SPC Tornado, Hail, and Wind Database (5007_torn, 5507_hail, 5507_wind) Format Specification

Comma separated value (.csv) files available at http://www.spc.noaa.gov/wcm/

Note! These files are an attempt to represent the data that is submitted to the *Storm Data* publication by National Weather Service field offices. Careful review of the data is conducted at the National Climate Data Center and the Storm Prediction Center. Nonetheless, some errors/discrepancies may exist. Please contact Gregory.Carbin@noaa.gov for additional information/clarification.

Field No. - (MySQL torn field id), **(hail field id)**, **(wind field id)**
Description

1-(om)
Tornado number - A count of tornadoes during the year: Prior to 2007, these numbers were assigned to the tornado as the information arrived in the NWS database. Since 2007, the numbers should be assigned in sequential (temporal) order after event date/times are converted to CST.

2-(yr)
Year, 1950-2007.

3-(mo)
Month, 1-12.

4-(dy)
Day, 1-31.

5-(date)
Date in MySQL date format (yyyy-mm-dd). Note: MySQL can output this date to different formats (e.g. mm/dd/yy), if needed.

6-(time)
Time in HH:MM:SS.

7-(tz)
Time Zone. All times, except for ?=uknown and 9=GMT, were converted to 3=CST. This should be accounted for when building queries for GMT summaries such as 12z-12z.

8-(st)
State - Two-letter accepted abbreviation. (PR=Puerto Rico.)

9-(stf)
State FIPS number

10-(stn)
State number - number of this tornado, in this state, in this year: May not be sequential in some years.

11-(f), or **(sz)**, or **(mag)**
F-scale / EF-scale (after Jan. 2007): Values -9, 0, 1, 2, 3, 4, 5. Hail size (in.). or Wind speed (kt).

12-(inj)
Injuries - when summing by state use sn=1, not sg=1. (See below).

13-(fat)
Fatalities - when summing by state use sn=1, not sg=1. (See below).

14-(loss)
Monetary loss. Prior to 1996 this is a categorization of tornado damage by dollar amount (0 or blank-unknown; 1<$50, 2=$50-$500, 3=$500-$5,000, 4=$5,000-$50,000; 5=$50,000-$500,000, 6=$500,000-$5,000,000, 7=$5,000,000-$50,000,000, 8=$50,000,000-$500,000,000, 9= $5000,000,000). From 1996, this is tornado property damage in millions of dollars.

15-(closs)
Crop Losses in millions of dollars (added in 2007). Entry of 0 does not mean $0.

16-(slat)
Starting latitude in decimal degrees

17-(slon)
Staring longitude in decimal degrees

18-(elat)
Ending latitude in decimal degrees

19-(elon)
Ending longitude in decimal degrees

20-(len)
Length in miles

21-(wid)
Width in yards

22-(ns)
Number of states affected by this tornado: 1, 2, or 3. If ns=1, this is the only record for this tornado, If ns=2, there will be two additional records (coded as: ns=2, sn=1, sg=2) describing this tornado, etc.

23-(sn)
Unique state tornado - If ns (above)=1, this is a single "one-state" tornado and sn=1. If ns (above)=2 and sn=1, this is one state segment of the multiple state tornado (count these records for state fatalities, etc.). When sn=0, this is a multiple state tornado (e.g. ns=2) and this record (e.g. ns=2, sn=0, sg=1) includes information about the entire tornado track. In the case of these multiple state records, the state (st) is the state where the tornado first touched down.

24-(sg)
Tornado segment: 1, 2, or -9. If sg=1, this is the entire tornado record. If sg=2, this is one of the segments of a multiple state tornado. If sg=-9, this is a continuation record when the tornado crosses more than 4 counties in a prior sg=1 or sg=2 record. Note: multiple state tornadoes and county overflow records should have the same om number!

25-(f1)
1st County FIPS code

26-(f2)
2nd County FIPS code

27-(f3)
3rd County FIPS code

28-(f4)
4th County FIPS code - Additional counties will be included in sg=-9 records with same om number.

29-(mt) WIND ONLY
Magnitude-type is only used for wind data. EG=estimated gust, MG=measured gust.