

# Derechoes in Europe

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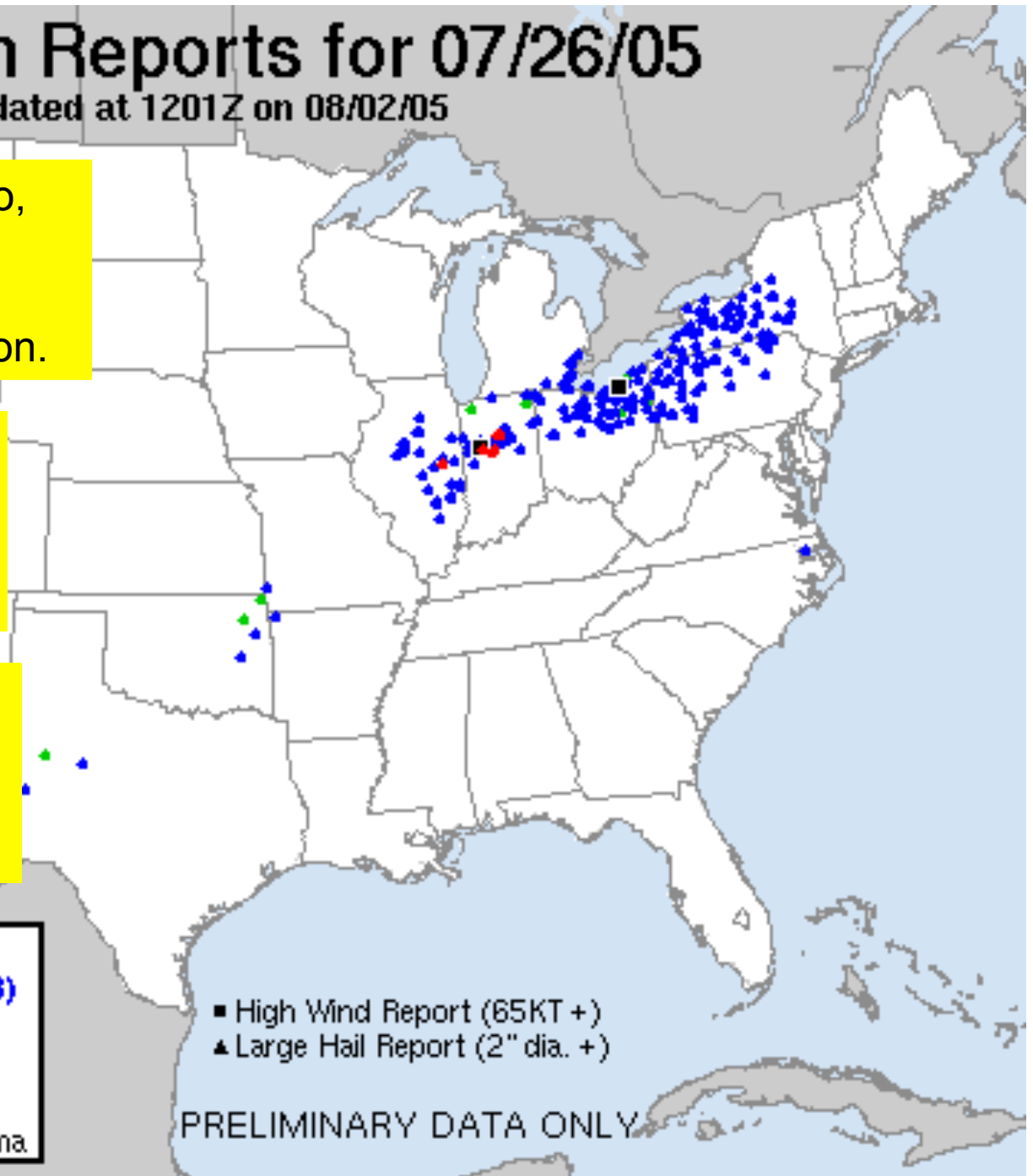
# SPC Storm Reports for 07/26/05

Map updated at 1201Z on 08/02/05

Fujita, T. T., and R. W. Wakimoto, 1981: Five scales of airflow associated with a series of downbursts on 16 July 1980. Mon. Wea. Rev., 109, 1438-1456

Johns, R. H., and W. D. Hirt, 1987: Derechos: widespread convectively induced windstorms. Wea. Forecasting, 2, 32-49

Ashley, W. S., and T. L. Mote, 2005: Derecho hazards in the United States. Bull. Amer. Meteor. Soc., 86, 1577-1592



 **TORNADO REPORTS.. (7)**  
**WIND REPORTS/HI..... (212/3)**  
**HAIL REPORTS/LG..... (12/0)**  
**TOTAL REPORTS..... (231)**

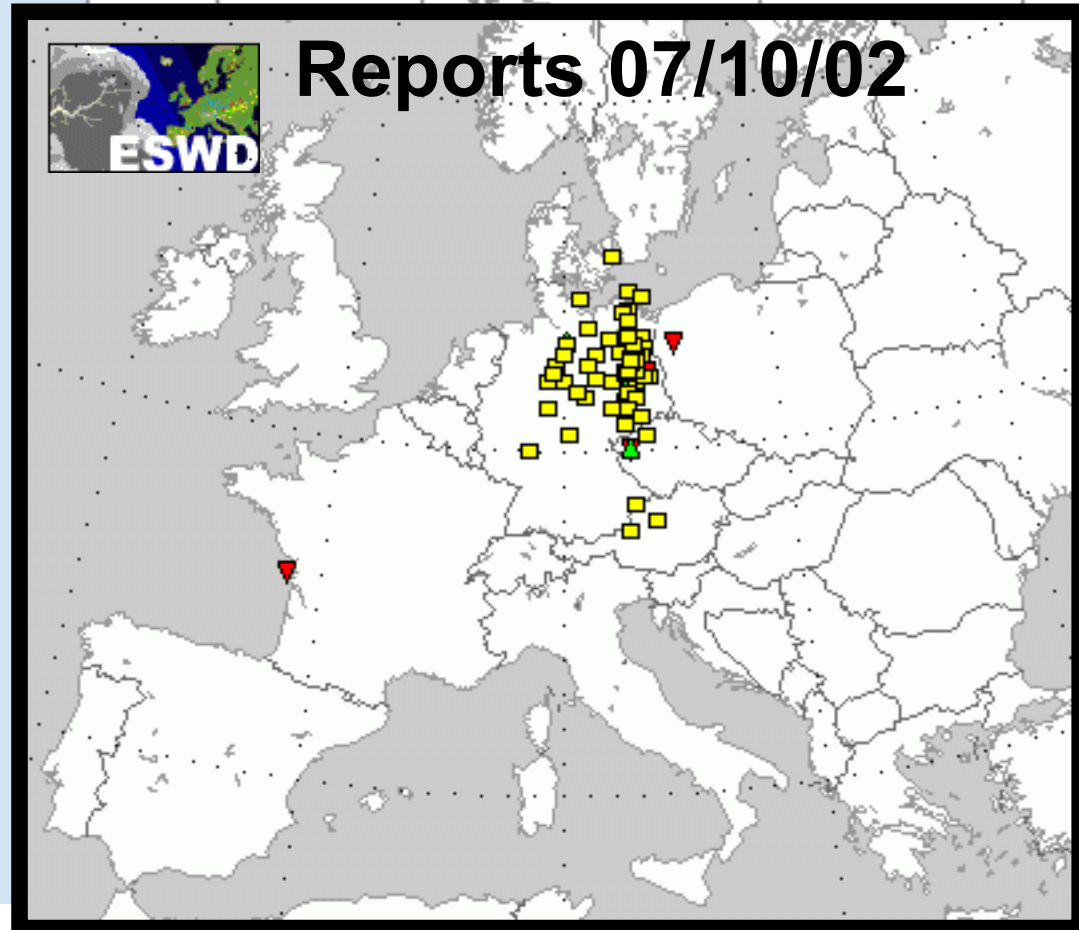
National Weather Service  
Storm Prediction Center      Norman, Oklahoma

PRELIMINARY DATA ONLY

# SPC Storm Reports for 07/26/05

Map updated at 1201Z on 08/02/05

400 km



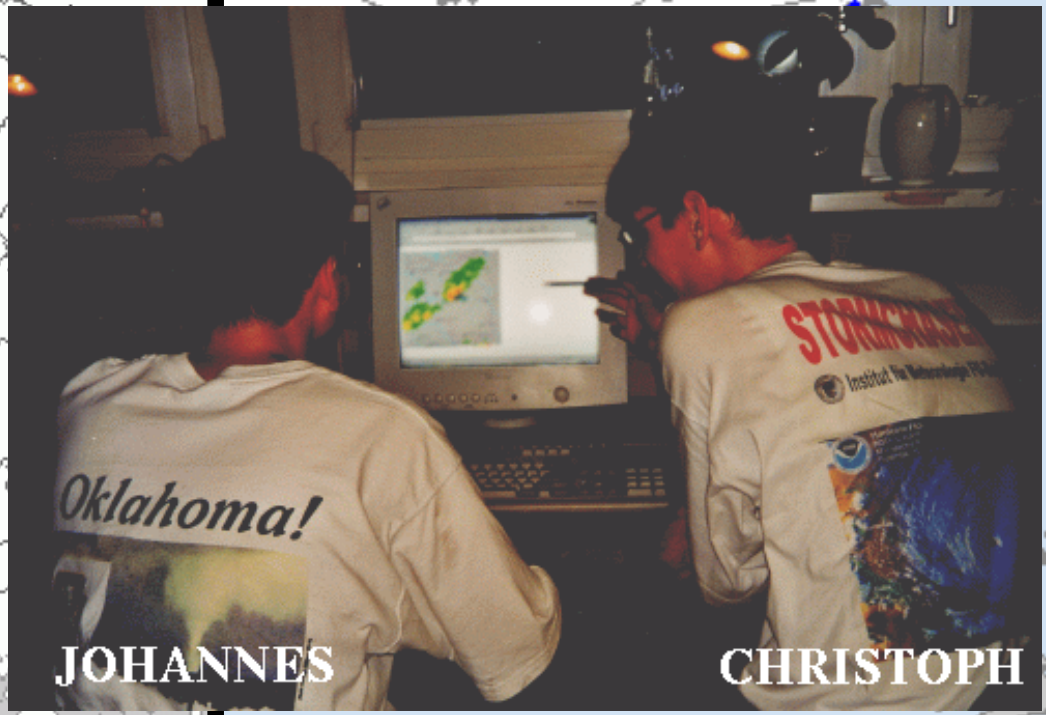
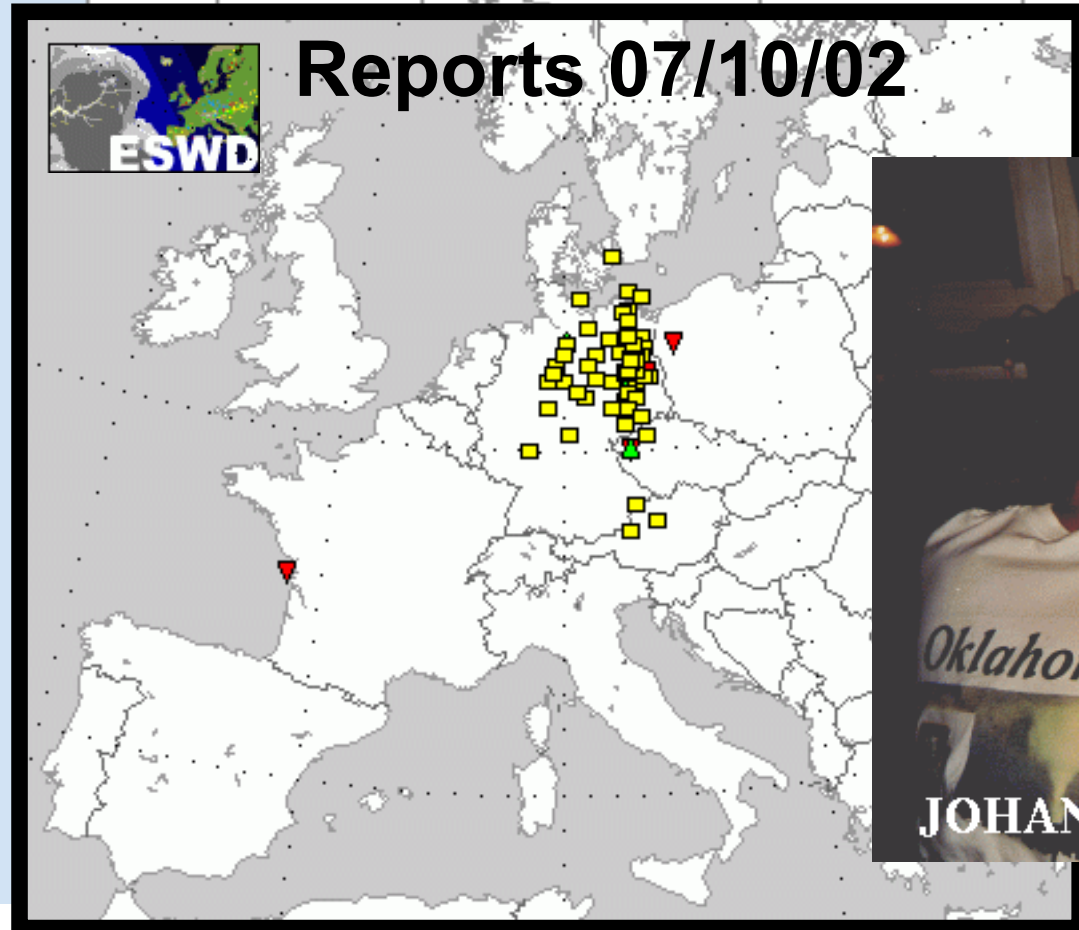
High Wind Report (65KT +)  
Large Hail Report (2" dia. +)

PRELIMINARY DATA ONLY

# SPC Storm Reports for 07/26/05

Map updated at 1201Z on 08/02/05

400 km

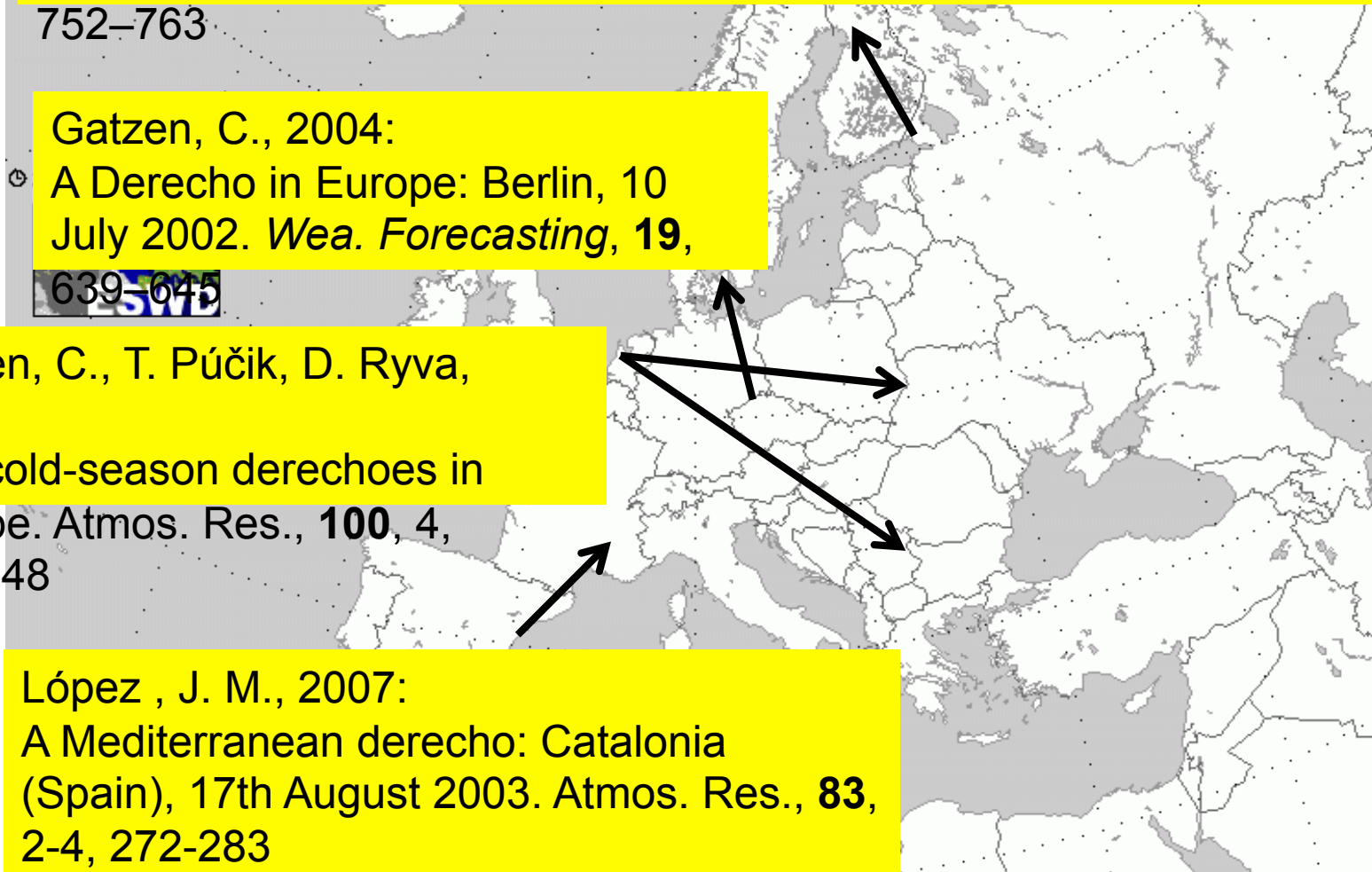


Punkka, A.-J., J. Teittinen, R. H. Johns, 2006:  
Synoptic and Mesoscale Analysis of a High-Latitude Derecho–Severe  
Thunderstorm Outbreak in Finland on 5 July 2002. *Wea. Forecasting*, **21**,  
752–763

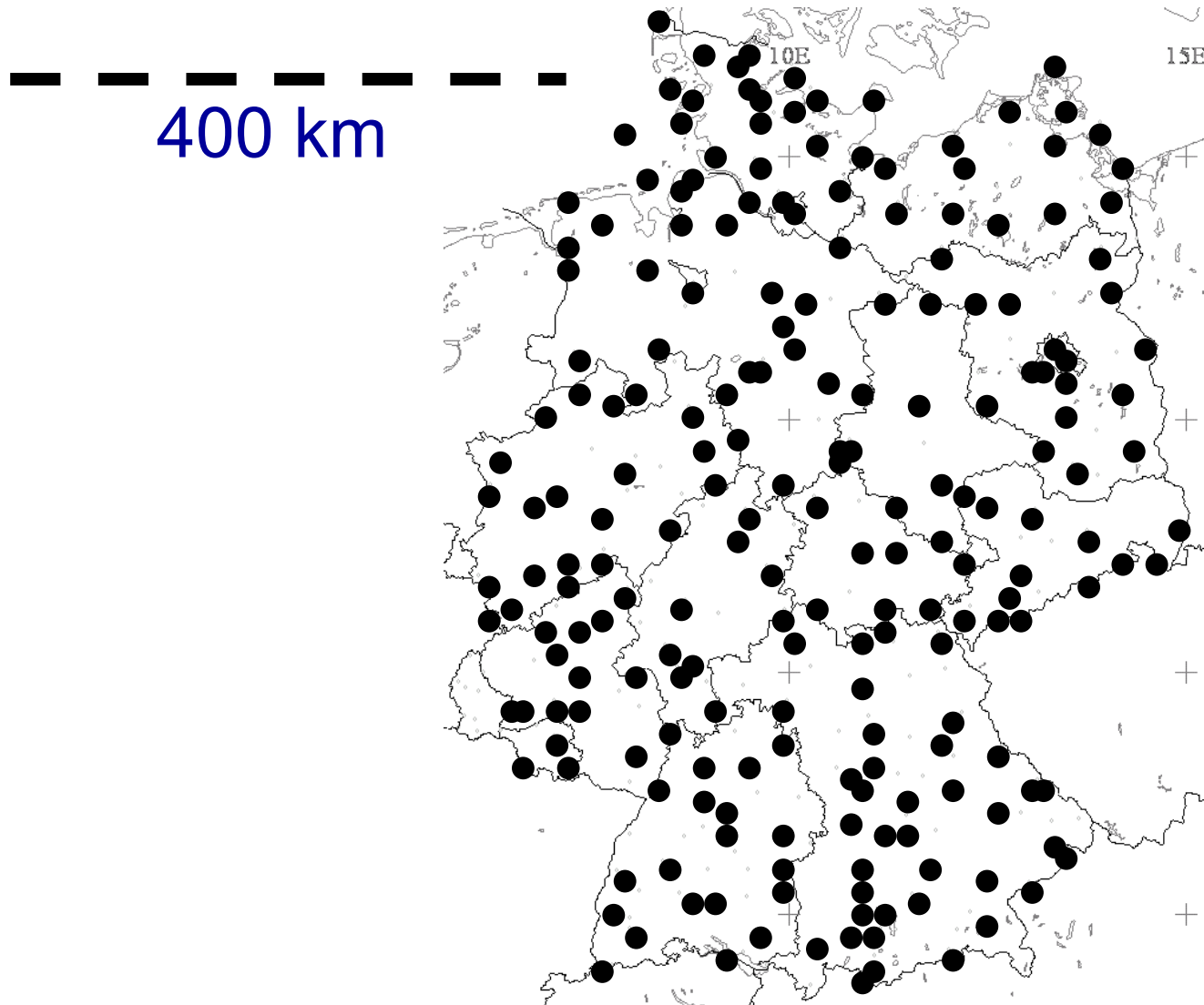
Gatzen, C., 2004:  
A Derecho in Europe: Berlin, 10  
July 2002. *Wea. Forecasting*, **19**,  
639–645

Gatzen, C., T. Púčik, D. Ryva,  
2011:  
Two cold-season derechos in  
Europe. *Atmos. Res.*, **100**, 4,  
740–748

López , J. M., 2007:  
A Mediterranean derecho: Catalonia  
(Spain), 17th August 2003. *Atmos. Res.*, **83**,  
2–4, 272–283



# DWD wind gust measurements





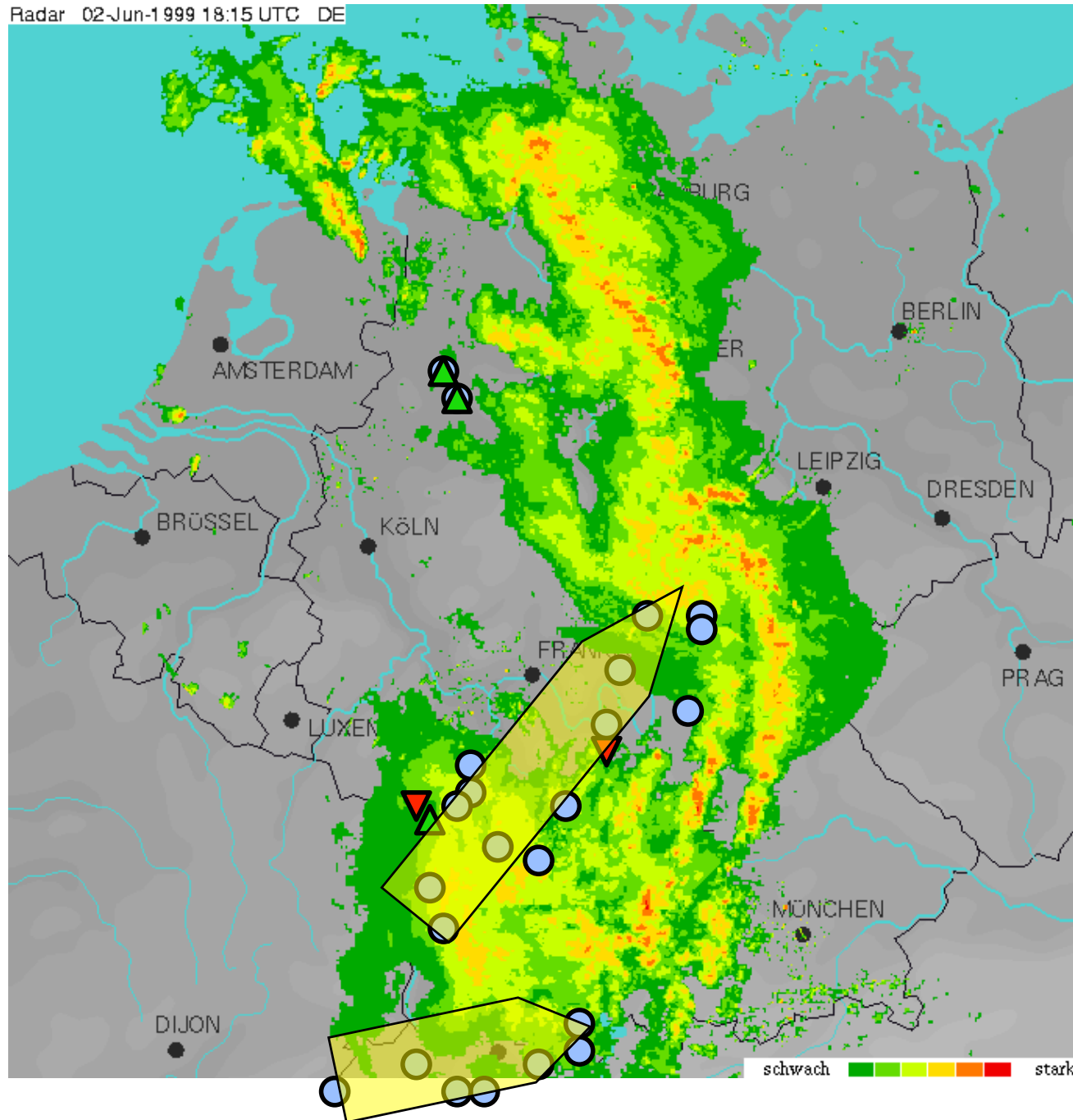
# 1999/06/02 1500 UTC

Radar 02-Jun-1999 14:45 UTC DE



# 1999/06/02 1800 UTC

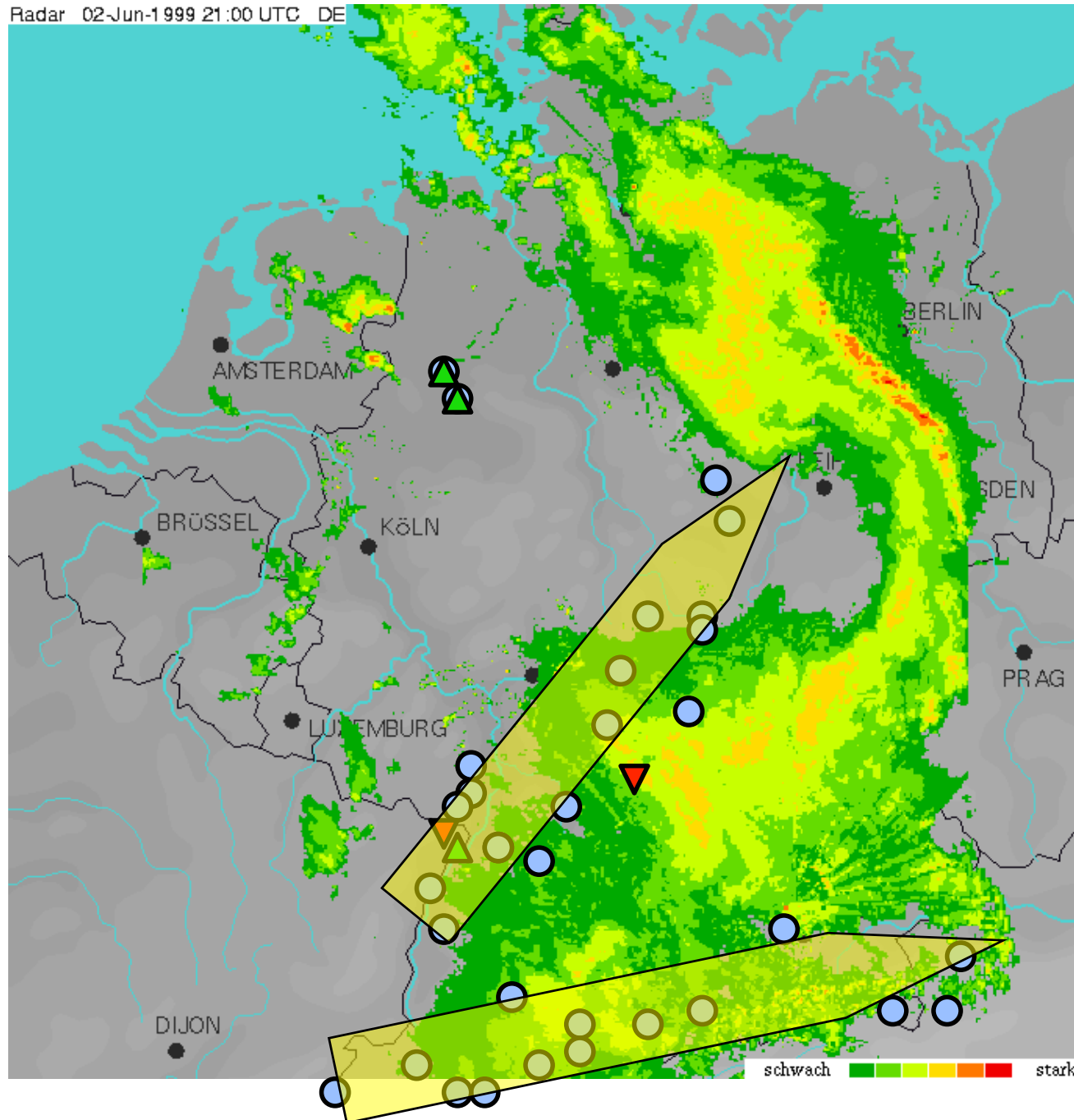
Radar 02-Jun-1999 18:15 UTC DE





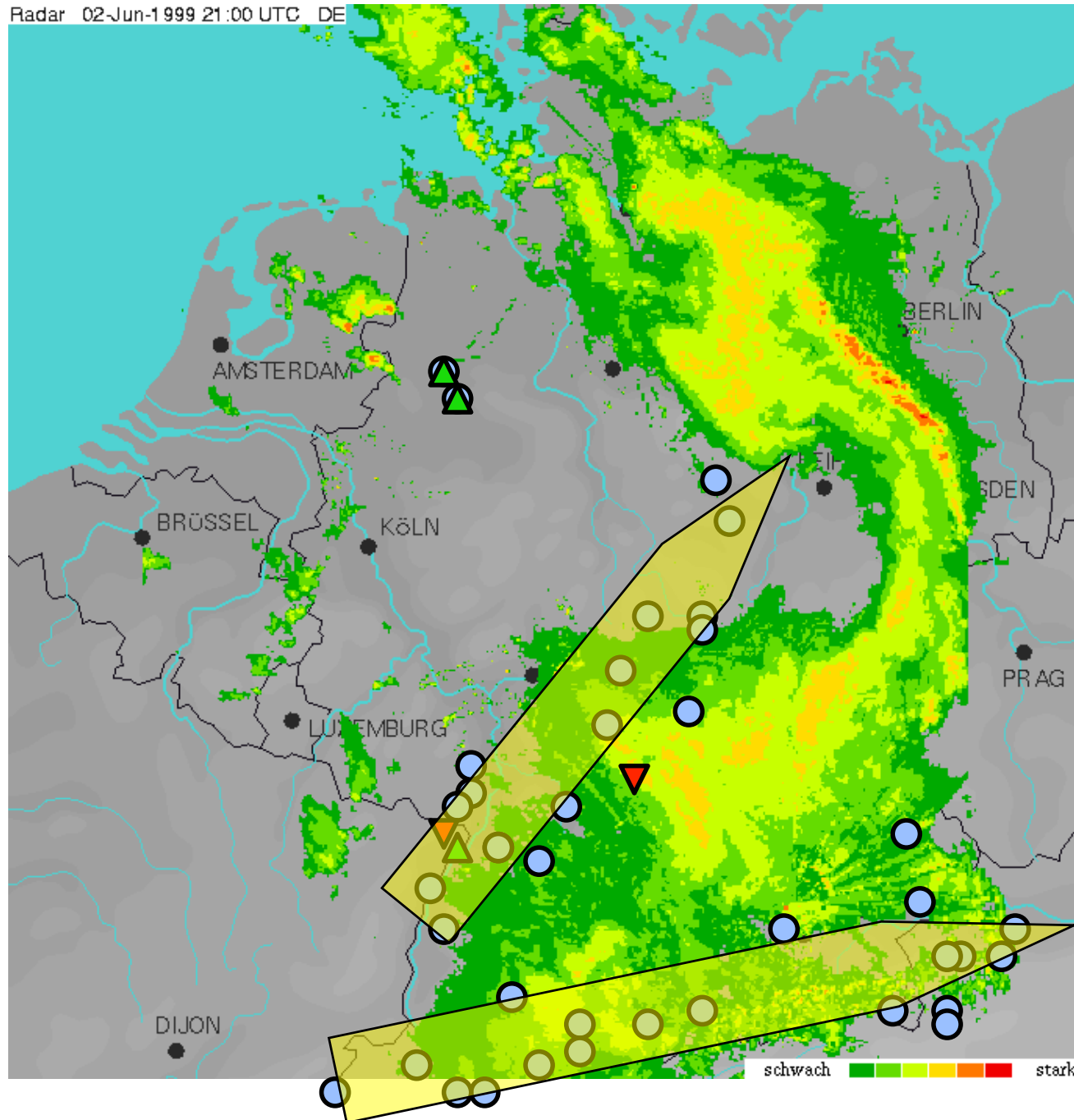
# 1999/06/02 2100 UTC

Radar 02-Jun-1999 21:00 UTC DE

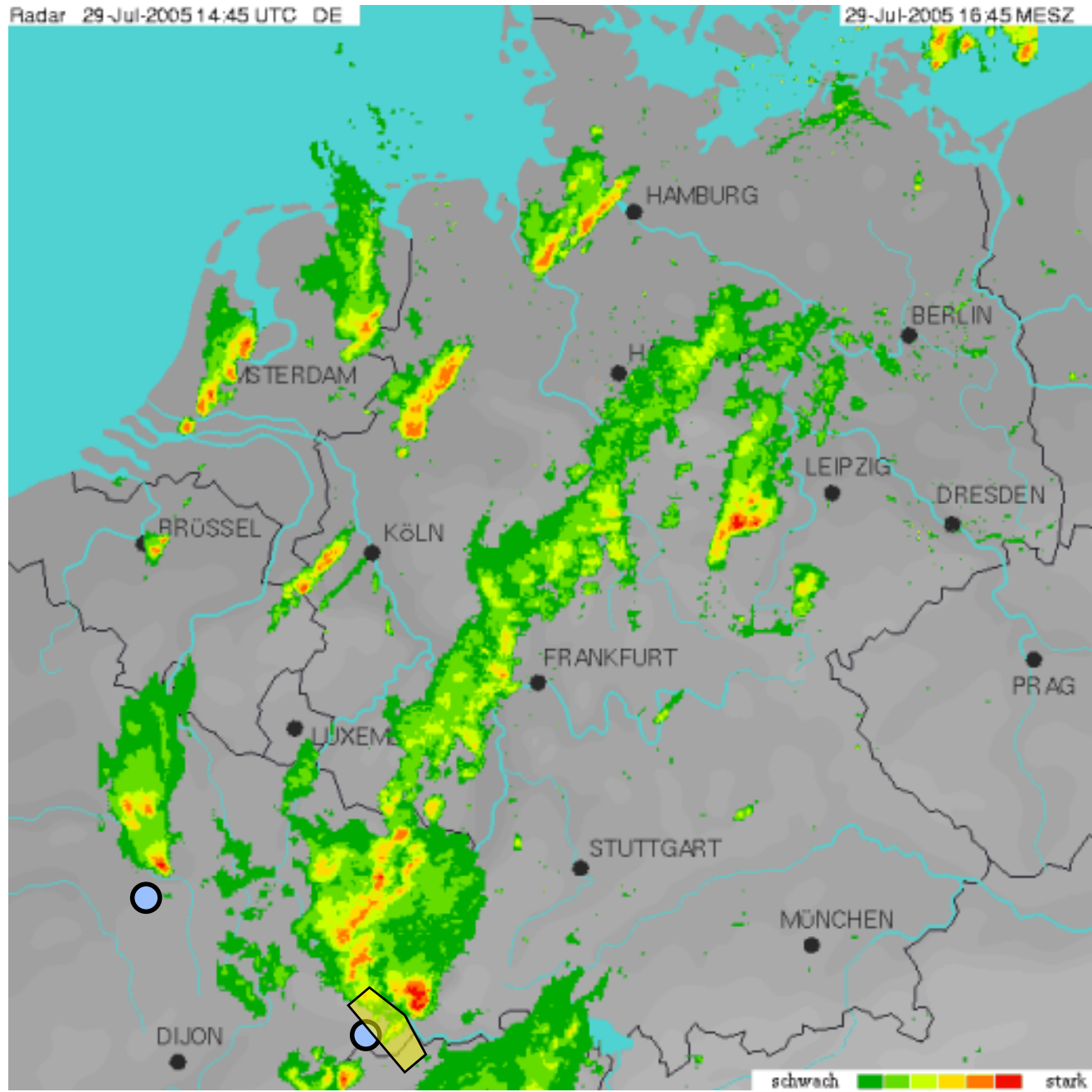


# 1999/06/02 2100 UTC

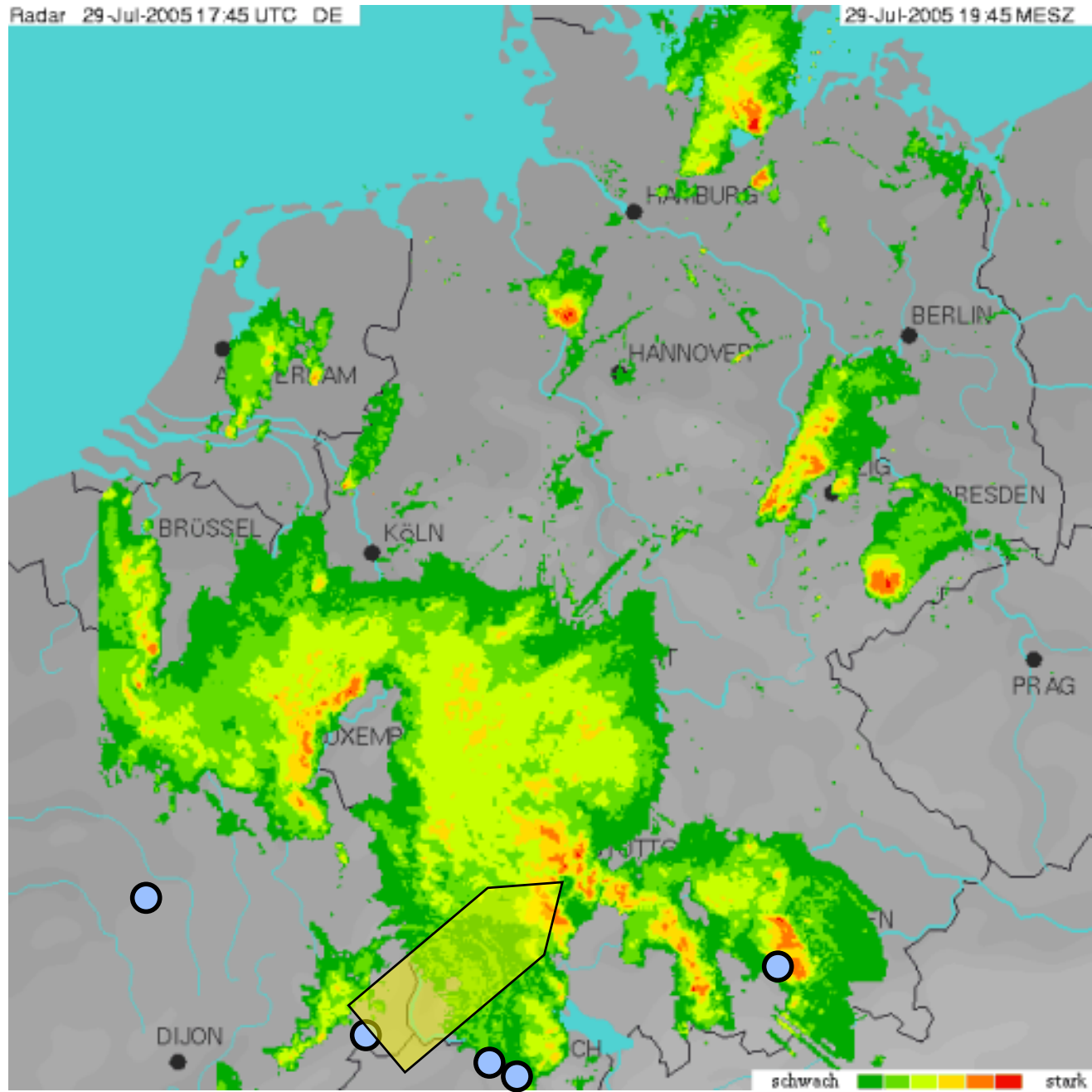
Radar 02-Jun-1999 21:00 UTC DE



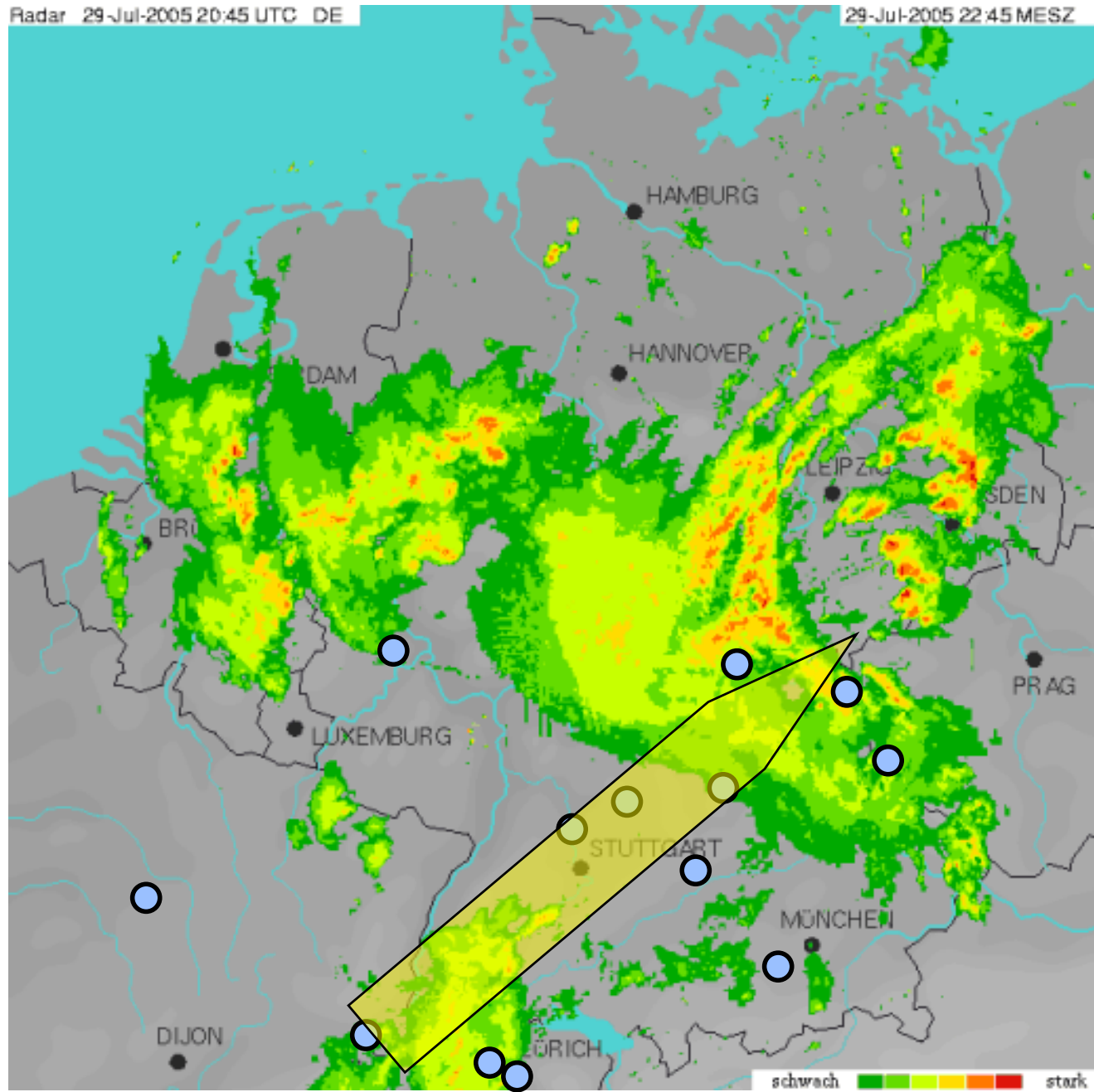
# 2005/07/29 1500 UTC



# 2005/07/29 1800 UTC

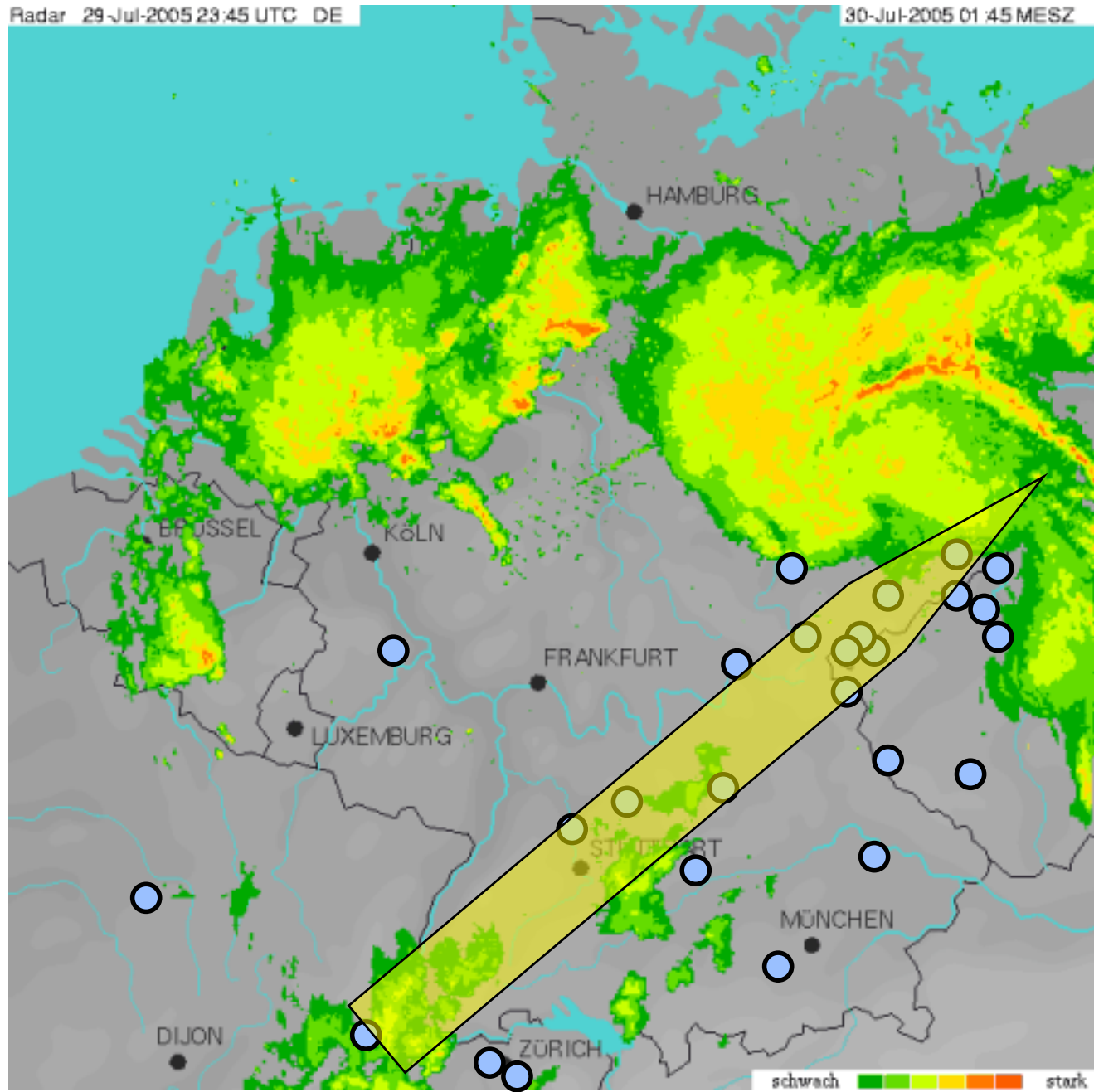


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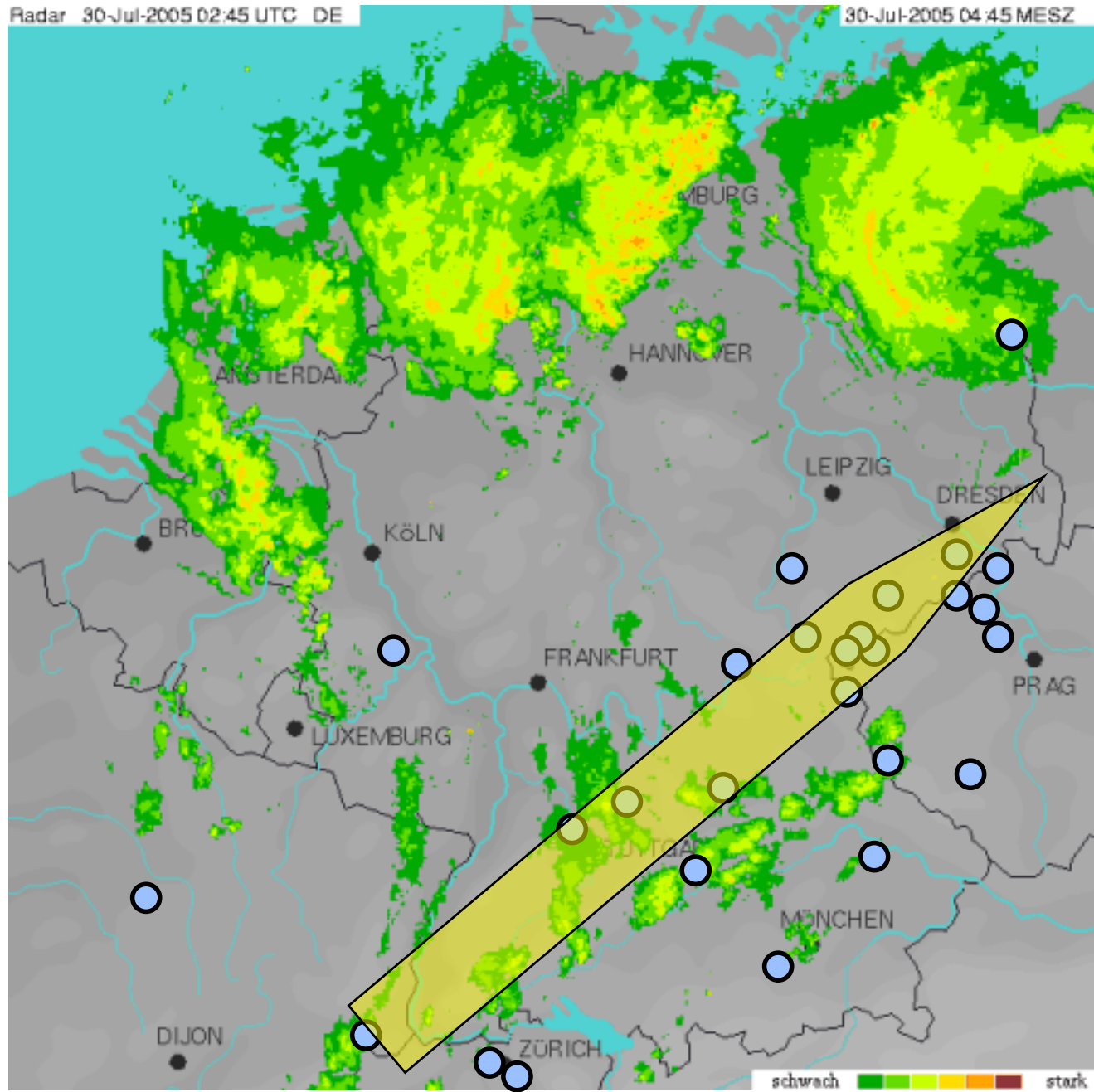


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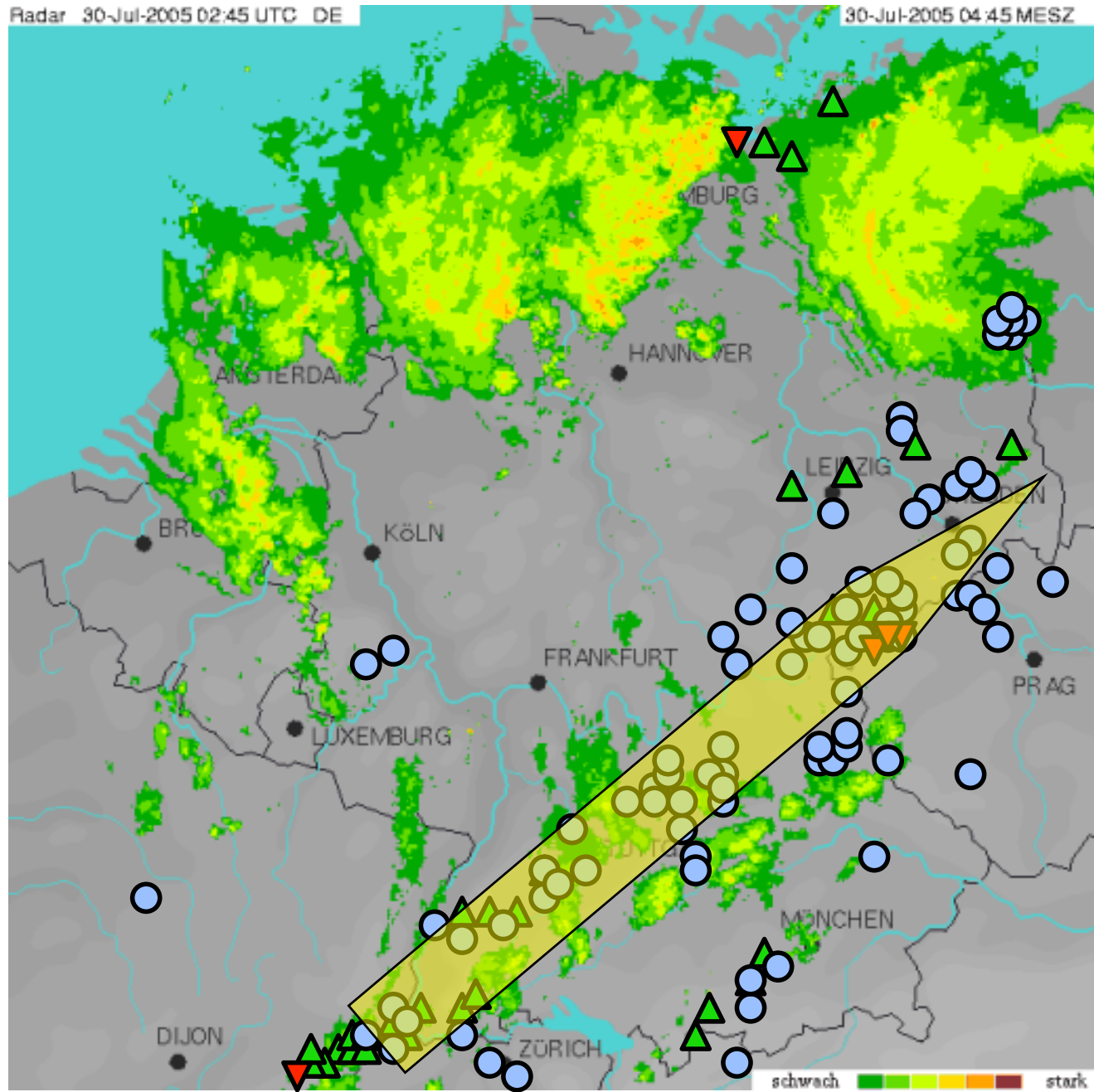




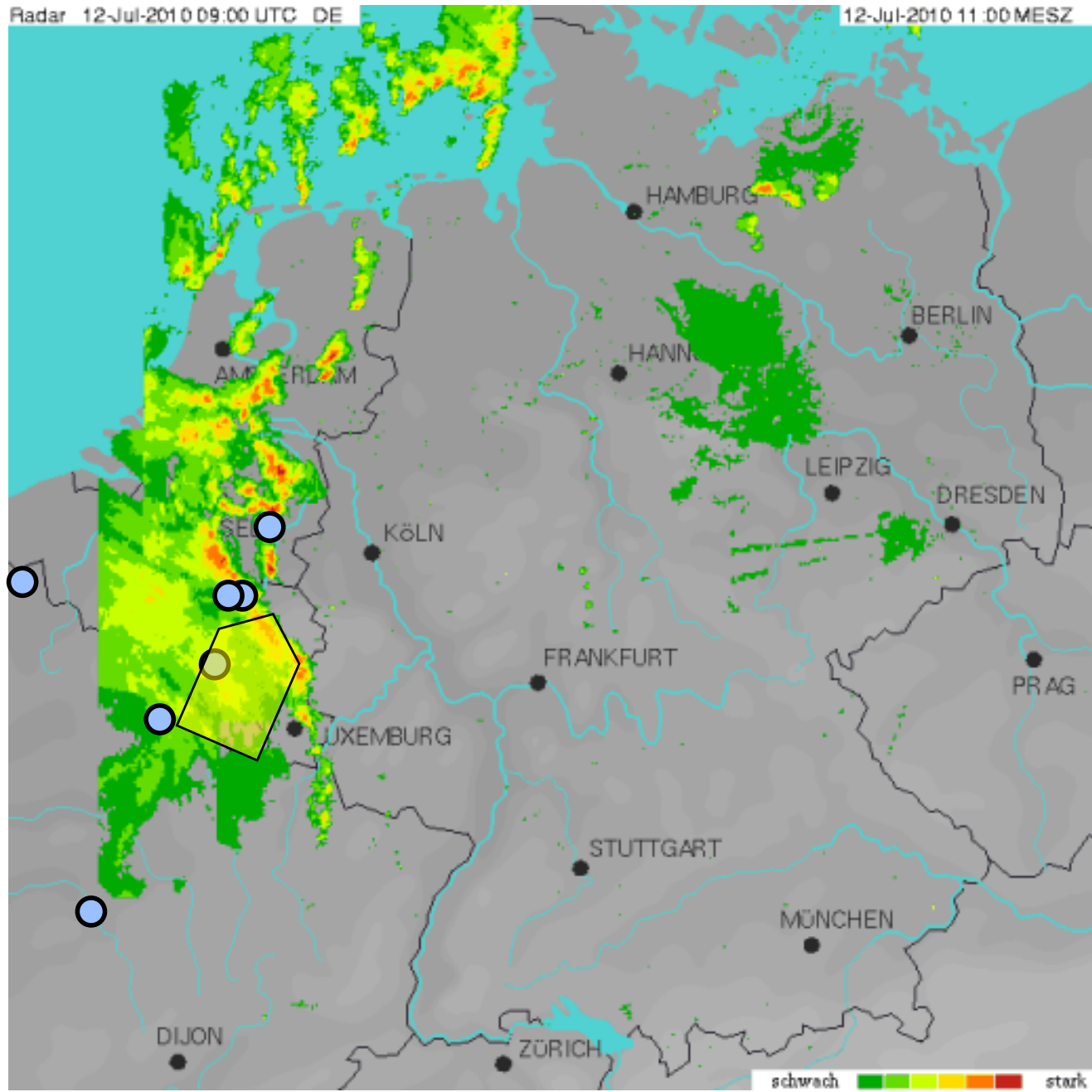
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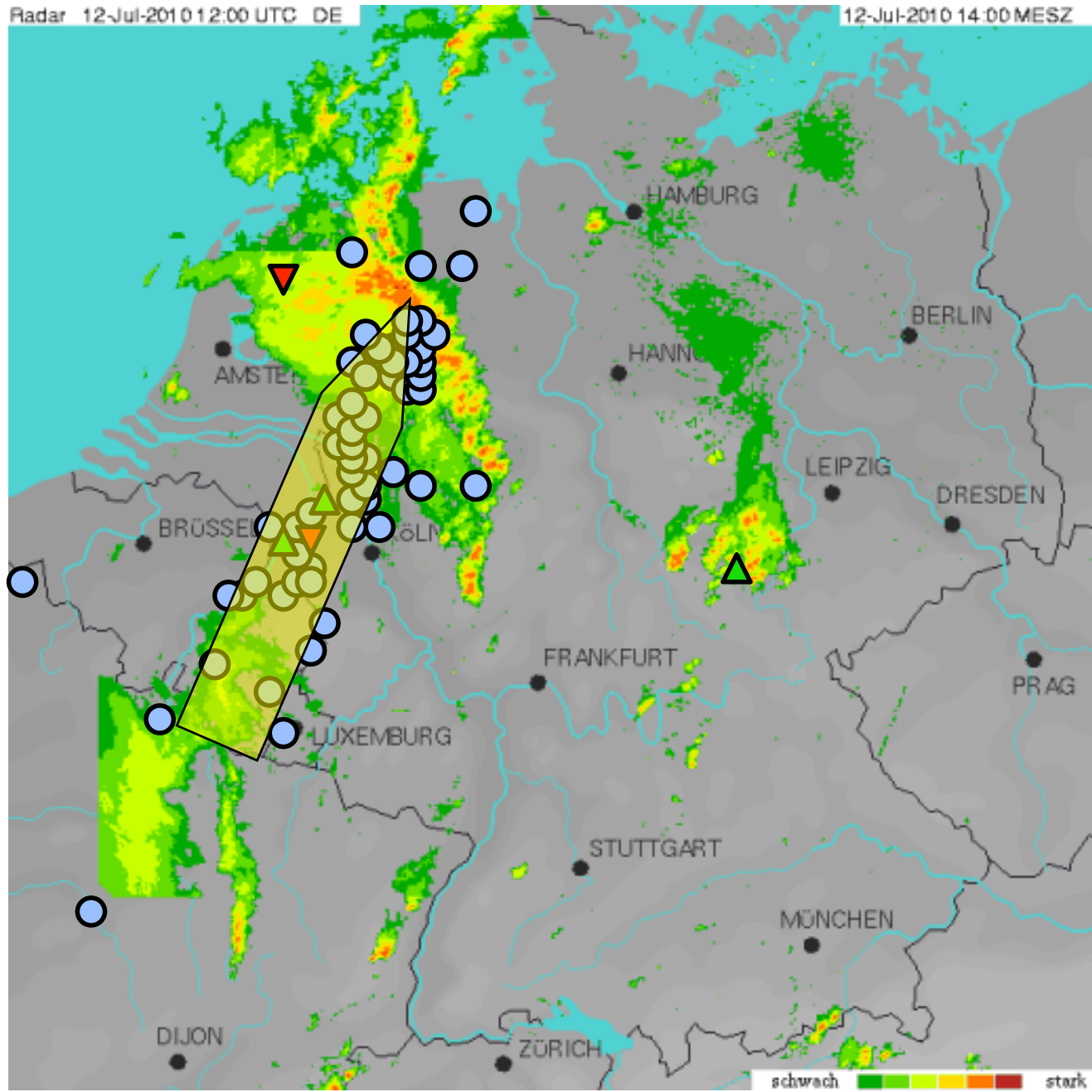
# 2005/07/30 0300 UTC



# 2010/07/12 0900 UTC

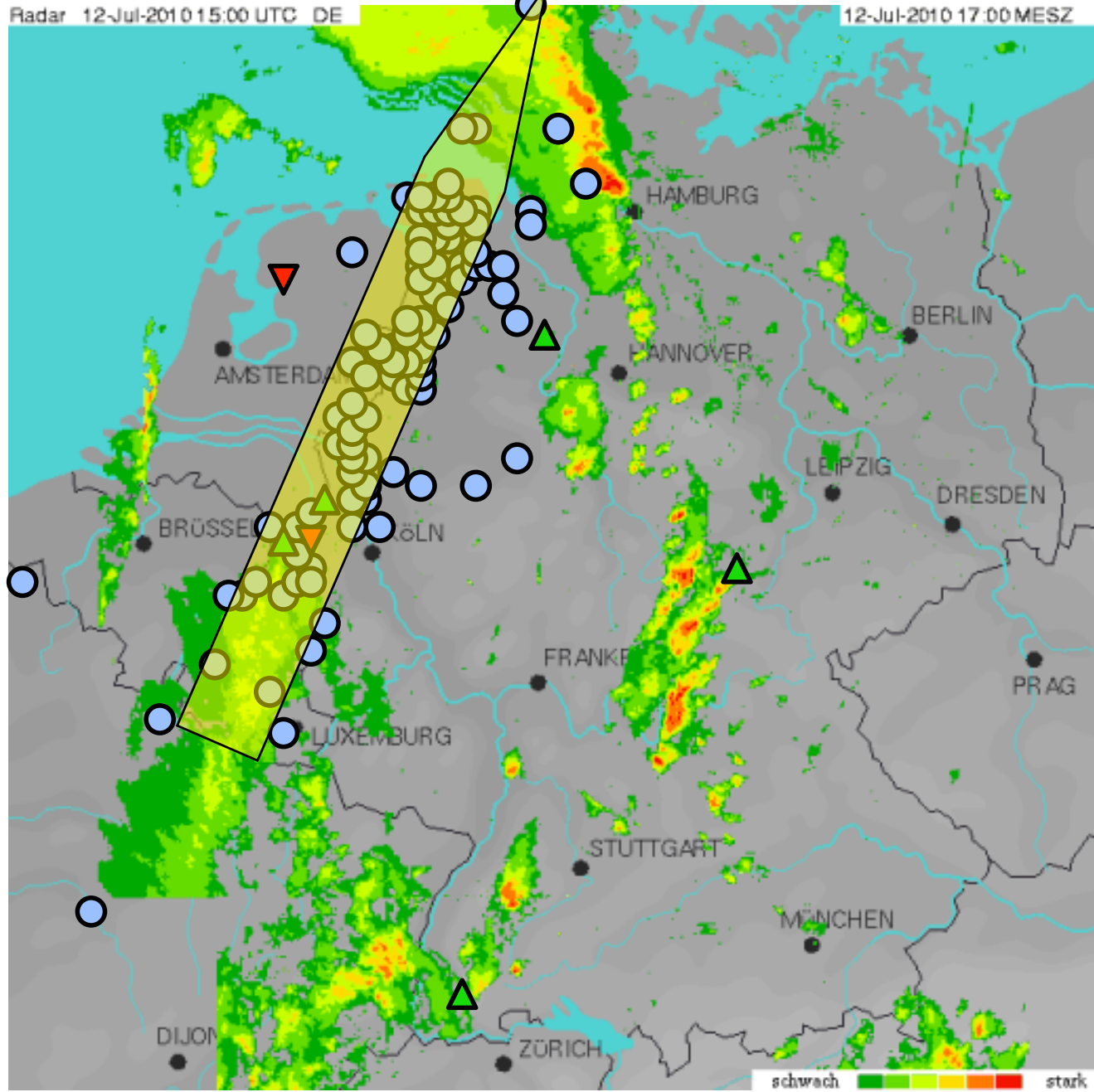


# 2010/07/12 1200 UTC



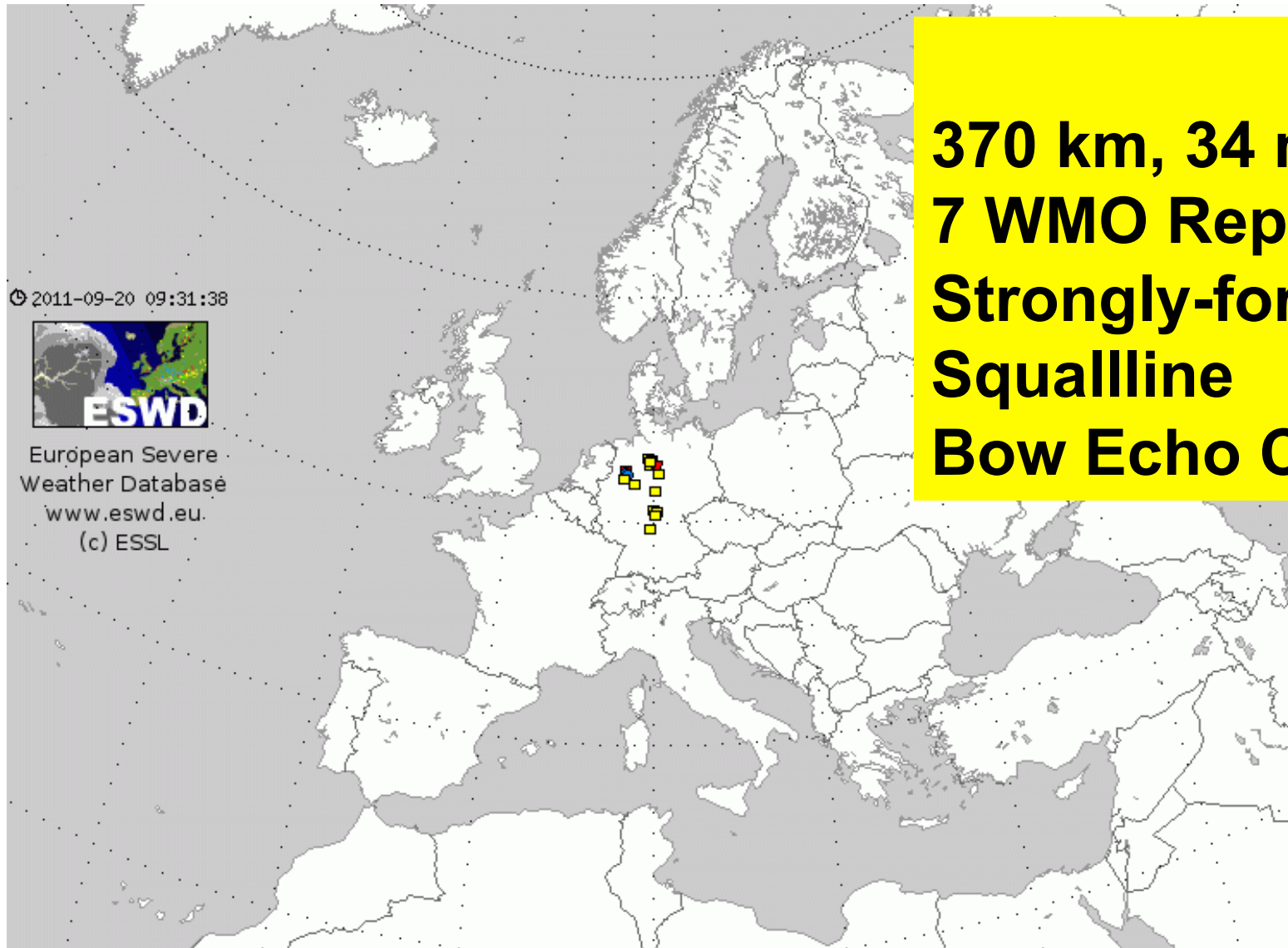


# 2010/07/12 1500 UTC



**1997/06/29**

**\*\*\* 3 INJ \*\*\***



**370 km, 34 m/s  
7 WMO Reports  
Strongly-forced S  
Squalline  
Bow Echo Complex**

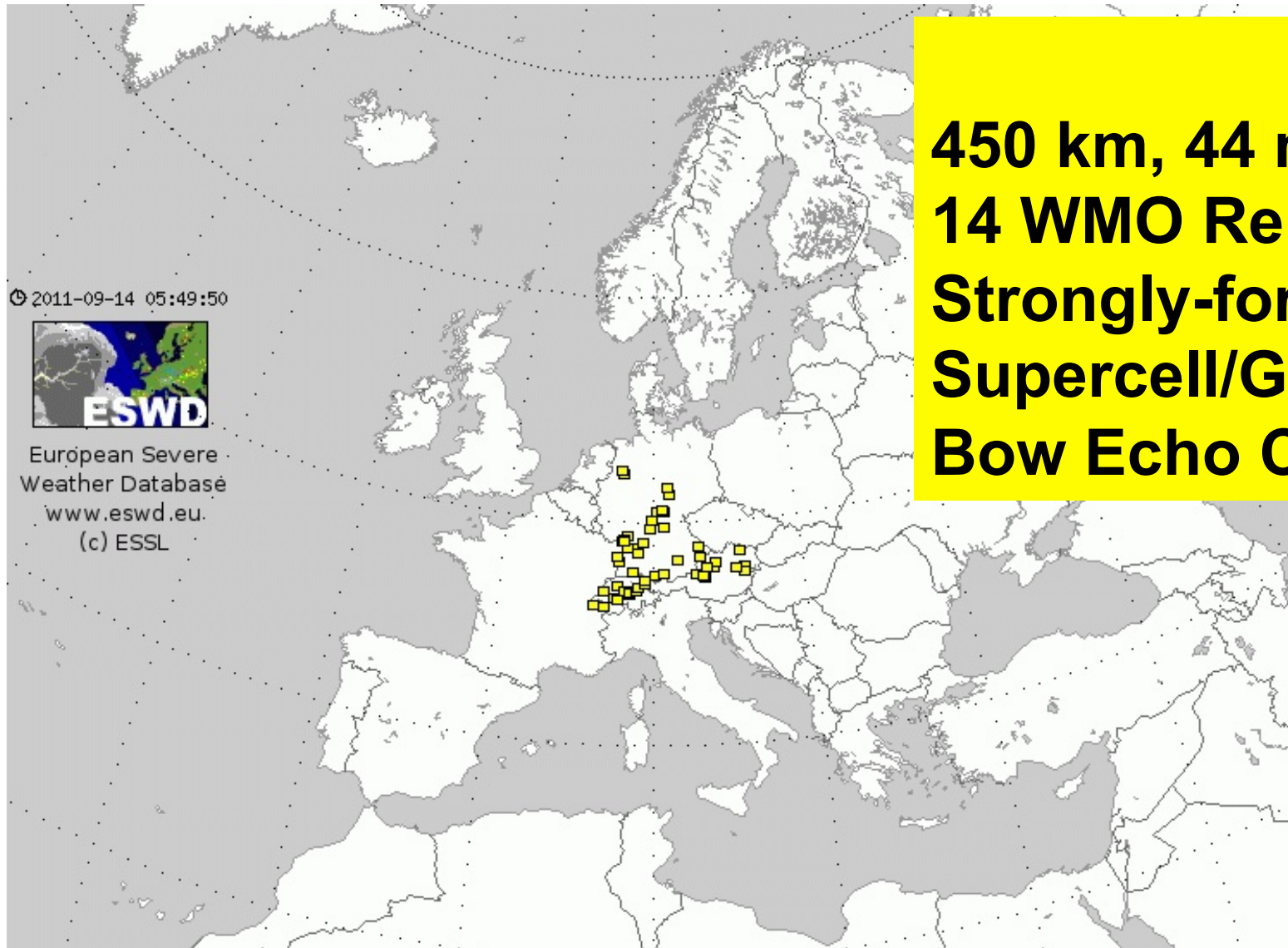
2011-09-20 09:31:38



European Severe  
Weather Database  
[www.eswd.eu](http://www.eswd.eu)  
(c) ESSL

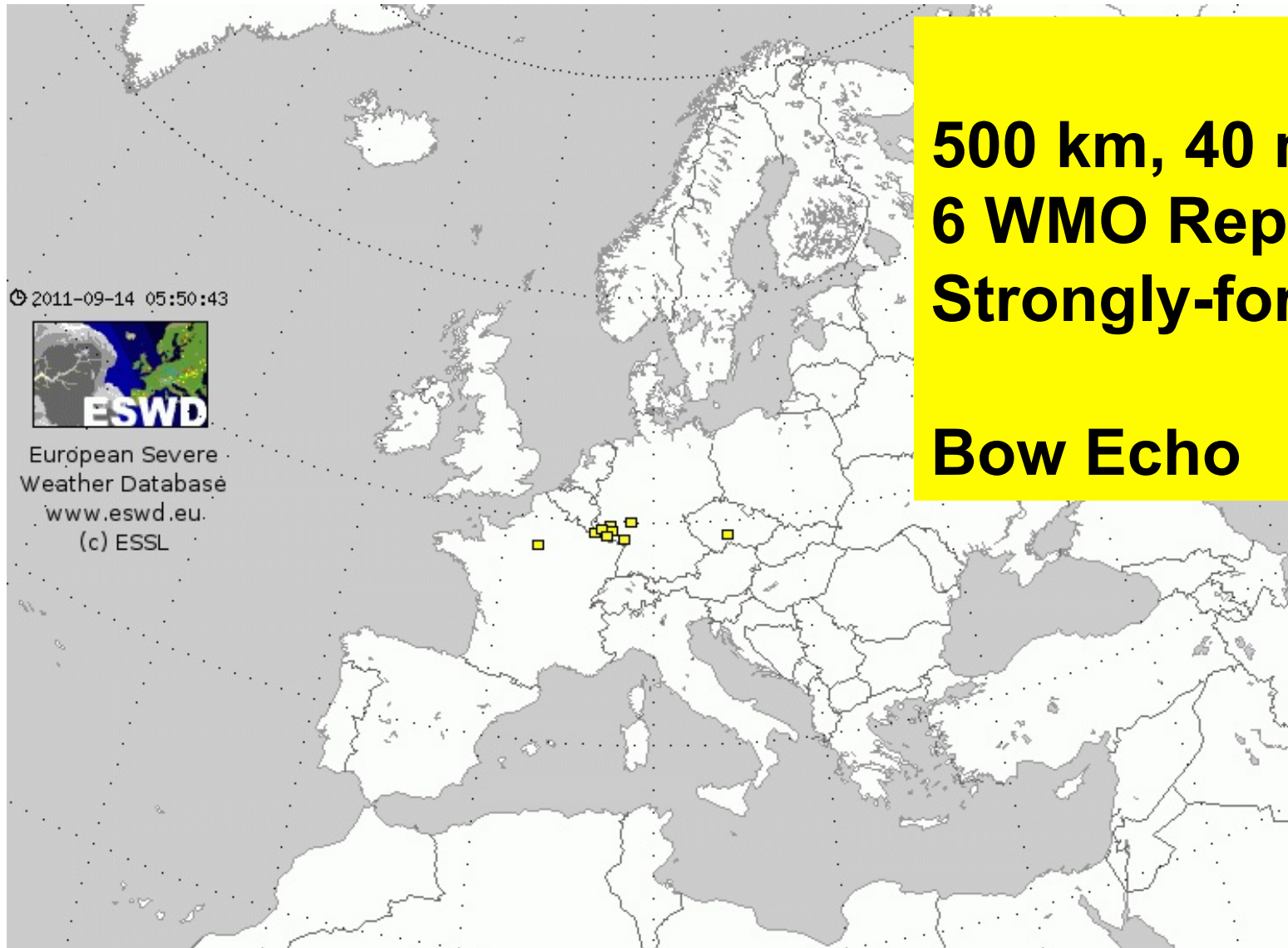


**1999/06/02**

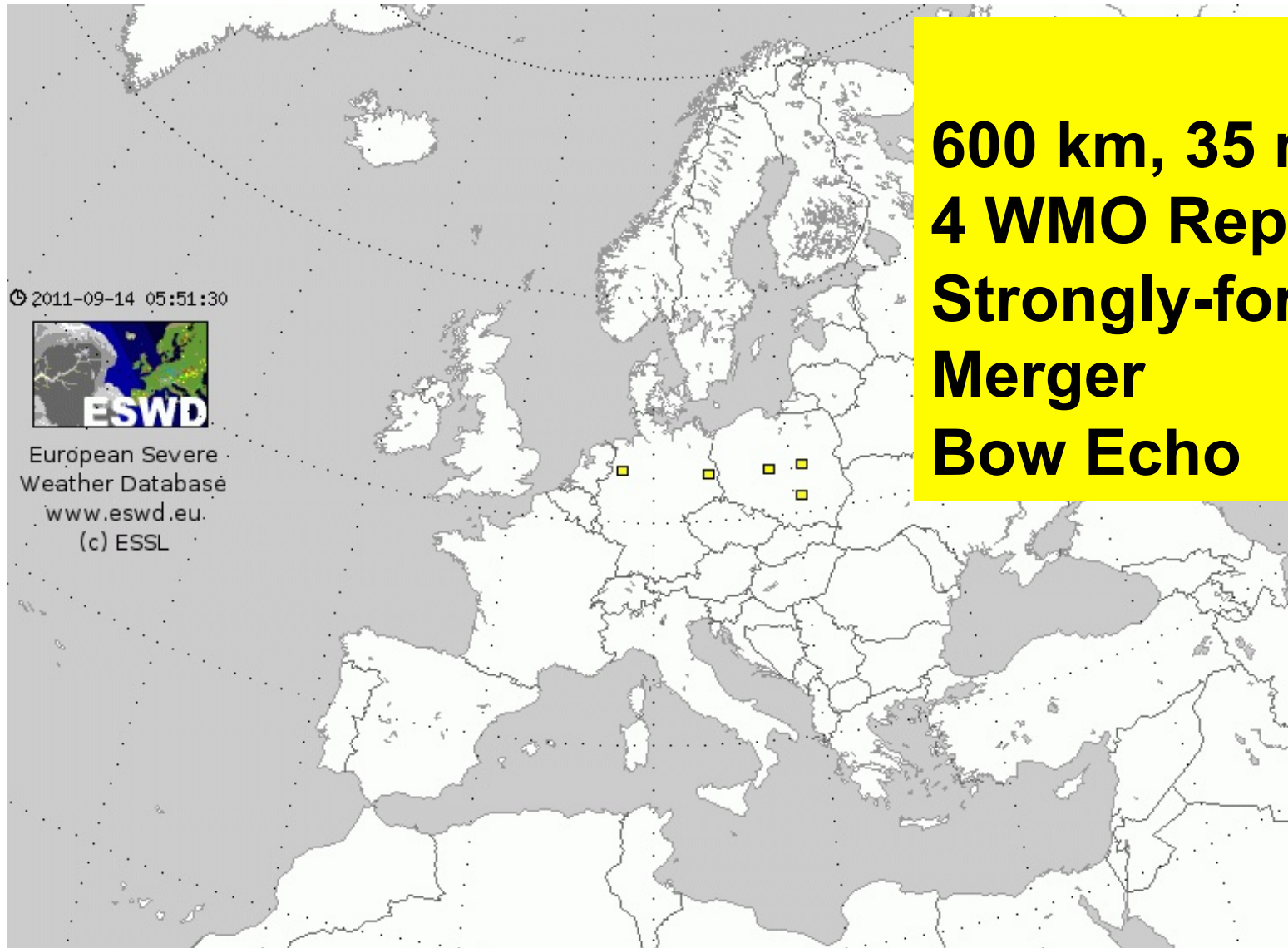


**450 km, 44 m/s  
14 WMO Reports  
Strongly-forced SW  
Supercell/Group  
Bow Echo Complex**

**2000/07/02**



**2000/08/17**



**600 km, 35 m/s  
4 WMO Reports  
Strongly-forced SW  
Merger  
Bow Echo**

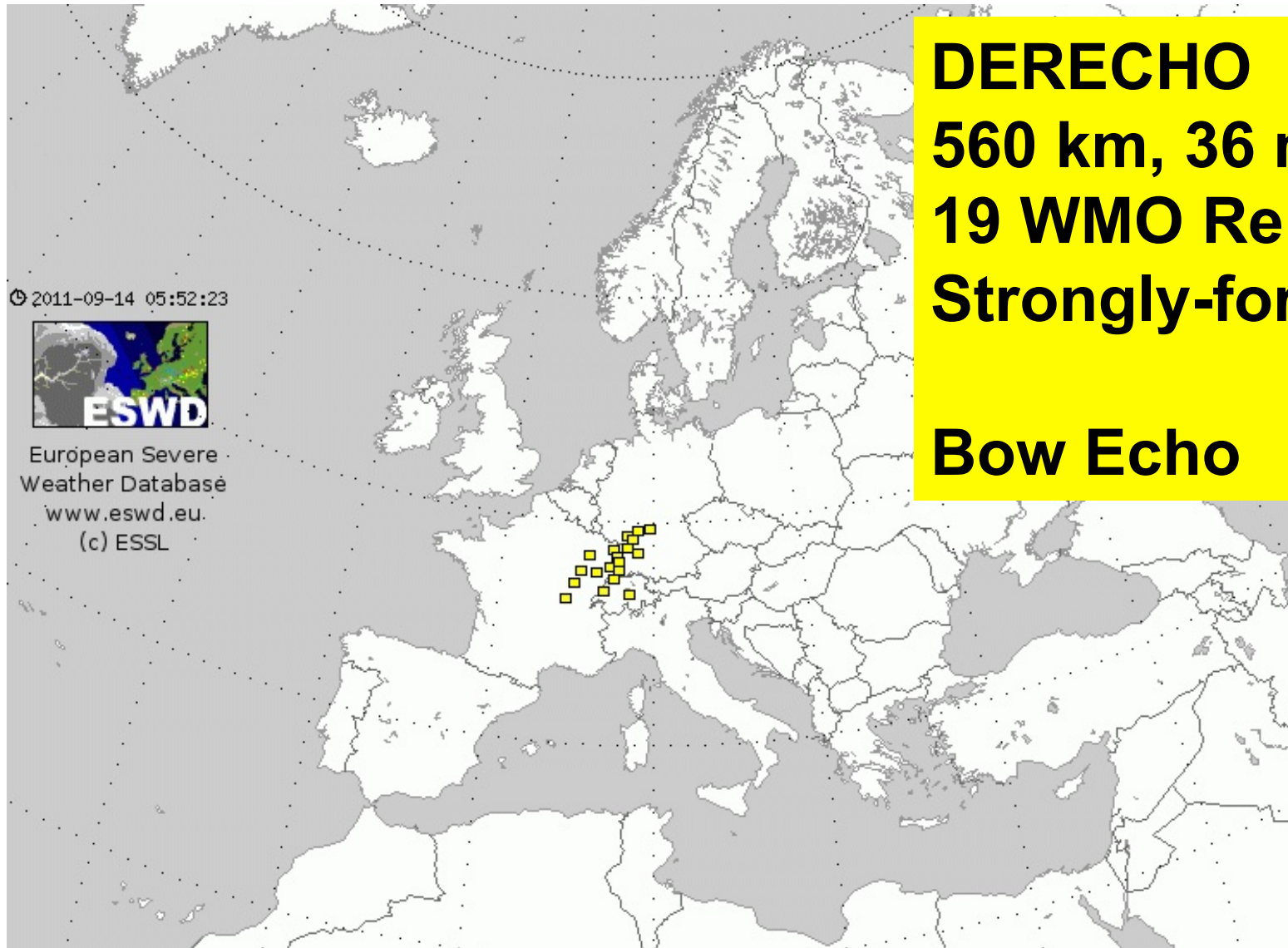
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Weather Database  
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**2001/07/06**

**\*\*\* 12 FATAL \*\*\***



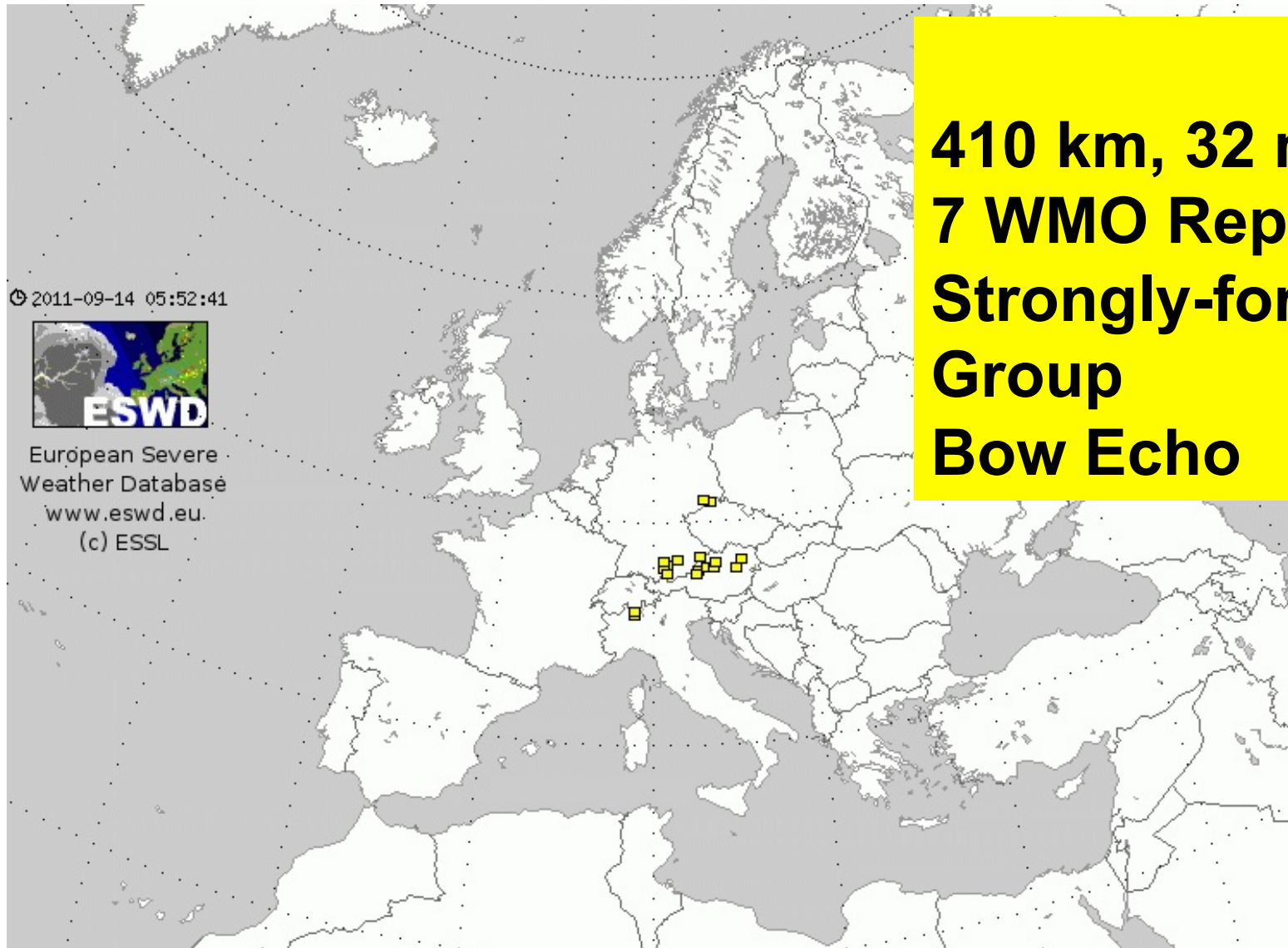
**DERECHO**  
**560 km, 36 m/s**  
**19 WMO Reports**  
**Strongly-forced SW**

**Bow Echo**



**2001/07/07**

**\*\*\* 3 FATAL, 12 INJ \*\*\***



**410 km, 32 m/s  
7 WMO Reports  
Strongly-forced S  
Group  
Bow Echo**

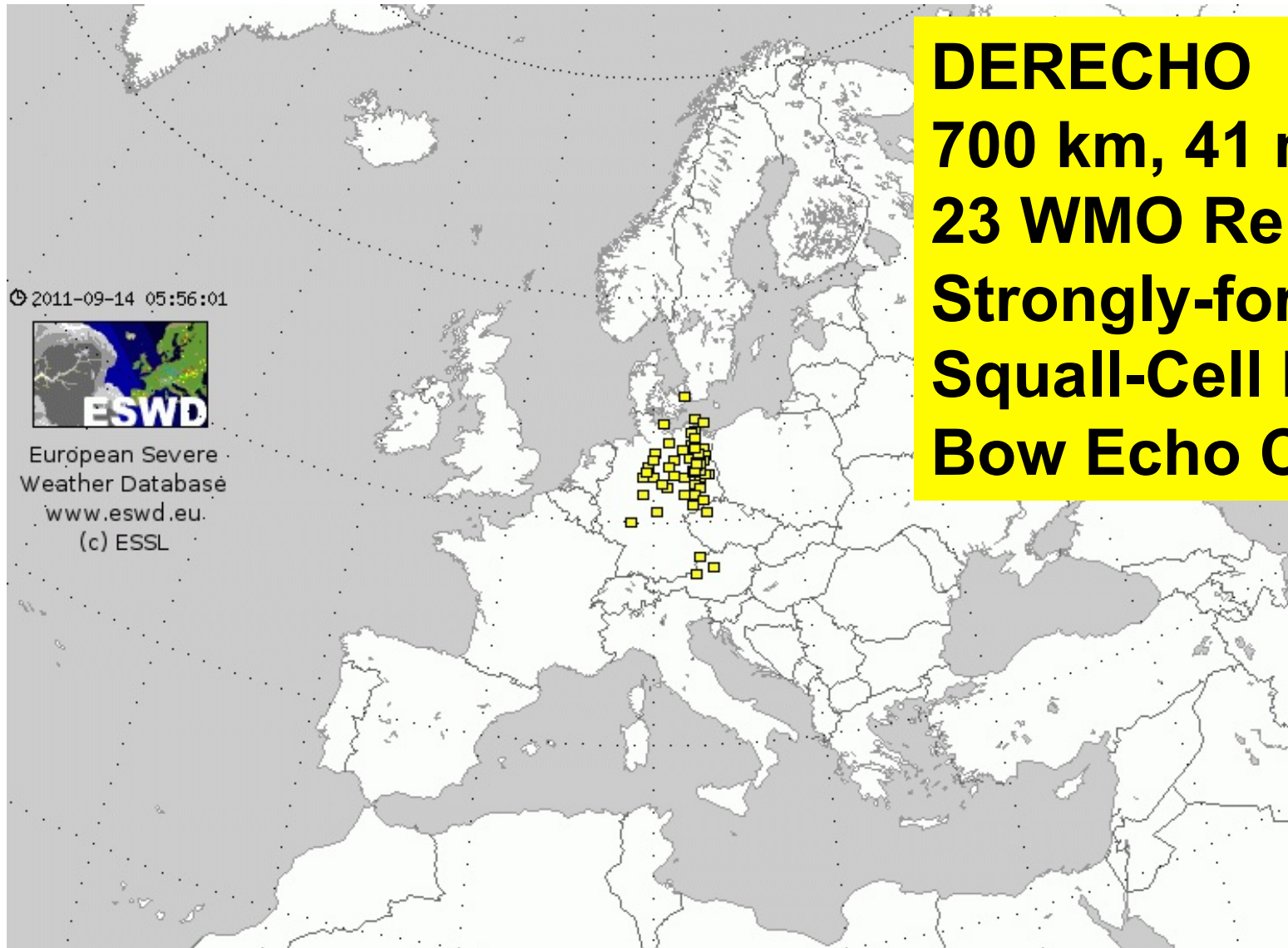
2011-09-14 05:52:41



European Severe  
Weather Database  
[www.eswd.eu](http://www.eswd.eu)  
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**2002/07/10**

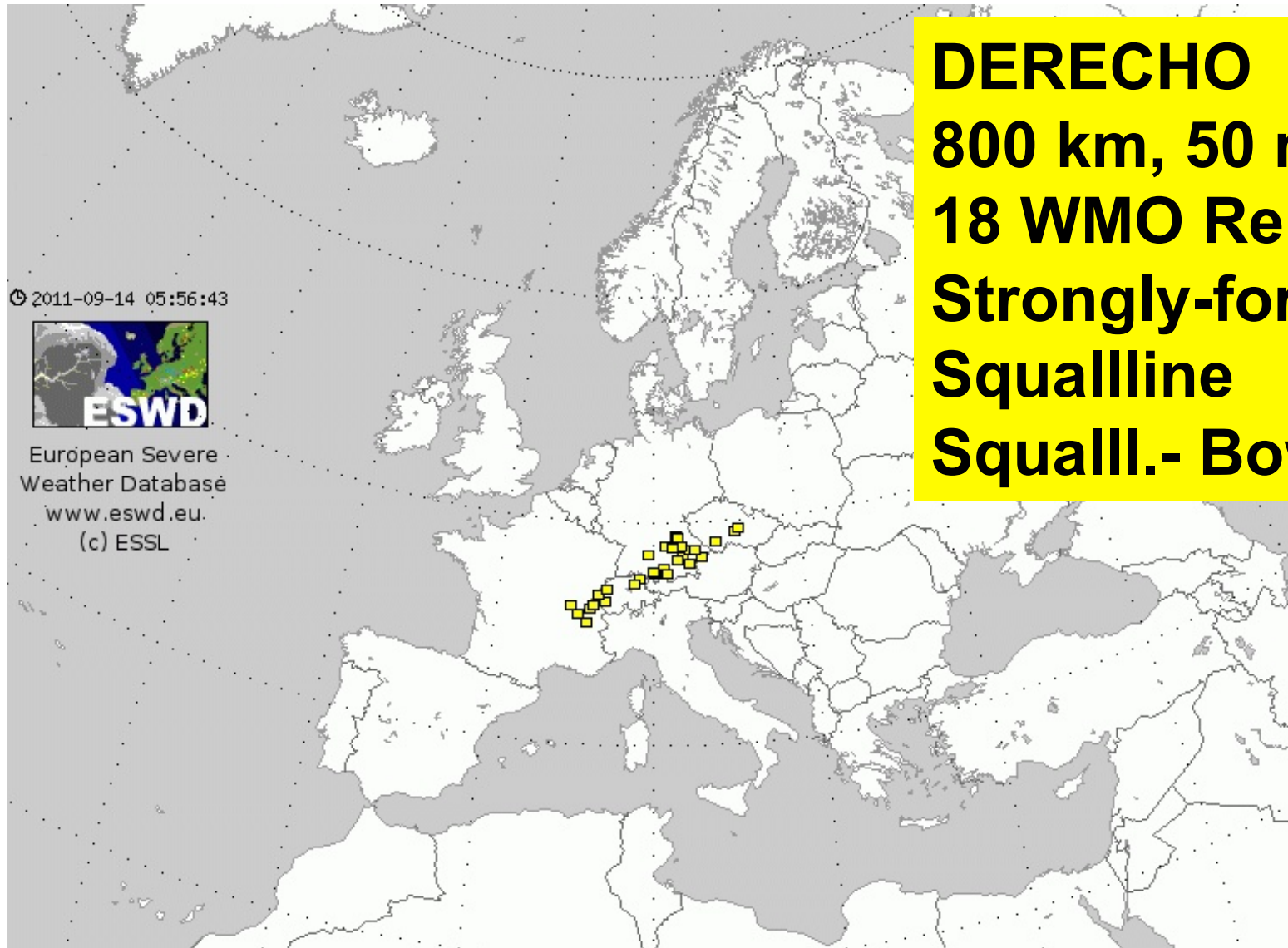
**\*\*\* 8 FATAL, 50 INJ \*\*\***



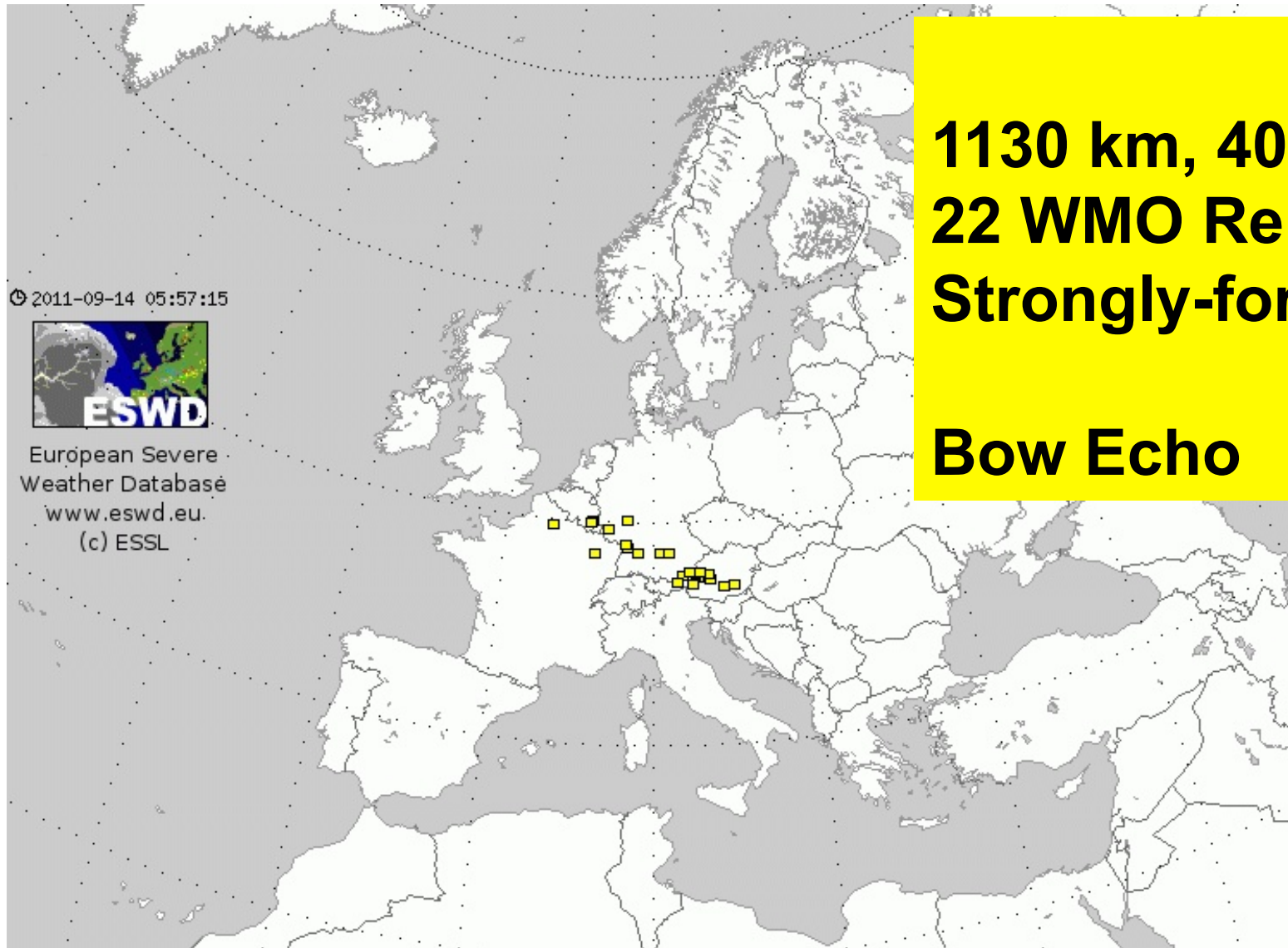
**DERECHO**  
**700 km, 41 m/s**  
**23 WMO Reports**  
**Strongly-forced SW**  
**Squall-Cell Merger**  
**Bow Echo Complex**



**2003/05/19**



**2003/06/14**



**1130 km, 40 m/s  
22 WMO Reports  
Strongly-forced NW**

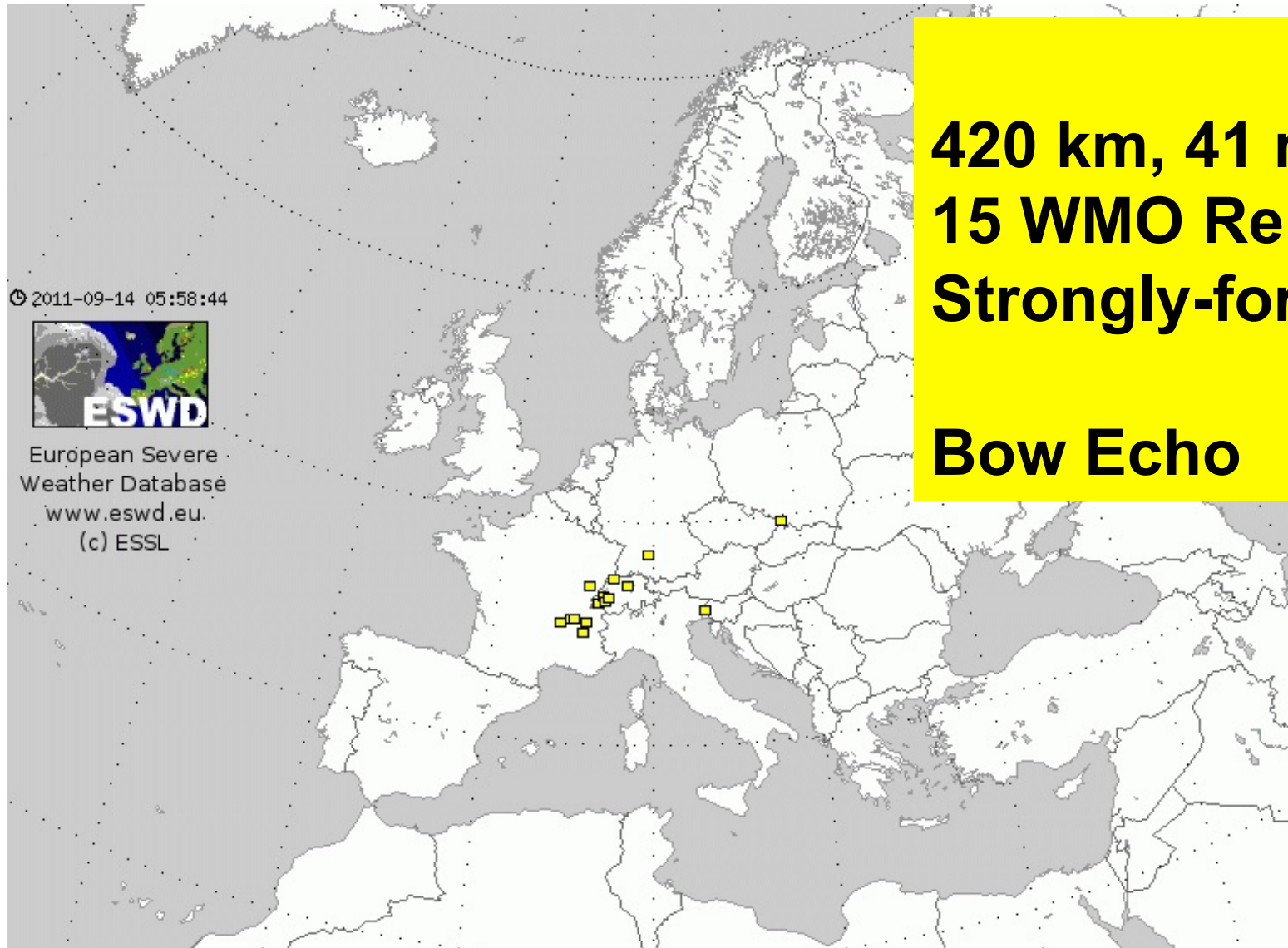
**Bow Echo**

2011-09-14 05:57:15



European Severe  
Weather Database  
[www.eswd.eu](http://www.eswd.eu)  
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**2003/08/28**



**420 km, 41 m/s  
15 WMO Reports  
Strongly-forced SW**

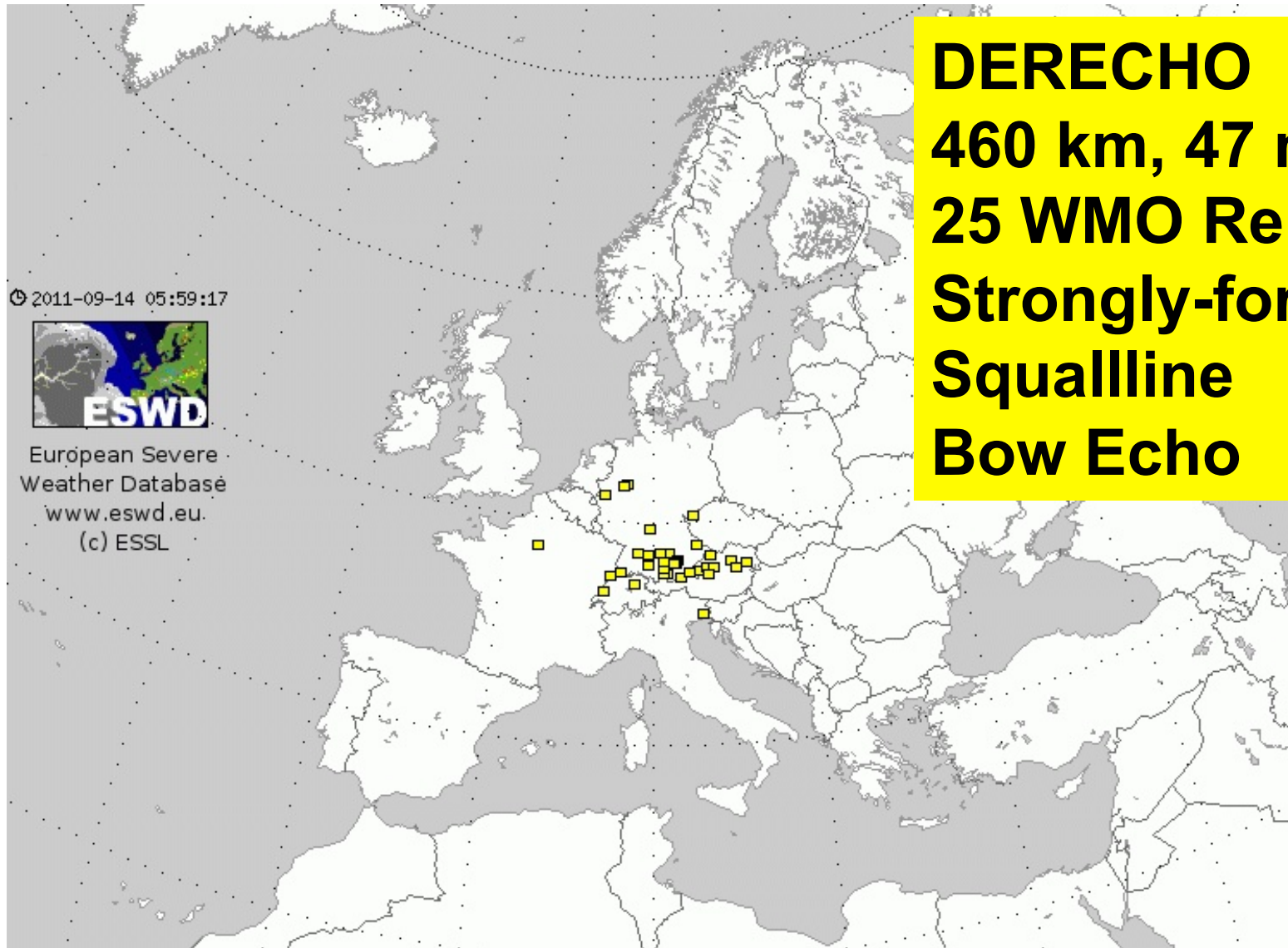
**Bow Echo**

2011-09-14 05:58:44



European Severe  
Weather Database  
[www.eswd.eu](http://www.eswd.eu)  
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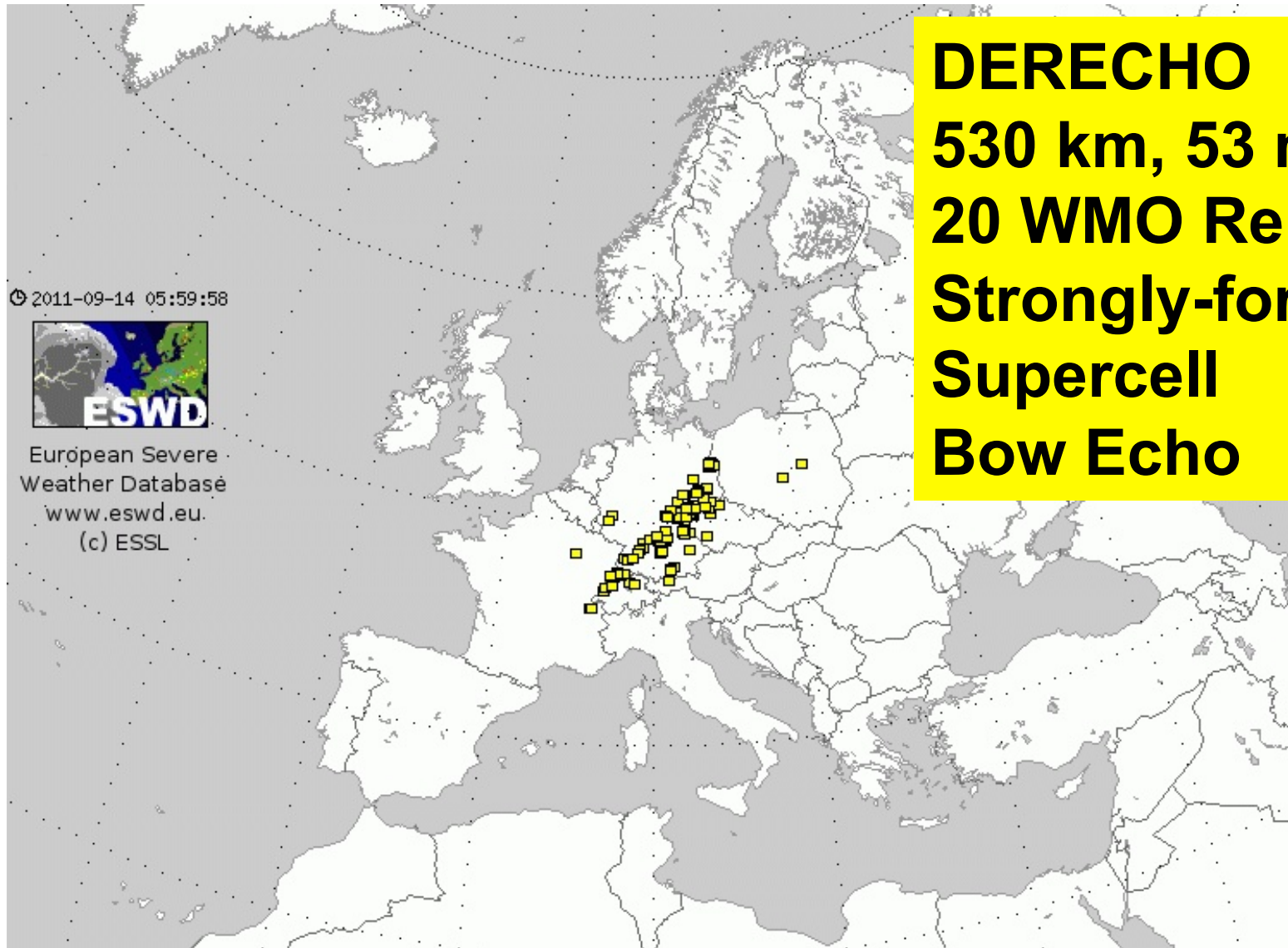
**2004/08/12**





**2005/07/29**

**\*\*\* 1 FATAL, 30 INJ \*\*\***



**DERECHO**  
**530 km, 53 m/s**  
**20 WMO Reports**  
**Strongly-forced SW**  
**Supercell**  
**Bow Echo**

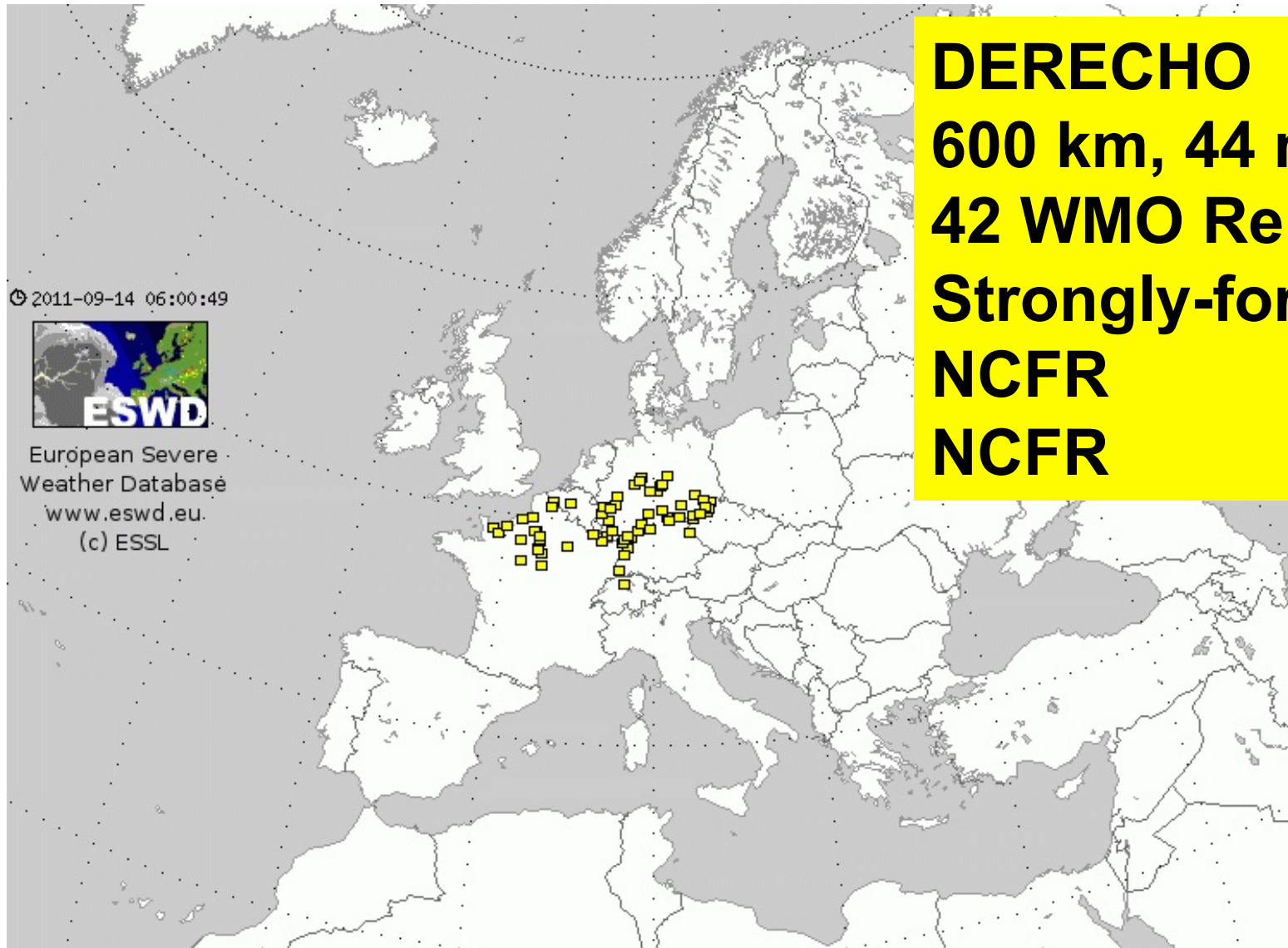
2011-09-14 05:59:58



European Severe  
Weather Database  
[www.eswd.eu](http://www.eswd.eu)  
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2006/05/20

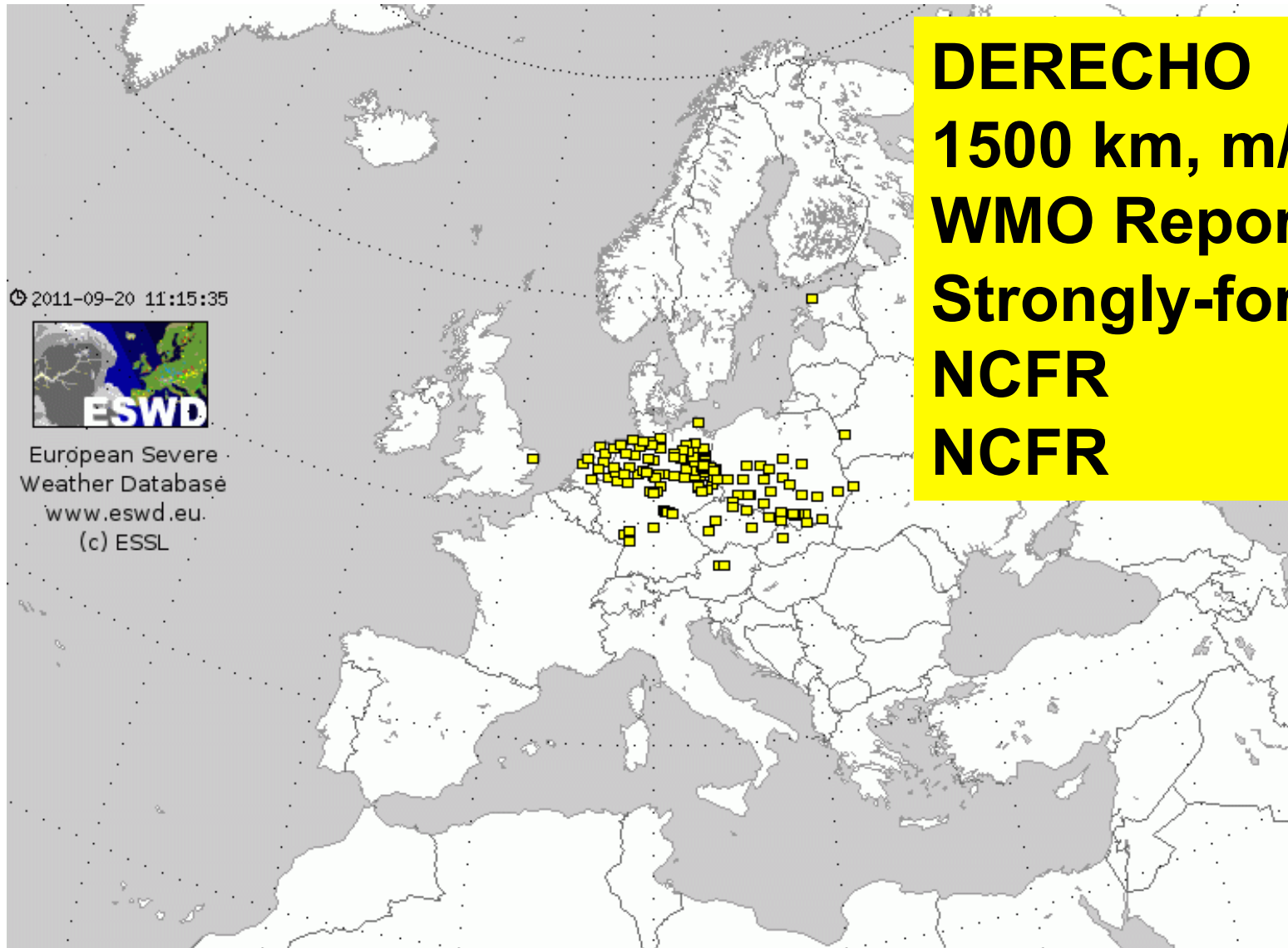
\*\*\* 1 FATAL, 4 INJ \*\*\*





2007/01/18

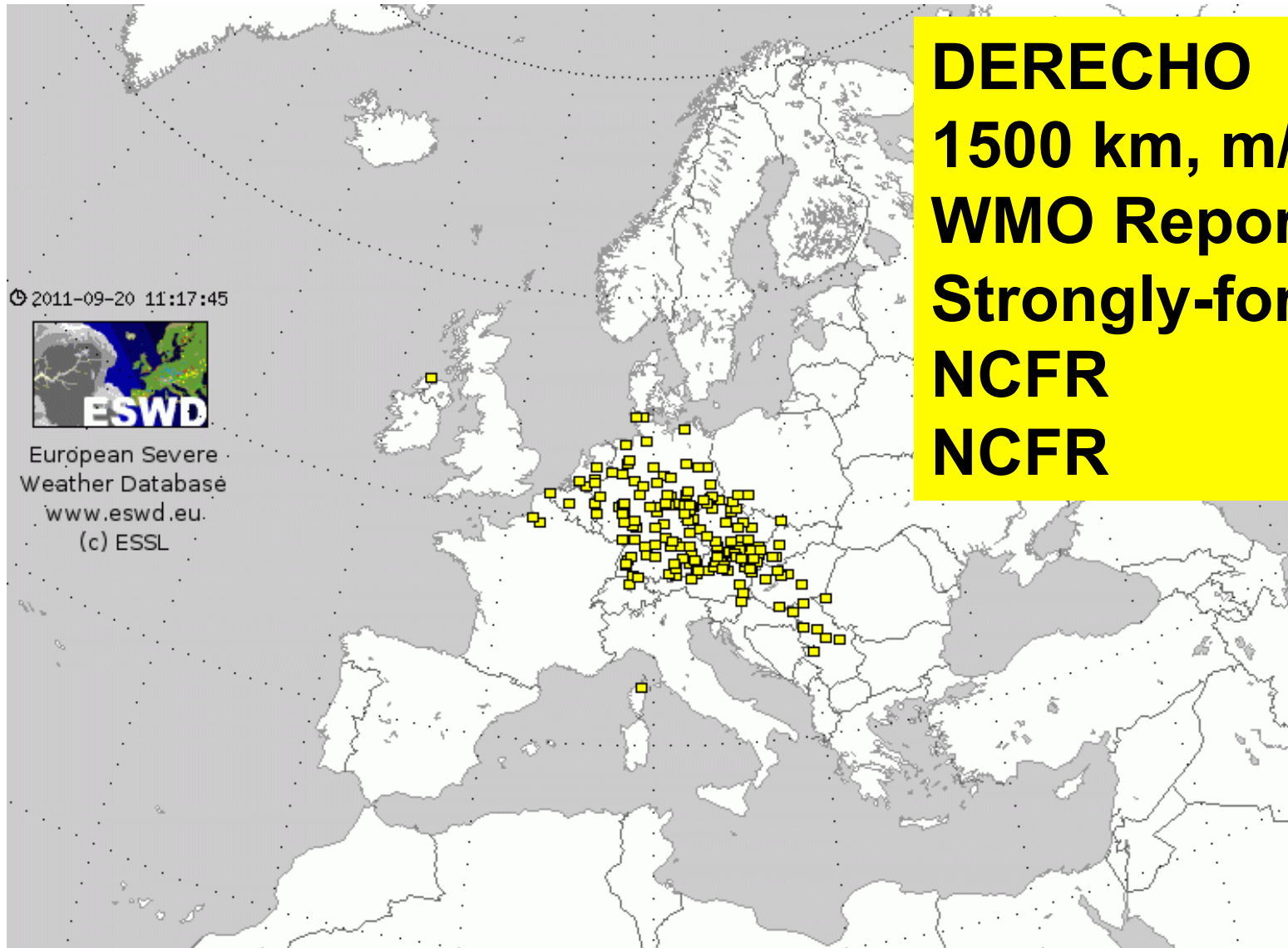
**\*\*\* 47 FATAL \*\*\***



**DERECHO**  
**1500 km, m/s**  
**WMO Reports**  
**Strongly-forced W**  
**NCFR**  
**NCFR**

2008/03/01

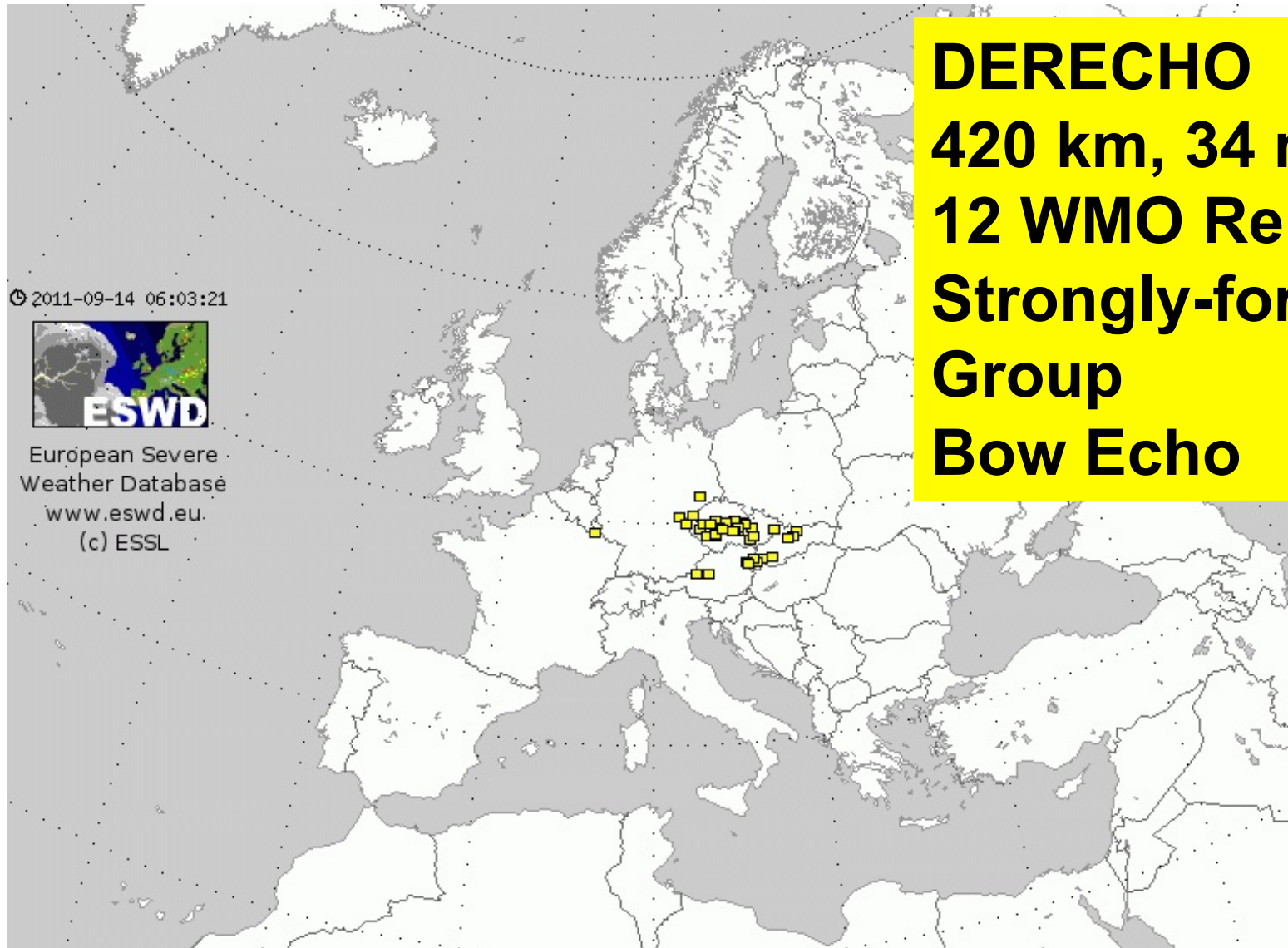
**\*\*\* 14 FATAL \*\*\***



**DERECHO**  
**1500 km, m/s**  
**WMO Reports**  
**Strongly-forced NW**  
**NCFR**  
**NCFR**

**2008/06/25**

**\*\*\* 4 FATAL \*\*\***



**DERECHO**  
**420 km, 34 m/s**  
**12 WMO Reports**  
**Strongly-forced W**  
**Group**  
**Bow Echo**

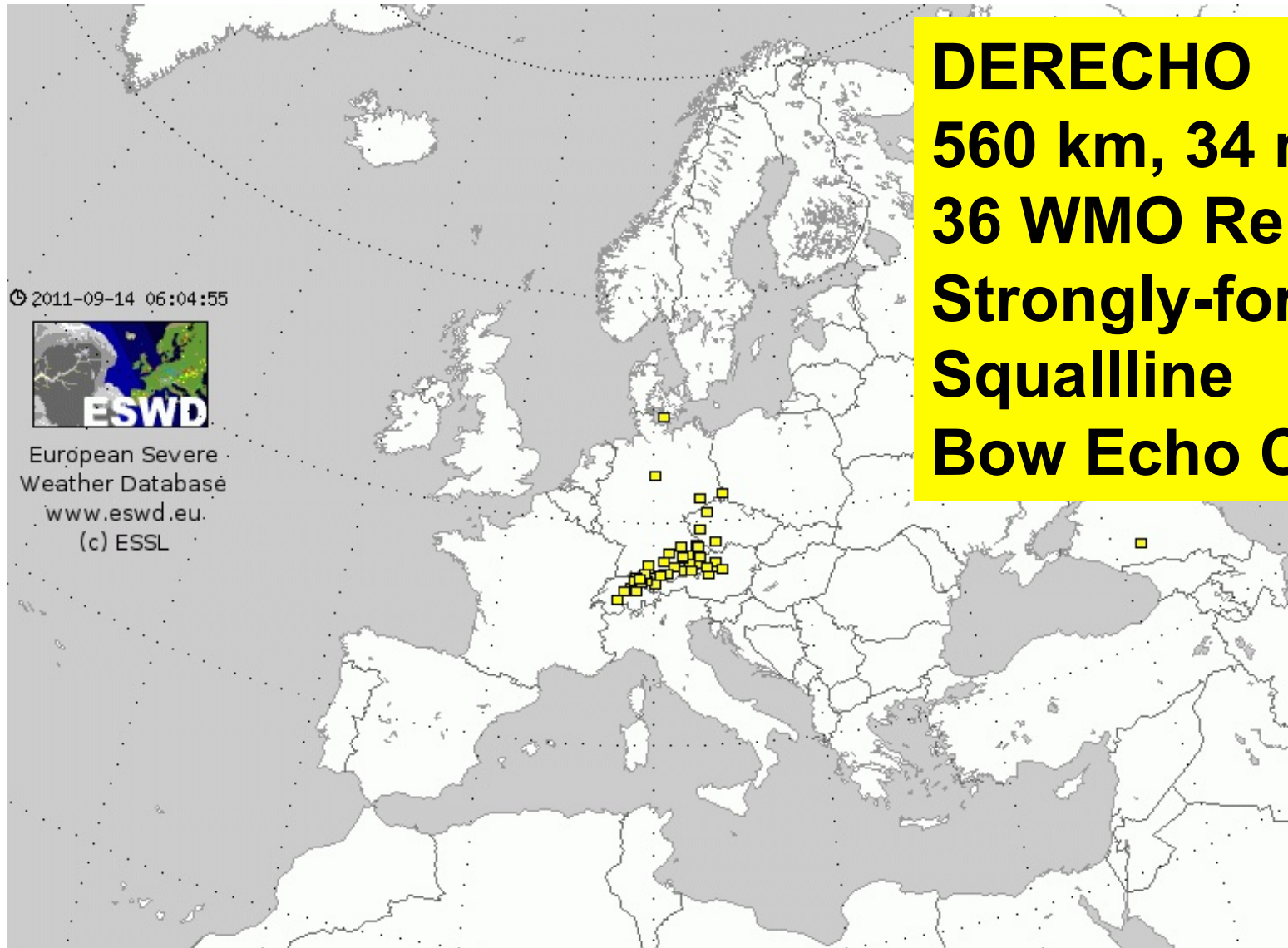
© 2011-09-14 06:03:21



European Severe  
Weather Database  
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2009/05/26

**\*\*\* 1 FATAL \*\*\***



**DERECHO**  
**560 km, 34 m/s**  
**36 WMO Reports**  
**Strongly-forced SW**  
**Squalline**  
**Bow Echo Complex**

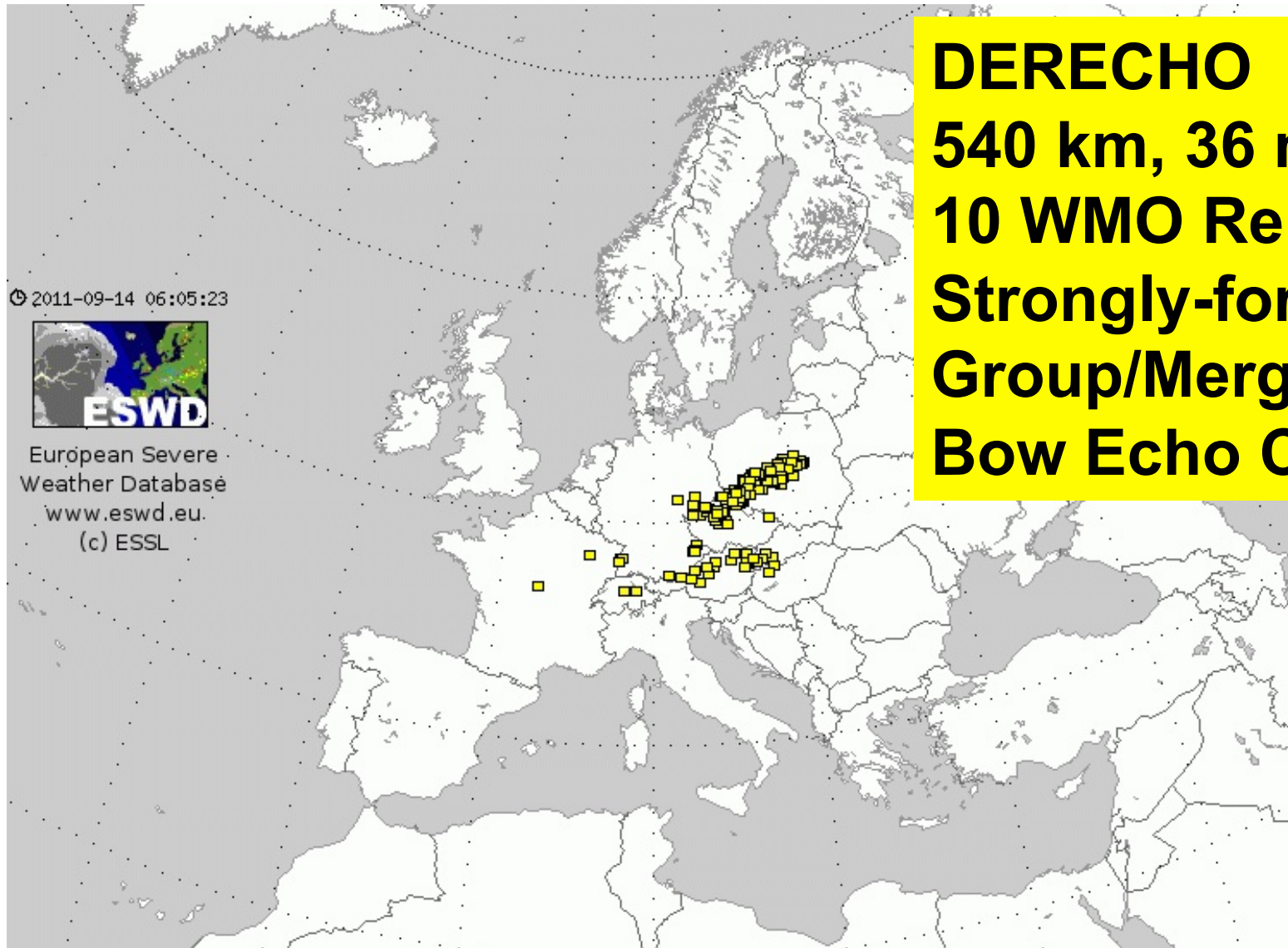
2011-09-14 06:04:55



European Severe  
Weather Database  
[www.eswd.eu](http://www.eswd.eu)  
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2009/07/23

\*\*\* 7 FATAL, 43 INJ \*\*\*



**DERECHO**  
**540 km, 36 m/s**  
**10 WMO Reports**  
**Strongly-forced SW**  
**Group/Merger**  
**Bow Echo Complex**

2011-09-14 06:05:23

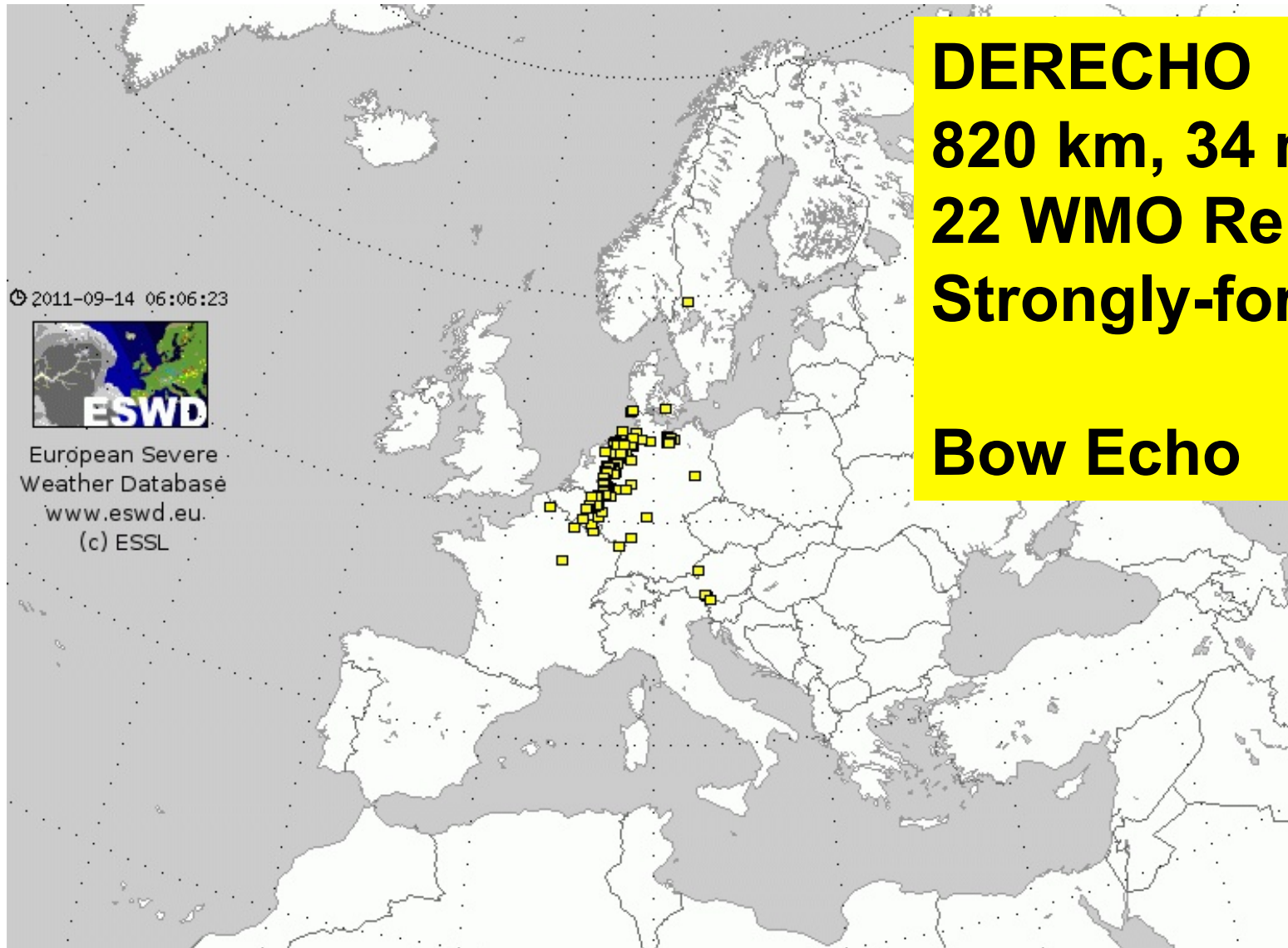


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Weather Database  
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2010/07/12

\*\*\* 2 FATAL, 3 INJ \*\*\*

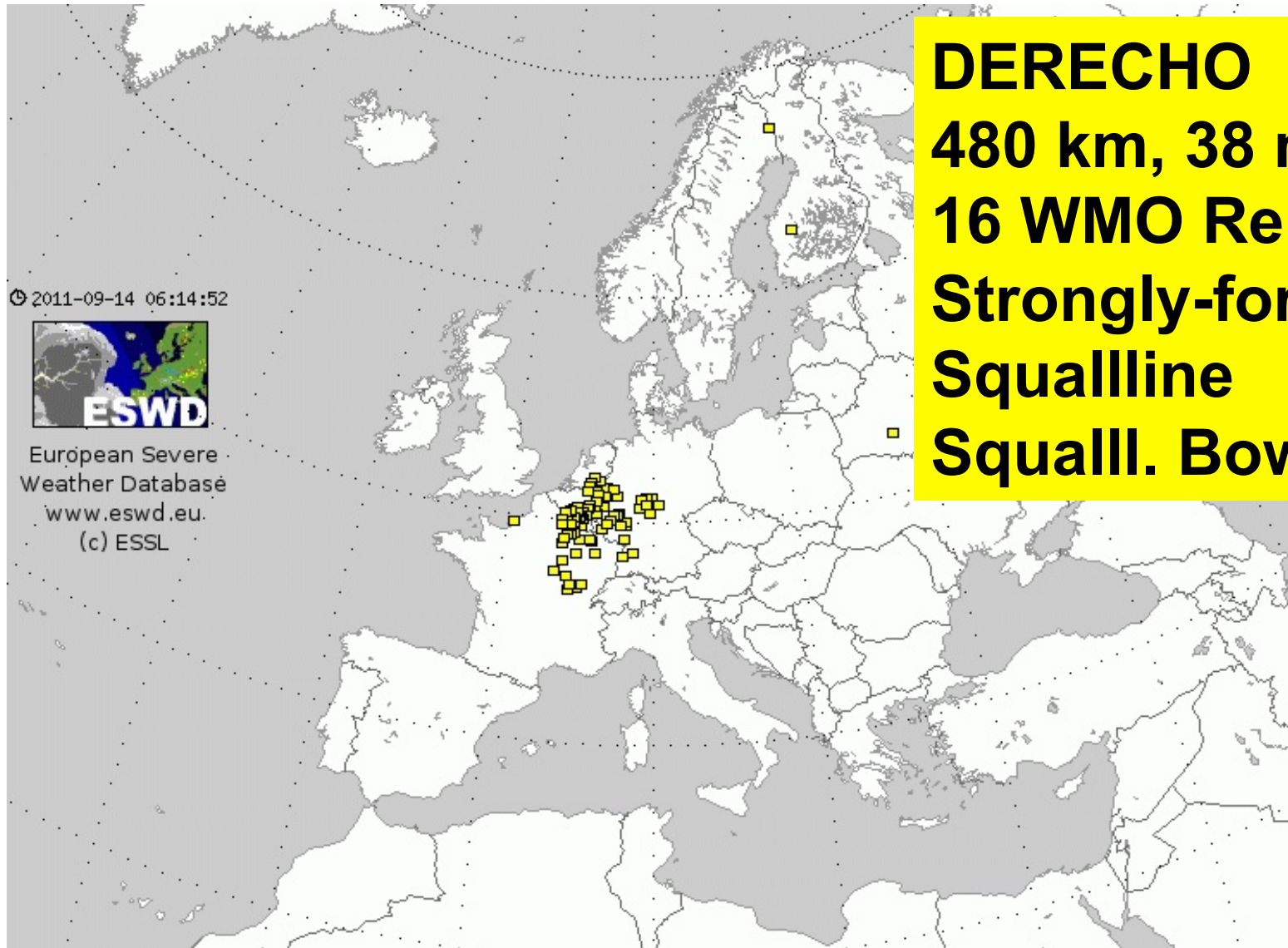


**DERECHO**  
**820 km, 34 m/s**  
**22 WMO Reports**  
**Strongly-forced SW**

**Bow Echo**

2010/07/14

**\*\*\* 2 FATAL, 24 INJ \*\*\***



2011/08/18

\*\*\* 4 FATAL, 40 INJ \*\*\*



**10 new Derechoes, Average path 730 km**

**Possibly 7 further events**

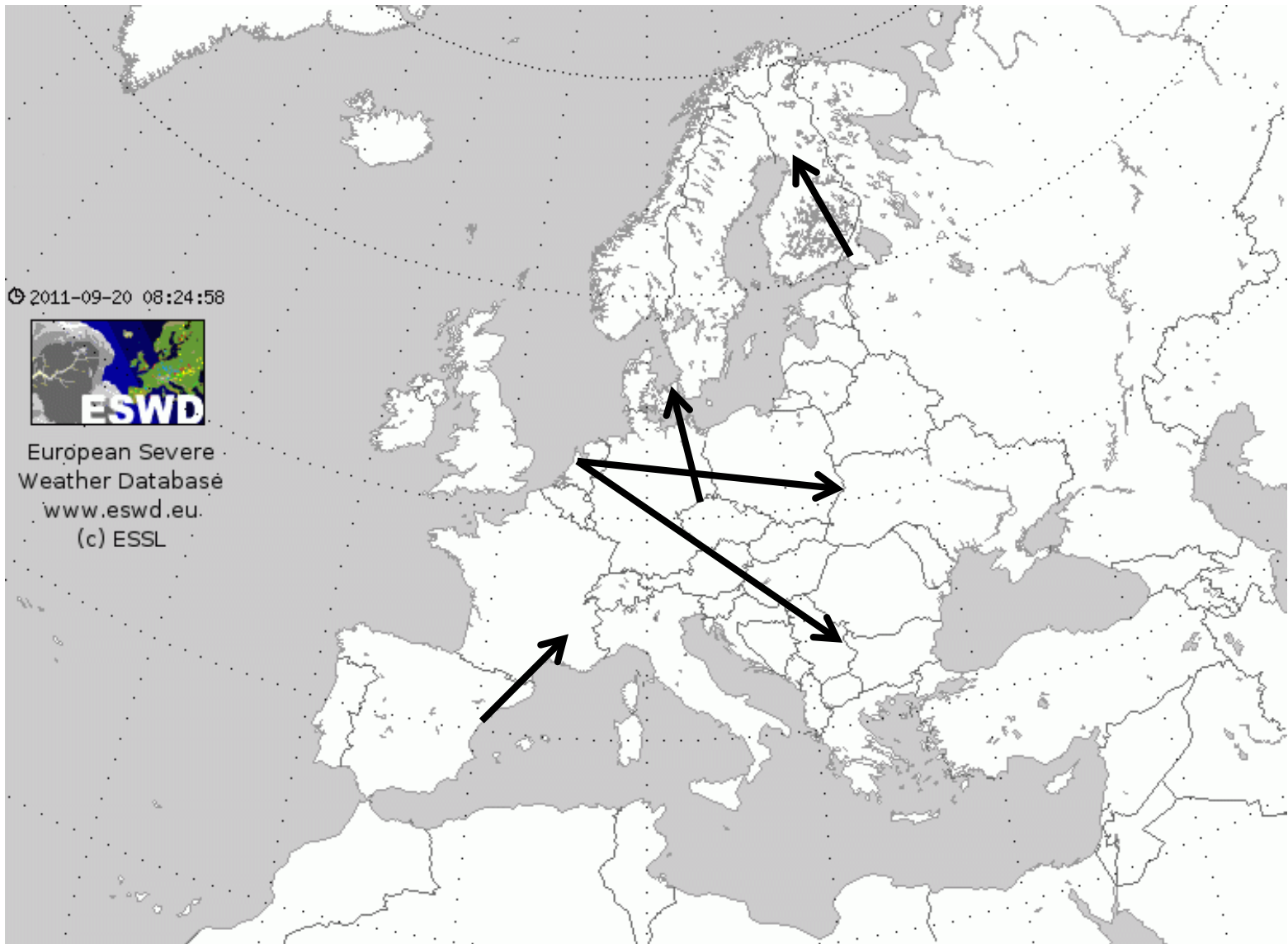
**106 Fatal, 200 INJ**

**10 new Derechoes, Average path 730 km  
Possibly 7 further events**

**And a lot of cases left to analyse...**

**1989/08/28** **1991/06/27**  
**1990/08/20** **1991/04/16** **1992/04/15**  
**1990/09/14** **1992/05/10**  
**1992/05/11**  
**1992/07/21**  
**1993/05/21** **1992/08/21** **1992/08/10**  
**1993/07/25**  
**1993/07/30** **1994/08/14**  
**1994/04/09** **1994/07/04** **1995/06/08**  
**1994/06/02** **1995/07/22**  
**1996/05/17**  
**1996/07/05**

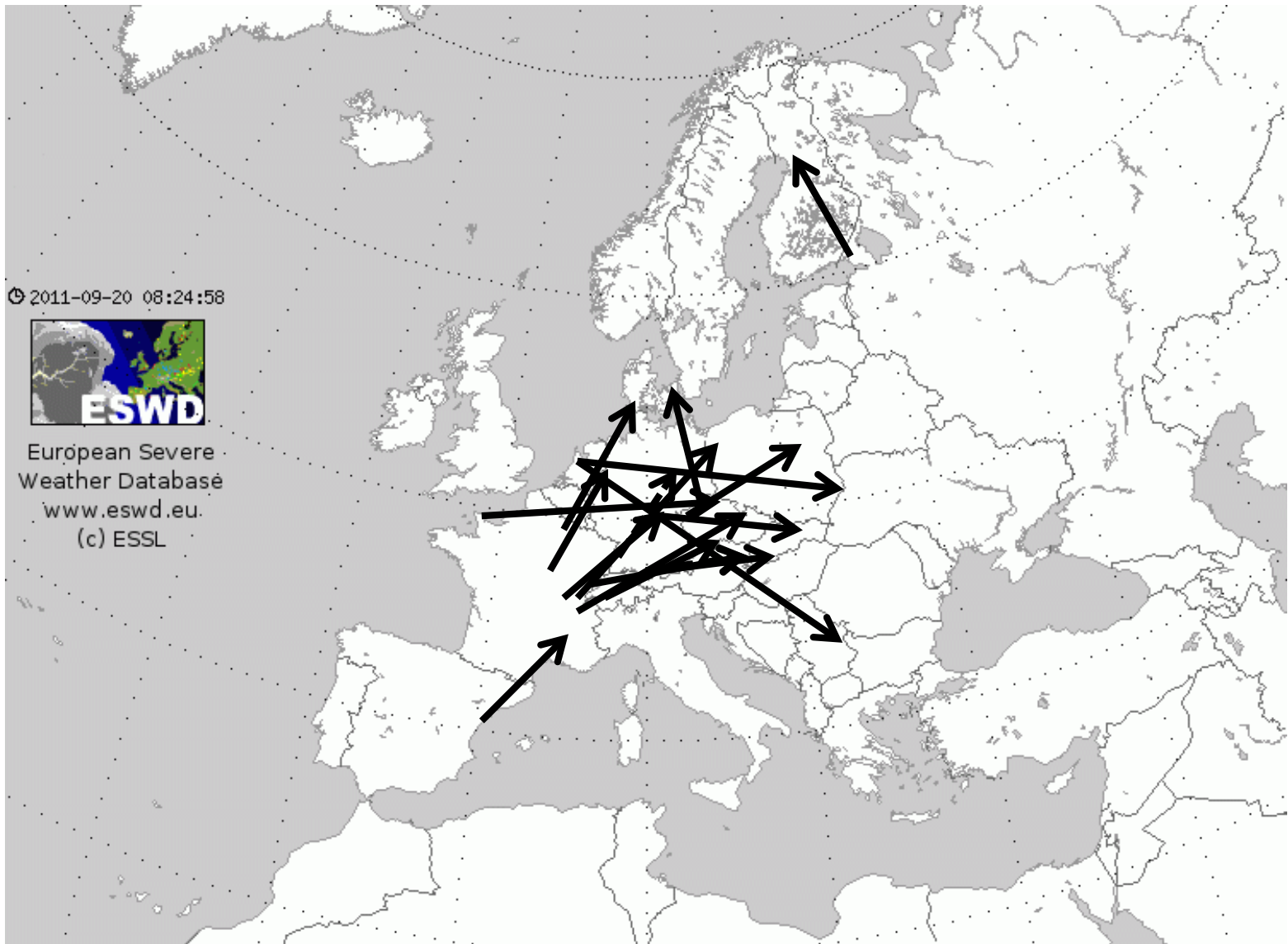




2011-09-20 08:24:58



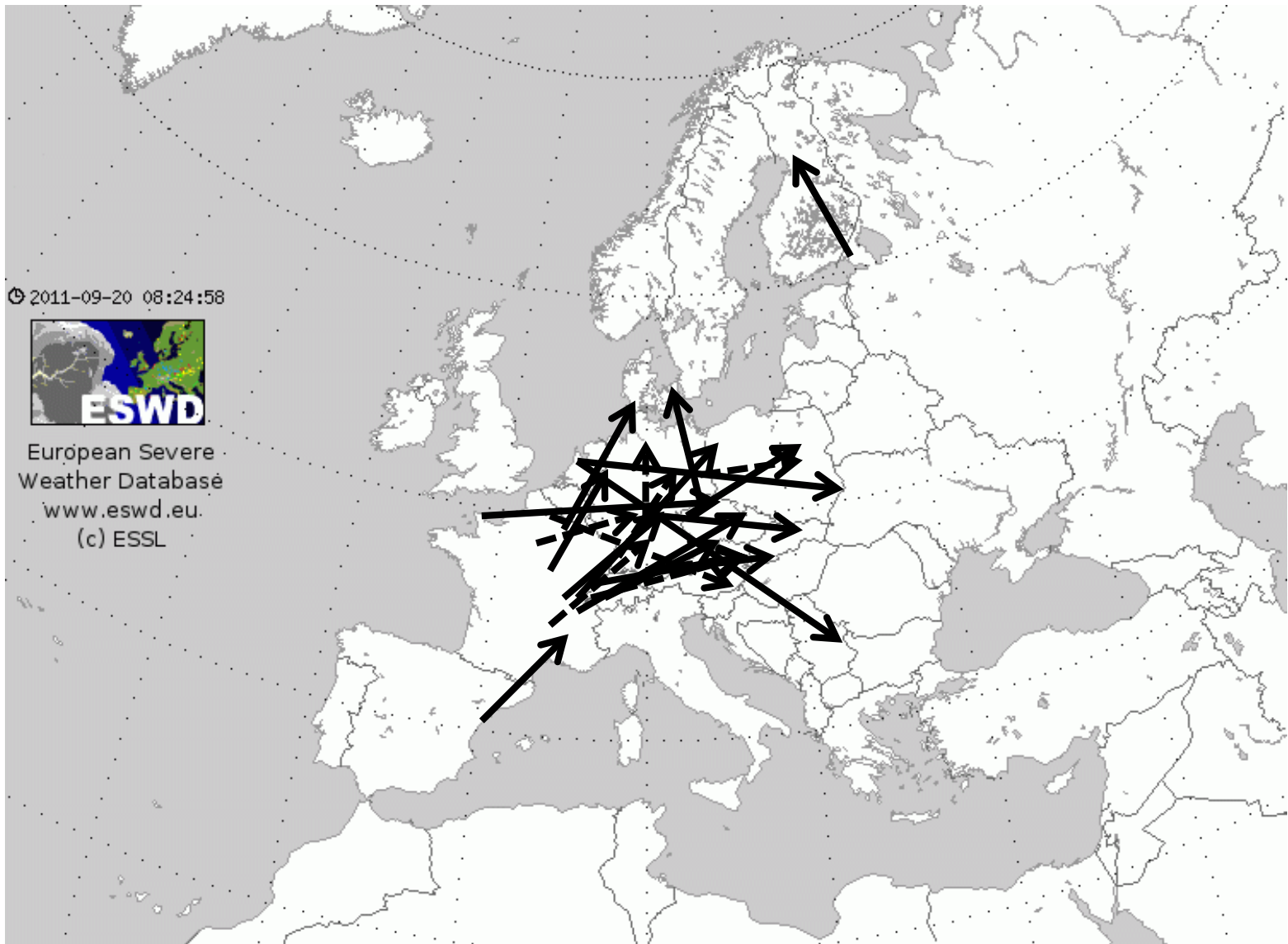
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**Derechoes in Europe?**

**I need your help!**

**Gatzen@estofex.org**

