

Status of NDFD Elements as of August 23, 2019

Element	CONUS	Puerto Rico	Hawaii	Guam	Alaska	Oceanic
12-hour Probability of Precipitation	Operational since 12/1/04	Operational since 6/21/05	Operational since 6/21/05	Operational since 9/20/05	Operational since 8/26/16	Not available
Apparent Temperature	Operational since 3/15/06	Operational since 3/15/06	Operational since 3/15/06	Operational since 3/15/06	Operational since 8/26/16	Not available
Climate Outlooks Days 8-14, 30-, and 90-Days Temperature Above/ Below Normal, Precipitation Above/ Below Normal	Operational since 9/18/08	Not available	Not available	Not available	Operational since 9/18/08	Not available
Convective Hazards - Outlook - Probability of: Tornadoes, Hail, Damaging Thunderstorm Winds, Extreme Tornadoes, Extreme Hail, Extreme Thunderstorm Winds - Total Probability of: Severe Thunderstorms, Extreme Severe Thunderstorms	Operational since 4/30/09	Not available	Not available	Not available	Not available	Not available
Dewpoint	Operational since 3/15/05	Operational since 6/21/05	Operational since 6/21/05	Operational since 9/20/05	Operational since 8/26/16	Not available
Fire Weather Outlooks - Fire Weather Critical and Extremely Critical Areas - Fire Weather Critical Areas for Dry Thunderstorms	Operational since 7/14/11	Not available	Not available	Not available	Not available	Not available

Element	CONUS	Puerto Rico	Hawaii	Guam	Alaska	Oceanic
Forecast of Reference Crop Evapotranspiration (FRET) - Daily - Weekly - Daily departure	Operational since 4/13/16	Not available	Not available	Not available	Not available	Not available
Hazards	Operational since 9/15/09	Operational since 9/15/09	Operational since 9/15/09	Operational since 9/15/09	Operational since 8/26/16* * subset of hazards	Operational since 2/6/18
Ice Accumulation	Operational since 11/5/13* * subset of CONUS	Not required	Not required	Not required	Not available	Not available
Maximum and Minimum Relative Humidity	Operational since 11/27/12	Operational since 11/27/12	Operational since 11/27/12	Operational since 11/27/12	Operational since 8/26/16	Not available
Maximum and Minimum Temperature	Operational since 12/1/04	Operational since 6/21/05	Operational since 6/21/05	Operational since 9/20/05	Operational since 8/26/16	Not available
Quantitative Precipitation Forecast (QPF)	Operational since 7/8/08	Operational since 7/8/08	Operational since 7/8/08	Operational since 7/8/08	Operational since 8/26/16	Not available
Precipitation Probability Index (PPI)	Experimental since 9/29/15	Not available	Not available	Not available	Not available	Not available
Relative Humidity	Operational since 3/15/06	Operational since 3/15/06	Operational since 3/15/06	Operational since 3/15/06	Operational since 8/26/16	Not available
Significant Wave Height	Operational since 5/31/07	Operational since 5/31/07	Operational since 5/31/07	Operational since 5/31/07	Operational since 8/26/16	Operational since 2/6/18

Element	CONUS	Puerto Rico	Hawaii	Guam	Alaska	Oceanic
Sky Cover	Operational since 7/8/08	Operational since 7/8/08	Operational since 7/8/08	Operational since 7/8/08	Operational since 8/26/16	Not available
Snow Amount	Operational since 7/8/08	Not required	Operational since 7/8/08	Not required	Operational since 8/26/16	Not available
Snow Amount Probabilities 24-hour 10% exceedance 24-hour 90% exceedance 48-hour 10% exceedance 48-hour 90% exceedance 72-hour 10% exceedance 72-hour 90% exceedance	Experimental since 2/26/19	Not required	Not required	Not required	Not available	Not required
Snow Level	Experimental since 10/12/18	Not required	Not required	Not required	Not available	Not required
Temperature	Operational since 3/15/05	Operational since 6/21/05	Operational since 6/21/05	Operational since 9/20/05	Operational since 8/26/16	Not available
Tropical Cyclone Surface Wind Speeds Probabilities >34kts (incremental) >34kts (cumulative) >50kts (incremental) >50kts (cumulative) >64kts (incremental) >64kts (cumulative)	Operational since 5/31/07	Not available	Operational since 5/13/10 (graphics only)	Operational since 5/13/10 (graphics only)	Not required	Not available
	Northern Hemisphere domain Operational since 5/31/07					
	North Pacific Ocean domain Operational since 5/13/10					
Tropical Cyclone Threats - Wind - Storm surge - Flooding rain - Tornado	Operational since 6/1/15	Operational since 6/1/15	Operational since 6/1/17	Not available	Not required	Not available
Weather	Operational since 3/15/05	Operational since 6/21/05	Operational since 6/21/05	Operational since 9/20/05	Operational since 8/26/16	Not available

Element	CONUS	Puerto Rico	Hawaii	Guam	Alaska	Oceanic
Wet Bulb Globe Temperature	Experimental since 08/23/19	Experimental since 08/23/19	Experimental since 08/23/19	Experimental since 08/23/19	Not required	Not required
Wind Direction and Speed	Operational since 12/14/05	Operational since 12/14/05	Operational since 12/14/05	Operational since 12/14/05	Operational since 8/26/16	Operational since 2/6/18
Wind Gust	Operational since 9/20/07	Operational since 9/20/07	Operational since 9/20/07	Operational since 9/20/07	Operational since 8/26/16	Operational since 2/6/18
Winter Weather Outlook	Operational since 4/3/18	Not required	Not required	Not required	Not available	Not required