

# The world's most accurate forecast just got better

## Global-High Resolution Atmospheric Forecasting (GRAF)

GRAF helps democratize weather forecasts so people, businesses and governments—anywhere—can make better decisions.

### Not all forecasts were created equal - until now.

Most locations around the world have not had access to timely and reliable weather information. This is due to a lack of specialized weather equipment and models that update infrequently (~every 6-12 hours) and at a resolution too wide to capture many weather phenomena (~10km).

### Global High-Resolution Atmospheric Forecasting

GRAF is a high-precision, rapidly updating global weather model that updates hourly and at a 3km resolution to provide a clearer picture of weather activity around the globe.

### Three key differentiators set GRAF apart:

- **Improved global mapping of the atmosphere:** We partnered with the National Center for Atmospheric Research (NCAR) to improve its latest-generation global weather model, which uses state-of-the-art science to forecast the atmosphere at a truly global scale.
- **Better data and observations:** GRAF has the capability to incorporate previously untapped data sources to help overcome the lack of specialized weather equipment in many parts of the world.
- **First-ever operational global weather model to run on GPU-accelerated servers:** To handle the increased resolution and update frequency, the GRAF system runs on an advanced supercomputer optimized for Graphics Processing Units (GPUs).

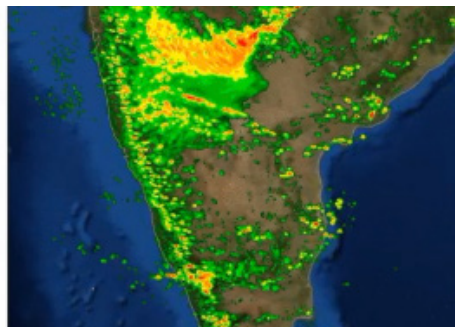
### Driving decisions globally

GRAF will give a clearer sense of exactly when and where weather will hit around the globe, empowering:

- Utility companies to better position outage repair crews for a storm
- Airlines to more effectively route around turbulence
- Farmers to better anticipate and prepare for dramatic shifts in weather
- Broadcasters to keep their audiences informed and engaged



Current best model



GRAF

### 6 key features set GRAF apart:

- **Fidelity:** Takes resolution down from 10km-12km to 3km-4km
- **Frequency:** Updates every hour instead of 6-12 hours
- **Fresh:** Assimilates weather data more rapidly into forecasts
- **Fine Grain:** Up to 5 minute outputs vs. 1 hour provides a clearer picture of weather occurrences
- **Fortified:** Exploring incorporation of untapped data sources
- **Forefront:** First operational global weather model to run on a GPU-accelerated supercomputer

To learn more visit:

[weathercompany.com/graf](https://weathercompany.com/graf)

Improved predictions from GRAF enhance The Weather Company enterprise offerings and are available for free to consumers using The Weather Company apps and websites (The Weather Channel & Weather Underground).