USAP Meteorology: **SCIENCE TO OPERATIONS COOPERATIVES FOR ANTARCTIC WEATHER** FORECASTING





Need to Improve

- Remote Forecasting
 Unknown patterns, unknown adaptations
- Smarter
 - Add Confidence to Forecasts using Ensemble
 - Auto generate finished customer products
 - Lobby for AMPS improvements

SOPP McMurdo Staffing								
	MCM Pre-ROF		MCM Post ROF		MCM With LAWRS		MCM Potential	
	Staffing #	% Reduction	Staffing #	% Reduction	Staffing #	% Reduction	Staffing #	% Reduction
MET *	17	-	15	12%	12	29%	9	47%
ATC	17		8	53%	-			
Site Mgr #	1	-	1	0%	-	-	-	-
	Christchurch Changes				Reduced to 1/2 Season			
BaseOps	3	-	1	67%	0.5	83%		
	Pre-MLS		Post MLS		Potential** (2015-16)			
	Staffing #	% Reduction	Staffing #	% Reduction	Staffing #	% Reduction		
GEM	17	-	15	88%	11	35%		
							# Bodies	% Reduction
SOPP Total Off Ice Reduction Current							16	31%
(Based on Pre-2005					05 Staffing)	Potential	23	44%
* Potential reductions based on ability to automate or move ASC Observation input from SOPP watch floor								
# Site Manager dual hat primarily with ATC Manager								
**GEM potential reduction based on move from seasonal Techs to fulltime (greater capability from trained staff)								





Pending initiative that has been presented to SOPP includes:

- Re-analysis of West Antarctica
- AWARE (requires further coordination)

Internal initiatives:

- Employment of a Research Analyst
- AIREP Reengaging ATC to provide meteorology parameters
- Fog Alert continued development of fog alert calculator based on vertical measures. (ADVECTION remains a problem)
 - Crater Hill enhancement with the addition of Temperature/ Dew Point Sensor
 - Automatic updates from the AWS Database



2015 and beyond

Future Improvement discussions

- TeraScan issues
- Radar
- WebCams
- Redesign of Field Party MET Kits
 - May include rangefinder Binoculars
 - Smaller/lighter for greater employment



Questions or Concerns?