

Multi-model Experimental Atmospheric River Forecast*

Issued on Thursday, November 15, 2018

Contents:

6-day to 8-day lead forecast: “Weather” - Typical presentation of US west coast weather/precipitation forecast over lead times of 6-8 days considering only the likelihood of an atmospheric river (AR) occurring on a given forecast day. *Novelty – a weather forecast presented only in terms of AR likelihood.*

ECMWF (European Centre for Medium-Range Weather Forecasts) forecast system

NCEP (National Centers for Environmental Systems) forecast system

ECCC (Environment and Climate Change Canada) forecast system



**This is an experimental activity for the 2017-18 and 2018-19 winters. Methodologies and hindcast skill are documented in DeFlorio et al. (2018a,b). Further validation of the real-time forecast results is required and underway. This phase of the research includes gathering stakeholder input on the presentation of information – feedback is welcome.*

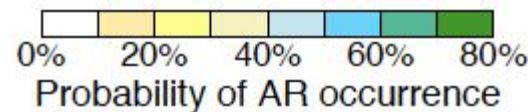
POC: Michael J. DeFlorio (mdeflorio@ucsd.edu)



Jet Propulsion Laboratory
California Institute of Technology



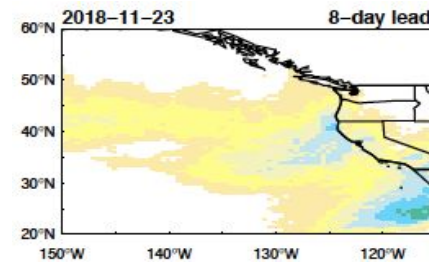
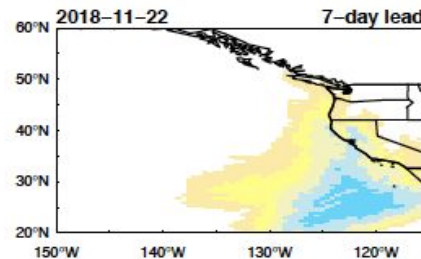
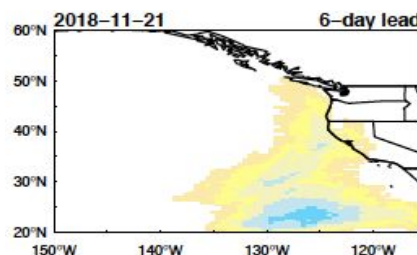
**Center for Western Weather
and Water Extremes**



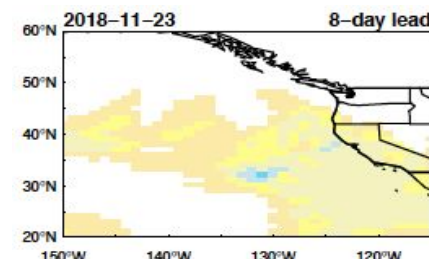
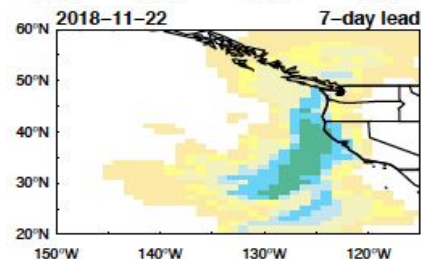
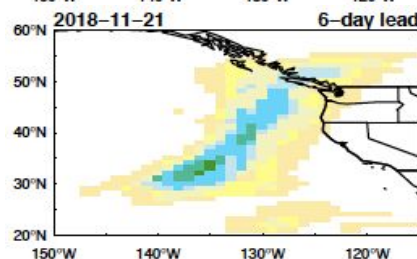
***** EXPERIMENTAL AR FORECAST *****
Forecast initialized: 2018-11-15, 00Z



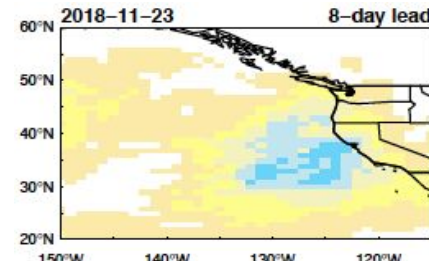
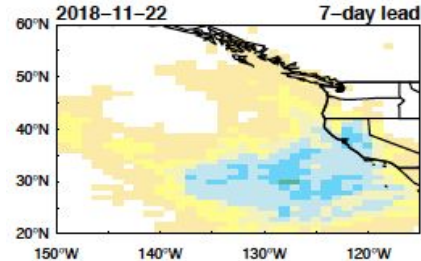
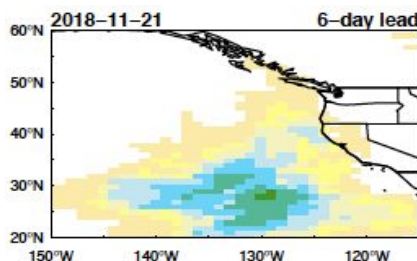
ECMWF



NCEP



ECCC



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AT UC SAN DIEGO

Provided by Mike DeFlorio

Summary

- Multi-model agreement on increased AR activity near California at 6-8 day lead
 - Disagreements on exact timing, landfall location, and ensemble fraction agreement of AR occurrence

