# 11th AOMSUC & 2021 FY Conference Agenda (Draft)

### 1-5 November 2021

## Beijing, China

DAY 1-1st November (Beijing time UTC+8)

Opening Ce	remony	Host: Dr. Jingsong Wang	
9:00-9:20	Welcome address:  - Mr. ZHIJANG Guotai. Administrator of CMA to speak at the ceremony.		
9:20-9:50	Keynote: Satellite Data Assimilation for NWP	ECMWF Dr. Niels Bormann	
	Coffee Break		
Session 1	Satellite Systems Programme	Co-chair: Jingsong Wang Dr.Allen Huang	
Time	Title	Name/Affiliation	
10:00-10:30	<b>Keynote:</b> The value of Earth observing satellites in meeting WMO's mission	WMO Dr. Wenjian Zhang	
10:30-10:45	Status of FengYun Satellite Program and Future Development	China Meteorological Administration / National Satellite Meteorological Center, China Dr. Jingsong WANG	
10:45-11:00	Status of Himawari-8/9 and their follow-on satellite program	Japan Meteorological Agency, Japan Mr. Kotaro Bessho	
11:00-11:15	KMA's current and future satellites	Korea Meteorological Administration, Korea <b>Dr. Jinho Shin</b>	
11:15-11:30	Current state and prospects of Russian space-based meteorological observing systems	SRC Planeta (Roshydromet), Russian Federation <b>Prof. Alexander Uspensky</b>	
11:30-11:45	NOAA: Current and Future Satellite Systems	NOAA/NESDIS,United States of America Mr. Mark Paese	
11:45-12:00	EUMETSAT programmes and plans	EUMETSAT, Germany	
12:00-12:15	Status of the WMO Integrated Global Observing System	WMO Dr. Kenneth Holmlund	
	Close with Panel	END morning session	
	LUNCH BREAK		
Session 2	Data and Products	Chair: Prof. Fuzhong Weng	
14:30-15:00	<b>Keynote:</b> Utilisation of satellite data at the Bureau: current applications and future opportunities	Bureau of Meteorology, Australia Ms. Agnes Lane	
15:00-15:15	FengYun Satellite data and products	China Meteorological Administration / National Satellite Meteorological Center, China Dr. Xingying Zhang	

15:15-15:30	Satellite Meteorology Training in WMO RA V during 2020/2021: The Australian VLab Centre of Excellence experience	Bureau of Meteorology, Australia Mr. Bodo Zeschke	
15:30-15:45	Operationalization of Multi Mission Meteorological Data Reception and Processing System at India Meteorological Department (IMD): Data access and products	India Meteorological Department, India Dr. Ashim Kumar Mitra	
15:45-16:00	Agency report	BMKG	
16:00-16:15	Data dissemination and distribution of Himawari-8/9 and their recent updates	Japan Meteorological Agency, Japan <b>Dr. Takuya Sakashita</b>	
16:15-16:30	Introduction to KMA satellite data service	Korea Meteorological Administration, Korea Mr. Taekyu Jang	
16:30-16:45			
16:45-17:00	Data access and product	NOAA/NESDIS,United States of America Dr. Mitch Goldberg	
17:00:17:15	EUMETSAT Data Services Evolution and Product News	EUMETSAT, Germany Mr. Joachim Saalmueller	
	Close with Panel	END OF DAY 1	

DAY 2- 2<sup>nd</sup> November

Session	2021 FENGYUN User conference	Chair: Dr. Jun Yang	
Time	Title	Name/Affiliation	
9:00-9:30	<b>Keynote</b> : The value of satellite observations for characterizing and predicting high impact weather events across temporal and spatial scales	Dr. Paulo Ruti EUMETSAT	
9:30-9:45	Latest Update Status of FY-3 Program	Dr. Xiuqing Hu NSMC, CMA	
9:45-10:00	Update on CMA FY-4 satellite programmes	Dr. Feng Lu NSMC, CMA	
10:00-10:15	Effect of Using Different Amounts of Multi-temporal Data on the Accuracy: A case of Land Cover Mapping of Parts of Africa using FengYun-3C data	Adugna Regasa Tesfaye University of Electronic Science and Technology of China (UESTC)	
10:15-10:30	Improving Cross-Track Scanning Radiometers' Precipitation Retrieval over Ocean by Morphin	Yalei You University of Maryland	
10:30-10:45	Tracking Fires in India Using Advanced Geosynchronous Radiation Imager	Riddhish Chetan Soni Indian Institute of Remote Sensing	
10:45-11:00	GSDART: A Global Scene-Dependent Atmospheric Retrieval Testbed for Passive Microwave Sounding Instruments onboard FengYun-3 satellites	Hao Hu Chinese Academy of Meteorological Sciences	
11:00-11:15	Application of the FY2H images for the dynamic monitoring of clouds and humidity during the devastating flood events at Shiraz metropolis	Nazemosadat Seyed Mohammadjafar Iran Shiraz University	
11:15-11:30	Using A Weather Satellite Data to Provide Actual Data for Impact-Based Forecast in Eastern Part of Indonesia (Maluku Region)	Salman Suaib Rion Indonesian Agency for Meteorology Climatology and Geophysics	
11:30-11:45	Hydrometeorological disaster monitoring with FengYun Satellite data in support of the Belt and Road initiative	Jinlong Fan NSMC, CMA	
11:45-12:00	An open source dataset for resolution enhancement of FengYun images	Jingbo Wei Nanchang University	
	LUNCH BREAK		

14:00-14:15	Service status of the Belt and Road Initiative	Di Xian NSMC, CMA	
14:15-14:30	Remote sensing applications in Seychelles	Egbert Quatre Seychelles Meteorological Authority	
14:30-14:45	The service and update plan of CMACast	Xiaoru Li National Information Center	
14:45-15:00	Application of meteorological satellites in Namibia	Vilho Ndeunyema Namibia Meteorological Service	
15:00-15:15	Remote sensing of global volcanic eruptions using FengYun series satellites	Lin Zhu NSMC, CMA	
15:15-15:30	Utilization of satellite products for monitoring and forecasting weather of the Maldives	Thahumeena Abdul Kareem Maldives Meteorological Service	
15:30-15:45	Utilisation of GEO/LEO satellite data for weather monitoring and forecasting in Hong Kong, China	Yingwa Chan Hong Kong Obervatory	
15:45-16:00	Adapting Aviation to a Changing Climate: Building Resilience through Aviation Community Perception in I Gusti Ngurah Rai Airport	Sumaja Kadek Indonesian Agency for Meteorology Climatology and Geophysics	
16:00-16:15	Application of FengYun satellite data in monitoring and evaluating sugarcane growth and drought in China and "Belt and Road" countries	Meihua Ding Guangxi Academy of Meteorological Sciences	
16:15-16:30	Convection Forecast with Deep Learning Approaches based on FY-4A Satellite	Xutao Li Harbin Institute of Technology	
16:30-16:45	Development and application of heatwave monitoring by Fengyun satellite series	Ronghan Xu NSMC, CMA	
	Close with Panel	END OF DAY 2	

#### DAY 3-3<sup>rd</sup> November

Session 3	NWP, Forecasting and Nowcasting	Co-chair: Dr. Xiang Fang Dr. James Purdom	
Time	Title	Name/Affiliation	
9:00-9:30	Keynote: Convection and Severe Storms	Dr. James Purdom AOMSUC	
9:30-9:45	Satellite data utilization in NWP	Mr. Yoshiaki Sato Japan Meteorological Agency	
9:45-10:00	Preparing for assimilation of the combined microwave sounding observations aboard on the early morning satellite FY-3E in GRAPES	Dr. Peiming Dong Chinese Academy of Meteorological Sciences	
10:00-10:15	The updated status of the algorithms for GK2A products in 2021	Mr. Hancheol Lim National Meteorological Satellite Center	
10:15-10:30	Lightning detection based on microwave sensing using machine learning algorithms	Ms. Olga Nechepurenko National Research Tomsk State University	
10:30-10:45	Overview of satellite-based nowcasting products	Mr. Shiro Omori Japan Meteorological Agency	
10:45-11:00	Mitigation Strategy for Heavy Rain and Strong Wind on Aviation caused by Tropical Cyclones	Mr. Kadek Sumaja Indonesia Agency for Meteorology Climatology and Geophysics	
11:00-11:15	Data Validation and Mesoscale Assimilation of Himawari-8 Optimal Cloud Analysis Products	Dr.Michiko Otsuka Japan Meteorological Agency	
11:15-11:30	Analysis of the Observation Errors of FY-3C MWRI Radiance Data for All-sky Assimilation in Regional NWP	Ms. Mae Liu Chinese Academy of Meteorological Sciences	

	Toward Observing to immunity high immed weath or forecasts	M., W.: II		
11:30-11:45	Targeted Observing to improve high impact weather forecasts	Mr. Wei Han		
	using FY-4A GIIRS			
	Close with Panel	END: morning session		
	LUNCH BREAK			
Session 4	Land, Ocean and Atmospheric Products	Chair:		
Session 1	· •	Prof. Jun Li		
14:00-14:30	<b>Keynote:</b> Community Satellite Processing Package - Real-Time	Dr. Allen Huang		
14.00-14.50	Weather and Environment Products Generation	SSEC/CIMSS, UW-Madison		
	Cloud liquid water and total precipitable water derived from FY-	Prof. Fuzhong Weng		
14:30-14:45	3 microwave sounding instruments	Chinese Academy of		
	<u> </u>	Meteorological Sciences		
14.45 15.00	Retrieval and application of temperature and humidity profiles	Mr. Byung-il Lee		
14:45-15:00	for GK2A/AMI	Satellite Planning Division, NMSC/KMA		
		Prof. Chao Liu		
15:00-15:15	Cloud property retrievals for the FengYun-4A spectral	Nanjing University of Information		
13.00-13.13	radiometer	Science and Technology		
	OceanWatch Central Pacific – a multi-pronged approach to	Dr. Melanie Abecassis		
15:15-15:30	disseminating ocean remote sensing data	ESSIC/CISESS, UMD		
		Dr. Feixiong Huang		
15:30-15:45	GNSS reflectometry wind speed retrieval of FengYun-3E	National Space Science Center,		
	satellite GNOS-II payload	Chinese Academy of Sciences		
15:45-16:00	Introduction to cloud-based satellite systems at MetService	Dr. Yizhe Zhan		
13.43-10.00	introduction to cloud based saterine systems at inciservice	MetService New Zealand		
	Assessing FengYun-4A capabilities on typhoon surface	capabilities on typhoon surface Mr. You Zhao		
16:00-16:15	precipitation fusion with multi-source data	Nanjing University of Information		
		Science and Technology		
16:15-16:30	Application of FORMOSAT-7/COSMIC-2 radio occultation data	Yingwa Chan		
	in diagnosing volcanic eruption and stratospheric intrusion	Hong Kong Observatory		
16:30-16:45	Characteristics of lightning activity detected by FengYun-4A	Dr. Dongjie Cao		
	Lightning Mapping Imager	NSMC, CMA		
16:45-17:00	Monitoring the Performance of the FengYun Satellite	Dr. Chunqiang Wu		
	Instruments using RTMs and NWP Fields	NSMC, CMA		
	Close with Panel	END OF DAY 3		

#### DAY 4-4<sup>th</sup> November

Session 5	Space weather	Chair: Xiaoxin Zhang	
Time	Title	Name/Affiliation	
9:00-9:30	<b>Keynote:</b> Solar Wind -Magnetosphere -Ionosphere Coupling - A Spatial Observatory on Chinese FY 3E & 4B meteorological Satellites	Prof. Qiugang Zong Peking University	
9:30-9:45	National and International activities of Space Weather Research and Operation	Dr. Mamoru Ishii National Institute of Information and Communications Technology	
9:45-10:00	Introduction on the Chinese Meridian Project	Dr. Jiyao Xu The Chinese Academy of Sciences	
10:00-10:15	Thermosphere and ionosphere responses to energy flux from the magnetosphere	DR. Wenbin Wang National Center for Atmospheric Research, USA	
10:15-10:30	Space weather in WMO	Dr. Larisa Trichtchenko Canadian Space Weather Forecast Centre	
10:30-10:45	Atmospheric escape on Earth and beyond: Space weather as a driving force	Prof. Jun Cui Sun Yat-sen University	

10:45-11:00	Satellite-based Space Weather Observation of KMA	Dr. Jiyoung Kim Korea Meteorological Administration	
11:00-11:15	Linkage between ring current proton precipitation and electromagnetic ion cyclotron waves based upon POES and Van Allen Probes conjugate measurements	Prof. Binbin Ni Wuhan University,China	
11:15-11:30	The space weather effect of shock-ICMEs interaction structures	Prof. Chenglong Shen University of Science and Technology of China	
11:30-11:45	the overview of Korean Space Weather Center's role and space weather operation	Dr. Kichang Yoon National Radio Research Agency, MSIT.	
11:45-12:00	The ability of China's Satellite X-ray payload to warn of solar radio bursts interfering navigation and communication events from the Event of September 6, 2017	Dr. Liang Dong Yunnan Observatories	
	Close with Panel	END: morning session	
	Lunch Break		
Session 6	Climate	Co-chair: Peng Zhang Kotaro Bessho	
Time	Title	Name/Affiliation	
14:00-14:30	Space-based Climate Monitoring and Application Studies in Japan	Prof. Tadahiro Hayasaka Japan Aerospace Exploration Agency	
14:30-14:45	WMO Space-based Weather and Climate Extremes Monitoring (SWCEM) for East Asia and Western Pacific	Prof. Yuriy Kuleshov Australian Bureau of Meteorology	
14:45-15:00	Progress of Fengyun series dataset for climate	Ms. Ling Sun NSMC, CMA	
15:00-15:15	Toward the upgrade of Geo-Ring observation	Mr. Kotaro Bessho Japan Meteorological Agency	
15:15-15:30	Recent progress in Global Satellite Mapping of Precipitation (GSMaP) product	Dr. Moeka Yamaji Japan Aerospace Exploration Agency	
15:30-15:45	A Climatology of Open and Closed Mesoscale Cellular Convection over the Southern Ocean derived from Himawari-8 Observations	Dr. Francisco Lang Monash University	
15:45-16:00	Himawari-8 calibration and navigation performance and future plan	Mr. HANDA Taro Japan Meteorological Agency	
16:00-16:15	A histogram matching method for GSMaP improvement in geostationary meteorological satellite observing areas	Dr. Hitoshi Hirose Japan Aerospace Exploration Agency	
16:15-16:30	An Assessment of Climate Prediction and its Impact on Selected Urban Cities of South Asia Using Geo-Spatial Techniques	Mr. Jan Muhammad Pakistan Meteorological Department	
16:30-16:45	Assessment of meteorological drought based on CHIRPS derived rainfall departure at districts level over TAMIL NADU in India	Dr. Samykannu Venkadesh Tamil Nadu Agricultural University	
16:45-17:00	Impact of aerosol on lightning activities over the rugged terrain of Nepal	Mr. Hari Bahadur K.C Tribhuvan University Kathmandu Nepal	
17:00-17:15	Drought Monitoring for the Korean Peninsula Using GK2A/AMI	Prof. Yangwon Lee Pukyong Natinal University	
	Closing	Peng Zhang	

## Day 5-5<sup>th</sup> November – RA 2/5

Day 3-3<sup>rd</sup> November Start from 17:30 (Beijing time)

Day 5-5 November Start from 17:50 (Beijing time)  Chair:			
Time	Parallel session-Poster Room 1	XIAN Di	
17:30-17:40	Investigating a Tornado Outbreak by Creating LEO Sounder Products at GEO	Dr. Paul Menzel	
17.30-17.40	Imager Spatial and Temporal Resolution	University of Wisconsin	
	Identifying the spatiotemporal variations in ozone formation regimes across	Mr. Ruiyuan Li	
17:40-17:50	China from 2005 to 2019 based on polynomial simulation and causality	NSMC, CMA	
	analysis	-	
		Mr. Naoto Kusano	
17:50-18:00	Update of the radiative transfer model to RTTOV 13.0 at JMA	Numerical Prediction	
		Development Center, JMA	
		Jing Wang	
18:00-18:10	Preliminary post-launch test of FY-4B GHI: progress and prospects	NSMC, CMA	
10.10.10.20		Shengli WU	
18:10-18:20	Progress on FY-3/MWRI Fundamental Climate Data Record	NSMC, CMA	
Time	Parallel session-Poster Room 2	Chair:	
Time	Parallel session-Poster Room 2	WENG	
		Fuzhong	
	Sunshine duration product based on estimation from 2.5-minute Himawari-8	Mr. Takahito Imai	
17:30-17:40	observation data	Japan Meteorological	
		Agency	
17 40 17 50	Estimate GK2A RTTOV coefficients and its application for validating clear	Heewoo Shin	
17:40-17:50	sky radiance	Satellite planning division, NMSC/KMA	
		Zhuoya Ni	
17:50-18:00	Introduction and preliminary result of FY4B/GIIRS on-orbit test	NSMC, CMA	
10.00.10.10	Introduction of FY-3E/MERSI-LL low-light band and preliminary result of	Hanlie Xu	
18:00-18:10	on-orbit test	NSMC, CMA	
18:10-18:20	Evaluation of FY-3B/VIRR outgoing longwave radiation reprocessing data set	Wanchun Zhang	
18:10-18:20	Evaluation of FY-3B/VIKK outgoing longwave radiation reprocessing data set	NSMC, CMA	
Time	Parallel session-Poster Room 3	Chair:	
		LI Jun	
17:30-17:40	Hypothetical night RGB Imagery generation of Advanced Meteorological	Prof. Sungwook Hong	
	Imager using deep learning technique	Sejong University	
17:40-17:50	Assessment of Microwave Upper-level Temperature Sounding Channel Calibrations Using COSMIC-2 Profiles	Mr. Yang Han NSMC, CMA	
		Xiaochun Zhai	
17:50-18:00	The arctic sea ice monitoring with FY-3E WindRAD measurements	NSMC, CMA	
	Spatial downscaling of FY-4A land surface temperatures using both temporal	Guangzhen Cao	
18:00-18:10	and spatial information	NSMC, CMA	
18:10-18:20	Characteristics of lightning signals over the Tibetan Plateau and detection of	Wen Hui	
	lightning in the Plateau by FY-4A LMI	NSMC, CMA	