

**The 23th International TOVS Study Conference (ITSC-23)**  
**Virtual meeting**  
**Draft PROGRAM**

last modified 18 June 2021

**TIME IS UTC**

**Thursday 24 June 2021**

**12:15 – 12:30 Virtual meeting open**

**12:30 – 12:45**

**Welcome – Opening**

**Liam Gumley and Vincent Guidard (ITWG co-chairs)**

**12:45 – 14:15 Working group reports**  
**(oral presentations – 15 minutes)**  
**Chair-persons: Liam Gumley, Vincent Guidard**

NWP  
 Radiative transfer and surface properties  
 Advanced Sounders  
 Products and Software  
 Climate  
 International and Future systems

**14:15 – 15:00 Session 1: International**  
**(oral presentations – 12 minutes)**  
**Chair-person: Dorothee Coppens**

1.01	Richard Kelley	Two ITU Items of Interest Since ITSC-XXII
1.02	Mitch Goldberg	Report from CGMS
1.03	Philippe Chambon	Report from IPWG

**15:00 – 15:15 Health break**

**15:15 –16:45 Session 2: Radiative Transfer**  
**(oral presentations – 12 minutes)**  
**Chair-person: Christina Stumpf**

2.01	Xavier Calbet	Results on the radiative transfer model effects from the in-homogeneity of water vapor fields in the field of view of infrared and microwave sounders
2.02	Thibault Delahaye	CO2 spectroscopy in 4A/OP: new developments and applications to satellite missions.
2.03	James Hocking	RTTOV development status
2.04	Benjamin Johnson	Recent advances in the Community Radiative Transfer Model
2.05	Leonhard Scheck	A fast neural network based method for generating synthetic satellite images in the solar spectral range
2.06	Jun Yang	Recent developments and applications of advanced radiative transfer modeling system (ARMS)

**16:45 End of Day 1**

## Friday 25 June 2021

**12:15 – 12:30 Virtual meeting open**

<b>12:30 – 14:00 Session 3: Products, Retrievals and Software (oral presentations – 12 minutes) Chair-person: Kathleen Strabala</b>		
3.01	Nigel Atkinson	NWP SAF Processing Packages to support EPS-SG and MTG
3.02	Jérôme Pernin	A newly born TIGR data set to meet the requirements of the high spectral resolution instruments : the TIGR-2020.
3.03	Graeme Martin	Overview of the NASA CrIS Level 1B Version 3 Data Product and Product Assessment
3.04	Hao Hu	GSDART: A Global Scene-Dependent Atmospheric Retrieval Testbed for Passive Microwave Sounding Instruments.
3.05	Tim Hultberg	Hyperspectral Infrared Machine Learning (HSIR ML)
3.06	Anthony L. Reale	Enterprise Comparison of Atmospheric Profiles Derived from Polar Satellite and GNSS Constellations

**14:00 – 14:15 Information on how poster sessions will run**

**14:15 – 14:30 Health break**

**14:30 – 16:00 Poster session 1**

<b>16:00 – 16:50 Session 4: Space agency reports (oral presentations – 8 minutes) Chair-person: Nadia Fourrié</b>		
4.01	Dorothee Coppens	EUMETSAT
4.02	Kozo Okamoto	JMA and JAXA
4.03	Mitch Goldberg	NOAA
4.04	Peng Zhang	CMA
4.05	Sergey Uspensky	ROSHYDROMET
4.06	Kenneth Holmlund	WMO

**16:50 End of Day 2**

## Monday 28 June 2021

**12:15 – 12:30 Virtual meeting open**

<b>12:30 – 13:45 Session 5: Calibration – Validation (oral presentations – 12 minutes) Chair-person: Michelle Loveless</b>		
5.01	Hu Yang	Current Status and Future Improvements for JPSS ATMS On-orbit Absolute Calibration
5.02	Fei Tang	Bias characterization of FengYun-4A/AGRI infrared channels using Advanced Radiative Transfer Modeling System (ARMS)
5.03	Peng Zhang	The Progress on Retrospective Calibration of Historical Chinese Fengyun Satellite Data
5.04	Jaap Onderwaater (for Timo Hanschmann)	A consistently calibrated data record of the High-Resolution Infrared Radiation Sounder (HIRS) radiances
5.05	Cheng-zhi Zou	The Reprocessed Suomi NPP Satellite Observations

**13:45 – 14:00 Session 1: International (continued)**  
**(oral presentations – 12 minutes)**

1.04	Gianpaolo Balsamo	The new International Earth Surface Working Group
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**14:00 – 14:15 Health break**

**14:15 – 15:45 Poster Session 2**

**15:45 – 16:45 Session 6: Climate**  
**(oral presentations – 12 minutes)**  
**Chair-person: Nathalie Selbach**

6.01	William Bell	Preparations for Assimilating Sounding Observations in the Next Generation Global Atmospheric Reanalysis at ECMWF - ERA6
6.02	Indira S. Rani	An overview of the satellite sounding radiance assimilation in the IMDAA regional reanalysis
6.03	Henry Revercomb	Rationale for Flight of an Infrared SI Reference Sensor for Climate Data Uncertainty Quantification
6.04	Yoann Tellier	Clear-Sky Estimation of Earth Outgoing Longwave Radiation and Atmospheric Heating Rate with IASI

**16:45 End of Day 3**

**Tuesday 29 June 2021**

**12:15 – 12:30 Virtual meeting open**

**12:30 – 14:20 Session 7: NWP centre reports**  
**(oral presentations – 10 minutes)**  
**Chair-person: Agnes Lane**

7.01	Indira S. Rani	NCMRWF
7.02	Chris Tingwell	Bureau of Meteorology
7.03	Ruoying Yin	CMA
7.04	Hidehiko Murata	JMA
7.05	Emily Liu	NCEP
7.06	Philippe Chambon	Météo-France
7.07	Christina Köpken-Watts	DWD
7.08	Alain Beaulne	ECCE
7.09	Chawn Harlow	MetOffice
7.10	Mohammed Dahoui	ECMWF
7.11	Benjamin Ruston	NRL

**14:20 – 14:30 Health Break (Session on chocolate bars, chair-person: Camille Birman)**

**14:30 – 15:45 Poster Session 3**

**15:45 – 16:45 Session 8: NWP Advances**  
**(oral presentations – 12 minutes)**  
**Chair-person: Nancy Baker**

8.01	Roger Randriamampianina	Improving the use of satellite radiances in high latitude regional NWP
8.02	Fiona Smith	Operational Hyperspectral Sounder Error Correlations
8.03	Hongyi Xiao	Impact of FY-3D MWRI Radiance Assimilation in GRAPES 4D-Var on Typhoon Shanshan Forecasts
8.04	Wei Han	Assimilation of Geostationary Hyperspectral InfraRed Sounders (GeoHIS) : progresses, challenges and perspectives

**16:45 End of Day 4**

**Wednesday 30 June 2021**

**12:15 – 12:30 Virtual meeting open**

**12:30 – 13:30 Session 9: NWP All-sky assimilation**  
**(oral presentations – 12 minutes)**  
**Chair-person: Christina Köpken-Watts**

9.01	Maziar Bani Shahabadi	Recent Progress for All-Sky Microwave Radiance Assimilation in Environment Canada's Global Deterministic Weather Prediction System.
9.02	Mary Borderies	Status of the assimilation of cloudy and rainy microwave observations in the Météo-France global NWP model ARPEGE
9.03	David Duncan	Moving AMSU-A to all-sky assimilation at ECMWF
9.04	Kozo Okamoto	Preliminary assimilation of all-sky IR radiances of Himawari-8 in the global data assimilation system at JMA

**13:30 – 14:45 Poster Session 4**

**14:45 – 15:00 Health Break**

**15:00 – 15:30 Session 10: NWP Surface**  
**(oral presentations – 12 minutes)**  
**Chair-person: Cristina Lupu**

10.01	Niels Bormann	Advances in the assimilation of MW sounding data over snow and sea-ice
10.02	Camille Birman	Assimilation of SEVIRI retrieved land surface temperature in AROME NWP model

**15:30 – 16:30 Session 11: NWP Future**  
**(oral presentations – 12 minutes)**  
**Chair-person: Kirsti Salonen**

11.01	Will McCarty	Investigating the Impacts of Hyperspectral Infrared Sounders in Geostationary Orbits Using Observing System Simulation Experiments
11.02	Chris Burrows	Initial assimilation tests of CrIS short-wave channels at ECMWF
11.03	William Smith	Hyperspectral Radiance Sounding Information Content
11.04	Bjorn Lambrigtsen	Is a Geostationary Microwave Sounder Now Feasible?

**16:30 – 16:45**

**Closing**

**Liam Gumley and Vincent Guidard (ITWG co-chairs)**

**16:45 End of Day 5 – End of ITSC-23**