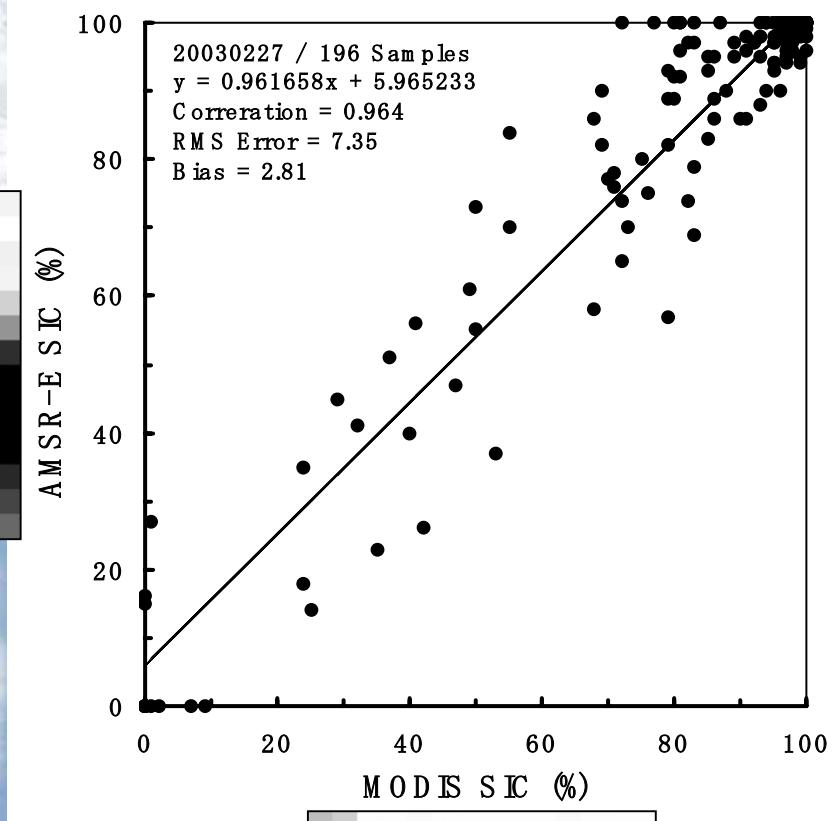
The background image shows a vast expanse of sea ice from an aerial perspective. The ice is composed of numerous white, irregular floes of varying sizes, separated by dark blue or black areas representing open water or leads. The overall texture is rough and fragmented.

Validation studies of AMSR-E ice concentrations in the Sea of Okhotsk

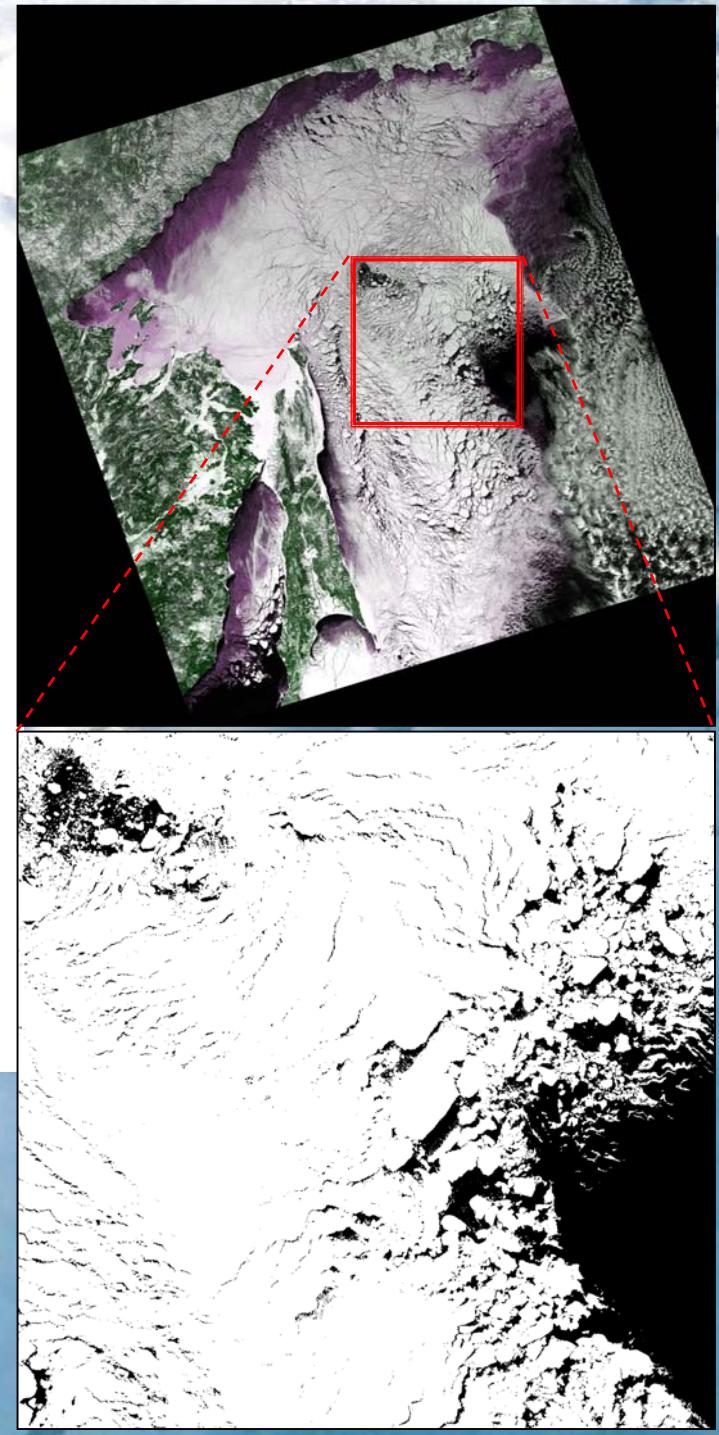
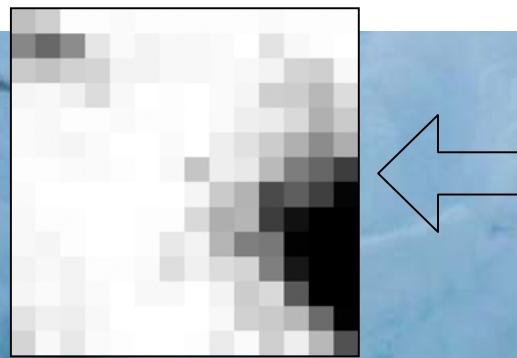
- First result of sea ice thickness and brightness temperature -

Masashige Nakayama / JAXA EORC
Fumihiko Nishio / Chiba University CEReS
Josefino C. Comiso / NASA GSFC
Al Gasiewski / NOAA ETL

Validation using MODIS



February 27, 2003
Sea of Okhotsk



Aircraft and ship observation

- February 5 – 14, 2003.
 - Sea of Okhotsk
- August 16 – September 4, 2003.
 - Bellingshausen Sea
- September 11 – October 30, 2003.
 - Hobart to Casey station (AUS)
- February 5 – 14, 2004.
 - Sea of Okhotsk

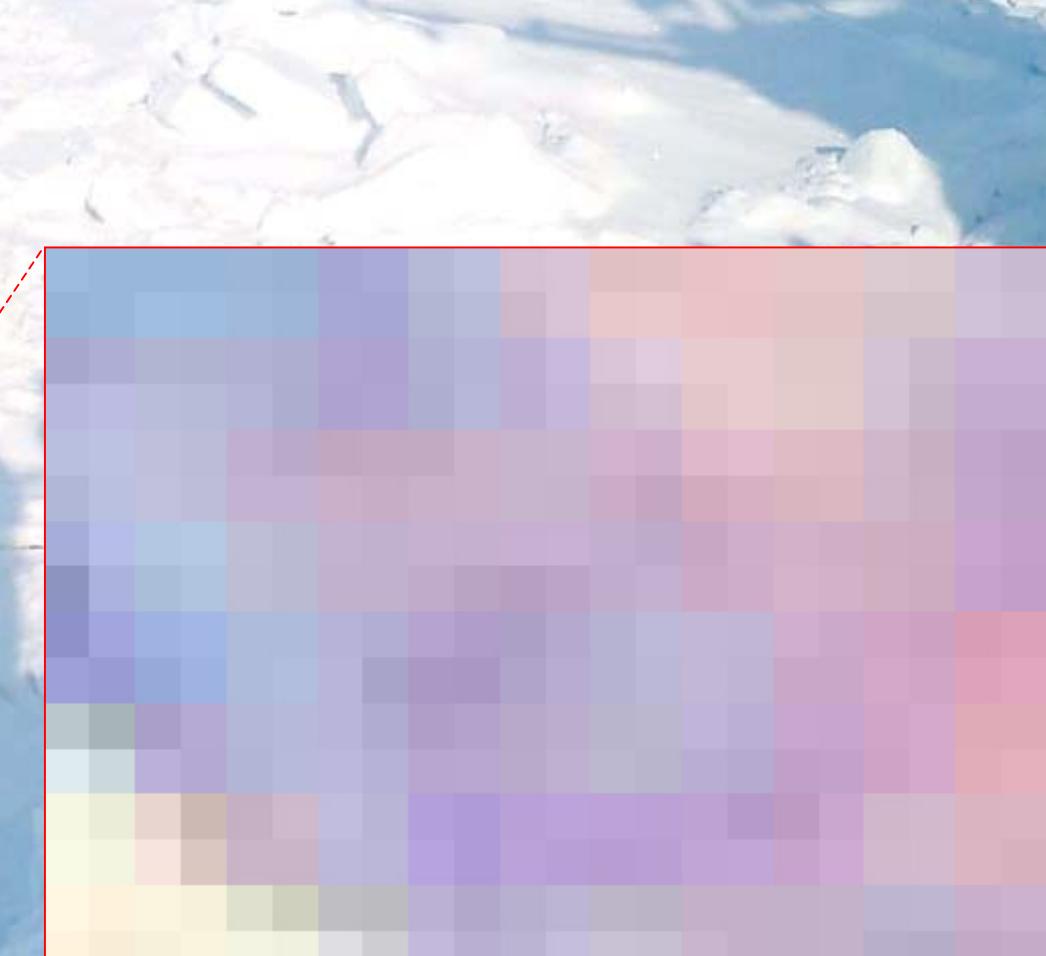
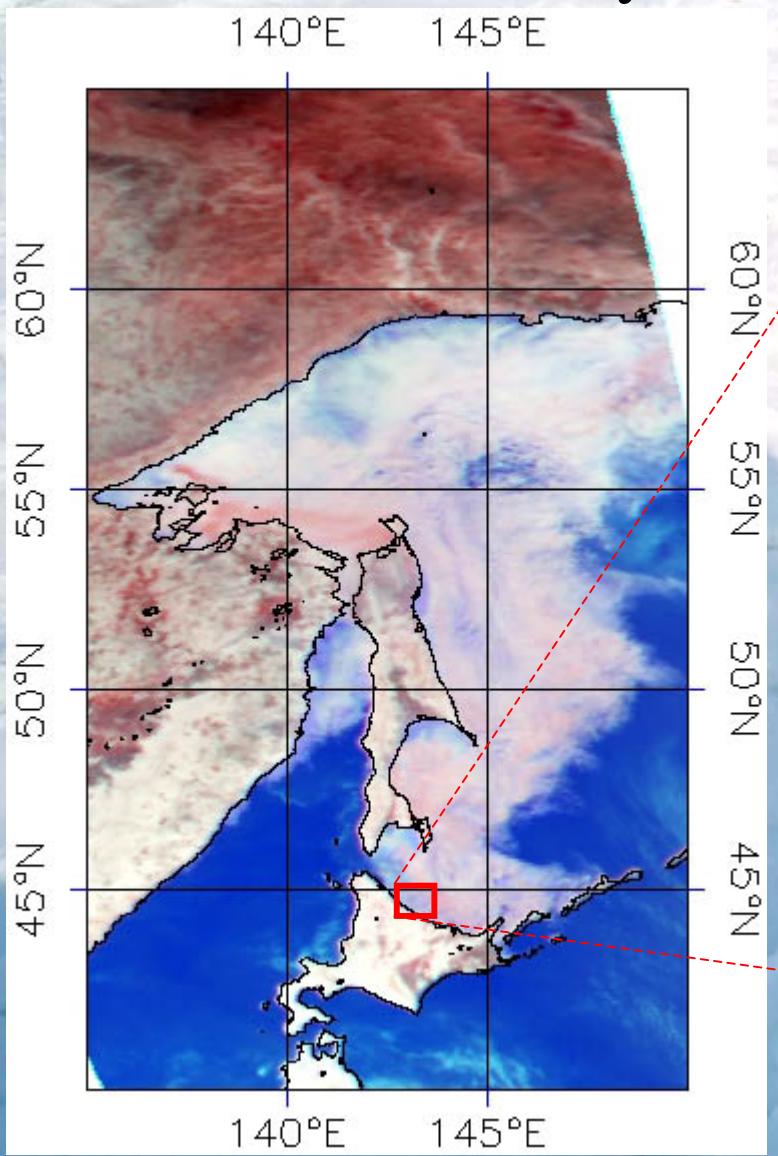


Japan Coast Guard P/V SOYA



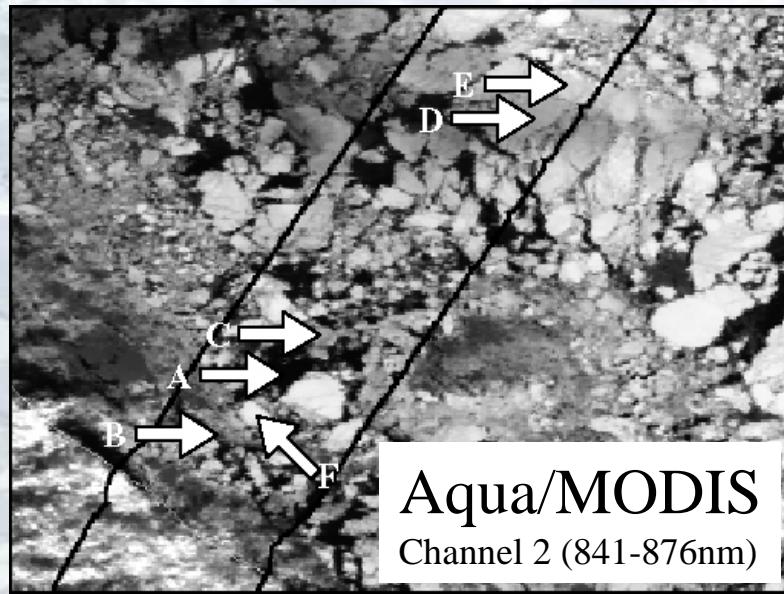
Concurrent observations

February 7, 2003 Sea of Okhotsk

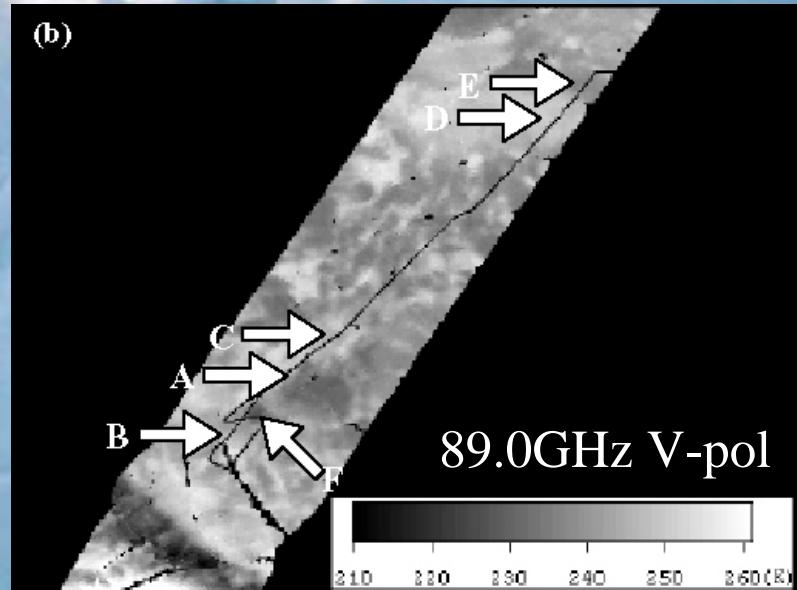
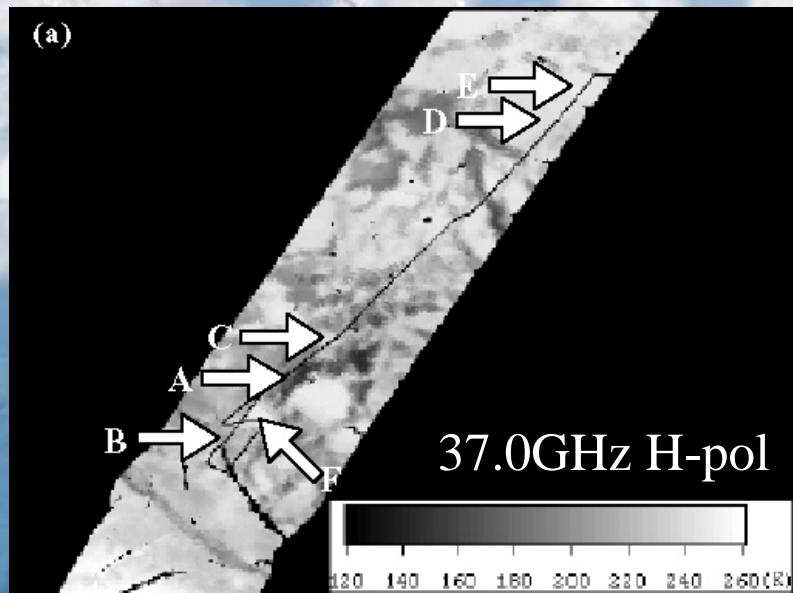


AMSR-E (RGB : 36.5H, 89.0H, 89.0V)

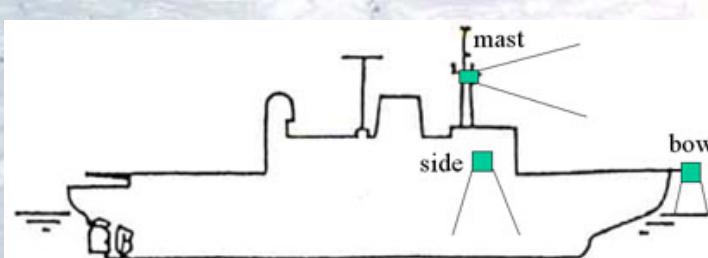
PSR data over P/V SOYA



NASA P3-B PSR

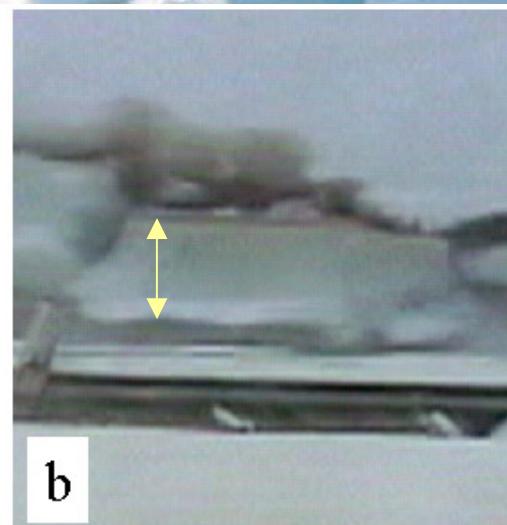
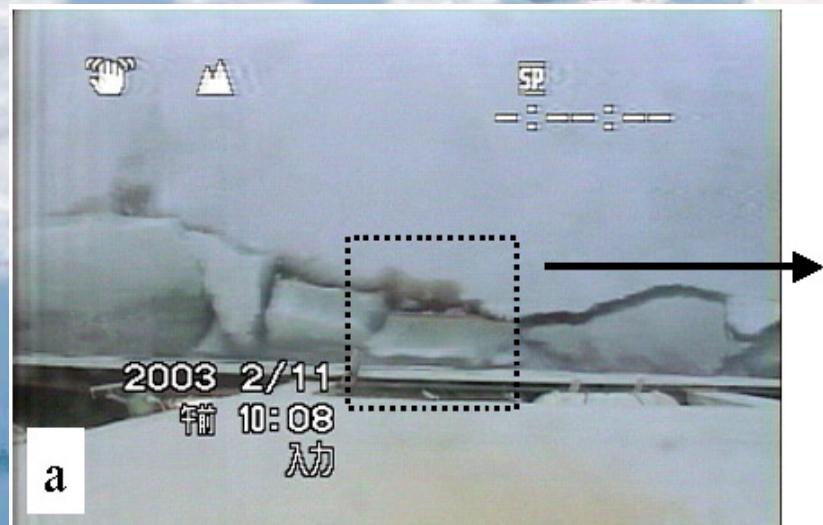


Sea ice thickness observation from ship



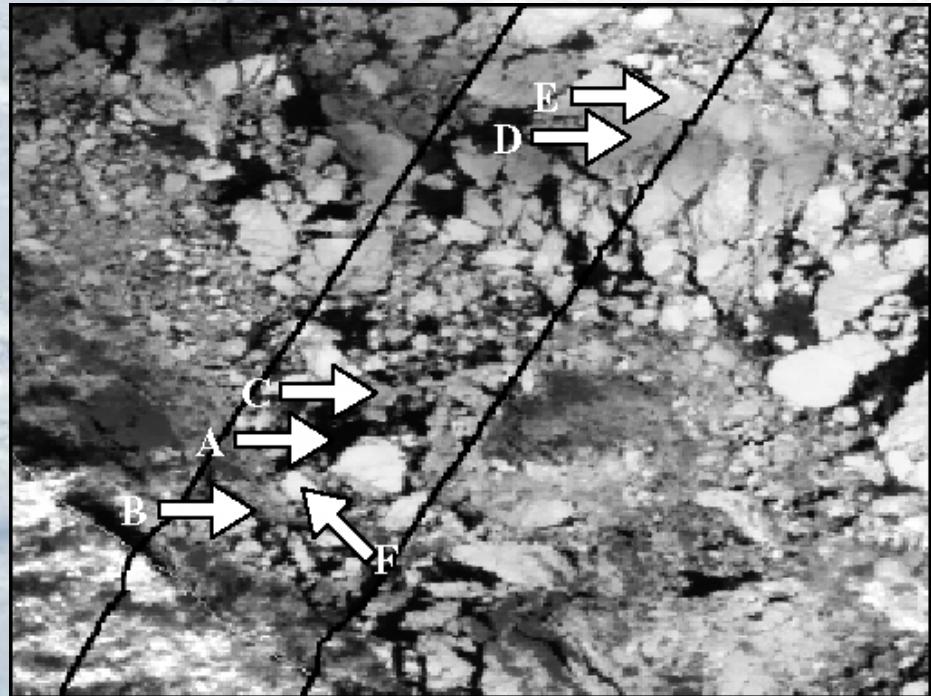
Position of camcorder
on P/V SOYA

Sample images taken by camcorders
a:mast, b:bow, c:broadside



Example image of
measuring sea ice thickness

Average sea ice thickness of area A ~ F



A (>2cm)

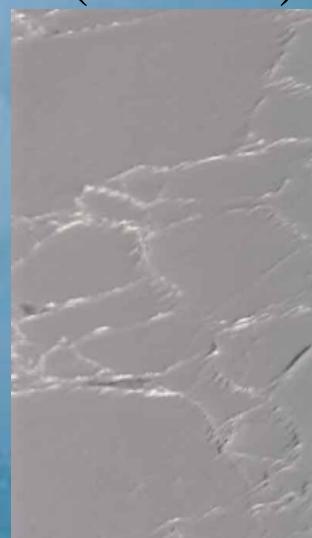
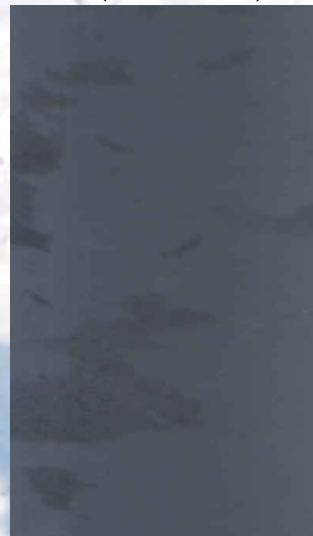
D (18.5cm)

B (6.8cm)

E (27.2cm)

C (11.1cm)

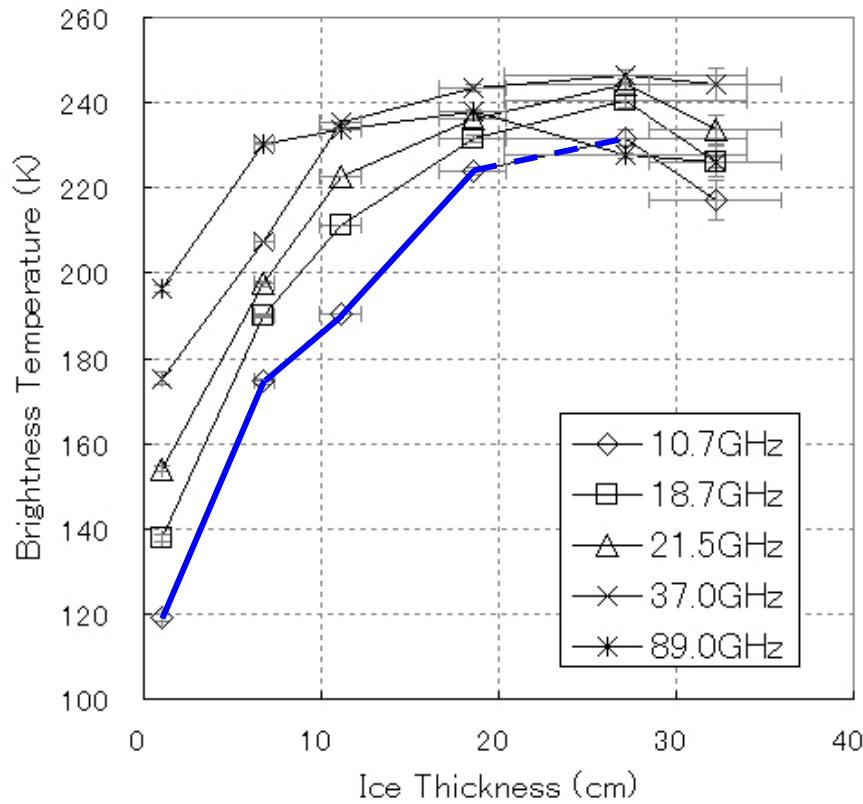
F (32.2cm)



Relationship of brightness temperature to sea ice thickness

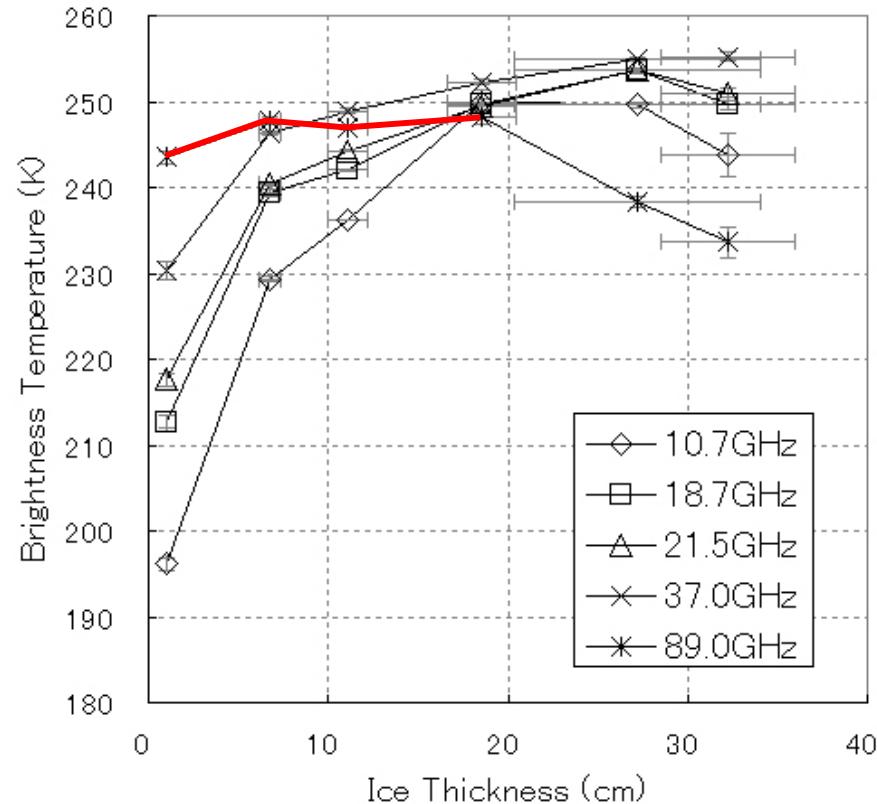
(A)

Horizontal polarization



(B)

Vertical polarization





ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)



マイコンピュータ

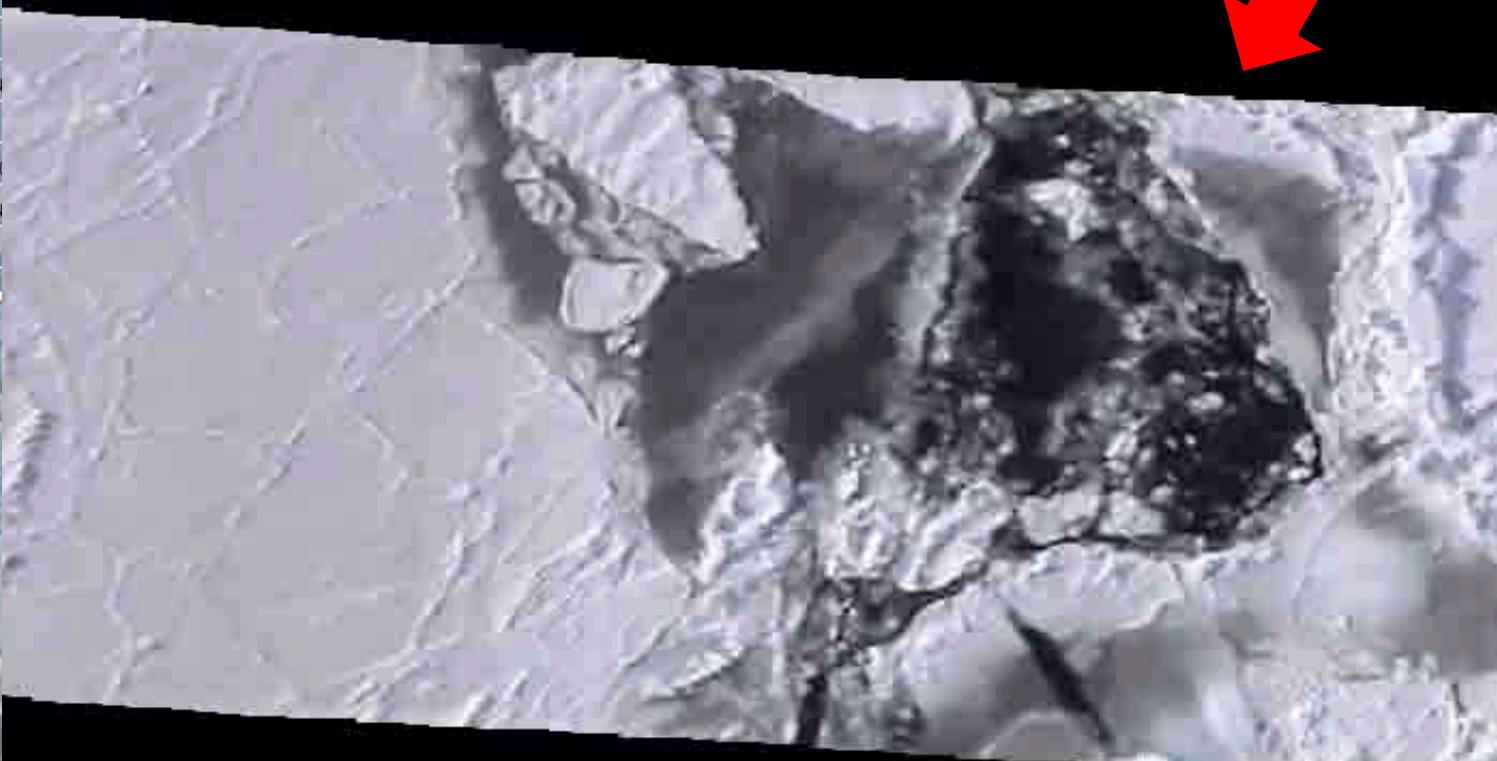
ページが表示されました

1431.162 142 K 45.0441 - 144.5510

year	month, day
2003	February 5 - Febru
2003	August 16 - Septe
2003	September 11 - Oct
2004	February 5 - Febru
2005	February

[Validation Data]

Feb. 2003 -- from
Aug. 2003 -- from
Sep. 2003 -- from
Feb. 2004 -- from



1425.jpg 114 K 44.0000 - 144.0000

ページが表示されました

マイコンピュータ

Valid

E ¥ EORC_検証実験データ公開サイト用¥sea_ice.htm - Microsoft Internet Explorer

AMSRE AMSR-E Sea ice validation

[Validation Activities]

year	month, day	area	platform
2003	February 5 – February 14	Sea of Okhotsk	P/V SOYA
2003	August 16 – September 4	Bellingshausen Sea	R/V LMG
2003	September 11 – October 30	Indian Ocean	R/V AA
2004	February 5 – February 14	Sea of Okhotsk	P/V SOYA
2005	February	Sea of Okhotsk	P/V SOYA

[Validation Data]

Feb. 2003 -- from P/V SOYA ([SatelliteImage], [Mosaic])
Aug. 2003 -- from R/V LMG (---, [GPS], [SeaIceThickness])
Sep. 2003 -- from R/V AA (---, [GPS], [SeaIceThickness])
Feb. 2004 -- from P/V SOYA

