“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. |
| 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. |