Modeling the diurnal variability of SST
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Figure: Maximum mean monthly warming, \( \overline{\Delta SST}_{day} - \Delta SST_{found} \).

Figure: Modelled SST with different forcing.

Figure: Diurnal variability at 2 m depth from July 4th to 14th, 2013.
Seasonal variation of sea surface temperature in the central North Pacific
Masahisa Kubota and Tsutomu Hihara (Tokai Unniversity)

Figure 1  Time variation of SST at 45°N, 145°W.

Figure 4. Time variation of (a) Monthly accumulated amount of SST change related to each term in a bulk mixed layer model, and (b) Monthly accumulated amount of SST change by each advection term
Wave and Wind Direction Effects on Ocean Surface Emissivity Measurements
Heather Holbach, Eric Uhlhorn, and Mark Bourassa

Wind Speed < 10 ms⁻¹

Wind Speed ~ 17 ms⁻¹

Wind Speed ~ 28 ms⁻¹

Storm motion direction
Wind direction

Longitude (°W.)

Latitude (° N.)

−86 −85.8 −85.6 −85.4 −85.2 −85 −84.8

24.3
24.5
24.7
24.9
25.1
Extreme Coastal Wind Events:
What the Scatterometer Does (Not) See
P. Ted Strub and Corinne James
CEOAS – Oregon State University
ASCAT Near-Coastal Wind Retrieval with Land Fraction Thresholding

- Near-coastal backscatter measurements can be contaminated by land resulting poor winds
- Land fraction approach used to discard land-contaminated backscatter measurements
- Dynamic land fraction threshold selected based on local conditions to control for maximum tolerable wind error
- Permits retrieval of near-coastal winds within a few kilometers of the coast, better with UHR

BYU R. Lindsley and D. Long
IMPLICATIONS OF SCATTEROMETRY IN POLAR MESOCYCLONE SURFACE TURBULENT FLUX SIMULATIONS AND REANALYSIS