• SMAP is an identical radiometer, using identical processing algorithms

• Yet, SMAP regional/temporal biases distinct from those in Aquarius, which was mysterious
Approach

To reconcile differences between SMAP and Aquarius SSS we should process SMAP as if it were observing like Aquarius.
• Similar temporal/regional biases observed when SMAP processed to observe like Aquarius

• Suggests some geometric dependent bias in processing (e.g. emissivity -> wind/wave, reflected galaxy)
  • Instrument calibration less likely as cause
MONTHLY COMPARISON
Month 6

Aquarius V5

SMAP SSS for at Horn 2 α
Month 7

Aquarius V5

SMAP SSS for at Horn 2 α
SCAN DEPENDENT BIASES
Summary

• SMAP processed to observed like Aquarius shows similar space/time biases

• Initially pursued wind direction dependent residual in Faraday rotation correction, but found that not to be a likely contributor

• Some space/time structures in residual biases have correlations with galaxy, pointing to possible cause