**St. Jude’s day storm** (Cyclone Christian)
28 October 2013

* On Monday 28 October 2013, a severe storm travelled across southern England, an area of the UK that does not normally experience 70-80mph winds, which increased the vulnerability of affected areas to impacts.
* Gusts of between 60 and 90mph were measured along the southern coast and in the south-east. Gusts of 99mph were recorded on the Isle of Wight.
* Over 600,000 homes lost power, and heavy rain caused some localised flooding with the highest rainfall of 53.6 mm recorded in Cardiff.
* There was widespread transport disruption to road and rail with cancelled or delayed trains and flights.

**Impacts / consequences**

**Physical**

* **Trees felled**

Trees were still in full leaf and therefore vulnerable to the storm-force winds. Several thousand trees were lost, though far fewer than if the ground had been saturated (as it was in the 1987 storm in which over 15 million trees were lost).

* **Flooding**

There were 147 flood alerts, and 17 flood warnings.

**Social / Human**

* **Travel disruption**

Falling trees were the main cause of disruption. Some train companies cancelled all services, roads were closed, Port of Dover closed, and over 130 flights were cancelled.

* **Housing damage**

Roofs, cladding and glazing was damaged on buildings

* **Deaths**

4 people were killed as a result of falling trees.

* **Insurance cost**

The cost to insurers was between £300-500 million.

**Environmental**

* **Tree damage**

Hundreds of thousands of trees were damaged in the storm.

**Responses**

**Short-term**

* **Advance forecasting**

The Met Office forecast gave at least 5 days warning and enabled contingency planners, emergency responders and the general public to prepare for and limit the impacts of the storm.

Met Office warnings were issued on the following dates:

* + **Thursday 24 October**

Warnings for the risk of potentially damaging winds across southern parts of England five days ahead of the storm - the earliest possible warning on our five-day National Severe Weather Warning service.

* + **Friday 25 October**

The amber warning area was extended across southern England.

* + **Saturday 26 and Sunday 27 October**

The areas we identified as most at risk changed very little in the run-up to the storm on Monday.

* + **Monday 28 October**

The storm arrived in line with our forecasts in terms of timing, wind speeds (we talked of 60 to 70 mph inland, and potential for over 80 mph), and the areas most likely to be affected by the strongest winds.

Met Office advisors took part in 90 teleconferences with local resilience groups around the UK to keep them up to date with the latest information so they could plan for likely impacts.

* **Media** **warnings**
* News releases shared across all platforms.
* Graphic explaining what to do during severe wind.
* Regular updates via Twitter on the latest storm track.
* Sharing videos explaining likely track of storm with Yahoo, BBC, Sky News, Channel 5, Mirror Online, Daily Mail Online and Express.
* Met Office twitter and YouTube sites had a 10 percent increase in followers and subscribers over a three-day period, while our videos had over half a million views. Many more people visited our website with a peak of 2,510,603 visits and 1,768,424 new visitors on 27 October.

**Behaviour**
People changed travel plans and worked from home to avoid travelling during the storm.

* **Transport**

Local councils cleared drains of leaves the day before to improve drainage. Staff were on standby throughout the night and clearing up throughout the morning of the storm which reduced disruption.

* Train services were cancelled to avoid the danger of trees on the lines. Buses were able to get passengers to their destinations.

**Long-term**

* **Supercomputer**
The Met Office periodically upgrades the super-computer it uses to produce forecasts. This more complex models of the weather that use more data to be run, which in turn produce better forecasts. For example, a 4-day forecast today is more accurate than a 1-day forecast in 1980.
* **Reflection**Once the storm was over, organisations that co-operated in preparing for and responding to the storm go over what happened to see if anything can be improved for future events
* **Improved infrastructure resilience**Planning law is used to ensure new buildings are not susceptible to extreme weather events and do not contribute to flooding. New infrastructure is designed to be resilient and capable of surviving both todays extreme weather and that forecast for the future as the climate changes.

Sources: <https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/weather/learn-about/uk-past-events/interesting/2013/autumn-storm-october-2013---met-office.pdf>; <https://rgsweather.com/2013/10/29/st-jude-causes-and-impacts-of-the-october-storm-27-28-2013/>

**Internet resources**

**Information – weather**

* **Met Office - A powerful autumn storm brought damaging winds across much of southern England on 28 October 2013**.<http://www.metoffice.gov.uk/climate/uk/interesting/2013-octwind>

**Information – impacts and responses**

* **Reigate Grammar School - The birth and impact of the St Jude storm: October 2013**Thorough, in-depth information appropriate for secondary pupils

<https://rgsweather.com/2013/10/29/st-jude-causes-and-impacts-of-the-october-storm-27-28-2013/>

* **Four die as storm hits southern UK – BBC News**

<http://www.bbc.co.uk/news/uk-24699748>

**St. Jude storm**

* <https://en.wikipedia.org/wiki/St._Jude_storm>

**Images**

* **Daily Telegraph - St Jude's storm in pictures: UK hit by hurricane-strength winds** <http://www.telegraph.co.uk/news/picturegalleries/uknews/10408407/St-Judes-storm-in-pictures-UK-hit-by-hurricane-strength-winds.html>
* **The Guardian - St Jude’s storm hits Britain – in pictures**

<https://www.theguardian.com/uk-news/gallery/2013/oct/28/st-judes-storm-hits-britain-in-pictures>

**Video**

* **Animated satellite imagery of the storm – Met Office**

<http://www.metoffice.gov.uk/climate/uk/interesting/2013-octwind>

* **How storm went from 60 to 99mph – BBC Weather**

<https://www.youtube.com/watch?v=tDsIvvrqH_o>

* **BBC News St Jude’s storm whips across northern Europe – BBC News**

<https://www.youtube.com/watch?v=padP0eBbmjE>

* **St Jude storm – BBC Weather**

<https://www.youtube.com/watch?v=iSqJ9XicU6g&t=1s>

* **St Jude Storm Alerts as UK Set For 'Hurricane 28 October 2013 – Sky News**

<https://www.youtube.com/watch?v=LZSUICZDx7w>

* **St Jude Day's storm wreaks havoc across southern England – The Telegraph**

<https://www.youtube.com/watch?v=06x9HXMlclo>

* **How To... Decode A Weather Forecast - The Great British Weather - BBC Weather**

<https://www.youtube.com/watch?v=lITCF3UPVu4>

**Media**

* **St Jude's Day storm brings hurricane-strength winds to UK – The Telegraph**

<http://www.telegraph.co.uk/news/weather/10408190/St-Judes-Day-storm-brings-hurricane-strength-winds-to-UK.html>

* **Was St Jude's storm really that bad? – The Guardian**

<http://www.telegraph.co.uk/news/weather/10409362/Was-St-Judes-storm-really-that-bad.html>

* **UK death toll mounts as St Jude storm leaves trail of destruction – The Guardian**

<https://www.theguardian.com/uk-news/2013/oct/28/britain-storm-winds-death-flooding>

* **10 key moments of the UK winter storms – BBC News**

<http://www.bbc.co.uk/news/uk-26170904>

**Government response**

* **Information and advice from government departments and agencies about the storm that has been causing disruption to parts of the UK.**

<https://www.gov.uk/government/news/october-2013-storm-uk-government-response>