## The 16<sup>th</sup> International Conference on Atmospheric Physics, Climate and Environment

23-26, September, 2024, Dunhuang, Gansu Province, China

## **Conference Program**

Wednesday 25, September, 2024 Feitian Meeting Room(飞天厅)			
08:30		Registration	
	Paper	Opening Ceremony	
	Number	Chair: Dr. Meigen Zhang, IAP, CAS	
09:00		Welcome remarks by Prof. Tianjun Zhou, Deputy Director, IAP, CAS	
09:05		Welcome remarks by Prof. Vladimir Semenov, Director, IAP, RAS	
		Session I	
		Chair: Prof. Hongbin Chen, IAP, CAS	
00.10	OS-001	Historical Arctic sea ice variations: uncertainties and reconstructions	
09:10		Prof. Vladimir Semenov, IAP, RAS	
		The Observed Near-surface Energy Exchange Processes over Arctic	
09:30	OS-002	Glacier in summer	
		Prof. Libo Zhou, IAP, CAS	
		The role of Arctic sea ice loss in the interdecadal trends of the East	
09:50	OS-003	Asian summer monsoon in a warming climate	
		Prof. Bian He, IAP,CAS	
10:10		Photo Session & Tea break	
		Session II	
		Chair : Prof. Vladimir Semenov, IAP, RAS	
10:30	OS-004	Baroclinic instability in geophysical hydrodynamics problems	
10.30		Dr. Otto Chkhetiani, IAP, RAS	
		Decade-Long 1-km Surface Solar Radiation Data from the Fenyun-2	
10:50	OS-005	Geostationary Satellite - Method and Product	
		Prof. Xiang'ao Xia, IAP, CAS	

11:10	OS-006	Structure and dynamics of the atmospheric boundary layer in conditions of heterogeneous peatland topography Dr. Irina Repina, IAP, RAS	
11:30	OS-007	The Characteristic of Multi-scale Flow Structure and its Parameterization on Air-Sea Flux in the Atmospheric Boundary Layer Prof. Xueling Cheng, IAP, CAS	
11:50	OS-008	Hysteresis of the global carbon cycle to anthropogenic CO <sub>2</sub> emissions into the atmosphere  Prof. Aleksey Eliseev, IAP, RAS	
12:10	OS-009	Time series prediction combined with slow feature analysis Prof. Geli Wang , IAP, CAS	
12:30		Lunch	
		Session III	
		Chair : Prof. Libo Zhou, IAP, CAS	
13:30	OS-010	Marine Weather Observer (MWO): a mobile long-endurance ocean weather observation system	
13:50	OS-011	Prof. Hongbin Chen, IAP, CAS  Vertical helicity flux as an index of the intensity of atmospheric motions  Prof. Michael Kurgansky, IAP, RAS	
14:10	OS-012	Can soil effectively sequester carbon for climate change mitigation?  Dr. Guocheng Wang, Beijing Normal University	
14:30	OS-013	Trajectory based simulation of collision-induced spectra Prof. Andrey Vigasin, IAP, RAS	
14:50	OS-014	The Validation of Chinese CO2-measuring sensors and European TROPOMI/Sentinel-5 Precursor using FTIR and MAX-DOAS data at Xianghe (VCEX)  Prof. Pucai Wang, IAP, CAS	
15:10	OS-015	Extratropical cyclones and their impact on ocean waves in the Northern Hemisphere Dr. Mirseid Akperov, IAP, RAS	

15:30	OS-016	Lidar studies of the middle atmosphere in the polar region Prof. Weilin Pan, IAP, CAS		
15:50		Tea Break		
		Session IV		
		Chair: Dr. Irina Repina, IAP, RAS		
	OS-017	Emission ratios of trace gases and ozone production in Siberian forest		
16:10		fire plumes		
		Dr. Anastasiia Vasileva, IAP, RAS		
		Size-resolved microphysical and optical properties of atmospheric		
16:30	OS-018	aerosols in an urban area of the northern Tibetan Plateau		
		Prof. Yunfei Wu, IAP, CAS		
16.50	OS-019	Lightning leader propagation and its effects		
16:50		Dr. Shanfeng Yuan, IAP ,CAS		
17.10	OC 020	Convective and electrostatic components of dust aerosol emission		
17:10	OS-020	Dr. Elena Malinovskaia, IAP ,RAS		
17.00	OS-021	Turbulent flux transfer over the Dunhuang Gobi surface		
17:30		Dr. Degang Zhou		
	OS-022	Characteristics of the inertia gravity waves and turbulence		
17.50		parameters in the troposphere and lower stratosphere revealed by the		
17:50		MST radar observations		
		Dr. Yufang Tian, IAP ,CAS		
	OS-023	AI assists the development of meteorological observation equipment		
18:10		Zhaorui Li, ZOGLAB Microsystem Co., Ltd.		
19:00		Reception		
Thursday 26, September, 2024 Feitian Meeting Room(飞天厅)				
		Session V		
		Chair: Dr. Pucai WANG, IAP, CAS		
		Nighttime Aerosol Optical Thickness Remote Sensing from Starlight		
09:00	OS-024	Observations		
		Prof. Minzheng Duan, IAP, CAS		
09 :20	OS-025	Correction of satellite datasets to improve the orbital and		

		ground-based data compliance parameters and to clarify the
		atmospheric composition trend estimates
		Dr. Vadim Rakitin, IAP, RAS
		How can finer resolution of General Circulation Model improve the
09 :40	OS-026	precipitation simulation in China?
		Dr. Xiaolong Chen, IAP, CAS
		Spatiotemporal evolution of the Arctic sea ice in the 21st century
10:00	OS-027	according to observations and CMIP6 models
		PhD St. Viktor Romanenko, IAP, RAS
10:20		Tea Break
		Session V
		Chair: Dr. Otto Chkhetiani, IAP, RAS
		The Impacts of Air Quality on Photovoltaic Power Generation under
10 :40	OS-028	Different Carbon Neutrality Pathways in China
		Dr. Hongrong Shi, IAP, CAS
		Electric field-meteorological integrated sounding and the charge
11:00	OS-029	structure of thunderstorms in North China
		Dr. Hongbo Zhang, IAP, CAS
		The decomposition of complex acoustic atmospheric signals into
11 :20	OS-030	specific shapes
		PhD St. Marat Zakirov, IAP, RAS
		The Potential Impact of Blue Jet Discharge on Stratospheric
11 :40	OS-031	Chemistry Using a Detailed Plasma-Chemistry Model
		Dr. Chen Xu, IAP, CAS
12:00	OS-032	Stratospheric aerosol variability over Tibetan Plateau
12.00	05-032	Dr. Qie Kai, IAP ,CAS
12:20		Closing
12:30		Lunch