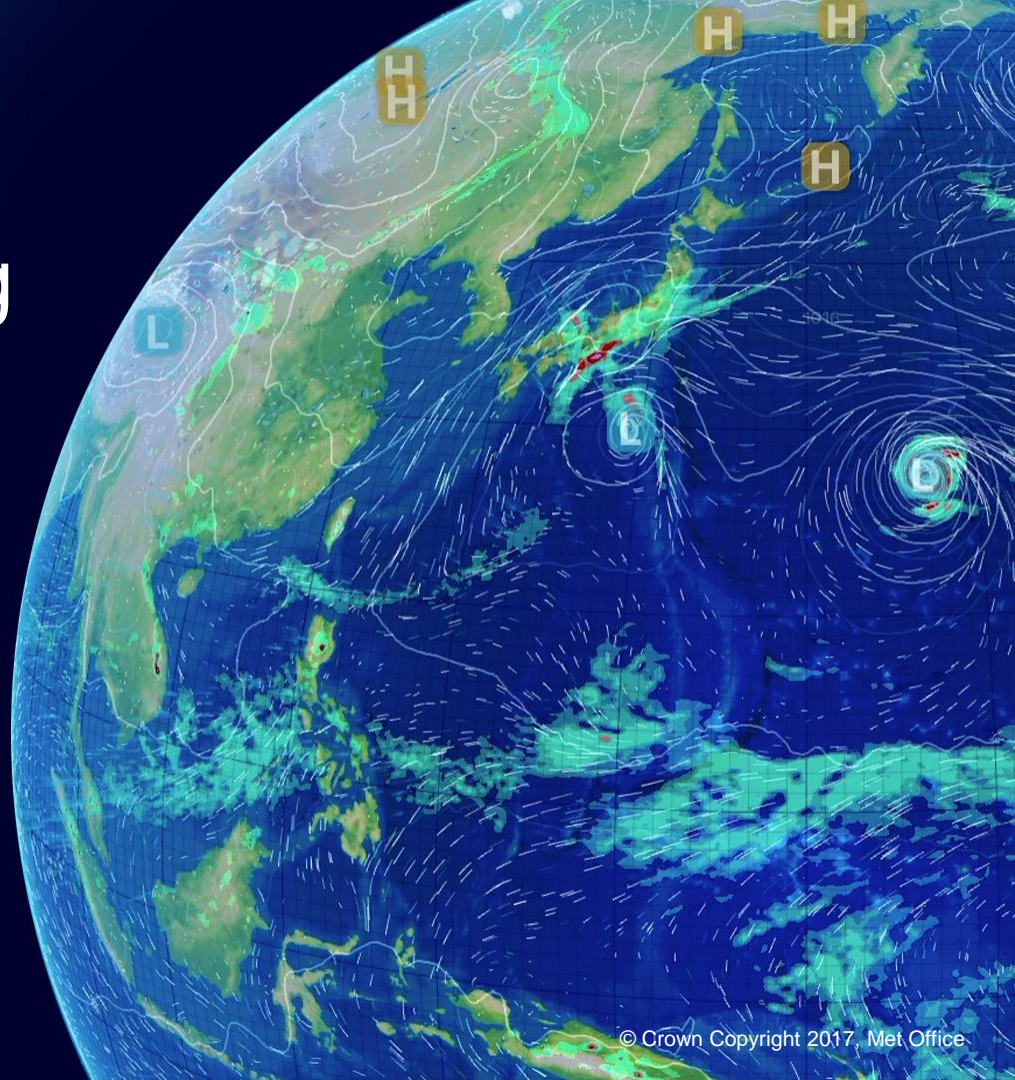


AMV temporal thinning

Mary Forsythe, James Cotton

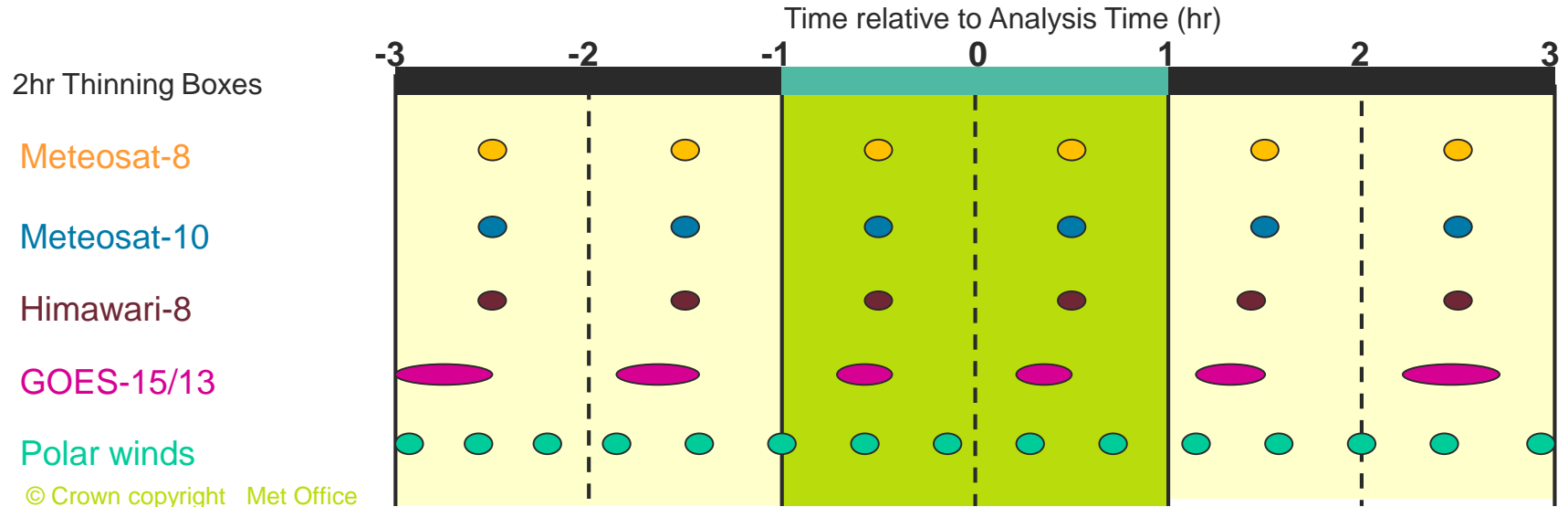
EUMETSAT AMV meeting – 11/10/2017



Met Office AMV temporal thinning

Have hourly AMVs from most geostationary satellites – more even distribution throughout the assimilation window

Below illustrates when data arrives for different AMV types relative to the analysis time:

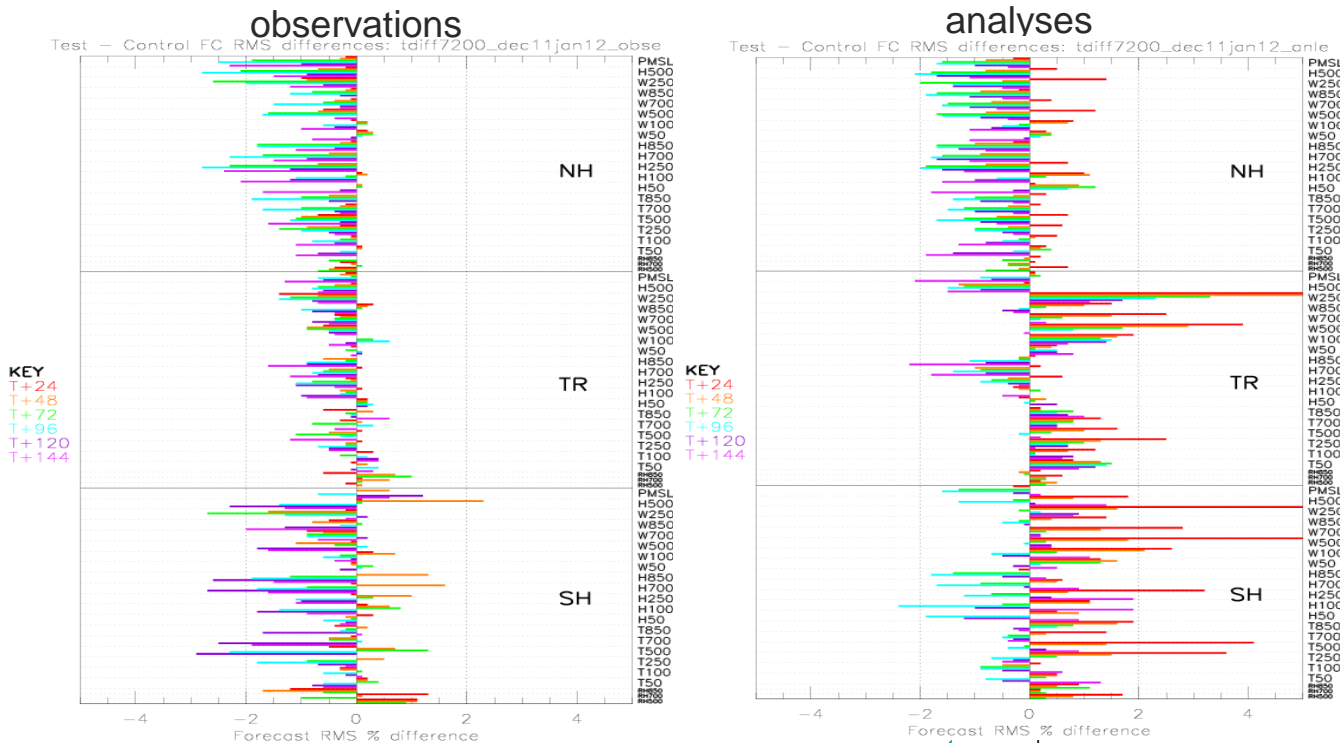


	vs Observations	vs Analyses
Season 1	+0.5	-1.7

NWP index positive versus observations, but strongly negative versus analysis

Biggest problem at T+24 in tropics and SH for wind and temps

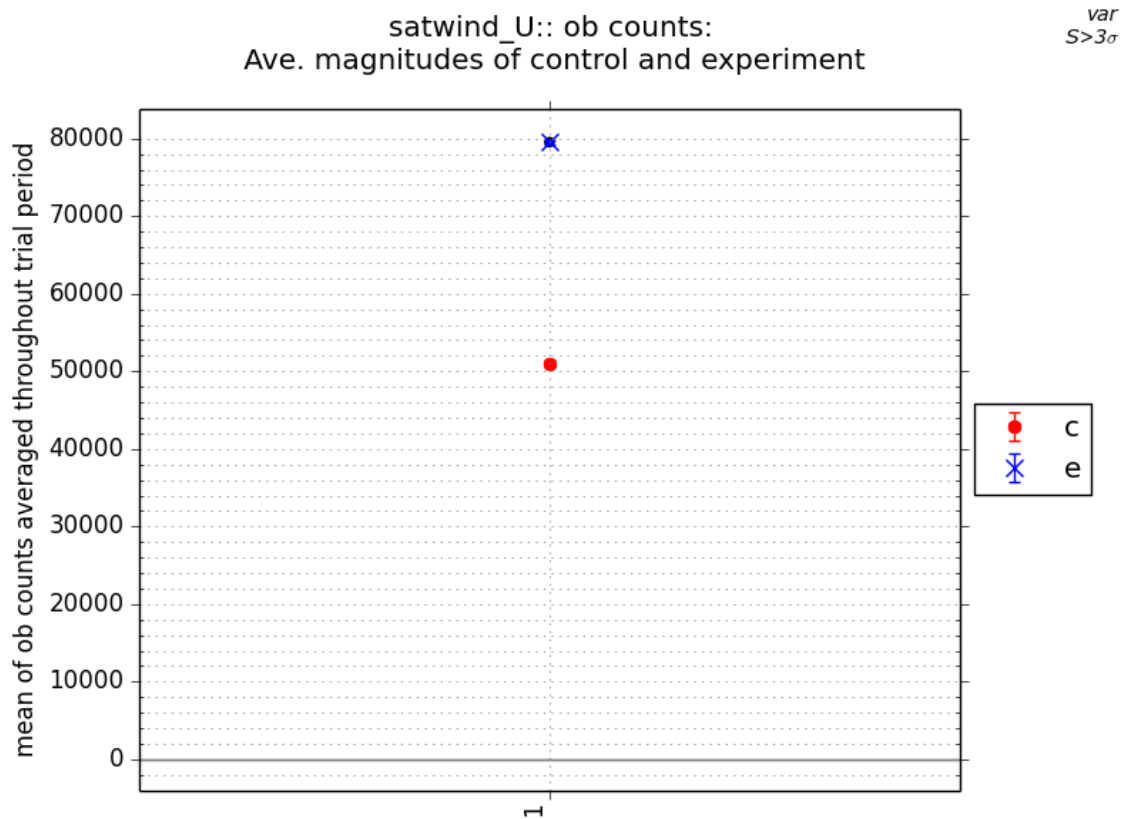
Especially large hits for W250



Positive impact ←

Positive impact ←

Met Office Trial of 1 hr temporal thinning



N320 L70 trial

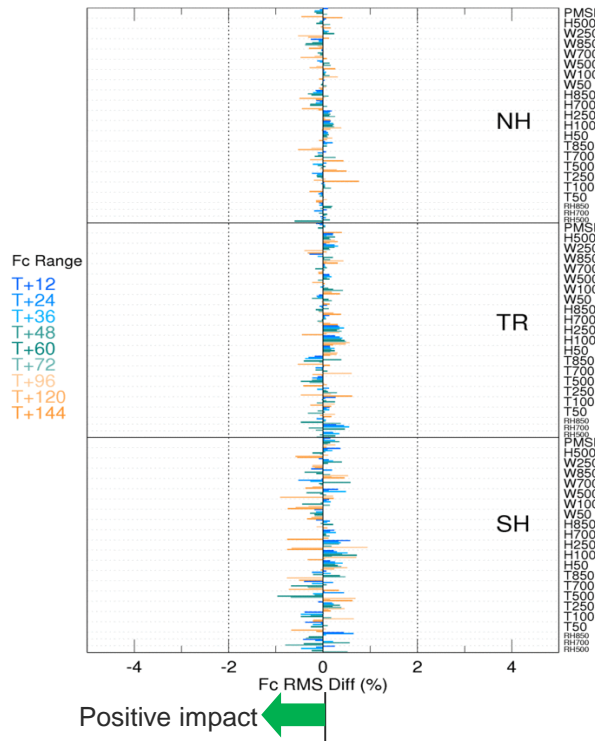
1 Nov- 31 Dec 2016

Increase in number of AMVs assimilated from ~50,000 per cycle to ~80,000 per cycle.

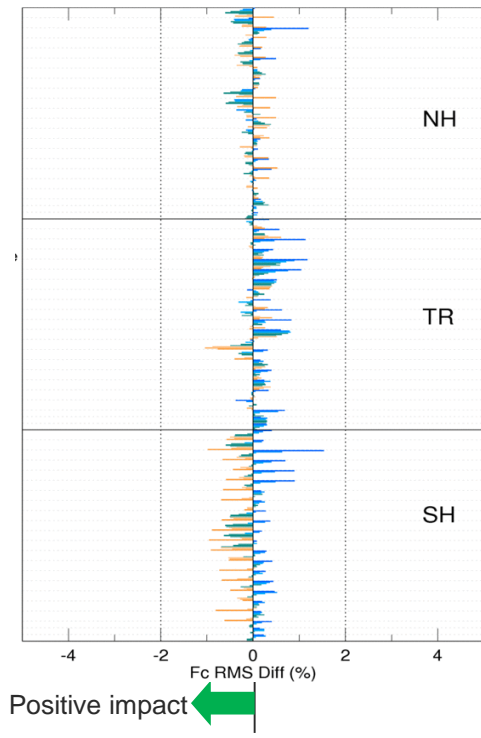
Results very neutral

	vs Observations	vs Analyses	Vs EC analyses
Season 1	0.0	0.0	0.1

Verification vs Observations
 From 20161101 to 20161231
 Validity Times: 0 1200
 Cntl Exp Id: u-ai607-GM, Test Exp Id: u-ak259-GM



Verification vs Analysis
 From 20161101 to 20161231
 Validity Times: 0 1200
 Cntl Exp Id: u-ai607-GM, Test Exp Id: u-ak259-GM



Verification vs Analysis
 From 20161101 to 20161231
 Validity Times: 0 1200
 Cntl Exp Id: u-ai607-GM, Test Exp Id: u-ak259-GM

