

Operation IceBridge, OIB:

1. Laser freeboard from ATM (green laser),
2. Snow depth from snow radar
3. surface roughness from ATM

Version IDCSI4 downloaded from nsidc.org. Final data sets are available for:

Arctic 2009-2013

Antarctic 2009-2010

Quicklooks:

Arctic 2014-2015

Antarctic ... none

NASA OIB observations have been averaged in 50km sections along-track, whereas surface roughness has not been averaged.

collocation with CS2 freeboard heights averaging CS2 data using a 25 km search radius on individual tracks and date of observation plus/minus 14 days.

CRREL IMB observations have been collocation with ENVISAT freeboard heights averaging ENVISAT data using a 50 km search radius on individual tracks and date of observation plus/minus 14 days.

An overview of the flights included in the RRDP2 is given below.

ARCTIC:

IMB ID	Start date	End date	CS2	ENVISAT
2009	20090331 20090402 20090405 20090421 20090425	FISHY		X
2010	20100323 20100326 20100402 20100405 20100412 20100419 20100420 20100421	FISHY		X
2011	20110316 20110317 20110318 20110322		X	X*

	20110323 20110325 20110326 20110328 20110415			
2012	20120314 20120315 20120316 20120317 20120319 20120321 20120322 20120323 20120326 20120327 20120328 20120329 20120402 20120410	FISHY FISHY	X	X*
2013	20130320 20130321 20130322 20130323 20130324 20130425 20130326 20130327 20130422 20130424		X	

*Only data north of 81.5N

ANTARTIC:

IMB ID	Start date	CS2 ESA	CS2 AWI	ENVISAT
2009	20091021 20091024 20091030			X
2010	20101026 20101028 20101030	FISHY		X

Data format:

- *Observation ID*
- *Time (YY-MM-DDTHH:MM:SS)*
- *Latitude (dechr)*
- *Longitude (dechr)*
- *CS2 AWI/SICCI freeboard heights (m)*
- *CS2 ESA freeboard heights (m)*
- *ENVISAT SICCI freeboard heights using OSISAF as sea ice types (m)*
- *ENVISAT SICCI freeboard heights using IFREMÉR as sea ice types (m)*
- *OIB laser freeboard (m)*
- *OIB snow depth (m)*
- *OIB surface roughness*
- *W99 snow depth (m)*
- *W99 snow density (kg/m³)*
- *NEMO-LIM3 modelled snow depths (m)*