The data collection and transmission system at the Tiksi HMO

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Detailed scheme of HMO LAN
Problems

• Low proficiency and low motivation of local staff
• Poor quality and unstable electricity
• Acquisition computers are the different old used laptops. There is no reserve for fast replacement
• Operation system on most acquisition computers is Windows XP. It complicates remote management and data transfer
• Local network in Meteo building is in bad condition
The report on the collected data for the last three years
The data from the NOAA instruments
The data on BSRN have started coming from June 8, 2010. The data arrives on the AARI server every day. During the all observation period the problems were two times:

1) from Dec 24, 2010 up to Jan 12, 2011. A storm dropped a power line pole.
2) Aug 8 - Aug 18. There were electricity supply problems.
The data on the reflected solar radiation data have started coming from April 21, 2011.

The data arrives on the AARI server every day. During the all observation period the problem was once:

1) from Jul 31 up to Aug 3. There were electricity supply problems.
The climate data have started coming from April 27, 2011.
The data arrives on the AARI server every day. During the all observation period the problems were two times:
1) from Feb 20 up to Mar 5, 2011: the fans did not work.
2) from Jul 29 up to Aug16. There were electricity supply problems.
The sun photometer data have started coming from June 10, 2010.
The data arrives on the AARI server seasonally: from spring to autumn.
in 2010: from Jun 10 up to Nov 22
in 2011: from May 26 up to Nov 23
in 2012: the photometer has been working from May 24
The data on black carbon have started coming from September 29, 2009.

The malfunctions were only twice:

1) Dec 24, 2010 the problems with air inlet.
2) Dec 27, 2011 the problems with air inlet.

From Jan 28, 2012 the data have started to arrive automatically on the AARI server every day.
The data have started coming from Oct 20, 2010.
The data are taken from the instrument by hand once every two weeks.
The data from the FMI instruments
• The aerosol data have started coming from June 6, 2010.
• For all period the problems have been observed two times:
  • 1) from Dec 24, 2010 up to Jan 12, 2011 a power line pole was dropped, no data
  • 2) from Jul 18, 2012 the data have stopped coming. The problem with the hard drive.
Data on greenhouse gas emissions have started coming from July 4, 2010.

The malfunctions were several times. The main reason is short-time power blackout.
• The data on soil and air have started coming from August 1, 2010.
• The malfunction was only once:
• December 24, 2010 A snowstorm dropped a power line pole.
The flux data have started coming from October 8, 2010.

Raw fails data have started automatically coming on the AARI server from April 5, 2011.
The data from the tower

IAP RAS Instruments
The gas analyzer data

- The data have started coming from April 26, 2011.
- The data arrives on the AARI server every day.
The acoustic anemometer data

- The data have started coming since April 29, 2011 from all anemometers.
- The malfunctions:
  - 1) The Sonic 3 meter data stopped coming on July 16, 2011.
  - 2) On December 26, 2011 Sonic 15 meter blew away in a strong wind into the tundra.
• The data of temperature, wind speed and direction have started coming on the AARI server from April 26, 2011.
• The malfunctions: 1) The reason is short-time power blackout.
The data from AARI instruments
The data on standard meteorology and exhaust thermometers

- The data on standard meteorology have been registered by the staff of Polyarka, the corresponding files arrive on the AARI server every day in proper time.
- The data from exhaust thermometers have been registered by hands.
- The malfunctions: 1) PC problems in February and April 2012.
The data on actinometry and greenhouse gas

- The data on actinometry have been registered by hands.
- The data on CO2 have been registered by hands from spring to autumn, have come by e-mail.
- The malfunctions: 1) PC problems in February and April 2012.
- 2) CO2-meter does not work since July 13, 2012.
Dear colleagues,

Thank you for attention to this report on the collected data for the last three years.

THANKS!