Emissions Science for a Healthy Environment

The interplay of human versus natural influences on climate and air quality

University of Hamburg, Hamburg, Germany

Meteorological Institute, Bundesstrasse 55













PROGRAM AT A GLANCE

Version - 14 July 2017

18:30	20:00	Icebreaker event
Wedn	esdav	13 September 2017
7:30	~~~~~	Registration
8:30		Welcome Session
9:30		Inventories and Emissions Trends: Oral Session 1
10:20	10:50	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
10:50		Inventories and Emissions Trends: Oral Session 2
11:35		Inventories and Emissions Trends: Oral Session 3
12:20	~~~~	Lunch, GEIA Working Group meetings
14:00		Inventories and Emissions Trends: Oral Session 4
14:45		Inventories and Emissions Trends: Poster Presenter Introductions
15:00		Inventories and Emissions Trends: Poster Session
16:00	16:30	
16:30		Top-Down Emissions Analyses: Oral Session 1
17:20	~~~~~~~~~	Top-Down Emissions Analyses: Oral Session 2
18:05		Demonstration of ECCAD, GEIA's Emissions Database Portal
18:30		Conference Reception
		September 2017
7:30		
		Registration
8:30	9:15	Top-Down Emissions Analyses: Oral Session 3
9:15	9:15 10:00	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4
9:15 10:00	9:15 10:00 10:30	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break
9:15 10:00 10:30	9:15 10:00 10:30 10:45	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions
9:15 10:00 10:30 10:45	9:15 10:00 10:30 10:45 11:45	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session
9:15 10:00 10:30 10:45 11:45	9:15 10:00 10:30 10:45 11:45 13:15	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables
9:15 10:00 10:30 10:45 11:45 13:15	9:15 10:00 10:30 10:45 11:45 13:15 14:05	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables Environmental, Climate, Health and Societal Impacts: Oral Session 1
9:15 10:00 10:30 10:45 11:45 13:15 14:05	9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables Environmental, Climate, Health and Societal Impacts: Oral Session 1 Environmental, Climate, Health and Societal Impacts: Oral Session 2
9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50	9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables Environmental, Climate, Health and Societal Impacts: Oral Session 1 Environmental, Climate, Health and Societal Impacts: Oral Session 2 Break
9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20	9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables Environmental, Climate, Health and Societal Impacts: Oral Session 1 Environmental, Climate, Health and Societal Impacts: Oral Session 2 Break Town Hall
9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45	9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45 17:30	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables Environmental, Climate, Health and Societal Impacts: Oral Session 1 Environmental, Climate, Health and Societal Impacts: Oral Session 2 Break Town Hall Reports from GEIA Working Groups and Partners
9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20	9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45 17:30	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables Environmental, Climate, Health and Societal Impacts: Oral Session 1 Environmental, Climate, Health and Societal Impacts: Oral Session 2 Break Town Hall Reports from GEIA Working Groups and Partners Demonstration of Community Emissions Data System (CEDS)
9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45	9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45 17:30	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables Environmental, Climate, Health and Societal Impacts: Oral Session 1 Environmental, Climate, Health and Societal Impacts: Oral Session 2 Break Town Hall Reports from GEIA Working Groups and Partners
9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45 17:30	9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45 17:30 17:45	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables Environmental, Climate, Health and Societal Impacts: Oral Session 1 Environmental, Climate, Health and Societal Impacts: Oral Session 2 Break Town Hall Reports from GEIA Working Groups and Partners Demonstration of Community Emissions Data System (CEDS)
9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45 17:30	9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45 17:30 17:45	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables Environmental, Climate, Health and Societal Impacts: Oral Session 1 Environmental, Climate, Health and Societal Impacts: Oral Session 2 Break Town Hall Reports from GEIA Working Groups and Partners Demonstration of Community Emissions Data System (CEDS) Evening out in Hamburg
9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45 17:30	9:15 10:00 10:30 10:45 11:45 13:15 14:05 14:50 15:20 16:45 17:30 17:45	Top-Down Emissions Analyses: Oral Session 3 Top-Down Emissions Analyses: Oral Session 4 Break Top-Down Emissions Analyses: Poster Presenter Introductions Top-Down Emissions Analyses: Poster Session Lunch, Early Career - Senior Scientist Roundtables Environmental, Climate, Health and Societal Impacts: Oral Session 1 Environmental, Climate, Health and Societal Impacts: Oral Session 2 Break Town Hall Reports from GEIA Working Groups and Partners Demonstration of Community Emissions Data System (CEDS) Evening out in Hamburg ptember 2017

10:00	10:15 Environmental, Climate, Health and Societal Impacts: Poster Presenter Introductions
10:15	10:45 Break
10:45	11:45 Environmental, Climate, Health and Societal Impacts: Poster Session
11:45	12:15 Concluding Session
12:15	14:00 Lunch

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DETAILED PROGRAM

7:30	8:30	Registration	
8:30	9:30	Welcome Session	
8:30 8:40		Conference Overview Welcome from Conference Host	Greg Frost, Paulette Middleton Guy Brasseur (MPIM - Hamburg)
8:45		Welcome from IGAC	Representative of IGAC
8:50	~~~~~	Welcome from iLEAPS	Representative of iLEAPS
8:55		Welcome from NASA	Representative of NASA
9:00		Energy in the future	Hartmut Grassl (MPIM, U Hamburg)
9:15		The Status of the first Atmospheric Sentinel Mission S-5 Precursor and its possible Exploitation for Emission Monitoring	Claus Zehner (ESA)
9:30	10:20	Inventories and Emissions Trends: Oral Session 1	Chairs: Greet Janssens-Maenhout, Ute
			Skiba, Hugo Denier van der Gon
9:30		Theme Introduction	Session Chairs
9:35	~~~~~~~	The 1970-2012 emissions atlas of EDGARv4.3.2	Greet Janssens-Maenhout (JRC)
9:40	9:45	Surface emissions from the RCPs scenarios: are they	Claire Granier (Laboratoire d'Aerologie,
		consistent with the most recent inventories?	Toulouse; NOAA/CIRES)
9:45	9:50	Global emissions in the Copernicus Atmosphere Monitoring Service	Mark Parrington (ECMWF)
9:50	9:55	Next Steps For Improving Emission Estimates (With The Community Emissions Data System-CEDS)	Steven Smith (JGCRI)
9:55	10:00	Progress towards comprehensive uncertainty estimates and emissions ensembles with the Community Emissions Data System (CEDS)	Rachel Hoesly (JGCRI)
10:00	10:20	Session discussion	
10:20	10:50	Break	
10:50	11:35	Inventories and Emissions Trends: Oral Session 2	Chairs: Greet Janssens-Maenhout, Ute Skiba, Hugo Denier van der Gon
10:50	10:55	Inter-comparison of different NOX emission inventories and associated variation in simulated surface ozone in Indian region	Sachin Ghude (IITM)
10:55	11:00	The KORUS2015 Emissions Inventory – Initial Findings and Future Perspectives	Jung-Hun Woo (Konkuk U)
11:00	11:05	African Anthropogenic Emissions Inventories for gases and particles from 1990 to 2016	Keita Sekou (U Félix Houphoët-Boigny, Côte d'Ivoire)
11:05	11:10	First analysis of anthropogenic VOC distribution and emission fingerprints in Abidjan, West Africa	Pamela Dominutti (LaMP/CNRS, Clermont- Ferrand)

11:10	11:15	DICE-Africa: Diffuse and Inefficient Combustion Emissions in Africa, today and in the future	Christine Wiedinmyer (NCAR)
11:15	11:35	Session discussion	
11:35	12:20	Inventories and Emissions Trends: Oral Session 3	Chairs: Greet Janssens-Maenhout, Ute
			Skiba, Hugo Denier van der Gon
11:35	11:40	An emission processing system for the Mexico City	Marc Guevara Vilardell (Barcelona
		metropolitan area: Evaluation and comparison of the	Supercomputing Center)
		MOBILE6.2-Mexico and MOVES-Mexico traffic emissions	
11:40	11:45	Current and Future Primary Particle Number Size	Ekbordin Winijkul (Asian Institute of
		Distribution Emission Inventory of On-road Vehicles in	Technology)
		Southeast Asia	
11:45	11:50	Now you see me, now you don't. Lessons learnt from the	Jukka-Pekka Jalkanen (Finnish
		construction of ship emission inventories ranging from local	Meteorological Institute)
		to global scale.	,
11:50	11:55	An AIS-based 2013 ship emission inventory and estimated	Junyu Zheng (South China U Tech)
		trends from 2004 to 2040 in China	,
11:55	12:00	Ship Emissions from All Vessels with AIS Activity Data in	Yiqi Zhang (Hong Kong U Sci Tech)
		Pearl River Delta	
12:00	12:20	Session discussion	
12:20	14:00	Lunch	
		GEIA Working Group meetings	
14:00	14:45	Inventories and Emissions Trends: Oral Session 4	Chairs: Greet Janssens-Maenhout, Ute
			Skiba, Hugo Denier van der Gon
14:00	14:05	Inter-comparison of Global Satellite Burned Area Maps	Angelika Heil (MPIC - Mainz)
		derived from MODIS, MERIS and SPOT-VGT	
14:05	14:10	Fire Activity in Northern Eurasia from 2002 to 2015	Wei Min Hao (US Forest Service)
14:10	14:15	Drying lakes as emerging sources of dust: Case of Urmia	Ali Hoshyaripour (Karlsruhe Institute of
		Lake, Iran	Technology)
14:15	14:20	Ammonia emissions from agriculture activities in Argentina	Paula Castesana (3iA-UNSAM & FRBA-UTN,
		(2000-2012) under increasing soybean expansion and	Buenos Aires)
		changes in livestock production	,
14:20	14:25	Volatile Chemical Products Emerging as Largest Fossil-	Brian McDonald (NOAA/CIRES)
		Source of Organics over U.S. Cities	, ,
14:25	14:45	Session discussion	
14:45	15:00	Inventories and Emissions Trends: Poster Presenter	Chairs: Greet Janssens-Maenhout, Ute
		Introductions	Skiba, Hugo Denier van der Gon
15:00	16:00	Inventories and Emissions Trends: Poster Session	Chairs: Greet Janssens-Maenhout, Ute
			Skiba, Hugo Denier van der Gon
		Global Modeling of Oceanic Carbon Monoxide Emissions	Ludivine Conte (CEA-CNRS-UVSQ, Gif sur
		<u> </u>	Yvette)
		The Community Emissions Data System (CEDS): an open	Leyang Feng (JGCRI)
		source system for global anthropogenic emissions	,
		inventories	
************	~~~~~	Using STEAM and SILAM to model hydrocarbon emissions	Jaakko Laakia (Finnish Meteorological
		and dispersion from compression-ignition ship engines	Institute)
		Extension of a long-term BVOC emission dataset and its	Katerina Sindelarova (Charles U, Prague;
		comparison with other emission studies	LATMOS-IPSL, Paris)
		companison with other emission studies	LATIVIOS-II SL, I alisj

		Influence of canopy reduction on biogenic NO emission patterns in northern Europe	Jan Alexander Arndt (Helmholtz-Zentrum Geesthacht)
		Emissions from cooking and other sources in West Africa	Evan Coffey (U Colorado)
		Evaluation of historical emission inventory in Asia	Jun-ichi Kurokawa (Asia Center for Air
		,	Pollution Research)
		Regional, national and port level shipping emission	Huan Liu (Tsinghua U, Beijing)
		inventories in East Asia	
		Modelling the temporal and spatial allocation of emission	Volker Matthias (Helmholtz-Zentrum
		data	Geesthacht)
	•••••	Shipping emissions over Europe: A state-of-the-art and	Michael Russo (University of Aveiro,
		comparative analysis	Portugal)
	•••••	Biomass burning emissions inventories over Africa: How to	N'Datchoh Evelyne Toure (Laboratoire
		explain the differences observed between GFED and	d'Aerologie, Toulouse; U Félix Houphoët-
		AMMABB inventories?	Boigny, Côte d'Ivoire)
		Aerosol and VOC emission factor measurements for African	Veronique Yoboué (U Félix Houphoët-
		anthropogenic sources	Boigny, Côte d'Ivoire)
		Impacts of emissions from Cuba's stationary sources	Osvaldo Cuesta-Santos (Cuban
			Meteorological Institute)
		Estimation of greenhouse gases emissions from the	Sadig Hasanov (National Academy of
		transport sector in Azerbaijan	Sciences of Azerbaijan)
		Portuguese emissions trends under the NEC Directives	Joana Leitão (University of Aveiro, Portuga
~~~~~	***********	Development of spatial disaggregation models for the Waste	Romina María Pascual Flores (National
		Sector Emission Inventory in Argentina	Technological University, Mendoza)
		Seasonal variations of aerosols in Pakistan: Contributions of	Muhammad Zeeshaan Shahid (King Abdulla
		domestic anthropogenic emissions and transboundary	University of Science and Technology)
		transport	
		Agriculture gridded emissions for air quality modelling	Sara Silva (University of Aveiro, Portugal)
		purposes – the Portuguese case	
		Historical Trend of Air Pollutants Emissions in Japan	Yutaka Tonooka (Assoc Internat Research
		,,,,,,,,	Initiatives for Environmental Studies, Japan
		Overview of Korean National Air Pollutants Emissions	So-young Yeo (National Institute of
		Inventory	Environmental Research, Incheon, Korea)
	• • • • • • • • • • • • • • • • • • • •	A line-point source model for ship emissions in ports	Armin Aulinger (Helmholtz-Zentrum
		The period of the control of the con	Geesthacht)
	• • • • • • • • • • • • • • • • • • • •	Determination of the Emission Factors of Jeepneys and	Mylene Cayetano (University of the
		Tricycles in the Philippines	Philippines)
	~~~~~	Emission inventories for domestic heating: a bottom-up	Martin Otto Paul Ramacher (Helmholtz-
		model for the city of Hamburg	Zentrum Geesthacht)
	•••••	Evaluation of Tehran air pollution changes in the last decade	Hossein Shahbazi (Sharif University of
		based on emission inventory and air quality data	Technology, Tehran)
***************************************	***********	Emission Characteristics of VOCs for Automobile Surface	Zhien Zhou (Chongqing Research Academy
		Coating Operations	of Environmental Sciences)
		0	
16:00	16:30	Break	
16:30	17:20	Top-Down Emissions Analyses: Oral Session 1	Chairs: Yuxuan Wang, Johannes Kaiser,
			Leonor Tarrasón
16:30	16:35	Theme Introduction	Session Chairs
16:40	16:45	Decadal changes in global surface NOx emissions from multi-	
		constituent satellite data assimilation	Kazuyuki Miyazaki (JAMSTEC)

18:30	20:00 Conference Reception	
18:05	18:20 Demonstration of ECCAD, GEIA's Emissions Database Portal	ECCAD representative
17:45	18:05 Session discussion	
	regional scale using advanced 3D inverse modeling and AGAGE observations	Alicia Gressent (MIT)
17:40	17:45 Optimal estimation of Sulfuryl Fluoride emissions on	
17.33	China over the Korean Peninsula during the 2016 KORUS-AQ Field Campaign	Hannah Halliday (NASA Langley)
17:35	constraints on OH concentrations 17:40 Assessing the influence of regional transport from Mainland	for Space Aeronomy)
17:30	17:35 Estimating CO emissions using IASI data and hemispheric	Trisevgeni Stavrakou (Royal Belgian Institute
	emissions derived from the Ozone Monitoring Instrument (OMI)	Vitali Fioletov (Environment and Climate Change Canada)
17:25	17:30 A global inventory of anthropogenic and volcanic SO2	
	model	Institute for Space Aeronomy)
17:20	17:25 Emissions of VOCs over India and the Middle East estimated using OMI HCHO observations and the MAGRITTE regional	Jean-François Müller (Royal Belgian
17.20	17:25 Emissions of VOCs are India and the Middle Fort activated	Leonor Tarrasón
17:20	18:05 Top-Down Emissions Analyses: Oral Session 2	Chairs: Yuxuan Wang, Johannes Kaiser,
17:00	17:20 Session discussion	
	observations (MARCOPOLO project)	Thessaloniki)
	and assessment of regional air quality in China using space	MariLiza Koukouli (Aristotle University of
16:55	17:00 A new emission inventory for China based on the monitoring	
16:50	16:55 Confronting Recent Chemical Reanalyses with Satellite Data on Combustion Characteristics Over Megacities	Avelino Arellano (U Arizona)
16.50		Jieying Ding (KNMI)
16:45	16:50 Space-based NOx shipping emissions near the Chinese coasts	

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DETAILED PROGRAM

7:30	8:30	Registration	
8:30	9:15	Top-Down Emissions Analyses: Oral Session 3	Chairs: Yuxuan Wang, Johannes Kaiser,
			Leonor Tarrasón
8:30	8:35		Marielle Saunois (LSCE, CEA-UVSQ-CNRS,
~~~~~	200000000000000000000000000000000000000	The global methane budget 2000-2012: budget and trends	Université Paris Saclay)
8:35	8:40	Satellite-based methane emissions estimation from the	SM Nazrul Islam (U Northern British
~~~~~		natural gas industry in Northeast British Columbia, Canada	Columbia)
8:40	8:45	Gas flaring detection, characterisation and emissions	
		assessment from Sentinel-3 SLSTR	Alexandre Caseiro (MPIC, Mainz)
8:45	8:50	Measurement-based methane emission quantification from	
		Europe's largest on-shore gas field	Hugo Denier van der Gon (TNO)
8:50	8:55	Emission rate estimates determined for VOCs using airborne	Shao-Meng Li (Environment and Climate
		measurements for the oil sands facilities in Alberta, Canada	Change Canada)
8:55	9:15	Session discussion	
9:15	10:00	Top-Down Emissions Analyses: Oral Session 4	Chairs: Yuxuan Wang, Johannes Kaiser,
		,	Leonor Tarrasón
9:15	9:20	Integrating remotely sensed AOD and trace gasses to	
		quantify the 3-dimensional emissions of Asian aerosols	Jason Blake Cohen (Sun Yat-Sen University
9:20	9:25	Efficient high-resolution constraints for primary aerosol	
		emissions during biomass burning events	Jonathan Guerrette (NOAA)
9:25	9:30	Constraining black carbon emissions from Siberian wildfires	Igor Konovalov (Russian Academy of
		using remote sensing aerosol measurements	Sciences)
9:30	9:35	Top-down Validation of Swiss non-CO2 Greenhouse Gas	
		Emissions	Stephan Henne (EMPA)
9:35	9:40	Improving emission and air quality analyses via better	
		representing the land surface states	Min Huang (George Mason U)
9:40	10:00	Session discussion	
10:00	10:30	Break	
40.20	40.45		
10:30	10:45	Top-Down Emissions Analyses: Poster Presenter Introductions	Chairs: Yuxuan Wang, Johannes Kaiser, Leonor Tarrasón
10:45	11:45	Top-Down Emissions Analyses: Poster Session	Chairs: Yuxuan Wang, Johannes Kaiser,
			Leonor Tarrasón
		Consistency between recent trends in emissions and	Claire Granier (Laboratoire d'Aerologie,
		satellite observations in different world cities	Toulouse; NOAA/CIRES)
		High-resolution global surface NOx emissions from multi-	
		constituent satellite data assimilation	Takashi Sekiya (JAMSTEC)

		Agricultural NH3 emissions regional variability and trends as	Audrey CHEINEY (LISA, CNRS/INSU,
		observed by IASI	Université Paris-Est Créteil)
		Direct measurements of atmospheric isoprene from satellite observations	Dejian Fu (JPL)
		Network for Observation of Volcanic and Atmospheric	Bo Galle (Chalmers U, Göteberg)
		Change (NOVAC)	
		Mobile monitoring of ultrafine and fine particle at the street	
		level in a Southeast Asian City: finding the source locations	Md Firoz Khan (Universiti Kebangsaan
		and the health risk assessment	Malaysia)
		Evaluation of the BC / OC ratios for aerosol emissions from	
		biomass burning in Siberia using AERONET retrievals Spatio-temporal distribution and correlation between NO2	Daria Lvova (Russian Academy of Sciences)
		and aerosols over South Asia	Salman Tariq (University of the Punjab)
***********		An optimized NOx emission inventory over East Asia, from	Lorenzo Costantino (LISA, Université Paris-
		PYVAR-CHIMERE inverse modeling tool constrained by OMI	Est Créteil)
		satellite observations	,
		Mobile measurements reveal high ammonia concentrations	
		in German inner cities	Robert Wegener (Forschungszentrum Jülich
		SO2 emissions over China: Evaluation of new top-down	Dimitrios Balis (Aristotle University of
		inventories	Thessaloniki)
		Verifying the UK agricultural N2O emission inventory with	
		tall tower measurements	Edward Carnell (CEH Edinburgh)
		Stratospheric Ozone data quality in form of long term	
		variability and trend study on comparison of Indian	
		Ozonesonde and Satellite data over three sites at different	Rohtash Singh Garhwal (CSIR-National
		latitudes of India	Physical Laboratory)
			Imran Shahid (Institute of Space Technolog
		Devlopment of black carbon emissions inventory of Pakistan	Islamabad)
		Spatial and temporal distribution of emissions from on-road	Ignacio Andrés Suárez Laengle (Universidad
		transport activity in Chile	Técnica Federico Santa María, Santiago)
		City-scale top-down verifications of NOX emissions in South	Jae Hyeong Lee (Kongju National University
		Korea using satellite observations	Korea)
		High spatial resolution mapping of urban emissions at	Erik Velasco (Singapore-MIT Alliance for
		neighborhood scale	Research and Technology)
		Evaluating updated light alkane emissions from the oil and	Zitely Tzompa (Colorado State U)
		natural gas industry in the U.S.	zitely izompa (colorado state o)
~~~~~			Gara Villaiba (Universitat Autònoma de
		Carbonyl Sulfide Serves as Tattletale for Biosphere Signal	Barcelona)
			Damian Zasina (The National Centre for
		Geostatistics for local emission inventories	Emissions Management, Warsaw, Poland)
		Anthropogenic Carbon Dioxide Emissions in Tokyo	Richao Cong (NIES, Japan)
		Metropolis Estimated with a Combination of Top-down and	
		Bottom-up Approach	
		bottom up reproduit	
11:45	13:15	Lunch	
		Early Career - Senior Scientist Roundtables	
13:15	14:05	Environmental, Climate, Health and Societal Impacts: Oral	Chairs: Beatriz Cárdenas, Cathy Liousse,
		Session 1	Zbigniew Klimont
			Caratan Chatan
13:15	13:20	Theme Introduction	Session Chairs
13:15 13:20		Theme Introduction Uncertainties of Estimated PM2.5- and O3-Related Health	Session Chairs

17:30	17:45	Demonstration of Community Emissions Data System (CEDS)	CEDS Representative
17:10	17.20	fire emission estimates with current field campaigns Session discussion	Interdisciplinary Biomass Burning Initiative
17:05	17:10	Report from 2017 IBBI workshop on improving operational	Johannes Kaiser (MPIC, Mainz) - on behalf o
		local emission inventories	WG
17:00	17:05	New methods to bridge differences between regional and	Leonor Tarrasón (NILU) - on behalf of Urba
16:55	17:00	Comparing measurements and emission inventory data for NMVOCs in urban areas	Erika von Schneidemesser (IASS, Potsdam) on behalf of NMVOC WG
16:50	16:55	Managing the mean or the tail: sensitivity of surface PM2.5 to emissions changes in China	Yuxuan Wang (U Houston; Tsinghua U, Beijing) - on behalf of China WG
16:45		Towards a harmonized emission inventory in South America for air quality and climate modelling	Nicolas Huneeus (U Chile) - on behalf of Latin America/Caribbean WG
16:45	*******	Reports from GEIA Working Groups and Partners	Chairs: Greg Frost, Paulette Middleton
16:30	16:45	Reconvene and reports from breakout groups	
15:30	00000000000000	Breakout group discussions	
15:20	15:30	Introduce town hall, separate into breakout groups	
L5:20	16:45	Town Hall	Chairs: Leonor Tarrasón, Greg Frost, Paulette Middleton, Claire Granier
14:50	15:20	Break	
14:30	14:50	Session discussion	
14.00	44 = 5	quality modelling results	Jacek Kaminski (Polish Academy of Science
14:25	14:30	Electric vehicles – emission scenarios for Poland and air	
		backward sensitivity analysis	Marjan Soltanzadeh (Carleton U, Ottawa)
14:20	14:25	Source-specific estimation of air quality co-benefits of CO2 reduction in Europe, Canada and the United States using	
		sector: an insight on climate and air quality/health cobenefits.	Marilena Muntean (JRC)
14.13	14.20	biomass combustion and fossil fuel used in the residential	
14:15	1/1.20	Analyses of NCAR-CESM Simulations Benzo[a]pyrene and CO2 emissions trade-off between	Albany)
14:10	14:15	The Effect of Meteorological Variabilities on Atmospheric Sulfate Aerosols over East China and the United States: The	Chi-Yun Wang (National Taiwan U; SUNY
	4445	tropospheric ozone	Johan Mellqvist (Chalmers U, Göteberg)
14:05	14:10	Discrepancies in industrial VOC emissions: impact on	Zbigniew Klimont
14:05	14:50	Environmental, Climate, Health and Societal Impacts: Oral Session 2	Chairs: Beatriz Cárdenas, Cathy Liousse,
13:45	14:05	Session discussion	
		changing climate over Global, Asian and Regional scales	Dilip Chate (IITM, Pune)
13:40	13:45	Air quality and health impact with mitigation measures in	institute, Agraj
13:35	13:40	Characteristics of emission particles over Indo-Gangetic Basin: health and climatic implications	Ranjit Kumar (Dayalbagh Educational Institute, Agra)
13:30	~~~~~~~~	Implication of Rural Residential Energy Transition in China	Shu Tao (Peking U)

## **Emissions Science for a Healthy Environment**

The interplay of human versus natural influences on climate and air quality

University of Hamburg, Hamburg, Germany

Meteorological Institute, Bundesstrasse 55













#### **DETAILED PROGRAM**

7:30	8:30	Registration	
8:30	9:15	Environmental, Climate, Health and Societal Impacts: Oral	Chairs: Beatriz Cárdenas, Cathy Liousse,
~~~~~		Session 3	Zbigniew Klimont
8:30	8:35	Quantifying sources contributing to ambient particulate	Roelof Burger (North-West University,
	~~~~~	matter in low income areas of South Africa	Potchefstroom, South Africa)
8:35	8:40	Simulation of current and future surface ozone	
	~~~~~	concentrations over the South African Waterberg region	Mogesh Naidoo (CSIR-NRE, Pretoria)
8:40	8:45	Emissions, Air pollution and Health in southern west Africa	Cathy Liousse (Laboratoire d'Aerologie,
		in the frame of DACCIWA-WP2 program.	Toulouse)
8:45	8:50	Household solid fuel use for space heating: Updating	
		emissions estimates to better understand air pollution,	
		health, and climate change implications	Zoe Chafe (Cornell U)
8:50	8:55	Impact of landuse change from forest to oil palm plantation	
		on direct and indirect greenhouse gas emissions.	Ute Skiba (CEH, Penicuik)
8:55	9:15	Session discussion	
9:15	10:00	Environmental, Climate, Health and Societal Impacts: Oral	Chairs: Beatriz Cárdenas, Cathy Liousse,
		Session 4	Zbigniew Klimont
10:00	9:40		Solene Turquety (UPMC; CNRS/INSU;
		Forecasting wildfires' impact on air quality	LMD/IPSL, Paris)
10:05	10:10		Beatriz Cardenas (Mexico City Ministry of
		First Experiences of Mexico City Air Quality Forecast System	Environment)
10:10	10:15	Canadian Air Quality Modelling Platform for Policy Emission	Sophie Cousineau (Environment and Climate
		Reduction scenarios	Change Canada)
10:15	10:20	Assessing the air quality health benefits of phasing out coal-	
		fire power plant in Ontario and Alberta: An adjoint	
		sensitivity analysis	Yasar Burak Oztaner (Carleton U, Ottawa)
10:20	10:25	Estimating the Tipping Point of Urban NOx Control in major	
		US cities	Angele Genereux (Carleton U, Ottawa)
10:25	10:45	Session discussion	
10:00	10:15	Environmental, Climate, Health and Societal Impacts:	Chairs: Beatriz Cárdenas, Cathy Liousse,
		Poster Presenter Introductions	Zbigniew Klimont
10:15	10:45	Break	
10:45	11:45	Environmental, Climate, Health and Societal Impacts:	Chairs: Greet Janssens-Maenhout, Ute
		Poster Session	Skiba, Hugo Denier van der Gon
		Kuwait's Vision for Environmental Data Management 2010-	

11:45	12:15 Concluding Session	Leonor Tarrasón
	consideration of the constant	
	climate model	
	Effect of climate change and CO2 inhibition on isoprene emissions in Europe calculated using the ALARO-0 regional	Maite Bauwens (BIRA-IASB, Brussels)
	Anthropogenic and Biomass Burning emissions	Maita Pauruana (PIDA IACD Double)
	species releases: concerns for local effects due to	Atmospheric Pollution Research, Italy)
	Geographical distribution of the atmospheric short living Hg	Francesco De Simone (CNR-Institute of
	Eastern China	Meteorological Service, Shanghai)
	An Operational Numerical Air Quality Forecasting over	Guangqiang Zhou (YRDCEPW, Shanghai
	modelling approach	Shubha Verma (IIT Kharagpur, India)
	population exposure assessment using a strategic integrated	0. 11 14 19 19 19 19 19 19 19 19 19 19 19 19 19
	optimised black carbon emission over Indian region and its	
	Estimates of spatially and temporally resolved gridded	
	in an Urban Environment of Niger Delta Region of Nigeria	Otuoke, Nigeria)
	Measurement of Particulate Matter and its Risk Assessment	Stephen Uzoekwe (Federal University,
~~~~~	global carbon budget?	Dan Tong (Tsinghua U, Beijing)
	How current and proposed thermal power plants affect the	
	pollution in Dhaka, Bangladesh	Abdus Salam (U Dhaka, Bangladesh)
	Influence of Brick kilns emissions in the atmosphere	
~~~~	fired Power Plants in China from 2005 to 2015	Wu Ruili (Tsinghua U, Beijing)
	Air Quality and Health Impacts from Control Policies on Coal-	
	to O3 in the Seoul Metropolitan Area	
	Precursors, and Evaluation of Emissions Sector Contributions	
	KORUS-AQ: Spatiotemporal Analysis of O3 and its	
	High-Frequency Box-Modelling of Airborne Data from	Jason Schroeder (NASA Langley)
	Urban Atmosphere of Southwestern Nigeria	Ekiti, Nigeria)
	Airborne Particles and Appraisal of Exposure Risk in an	Gbenga Olumayede (Federal University Oye
	Bioavailability of the Metal Bounded to Ultrafine Fraction of	
	in Nigeria.	Oke Foundation, Nigeria)
	The Impact of Climate Change and the Coastal Settlement	Michael Adedotun Oke (Michael Adedotun
	Central Megalopolis Area.	Autónoma de Puebla, Mexico)
	Surface Data of Aerosols and Meteorology for the Mexico	Marco Mora (Benemérita Universidad
	Climatology (2003-2015) analysis of Remotely-Sensed and	
	southern Africa	Potchefstroom, South Africa)
	concentrations measured at a site on the west coast of	Danitza Klopper (North-West University,
	Aerosol transport and the links to black carbon	
	Pathways for China and Korea	Younha Kim (Konkuk U, Seoul)
	Linked Analysis of Baseline Emissions and Reduction	
	study: Highest record of temperature in Bogota, Colombia.	Juan Aragon (Universidad Libre Colombia)