

Sea Ice Advisory to 34th Indian Scientific Expedition to Antarctica (3rd Sea Ice Advisory Dated Feb 23, 2015)

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Highlight:

Feb 23, 2015

- This year the situation is far better than the last year, as far as fast ice extent and sea ice presence in India Bay is concerned.
- As per the latest available RISAT SAR data and cloud free optical data, there is almost 15 km fast ice North of Indian Barrier.
- The fast ice North of Russian Barrier is almost 3 km, which may further decrease in coming days.
- The disintegration of fast sea ice is going on (as seen by Resourcesat-2 LISS-IV) over both the regions i.e. North of Indian Barrier and North of Russian Barrier.
- The fragmented sea ice on the way to reach fast ice edge, should not pose any serious resistance.

RISAT SAR Data over India Bay: Feb 19, 2015

Sea Ice

A & B: Expected Ship Locations
Distance A to In: ~15km.
Distance B to Rs: ~3km.

Fragmented
Fast Ice

B

Fast Ice

Rs

A

Fast Ice

In

Ice Shelf

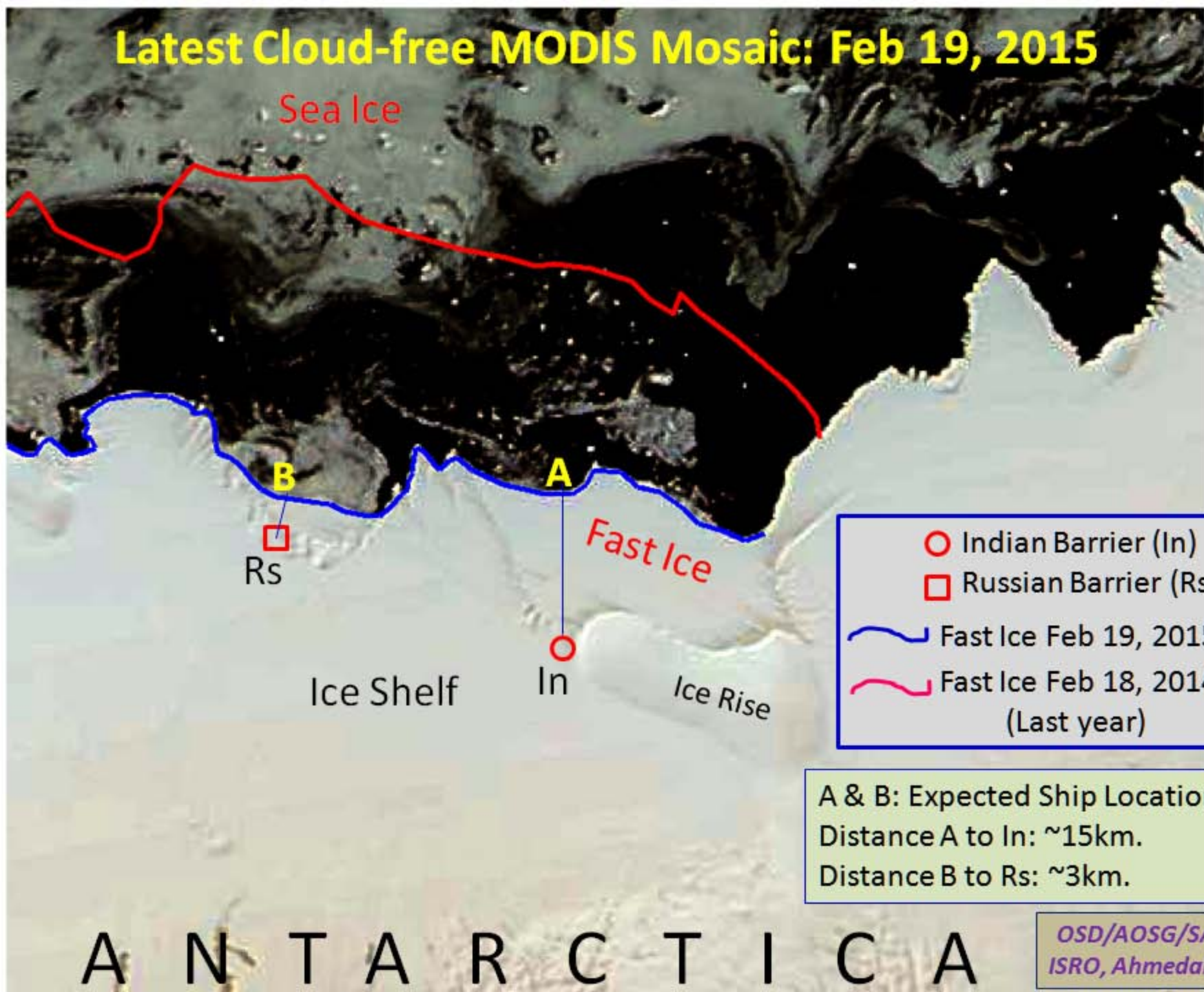
Ice Rise

- Indian Barrier (In)
- Russian Barrier (Rs)

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ANTARCTICA

Latest Cloud-free MODIS Mosaic: Feb 19, 2015



Sea Ice

B
Rs

A
In

Fast Ice

Ice Shelf

Ice Rise

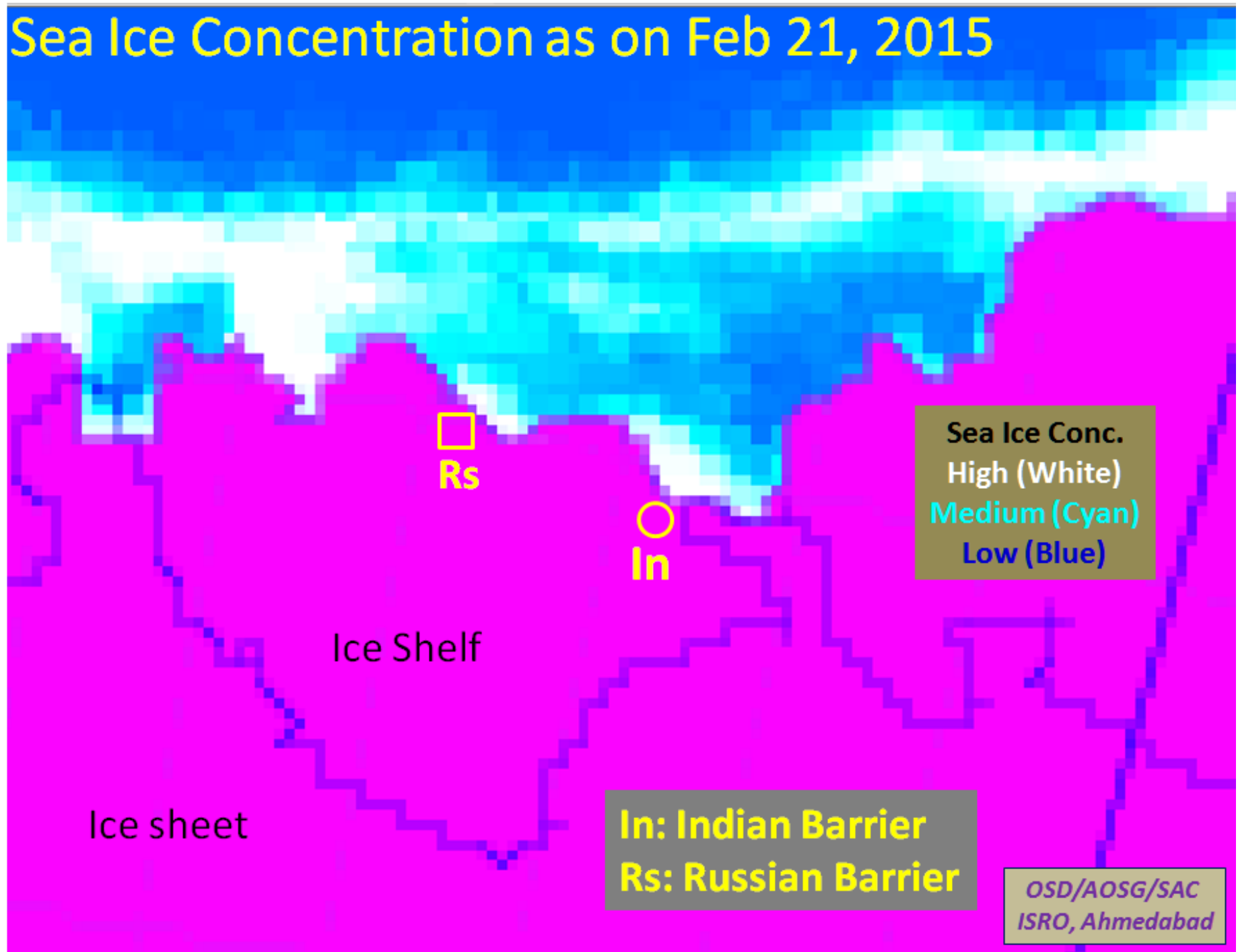
- Indian Barrier (In)
- Russian Barrier (Rs)
- ~ Fast Ice Feb 19, 2015
- ~ Fast Ice Feb 18, 2014 (Last year)

A & B: Expected Ship Locations
Distance A to In: ~15km.
Distance B to Rs: ~3km.

A N T A R C T I C A

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Sea Ice Concentration as on Feb 21, 2015



Rs

In

Ice Shelf

Ice sheet

Sea Ice Conc.
High (White)
Medium (Cyan)
Low (Blue)

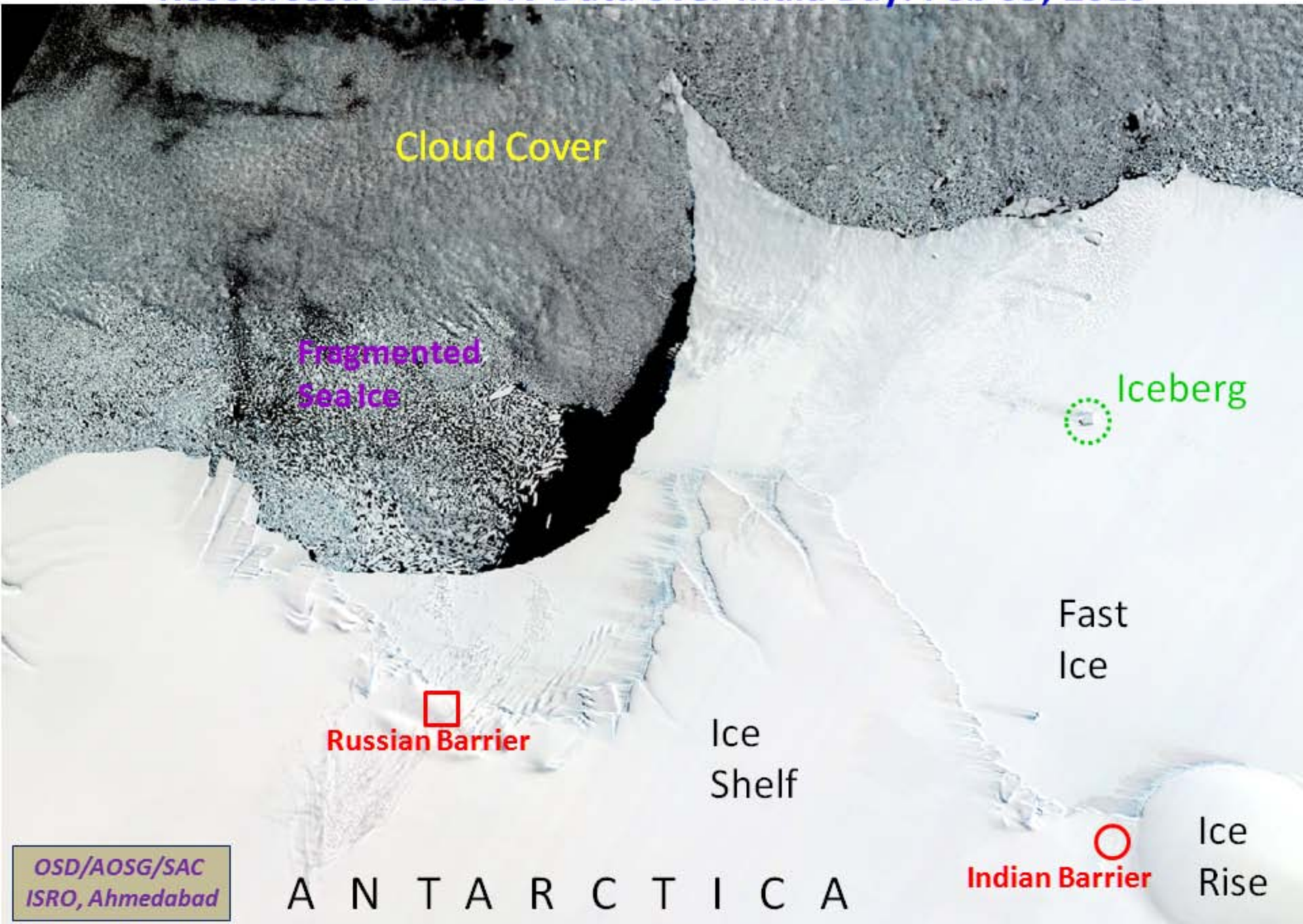
In: Indian Barrier
Rs: Russian Barrier

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Resourcesat-2 AWiFS Data over Maitri & India Bay: Feb 05, 2015



Resourcesat-2 LISS-IV Data over India Bay: Feb 05, 2015



Resourcesat-2 LISS-IV over Russian Barrier: Feb 05, 2015

FAST ICE



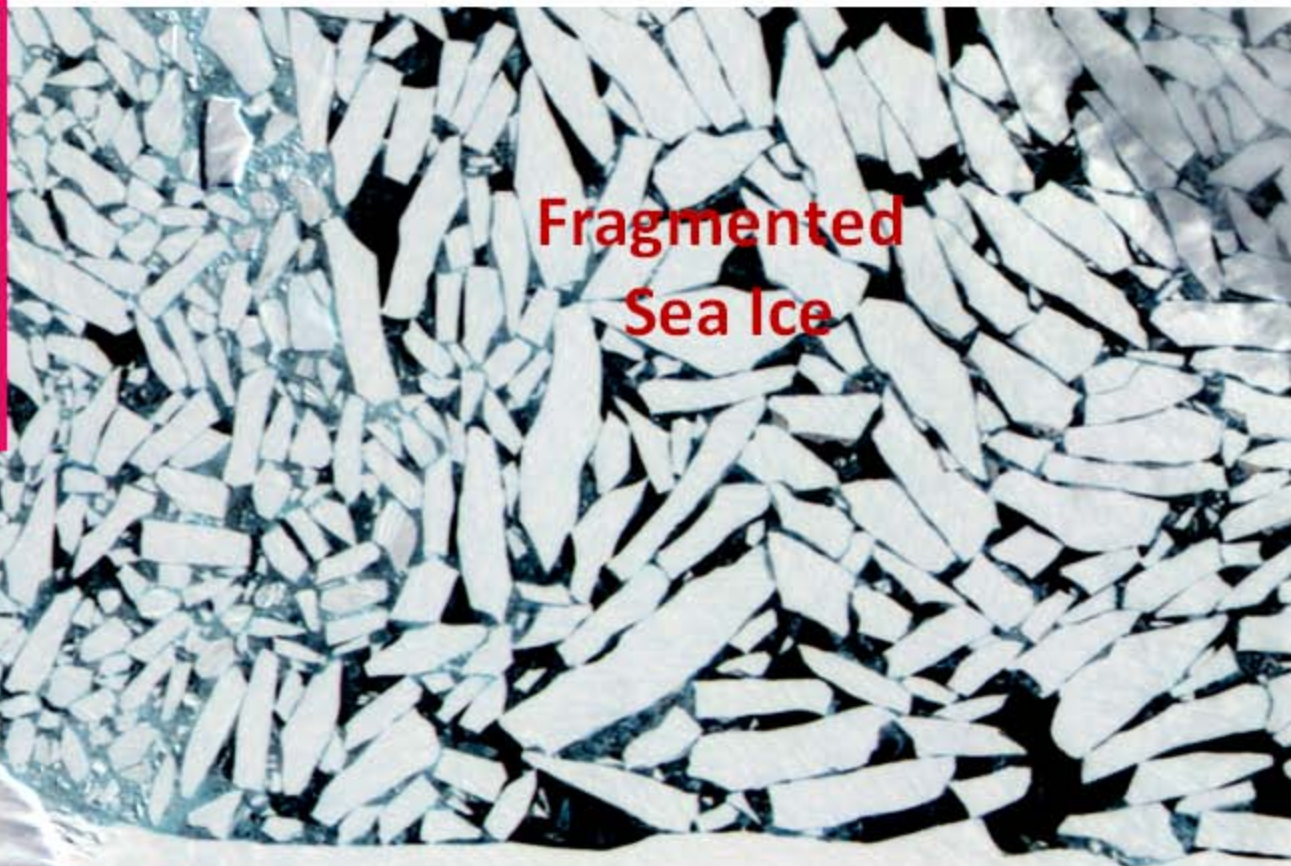
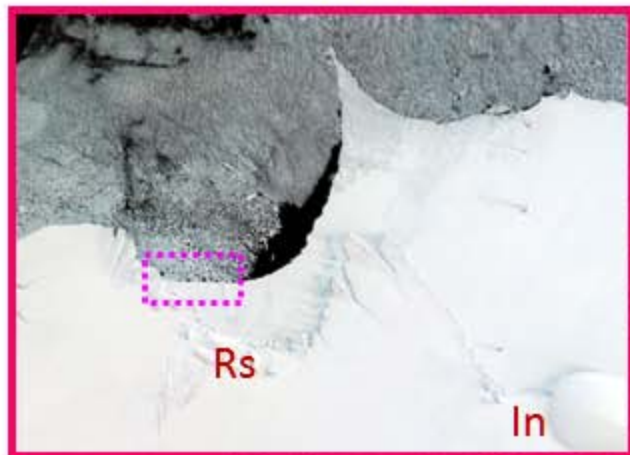
Containers seen at
Russian Barrier



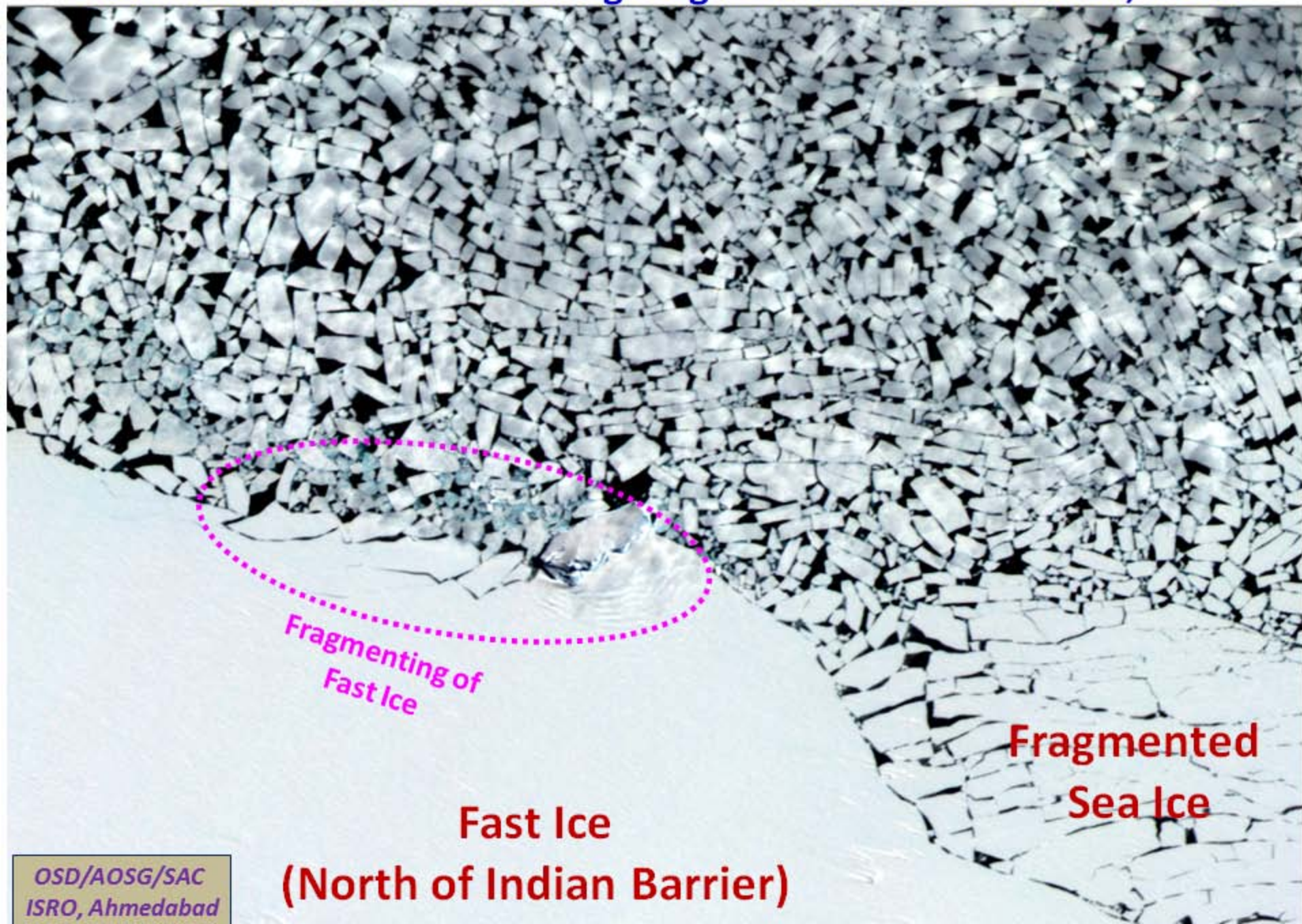
Ice Shelf
Disintegration

ICE SHELF

Resourcesat-2 LISS-IV Showing Fragmented Sea Ice: Feb 05, 2015



Resourcesat-2 LISS-IV Showing Fragmented Sea Ice: Feb 05, 2015



Fragmenting of
Fast Ice

Fragmented
Sea Ice

Fast Ice

(North of Indian Barrier)

Sea Ice Concentration (in %) as on 22-Feb-2015 (24:00 GMT)

0°E 2°E 4°E 6°E 8°E 10°E 12°E 14°E 16°E 18°E 20°E 22°E

