

Workshop on “Challenges in the Understanding of the Global Water Energy Cycle and its Changes in Response to Greenhouse Gases Emissions”

26–30 September 2022

All presentations are 20' slots including 20' for discussions

Monday, 26 September 2022		
Time	Topic	Chair/ Speaker
13:30	Registration ISSI, Hallerstrasse 6, 1st floor	
14:00-14:30	Welcome and introduction to the ISSI workshop on the global water-energy cycle	M. Rast & B. Meyssignac
14:30-17:10	Global energy budget : closure and consistency	
14:30-15:10	The NASA NEWS consistency experiment	T. L'Ecuyer et al.
15:10-15:50	Evaluation of CMIP6 models using consistent global water and energy fluxes	R. Roca
15:50-16:30	ESMO, the new core project of WCRP	J. Schultz
16:30-16:50	<i>Coffee Break</i>	
16:50-18:00	Discussion on consistency	
18:30	<i>Welcome Reception - Hallerstrasse 6, 1st floor</i>	

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Tuesday, 27 September 2022		
Time	Topic	Speaker
08:30-12:25	Earth Energy Imbalance	
08:30-09:05	Spectrally resolved radiation	H. Brindley
09:05-09:40	Measuring Earth's Energy Imbalance From Space	M. Hakuba
09:40-10:15	The Earth Climate Observatory: a new space mission concept for the monitoring of the Earth Energy Imbalance	S. Dewitte
10:15-10:35	Coffee Break	
10:35-11:10	Trends in EEI	N. Loeb
11:10-11:45	Long term monitoring of Earth's energy balance and water cycle	R. Allan
11:45-12:25	Constraint on ECS from historical EEI observations	B. Meyssignac
12:25-14:00	Lunch	
14:00-17:15	Subsurface storage: ocean heat uptake, land water storage	
14:00-14:35	OHC status	T. Boyer
14:35-15:10	Global High-Resolution Random Forest Regression Maps of Ocean Heat Content Anomalies Using in Situ and Satellite Data	J.Lyman
15:10-15:45	Attempting Observation-Based Closure of Earth's Seasonal Energy Budget	G.C. Johnson
15:45-16:20	EEI from space altimetry and space gravimetry, causes of the Non-closure of the sea level since 2015	A. Barnoud
16:20-16:55	Progress and challenges in monitoring subsurface water storage changes	M. Rodell
16:55-17:15	Coffee Break	
17:15-18:00	Discussion on Earth energy imbalance, ocean heat uptake and land water storage	

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Wednesday, 28 September 2022		
Time	Topic	Speaker
08:30-10:15	Atmospheric fluxes	
08:30-09:05	Water vapor in the atmosphere	H. Brogniez
09:05-09:40	Testing reanalyses water and energy cycles	M. Bosilovich
09:40-10:15	Energy budget in reanalysis	M. Mayer
10:15-10:35	Coffee Break	
10:35-12:20	Deep convection	
10:35-11:10	Progress toward the next generation of the International Satellite Cloud Climatology Project (ISCCP)	A.Heidinger
11:10-11:45	MCS climatology	T. Fiolleau
11:45-12:20	The decade of convection	G. Stephens
12:20-14:00	Lunch	
14:00-14:40	Observational assessment of radiative-convective feedbacks in the tropics	H. Masunaga
14:40-15:20	Physical linkages between deep convection and ECS	K. Schiro
15:20-16:00	Pattern effect in the tropics	T. Andrews
16:00-16:20	Coffee Break	
16:20-17:20	Discussion on atmospheric fluxes, convection, pattern effect	
19:00	Workshop Dinner at the Restaurant Rosengarten	

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Thursday, 29 September 2022		
Time	Topic	Speaker
8:30-09:50	Surface fluxes	
08:30-09:10	Regional energy budget	S. Kato
09:10-09:50	The BSRN network	Ch. Lanconelli
09:50-10:30	Surface energy budget	M. Wild
10:30-10:50	<i>Coffee Break</i>	
10:50-11:30	Extreme precipitation over the tropical oceans	R. Roca
11:30-12:10	New precipitation products for climate science	A. Behrangi
12:10-14:00	<i>Lunch</i>	
14:00-14:40	Land water cycle and droughts in a warming climate	S. Seneviratne
14:40-15:20	Last assessment of evaporation over the ocean	M. Schröder/R. Hollman
15:20-16:00	Inverse modelling and consistency with ocean heat transport	K. Haines
16:00-16:40	Discussion on surface fluxes	
16:40-17:00	<i>Coffee Break</i>	
17:00-18:00	General discussion on the ISSI book outline	

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Friday, 30 September 2022		
Time	Topic	Speaker
8:30-13:00	GDAP meeting	
13:00	<i>End of Workshop</i>	

Last update: 23 September 2022