

SPARC General Assembly 2018: Conference Program

30 (Sunday)		1 (Monday)	
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Registration
(poster room accessible)

Icebreaker

Registration
(poster room accessible)

Opening Ceremony

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Keynote 1: Clara Orbe

Oral 1: Gabriel Chiodo

Oral 2: Seungmok Paik

Coffee & Posters (I-A)

Composition & Chemistry
Prediction
Observation & Reanalysis

Lunch
(poster room accessible)

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Keynote 2: Marta Abalos

Oral 3: Leonie Bernet

Oral 4: William Ball

Coffee & Posters (I-B)

Composition & Chemistry
Prediction
Observation & Reanalysis

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Keynote 3: Hans Schlager

Oral 5: Alina Fiehn

Oral 6: Tianjun Zhou

Coffee & Posters (I-C)

Composition & Chemistry
Prediction
Observation & Reanalysis

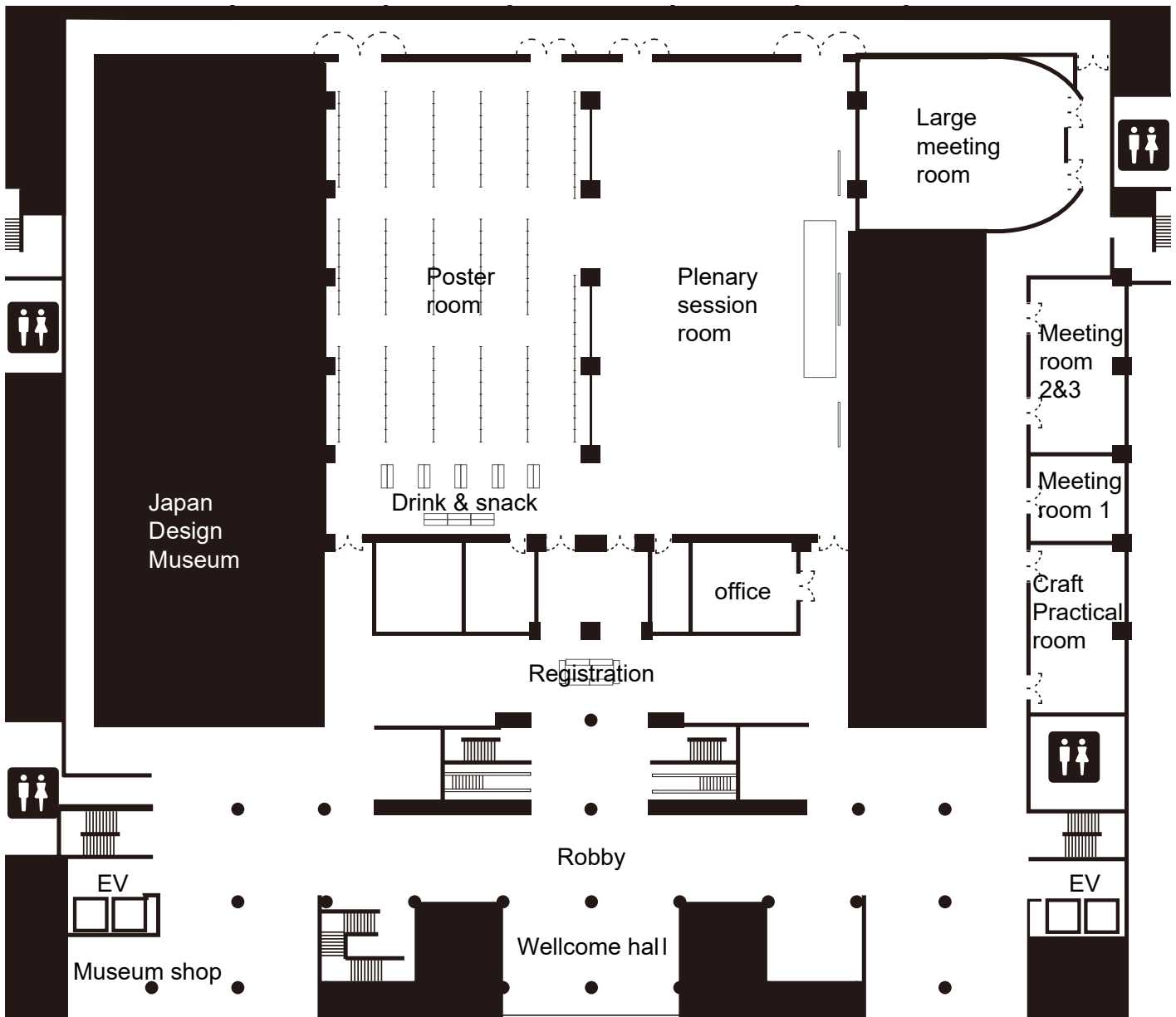
SPARC General Assembly 2018: Conference Program

2 (Tuesday)		3 (Wednesday)	
08:00-08:15	Registration (poster room accessible)	08:00-08:15	Registration (poster room accessible)
08:15-08:30		08:15-08:30	
08:30-08:45		08:30-08:45	
08:45-09:00	Theme 5 Keynote 1: Nathaniel Livesey	08:45-09:00	Theme 2 Oral 3: Tobias Spiegl
09:00-09:15	Oral 1: David Flittner	09:00-09:15	Oral 4: Lei Wang
09:15-09:30	Oral 2: Kaley Walker	09:15-09:30	Oral 5: Nicholas Byrne
09:30-09:45	Oral 3: Jaquelyn Witte	09:30-09:45	Oral 6: Eun-Pa Lim
09:45-10:00	Oral 4: Emma Leedham-Elvidge	09:45-10:00	
10:00-10:15		10:00-10:15	Theme 4 Keynote 1: Chaim Garfinkel
10:15-10:30		10:15-10:30	Oral 1: Shigeo Yoden
10:30-10:45	Coffee & Posters (I-D)	10:30-10:45	Oral 2: George N. Kiladis
10:45-11:00	Composition & Chemistry	10:45-11:00	
11:00-11:15	Prediction	11:00-11:15	Coffee & Posters (II-F)
11:15-11:30	Observation & Reanalysis	11:15-11:30	Dynamics, Variability & Change
11:30-11:45		11:30-11:45	Tropical Processes
11:45-12:00		11:45-12:00	SPARC Science for Society
12:00-12:30	Lunch (poster room accessible)	12:00-12:30	Lunch
12:30-12:45		12:30-12:45	
12:45-13:00		12:45-13:00	
13:00-13:15		13:00-13:15	
13:15-13:30	Theme 5 Keynote 2: Daren Lyu	13:15-13:30	
13:30-13:45	Oral 5: Susann Tegtmeier	13:30-13:45	
13:45-14:00	Oral 6: Edwin Gerber	13:45-14:00	
14:00-14:15		14:00-14:15	
14:15-14:30		14:15-14:30	
14:30-14:45		14:30-14:45	
14:45-15:00	Coffee & Posters (I-E)	14:45-15:00	
15:00-15:15	Composition & Chemistry	15:00-15:15	
15:15-15:30	Prediction	15:15-15:30	
15:30-15:45	Observation & Reanalysis	15:30-15:45	
15:45-16:00		15:45-16:00	
16:00-16:15		16:00-16:15	
16:15-16:30	Theme 2 Keynote 1: Amy Butler	16:15-16:30	
16:30-16:45	Oral 1: Shunsuke Noguchi	16:30-16:45	
16:45-17:00	Oral 2: Alexey Karpechko	16:45-17:00	
17:00-17:15		17:00-17:15	
17:15-17:30	Keynote 2: Daniela Domeisen	17:15-17:30	
17:30-17:45		17:30-17:45	
17:45-18:00		17:45-18:00	
18:00-18:15	Coffee & Posters (I-F)	18:00-18:15	
18:15-18:30	Composition & Chemistry	18:15-18:30	
18:30-18:45	Prediction	18:30-18:45	
18:45-19:00	Observation & Reanalysis	18:45-19:00	
19:00-19:15	ECR Poster Awards Ceremony	19:00-19:15	
19:15-19:30	Changeover Posters	19:15-19:30	
19:30-19:45		19:30-19:45	
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72:15-72:30		72:15-72:30	

SPARC General Assembly 2018: Conference Program

4 (Thursday)		5 (Friday)	
08:00-08:15	Registration (poster room accessible)	08:00-08:15	Registration (poster room accessible)
08:15-08:30		08:15-08:30	
08:30-08:45		08:30-08:45	
08:45-09:00	Theme 4 Kyenote 2: Takatoshi Sakazaki	08:45-09:00	Theme 6 Kyenote 1: Guy Brasseur
09:00-09:15	Oral 3: Laura Holt	09:00-09:15	Oral 1: Donald J. Wuebbles
09:15-09:30	Oral 4: Sergey Khaykin	09:15-09:30	Oral 2: Paul Young
09:30-09:45	Oral 5: Amit K. Pandit	09:30-09:45	
09:45-10:00	Oral 6: Wen Chen	09:45-10:00	Kyenote 2: Robert Carver
10:00-10:15		10:00-10:15	
10:15-10:30	Coffee & Posters (II-B)	10:15-10:30	Coffee & Posters (II-E)
10:30-10:45	Dynamics, Variability & Change	10:30-10:45	Dynamics, Variability & Change
10:45-11:00	Tropical Processes	10:45-11:00	Tropical Processes
11:00-11:15	SPARC Science for Society	11:00-11:15	SPARC Science for Society
11:15-11:30		11:15-11:30	
11:30-11:45		11:30-11:45	
11:45-12:00		11:45-12:00	
12:00-12:15	Lunch (poster room accessible)	12:00-12:15	Lunch (poster room accessible)
12:15-12:30		12:15-12:30	
12:30-12:45		12:30-12:45	
12:45-13:00		12:45-13:00	
13:00-13:15		13:00-13:15	
13:15-13:30	Theme 3 Keynote 1: Hisashi Nakamura	13:15-13:30	Theme 6 Kyenote 3: Erica Key
13:30-13:45	Oral 1: Wanying Kang	13:30-13:45	Oral 3: Taoyuan Wei
13:45-14:00	Oral 2: Sean Davis	13:45-14:00	Oral 4: Federico Fierli
14:00-14:15	Oral 3: Marlene Kretschmer	14:00-14:15	Oral 5: Karin van der Weil
14:15-14:30		14:15-14:30	
14:30-14:45		14:30-14:45	
14:45-15:00		14:45-15:00	
15:00-15:15	Coffee & Posters (II-C)	15:00-15:15	Coffee & Posters (II-A)
15:15-15:30	Dynamics, Variability & Change	15:15-15:30	Dynamics, Variability & Change
15:30-15:45	Tropical Processes	15:30-15:45	Tropical Processes
15:45-16:00	SPARC Science for Society	15:45-16:00	SPARC Science for Society
16:00-16:15		16:00-16:15	
16:15-16:30	Theme 3 Keynote 2: Joowan Kim	16:15-16:30	Roundtable discussion: The future of SPARC
16:30-16:45	Oral 4: Kunihiro Kodaera	16:30-16:45	
16:45-17:00	Oral 5: Talia Tamarin-Brodsky	16:45-17:00	
17:00-17:15	Oral 6: Lena Schoon	17:00-17:15	
17:15-17:30		17:15-17:30	
17:30-17:45		17:30-17:45	
17:45-18:00		17:45-18:00	Closing Ceremony
18:00-18:15	Coffee & Posters (II-D)	18:00-18:15	
18:15-18:30	Dynamics, Variability & Change	18:15-18:30	
18:30-18:45	Tropical Processes	18:30-18:45	
18:45-19:00	SPARC Science for Society	18:45-19:00	
19:00-19:15		19:00-19:15	
19:15-19:30	ECR Poster Awards Ceremony	19:15-19:30	
19:30-19:45		19:30-19:45	
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B1 Floor plan

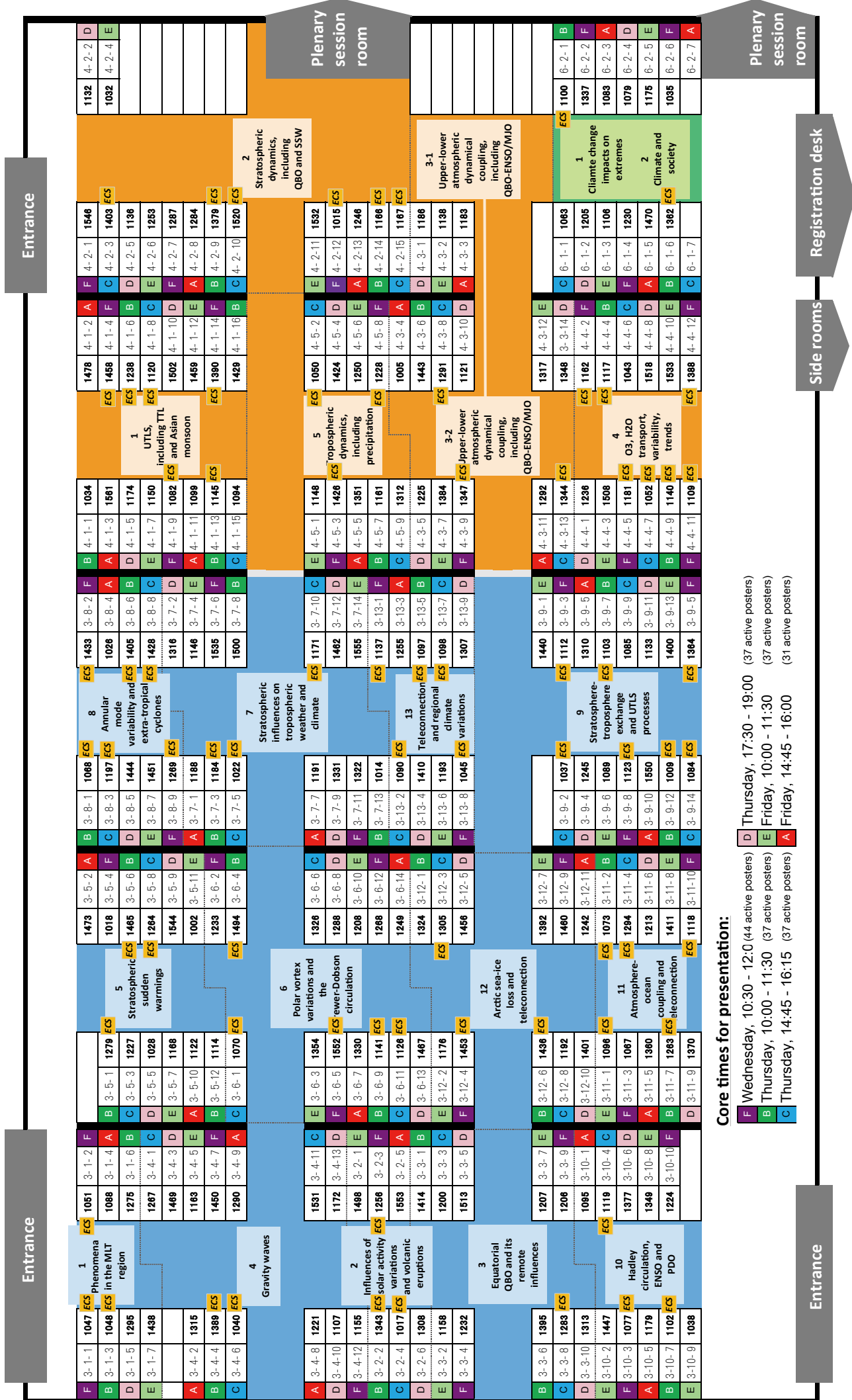


- Theme 1: Connections of Atmospheric Composition and Chemistry to Weather and Climate
- Theme 2: Climate Prediction from Weeks to Decades
- Theme 5: Advances in Observation and Reanalysis Datasets



Floor plan Poster room - Block II (Wednesday - Friday)

Theme 3: Role of Atmospheric Dynamics for Climate Variability and Change
Theme 4: Atmospheric Impacts and Interactions Related to Tropical Processes
Theme 6: SPARC Science for Society



Theme 1 Connections of Atmospheric Composition and Chemistry to Weather and Climate

1254	1	Keynote 1	Clara Orbe	1(Mon) 09:30-10:00	ECS	Overview of Large-Scale Tropospheric Transport in the Chemistry Climate Modeling Initiative (CCMI) Models
1046	1	Keynote 2	Marta Abalos	1(Mon) 13:30-14:00	ECS	New Insights on the Impact of Ozone Depleting Substances and the Antarctic Ozone Hole on the Brewer-Dobson Circulation
1336	1	Keynote 3	Hans Schlager	1(Mon) 16:15-14:45	-	First Airborne Measurements of SO ₂ , H ₂ SO ₄ , NO, HNO ₃ , and NO _y in the Asian Summer Monsoon Anticyclone between 12 and 20 Km
1258	1	Oral 1	Gabriel Chiodo	1(Mon) 10:00-10:15	-	The Importance of the Ozone Layer for the Response of the Climate System to Natural and Anthropogenic Forcings
1493	1	Oral 2	Seungmok Paik	1(Mon) 10:15-10:30	ECS	Divergent Hydrological Responses to Volcanic Eruptions in CMIP5 Multi-Models
1156	1	Oral 3	Leonie Bernet	1(Mon) 14:00-14:15	ECS	Stratospheric Ozone Recovery at Mid-Latitudes: Improved Ground-Based Time Series and Trend Estimations
1180	1	Oral 4	William Ball	1(Mon) 14:15-14:30	-	Evidence for a Continuous Decline in Lower Stratospheric Ozone Offsetting Ozone Layer Recovery
1442	1	Oral 5	Alina Fiehn	1(Mon) 16:45-17:00	-	Importance of Seasonally Resolved Oceanic Emissions for Bromoform Delivery to the Stratosphere through the Asian Monsoon
1507	1	Oral 6	Tianjun Zhou	1(Mon) 17:00-17:15	-	Anthropogenic Aerosols Reduced Global Land Monsoon Precipitation

1. Aerosol observations and analysis

1454	1	1	1	B	Kevin R. Leavor	ECS	A Global Perspective of SAGE III ISS Aerosol Observations
1541	1	1	2	F	Hazel Vernier	-	Chemical Composition of Aerosols in the Upper Troposphere and Lower Stratosphere over India
1484	1	1	3	C	Ranjit Kumar	-	Characterization of Atmospheric Soot Particles using Aethalometer and SEM-EDX
1204	1	1	4	A	Ram P R Sinha	-	Development of Balloon-Borne Impactor Payload for Profiling Free Tropospheric Aerosol Size Distribution
1021	1	1	5	D	Muhammad Zeeshaan Shahid	ECS	Modelling and Remote-Sensing based Analysis of a Dense Haze Event over Northeastern Pakistan
1495	1	1	6	B	Jonathon S. Wright	-	Links between the Large-Scale Circulation and Daily Air Quality Variations over Central-Eastern China during Winter
1501	1	1	7	E	Andrea Stenke	-	Composition of the Asian Tropopause Aerosol Layer Simulated with a Coupled Aerosol-Chemistry-Climate Model: Enhanced H ₂ SO ₄ -H ₂ O Droplets, HNO ₃ -H ₂ SO ₄ -H ₂ O Ternaries, Organics, Ice, or a Mix?
1062	1	1	8	C	Pradeep Kumar	ECS	Seasonal Variations of Atmospheric Aerosols and its Association with the Optical Properties of Aerosols in Varanasi at Middle Indo-Gangetic Plain
1011	1	1	9	F	Kanika Taneja	-	Impact of an Extreme Weather Event on Aerosol Optical and Radiative Properties in India
1019	1	1	10	D	Imran Shahid	-	Variability of Particulate Matter Concentrations during Dense Winter Fog Period in Northeastern Pakistan
1446	1	1	11	A	Lakhima Chutia	ECS	Composition of Aerosols in the Upper Troposphere over Indian Subcontinent
1356	1	1	12	E	Rashada Akter Nahida	-	Polycyclic Aromatic Hydrocarbons in Atmospheric Fine Particulate Matters in Dhaka, Bangladesh: Sources Characterization and Potential Health Impact
1093	1	1	13	B	Vikas Goel	ECS	Chemical Processing of Dust in an Urban Environment (New Delhi)
1361	1	1	14	F	Chandra Mouli Pavuluri	-	High Abundance of Non-Fossil Derived Organics in Fine Aerosols in the Eastern Mediterranean Troposphere
1223	1	1	15	C	Mingfu Cai	ECS	The Size Resolved Cloud Condensation Nuclei (CCN) Activity and its Prediction based on Aerosol Hygroscopicity and Composition in the Pearl Delta River (PRD) Region during Wintertime 2014
1432	1	1	16	B	Masatomo Fujiwara	-	Measurements of Cloud Particles and Sea Salt Aerosols at Tarawa (1.35N, 172.92E), Kiribati using Balloon-Borne Cloud Particle Sensor (CPS) under the SOWER Campaigns
1504	1	1	17	E	Anita Lakhani	-	Chemical Characteristics, Source Apportionment and Health Risk Assessment on Human Exposed to Heavy Metals in PM ₁₀ at a Traffic Site
1061	1	1	18	C	Arti Choudhary	ECS	Estimate the Influence of Aerosols Optical Properties its Radiative Effects and Seasonal Variability in Megacity Delhi, India
1357	1	1	19	D	Tanzina Tul Karim	-	Source Apportionment Study with PMF Model and Health Risk Assessment of Volatile Organic Compounds (VOCs) at Atmospheric Fine Particulate Matters (PM _{2.5}) in Dhaka, Bangladesh
1350	1	1	20	D	Chong Shen	-	The Impacts of Aerosol on Precipitation in the Pearl River Delta Region
1301	1	1	21	F	Alan Robock	-	Impacts of Stratospheric Sulfate Geoengineering on PM _{2.5}

2. Volcanic emissions and analysis

1116	1	2	1	B	Timofei Sukhodolov	ECS	Influence of Volcanic SO ₂ Emissions on the Climate and Ozone Layer Evolution during Early 21st Century.
1482	1	2	2	D	Hans Brenna	ECS	Atmospheric, Climatic and Environmental Effects of the Super-Size Los Chocoyos Eruption 84 Kysr Ago
1487	1	2	3	C	Andrea Stenke	-	Impacts of Mt. Pinatubo Volcanic Aerosol on the Tropical Stratosphere in Chemistry-Climate Model Simulations using CCMI and CMIP6 Aerosol Data

1525	1	2	4	F	Jean-Paul Vernier	-	VolRes: Volcano Response Plan to Be Prepared for the Next Large Volcanic Eruption
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3. Stratospheric ozone

1296	1	3	1	D	Janusz Jaroslawski	-	Signs of the Total Ozone Recovery based on the Satellite (MSR) Data for the Period 1979-2017
1427	1	3	2	B	Catherine Wilka	ECS	The Influence of Heterogeneous Chemistry on Volcanic Sulfate Aerosols on Ozone Depletion and Recovery
1341	1	3	3	E	Ray (H.J.) Wang	-	Preliminary Validation Results of SAGE III-ISS Ozone Data
1353	1	3	4	C	Alessandro Damiani	-	Contribution of Energetic Particle Precipitation to Natural Ozone Variability in Antarctica
1516	1	3	5	F	Sean Davis	-	Assessment of the Robustness of Recent Lower Stratospheric Ozone Trends and their Reproduction by Models
1527	1	3	6	D	Martyn Chipperfield	-	Stratospheric Ozone: Ongoing Depletion or Recovery?
1381	1	3	7	A	James Keeble	ECS	Diagnosing the radiative and chemical contributions to future changes in tropical column ozone with the UM-UKCA chemistry-climate model
1338	1	3	8	E	Sophie Godin-Beekmann	-	Ozone Trends in the Lower Stratosphere from Long-Term Lidar and Satellite Records
1471	1	3	9	B	Annika Seppala	-	Polar Ozone Response to Energetic Particle Precipitation over Decadal Time Scales
1439	1	3	10	F	Irina Petropavlovskikh	-	Is Stratospheric Ozone Recovering as We Expect? Results of the SPARC LOTUS Analyses.
1483	1	3	11	C	Michael Pitts	-	The SPARC Polar Stratospheric Cloud Initiative (PSCi)
1217	1	3	12	B	Michelle L Santee	-	Ozone Mini-Hole Representation in Satellite Data and Reanalyses
1262	1	3	13	E	Peter Braesicke	-	The Warming of the Antarctic Peninsula: Is the Ozone Hole to Blame?
1240	1	3	14	C	Marta Abalos	-	Response of Stratospheric Transport and Mixing to Sudden Stratospheric Warmings in WACCM: Impacts on Arctic Ozone
1399	1	3	15	F	Michael C Pitts	-	Reference PSC Data Record and Climatology based on CALIOP, MLS, and MIPAS Observations
1211	1	3	16	D	Farahnaz Khosrawi	-	Arctic Winter 2009/2010, 2010/2011 and 2015/2016 in Comparison: Denitrification and Polar Stratospheric Cloud Formation
1144	1	3	17	A	Hao-Jhe Hong	-	Intraseasonal Ozone-Circulation Relationships in the Arctic Stratosphere
1078	1	3	18	E	Madhu Vazhathottathil	-	North Atlantic Oscillations in Total Ozone Detected by Chemistry-Climate Model and Reanalysis
1057	1	3	19	B	Jiankai Zhang	ECS	Stratospheric Ozone Loss over the Eurasian Continent Induced by the Polar Vortex Shift
1036	1	3	20	F	Xie Fei	-	A Connection from Arctic Stratospheric Ozone to El Nino-Southern Oscillation
1108	1	3	21	C	Karthika Gangadharan	-	Diurnal and Seasonal Variability of Total Column Ozone Over Cochin - A Comparative Study of Microtop II Ozonometer Measurements with Reanalysis and Satellite Observations.

4. Dynamics and long range transport

1514	1	4	1	E	Federico Fierli	-	Are CCMIs Reproducing the Main Features of the Asian Anticyclone ? What We Can Learn from the StratoClim 2017 Campaign
1054	1	4	2	B	Silvia Bucci	ECS	Convective Sources and Transport Patterns into the Stratosphere during the 2017 StratoClim Campaign
1069	1	4	3	F	Lei Wang	-	Large Impacts, Past and Future, of Ozone Depleting Substances on Brewer-Dobson Circulation Trends: A Multi-Model Assessment
1368	1	4	4	C	Myung-Il Jung	ECS	Southern Hemisphere Atmospheric General Circulation Changes in CCMi Models
1059	1	4	5	A	Ravindra Babu Saginela	ECS	Tropical Tropopause Layer (TTL) Variability during the Balloon Measurement Campaigns of the Asian Tropopause Aerosol Layer (BATALL) over Indian Region
1042	1	4	6	D	Disha Sharma	ECS	Tracking the Influence of Long Range Transport of Dust Aerosols on their Chemical Characteristics Observed in the North-West Indo Gangetic Plains.
1127	1	4	7	B	S. Y. Aslanoglu	ECS	A 9-Year Three-Dimensional Desert Dust Transport Evaluation over Anatolia with CALIPSO Derived Product
1265	1	4	8	E	Makoto Deushi	-	Impact of Ozone on Tropical Tropospheric Circulation Change after a Stratospheric Sudden Warming Event
1152	1	4	9	C	Paul Konopka	-	Impact of Mixing on the Composition of Air in the Upper Troposphere and Lower Stratosphere (UTLS): A Lagrangian View
1157	1	4	10	F	Andrea Schneidereit	-	Boreal Planetary Wave Transport of Zonally Asymmetric Ozone during the Polar Healing Phase
1257	1	4	11	D	Mohamadou Diallo	-	Impact of the El Nino Southern Oscillation (ENSO) on the Structure of the Brewer-Dobson Circulation in the Lower Stratosphere
1151	1	4	12	B	Marta Abalos	ECS	Future Trends in Stratosphere-to-Troposphere Transport in CCMi Models
1369	1	4	13	E	Zibing Yuan	-	Impact of Large-Scale Synoptic Circulation Pattern on Ozone Forming Mechanism in Shanghai, China

1510	1	4	14	C	Shunsuke Noguchi	ECS	Potential Influence of Elevated Stratopause Events on the Lower Atmospheric Circulation
1472	1	4	15	F	Fumio Hasebe	-	CUBE/Biak: Observations of Dynamics and Chemistry Affecting the Air on its Ascent in the Tropical Lower Stratosphere
1270	1	4	16	D	Robert Damadeo	-	The Impact of Sampling Corrections on Derived Long-Term Ozone Trends
1346	1	4	17	A	Hideharu Akiyoshi	-	Dynamical Analysis in the Southern Hemisphere Associated with a Three-Week Total Ozone Reduction over the Southern Tip of South America in November 2009

5. Trace gas observations and analysis

1182	1	5	1	A	Shankar Bhattarai	ECS	CubeSat with Cylindrical Langmuir Probes to Characterize Ionosphere and Thermosphere Plasma
1499	1	5	2	D	Zia Ul-Haq	-	Anthropogenic Emissions and Satellite Inferred Tropospheric Formaldehyde Trends, Seasonality and Anomalies over South Asian Region
1104	1	5	3	B	Nidhi Tripathi	ECS	First PTR-TOF-MS Based Measurement of Volatile Organic Compounds (VOCs) in New Delhi: Implication to Regional Atmospheric Chemistry and Climate during Winter-Summer Transition
1435	1	5	4	E	Masato Shiotani	-	Systematic Biases owing to a Response Time Issue of Ozonesondes
1511	1	5	5	C	Puneet K Verma	ECS	Potential Source Contributions and Cancer Risk Assessment of Atmospheric Polycyclic Aromatic Hydrocarbons (PAHs) and Nitro-PAHs over a Traffic Indo-Gangetic Site
1164	1	5	6	F	Jianchun Bian	-	Sounding Water Vapor, Ozone, and Particles during the ASM
1111	1	5	7	D	Ralph Lehmann	-	Model Calculations of the Contribution of Tropospheric SO ₂ and DMS (Dimethyl Sulfide) to the Stratospheric Sulfur Budget
1237	1	5	8	B	Aman Gupta	ECS	The Impact of Model Numerics on Trace Gas Transport in the Stratosphere: A Dynamical Core Benchmark Test Using the Age of Air
1425	1	5	9	E	Rolf Mueller	-	The Maintenance of Elevated Active Chlorine Levels in the Antarctic Lower Stratosphere through HCl Null Cycles
1485	1	5	10	C	Ryan, S. Williams	ECS	Seasonality and Geographical Variability of Tropospheric Ozone (O ₃), Stratospheric Influence and Recent Trends
1272	1	5	11	F	Eric Ray	-	Disentangling Interannual Stratospheric Transport Variability Impacts on Surface Trace Gas Concentrations
1530	1	5	12	D	Qing Liang	-	The Impact of Stratosphere-Troposphere Exchange on Atmospheric Nitrous Oxide (N ₂ O) and its Isotopic Budget in the Troposphere
1529	1	5	13	A	Jean-Paul Vernier	-	Assessing the Transport of Asian Pollution into the Stratosphere through Balloon-Borne and Satellite Observations together with the GEOS-Chem Chemical Transport Model.
1519	1	5	14	E	David W. Tarasick	-	Tropospheric Ozone Assessment Report: Tropospheric Ozone Observations - How Well Do We Know Tropospheric Ozone Changes?

6. Asian monsoon

1300	1	6	1	B	Laura Pan	-	Atmospheric Composition and the Asian Monsoon (ACAM): A Joint Activity of SPARC and IGAC
1154	1	6	2	F	Michelle L Santee	-	Characterizing the Climatological Composition and Intraseasonal and Interannual Variability of the Asian Summer Monsoon Anticyclone Using Aura Microwave Limb Sounder Measurements
1412	1	6	3	C	Emma Leedham Elvidge	-	Aircraft-Based Observations of Transport Tracers and Ozone-Depleting Substances in and above the Asian Monsoon
1376	1	6	4	A	Tatsuo Onishi	-	Transport of Aerosols and Trace Gases into the Upper Troposphere during the Peak Asian Monsoon Period in Summer 2017
1012	1	6	5	D	Xue Wu	ECS	Equatorward Dispersion of a High-Latitude Volcanic Plume and its relation to the Asian Summer Monsoon: A Case Study of the Sarychev Eruption in 2009
1130	1	6	6	B	Simone Brunamonti	ECS	UTLS Structure and Tracer Distributions in the Asian Summer Monsoon Anticyclone Inferred from Balloon Measurements during StratoClim 2016-2017
1271	1	6	7	E	Mian Chin	-	Natural and Anthropogenic Aerosols in the UTLS in Recent Decade: Sources and the Role of Monsoon Transport
1477	1	6	8	C	Yi Liu	-	Stratosphere and Troposphere Exchange Experiment over Asian Summer Monsoon Project (STEAM)
1430	1	6	9	C	Bernard Legras	-	Confinement of Air in the Asian Monsoon Anticyclone and Pathways of Convective Air to the Stratosphere during Summer Season

7. UTLS

1339	1	7	1	E	Peter Hoor	-	An Overview of OCTAV-UTLS (Observed Composition Trends and Variability in the UTLS), a SPARC Activity
1153	1	7	2	B	Ulrike Langematz	-	Future Changes in the Stratosphere-to-Troposphere Ozone Mass Flux
1159	1	7	3	F	Peter Hoor	-	Mixing and Transport in the UTLS: Results from the Wave-Driven Isentropic Exchange (WISE) Mission
1178	1	7	4	C	Yoichi Inai	-	Seasonal Characteristics of Chemical and Dynamical Transports into the Extratropical Upper Troposphere/Lower Stratosphere
1457	1	7	5	A	Haosen Xi	-	Stratosphere-Troposphere Exchange of Ozone and Carbon Monoxide over the Northern Pacific Ocean in Northern Winter using Two Chemical Reanalysis Data Sets
1455	1	7	6	D	Joern Ungermann	-	A Case Study of Water Vapor In-Mixing into the LS from SparcGLORIA Measurements Acquired during the WISE Campaign
1243	1	7	7	B	Xiaoyang Chen	-	Impact of Photochemical and Meteorological Processes within Boundary Layer and Stratosphere-Troposphere Exchange on Vertical Ozone

1239	1	7	8	E	Hongyue Wangh	-	Impact of Stratosphere-to-Troposphere Exchange on Surface Ozone in Eastern China from the Valley between the South Asia High and the Subtropical Pacific High.
1177	1	7	9	C	Qian Li	-	Distribution and Variation of Surface Emitted Air Pollutants in UTLS under the Control of Asian Summer Monsoon
1033	1	7	10	B	Tao Wang	ECS	Quantify Laminar Cirrus Ice and its Contribution to the Total Water Budget in the Tropical Tropopause Layer

8. Climate analyses

1549	1	8	1	B	Antara Banerjee	ECS	Stratospheric Water Vapor: an Important Climate Feedback
1311	1	8	2	F	Ram P R Sinha	-	Ubiquity of Quasi-Aerosol Layers in the Free Troposphere and its Regional Climate Response
1491	1	8	3	C	Sampa Das	-	An Investigation of the Summer 2017 North American Wildfires and their Influence on the Upper Troposphere and Lower Stratosphere
1039	1	8	4	A	Xuan Ma	ECS	An Advanced Impact of Arctic Stratospheric Ozone Changes on Spring Precipitation in China
1539	1	8	5	D	Kane Stone	ECS	Using Stratospheric Ozone to Predict Northern Hemisphere Surface Temperatures
1199	1	8	6	B	Katharina Meraner	ECS	How Useful is a Linearized Ozone Scheme for Global Climate Modelling?
1261	1	8	7	E	William J Collins	-	Climate Impacts of a Short-Lived Climate Forcer Mitigation Scenario
1522	1	8	8	C	Dmitry V. Kulyamin	-	Modeling of the Energetic Particles Precipitation Influence on Atmospheric Ozone, Circulation and Surface Climate
1302	1	8	9	F	Pao K. Wang	-	How Deep Convective Storms Influence Global Climate: Cross-Tropopause Transport of H ₂ O
1309	1	8	10	D	Wenshou Tian	-	The Relationship between Lower-Stratospheric Ozone at Southern High Latitudes and Sea Surface Temperature in the East Asian Marginal Seas in Austral Spring
1087	1	8	11	A	Franziska I. Frank	ECS	Atmospheric Methane and its Isotopic Composition in a Changing Climate: A Modeling Study
1385	1	8	12	E	Michaela Hegglin	-	ESA Climate Change Initiative: Long-Term Changes in Atmospheric Water Vapour
1282	1	8	13	B	Amanda C. Maycock	-	On the Structure of Greenhouse Gas Radiative Forcing Kernels
1402	1	8	14	F	David A Plummer	-	Comparing the Stratosphere in Specified Dynamics (Nudged) and Free-Running Simulations from the Chemistry Climate Model Initiative Model Intercomparison
1409	1	8	15	C	Feng Li	-	Effects of Greenhouse Gas Increase and Stratospheric Ozone Depletion on Brewer-Dobson Circulation in 1960-2010
1419	1	8	16	B	Gabriel Chiodo	-	Is Interactive Ozone Chemistry Important to Represent Stratospheric Temperature Variability in Earth System Models?
1489	1	8	17	E	Birgit Hassler	-	CMIP Model Evaluation with the Earth System Model Evaluation Tool (ESMValTool)

Theme 2 Climate Prediction from Weeks to Decades

1259	2	Keynote 1	Amy H. Butler	2(Tue) 16:00-16:30	-	Stratosphere-Troposphere Coupling Processes on S2S and Longer Timescales
1190	2	Keynote 2	Daniela Domeisen	2(Tue) 17:00-17:30	-	Weather and Climate Prediction from Weeks to Decades: Where Do We Stand?
1274	2	Oral 1	Shunsuke Noguchi	2(Tue) 16:30-16:45	ECS	Impact of Satellite Observations on Forecasting Sudden Stratospheric Warmings
1480	2	Oral 2	Alexey Karpechko	2(Tue) 16:45-17:00	-	Predictability of Sudden Stratospheric Warmings in Sub-Seasonal Forecast Models
1169	2	Oral 3	Tobias Spiegl	3(Wed) 08:30-08:45	-	The Solar Cycle Signal in Northern Hemisphere Winter in Ensemble Simulations with a Comprehensive Decadal Prediction System
1058	2	Oral 4	Lei Wang	3(Wed) 08:45-09:00	-	Empirical Seasonal Forecast of Winter NAO and Surface Climate
1053	2	Oral 5	Nicholas J. Byrne	3(Wed) 09:00-09:15	ECS	Seasonal Persistence of Circulation Anomalies in the Southern Hemisphere Stratosphere, and Its Implications for the Troposphere
1367	2	Oral 6	Eun-Pa Lim	3(Wed) 09:15-09:30	-	Impacts and Predictability of Southern Hemisphere Stratosphere-Troposphere Coupling

1. S2S prediction

1540	2	1	1	B	Yvan J. Orsolini	-	Subseasonal-to-Seasonal Forecasts with the Norwegian Climate Prediction Model
1407	2	1	2	E	Craig Long	-	Influence of Sudden Stratospheric Warmings upon Sub-Seasonal Forecasts
1422	2	1	3	C	Yvan J. Orsolini	-	Duration and Decay of Polar Stratospheric Vortex Events in the ECMWF Seasonal Forecast Model
1408	2	1	4	F	Craig Long	-	Sudden Stratospheric Warming Monitoring at NOAA/Climate Prediction Center
1537	2	1	5	D	Steven Pawson	-	The Stratospheric Warming of 2018 in Context of the Earth System
1423	2	1	6	A	Judith Berner	-	Regime-dependent Predictability in Sub-seasonal Forecasts
1030	2	1	7	E	Chen Schwartz	-	Relative Roles of the MJO and Stratospheric Variability in North Atlantic Climate Patterns during Boreal Winter
1248	2	1	8	B	Yueyue Yu	ECS	On the Linkage among Anomalous Strong Stratospheric Mass Circulation, Stratospheric Sudden Warming, and Cold Weather Events
1366	2	1	9	F	Eun-Pa Lim	-	S2S Forecast Skill for Southern Hemisphere Early Spring Vortex Variability
1461	2	1	10	C	Chiara Cagnazzo	-	Stratospheric Variability and Stratosphere-Troposphere Coupling in High versus Low Resolution Simulations within the H2020 PRIMAVERA Project
1490	2	1	11	A	Yuna Lim	-	MJO Prediction Skill of the Subseasonal-to-Seasonal Prediction Models
1025	2	1	12	D	Chaim I Garfinkel	-	The Influence of the Madden Julian Oscillation and the Quasi-Biennial Oscillation on the Boreal Winter Arctic Stratosphere in S2S Subseasonal Forecast Models
1072	2	1	13	B	Robert W. Lee	ECS	ENSO Modulation of MJO Teleconnection to the North Atlantic & Europe and Implications for Subseasonal Predictability
1488	2	1	14	E	Yuna Lim	-	Influence of the QBO on MJO Prediction Skill in the S2S Models

2. Seasonal prediction

1165	2	2	1	C	Nicholas Tyrrell	ECS	Atmospheric Circulation Response to Anomalous Siberian Forcing in Autumn 2016 and its Long-range Predictability.
1235	2	2	2	D	Cory A. Barton	ECS	Optimization of Gravity Wave Source Parameters to Improve Seasonal Forecasts of the Quasi-Biennial Oscillation in a Stratosphere-Resolving Numerical Weather Prediction Model
1247	2	2	3	D	Masakazu Taguchi	-	Seasonal Winter Forecasts of the Northern Stratosphere and Troposphere: Results from JMA Seasonal Hindcast Experiments
1251	2	2	4	F	Hong-Li Ren	-	Dynamics and Predictability of 2016 Extreme Indian Ocean Dipole Event
1486	2	2	5	E	Timothy N Stockdale	-	Prediction of the Quasi-Biennial Oscillation (QBO) with a Multi-Model Ensemble of QBO-Resolving Models
1321	2	2	6	F	Yanqiu Gao	-	A Study of the Impact of Initialization on ENSO Predictability based on Ensemble Coupled Data Assimilation
1329	2	2	7	C	Stephen I. Thomson	ECS	Atmospheric Response to SST Anomalies. Background-State Dependence, Teleconnections and Local Effects in Winter and Summer
1055	2	2	8	A	Dim Coumou	-	Long-Lead Empirical Forecasts of the Indian Summer Monsoon Rainfall based on Causal Precursors
1076	2	2	9	D	Joshua Ngaina	ECS	Predictability of Seasonal Rainfall over the Greater Horn of Africa
1092	2	2	10	B	Anastasia Makhnykina	ECS	Seasonal Changes in Soil CO ₂ Emission in the Forest Ecosystems of Central Siberia
1222	2	2	11	E	Xuefeng Cui	-	Impacts of Climate Seasonal Prediction on Agriculture: Comparison between India and China
1393	2	2	12	C	Folmer Krikken	ECS	Global Empirical System for Probabilistic Seasonal Climate and Fire Risk Forecasts
1203	2	2	13	F	Chaofan Li	-	Skillful Seasonal Prediction of Yangtze River Valley Summer Rainfall
1441	2	2	14	D	Zoe E Gillett	ECS	Modelling the Influence of the Antarctic Ozone Hole on Southern Hemisphere Surface Climate Variability

3. Decadal prediction

1049	2	3	1	C	Anthony Banyouko Ndah	ECS	A Novel Perspective on the Sun-Ocean Time-Lag and Proposed Mechanism for Bottom-Up (Ocean-Atmosphere) Climate Forcing: Implications for Decadal Climate Predictions
1466	2	3	2	B	Stergios Misios	-	Observed and Modelled Influences of the 11-Yr Solar Cycle on the Walker Circulation
1280	2	3	3	C	Cheng Sun	-	North Atlantic Oscillation Implicated as a Predictor of Northern Hemisphere Multidecadal Climate Variability

4. Extremes and others					
1328	2	4	1	E	Jaeyoung Hwang - Future Change of Northern Hemisphere Blocking in CESM Large Ensemble Simulations
1198	2	4	2	C	Gabriele Messori ECS Dynamical Systems Proxies of Atmospheric Predictability and Mid-Latitude Extremes
1492	2	4	3	F	Xuan-Tien Nguyen-Vinh - Evaluation of the Global Weather Research and Forecasting (WRF) Model, Focusing on Summer Mid- and High-Latitude Upper Troposphere and Lower Stratosphere Temperature Profile
1286	2	4	4	D	Dhrubajyoti Samanta ECS The Double ITCZ Bias in GCMs: Causes and Implications for Future Rainfall Projections
1547	2	4	5	A	James Anstey - Uncertainty of Regional Climate Change Projections Associated with Atmospheric Blocking Events
1244	2	4	6	E	Abebaw Alemu - Estimating Coefficients of Z-R Relationship for Bahir Dar City by using Blue Nile Weather Radar Data
1506	2	4	7	B	Inna Polichtchouk ECS Sensitivity of the Lower Tropical Stratosphere to Vertical Resolution in NWP Models
1551	2	4	8	C	Annelize Van Niekerk ECS The Circulation Response to Resolved Versus Parametrized Orographic Drag over Complex Mountain Terrains

Theme 3 Role of Atmospheric Dynamics for Climate Variability and Change

1318	3	Keynote 1	Hisashi Nakamura	4(Thu) 13:30-14:00	-	Modulations of the East Asian Winter Monsoon by the Western Pacific (WP) Pattern: Its Dynamics and Remote Influence from the Tropics
1434	3	Keynote 2	Joowan Kim	4(Thu) 16:15-16:45	-	Dynamical Processes in the Tropical UTLS: Observational Evidences and Issues in Numerical Models
1016	3	Oral 1	Wanying Kang	4(Thu) 14:00-14:15	ECS	The Teleconnection between the Madden-Julian Oscillation (MJO) and the Sudden Stratospheric Warmings (SSW)
1219	3	Oral 2	Sean Davis	4(Thu) 14:15-14:30	-	Tropical Expansion: Comparison of "Upper" and "Lower" Metrics
1115	3	Oral 3	Marlene Kretschmer	4(Thu) 14:30-14:45	ECS	Using Causal Discovery Algorithms to Evaluate Arctic-Stratosphere Linkages in CMIP5 Models
1202	3	Oral 4	Kunihiko Kodera	4(Thu) 16:45-17:00	-	Role of Downward Propagating Planetary Waves in European Severe Cold Snap during a Recovery Phase of the SSW in February 2018
1074	3	Oral 5	Talia Tamarin-Brodsky	4(Thu) 17:00-17:15	ECS	A Dynamical Perspective on Temperature Variability, Extremes and Their Response to Climate Change
1380	3	Oral 6	Lena Schoon	4(Thu) 17:15-17:30	ECS	A Novel Method for the Extraction of Local Gravity Wave Parameters: Description, Validation and Application

1. Phenomena in the mesosphere and lower-thermosphere (MLT) region					
1047	3	1	1	F	Sivakandan Mani ECS The Predominant Occurrence Altitudes of Middle Atmospheric Temperature Inversions and Mesopause over the low Latitude Indian Sector
1051	3	1	2	F	Priyanka Ghosh ECS Vertical Coupling from the Lower Atmosphere to the Ionosphere: Observations Inferred from Indian MST Radar, GPS Radiosonde, Ionosonde and SABER/TIMED Instrument over Gadanki
1048	3	1	3	B	Mani Sivakandan ECS Long-Term Variation of OH Peak Emission Altitude and Volume Emission Rate over Indian Low Latitudes
1088	3	1	4	A	Som Kumar Sharma - Investigations on Stratospheric-Mesospheric Temperature Climatology in the Northern and Southern Hemispheres
1295	3	1	5	D	Christoph Züllicke - Coupling of Stratospheric Warmings with Mesospheric Coolings
1275	3	1	6	B	Koki Iwao - Climatological Features of Planetary Waves in the Middle Atmosphere during the Northern Hemisphere Winter
1438	3	1	7	E	Ryosuke Yasui - In-Situ Gravity Wave Generation by Shear Instability in the MLT Region

2. Influences of solar activity variations and volcanic eruptions					
1498	3	2	1	E	Ziniu Xiao - Preferred Solar Signal Transfer in the Asian-Pacific Sector
1343	3	2	2	B	Kevin DallaSanta ECS The Circulation Response to Volcanic Eruptions: The Key Roles of Stratospheric Warming and Eddy Interactions
1256	3	2	3	F	Wenjuan Huo ECS Modulation of Solar Activity on Tropical Pacific SST Anomalies by the Wintertime AO-Like Variability
1017	3	2	4	C	Dhruba Banerjee ECS A Study of Tropical Cyclones over India (Bay of Bengal and Arabian Sea) and Solar Influence on It
1553	3	2	5	A	Hauke Schmidt - Polar Vortex Responses to Solar, Volcanic and ENSO Forcing in a Large Ensemble of Historical Simulations
1308	3	2	6	D	Tao Wang - Influence of Low-Frequency Solar Forcing on the East Asian Winter Monsoon based on HadCM3 and Observations

3. Equatorial quasi-biennial oscillation (QBO) and its remote influences

1414	3	3	1	B	James Anstey	-	Teleconnections of the Quasi-Biennial Oscillation (QBO) in a Multi-Model Ensemble of QBO-Resolving Models
1158	3	3	2	E	Jadwiga Richter	-	Quasi-Biennial Oscillation in a Warming Climate, Part 1: Overview & Metrics
1200	3	3	3	C	Neal Butchart	-	Quasi-Biennial Oscillation in a Warming Climate, Part 2: Response of the QBO Drivers
1232	3	3	4	F	Hiroaki Naoe	-	The Extratropical Response to the Quasi-Biennial Oscillation (QBO) in the NH Winter in QBOi Experiments
1513	3	3	5	D	R. K. Scott	-	Polar-Tropical Coupling in the Winter Stratosphere
1395	3	3	6	B	Hua Lu	-	On the Role of Rossby Wave Breaking in Quasi-Biennial Modulation of the Stratospheric Polar Vortex
1207	3	3	7	E	Martin Andrews	-	Robustness of Observed and Simulated Teleconnections between the Stratospheric Quasi-Biennial Oscillation and Boreal Winter Atmospheric Circulation
1283	3	3	8	C	Pu Lin	ECS	The Development of the Eddy Momentum Flux Divergence during the 2015/2016 Quasi-Biennial Oscillation Disruption
1206	3	3	9	F	Yousuke Yamashita	-	Two Possible Pathways of the Southern Hemisphere Polar Vortex Response to the QBO from Winter to Early Summer
1313	3	3	10	D	Peter Hitchcock	-	Non-Radiative Dissipation of Stratospheric Kelvin Waves

4. Gravity waves

1267	3	4	1	C	Petr Pisoft	-	Localized Gravity Wave Forcing in the Lower Stratosphere - Role of the East Asian and North Pacific Hotspot
1315	3	4	2	A	Ji-Hee Yoo	-	Characteristics and Sources of Inertia-Gravity Waves Revealed in Operational Radiosonde at Jang Bogo Station (JBS), Antarctica
1469	3	4	3	D	Tracy Moffat-Griffin	-	Radiosonde Observations of Gravity Waves in the Stratosphere Close to 60S
1389	3	4	4	B	Kathrin Baumgarten	ECS	Seasonal and Short Term Variability of Atmospheric Waves at Mid-Latitudes Derived from Ground-Based Observations and Reanalysis Data
1163	3	4	5	E	Yukari Sumi	-	Frontal Structure and Gravity Waves Observed during Stratospheric Sudden Warming Events
1040	3	4	6	C	Rui Yang	ECS	Simulation of a Torrential Rainstorm and Stratospheric Gravity Wave Analysis
1450	3	4	7	F	Peter Preusse	-	Propagation of Mesoscale Gravity Waves above the Scandinavian Mountains as Observed by GLORIA and AIRS
1221	3	4	8	A	Ling Wang	-	High Resolution Numerical Simulations of Gravity Wave Encounters with the Tropopause
1290	3	4	9	A	Andreas Doernbrack	-	Gravity Waves Excited during a Minor Sudden Stratospheric Warming
1107	3	4	10	D	Ulrich Achatz	-	Beyond Traditional Limits of Gravity-Wave Parameterizations: Unbalanced Mean Flows
1531	3	4	11	C	Riwal Plougonven	-	On Constraints and Uncertainties for Gravity Wave Parameterizations
1155	3	4	12	F	Gergely Boeloeni	-	Towards a Transient Gravity Wave Drag Parametrization in Atmospheric Models
1172	3	4	13	D	Hella Garny	-	Role of Parametrized Gravity Wave Drag for the Stratospheric Circulation and Transport

5. Stratospheric sudden warmings (SSWs)

1279	3	5	1	B	Byeong-Gwon Song	ECS	Three-Dimensional Structure of Planetary and Gravity Wave Forcing during the Evolution of the January 2009 Stratospheric Sudden Warming
1473	3	5	2	A	Paul A. Newman	-	Impact of the February 2018 Major Stratospheric Sudden Warming on Global Ozone
1227	3	5	3	C	Yayoi Harada	-	A WN2-Type Major Sudden Stratospheric Warming Event in February 2018
1018	3	5	4	F	Ming Bao	-	Classifying the Tropospheric Precursor Patterns of Sudden Stratospheric Warmings
1028	3	5	5	D	Martin Jucker	-	Using Precursors for Statistical SSW Prediction
1465	3	5	6	B	Kazuhira Hoshi	ECS	Characterizing Influences of the Arctic Sea Ice Loss on Weak Stratospheric Polar Vortex Events
1168	3	5	7	E	Olivia Martius	-	Rossby Wave Propagation into the Northern Hemisphere Stratosphere: The Role of Zonal Phase Speed
1264	3	5	8	C	Patrick Martineau	ECS	Lower-Stratospheric Control of the Frequency of Sudden Stratospheric Warming Events
1544	3	5	9	D	Noboru Nakamura	-	Wave Activity Budget and the Onset of Sudden Stratospheric Warming
1122	3	5	10	A	Froila M. Palmeiro	-	Assessing Sudden Stratospheric Warming Variability in the EC-EARTH Climate Model
1002	3	5	11	E	Pavel Vargin	-	Lower troposphere impact of stratospheric perturbations in historical simulations of INM climate model

1114	3	5	12	B	Froila M. Palmeiro	-	On How Turbulent Mountain Stress Influences Sudden Stratospheric Warming Occurrence in WACCM
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6. Polar vortex variations and the Brewer-Dobson circulation (BDC)

1070	3	6	1	C	Jinlong Huang	ECS	Preconditioning of Arctic Stratospheric Polar Vortex Shift Events
1233	3	6	2	F	Xiaoqing Lan	-	The Modulation Effects of Pacific Decadal Oscillation on Relation between Arctic Oscillation and Mid-High Latitude Climate and Evolution of Weak Polar Vortex Events in Northern Hemisphere Winter
1354	3	6	3	E	Yuta Ando	-	Detection of a Climatological Short Break in the Polar Night Jet in Early Winter and its Relation to Cooling over Siberia
1494	3	6	4	B	Luke Hatfield	ECS	Low-Frequency Variability of the Winter Polar Vortex in a Simple Model of the Seasonally Evolving Stratosphere
1552	3	6	5	F	Annelize Van Niekerk	ECS	The Modulation of Stationary Waves, and their Response to Climate Change, by Parameterized Orographic Drag
1326	3	6	6	C	Chaim Garfinkel	-	Rossby Waves in the Stratosphere: The Effect of Mean Flow on the Accuracy of Quasi-Geostrophic Solutions
1330	3	6	7	A	Kazuaki Nishii	-	Midlatitude Oceanic Fronts and the Stratospheric Polar Vortex
1288	3	6	8	D	Soichiro Hirano	-	Primary Contribution of the Australian High to Climatology of the Stratospheric Momentum Budget during the Austral Spring
1141	3	6	9	B	Inna Polichtchouk	ECS	Sensitivity of the Brewer-Dobson Circulation and Polar Vortex Variability to Parametrized Nonorographic Gravity-Wave Drag in a High-Resolution Atmospheric Model
1208	3	6	10	E	Steven Hardiman	-	The Influence of Dynamical Variability on the Observed Brewer-Dobson Circulation
1126	3	6	11	C	Andreas Chrysanthou	ECS	The Transient Evolution of the Stratospheric Residual Circulation Response to Climate Change
1268	3	6	12	F	Petr Pisoft	-	Changing Spatial Structure of the Brewer-Dobson Circulation in CCM1 Simulations - Is There a Role for the Wave Driving?
1467	3	6	13	D	Sanjay K. Mehta	-	The Fine Scale Structure of the Annual Cycle in Stratospheric Temperatures Observed from GPS Radio Occultation
1249	3	6	14	A	Toshiki Iwasaki	-	Three-Dimensional Structure of Mass-Weighted Isentropic Time Mean Meridional Circulations

7. Stratospheric influences on tropospheric weather and climate

1188	3	7	1	A	Harry H. Hendon	-	Compounding Tropical and Stratospheric Forcing of the Record Low Antarctic Sea-Ice in 2016
1316	3	7	2	D	Wen Zhou	-	Role of the Stratospheric Polar Vortex and Tropospheric Blocking in Winter 2016
1184	3	7	3	B	Sandro Lubis	ECS	Understanding the Stratospheric Influence on the Troposphere through Finite-Amplitude Wave Activity Theory
1146	3	7	4	E	Hitoshi Mukougawa	-	Dynamics and Predictability of Downward Propagating Stratospheric Planetary Waves Observed in March 2007
1022	3	7	5	C	Ian White	ECS	The Downward Influence of Sudden Stratospheric Warmings: Insight using an Idealised Moist GCM
1535	3	7	6	F	Reik Donner	-	Stratosphere-Troposphere Coupling in the Northern Hemisphere Analyzed with Climate Network Measures
1191	3	7	7	A	Daniela Domeisen	-	The Predictability of Polar Jet Oscillation Events and their Surface Impacts
1500	3	7	8	B	Peter Hitchcock	-	The Downward Influence of Uncertainty in the Northern Hemisphere Stratospheric Polar Vortex Response to Climate Change
1331	3	7	9	D	Elisa Manzini	-	Nonlinear Response of the Stratosphere and the North Atlantic-European Climate to Global Warming
1171	3	7	10	C	Janice Scheffler	ECS	Stratosphere-Troposphere Coupling in Ensemble Simulations with Fast Stratospheric Ozone Chemistry
1322	3	7	11	F	Guangyu Liu	-	Relationships between Antarctic Ozone Hole and Dynamical Fields
1462	3	7	12	D	Chiara Cagnazzo	-	Stratosphere Resolving CMIP5 Models Simulate Different Changes in the Southern Hemisphere
1014	3	7	13	B	Ke Wei	-	The Effect of a Well-Resolved Stratosphere on East Asian Winter Climate
1555	3	7	14	E	Frank M. Selden	-	The Climate in a World without Ozone

8. Annular mode variability and extra-tropical cyclones

1068	3	8	1	B	Lina Boljka	ECS	On the Coupling between Baroclinic and Barotropic Annular Modes
1433	3	8	2	F	Aditi Sheshadri	ECS	Propagating Annular Modes
1197	3	8	3	C	Gabriele Messori	ECS	Low-Frequency Variability of Wintertime Euro-Atlantic Planetary Wave Breaking
1026	3	8	4	A	Yu Nie	-	On the Roles of Upper- versus Lower-level Thermal Forcing in Shifting the Eddy-Driven Jet

1444	3	8	5	D	Min-Gyu Seong	-	A Bayesian Attribution Analysis of Global and Regional Changes in Extreme Temperatures during 1951-2010
1405	3	8	6	B	Jaeyeon Lee	ECS	Characteristics of East Asian Extratropical Cyclones in CMIP5 Climate Models
1451	3	8	7	E	Akira Kuwano-Yoshida	-	Long-Term Changes in Explosive Cyclone Activity over the Midwinter North Pacific
1428	3	8	8	C	Luke L. B. Davis	ECS	The Influence of Thermal Damping Timescales on Climate Variability and the Extratropical Circulation
1269	3	8	9	F	Robin Pilch Kedzierski	ECS	Baroclinic Life-Cycles from GPS Radio-Occultation Measurements

9. Stratosphere-troposphere exchange (STE) and upper troposphere-lower-stratosphere (UTLS) processes

1440	3	9	1	E	Kohei Yoshida	-	What Causes Disagreement of Upwelling in the TTL among CMIP5 Models?
1037	3	9	2	C	Yan Xia	ECS	Impacts of Tropical Tropopause Warming on the Stratospheric Water Vapor
1112	3	9	3	F	Robert Boschi	ECS	Identifying the Major Sources of Hindu Kush Himalayan Air and Moisture using a Lagrangian Approach
1245	3	9	4	D	Peter Haynes	-	Seasonal and Interannual Variations in Upwelling and Temperatures in the Tropical UTLS
1310	3	9	5	A	Takeshi Horinouchi	-	Dynamical UTLS Control on Summertime Precipitation from Weather to Climate
1089	3	9	6	E	Reona Satoh	-	Intraseasonal Variability of Cloud Amount in Middle Latitude during Boreal Winter
1103	3	9	7	B	Frauke R.L. Fritsch	ECS	On the Derivation of Mean Age of Air and Spectra from Ideal and Realistic Tracers
1123	3	9	8	F	Marianna Linz	ECS	Non-Gaussian Tracer Distributions from Horizontal Advection
1085	3	9	9	C	Liu Ting	-	Influence of the Boreal Autumn SAM on Winter Precipitation over Land in the Northern Hemisphere
1550	3	9	10	A	Julie Arblaster	-	Precipitation Response to Ozone Depletion in the Southern Hemisphere
1133	3	9	11	D	Jilong Chen	-	Decadal Shifts of Summer Heavy Rainfall in Southern China
1009	3	3	12	B	Furqon Alfahmi	ECS	The Impact of Curvature Coastline to Rainfall Offshore over Maritime Continent
1400	3	9	13	E	Zhun Guo	-	Impact of Horizontal Resolutions and Topography on the Simulation of Summer Rainfall over Southeast China
1084	3	9	14	C	Salaudin Mohammad	ECS	Monsoon Variability and Stratosphere-Troposphere Exchange (STE) of Ozone over Costa-Rica (10N, 83.4W)
1364	3	9	15	F	Roberta D'Agostino	ECS	Moisture Budget Decomposition and Mechanisms behind Monsoon Response in the Mid-Holocene and Future Climate Scenario

10. Hadley circulation, El Nino-Southern Oscillation (ENSO) and Pacific Decadal Oscillation (PDO)

1095	3	10	1	A	In-Hong Park	-	Understanding the Indo-Pacific Warm Pool Expansion: Seasonal Changes
1447	3	10	2	E	Yuki Ishida	-	The Leading Mode of NH Interannual Tropopause Height Variability and its Relationship with ENSO
1077	3	10	3	F	Seoyeon Kim	ECS	Southern Hemisphere Zonal-Mean Circulation Changes from Last Glacial Maximum (LGM) to Future Climate
1119	3	10	4	C	Bianca Mezzina	ECS	Separating ENSO and NAO Signatures in the North Atlantic
1179	3	10	5	A	Bo Wu	-	Atmospheric Dynamic and Thermodynamic Processes Driving the Western North Pacific Anomalous Anticyclone during El Nino
1377	3	10	6	D	Daniela Matei	-	InterDec: The Potential of Seasonal-to-Decadal-Scale Inter-Regional Linkages to Advance Climate Predictions
1102	3	10	7	B	Lea Svendsen	ECS	Pacific Contribution to the Early 20th Century Warming in the Arctic
1349	3	10	8	E	Yu Kosaka	-	Global Temperature Fluctuations due to Tropical Pacific Decadal Variability and their Uncertainty
1038	3	10	9	E	Lixia Zhang	-	ENSO Transition from La Nina to El Nino Drives Prolonged Spring Summer Drought over North China
1224	3	10	10	F	Chiaki Kobayashi	-	Formation of Tropospheric Zonal Mean Anomalies Associated with ENSO

11. Atmosphere-ocean coupling and teleconnection							
1096	3	11	1	E	Dim Coumou	-	Occurrence of North Atlantic SST and Atmospheric Circulation Patterns in a Changing Climate
1073	3	11	2	B	Robert W. Lee	ECS	Impact of Gulf Stream SST Biases on the Global Atmospheric Circulation
1067	3	11	3	F	Tine Nilsen	ECS	Northern North Atlantic Oceanic Conditions as an Important Driving Factor for Forest Fire Activity in Northern Scandinavia
1294	3	11	4	C	Annika Reintges	ECS	Variability and Teleconnections in Wind-Driven Hindcasts with the Kiel Climate Model
1360	3	11	5	A	Annika Reintges	-	Reducing Climate Model Systematic Error in the Tropical Atlantic Sector by Enhancing Atmospheric Resolution: Implications for Seasonal to Interannual Variability and Predictability
1213	3	11	6	D	Mehdi Pasha Karami	-	The Variability of the North Atlantic Subpolar Gyre and its Global Impact
1263	3	11	7	B	Patrick Martineau	ECS	Role of the Atlantic Ocean in Modulating North-American and European Weather Extremes on Decadal Timescales
1411	3	11	8	E	Bunmei Taguchi	-	Influence of Extra-Tropical Oceanic Variability on the Interannual-to-Decadal Variability of the Midlatitude Atmosphere
1370	3	11	9	D	Juergen Bader	-	Global Temperature Modes Shed Light on the Holocene Temperature Conundrum
1118	3	11	10	F	Stefanie Talento Costa	ECS	Influence of Extratropical Thermal Forcings on the Asian Monsoons
12. Arctic sea-ice loss and teleconnection							
1324	3	12	1	B	Russell Blackport	-	Atmospheric Circulation Response to Arctic Sea Ice Loss
1176	3	12	2	E	Torben Koenigk	-	Siberian Cooling Trends and the Linkage to Arctic Sea Ice Loss
1305	3	12	3	C	Russell Blackport	ECS	Cold Winters in Mid-Latitudes Coincident with But Not Caused by Reduced Arctic Sea Ice
1453	3	12	4	F	Hye-Jin Kim	ECS	Is Recent Eurasian Winter Cooling Caused by Arctic Amplification?
1456	3	12	5	D	Yongqi Gao	-	Intensified Linkage between the Arctic Warming and the Eurasian Cooling
1436	3	12	6	B	Chang-Hyun Park	ECS	A Causal Relationship between Barents-Kara Sea Ice Concentration and Wintertime Surface Air Temperature Variability in East Asia
1392	3	12	7	E	Evangelos Tyrllis	-	The Key Role of Blocking in Arctic Sea Ice Loss and Cold Spells over Central Asia in Autumn 2016
1192	3	12	8	C	Masato Mori	-	Quantification of Influence of Arctic Sea-Ice Decline and Natural Variability to Recent Eurasian Cooling
1460	3	12	9	F	Jinro Ukita	-	Long-Term Change in Stationary Eddy Heat Flux Related to Arctic-Midlatitude Climate Linkage
1401	3	12	10	D	Dim Coumou	-	The Influence of Arctic Amplification on Mid-Latitude Summer Circulation
1242	3	12	11	A	Irina Rudeva	-	The Interaction between the Polar, Midlatitude and Tropical Regions.
13. Teleconnections and regional climate variations							
1137	3	13	1	F	Lei Song	ECS	Relative Contributions of Synoptic and Intraseasonal Variations to Strong Cold Events over Eastern China
1090	3	13	2	C	Hyeong-Oh Cho	ECS	Springtime Extratropical Cyclones in Northeast Asia and their Impacts on Long-Term Precipitation Trends
1255	3	13	3	A	Deming Zhao	-	Role of Land Use and Cover Changes in Regional Climate Studies over East Asia
1410	3	13	4	D	Igor I. Zveryaev	-	Soil Moisture Variability in European Russia and its Links to Regional Climate During Summer #
1097	3	13	5	B	Kieran M R Hunt	ECS	Vertical Structure of Western Disturbances in the Subtropical Jetstream and Mechanisms Associated with Extreme Rainfall in South Asia
1193	3	13	6	E	Shion Sekizawa	-	Interannual Variability of Australian Summer Monsoon and its Remote Influence on Wintertime East Asian Climate
1098	3	13	7	C	Kieran M R Hunt	ECS	Future Projections of Western Disturbances: A CMIP5 Multi-Model Assessment
1045	3	13	8	F	Kai Kornhuber	ECS	Increasing Probability of Simultaneous Mid-Latitudinal Heat Waves due to a Quasi-Stationary Wave 7 Teleconnection Favored by Heterogeneous Surface Warming
1307	3	13	9	D	Lin Wang	-	Multidecadal Fluctuation of the Wintertime Arctic Oscillation Pattern and its Implication

Theme 4 Atmospheric Impacts and Interactions Related to Tropical Processes

1394	4	Keynote 1	Garfinkel Chaim	3(Wed) 09:30-10:00	-	Connections between Tropical Convection and the Tropical Stratosphere
1201	4	Keynote 2	Takatoshi Sakazaki	4(Thu) 08:30-09:00	ECS	Tropospheric Response to Downward Propagating Tide from the Stratosphere
1306	4	Oral 1	Shigeo Yoden	3(Wed) 10:00-10:15	-	A Series of Numerical Experiments on Stratosphere-Troposphere Two-Way Dynamical Coupling in the Tropics through Organizations of Moist Convective Systems
1505	4	Oral 2	George N Kiladis	3(Wed) 10:15-10:30	-	Associations between Stratospheric Wave Activity and Tropical Convection in Various Reanalysis Datasets
1129	4	Oral 3	Laura Holt	4(Thu) 09:00-09:15	ECS	Evaluation of Resolved Equatorial Waves and Wave-Driving of the QBO in the QBOi Models
1476	4	Oral 4	Sergey Khaykin	4(Thu) 09:15-09:30	-	Cross-Tropopause Transport of Water in the Asian Summer Monsoon from Airborne and Satellite Observations
1512	4	Oral 5	Amit K Pandit	4(Thu) 09:30-09:45	ECS	Long-Term Records of Cirrus Cloud Properties for Climate Understanding
1031	4	Oral 6	Wen Chen	4(Thu) 09:45-10:00	-	Modulation of the QBO on the Impact of ENSO on the South Asian High in the Following Summer

1. UTLS, inclding TTL and Asian monsoon

1034	4	1	1	B	Vivek Panwar	-	Temperature Trends and Long Term Variations in the UTLS Region and its Association with Convection over Indian and Adjacent Region
1478	4	1	2	A	Riwal Plougonven	-	Impact of Equatorial and Gravity Waves on the Structure and Evolution of Tropical Tropopause Layer Cirrus Clouds
1561	4	1	3	A	Kirstin Krueger	-	The South Asian Summer Monsoon Anticyclone in Reanalysis
1458	4	1	4	F	Erik Johansson	ECS	How Does Cloud Overlap Affect the Radiative Heating in the Tropical Upper Troposphere / Lower Stratosphere?
1174	4	1	5	D	Yoichi Inai	-	Long-Term Variation in the Mixing Fraction of Tropospheric and Stratospheric Air Masses in the Upper Tropical Tropopause Layer
1238	4	1	6	B	Kai-Wei Chang	ECS	Evolution of Tropical Tropopause Temperature Induced by Convective and Stratiform Latent Heating
1150	4	1	7	E	I.A. Dion	-	Diurnal Cycle of Ice Water Content Impacted by Deep Convection in the Tropical Upper Troposphere with an Emphasis over the Maritime Continent
1120	4	1	8	C	Ahana K. K.	ECS	Turbulence Parameter Estimation from Concurrent Measurements of Radar and Radiosonde
1082	4	1	9	F	Suneeth Kuniyil Viswanathan	ECS	Role of Zonal Circulation in the Exchange of Minor Constituents between the Upper Troposphere and Lower Stratosphere
1502	4	1	10	D	Florian Ladstaedter	-	Tropical Temperature and Tropopause Trends from Vertically High-Resolved Observations
1099	4	1	11	A	Vanmathi Annamalai	-	Relationship between Tropical Tropopause and Tropical Easterly Jet Streams over the Indian Monsoon Region
1459	4	1	12	E	Emmanuel D. Riviere	-	Estimation of Hydration by Stratospheric Overshoots during TRO-Pico, Brazil: Mesoscale Simulations of Observational Cases
1145	4	1	13	B	Arata Amemiya	ECS	Characterizing the Quasi-Biweekly Variability of the Anticyclone in the Upper Troposphere and Lower Stratosphere over the Asian Summer Monsoon Region
1390	4	1	14	F	Xiaolu Yan	ECS	El Nino Southern Oscillation Influence on the Asian Summer Monsoon Anticyclone
1094	4	1	15	C	Saleem Ali	-	Occurrence of the Cirrus Clouds and its Effect on the Thermal Structure of the Tropical Tropopause Layer (TTL)
1429	4	1	16	B	Noersomadi	-	The Influence of Madden Julian Oscillation to the Tropical Tropopause Inversion Layer as Revealed by COSMIC GPS-RO

2. Stratospheric dynamics, including QBO and SSW

1546	4	2	1	F	Jessica Neu	-	Short-Term Trends in Stratospheric Circulation Driven by Seasonal Timing of the Quasi-Biennial Oscillation
1132	4	2	2	D	Nagio Hirota	-	The Influences of El Nino and Arctic Sea-Ice on the QBO Disruption in February 2016
1403	4	2	3	C	Yuanpu Li	ECS	The Trend of the Planetary Waves and Stratospheric Sudden Warming in the Northern Hemisphere Related to the Indian Ocean and Maritime Continent Warming
1032	4	2	4	E	Shingo Watanabe	-	Hindcasts of the 2016 Disruption of the Stratospheric Quasi-Biennial Oscillation
1136	4	2	5	D	Tobias Kerzenmacher	-	Regional Teleconnections Revealed by Lagged Correlations between the Quasi-Biennial Oscillation and Ozone Concentrations
1253	4	2	6	E	Anne Smith	-	Comparing Observed Equatorial Zonal Winds around the Stratopause with the QBOi Model Ensemble
1287	4	2	7	F	Min-Jee Kang	-	Momentum Flux of Convective Gravity Waves Derived from an Offline Gravity Wave Parameterization: Impacts on the Large-Scale Flow Including the QBO
1284	4	2	8	A	Andrew C Bushell	-	Coordinated Multi-Model Simulations of the Quasi-Biennial Oscillation
1379	4	2	9	B	Kylash Rajendran	ECS	Evaluation of Seasonal Synchronization Tendencies of the QBO in the SPARC QBOi Project

1520	4	2	10	C	B. Helen Burgess	ECS	Mixing and the Potential Vorticity Structure of the Quasi-Biennial Oscillation
1532	4	2	11	E	Riwal Plougonven	-	Accuracy of Lower Stratospheric Winds in ECMWF Analyses and Forecasts, Assessed from Superpressure Balloon Trajectories
1015	4	2	12	F	Sourabh Bal	ECS	Residual Mean Circulation during the Evolution of Sudden Stratospheric Warming
1246	4	2	13	A	Peter Haynes	-	Robust Tropical Responses to Sudden Stratospheric Warmings
1166	4	2	14	B	Nicholas Tyrrell	ECS	The Importance of the QBO Meridional Circulation for Modulating the Polar Vortex in Climate Models
1167	4	2	15	C	Nicholas Tyrrell	ECS	Analyzing Teleconnections in the QBOi Dataset using Causal Effect Networks

3. Upper-lower atmospheric dynamical coupling, including QBO-ENSO/MJO

1186	4	3	1	D	Harry H. Hendon	-	Variations in Vertical Structure of the MJO Associated with the QBO
1138	4	3	2	E	Yoshio Kawatani	-	ENSO Modulation of the QBO: Results from MIROC Models with and without Nonstationary Gravity Wave Parameterization
1183	4	3	3	A	Jack Chen	-	Interaction between QBO and MJO Simulated by QBOi Models
1005	4	3	4	A	Matthew H. Hitchman	-	Observational Studies of the Direct Influence of the Stratospheric QBO on Tropical Deep Convection, the Early Years (1961 - 2003)
1225	4	3	5	D	Yayoi Harada	-	Relationship between the Boreal Summer Intra-Seasonal Oscillation and the Stratospheric Quasi-Biennial Oscillation
1443	4	3	6	B	Chiara Cagnazzo	-	QBO and ENSO Relationships in Climate Models. Implications for Teleconnection Patterns and Predictability
1384	4	3	7	E	Lon L. Hood	-	QBO/Solar Influence on the Madden-Julian Oscillation: Midlatitude Impacts
1291	4	3	8	C	Eriko Nishimoto	ECS	Thorough Survey of Zonal-Mean Influence of the Stratospheric QBO on the Troposphere
1347	4	3	9	F	Hera Kim	ECS	MJO-Induced Precipitation Change in East Asia and its Modulation by QBO
1121	4	3	10	D	Froila M. Palmeiro	-	Dynamics of the ENSO Impact on the Tropical Upwelling
1292	4	3	11	A	Takenari Kinoshita	-	On the Gravity Wave Activities based on Intensive Radiosonde Observations at Bengkulu during YMC-Sumatra 2017
1317	4	3	12	E	Nawo Eguchi	-	Stratospheric Dynamical Impact on the Development of Tropical Cyclone
1344	4	3	13	C	Kevin DallaSanta	ECS	Annular Modes in the Tropical Circulation
1348	4	3	14	D	Kunihiko Kodera	-	Impact of the Tropical Lower Stratospheric Cooling on Deep Convective Activity during a Boreal Summer Monsoon

4. O₃, H₂O transport, variability, trends

1236	4	4	1	D	Anne Thompson	-	Variability and Trends in Free Tropospheric and Lower Stratospheric Ozone in the Tropics from SHADOZ
1162	4	4	2	F	Wuke Wang	ECS	Decadal Variability of Tropical Tropopause Temperatures and Lower Stratospheric Water Vapour
1508	4	4	3	E	Michel Grutter	-	Stratospheric Variability over a Sub-Tropical High Altitude Station in Central Mexico
1117	4	4	4	B	Jacob W Smith	ECS	Determining Stratospheric Water Vapour Variability in a Global Climate Model
1181	4	4	5	F	Olga Tweedy	ECS	The Impact of Tropical SSTs on Interannual Variability of Tropical Lower Stratospheric Ozone
1043	4	4	6	C	Mohamadou Diallo	-	Response of Stratospheric Water Vapor and Ozone to the Unusual Timing of El Nino and QBO Disruption in 2015-2016
1052	4	4	7	C	Yuli Zhang	ECS	Madden-Julian Oscillation in Wintertime Ozone in the Upper Troposphere and Lower Stratosphere
1518	4	4	8	D	Dale F. Hurst	-	Anomalously Strong and Rapid Drying of the Tropical Lower Stratosphere in 2016: Connections to the QBO and ENSO
1140	4	4	9	B	Vinay Kumar	ECS	Impact of QBO and ENSO on the Stratospheric Water Vapor from the Equator to Mid-Latitudes
1533	4	4	10	E	Susann Tegtmeier	-	Widening of the Cold Point Tropopause and Implications for Stratospheric Composition
1109	4	4	11	F	Vered Silverman	ECS	Radiative Effects of Ozone Waves on the Northern Hemisphere Polar Vortex and its Modulation by the QBO
1388	4	4	12	F	Mengchu Tao	ECS	A Lagrangian Model Diagnosis of Stratospheric Contributions to Tropical Mid-Tropospheric Air

5. Tropospheric dynamics, including precipitation									
1148	4	5	1	E	Ken-Chung Ko	-	The ENSO Effect on Summertime Submonthly Wave Patterns in the Western North Pacific		
1050	4	5	2	C	Priyanka Ghosh	ECS	Convection Generated High-Frequency Gravity Waves: Comparison between MST Radar Observations & WRF Simulation		
1426	4	5	3	F	Ian White	ECS	The Saliency of Nonlinearities in the Boreal Winter Response to ENSO		
1424	4	5	4	D	Judith Berner	-	Improved ENSO Predictability in Coupled Climate Simulations with Stochastic Parameterizations		
1351	4	5	5	A	Rongcai Ren	-	A decomposition of ENSO's impacts on the northern winter		
1250	4	5	6	E	Hong-Li Ren	-	Impacts of the Super El Nino Events on the Probability of Spring-Summer Extreme Precipitation in Eastern China		
1161	4	5	7	B	Tieh-Yong Koh	-	Multi-Scale Interactions in a High-Resolution Tropical-Belt Experiment using WRF Model		
1228	4	5	8	F	Jayakrishnan Pandiyattillam Rajan	ECS	Observation and Modelling of the Influence of Synoptic Scale Features on the Sea / Land Breeze Circulation during Southwest and Northeast Monsoon Seasons over Northeast Coastal Station in Peninsular Malaysia		
1312	4	5	9	C	Tetsuya Takemi	-	Control of Tropospheric Stability on the Intensification of Tropical Cyclones		

Theme 5 Advances in Observation and Reanalysis Datasets

1277	5	Keynote 1	Nathaniel Livesey	2(Tue) 08:30-09:00	-	Beyond the "Golden Age" - Routes to Continuing and Augmenting the Record of Spaceborne Limb and Occultation Sounders
1365	5	Keynote 2	Daren Lyu	2(Tue) 13:30-14:00	-	Atmospheric Profiling Synthetic Observation System in Tibet
1397	5	Oral 1	David Flittner	2(Tue) 09:00-09:15	-	Stratospheric Aerosol and Gas Experiment III Installed on the International Space Station (SAGE III/ISS): On-Orbit Update
1383	5	Oral 2	Kaley Walker	2(Tue) 09:15-09:30	-	The SPARC Water Vapour Assessment II: Overview of Results and Characterization of Instruments and Data Records
1142	5	Oral 3	Jacquelyn C Witte	2(Tue) 09:30-09:45	-	Twenty Years of SHADOZ: Archiving, Reprocessing, and Uncertainties of Tropical Ozone profiles
1448	5	Oral 4	Emma Leedham Elvidge	2(Tue) 09:45-10:00	ECS	Multiple Tracer Gases from Aircraft and AirCores and their Potential as Diagnostic Tools for Stratospheric Changes
1521	5	Oral 5	Susann Tegtmeier	2(Tue) 14:00-14:15	-	The Tropical Tropopause Layer in Observations and Reanalysis Data Sets
1252	5	Oral 6	Edwin Gerber	2(Tue) 14:15-14:30	-	The Annular Modes in Reanalyses: The Value of Conventional and Surface-Observation Only based Reanalyses in the Northern Hemisphere

1. Interannual variations and climate

1281	5	1	1	E	Amanda C. Maycock	-	Revisiting the Mystery of Recent Stratospheric Temperature Trends
1406	5	1	2	B	Craig Long	-	Climatology and Interannual Variability of Dynamic Variables in Multiple Reanalyses Evaluated by the SPARC Reanalysis Intercomparison Project (S-RIP)
1463	5	1	3	F	Chiara Cagnazzo	-	Assessing the Quality of Reanalyses Trends in the Southern Hemisphere Stratosphere-Troposphere through the Use of CMIP5 Models
1044	5	1	4	C	Naga Sai Madhavi Gummadipudi	ECS	Long Term Oscillations Observed Globally in the Middle Atmosphere using COSMIC GPS RO and SABER/TIMED Measurements
1160	5	1	5	A	Ulrich Foelsche	-	Improving the Value of Radio Occultation Data for Monitoring Climate in the UTLS
1320	5	1	6	D	Torsten Schmidt	-	Tropopause Characteristics Observed with GPS Radio Occultation Data
1421	5	1	7	B	Andrea K. Steiner	-	Advances in GNSS Radio Occultation for Atmospheric Climate Monitoring

2. Large-scale dynamics

1001	5	2	1	B	Michal Kozubek	ECS	New Reanalyses and How They Behave in the Middle Atmosphere
1226	5	2	2	D	Masatomo Fujiwara	-	SPARC Reanalysis Intercomparison Project (S-RIP)
1496	5	2	3	C	Jonathon S. Wright	-	Assessing Diabatic Signatures of Upwelling near the Tropical Tropopause in Reanalyses
1194	5	2	4	E	Paul Konopka	-	How Robust are Stratospheric Age of Air Trends from Different Reanalysis Data Sets and Different Methods?

1335	5	2	5	D	Simon Chabrillat	-	Comparison of Mean Age of Air in Five Reanalyses Using the BASCOE Transport Model
1534	5	2	6	F	Hella Garny	-	Brewer-Dobson Circulation Inter-Comparison Based on Reanalyses and Models
1134	5	2	7	E	Kaoru Sato	-	The Climatology of Brewer-Dobson Circulation and the Contribution of Gravity Waves
1345	5	2	8	A	Froila M. Palmeiro	-	Reanalyses Performance in Representing Major Sudden Stratospheric Warmings
1378	5	2	9	F	Michaela Hegglin	-	Seasonal and Regional Variations and Long-Term Trends in Upper Tropospheric Jets from Reanalyses
1382	5	2	10	B	Corwin Wright	-	How Well Do Stratospheric Reanalyses Reproduce High-Resolution Satellite Temperature Measurements?
1431	5	2	11	A	Bernard Legras	-	Comparison of the Cloud Properties of Five Modern Reanalyses with Satellite Based Products in the TTL
1548	5	2	12	C	James Anstey	-	How Well Do Reanalyses Represent the Quasi-Biennial Oscillation?
1187	5	2	13	B	Yoshihiro Tomikawa	-	Comparison of Climatological Atmospheric Fields in the Upper Stratosphere and Lower Mesosphere between Multiple Reanalysis Data
1319	5	2	14	D	Toshihiko Hirooka	-	Intercomparison of Dynamical Fields in the Middle Atmosphere Revealed in Global Reanalyses
1413	5	2	15	C	Hua Lu	-	Solar Cycle Modulation of the North Atlantic Oscillation: The Role of Rossby Wave Breaking, Internal Wave Reflection and Critical Layer Instability
1170	5	2	16	E	John McCormack	-	Investigation of Planetary Waves and Tides in a High Altitude Meteorological Analysis System
1542	5	2	17	F	Steven Pawson	-	Global Assimilation of X Project Loon Stratospheric Balloon Observations
1278	5	2	18	A	Dai Koshin	ECS	A Study on the Optimal Data Assimilation System for the Whole Neutral Atmosphere
1135	5	2	19	B	Noriyuki Nishi	-	Cirrus Cloud-Top Height Estimation using Geostationary Satellite Split-Window Measurements Trained with CALIPSO and CloudSat data

3. Gravity waves and turbulence

1027	5	3	1	C	Corwin Wright	-	3D Measurements of Atmospheric Gravity Waves, in Observations and Reanalyses
1396	5	3	2	D	Neil Hindley	ECS	Three-Dimensional Satellite Observations of Gravity Waves around the Southern Wintertime Polar Vortex: Separating Contributions from Orographic and Non-Orographic Sources
1445	5	3	3	E	Peter Preusse	-	A Test of the Polarization Relations Based on 3D GLORIA and In Situ Data
1212	5	3	4	F	Masashi Kohma	-	Seasonal Variation of Energy Dissipation Rate Derived from Radar and Radiosonde Observations at Syowa Station in the Antarctic
1289	5	3	5	E	Yuichi Minamihara	-	The Intermittency of Gravity Waves Momentum Fluxes in the Antarctic Troposphere and Lower Stratosphere Revealed by the PANSY Radar Observation
1314	5	3	6	D	Ryosuke Shibuya	ECS	Gravity Wave Characteristics in the Winter Antarctic Mesosphere by a Long-Term Numerical Simulation Using a Non-Hydrostatic General Circulation Model
1372	5	3	7	B	Mareike Kenntner	-	Characterisation of Mountain Waves in the Tropopause Region Using MTP Measurements
1481	5	3	8	F	Paul Konopka	-	Vertical Diffusivity in the Tropical Upper Troposphere-Lower Stratosphere in the Lagrangian Transport Model ClaMS and Comparison with In Situ Observations of Turbulence
1449	5	3	9	C	Hye-Yeong Chun	-	Increased Access to High-Resolution Radiosonde Data - New Science Prospects for FISAPS

4. Trace gases and aerosols (combined dataset)

1260	5	4	1	B	Krzysztof Wargan	-	Long-Term Ozone Variability and Trends from Reanalyses
1474	5	4	2	D	Birgit Hassler	-	An Updated Version of a Gap-Free Monthly Mean Zonal Mean Ozone Database
1334	5	4	3	C	Ryan M Stauffer	ECS	Evaluation of MERRA-2-based Ozone Profile Simulations with the Global Ozone Network
1220	5	4	4	F	Nathaniel Livesey	-	Characterizing Sampling and Screening Biases in Solar Occultation and Limb Sounders
1299	5	4	5	D	Sean Davis	-	Assessment of Upper Tropospheric and Stratospheric Water Vapor and Ozone in Reanalyses as Part of S-RIP
1386	5	4	6	B	Mengchu Tao	ECS	Multi-Timescale Variations of Modelled Stratospheric Water Vapor Derived from Different Reanalysis Products
1210	5	4	7	E	Farahnaz Khosrawi	-	The SPARC Water Vapour Assessment II: Comparison of Stratospheric and Lower Mesospheric Water Vapour Time Series Observed from Satellites
1216	5	4	8	C	Niall J Ryan	ECS	Global Cl Species Climatologies from Measurements and Modelling
1371	5	4	9	F	Quentin Errera	-	BASCOE Reanalysis of Aura MLS (BRAM)
1125	5	4	10	D	Henda Guermazi	ECS	The Simultaneous Retrieval of Volcanic Sulphur Dioxide and Sulphate Aerosols from TIR Spectra: Analysis of Satellite and Ground-Based Observations
1524	5	4	11	A	Andrea Stenke	-	The Basis and Development of the CMIP6 Stratospheric Aerosol Record

5. Trace gases and aerosols (satellite)

1545	5	5	1	B	Juying Warner	-	Upper Tropospheric Ammonia Detected from AIRS
1375	5	5	2	F	Kaley Walker	-	Long-Term Validation for the Atmospheric Chemistry Experiment (ACE) Satellite Mission
1285	5	5	3	C	Ghassan Taha	-	Comparison of SAGE III/ISS Ozone and Aerosol Profiles with Correlative Measurements
1523	5	5	4	A	Robert Damadeo	-	The Stratospheric Aerosol and Gas Experiment (SAGE) IV Pathfinder
1304	5	5	5	D	Marilee Roell	-	Validation of the SAGE III on ISS Science Data Products
1543	5	5	6	B	Landon Rieger	ECS	Multiwavelength Limb Scattering Aerosol Algorithm and Application to the OSIRIS Dataset
1323	5	5	7	E	Michael C Pitts	-	SAGE III/ISS Temperature and Pressure Research Products
1437	5	5	8	C	Masato Shiotani	-	Satellite Observation of the Whole Atmosphere - Superconducting Submillimeter-Wave Limb-Emission Sounder (SMILES-2)
1333	5	5	9	F	Makoto Suzuki	-	Sensitivity Analysis for Submm/THz Limb Sounder, SMILES-2 Proposal
1110	5	5	10	D	Daniel J. Zawada	ECS	The University of Saskatchewan OMPS-LP Data Products

6. Trace gases and aerosols (in situ/ground-based)

1143	5	6	1	E	Jacquelyn C Witte	-	Celebrating 50 Years of the Wallops Island, VA, USA Ozone Program
1185	5	6	2	B	Klara Cizkova	-	Eight Years of B199 Brewer Umkehr Measurements at the Marambio Base, Antarctic Peninsula
1374	5	6	3	F	Klara Cizkova	-	Variability Modes of Umkehr Vertical Ozone Profiles at Marambio, Antarctica
1234	5	6	4	C	Anne Thompson	-	Quality Assurance in Ozonesonde Data: The JOSIE-SHAZOZ (2017) Experience
1418	5	6	5	B	Franziska Schranz	ECS	Middle Atmospheric O ₃ and H ₂ O Measurements by Ground-Based Microwave Radiometry in the Arctic
1536	5	6	6	E	Akira Mizuno	-	A Millimeter-Wave Spectrometer Equipped with a New Frequency Multiplexer for Simultaneous Multi-Line Observation
1556	5	6	7	C	Thierry Leblanc	-	Re-Analysis and Validation of the Ozone, Temperature and Water Vapour Lidar Long-Term Time-Series at Table Mountain Facility and Mauna Loa Observatory
1464	5	6	8	F	Johannes C. Laube	-	An Overview of Recent Findings from Halogenated Trace Gas Observations in the Troposphere and Stratosphere
1503	5	6	9	D	Linjun Pan	-	Simulations in the Terahertz Band on the Plateau by Two Different Radiative Transfer Models
1139	5	6	10	A	Teresa Jorge	ECS	Peltier Cooled Frost Point Hygrometer: PCFH - Future Instrument for Balloon Borne Water Vapor Measurements in the UTLS
1452	5	6	11	E	Junko Suzuki	-	Primary Results of the Ozone Variability and the Dehydration Process in the UTLS During YMC-Sumatra 2017 Field Campaign

7. Lower troposphere and surface

1363	5	7	1	D	Jin Li	-	Application of Extensive Air Monitoring Network: Development of National Land Use Regression for Air Pollution Exposure in China
1101	5	7	2	B	Nirmala Bai Jadala	ECS	Estimation of GPS Water Vapour Using Collocated Simultaneous MET Data and Interpolated Automatic Weather Station Data from India Meteorological Department Hyderabad at a Distance of Approximately 30 km
1358	5	7	3	E	Tianbao Zhao	-	Surface Relative Humidity Changes in Reanalysis and Observations
1013	5	7	4	C	Minha Naseer	ECS	Assessment of Drought in Regions of Pakistan Using NDVI in Relation to Different Rainfall Regimes
1231	5	7	5	F	Andrew Turner	-	Emerging Results from the INCOMPASS Field Campaign of the 2016 Indian Monsoon
1355	5	7	6	D	Rui Li	-	Satellite Observed Impacts of Wildfires on Regional Atmosphere Composition and the Shortwave Radiative Forcing: A Multiple Case Study
1332	5	7	7	E	Torsten Schmidt	-	A Comparison of Precipitable Water Values from GNSS Ground-Based, GPS Radio Occultation and Reanalysis Above Oceanic Regions
1417	5	7	8	B	Sarkar Md.Riad Pavel	-	Acceptability of Black Carbon Instead of Particular Mass Concentration as an Indicator for Traffic Related Partricles in Dhaka City
1420	5	7	9	F	Chuyong Lin	-	A New Top-Down Approach to Quantifying the Spatial, Temporal, and Vertical Distribution of Urban and Biomass Burning Regions Using Decadal Measurements from MOPITT
1041	5	7	10	C	Cheima Barhoumi	ECS	Holocene Fire History and Vegetation Dynamic in Komi Republic, Urals Region, Russia

Theme 6 SPARC Science for Society

1559	6	Keynote 1	Guy Brasseur	5(Fri) 08:30-09:00	-	The New Strategic Plan of the World Climate Research Programme
1558	6	Keynote 2	Robert Carver	5(Fri) 09:30-10:00	-	Project Loon: Balloon-Powered Internet for Everyone
1554	6	Keynote 3	Erica Key	5(Fri) 13:30-14:00	-	Advancing Climate Resilience through Transdisciplinary Approaches
1416	6	Oral 1	Donald J. Wuebbles	5(Fri) 09:00-09:15	-	Particulate Matter and Ozone Prediction and Source Attribution for Air Quality Management in a Changing Climate
1517	6	Oral 2	Paul Young	5(Fri) 09:15-09:30	-	UV, the Biosphere, the Carbon Cycle and the World Avoided by the Montreal Protocol
1327	6	Oral 3	Taoyuan Wei	5(Fri) 14:00-14:15	-	Impact on Agricultural Production of Extreme Weather Events
1515	6	Oral 4	Federico Fierli	5(Fri) 14:15-14:30	-	The Evaluation and Quality Control of Observational ECVs for the Copernicus Climate Service
1075	6	Oral 5	Karin Van Der Wiel	5(Fri) 14:30-14:45	ECS	More Accurate Assessment of Climate Induced Impacts

1. Climate change impacts on extremes

1063	6	1	1	C	Saran Aadhar	-	Increasing Drought Frequency in 1.5 Degree and 2.0 Degree Warming World over South Asia
1205	6	1	2	D	Sarah Sparrow	-	Attribution of 2017 Brahmaputra Floods: Implications for Loss and Damage
1106	6	1	3	E	Catrin Kirsch	-	ENSO's Different Flavors and Global Patterns of Seasonal Climate Anomalies in Troposphere and Stratosphere
1230	6	1	4	F	Andrew Turner	-	Better Understanding of Interregional Teleconnections for Prediction in the Monsoon and Poles (BITMAP)
1470	6	1	5	A	Scott M Osprey	-	Globally Observed Teleconnections in a Hierarchy of Atmospheric Models - GOTHAM
1362	6	1	6	B	Roberta D'Agostino	ECS	PaCMEDy - Palaeoclimate Constraints on Monsoon Evolution and Dynamics
1560	6	1	7	C	Theodore G. Shepherd	-	Storyline Approaches to Regional Climate Change

2. Climate and society

1100	6	2	1	B	M.F Fossa Riglos	ECS	Building a Climate Knowledge Co-Production Dialogue: An Implicated Science Experience
1337	6	2	2	F	Neil Harris	-	Potential Economic Benefit of Reduced SO2 Emissions during the South Asian Monsoon
1083	6	2	3	A	Vimal Mishra	-	Impacts of Rising Heat on Crop Yields in India
1079	6	2	4	D	Ye Shu	-	Study on Outdoor Thermal Comfort of Urban Microclimate in the Urban Street in a Hot Subtropical Area of China
1175	6	2	5	E	Hye-min Kim	-	Estimation of the Electricity Demand Function in Jeju-Island using Temperature Variable
1035	6	2	6	F	Tianyi Zhang	-	Biases in Simulation of Rice Phenology Model under Warmer Climate: Compared with Four Models in Five Asian Countries
1468	6	2	7	A	Xiaoyu Ren	-	The Experiment of Stratosphere Turbulence Observation with Resolution Sounding