

Amplifying the impact of CTBTO data for emergency response and climate change monitoring

Raymond Wang &
Jessica Margolis



SDG 13: Climate Action

Target 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters

- Indicator 13.1.3: Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies
- Indicator 13.1.1: Number of deaths, missing persons and persons affected by disaster per 100,000 people

Target 13.2 Integrate climate change measures into national policies, strategies and planning

Target 13.3 Improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

- Indicator 13.3.2: Number of countries that have communicated the strengthening of institutional, systematic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions

Target 13.B: Promote mechanisms for raising capacity for effective climate change-related planning and management in the least developed countries

- Indicator 13.B.1: Number of least developed countries and small island developing States that are receiving specialized support...including technology and capacity-building, for raising capacities for effective climate change-related planning and management

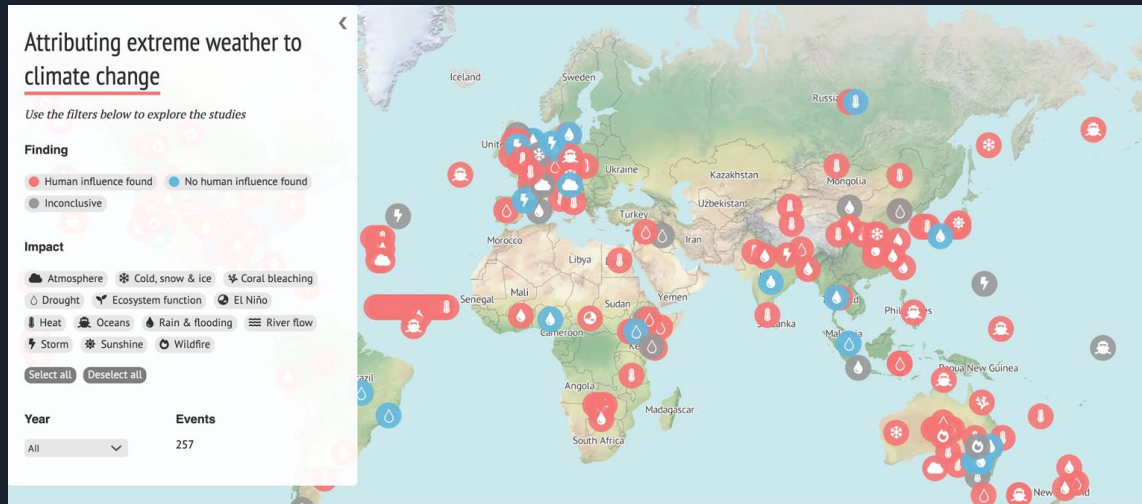


Introduction:

- The cumulative effect of climate change is difficult to capture. This could be addressed by building a platform that marries long-term climate change data to social media posts or personal multimedia in the news.
- Collaboration and outreach initiatives with local or national authorities in charge of emergency response will inform them of how IMS data can help reinforce emergency response.
- Leverage unused sources of CTBTO data to improve what is currently available on non-IMS systems. This presentation will use pollen detectors as an example, but also of interest may be using meteorological data at IMS stations to complement standard meteorological stations.

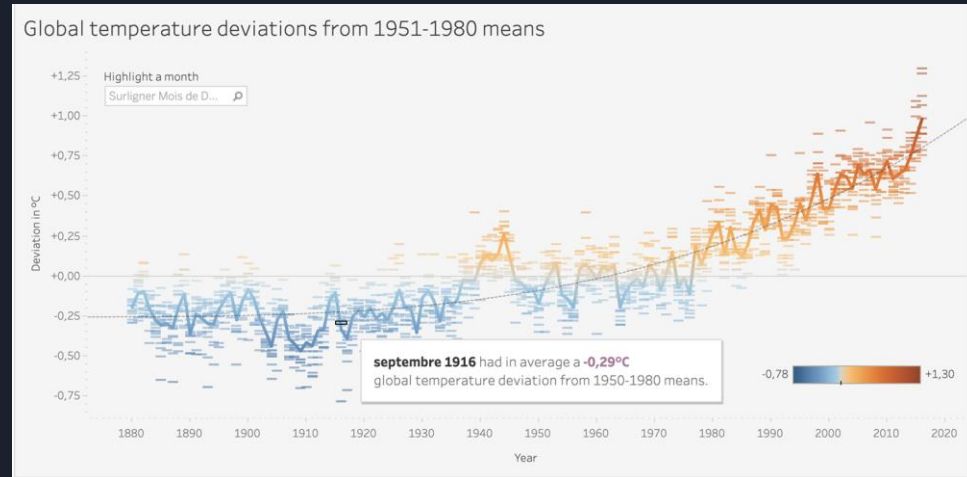
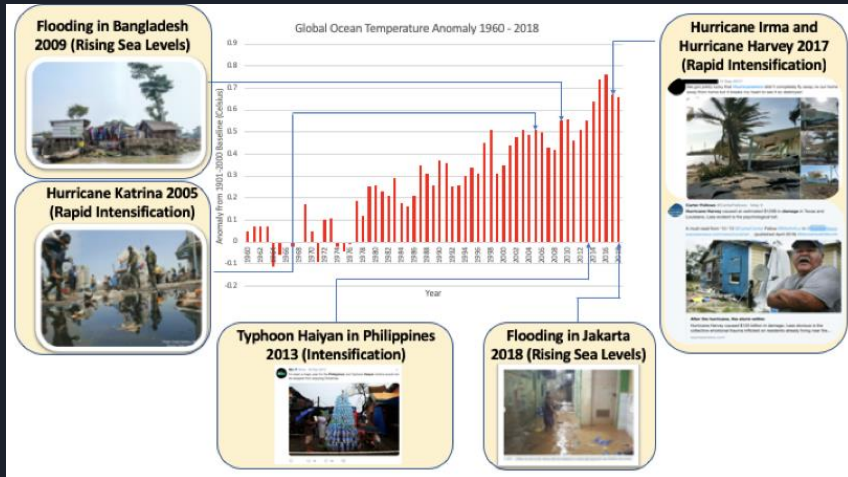
Climate Attribution

- Studies to what extent the strength and likelihood of extreme weather events – many of which occurred at a lower intensity or frequency ‘before’ climate change – are attributable to climate change
- Examples include American Meteorological Society and Carbon Brief



Putting a face to technical data

- Creating a one platform that encompasses multiple climate-related data streams, and is overlaid with social media posts
- Capturing how these climate events affect people's daily lives makes the data more relatable
- Scale-up options include Tableau, ArcGIS

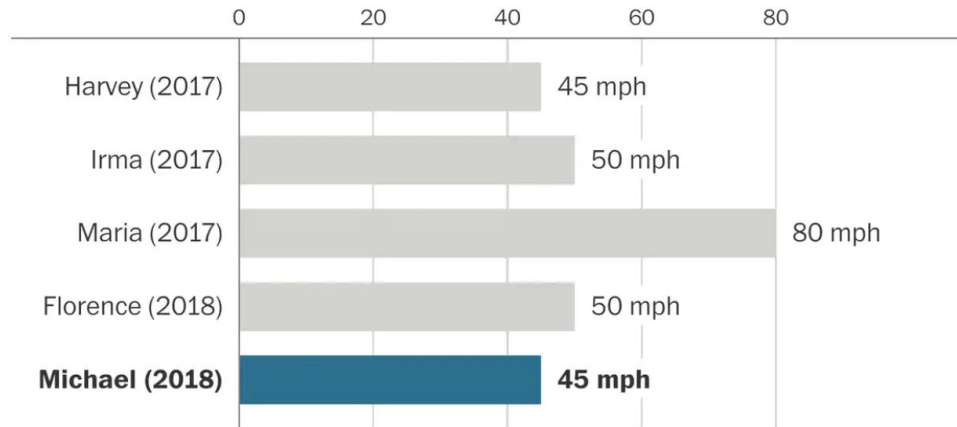


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Rapid Intensification

That happened fast

One of the most distinctive – and ominous – features of recent hurricanes is just how rapidly they have strengthened, often leaping suddenly to Category 4 or 5 intensity. The chart shows the largest wind speed increase over a 24-hour period for the five worst Atlantic storms of 2017 and 2018.

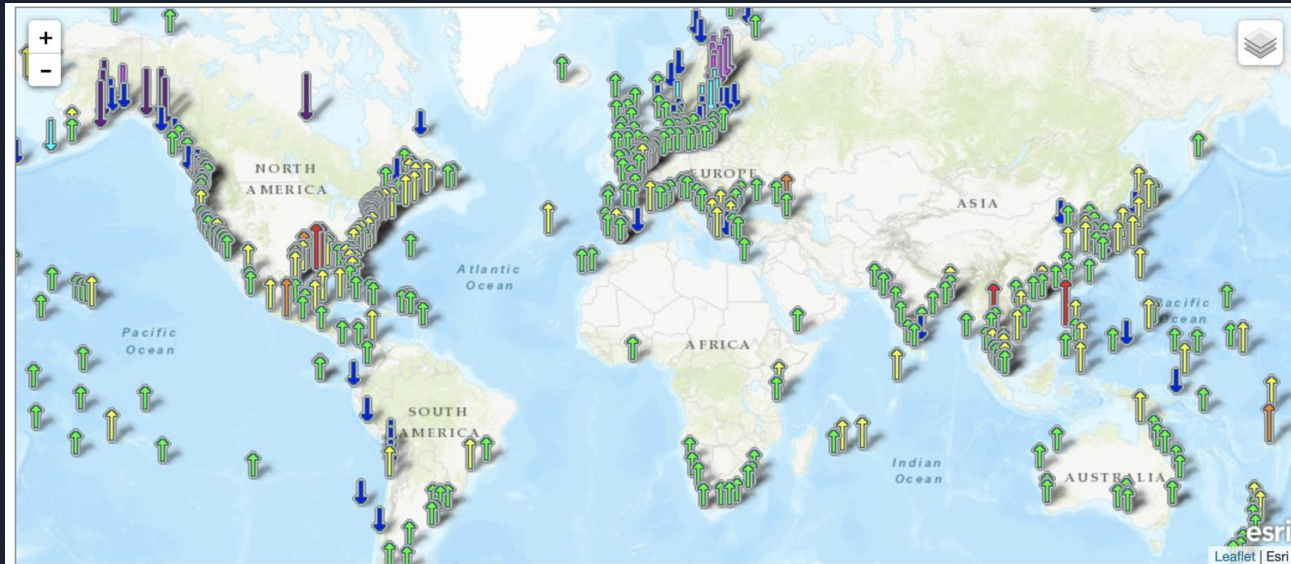


Source: National Hurricane Center

THE WASHINGTON POST

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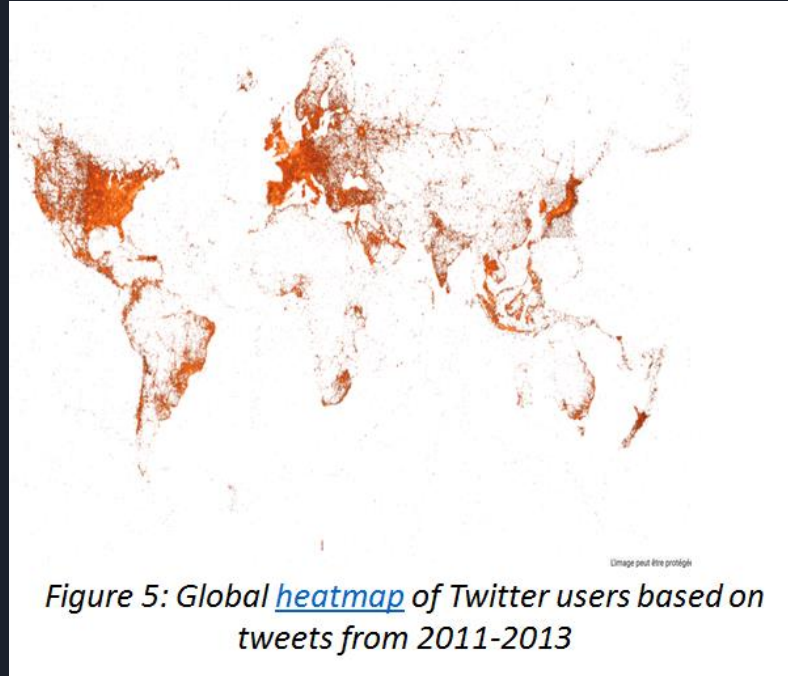
Rising Sea Levels



The map above illustrates relative sea level trends , with arrows representing the direction and magnitude of change. Click on an arrow to access additional information about that station.



Twitter Alerts + Emergency Response in Japan



Potential Future Uses - Pollen Monitoring





Thank You!