Agenda – U.S. CLIVAR Hurricane Working Group Workshop 5-7 June 2013, GFDL, Princeton, NJ

Wednesday, June 5th

8:30am – US-CLIVAR Hurricane WG: How we got here - where are we going? **Gabriel Vecchi**

9:00am – *Characteristics of tropical cyclones in high-resolution models of the present climate*, by **Daniel A. Shaevitz**, S.J. Camargo, A.H. Sobel and the US CLIVAR hurricane working group.

9:30am – Response of global tropical cyclone frequency to a doubling of CO_2 and a uniform SST warming – a multi-model intercomparison, by **Ming Zhao**, G. Vecchi, E. Scoccimarro, S. Gualdi, H. Wang, A. Kumar, Y.-K. Lim, and S. Schubert.

10:00am - Coffee Break

10:30am- Response of downscaled tropical cyclones to climate forcing: Results and interpretation, by **Kerry Emanuel**.

11:00am – *Cluster analysis of explicitly and downscaled simulated North Atlantic tropical cyclone tracks*, by A.S. Daloz, **Suzana J. Camargo**, J. Kossin, K. Emanuel, and US CLIVAR hurricane working group

11:30am – *A comparison of observed and model-generated tropical cyclone climatologies using a spatial lattice*, by **Sarah Strazzo**, J.B. Elsner, T. LaRow, and M. Zhao

12:00pm - Lunch

1:00pm – *Projected changes in the seasonal cycle of tropical cyclones*, by **John G. Dwyer**, S.J. Camargo, A.H. Sobel, M. Biasutti, K.A. Emanuel, G.A. Vecchi, and M. Zhao.

1:30pm – Warming sea-surface temperature raises the bar for tropical cyclogenesis, by **Jenni Evans**

2:00pm – North Atlantic hurricane potential intensity in CMIP5 models: Anthropogenic forcing versus Atlantic multi-decadal variability, **Mingfang Ting**, S.J. Camargo and Y. Kushnir.

2:30pm – *On the relationship between potential intensity and CAPE*, by **Stephen Garner**

- 3:00pm Coffee Break
- 3:30pm Discussion
- 4:00pm Dynamic hurricane prediction with the NCEP CFS CGCM, by **Jae K. E. Schemm** and L. Long
- 4:30pm *Uncertainties in future changes in tropical cyclone activity projected by multi-physics and multi-SST ensemble experiments*, by **Hiroyuki Murakami**
- 5:00pm *Tropical cyclone characteristics in response to different cumulus convective activity in a high-resolution climate model*, by **Young-Kwon Lim** and S. Schubert
- 6:30pm 8pm: Reception at Salt Creek Grille with appetizers and beverages

Thursday, June 6th 2013

- 8:30am Dynamical downscaling of tropical cyclone activity: An update on the use of the GFDL Hurricane model in multiple basins, by **Thomas R. Knutson**
- 9:00am *Tropical cyclone simulation and response to CO2 doubling in GFDL CM2.5 high-resolution coupled model*, by **Hyeong-Seog Kim**, G. Vecchi, T.R. Knutson, T.L. Delworth, and M. Zhao.
- 9:30am *Tropical cyclone studies with a hierarchy of climate model resolutions from the UPSCALE project*, by **Malcolm Roberts**, M. Mizielinski, J. Strachan, P.L. Vidale, M.E. Demory, and R. Schiemann
- 10:00am Coffee Break
- 10:30am *Hurricane simulations in a regional climate model*, by **R. Saravanan**, C.M. Patricola and P. Chang
- 11:00am *Tropical cyclone simulations in the very high-resolution global climate models*, **Cheng-Ta Chen**, T.-P. Tzeng, M. Wehner, Prabhat, and A. Kitoh
- 11:30am Discussion
- 12:00pm Lunch

- 1:00pm High resolution, multi-decadal tropical cyclone simulations using a variable-resolution general circulation model, by **Colin M. Zarzycki** and C. Jablonowski
- 1:30pm Results from the Community Atmosphere Model CAM5.1, by **Michael Wehner**, Prabhat, K. Reed, C.-T. Cheng, and D. Stone
- 2:00pm Tropical cyclone research with a global non-hydrostatic model, by **Kazuyoshi Oouchi**
- 2:30pm Environmental control of tropical cyclone genesis in paleoclimate simulations, by **Robert Korty**, S.J. Camargo and J. Galewsky
- 3:00pm Coffee Break
- 3:30pm *Intense precipitation events associated with landfalling storms in a warmer climate*, by **Enrico Scoccimarro**, S. Gualdi, G. Villarini, A. Navarra, and modelers of the US CLIVAR hurricane working group
- 4:00pm *Sensitivity of tropical cyclone rainfall to different warming scenarios*, by D.A. Lavers, **Gabriele Villarini**, E. Scoccimarro, G.A. Vecchi and modelers of the US CLIVAR hurricane working group
- 4:30pm *Impact of stratospheric temperature on hurricane intensity: An idealized modeling study*, by **Shuguang Wang**, S.J. Camargo, A.H. Sobel and L.M. Polvani

5:00pm - Discussion

Friday, June 7th, 2013

- 8:30am *Detection of tropical cyclones using a phenomenon-based cyclone tracking scheme*, by M. Horn, **Kevin Walsh** and A. Ballinger
- 9:00am How well can we detect tropical cyclone tracks in the Reanalyses data, by **Cheng-Ta Chen**, T.-P. Tzeng, M. Wehner and Prabhat
- 9:30am The impact of the El Niño-Southern Oscillation and Atlantic Meridional Mode on Atlantic tropical cyclone activity, by **Christina Patricola**, R. Saravanan and P. Chang

10:00am – Coffee Break

10:30am – How well do global climate models simulate the variability of Atlantic tropical cyclones associated with ENSO? by **Hui Wang**, L. Long, A. Kumar, W. Wang, and J.-K. E. Schemm

11:00am – *Isentropic analysis of hurricanes*, by **Agnieszka Mrowiec**, O. Pauluis and F. Zhang

11:30am - Discussion

12:30pm – End of the workshop