Background for data from Engabreen

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To:Paul Leclercq <paul.leclercq@geo.uio.no>;

0 3 attachments

MapFlybilde_Engabreen_PiM_editedFinal3.jpg; MapStations.jpg; TimeSpanData2.pdf;

Hei Paul,

I leave tonight a flash drive on your desk with Precipitation and Air Temperature data that I mention below.

I summarise the weather data available around the Svartisen Subglacial Laboratory (SSL) between 1990-2014 (also see TimeSpanData.pdf for span of all data available). I attach two overview maps with the main official longterm weather stations: <u>Glomfjord</u>, <u>Reipaa</u> and <u>Skjaeret</u>; and the discharge stations: Engabrevatn, SSL(2 stations) and Engabreelv.

Weather data (Air temperature and Precipitation) are openly accessible via <u>eKlima.no.</u> If you start downloading some data, I have a couple of recommendations to give you (see end of the email). > Air Temperature: - <u>Glomfjord</u> AWS at 1hr interval for period Sep 1997-Mar 2010. Relatively good. (earlier data have daily/4hr interval)

- Reipaa at 1hr interval since Sept 2009. No data before.
- <u>Skjaeret</u> at 1hr interval since 1995. With gaps, and sometimes unreliable because of harsh weather on the nunatak.
 - Engabrevatn (NVE Data) at 1hr interval since June 2010.
- > Precipiation: <u>Glomfjord</u> at daily interval before Sept. 1997 and then hourly until 2004. Seems to malfunction from 2003.
- <u>Reipaa</u> at daily interval before Sept 2009 and then hourly (two months transition July-Aug: Measurements at 07:00 and 19:00).

Discharge Data will potentially be accessible via Sildre.no, but come directly from NVE.

- <u>Engabrevatn</u> daily data since 1969 with irregular time series, becoming hourly from 1992.
 - Engabreely at 1hr interval since May 2012
 - SSL: Sediment Chamber at 1hr interval since June 1992

DEM: I have heard that they have done laser scanning in Sept 2000, Sept 2002, Sept 2003, Aug 2008 and Sept 2013. I have hold on the last one, only. Might not cover the whole catchment (only lower part). I would suggest to start using the SRTM DEM.

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Surface Velocity: Alexandra Messerli and Thomas Schellenberger have produced velocity maps of Engabreen for the last 2 years, but don't know the extent (not yet published, but keen in collaborating).

I have produced at the beginning of my PhD a report on all data available near Engabreen, you can access it at: http://ncoe-svali.org/xpdf/ssl_data_pim_2013_09.pdf

Cheers, PiM

Recommendations for using eKlima.no:

After registration, they are accessible in the panel Observations. The region, where are the stations located, is called Nordland.

Their server is not able to create large files. I had to get the data per periods of two years. The data will come in Norwegian Mean Time (NMT=UTC+1), which is winter time all year around. Don't forget to select dot instead of commas for decimals. Norwegians use by default commas!!!

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