

# Validation of OISST+GDAS input file Version 0.5 (03312023)

One granule case study on Aqua, 2023 042 19:35 UTC

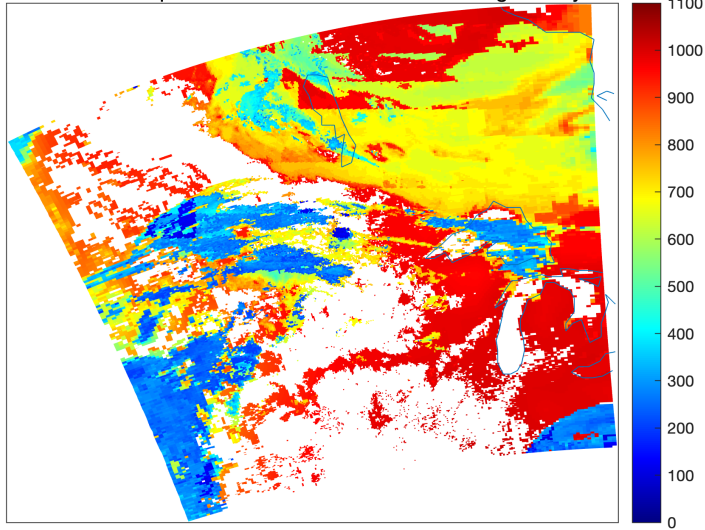
Three runs are compared using:

1. Old (V0.4) OISST daily mean + GDAS for SST only
2. New (V0.5) OISST daily mean + GDAS for SST and Ice Concentration
3. Weekly Reynold SST

# MYD06 CTP: Aqua 2023 042 at 1935 UTC

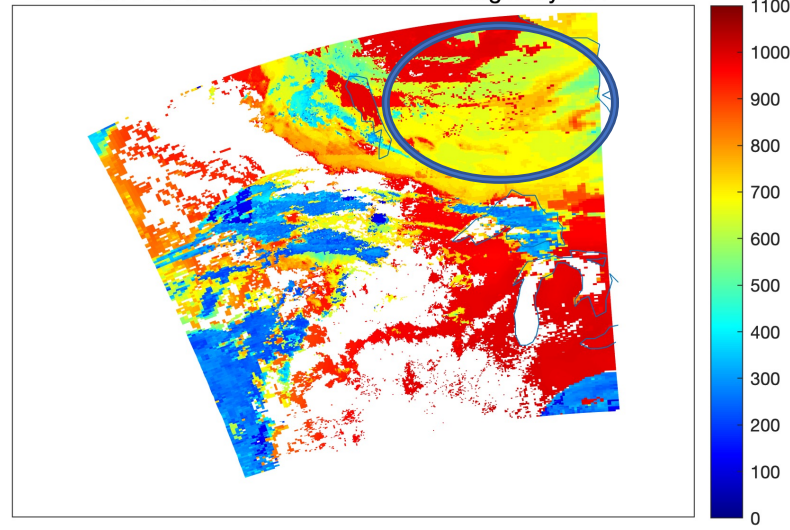
Using Weekly mean Reynolds SST

MYD06 Cloud Top Pressure on 2023042.1935 - Using Weekly SST



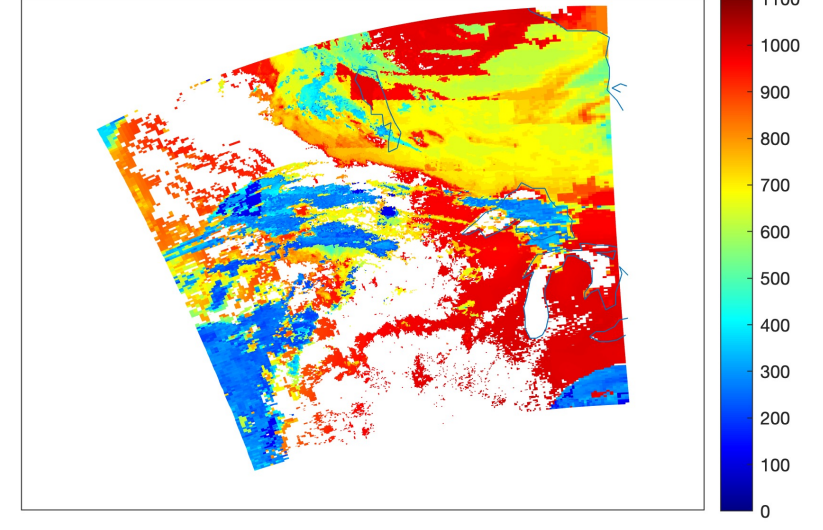
Using OISST+GDAS daily mean SST without ice concentration over inland water

MYD06 CTP on 2023042.1935 - Using Daily SST



Using OISST+GDAS daily mean SST with Ice concentration fixed

MYD06 CTP on 2023042.1935 - Using Daily SSTice

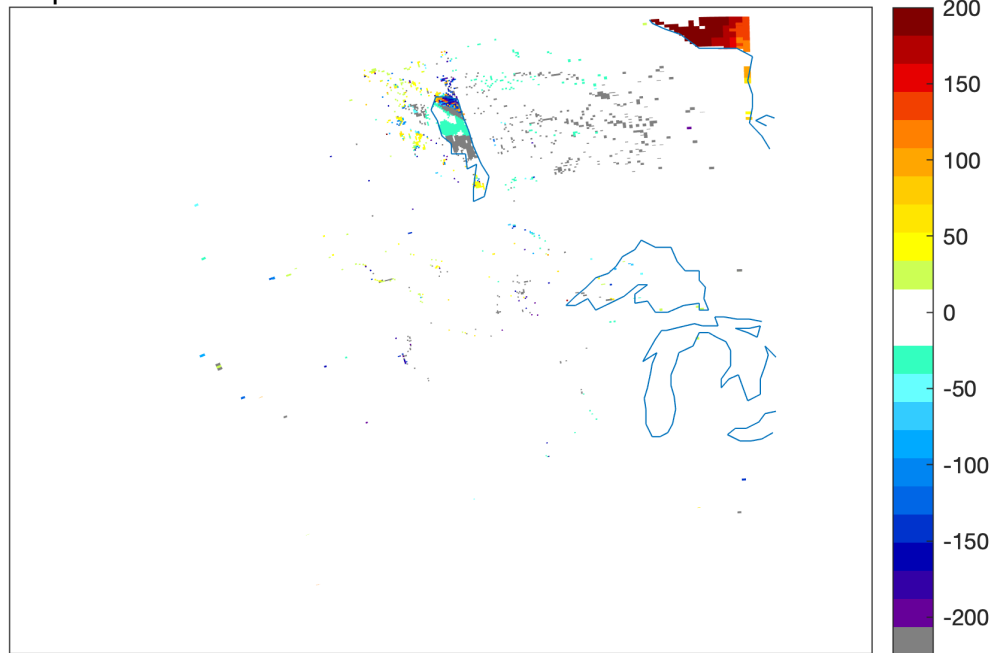


# MYD06 CTP diff: Aqua 2023 042 at 1935 UTC

Differences  
Weekly – Daily mean SST

Using old OISST+GDAS daily mean SST file/  
With missing ice concentration over lakes

Differences of Cloud Top Pressure (Weekly-Daily) on 2023042.1935  
Different pixels = 2622 out of 109620 Percent= 2.39 mean= -3.26 std= 37.71



Using new OISST+GDAS daily mean SST file/  
Adding GDAS ice concentration over lakes

Differences of Cloud Top Pressure (Weekly-DailyIce) on 2023042.1935  
Different pixels = 658 out of 109620 Percent= 0.60 mean= -0.66 std= 16.32

