

Winter 2004-2005 Climate Forecast



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November 10th, 2004

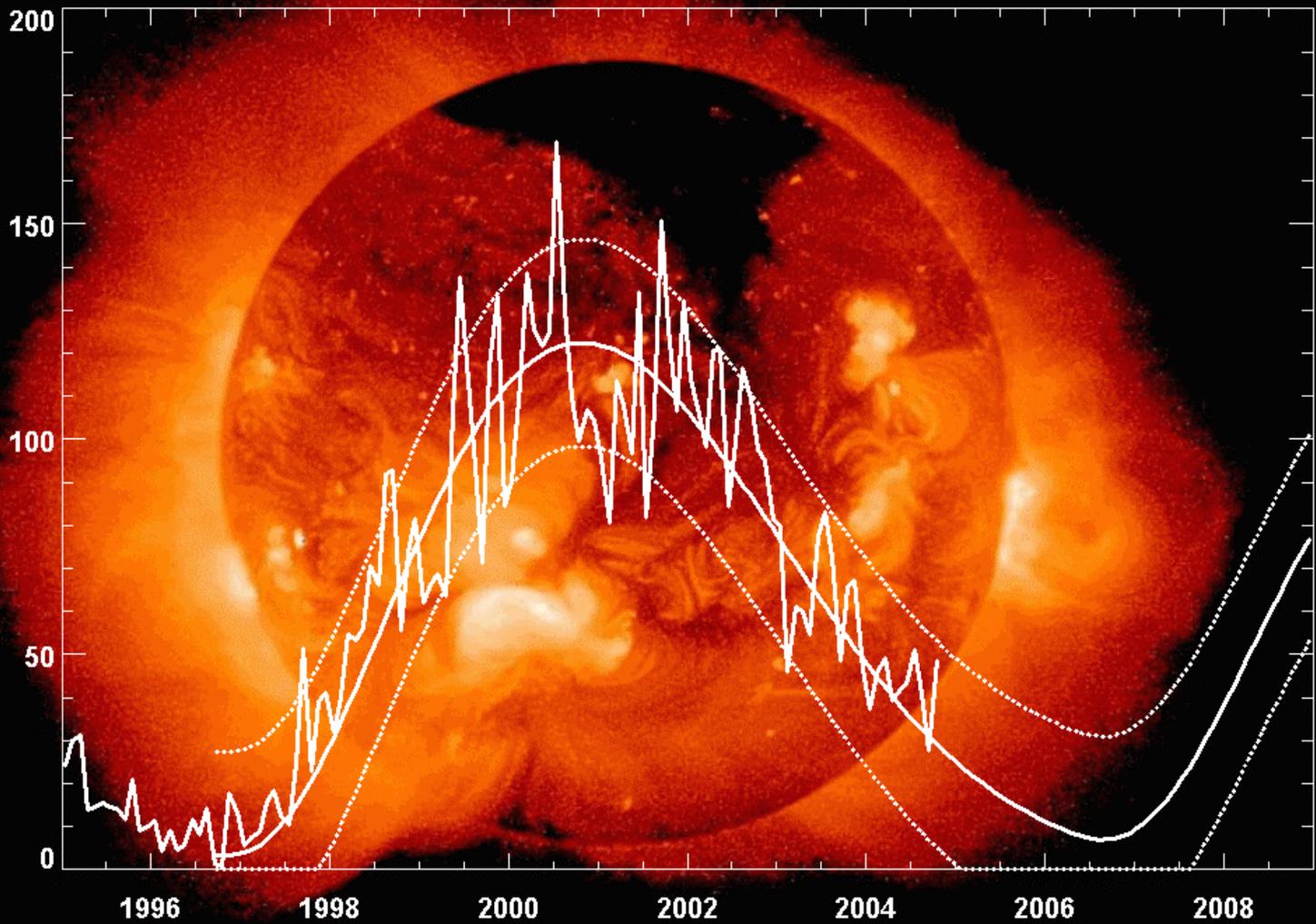
Columbia River Inter-
Tribal Fish Commission

Introduction



- Forecast uses the Tribal approach-- holistic.
- Big-picture: Solar-Forcing (e.g., sunspot cycles) does influence our global weather patterns.
In memoriam: Dr. Landscheidt, 1922 – 2004.
- Track ENSO via Multi-variable ENSO Index.
- Sea-Surface Temperature Departure Forecasts.
- Hydro-Climate approach: use 2005 water year volume forecast and find analog years.

Cycle 23 Sunspot Number Prediction (November 2004)



NASA/NSSTC/Hathaway

http://science.msfc.nasa.gov/ssl/pad/solar/images/ssn_predict_1.gif

SEA SURFACE TEMPERATURE DEPARTURE FORECAST

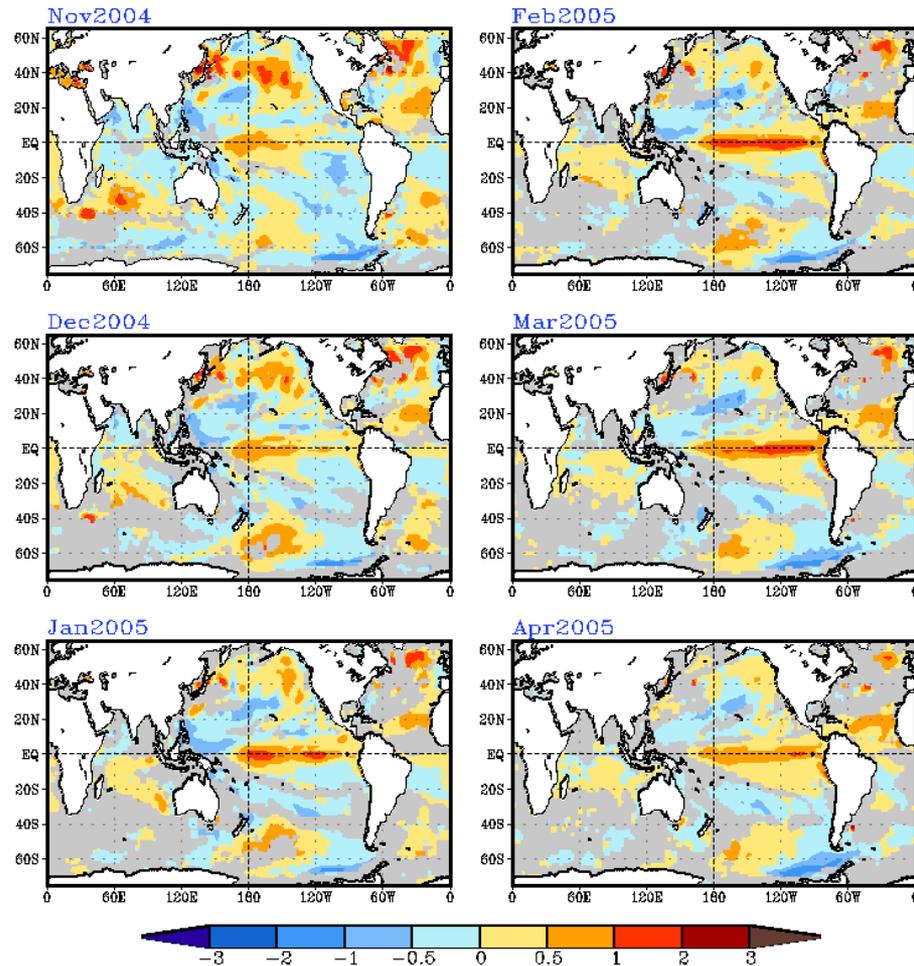


NWS/NCEP

Last update: Mon Nov 8 2004

Initial conditions: 11Oct2004-30Oct2004

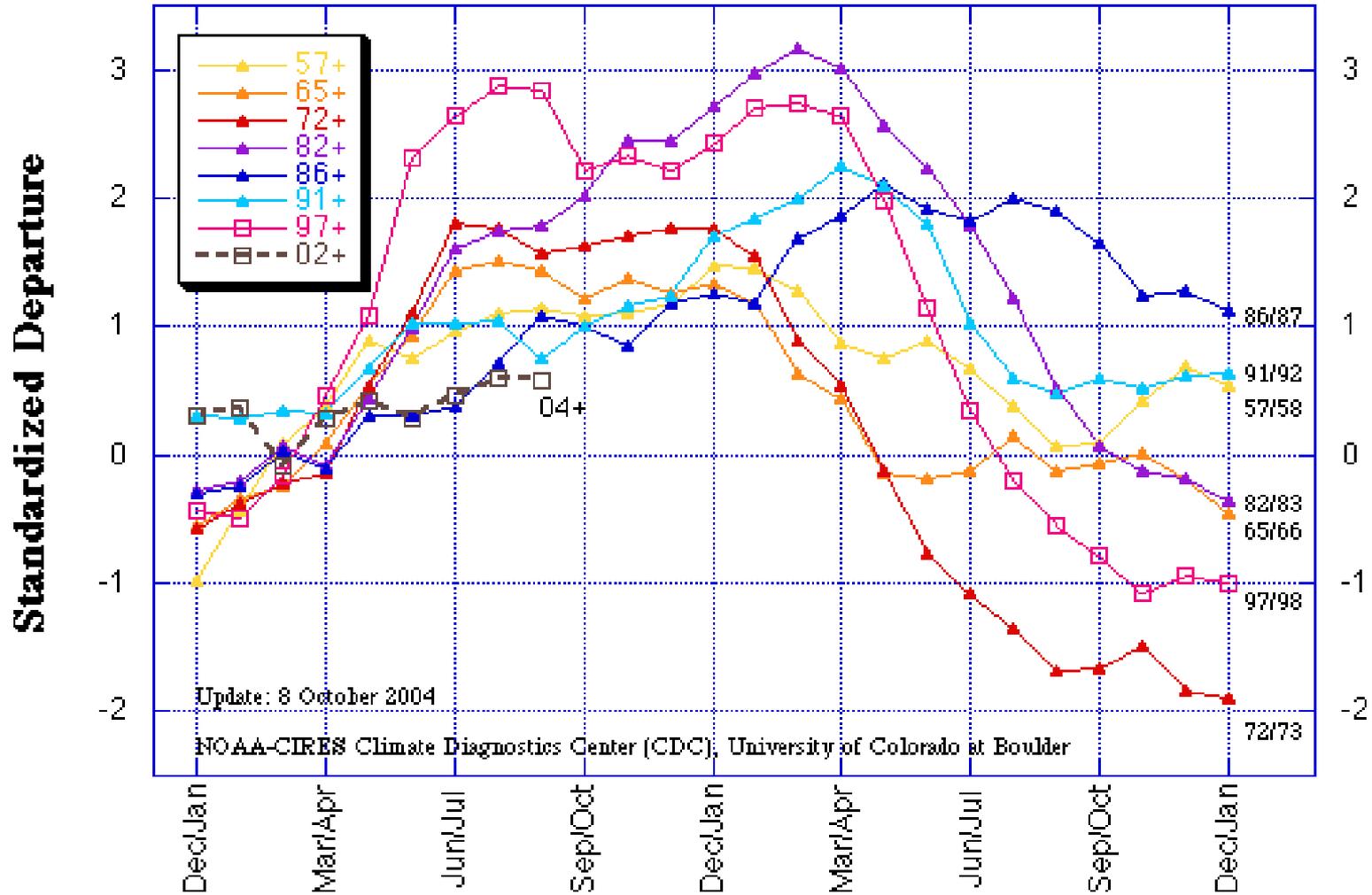
CFS monthly SST forecast (K)



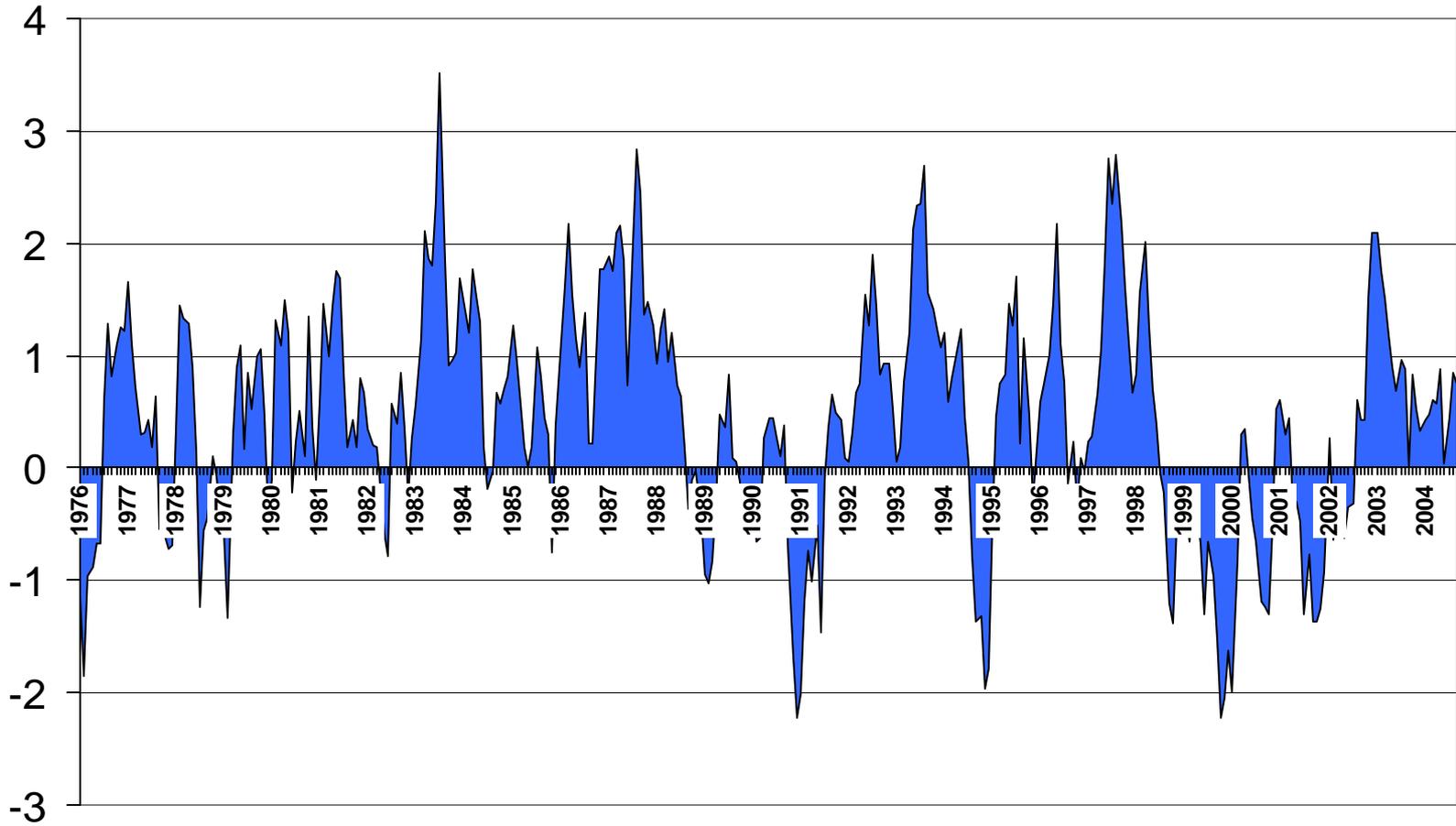
Ensemble average of 20 members from initial conditions of 11Oct2004 to 30Oct2004.
Base period for climatology is 1982-2003. Base period for bias correction is 1982-2003.
Forecast skill in grey areas is less than 0.3.

MEI-- MULTI-VARIABLE EL NINO INDEX

Multivariate ENSO Index for the 7 strongest El Niño events since 1950 vs. recent conditions

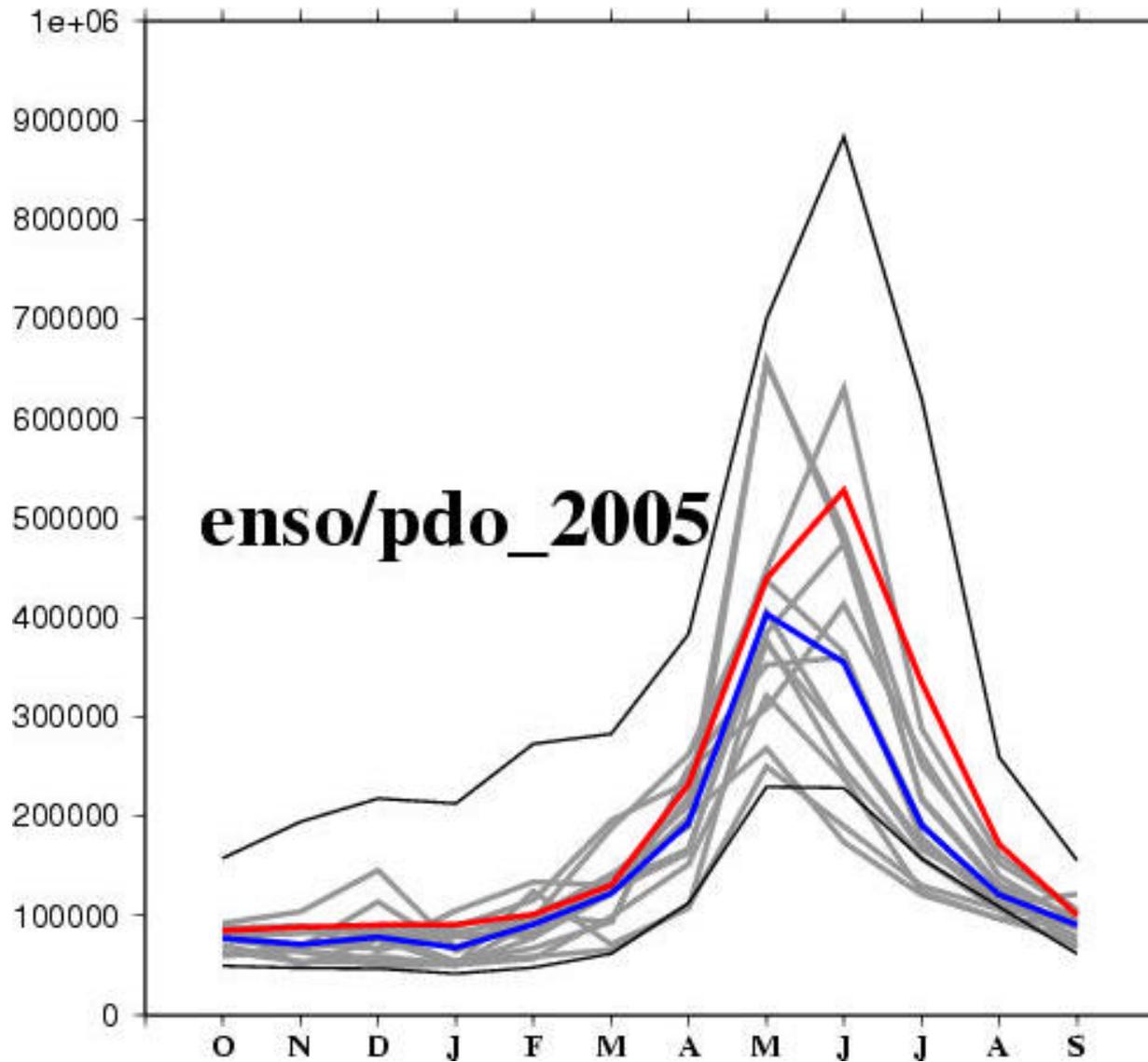


PACIFIC DECADAL OSCILLATION (PDO)



Source: UW-Climate Impacts Group

UW CLIMATE IMPACTS GROUP EXPERIMENTAL FORECAST- COLUMBIA AT THE DALLES



Summary: The CRITFC Winter Forecast



Month:	Temperature (mean monthly):	"Hedge"	Precipitation (% normal):	"Hedge"
November	Near Normal (-1.8 to + 1.8 degF)	0.4	Below Normal (70 - 90%)	75%
December	Near Normal (-1.8 to + 1.8 degF)	0.3	Near Normal (90 - 110%)	97%
January	Near Normal (-1.8 to + 1.8 degF)	0.7	Near Normal (90 - 110%)	100%
February	Above Normal (> +1.8 degF)	2	Near Normal (90 - 110%)	89%
March	Near Normal (-1.8 to + 1.8 degF)	1.3	Near Normal (90 - 110%)	89%

...but what about snow events?!