



CIWRO Hybrid Workshop on Forecast Applications Improvements

Introduction

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CIWRO Overview



Established on 1 October 2021 as a new NOAA Cooperative Institute



Collaborative research between OU & NOAA to improve understanding needed to produce better forecasts & warnings that save lives & property



CIWRO essentially a continuation of CIMMS which was established in 1978



Largest research center at OU (~16% of research expenditures in Norman campus)



Now a consortium that allows us to take advantage of expertise of our partners: UA, Howard, PSU and TTU

Research Themes



Theme 1: Weather radar and observations R&D



Theme 2: Mesoscale and Storm-scale modeling R&D



Theme 3: Forecast applications improvements R&D



Theme 4: Subseasonal to seasonal (S2S) prediction for extreme weather events



Theme 5: Social and socioeconomic impacts of high impact weather systems

Approaches



Enhanced knowledge of physical processes (mesoscale & stormscale dynamics, electricity, microphysics, PBL processes)



Development of observational tools (weather radar, profilers, mobile mesonet, lidars, field projects, UAS)



Development & application of high-resolution numerical models (parameterizations, data assimilation, ensembles, uncertainties)



Improved understanding of societal impacts of strategies for informing public about high impact weather



S2S predictions of intensity and location of extreme weather

Goals of Workshop



Identify potential projects that we may be able to pursue in next 5 to 10 years that go beyond what we are already doing



Identify sources of sponsorship for these projects (either within NOAA or outside of NOAA)



Enhance collaboration between NOAA units, OU and other consortium partners in these future projects



Form smaller working groups to develop white papers or proposals to advance such projects



Today, a “get to know you” session so that consortium members and NOAA scientists can pursue these first 4 goals

Outline of Workshop

- 12 minute talks with 3 minutes for questions
 - Warning given at 10 minutes (2 minutes left)
 - Given # of talks, times must be enforced
- Discussion sections also included
- If you object to your talk being recorded, let us know
- **Take breaks as needed**