Site name: Abernethy Flats



Device codes: JF; *XX-snow*

Coordinates: S63°52'52.9"; W57°56'53.7"

Altitude: 41 m

Site description:

The study site is located in the northern part of Ulu Peninsula, James Ross Island. Both meteorological and ground data are available. The surroundings is covered by regolith and there is open sea to the north of the study site in the distance of approx. 2,5 km.

Measured parameters:

Current setting:

JF - Air temperature and Relative humidity (200 cm) – since 11 January 2006

JF - Surface temperature – since 11 January 2006

JF - Soil temperature (5, 10, 20, 30, 40, 50 cm) – since 11 January 2006

JF - Soil temperature (75 cm) – since 6 February 2012

JF - Soil heat flux (5, 20 cm) – since 28 January 2015

*XX -* Snow depth – since 4 February 2016

Cancelled measurement:

AF - Air temperature and Relative humidity (200 cm) - between 4 February 2013 and 30 January 2014

JF - Soil heat flux (2 cm) – between 14 January 2006 and 28 January 2015

Measurement interval:

JF – 30 min

*XX – 180 min*

Total data availability: 95 %

Data quality: 2 (several errors occurred)

Missing data period: 15 September 2011 – 6 February 2012 (113 days)

Published data period: 6 February 2012 to 31 March 2015

Cited as: Hrbáček, F., Nývlt, D., Láska, K., 2017. Active layer thermal dynamics at two lithologically different sites on James Ross Island, Eastern Antarctic Peninsula. Catena. <http://dx.doi.org/10.1016/j.catena.2016.06.020>

Data files:

Complete time series – raw data:

JF\_refin\_2012.dcv (11 January 2006 to 6 February 2012)

JF\_refin\_2015.dcv (6 February 2012 to 28 January 2015)

JF\_refin\_2016.dcv (since 28 January 2015)

*XX\_refin\_2016.dcv (since 4 February 2016)*

Soil texture sampling: 29 January 2015

Soil texture results: Not Available

Soil moisture sampling: 29 January 2015

Soil moisture results: Available – Abernethy\_SoilMoisture.xlsx

