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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附件： 1（仅以英文提供）

主题： WMO 航空气象科学网络研讨会（2023 年 12 月 5 日）

要求采取的行动： 将公告分发给有关各方，并确保参会人员于 **2023 年 11 月 15 日前**通过该网络研讨会注册表自我注册

尊敬的先生/女士，

我谨通知您，世界气象组织（WMO）天气、气候、水文、海洋及相关环境服务与应用委员会（SERCOM）将于 2023 年 12 月 5 日协调世界时 06:00 至 09:00 点召开一次网络研讨会，以展示 WMO 第二区域协会（亚洲）和第五区域协会（西南太平洋）在航空气象方面取得的部分最新科技进展。此次网络研讨会是继 2022 年 6 月在 WMO 各区域成功举办一系列网络研讨会之后的又一次会议。

本次网络研讨会的主题是：“*湍流和机身结冰观测和预报中的科技创新，以期转变服务提供方式、提升航空安全*”。

本次网络研讨会的目标是展示科技进步，特别是人工智能(AI)和机器学习(ML)在气象观测、预报、咨询和警报中的应用，以及将气象信息决策支持服务的关注点扩展到全球空中交通管理系统。本次网络研讨会将简要介绍气候研究工作，或可有助于深入了解气候变化对航空运营的潜在影响。更多信息请参见本公告所附的概念说明(仅以英文提供)和本网络研讨会网站。

本次网络研讨会将包括预先录制的视频演示和现场专题小组讨论。本次网络研讨会的工作语言为英文。鉴于本次研讨会的在线性质，与会者须能接入必要和适当的公共互联网，包括足够的带宽。所选网络研讨会的注册应由每位参与者于 **2023 年 11 月 15 日前**通过此处提供的网络研讨会注册表完成：https://forms.office.com/e/LiyDfhiBwa。有关网络研讨会的任何问题，请联络 WMO 航空服务处（aviation@wmo.int）。

烦请将此公告在贵国贵部门内外广为散发。

谨上

埃琳娜·玛娜妍科娃博士
代秘书长

致： 第二区域协会（亚洲）和第五区域协会（西南太平洋）会员常任代表（有限分发）

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; and

(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 5 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, and

(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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