

Use of Weather information in Aeromexico



MEXICO'S GLOBAL AIRLINE

Aeroméxico is Mexico's flagship airline with more than 90 years of history, connecting people, cultures and destinations with excellence, safety and genuine Mexican hospitality.





OUR HISTORY

- **1934** Aerovías de México is founded, predecessor of Aeroméxico.
- **1944** Aeroméxico begins operations as Mexico's first airline.
- **1990** A new stage of modernization and expansion begins.
- **Today** We fly to the future, taking Mexico higher.



OUR FLEET

We operate a modern and efficient fleet.



Boeing 787 Dreamliner



Boeing 737 MAX



Embraer 190



Boeing 737-800

One of the youngest and most technologically advanced fleets in Latin America.



WE CONNECT THE WORLD

We fly to more than 90 destinations in Mexico, the United States, Canada, Latin America, Europe and Asia.

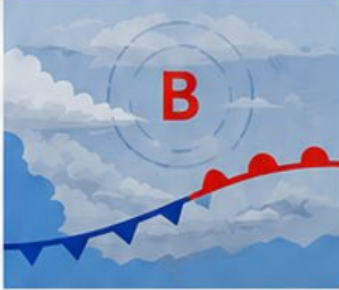


MAIN HUB

Mexico City (MEX)

Our operations center that connects Mexico with the world.

Weather phenomena that affects our operations

TURBULENCE  Irregular air movements that can cause sudden changes in altitude and attitude.	THUNDERSTORMS  Clouds with strong vertical development that produce lightning, heavy rain, hail, and strong gusts.	HEAVY RAIN  Intense precipitation that reduces visibility and affects operations on the ground and in the air.	FOG  Suspension of tiny water droplets that drastically reduces horizontal visibility.	SNOW / ICE  Precipitation of ice crystals or accumulation of ice on aircraft surfaces and runways.
STRONG WINDS / GUSTS  Sustained winds or gusts that can affect takeoff, landing, and flight stability.	WIND SHEAR  Sudden change in wind speed or direction over short distances or at different altitudes.	LOW PRESSURE SYSTEMS / FRONTS  Weather systems that can produce clouds, precipitation, winds, and abrupt changes in weather.	VOLCANIC ASH  Tiny particles suspended in the air that reduce visibility and can damage aircraft engines and systems.	HEAT WAVE / EXTREME TEMPERATURES  Very high or very low temperatures that affect aircraft performance and operations on the ground.

Operations and Customer Center (OCC) Team





Objective:

To analyze the meteorological and atmospheric conditions of Aeromexico's airports and flight routes so that operations are carried out safely and efficiently, processing information obtained from various sources, and providing useful meteorological advice to any area of Aeromexico that requires it.

Some Weather Team Products

- Hourly forecast for the main hub (MMMX) up to 48 hours in advance, twice-a day for several variables (temperature, QNH, precipitation, visibility, tail-wind, cross-wind, runway).
- Weather forecasts for arrival routes to MMMX.
- Joint meteorological forecast between SENEAM-AEROMEXICO for MMMX
- Thunderstorm forecast for airports.
- Volcanic ash advisories for Popocatépetl and other volcanoes
- Weather forecasts for national and international airports with relevant weather conditions
- Nowcasting of weather conditions for MMMX following radar, automatic weather stations and lightning detections tools.
- Forecast of low visibility conditions for early-morning flights
- Among other products

Automatic Weather Stations



SOURCES OF WEATHER INFORMATION – METAR, SPECI, TAF

AFTN (METAR,TAF Y NOTAM)

CARTAS ANALISIS

DATOS MMMX

CARTAS PRONOSTICO

VOLCANES

GAMET

AIRMET

AVISO DE AERODROMO

AVISO DE CIZALLADURA

MMTJ

SAMX41

METAR [MMAA](#) 222145Z 25006KT 8SM FEW120 BKN300 34/24 A2973 RMK 8/038 HZY DSNT TCU NE NW=

METAR [MMBT](#) 222143Z 00000KT 8SM SKC 34/22 A2979=

METAR [MNCB](#) 222153Z 00000KT 8SM FEW025 BKN250 30/12 A3002 RMK 8/101 AC=

METAR MMIT #####

METAR [MMMXX](#) 222148Z 08010KT 10SM SCT020 BKN220 27/04 A3022 NOSIG RMK 8/108 HZY ISOL MDT CU DSNT CB S=

METAR [MMSM](#) 222147Z 03008KT 10SM SCT020TCU SCT200 25/06 A3023 RMK 8/202 HZY=

METAR [MMOX](#) 222140Z 16005KT 12SM SCT030TCU BKN210 30/11 A3009 RMK 8/208=

METAR [MMPA](#) 222143Z 03008KT 6SM SKC 33/24 A2985 RMK HZY DSTN CB FRMG SW ISOL CU=

METAR [MMPB](#) 222146Z 09003KT 12SM FEW025 SCT230 25/04 A3025 RMK 8/102=

METAR [MMPs](#) 222147Z 23006KT 10SM SKC 33/26 A2986 RMK HZY=

METAR [MMQT](#) 222141Z 06007KT 10SM SCT025 28/06 A3022 RMK 8/100 MDT CU=

METAR [MMTM](#) 222148Z 13009KT 7SM SKC 32/26 A2986 RMK HZY CI=

METAR [MMTO](#) 222144Z 15010KT 8SM SCT020TCU BKN200 21/10 A3032 RMK 8/208 HZY=

METAR [MMVR](#) 222146Z 08008KT 7SM SKC 33/24 A2987=

METAR [MMZH](#) 222144Z 23008KT 7SM BKN100 BKN250 34/23 A2973 RMK 8/038 HZY MDT CU NE=

METARs & TAFs

IDs:

RKSI

Load

Most recent ▾

☒ METARs

☐ Decoded

☐ Alphabetize

☒ TAFs

☐ Tabular

☒ Auto refresh

Impacts

Map

Raw data

Last updated: 2232 UTC 22 Wed Jul 2026

METAR RKSI 222200Z 20009KT 7000 BKN010 BKN030 OVC070 26/26 Q1007 NOSIG

TAF RKSI 221700Z 2218/2324 18007KT 6000 BKN006 BKN020 OVC080 TN24/2220Z TX27/2306Z TN25/2320Z

TEMPO 2218/2221 3500 -RA

BECMG 2222/2224 21010G20KT 4000 -RA SCT008 BKN025 OVC080

TEMPO 2301/2305 23015G30KT 2500 RA SCT004CB BKN020 OVC060

BECMG 2309/2311 17008KT 6000 NSW

TEMPO 2317/2321 3500 -RA SCT004CB BKN020 OVC060

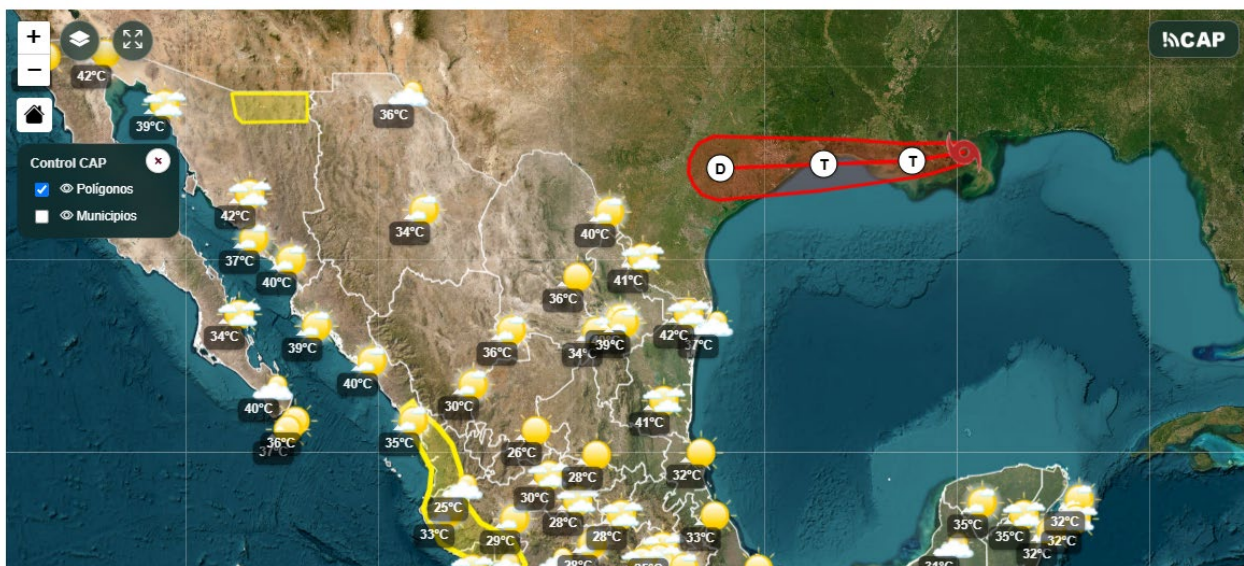
Gobierno de México

Inicio SMN- Pronósticos- Ciclones Tropicales- Climatología- Modelos de Pronóstico Numérico- Observando el Tiempo- Contacto

Lluvias fuertes con puntuales muy fuertes (50 a 75 mm): en zonas de Sinaloa, Nayarit, Jalisco, Colima, Michoacán, Guerrero y Chiapas.

Aviso potencial de Tormentas Ciclón Tropical Atlántico Ciclón Tropical Pacífico Pronóstico General Pronóstico Inmediato Pronóstico Extendido Megalópolis a 72h Monitoreo Volcánico Reporte para la Agricultura Grijalva Usumacinta

Pacífico: FAUSTO SE MANTIENE LEJOS DE LAS COSTAS DE MÉXICO Atlántico: La tormenta tropi



NATIONAL HURRICANE CENTER and CENTRAL PACIFIC HURRICANE CENTER
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ANALYSIS & FORECASTS DATA & TOOLS EDUCATIONAL RESOURCES ARCHIVES ABOUT SEARCH

Top News of the Day... view past news Last update Wed, 22 Jul 2026 21:57:17 UTC

- NHC issuing advisories for the Atlantic on [TS Bertha](#)
- NHC issuing advisories for the Eastern Pacific on [Hurricane Fausto](#)
- Marine warnings are in effect for the [Gulf of America](#) and [Eastern Pacific](#)
- Key messages regarding Tropical Storm Bertha (en Español: Mensajes Claves)
- Local info on Bertha: [Houston/Galveston](#), [Lake Charles](#), [New Orleans/Baton Rouge](#), [Mobile/Pensacola](#)
- [NOAA predicts below-normal 2026 Atlantic hurricane season](#)
- [National Hurricane Center Products and Services Update for 2026 Hurricane Season](#)

Central Pacific Pacific Atlantic 2-Day Forecast 7-Day Forecast

Disturbances: None

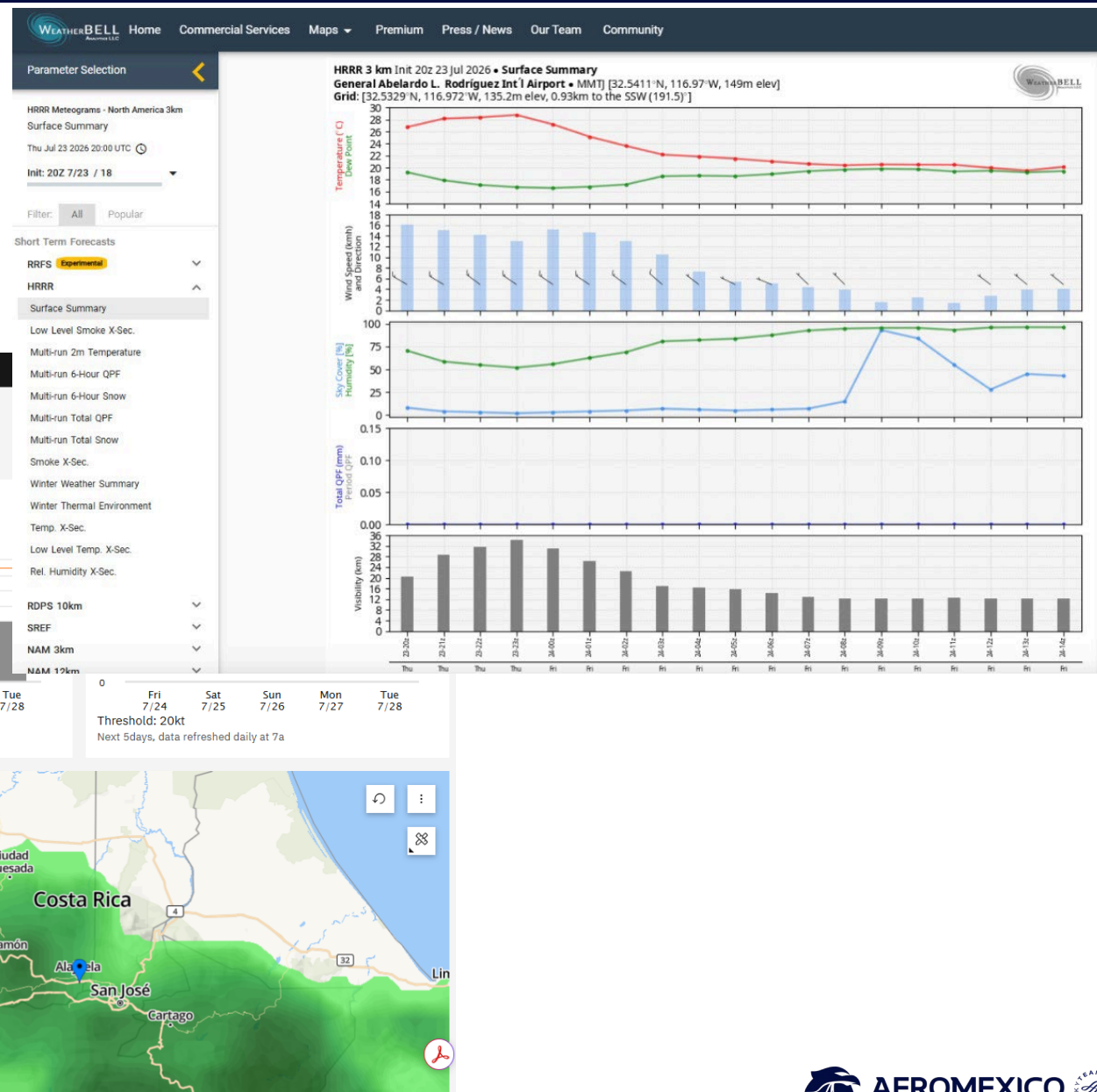
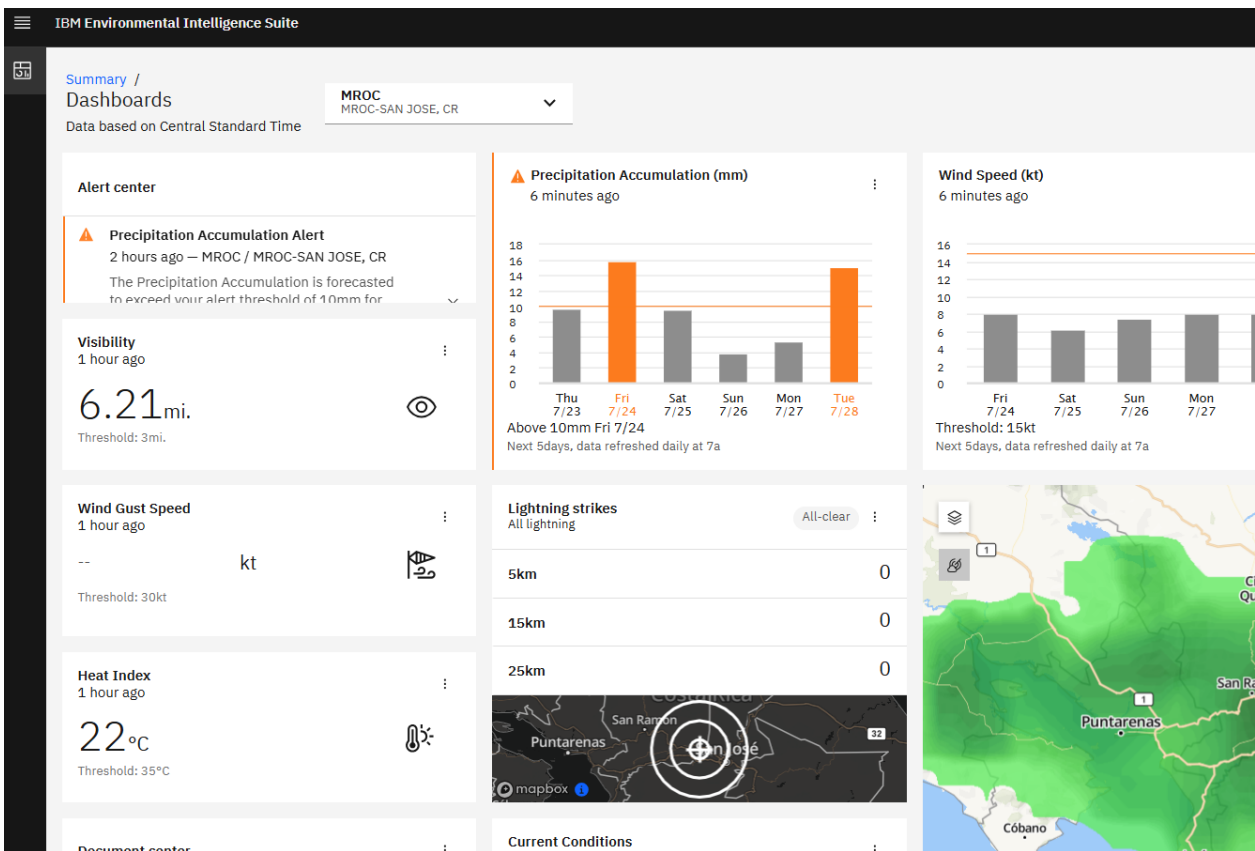
Seven-Day Graphical Tropical Weather Outlook
National Hurricane Center Miami, Florida

All Disturbances

BERTHA

www.hurricanes.gov

Investment in commercial tools



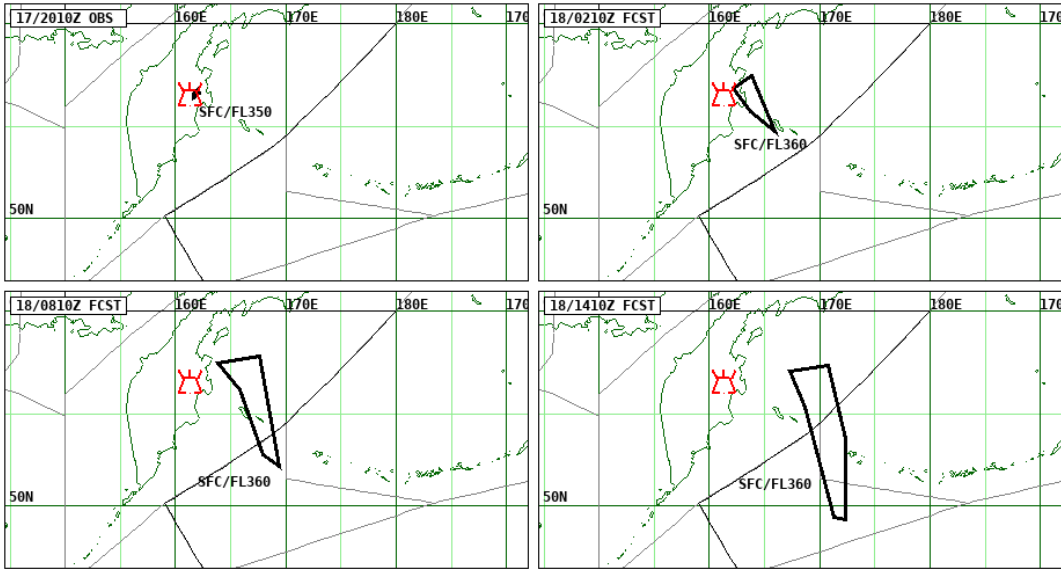


Tokyo Volcanic Ash Advisory Center
Japan Meteorological Agency

Volcanic Ash Advisories

As of 24 July, 2014, information of volcanoes in VAAs such as names, locations, volcano numbers and others are those Program for VAA.
The database is provided as a service to the ICAO and does not represent any formal position by ICAO.

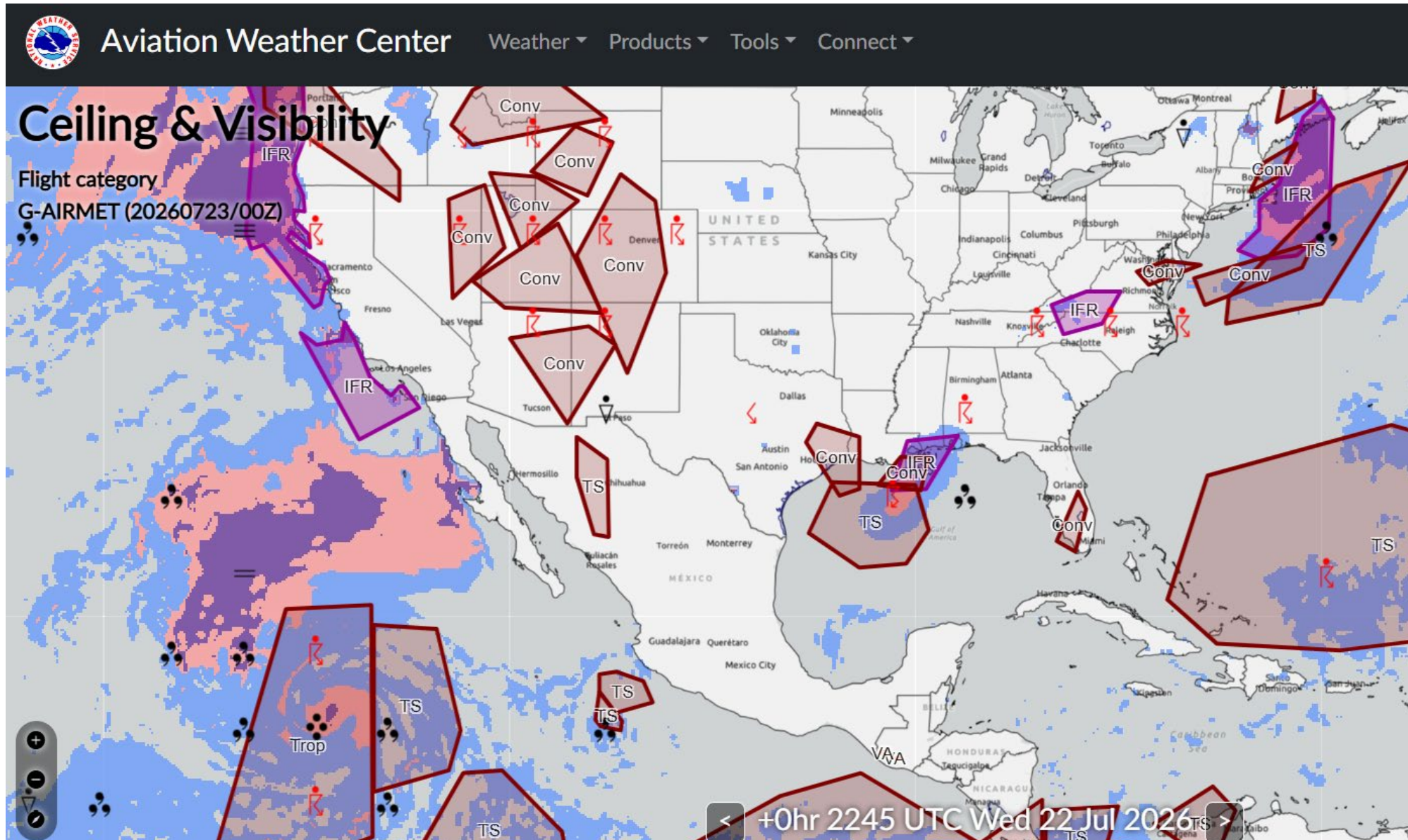
 Date Time 	 Volcano 	 Area 	Advisory Number	VAA Text
18:00 UTC, 23 Jul. 2026	SHEVELUCH	RUSSIA	2026/282	Text
17:50 UTC, 23 Jul. 2026	SAKURAJIMA (AIRA CALDERA)	JAPAN	2026/93	Text
14:39 UTC, 23 Jul. 2026	SAKURAJIMA (AIRA CALDERA)	JAPAN	2026/92	Text
13:58 UTC, 23 Jul. 2026	SAKURAJIMA (AIRA CALDERA)	JAPAN	2026/91	Text



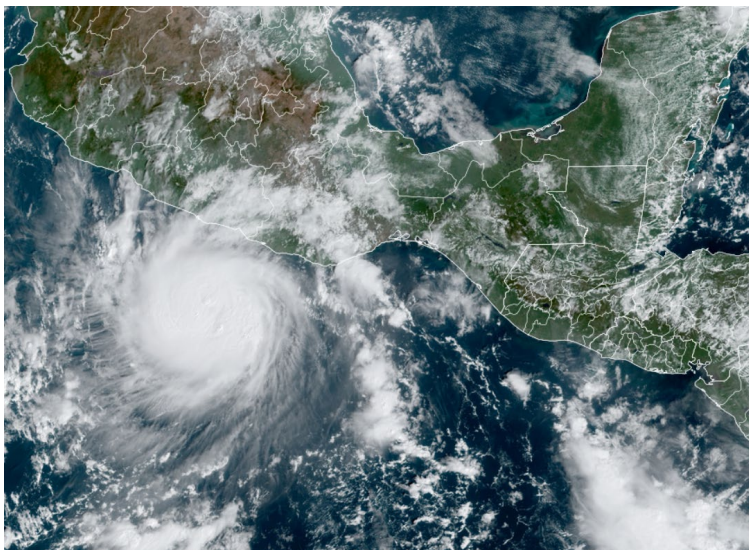
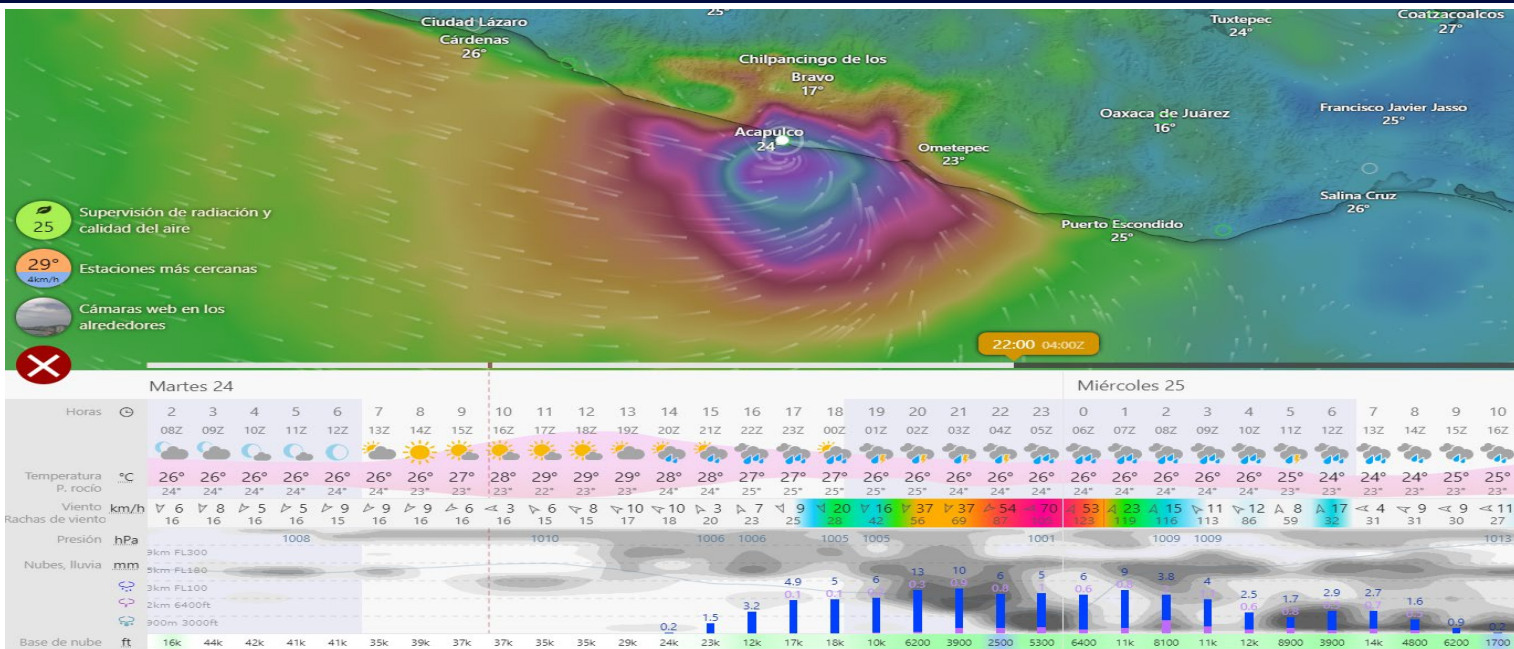
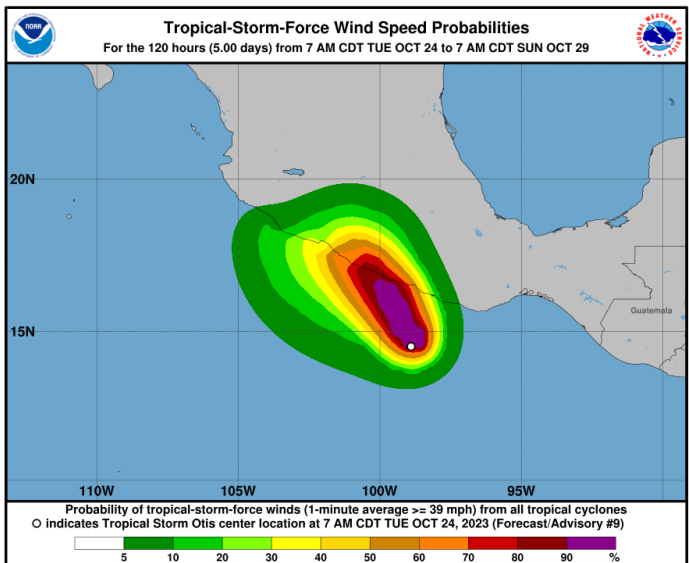
VA ADVISORY
DTG: 20260717/2055Z
VAAC: TOKYO
VOLCANO: SHEVELUCH 300270
AREA: RUSSIA
SOURCE ELEV: 3283M AMSL
ADVISORY NR: 2026/267
INFO SOURCE: HIMAWARI-9

ERUPTION DETAILS: POSS ERUPTION OBS AT
20260717/1940Z FL350 EXTD SE
RPMK: NIL
NXT ADVISORY: 20260718/0000Z

Use of SIGMET information for route planning



Tropical cyclone products



BULLETIN

Tropical Storm Otis Advisory Number 9

NWS National Hurricane Center Miami FL

EP182023

1000 AM CDT Tue Oct 24 2023

...OTIS NEARING HURRICANE STRENGTH...

SUMMARY OF 1000 AM CDT...1500 UTC...INFORMATION

LOCATION...14.8N 99.1W

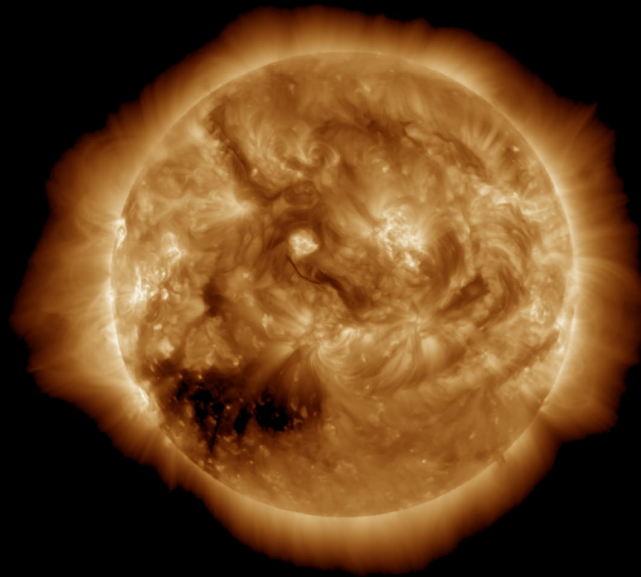
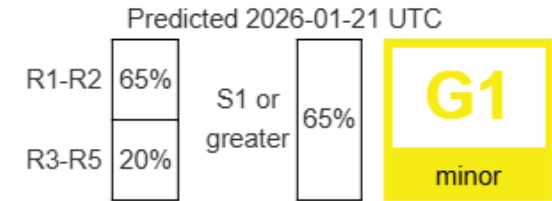
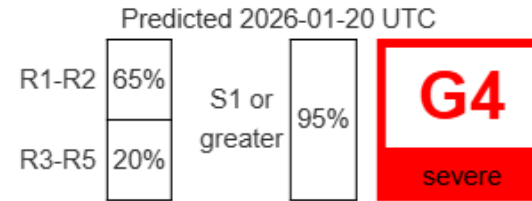
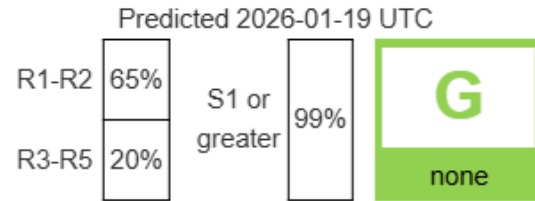
ABOUT 155 MI...250 KM SSE OF ACAPULCO MEXICO

MAXIMUM SUSTAINED WINDS...70 MPH...110 KM/H

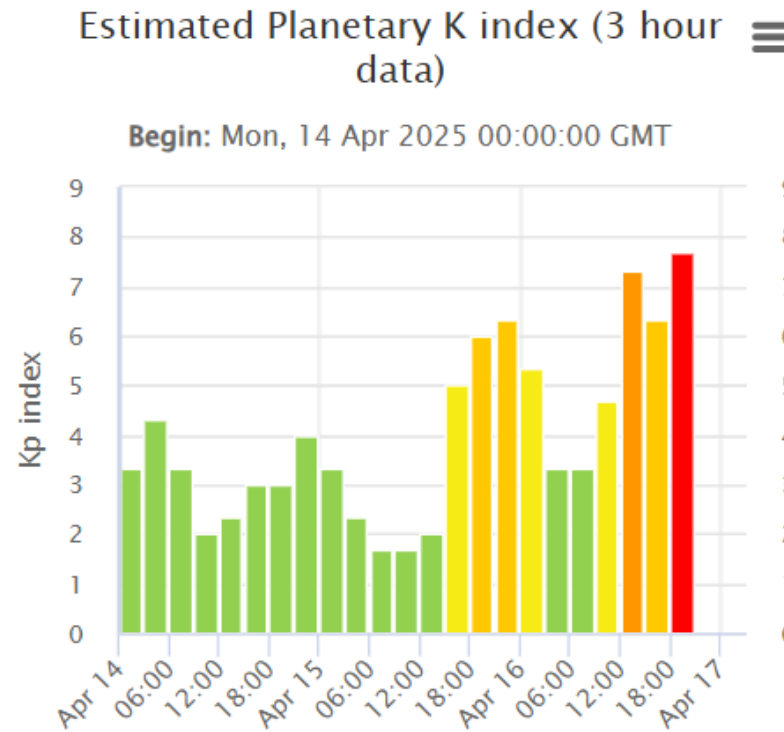
PRESENT MOVEMENT...NNW OR 330 DEGREES AT 8 MPH...13 KM/H

MINIMUM CENTRAL PRESSURE...993 MB...29.33 INCHES

Space Weather Forecasting



GOES-19 SUVI Composite 195 Angstroms 2025-04-16 21:48:51



With the support of Weather information based upon forecasts, climatology, now-casting and reports, Aeromexico take decisions on:

- Security of personnel, aircrafts and installations
- Extra fuel
- Crew management
- Flight delay
- Flight cancellation
- Consideration of weight restrictions
- Awareness of space-weather effects
- Management of recovery activities from airport operation closures

Airline achievements

2024
2025



We consider that there are some areas of opportunity to improve weather information for aviation:

- Have regular evaluations of Weather forecasts (TAFs) for every airport and make them public for users
- Increase the forecast period in case of the possibility of occurrence of an extreme Weather event
- Have the climatology of every airport available for the main weather variables (visibility, wind, temperature, thunderstorms, etc.) for each month of the year and hour of the day. This will be very useful for planning of new routes/schedules.
- Improve the availability of real-time information from instruments such as radars and automatic weather stations
- Improve airport reports by taking into account transfer times, for example in the case of flights arriving early in the morning.

For your attention, thank you

Comments

Questions