



NEWSLETTER

2019-2020工作简报 总第1期,2020第1期

MAP-AQ 亚洲区域办公室成立

WMO OMM



27485/2019/2019-RES/ARE

1 (available in English only)

7 bis, avenue de la Paix – Case p CH 1211 Genève 2 – Suisse Tél.: +41 (0) 22 730 81 11 Fax: +41 (0) 22 730 81 81

Ms Yaming Liu Permanent Representative of China with WMO China Meteorological Administration (CMA) 46 Zhongguancun Nandajie Beijing 100081 China

Establishment of the Shanghai office for Monitoring, Analysis, and Prediction of Air

Dear Ms Liu,

As you may be aware, the eighteenth World Meteorological Congress (Cg-18, Geneva, 3–14 June 2019) adopted a historical reform of the constituent bodies of the World Meteorological Organization (WMO) to embrace a more comprehensive Earth system approach, with a stronger focus on water resources and the ocean, more coordinated climate activities, and a more concerted effort to translate science into services for society.

Within WMO, the Global Atmosphere Watch (GAW) Programme coordinates the activities related to the atmospheric chemical composition. GAW, as a research programme, focuses in particular on development of new services, and through close cooperation with the WMO operational community, it strives to translate these new services to operational capabilities to provide benefits to user community. GAW is supervised by the newly established Research Board that works closely with the new Technical Commissions to ensure the co-design of the new services.

WMO co-organized the first Global Conference on Air Pollution and Health with the World Health Organization, from 30 October to 1 November 2018. At this conference WMO took a commitment to improve the air quality forecasting capabilities to avoid acute health episodes. Such capabilities would build on the earlier successful systems implemented and being developed by the National Hydro-Meteorological Services and by academic partners

One of such joint initiatives co-organized by WMO and the International Global Atmospheric Chemistry (IGAC) project is Monitoring, Analysis, and Prediction of Air Quality (MAP-AQ) project. This project has an objective to develop and implement a global air pollution monitoring, analysis, and prediction system for air quality with downscaling capability in regions of the world affected by high levels of atmospheric pollutants, in particular in Asia, Latin America, and Africa, and it constitutes one of the important elements of the Global Air Quality Forecasting framework being spearheaded by WMO.

The concept of the MAP-AQ, its objective and workplan were discussed at the meeting of the WMO/GAW Scientific Advisory Group on Application at the end of May 2019. This meeting was attended by the delegation from Fudan University that proposed its capabilities to support MAP-AQ project. In particular, the group in Fudan University can help in facilitation of the regional activities related to air quality observations and forecasting and assist in connecting this activity with WMO global initiative. In this way, the Shanghai office of MAP-AQ could serve as a regional hub for the related activities and support the capacity building effort for WMO members in the Asian region. More specific tasks of this office are proposed in the Annex.

cc: Prof. Renhe Zhang, Department of Atmospheric and Oceanic Sciences & Institute of Atmosphe

2019/10 在中国气象局的大力支持下,经联 合国特别机构世界气象组织(WMO)批准, MAP-AQ亚洲区域办公室在中国上海复旦大学设立。

The Shanghai office would work very closely with China Meteorological Administration (CMA) on implementing its activity and with WMO Secretariat where the global coordination office will be established being supported by the Junior Professional Office (supported by China).

I should be grateful if you could indicate your concurrence with establishment of the MAP-AQ office in Shanghai by Fudan University and the intention of CMA to work closely with this office. Please do not hesitate to let me know if any further information is required. For the technical clarification please consult with Oksana Tarasova, Chief, Atmospheric Environment Research Division at otarasova@wmo.int

 $\,$ I would like to take this opportunity to express our appreciation for your continuous support to the programmes of WMO.

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ANNEX

provide support/coordination of the national and regional activities related to air quality and health including follow up on MarcoPolo and Panda projects;
creation and support of the related web page;
support of the organization of the regional and national meetings related to the air quality forecasting in the region in collaboration with the national and regional partners;
establishment of the working relationship between air quality measurement and modelling community and health community in China in collaboration with the regional/national office of WHO:

establishment and support of the regional collaborative activities through South-South collaboration calls;

coordination of the contribution of the regional activities to the global activities of MAP-AQ project and WMO Global Air Quality Forecasting initiative.

办公室主要职责:

- ✓ 协调亚洲地区更好地参与 MAP-AQ国际研 究计划的各项活动
- ✓ 协助政府部门因地制宜地制定减排政策
- ✓ 向公众传递空气污染相关知识

支持单位:中国气象局、复旦大学

管理单位:复旦大学大气与海洋科学系/大 气科学研究院

负责人:张人禾(中国科学院院士)

2019/03 张人禾院士率队在北京与出席世界气象中心 (WMO/WMC) 工作会议的Xu Tang司长 (WMO) 和 Greg Carmichael教授 (WMO全球大气成分监测科学指导委员会主席) 等商议复旦大学支持WMO大气化学研究计划等事宜。

2019/05 复旦大学代表团应邀参加在日内瓦召开的WMO全 球大气成分监测科学咨询应用专家组会议 (GAW APP SAG) 暨 MAP-AQ科学委员会会议,并介绍了复旦大学支持WMO全球大 气环境研究项目的能力与愿望,特别是在亚洲区域的空气污染观 测预报研究与治理工作等方面。

办公室团队在国内期刊发表 论文介绍了MAP-AQ国际 研究计划及前沿科学问题。



2020年1月

气候变化研究进展

王晓妍, 赵德峰, 欧阳慧灵, 等,空气质量监测、分析、预报国际研究计划及前沿问题 [7], 气候变化研究进展, 2020, 16 (1): 130-132 Climate Change Research, 2020, 16 (1): 130-132

空气质量监测、分析、预报国际研究计划及前沿问题《

International project of monitoring, analysis, and prediction of air quality and some essential questions

王晓妍, 赵德峰, 欧阳慧灵, 张人禾





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成为MAP-AQ在环境灾害人道救援组织中的联络代表





Max-Planck-Institut für Meteorologie | Bundesstr. 53 | 20146 Hambur

Institutional Letter of Endorsement for Environment in Humanitarian

Action Network (EHA Network)

Prof. Dr. Guy Brasseur

Max-Planck-Institut für Meteorologie Environmental Modeling Group Bundesstr. 53 20146 Hamburg Deutschland Tel.: +49 - (0)40 - 41173 - 209 Fax: +49 - (0)40 - 41173 - 390 guy.brasseur@mpinet.mpg. de

Hamburg, 4.05.2020

Dear Colleagues,

I, Prof. Dr. Guy P. Brasseur, Max Planck Institute for Meteorology and co-Chair of the MAP-AQ Project, have been informed about the *Environment in Humanitarian Action Network* (*EHA Network*).

The failure to take the environment into account during humanitarian response planning has manifested itself in many ways across various crisis situations and countries. For instance, it resulted in deforestation because of brick production for humanitarian operations in Darfur; dried up wells due to over-drilling for water by humanitarian organisations in Afghanistan; lead to fishing stock depletion in post-Tsunami Sri Lanka following an over-provisioning of fishing boats; triggered environmental contamination in Haiti due to a failure to meet waste treatment standards, causing the largest outbreak of cholera in recent history; and has triggered landslides in the Cox's Bazar Rohingya refugee camp in 2017. These examples illustrate how nature's contributions to people are often invisible in the humanitarian choices we make, with short term stability being realized by steadily drawing down local natural resources. Indeed, failing to properly take environmental issues into consideration can inadvertently undermine the humanitarian "do no harm" principle.

The Environment and Humanitarian Action Network (EHA Network) is a global partnership of UN agencies, NGOs, as well as specialist organisations that collectively aim to influence policy, enhance implementation and better coordinate efforts in the field of Environment and Humanitarian Action. The network advocates for a timely and appropriate inclusion of identified environmental issues in humanitarian planning processes. The EHA Network was established in 2014, in line with the mandate given by the Strategic Advisory Group on Environmental Emergencies (SAGEE), and the Secretariat is hosted at the UNEP/OCHA Joint Environment Unit.

My organization fully endorses this vision and I officially express our support to the EHA Network.

I hereby appoint Prof. Xu Tang and Dr. Huiling Ouyang (Fudan University) as the focal point from our organization. They will support the implementation of the work plan of the EHA Network. We may also consider additional support to the network subject to our mandate and resources on a case to case basis. I wish the EHA Network the very best in all its endeavours.

Sincerely yours,

Maseu

Guy P. Brasseur Chair of MAP-AQ Senior Scientist Max Planck Institute for Meteorology Hamburg, Germany 2020/05 MAP-AQ联合主席Prof. Guy Brasseur同意MAP-AQ加入EHAN网络,并指定MAP-AQ亚洲区域办公室的汤绪教授和欧阳慧灵博士为首要联络人 (Focus Point)。



EHAN是联合国环境署(UNEP)、人道协调厅 (UNOCHA)共同建立的联合环境机构(JEU)组 织发起的国际环境与人道救援网络。EHAN网络 现有10个机构和170余位专家组成,联合环境机构 (JEU)是负责该网络协调的秘书处。





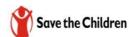














Meeting between WMO Coordination Hub (WCH) and Joint UNEP/OCHA Environment Unit (JEU)

11 December 2019, 11:00 h - 12:30 h, WMO Secretariat (Jura 5)

MEETING MINUTES

I. Participants

JEU: Ms. Emilia Wahlstrom

WCH: Dr. Xu Tang, Ms. Huiling Ouyang, Mr. Zheqing Fang

II. Meeting agenda

Time €	Theme@	Presenter@
11:00 - 11:45	Introduction of JEU	Emilia Wahlstrome
11:45 - 12:15	Introduction of WCH ^Q	Xu Tang€
12:15 - 12:304	Discussion of future collaborations	e a la company de la company d

2019/11

2020/02

与JEU/EHAN官员会晤,讨论在环境 危害领域可能的合作,以及气象专家 如何更多的参与人道主义救援工作。







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深度参与JEU/EHAN的各项工作

2020年4月

介绍MAP-AQ亚洲区域 办公室及其11月份拟召开 的国际会议。

- Huiling Ouyang/MAP-AQ Shanghai informed EHAN members that the MAP-AQ Shanghai Office is a newly setup office and the first regional office of the MAP-AQ project, coordinating the national and regional activities related to air quality and health, and support the organization of the regional and national meetings related to the air quality forecasting in the region in collaboration with the national and regional partners. They are planning to host an international meeting on chemical weather analysis and forecasting at the end of this year. More information will be available soon.
- AP 14. EHAN members interested in this topic are requested to contact Huiling Ouyang/MAP-AQ (ouyanghuiling@fudan.edu.cn) for further information.

2020年6月

介绍 MAP – AQ化学天气 与气候论坛的筹备情况。

9. AOB←

- Xu Tang/MAP-AQ briefly introduced the forum on Chemical Weather and Chemical Climate. Xu Tang will share the agenda and more information with EHAN members at a later date.
- AP 11. EHAN members interested in "The First International Forum on Chemical Weather and Chemical Climate" organized by MAP-AQ (date now set to May 2021 due to COVID-19) to contact Xu Tang/MAP-AQ (xutang2016@gmail.com). ←

2020年9月

再次介绍MAP-AQ论坛筹 备进展并且邀请EHAN成 员出席。

Opportunities for collaboration 4

- The MAP-Forum on Chemical weather and Chemical climate, originally planned for November 2020 is postponed to May 2021 due to COVID-19. Six sessions are planned, one of which is on global governance on air quality and interactions with stakeholders. EHAN members are invited to attend the forum. Those interested can contact ouyanghuiling@fudan.edu.cn or Prof. Tang Xu (tangxu@fudan.edu.cn). ←

在相关会议上介绍MAP-AQ及其亚洲区域办公室的工作





将MAP-AQ及其亚洲区域办公室相 关活动纳入EHAN的年度工作计划

Work Plan for the Environment and Humanitarian Action Network 2020

EHAN network members are invited to review and comment on below work plan, adding EHA activities they are involved in and indicating areas where they could be involved or foresee synergies with ongoing projects and activities.

Area of work	Objectives	Activities	Timeframe	Lead/Co-leads	Contributors	Remarks
		•				
	[added in April 2020]	4.3.1 Produce global guidance for environmental mainstreaming in humanitarian response planning including low cost actions, indicators and additional guidance per sector	March 2020 - March 2021	UNEP, IOM	JEU (currently building working group) UNITAR/GPA interested	Concept note here.
		3.1.2. Provide ad-hoc expert advice to the JEU as needed, including through the OCHA remote analysis cell (support OCHA and inter-agency partners to carry out coordinated and joint assessments in crisis context)	Ongoing / as needed	Members of Environment Assessment and Analysis Cell (see TOR here)	International Expert Network (MAP-AQ) Interested in joining the team as requested.	MAP-AQ is a WMO Initiative under the WMO Global Atmosphere Watch (GAW) Programme

Work Plan for the Environment and Humanitarian Action Network 2020

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Area of work	Objectives	Activities	Timeframe	Lead/Co-leads	Contributors	Remarks
		programmes 3.1.6. Inclusion of EHA matters in the regular Summer School of MAP-AQ to train all relevant national professional teams on how to connect the knowledge and experience on atmospheric environment with JEU and environment humanitarian actions.	July and/or August , during each summer vacation period	MAP-AQ: Guy Brasseur, Renhe Zhang, Rajesh Kumar, ,Xu Tang	JEU and EHA Network	

Work Plan for the Environment and Humanitarian Action Network 2020

EHAN network members are invited to review and comment on below work plan, adding EHA activities they are involved in and indicating areas where they could be involved or foresee synergies with ongoing projects and activities.

Area of work	Objectives	Activities	Timeframe	Lead/Co-leads	Contributors	Remarks
		2.1.3. Organize side event and booth on EHA at ECOSOC HAS	June 2020	JEU	-	Are EHAN interested in this? JEU organized one in 2019 NB: Event may be postponed due to COVID-19
		2.1.4 Organizing the International Forum on Chemical Weather Analysis and Forecasting (IFCWAF) and a special Forum Session on Environment Emergency and Governance will be included.	Nov. 2020 (Shanghai, China)	Guy Brassuer, Renhe Zhang, Xu Tang (MAP-AQ)	JEU, EHA and others who are interested in this topic and willing to join the Forum Session will be invited.	The timeline for the Forum will be finally announced in August due to Covid-19 (it might be postponed to Nov. 2021 and keep it as the face-to-face meeting) .





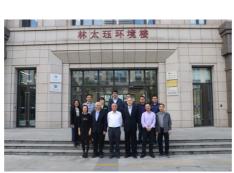
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积极主办系列学术活动



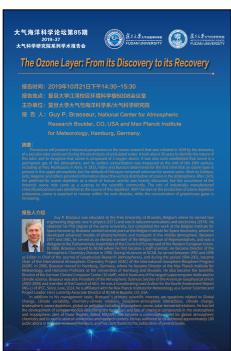




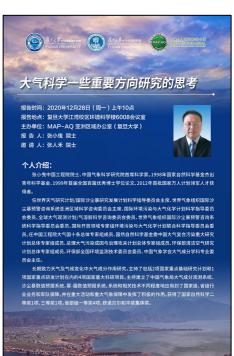




Dr. Yixuan Gu, Shanghai Center of Urban Environmental Meteorology, Shanghai Meteorological









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工作剪影

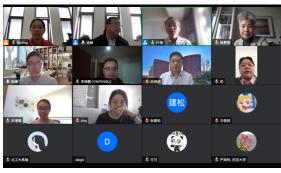


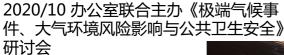




2019/10 MAP-AQ联合主席 Prof. Guy Brasseur到访亚洲区域办公室

2020/12 张小曳院士 学术报告







2020/06 黄忠伟教授报告





办公室成员参加人道救援国际网络周活动 2019/12 办公室成员借调WMO



2019/05 复旦大学 代表团应 邀赴 WMO参 加MAP-AQ科学委 员会会议







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2021年工作计划

- ▶ 招聘1-2名全职人员
- 建立项目办公室网站
- 开展空气质量预报的现状调研
 - 调研全球各地区目前采用的模式类型、 关注的研究区域
 - 调研区域内空气质量预报服务现状
 - 协助延续 MarcoPolo Panda计划

- 定期举办在线讨论会
 - 关注热点话题、最新政策以及高影响研究成果
- 举办培训活动、暑期学校
- 举办学术论坛
 - 拟定于2021年5月
 - 设置相关领域青年科学家奖项

第一届化学天气和化学气候国际论坛(初步方案)

Time	Day 1	Day 2	Day 3	Day 4
08:30 - 09:00	0	Plenary Talk: Renhe Zhang (FDU)	Plenary Talk: Kebin He (THU)	
09:00 - 09:30	Opening Ceremony	Plenary Talk: Daniel Jacob (Harvard)	Plenary Talk: Vincent-Henri Peuch (ECMWF)	Scientific Tour:
09:30 - 10:00	Plenary talk: Jiming Hao (THU)(45 min)	VIPs + Launching (1 h) enary talk: Jiming Hao (THU)(45 min) Coffee Break & Poster Coffee Break & Poster		Shanghai
10:00 - 10:30	Photo & Break (45 min)			Meteorological
10:30 - 11:00				Museum
11:00 - 11:30	Plenary Talk: Greg Carmichael (GAW)	Sessions 1 - 5 in Parallel	Sessions 1 - 5 in Parallel	(Optional)
11:30 - 12:00	Plenary Talk: Jim Crawford (IGAC)			
12:00 - 14:00	Lunch	Lunch	Lunch	
14:00 - 14:30		Sessions 1 - 5 in Parallel		
14:30 - 15:00	Sessions 1 - 5 in Parallel		Session 6	
15:00 - 15:30				
15:30 - 16:00	Coffee Break & Poster	Coffee Break & Poster		
16:00 - 16:30	Coffee Break & Poster	Confee Break & Poster	Coffee Break	
16:30 - 17:00			Closing Ceremony	
17:00 - 17:30	Sessions 1 - 5 in Parallel	Sessions 1 - 5 in Parallel	Summary talk: Rajesh Kumar	
17:30 - 18:00			Award announcement	
18:00 - 19:00		Dinner	Dinner	
19:00 - 19:30				
19:30 - 20:00	D		Paris and Martin	
20:00 - 20:30	Banquet	Business Meeting	Business Meeting	
20:30 - 21:00				

Sessions	Chairs
Session 1: Emission inventory of gases and aerosols	HUGO Denier van der Gon (TNO)
	● Kebin He (THU)
Session 2: Observation of the physic-chemical characteristics	● Tao Wang (HK PolyU)
of atmospheric components	● Lin Wang (FDU)
Session 3: Multi-scale simulation and forecasting of chemical	Oriol Jorba (Barcelona Supercomputer Center)
weather/climate	● Hong Wang (CAMS)
Session 4: Linkage between air pollution and weather/climate	Johannes Flemming (GAFIS, ECMWF)
	Xiaoye Zhang (CAMS)
Session 5: Assessment of environmental and health risk	Sophie Gumy (WHO)
associated with air pollution	● Tong Zhu (PKU)
Session 6: Global governance on air quality and interactions	Jessica Seddon (World Resource Institute, Washington, DC)
with stakeholders	● Xu Tang (FDU)