

WMO Commission for Instruments and Methods of Observation (CIMO) Expert Team on Upper Air Measurements



CIMO WORKING STRUCTURE (2018-2020/22)

(Adopted by CIMO-17)

CIMO Management Group

Management Group Terms of Reference

Membership:

		Responsible for overseeing work of:	Responsible for liaison with Regional Association
President:	Bruce FORGAN	TT-RadRef	
Vice-President:	Bruce HARTLEY	IPET-OWR & TT-Class	RA V
Coordinators:	Christine BEST	ET-UAM & TT-UAI	RA IV
	Mario GARCIA	ET-CDO & TL-RPM	RA III
	Tilman HOLFELDER	EdBd & TT-OMU	RA VI
	Minna HUUSKONEN	ET-SM	RA VI
	Changxing LI	IPET-ABO	RA II
	Rabia MERROUCHI	ET-MET & TT-Auto	RA I

Expert Team on Surface Measurements (ET-SM)

Chair: Yves-Alain ROULET

Vice-Chair: Jane WARNE

Expert Team on Upper Air Measurements (ET-UAM)

Chair: Junhong WANG

Vice-Chair: Volker LEHMANN

Expert Team on Metrology (ET-Met)

Chair: Drago GROSELJ

Vice-Chair: Holger DOERSCHEL

Task Team on Overall Measurement Uncertainties (TT-OUM)

Chair: Ian DOLLERY

Vice-Chair: Andrea MERLONE

Task Team on Transition to Automation (TT-Auto)

Chair: Andrew HARPER

Vice-Chair: Mike MOLYNEUX

Task Team on Upper Air Intercomparison (TT-UAI)

Chair: Ruud DIRKSEN

Vice-Chair: Giovanni MARTUCCI

Theme Leader on Radiosonde Performance Monitoring (TL-RPM)

Mustafa ERDEM

Qiyun GUO

Expert Team on Upper Air Measurements

Title	Surname	First name	Gender	Country	Function	Email
Dr	Wang	Junhong (June)	Female	United States of America	Chair	jwang20@albany.edu
Dr	Lehmann	Volker	Male	Germany	Vice-chair	volker.lehmann@dwd.de

Core members

Dr	Ristori	Pablo Roberto	Male	Argentina	Core	pablo.ristori@gmail.com / pristori@citedef.gob.ar
Mr	Yang	Rongkang	Male	China	Core	yrkaoc@cma.gov.cn
Mr	Klink	Stefan	Male	Germany	Core	stefan.klink@dwd.de
Eng	Chan	Pak Wai	Male	Hong Kong, China	Core	pwchan@hko.gov.hk
Dr	Sakai	Tetsu	Male	Japan	Core	tetsu@mri-jma.go.jp
Mr	Apituley	Arnoud	Male	Netherlands	Core	apituley@knmi.nl
Eng	Haefele	Alexander	Male	Switzerland	Core	alexander.haefele@meteoswiss.ch
Dr	Gaffard	Catherine	Female	United Kingdom	Core	catherine.gaffard@metoffice.gov.uk
Eng	Brewer	Daniel	Male	United States of America	Core	daniel.brewer@noaa.gov
Dr	Kim	Yong-Gwoo	Male	Korea	BIPM-Rep (Core)	dragon@kriss.re.kr
Mr	Lehmuskero	Matti	Male	Finland	HMEI-Rep (Core)	matti.lehmuskero@vaisala.com

Ad Hoc Members

Dr	Xu	Jianliang	Male	China	Ad-hoc	xujl@atmb.net.cn
Eng	Pieter	Haime D F	Male	Curacao	Ad-hoc	haime.pieter@meteo.cw
Mr	Mahmoud	Emad Eldin	Male	Egypt	Ad-hoc	emad.met@gmail.com
Eng	Piguet	Bruno	Male	France	Ad-hoc	bruno.piguet@meteo.fr
Eng	Traullé	Olivier	Male	France	Ad-hoc	olivier.traulle@meteo.fr
Ms	Lee	Shuk Ming, Olivia	Female	Hong Kong, China	Ad-hoc	olee@hko.gov.hk
Mr	Song	Taejun	Male	Korea	Ad-hoc	songtj@korea.kr
Mr	Zaidouni	Taoufik	Male	Morocco	Ad-hoc	taoufikzaidouni@gmail.com
Eng	Moreta	Juan Ramón	Male	Spain	Ad-hoc	jmoretag@aemet.es

- (a) **Develop specifications** for instruments, observing systems, automatic measurement techniques and manual observing methods in order to meet requirements from Members for the measurement of upper air meteorological, climatological, related geophysical and environmental variables;
- (b) Develop guidance material and standards related to upper air measurements and methods of observation for inclusion in the **CIMO Guide** and/or as Instruments and Observing Methods (IOM) reports. Ensure that the identification and development of standards is pursued in co-operation with other international standardization organizations, such as ISO and BIPM, where appropriate;
- (c) Regularly review, and update as required, all chapters of the CIMO Guide related to upper air measurements and instrumentation and ensure consistency with other WIGOS regulatory and guidance material;
- (d) **Review and publish performance results and recommendations** relating to state-of-the-art operational upper air instruments, their calibration and measurement methods and their required supporting infrastructure;
- (e) **Monitor, investigate and report on the performance** of emerging upper air measurement technologies and techniques, including low cost technologies;

Term of Reference (cont)



- (f) **Promote developments** related to instruments, automated measurement techniques and methods of manual observation of upper air conditions suitable for all Members, including the least developed countries, in liaison with the Association of Hydro-Meteorological Equipment Industry, National Meteorological and Hydrological Services and other relevant scientific institutions;
- (g) **Review outcomes of the Testbed(s) and/or Lead Centre(s) (TB/LC)** assigned to this Expert Team, and in collaboration with the TB/LC(s), coordinate timely inclusion of guidance material on best practices and of training material on the WMO IMOP website, in IOM reports and/or the CIMO Guide;
- (h) **Monitor and review regional and national intercomparisons of upper air instrumentation.** Ensure that relevant findings from these intercomparisons are included in updated guidance material in the CIMO Guide;
- (i) **Liaise effectively with the Expert Team on Capacity Development and Outreach** on developments of guidelines and training material for supporting activities relevant to the ET Terms of Reference;
- (j) **Propose to the relevant coordinator the establishment of Task Teams** to address specific tasks, as appropriate, and monitor Task Team work progress.

CIMO ET-UAM & GRUAN

1. Overlap in members, expertise & ToR
2. GRUAN impacts the broader community through CIMO ET-UAM
3. Collaborations on new developments on all aspects regarding UAM
4. Promote GRUAN through CIMO ET-UAM
5. ???