

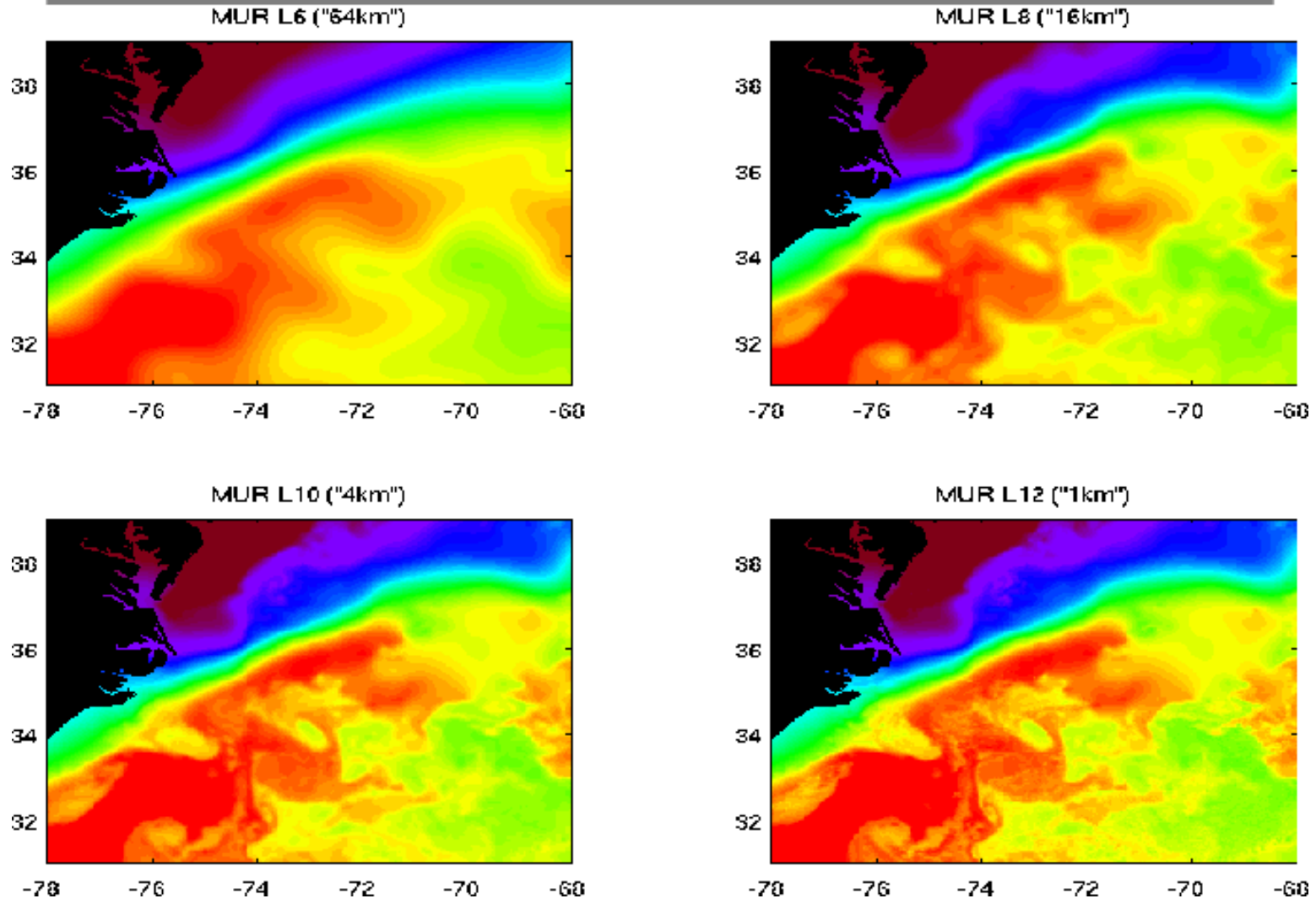
Gridded Analysis Inter-Comparison (IC):

Some possible Future Issues for Higher-Resolution Analysis

- More L2P data sets to entice \sim sub-5km analysis.
- How do you validate fine scale features?
 - Buoy data are not dense enough ...
 - Other satellite-based data, i.e., *comparison*, maybe the only option.
- Potential complication factor(s):
 - Smaller scale features seem to evolve faster ...
 - “Synoptic” time-scale maybe shorter than a day.

An Example: (from GHRSSST-16)

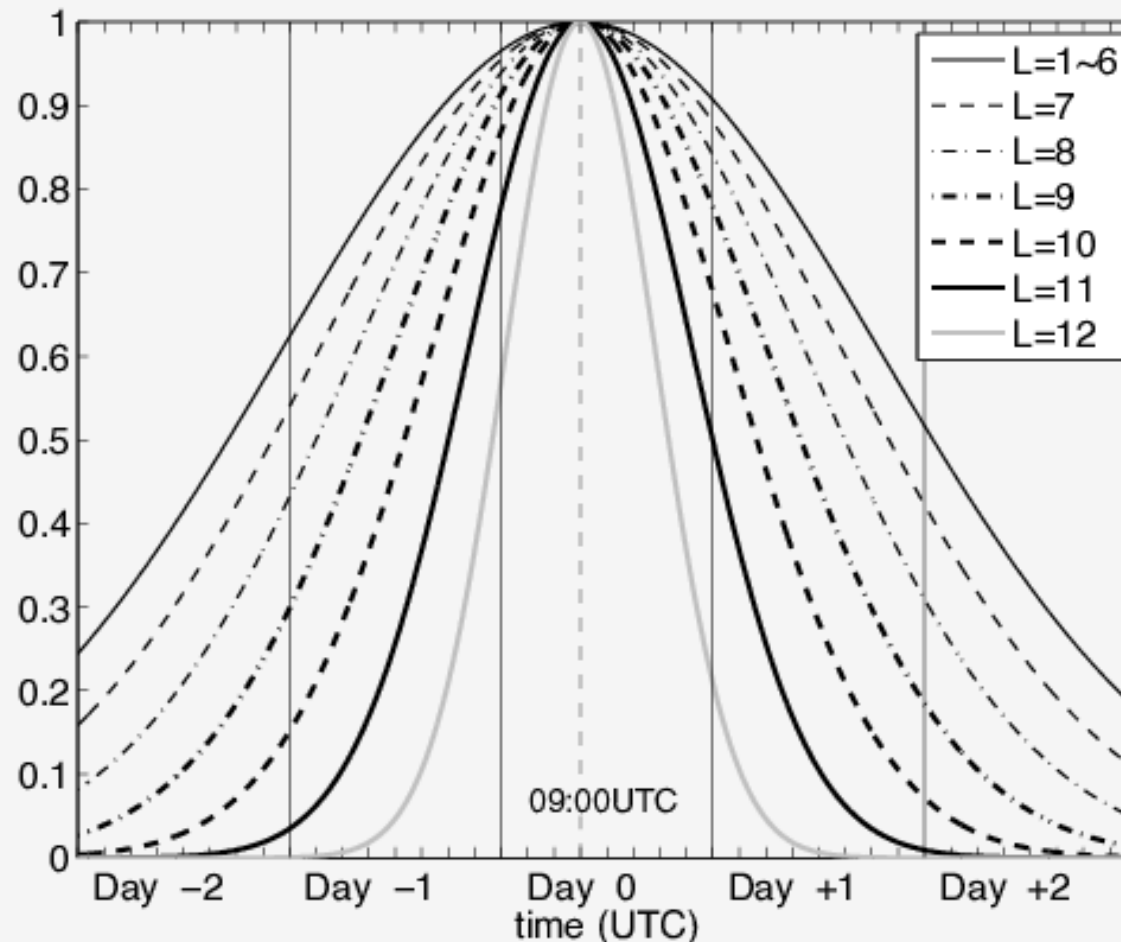
MUR Analysis Approach: Multi-scale analysis



An Example: (from GHRSSST-16)

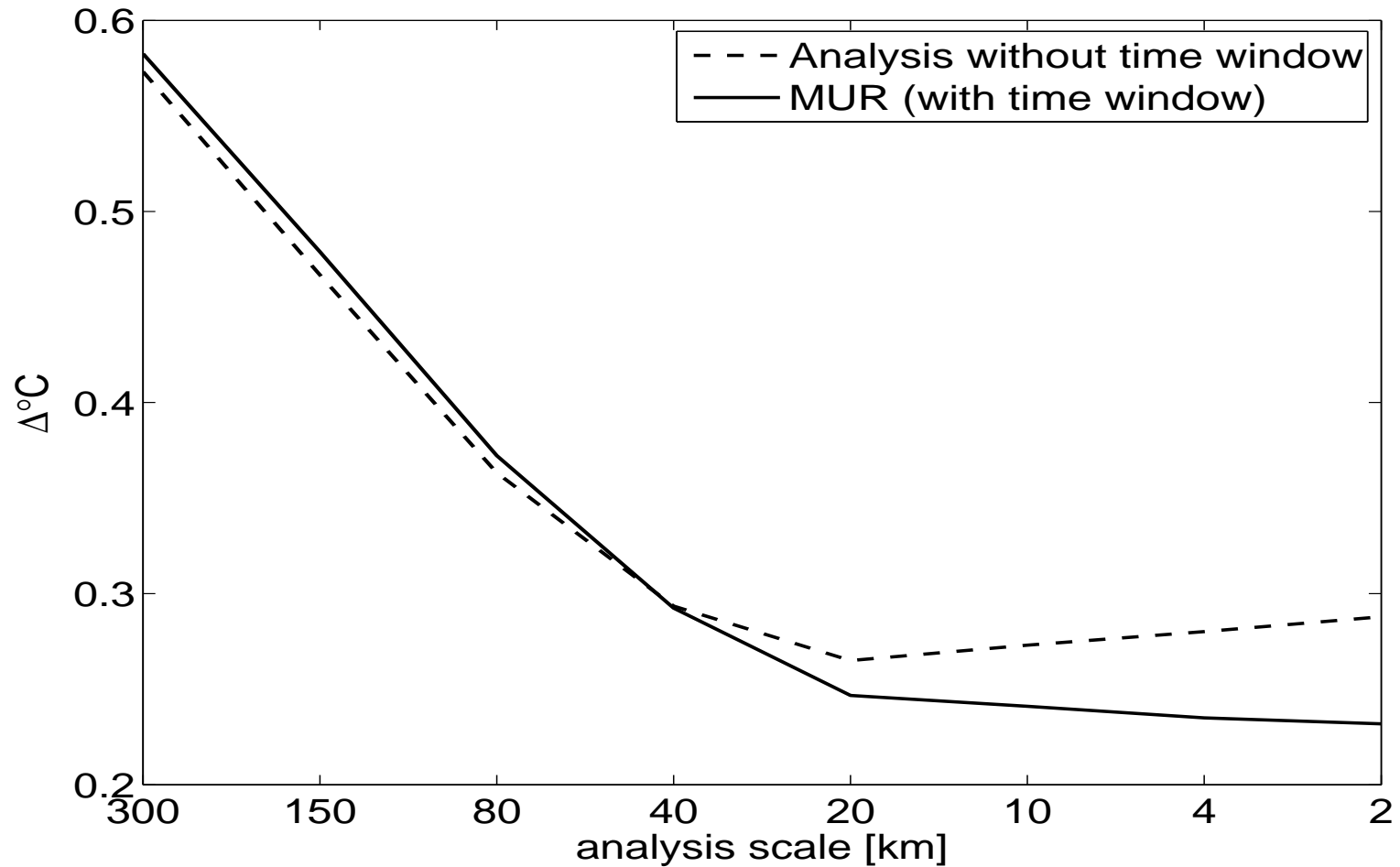
MUR Analysis Approach: Input time windows

Narrower time-windows for higher resolution analysis stages:



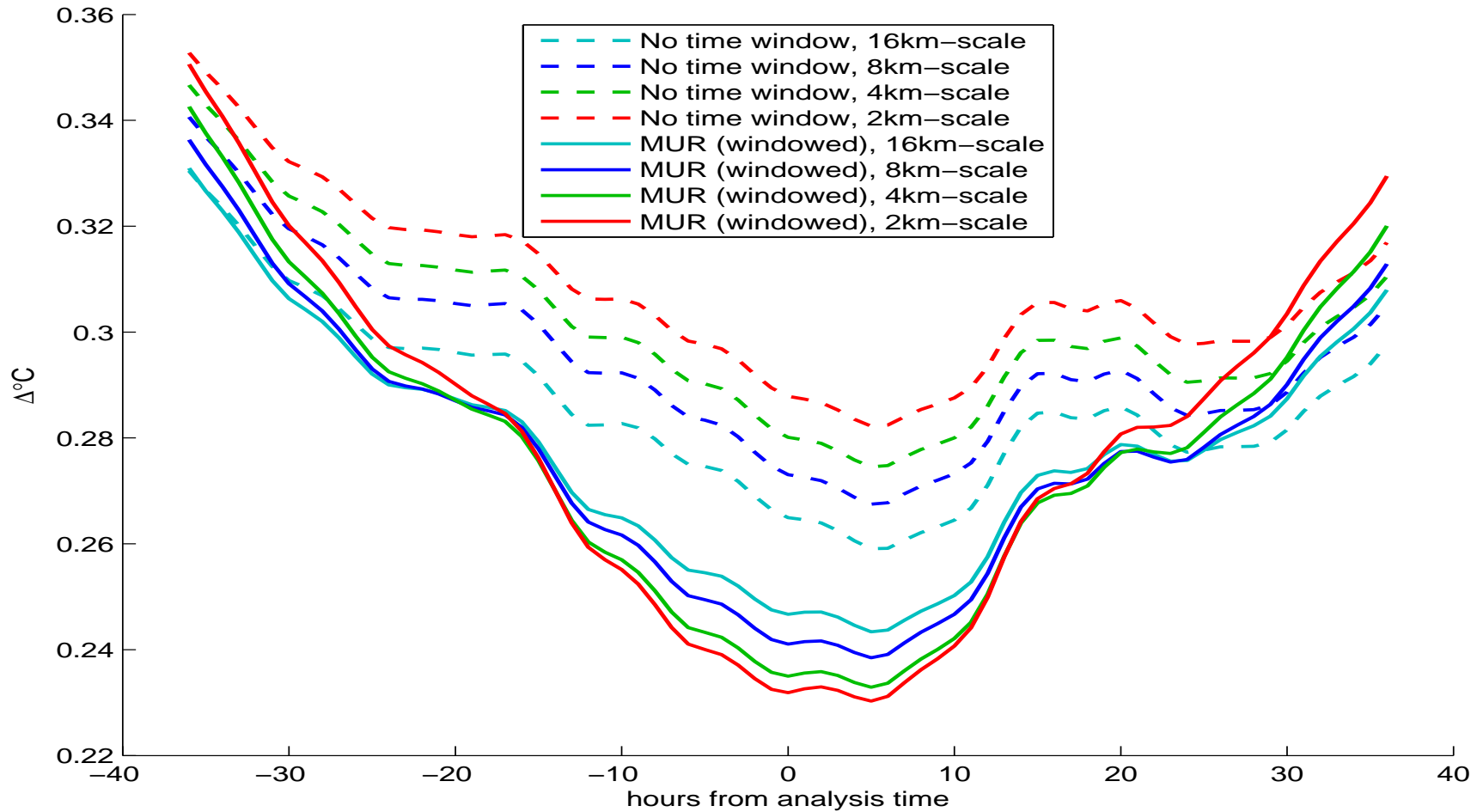
Use of model-simulated SST

1/48° ECCO2 model SST fields at 1-hour frequency:



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Random thoughts on higher-resolution IC

- Measure of comparison:
 1. Average difference of grid values.
(traditional, e.g., match-up database statistics)
 2. Direct comparison of feature geometry
(e.g., front locations/shape).
What? How? Reproduceable by all?
- Extensions of past IC-TAG activities
 1. Higher-resolution GMPE? (“GMPE2”?)
 2. Higher-resolution model-simulated SST?
(Extend the public version of experiments in Reynolds et al. 2013)