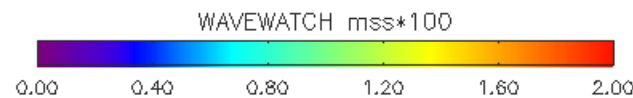
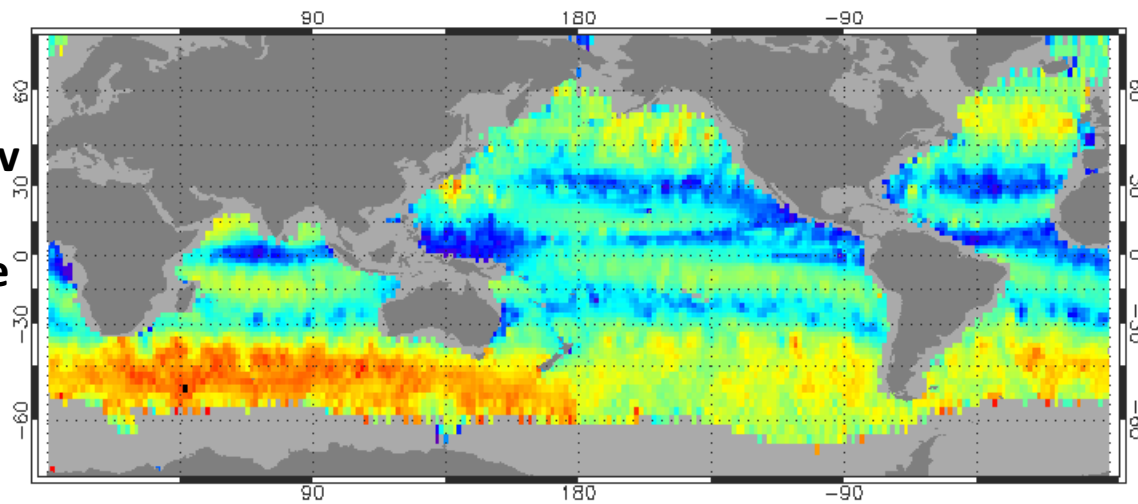
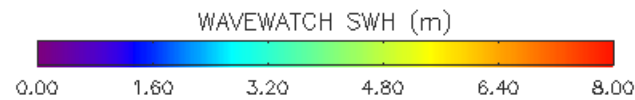
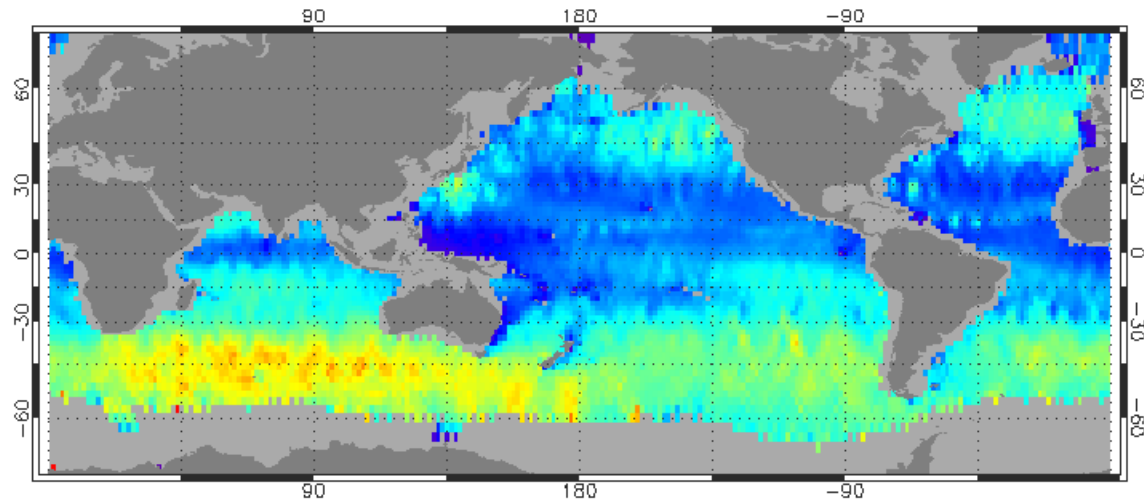


Evaluating the impact of ocean gravity wave variability on Aquarius satellite measurements

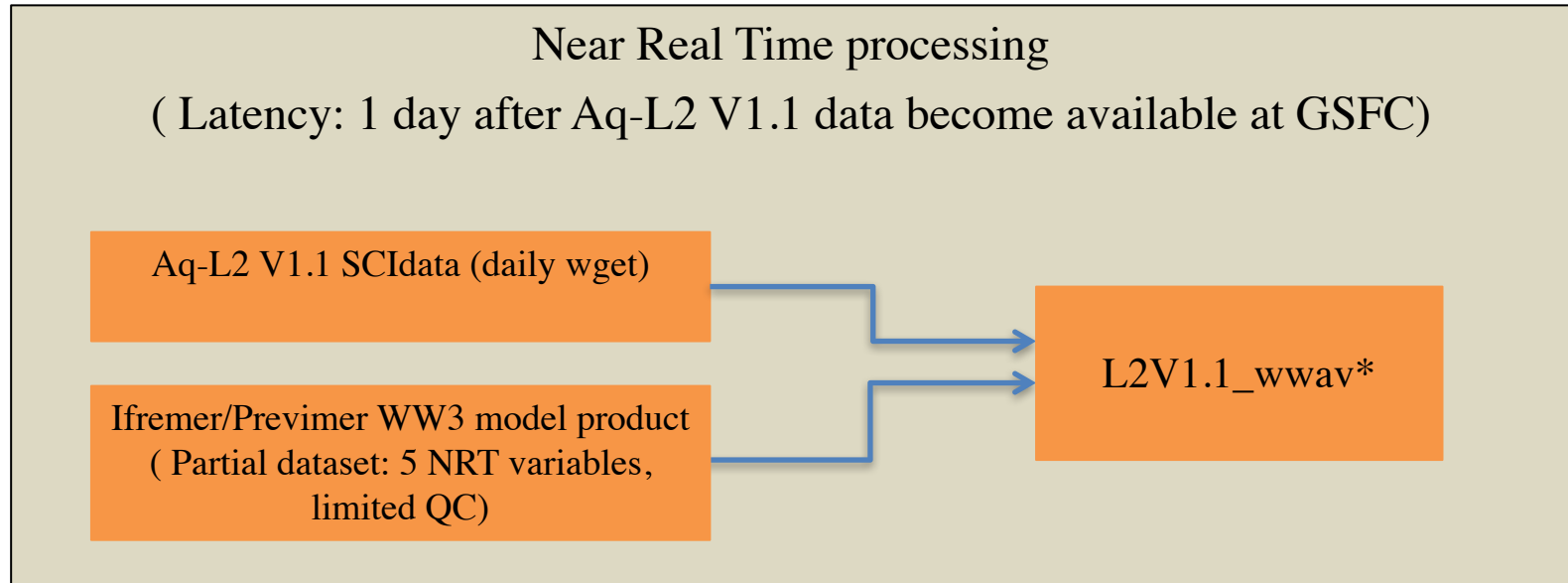
D. Vandemark, H. Feng
Univ. of New Hampshire/EOS

Global Wave model fields, Aquarius L2_wwav files*, Day 240-271 2011

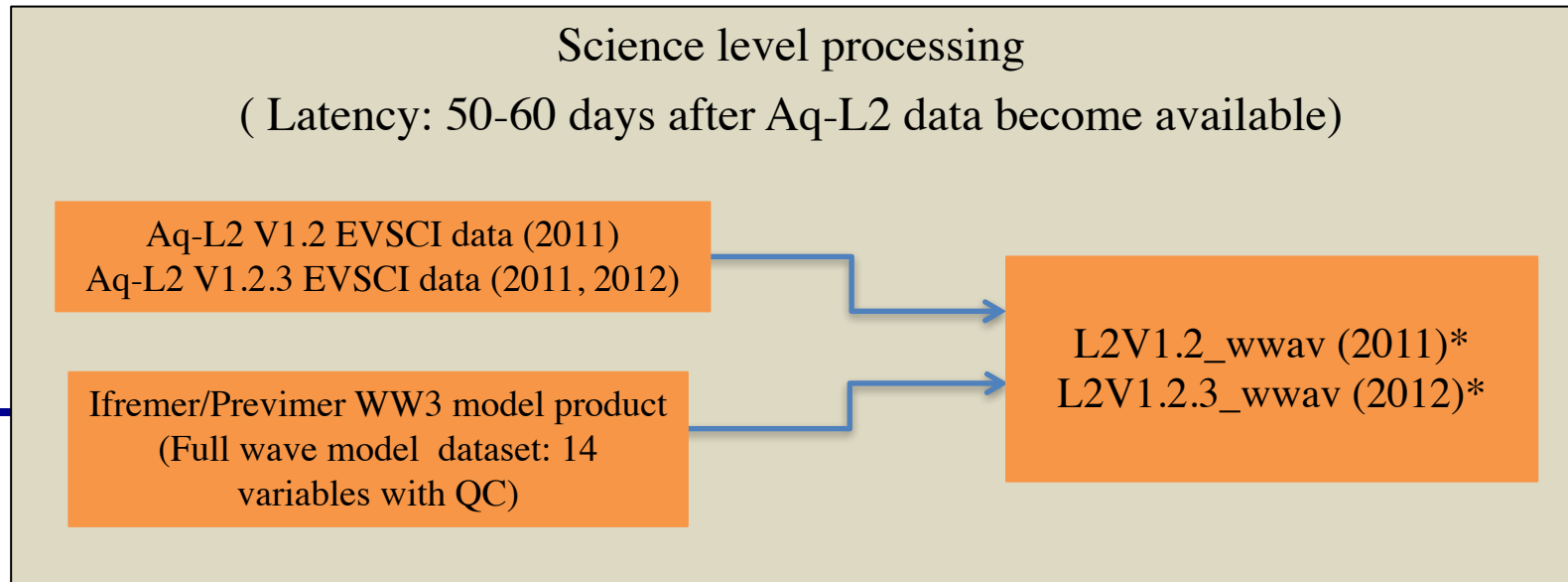


* aquarius_L2_wwav files are assembled daily at UNH for the Aq. cal/val team

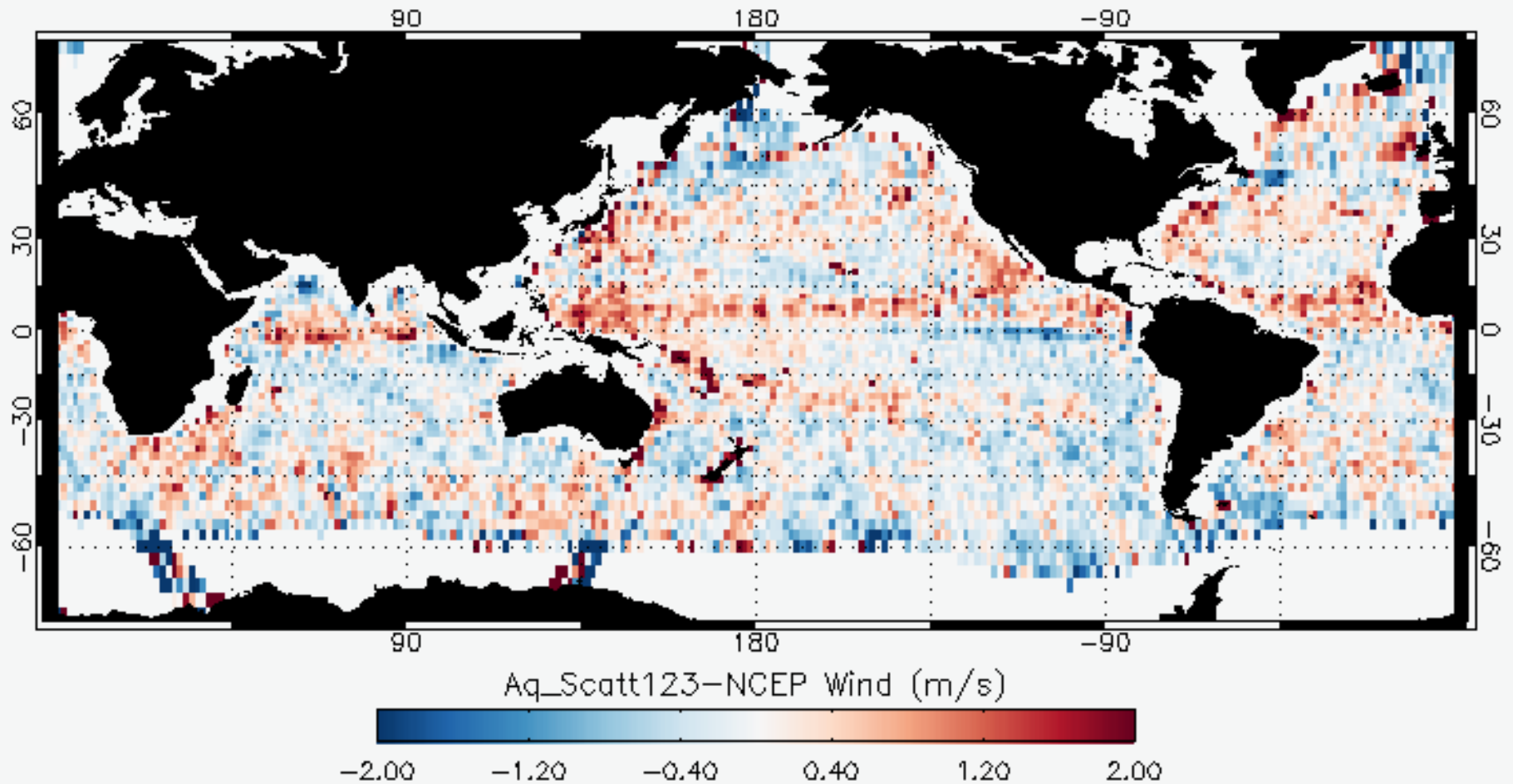
Aquarius Level 2 wave model collocation products: Processing status (March 2012)



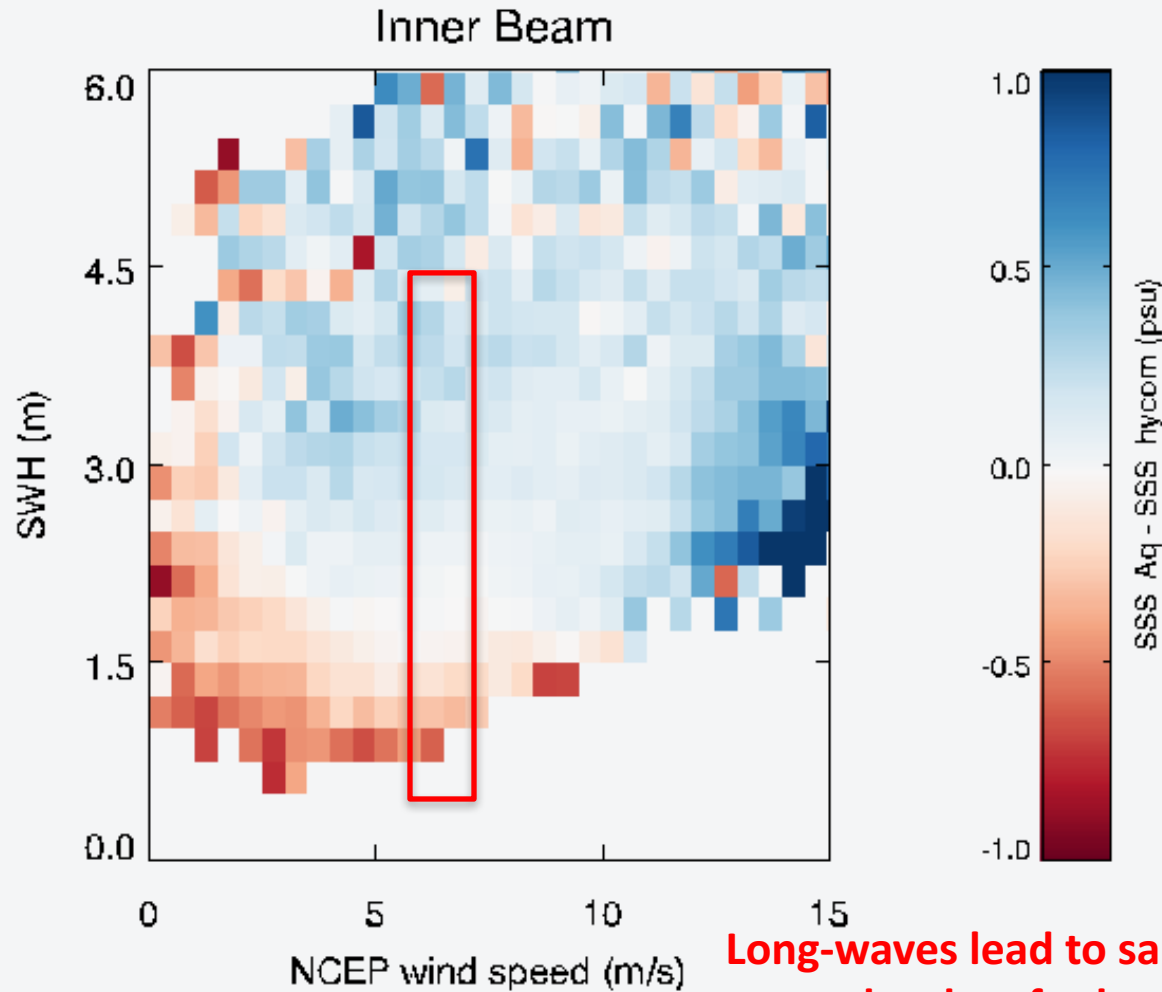
* ftp access via PODAAC for Aq. Cal/Val team members



Wind products and spatial differences Day 240-270 (cycles 1-5)



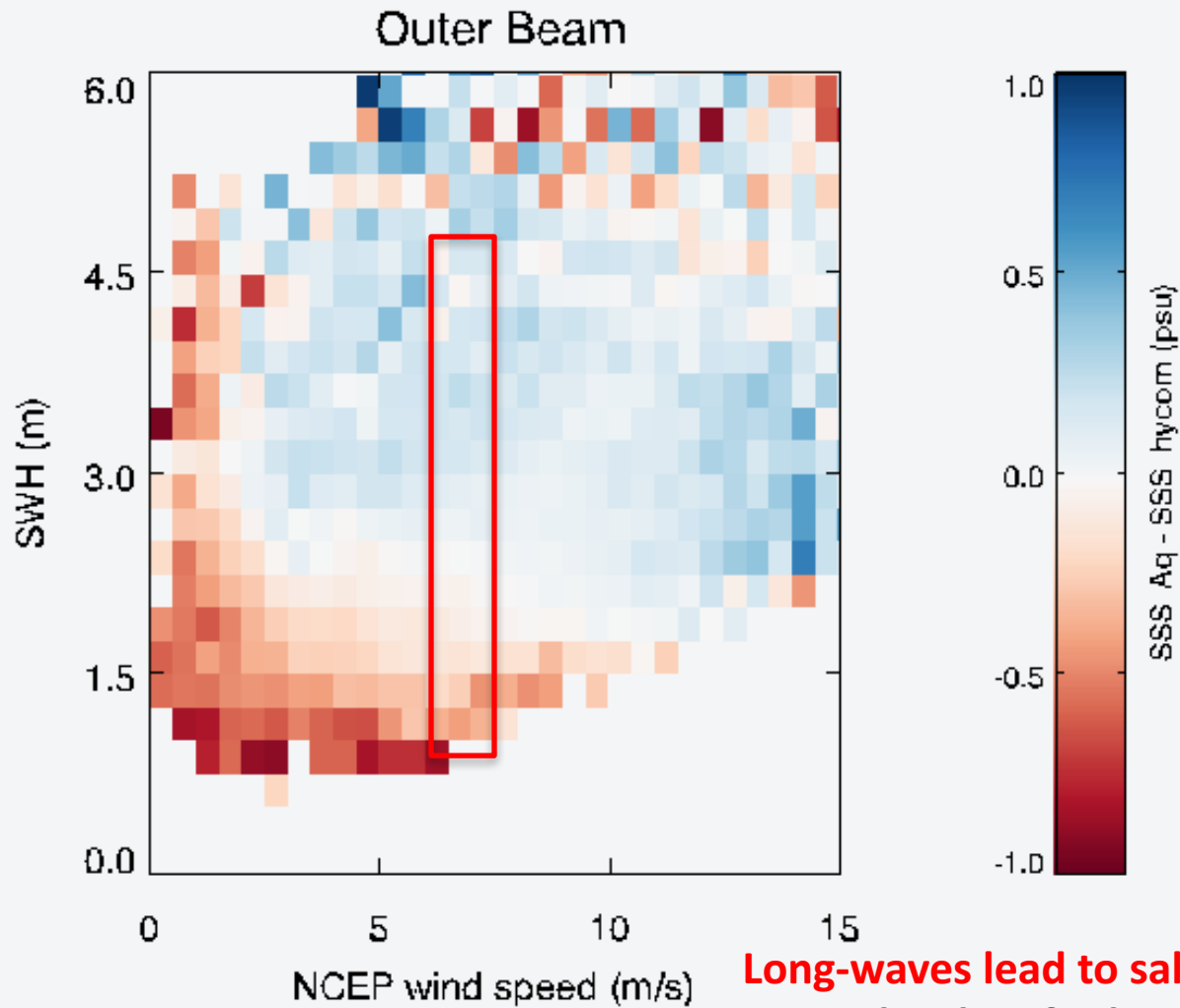
Aquarius Radiometer Salinity error vs. SWH (17 weeks; Day 240-362) ; X-axis=NCEP wind



Residual Salinity
taken with
respect to
HYCOM model
SSS

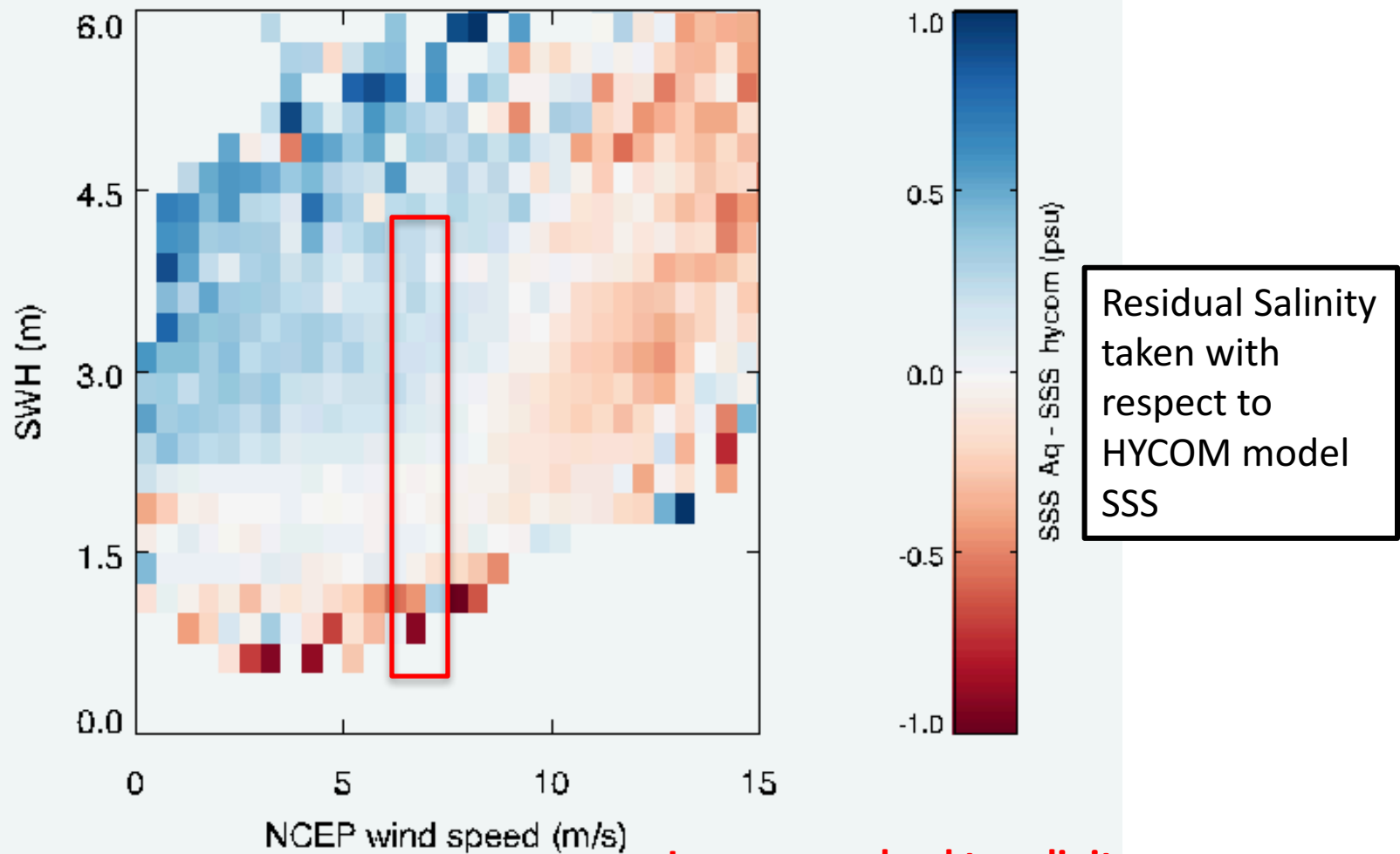
**Long-waves lead to salinity
anomaly – low for low seas, high
for high seas**

Aquarius Radiometer Salinity error vs. SWH (17 weeks; Day 240-362) ; X-axis=NCEP wind; V1.2; DESC



Long-waves lead to salinity anomaly – low for low seas, high for high seas

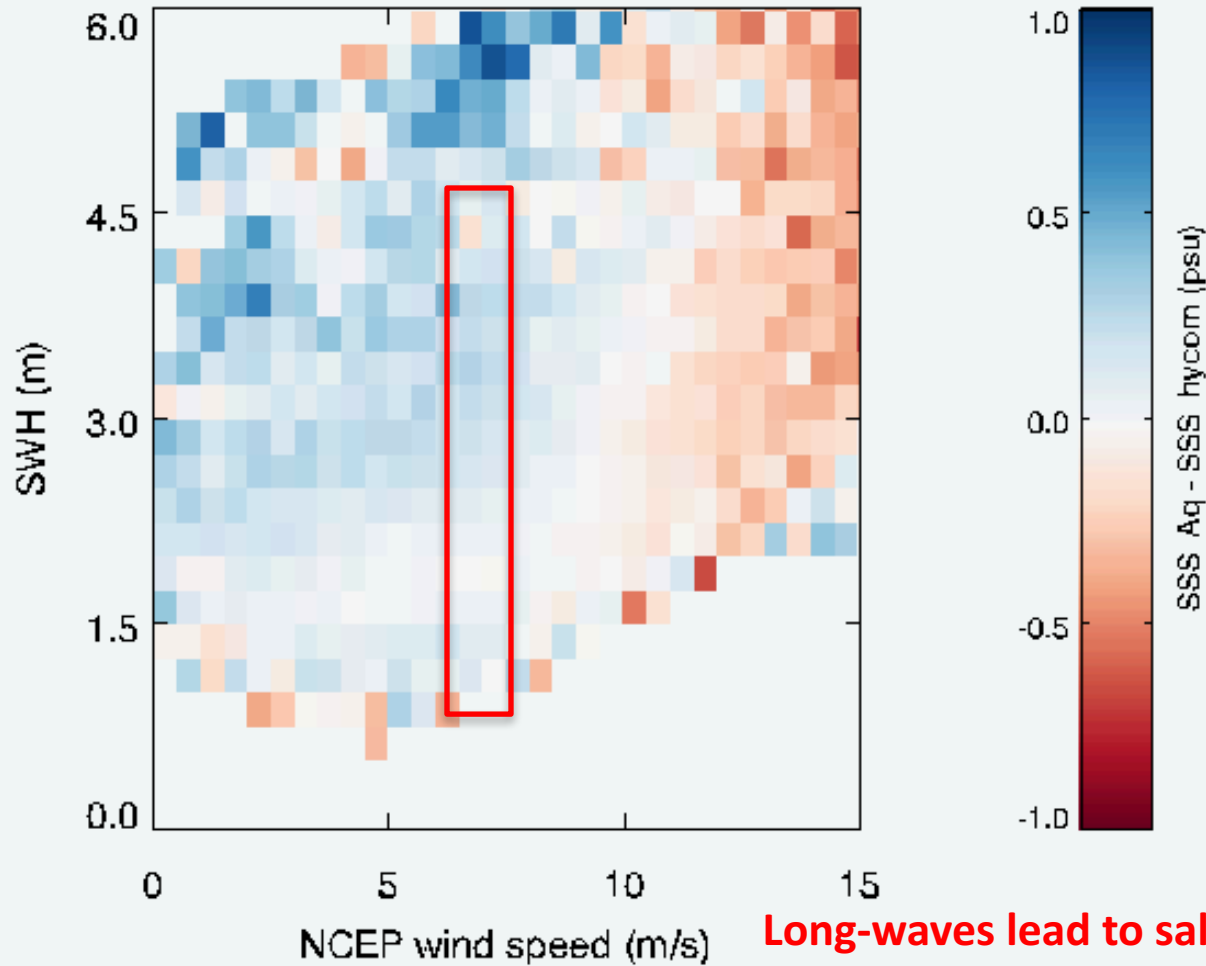
Aquarius Radiometer Salinity error vs. SWH (17 weeks; Day 240-362) ; X-axis=NCEP wind; Ver 1.2.3; ASC; OUTER BEAM



Long-waves lead to salinity anomaly – low for low seas, high for high seas

Aquarius Radiometer Salinity error vs. SWH

(17 weeks; Day 240-362) ; X-axis=NCEP wind; Ver 1.2.3; DESC; OUTER BEAM



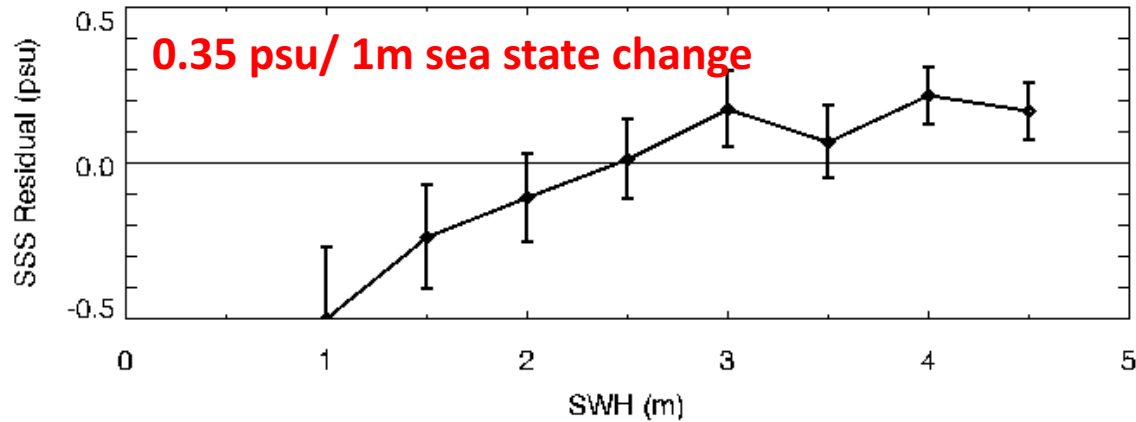
Residual Salinity taken with respect to HYCOM model SSS

Long-waves lead to salinity anomaly – low for low seas, high for high seas



Aquarius Scatterometer Wind vs. significant wave height (17 weeks; Day 240-362) ; X-axis=NCEP wind; V1.2

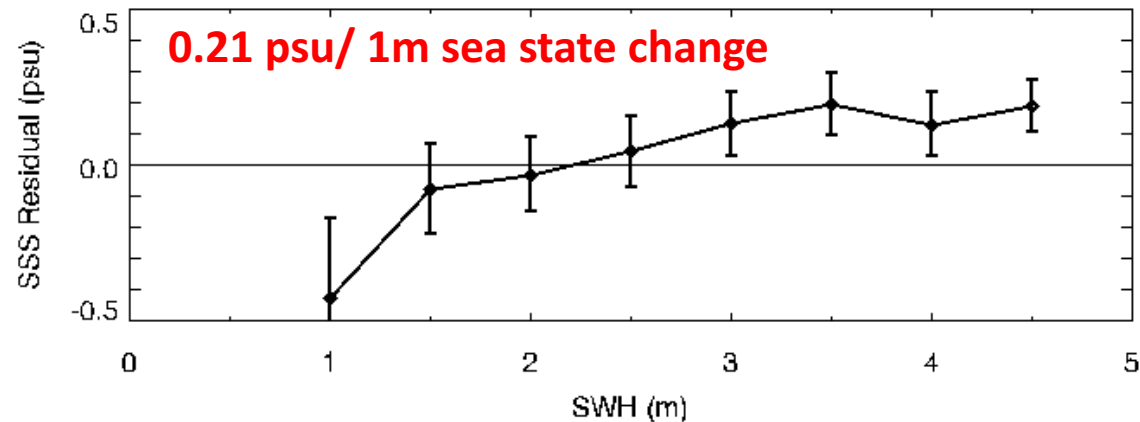
Wind Speed Bin= 4 m/s (+ - 0.5)



OUTER BEAM
 $\theta = 46$ deg.

DESC ONLY

Wind Speed Bin= 7 m/s (+ - 0.5)



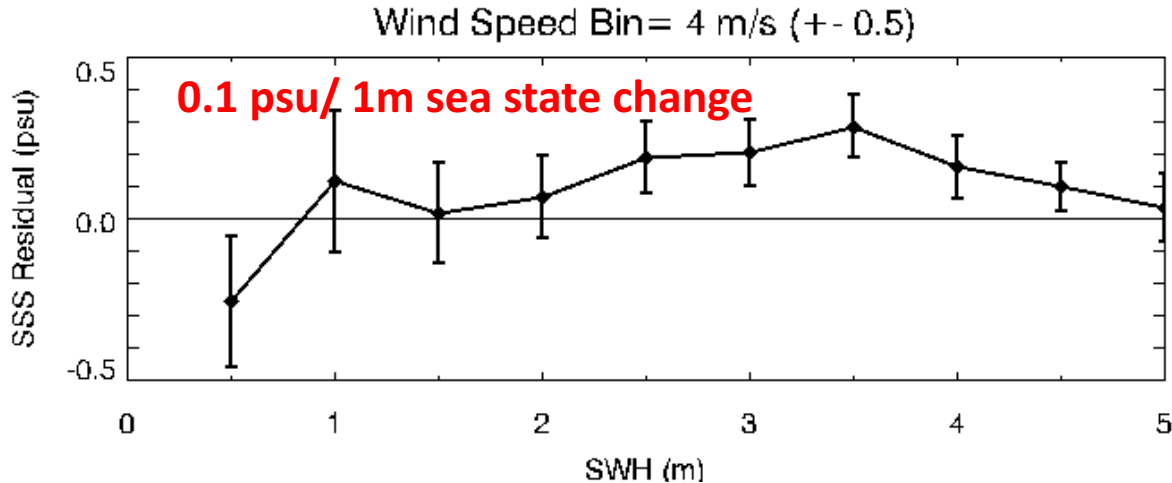
OUTER BEAM
 $\theta = 46$ deg.

Desc Pass data, Galactic refl < 1 K

Aq Cal/Val, March 2012

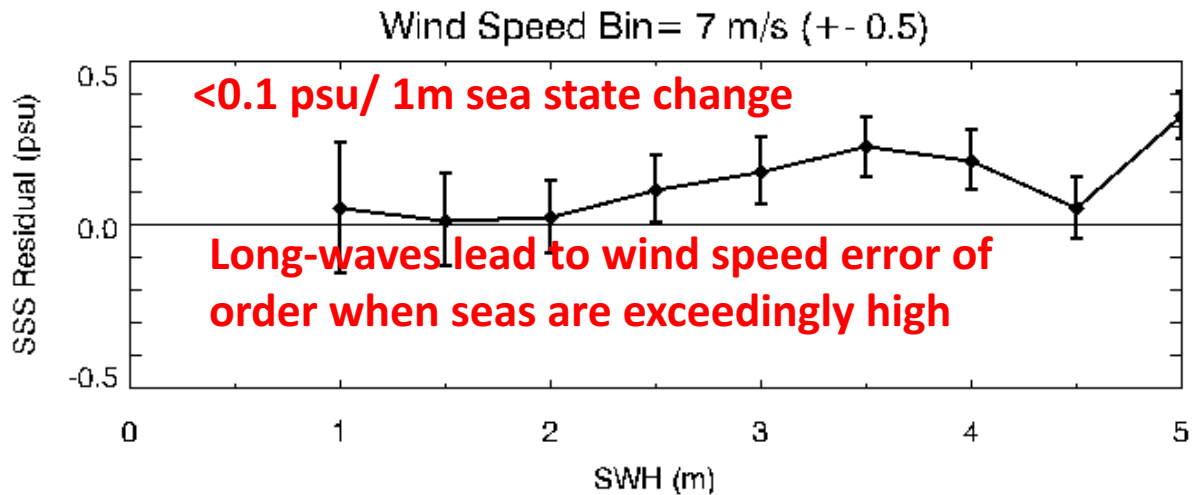


Aquarius Scatterometer Wind vs. significant wave height (17 weeks; Jan-Feb2012) ; X-axis=NCEP wind; Ver. 1.2.3



OUTER BEAM
 $\theta = 46$ deg.

DESC ONLY



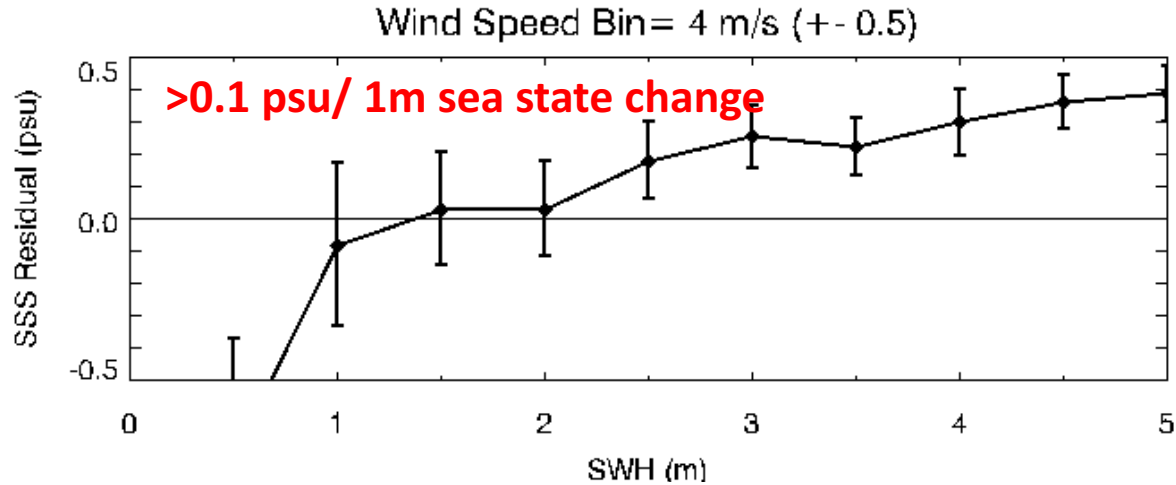
OUTER BEAM
 $\theta = 46$ deg.

Desc Pass data, Galactic refl < 1 K

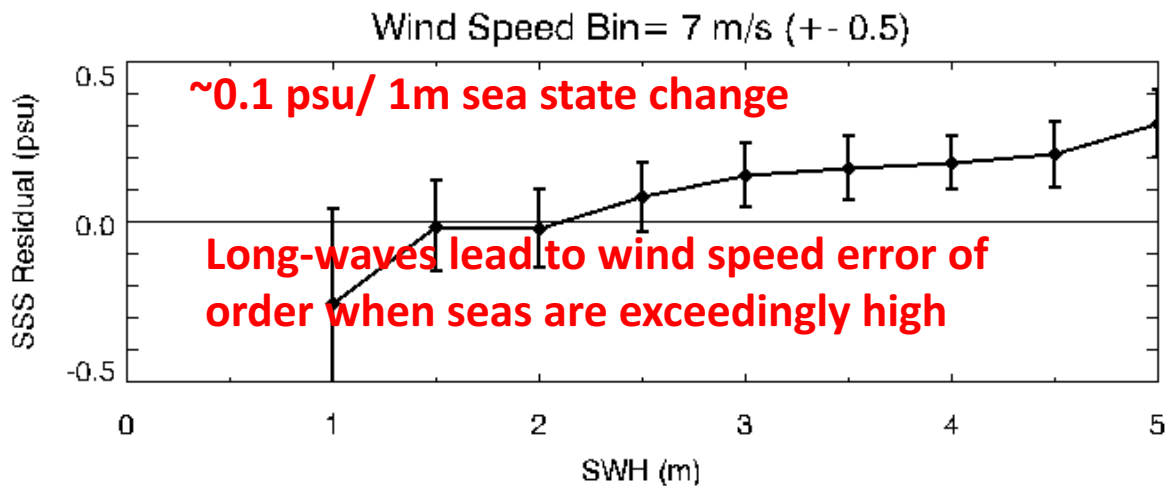


Aquarius Scatterometer Wind vs. significant wave height (17 weeks; Jan-Feb2012) ; X-axis=NCEP wind; Ver. 1.2.3

ASC ONLY



OUTER BEAM
 $\theta = 46$ deg.



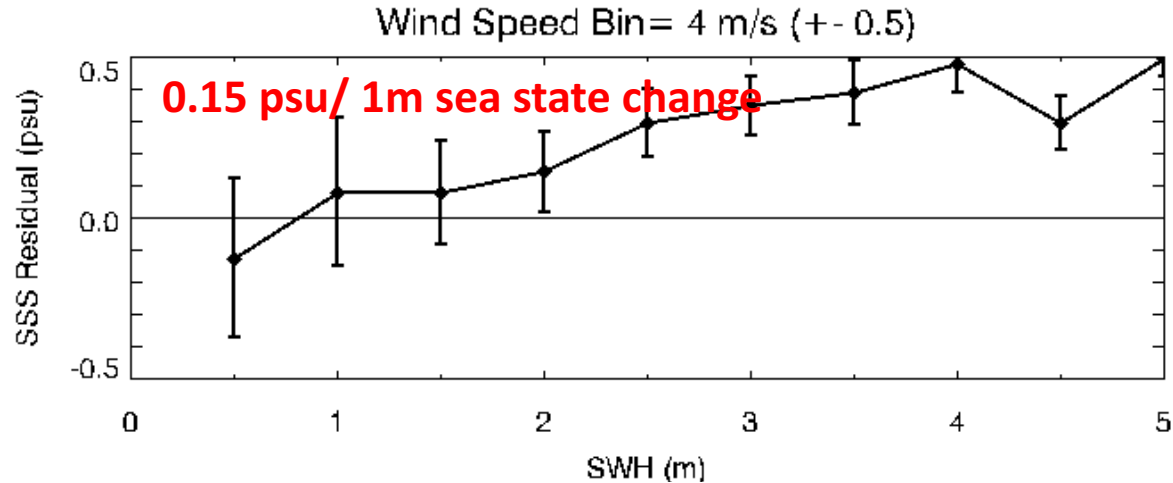
OUTER BEAM
 $\theta = 46$ deg.

ASC Pass data, Galactic refl < 1 K

Aq Cal/Val, March 2012

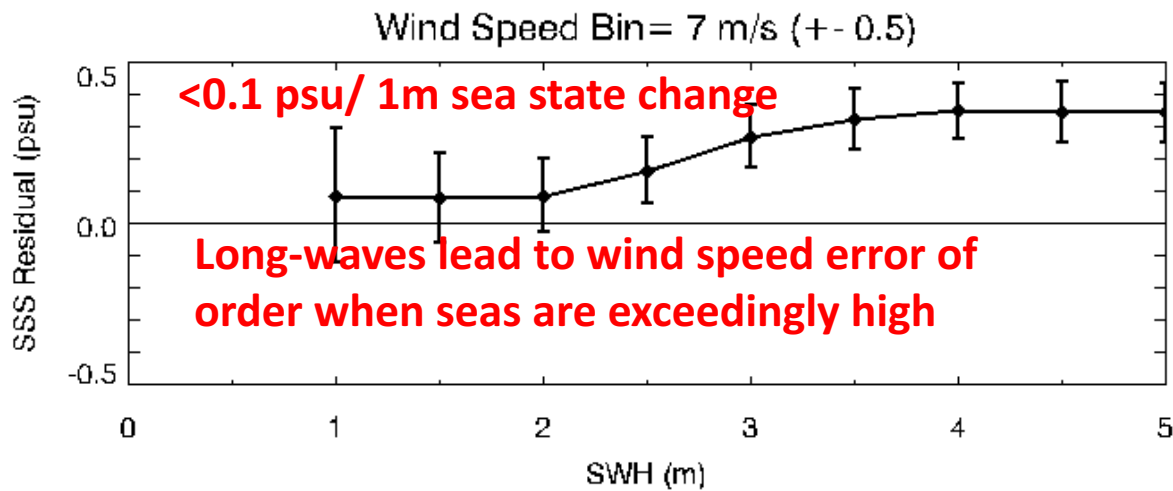


Aquarius Scatterometer Wind vs. significant wave height (17 weeks; Jan-Feb2012) ; X-axis=NCEP wind; Ver. 1.2.3



INNER BEAM
 $\theta = 28$ deg.

DESC ONLY



INNER BEAM
 $\theta = 28$ deg.

Desc Pass data, Galactic refl < 1 K

Aq Cal/Val, March 2012

