

# SIO 219: Observational Oceanography Seminar

**Winter 2015**

*Seminar URL:* <http://www-pord.ucsd.edu/~ltalley/sio219>

**Instructor: Lynne Talley**

**Location: Keck (OAR) Seminar Room**

**Time: Friday, noon-1**

<http://sam.ucsd.edu>

ltalley at ucsd.edu

x46610

NH 305

**Grading: S/U**

**Units: 1**

## **Course overview**

The observational seminar meets during the academic quarters and is open to all (students, postdocs, researchers, etc). It is a forum for informal discussion of current literature on observational aspects of physical oceanography and for presentation of individual's work in progress. The subject matter for each quarter is determined by the participants, weighted towards the preferences of the enrolled students.

## **Topic for Winter 2015: IPCC AR5 WG1 ocean**

The winter quarter focus is the IPCC AR5 Working Group 1 (2013) report and recent published updates if conclusions have been refined. Students will be encouraged to focus on the Boxes and FAQs that are interspersed in the chapters. Presentations may also be drawn from the annual U.S. State of the Climate reports (BAMS) or the annual ICES climate reports (European perspective), or similar publications.

The format is a 30 to 40-minute presentation followed by or interleaved with discussion. Each enrolled student gives or shares one presentation and leads the discussion. Enrolled students are expected to read the assigned paper and participate actively each week.

Resources:

IPCC AR5 WG1 website <http://www.climatechange2013.org>

Full WG1 report (385 MB) is found at that site.

[Local link to WG1 report](#), which might still be a slow download

Important subchapters

[IPCC AR5 Summary for Policymakers](#)

IPCC AR5 [Technical summary](#) (local link)

Click on Quick Links on the WG1 website to reach the following, and also a generic presentation on WG1.

IPCC AR5 WG1 fact sheet [http://www.climatechange2013.org/images/uploads/WG1AR5\\_FactSheet.pdf](http://www.climatechange2013.org/images/uploads/WG1AR5_FactSheet.pdf)

IPCC AR5 WG1 headline statements

[http://www.climatechange2013.org/images/uploads/WG1AR5\\_Headlines.pdf](http://www.climatechange2013.org/images/uploads/WG1AR5_Headlines.pdf)

[State of the Climate 2013](#), Bulletin of the American Meteorological Society. Jessica Blunden and Derek S.

Arndt, 2014: State of the Climate in 2013. *Bull. Amer. Meteor. Soc.*, **95**, S1–S279.

doi: <http://dx.doi.org/10.1175/2014BAMSStateoftheClimate.1>

[IROC: ICES Report on Climate](#) of the North Atlantic with interactive graphics and annual reports. (Most recent pdf report published in Dec. 2013, for year 2012.)

### **Winter, 2015 schedule.**

January 9: Catherine Jones. IPCC WG1 structure, generic presentation, headline summary. Local link to [WG1 Generic presentation](#) (ppt) and [WG1 headline statements](#) (pdf).

January 16: Veronica Tamsitt. Heat content – observations.

Reading:

[Headline statements](#)

[Summary for Policymakers](#): Section B.2 (page 8)

[Technical summary](#): TS2.2 (pages 37-39)

[Chapter 3](#): Section 3.2 and FAQ 3.1.

January 23: Uriel Zajaczkovski. Heat content – attribution and projection

[Summary for Policymakers](#): Section B.3 (p. 9-10) and E.5 (p 24-25).

[Technical summary](#): TS 5.4.5 (p. 88), TS5.5.6 (p. 93) – both just 1 paragraph

[Chapter 11](#) (Near-term Climate Change): 11.3.3.1

[Chapter 12](#) (Long-term Climate Change): 12.4.7

[Annex 1](#) (Atlas ♦Projections): Figures A1.4, A1.5

January 30: Ru Chen. Cryosphere change with focus on sea ice

[Summary for Policymakers](#): Section E.4 (p. 24). Also D.1 and D.3 if you♦re interested.

[Technical summary](#): TS 2.5.3 and 2.5.4 (p. 40-41, 46)

[Chapter 4](#) (Cryosphere): Focus on 4.1 and 4.2; skim all.

February 6: Andrew Delman. Regional climate projections.

[Summary for Policymakers](#): Section E.1 and E.2.

[Chapter 14](#) (Future regional climate change): Exec summary, FAQ 14.2 (1256-1257), Table 14.3 (1288-1289). Optional: section 14.1

[Chapter 14 supplementary material](#): section 14.SM.6.1 confidence levels and tables

February 13: Alisa Beaubien. Atmospheric circulation changes.

February 20: Julia Fiedler. Sea level rise.

February 27: Caitlin Whalen (and Jess Millar). Variability and extreme events.

March 6: Yassir Eddebar. Biogeochemical changes.

March 13: Erica Rosenblum. Cryosphere projections and overall summary.

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Last modified 4 February 2015