



EUROPEAN  
SCIENCE  
FOUNDATION



JSPS Japan Society for the Promotion of Science

## ESF Research Conferences

A Programme of the European Science Foundation

Final  
Programme

### ESF-JSPS Frontier Science Conference Series for Young Researchers

#### Climate Change

Nynäshamn • Sweden • 24-29 June 2006

**Co-Chair:** Kevin Noone • International Geosphere-Biosphere Programme, SE

**Co-Chair:** Shoichiro Fukao • RISH, Kyoto University, JP

[www.esf.org/esfjgps/06214](http://www.esf.org/esfjgps/06214)

#### With support from

- Swedish Research Council (VR)
- Swedish Research Council for Environment, Agricultural Sciences & Spatial Planning (FORMAS)



Vetenskapsrådet



Saturday 24 June	16.00 onwards	Registration at ESF/JSPS desk		
	20.00	Dinner and introduction of each participant		
	21.00	Welcome Drink		
Sunday 25 June	08.25-08.45	Conference Opening (Welcome from Shoichiro Fukao & Kevin Noone, Conference Co-Chairs)		
	08.45-09.00	Conference Opening (Welcome from Isao Kiso, JSPS Executive Director)		
	<b>Session 1 • Atmospheric Variability on Intraseasonal to Interannual Timescales</b> Chair: Kevin Noone • IGBP, SE			
	09.00-09.40	<b>Tetsuzo Yasunari</b> • Nagoya University, JP	<i>Impact of uplift of Tibet-Himalaya Plateau on global climate change</i>	
	09.40-10.20	<b>Robert MacKenzie</b> • Lancaster University, UK	<i>Climate-Chemistry issues in the upper troposphere and lower stratosphere</i>	
	10.20-11.00	<b>Teruyuki Nakajima</b> • University of Tokyo, JP	<i>A study of aerosol and cloud effects on the earth's climate using satellite remote sensing and modeling</i>	
	11.00-11.30	Coffee break		
	Short oral presentations			
	11.30-11.50	<b>Ravi Bhushan</b> • Physical Research Laboratory, IN	<i>Bay of Bengal sediment records</i>	
	11.50-12.10	<b>Masakazu Taguchi</b> • Aichi University of Education, JP	<i>ENSO, stratospheric warmings, and recent trends in winter climate</i>	
	12.30-14.00	Lunch		
	14.00-15.30	Poster Session		
	<b>Session 2 • Variability of the Atmosphere-Ocean System on Decadal to Millennial Time Scales</b> Chair: Shoichiro Fukao • RISH, JP			
	15.30-16.10	<b>Toshio Yamagata</b> • University of Tokyo, JP	<i>Coupled ocean-atmosphere variability in the tropical Indian Ocean and its predictability</i>	
	16.10-16.50	<b>Akimasa Sumi</b> • University of Tokyo, JP	<i>Global Warming Simulation using a high-resolution climate model</i>	
	16.50-17.30	<b>Motoyoshi Ikeda</b> • Hokkaido University, JP	<i>Predicting synchronized change in the Arctic Environment</i>	
	17.30-18.00	Coffee break		
	Short oral presentations			
	18.00-18.20	<b>Diana Stoykova</b> • University of Sofia, BG	<i>Climatic Cycles from Annual to Orbital Scale, their Origin and Stability</i>	
	18.20-18.40	<b>Masumi Zaiki</b> • Kobe University, JP	<i>Recovery of 19th century instrumental meteorological data in Japan</i>	
	20.00	Dinner		
21.00	Poster Viewing			

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Session 3 • Changes in the Earth System on Long Time Scales		
Chair: Shoichiro Fukao • RISH, JP		
08.40-09.20	<b>Koji Minoura</b> • Tohoku University, JP	<i>Siberian climate changes and glacial-interglacial rhythm</i>
09.20-10.00	<b>André Berger</b> • Univ. Catholique de Louvain, BE	<i>An exceptionally long interglacial ahead?</i>
10.00-10.40	<b>Ayako Abe-Ouchi</b> • University of Tokyo, JP	<i>Applying climate/ice sheet models on paleoclimate studies</i>
10.40-11.30	Coffee break	
Short oral presentations		
11.30-11.50	<b>Roberta Pini</b> • University of Milano-Bicocca, IT	<i>A new paleoclimatic and glacio-eustatic record of the last four glacial-interglacial cycles in the southeastern alpine foreland</i>
11.50-12.10	<b>Kosei E. Yamaguchi</b> • Japan Agency for Marine-Earth Sci. & Tech., JP	<i>Early evolution of the atmosphere, ocean, and microbial biosphere</i>
12.10-12.30	<b>Kazuyoshi Yamada</b> • Shimane University, JP	<i>Holocene climate variability recorded in brackish lacustrine sediments of Lake Shinji, western Japan</i>
12.30-14.00	Lunch	
14.00-15.30	Poster Session	
Session 4 • Climate Variability and Spatial Scale Issues		
Chair: Kevin Noone • IGBP, SE		
15.30-16.10	<b>Ryuji Tada</b> • University of Tokyo, JP	<i>Onset and propagation of millennial-scale abrupt climatic changes</i>
16.10-16.50	<b>Eric Wolff</b> • British Antarctic Survey, UK	<i>The ice core record of Earth System change</i>
16.50-17.30	Coffee break	
Short oral presentations		
17.30-17.50	<b>Takemasa Miyoshi</b> • Japan Meteor. Agency, JP	<i>Ensemble Kalman filtering proposes new-generation reanalysis products with flow-dependent errors</i>
17.50-18.10	<b>Seiya Nishizawa</b> • Kyoto University, JP	<i>Distribution function of spurious trend and detectability of trend</i>
19.30	Dinner	
21.00	Poster Viewing	

Tuesday  
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<b>Session 5 • Future climate change</b>		
Chair: Kevin Noone • IGBP, SE		
09.00-09.40	<b>David Viner</b> • University of East Anglia, UK	<i>An Assessment of the sources of uncertainty in climate change studies</i>
09.40-10.20	<b>Shigeo Yoden</b> • Kyoto University, JP	<i>The use of numerical models to understand climate variability and change</i>
10.20-11.00	<b>Pavel Kabat</b> • Wageningen University, NL	<i>Effects of climate change on the water cycle and water resources and relation with hydrometeorological extremes</i>
11.00-11.30	Coffee break	
Short oral presentations		
11.30-11.50	<b>Christoph Oelke</b> • University of Muenster, DE	<i>Climate trends in soil temperature and active-layer depth for the Arctic terrestrial drainage system</i>
11.50-12.10	<b>Joao Nascimento</b> • Technical University Lisbon, PT	<i>Effect of climatic change in groundwater resources of Portugal</i>
12.10-12.30	<b>Tomonori Sato</b> • University of Tokyo, JP	<i>Comparative study on the land-cover change &amp; global warming impacts on regional climate in Northeast Asia</i>
12.30-14.00	Lunch	
14.00-15.30	Poster Session	
<b>Session 6 • Special Session of the Swedish Research Council:</b>		
Chair: Kevin Noone • IGBP, SE		
15.30-16.05	<b>Markku Rumukainen</b> • SMHI, SE	<i>Past, present and Future regional climate modeling in Sweden</i>
16.05-16.40	<b>Paul Glantz</b> • Stockholm University, SE	<i>Estimating a relationship between aerosol optical thickness and surface wind speed over oceans</i>
16.40-17.15	<b>Margareta Hansson</b> • Stockholm University, SE	<i>Lecture</i>
17.15-17.45	Coffee break	
17.45-18.20	<b>Torben Christensen</b> • Lund University, SE	<i>Towards a comprehensive understanding of carbon cycling and greenhouse gas emissions in the Arctic</i>
18.20-18.55	<b>Ninis Rosqvist</b> • Stockholm University, SE	<i>Reconstructions of past climate change in Northern Scandinavia</i>
18.55-19.30	<b>Donal Murtagh</b> • Chalmers University, SE	<i>Past, present and future regional climate modelling in Sweden</i>
19.30	Dinner	
21.00	Poster Viewing	

Wednesday  
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<b>Session 7 • Ecological Effects of Climate Change</b>		
Chair: Shoichiro Fukao • RISH, JP		
09.00-09.40	<b>Ole Mertz</b> • University of Copenhagen, DK	<i>Adapting to climate change in smallholder agriculture in developing countries</i>
09.40-10.20	<b>Kouki Hikosaka</b> • Tohoku University, JP	<i>Plant responses to climate change</i>
10.20-11.00	<b>Dan Yakir</b> • Weizmann Institute of Science, IL	<i>Global Ecology: The Stable Isotope Perspective</i>
11.00-11.30	Coffee break	
Short oral presentations		
11.30-11.50	<b>Dolors Armenteras</b> • Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, CO	<i>Biomass burning emissions</i>
11.50-12.10	<b>Oscar Franklin</b> • IIASA, AT	<i>Forest production and carbon storage potentials in Europe</i>
12.10-12.30	<b>Hiroko Akiyama</b> • National Institute for Agro-Environmental Sciences, JP	<i>N<sub>2</sub>O emission from Agricultural field -Estimate of N<sub>2</sub>O emission factor from rice paddy field</i>
13.00-14.15	Lunch	
14.15-15.30	Poster Session	
<b>Session 8 • Human Dimensions of Climate Change</b>		
Chair: Kevin Noone • IGBP, SE		
15.30-16.10	<b>Falk Schmidt</b> • IHDP, DE	<i>Human Dimensions of Climate and Environmental Change</i>
16.10-16.50	<b>Yoichiro Sato</b> • RIHN Kyoto, JP	<i>Human activity and environment - Environmental change due to agriculture</i>
16.50-17.30	Coffee break	
Short oral presentations		
17.30-17.50	<b>Anna Maria Jönsson</b> • Lund University, SE	<i>Climate change and forest damage</i>
17.50-18.10	<b>Takanori Nagano</b> • RIHN Kyoto, JP	<i>Assessing systematic response of agricultural production system towards climate change.</i>
18.10-18.30	<b>Satoshi Nishida</b> • Tokyo Metropolitan University, JP	<i>OH reactivity measurements in sub urban area at Tokyo</i>
19.30	<b>Get-together &amp; Conference Dinner</b>	

Thursday  
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Session 9 • The Future of Climate Change		
Chair: Kevin Noone • IGBP, SE		
09.00-10.00	<b>Shukuro Manabe</b> • Princeton University, US	<i>Early development in climate modeling and prospect for the future</i>
10.00-11.00	<b>Guy Brasseur</b> • NCAR, US	<i>Towards Earth System Modeling</i>
11.00-11.30	Coffee break	
11.30-12.45	Panel Discussion: Future Directions for Climate Change Research	
12.45-13.00	Closing Remarks from Conference Co-Chairs	
13.00	Lunch and departure	

**Abstracts, posters and short talks:**

There will be no **short talks** other than those announced on the programme.

All other abstracts are accepted as **posters**.