

Landspout tornado Schuinesloot/Slagharen

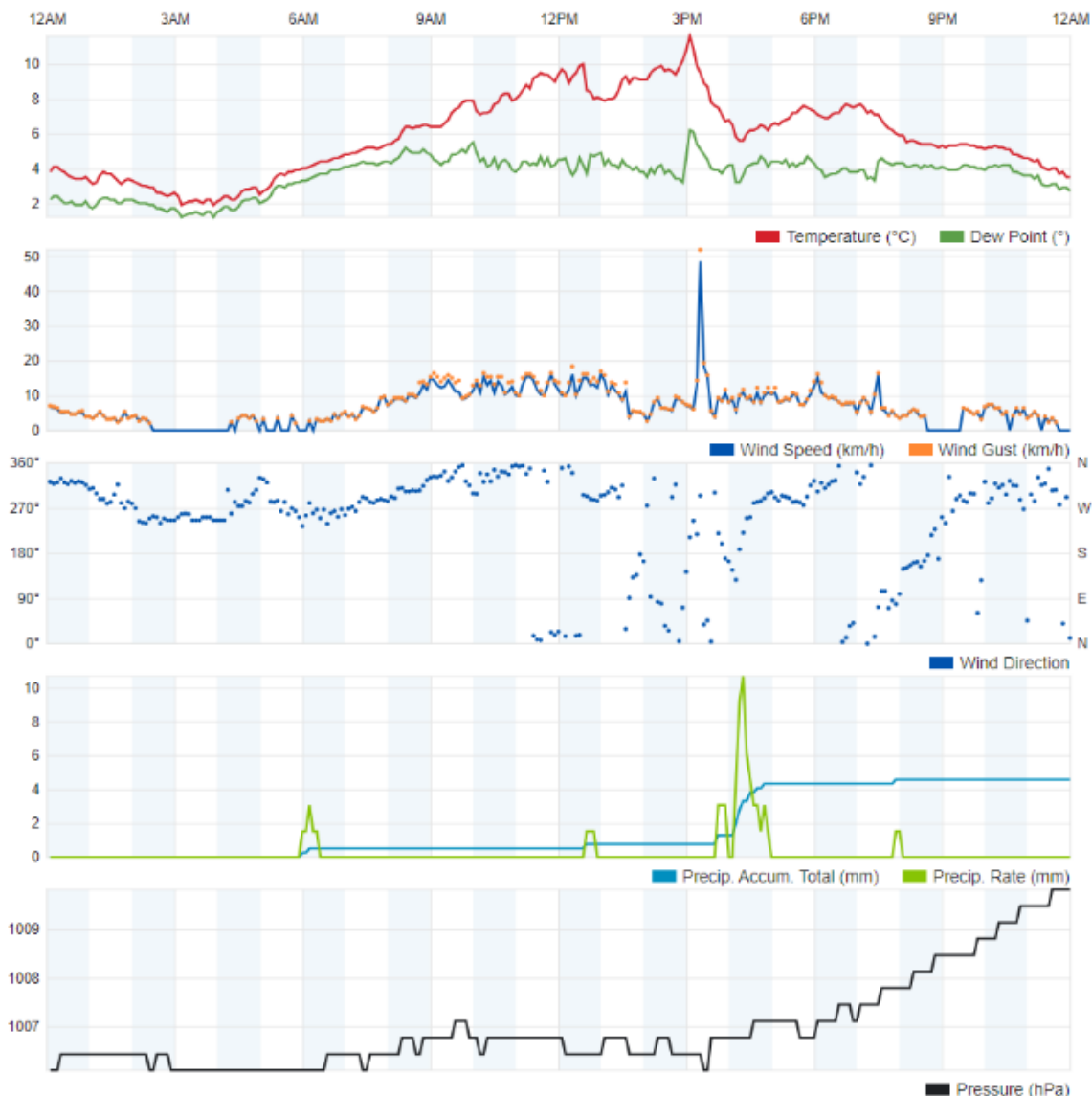
17/4/2024

Map of path and damage in conclusion

Schuinesloot and Slagharen, The Netherlands: On April 17th

It's a chilly day with widespread rain and hail storms. The upper atmosphere was very cool. Satellite shows that directional shear was present at the location. Lightning also occurred sporadically. There was a NW wind at 5-15km/h. Storm motion was SE. A shower rolls in and begins to intensify rapidly. While intensifying, 1.5-2cm hail accompanied the storm. This was shown by radar and satellite. At 3:19 +5 minutes (Local time), a 51.8kmh wind gust is measured at in a field near a home, as well as a direction shift and a slight pressure drop (1006.43hPa – 1006.1hPa – 1006.77hPa). Right before the storm hit the station, the temperature and dews spiked from 9.8C/3.4C to 11.6C/6.2C.

April 17, 2024



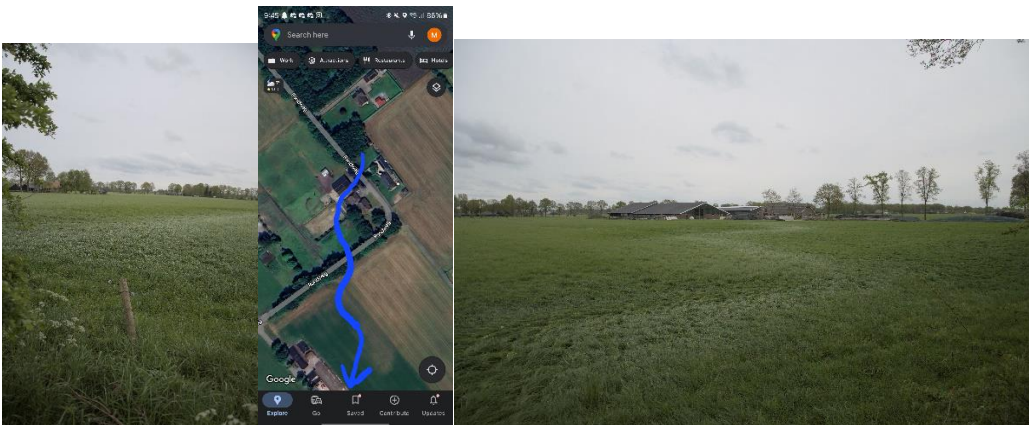
Near this location, a trampoline was overturned and a poorly built greenhouse was also overturned.



Roof damage was observed at a farm near the next location. The building was poorly built, the roof was made of asbestos sheets with isolation panels underneath. Video shows debris rotating, but not being picked up, something that did happen later on. The vortex was clearly visible because of dust and sand.



Small branches littered the field near the impacted structure and were debarked. At 3:24:58PM (Local time), security footage shows a vortex moving through the grass and right past a home. This video also shows small debris flying through the sky across the street. A neighboring home shows a singular roof tile missing. This is a well-built structure. Near this location, a path is observed in a field. A fence post was angled over 45 degrees and a 4.5cm branch torn off a tree. This post was potentially impacted by one of the pipes described in the following section.



What stands out in the path, is that the tornado appeared to be dancing through the field, swaying left and right as it moved on to the next structure. This was observed by an eye witness who stated that the circulation

should have hit their house, but went in between their house and another structure on the property. A tarp held down by three steel pipes and a laundry tub were picked up. The eye witness also stated to have found isolation material, which is likely to have come from the first barn to be impacted.

One pipe was found on the property, one was found on the road next to the property and the last pipe was found with the tarp in the field across from the property, it has been thrown an approximate 250 meters. The laundry tub was never located.

The circulation then impacted the next structure, where eyewitness report about 10m² of roof tiles missing. This is a well-built structure and was repaired by 7PM the same day. No images of the damage were found, but it was stated that the brunt of the missing tiles were from the area where there is a 90 degree angle in the roof.

The next point of interest leads us to another home, where, according to eye witness, approximately 80 roof tiles were displaced/missing. This structure was repaired shortly before we arrived the next day. This roof was very well-built.

The next series of structures impacted consisted of three barns and a house, located on the same property. As the circulation crossed the road, it took out a tarp, but left two more tarps in place. It then hit the first barn, where there's damage to the poorly built, asbestos roof.



The other side of this barn shows worse damage, though was covered by a tarp after the impact. We believe we found fragments of the clear sections approximately 1070 meters away.

This debris was lifted and carried some distance, suggesting that between this and the last barn, the landspout may have changed into a regular tornado. This then suggests that this may have been a hybrid tornado.



The house on that property was impacted next, it was a well-built home with minor roof damage



The barn next to the house shows minimal roof damage (likely due to debris impacting the structure) and some lead under the chimney was slightly pulled upwards:



There are several holes present in the poorly built roof. Only small fragments are left on the outside, which motivated the belief of the damage to this particular structure to be impacts, rather than direct wind.

The lead being pulled upward appears to be the result of the chimney shifting after debris impacting it or winds pushing it over, with the first being the most likely case.

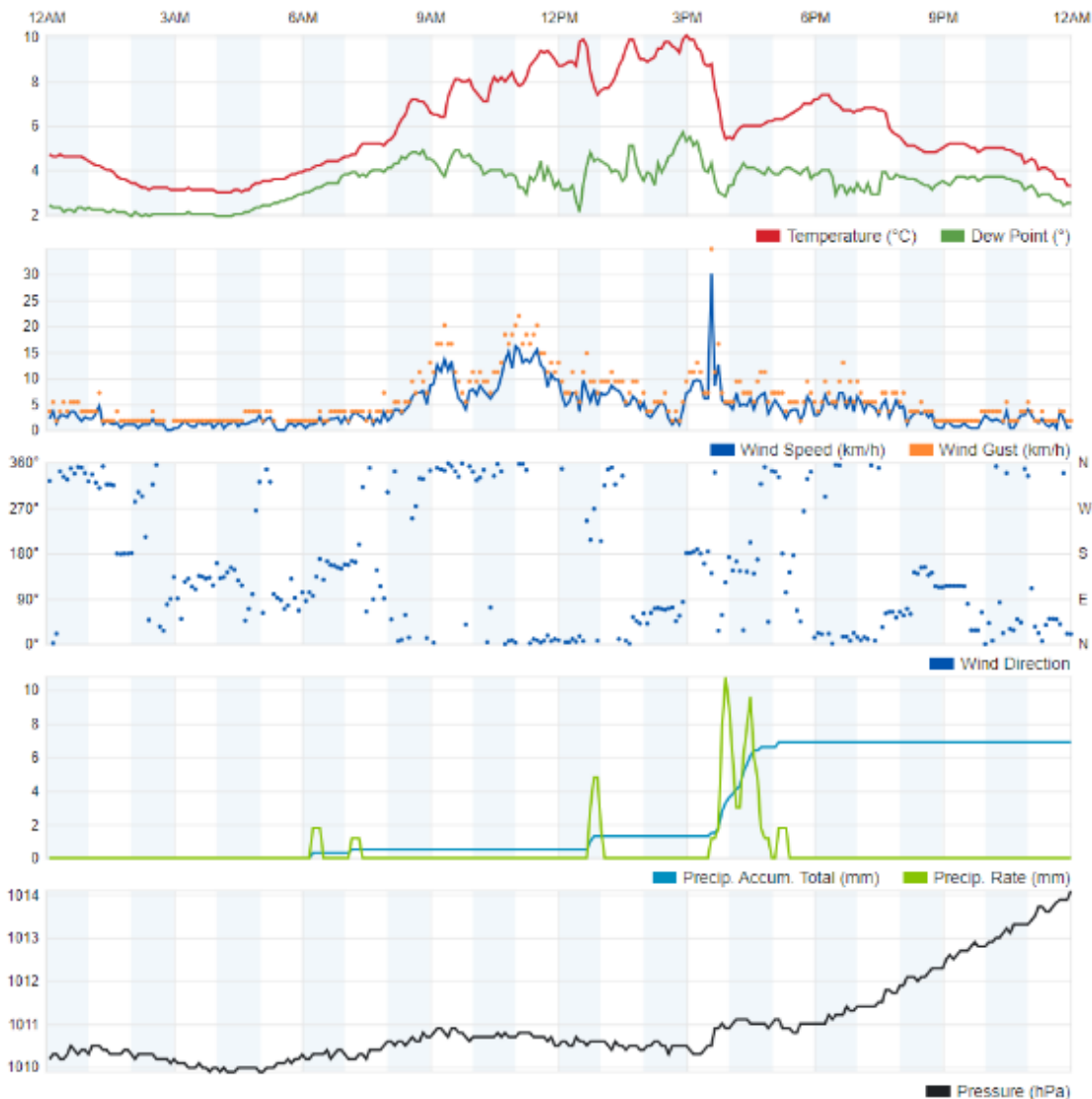
Entering the very east side of Slagharen, we found debris in the form of an isolation panel, plastic flower pot and an unknown piece in a ditch. The isolation has possibly been carried for 1.7km.





The next P.O.I. is a weather station located in a neighborhood of Slagharen. At 3:34PM +/-5 minutes (local time), this station measured a 34.9kmh as well as a wind shift. A pressure drop was absent, hence we firmly believe it wasn't directly impacted:

April 17, 2024



The circulation looked to have stayed over open fields as there was no damage found in the neighborhood. This would indicate a left turn, right before entering town. This behavior is common for tornadoes, formed from a supercell, but we've never heard of a landspout behaving like this. We found some small debris, potentially from the barn mentioned earlier.



The debris match the clear panels on the barn 1070 meters back. Only small fragments were present at the location, but were easily identified by the shape and color.

The amusement park was hit next and is located right next to the previously mentioned location. A poorly built metal structure had its awning completely stripped away and the roof on the same structure had sections that were slightly pulled upward.



Video of eye witness show metal peeled away and a car with its roof caved in, this is likely due to flying debris. The video was shot by Evianne Van Gennepe.





This concludes the damage path as far as we could survey it.

There are a few remarks and scepticisms, however. They will be listed on the next page.

Scepticisms:

- Hybrid tornado? Evidence suggests that a landspout formed and transitioned into a regular tornado as the storm developed its updraft
- A left turn was made, which would indicate an attempted occlusion on a normal tornado. Is this common for landspouts?
- Swinging path is very peculiar
- Adding to the left turn, random spots of flat grass were observed next to the neighborhood where the second weather station was located. The grass exhibited a rotating pattern in some places
- Forward speed appears to be 11km/h, however, the swinging path could increase that to 18-22km/h. Storm motion was approximately 11km/h as well
- Damage VERY local (Some areas seem to have been skipped)
- Windfield width hard to determine
- Overturned trampoline found 940 meters away from projected path. It was moved throughout the yard. Possibly due to surge. Related?

Remarks:

- The damage path reveals a swinging motion
- Characteristics of both landspout tornadoes and regular tornadoes observed
- Rather large windfield
- Very narrow vortex early on
- Very slow forward speed
- 1.5 – 2cm hail
- Explosive updraft on satellite imagery
- Debris high up in the air
- Not fully condensed
- Funnel spotted near starting point
- Pressure drop near start

Funnel near starting point (Sjaak Kremer):



Debris high up in the air:



(Joey Jansen):



'Cinnamon bun' cloud with debris (Source unknown)



Patterns in grass, indication of circulation? Between the last farm to be hit and the amusement park:



Debris lodged into a roof near the first barn to be impacted:



Conclusion

On April 17th, 2024, a landspout or possible hybrid tornado has hit the towns of Schuinesloot and Slagharen.

-Time: 3:19PM +-5 minutes

-Potential rating: Mainly IF0.5, with a few IF1 matches according to version 1.0

-Distance travelled: 3.5km

-Maximum width unknown

-Forward speed: 11-22km/h

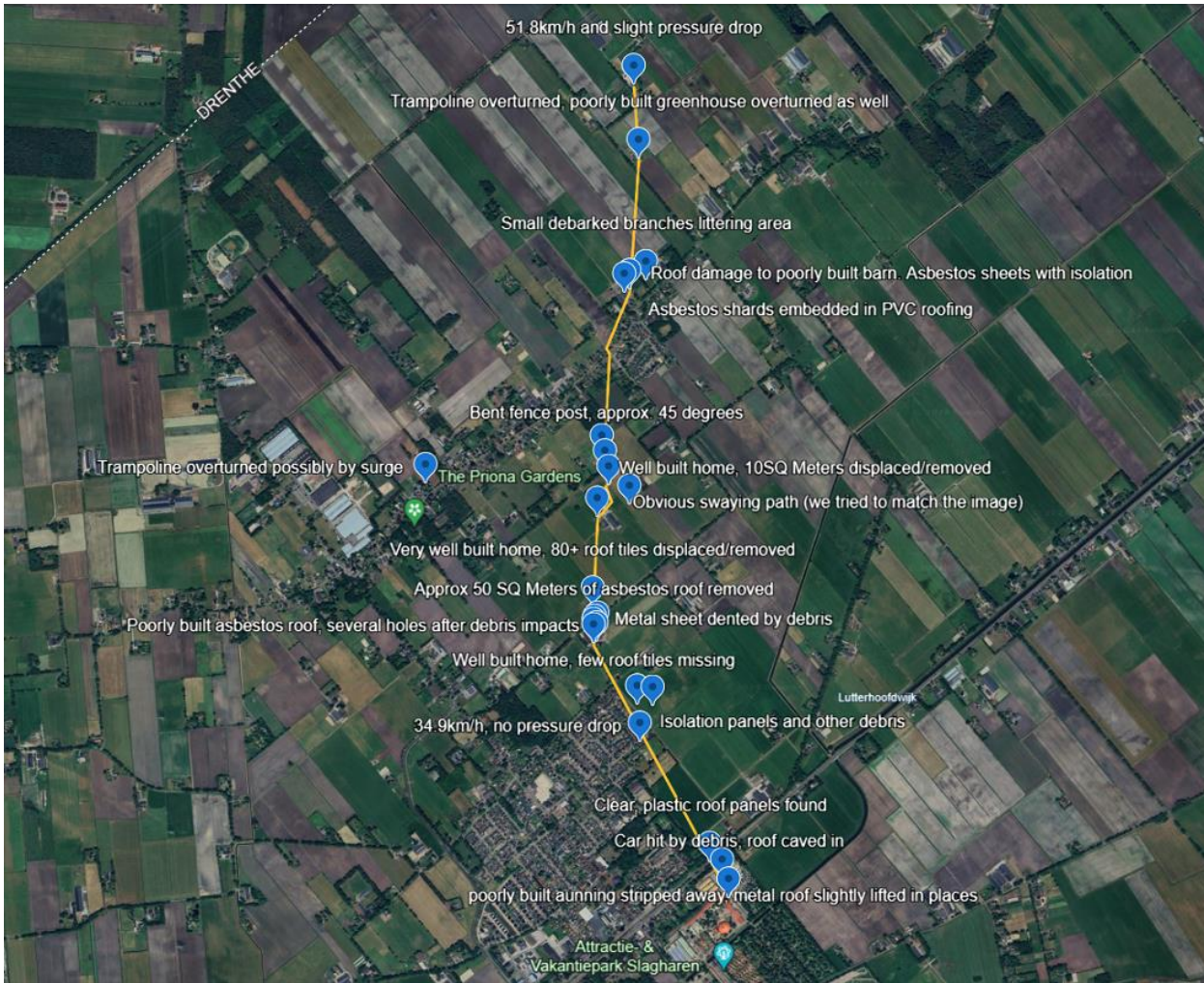
-Injuries/casualties 0/0

-Number of DI's studied: 13

-Number of weather equipment measurements: 2

-Damage: minor

This is the estimated track with DI's and POI's:



This article was written by Hardhills Chasers on April 19th to 21st, 2024

This article may be published with proper credits to Hardhills Chasers and its members.