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RAL SEMINAR SERIES

METplus: A Community Framework for Flexible & Reproducible Model Evaluation

MICHELLE HARROLD
JOHN HALLEY GOTWAY
CHRISTINA KALB

NSF National Center for Atmospheric Research

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1-2 PM (MT) FL2-1022 or Virtual | [Watch Live](#)



Verification and diagnostic evaluation are essential for advancing numerical weather prediction (NWP) and enabling informed use of model guidance across research and operations. The Model Evaluation Tools (METplus) framework provides a community-driven, flexible, and extensible system for performing robust verification and diagnostic analyses across a wide range of applications. Centered on the MET verification package, METplus has evolved into a comprehensive ecosystem that integrates Python-based workflow automation, diagnostic and statistical analysis tools, and visualization capabilities within a consistent and reproducible framework.

This seminar will provide a high-level overview of METplus, including its development history, governance structure, and broad adoption across organizations, including NSF NCAR. Emphasis will be placed on the maturity of the framework, including its extensive documentation, active user support, and rigorous testing practices. We will highlight core capabilities within METplus, spanning grid-to-grid and grid-to-observation verification, ensemble and probabilistic methods, tropical cyclone diagnostics, and object-based approaches. Examples will demonstrate how METplus supports end-to-end workflows, including applications within automated workflow systems. We will also highlight recent developments, including emerging AI-focused capabilities, and provide updates on current and upcoming releases. [Event Website](#)

METplus