## POST TROPICAL CYCLONE REPORT

Storm Name Tropical Storm Ophelia

NWS Office Newport/Morehead City, NC

**Begin/End Date** 09/22/2023 - 9/23/2023

Fatalities 0 Direct

0 Indirect

#### **Tornadoes**

### **Event Summary**

On Thursday, September 21st, an area of low pressure begin to develop and get more organized off the Southeast US coastline. That low continued to deepen and become more organized, eventually taking on tropical characteristics, becoming the 15th named storm of the 2023 Atlantic Hurricane Season on Friday, September 22nd. Ophelia developed into a strong tropical storm and moved north over the next couple of days, making landfall during the early morning hours near Emerald Isle, NC. Ophelia continued to march north through the heart of Eastern North Carolina on Saturday, September 23rd. Ophelia eventually weakened to a Tropical Depression Saturday evening over southern Virginia.

Ophelia brought widespread heavy rainfall, gusty winds, and significant river and storm surge flooding to portions of Eastern North Carolina, and is a reminder that it's never "just a tropical storm". One of the more notable impacts with Ophelia was flooding, both from storm surge and from heavy rain of over 8 inches in some places and flash flooding. Significant storm surge flooding of 4 to 6 feet occurred along the Neuse, Pamlico, and Pungo Rivers. Inland, significant flooding occurred in the Greenville area due to flash flooding and a rapidly rising Green Mill Run.

NOTE: It is unlikely that the point-based observations provided in this report sampled the peak values for the event.

#### **Highest 10 Land Winds (kts)\***

|                         | · /           |           |           |      |
|-------------------------|---------------|-----------|-----------|------|
| Station                 | St            | tate Type | Sustained | Gust |
| Fort Macon              | N             | C Mesone  | et 40     | 57   |
| Oregon Inlet CG         | N             | C Mesone  | et 40     | 59   |
| Buxton                  | N             | C Mesone  | et 39     | 53   |
| Avon-Sound              | N             | C Mesone  | et 38     | 49   |
| Frisco Woods            | N             | C Mesone  | et 37     | 47   |
| Oregon Inlet            | N             | C Mesone  | et 36     | 49   |
| Kites Resort            | N             | C Mesone  | et 35     | 47   |
| Piney Island - BT11 Bom | nbing Range N | C ASOS    | 34        | 52   |
| Billy Mitchell Field    | N             | C ASOS    | 33        | 45   |

<sup>\*</sup> Anemometer heights < 20 m

Highest 10 Marine Winds (kts)\*

| Station          | Туре    | Sustained | Gust |
|------------------|---------|-----------|------|
| Cape Lookout     | NDBC    | 53        | 63   |
| Jennettes Pier   | Mesonet | 47        | 58   |
| Duck             | NOS     | 44        | 48   |
| Pamlico Sound    | Mesonet | 44        | 53   |
| Beaufort         | NOS     | 40        | 52   |
| Avon-Ocean       | Mesonet | 39        | 49   |
| Onslow Bay Outer | CORMP   | 37        | 52   |
| Oregon Inlet     | NOS     | 37        | 47   |
| Diamond Shoals   | NDBC    | 37        | 49   |
| Real Slick       | Mesonet | 36        | 46   |
|                  |         |           |      |

<sup>\*</sup> Anemometer heights < 20 m

# **Highest 10 Rainfall Totals**

| Station               | State | Туре     | Inches |
|-----------------------|-------|----------|--------|
| Jacksonville (COOP)   | NC    | COOP     | 8.82   |
| Jacksonville 7.0 W    | NC    | CWOP     | 8.64   |
| Cape Carteret 1.5 NE  | NC    | COOP     | 8.11   |
| WINTERVILLE           | NC    | CWOP     | 7.60   |
| Cape Carteret 1.0 NNW | NC    | COCORAHS | 6.99   |
| New Bern 2.6 SW       | NC    | COCORAHS | 6.85   |
| Cape Carteret 0.8 NE  | NC    | COCORAHS | 6.80   |
| Greenville 4.4 SSE    | NC    | COCORAHS | 6.78   |
| New Bern 8.8 W        | NC    | COCORAHS | 6.65   |
| Trent Woods 1.3 SSE   | NC    | COCORAHS | 6.37   |

# **Highest NOAA Tide Gage Observations**

| Station                               | State | Datum | Water Level (ft) |
|---------------------------------------|-------|-------|------------------|
| Pamlico Sound at Oregon Inlet Marina  | NC    | MHHW  | 2.52             |
| Atlantic Coast at Beaufort Marine Lab | NC    | MHHW  | 1.76             |
| Pamlico Sound at Coast Guard Hattera  | NC    | MHHW  | 1.50             |
| Atlantic Coast at Duck                | NC    | MHHW  | 1.05             |

### **Lowest 10 Pressures**

| Station                  | State | Туре    | Millibars |
|--------------------------|-------|---------|-----------|
| Onslow Bay Outer         |       | CORMP   | 981.7     |
| Coastal Carolina Airport | NC    | ASOS    | 982.8     |
| Bogue Field              | NC    | ASOS    | 983.1     |
| Cherry Point Air Station | NC    | ASOS    | 984.3     |
| Fort Macon               | NC    | Mesonet | 986.9     |
| Beaufort                 |       | NOS     | 987.9     |
| Beaufort Airport         | NC    | ASOS    | 989.1     |
| Cape Lookout             |       | NDBC    | 990.5     |
| Pitt-Greenville Airport  | NC    | AWOS-3  | 992.2     |
| New River Air Station    | NC    | ASOS    | 992.4     |

## Report Last Updated on 09/28/2023:

The following files have been updated: Wind and Pressure, Rainfall, Water Level, Tornadoes