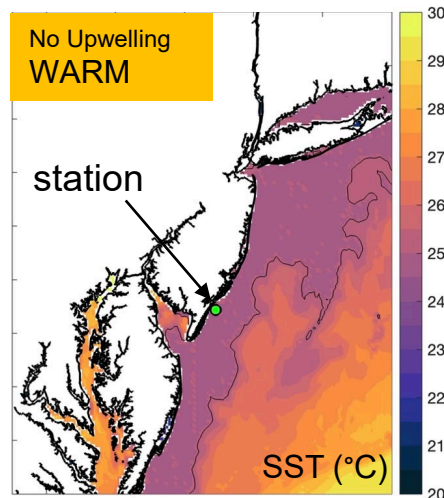
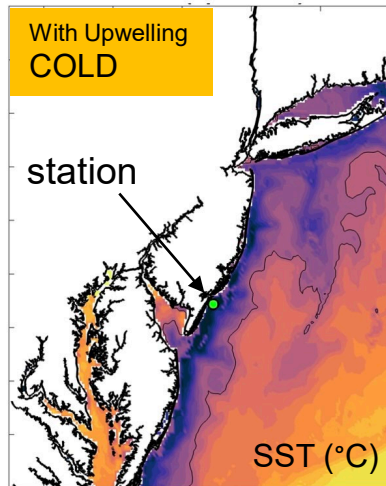
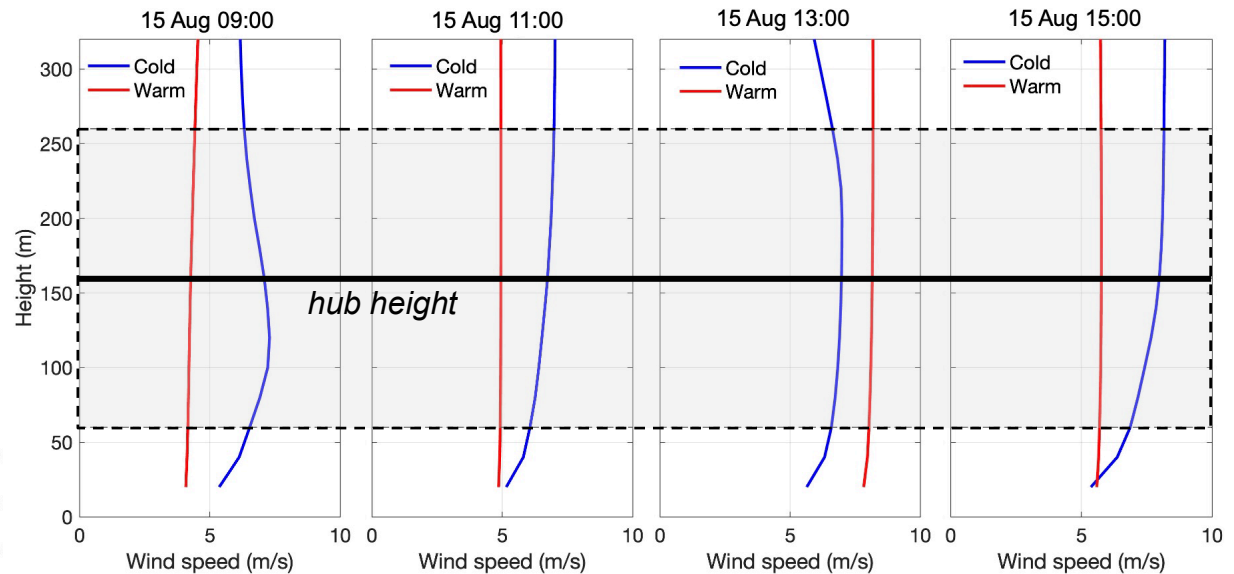


## Effect of Coastal Upwelling on Air-Sea Interaction and Offshore Wind in New Jersey

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Does colder SST affect winds at turbine hub height?



Power is proportional to cubed wind speed!  
Total energy over a two-day model (RU-WRF) run:

Cold SST	Warm SST
$7.86 \times 10^4$ kWh	$5.68 \times 10^4$ kWh

Sum of energy in the Cold run was 38% higher than in the Warm run

**Ocean conditions impact offshore wind power production**