

Climate Variability and Change Residence Course (CVCRC) Working Agenda (3/11/2016)

Lecture	Activity	Break
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Time	Tuesday, April 5	Wednesday, April 6	Thursday, April 7	Friday, April 8
8:00 – 12:00	Introduction (8:00-8:30) <i>Marina Timofeyeva</i>	MJO (8:00 – 8:45) <i>Matt Rosencrans</i>	Intro to Climate Science Communication (8:00 – 9:00) <i>Deke Arndt</i>	Climate Change Impacts (9:15 – 10:15) <i>Deke Arndt</i>
	Climate and Weather (8:30 – 9:30) <i>Shawn Rossi</i>	MJO Lab (8:45 – 9:30) <i>Matt Rosencrans</i>	Climate Prediction Tools, Outlooks, and Products Activity (9:15 – 10:45) <i>Mike Halpert</i>	Making Climate Change Decision (10:30 – 12:00) <i>Marina Timofeyeva & Shawn Rossi</i>
	Understanding Climate Statistics and Methods (9:45 – noon include 15 min break) <i>Marina Timofeyeva</i>	Hurricane Outlooks (9:45 – 10:30) CPC <i>Gerry Bell</i> over the conf call	Water and Climate (11:00 – 12:00) <i>Doug Kluck</i>	Communicating Climate Information to Different Users (1:00 – 2:00) <i>Deke Arndt</i>
12:00-1:00	Lunch break	Lunch break	Group Lunch	Lunch break
1:00 -5:00	Practice for Climate Studies (1:00 – 2:00) <i>Shawn Rossi & Dee Kann</i>	Climate Variability Assignment (1:00 – 2:30) <i>Shawn Rossi & Dee Kann</i>	Water and Climate Lab (1:00 – 1:45) <i>Shawn Rossi & Dee Kann</i>	Climate Communication Tools and Resources Lab (1:00– 2:00) <i>Deke Arndt</i>
	Climate Variability, Anomalies, and Teleconnection (2:15– 3:15) <i>Mike Halpert</i>	Climate Extended Range Tools, Outlooks, and Products (2:45 – 3:45) <i>Matt Rosencrans</i>	Climate Change Science (2:00 – 3:00) <i>Deke Arndt</i>	Exercise on Tuning Climate Information for Decision Making (2:15 – 3:15) <i>Shawn Rossi & Dee Kann</i>
	ENSO (3:30 – 4:15) <i>Mike Halpert</i>	Climate Long Lead Tools, Outlooks, and Products (4:00 -5:00) <i>Mike Halpert</i>	Discussion on climate science and service issues (3:15 – 5:00) all participants, Marina facilitator	Course Summary Activity (3:30 – 4:30) <i>Shawn Rossi & Dee Kann</i>
	ENSO Lab (4:15 – 5:00) <i>Mike Halpert</i>			Course Wrap Up (4:30 – 5:00) <i>Marina</i>

Objectives:

- Climate Variability Climate versus Weather:** Definitions of climate and weather, principles of explaining climate and weather extremes to various groups of users
- Climate Variability Anomalies and Teleconnections:** Understanding climate variability modes (ENSO, AO/NAO, PDO, PNA, AAO), blockage, teleconnections, their physical mechanisms, impacts and predictability
- Principles of Science Communication:** understanding public perceptions on climate change issues, familiarity with best practices for climate communication
- Understanding meaning of climate statistical terms and use of local tools:** Definitions of climatology, what climate statistics explain about variability and change, NOAA's definitions of predictions/forecasts/outlooks/projections, skill of products, confidence and uncertainty of NOAA climate products, tools for understanding climate variability and change impacts?
- Practice Session on Understanding Statistical Terms:** using online forum format and NOAA tools, practice of writing short and meaningful summaries of local climate variability and change impacts in response to various climate user needs
- ENSO:** understanding physical mechanisms, impacts, predictability of ENSO, use of NOAA tools to monitor and predict ENSO; NOAA CPC ENSO briefings 101
- ENSO Lab:** Practice understanding current conditions and expected development
- MJO:** understanding physical mechanisms, impacts, predictability of MJO, use of NOAA tools to monitor and predict MJO; NOAA CPC MJO briefings 101
- MJO Lab:** Practice understanding current conditions and expected development
- Hurricane Monitoring and Seasonal Outlooks:** Understand hurricane climatology, current development, and methods of forecasting
- Hurricane Monitoring and Seasonal Outlooks Lab:** Practice understanding of current hurricane conditions and expected developments
- Drought Science:** understanding physical mechanisms, impacts, predictability of drought, NOAA tools for drought monitoring and predictions
- Drought Lab:** Hands on Drought.gov tools and information
- Assignment:** Practice communication of climate information to local office peers, prepare a 15 min briefing and communicate to local office staff information on climate variability current development and implications to local office products and services to users
- NOAA Climate Predictions Tools, Outlooks, and Products:** Understanding climate outlooks (long lead and extended range, drought, hurricane, etc.) and tools used for their development, interpretation of climate prediction information
- NOAA Climate Predictions Tools Practice:** Learn how communicate climate prediction information to various users' requests and outreach activities
- Water and Climate:** Understanding water and climate interactions and climatic impacts on hydrologic variables, use of climate information in NOAA hydrologic warnings and predictions, and dealing with climate and water – related societal challenges.
- Discussion on Climate Issues:** learn by examples. All class students need to report to the class on their climate science and services challenges and be prepared to elevate your case for the group discussion. At least one regional case study will be discussed and solution on how to deal with climate challenges will be identifies during the discussion.
- Climate Change Science:** understanding of physical mechanism, impacts and predictability of climate change impacts on extreme weather conditions
- Climate Change Impacts:** What are the climate change impacts on human line, biological diversity, and natural resources?
- Making Climate Change Decisions:** become aware of current practices on **making climate change decision, and learn what climate information is appropriate to guide such decision and where to obtain this information**
- Communicating Climate Information for Different Users:** understanding the difference in climate information applications (what different user groups seek) and learn how to tailor climate information to various user needs
- Climate Communication Tools and Resources:** Navigation of climate.gov, Climate Resilience Toolkit, their utility for local user inquiries
- Exercise on Tuning Climate Information for Decision Making:** practice selecting and communicating action-oriented climate information delivery
- Closing Activity:** room around discussion on what messages became the highlights of the course