

# CORRELATION OF THUNDERSTORMS TO HAUNTED HOUSES

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Since the early writings of William Shakespeare, mainstream literature and anecdotal evidence have shown that electrical thunderstorms are frequently associated with haunted houses, ghosts, monsters (including skeletons), and various evil deeds (Disneyland, 1964, et al). These unusual weather phenomena, often referred to as *Satanic convection anomalies*, are very common occurrences around paranormal activity. For many years their impact on weather forecasting and climatology has largely been ignored, and requests to parameterize them into National Weather Service numerical weather prediction models have fallen on deaf ears. A field experiment was recently conducted, however, that yielded the first quantitative insight into a typical satanic weather event.

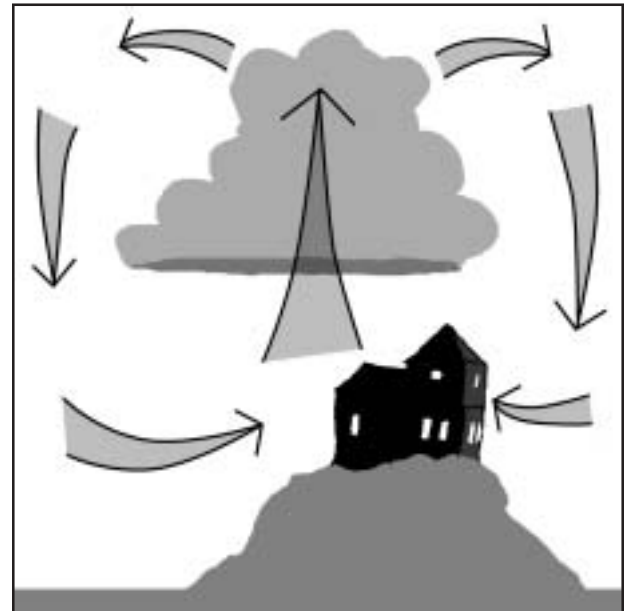
## Background

Satanic convection anomalies have always been associated with large quantities of cold, drafty air in or around a haunted house. This air either remains deathly still or rushes into rooms where ghosts are (Anson, 1977). In recent years, the concept of a small-scale vertical circulation with upward vertical motion at the center (Figure 1) has been widely adopted to account for the rain and thunderstorms that develop in proximity to haunted houses.

The impact of satanic anomalies on American taxpayers is quite significant in light of the National Weather Service's 1988 funding of a \$450 million Doppler radar network across the United States. The Federal government's haphazard implementation of a dense radar network in the Midwest and south central United States with inadequate coverage in locations prone to satanic weather occurrences (Figure 2) is noteworthy. The northeast United States is especially prone to these incidents (King, 1989, et al) and estimates from the insurance industry have shown that over \$900 trillion in losses were attributed to unforeseen thunderstorms and wind events around Maine alone.

Early studies have also shown that there is a positive correlation of lightning strikes to evil deeds and the reanimation of mechanical monsters (Shelley, 1818). This phenomenon is being researched at present by the U.S. Navy as part of Senate Pork Barrel Appropriations Subcommittee Grant #99023-M12, and is believed to be related to thermal energy transformations within the storm environment.

It is important to point out that satanic weather events are not entirely confined to thunderstorms. In 1979, a blizzard developed in response to evil occurrences at the Overlook Hotel<sup>1</sup> in the Colorado Rockies (Kubrick, 1980). Additionally, storms earlier attributed to katabatic winds in Antarctica dur-



**Figure 1.** Conceptual model of tropospheric circulation around haunted houses (Key, 1999).



**Figure 2.** Distribution of Doppler weather radars (“plus” symbols) and haunted houses (dots). We noted on border welcome signs that British Columbia calls itself “Super, Natural,” so a haunted house was assumed to be in every town with more than 5,000 people. Haunted house locations from Sringati, 1985.

<sup>1</sup> Data comparison showed an increase in snowfall rate at Denver Stapleton Airport within one hour after Jack was let out of the freezer.

ing the discovery of an alien lifeform (Carpenter, 1982) are now thought to be the result of satanic weather anomalies.

## Field Experiment

On 2-3 May 1999 a mobile observation team, nicknamed Geophysical Haunting Observatory for Synoptic Thermodynamics (GHOST) was deployed to Sudbury, England to conduct field experiments at Borley Rectory, a well-known haunted house in Great Britain. After an initial briefing at 1730 GMT at the Salty Dog Pub, the team departed at 2000 GMT to begin the experiments with the onset of night. Detailed measurements of temperature, pressure, and wind, using direct measurement and remote sensing, continued through 0200 GMT, at which point the team decided a data assessment was in order. This assessment<sup>2</sup> was promptly held at 0210 GMT at the Salty Dog Pub and concluded at 0730 GMT.

Analysis of data from the GHOST field experiment confirmed the suspected tropospheric circulation associated with satanic convection anomalies. Before sunset, mobile temperature measurements showed a thin layer (about 200 feet deep) of unusually cold air present around the haunted house, covering 2.7 km<sup>2</sup> and later expanding to 225 km<sup>2</sup>. After sunset, C-band Doppler radar measurements began showing organized areas of upward motion, with velocities exceeding 0.65 m s<sup>-1</sup> only 92 min after sunset. Thunderstorms developed over the haunted house with numerous sightings of ghosts in and near the structure at this time. Radar measurements began showing convergence in the lower troposphere and divergence in the upper troposphere. As convection strengthened, sferic measurements showed a cloud-to-ground lightning flash maximum centered on Borley Rectory's graveyard.

## Summary

Absorption of energy by evil entities<sup>3</sup> is thought to be responsible for the formation of microscale cold pockets near the haunted house, a finding which is supported by the presence of cold air well before convective initiation. These cold pockets are generally mixed out by solar heating during the day, but at night they spread out along the Earth's surface on a scale of tens of kilometers or more and become quite significant. The forward edge of the cold air takes on all the properties of a typical cold front, with isentropic lift<sup>4</sup> occurring where the environmental wind direction contains a component of motion towards the cold air (Ondasofa, 1984). This lift results in saturation of the air mass, producing clouds and rain shortly after dark.

The release of latent heat steepens lapse rates in the troposphere and in many cases leads to convection and thunderstorm activity.

An exceptionally evil entity is often associated with violent thunderstorms and even tornadoes (Hooper, 1982, et al). These entities absorb larger amounts of heat, amplifying the strength of the initial cold pocket. This in turn increases the slope of potential temperature surfaces, creating stronger lift and ultimately causing much stronger thunderstorms due to the enhanced forcing (Cunningham, 1980).

Orographic lift, upward motion resulting from terrain, can be a significant contributor to thunderstorm development. In Transylvania, orographic lift up the sides of mountains and castles accelerates the saturation of air and the release of latent heat (Fisher, 1958). However in most cases isentropic lift is suspected as the dominant process in satanic weather events.<sup>5</sup>

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## REFERENCES

- Anson, J., 1977: *The Amityville Horror*. Prentice Hall, 353 pp.
- Carpenter, J., dir, 1982: *The Thing*. Universal Pictures.
- Cunningham, S. S., dir, 1980: *Friday the 13th*. Paramount.
- Disneyland, 1964. *Chilling, Thrilling Sounds of the Haunted House*. Walt Disney Music Co.
- Fisher, T., dir, 1958: *Dracula*. Universal Pictures.
- Hooper, T., dir, 1982: *Poltergeist*. MGM.
- Key, S. M., 1999: *Here's that diagram you wanted*, 1 pp.
- King, S., 1989: *Pet Sematary*. Doubleday.
- Kubrick, S., dir, 1980: *The Shining*. Warner Bros.
- Ondasofa, R. O., 1984: *Effects of Jolly Green Giant on Boundary Layer Airflow*, Preprint, Seventh Conf. on Weather and Forecasting, Phoenix, American Meteorological Institute, 582-596.
- Shelley, M. W., 1818: *Frankenstein: Or, The Modern Prometheus*. Lackington, Hughes, Harding, Mavor, and Jones, 423 pp.
- Sringati, F. S., 1985: *Implications of Salinity on Australian Plankton Productivity and Table Of Haunted House Data*, Preprint, Fourth Conf. on Pacific Marine Biology, San Francisco, Calif., American Marine Institute, 175-184.

<sup>2</sup> A beverage spill due to fisticuffs damaged the lightning detection laptop computer; all data after 0100 GMT was lost.

<sup>3</sup> It's just a hunch; trust me.

<sup>4</sup> Vertical motion forced by ascent of an air parcel along sloped potential temperature surfaces.

<sup>5</sup> What say we go get a burger now?