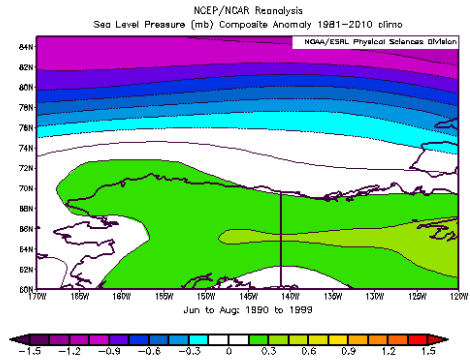


Weather Balloons, Wave Gliders and other **Hitchhikers**

Kevin R. Wood
James E. Overland
Sigrid A. Salo
Nicholas A. Bond

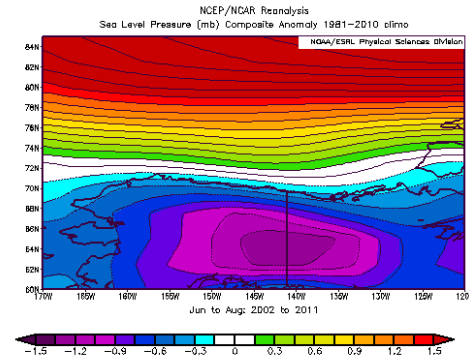
Climatology (NCEP-NCAR Reanalysis)

Anomaly 1990-99

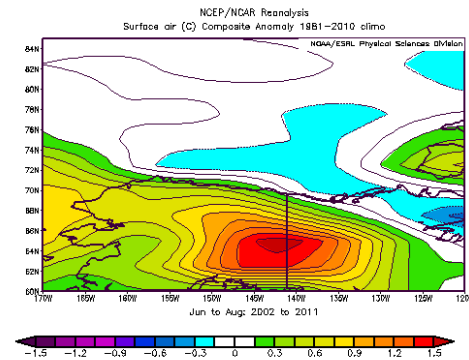
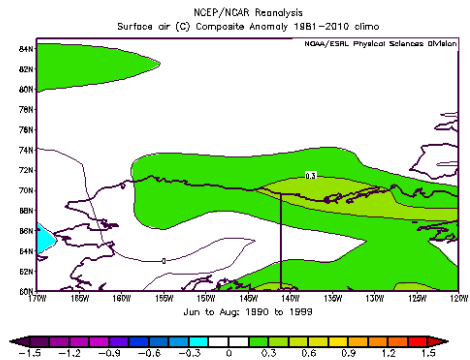


SLP

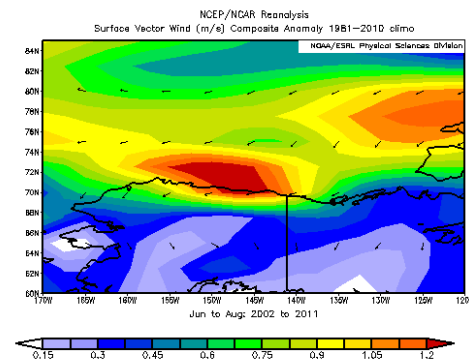
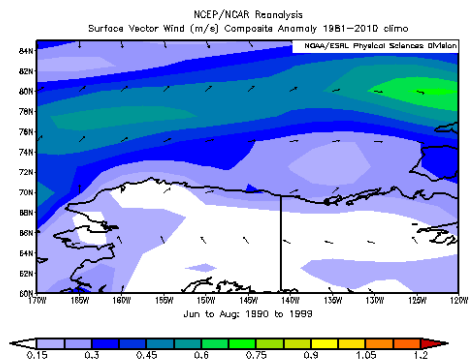
Anomaly 2002-11



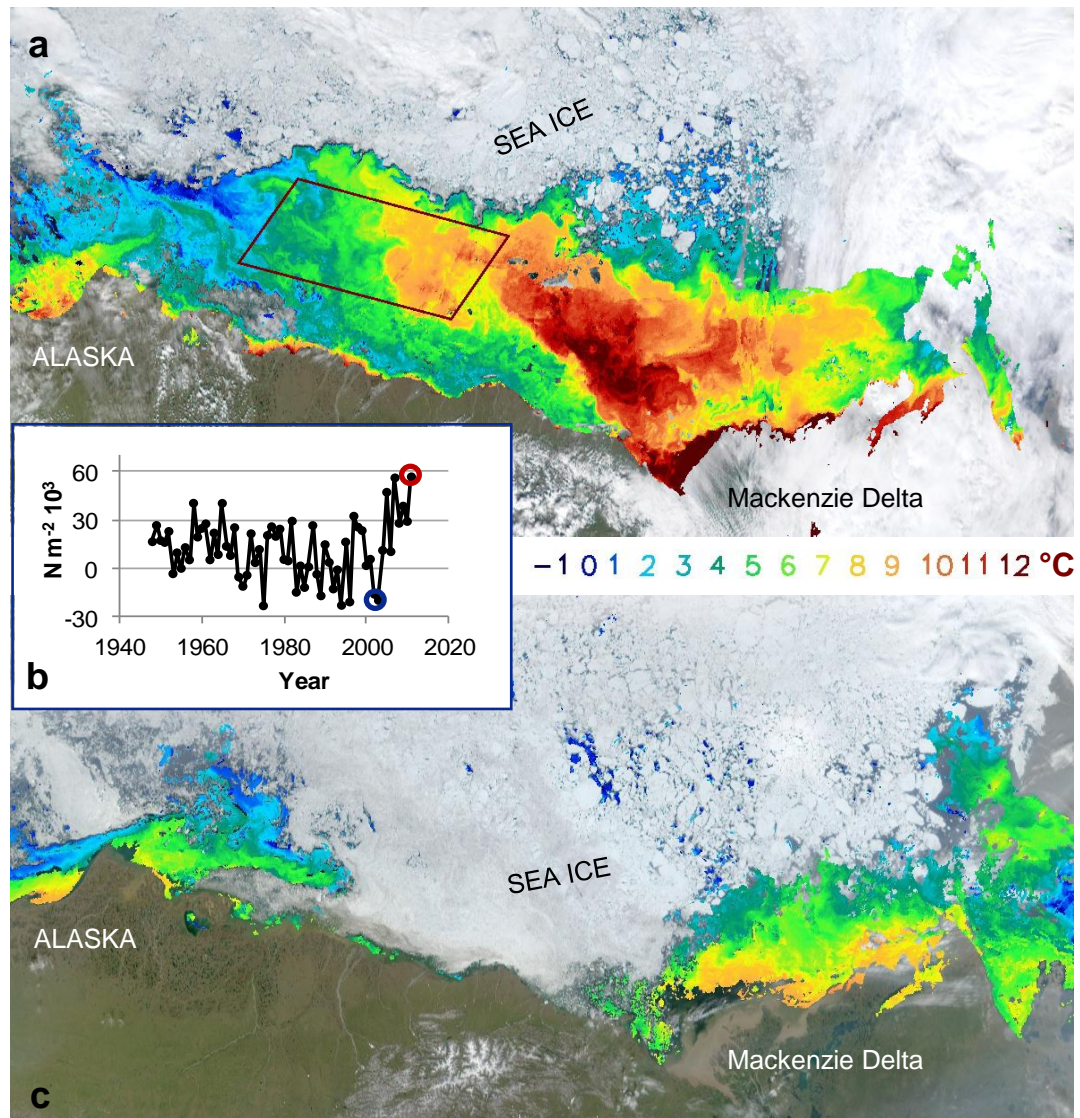
SAT



Vector
Wind



Impact of changing a wind field in the Beaufort Sea



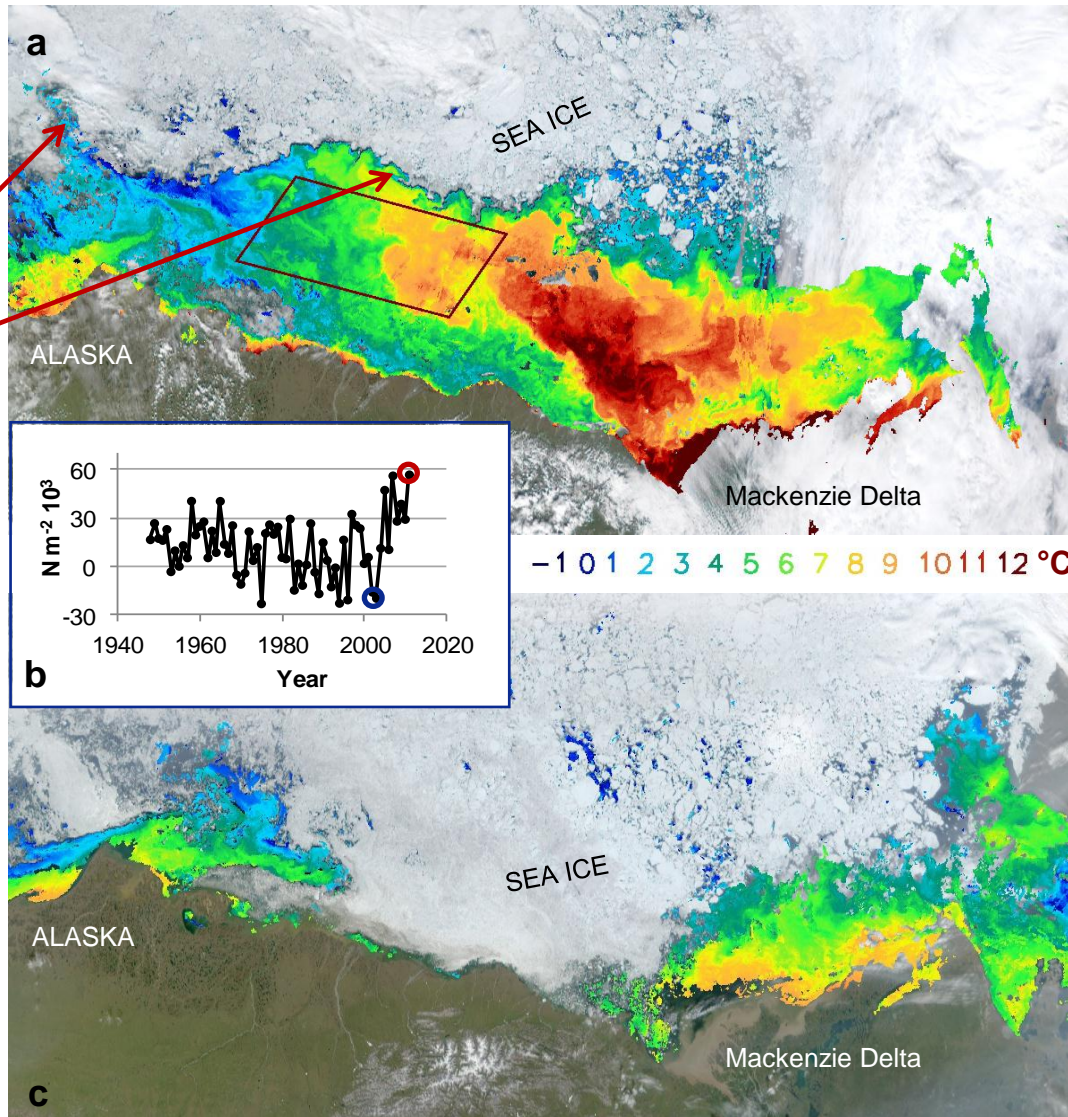
Impact of Δ sea ice & heat on atmospheric circulation



Weather balloon transects to sample MABL

Wave Gliders & other automatons

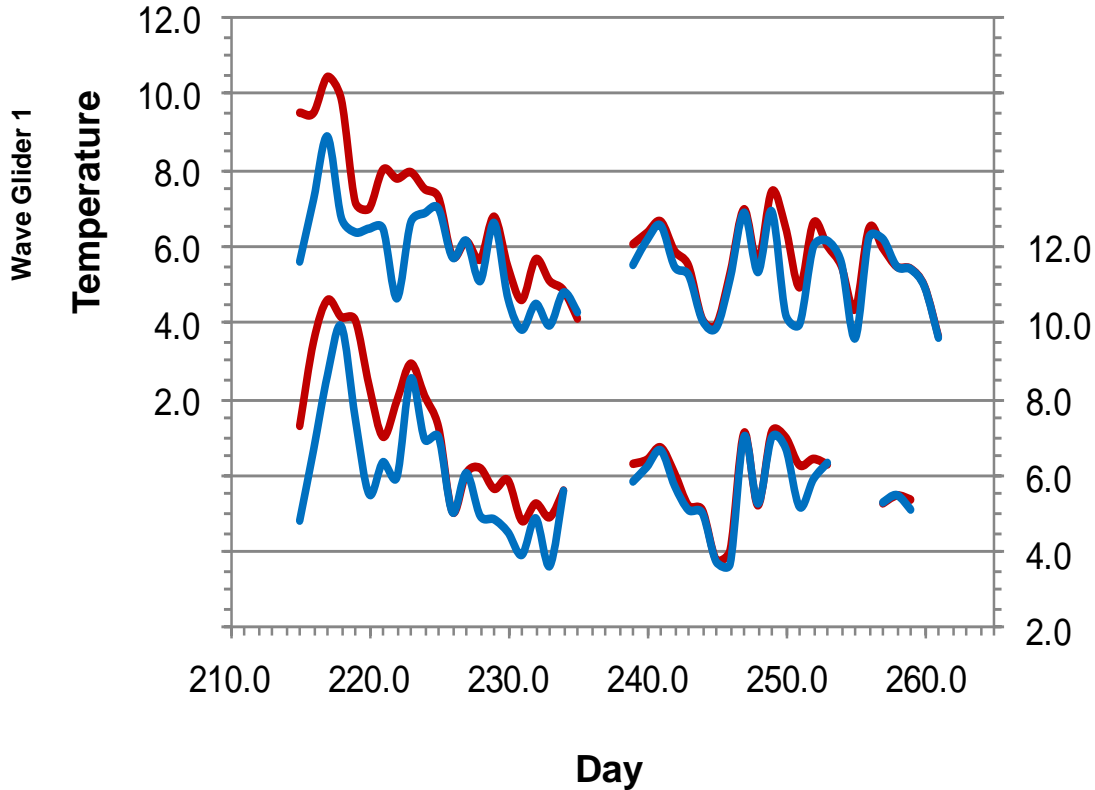
Onboard wx / rad.



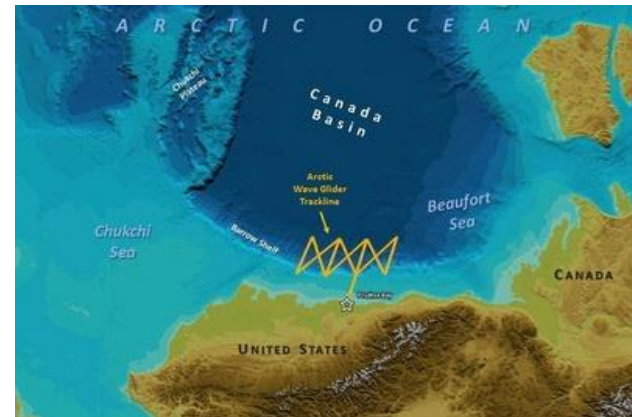
Arctic Wave Glider (PMEL/Liquid Robotics)



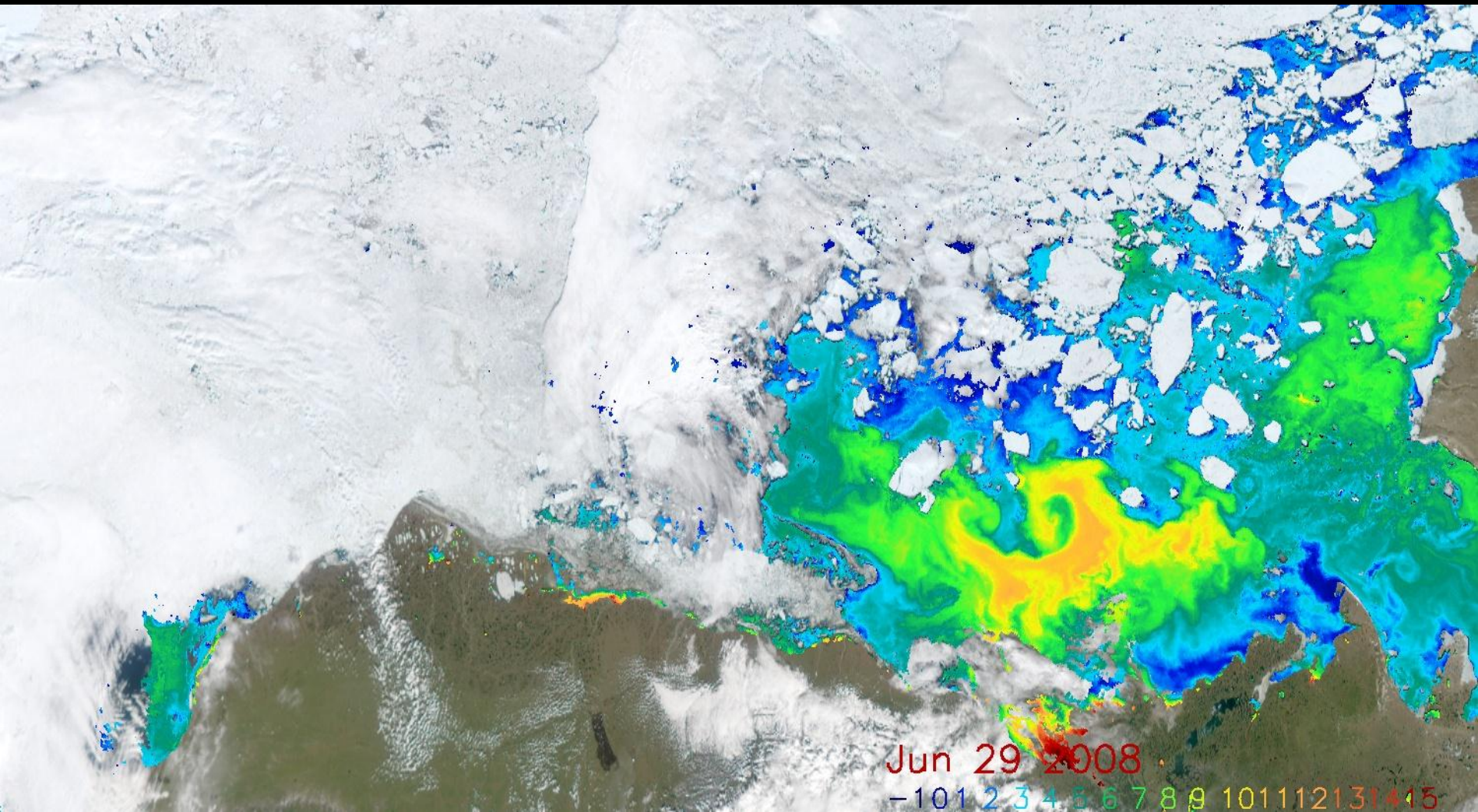
Arctic Wave Glider Data 2011 Deployment



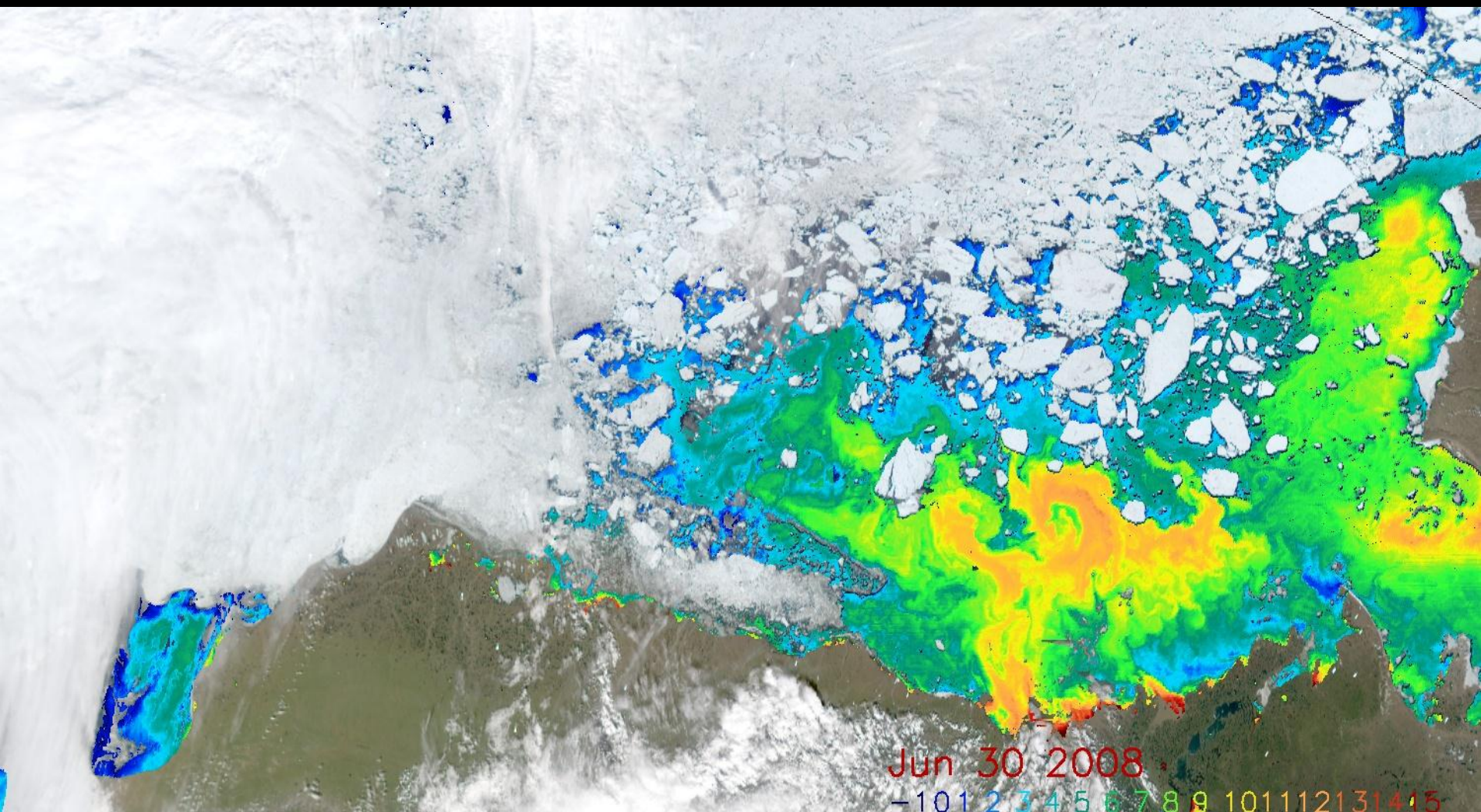
Red = 0.5 m Blue = 6.0 m



2008 Plume Explosion

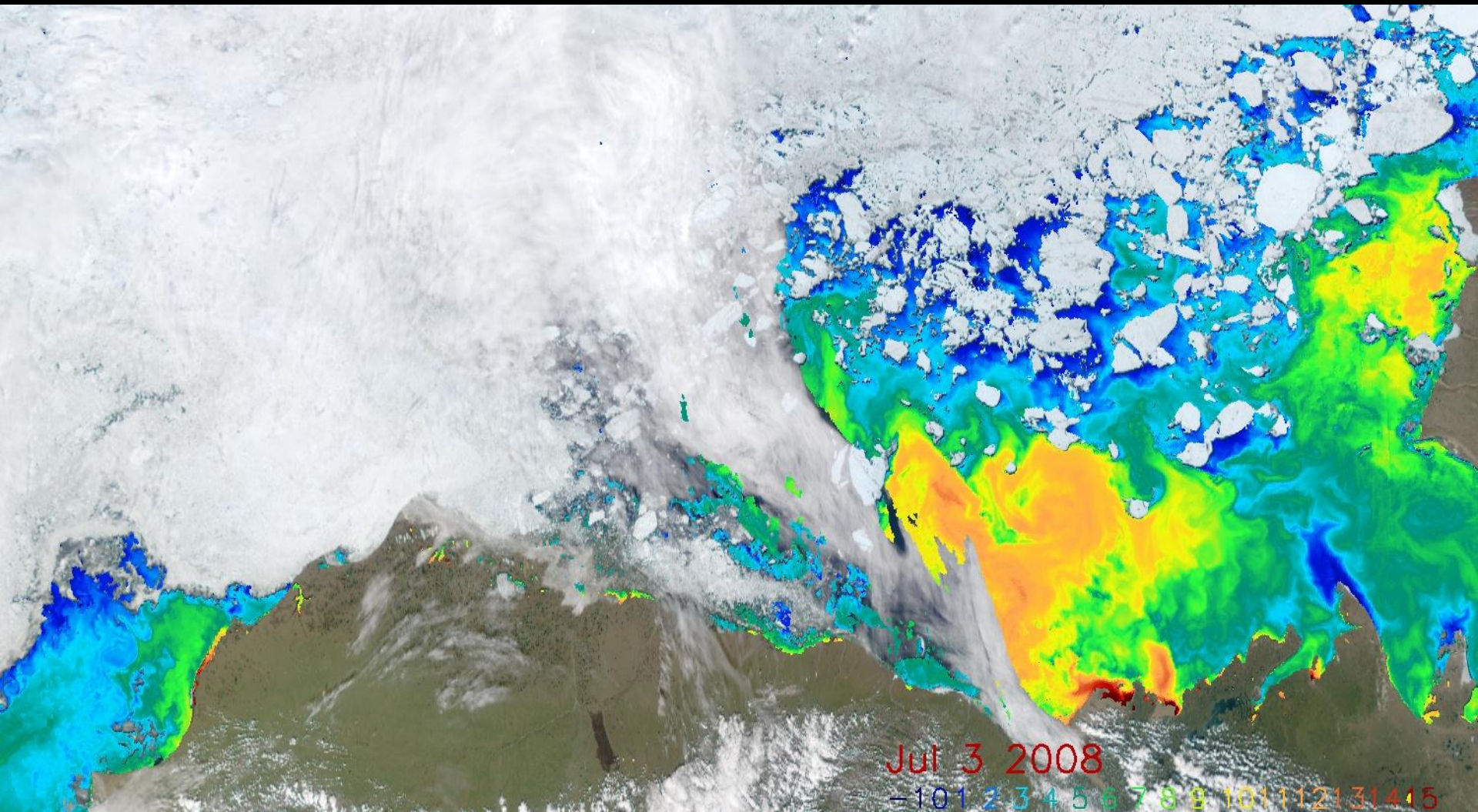


Only MODIS sequence available since 2000



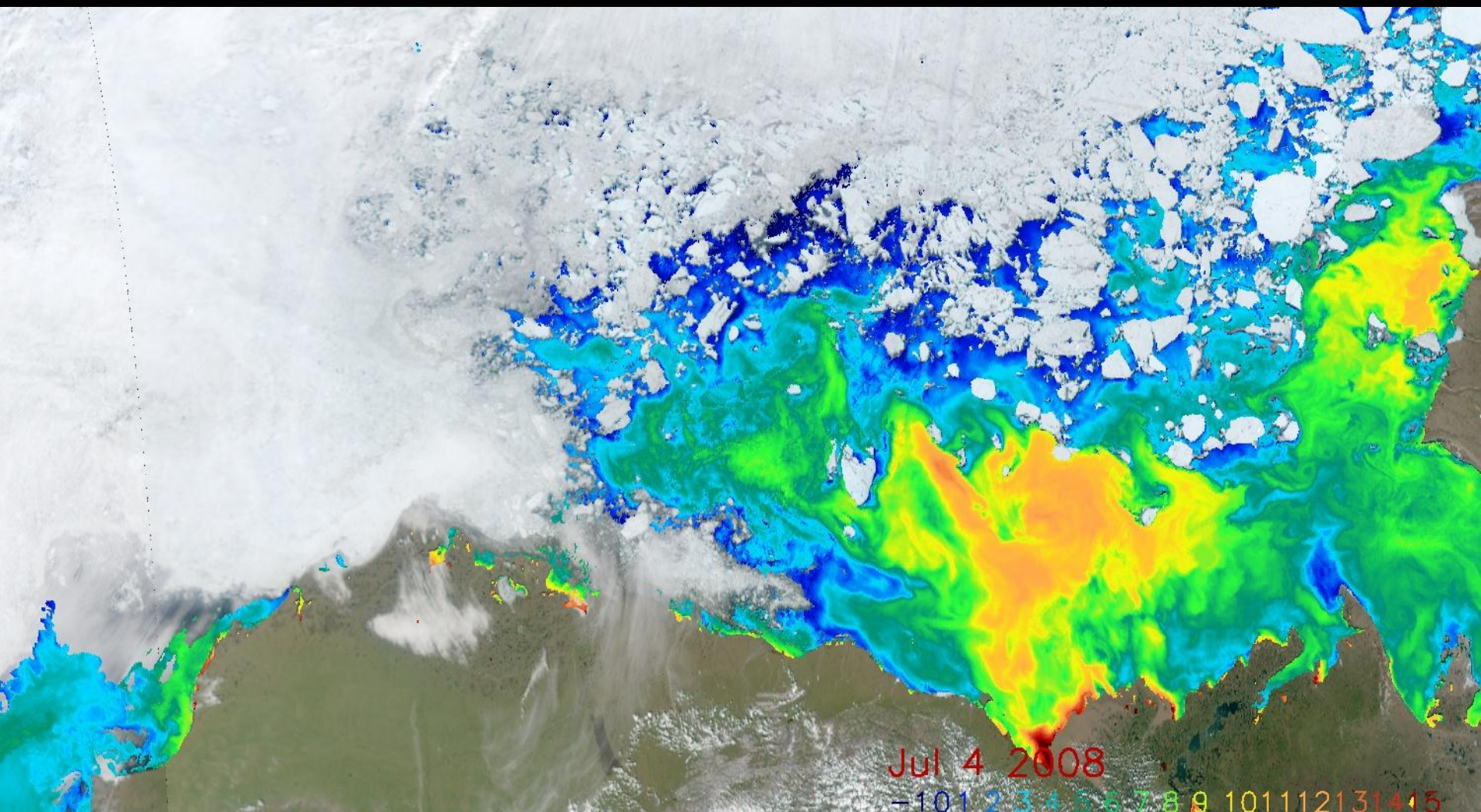
Jun 30 2008

-101 2 3 4 5 6 7 8 9 10 11 12 13 14 15



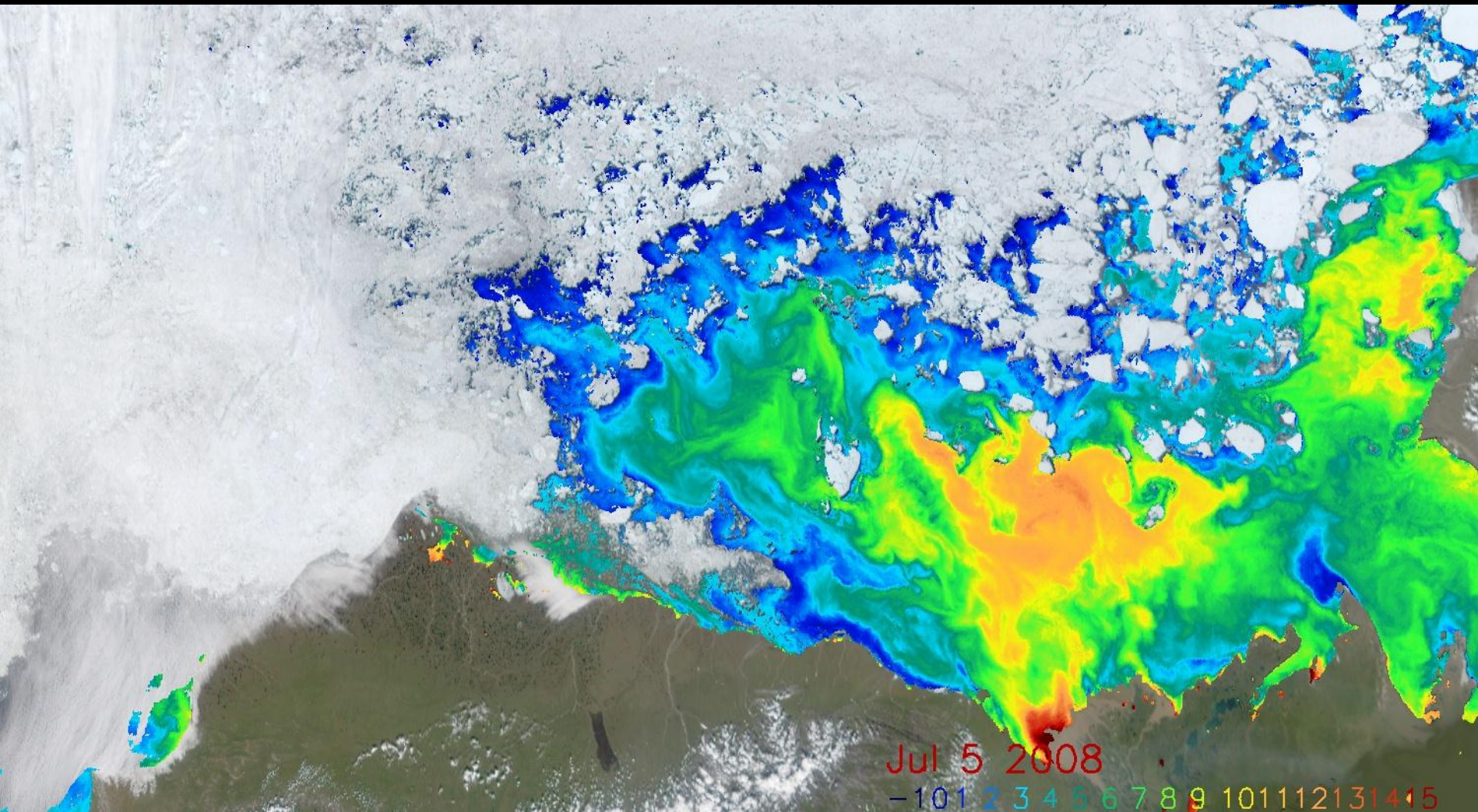
Jul 3 2008

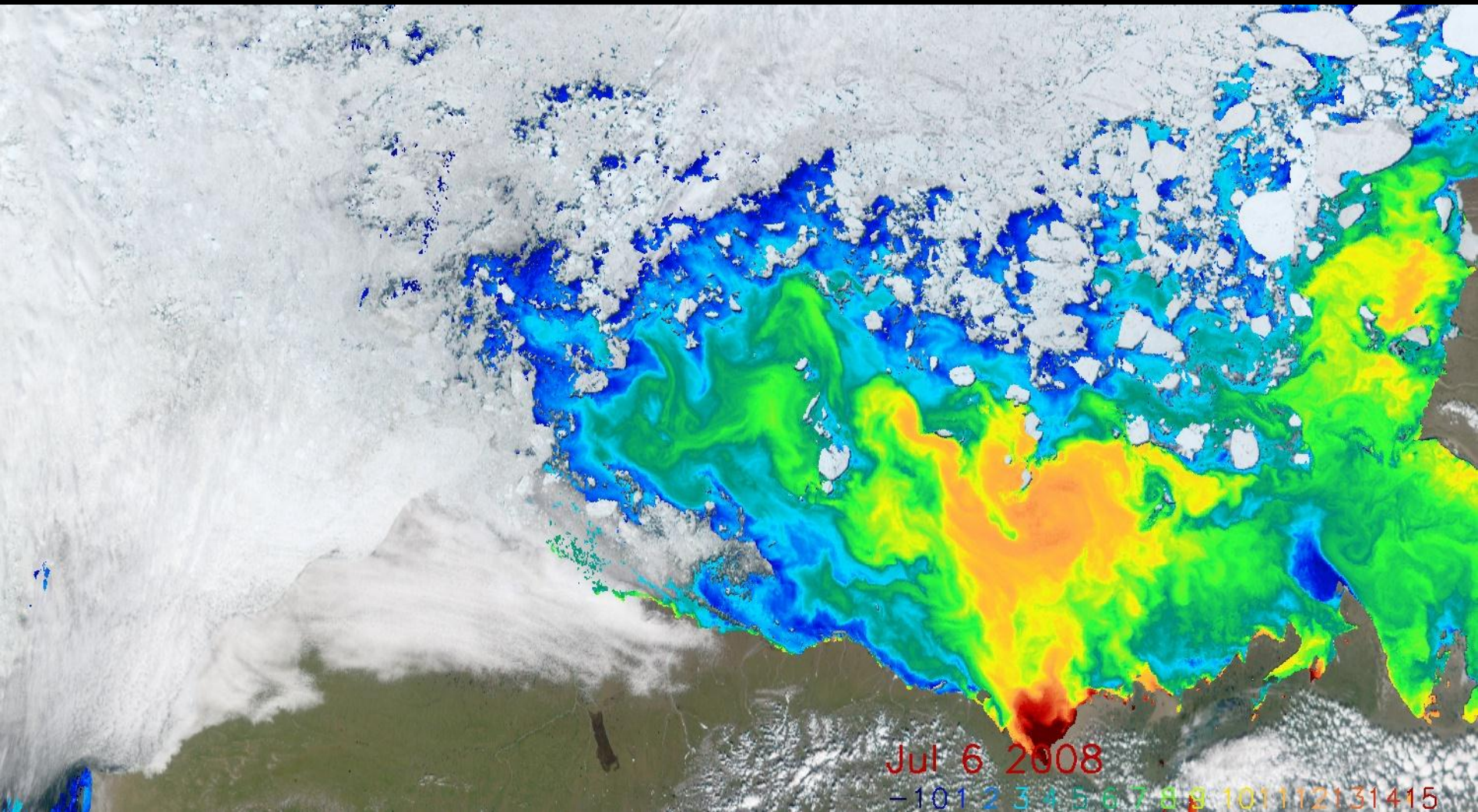
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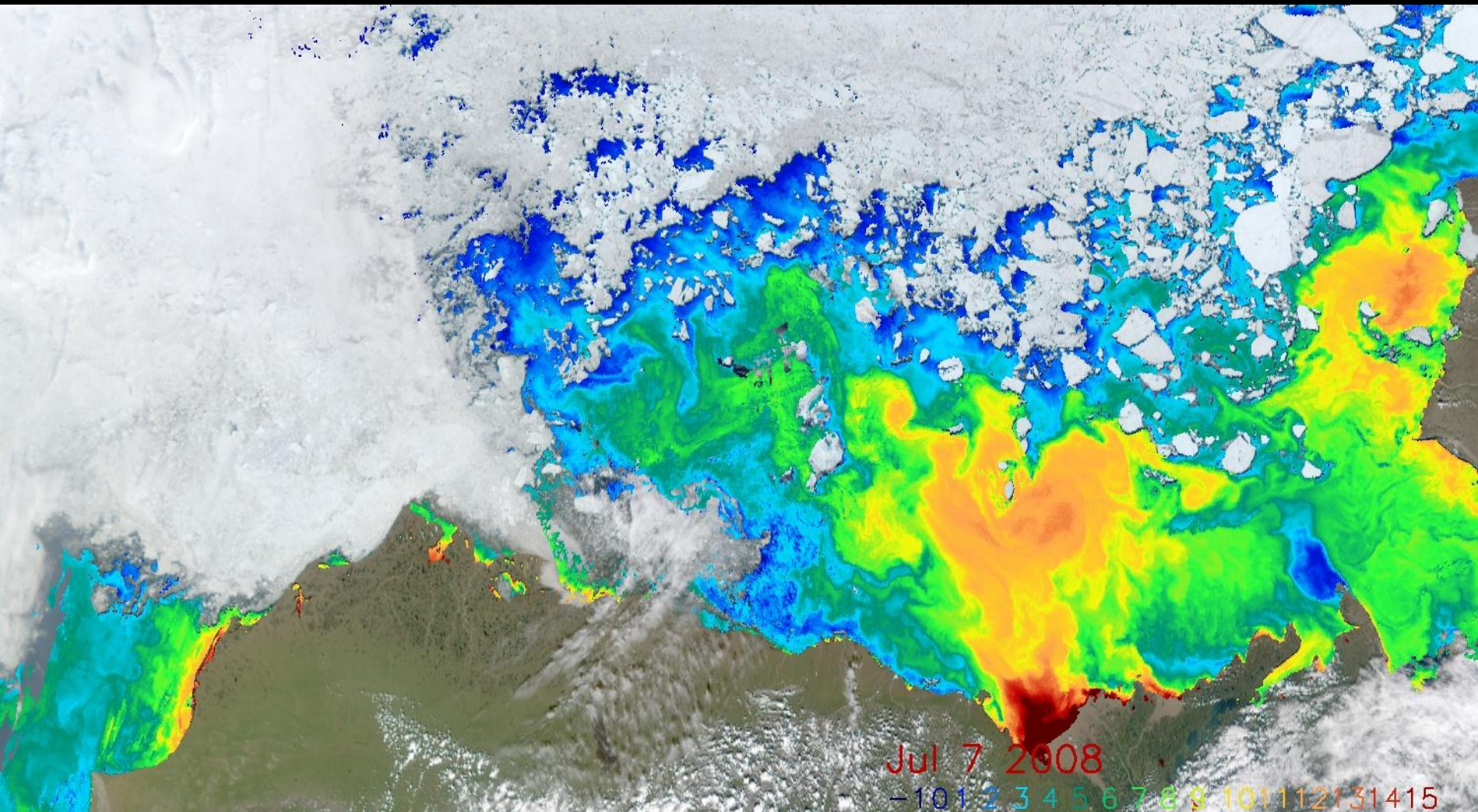


Jul 4 2008

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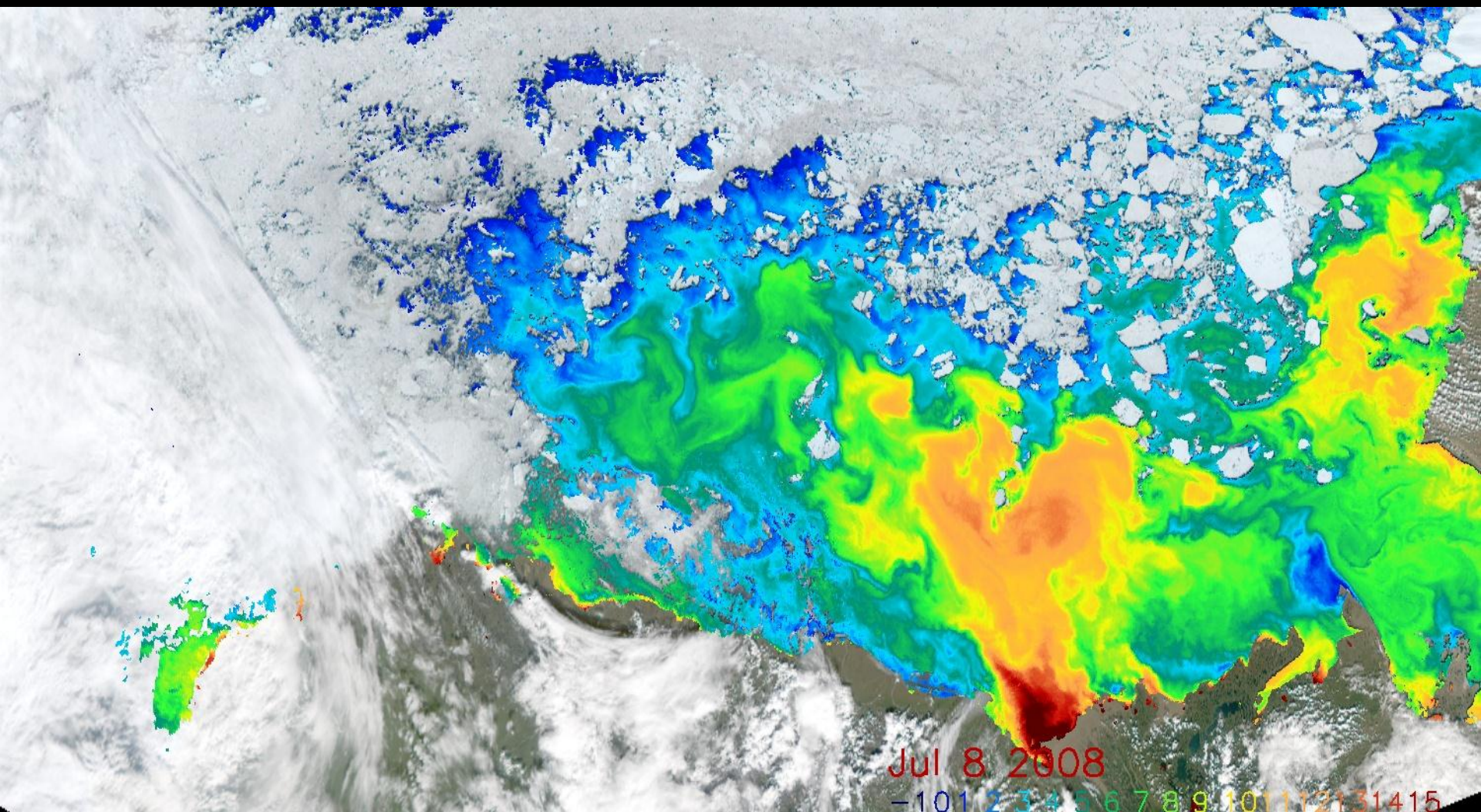






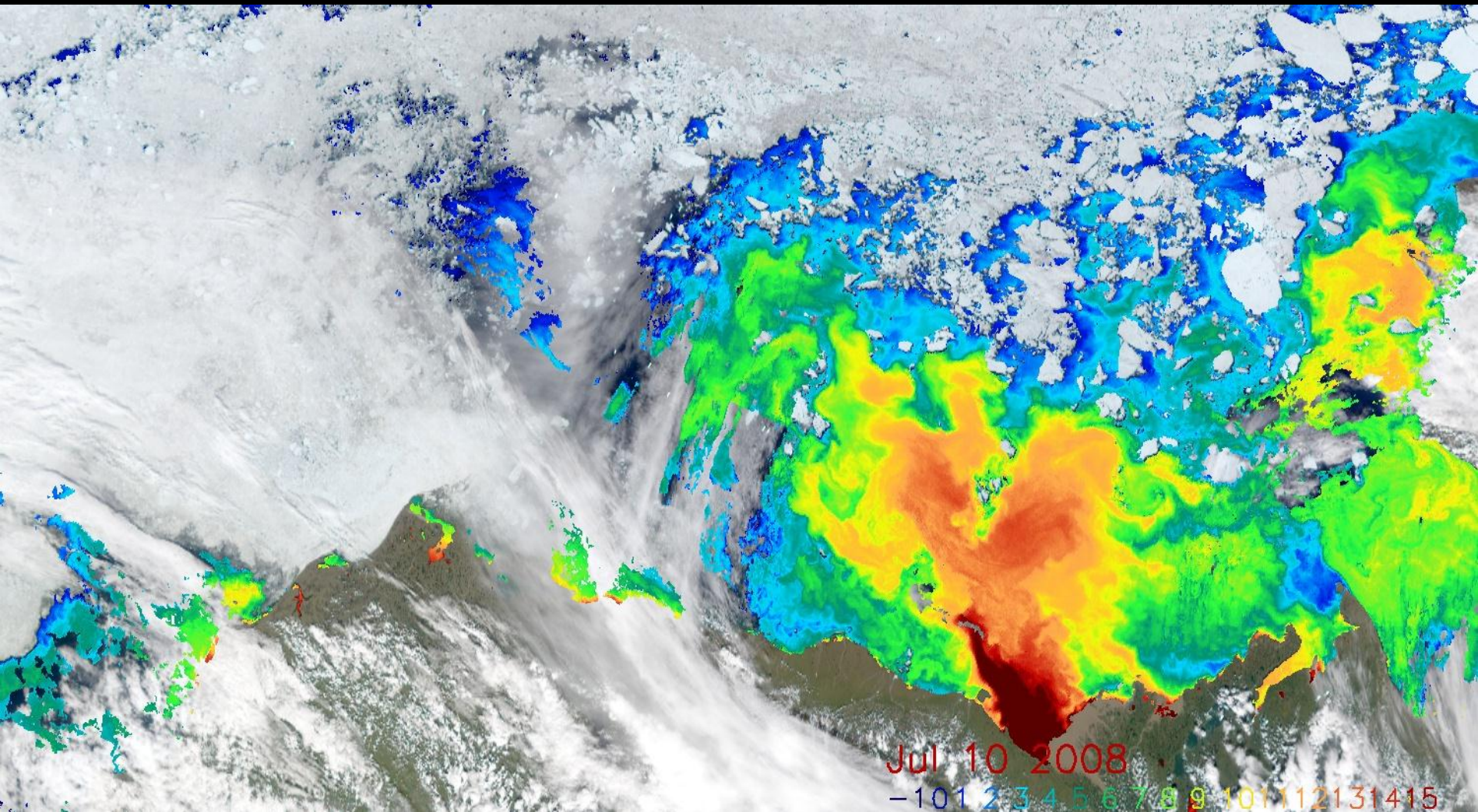
Jul 7 2008

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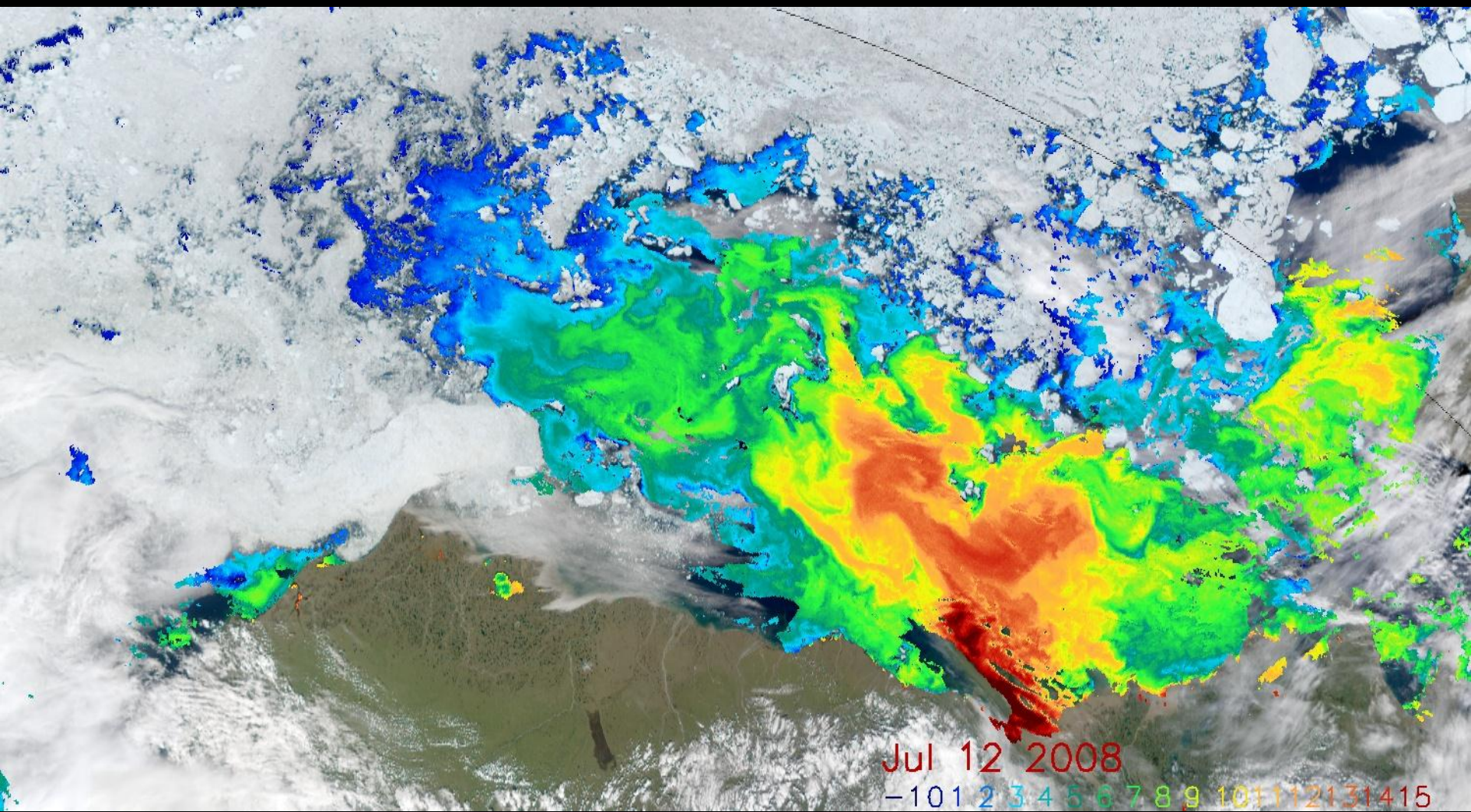
Jul 8 2008

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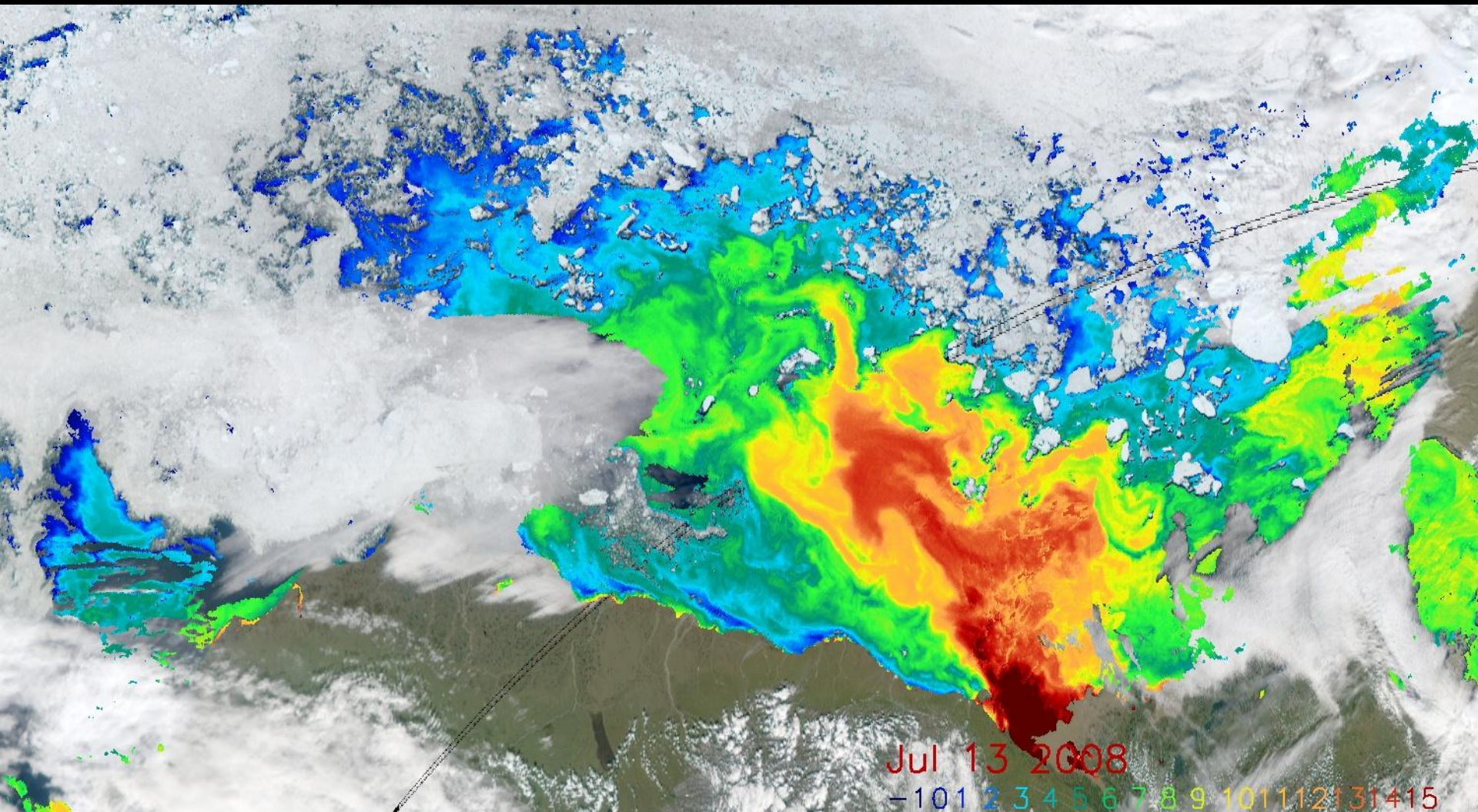
Jul 10 2008

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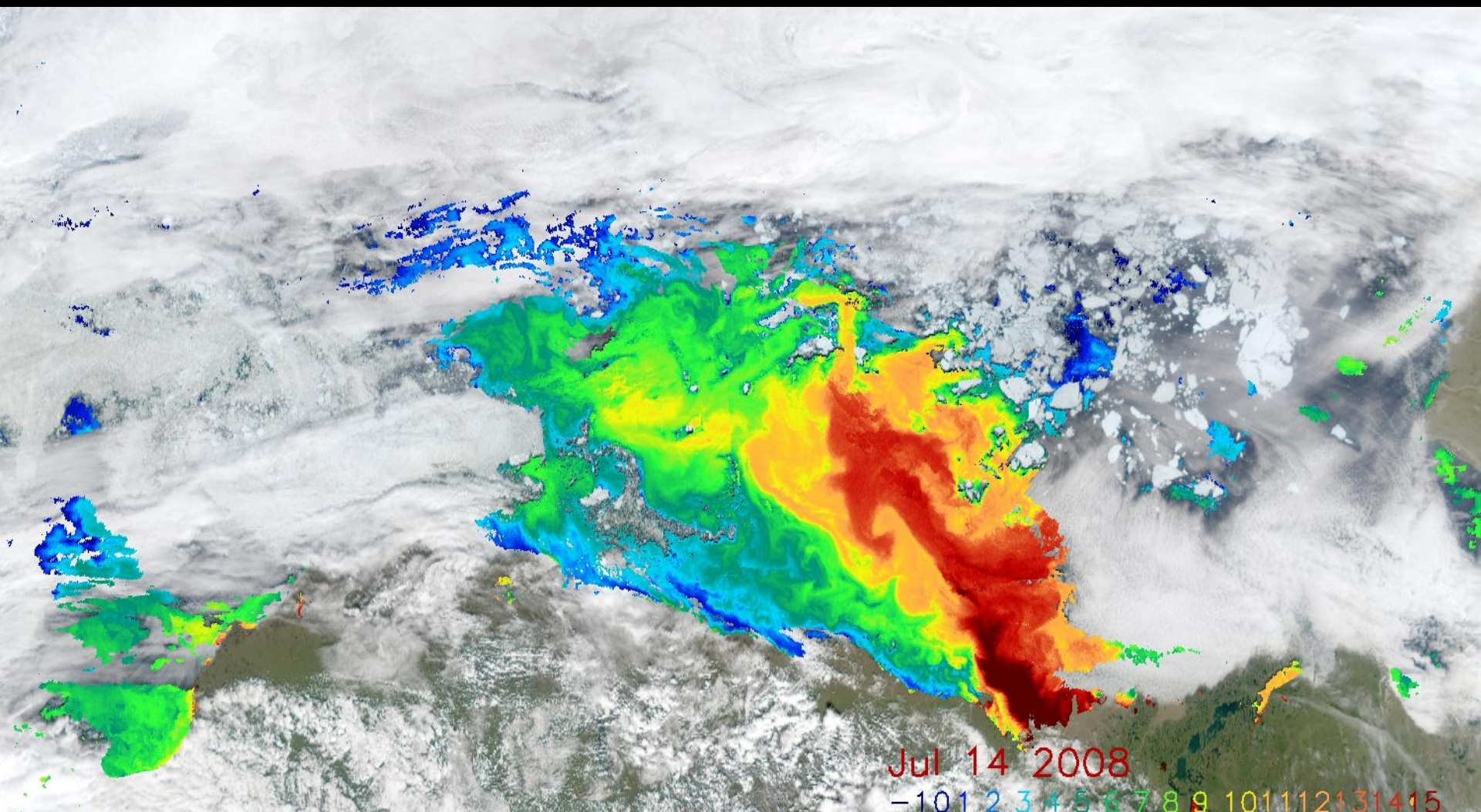
Jul 12 2008

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Jul 13 2008

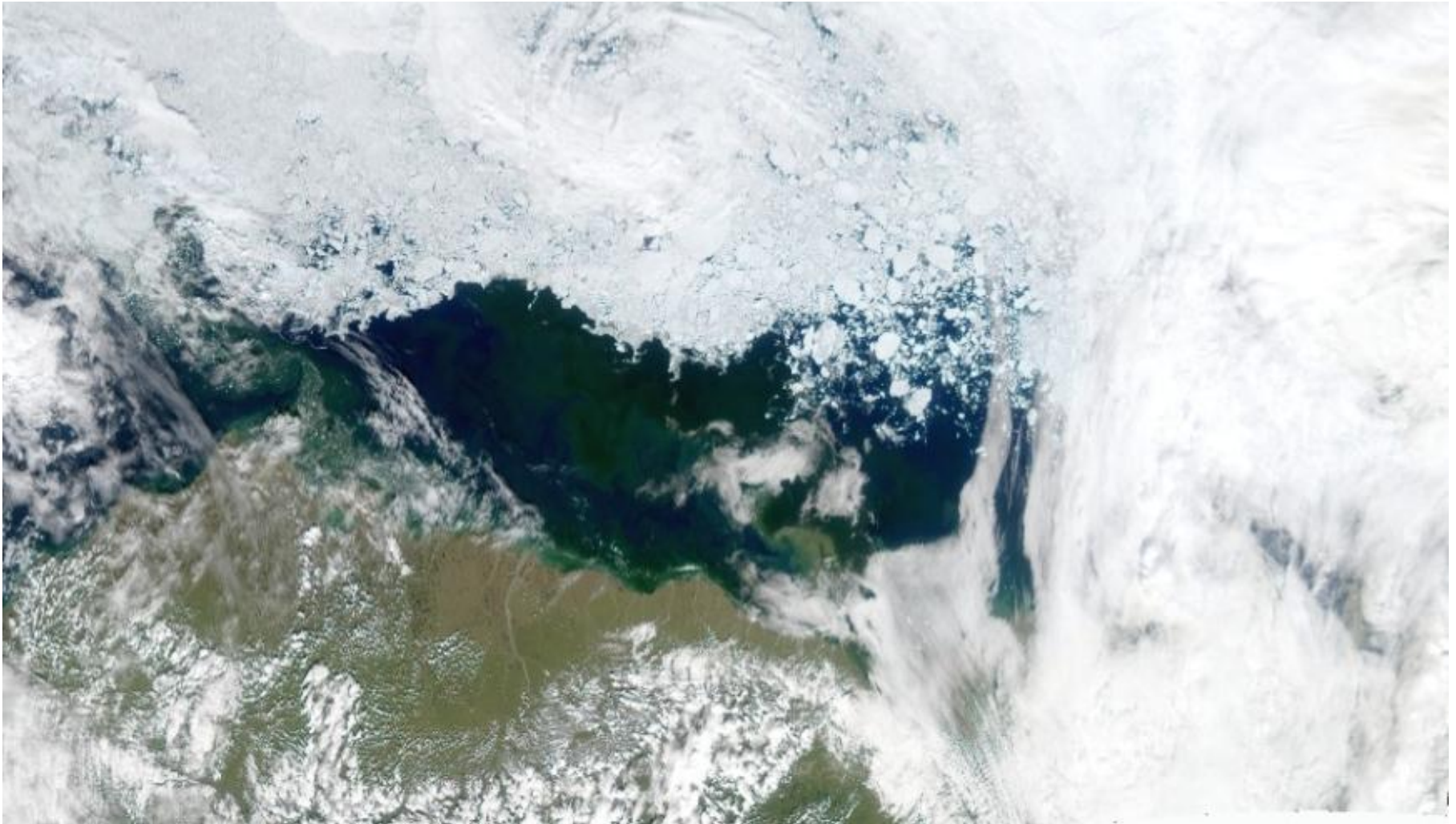
-10 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



Jul 14 2008

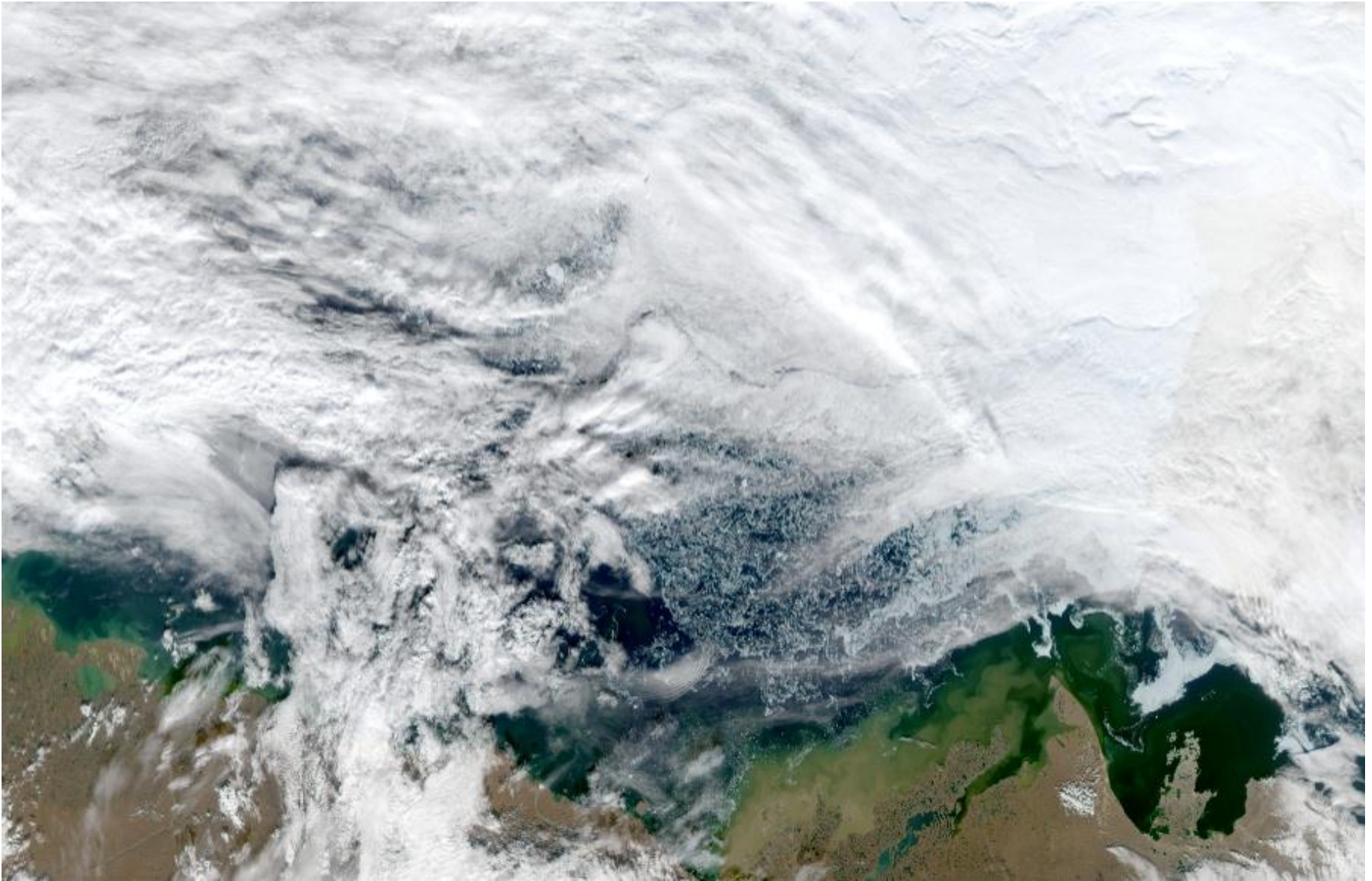
-1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Mackenzie River plume (July 19, 2011)



MODIS true color

Mackenzie River plume (Sept. 6, 2002)



MODIS true color