Anders' STSM at the WRDC in St. Petersburg

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STSM Overview

• **Mission:** to get long-term global radiation data for many European stations

• **Data that is needed for UV reconstruction in COST 726**

• **Duration**
  – Thu 24 Jan --- Thu 7 Feb

• **Host(s)**
  – World Radiation Data Centre (WRDC)
  – Anatoly Tsvetkov and co-workers
What happened?

- Learned about procedures at WRDC concerning
  - Quality checking of data
  - Communication with national Met Services
  - Data archive
  - New super computing facilities
- Gave presentation on UV Reconstruction Techniques and COST Action 726
- Received data for 79 European stations
- Time series of at least 20 years
- Everybody became happy!
79 European stations

- Stations of high quality were chosen
- Based on WRDC expertise
- Length of time series at least 20 years
- Some areas are still not well-covered
- Some questions concerning the WRR scale remain
- Additional quality checks are encouraged
- More details in STSM Report
World Radiometric Reference (WRR) Scale

- Introduced by WMO, applied to radiation measurements in general since 1981
- However, for all stations, the WRDC has not received information on correction factor (CF) and/or start date of WRR scale
- Typically CF=1.02
- Some examples:
  - Austria | WRR since Jan 1981 | CF=?
  - Denmark | WRR since Sep 1982 | CF=?
  - Romania | WRR since ??? | CF=?
  - Spain | WRR since ??? | CF=?
  - Switzerland | WRR since ??? | CF=1.022

- NOTE: Davos and Locarno WRR dates known, but not for other Swiss stations

Suggestion: Use CF=1.02

No correction can be made!?
Additional quality check would be good – example
Summary of STSM at WRDC Petersburg

• Successful mission
• Data received for 79 stations
• Long-term: minimum length of time series is 20 years
• Some open questions and assumptions concerning correction to the WRR scale (~2% difference)
• More details are available
  • In STSM report by Anders Lindfors (available as PDF)
  • In the headers of the data files

• Remember to acknowledge WRDC when data is used
• Also: communicate with WRDC if something interesting/strange is found