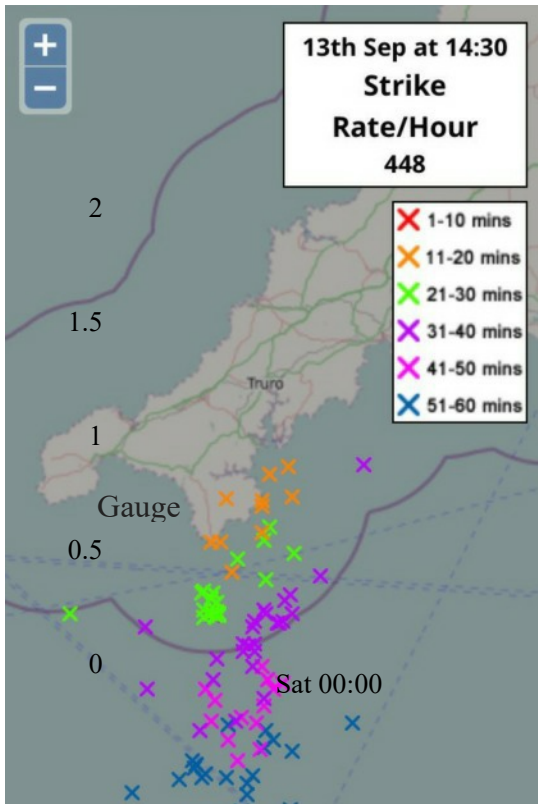


# Cornwall - Severe Thunderstorms and Flooding 13th/ 14th September

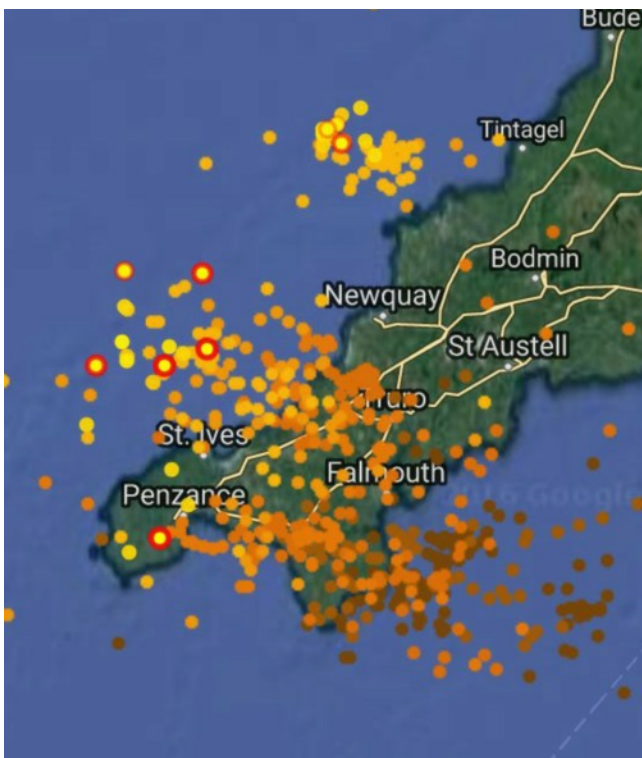
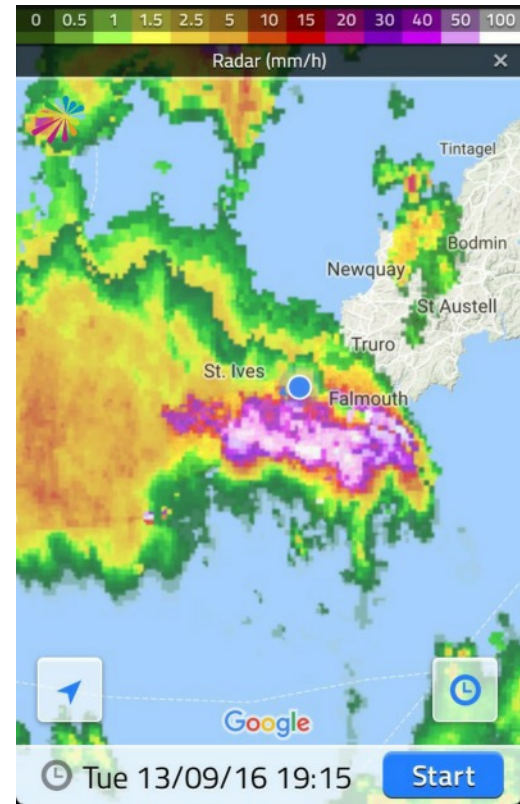


The 13<sup>th</sup> was a very dull day in Penzance. The afternoon was, unlike over most of England, the coolest for several weeks. The temperature near 17C much of the time. In fact the highest temperature on 13<sup>th</sup> was around 20C just after midnight.

During the afternoon a brief thunderstorm moved up from the south, reaching Penzance around 15:30. There were brief bursts of heavy rain, though much more just to the east, especially near Helston. (See 14:30 lightning radar on the left). The storm caused flooding around Truro.

In Penzance, and much of Cornwall, the 2<sup>nd</sup> storm was far more severe. I'd been tracking it from 16:00. The 1st thunder was about 18:00, and over the 30 minutes 19:00 to 19:30 it was virtually continuous. The rain really set in around 19:00 was briefly torrential. (See 19:15 Radar image on the right). Around 15mm in the 40 minutes 19:00-19:40.

The Falmouth Redruth area was severely hit by this storm. 30mm in approx 20 minutes was recorded at Redruth & near Portreath. This caused some severe flooding in Falmouth, Camborne & Redruth, and in the narrow valleys running towards the north Cornish coast. The photographs below are of Camborne railway station and Falmouth.



After those 2 storms came the third one, crossing Cornwall between 03:00 & 05:00 (See the 04:00 lightning map on the left). It was this storm which gave the most lightning. The thunder was virtually continuous for some time.

Whilst there was some further flooding, and some lightning damage, there appears to have been no repeat of the exceptionally intense rain which affected some localities the previous evening. Lightning hit a terrace of four houses in Crelly, near Helston at about 04:00, with one person requiring medical attention for smoke inhalation.

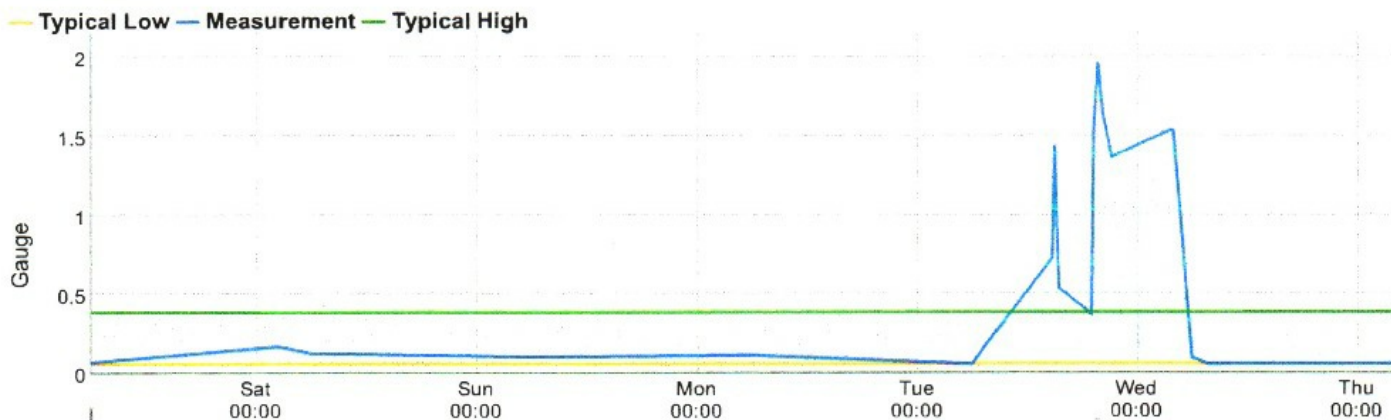
A number of schools were closed the following day. A spokesperson for Cornwall Fire and Rescue Service said: "The Fire Service have been extremely busy dealing with numerous 999 calls in the west of the County.

Total rainfall in Penzance for the total event was 25.6mm, of which approx 15mm fell in 40mins commencing 19:00 on 13<sup>th</sup>. Penzance avoided the really intense rain and flooding.

I visited the Cornish Gold site, between Portreath & Redruth on Thursday 16<sup>th</sup>, and was surprised to see the extent of the damage done by a stream which is normally a trickle. The stream rose from being a trickle, to a height not seen since the complex was built several decades ago, in < 20 minutes. This gave no time to move stock & belongings. This ties in with the reports of >30mm of rain falling just upstream in a similar time. The graph below is from the EA for the Portreath stream. Anything above the green line is unusual. The affect of the 3 distinct thunderstorms on the river level is striking. Why there was no weather warning at any time is a mystery. The storms were all evident long before they hit Cornwall.



Past Week



**Flood Damage at "Cornwall Gold" near Portreath**