

OPENING ADDRESS

Charting a Path Forward at the Climate Prediction Center

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The Climate Prediction Center (CPC) provides the operational short-term climate prediction and monitoring capability for the National Oceanic and Atmospheric Administration (NOAA). CPC is a center of excellence with an extremely talented team of federal and affiliate scientists. In order to continue to improve our existing products and services and meet stakeholder demand for new products and services CPC complements its internal capacity by leveraging the capabilities of the broader climate enterprise. Indeed, we and our collaborators have found the research to operations (R2O) and operations to research (O2R) activities to be mutually beneficial. Over time we have found that a few key principals help to ensure successful collaborations. These include use of a co-development process to the extent possible, a focused product development strategy, and transparency in the research process.

Currently, we are focusing our development efforts in areas that have received prioritization from NOAA management. Some specific activities that are being pursued include:

- Exploring the feasibility of producing prediction products in the week 3-4 timescale. Currently, the National Weather Service (NWS) does not have any prediction products at this timescale though there is significant stakeholder interest in having such products if they can be shown to have skill. Forecasts at this timescale are characterized by a small signal, large noise and have low predictability due to the decaying influence of atmospheric initial conditions and marginal influence from boundary conditions such as sea surface temperature, soil moisture, sea ice, *etc.* Consequently, forecasts of opportunity are likely to serve as the backbone for these outlooks.
- Development of experimental seasonal Arctic Sea Ice forecasts for the NWS Alaskan Region. Several key stakeholders including the military, transportation, and oil drilling industry are interested in forecasts of the ice cover in the Arctic. CPC is developing an improved version of the current operational sea ice forecasting model in order to better meet these stakeholder needs.
- Incorporation of social science research to better understand our stakeholder needs and to improve the presentation of our products to better meet those needs.

We are of course also engaged in research to enable the continual incremental improvement process for all of our products and services, which are too numerous to be listed here. There are several initiatives available for collaborating with CPC including through NWS headquarters and the Climate Program Office and Climate Testbed. If you are interested in collaborating with CPC and are unsure of the best way to engage us please feel free to send me an e-mail to david.dewitt@noaa.gov or call me at (301) 683-3428.