

## **WMO OMM**

World Meteorological Organization Organisation météorologique mondiale Organización Meteorológica Mundial Всемирная метеорологическая организация المنظمة العالمية للأرصاد الجوية 世界气象组织



Secrétariat

7 bis, avenue de la Paix Case postale 2300 CH 1211 Genève 2 - Suisse Tél.: +41 (0) 22 730 81 11 Fax: +41 (0) 22 730 81 81 wmo@wmo.int - wmo.int

文件编号: 6433004/2025/I/GCW/TT-CPOS

2025年9月8日

附件: 2 (仅以英文提供)

主题: 关于加入 WMO 冰冻圈与空间极地观测任务组(TT-CPOS)的邀请函

要求采取的行动: 提名贵国家机构一名专家加入 TT-CPOS, 并于 **2025 年 10 月 31 日**前提交提名

尊敬的先生/女士,

世界气象组织(WMO)谨此宣布成立冰冻圈与空间极地观测任务组(TT-CPOS)。

TT-CPOS 将支持 WMO 为协调国际活动做出的贡献,以推进极地和高山地区冰冻圈的空基 监测。TT-CPOS 为 WMO 提供了一个更新机制,以再度吸引国际卫星观测界参与,重点关注冰冻圈监测, 在前极地空间任务组(PSTG)的基础上,打造并推进其工作。更多信息见本函附件 I。

TT-CPOS 的建立是对世界气象大会第十九次届会(Cq-19)批准的 WMO 优先事项以及执 行理事会(EC)的决定(包括 EC 第七十九次届会(EC-79)关于 WMO 在组织 2032-33 国际极地年中 的作用的决议 2), 关于 "通过协调有意机构的参与, 从不断增加的极轨卫星和其他冰冻圈监测卫星群获 益,并从现场和遥感观测日益增强的互补性中获益"的直接支持。

我谨此邀请您提名一名贵国家机构(最好是空间机构/卫星运营方)专家,供观测、基础设施 与信息系统委员会(INFCOM)主席审议TT-CPOS成员组成。

成员遴选将基于所展示的知识专长和对冰冻圈和极地地区空间观测相关的科学或业务计划的 积极参与度,特别是具有公认国际贡献者。我们希望任务组获选专家能具观测系统视角。

经 INFCOM 主席批准的 TT-CPOS 职责详见本函附件 II。任务组的人员组成将由 INFCOM 主席根据全球冰冻圈监视网咨询组(AG-GCW)组长与地球观测系统于监测网络常设委员会(SC-ON) 主席协商后形成的建议,并与气象卫星协调组(CGMS)和地球观测系统委员会(CEOS)协商后予以批 准。任务组将由两名联合主席主持,他们也将由 INFCOM 主席与 CGMS 和 CEOS 协商后批准。

TT-CPOS 将在 INFCOM 下作为 AG-GCW 的子结构运作。它将定期向 SC-ON 汇报并与空 间系统于利用专家组(ET-SSU)展开协作。TT-CPOS的产出将酌情纳入 CGMS和 CEOS及其各自工 作组提交的 WMO 报告中。

致: WMO 阿根廷、澳大利亚、巴西、加拿大、中国、法国、德国、印度、意大利、日本、巴基斯坦、俄罗斯联邦、英国、 美利坚合众国常任代表 (有限分发)

Simonetta Cheli 女士, ESRIN ESA 地球观测计划主任 Phil Evans 先生, EUMETSAT 主任

EC/哥白尼: Simon Jutz 先生, 哥白尼空间办公室主任

抄送: 水文顾问(有限分发)

CGMS 秘书处, Anne Taube 女士 CEOS 秘书处, Steven Ramage 先生 TT-CPOS 将根据共同意向,通过邀请 WMO 相关子机构、全球气候观测系统、WMO 研究理事会及其计划的专家,以及 WMO 合作伙伴的代表,参与扩大的世界天气监视网(EWWW)和 WMO 空间计划以及 WMO 研究活动。这将使我们能够将 TT-CPOS 的成员数量保持在最低必要水平,同时确保相关举措之间的大力协调。

望 WMO 秘书处能在 2025 年 10 月 31 日前收到您的提名。请通过 hpohjola@wmo.int 和 cryosphere@wmo.int 通知 Heikki Pohjola 先生。

我谨此向您致以崇高敬意,并承诺 WMO 将全力支持会员的优先事项。

谨上

寇·巴雷特女士

代秘书长

## **Background**

The nineteenth World Meteorological Congress (Cg-19) approved as one of the WMO priorities for this financial period, the addressing of global and regional impacts of changes in the cryosphere, including by "Sustaining the advocacy for critical satellite observations and data over polar and high mountain regions to support risk monitoring and assessments and the development of necessary services".

Furthermore, Resolution 4 (EC-78) on Cryosphere high-level ambitions, requested INFCOM to "work with the satellite community, especially through the Coordination Group for Meteorological Satellites (CGMS) for multi-satellite coordinated cryosphere monitoring products to improve the spatial and temporal resolution and coverage of cryosphere monitoring", and, "in coordination with the EC Panel on Polar and High Mountain Observation, Research, and Services (PHORS), to organize consultations towards WMO pursuing closer links with the international satellite community on the monitoring of the cryosphere, and to co-organize a symposium on the cryosphere observation from space, in collaboration with satellite operators".

The second session of the Commission for Observation, Infrastructure and Information Systems (INFCOM-2), requested the Advisory Group on the Global Cryosphere Watch (AGGCW) and the Standing Committee on Earth Observing Systems and Monitoring Networks (SCON) to prepare "terms of reference and a modus operandi for a task team on the coordination of space-based capabilities for advancing benefits of, and access to, space-based cryosphere observations, by evolving those of the Polar Space Task Group (PSTG), for approval by INFCOM President". The WMO PSTG operated successfully until 2019 under the auspices of the Executive Council panel PHORS, as the successor of the International Polar Year Space Task Group (IPY-STG), which had been established for Space Agency planning, processing and archiving of the IPY (2007–2008) Earth Observation legacy dataset. A request was made during the sixty-eighth session of the WMO Executive Council that the scope of PSTG be expanded to include the cryosphere in high mountain regions, e.g. tropical glaciers and high mountain Asia, etc.

## **Terms of Reference**

Under the auspices of INFCOM and the remit of AG-GCW and in collaboration with SC-ON, TT-CPOS will:

- 1. Convene and coordinate collaborations (technical, scientific, planning) on satellite Earth observations to support research and operational cryospheric information needs in the Arctic, Antarctic, and high mountains worldwide;
- 2. Contribute to relevant WMO outputs on space-based capabilities and gaps regarding the cryosphere, addressing requirements from both research and operational communities, coordinated through AG-GCW. This includes activities such as the RRR on the Cryosphere, WMO Integrated Global Observing System (WIGOS) Vision 2050, IPY activities, research programmes, and the GCOS Implementation Plan. Additionally, facilitate the dissemination of RRR outputs to agencies focused on research and operational objectives;
- 3. Facilitate consultations and develop recommendations to meet specific requirements with broad benefits as expressed by IPY, WMO, or research programmes. This may include optimizing mission planning, adjusting acquisition plans of existing satellites, leveraging existing flexibilities, exploring complementarities (such as the benefits of time/space colocated data products), and tailoring existing plans as needed;
- 4. Identify and make recommendations on existing, unique and complementary remote sensing capabilities that could be leveraged for cryospheric monitoring and scientific progress and on (new) products with the potential to meet needs of users (e.g. for IPY) and for new applications and emerging opportunities, e.g. AI/ML, etc.;
- 5. Support the implementation of the WMO Unified Data Policy on cryosphere core and recommended satellite data and the WMO Annual Gap Analysis for space-based observing systems for critical satellite observations and data over polar and high mountain regions, in collaboration with SC-ON/ET-SSU;
- 6. Address specific requests from AG-GCW, such as on requirements for ground-based observations for calibration and validation and on access to and assurance of complementary in situ observations, on fostering satellite cryosphere product intercomparisons, and on improvements to operational products and services, etc.;

## Membership

- The members of TT-CPOS will be identified and approved by the President of INFCOM from those nominated by Members;
- Expert engagement with the scientific and operational user communities will be ensured through the membership and engagements of AG-GCW, as well as:
  - Global Climate Observing System (GCOS);
  - WCRP, through its projects, e.g. Climate and Cryosphere (CliC), GEWEX, etc.;
  - Scientific Committee for Antarctic Research (SCAR);
  - International Arctic Scientific Committee (IASC);
  - International Association of Cryospheric Sciences (IACS);
  - The Intergovernmental Oceanographic Commission of UNESCO (IOC) and its Global Ocean Observing System (GOOS);
- Other experts may be invited based on work objectives.