

# Google & EW4A

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People come  
to Google in  
times of  
crisis.



- is it flooding
- is it flooding in california
  - is it flooding
  - is it flooding in utah
  - is it flooding in san francisco
  - is it flooding today
  - is it flooding in california right now
  - is it flooding in los angeles
  - is it flooding right now
  - is it flooding in vegas
  - is it flooding in brazil

### 2024 Rio Grande do Sul floods

Brazil  
2024



Search queries for "Flood"

### 2024 Rio Grande do Sul floods

Brazil  
2024



Search queries for "Shelter"

### Myanmar (Burma) earthquake

Myanmar  
2025



Search queries for  
"Earthquake"



Wildfires



Floods



Cyclones



Weather

Can we provide **timely, reliable predictions** of these threats  
to help people **stay safe**?

# Notifications & Alerts

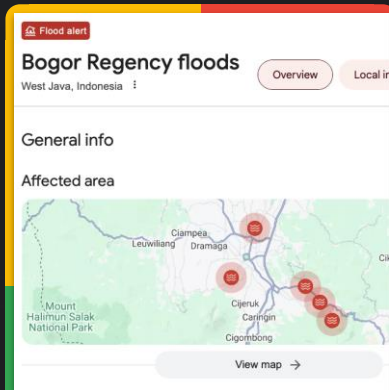
Google Search,  
Maps & Weather

Web Services

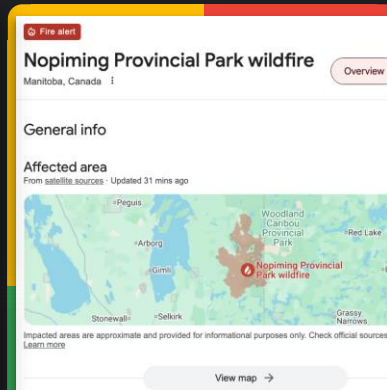
(FloodHub)

Data & Models

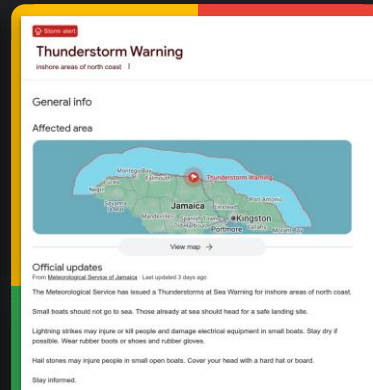
(API, historical datasets,  
open source models)



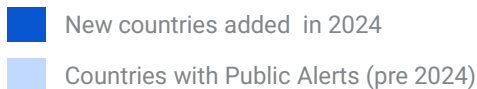
**SOS Notifications**  
Curation of authoritative  
information from the  
web



**Google notifications**  
Information based on  
Google's models



**Public Alerts**  
CAP Alerts from local  
authorities



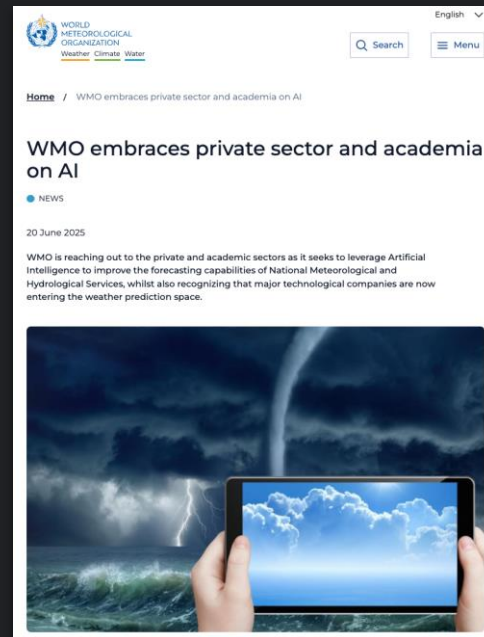
<https://sites.research.google/gr/floodforecasting/>



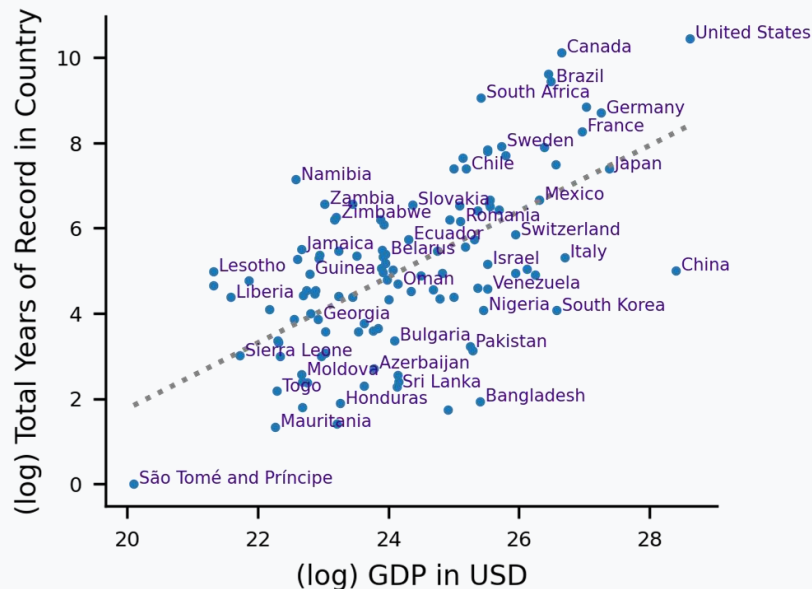
**700 million**  
People

**150+**  
Countries

**Predicting riverine floods up to 7 days in advance**



<https://sites.research.google/gr/floodforecasting/>

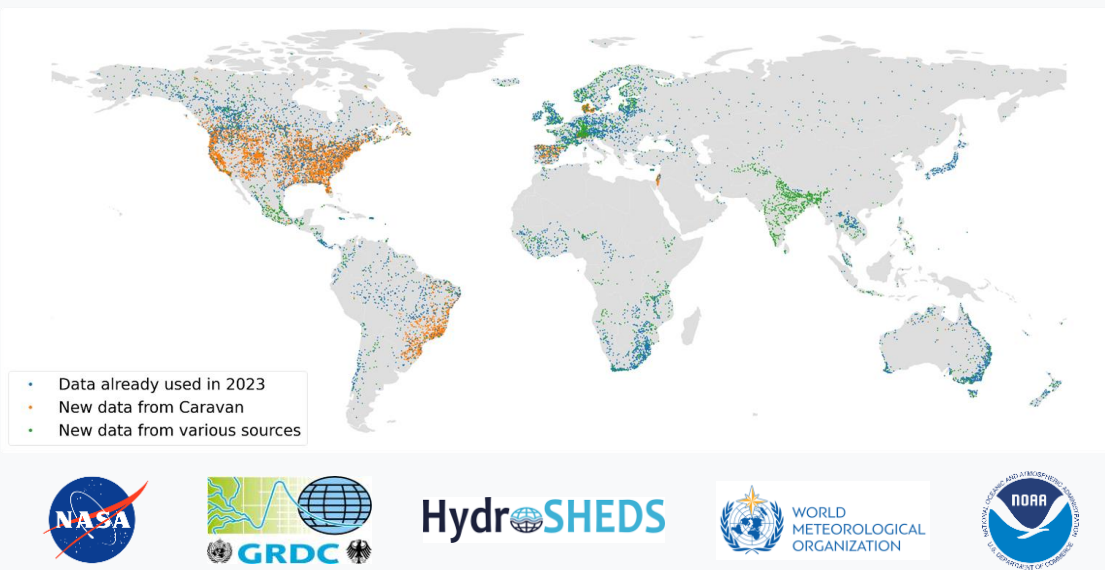


**Problem:** Data are not equally available everywhere.

The Google Floods team is developing models that work everywhere for all kinds of flood-related events.

<https://sites.research.google/gr/floodforecasting/>

**Solution:** Train a model on all data available globally.



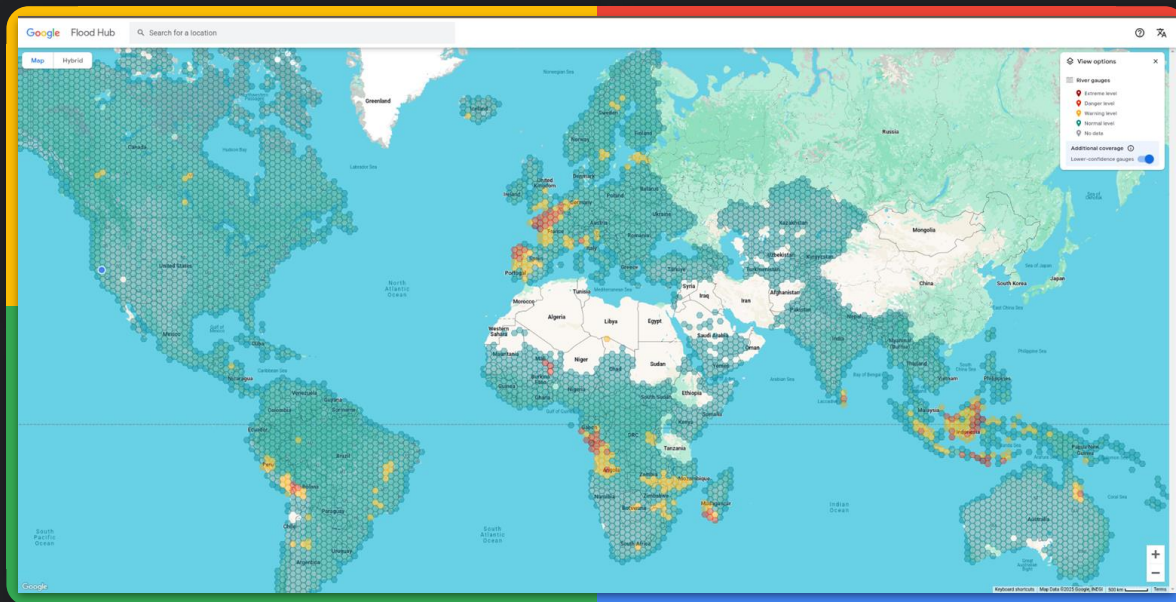
[g.co/floodhub](https://g.co/floodhub)

# Notifications & Alerts

Google Search,  
Maps & Weather

Web Services  
(FloodHub)

Data & Models  
(API, historical datasets,  
open source models)



# Partnerships & Outreach

... is a large and critical part of our strategy for understanding needs and driving development.

@yuvalc, @jz xu

## Partnerships

### Big Tech and Artificial Intelligence can support Early Warnings for All

● PRESS RELEASE

31 May 2023

The private sector has a huge potential role to play in the achievement of Early Warnings for All, through leveraging the outreach of Big Tech and the power of Artificial Intelligence.

#### Key messages

- Big Tech
- Artificial Intelligence
- Early Warnings for All



The World Meteorological Congress held two special dialogues dedicated to exploring the potential of Big Tech and Artificial Intelligence for Early Warnings for All.

Google The Keyword

OUTREACH AND INITIATIVES SUSTAINABILITY

### Our support for early warning systems

Jun 22, 2023 · 3 min read

Share

Google's Yossi Matias and the WMO's Anthony Rea discuss the importance of early warnings about climate hazards and Google's support for the WMO's Early Warnings for All initiative.

Yossi Matias  
VP, Engineering and Research

Listen to article 5 minutes

Last month I represented Google at the United Nations' World Meteorological Congress. There, I shared our support for the World Meteorological Organization's (WMO) Early Warnings for All initiative, which aims to provide early warnings about climate hazards to everyone around the world by 2023.

disha

News and stories

### AI from Google Rescues humanitarian disaster coverage, faster damage assessment

September 16, 2024

By Lars Bromley, Kersten Jauer, and Yossi Matias

Lars Bromley is a Specialist at the United Nations Satellite Center  
Kersten Jauer is the Deputy Director for Strategic Communications at the United Nations  
Yossi Matias is the Vice President of Engineering at Google

Between storms, earthquakes, floods, and other natural disasters, impact communities worldwide each year. Google is helping to assess damage to infrastructure in the affected areas following disasters.

## Partnerships

### Collaboration with Local & National Authorities and Organizations

|                  |                                                                 |                                 |                                               |                                                  |
|------------------|-----------------------------------------------------------------|---------------------------------|-----------------------------------------------|--------------------------------------------------|
| WMO              | The Vietnam<br>National Center<br>for Hydro-Met.<br>Forecasting | Rwanda<br>Meteorology<br>Agency | Czech<br>Hydromet.<br>Institute               | US Geological<br>Survey                          |
| UK Met Office    | NOAA                                                            | Japan Met.<br>Agency            | Nigeria<br>Hydrological<br>Services<br>Agency | National<br>Interagency<br>Forest Fire<br>Center |
| IFRC             | ITU                                                             | World Food<br>Programme         | OCHA                                          | UNDRR                                            |
| Filter Alert Hub | NASA                                                            | ECMWF                           | INUMET                                        | EUMETSAT                                         |

**And many others ...**