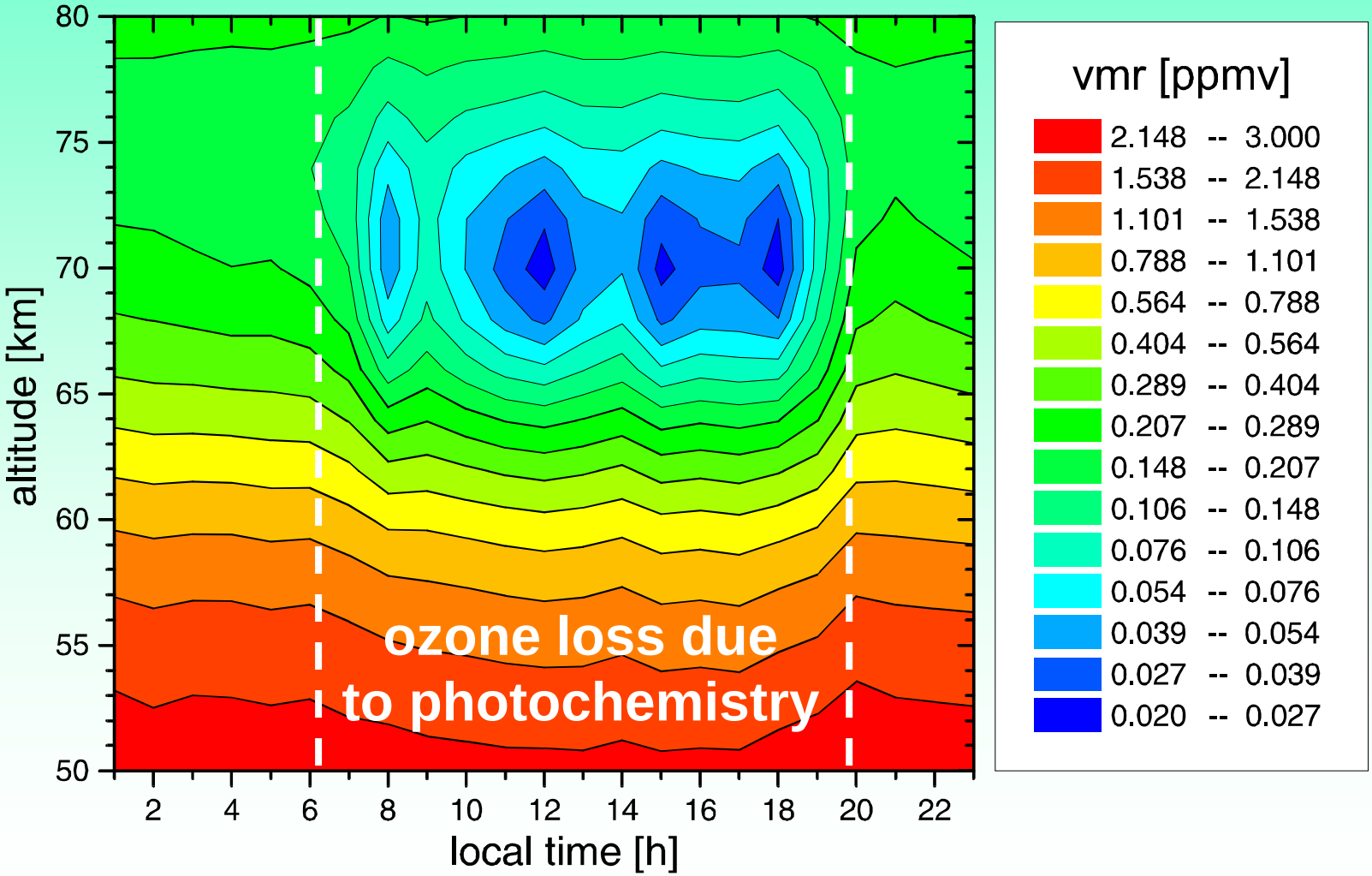
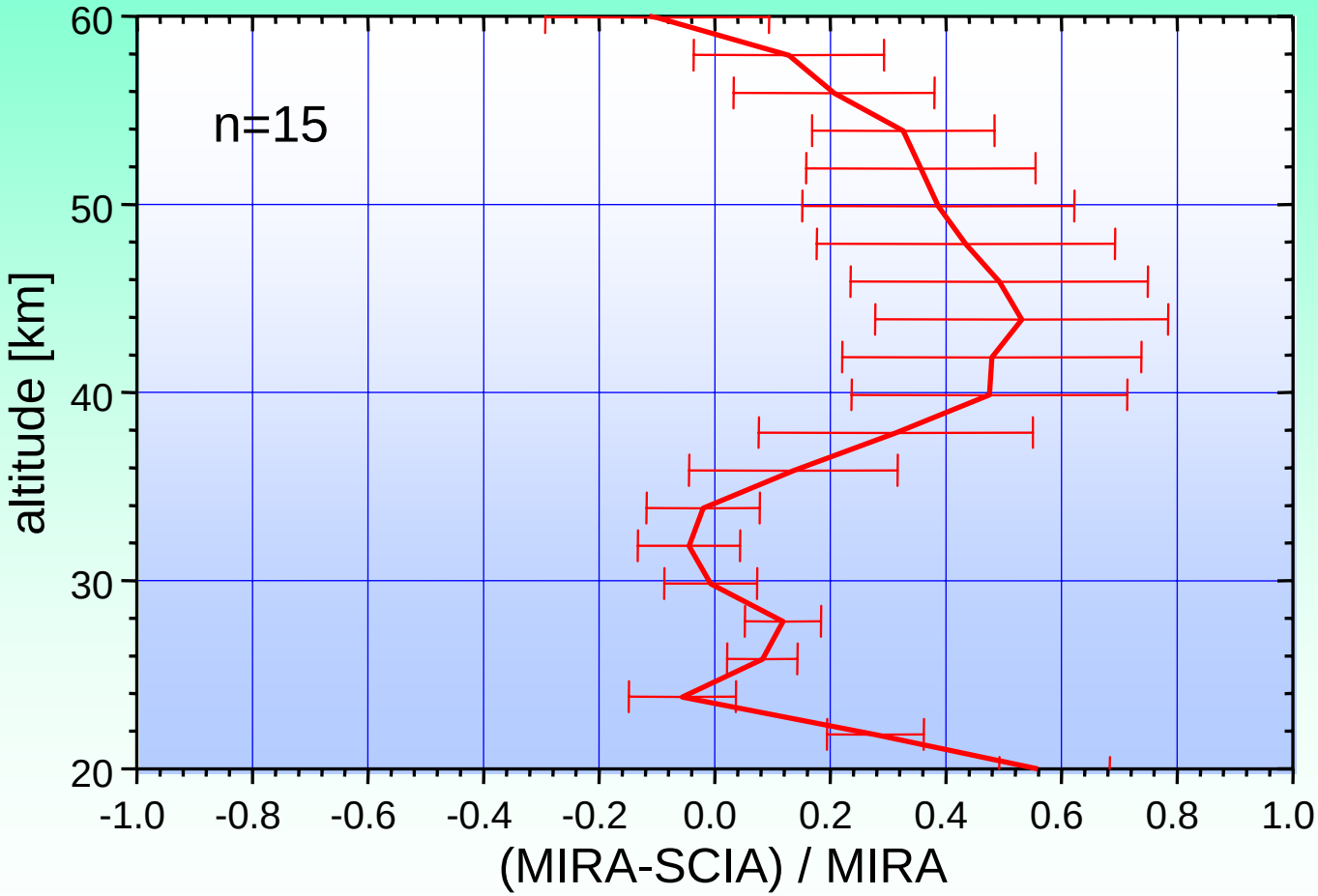
Ozone from 27th May 2004 to 28th June 2005, as measured by MIRA 2 in Mérida



Ozone over Mérida on 26th January 2005

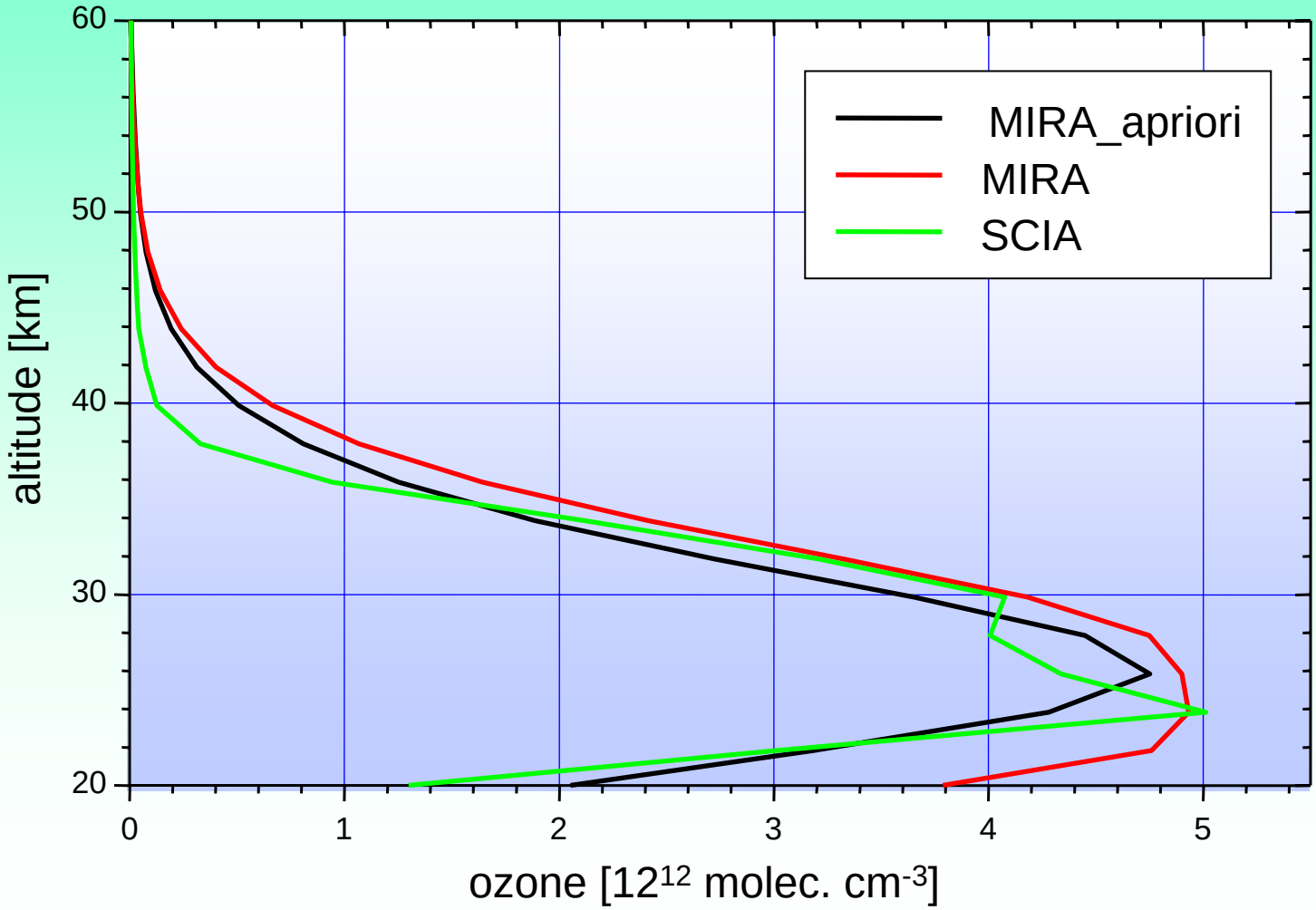


Comparison of SCIA Ozone Profiles (IFE 1.61 with Pointing Correction) with MIRA-Measurements in Mérida

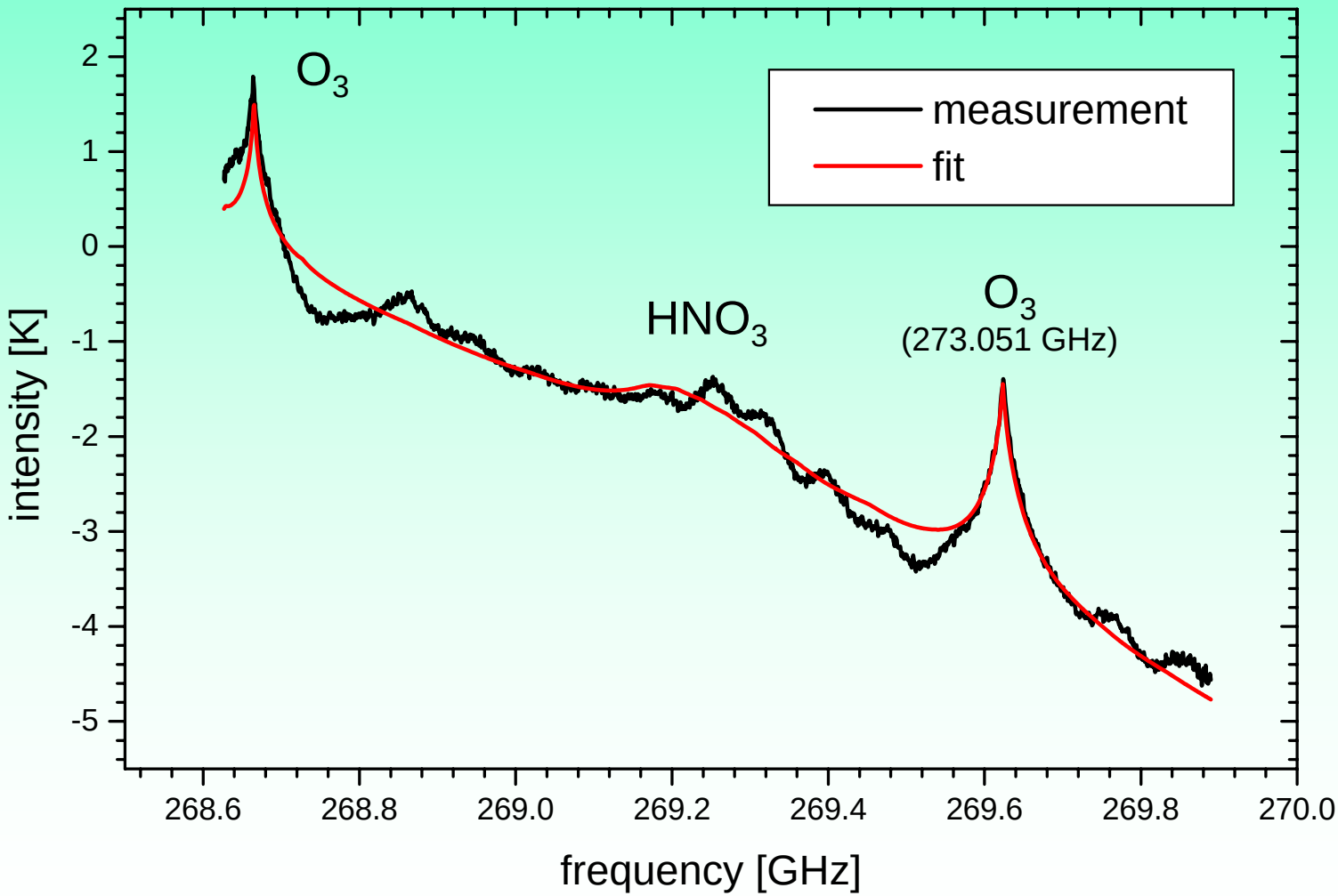


E. J. Brinksma, et al., "Geophysical Validation of SCIAMACHY Limb Ozone Profiles", Atmos. Chem. Phys. Discuss., 5, 4893-4928, 2005.

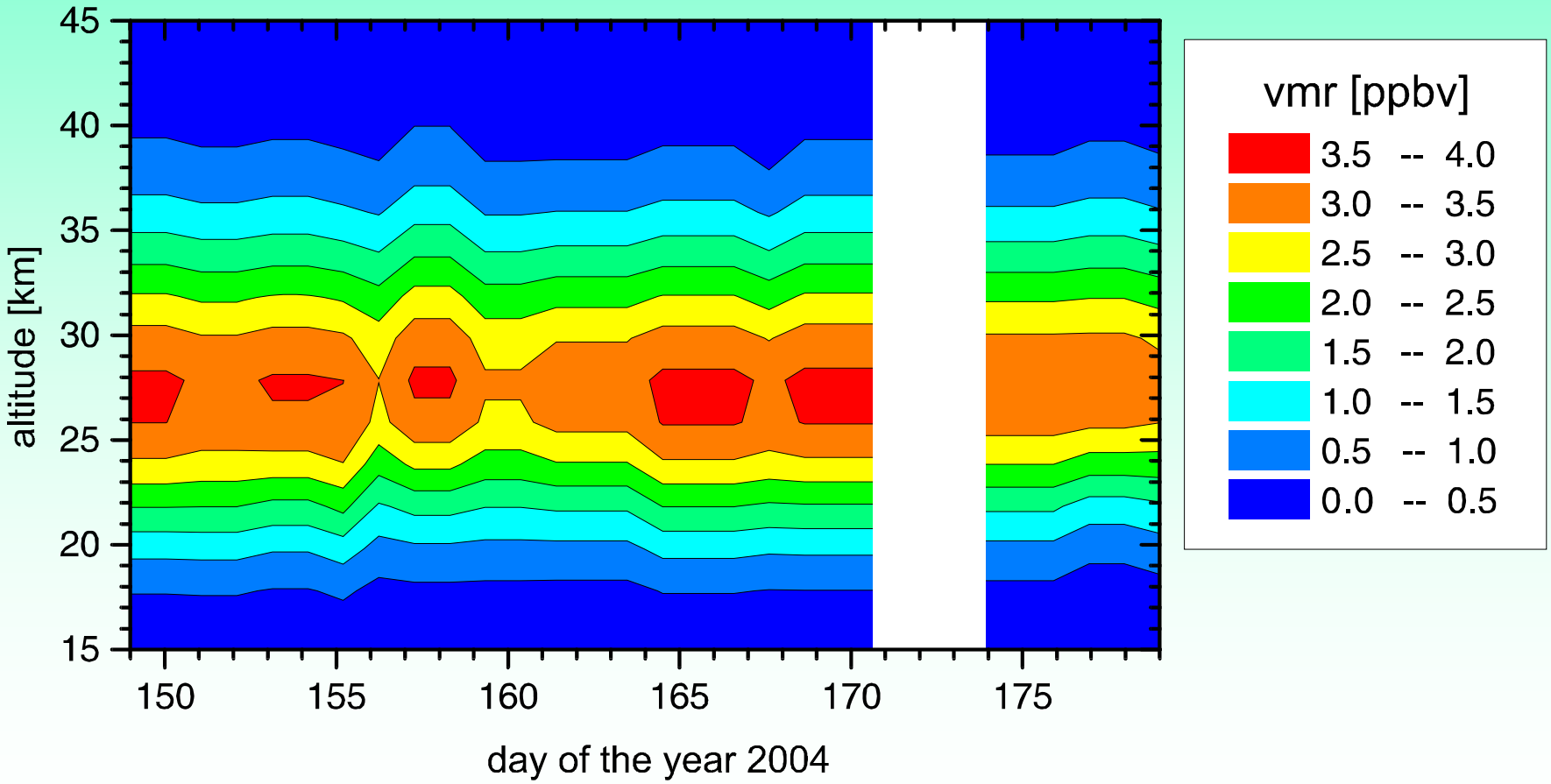
Comparison of Ozone Profiles of 1st September 2004



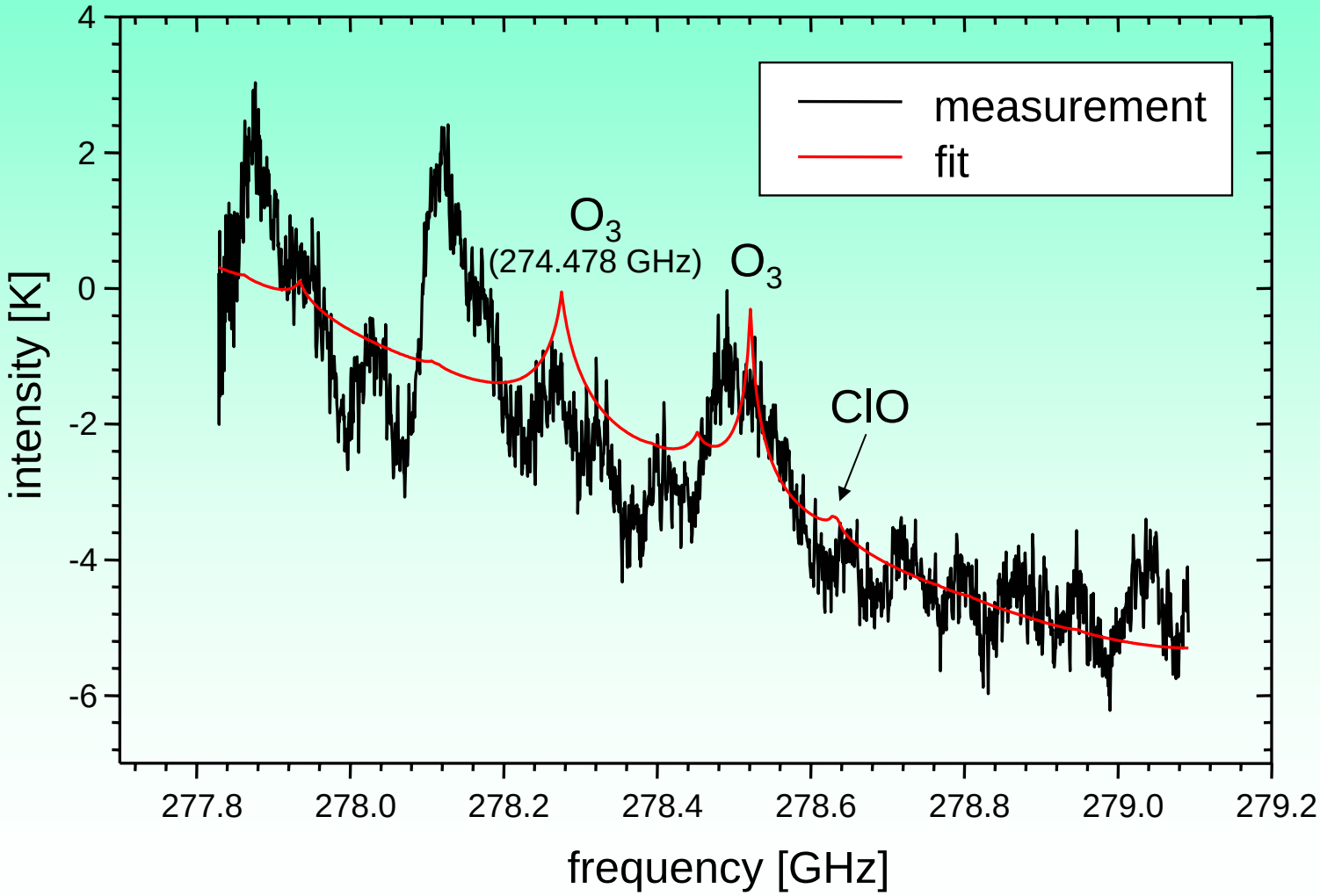
Measurement of HNO_3 of 7th June 2004



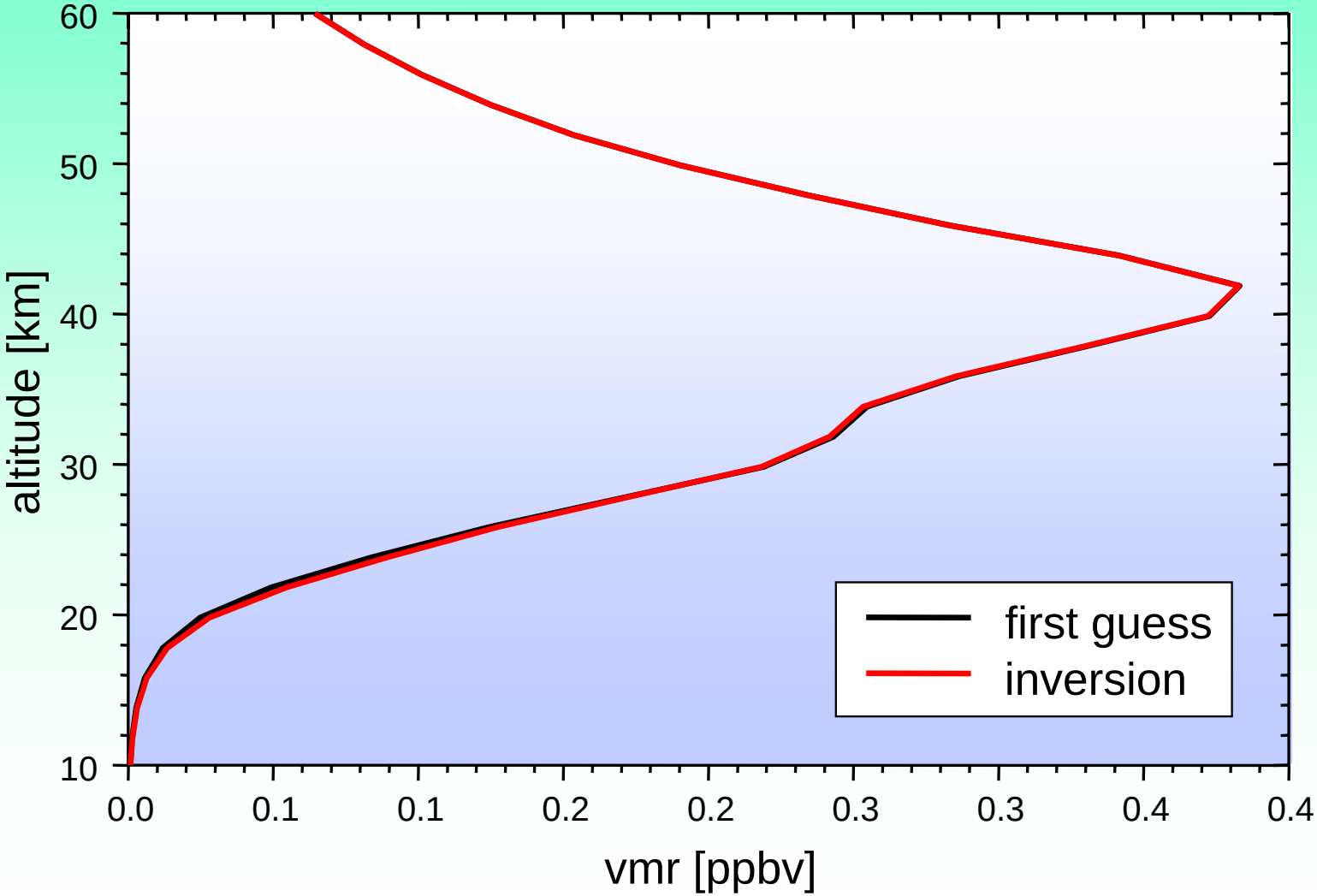
HNO_3 over Mérida from 27th May 2004 to 26th June 2004



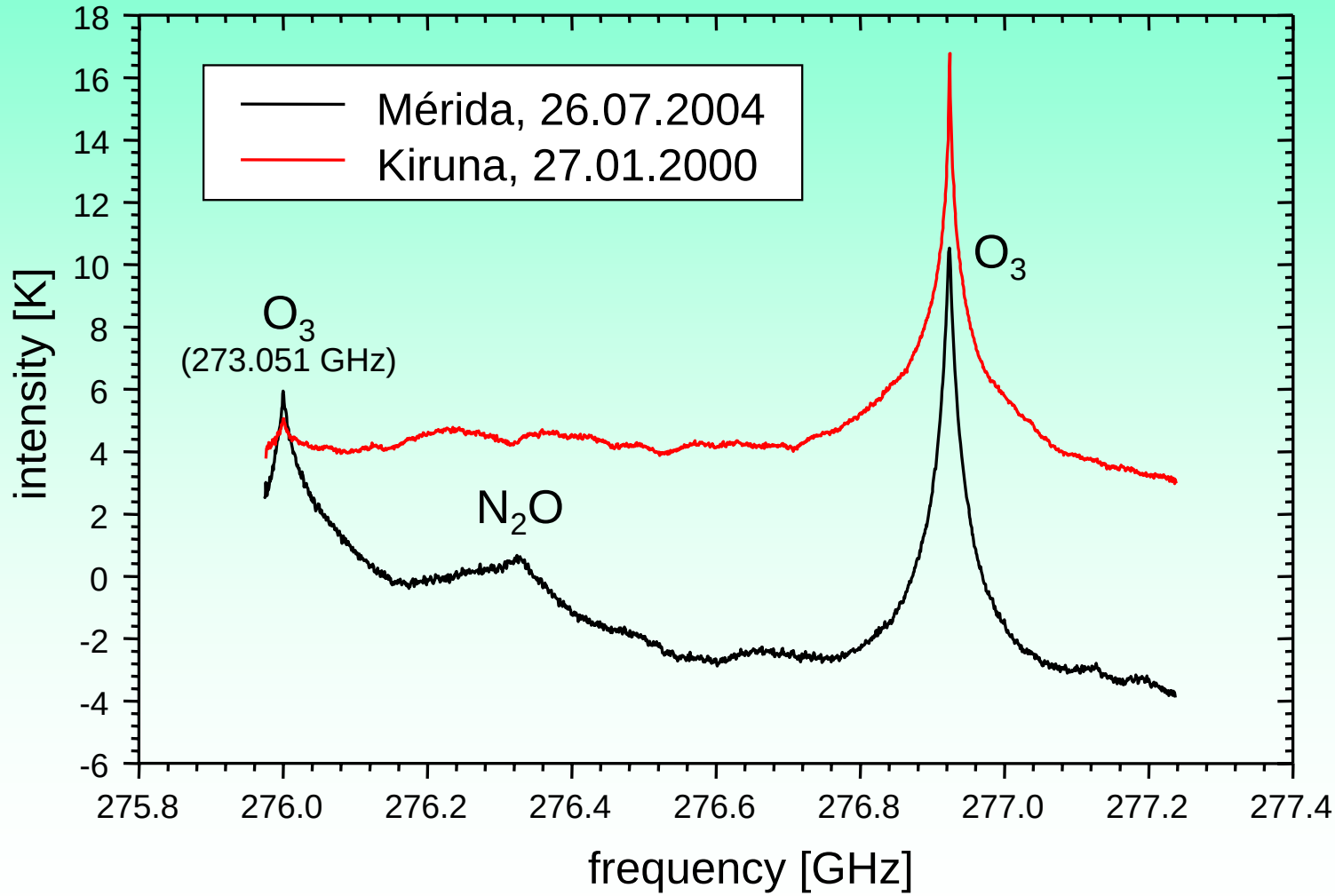
Measurement of ClO of 4th June 2004



ClO over Mérida on 4th Juni 2004



N_2O-Spectra as measured by MIRA 2



Summary

- meteorological data available for several months
- Pico Espejo well suited for microwave measurements
- nearly daily ozone measurements for a whole year
- comparison to SCIAMACHY ozone profiles revealed discrepancies
- first results for HNO_3

Outlook

- comparison with model calculations and other measurements (PEP, CAWSES)
- continuation of the satellite validation
- successful measurement of ClO and N_2O
- further automatization of the retrieval