## GG 140 - The Atmosphere, the Ocean and Environmental Change with Professor Ronald B. Smith

## Lecture 19 – Ocean Bathymetry and Water Properties

- 2. Plate Tectonics. Image credit: Addison Wesley Longman, Inc <a href="http://www.mun.ca/biology/scarr/Plate\_Tectonics.html">http://www.mun.ca/biology/scarr/Plate\_Tectonics.html</a> (Accessed Oct. 20, 2011)
- 3. Plate Tectonics. Image credit: USGS <a href="http://geology.com/plate-tectonics.shtml">http://geology.com/plate-tectonics.shtml</a> (Accessed Oct. 20, 2011)
- 5. Plate Tectonics. Image credit: USGS <a href="http://www.nature.nps.gov/geology/usgsnps/gtime/gtime1.html">http://www.nature.nps.gov/geology/usgsnps/gtime/gtime1.html</a> (Accessed Oct. 20, 2011)
- 6. Ocean crust and continental crust. Image credit: Brooks Cole Publishing. http://spot.pcc.edu/~aodman/GS%20107%20web/earth,venus,mars/earthmarsvenusindex.htm (Accessed Oct. 20, 2011)
- 7. Hypsometric curve. Image credit: unknown. <a href="http://www3.geosc.psu.edu/~dmb53/DaveSTELLA/Carbon/hypso.gif">http://www3.geosc.psu.edu/~dmb53/DaveSTELLA/Carbon/hypso.gif</a> (Accessed Oct. 20, 2011)
- 9. Acoustic depth profiling. Image credit: USGS. <a href="http://woodshole.er.usgs.gov/operations/sfmapping/sonarhist.htm">http://woodshole.er.usgs.gov/operations/sfmapping/sonarhist.htm</a> (Accessed Oct. 20, 2011)
- 10. Ocean bathymetry. Image credit: unknown. <a href="http://www.pacificislandtravel.com/nature\_gallery/platetectonics.html">http://www.pacificislandtravel.com/nature\_gallery/platetectonics.html</a> (Accessed Oct. 20, 2011)
- 11. World ocean bathymetry. Image credit: Russell E. McDuff and G. Ross Heath. <a href="http://www2.ocean.washington.edu/oc540/lec01-1/">http://www2.ocean.washington.edu/oc540/lec01-1/</a> (Accessed Oct. 20, 2011)
- 13. Atlantic Ocean bathymetry. Image credit: NOAA. <a href="http://en.wikipedia.org/wiki/File:Atlantic\_bathymetry.jpg">http://en.wikipedia.org/wiki/File:Atlantic\_bathymetry.jpg</a> (Accessed Oct. 20, 2011)

- 15. Arctic Ocean bathymetry. Image credit: Intergovernmental Oceanographic Commission (IOC), the International Arctic Science Committee (IASC), the International Hydrographic Organization (IHO), the US Office of Naval Research (ONR), and the US National Geophysical Data Center (NGDC). <a href="http://geology.com/world/arctic-ocean-bathymetry-map.shtml">http://geology.com/world/arctic-ocean-bathymetry-map.shtml</a> (Accessed Oct. 20, 2011)
- 17. Sea surface temperature. Image credit: Unisys Weather. <a href="http://weather.unisys.com/archive/sst/sst-000827.gif">http://weather.unisys.com/archive/sst/sst-000827.gif</a> (Accessed Oct. 20, 2011)
- 18. Sea surface salinity. Image credit: unknown. <a href="http://rs-nautical.blogspot.com/2011/04/sea-salinity.html">http://rs-nautical.blogspot.com/2011/04/sea-salinity.html</a> (Accessed Oct. 20, 2011)
- 19. Nansen Bottle. Image credit: unknown. <a href="http://www.oceanecology.ca/water-sampling.htm">http://www.oceanecology.ca/water-sampling.htm</a> (Accessed Oct. 20, 2011)

Nansen Bottle. Image credit: Dietrich et al. <a href="http://oceanworld.tamu.edu/students/satellites/satellite2.htm">http://oceanworld.tamu.edu/students/satellite2.htm</a> (Accessed Oct. 20, 2011)

- 20. CTD and rosette. Image credit: Flickr user CIOERT. <a href="http://www.flickr.com/photos/cioert/4809433560/in/photostream">http://www.flickr.com/photos/cioert/4809433560/in/photostream</a> (Accessed Oct. 20, 2011)
- 22. Autonomous benthic explorer. Image credit: Woods Hole Oceanographic Institute. <a href="http://auvac.org/configurations/view/135">http://auvac.org/configurations/view/135</a> (Accessed Oct. 20, 2011)
- 23. Typical ocean soundings. Image credit: The Earth Institute of Columbia. <a href="http://ocp.ldeo.columbia.edu/climatekidscorner/whale\_dir.shtml">http://ocp.ldeo.columbia.edu/climatekidscorner/whale\_dir.shtml</a> (Accessed Oct. 20, 2011)