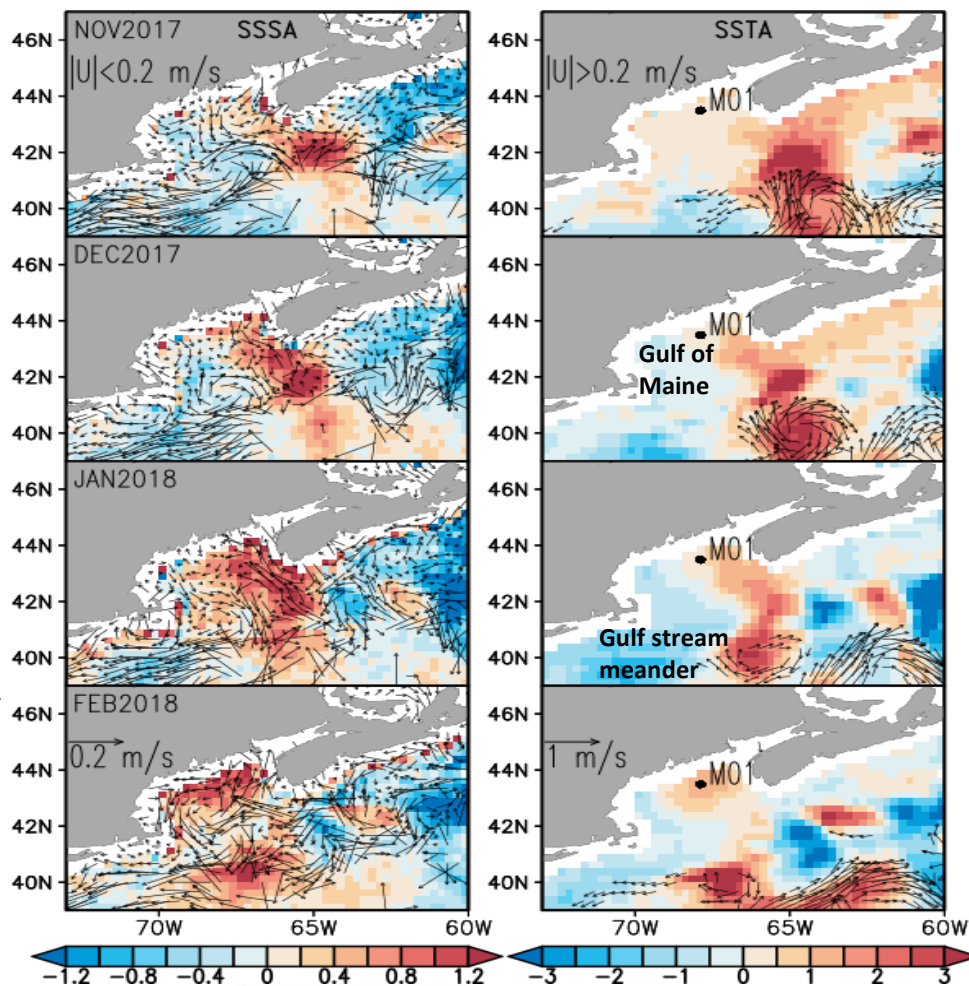


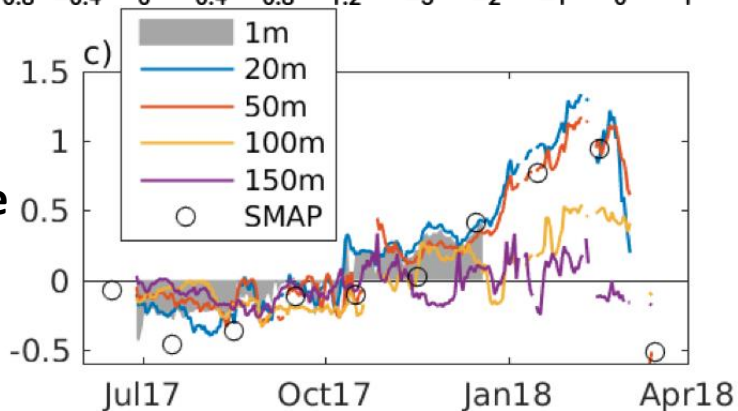
Monthly SSTA and SMAP SSSA on the NW Atlantic shelf, winter 2017-2018

- Buoy M01 lies inside the Gulf of Maine, 2003-2018

- Vectors are OSCAR currents



In situ salinity anomalies at Buoy M01 inside Gulf of Maine with SMAP SSSA data (symbols)



Satellite detection of an unusual intrusion of salty slope water into a marginal sea

S. Grodsky, D. Vandemark, H. Feng, and J. Levin. 2018. *Remote Sensing of Environment*. 217. 550-561. <https://doi.org/10.1016/j.rse.2018.09.004>

- SMAP ocean surface salinity data track advection of unusually warm salty surface water into the Gulf of Maine in winter 2017-2018
- SMAP results confirmed by buoy measurements inside the Gulf as well as glider data on shelf
- Such dense and salty surface water hasn't been observed in Jordan Basin in the last 15 years and is linked to shelf/slope interactions with a GS Gulf Stream meander and warm core eddy
- New SMAP results demonstrate an all-new monitoring capability along the US East coast



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