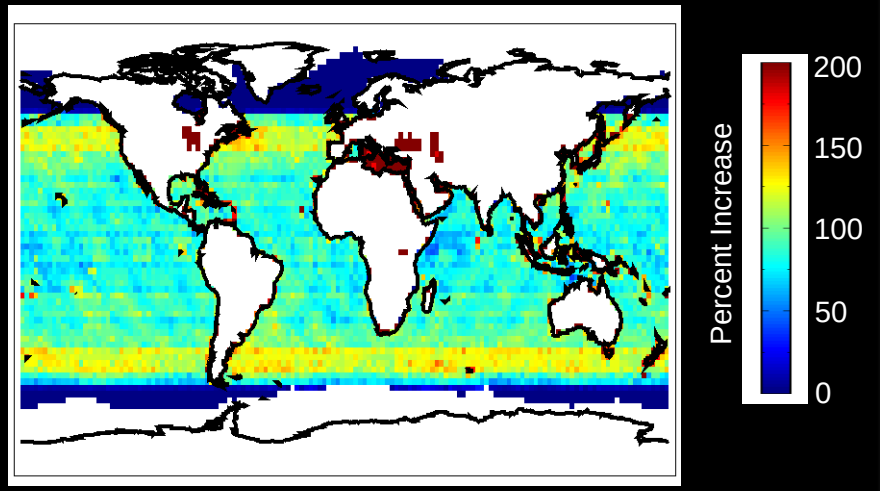
Real-Time Assimilation of ISS-RapidScat Observations

Increase of Surface Wind Observations by Assimilating RapidScat



Flying on the International Space Station, RapidScat is providing surface wind observations between ±56° Latitude

These observations are available with low latency from JPL RapidScat Team and are ***assimilated in real-time*** at GMAO

The ISS orbit provides data coverage complementary to EUMETSAT ASCAT, greatly improving global sampling

Observation impacts, which quantify the reduction of short-term forecast error in observation space, show that ***RapidScat*** is outperforming ***ASCAT*** in our system

The metric also shows that, per observation, the RapidScat observations are nearly on-par with atmospheric motion vectors derived from geostationary satellite imagery