

5th INTERNATIONAL ICE ANALYST WORKSHOP



Navigating Sea Ice and Icebergs of Antarctica

CDR Kenneth J. Boda
Icebreaker and Buoy Tender Chief,
Office of Cutter Forces (CG-751)



USCGC POLAR STAR (WAGB 10)

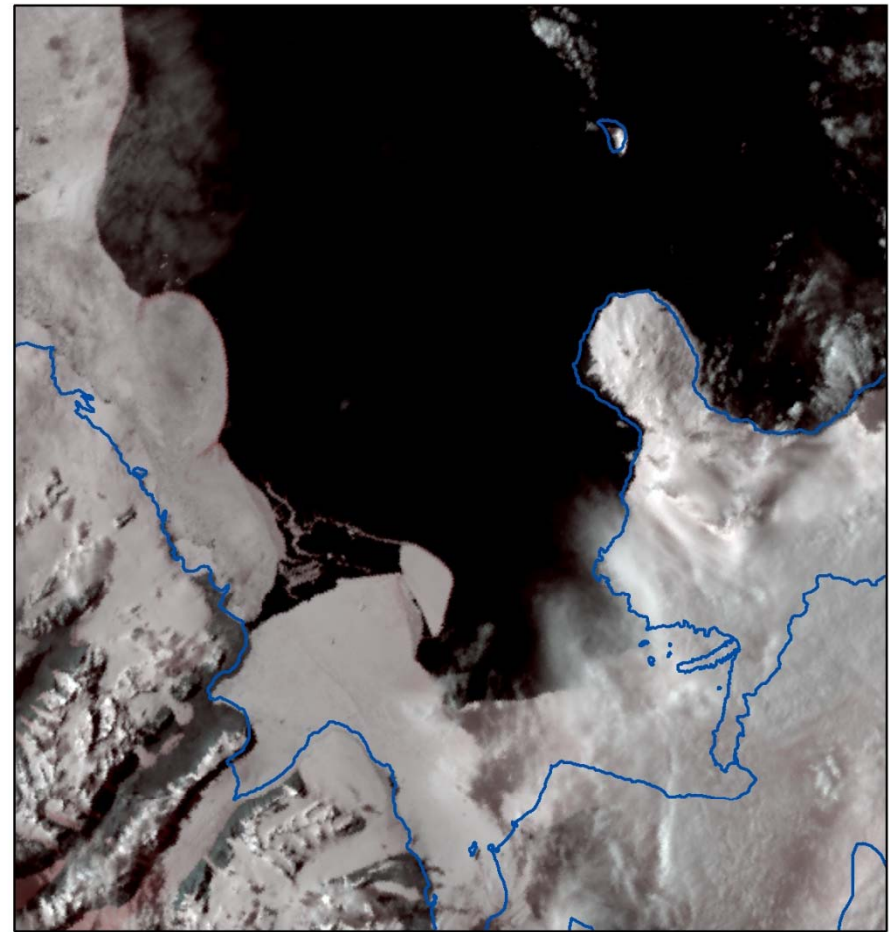
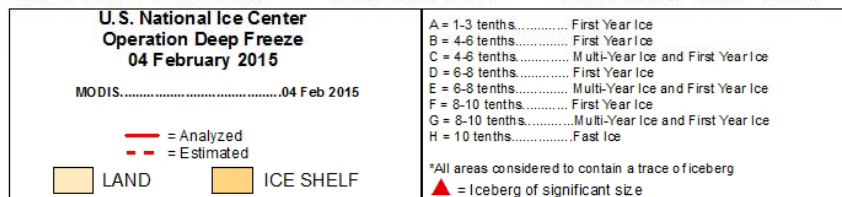
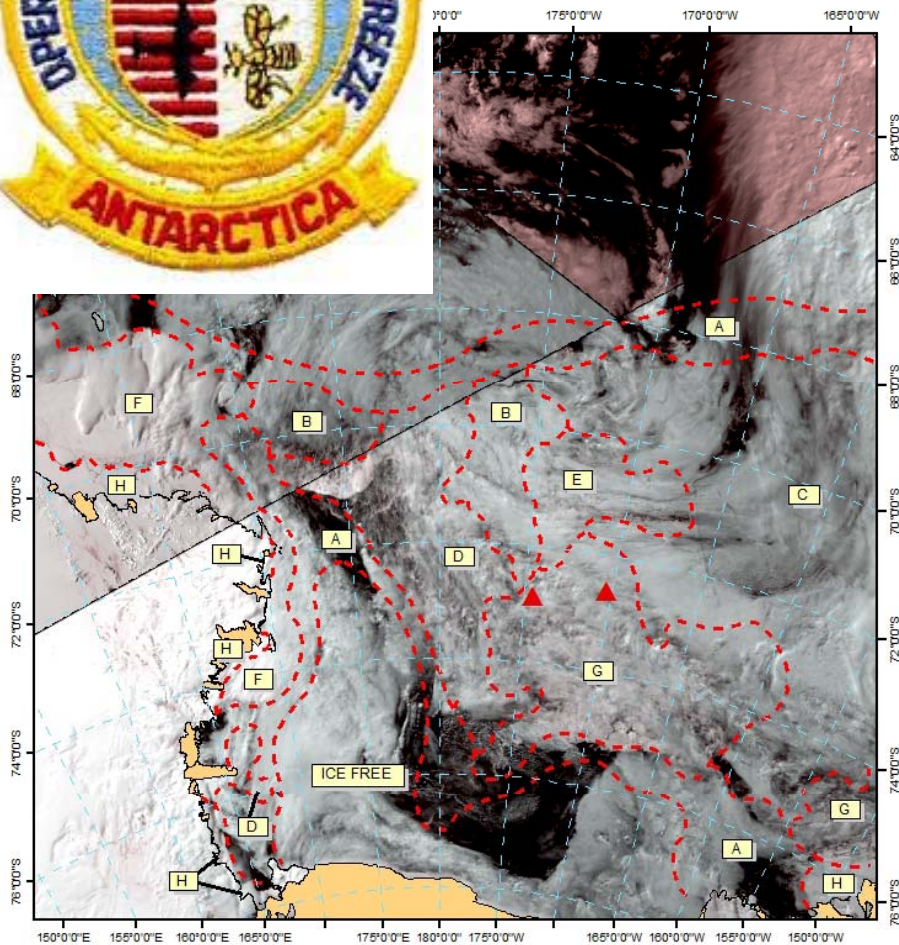


POLAR STAR Crew





Operation DEEP FREEZE



McMurdo Zoom

No analysis provided for this increased zoom.

Image provided as a courtesy

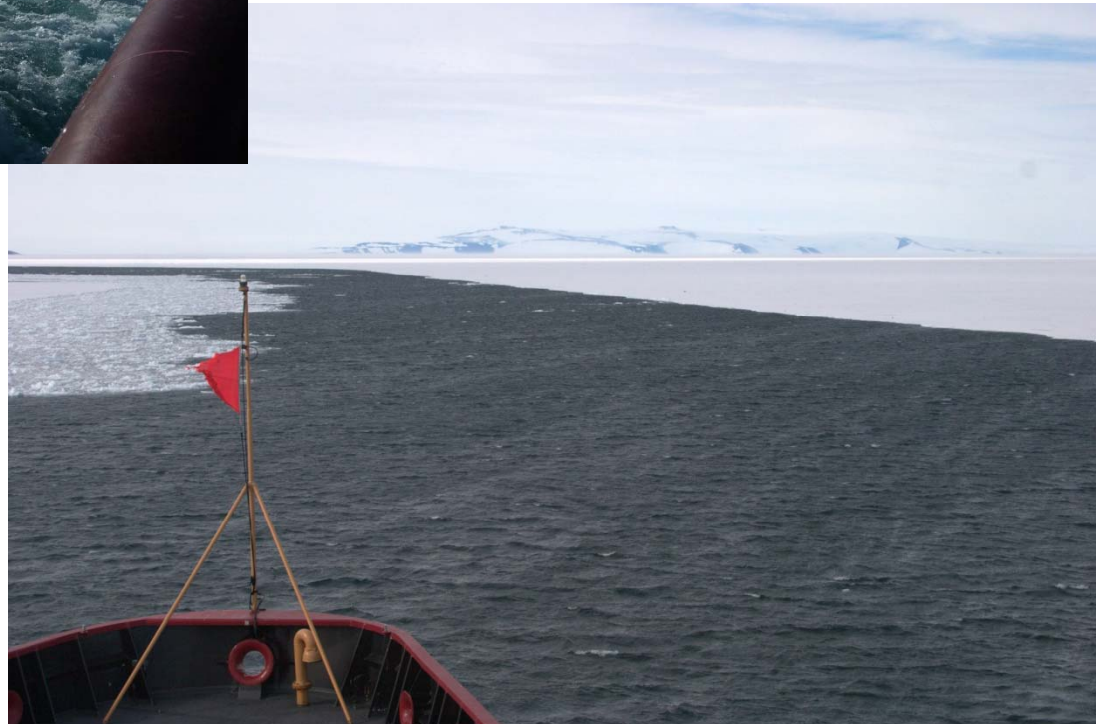
U.S. NATIONAL ICE CENTER

Operation Deep Freeze Support
31 January 2015

MODIS.....31 JAN 2015 1405Z

Operation DEEP FREEZE

McMurdo Break In, January 2015



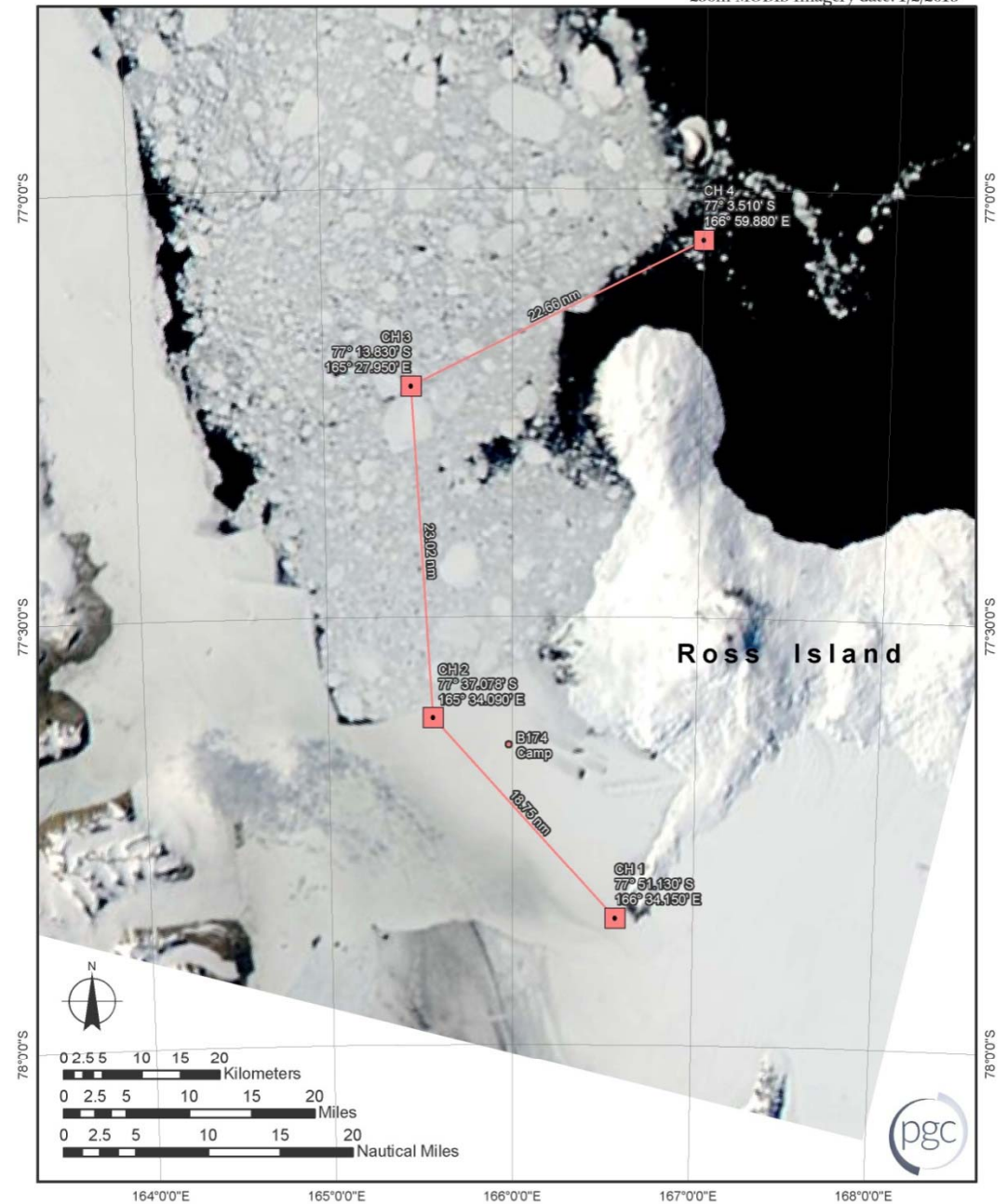
Beginning Turning Basin



Operation DEEP FREEZE McMurdo Shipping Channel

Shipping Channel Monitoring Sites
2014-2015

January 8, 2015
Map Author: Cole Kelleher
250m MODIS Imagery date: 1/2/2015



McMurdo Shipping Channel



Close Ice Escort, M/V OCEAN GIANT



Operation DEEP FREEZE

McMurdo Station, February 2014

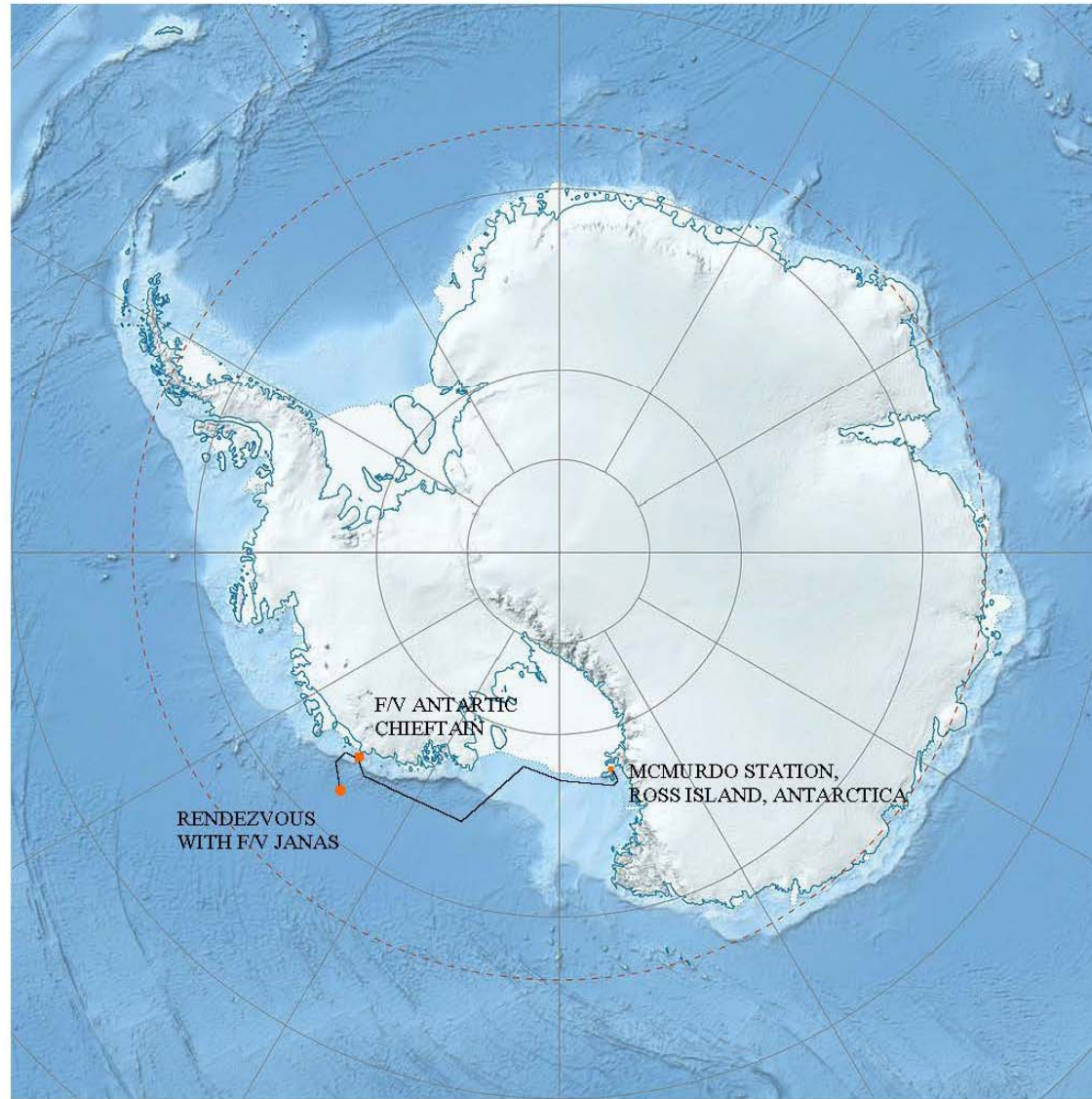


Operation DEEP FREEZE

Marble Point, February 2014

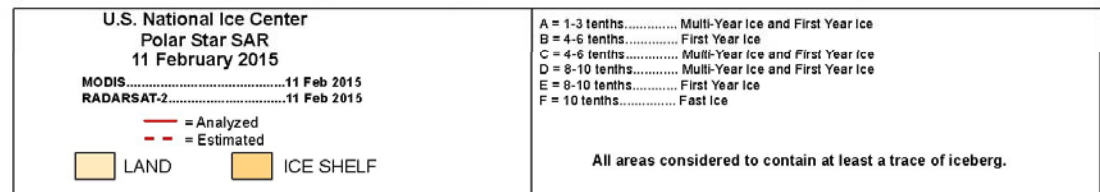
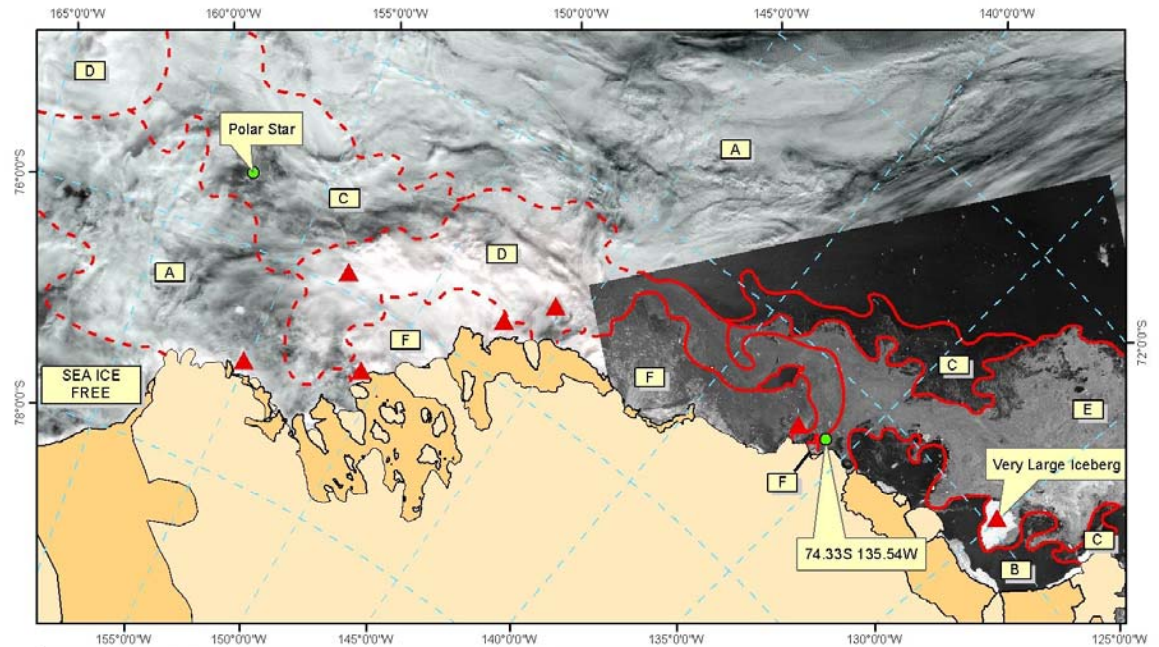
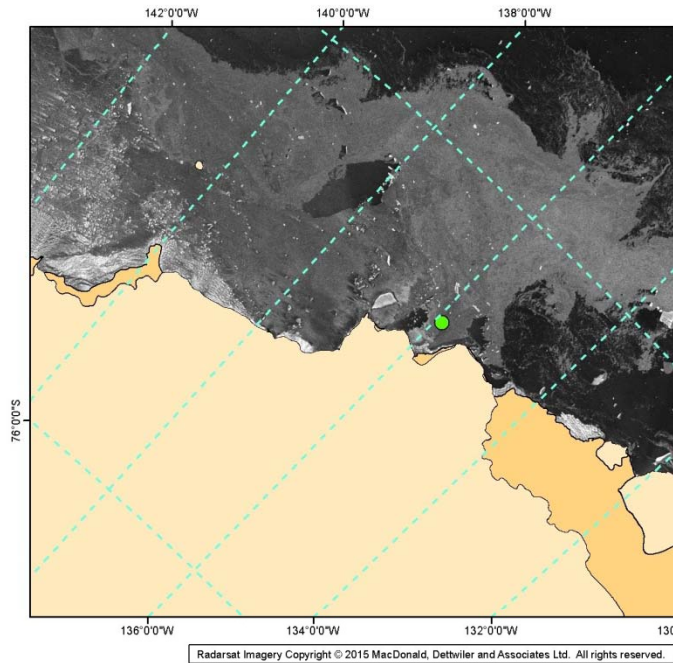


Search And Rescue



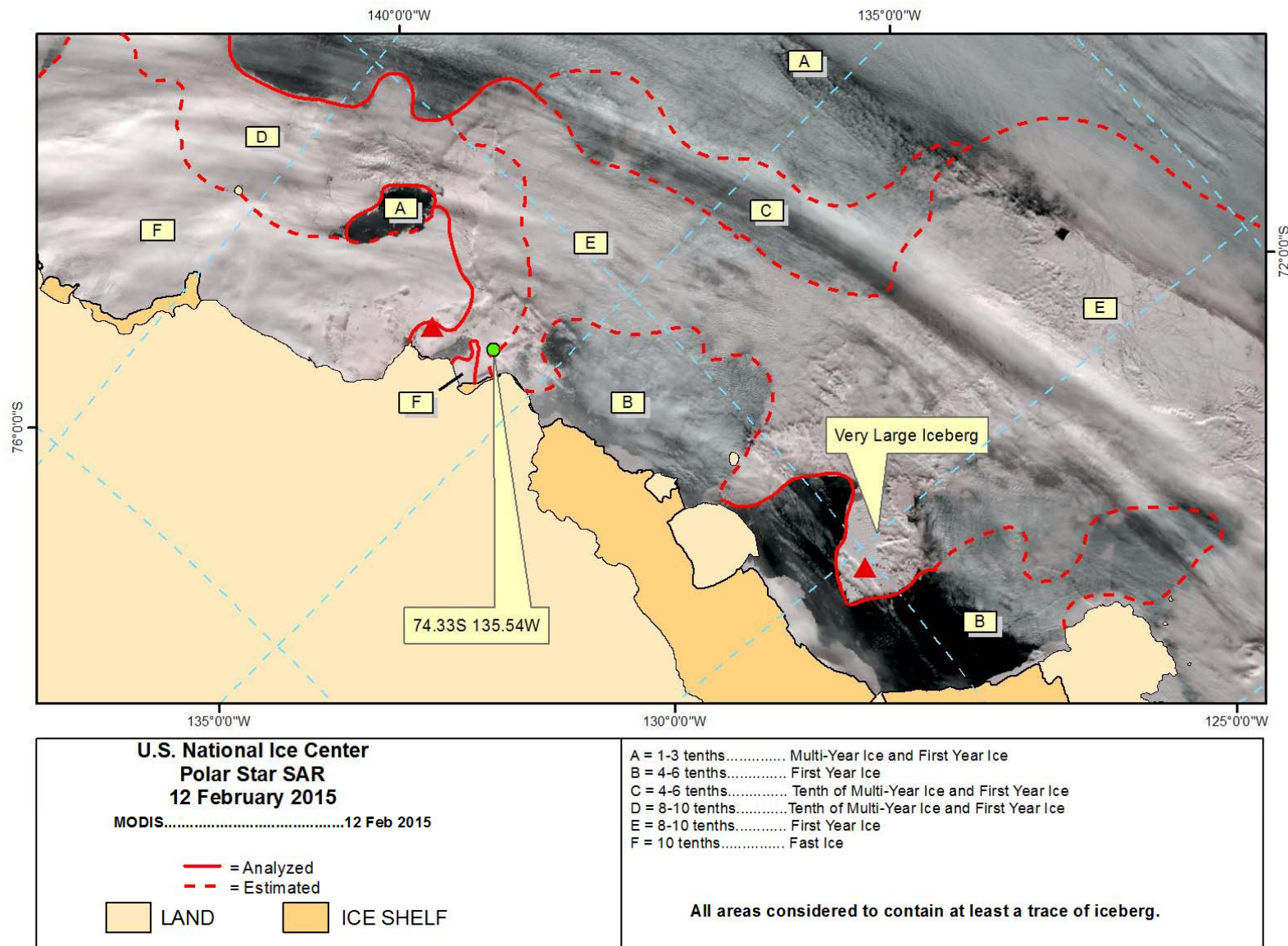
11 February 2015

11FEB-0603Z- Diverted, position
74-14 S 164-35 W



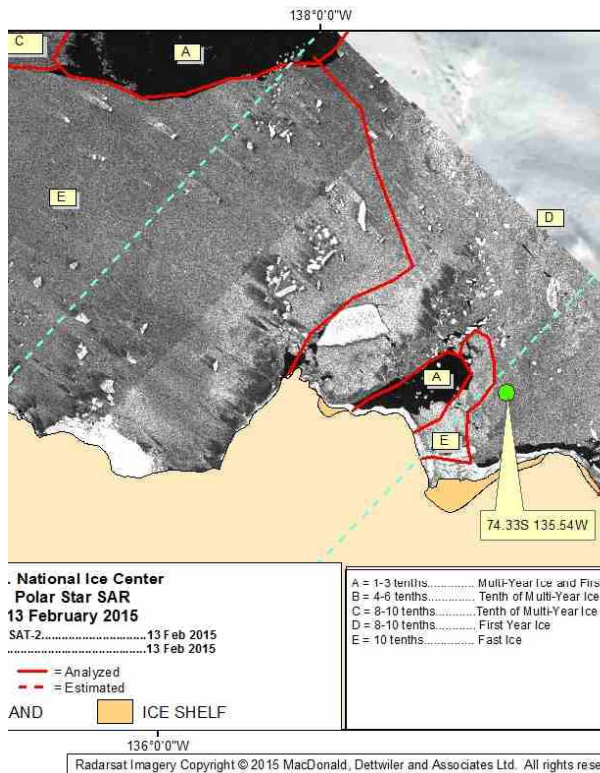
Radarsat Imagery Copyright © 2015 MacDonald, Dettwiler and Associates Ltd. All rights reserved.

12 February 2015

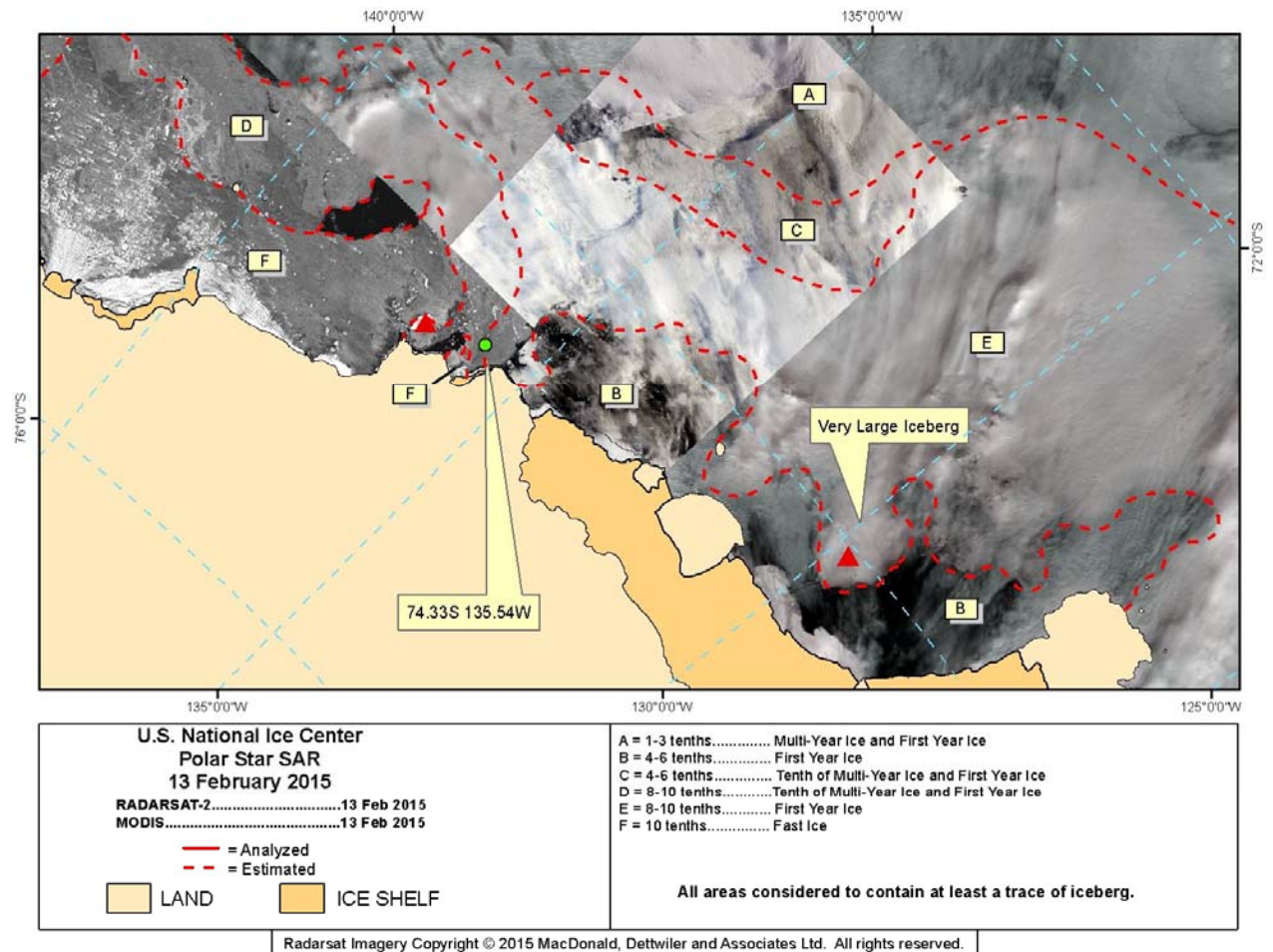


13 February 2015

13FEB- 1730Z- M/V Antarctic Chieftain
in sight, position 74:28.7'S, 135:57.2'W
Bearing 172T



Note- Total distance traveled, Approximately 753.6 NM total, 89 NM of 10/10 M&FYT tight pack ice, 2-3' snow coverage



13 February 2015



F/V ANTARCTIC CHIEFTAIN



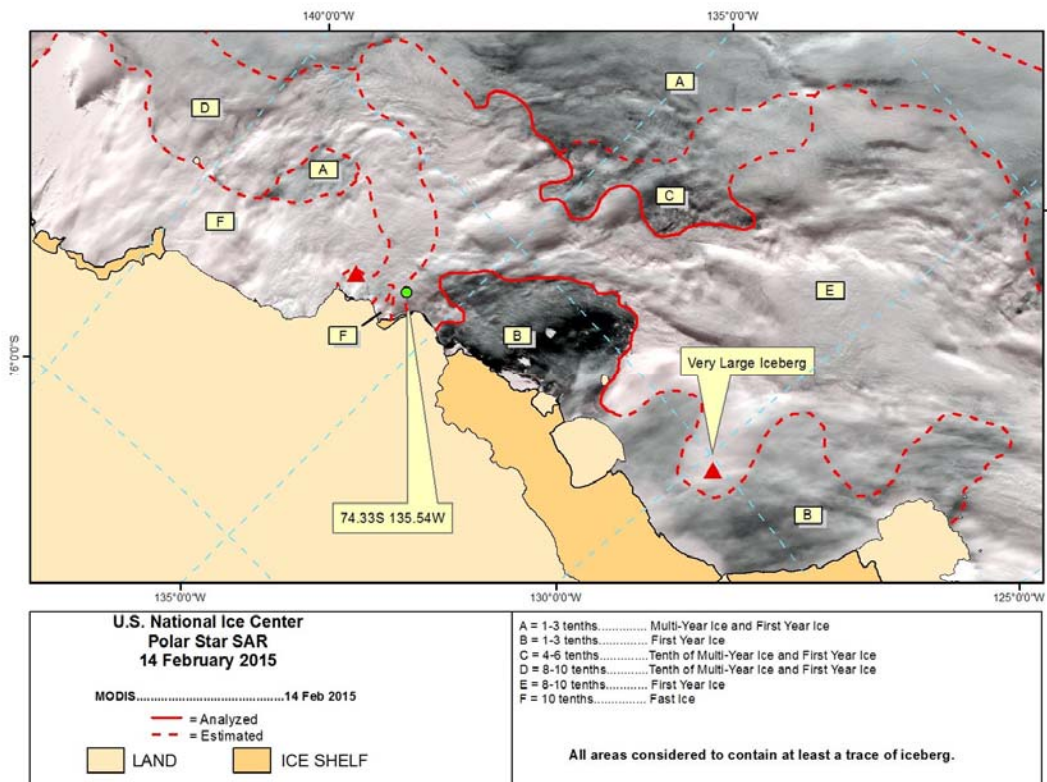
F/V ANTARCTIC CHIEFTAIN Rescue



2030Z- Moored alongside, pos
74:33.4'S; 135:54.8 W, deployed
ROV



14 February 2015



14FEB- 0313Z- Tow line connected, previous position

0416Z- Tow line parted, position 74-32.4 S 135- 50.7 W

0530Z- Tow line connected, previous position

0720Z- Tow parted, position 74:28.9'S, 135:38.9'W

1855Z- Tow connected, previous position

F/V ANTARCTIC CHIEFTAIN Rescue



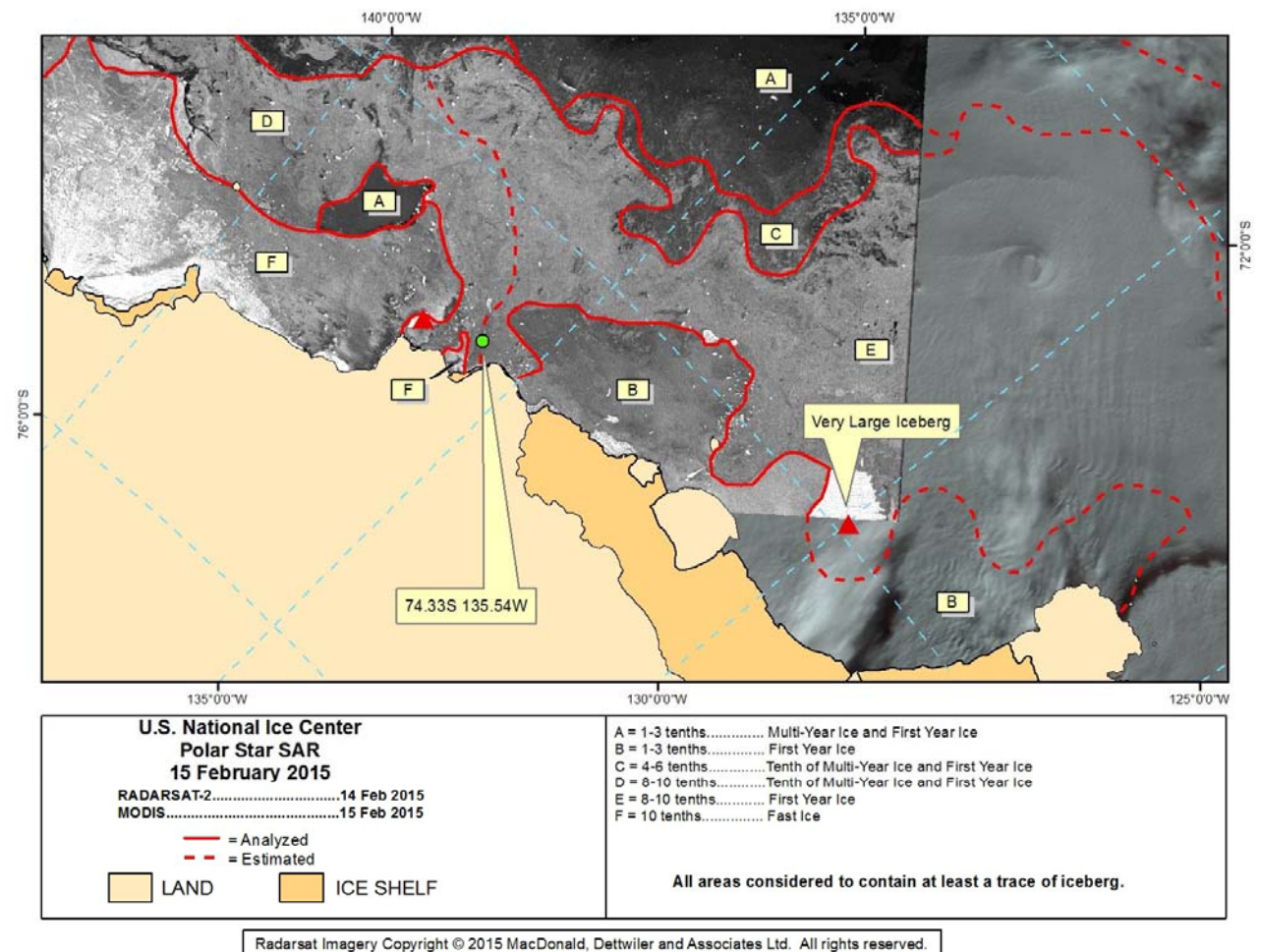
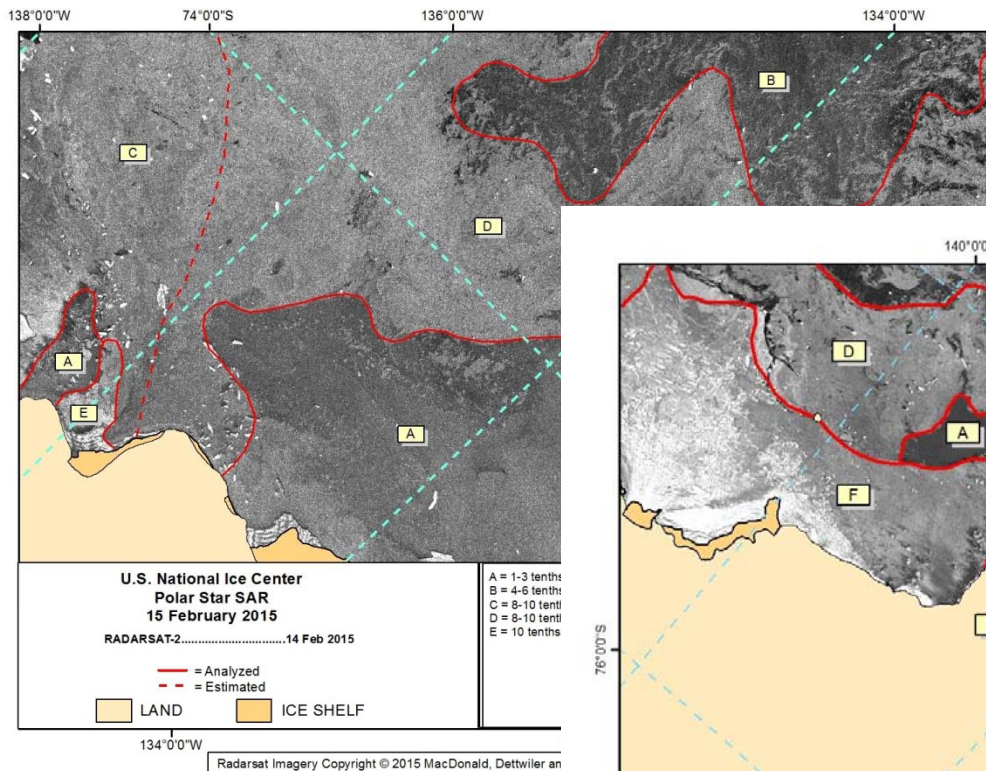
Towed F/V Antarctic Chieftain
8 NM, 10/10 FYT tight pack
ice, 1-2' snow coverage

Towed through 37 NM open water,
4.25 NM 10/10 FYT pack ice, Total
tow: 49.25 NM



15 February 2015

15FEB- 0605Z- Tow parted,
position 73-54 S 134-07 W



0615Z- Commenced
close ice escort, previous
position
Close ice escort 57.75
NM, 37 NM of 8-10/10 FY
pack ice, 20.75 NM 4-
6/10 light pack

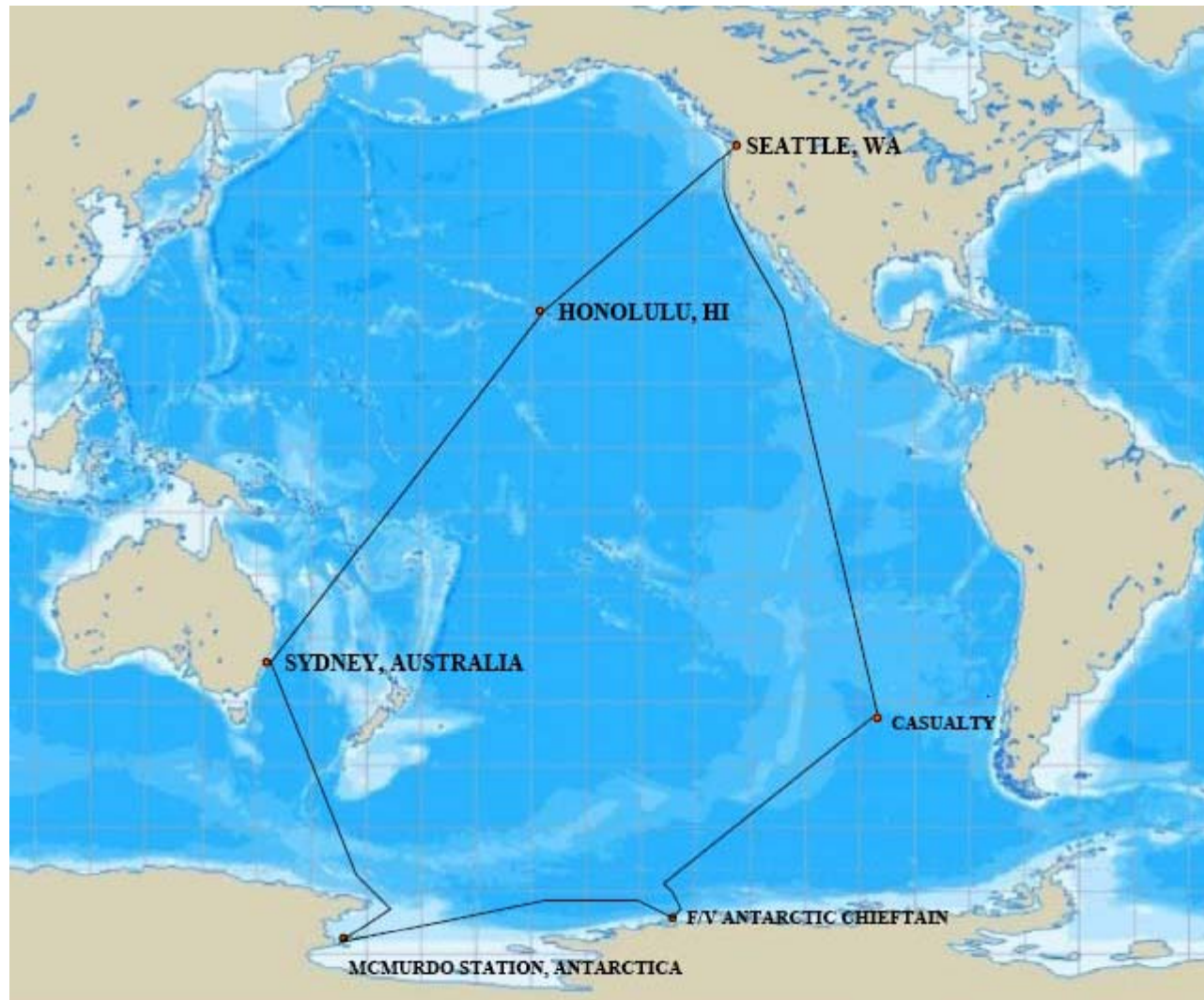
Towing Antarctic Chieftain



Towing Antarctic Chieftain



Cutter's Trackline



Any Questions?

