

STORM EVENT

- 26th January 1917–

Destruction of the village of Hallsands in South Devon



Severity Ranking		
		4
Social	Loss of life	*
	Residential property	29 homes destroyed
	Evacuation & Rescue	The 128 inhabitants of Hallsands retreated from the village
Economic	Cost	*
	<u>Ports</u>	*
	Transport	*
	<u>Energy</u>	*
	Public services	*
	Water & wastewater	*
	<u>Livestock</u>	*
	Agricultural land	*
Environmental	Coastal erosion	Set-back of coast as the village Hallsands slid into the sea. Lowering of foreshore had been a cause and consequence of the event
	Natural environment	*
	Cultural heritage	Loss of livelihoods and belongings of the entire village
	Coastal defences	Shingle beach eroded (in years building up to the event); sea wall destroyed

^{*}No known sources of information available

Source

The storm formed over the coast of southwest Spain during the early hours of 26th January 1917, and moved northwards towards the UK. While centred over the Atlantic coast of France the central pressure reduced to around 1000 mbar on 27th January. The storm, in conjunction with the high pressure system over Norway and the North Sea, resulted in winds of a predominantly eastward orientation over the English Channel.

We are unaware of any information regarding the sea level conditions during this event. Within the national tide gauge network, only the Newlyn tide gauge was operational at the time, but this has missing data for this period. The event occurred 1 day after peak spring tides.

We are unaware of any sources describing the wave conditions during this event, although there are reports of considerably sized waves.

Pathway

We are unaware of any sources describing the specific flood pathways relevant for this event.

Receptor & Consequence

On 26th January 1917, large waves crashed through sea walls at Hallsands, demolishing buildings and ultimately leading to the loss of the entire village (BBC, 2006). Around 29 properties were demolished by the waves, along with the livelihoods and belongings of the whole village. We are unaware of any further sources describing this event, although it is mentioned in a compilation of historical floods presented by Zong and Tooley (2006).

Today, Hallsands sits higher above the cliff face overlooking the remains of buildings in its former position.

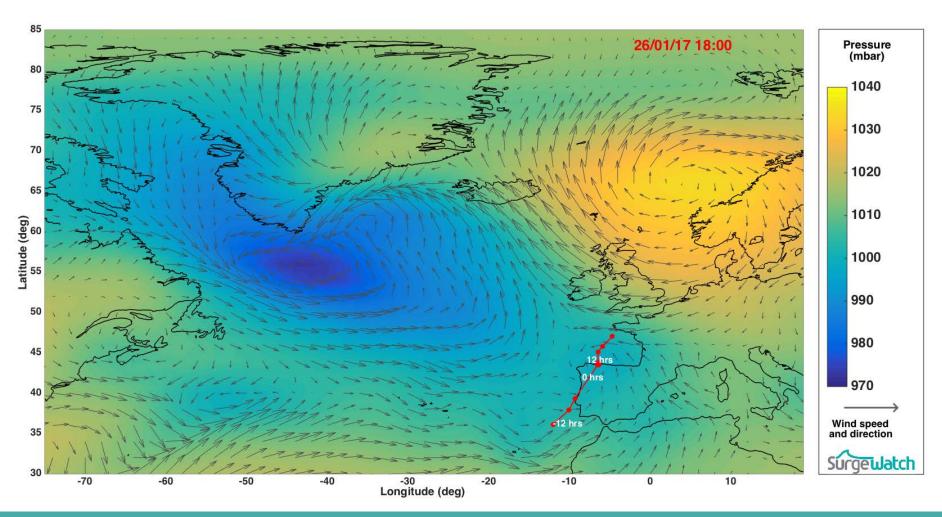


Figure 1: Meteorological conditions at time of maximum water level overlaid by the storm track

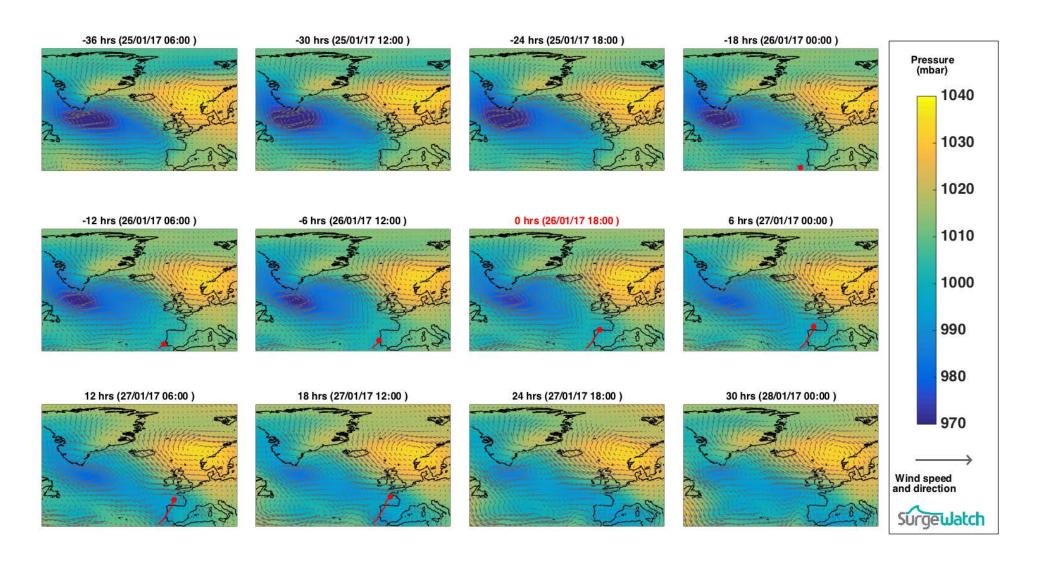


Figure 2: Meteorological conditions during event

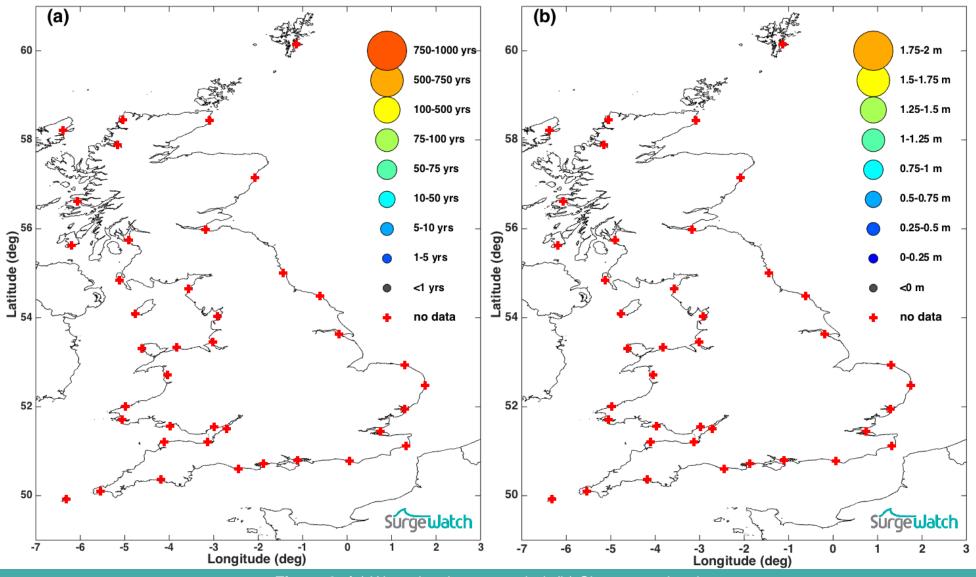


Figure 3: (a) Water level return period; (b) Skew surge levels

References

- BBC, 2006. How Hallsands was lost to the sea. *BBC News*. Available at: http://www.bbc.co.uk/devon/content/articles/2006/11/03/lost_hallsands_feature.shtml [Accessed September 22, 2015].
- Zong, Y. & Tooley, M.J., 2003. A Historical Record of Coastal Floods in Britain: Frequencies and Associated Storm Tracks. *Natural Hazards*, 29(1), pp.13–36. Available at: http://link.springer.com/article/10.1023/A%3A1022942801531 [Accessed March 5, 2015].

Additional sources of information

May, V.J., and Hansom, J.D., 2003. Coastal Geomorphology of Great Britain, Geological Conservation Review Series, No. 28. Joint Nature Conservation Committee, Peterborough, 754 pp.