Contributions to National Climate Services Panel

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Outline

- Relevant thoughts on panel discussion
- CPC prediction product suite
- CPC seasonal forecast process
- CaRDS process

Thoughts Relevant to Panel Discussion

- CPC needs to continue to produce short-term climate prediction products that are timely, credible, and actionable, i.e. serve as the NOAA authoritative source for short-term climate prediction.
- NWS has adopted a new process (CaRDS) for vetting requests, determining if they are requirements and then prioritizing requirements given available resources and scientific readiness.
- NWS leverages the capabilities of other line offices (and other parts of government) to meet stakeholder needs as required, for example NWS is using forecasts from NOS for harmful algal blooms in the Great Lakes.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

CPC Subseasonal to Seasonal Outlooks

Outlook	Variables	Type	Frequency	Release Date and Time	
Days 8-14	Temp/Precip	Probabilistic	Daily	Daily	3 PM ET
Monthly	Temp/Precip	Probabilistic	2x per month	3rd Thurs of month / Last day of month	8:30 AM, 3 PM ET
Seasonal	Temp/Precip	Probabilistic	1x per month	3rd Thursday of month	8:30 AM ET
Monthly drought	Drought tendency	Categorical	1x per month	Last day of month	3 PM ET
Seasonal drought	Drought tendency	Categorical	1x per month	3rd Thursday of month	8:30 AM ET
U.S. Hazards	Temps, precip, winds, etc.	Categorical	Daily	Monday - Friday	3 PM ET
Global Tropics, Africa, etc.	Precip, TCs, etc.	Categorical	Weekly	Tuesday or Wednesday	12 PM ET

Generation of Seasonal Forecasts at CPC

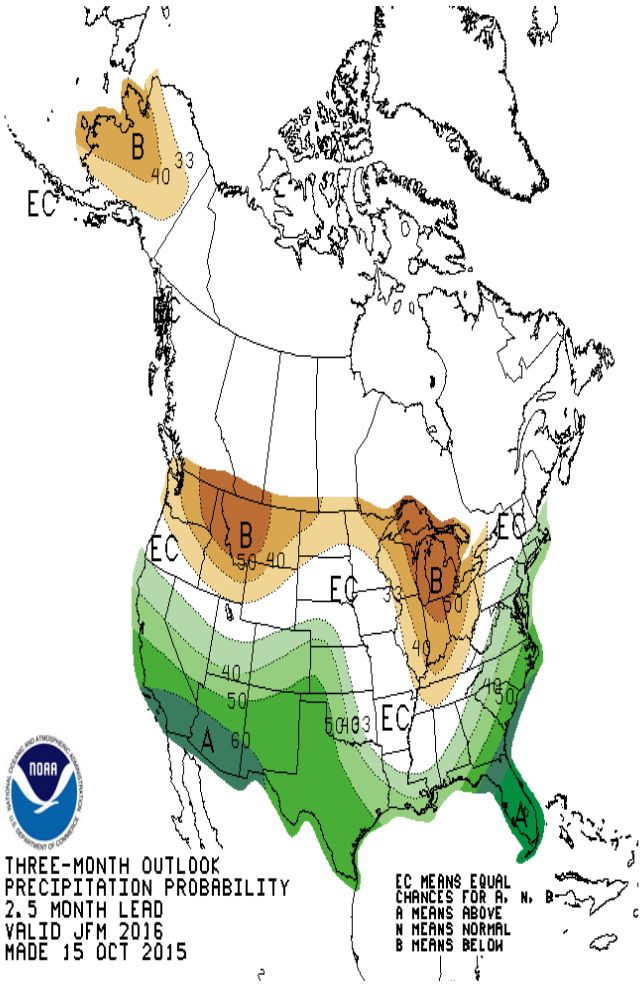
Human Forecasters Use Various Tools To Develop Seasonal Predictions:

- Dynamical Models
- Statistical Models
- Historical Analogs
- Historical Composites
- Trends

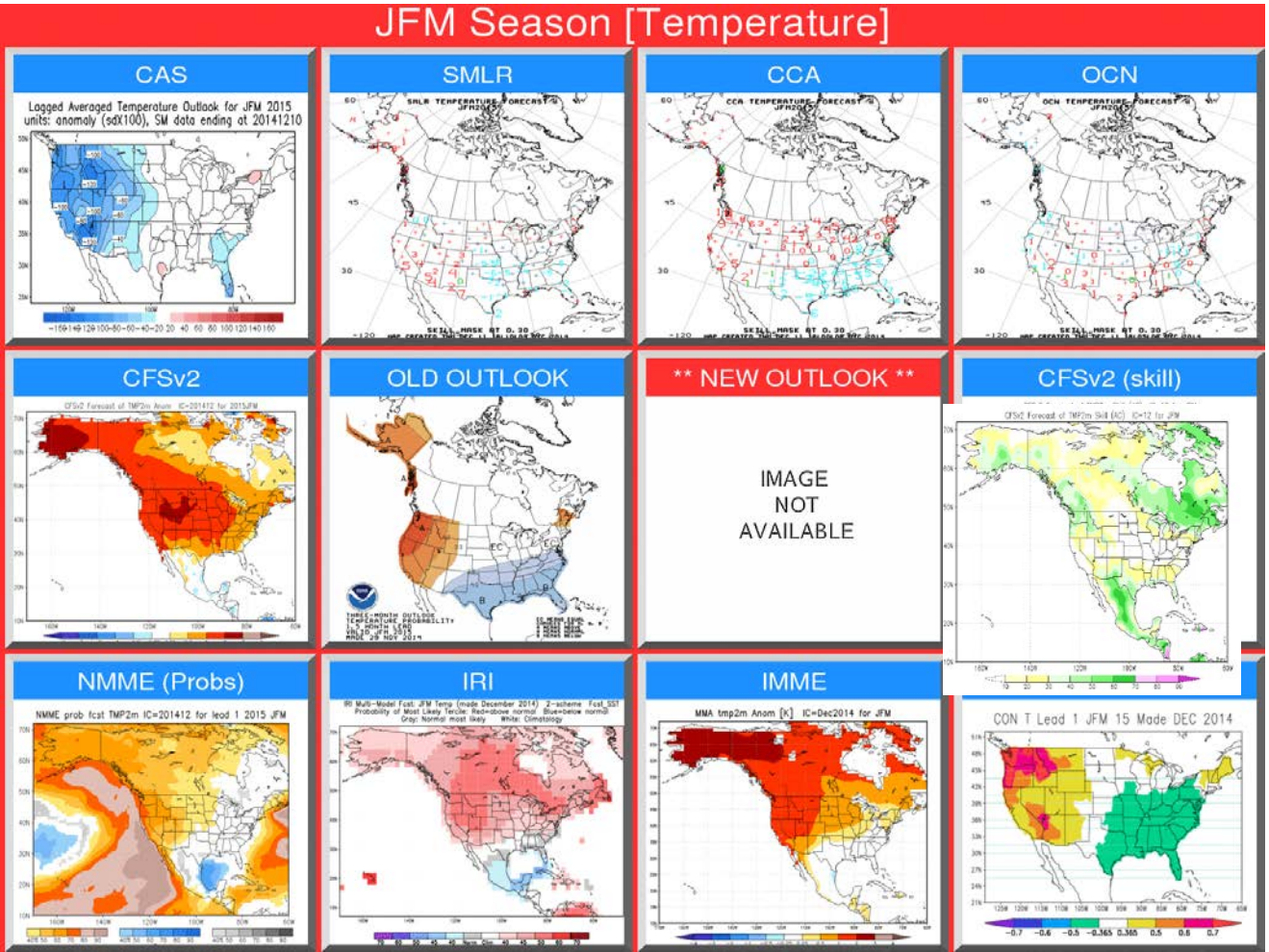
Goal is to leverage complementary skill between the tools.

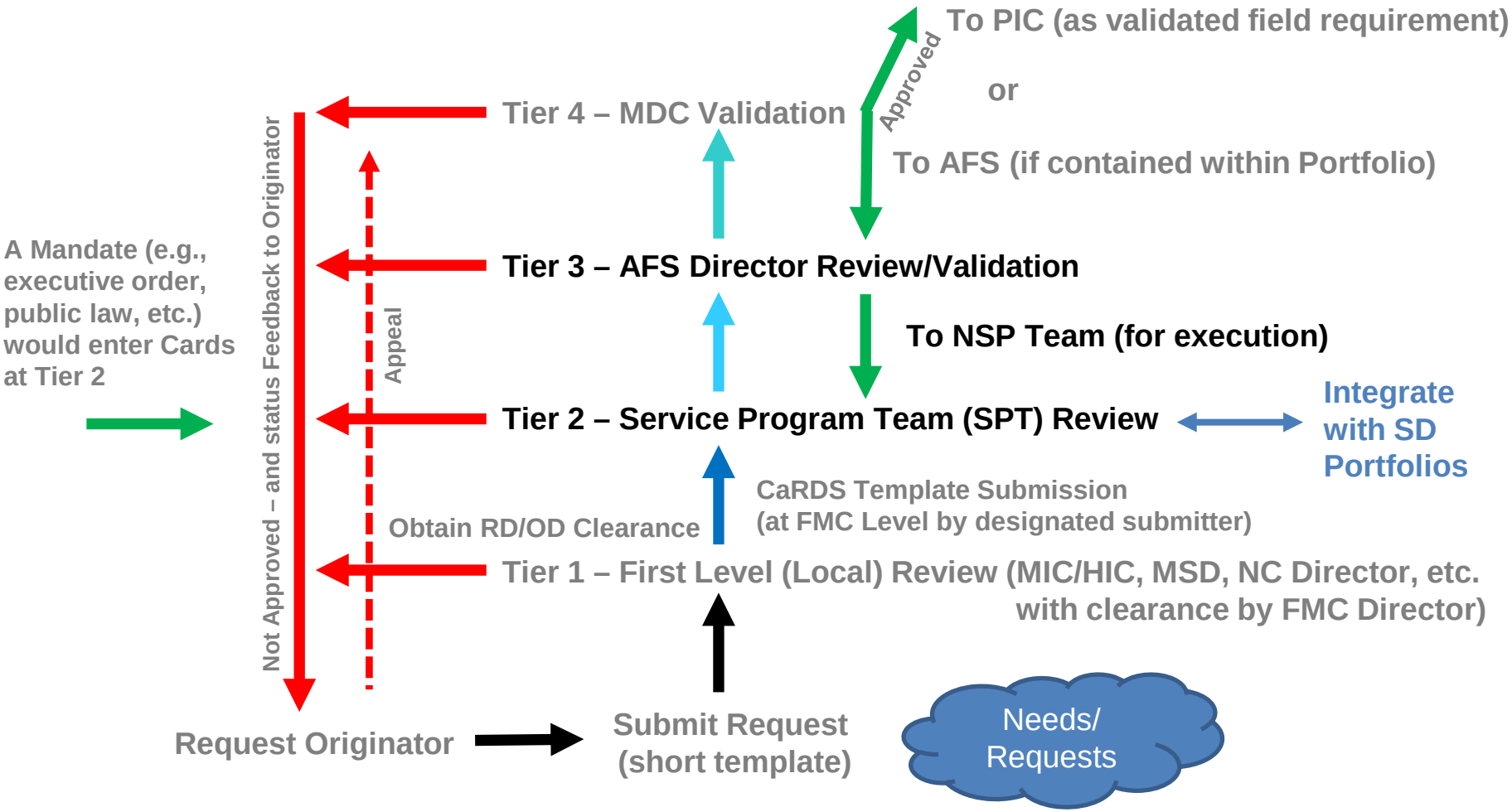
Seasonal prediction problem is characterized as small signal and large noise.

Ultimately, skill of seasonal forecast depends on skill of tools made available to the forecaster!!



Tools Used by Forecasters to Make Seasonal Outlooks



Statistical
Dynamical
Trend

High-level Process Overview for CaRDS