WCRP-CLIVAR Workshop "Climate Interactions among the Tropical Basins" 24 – 26 February 2021, Online Registration form

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Title of your presentation: Cross-basin ocean-atmospheric interactions in the Anthropocene

Abstract: Global climate response to an isolated energy perturbation is at the heart of the dynamics of anthropogenic climate change. Major sources of anthropogenic aerosols—mostly as an albedo cooling—are over Europe, North America, East and South Asia, with a distinct time trajectory for each emission source. Even though greenhouse gases (GHGs) are nearly spatially uniform, the air-sea energy dis-equilibration as indicated by large surface heat flux is confined in the subpolar North Atlantic and Southern Ocean. This talk reviews recent progress in developing zonal-mean energy view and cross-basin ocean-atmospheric dynamics of regional patterns of anthropogenic climate change.