WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

WMO OMM
World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
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Annexe: 1 (disponible en anglais seulement)

Objet: Webinaire scientifique de l'OMM sur la météorologie aéronautique – 7 décembre 2023

Suite à donner: Diffuser l'annonce auprès des intéressés et veiller à ce que chaque participant s'inscrive via le formulaire dédié sur le site du webinaire le **15 novembre 2023** au plus tard

Madame, Monsieur,

J'ai le plaisir de vous informer que la Commission des services et applications météorologiques, climatologiques, hydrologiques, maritimes et environnementaux (SERCOM) de l'Organisation météorologique mondiale (OMM) organise un séminaire en ligne («webinaire»), qui se tiendra le 7 décembre 2023, de 17 heures à 20 heures UTC, afin de présenter certaines des innovations scientifiques et technologiques les plus récentes en matière de météorologie aéronautique dans les Régions III (Amérique du Sud) et IV (Amérique du Nord, Amérique centrale et Caraïbes) de l'OMM. Ce webinaire fait suite à une série de webinaires organisés avec succès dans toutes les Régions de l'OMM en juin 2022.

Le thème du webinaire est le suivant: «Innovation scientifique et technologique dans les observations et la prévision des turbulences et du givrage d'aéronef au service de la transformation de la prestation de services et de l'amélioration de la sécurité aérienne».

Ce webinaire a pour objectif de présenter les avancées scientifiques et technologiques dans le domaine des observations, prévisions, alertes et avis météorologiques, notamment pour ce qui concerne l'application de l'intelligence artificielle et de l'apprentissage automatique, tout en mettant l'accent sur l'intégration des services d'aide à la décision reposant sur des informations météorologiques dans le système de gestion mondiale du trafic aérien. Il sera également question brièvement des travaux de recherche sur le climat pouvant livrer des enseignements sur l'incidence potentielle du changement climatique sur la navigation aérienne. Vous trouverez de plus amples informations dans la note de synthèse en annexe (en anglais seulement) ainsi que sur le site du webinaire.

Le webinaire sera composé de présentations vidéo préenregistrées et de tables rondes diffusées en direct. Des services d'interprétation seront assurés en anglais et en espagnol. Compte tenu du format choisi, il est essentiel que les participants disposent d'un accès adapté à Internet et d'une capacité de bande passante suffisante. Il est attendu de chaque participant qu'il s'inscrive au webinaire au moyen du formulaire d'inscription disponible ici au plus tard le **15 novembre 2023**. Pour toute question concernant le webinaire, veuillez contacter la Division des services à l'aviation de l'OMM (courriel: aviation@wmo.int).

Aux: Représentants permanents des Membres des Conseils régionaux III (Amérique du Sud) et IV (Amérique du Nord, Amérique centrale et Caraïbes) de l'OMM (distribution retreinte)

Je vous saurais gré de bien vouloir assurer une large diffusion de la présente annonce au sein de votre Service ainsi que des autres organismes compétents de votre pays.

Veuillez agréer, Madame, Monsieur, l'expression de ma considération distinguée.

Elena Manaenkova
pour le Secrétaire général

WMO AERONAUTICAL METEOROLOGY SCIENTIFIC WEBINARS 2023

5, 6 and 7 December 2023 (*online*)

CONCEPT NOTE

1. BACKGROUND AND RATIONALE

1.1. In November 2017, an Aeronautical Meteorology Scientific Conference (AeroMetSci-2017) was convened in Toulouse, France by the World Meteorological Organization (WMO), Météo-France and other co-sponsors. The Conference addressed:

(a) Science underpinning meteorological observations, forecasts, advisories and warnings;

(b) Integration, use cases and fit-for-purpose service delivery;

(c) The impacts of climate change and variability on aviation operations and associated science requirements.

1.2. More than 200 participants attended AeroMetSci-2017. The overwhelmingly positive feedback clearly indicated that WMO should conduct a similar Conference within five years to foster early technological transfer in order for Members to be well prepared for the progressive transformation from a conventional "product-centric" approach to a modern "information-centric" approach to MET service provision, as articulated in the WMO long-term plan for aeronautical meteorology (LTP-AeM) as well as the International Civil Aviation Organization (ICAO) Global Air Navigation Plan (GANP).

1.3. The WMO Services Commission (SERCOM) Standing Committee on Services for Aviation (SC-AVI) had intended to convene the next (physical) AeroMetSci Conference in 2021. However, due to the unforeseen and unprecedented impact of the COVID-19 pandemic on international travel, the Conference has been postponed to 2024. This revised time frame for the physical Conference will serve as an approximate midpoint of research activities linked to Phase 2 of an Aviation Research and Development Project (AvRDP2), a joint collaboration between the Research Board (RB) World Weather Research Programme (WWRP) and SERCOM SC-AVI.

1.4. Given the prevailing postponement of the physical Conference and in order to maintain community interest and engagement, the SERCOM SC-AVI, with the support of the RB and Infrastructure Commission (INFCOM) as necessary, is conducting a series of web-based seminars ('webinars') to showcase some of the latest state-of-the-art scientific and technological advances taking place in aeronautical meteorology. The first round of webinars was held in June 2022 and attracted more than 250 online participants. A second round of webinars is scheduled for December 2023. These webinars, convened across all six WMO Regions, are helping to promote awareness within and stimulate collaboration across national meteorological services and others involved in the provision and use of meteorological service for international air navigation, with a particular focus on key meteorological hazards of concern to aviation such as severe convection or turbulence.

2. OBJECTIVE AND THEME

2.1. Building on the success of AeroMetSci-2017 and taking into account the current and foreseen modernization of meteorological service for international air navigation in line with ICAO GANP and WMO LTP-AeM, the objective of the webinars is to further showcase scientific and technological advances, for instance the application of artificial intelligence (AI) and machine-learning (ML), in meteorological observations, forecasts, advisories and warnings as well as expand focus on the integration of meteorological information decision-support services into the global air traffic management system. The webinars also briefly cover climate research efforts that may offer insights into the potential impacts of a changing climate on aviation operations.

2.2. The theme of the 2023 webinars series will be:

"Scientific and technological innovation in observation and forecast of turbulence and airframe icing to enable service delivery transformation and improve aviation safety"

3. EXPECTED OUTCOME AND OUTPUTS

3.1. The webinars will serve to help WMO refine a common vision for scientific and technological research and development, increase visibility of AvRDP2, and allow for a more objective assessment of the current and expected operational capability of aeronautical meteorological service providers in the next 5 to 10 years. In addition, the webinars will help inform WMO's advice to ICAO, for example in respect of the hazardous weather information service (HWIS) concept and industry efforts to mitigate the effects of and adapt to a changing climate.

3.2. Outputs of the webinars will include a final report comprising an overview of the presentations and a summary of the panel discussions as well as recommendations to help guide or direct future work and preparations for a physical AeroMetSci Conference.

4. STAKEHOLDERS AND PARTNERS

4.1. A broad array of internationally recognized scientific research partners, aviation stakeholders and other parties are expected to express interest in the webinars, including:

(a) WMO Member States and Territories, technical commissions, regional associations and other bodies;

(b) Scientific research institutes, universities and other academia;

(c) International aviation organizations/associations such as ICAO, IATA, IFALPA, IFATCA, ACI and CANSO and others from the international aviation industry;

(d) National or regional air traffic management modernization programmes such as SESAR (Europe), NextGen (USA) and CARATS (Japan);

(e) Meteorological instrumentation systems, data processing and display providers, including associate members of HMEI;

(f) Public and private meteorological service providers serving international civil aviation.

5. FORMAT AND RESPONSIBILITIES

5.1 The webinars will comprise a blend of pre-recorded video presentations and live panel discussions involving renowned experts and agencies from across the aeronautical meteorology community.

5.2 The webinars will be conducted across multiple WMO Regions (multiple time zones) in order to reach a global audience, provisionally as follows:

UTC	Tuesday 5 December 2023	Wednesday 6 December 2023	Thursday 7 December 2023
0600–0900	RA II (Asia) and RA V (South-West Pacific)		
1100–1400		RA I (Africa) and RA VI (Europe)	
1700–2000			RA III (South America) and RA IV (North America, Central America and the Caribbean)

5.3 The SC-AVI, through its Expert Team on Weather and Climate Science for Aviation Applications (ET-WCS) and with the support of others as necessary, will be responsible for leading the planning, preparation and conducting of the webinars and for reporting on the outcomes to SERCOM and others concerned.

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