

Strengthening Aviation Meteorology Collaboration



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Adverse weather poses significant challenges



Lightning



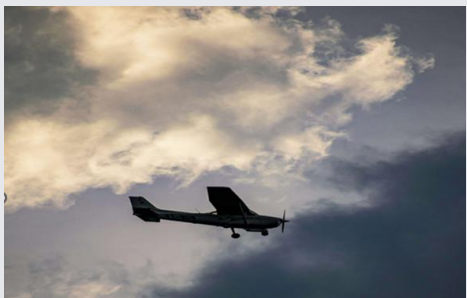
Volcanic Ash



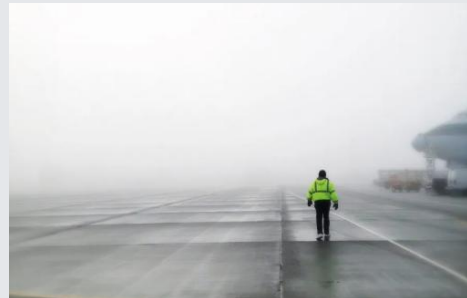
Wind Shear



Convective Storms



Turbulence



Low Visibility

Tremendous impact across entire aviation ecosystem

SAFETY

- Major contributing factor to global high-risk categories occurrences (G-HRCs)
- Injuries to passengers, crew, and ground staff

OPERATIONS

- More flight delays and diversions
- Increase aviation professional workload
- Reduced predictability

CAPACITY

- Reduction in efficiency and capacity

A collective effort between ANSPs and MET



LOI on strengthening aviation meteorology collaboration was signed on 8 Dec 2025 by ICAI, NEA, JANS, EUROCONTROL, CAAS, HKCAD, ATMB of CAAC, HKO, VATM, and CANSO

3 key areas of collaboration and possible projects

1 Research & Development

Joint R&D projects, such as:

- AI-enabled predictive models to improve convective weather forecasting
- Enhance nowcasting of lightning events
- Sustainability including emissions reduction and contrail assessment
- Enhancement of worker protection measures

2 Data Sharing

Sharing of weather data, such as:

- Turbulence reports and forecast
- Windshear reports and forecast
- Spatial blending of high-resolution Numerical Weather Prediction (NWP) model data

3 Capability Development

- Technical exchanges, such as on airport lightning warning system
- Rotational attachment of MET and ATM personnel at ATC centres or MET centers for familiarisation of ATM/MET operations

Next steps

- Conduct a survey on current and upcoming initiatives that individual agencies are undertaking to identify areas of collaboration
- Develop a list of data fields for data sharing
- Share experiences in capability building
- Hold the next high level coordination meeting in May 2026