January 15 (Thursday) Session 1: Findings from the KESS and CLIMODE programs; Co-coveners: Meghan Cronin and Terry Joyce

7:30 - 8:00 Breakfast
8:00 - 8:30 Welcome and Introductions
8:30-9:00: Ocean frontal effects on the atmosphere: A synthesis of observations and models - Shang-Ping Xie (invited)
9:00-9:20: Recirculation in the Kuroshio Extension - Steve Jayne
9:20-9:40: An observational analysis of the variability of the sea surface heat flux in the Kuroshio Extension region - Masanori Konda
9:40-10:00: Interannual Variability of the North Pacific Subtropical Mode Water: New Insights from the KESS Profiling Float Program - Bo Qiu

10:00-10:20: Coffee Break

10:20-10:50: Ocean convection within the wintertime Gulf Stream and interannual changes in the N. Atlantic storm track: some early results from CLIMODE - Terrence Joyce (invited)
11:10-11:30: Episodic Mode Water Formation: Atmospheric Controls and Trends - Jeffrey Shaman
11:30-11:50: Sources and Predictability of Anomalies in North Atlantic Subtropical Mode Water Formation and Transformation Using the Walin Framework - Kathie Kelly
11:50-12:30: Key points - discussion

12:30-14:00PM: Lunch (on your own)

Session 2: Frontal Scale air-sea interaction in WBC regions
Co-conveners: Justin Small and Kathie Kelly

14:00-14:30PM: Influence of the Gulf Stream on the troposphere - Shoshiro Minobe (invited)
14:30-14:50PM: Air Sea Interaction over the Gulf Stream - Ralf Hand
14:50-15:10PM: Eighteen Degree Water from profiling floats in CLIMODE - Lynne Talley
15:10-15:30PM: Influences of the Kuroshio/Oyashio Extensions on air-sea heat
exchanges and storm track activity as revealed in regional atmospheric model simulation - Bunmei Taguchi

3:30-3:50PM: Coffee Break

15:50-16:10PM: Mesoscale air-sea interaction and feedback in the western Arabian Sea - Hyodae Seo
16:10-16:30PM: Air-sea interactions in the Gulf Stream region from long-term in-situ observations - Sebastien Bigorre
16:30-16:50PM: Ocean frontal effects on the vertical development of clouds over the western North Pacific: In situ and satellite observations - Hiroki Tokinaga
17:50-17:10PM: Frontal Scale Air-Sea Interaction in High Resolution Versions of the Community Climate System Model - Frank Bryan, B. Tomas and J. Mclean
17:10-17:50PM: Key points - discussion

18:10-20:10PM: Poster session and Reception

January 16 (Friday): Session 2 (continued)

7:30 - 8:30 Breakfast
8:30-8:50: Ocean-atmosphere Coupling over Mid-latitude Ocean Fronts - Timothy Liu
8:50-9:10: Ocean model representation of western boundary currents and frontal systems: How good are the strongly eddying models? - Matthew Hecht

Session 3a: Basin-Scale air-sea interaction in connection with WBC variability
Co-Conveners: Young-Oh Kwon and Mike Alexander

9:10-9:40: Interaction of large scale climate fluctuations with the western boundary currents in the North Pacific - Niklas Schneider (invited)
9:40-10:10: Decadal variability in the Kuroshio and Oyashio Extension fronts simulated in an eddy-resolving OGCM - Masami Nonaka (invited)
10:10-10:30: The Oceanic Eddy Heat Transport in a high resolution Ocean GCM simulation - Kunihiro Aoki

10:30-10:50: Coffee Break

Session 3b: Coupled interactions in the western boundary current region

10:50-11:20: Review of observed influence of SST anomalies in Western Boundary Current regions on the large-scale atmospheric circulation - Claude Frankignoul (invited)
Subtropical Mode Water with Implications to Pacific Climate Variability - Xujing Davis
11:40-12:00: North Pacific Gyre Oscillation synchronizes climate fluctuations in the eastern and western North Pacific - Lina Ceballos
12:00-12:40: Key points - discussion

12:40-14:00PM: Lunch (on your own)

Session 4: Impact of upper ocean variability in WBC regions on midlatitude climate variability and predictability
Co-conveners: Hisashi Nakamura and Claude Frankignoul

14:00-14:30: Western Boundary Current SST anomalies and their Interaction with the Atmosphere - Yochanan Kushnir (invited)
14:50-15:10: Tropical Cyclone to Extratropical Storm Transitions in the Vicinity of the Kuroshio: Sensitivity to Regional SST - Nick Bond
15:10-15:30: Coupled ocean-atmosphere response to wind-stress forcing over the North Pacific - Lixin Wu

15:30-15:50 PM: Coffee Break

15:50-16:20: Importance of midlatitude oceans in the formation of storm-tracks and westerly jets and in their variability: A review - Hisashi Nakamura (invited)
16:40-17:00: Gulf Stream effects on the NAO: theory, modeling and observations -Michael Ghil
17:00-17:40: Key points - discussion

January 17 (Saturday): Discussion and outlook session:

8:30-9:30 Comparison of Western Boundary Currents: Gulf Stream and Kuroshio Extension
Presenter: Kathie Kelly, Moderator: Bo Qiu

9:30-10:30 Beyond KESS and CLIMODE
Presenter: Meghan Cronin, Moderator: Nick Bond

10:30-10:50 Coffee Break
10:50-11:50 Evaluation of WBC representation in climate models
Presenter: LuAnne Thompson, Moderator: Young-Oh Kwon

12:00-1:30PM Lunch (provided)

13:30-14:30 Frontal-scale WBC air-sea interaction issues
Presenter: Justin Small, Moderator: Hisashi Nakamura

14:30-15:30 Tropical teleconnections and midlatitude WBC variability
Presenter: Mike Alexander, Moderator: Claude Frankignoul

15:30 - 17:00 Round-table discussions/writing assignment

Poster presentations:

Session 1:

- Influence of summer-time surface heat flux to the pre-condition of winter-time mixed layer observed by the Kuroshio Extension Observatory - Kako
- Frontal waves along the Kuroshio Extension and formation of distinctive salinity minimum - Yasuda
- Comparisons between KESS data and the OCCA assimilation results - Douglass
- The Character of North Atlantic Subtropical Mode Water Potential Vorticity Forcing - Olsina
- Distribution of deep near-inertial waves observed in the Kuroshio Extension - Park
- Oceanic response to atmospheric forcing in the Kuroshio Extension - Rainville

Session 2:

- The mechanism of the atmospheric response to the Gulf Stream in a regional climate model - Takatama
- High-resolution simulation of the global coupled atmosphere–ocean system using CFES - Komori
- Atmospheric response to the Gulf Stream in an AGCM - Kuwano-Yoshida
- Decadal variability of the Kuroshio Extension jet in a global eddy-resolving ocean model hindcast - Yoshi Sasaki
- Modification of Air-Sea Heat Fluxes by Ocean Eddies in the North Pacific - Ivana Cerovecki and Julie McClean

Sessions 3/4:
• On the relationship between synoptic wintertime atmospheric variability and path shifts in the Gulf Stream and Kuroshio Extension - Joyce
• The nonlinear connection between Labrador Sea buoyancy loss, Deep Western Boundary Current strength, and Gulf Stream path in an OGCM - Yeager
• Inter-annual variability of the Kuroshio transports south of Japan derived from satellite altimetry data - Nagano
• Manifestation of the Pacific Decadal Oscillation in the North Pacific Western Boundary Current System - Andres
• Influence of summer-time surface heat flux to the pre-condition of winter-time mixed layer observed by the Kuroshio Extension Observatory - Tomita