# ICM-10 Agenda

23-27 April 2018 Potsdam, Germany

Hosts: AWI & Lindenberg Meteorological Observatory (DWD)

Organizers: Marion Maturilli (AWI), Ruud Dirksen (DWD), Peter Thorne (Maynooth), David Smyth

(Maynooth), Caterina Tassone (WMO), Tim Oakley (WMO), Howard Diamond (NOAA)

## **Monday 23 April**

Day chair: Peter Thorne

#### Session 1 - Official address ICM Anniversary

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08:00 - 08:45	Registration	
08:45 - 08:55	Official opening by Brandenburg's minister for Science,	Martina Münch
	Research & Culture	
08:55 - 09:05	Introductory talk from AWI	Markus Rex (AWI)
09:05 - 09:15	Introductory talk from DWD	Paul Becker (vice-pres. DWD)
09:15 - 09:30	A brief history of GRUAN	Peter Thorne
09:30 - 09:45	GRUAN Fundamentals	Ruud Dirksen (LC)

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## Session 2 - Keynotes

10:15 - 10:45	Polar climate change and the role of ozone	Markus Rex
10:45 - 11:15	Potsdam Institute for Climate Impact Research: Tales of	Stefan Rahmstorf (PIK)
	the Gulf Stream, the Jet Stream and the Polar Vortex.	
11:15 - 11:45	The German Research Centre for Geosciences: From Solid	Jens Wickert (GFZ)
	Earth to Water Vapor and Sea Level	

## Session 3 - Review of progress

11:45 - 11:50	Welcome, local logistics, outline of events and Adoption of	Local hosts & WG chair
	agenda	
11:50 - 12:05	Remarks from GCOS including relevant AOPC outcomes	Caterina Tassone
12:05 - 12:20	Lead Centre progress report	Ruud Dirksen
12:20 - 13:05	Assessment of progress against action items arising from	Peter Thorne
	ICM-9	

#### 13:05 - 14:05 **Lunch**

## Session 4 - Discussion of topics raised by Task Team reports

14:05 - 14:15	Brief summary (2 slides) on discussion points arising from	Masatomo Fujiwara and
	Radiosonde Task Team report	Christoph von Rohden
14:15 - 14:30	Discussion of Radiosonde TT topics	To be led by day chair
14:30 - 14:40	Brief summary (2 slides) on discussion points arising from	Belay Demoz and Dale Hurst
	Sites Task Team report	
14:40 - 14:55	Discussion of Sites TT topics	To be led by day chair
14:55 - 15:05	Brief summary (2 slides) on discussion points arising from	Tom Gardiner and Fabio
	Scheduling Task Team report	Madonna
15:05 - 15:20	Discussion of Scheduling TT topics	To be led by day chair
15:20 - 15:30	Brief summary (2 slides) on discussion points arising from	Tony Reale and Thierry Leblanc
	Ancillary Measurements Task Team report	
15:30 - 15:45	Discussion of Ancillary Measurements TT topics	To be led by day chair

#### 15:45 - 16:10 Coffee

16:10 - 16:20	Brief summary (2 slides) on discussion points arising from	June Wang and Kalev Rannat
	GNSS-PW Task Team report	
16:20 - 16:35	Discussion of GNSS-PW TT topics	To be led by day chair
16:35 - 17:00	Report from GRUAN science coordinators and subsequent	Tom Gardiner
	discussion	
17:00 - 17:15	Discussion of topics arising from task teams	To be led by day chair

## **Tuesday 24 April**

Day chair: Tom Gardiner

## Session 5 - Advances in the development of new GRUAN data products

Presenters please explicitly assess progress against the criteria laid forth in GRUAN TN-4. i.e. A technical document commensurate with GRUAN-TN-2; peer reviewed paper; measurement system ready to be adopted at at least one GRUAN site; central processing facility identified; data stream run as a beta release; data stream reviewed for appropriateness.

09:00 - 09:25	Status of RS41 data processing	Ruud Dirksen
09:25 - 09:50	Meisei	Masami Iwabuchi
09:50 - 10:15	Modem	Gaëlle Clain
10:15 - 10:40	Ozonesonde	Greg Bodeker
10:40 - 11:05	GNSS	Galina Dick

#### 11:05 - 11:30 Coffee

11:30 - 11:55	MWR	Nico Cimini
11:55 - 12:20	Lidar	Thierry Leblanc
12:20 - 13:00	Discussion on progress of GRUAN product development	Day chair

#### 13:00 - 14:00 Lunch

#### Session 6 - Update on RS92-RS41 transition

14:00 - 14:20	Overview of the RS92-RS41 transition scientific dataset	Michael Sommer
14:20 - 14:40	Comparison results to date: analysis	Alessandro Fasso
14:40 - 15:00	Analysis of casing changes: styrofoam vs. plastic casing of	Daniel Brewer/Sterling
	the RS41	
15:00 - 15:20	Update on radiation measurements	Christoph von Rohden

#### 15:20 - 15:45 **Coffee**

15:45 - 16:05	RS92 and RS41 radiosonde windtunnel experiments	Marco Rosoldi, Fabio Madonna
16:05 - 16:25	Report of CoreTemp 2017, intercomparison of dual thermistor radiosonde (DTR) with RS41, RS92 and DFM09 radiosondes	Yong-Gyoo Kim
16:25 - 16:45	RIVAL Field Campaign at the ENA, NSA, & SGP ARM Sites	Lori Borg
16:45 - 17:05	On the accuracy of Vaisala RS41 versus RS92 upper air observations: Implications for satellite data cal/val	Bomin Sun
17:05 - 17:35	Discussion	Day chair

# Wednesday 25 April

Day chairs: Belay Demoz & Dale Hurst

## Session 7 - Sites day

08:30 - 09:00	Update on GRUAN data flow	Michael Sommer
09:00 - 09:30	Discussion of site reports	All

## Site updates

	09:30 - 09:45	GMAC: Updates from Beltsville site	Belay Demoz
(	09:45 - 10:00	GMAC: Updates from NWS-Sterling Field Support Center	Daniel Brewer
1	10:00 - 10:15	ARM: update and changes	Nicki Hickmon
1	10:15 - 10:30	Update of Tateno, Minamitorishima and Syowa	Masami Iwabuchi
1	10:30 - 10:45	Update of Dolgoprudny	Nadya Krestianikova

## 10:45 - 11:00 **Coffee**

11:00 - 11:15	MeteoSwiss Radiosonde current activities and future plans	Christian Felix
11:15 - 11:30	MeteoSwiss Raman LIDAR activities and future plans	Giovanni Martucci
11:30 - 11:45	Observations at Sodankylä	Rigel Kivi
11:45 - 12:00	Observations at Xilinhot GRUAN site: work in progress and	Rongkang YANG
	plan	

## UTLS Water Vapor Measurements

12:00 - 12:15	Development of the Peltier CFH	Teresa Jorge
12:15 - 12:30	New Peltier-based chilled-mirror hygrometer "SKYDEW"	Takuji Sugidachi
12:30 - 12:45	The FLASH-B instrument	Alexey Lykov
12:45 - 13:05	Video uplink Ny Alesund + balloonsounding	Marion Maturilli

# 13:05 - 14:35 Lunch and tour Telegrafenberg 2 groups alternate lunch, tour

14:35 - 14:50	Anomalously Strong and Rapid Drying of the Tropical	Dale Hurst
	Lower Stratosphere in 2016	
14:50 - 15:05	Update on IAGOS-H2O and plans for FPH/CFH tests	Herman Smit
	atmospheric simulation chamber	

## Science applications

15:05 - 15:20	Development of a cloud particle sensor for radiosonde sounding	Masatomo Fujiwara
15:20 - 15:35	Diagnostics of radiosonde vertical uncertainty covariance	Bruce Ingleby
15:35 - 15:50	Multidisciplinary drifting Observatory for the Study of Arctic Climate (MOSAIC)	Anja Sommerfeld
15:50 - 16:05	Are the climatic trends estimated using GRUAN data statistically significant?	Fadwa Alshawaf

## 16:05 - 16:20 **Coffee**

16:20 - 16:35	Combining Data from the Distributed GRUAN Site Lauder-	Jordis Tradowsky
	Invercargill, New Zealand, to Provide a Site Atmospheric	
	State Best Estimate of Temperature.	
16:35 - 16:50	Ozone sondes: Report about the JOSIE 2017 -SHADOZ	Herman Smit
	campaign	
16:50 - 17:05	EUMETSAT satellite products and their validation by	Thomas August
	coincident radiosoundings	
17:05 - 17:30	Discussion	Day Chair

19:00	GRUAN anniversary party	
	Hotel Mercure - Restaurant El Puerto	
20:30	Improv theatergroup, followed by GRUAN quiz	

# Thursday 26 April - Site Visit

08:00 - 09:30	Bus departs from Mercure hotel	
09:30 - 09:45	Welcome, legacy and present role of Lindenberg	Franz Berger
	Observatory	
09:45 - 10:10	Presentation Remote sensing group	Volker Lehmann
10:10 - 10:35	Presentation Boundary layer group	Frank Beyrich
10:35 - 11:00	Presentation Radiation group	Stefan Wacker
11:00 - 11:25	Presentation in-situ sounding group	Ruud Dirksen

11:25 - 12:55	Lunch	Gasthof Simke
12:55 - 13:25	Radiosonde launch + group picture	
13:25 - 15:25	Tour of observatory (split into separate groups)	
15:25 - 16:35	Visit Weathermuseum Lindenberg	
16:35 - 18:05	Bus returns to Potsdam	
18:05 - 19:00	Group picture at Sanssouci + stroll through gardens	
19:00 - 22:00	Conference Dinner (courtesy AWI)	

# Friday 27 April

Day chair: Ruud Dirksen

# Session 8 - Use of GRUAN for satellite validation

09:00 - 09:25	Review of principal project outcomes from GAIA-CLIM	Peter Thorne
09:25 - 09:40	Initial demonstration of polar satellite microwave data	Bomin Sun
	climate monitoring using GRUAN data	
09:40 - 10:05	Updates on the EUMETSAT Occultation Prediction Product	Axel von Engeln
	and Introduction of a new reprocessed GRAS Data Set	
10:05 - 10:15	Discussion	

# 10:15 - 10:40 **Coffee**

## Session 9 - Site perspectives

10:40 - 10:55	New Sites: Where are we headed?	ALL: Greg/Dale/Belay to lead
10:55 - 11:40	Thoughts of sites on future of GRUAN	ALL: Greg/Dale/Belay to lead

## Session 10 - Governance issues

11:40 - 11:55	Update on status of WG-GRUAN	Peter Thorne and Caterina
		Tassone
11:55 - 12:20	Update on progress towards a GCOS Surface Reference	Peter Thorne and Caterina
	Network	Tassone
12:20 - 12:45	Report on the progress of the task team on the future of	Tim Oakley
	GUAN	
12:45 - 13:00	Discussion	

## 13:00 - 14:00 **Lunch**

14:00 - 14:30	Actions/items to be raised with other programmes/bodies	All
	(WMO, WIGOS, GCOS/AOPC)	
14:30 - 16:00	Agree Actions	All
16:00 - 16:10	ICM-11 location announcement	Peter Thorne, Ruud Dirksen