

Severe storm reports of the 17th century: Examples from the UK and France

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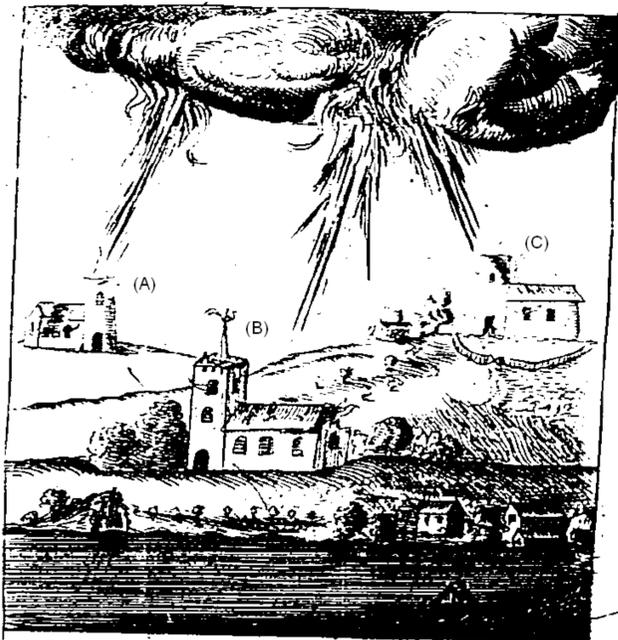
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Introduction

- Selected severe storms of the 17th century
- Storm damage descriptions
- How did contemporaries perceive severe storms?

1640: Anthony (Cornwall)

- [Carew and Bache](#) (1640) describe a severe storm which raged over Anthony (Cornwall) on May 24, 1640
- A “fiery ball” appeared in the church of Anthony during the holy mass which about 200 people attended. People were hit by the ball lightning and got burned
- The ball lightning broke into pieces with a horrible noise (p. 8f)
- [Carew and Bache](#) (1640, p. 9) draw a parallel to Widecombe in the Moor (Devonshire), where a ball lightning was described in 1638 (see [Pfeifer & Pfeifer, 2011](#))
- [Vicars](#) (1643, p. 49) mentions the storm of 1640: “thunder and lightning, and most violent winds” laid waste to three churches in the county of Kent (p. 40):



1672: Bedford

- A severe storm began with “a great darkness” and was “accompanied with extraordinary claps of thunder and lightning” ([Mithnal et al, 1672, p. 8](#)) in Bedford on August 19 in 1672 and lasted for about half an hour p. 3f)
- Impacts on the vegetation:
 - A “great tree” was carried through the air “as if it had been a bundle of feathers” (p. 4).
 - A large apricot tree was plucked up by the roots: it was taken from a “wall to which it was nailed, and [the tree was] carried [...] almost a quarter of a mile” (p. 4)
 - Several great trees were “plucked up [...] by the roots” (p. 4)
 - Many branches of trees were broken and blown away (p. 5)
- Damages on buildings
 - A stone wall was “blown down, and [made] such breaches [...] that two cards a breast might go thorow” (p. 7)
 - Many roof tiles were blown down (p. 6). Two houses were destroyed “in an instant” (p. 4). Gates of several inns were thrown off the hinges (p. 4f).
 - The churches of Saint Peter and Saint John were “much damnified” (p. 5)
- The tract discusses the risk of fire being whirled “from under the furnace” to set fire on the roof of the brewery (p. 6). However, people managed to quench the fire speedily with water.
- People did not know where to hide and were aware of the great danger (p. 6). According to the postscript, the storm “did not much harm upon any person” (p. 7).

1680: London, Oxfordshire & Bloise

- Hailstone “rebounded three foot high from the ground” ([Anonymous, p. 4](#)). The hail was followed with a “terrible shower of rain” (p. 4).
- The inhabitants tried to save their sheep, lambs and cattle (p. 4).
- “Huge and frequent” flashes of lightning struck from the sky and burnt down several barns. Houses were also set on fire but could be “quenched without doing any considerable damage” (p. 4).
- In Blois (France) two churches and two houses were damaged (p. 4). The residents ran into their arched cellars and were buried when the houses collapsed, but were “drawn out alive” (p. 5).
- Hailstone were “found as [being] as big as a mans fist” (p. 5). The hail destroyed “glass windows all over the town as if they had been beaten in a mortar” (p. 5). Apart from Blois, eight whole parishes were demolished by the hail.
- No person was harmed, as the contemporaries remained in their houses, as it was night (p. 5).
- London was hit on May 18 by a “very large hail, and extraordinary violent and hasty show[er]s of rain” (p. 6). Some hailstone were found to be as “big as pullets eggs, and some larger”. The shape was mostly round, but also “square and flat with very sharp edges” (p. 7).

Concluding Remarks

- Historical sources provide sparse damage indicators.
- Intensity indicators based on vegetation damages may be adapted, the scale needs to be modified w.r.t. buildings.
- Described coping strategies: extinguishing fire, saving farm animals and finding shelter in cellars

Acknowledgments

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