

# The Bracknell Storm - 7 May 2000

This was a localised storm that crossed southern Bracknell (Berkshire) and caused some flooding.

Although the first thunder was heard at around 7 p.m. (BST) most of the precipitation from the storm fell between 8 p.m. and 9.15 p.m. (BST). There were large hailstones up to 1.5 cm in diameter (some had a flattened, smarty shape). The lightning was mostly cloud to cloud with some intense cloud-to-ground strikes.

In the subsequent sections all times are given as UTC or Z which are 1 hour behind BST (British Summer Time).

At Beaufort Park, Bracknell **65 mm fell in the space of about an hour** and **hailstones in excess of 1 cm diameter** were measured. The 1961-90 average for the entire month is only 56 mm and this comes after the wettest April on record when Bracknell had over 3 times its normal rainfall amount.

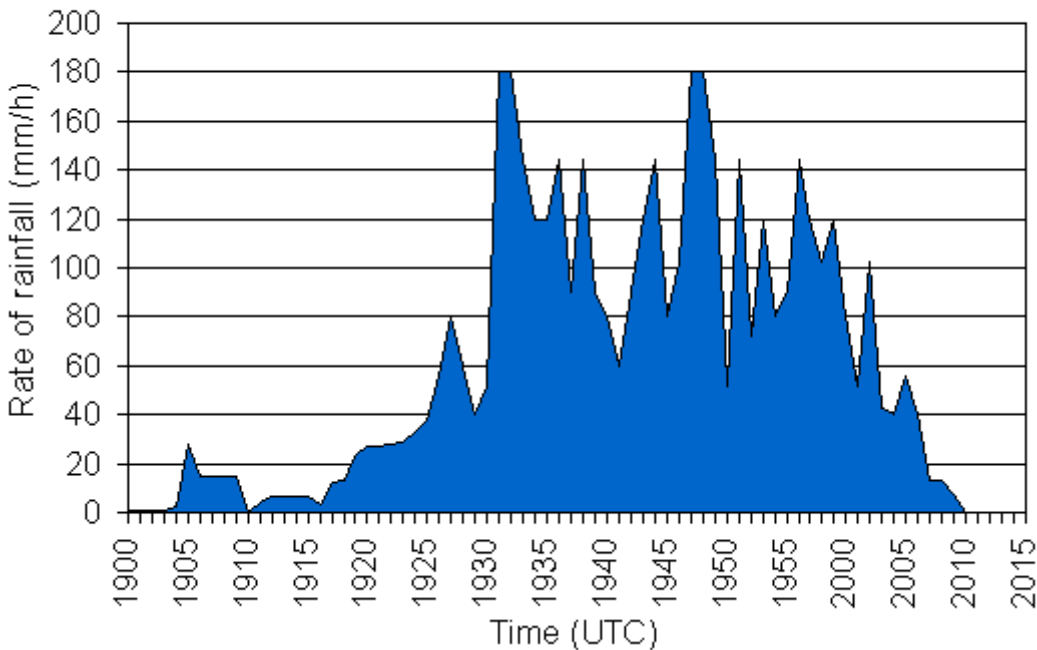
The table below gives return periods for the event and shows that the **storm was a 1 in 112 year event**.

**Hour ending (UTC) Precipitation (mm) Return period (years)**

Hour ending (UTC)	Precipitation (mm)	Return period (years)
1900	0.2	-
2000	39.8	38
2100	25.0	9
2 hour total	64.8	112

The daily total (0900-0900 UTC) was 65.8 mm and was the second wettest day since records began in 1962 (see below). 70.8 mm fell on 20 September 1980. The chart below shows minute-by-minute rainfall rate in millimetres per hour and indicates a peak of 180 mm/h. These data were recorded using a tipping-bucket raingauge (TBR).

Minute by minute rainfall rate from the TBR at Beaufort Park, Bracknell 7 May 2000

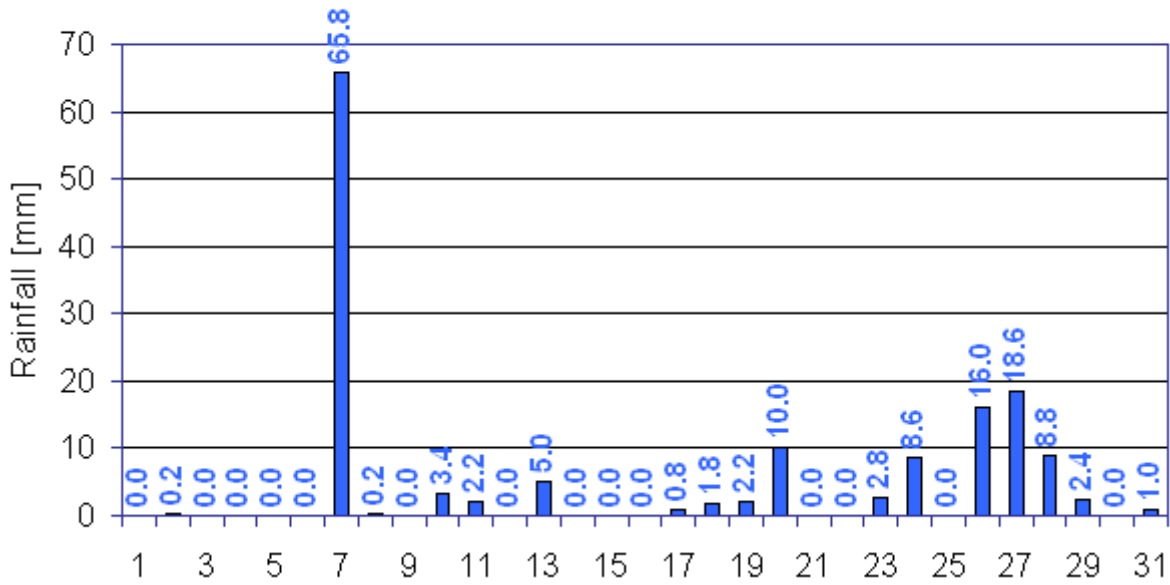


**Top five wettest days in Bracknell | Top five wettest Mays in Bracknell**

1 20 Sep 1980	70.8 mm	1 2000	149.8 mm
2 7 May 2000	65.8 mm	2 1979	117.6 mm

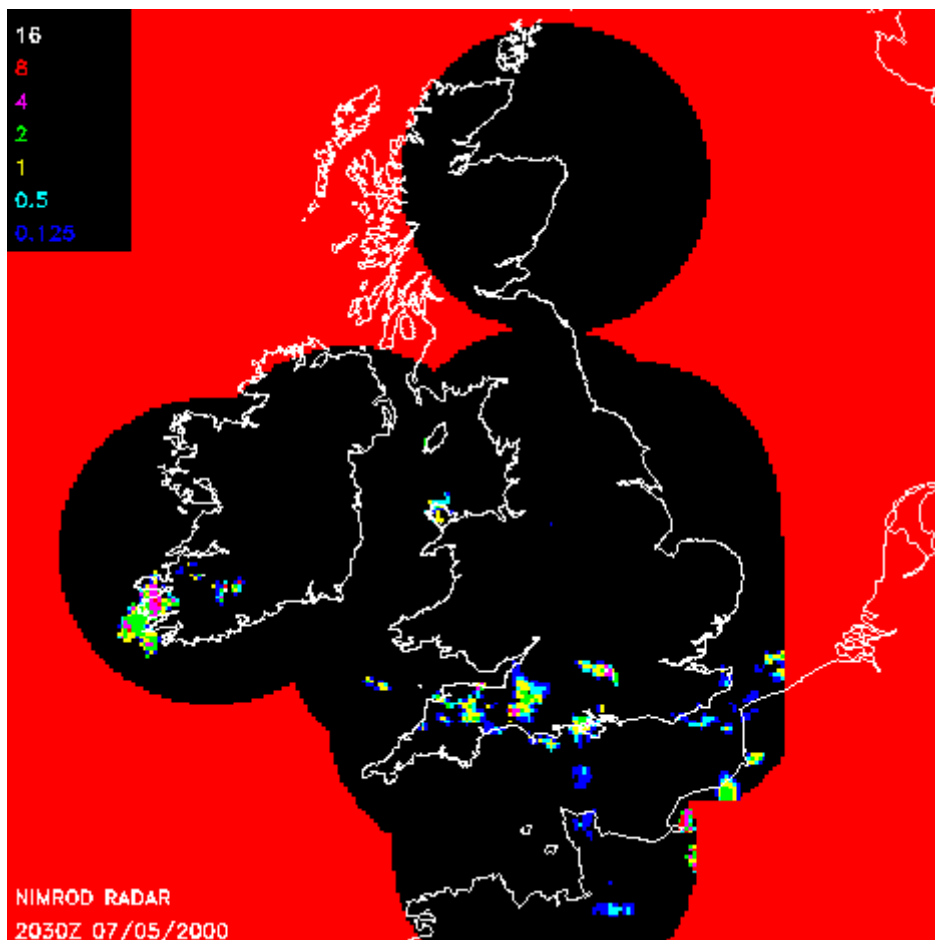
3	10 Jun 1971	59.1 mm	3	1967	116.0 mm
4	15 Sep 1968	55.2 mm	4	1984	107.0 mm
5	13 Sep 1975	48.0 mm	5	1978	90.3 mm

Daily observations from Beaufort Park, Bracknell  
May 2000

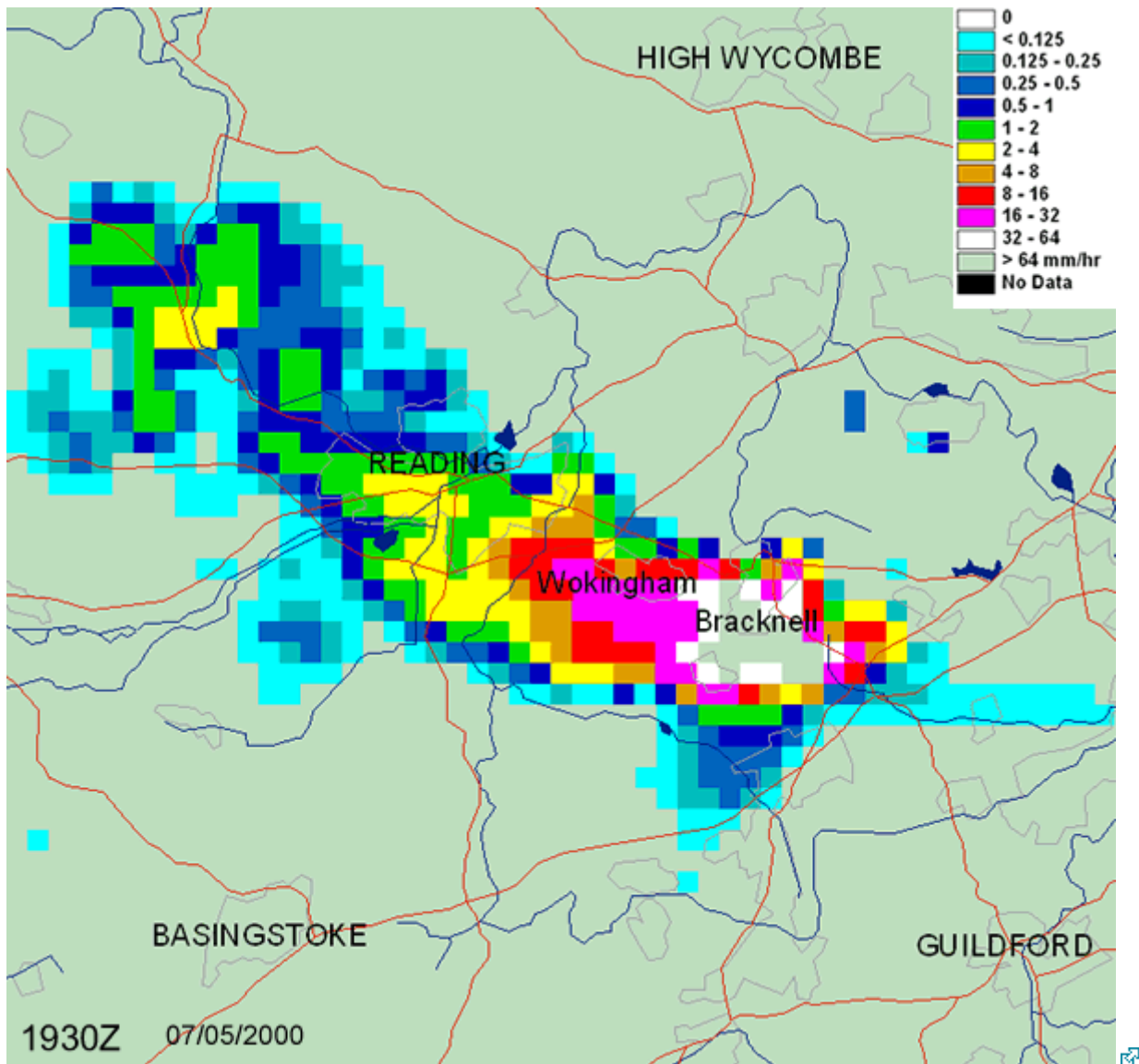


## Radar Imagery

UK image



## Bracknell area image (1 km squares)

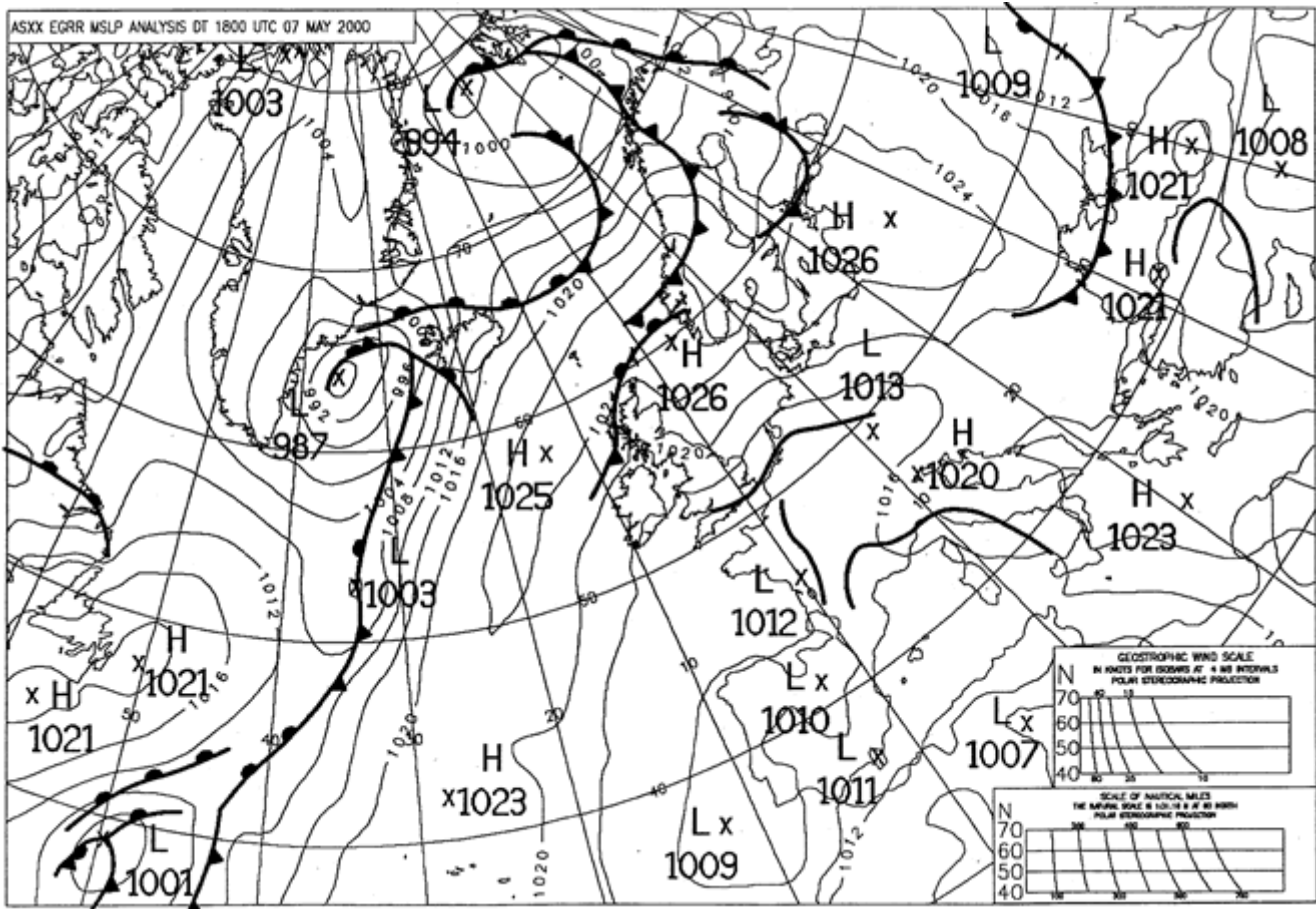


Please note: The greatest rainfall rate depicted on the Bracknell area image is >64 mm/hr; a limitation of the encoding and data transfer method.

The empirical relationship between radar reflectivity and rainfall rate is fixed whereas in reality this is highly dependent on precipitation type and is very different for rain and hail.

# Synoptic Chart

For the 7 May 2000 1800 (UTC).

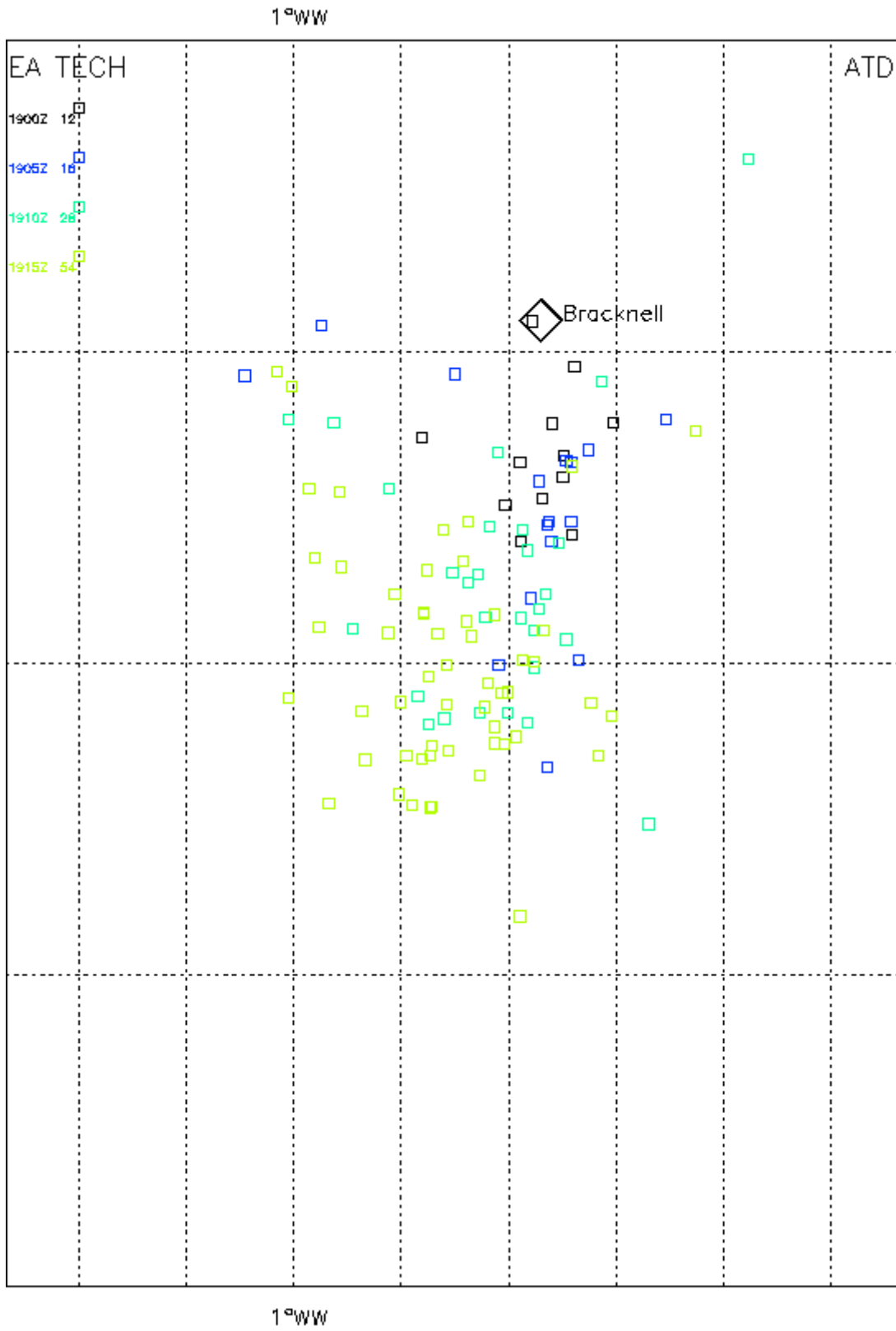


## Lightning reports

The images below show lightning activity detected by EA (Electricity Association) Technology. EA Technology use a magnetic direction finding system operating at ~1 kHz. The accuracy can vary depending on how many sensors pick up each flash, but is usually less than 2 km. The images show reports for the period 1900-2000 UTC, colour coded at five-minute intervals. The area shown is 1.2° W to 0.5° W and 51.1° N to 51.5° N, the gridlines are 0.1° apart. The peak of the activity seems to be at 1930 when 72 reports were observed.

# 1900-1915 (UTC)

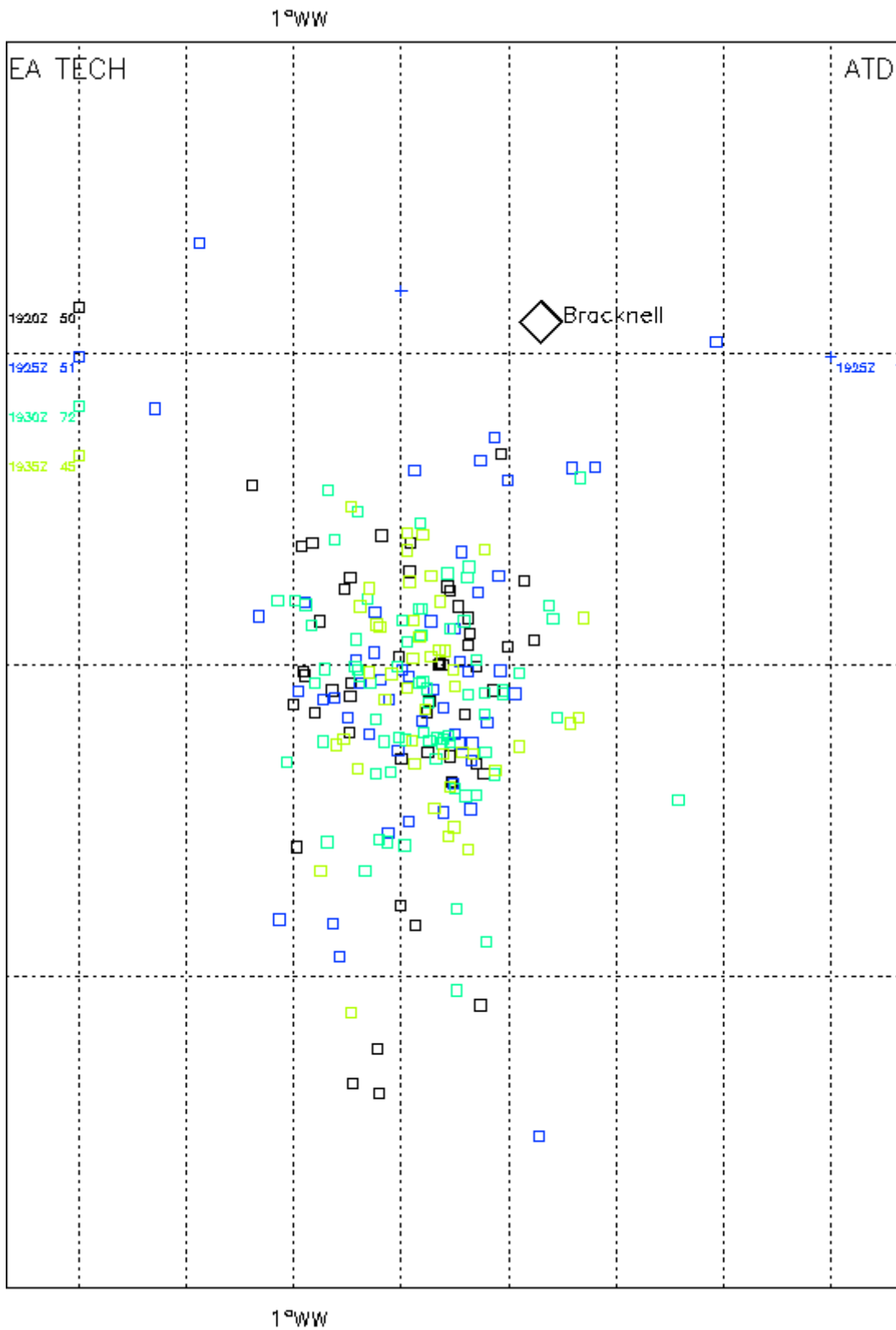
EA TECHNOLOGY AND ATD DATA FROM 1900Z ON 07/05/2000



In this 20 minute period, there were 110 EA Tech reports in this region, and 207 ATD fixes worldwide, of which 0 were in this region.

# 1920-1935 (UTC)

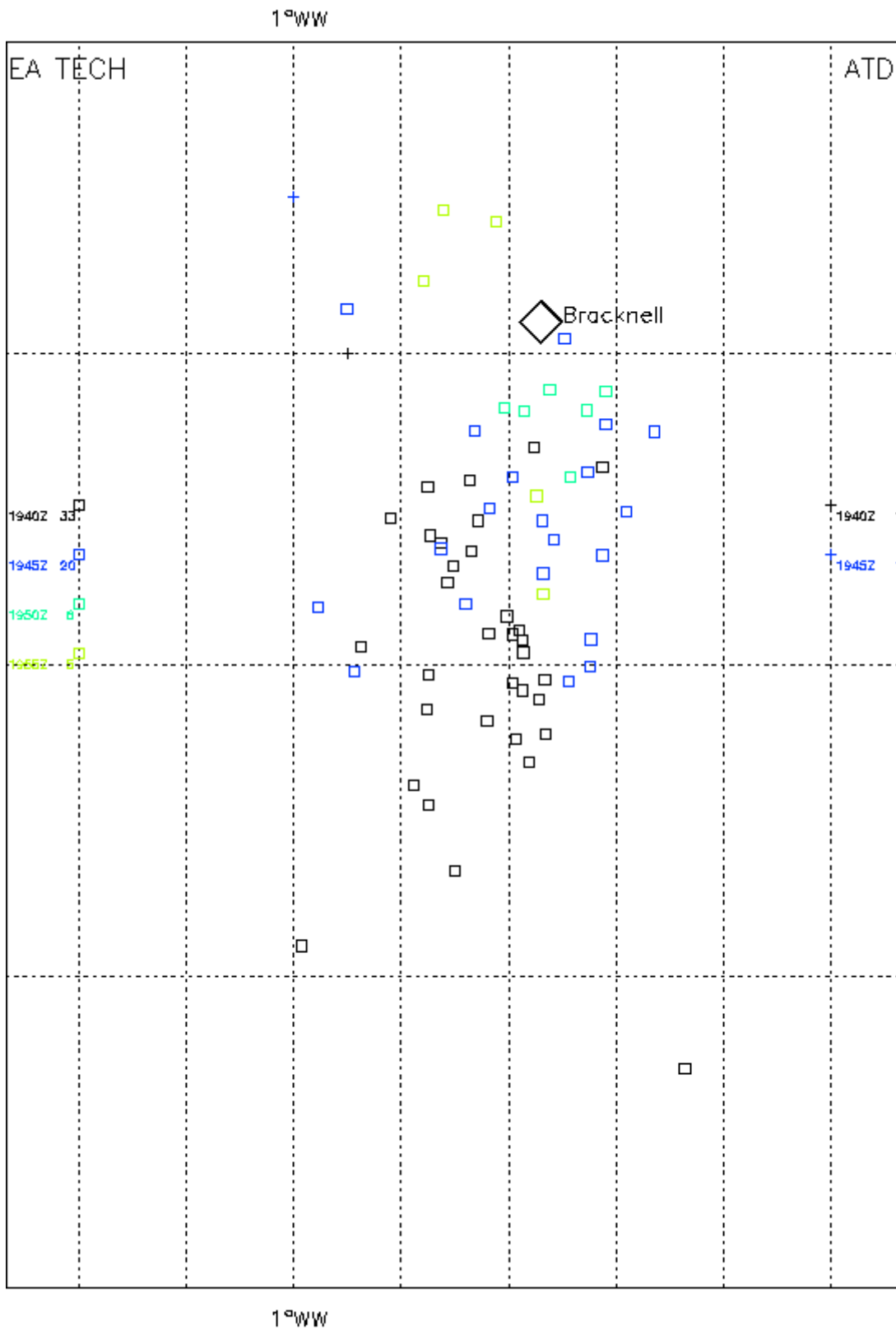
EA TECHNOLOGY AND ATD DATA FROM 1920Z ON 07/05/2000



In this 20 minute period, there were 218 EA Tech reports in this region, and 318 ATD fixes worldwide, of which 1 was in this region.

# 1940-1955 (UTC)

EA TECHNOLOGY AND ATD DATA FROM 1940Z ON 07/05/2000



In this 20 minute period, there were 64 EA Tech reports in this region, and 434 ATD fixes worldwide, of which 2 were in this region.

Last updated: 1 November 2012

