



PROGRAM ADDENDUM ADDENDUM DU PROGRAMME

All changes done after June 1, 2009 are part of the addendum / Tout changement fait après le 1^{er} juin 2009 est reflété dans cet Addendum

As of July 13th 2009 / en date du 13 juillet 2009

MONDAY JULY 20TH, 2009 / LE LUNDI 20 JUILLET 2009

Oral Sessions / Sessions orales

Changes / Changements

- 1415 M06.4/20302 **The Atmospheric Circulation Response to Idealized Climate Change-like Thermal Forcings in a Simple GCM**
A. Butler*, D.W.J. Thompson, R. Heikes
Colorado State University, Fort Collins, USA
Will be presented by D.W.J. Thompson
- 1445 P01.6/20313 **The Ulleung Warm Eddy in the Southwestern East Sea**
K.I. Chang *, Y.B. Kim, S.S. Byun
School of Earth and Environmental Sciences, Seoul National University, Korea
Will be presented by S.S. Byun
- 1645 P01.8/20413 **Physical and Chemical Signatures of a Developing Anti-Cyclonic Eddy in the Leeuwin Current, Eastern Indian Ocean**
M. Feng*, H. Paterson, A. Waite, D. Gomis, L. Beckley, D. Holiday, P. Thompson
CSIRO Marine and Atmospheric Research, Floreat, Australia
Will be presented by A. Waite
- 1645 J05.8/20408 **Ocean Surface Heat Flux Variability in the Barents Sea: A Model Study**
M. Aarthun*, C. Schrum
Geophysical Institute, University of Bergen, Norway
has been moved to 1745 J05.12/20408
- 1700 P09.9/20416 **Structure and Dynamics of Water Exchange between the Kuroshio and Marginal Seas of China**
D. Yuan*
Will be presented by C. Sun

Session Chair Modification

1630-1800

Session: Modeling

Chair: Sylvie Blanc

Cancelled / Annulations

- 1430 J12.5/20310 **Anthropic Land-Use Cools European Summer Season**
P. Lionello*, M. Zampieri
University of Salento
- 1700 P01.9/20413 **Is the Cold Center of the East China Sea an Eddy?**
F. Qiao*, X. Lv
First Institute of Oceanography, State Oceanic Administration, China
- 1715 P06.10/20415 **Transition to Turbulence in Salt Sheets**
W. Smyth*, S. Kimura
College of Oceanic and Atmospheric Sciences, Oregon State University, Corvallis, OR, USA
- 1745 J05.12/20408 **Variability of the Fresh Water Export through the Canadian Archipelago in an Arctic-Atlantic Regional Model**
M. N. Houssais*, C. Herbaut
LOCEAN, IPSL, UPMC, Paris, France

Poster Sessions / Sessions par affiches

Changes / Changements

- 1500 J022 J04.5/20417 **In situ Accumulation Measurements at Fleming Glacier (69°S), Wordie Ice-shelf Embayment, Western Antarctic Peninsula**
A. Rivera*, F. Bown, A. Wendt, R. Zamora, J. Went, C. Bravo, M. Rodriguez
Centro de Estudios Cientificos (CECS), Valdivia, Chile – **will be presented by Gino Casassa**
- 1500 M181 M08.38/20417 Numerical Simulation of Secondary Cyclone over the East Coast of Southern Brazil
C.M. Iwabe*, R.P. da Rocha
Will be presented by M. Reboita

Cancelled / Annulations

- 1500 J056 J12.16/20417 **Numerical Simulation of Regional Climate Extremes under IPCC A2 Scenario in Southeast China**
W. Chen*, Z. Jiang, L. Li, P. Yiou
- 1500 M125 M01.4/20417 **A Revised Ozone Parameterisation: COPCAT Coefficients within SLIMCAT Simulations**
B. Monge-Sanz*, N. Chipperfield
Institute for Atmospheric Science and Climate, University of Leeds, UK

- 1500 M167 M08.24/20417 **Numerical Modeling of Maximum Hail Size**
G.W. Reuter*, F. Jia
University of Alberta, Edmonton, Canada
- 1500 P231 P05.1/20417 **Subsatellite Experiments near the Shelf in the Black Sea**
V. Bakhanov*, N. Bogatov, A. Ermoshkin, V. Kazakov, O. Kemarskaya,
V. Lobanov, I. Repina, V. Titov, Yu. Troitskaya, E. Zuikova
Institute of Applied Physics RAS, Nizhny Novgorod, Russia
- 1500 M128 M01.7/20417 **Ozone and EESC Recovery Times in the Future Atmosphere Calculated under the CCMVal-REF2 Scenario and a No-Climate-Change Run**
H. Akiyoshi*, Y. Yamashita, K. Sakamoto, L.B. Zhou, T. Imamura
National Institute for Environmental Studies, Tsukuba, Japan

TUESDAY JULY 21ST, 2009 / LE MARDI 21 JUILLET 2009

Oral Sessions / Sessions orales

Additional / Supplémentaire

- 1745 P03.18/21416 **C-NOOFS: A Canadian Pilot Project in Operational Oceanography for the North West Atlantic**
G. Smith*, A. Ratsimandresy, D.A. Power, A. Lundrigan, D. Lefaiivre, P. Pellerin, F. Davidson
DFO-Northwest Atlantic Fisheries Centre, St. John's, NL, Canada

C-NOOFS: A Canadian Pilot Project in Operational Oceanography for the North West Atlantic

G. Smith^{1,4}, A. Ratsimandresy¹, D. A. Power¹, A. Lundrigan¹, D. Lefaiivre³, P. Pellerin³,
F. Davidson¹

(1) DFO-Northwest Atlantic Fisheries Centre, St. John's, NL, Canada, (2) DFO-Bedford Institute of Oceanography, Dartmouth, NS, Canada, (3) DFO-Institute Maurice Lamontagne, Mont-Joli, QU, Canada, (4) EC-Canadian Meteorological Centre, Dorval, QU, Canada

To demonstrate the potential benefits of an extended Canadian operational oceanographic capability a pilot project has been into place for the north west Atlantic Ocean entitled the Canada-Newfoundland Operational Ocean Forecast System (C-NOOFS) . The goal of the project is to produce an ocean ice forecast system that can be coupled to the Canadian regional GEM atmospheric forecast system. It is a follow-on project to a regional coupled ice atmosphere ocean forecasting system for the Gulf of St. Lawrence currently running at the Canadian Meteorological Centre. C-NOOFS makes use of the NEMO community ocean model forced by near real time wind forecasts from Environment Canada and provides a six-day forecast on a daily basis. In the initial development phase, boundary conditions are obtained from the 1/4 degree resolution MERCATOR-OCEAN global ocean forecast system and downscaled to 1/12 degree. The benefits of increasing the resolution from ¼ degree to 1/12 degree will be discussed along with challenges faced by open boundary conditions in a 1-way nesting protocol. Additionally, the data assimilation approach for the regional forecast system in its second development phase is presented. This system will included the assimilation of in-situ Argo data and satellite altimetry and sea surface temperature products. Finally ongoing system validation activities are presented..

Session Chair Modification

0830-1000

Session: Theoretical Advances in Dynamics

Chair: Nili Harnik

Changes / Changements

0945 M06.18/21102 **Persistent Multiple Jets and PV Staircase**

C. Yoo*, S. Lee

Pennsylvania State University, University Park, USA

Replaced with

0945 M06.18/21102 **A Theoretical Framework for Energy and Momentum Consistency in Subgrid-scale Parameterization for Climate Models**

T.A. Shaw*, T.G. Shepherd

University of Toronto, Canada

A Theoretical Framework for Energy and Momentum Consistency in Subgrid-scale Parameterization for Climate Models

T. A. Shaw¹, T. G. Shepherd²

¹Courant Institute, New York University, New York, USA

¹Department of Physics, University of Toronto, Toronto, Canada

A theoretical framework for the joint conservation of energy and momentum in the parameterization of subgrid-scale processes in climate models is presented. The framework couples a hydrostatic resolved (planetary scale) flow to a non-hydrostatic subgrid-scale (mesoscale) flow. The temporal and horizontal spatial scale separation between the planetary and mesoscales is imposed using multiple scale asymptotics. Energy and momentum are exchanged through subgrid-scale flux convergences of heat, pressure and momentum. The generation and dissipation of subgrid-scale energy and momentum is understood using wave-activity conservation laws which are derived by exploiting the (mesoscale) temporal and horizontal spatial homogeneities in the planetary scale flow. The relations between these conservation laws and the planetary-scale dynamics represent generalized non-acceleration theorems. A derived relationship between the wave-activity fluxes --- which represents a generalization of the second Eliassen-Palm theorem --- is key to ensuring consistency between energy and momentum conservation. The framework includes a consistent formulation of heating and entropy production due to kinetic energy dissipation.

0945 P06.18/21115 **Upper Ocean Diapycnal Heat Flux and Mixing Processes in the Central and Eastern Equator**

R. Hummels*, M. Dengler, B. Bourles

Leibniz-Institut Für Meereswissenschaften, Kiel, Germany

Will be presented by M. Dengler

1330 P06.25/21315 **What Can We Learn about Waves and Turbulence from Seismic Profiling?**

J.M. Klymak*, B.R. Ruddick, W.S. Holbrook

Will be presented by B.R. Ruddick

- 1730 P01.35/21413 **Contribution of Temperature Anomaly to Large Sea Surface Height Anomaly Associated with Mesoscale Eddy**
H. Abe*, K. Hanawa
Tohoku University, Sendai, Japan
Has been changed to a poster P219 P01.15/21417
- 1745 M06.36/21402 **A New Look at Stratified Shear Flow Instability**
E. Heifetz*, N. Harnik, A. Rabinovich, R. Brkan, O. Umurhan, F. Lott
Tel-Aviv University, Israel
Will be presented by N. Harnik

Cancelled / Annulations

- 0830 P05.13/21114 **Inventories of Bomb Tritium in the General Circulation Model of the North Pacific**
Y.F. Xu*, Q. Ba
Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China
- 0900 M08.15/21104 **Nargis Track Forecasts by JMA Weekly Ensemble Forecast Data**
T. Nakazawa*, R. Sakai, T. Komori
Meteorological Research Institute, Tsukuba, Japan
- 0900 P05.15/21114 **Seasonal and Interannual Variability of Sea Ice Extent in the Arctic Ocean**
A.G. Kostianoy*, A. M. Sirota, P.N. Ermakov
P.P. Shirshov Institute of Oceanology, Moscow, Russia
- 0915 M13.16/21101 **Synthetic Simulation of Aerosol-Cloud-Radiation-Precipitation Interactions with General Circulation Model**
T. Takemura*
Research Institute for Applied Mechanics, Kyushu University, Fukuoka, Japan
- 0945 P09.18/21116 **Wind Effects on Seasonal Variations of the Cross-Shelf Transport in the East China Sea**
Z.L. Liu*, D.X. Hu, D.Z. Yang
Institute Of Oceanology, Chinese Academy Of Sciences, Qingdao, China
- 1100 J17.21/21211 **Intensification of the ENSO-South Asian Summer Monsoon Interaction by a Weakened Atlantic Thermohaline Circulation**
W. Chen*, R. Lu
Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China
- 1115 J17.22/21211 **Towards Local Air-Sea Interaction in ITCZ Simulations**
A. Duan*, C.-H. Sui, G. Wu
State Key Laboratory of Numerical Modelling For Atmospheric Sciences and Geophysical Fluid Dynamics (LASG), Institute of Atmospheric Physics (IAP), Chinese Academy of Sciences (CAS), Beijing, China
- 1330 P03.7/21316 **Response of Marine Primary Production to Monsoon Variations in the South China Sea**
H. Wang*, S. Gao
National Marine Environmental Forecasting Center, SOA, Beijing, China

- 1400 M08.27/21304 **Polar Lows: High-Impact Weather at High Latitudes**
E.W. Kolstad*, T.J. Bracegirdle
Bjerknes Centre for Climate Research, Bergen, Norway
- 1445 M01.30/21303 **Stratospheric Transport in a CTM using DAS and GCM Winds: Identifying Effects**
B. Monge-Sanz*, M. Chipperfield, D. Dee, A. Simmons, S. Uppala, S. Ren, S. Polavarapu, T. Shepherd
Institute for Atmospheric Science and Climate, University of Leeds, UK
- 1715 M08.34/21404 **The Role of Dynamical Precursor Features in UK Heavy Precipitation Events**
A. Twitchett*, C. Schwierz
University of Leeds, UK
- 1715 J17.34/21411 **Impact of CO2-Induced Warming on Summer Rainfall over East Asia**
Y. Lei*, B. Hoskins, J. Slingo
University of Reading, Reading, UK

Poster Sessions / Sessions par affiches

Changes / Changements

- 1500 J065 J14.4/21417 **Snow-Air Exchange Processes at Barrow, Alaska in Spring 2009**
G. Kos*, N. Adechina, P.A. Ariya
McGill University, Department of Atmospheric and Oceanic Sciences, Montréal, Québec, Canada
will be presented by P.A. Ariya
- 1500 J004 J03.4/21417 **Human Influence on Arctic Sea Ice Detectable from Early 1990s Onwards**
S.-K. Min*, X. Zhang, F.W. Zwiers, T. Agnew
Has been moved to J364.14/24417

Cancelled / Annulations

- 1500 J067 J14.6/21417 **Drifting Snow Thresholds in the Presence of Precipitation**
K. Léonard*
Lamont-Doherty Earth Observatory of Columbia University, Palisades, New York, USA
- 1500 J092 J16.7/21417 **Recent Changes to Data Systems at the NSIDC Distributed Active Archive System (DAAC)**
R.L.S. Weaver*
National Snow and Ice Data Center, Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder, Colorado, USA
- 1500 J100 J17.5/21417 **The Effect of Eurasian Snow Cover and the SST of Arabian Sea and Bay of Bengal on the Monsoon Rainfall of Pakistan**
M.H.A. Baig*, G. Rasul
Research and Development Division (R&D), Pakistan Meteorological Department, Islamabad, Pakistan

- 1500 J107 J17.12/21417 **The Behaviors of South China Sea Summer Monsoon in IPCC AR4 CGCMs**
X. Wang*, W. Zhou
Guy Carpenter Asia-Pacific Climate Impact Centre, City University of Hong Kong, Hong Kong, China
- 1500 M187 M13.4/21417 **Dust Aerosol Detection Using PARASOL Multi-channel and Multi-directional Polarized Data**
X.H. Fan*, H.B. Chen, P. Goulob, L.F. Lin, Z.G. Han
LAGEO, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China
- 1500 J104 J17.9/21417 **The Influence of Wintertime Thermal Contrast over Asian Continent on Asian Monsoon**
H. Yan*, H. Liang, Y. Chen
Yunnan Climate Center, Kunming, China
- 1500 J002 J03.2/21417 **On the Role of Friction and Surface Fluxes of Heat and Moisture in Generating Favourable Conditions for Polar Low Developments**
T.E. Nordeng*
Norwegian Meteorological Institute, Oslo, Norway

WEDNESDAY JULY 22ND, 2009 / LE MERCREDI 22 JUILLET 2009

Oral Sessions / Sessions orales

Change / Changement

- 1100 J15.9/22208 **Seasonal Patterns of Sulphate Source Contributions to the Snowpack of a High Arctic Icefield**
V.L. Wasiuta*, A.-L. Norman, S.J. Marshall
Queen's University, Kingston, Canada
Changed to a poster presentation J404 J15.3/22417

Cancelled / Annulations

- 0900 M14.3/22102 **An Improved Geometric-Optical Model with Mutual Shadowing**
Q. He*, D.R. Lu¹
Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China
- 1345 J17.38/22311 **Effects of Aerosol and Greenhouse Gasses on the Summertime Asian Monsoon Rainfall Trend in the 20th Century**
M. Arai*, T. Miyasaka, T. Nozawa, T. Nagashima, M. Kimoto
Center for Climate System Research, University of Tokyo, Japan
- 1400 M14.15/22302 **Effects of Inhomogeneous Cloud on Radiative Distribution of Atmosphere by 3D Radiative Transfer Model Simulation**
J. Huo*, D. Lu
LAGEO, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China

- 1745 J02.12/22409 **Climate and Forecast Mode Simulations for Antarctic: Implications for Temperature and Wind - A Case Study for the Davis Station Using HIRHAM**
Y. Xin*, A. Rinke, L. Bian, K. Dethloff, C. Xiao
Chinese Academy of Meteorological Science, Beijing, China

Poster Sessions / Sessions par affiches

Cancelled / Annulations

- 1500 M547 M11.1/22417 **Using MERRA Data to Study Aerosol-Cloud Relationship under Different Meteorological Conditions**
S. Shen*, G. Leptoukh, S. Berrick, D. Ostrenga, Y.Zhang, S. Kempler
GMU/NASA GSFC, Greenbelt, USA
- 1500 J290 J02.9/22417 **Wind-Driven Polynya Dynamics with a Mass and Momentum Conserving, One-Dimensional Model**
M. A. Morales Maqueda*, A.J. Willmott, I.A. Walkington
Proudman Oceanographic Laboratory, NERC, Liverpool, UK
- 1500 J295 J02.14/22417 **Antarctic Peninsula Climate Variability and Atmospheric Circulation Change**
V. Tymofeyev*
Ukrainian Hydrometeorological Research Institute, Kiev, Ukraine

THURSDAY JULY 23RD, 2009 / LE JEUDI 23 JUILLET 2009

Panel/Audience Discussion on Geoengineering

**Panel and Audience Discussion
16:30, Thursday, 23 July 2009, Room 518ab**

Approaches to Limiting Climate Change by Deliberate Climate Modification or Enhancing Carbon Sinks

With the pace of climate change increasing and the array and magnitude of climate impacts intensifying, increasing attention is being paid to the potential for limiting the effects of anthropogenic climate change through large-scale technical means, often called geoengineering. Possible approaches include deliberately altering the Earth's radiation balance, or perturbing the carbon cycle or other biogeochemical cycles, for example via carbon sequestration. Although specific approaches have been proposed, relatively little is known about their potential effectiveness for moderating climate change and possible unintended consequences. Issues of technological feasibility are also largely unexplored. The panelists will provide an overview of the main approaches, including removing CO₂ from the atmosphere and reducing incoming solar radiation, setting the stage for questions, audience discussion, and a recommendation for framing a session at the 2011 IUGG conference in Melbourne.

Discussion Leaders:

Michael MacCracken, Climate Institute, Washington DC USA

Damon Matthews, Department of Geography, Planning and Environment , Concordia University, Montreal, Quebec, Canada

Igor Mokhov, A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences, Moscow, Russia

Convenor:

Michael MacCracken, Climate Institute, Washington DC

Oral Sessions / Sessions orales

Changes / Changements

1100 J07.3/23210 **Polar Warmth, Ice Sheet Stability, and Sea Level Rise at the Last Interglacial**

B. L. Otto-Bliesner*, N. Rosenbloom, J.T. Overpeck, S.J. Marshall, G.H. Miller
National Center for Atmospheric Research, Boulder, USA

Will be presented by S.J. Marshall

1100 J21.9/23207 **Applications of Conditional Nonlinear Optimal Perturbations to Target Observations for Tropical Cyclone Prediction**

M. Mu*, F.F. Zhou, H.L. Wang, F.H. Ge
Chinese Academy of Sciences, Beijing, China

Will be presented by F. F. Zhou

1645 P08.2/23416 **The Leeuwin Current and the Oligotrophic Marine Environment off the West Coast of Western Australia**

M. Feng*, A. Waite, P. Thompson
CSIRO Marine and Atmospheric Research, Floreat, Australia

Replaced with

1645 P08.2/23416 **Wave Control of Nearshore Macroalgal Propagule Success: The Influence of Climate**

C.L. Stevens*, D. Schiel, D. Taylor, S. Delaux, A. Kohout
National Institute for Water and Atmospheric Research (NIWA), Wellington, New Zealand

Wave Control of Nearshore Macroalgal Propagule Success: The Influence of Climate

C.L. Stevens¹, D. Schiel², D. Taylor^{2,3}, S. Delaux^{1,2}, A. Kohout⁴

¹National Institute for Water and Atmospheric Research (NIWA), Wellington, New Zealand ;

²University of Canterbury, Christchurch, New Zealand; ³Cawthron Institute, Nelson, New Zealand;

⁴National Institute for Water and Atmospheric Research (NIWA), Christchurch, New Zealand.

Climate variability will have substantial ramifications for coastal macrophyte populations and the species dependent on the habitat structures they form. Identifying the impact of climate on such species requires understanding of the interaction between physics and biology at a range of scales. A major obstacle for marine species is the transition phase between the release of propagules by reproductive adults to achieving settlement. During this dispersive phase, microscopic gametes undergo complex biological and physical interactions including fertilisation, development, transport, and for the successful few, arrival at appropriate substratum. For coastal species, these events generally occur in highly turbulent waters on topographically complex shores. Temporal scales for these processes typically range over times from seconds to hours. Here we use a combination of Lagrangian and Eulerian observational and modeling techniques to track particles and test their movement from release to encountering the boundary layer. Zygotes of NZ native species (e.g, *Hormosira banksii*, *Cystophora torulosa*, *Durvillaea antarctica*, *Sargassum sinclairii*). By varying boundary conditions it is possible to examine the role of climate change in influencing success. Here we focus on the influence of changing wave climates and coastal run-off in the New Zealand region.

Cancelled / Annulations

- 1115 J17.52/23211 **Interannual-Interdecadal Variability of South China Sea Summer Monsoon Onset**
D.X. Hu*, L.J. Yu
Institute of Oceanology, Chinese Academy of Sciences, Qingdao, China
- 1115 J21.10/23207 **Preliminary Application of CNOP Obtained by a Fast Algorithm to Identify the Sensitive Area in Targeting for Tropical Cyclone Prediction**
X. Tan*, B. Wang
LASG, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China
- 1130 J09.29/23205 **ENSO Hindcast Experiments Using a Coupled GCM**
Y. Yu*, L. Yan
LASG, Institute of Atmospheric Physics, Beijing, China
- 1130 J01.16/23208 **Sustaining Arctic and Southern Ocean Observing Systems as Legacies of the International Polar Year**
K. Alverson*
Intergovernmental Oceanographic Commission, Paris, France
- 1400 J13.21/23301 **Inverse Modeling of Methane Flux Using Ground- And Space-Based Measurements**
L. Neef*, M. van Weele, P. van Velthoven
Royal Dutch Meteorological Institute, De Bilt, The Netherlands
- 1430 P10.17/233315 **Variability of the Oceanic Heat Transport in the Subtropical and Subpolar Gyre**
S. Hüttl-Kabus*, M. Rhein
Institut Für Umweltphysik, Universität Bremen, Bremen, Germany
- 1445 P10.18/23315 **Spacebased Observation of Atlantic Meridional Heat Transport**
W. T. Liu*, X. Xie
Jet Propulsion Laboratory, - Caltech, USA
- 1630 J02.19/23406 **The Effects of Tides on Dense Water Formation in Arctic Shelf Seas**
M. A. Morales Maqueda*, C.F. Postlethwaite, G.R. Tattersall, J. Holt, A.J. Willmott
Proudman Oceanographic Laboratory, NERC, Liverpool, UK
- 1730 J17.65/23411 **Monsoon Moisture Transport and Precipitation Jump in Sahel**
W. T. Liu*, X. Xie
Jet Propulsion Laboratory, - Caltech, USA

Poster Sessions / Sessions par affiches

Changes / Changements

- 1500 C488 C04.6/23417 **Updating Ice Inventories in Glaciers of Central and Southern Chilean Andes**
F. Bown*, A. Rivera, P. Zenteno, C. Bravo
Centro De Estudios Científicos (CECS), Valdivia, Chile
Will be presented by Gino Casassa

- 1500 J348 J09.14/23417 **A Large-Scale Dynamical Analysis of Global Climate Anomalies in Winter 2007-08**
 F. Hosseinpour*, A. Mohebalhojeh, F. Ahmadigivi, E. Erfani
 Institute of Geophysics, University of Tehran, Tehran, Iran
Will be presented by F. Ahmadigivi

Cancelled / Annulations

- 1500 J406 J17.1/23417 **Classification of the African Monsoon Dynamics in the Holocene**
 W.P. Zheng*, P. Braconnot
 Laboratoire des Sciences du Climat et de l'Environnement, Gif-sur-Yvette, France
- 1500 J421 J17.16/23417 **Reinvestigations on East Asian Subtropical Monsoon and Tropical Monsoon**
 L. Qi*, J. He
 Nanjing University of Information Science and Technology, Jiangsu, China
- 1500 M556 M12.4/23417 **Microphysics in a Stratiform Cloud and Possible Mechanisms for the Production of High Ice and Raindrop Concentrations**
 Z. Hu*, H. Lei, T. Hou, Z. Shen
 Laboratory of Cloud Precipitation Physics and Sever Storms (LACS), Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China
- 1500 C503 C04.21/23417 **The Glacier Recession in the Sierra Nevada de Merida. Venezuelan Western Retroceso Glaciar en la Sierra Nevada de Mérida. Occidente de Venezuela**
 O.A. Guerrero*, G. Guerrero C., L.J. Quintero D., O. Guerrero C.
 Universidad de los Andes, Mérida, Venezuela
- 1500 C495 C04.13/23417 **A Mountain Glacier Scheme and Its Preliminary Application in China**
 D.Y. Ji*, Y.J. Dai
 State Key Laboratory of Earth Surface Processes and Resource Ecology, Beijing Normal University, Beijing, China
- 1500 C496 C04.14/23417 **A Distributed Surface Energy-Balance Model for Complex Topography and Its Application to Qiyi Glacier in Qilian Mountains, China during the Ablation Season**
 X. Jiang*, N.L. Wang, J.Q. He, X.B. Wu
 Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences, Lanzhou, China

FRIDAY JULY 24TH, 2009 / LE VENDREDI 24 JUILLET 2009

Session Chair Modification

- 0830-1000 Session: Effects of Climate Variability on Nearshore Coastal Environments: Physical, Geomorphologic and Biological Interactions
Chair: Bo Gustafsson
- 1630-1800 Session: Wind Storms and Droughts
Chair: Colin Price

1630-1800 Session: Constituents
Chair: Ivanka Stajner and William Lahoz

Oral Sessions / Sessions orales

Changes / Changements

- 0830 J19.19/24109 **A Climate Feedback between Tropical Cyclones and Ocean Circulation: Do Climate Models Underestimate Changes in the Tropics in a Warmer World?**
C.M. Brierley*, A.V. Fedorov
Yale University, New Haven, USA
Will be presented by A.V. Fedorov
- 0915 P02.10/24116 **Biological Influence on Mud Deposition under Wave Action on a Mud-Salt Marsh Interface (Bahía Blanca Estuary, Argentina)**
G.M.E. Perillo*, P.D. Pratolongo, M.C. Piccolo, M.M. Perillo
Instituto Argentino de Oceanografía (CONICET - UNS), Bahia Blanca, Argentina
Changed to a poster – now at P575 P02.7 – will be presented by E. Garibotti
- 0930 P02.11/24116 **Lack of Migration of Acartia tonsa in an Homogeneous Temperate Estuary (Bahía Blanca, Argentina)**
M.C. Piccolo*, E.J. Garibotti, P.M. Cervellini
Instituto Argentino de Oceanografía, Bahia Blanca, Argentina
will be presented by E. Garibotti
- 1345 J18.8/24311 **Climate Extremes in the Mediterranean Region**
P. Lionello*, R.-F. Garcia-Herrera
University of Salento, Lecce, Italy
- Replaced with**
- 1345 J18.8/24311 **Now-casting Lightning Clusters in the Mediterranean Region using WDSS-II**
C. Price*, M. Kohn, E. Galanti, K. Lagouvardos, V. Kotroni
Tel Aviv University, Tel-Aviv, Israel

Cancelled / Annulations

- 1045 C04.26/24213 **Geodetic Determination of Volumetric Changes and Comparison with In-situ Mass Balance Measurements at Storglaciären, Sweden**
M. Zemp*, I. Gärnler-Roer, W. Haeberli, P. Holmlund, P. Jansson, P. Thee, T. Koblet
University of Zurich, Switzerland
- 1330 J19.31/24309 **Distribution and Intensity of Convection in Tropical Cyclones in Global Basins as Seen from TRMM**
H. Jiang*, E.J. Zipser
University of Utah, Salt Lake City, UT, USA
- 1400 J21.39/24307 **ADM-Aeolus Vertical Sampling Strategy for Stratospheric Wind Analysis**
H. Körnich
University of Stockholm, Sweden

- 1415 J19.34/24309 **Observation and Simulation of the Genesis of Typhoon Fengshen (2008) in the Tropical Western Pacific**
H. Yamada*, W. Yanase, R. Shirooka, K. Yoneyama, M. Satoh, M. Yoshizaki
Japan Agency for Marine-Earth Science and Technology, Yokosuka, Japan
- 1715 J11.28/24410 **How Well do Atmospheric General Circulation Models Capture the Leading Modes of the Interannual Variability of Asian-Australian Monsoon?**
B. Wu*, T. Zhou, B. Wang
Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China
- 1715 J21.46/24407 **Inverse Modeling of Methane Emissions Using 4D-Var**
L. Neef*
Royal Dutch Meteorological Institute, De Bilt, The Netherlands

Poster Sessions / Sessions par affiches

Additional / Supplémentaire

- 1500 J458 J21.6 / 24417 **ADM-Aeolus Vertical Sampling Strategy for Stratospheric Wind Analysis**
H. Körnich*
University of Stockholm, Sweden

Change / Changement

- 1500 J437 J18.9/24417 **Estimation of Extreme Wind Speeds in the Mixed Strong Wind Climate of South Africa**
A.C. Kruger*, S. Sekele, A.M. Goliger, J.V. Retief
South African Weather Service, Pretoria, South Africa
Will be presented by C.J.C. Reason
- 1500 P569 P02.1/24417 **Preliminary Analysis of the Temperature Variability in the Bahía Blanca Estuary, Argentina**
M.C. Piccolo*, D. Beigt
Will be presented by E. Garibotti
- 1500 P570 P02.2/24417 **Effect of Vegetation on a Summer Heat Balance in an Argentine Coastal Wetland**
M.C. Piccolo*, A. Vitale, G.M.E. Perillo, C. Delrieux
Will be presented by E. Garibotti

Cancelled / Annulations

- 1500 M541 M05.10/24417 **Stratospheric Precursors of Cold Air Outbreaks**
E.W. Kolstad*, T. Breiteig, A.A. Scaife
Bjerknes Centre for Climate Research, Bergen, Norway

MONDAY JULY 27TH, 2009 / LE LUNDI 27 JUILLET 2009

Oral Sessions / Sessions orales

Additional author

- 0830 M17.1/27105 Geographical Variations of Lightning Characteristics
O. Pinto Jr.* **S.A. De Melo Garcia**
Brazilian Institute of Space Research, S.J. Campos, Brazil

Cancelled / Annulations

- 0930 M10.5/27103 **Global Tropical-Extratropical Teleconnection during the Northern Hemisphere Summer: Observational Analysis**
B. Wang*, Q. Ding
University of Hawaii at Manoa, Honolulu, USA
- 1345 M15.8/27304 **Model Analysis of Fine Particle Pollution in Beijing during the 2008 Olympic Games**
M. Zhang*, L. Zhu, Y. Wang, W. Liu
LAPC, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China

Poster Sessions / Sessions par affiches

Cancelled / Annulations

- 1500 M741 M17.7/27417 **A New VLF-VHF Dual Band Lightning Detection and Location System in China and the Preliminary Results**
W. S. Dong*, Y.J. Zhang, T. Wang, H.Y. Liu
Laboratory of Lightning Physics and Protection Engineering, Chinese Academy of Meteorological Sciences, Beijing, China
- 1500 M701 M15.12/27417 **Evolution of the GAW/METEO-FRANCE Network**
A. Mezdour*, C. Thibord, J. Duvernoy
METEO FRANCE/Direction Des Systèmes D'Observation, Trappes, France

TUESDAY JULY 28TH, 2009 / LE MARDI 28 JUILLET 2009

Oral Sessions / Sessions orales

Additional author

- 1045 M16.8/28205 **Lightning Activity in the 50 Years as Inferred from Thunderstorm Day Data**
I.R.C.A. Pinto*, O. Pinto Jr., **S.A. De Melo Garcia**
Brazilian Institute of Space Research, S.J. Campos, Brazil

Change / Changement

- 1430 M02.41/28301 **Poster Introduction I by Laura Pan**
L.L. Pan*
NCAR, USA
- 1445 M02.42/28302 **Poster Introduction II by Laura Pan**
L.L. Pan*
NCAR, USA

Cancelled / Annulations

- 0915 M16.4/28105 **Observations of Lightning and Radar Characteristics of Thunderstorms in the South of Brazil During the Warm Season - Preliminary Results**
C. Beneti*, A.J. Pereira Filho, L. Calvetti, M. Jusevicius
SIMEPAR Technological Institute, Curitiba, Brazil
- 1030 M10.31/28203 **Interannual Climate Variability in the South-Eastern Tropical Pacific and its Relation with ENSO**
T. Toniazzo*
NCAS-Climate, University of Reading, UK
- 1430 M16.17/28305 **The Regional Distribution of Tropospheric NO₂ Column Density over Northern China**
P. Wang*, H. Yu, X. Zong, X. Li, D. Lu,
LAGEO, Institute of Atmospheric Physics, Chinese Academy of Sciences, China
- 1645 M16.20/28305 **First Results of Sprites, Lightning Activities and Thunderstorms in Chinese Mainland**
J. Yang*, X. Qie, G. Zhang
Key Laboratory of Middle Atmosphere and Global Environment Observation (LAGEO),
Institute of Atmospheric Physics, Chinese Academy of Sciences, China
- 1730 M10.47/28403 **Role of Subtropical Precipitation Anomalies in Maintaining the Summertime Meridional Teleconnection over the Western North Pacific and East Asia**
R. Lu*, Z. Lin
Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China

Poster Sessions / Sessions par affiches

Cancelled / Annulation

- 1500 M728 M16.1/28417 **Numerical Simulation of Tornadogenesis in a Realistic Condition: Importance of Near-Surface Conditions**
K. Shimose*, T. Kawano
Kyushu University, Fukuoka, Japan
- 1500 M725 M16.4/28417 **Thunderstorm Observation in the Metropolitan Area of São Paulo: Warm Season 2004-2008**
R.B.B. Gin*, A.J. Pereira Filho, C.A. Beneti, M. Jusevicius
University of FEI, São Paulo, Brazil

WEDNESDAY JULY 29TH, 2009 / LE MERCREDI 29 JUILLET 2009

Oral Sessions / Sessions orales

Change / Changement

- 1745 M09.24/29405 **A Case Study of the Interaction of Mid-tropospheric Vortices in the Caspian Sea and Alborz Mountains in 2007-2008 Winter**
E. Erfani*, A. Mohebalhojeh, M.M. Farahani, F. Hosseinpour
Will be presented by M. M. Farahani

Cancelled / Annulations

- 0900 M10.51/29103 **Interdecadal Change in Circulation Anomalies Associated with the Meridional Displacement of the East Asian Jet Stream in June**
Z. Lin*, R. Lu, W. Zhou
Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China
- 0830 M15.43/29104 **The Effect of Atmospheric Brown Clouds (ABC) on the Radiative Balance of the East Rongbuk Glacier (ERG) on the Northern Slope of the Himalayas**
J. Ming*, C. Xiao, D. Qin
National Climate Center, China Meteorological Administration, Beijing, China

Poster Sessions / Sessions par affiches

Cancelled / Annulations

- 1500 M665 M09.2/29417 **Investigation of Beech Growth in Different Elevation Levels with the Climatic Changes Trend in Northern mountain forests of Iran (Case study: Asalem basin)**
Eslami*, M. Rroshani
College of Agriculture, Islamic Azad University, Rasht, Iran
- 1500 M673 M09.10/29417 **Reliability of NCEP/NCAR Reanalysis Temperature in the Zhongshan Station-Dome a Region**
A. Xie*, C. Xiao, J. Ren
State Key Laboratory of Cryospheric Sciences, Cold and Arid Regions Environment and Engineering Research Institute, CAS, China

Other Related Meetings and Events Additions

Event Title: International Commission on Dynamical Meteorology

Open to: Members of ICDM and other invitees

When: Wednesday 22 July from 10.30 am to 12.30 pm

Where: Palais des congrès de Montréal, Room 522b

Contact: Richard Swinbank (richard.swinbank@metoffice.go.uk)

Description: Regular biennial business meeting

Event Title: IACS Plenary

Open to: IACS members and all interested

When: Thursday, July 23 2009 from 1200 – 13:30

Where: Palais des congrès de Montréal, Room 516b

Contact: Manfred Lange (m.a.lange@cyi.ac.cy)

Description: The IACS Plenary session is the formal assembly that gives members of the Association the opportunity to influence and direct the activities and plans of IACS for the next 2 years. All persons engaging in scientific research on the cryosphere, or otherwise contributing to the objectives of the Association are warmly invited to attend. All scientific participants are entitled to vote on matters of scientific purpose of the Association. Decisions on matters of administration and finance will be determined by votes from accredited delegates as outlined in the Statutes of the Association (www.cryosphericsscience.org). The Plenary will include a report from the President, and the changeover of President from Georg Kaser to Ian Allison.

Other Related Meetings and Events Changes

Please note that for the First IAMAS Executive Committee (EC) Meeting, scheduled for Monday July 20th - ***time has been changed from 1515 to 1745pm and the room is now 522b.***

Please note that the ICMA Meeting, scheduled for Thursday July 23rd, - ***room number has been changed to 522b.***

Additional Exhibitor – Exposant supplémentaire

World Meteorological Organization - Booth 101



The World Meteorological Organization coordinates the research activities of partners in 188 countries. A priority is environmental prediction in the next decade; bringing observations and weather-climate predictions together to assess and avoid risks related to weather, climate, water and environment. In 2009, it hosts World Climate Conference 3. <http://www.wmo.int>

L'Organisation météorologique mondiale coordonne les activités de recherche de partenaires dans 188 pays. Les prévisions environnementales constituent l'une des priorités de la prochaine décennie; il s'agit de réunir les observations et les prévisions climatiques afin d'évaluer et d'éviter les risques liés à la température, au climat, à l'eau et à l'environnement. En 2009, l'OMM tiendra la Conférence mondiale sur le climat 3. <http://www.wmo.int>

Additional Partner – Partenaire supplémentaire

Montréal Science Centre



The **Montréal Science Centre** helps visitors of all ages acquire an understanding of science and technology for use in building their future. It highlights and explains recent Canadian innovations and inventions both within the exhibition halls and in its public areas to show them off and make visitors more aware of the know-how of our local industries.

Le **Centre des sciences de Montréal** contribue à ce que chaque individu devienne capable de s'approprier les sciences et technologies pour construire son avenir. Tant à l'intérieur des salles d'expositions que dans les lieux publics du Centre, les innovations et inventions canadiennes récentes sont mises en valeur et expliquées afin de les faire connaître aux visiteurs et de sensibiliser ceux-ci au savoir-faire des industries d'ici.

Exhibit Hours – Horaire de l'exposition

Monday July 20 15:00-18:00	
Le lundi 20 juillet	15 h – 18 h
Tuesday July 21	10:00-18:00
Le mardi 21 juillet	10h- 18 h
Wednesday July 22	10:00-18:00
Le mercredi 22 juillet	10 h – 18 h