

Sea Ice Advisory to 35th Antarctic Expedition

Dt. Jan 1, 2016

Highlights

The current extent of the fast ice layer is more than that was there during previous two expeditions i.e. 34th and 33rd ISEA (slide 2, Resourcesat-2 AWiFS Data and previous year's MODIS mosaic data comparison).

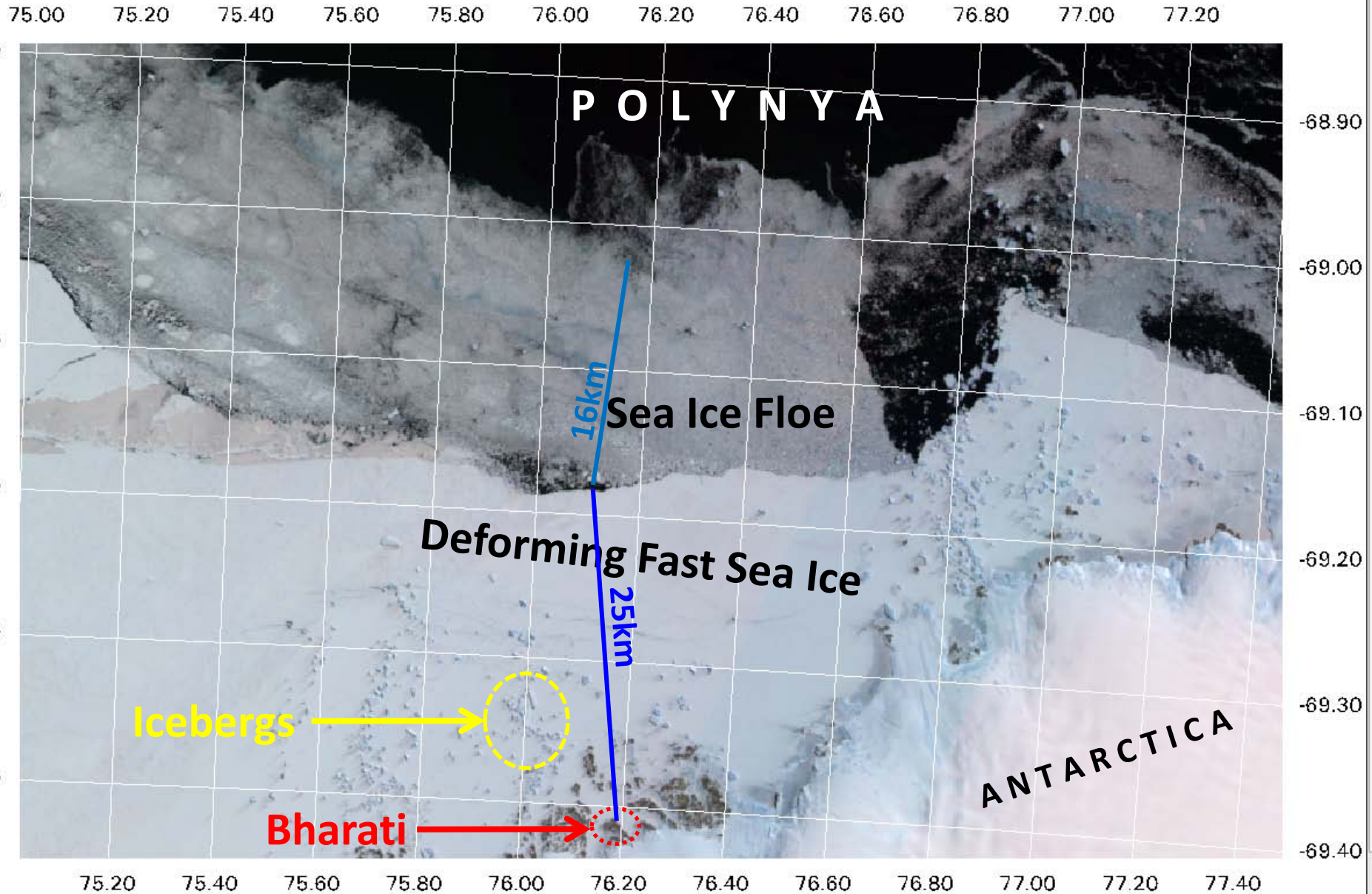
Multi-satellite data analysis shows that the fast ice layer attached to the Antarctic coast near Bharati is deforming slowly due to formation of cracks in it (see slides 3 and 4, Resourcesat-2 LISS-III Data).

Sea ice floe layer attached to the fast ice layer is composed of floe of varied dimensions. It is expected that Ivan Papanin will be able to sail through this layer (Slide 5, RISAT-1 SAR).

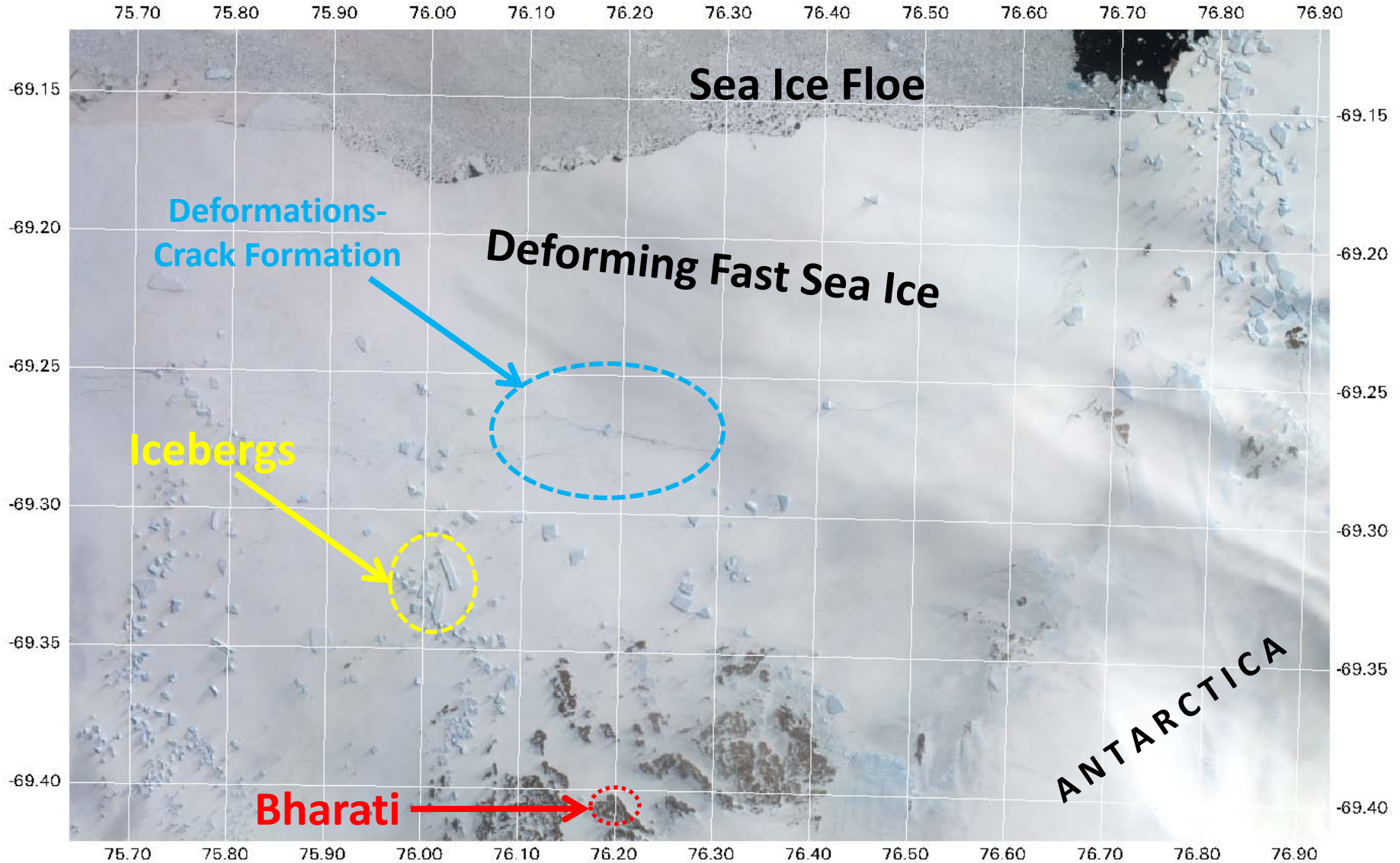
Low concentration sea ice may be encountered by the expedition ship before entering into the polynya near the Bharati coast (See slide 6, MODIS mosaic).

The extent of deforming fast sea ice near the coast is almost 25km and the floe layer between the polynya and the fast sea ice layer is almost 16km (Slide 2).

Sea Ice Status Near Bharati on Dec 30, 2015 (RS2 AWiFS Data)

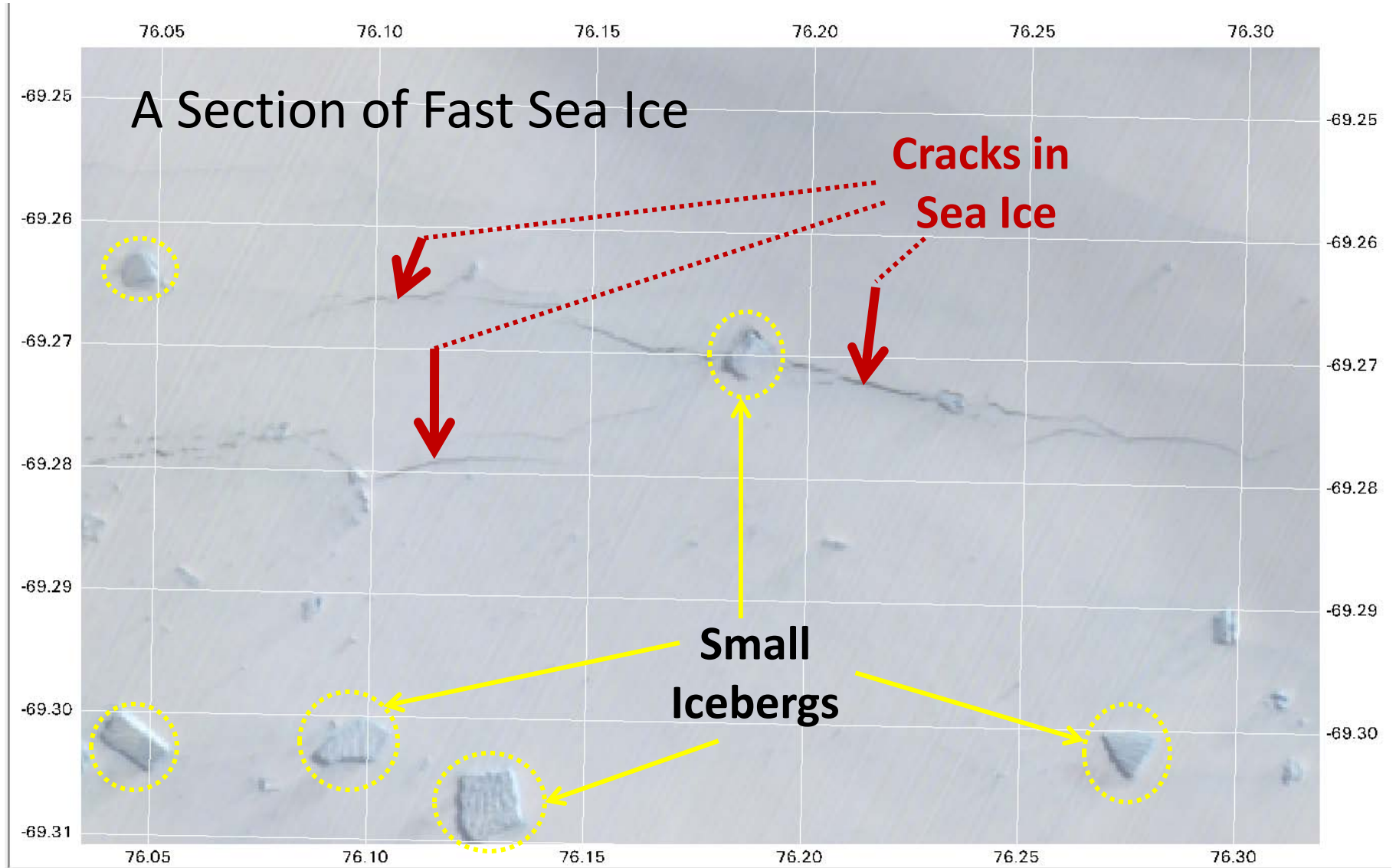


Sea Ice Status Near Bharati on Dec 26, 2015 (RS2 LISS-III Data)

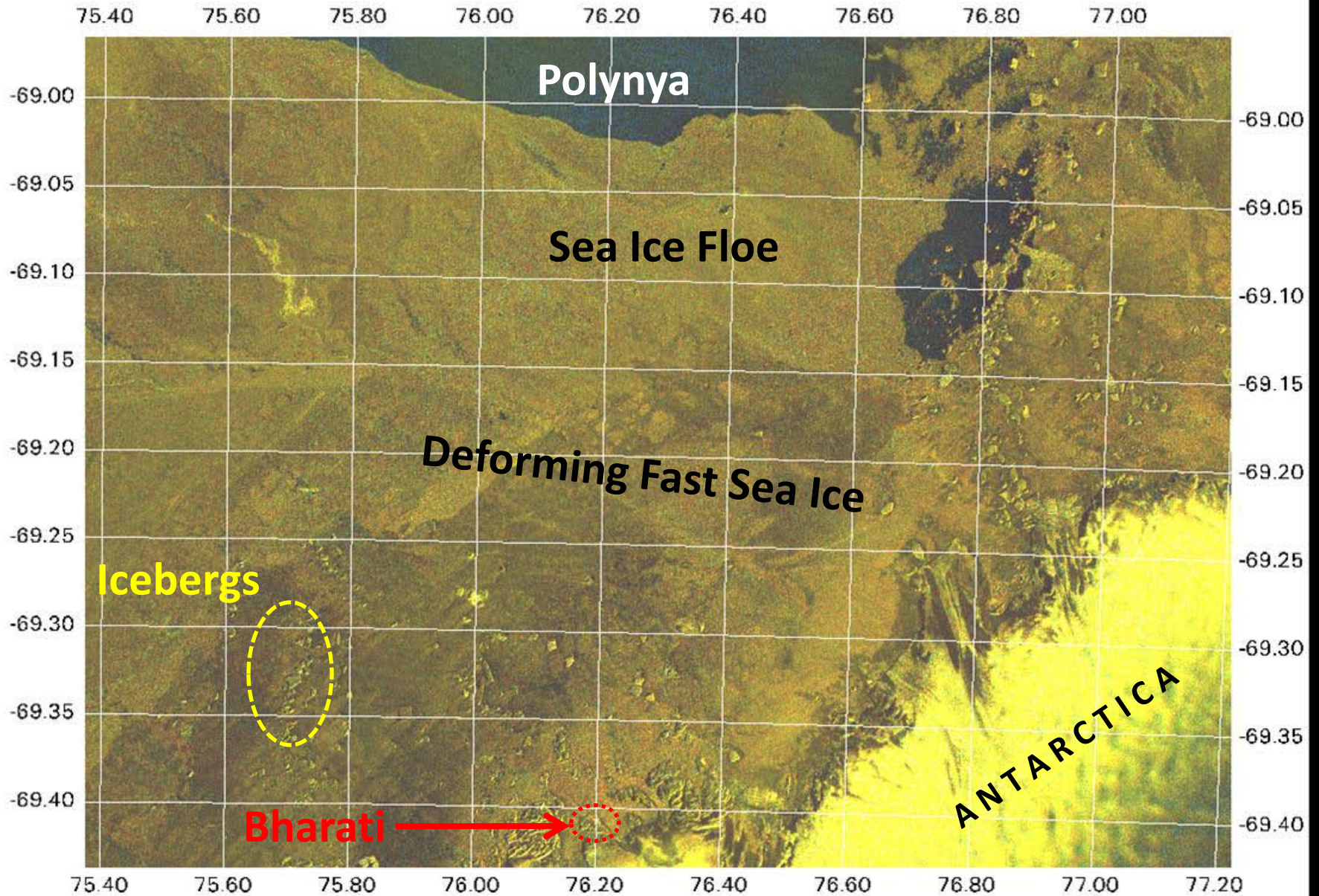


Sea Ice Status Near Bharati on Dec 26, 2015 (RS2 LISS-III Data)

Enlarged section showing cracks



Sea Ice Status Near Bharati on Dec 25, 2015 (RISAT-1 SAR CRS Data)



The Status of Fast Ice and Sea Ice Floe Near Bharati Coast (Antarctica): MODIS Mosaic (Terra) - Dec 30, 2015

