“EARTH” SIMULATION VARIABLES CHEAT SHEET

Refer to the table below for descriptions of various Air and Ocean variables for the “Earth” simulation.

Mode	Overlay Variable	Description	Notes
Air	Wind	Wind speed	
	Temp	Temperature	
	RH	Relative humidity	
	WPD	Wind power density	The amount of available wind energy. This is an important measurement in wind farms. You can measure it at any height except surface (“Sfc.”).
	3HPA	Three-hour precipitation accumulation	The amount of rain that has fallen in the last three hours.
	CAPE	Convective available potential energy	A measurement of how unstable the atmosphere is. The simulation uses the unit J/kg (joules per kilogram).
	TPW	Total precipitable water	The total amount of water in the air over a point, assuming it all fell as rain.
	TCW	Total cloud water	The total amount of water in the clouds over a point.
	MSLP	Mean sea level pressure	The air pressure near sea level. The simulation uses a unite of hPa (hectopascals). Standard pressure is around 1013 hPa.
	MI	Misery index	Measure of how uncomfortable it feels outside. Based on the heat index and wind chill.

Mode	Overlay Variable	Description	Notes
Ocean	Currents	Estimated speed of ocean currents	
	Waves	Measurement of the most energetic waves at a point	
	SST	Sea surface temperature	The temperature of the ocean surface.
	SSTA	Sea surface temperature anomaly	How many degrees hotter or colder the sea surface temperature is compared to the daily average. The average is based on daily temperatures from 1981-2011.
	HTSGW	Significant wave height	An estimate of average wave height. A “trained observer” estimates this height.