

Paolo  
Antonelli  
Adaptive Meteo  
Oral  
(Virtual Talk)

This study focusses on the operational evaluation and prediction of cloud cover, coupled with the subsequent enhancement and validation of cloud forecasts. Operational prediction of cloud cover is achieved through the assimilation of Transformed Retrievals derived from hyperspectral IR data into a Rapid Update Cycle NWP model. Meanwhile, the enhancement and validation of cloud forecasts involve the use of Physical Retrievals from hyperspectral IR data and the cloud mask products derived from VIIRS/AVHRR data. In addition to outlining the primary accomplished and anticipated milestones of the project, the presentation offers an evaluation of the advantages and limitations of employing satellite data and products in cloud forecasting. Furthermore, it explores the potential of integrating algorithms based on deep learning to effectively harness the extensive data volume from current and future satellite sensors.

Presentation file

[Antonelli-dod-2023.pdf](#)

YouTube link

[View recording](#)

Meeting homepage

[DoD Cloud Post-Processing and Verification Workshop](#)

[Download to PDF](#)