SCC 2015 CONFERENCE ON SUN-CLIMATE CONNECTIONS

Kiel, 16-19 March 2015

Sponsors

Mo 16 March	Tue 17 March	Wed 18 March	Thu 19 March	
08:30 Welcome (Katja Matthes)				
Chair Session 1: Eugene Rozanov	*Chair Mixed Session: Kalevi Mursula*	*Chair Session 3: Irina Mironova*		
08:40 Greg Kopp: Solar Radiative Forcing of Climate (invited)	08:30 Joanna Haigh: Solar spectral variability and the Earth's atmosphere (invited)	08:30 Bernd Funke: Energetic particle impact on the atmosphere and the link to regional climate: Observational constraints and current understanding (invited)		
09.10 Margit Haberreiter: Our current understanding of the variations of solar spectral irradiance (keynote)	09:00 Franz-Josef Lübken: Scientific Highlights from ROMIC	09:00 Karen Aplin: Effects of energetic particles in the lower atmosphere (keynote)	09:00 - 13:00: Outreach **Mini Conference on Sun-Climate Connections for pupils** **Minikonferenz Sonne-Klima Wechselwirkungen für Schüler:** Teilnehmer: 10. Klasse (Geo-Profil/NaWi-Profil), Gymnasium Kronshagen und Doppeljahrgang (11/12, Chemie-Profil), Max-Planck-Schule Kiel Programm: - 9:00-10:00 Begrüßung und Einführung (Katja Matthes) - 10:00-12:45 Gruppenaktivitäten 1. Planeterrella (Jean Lilensten, Verónica Salazar) 2. Mini Poster Session (Rémi Thiéblemont) 3. Mini Oral Session (Ben Laken, Jasa Calogovic, Raimund Muscheler) - 12:45-13:00 Verabschiedung	09:00 - 12:30 **Guided Visit of GEOMAR** (Andreas Villwock) - Westshore: Introduction to GEOMAR, visit of Glider laboratory and meteorological instruments - Eastshore: visit of technology and logistics centre where expeditions are planned, instruments and observing systems such as under water vehicles are developed, repaired and maintained. Bus transfer between west and east shore and back to Wissenschaftszentrum included
	09:15 Tobias Schiefendecker: A connection between the solar sunspot cycle and water vapor in the Upper Troposphere Lower Stratosphere?			
09:40 Natalie Krivova: Measurements and models of solar irradiance variability in the satellite-era	09:30 Annika Seppälä: Energetic particle forcing of the Northern Hemisphere winter stratosphere: comparison to solar irradiance forcing	09:30 Pekka Verronen: Modelling the ion chemistry of mesosphere for particle precipitation studies		
09:55 Frédéric Clette: Re-calibrating the Sunspot Number: diagnostics and implications	09:45 Amanda Maycock: The solar---ozone feedback in observations and models	09:45 Yvan Orsolini: Downard Transport of Nitrogen Oxides Produced by Energetic Particle Precipitation		
10:10 Raimund Muscheler: Sun-climate linkages inferred from the paleorecord	10:00 Monika Andersson: Solar-cycle effect of energetic electron precipitation seen in mesospheric ozone	10:00 Holger Nieder: Solar influence on the MLT region: NOx production and global model studies		
10:25Florian Adolphi: Persistent link between solar activity and Greenland climate during the Last Glacial Maximum	10:15 Manuel Lopez-Puertas: Solar cycle and seasonal variability of CO and CO2 in the mesosphere and lower thermosphere	10:15 Jasa Calagovic: Can isolating specific cloud types provide evidence of a cosmic ray - cloud link?		
10:40 Poster Session 1 with coffee break	10:30 Poster Mixed Session with coffee break	10:30 Poster Session 3 with coffee break		
12:30 - 14:00 Lunch break	*12:30 - 14:00 Lunch break*	*12:30 - 14:00 Lunch break / group photo*	*12:30 - 14:00 Lunch break*	
Planeterrella Sessions	*Planeterrella Sessions*	*Planeterrella Sessions*		
Chair Session 2: Thierry Dudok de Wit	*Chair Session 4: Hauke Schmidt*	*Chair Mixed Session: Yoav Yair*	**14:00 - 15:30 Wissenschaftszentrum** **Scientific Discussion on Future Directions of Sun-Climate Research** Panelists: Guy Brasseur (MPI-Met, Hamburg) Greg Kopp (LASP, Boulder) Gian-Kasper Plattner (University of Bern)	
14:00 Mojib Latif: The Hiatus in Global Warming (invited)	14:00 Stefan Brönnimann: Solar influences on climate in observations, reconstructions, and climate models over the past millennium (invited)	14:00 Martin Visbeck: Integrated Marine Science: Ocean - Climate - Society (invited)		
14:30 Kalevi Mursula: Long-term variation of the solar wind and its suggested effects on the Earth's atmosphere and climate (keynote)	14:30 Klarie Tourpali: Modelling the Impact of Solar Variability on the Earth's Atmosphere and Climate (keynote)	14:30 Stergios Misios: Solar signals in CMIP-5 Simulations: Effects of Atmosphere-Ocean Coupling		
		14:45 Martin Andrews: A simulated lagged response of the North Atlantic Oscillation to the Solar Cycle over the period 1960-2009		
15:00 Timo Asikanen: Long-term variation and solar wind drivers of energetic particle precipitation	15:00 Gabriel Chiodo: The impact of a future solar minimum under a climate change scenario	15:00 Kunihiko Kodera: Where should we expect solar signal on the Earth's surface		
15:15 Mai Mai Lam: Response of the lower atmosphere to changes in the global atmospheric electric circuit associated with solar wind variability	15:15 Lon Hood: Origin of the Tropical Lower Stratospheric Response to 11-Yr Solar Forcing	15:15 Radan Huth: Effects of the 11-year solar cycle on tropospheric circulation in the Southern Hemisphere in winter		
15:30 Ville Maliniemi: Long-term relation between geomagnetic activity and Northern Hemisphere winter circulation	15:30 Ewa Bednarz: Separating the role of direct radiative heating and photolysis in modulating the atmospheric response to the 11-year solar cycle	15:30 Colin Price: Using Radio Waves to Monitor the Variability of Mesopause Temperatures		
15:45 Konstantin Herbst: On the Production of Cosmogenic Radionuclides due to Galactic and Solar Cosmic Rays	15:45 Anne Kubin: The 11-year solar signal in ocean-coupled climate models with and without interactive chemistry	15:45 Eija Tanskanen: Solstice dominance in geomagnetic activity during high-speed streams	**16:30 - 18:00 GEOMAR (Hörsaal Westufer)** **Public Panel Discussion on Sun-Climate Connections** **Öffentliche Podiumsdiskussion zum Sonneneinfluss auf das Klima**	
16:00 Poster Session 2	16:00 Poster Session 4		- Prof. Dr. Guy Brasseur (MPI-Met, Hamburg), - Dr. Gian-Kasper Plattner (Universität Bern) - Dr. Margit Haberreiter (PMOD, Davos) - Prof. Dr. Katja Matthes (GEOMAR, Kiel) Moderation: Dr. Andreas Villwock (Leiter GEOMAR Pressestelle)	
18:30 Ice Breaker, Wissenschaftszentrum		**18:00 Dinner Steigenberger Hotel Conti Hansa Schloßgarten 7, 24103 Kiel**		
Planeterrella Sessions				

Poster Session 1 (Author in attendance Monday 10:40 - 12:30 and 16:00 - 18:00)	
Jan Lastovicka	The trend and solar cycle response of selected stratospheric parameters using MERRA reanalysis
Laure Lefevre	Going beyond the International Sunspot Number
Toshihiko Hirooka	Influence of thermal tides on the mean field in the MLT region
Gerard Thuillier	ISS SOLAR Spectrometers: The 2008 Minimum Solar spectral Irradiance and its properties.
Christian Muller	The FP-7 PERICLES programme applied to the preservation of solar spectral irradiance data collected on board the International Space Station.
Markus Czymzik	Solar modulation of flood-prone atmospheric circulation patterns in northwestern Europe on decadal to millennial time-scales
Laure Lefevre	Merging sunspot catalogues: the case of the morphological classifications of Cortie and Zurich
Gaël Cessateur	The solar irradiance: Observations and Models
Thierry Dudok de Wit	Hunting out trends in solar UV observations
Thierry Dudok de Wit	What do butterflies tell us about long-term solar variability?
Lon Hood	Tropical Upwelling Response to Short-Term Solar UV Variations: Evidence from Column Ozone and Reanalysis Temperature Data
Margit Haberreiter	Height-dependent temperature and density distribution of the solar atmosphere from 3D MDH simulation
Margit Haberreiter	FP7 SOLID - The first European comprehensive SOLar Irradiance Data exploitation
Francesco Berrilli	Long-term response of stratospheric ozone and temperature to solar variability
Poster Session 2 (Author in attendance Monday 16:00 - 18:00)	
Mirela Voiculescu	Comparison between solar possible effects at low and high altitudes on cloud cover
Mai Mai Lam	Solar wind-atmospheric electricity-cloud microphysics connections to weather
Poster Session 3 (Author in attendance Wednesday 10:30 - 12:30)	
Natalya Kilifarska	Strengths and weaknesses of existing mechanisms for highly energetic particles' influence on climate
David Newnham	Mesospheric nitric oxide production by energetic electron precipitation above Halley station, Antarctica
Irina Mironova	Impact energetic particles on the Earth atmosphere. Overview of activity of WG3 TOSCA COST ES1005.
Koen Hendrickx	Effects of energetic particles on Nitric Oxide production in the MLT- region as seen by Odin/SMR and AIM/SOFIE
Khalil Karami	How energetic particle precipitation can influence the middle atmosphere circulation and temperature? A dynamical perspective
Alessandro Damiani	Solar signal within the winter polar vortex
Anne Vialatte	Impact of energetic inputs on the upper atmosphere: Nitric Oxide
Yoav Yair	The variability of the fair weather electric field in the Negev desert, Israel, and its relation to global lightning activity
Miriam Sinnhuber	Electron precipitation into the mesosphere and upper stratosphere: quantification of ionization rates constrained by trace gas observations
Thomas Reddmann	Simulation of the impact of energetic particle precipitation in the middle atmosphere for the period 2001 - 2010
Sanna-Mari Päivärinta	Effects of solar proton events and sudden stratospheric warmings on odd nitrogen and ozone in the polar middle atmosphere
Anna Morozova	Modes of temperature and pressure variability in the mid-latitude troposphere in relation to the geomagnetic and cosmic ray variations
Bernd Heber	Energy spectra of potential Ground Level Events during solar cycle 24
Michal Dyrda	Solar flare influence on the low ionosphere - studies using the Schumann resonances
Bernd Funke	HEPPA-II model-observation intercomparison project: EPP indirect effects during the dynamically perturbed NH winter 2008/2009
Poster Session 4 (Author in attendance Tuesday 16:00 - 18:00)	
Pavle Arsenovic	Climate and ozone layer in the future: implications of Grand Solar Minimum
Venera Dobrica	Decadal variability of NH temperatures and its connection with solar variability
Lon Hood	Solar Signals in CMIP-5 Simulations: The Ozone Response
Ales Kuchar	Solar cycle in the CCM SOCOL hindcast simulations
Katharina Meraner	Transport of nitrogen oxides through the mesopause region
Rémi Thiéblemont	Solar forcing synchronizes decadal North Atlantic climate variability
Tobias Spiegl	Evaluating the Impact of different Maunder Minimum Reconstructions on Surface and Middle Atmosphere Climate with a state-of-the-art Chemistry-Climate Model
Yuhji Kuroda	Influence of the solar cycle on the Polar-night Jet Oscillation in the southern hemisphere winter
Poster Mixed Session (Author in attendance Tuesday 10:30 - 12:30)	
Jan Lastovicka	Two-core structure in northern winter mid-stratosphere meridional winds and its long-term evolution
Lev Pustilnik	On Non-Universality of Solar-Terrestrial Connections
Lev Pustilnik	Multi-scale percolation of magnetic energy and currents as mechanism of flare energy release
Pankaj Kumar	Multiwavelength study on solar and interplanetary origins of the strongest geomagnetic storm of solar cycle 23
Stergios Misios	Surveying the needs of climate and chemistry-climate modelling communities for new irradiance datasets: A SOLID approach
Claudia Stubenrauch	What can we achieve with global cloud satellite observations?
Juan José Curto	A century of Sunshine and synoptic cloud observations at Ebro Observatory.
Maria Carmen Llasat	Influence of solar variability in flood-rich periods
Dominik Utz	Long-time trends of magnetic bright points: number of MBPs at disc centre