

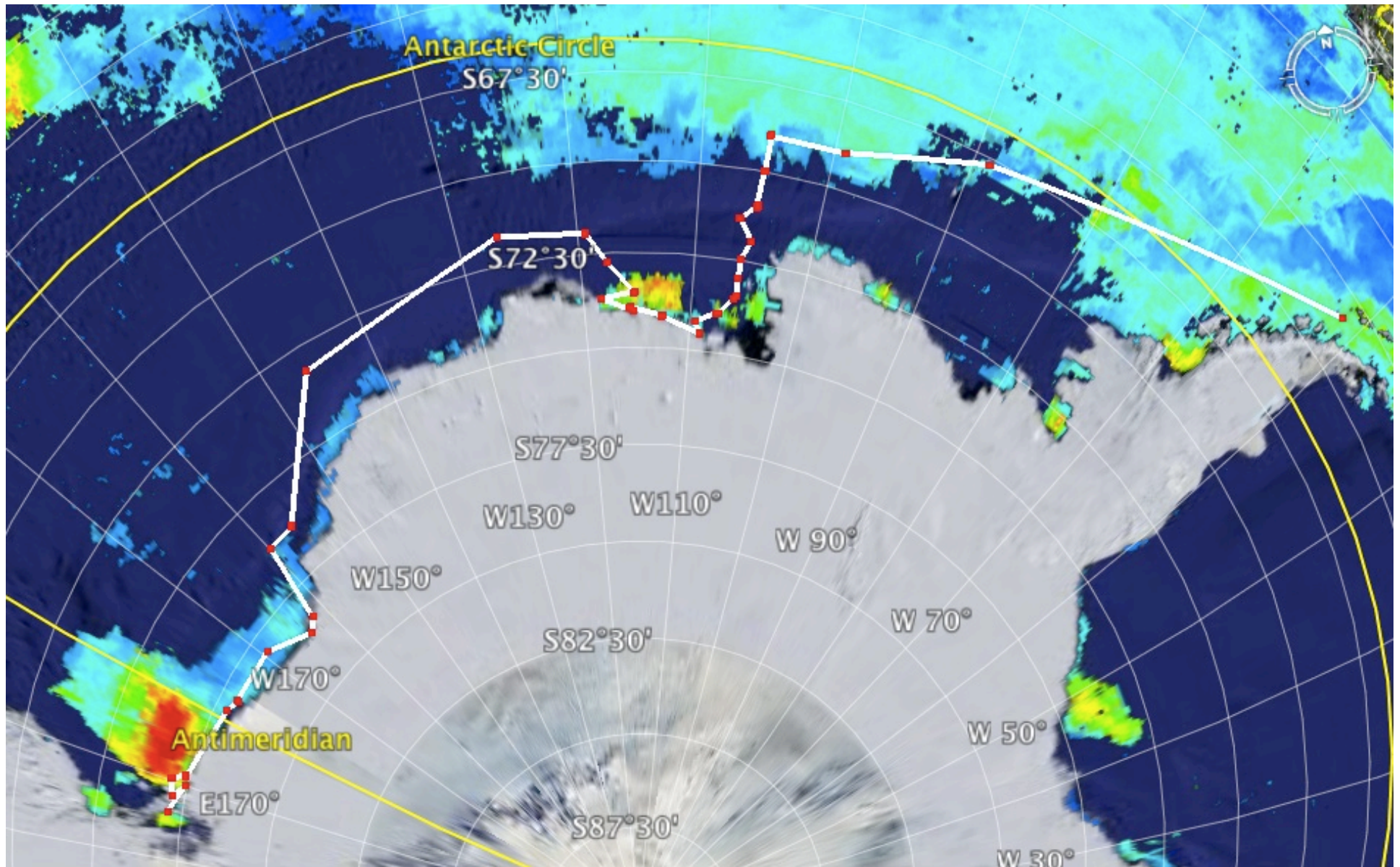


2008 Oden Antarctic Expedition

White is continent, pale gray is ocean, dark gray is the maximum extent of sea ice, black is open water in the summer (polynyas).

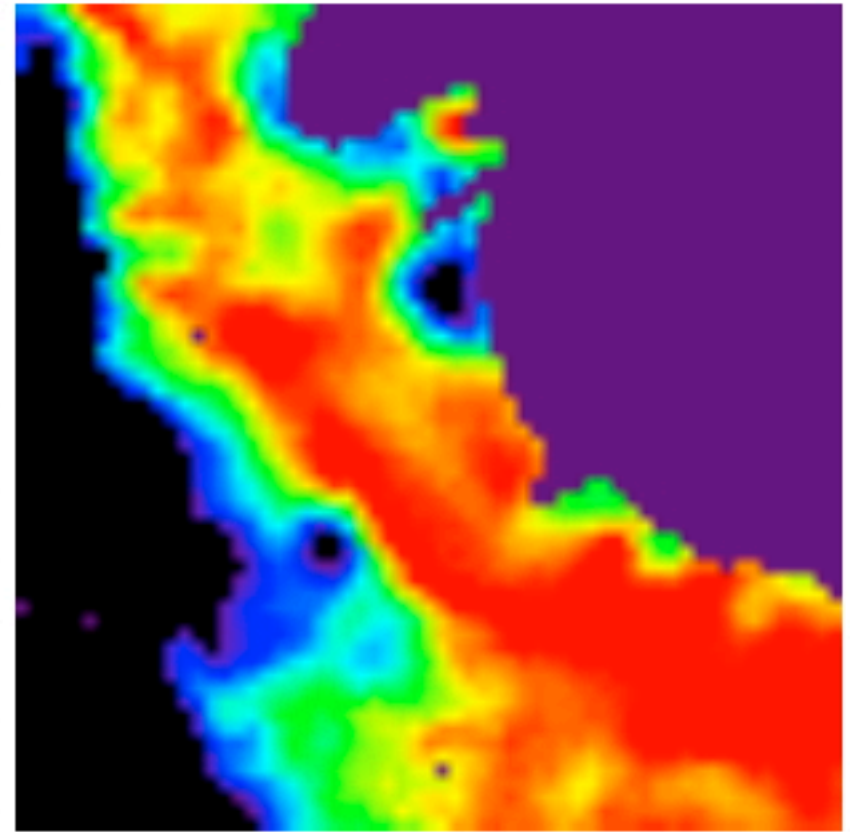
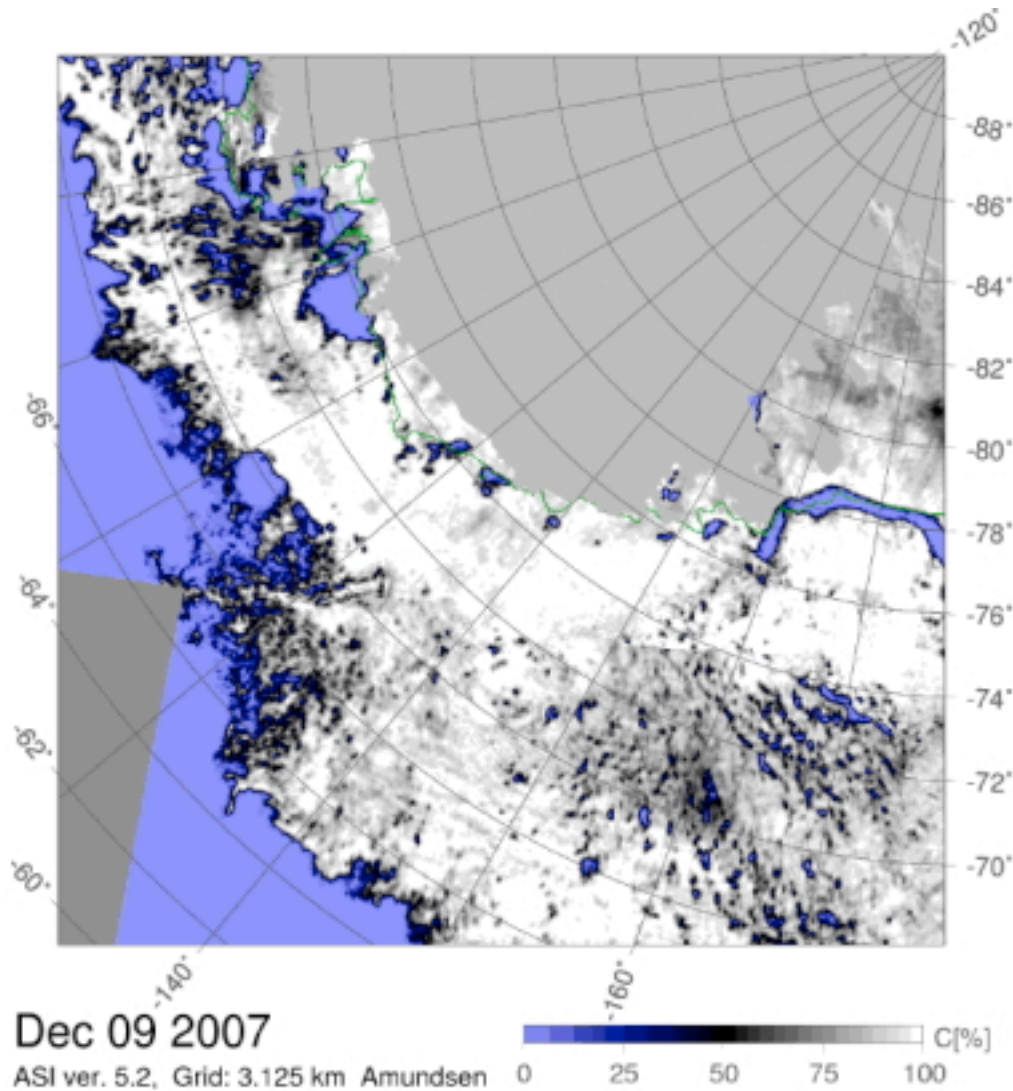
The 2008 Oden Expedition will be leaving from Montevideo and traveling into the Amundsen and Ross Seas on the way to McMurdo Station, Antarctica.

Map Courtesy of Ducklow and Yager, 2007.



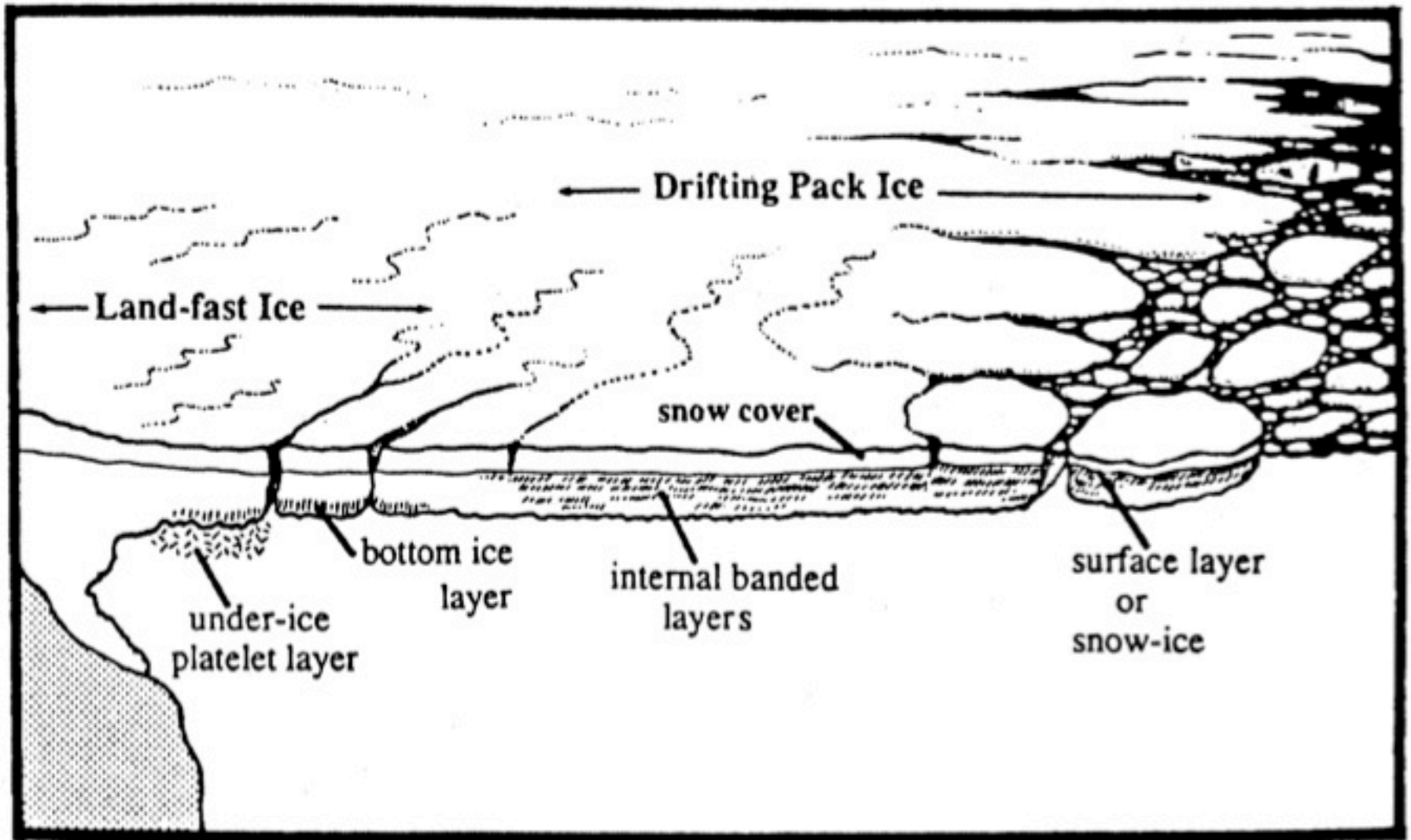
This is the cruise track from last year's Oden Antarctic Expedition overlain on top of satellite images of the continent and SeaWiFS (chlorophyll) in the ocean. The dark blue is sea ice, and the warm colors on SeaWiFS is where the chlorophyll levels are the highest. The red areas in the polynyas.

The 2008 Oden Expedition will not be following this route exactly, but parts will be similar. *Map courtesy of Rob Sherrell.*



These are satellite images for the Amundsen Sea region. One is AMSR (Advanced Microwave Scanning Radiometer) and the other is SSM/I (Special Sensor Microwave/Imager). Both are microwave images with different spatial and temporal resolutions (left is instantaneous for last December; right is a lower resolution climatology (=20-year-average) for December) showing the sea ice concentrations.

On the left, blue is open water and the gray scale indicates the concentration of the ice (white being the highest). On the right, purple is the continent, black is open water, and red is the highest concentration of sea ice. *Maps courtesy of Tish Yager.*



Here's a figure from Garrison (1991), showing different habitats for sea ice microbial communities.

Compound name	Chemical formula
Iodomethane	CH_3I
Trichloromethane	CHCl_3
Tetrachloromethane	CCl_4
1,1,1-trichloroethane	CH_3CCl_3
Trichloroethene	$\text{CHCl}=\text{CCl}_2$
Dibromomethane	CH_2Br_2
Bromodichloromethane	CHCl_2Br
Chloriodomethane	CH_2ClI
2-Iodobuthane	$\text{CH}_3\text{CHICH}_2\text{CH}_3$
Tetrachloroethene	$\text{CCl}_2=\text{CCl}_2$
Dibromochloromethane	CHClBr_2
1-Iodobuthane	$\text{CH}_2\text{ICH}_2\text{CH}_2\text{CH}_3$
2-Iodopropane	$\text{CH}_3\text{CHICH}_3$
Tribrommethane	CHBr_3

Some of the compounds (in addition to CO_2) that the team on the 2008 Oden Antarctic Expedition will be studying (from Abrahamsson et al. 2001):