Louis Escamilla U.S. Air Force Oral

(Virtual Talk)

This briefing explores the robust collaboration between Air Force Weather and NASA in the application and enhancement of the Global Hydro-Intelligence (GHI) Subseasonal-to-Seasonal (S2S) forecast system. Contrary to a conventional weather and climate model, the GHI-S2S system is a pioneering global initiative focused on predicting hydrological parameters on seasonal to sub-seasonal timescales.

We will highlight how the 14th Weather Squadron leverages NOAA's S2S models in conjunction with the GHI system to advance hydrological forecasting capabilities. This integration is pivotal for reducing model bias and errors, thus enhancing the accuracy of forecasts vital for strategic decision-making in both Air Force and Army operations.

Key points of discussion will include:

1. The significance of the Air Force Weather and NASA collaboration in advancing the GHI-S2S system, aimed at bridging gaps in global hydrological predictions.

2. The verification of NOAA's S2S model outputs when integrated with the GHI-S2S system, showcasing the effective synergy between these systems.

3. The impact of enhanced hydrological data from the GHI-S2S system on Air Force and Army operations, particularly in improving preparedness and responses to hydrological events. Additionally, the briefing will address the potential benefits of the GHI-S2S system for the Department of State, especially concerning disaster mitigation, response, and transboundary

water security issues. The session will conclude with a discussion on future enhancements to the GHI-S2S system and the broadening of its applications within the Air Force Weather enterprise.

Presentation file <u>Escamilla-Louis.pdf</u> Meeting homepage <u>S2S Community Workshop</u> <u>Download to PDF</u>