TORs of the WGNE MJO Task Force

Overall goal: Facilitate improvements in the representation of the MJO in weather and climate models in order to increase the predictive skill of the MJO and related weather and climate phenomena.

* Further development and promotion of process‐oriented diagnostics/metrics that improve insight into the physical mechanisms for robust simulation/prediction of the MJO and that facilitate improvements in convective and other physical parameterizations relevant to the MJO.

* Promote the ongoing evaluation of real‐time forecasts and hindcasts of tropical intraseasonal variability, including assessment of hindcasts in the Subseasonal to Seasonal Prediction Project (S2S) model database. Coordinate with WGNE to implement new forecast metrics within the operational forecast centers.

* Develop, coordinate, and promote analyses of MJO air‐sea interaction, including development of diagnostics that relate MJO simulation capability to fidelity in simulating key air‐sea interaction processes.

* Advance understanding of MJO interactions with the Maritime Continent to facilitate improvements in model bias and foster better subseasonal predictions across the Maritime Continent and the globe.

* Develop, coordinate, and promote analyses of MJO interactions with the extratropics, including an assessment of model ability to accurately simulate such interactions and the consequences for prediction of the midlatitude circulation and extreme events.

* Collaborate with WCRP and WWRP activities such S2S and PPP, the CLIVAR/GEWEX Monsoons Panel, and GASS to advance common objectives. Address WCRP Grand Challenges through advancement of task force goals.

* Report at least annually to the WGNE co‐chairs.

* Organize workshops and meetings of opportunity to further the work of the Task Force in coordination with the relevant WMO and WCRP secretariat staff.