

# L'Ordre du Jour / Agenda for CCMI Workshop

13-15 Juin/June 2017, Toulouse

### Mardi 13 Juin / Tuesday 13 June

\*\*invited speakers in green

Session 1: CCMI and its Big Brothers			
09:00-09:10	Marc Pontaud Béatrice Josse Jean Maziejewski Alison Ming	Welcome	
09:10-09:20	CCMI Co-chairs	CCMI overview/Goals of the workshop	
09:20-09:25	Colette Heald	IGAC – status	
09:25-09:30	Fiona Tummon	SPARC – status	
09:30-10:00	Guy Brasseur	WCRP – Global change research in the future	
10:00-10:30	Didier Hauglustaine	Evaluation of the global distribution of particulate nitrate and its impact on air quality, climate and ecosystems	
10:30-11:00	Café-Thé / Coffee-Tea		
	Session 2: Links	s with other Community Activities	
11:00-11:20	Michael Schulz	Aerosol climate forcing analysis in AeroCom and AerChemMIP	
11:20-11:40	Stefano Galmarini	HTAP – Testing hemispheric transport in models	
11:40-12:00	Doug Kinnison	CCMI and the WMO Scientific Assessment of Ozone Depletion: 2018	
12:00-12:20	Ramiro Checa-Garcia	The CCMI ozone forcing database in support of CMIP6 (1850-2100)	
12:20-13:00 Discussion Period in Session 2: Setting the Workshop Tone			
13:00-14:00	13:00-14:00 Le Déjeuner / Lunch		
	Ses	ssion 3: Stratosphere	
14:00-14:20	Luke Oman	Stratospheric Composition and Transport: How observations help us decode the past to better project the future	
14:20-14:40	David Plummer	Comparing the stratosphere in the CCMI Specified Dynamics and REF-C1 simulations	
14:40-15:00	Björn-Martin Sinnhuber	A multi-model analysis of Arctic stratospheric ozone depletion in CCMI C1SD-simulations	
15:00-15:20	Martin Dameris	Short- and long-term fluctuations of stratospheric water vapor and ozone in CCMI simulations of EMAC	
15:20-15:40	Lucien Froidevaux	Evaluation of CESM1 (WACCM) free-running and specified- dynamics upper atmospheric simulations using global multi- species satellite data records	
15:40-16:00	Discussion Period in Sessi	ion 3	
16:00-16.30	Café-Thé / Coffee-Tea		
Poster Session 1			
18.30	Cocktail de bienven	ue / Icebreaker (bus to city centre leaves venue 20.30 PM)	

### Mercredi 14 Juin / Wednesday 14 June

Session 4: Observations for Model Evaluation			
09:00-09:20	Jonathon Wright	A cause-and-effect assessment of discrepancies in reanalysis-driven diabatic transport calculations in the tropical upper troposphere and stratosphere	
09:20-09:40	Valerie Thouret	IAGOS: 20 years of in-situ observations in the UTLS	
09:40-10:00	Martin Schultz	Tropospheric Ozone Assessment Report: Database and Metrics Data of Global Surface Ozone Observations	
10:00-10:20	Roisin Commane	Using airborne and in situ observations to test model inter- comparison studies	
10:20-10:40	Colette Heald	Observationally-Driven Model Explorations of Tropospheric Aerosols	
10:40-11:00	10:40-11:00 Discussion Period in Session 4		
11:00-11:30	11:00-11:30 Café-Thé / Coffee-Tea		
Poster Session 2			
13:00-14:00	Le Déjeuner / Lunch		
	Session 5: Stra	atosphere-Troposphere Coupling	
14:00-14:20	David Ferreira	Response of Antarctic sea surface temperature and sea ice cover to ozone depletion	
14:20-14:40	Sabine Haase	The Importance of Interactive Chemistry for Circulation Changes due to Southern Hemisphere Ozone Trends	
14:40-15:00	Seok-Woo Son	Aerosol versus greenhouse gas forcings on the Southern Hemisphere general circulation change	
15:00-15:20	Wuke Wang	Decadal variability of tropical tropopause temperatures and lower stratospheric water vapour: links to the 11-year solar cycle and sea surface temperatures	
15:20-15:40	Susann Tegtmeier	Atmosphere-ocean coupling through trace gases	
15:40-16:00	Ryan Hossaini	The impact of short-lived halogens on composition and climate: an overview of recent advances with a focus on ozone	
16:00-16:30	6:00-16:30 Café-Thé / Coffee-Tea		
16:30-16:50	Andreas Chrysanthou	Comparing Brewer-Dobson circulation characteristics in CCMI-1 models	
16:50-17:10	Clara Orbe	Transport from the Northern Hemisphere Midlatitude Surface: Comparisons Between the CCMI Models	
17:10-17:30	Discussion Period in Sess	ion 5	
18:00	Bus leaves for city center		
20:00	Conference dinner Chez	Jules	

## Jeudi 15 Juin / Thursday 15 June

Session 6: Troposphere Chemistry & Dynamics			
09:00-09:20	Kengo Sudo	Interannual variability and long-term trends in global tropospheric chemistry and aerosols during recent decades and in the future	
09:20-09:40	Fiona Tummon	Diagnosing changes in free tropospheric ozone over Europe: A model study	
09:40-10:00	Alok Pandey	Comparison of satellite-derived and UKCA model-simulated air pollutants data over the Indo-Gangetic Plains	
10:00-10:20	Miyazaki Kazuyuki	Evaluation of ACCMIP and CCMI ozone simulations using a multi-constituent chemical reanalysis	
10:20-10:40	Julie Nicely	Quantifying the Causes of Differences in Tropospheric OH Within Global Models Part 2: The Power of Hourly Output and the Promise of Global Observations	
10:40-11:00	Discussion Period in Session 6		
11:00-11:30	Café-Thé / Coffee-Tea		
Poster Session 3			
13:00-14:00	Le Déjeuner / Lunch		
Session 7: La Grande Finale !			
	Sessio	on 7: La Grande Finale !	
14:00-14:20	Sessic Kentaroh Suzuki	<b>507 7: La Grande Finale !</b> Significance of cloud and precipitation processes in aerosol effect on climate: Satellite observations and modeling	
14:00-14:20 14:20-14:40	Sessic Kentaroh Suzuki Loretta Mickley	on 7: La Grande Finale !Significance of cloud and precipitation processes in aerosol effect on climate: Satellite observations and modelingThe climate change penalty on US air quality: New perspectives from statistical models	
14:00-14:20 14:20-14:40 14:40-15:00	Sessic Kentaroh Suzuki Loretta Mickley Jordan Schnell	on 7: La Grande Finale !   Significance of cloud and precipitation processes in aerosol effect on climate: Satellite observations and modeling   The climate change penalty on US air quality: New perspectives from statistical models   Global air pollution episodes and the meteorology that drives them	
14:00-14:20 14:20-14:40 14:40-15:00 15:00-16:00	Session   Kentaroh Suzuki   Loretta Mickley   Jordan Schnell   Discussion Period in Session	on 7: La Grande Finale !   Significance of cloud and precipitation processes in aerosol effect on climate: Satellite observations and modeling   The climate change penalty on US air quality: New perspectives from statistical models   Global air pollution episodes and the meteorology that drives them	

#### Posters

Abs.	Last name	First name	Title
31	Akiyoshi	Hideharu	A three-week total ozone reduction over Rio Gallegos in Argentina in November 2009 and its relation to planetary wave activity in the stratosphere and blocking in the troposphere
1	Ambade	Balram	Long term fine aerosol and tropospheric ozone over Chota Nagpur Plateau (CNP), India
89	Añel	Juan A.	Exploring the possibilities of cloud computing for climate modelling
28	Archibald	Alexander	Evaluation of CCMI historical evolution of tropospheric ozone budget
60	Bowman	Kevin	Emergent constraints in chemistry-climate interactions: a Bayesian Approach
79	Braesicke	Peter	How robust is the Holton-Tan relationship?
45	Brenna	Hans	Halogen and sulfur rich explosive eruptions in the tropics: A potential threat to the future ozone layer? Halogen and sulfur rich explosive eruptions in the tropics
29	Calvo	Natalia	Revisiting Southern Hemisphere polar stratospheric temperature trends in WACCM: The role of dynamical forcing
81	Chabrillat	Simon	Mean age of stratospheric air: large disagreements between five modern reanalyses
47	Checa-Garcia	Ramiro	The CCMI ozone forcing database in support of CMIP6 (1850- 2100)
69	Chipperfield	Martyn	Quantifying the current extent of ozone recovery from observations and models
95	Cionni	Irene	Long-term ozone changes and associated climate impacts in CCMI simulations
12	Das	Mohan Kumar	Role of Aerosol and its distribution over south Asian region
22	Dhomse	Sandip	New microphysical volcanic forcing datasets for the Agung, El Chichon and Pinatubo eruptions
65	Dietmüller	Simone	Stratospheric Age of Air in CCMVal-2 and CCMI model simulations
59	Revell	Laura	Comparison of the CCMI and CMIP6 stratospheric aerosol datasets in REF-C1 simulations
85	García Rodríguez	Michael	On the computational reproducibility of climate models

Abs.	Last name	First name	Title
19	Garfinkel	Chaim	Time varying changes in the simulated structure of the Brewer Dobson Circulation
20	Garfinkel	Chaim	Nonlinear response of tropical lower stratospheric temperature and water vapor to ENSO: implications for the millenium drop
83	Glanville	Sasha	Comparing stratospheric influence on tropospheric ozone across CCMI models
77	Griffiths	Paul	Analysis of surface O3 in the UKCA CCMI simulations
80	Haase	Sabine	The Importance of a Properly Represented Stratosphere for Northern Hemisphere Surface Variability in the Atmosphere and the Ocean
2	HaddadiMoghaddam	Kourosh	Coastal environment of the Caspian Sea Challenges and prospects
3	HaddadiMoghaddam	Kourosh	Study on the effect of climate change on ecological conditions and feeding of Persian sturgeon (Acipenser persicus ) in coastal zone of Caspian Sea (Iranian water)
16	HaddadiMoghaddam	Kourosh	Regional Climate Change Modeling: An effect of carbon dioxide and climate change on the Caspian Sea Basin
94	Hardiman	Steven	The Met Office HadGEM3-ES Chemistry-Climate Model: Evaluation of stratospheric dynamics and its impact on ozone
30	Jaiswal	Nitin Kumar	carbonaceous aerosol composition in industrial central India
14	Jung	Myung-II	Possible impact of tropospheric ozone and methane changes on the recent Arctic warming
49	Keeble	James	Diagnosing the radiative and chemical contributions to future changes in tropical column ozone with the UM-UKCA chemistry-climate model
37	Kim	Byung-Gon	Observed modifications of clouds and precipitation by severe hazes in Korea
34	Kim	Seo-Yeon	How well the state-of-the-art chemistry-climate models simulate tropospheric ozone in the East Asia?
33	Zhang	Wen-Ting	Characteristics of severe hazes accompanied with precipitation observed in Korea for 2011-2013
78	Köhler	Marcus	Changes in the tropospheric oxidizing capacity during the 20th century simulated with the Unified Model
39	Kuai	Le	The Attribution of variation in top-of-atmosphere flux over 9.6- micron Ozone band to tropospheric ozone, water vapor, and temperature

Abs.	Last name	First name	Title
39	Kuai	Le	The Attribution of variation in top-of-atmosphere flux over 9.6- micron Ozone band to tropospheric ozone, water vapor, and temperature
10	Kumar	Amit	Effect of Climate Change on Atmospheric Chemistry of a Indian Agricultural
71	Lamy	Kevin	Ultraviolet radiation evolution in the tropics during the 21st century
93	Latter	Barry	20+ year height-resolved ozone data from GOME-class instruments for ESA-CCI / C3S and 9+ years IASI methane.
66	Lee	Seungun	Global and regional climate impact of interactive ozone and aerosols from a new coupled chemistry-climate model (GRIMs-Chem)
87	Maycock	Amanda	The contribution of ozone to future stratospheric temperature trends
88	Maycock	Amanda	The representation of solar cycle signals in stratospheric ozone in CCMI models and global ozone databases
13	Ming	Alison	Ozone and water vapour contributions to the temperature annual cycle in the tropical lower stratosphere
58	Morgenstern	Olaf	Using CCMI simulations to construct stratospheric ozone ancillaries for use in CMIP6 simulations
7	Nadimikeri	Jayaraju	Impact of Dust over India: Implications to Climate Change
68	Nagashima	Tatsuya	Summertime surface O3 minimum in the East Asian maritime region: a comparison of observations with MIPs
24	Ngaina	Joshua	Numerical Simulation of effects of Cloud Seeding on Precipitation over Equatorial East Africa
55	Oman	Luke	Chemistry Simulations using MERRA-2 Reanalysis with the GMI CTM and Replay in Support of the Atmospheric Composition Community
48	Ordóñez	Carlos	Synoptic drivers of air quality changes in Europe
63	Park	Rokjin	Regional Arctic amplification accelerated by anthropogenic sulphate aerosol forcing in China
21	Quack	Birgit	Future emissions of marine halogenated Very-Short Lived Substances under climate change
5	Sahu	Lokesh	Impact of convection in the vertical distribution of O3 and CO over an urban region of India
86	Salawitch	Ross	Stratospheric Inorganic Bromine Loading Inferred from Field Campaigns in the Tropical Western Pacific: Implications for CCMI

Abs.	Last name	First name	Title
56	Seguel	Rodrigo	Tropospheric ozone column variation at mid-latitude in the southern hemisphere
41	Sekiya	Takashi	Global high-resolution simulations of tropospheric nitrogen dioxide using CHASER
74	Sheng	Jian-Xiong	Size-Resolved stratospheric aerosol distributions after Pinatubo derived from a coupled aerosol-chemistry-climate Model
36	Smith	Jacob W	Assessing the relationship between tropical tropopause temperatures and stratospheric water vapour in global climate models using trajectory studies
92	Son	Seok-Woo	Long-term ozone changes and their climate impacts in CCMI simulations
4	Tariq	Salman	Increasing burden of aerosols due to recent intense haze events over Pakistan and adjoining regions
84	Tegtmeier	Susann	Evaluation of atmospheric composition in CCMI models based on the SPARC Data Initiative satellite data sets
11	Tomar	Vandana	Analyzing the concept between Atmospheric Chemistry and Climate change and its impact.
67	Vazhathottathil	Madhu	Interannual variability of column ozone and its link with Oceanic Niño Index based on satellite observation and chemistry climate model
90	Walker	Thomas	Spatial attribution of decadal changes in methane and ozone radiative forcing constrained by satellite observations
64	Wang	Wuke	Decadal variability of tropical tropopause temperatures and lower stratospheric water vapour: links to the 11-year solar cycle and sea surface temperatures
15	Williams	Ryan	The impact of stratosphere-troposphere exchange (STE) on tropospheric ozone
42	Yamashita	Yousuke	The CCSR/NIES-MIROC3.2 CCM simulations of the low ozone anomaly in Arctic spring in the QBO-westerly and solar-minimum years
40	Yang	Huang	Impacts of jet biases on summertime midlatitudes-to-Arctic transport
72	Errera	Quentin	The BASCOE reanalysis of Aura MSL (BRAM)
51	Galytska	Evgenia	Variability of stratospheric NO2: CTM evaluation using SCIAMACHY measurements and its further application for photochemical conversion