Confirmed Tornado Mildmay, Ontario July 8, 2007

Date- Local: Sunday, July 8th, 2007

UTC: Sunday, July 8th, 2007

Time-Local: 1900

UTC: 2300

Location: Mildmay (10 km south of Walkerton)

Region: Grey - Bruce

Classification: Confirmed Tornado

Category: B

Casualties: None

Track Length: None available

Width: None available
Motion: None available
Damage Estimate: None available

F-Scale Rating: F0

Code: NI

Damage Survey: None

Spotter Reports: One report indicating two spotters saw tornado

Other Documents:

Document from Ron Gravelle and Dave Patrick (spotters) detailing the tornado

event at Bruce Rd. 3 at Hwy 9

:

Chase log from Dave Patrick detailing what he observed

Map detailing where the 2 tornados occurred simultaneously

Photos of the tornado

OSPC report detailing 2 trained spotters saw multi – vortex tornado

Tornado F-Scale Assessment

Brad L. Rousseau Tornado Data Production Assistant, Environment Canada April 19th, 2010

Classification: Confirmed Tornado

Date: Sunday, July 8th, 2007

Location: Mildmay - Bruce Rd 3 @ Hwy 9 (10 km south of Walkerton), Grey -

Bruce Region

Assessment: F0 F-Code: NI

Explanation of Assessment: No damage reported, only 2 spotters reported

seeing multi – vortex tornado.

SJS

Hi Dave, Geoff and Dave P.

Again, good work Dave P. Glad you were out as well. It's going to take some time to go over everything, but, we'll work out all the details on this event.

After looking at my video, I now believe there were 3 tornadoes in total: 2 tornadoes on the ground in Mildmay at the same time: There was a large, multiple vortex tornado to the east of the white one by the radio tower. The tower is on Bruce Rd. 3., and that street is 0.5km west of hwy 9 in Mildmay (I believe). The multiple vortex tornado lifted but the white tornado still continued it's life cycle then roped out. 2 minutes after that, another dark grey tornado formed right where the original multiple vortex tornado was previously. One thing is for sure: at least 3 tornadoes at Mildmay. Like Dave says, possibly 5 or even 6 touchdowns. The rotating wall cloud was almost on the ground, so who knows exactly how many small, brief touchdowns there were in the storms life cycle.

The YouTube video runs from 6:59:50 to 7:01:05 and does show both tornadoes, but not for very long: the dark grey tornado is at the very beginning, then finishes with the second white tornado by the radio tower. Enclosed is a few vidcaps showing both tornadoes on the ground at the same time. Along with a digital still of the 3rd tornado as it was lifting to the east of the tower. I was at the base of the tower looking to the ENE when I got the shot of the 3rd tornado. It was only on the ground for maybe 10 to 15 seconds, but it was there.

I am working the night shift this week but I am available on Saturday to meet with you guys in Mildmay on the exact spot I shot the video and took the digital still.

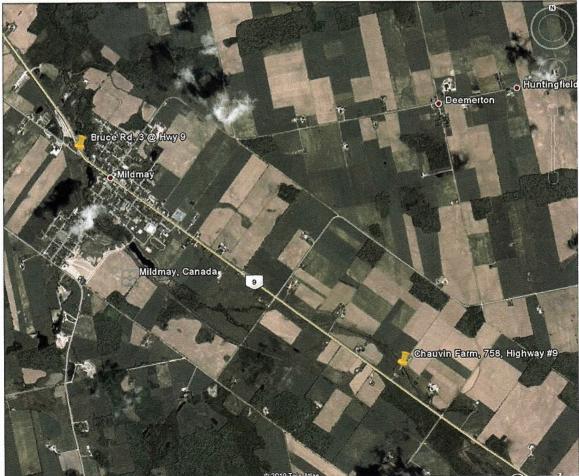
Ron VA3TVS

Home: 1 (519) 569-8746 Cell: 1 (519) 577-2125









Map indication where two tornados occurred simultaneously at 2300 UTC

Sills, David [Ontario]

From:

Ron Gravelle [va3tvs@kw.igs.net]

Sent:

July 12, 2007 8:28 AM

To:

Dave Patrick

Cc:

Sills, David [Ontario]; va3tvs@rac.ca; Coulson, Geoff [Ontario]

Subject:

Re: Mildmay tornado info

rollow op 11

Follow Up Flag: Follow up

Flag Status:

Red

Attachments:

July 08 2007 Mildmay Mesocyclone.jpg; July 08 2007 Mildmay Wall Cloud LR.jpg;

7_8_2007 6_59 PM_0001.jpg; 7_8_2007 6_59 PM_0001b.jpg; 7_8_2007 6_59 PM_0001c.jpg; MildmayTornado zoom.jpg; July 08 2007 MildmayTornado 275.jpg

Hi Dave, Geoff and Dave P.

Again, good work Dave P. Glad you were out as well. It's going to take some time to go over everything, but, we'll work out all the details on this event.

After looking at my video, I now believe there were 3 tornadoes in total: 2 tornadoes on the ground in Mildmay at the same time: There was a large, multiple vortex tornado to the east of the white one by the radio tower. The tower is on Bruce Rd. 3., and that street is 0.5km west of hwy 9 in Mildmay (I believe). The multiple vortex tornado lifted but the white tornado still continued it's life cycle then roped out. 2 minutes after that, another dark grey tornado formed right where the original multiple vortex tornado was previously. One thing is for sure: at least 3 tornadoes at Mildmay. Like Dave says, possibly 5 or even 6 touchdowns. The rotating wall cloud was almost on the ground, so who knows exactly how many small, brief touchdowns there were in the storms life cycle.

The YouTube video runs from 6:59:50 to 7:01:05 and does show both tornadoes, but not for very long: the dark grey tornado is at the very beginning, then finishes with the second white tornado by the radio tower. Enclosed is a few vidcaps showing both tornadoes on the ground at the same time. Along with a digital still of the 3rd tornado as it was lifting to the east of the tower. I was at the base of the tower looking to the ENE when I got the shot of the 3rd tornado. It was only on the ground for maybe 10 to 15 seconds, but it was there.

I am working the night shift this week but I am available on Saturday to meet with you guys in Mildmay on the exact spot I shot the video and took the digital still.

Ron VA3TVS

Home: 1 (519) 569-8746 Cell: 1 (519) 577-2125

Dave Patrick wrote:

Hi Dave and Ron And Geoff,

Firstly, grats Ron on yours. Great minds think alike (©) Wish I knew you were out that day.

I am going over my video and gps mapping to give you a accurate representation of where I was

and when. Video was on TWN (needed gas money) but I have lots more. Dave, I am wondering if you could send me a record of all my call reports I made to the desk? I remember each call and what I reported but the where's got fuzzy due to the sheer size, power and awe for a storm like this in Ontario. I have to say this was a storm I did not want to play in the core. And thank Mark who was working the desk for putting up with me and the many calls I made. At the time, I figured constant ground observation was important.

However, looking at Ron's and Trish's video, i have a sneaky suspicion that the two tornadoes I saw in the Mildmay area, were not the ones Ron and Trish saw. Her video looks like Rons on the base when things were getting destroyed. Also, I have no evidence of the radio tower in any of my footage. Where was that radio tower, so I can plot it on my gps and see if this was the same one of if indeed there was 2 tornadoes on the ground about the same time.

I first saw what I thought was a cone tornado on the ground about 2 kms south of Mildmay on hwy 28 looking almost due east around 6th concession. I travelled further south still spotting the tornado to my east (in the video) and turn east on 4th Concession. Based on the video, I travelled about 1.5 kms and got a good visual of it on the ground to my ENE about maybe 1 km or so from me. After reviewing my video, the 2 tornadoes I reported were indeed only one that wrapped around the localized wall cloud. Based on when I 1st saw the tornado and it final dissipation, I have calculated from video times stamps that it was on the ground for about 6½ mins total. The second tornado I reported was due north of my location and it was very brief (maybe a minute) and quite possibly the same 2nd one Ron saw? This one was about 3 kms or so away from me but the way it roped out at the end told me it was on the ground for a little time.

I also have some evidence of 1 and possibly 2 more tornadoes that were with this storm. I even had some still evidence that the original Wall cloud was in fact a large weak tornado.. Still trying piece together accurate times and places for things in relation to my gps track map. (i actually turn it on at the start of chase day and never turned it off so I have accurate placements .

The coolest thing I saw and videoed was the actual formation of to wall clouds at the same time both producing funnels at almost exactly the same time. I really do need to see the radar images of this storm. They must have been triggering for hours.

I am compiling all my major footage in DVD format and will give you that as well as my stills if you need them for further clarification of events.

Dave, if you need to talk or want to head out to see some of the footage, give me a shout 519-787-1874 hm or 519-831-7669 cell

Dave P

From: Sills, David [Ontario] [mailto:David.Sills@ec.gc.ca]

Sent: July-11-07 4:51 PM

To: <u>va3tvs@rac.ca</u>; <u>davepatrick@ontarioweather.com</u>

Cc: Coulson,Geoff [Ontario] **Subject:** Mildmay tornado info

Hi guys,

First, let me congratulate you for getting the July 8th event - I was drooling over the radar from Windsor trying to figure if there was any way possible for me to get N of Kitchener in an hour, short of time travel ;-)

So, we had a report of multiple tornadoes from you Dave, and two from you Ron. I understand that Ron you saw two in Mildmay, the first being a bit longer-lived, the second occurring further to the east. Which of these is in your video on Youtube? Do you know which of these destroyed the shed there (as can be seen from Trish Ruetz's video on Youtube). Any other details you can provide such as time, location, description, etc. would help.

Dave, do you have similar info for the tornadoes you spotted? I know you said you have video but I don't think I've seen it yet. Again, any info you can provide will be a great help when writing up a report on this beast.

Take care,

Dave

David Sills, Severe Weather Scientist
Cloud Physics and Severe Weather Research Section /
National Laboratory for Nowcasting and Remote Sensing Meteorology
Environment Canada
4095 Dufferin Street, Toronto, ON
CANADA M3H 5T4
(416) 514-2636 (Lab)
(416) 739-4525 (RSD)

Tuesday, April 20, 2010 Over 34,893,480 pages visited!

CENTRAL:

8:20:23 AM

The Ontario Weather Page

PACIFIC:

Warehousing london ontari strategic location to economically services Ontario & Canada ATLANTIC: 10:20:23 AM NEWFOUNDLAND: 10:50:23 AM

Brockville Real Estate
View properties for sale now 3D Tours,

Interactive Maps and more

Ads by Google

Quick Navigation:

Current

MOUNTAIN:

Forecasts Ar

Analysis Summer

EASTERN:

Winter

Industry

Specials

Misc.

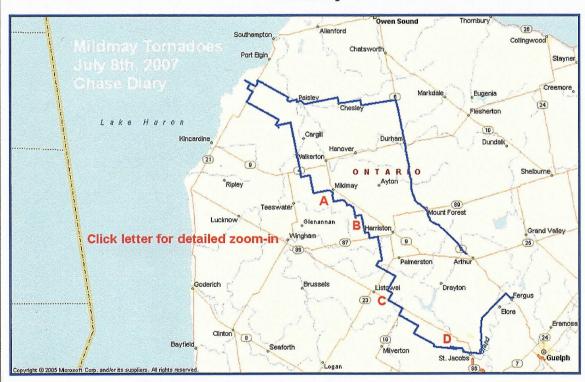
Mildmay, Ontario July 8th, 2007

I woke up pretty early on Sunday after looking at the models around 3 am and seeing a really slight chance of tornadic storms in the province. Firing up the computer, I saw a line of storms heading across southern Ontario and drove a short time north for Fergus to find out it was nothing special and drove back home. I checked Ruc models and 12z GFS and WRF and decided that today did hold promise in the afternoon if we got some clearing and heat. So it was load up the truck and wait. At 3 pm edt, I began to notice a boundary from the morning convection to my west trailing northwest into Lake Huron. On the northeastern edge around northern Michigan, a nice strong to severe storms was slowly heading southeastward.

My Chase

GMT:

GPS Chase Log



ABCD

I took off heading north towards Mount Forest as my original target was between Owen Sound and Southhampton. After a phone from my wife Kristy who offered to nowcast, my target area became more westerly as the storm was showing signs of right turning over the lake. I pulled into the region just south of Port Elgin and set up to watch the storm coming in. As it arrived, it really did not look all that great on radar or organized but it was still a nice storm after not chasing for over a month. I snapped a few photos and slowly headed southeast following it.











I made a quick phone to Kristy and she had said things really did not look all that great but was still showing signs of rotation. As I was talking to her, I noticed this feature to my northeast. This 1st thing I thought was this reminds me of that feature we could never identify in the 2005 South Plains tornado! So off I took to take a look at it and get out of the little bit of rain I was encountering.



This is about the time that the storm seemed to morph. You could just feel the energy as it rapidly strengthen and started to organize. It had hit the boundary from the mornings storms and became the biggest supercell I have seen in Ontario in the last 13 years of chasing here. Right before my eyes a huge wallcloud just developed and rotating like a top around 6:15pm.





As I was on the phone with Environment Canada saying this was rapidly rotating and possibly on the ground due to the black dirt it was kicking up, the wall cloud became one the most intense I have seen in North America. At the time of these pictures you can see the dirt and dust being kick up in the wall cloud and hail being wrapped around with the rfd. Not sure if any damage was reported but it was really moving stuff around in there indicating a large ground circulation. At the end of the 1st wall cloud, a small tornado formed for about 20 secs before dissipating.







But this storm was not done. Visible areas of rotation were all around me but very disorganized,





And then it really got organized and produced the biggest wall cloud I have ever seen. Had trouble fitting the size of it in my camera.









This was heading straight for the town of Mildmay. I got on the phone to E.C. about locations when I saw my 3rd tornado of the day. I have taken a vid cap of it. Although the quality sucked, it was there.



Pulling into the outskirts of Mildmay, I realized it would just miss them and stay in rural areas. I pulled over to the side of the road around 6:53pm to see what I thought was a nice white cone tornado. I am not sure if this was the same one or a new tornado but I headed further south to find a better position to film it.













20 meg low res video

After viewing multiple touchdowns and quite possibly there being 2 separate ones, I then spotted a weak one to my east as the wall cloud totally felled apart (you can just see it to the left of the road). This one last no more than a min.





north that last for about 30 seconds before roping out. Just as I figure it is over, another weak tornado becomes visible to my north and then slowly ropes out.





After that tornado dissipates, I headed southeast to see another funnel at 7:12pm to my east. I never seemed to touch down but last a good min before dying out.



After getting blocked in a road by a few trees that were down, I finally spotted some hail that I could measure. The largest I found at this site was lime sized or 52 mm/2 in.



I continued southward and spotted a ton of trees and fields shredded. I hike into them and found a bunch of baseball to tennis ball size hail and a few embedded into the wet ground (72mm or 2.75) This had probably melted for a good 20 mins so it was probably larger.











The storm seemed to cycle again and I had the chance to catch up with it outside of Listowel where a new wall cloud formed and a funnel developed.

I quickly took a few pics and continued to head southeast.









Getting about 8 kms to the southeast of Listowel, I noticed to areas of strong rotation forming. I pulled over to beginning filming and was amazed to see dual wall clouds forming at the same time. Watching this in awe, It turned into a copycat act as both wall cloud produced funnel clouds for about 15-20 secs before then died out.

AS they died out, some people pulled over and asked me if I had seen the funnel cloud to the east of Listowel about 8 mins ago. They finished tell me that it did touch down and hit a small shed or something and then only saw the funnel above it with no visible evidence at the surface.











Just when I figured this storm was all over, it seemed like it turned into an LP supercell during the end. It was awesome to see all the rotation in the upper levels and then the wall cloud formed underneath with what looked like a funnel. It never did touch down but just as the storm died it produced 3 mins before the whole thing finally died.



♦ 1997-2010 The Ontario Weather Page



Environnement Canada

[Français] [Back]

View Event

Back To Search Results

View Event	Back To Search Results
Event type	Tornado (vetted)
Event start date	2007-7-8 UTC (exact)
Event start time	23:00:00 UTC (exact)
Event duration	00:01:00 (exact)
Entered by	ruddicki (2008-09-11 14:33:04)
Event version	latest
fcst region	GREY - BRUCE
meso region	SAUGEEN SHORES - KINCARDINE - SOUTHERN BRUCE COUNTY
Latitude/Longitude	44 ° 3' N 81 ° 7' W
Location	0 KM N of Mildmay
Hail	no
Hail size descriptor	N/A
Hail diameter	N/A
Hail depth	N/A
Wind	no
Gust speed	N/A
Wind direction	N/A
Wind intensity	N/A
Rain	no
Rain amount	N/A
Rain duration	N/A
Tornado	yes
Tornado intensity	F0 (measured)
Lightning	no
Lightning Intensity	N/A
Mesocyclone	no
Funnel Cloud	no
Waterspout	no
Narrative	CONFIRMED F0 TORNADO in Mildmay. Two trained spotters saw multi-vortex tornado occurring at same time as F1 tornado.
Confidence	confirmed
Warning Criteria	met or exceeded
Source	Canwarn
MSC initiated report of event	N/A
Contact name	N/A
Contact phone	N/A
Contact email	N/A
Contact address	N/A
Number of fatalities	N/A
Fatality comments	N/A
Number of injuries	N/A
Injury comments	N/A
Damage amount	N/A
Damage comments	N/A
Power outage	N/A

Back To Search Results

Note: Event details are highlighted in orange.

You've Logged On As user: sillsd (ONT)

Today is: 2010-04-19

Account expiry date: 2014-12-31

Logoff

[Graphics off] |

Important Notices and Disclaimers

Canada

Created: 2003-12-08 Modified: 2006-02-16 Reviewed: 2003-12-08

Url of this page: http://performance.ec.gc.ca/eventdata/viewevent_e.php?b_templatePrint=true

The Green LaneTM, Environment Canada's World Wide Web Site.