











Prediction of Climate Variations & its Application in the Southern African Region

22ND & 23RD August 2011

Venue: HPC, University of Pretoria, South Africa

Monday 22nd:

Registration: 08:30-09:00

1. Opening Session
(Chair: N. Sweijd)

09:00	Address I	Prof. S. Burton (University of Pretoria)
09:05	Address II	L. Matooane (Director, Earth Systems, DST)
09:10	Address III	Y. Shirayama (Executive Director, JAMSTEC, Japan)
09:15	Address IV	T. Nakamura (Resident Representative, JICA SA)

2. Key Note Speech

(Chair: Y. Shirayama)

9:20	T. Yamagata (JAMSTEC/U. Tokyo, Japan)
	"Tsunami Catastrophe: Lessons Learned from the 3.11 Calamity Caused by the
	Earthquake off Tohoku, Japan"
9:40	J. Adegoke (CSIR / ACCESS, South Africa)

3. First Session - South African Climate Research under the SATREPS Framework -

(Chair: J. Adegoke)

10:00	H. Rautenbach (U. Pretoria, South Africa)
	"Characteristics and regional scale simulation of extreme climate events
	during 2010-2011"
10:20	S. Behera (JAMSTEC, Japan)
	"Extreme rainfall events over South Africa associated with modes of
	climate variations "

10:40-11:00 Coffee Break

4. Second Session - Climate and Ocean Processes (Chairs: T. Tozuka and H. Rautenbach)

44.00	ALD HUGT CONTROL IN
11:00	M. Rouault (UCT, South Africa)
	"On the intrusion of Tropical Water in The Benguela upwelling system"
11:20	I. Richter (JAMSTEC, Japan)
	"On the origin of GCM biases in the Gulf of Guinea and the Benguela
	upwelling region"
11:40	M. Nagura (JAMSTEC, Japan)
	"On the interannual variability in the Indonesian Throughflow"
12:00	R. Maisha (UP)
	"WRF Simulations over SA and Limpopo".

12:20 – 13:30 Lunch Break

13:30	J. Botai (U. Pretoria, South Africa)
	"Self-similarity in predictable water vapor derived from reanalysis data"
13:50	P. Oettli (U. Tokyo, Japan)
	"Spatial patterns of OLR anomalies over the tropical region at the
	intra-seasonal time scale, as revealed by a self-organizing map"

5. Third Session - **Dynamical Downscaling :** (Chairs: W. Landman and S. Behera)

14:10	K. Takahashi (JAMSTEC, Japan)
	"Simulating the Western Cape Climate using ultra-high Resolution
	Regional Models on the Earth Simulator"
14:30	J. V. Ratnam (JAMSTEC, Japan)
	"Downscaling of SINTEX-F forecast over Southern Africa using WRF model"
14:50	I. Jansen van Rensburg & Hannes Rautenbach (U. Pretoria, South Africa)
	"Dynamical downscaling of climate circulation over Mariepskop, Limpopo"

15:10	B. Hewitson (CSAG, UCT)
	"Framing foci: fundamental gaps in the knowledge chain"

15:10-15:30 Tea Break

(Chair: C. Lennard)

15:30 Discussion

Dinner: 7.30pm

Tuesday 23rd:

6. Fourth Session - Developments of New Generation Seasonal Forecasting - (Chairs: K. Takahashi and H. Rautenbach)

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08:40	W. Landman (CSIR, South Africa)
	"Optimizing AGCMs for operational seasonal forecasting for southern Africa"
09:00	A. Beraki (SAWS, South Africa)
	"SAWS operational ensemble prediction system: improvement and uncertainty"
09:20	J. Luo (JAMSTEC, Japan)
	"Impact of global ocean surface warming on seasonal-to-interannual
	climate prediction"
09:40	M. Lazenby (U. Pretoria, South Africa) & Willem Landman (CSIR, South Africa)
	"Seasonal maximum temperature prediction skill over southern Africa:
	1- vs. 2-tiered forecasting systems"

10:00-10:20 Coffee Break

10:20	T. Tozuka (U. Tokyo, Japan)
	"Seasonal Prediction by the University of Tokyo Coupled General
	Circulation Model (UTCM)"
10:40	F. Engelbrecht (CSIR, South Africa)
	"Verification of CCAM simulations over southern Africa:
	Reanalysis and AMIP-style runs"
11:00	H. Aiki (JAMSTEC, Japan)
	"Development of a coupled atmospheric and oceanic nonhydrostatic model
	for typhoon simulations"
11:20	W. Sasaki (JAMSTEC, Japan)
	"Role of vertical mixing originating from small vertical scale structures within
	the equatorial thermocline in an OGCM"

11:40-13:00 Lunch Break

7. Fifth Session - Climate Informatics and Societal Applications

(Chairs: P. Johnston & H. Sakuma)

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13:00	N. Sweijd (ACCESS, South Africa)
	"Report on ACCESS / SAWS / SATREPS meeting in April on Seasonal climate
	Prediction Information dissemination"
13:20	H. Sakuma (JAMSTEC, Japan)
	"Development of a Climate Information and Application System for South Africa"
13:40	A. Manhique (National Meteorological Service, Mozambique)
	"Seasonal forecasting process and relevance in Mozambique"
14:00	J. Olwoch (U. Pretoria, South Africa)
	"Using Climate Information to Understand Malaria Dynamics in
	Limpopo Province, South Africa"
14:20	G. Zuma-Netshiukhwi (ARC, South Africa)
	"Dissemination of agrometeorological information for improved
	decision-making"
14:40	S. Varlamov (JAMSTEC, Japan)
	"Web applications and tools for climate services"

15:00 -15:20 Tea Break

15:20	Discussion
16:45	Concluding Remarks: T. Yamagata / H. Rautenbach / J. Adegoke