

## PROGRAM OVERVIEW

Meeting Title:	Grand Challenge Initiative M/LT online session June 23rd, 2020		
Meeting Goals:	<p>According to the GCI M/LT white paper the project is planned to start in 2022 with the VortEX campaign (PI Gerald Lemacher). This gives us a perfect opportunity to plan complementary and new campaigns during and after VortEX. The white paper has entries from 9 nations on possible science topics, technologies, platforms, ground based observatories and potential research partners. To ensure the best possible scientific outcome and value for the funding institutions money, we should use this workshop to do <b>short (5 min) presentations (either live or pre-recorded) on proposed/planned experiments/campaigns and allow discussions/comments</b>. In the end of the session the organizers will propose the <b>formation of a GCI M/LT PI-coordination group</b>, as well as <b>time/place/type of follow-up meeting</b>.</p>		
Date:	23.06.2020 1700-1930 CET	Location:	Zoom link to be distributed
Chairperson:	Douglas Rowland, NASA Goddard	Minute-Taker:	Kolbjørn Blix, Andøya Space Center

## PARTICIPANTS

Name	Function / Affiliation	Title of talk	Category	Time	Pre-recorded
Kolbjørn Blix	GCI M/LT coordinator / Director of Space Systems dept., Andøya Space Center	Welcome, admin info		1700 - 1705	
Douglas Rowland	Session chair / Chief of the Ionosphere, Thermosphere, Mesosphere Physics Laboratory in the Heliophysics Science Division, NASA Goddard Space Flight Center	GCI intro – CUSP status, M/LT plans		1705 - 1715	
Gerald Lehmacher	Clemson University	The Vorticity Experiment (VortEx) to study mesoscale dynamics in the lower thermosphere: a planning update	Aeronomy, Atmospheric Sciences, Mesosphere, Lower thermosphere, Sounding rocket, Groundbased	1715 - 1720	
Wojciech Miloch	University of Oslo	Lower ionosphere - thermosphere and space weather activities at the University of Oslo, Norway	Sounding rocket, Groundbased, Satellite	1720 - 1725	
Boris Strelnikov	IAP, Germany	TBD	Atmospheric Sciences, Groundbased	1725 - 1730	
Henriette Trollvik	UiT-The Arctic University of Norway	Mesospheric Dust Studies Using Rocket Observations	Mesosphere, Sounding rocket, Groundbased	1730 - 1735	

Jörg Gumbel	Stockholm University	ORIGIN - a proposed rocket campaign connecting O, O <sub>2</sub> and OH in the Earth's nightglow	Aeronomy, Atmospheric Sciences, Mesosphere, Lower thermosphere, Sounding rocket	1735 - 1740	
Nickolay Ivchenko	KTH, Sweden	"SYSTER" rocket project as part of ESA Daedalus Phase A campaign	Lower thermosphere, Sounding rocket	1740 - 1745	
David Miles	University of Iowa	Sounding Rocket Magnetometer Options	Sounding rocket	1745 - 1750	X
Yun-Hang Cho	Chair of IET Sheffield Space and Solar Oncampus group, University of Sheffield	Overview of the Sheffield Space Initiative and Opportunities with GCI M/LT	Magnetospheric Physics, Atmospheric Sciences, Sounding rocket, Satellite	1750 - 1755	
Richard Collins	Professor and Associate Director Atmospheric Sciences and Geophysical Institute, University of Alaska Fairbanks	Wave Activity Forcing of E-Region (WAFER) Richard Collins for the WAFER team		1755 - 1800	
Oliver Drescher	DLR MORABA	HAS - Development of a thrust controllable research platform to hover in the middle atmosphere		1800 - 1805	X

Vladimir Yushkov	Central Aerological Observatory, Russian Federation	Sounding Rocket in Russia	Atmospheric Sciences, Mesosphere, Sounding rocket, Balloon, Aircraft	1805 - 1810	X
Peter Dalin	Swedish Institute of Space Physics	Stratospheric Observations of Noctilucent Clouds - SONC experiment.	Atmospheric Sciences, Balloon	1810 - 1815	
Diego Janches	NASA/GSFC	Balloon Sodium Lidar to measure Tides in the Antarctic Region (B-SoLiTARe)	Aeronomy, Atmospheric Sciences, Mesosphere, Lower thermosphere, Balloon	1815 - 1820	
Xiaoyan Zhou	University California, Los Angeles	The BALBOA Project: BALloon-Based Observations for Sunlit Aurora	Magnetospheric Physics, Balloon	1820 - 1825	
Oleg Ugolnikov	Space Research Institute, Russian Academy of Sciences	Noctilucent Clouds Size Estimation from All-Sky Monitoring: Color and Polarization Approaches	Mesosphere	1825 - 1830	X
John Plane	University of Leeds	Questions in mesospheric chemistry	Aeronomy, Atmospheric Sciences, Mesosphere, Lower thermosphere	1830 - 1835	

Mattias Abrahamsson	Director, Business Development, SSC, Science Services Division	Esrang Space Center – a launch and measurement site for GCI M/LT	Atmospheric Sciences, Balloon, Sounding rocket	1835 - 1840	
Liz MacDonald	NASA GSFC	Citizen Science and the Grand Challenges	Aeronomy	1840 - 1845	
Tomasz Noga	Lukasiewicz Research Network - Institute of Aviation	Polish Contribution to GCI M/LT	Sounding rocket	1845 - 1850	
Hein Olthof	T-Minus Engineering B.V.	Use of micro sounding rockets for supporting 4D atmospheric measurements	Sounding rocket	1850 - 1855	
Martina Faenza	Nammo Raufoss AS	Nucleus, Norwegian sounding rocket for mesosphere research	Mesosphere, Sounding rocket	1855 - 1900	
Franz-Josef Lübken	Director, IAP, Germany	No talk	Atmospheric Sciences, Groundbased		
Grzegorz Nykiel	Gdansk University of Technology	No talk			



Tim Kane	Penn State Uni	No talk	Aeronomy, Atmospheric Sciences, Mesosphere, Lower thermosphere, Sounding rocket, Groundbased		
Takumi Abe	ISAS/JAXA	No talk	Mesosphere, Lower thermosphere, Sounding rocket		
Gordon Marsh	NASA Wallops	No talk	Sounding rocket		
Åshild Fredriksen	UiT-The Arctic University of Norway	No talk	Mesospheric Dust Studies Using Rocket Observations		
Scott Bissett	NASA Wallops	No talk	Sounding rocket		
Michal Pakosz	Lukasiewicz Research Network - Institute of Aviation	No talk	Sounding rocket		



## MINUTES

ID	Subject / Action	Responsible	Due Date
[01]			
[02]			
[03]			
	Conclusion: Fill inn Conclusion here		

## RECIPIENTS

Name	Function	Company	email (if applicable)

## Annex A Action list

AI#	Description	Responsible	Due Date	Closure Date