

## **Ad-Hoc Committee on Dobson Operations Sapporo 2000 Quadrennial Ozone Symposium Meeting Report**

Prepared by: Bob Evans, Karel Vanicek, Ulf Kohler

The Ad-Hoc Committee on Dobson Operations conducted a short meeting during the Ozone Symposium held in Sapporo, Japan, July 3-8, 2000. The meeting was well attended - a list of the attendees is included at the end of this report. The following subjects were discussed:

### Upcoming Dobson intercomparisons:

The European Dobson Calibration Center Hohenpeissenberg/Hradec Kralove is operational, and intercomparisons are occurring - see the Dobson web pages. Next intercomparison campaign supervised by NOAA/CMDL is planned for the Southern Hemisphere, and Lauder, New Zealand is proposed. There is concern for the future of the intercomparison campaigns, and data users are being asked to support the campaigns.

### Dobson web pages:

The web site is operational and being supported by the Czech Hydrometeorological Institute. Operators are encouraged to investigate the site regularly for new postings, and submit information for inclusion, and suggestions for the site improvement. Intercomparison reports, instrument repair reports, and operational techniques will be published on this web site, as well as Archie Asbridge's memoirs.

### New reporting format for data submission to the WOUDC.

The new format (Extended Comma Separated Value – ExtCSV) has yet to have the formal endorsement of the WMO. The lack of this endorsement may be delaying the implementation of the format at some stations. Mike Proffitt (Secretariat of WMO) will work to secure the formal endorsement. The DOBSON-3.0 computer program does have the ability to format data in the new format. As this new format is much more flexible than the old one, all observations can and should be submitted to the WOUDC. Data collected for special projects is not always submitted to the WOUDC, and should be, after the completion of the project. There was some discussion of a broader-based data retrieval of different types, at a single site.

### Possible new sites, and instruments.

There are instruments not in use. Are there sites that should have these instruments? Two instruments (WMO owned) are in process of being rebuilt. One of these instruments has been proposed for a Siberian site. Data users have asked for more sites in the southern hemisphere, in the mid-latitudes – Atlantic and Indian Ocean areas. Two new stations are in progress – Maun, Botswana and Amberd, Armenia. Both stations equipped with re-calibrated instruments D015 (IOC) and D044 (German Meteorological Service) are to be in operation by the end of 2000.

### Re-valuation of data records after re-calibrations.

After an intercomparison, the existing data set often need revaluation in light of the results of the intercomparison. Investigation of historical data sets and results of recent

intercomparisons have shown that some of stations need re-calculation of their observations. A workshop on this subject was proposed, especially for stations located in the tropical and sub-tropical regions. The WMO is asked to organize such workshops in co-operation with DAHC - each considered for 7-10 participants.

#### Maintenance of the global network

Regular station audits and visits were proposed. Some regional calibration centers are doing these functions already. These are very important to data reliability, and evaluation.

#### New Developments:

It was suggested to include an Umkehr processing routine into the DOBSON-3 from the Czech Hydrometeorological Institute software package.

The Czech Hydrometeorological Institute offers to sell a semi-automated R-dial reading device, with a computer interface. This is the device similar to ones used in the Czech Republic and the USA. It can be used to improve observations by giving almost instant feedback to the operator as the quality of the measurements. A design of the facility and commercial aspects will be available at the Dobson web pages very soon.

A new version of electronics for Dobson instrument has been developed and is installed in the network by NOAA/CMDL. This also will be described at the Dobson web pages.

#### **Attendees:**

Gerrie Coetzee	South African Weather Bureau
Wafik Sharobiem	Egyptian Meteorological Service
Ghalal Kamal Hassan	Egyptian Meteorological Service
Ahmed A. Gahein	Egyptian Meteorological Service
Toshitumi Fujimoto	Japan Meteorological Agency
Seiji Miyanchi	Japan Meteorological Agency
Neusa Paes Leme	Brazilian Institute for Space Research
Pierre Viatte	Swiss Meteorological Institute
Rene Stubi	Swiss Meteorological Institute
Rich Stolarski	NASA/Goddard
Ed Hare	WOUDC – Met. Service of Canada

Vitali Fioletov	WOUDC – Met. Service of Canada
Tiziano Colombo	Italian Met. Service
Malgorzata Degorska	Polish Academy of Sciences
Laura Manea	Romanian Nat. Met and Hydr. Inst.
Ulf Koehler	German Weather Service
Karel Vanicek	Czech Hydrometeorological Institute
Mike Proffitt	WMO
Bob Evans	NOAA