

File Revision Date:

September 10th, 2019

Scoresbysund (Ittoqqortoormiit) Greenland, ozonesondes, launching commenced in 1989.

Over the years Science Pump, 5a, 6a, and ENSCI z-sondes have been used together with Vaisala interface cards. Since December 10th 2015 radiosondes of type RS-41 and interface card RSA411 has been in use. The corresponding Vaisala receiver (MW41) is being used to receive and record the data.

Since 1999 a home-made unit has been used for the ozonesonde calibration.

The pump time, measured during the preparation by a gilibrator (Gilian Instrument Corp.), has been used in the data reduction. Since 1999 the room temperature and humidity is recorded.

In all soundings since Oct 1991, the following 1% cathode solution has been used:

10 g KI

25 g KBr

1.25 g NaH<sub>2</sub>PO<sub>4</sub>\*H<sub>2</sub>O

3.73 g Na<sub>2</sub>HPO<sub>4</sub>\*7H<sub>2</sub>O

(from the Science Pump and ENSCI instruction manuals, amounts are per liter).

It is known that the ozone partial pressures measured with this cathode solution in ENSCI Z ozonesondes are too high. For this reason the resulting partial pressures are reduced using the transfer function determined by Smit (Smit et al.: O3S-DQA Activity:Guide Lines for Homogenization of Ozone Sonde Data, 2012/13).

If applied a note on the recalculation is inserted in the data file.

An ozonesonde is launched once a week if weather allows. In case of a running Match Campaign further ozonesondes may be launched during the months February and March.

Nis Jepsen

Danish Meteorological Institute

nje@dmi.dk