Public Information Statement National Weather Service Mount Holly NJ 314 PM EDT Tue Aug 11 2020 ... NWS DAMAGE ASSESSMENT RESULTS FOR TROPICAL STORM ISAIAS TORNADOES... Updates: 1) Increased the wind speed to EF2, 115 mph, for the long-tracked Kent to New Castle County Delaware tornado. Also extended the path length. 2) An 8th tornado (EF1) has been added; Milford in Sussex/Kent County, Delaware. Total Number of Tornadoes*: 8 EF2: 2 EF1: 4 EF0: 2 Number of Tornadoes by State*: DE: 3 PA: 2 NJ: 2 MD: 1 *NWS Mount Holly coverage area. .Kent and New Castle County Delaware Tornado... Start Location...Dover in Kent County, Delaware End Location...Southwest of Glasgow in New Castle County, Delaware Date...August 4, 2020 Estimated Time...8:55 AM EDT to 9:30 AM EDT Maximum EF-Scale Rating...EF2 Estimated Maximum Wind Speed...115 mph Maximum Path Width...500 yards Path Length...35.5 miles Beginning Lat/Lon...39.10N/75.50W Ending Lat/Lon...39.58N/75.76W * Fatalities...0 * Injuries...0Summary... The tornado touched down in the vicinity of the Eagle Meadows Apartment Homes on Sorghum Mill Road in Kent County then moved across Route 10. It tracked nearly parallel to South State Street through Anneville, the south side of Dover, where significant tree damage occurred, including some treetops shredded from Poplar Lane to the neighborhood around Steele Road. It was here where some roof damage occurred to some homes especially due to fallen trees, however a garage was significantly damaged on Dyers Tree Farm. The tornado then crossed over Route 13 near the Eden Medical Center and very near the William Henry Middle School. A couple sections of the schools roof were blown off along with

some tree damage nearby. A warehouse adjacent to the school had a few sections of its metal walls torn off and a couple of tractor trailer trailers flipped onto their side. The tornado then crossed over Walker Road at Route 15 then to Westminster Village at Dover near the intersection of Route 15 and College Road.

The tornado continued northward just east of Cheswold where the tornado may have lifted for a time with discontinuous tree damage before moving through the east side of Smyrna where more notable tree damage occurred. A 96 mph wind gust was measured at a Delaware Department of Transportation weather station located on Route 1 just north of Smyrna as the tornadic circulation passed by. From here, the tornado continued nearly parallel to Routes 1 and 13 on the east sides of Townsend and Middletown in New Castle County. Numerous trees were snapped or uprooted along portions of Blackbird Landing Road and Gum Bush Road in Townsend with some damage to roofs. A garage at a residence on Blackbird Landing Road was destroyed. The tornado then damaged homes in Middletown along Spring Hollow Drive. In this neighborhood, some homes had roof material and siding blown off with numerous trees uprooted. Several garage doors were blown out and one home had an entire side wall blown off. One picture showed a home with a missing exterior corner walls on the second story.

The tornado continued north northwest to the Summit Bridge area just south of the C and D canal. It is here where substantial damage occurred to several homes, including one home that had more than half of its roof completely torn off with a neighboring home losing several sections of their roof. Some other homes lost a portion of their roof and siding was torn off with a garage door blown in, along with several trees down or snapped. The tornado crossed the canal and tracked near Lums Pond and through an adjacent wooded area where pictures and areal footage showed a clear path with numerous trees down. The tornado then crossed Route 896 and into the Brennan Estates where hundreds of trees were down or uprooted and around a dozen homes sustained enough damage that they were declared as uninhabitable. The tornado then looked to have lifted prior to crossing over into Cecil County Maryland.

Based on the damage to the homes in the Middletown to Summit Bridge to Brennan Estates areas especially (some non-tree related damage), the rating of this tornado was increased to 115 mph which is equivalent to an EF2 on the Enhanced Fujita Scale. Doppler radar data showed a continuous and well defined rotational signature and also a tornado debris signature.

This tornado path length set a new record in Delaware, greatly surpassing the previous tornado path length record of 13 miles which occurred in 1988.

Special thanks is extended to Kent County and New Castle County Emergency Management, trained spotters, and the public for their extensive assistance with this survey. .Philadelphia and Bucks County Pennsylvania Tornado...

...Summary...

A tornado touched down just east of the Philadelphia Mills Mall as it moved in a northwesterly direction along or near Knights Road and Medford Road toward Dunks Ferry Road. Three exhaust systems and 6 RTU systems were blown off the roof in less than 15 seconds at the former Walmart Store currently undergoing reconstruction, and numerous trees, some close to 100 years old, were snapped or blown over along Knights Road, Medford Road, and Dunks Ferry Road. Roofs, siding, and awnings were blown off many homes in the area. A few cars were also tossed or turned over as the storm moved through. The estimated wind speed in this area was 100 mph, equivalent to EF1 on the Enhanced Fujita scale. Current evidence suggests the tornado then lifted off the ground as it proceeded in a northwesterly direction, briefly touching down in the Southampton area of Bucks County. Numerous trees were snapped in this area as well, with many homes and cars damaged due to falling trees and tree limbs. The Sycamore Drive and Harding Roads areas were hardest hit. The estimated wind speed in this area was 90 mph, equivalent to an EF1 on the Enhanced Fujita scale.

Current evidence again suggests the tornado lifted one more time as the parent circulation traveled to the Doylestown area, where it touched down one final time near the Central Bucks West High School. Here bleachers on the visitors side of the athletic field were picked up and tossed before the vortex moved on to the Doylestown Hospital complex where at least six automobiles were tossed some distance, and where substantial damage occurred to the Childrens Village Day Care center with no serious injuries reported. Numerous trees were felled in and around the hospital center, and several metal lamp posts were bent from the wind. The estimated wind speed in this area was 115 mph, equivalent to a low-end EF2 on the Enhanced Fujita scale. The tornado then continued moving in a northwesterly direction, snapping and falling trees, as well as causing damage to homes and other properties, especially along and near Sandy Ridge Road, Jefferson Avenue, and Lower State Road, before lifting along Ferry Road near the Peace Valley Reservoir. The estimated wind speed in this area was 100 mph, equivalent to an EF1 on the Enhanced Fujita scale.

Special thanks is extended to the Bucks County Office of Emergency Management, and to the Philadelphia Office of Emergency Management, for field reconnaissance associated with this survey.

.Sussex and Kent County Delaware Tornado...

Start Location...Milford in Sussex County, Delaware End Location...Milford in Kent County, Delaware Date...August 4, 2020 Estimated Time...8:25 AM EDT to 8:30 AM EDT Maximum EF-Scale Rating...EF1 Estimated Maximum Wind Speed...100 mph Maximum Path Width...400 yards Path Length...2.7 miles Beginning Lat/Lon...38.89N/75.45W Ending Lat/Lon...38.92N/75.46W * Fatalities...0 * Injuries...0

....Summary...

A tornado touched down in the Evergreen and Meadow Brook Lanes area of southwest Milford (Sussex County) around 8:25 AM on August 4. There was extensive tree damage from Meadow Brook and Evergreen lanes north to Haven Lake then across the lake to North Shore Drive in Kent County. Numerous trees were uprooted and snapped along the path of the tornado, with several trees falling onto homes. The tornado turned more northwest and crossed Williamsville Road producing additional tree damage, then lifted before it reached Milford Harrington Highway. Due to the extensive tree damage, power lines and some poles were also down along portions of the tornados path. Several of the trees were of softwood and snapped at their trunks, which is indicative of 100 mph winds and this was used to rate this tornado. This wind speed corresponds to an EF1 on the Enhanced Fujita Scale. Doppler radar data showed a well defined tornado debris signature that quickly developed on the west and northwest side of Milford as the circulation moved through.

Special thanks is extended to the Delaware Department of Transportation and the local media, especially WRDE Coast TV Meteorologist Alex Seymore, for their assistance with this survey.

.Kent County Delaware Tornado...

Start Location...Sandtown in Kent County, Delaware End Location...Sandtown in Kent County, Delaware Date...August 4, 2020 Estimated Time...8:25 AM EDT to 8:28 AM EDT Maximum EF-Scale Rating...EF1 Estimated Maximum Wind Speed...100 mph Maximum Path Width...200 yards Path Length...2.6 miles Beginning Lat/Lon...39.01N/75.69W Ending Lat/Lon...39.04N/75.73W

* Fatalities...0

* Injuries...0

....Summary...

The tornado touched down in the vicinity of Road 258 south of Sandtown Road, then tracked across a section of mostly open fields but damaged some trees along the way. It then tracked down the western portion of Sandtown Road closer to Route 10 damaging several homes and snapping and uprooting several trees. A home had some windows blown out along with roof damage, another home had its roof blown off and there was a large garage that had its back sheet metal wall torn off. The tornado crossed Route 10 near the intersection with Sandtown Road and moved across the Sandtown Landfill facility where additional trees were uprooted or snapped, two front-end loaders had windows blown out and some truck trailers were flipped over. The tornado exited the landfill and may have dissipated before reaching the Maryland-Delaware state line. Doppler radar data showed rotation and a notable tornado debris signature near and just northwest of Sandtown as debris was tossed into the air.

Special thanks is extended to the staff at the Country Cupboard store in Sandtown, Kent County Emergency Management and 911 Center staff for their assistance with this survey.

.Ocean County New Jersey Waterspout and Tornado...

Start Location...Near Ship Bottom in Ocean County, New Jersey
End Location...Near Mud City in Ocean County, New Jersey
Date...August 4, 2020
Estimated Time...10:50 AM EDT to 10:54 AM EDT
Maximum EF-Scale Rating...EF1
Estimated Maximum Wind Speed...110 mph
Maximum Path Width...Unknown
Path Length...3.0 miles
Beginning Lat/Lon...39.63N/74.20W
Ending Lat/Lon...39.68N/74.21W
* Fatalities...0

* Injuries...0

....Summary...

A waterspout developed in Manahawkin Bay between Ship Bottom and Brant Beach. It tracked northwestward and video footage showed the circulation with light debris in the air crossing the Route 72 bridge over the bay. The waterspout then continued tracking to the northwest and passed east of Mud City before moving ashore into a marshy area of the Manahawkin Wildlife Management area. Other than some light debris reported in the air as it crossed the Route 72 bridge, no other damage reports have been received as of this report. However, the circulation tracked right over the Long Beach Island WeatherFlow weather station located north of Egg Island and west of Flat Island in Manahawkin Bay which measured a 109 mph wind gust at 10:53 AM EDT. This measurement was used to rate this waterspout/tornado given the lack of actual damage. Doppler radar data showed no evidence of a tornado debris signature. Doppler radar data however did indicate velocities to 112 mph at about 1,600 feet above the ground very near the aforementioned weather station.

Special thanks is extended to the public who provided video that greatly helped with this survey.

.Cape May County New Jersey Tornado...

Start Location...Strathmere in Cape May County, New Jersey End Location...Marmora in Cape May County, New Jersey Date...August 4, 2020 Estimated Time...9:45 AM EDT to 9:50 AM EDT Maximum EF-Scale Rating...EF1 Estimated Maximum Wind Speed...100 mph Maximum Path Width...150 yards Path Length...5.25 miles Beginning Lat/Lon...39.19N/74.66W Ending Lat/Lon...39.27N/74.66W * Fatalities...0 * Injuries...0

....Summary...

A waterspout came ashore near the southern end of Corsons Inlet State Park near Strathmere then across marshy areas. The tornado then crossed the Garden State Parkway then tracked along Route 9 across the south side of Marmora. There were several pictures and videos of the waterspout and tornado including a trained spotter reporting a tornado on the ground with debris in the air. The tornado produced significant damage to homes and businesses on the 500 block of Route 9, starting in the vicinity of a Coca Cola facility where containers were tossed around with even a truck trailer flipped onto its side. Adjacent to the Coca Cola facility, a large shed at a residence was upended and vehicles were moved from their original locations. Several homes had portions of their roofs blown off with a couple of homes sustaining significant damage to a side wall or corner walls. The tornado crossed Route 9 to the Pine Hill Mobile Home Court where significant damage occurred to trees and buildings. One home was shifted off its foundation and others had roof damage and downed trees crushed several cars. The tornado tracked north northwest crossing Tuckahoe Road and may have dissipated over the adjacent marsh areas. Doppler radar data showed a well defined tornado debris signature as the tornado moved through portions of Marmora.

Special thanks is extended to Cape May County, trained spotters, and the local media for their help with this survey.

.Montgomery County Pennsylvania Tornado...

Start Location...Worcester Township in Montgomery County, Pennsylvania End Location...Worcester Township in Montgomery County, Pennsylvania Date...August 4, 2020 Estimated Time...10:44 AM EDT to 10:50 AM EDT Maximum EF-Scale Rating...EF0 Estimated Maximum Wind Speed...80 mph Maximum Path Width...200 yards Path Length...2.8 miles Beginning Lat/Lon...40.16N/75.33W Ending Lat/Lon...40.20N/75.36W * Fatalities...0

* Injuries...0

...Summary...

An EFO tornado occurred in Worcester Township in Montgomery County, Pennsylvania as Tropical Storm Isaias moved northward along the East Coast of the United States. With southeastern Pennsylvania being in the northeastward, right front quadrant, the tornado and parent storm moved in an unusual northwestward trajectory ahead of the main center of the tropical storm. An area of circulation tightened in a strong cell within a rainband in southeastern Montgomery County. As this circulation tightened, a brief tornado formed near the intersection of Brindle Court and Township Line Road in Worcester Township, where a few small trees were downed in a small residential subdivision. From here, the tornado continued its northwestward trajectory through the township, downing trees along Potshop Road. The circulation may have lifted with the path being somewhat discontinuous. A somewhat denser area of trees were downed as the tornado moved across Valley Forge Road and northwestward along Heebner Road. Several tree tops were sheared off in addition to several utility poles being pushed over along Heebner Road near the intersection of Shefley Lane. The tornado continued northwest from here, eventually downing several hardwood trees along Hollow Road. One tree brought down several utility lines as it fell. From here, the tornado lifted with only a few other trees being downed a little ways from Hollow Road in a small wooded area.

Special thanks is extended to the Montgomery County Emergency Management Office along with Skywarn Spotter Lou Ruh for their help in this survey.

.Queen Anne`s County Maryland Tornado...

Start Location...Queenstown in Queen Anne`s County in Maryland End Location...Queenstown in Queen Anne`s County in Maryland Date...August 4, 2020 Estimated Time...8:18 AM EDT to 8:19 AM EDT Maximum EF-Scale Rating...EF0 Estimated Maximum Wind Speed...70 mph Maximum Path Width...35 yards Path Length...0.60 miles Beginning Lat/Lon...38.93N/76.13W Ending Lat/Lon...38.93N/76.15W * Fatalities...0

* Injuries...0

...Summary... The tornado touched down along Stagwell Road in Queenstown. Pictures and video showed a distinct but narrow path in a corn field parallel to the road which is mostly east to west. The downed corn was in a circular pattern, and aerial footage over the corn field showed some downburst signatures on the right side of the tornado path. In addition to the cornfield damage, sporadic tree damage occurred along Stagwell Road across from the corn field. The tornado looks to have lifted before it reached the Wye River as there was no additional visible damage north of this path. Radar showed defined rotation, however given the weak intensity of the tornado it appeared to have occurred on the north side of a larger rotational signature and therefore tracked more east to west.

Special thanks is extended to Queen Annes County Emergency Management and local media for their assistance with this survey.

EF Scale: The Enhanced Fujita Scale classifies tornadoes into the following categories:

EF0...Weak.....65 to 85 mph EF1...Weak.....86 to 110 mph EF2...Strong....111 to 135 mph EF3...Strong....136 to 165 mph EF4...Violent...166 to 200 mph EF5...Violent...>200 mph

* The information in this statement is preliminary and subject to change pending final review of the events and publication in NWS Storm Data.

\$\$

Davis/Gorse/Miketta/Staarmann