Events

26-03-2019 to 26-03-2019

Catherine Kissel receives the EGU 2019 Petrus Peregrinus Medal

The 2019 Petrus Peregrinus Medal is awarded to Catherine Kissel for outstanding contributions in palaeomagnetism, applied to understanding the Earth?s magnetic field, palaeoclimate, palaeoceanography and the geodynamic evolution of the Mediterranean margins.

Catherine Kissel

Catherine Kissel?s accomplishments span a broad spectrum of applications of palaeomagnetism and rock magnetism to studies in tectonophysics, geomagnetic field behavior, palaeoceanography and palaeoclimate.

She provided a new interpretation of the evolution of the subduction zone in the Eastern Mediterranean, inspiring a generation of structural geologists. She showed that the curvature of the Aegean arc was a rapid and geologically recent process related to the geodynamic evolution of the ionian subduction zone.

She also investigated the evolution of Earth?s magnetic field during the Late Pleistocene and Holocene. She contributed fundamental studies of magnetic excursions,
especially on the Laschamp event, which has become a key marker in sediments and ice cores.

Kissel then undertook pioneering studies of magnetic properties of marine sediments to characterise variations in ocean currents and the climate of the past. She was able to reveal the provenance of sediments in the South China Sea and in the North Atlantic. She showed, from the analysis of the bulk magnetic properties of deep sea cores, that fast climatic changes are related

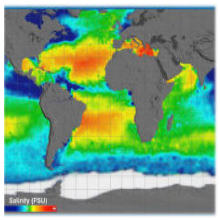
to coeval changes in the deep-sea circulation. She also used the magnetic properties of sediments in the Bay of Bengal to describe how erosion in the Himalaya changed with time and to obtain insight about palaeo-monsoons.

She has led several large international and interdisciplinary collaborations focused on palaeo-environmental reconstructions, while at the same time advancing new applications of magnetic mineralogy and palaeomagnetism. These collaborations have spanned a dozen oceanographic cruises as project scientist and often chief scientist, over the last two decades.

Because of her wide range of key contributions in palaeomagnetism, geodynamics, paaleoceanography and palaeoclimate, Catherine Kissel is a superb recipient of the Petrus Peregrinus Medal.

The Petrus Peregrinus Medal was established by the Earth Magnetism & Rock Physics Division in recognition of the scientific achievements of Petrus Peregrinus. It is awarded for outstanding scientific contributions in the fields of magnetism and palaeomagnetism.

Source : EGU



05-11-2018 to 09-11-2018

2018 Ocean Salinity Science Conference

Background

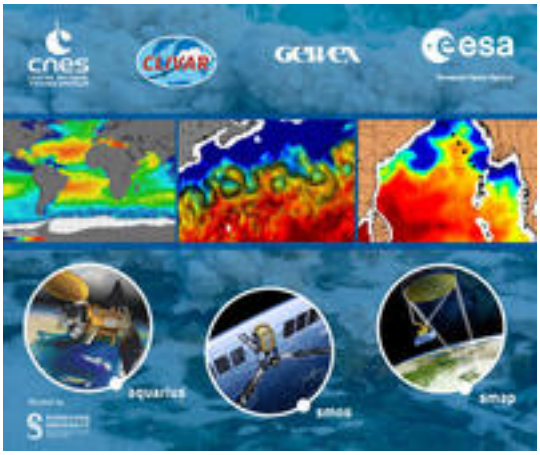
Ocean salinity is a key parameter that links various elements of the water cycle to ocean circulation dynamics and climate. Furthermore, salinity is a key dynamical parameter that influences oceans dynamics. Through the advent of new observing technologies, remote sensing and in situ, salinity research has gained much attention over the recent years, now leading to rapidly growing new insights. The conference intends to bring together communities working on all aspects of ocean salinity investigations, including analyses undertaken from in situ and satellite observations, numerical models, and data assimilation. This will review most recent results and discuss further progress that is required.

Meeting Objectives

The conference will review progress and ongoing work and will identify next frontiers in the fields of ocean salinity and freshwater cycle science.

In doing so it will focus on recent progress in:
1. Observing ocean salinity
2. Process-based insights from field observations
3. Role of salinity in ocean dynamics
4. Role of salinity in the global freshwater cycle and climate variability
5. Role of salinity in biogeochemistry
6. Aspects of surface freshwater fluxes, run off, and sea ice.
7. Challenges of future salinity observing, remote sensing and in situ.

See more



27-09-2018

Jan Polcher becomes GEWEX SSG new Co-Chair

Jan Polcher becomes Group du Global Energy and Water Exchanges (GEWEX) Scientific Steering Group new Co-Chair.

Jan Polcher

Dr. Polcher is Directeur de Recherche at the Centre National de la Recherche Scientifique (CNRS) and works at the Laboratoire de Météorologie Dynamique (LMD), part of the Institut Pierre Simon Laplace (IPSL) in Paris. He studied oceanography and theoretical physics in the1980?s in Kiel, Germany. He then moved to Paris to complete a Ph.D.under the supervision of Katia Laval at LMD in 1993. Since then, his main interest lies in climate modeling of the water cycle, particularly land surface processes and their interactions with the atmosphere. He is one of the founding members of the Organizing Carbon and Hydrology in Dynamic Ecosystems (ORCHIDEE) land-surface model at IPSL and continues to participate in its development. Land-surface modeling was also the reason for his initial involvement in GEWEX, where he led the creation of the Global Land/Atmosphere System Study (GLASS) Panel panel in 1999.

In 2003, Dr. Polcher focused on regional climate problems with the African Monsoon and Multidisciplinary Analyses (AMMA) project. He coordinated the project, which gathered 37 European and 22 African institutions around the objective of enhancing our understanding of the West African Monsoon. AMMA also served to empower the African research community to participate in research on climate change. As chair of the GEWEX Hydroclimatology Panel (GHP), he continued to pursue that aim of enabling com-munities around the world to come together around regional studies of the water cycle and its sensitivity to climate change by encouraging new regional hydroclimate projects.

In the last few years, he has reunited his passion for modeling with his interest in regional water cycle issues by leading the effort at IPSL to develop a regional climate model based on the same components as those used for the global Earthsystem model. This effort is currently centered on the Mediterranean region and contributes to the Hydrological Cycle in the Mediterranean Experiment (HyMeX) project. As this region?s water cycle is equally controlled by climate fluctuations and human water usage, Dr. Polcher is taking a keen interest in including anthropogenic processes in land surface models. This led him to accept the cochair position for the WCRP Grand Challenge on Water for the Food Baskets ofthe World.

Throughout his career, Dr. Polcher has coordinated a number of research projects funded by French and European agencies, supervised or co-supervised 12 Ph.D. theses, and authored or co-authored over 100 papers

Read more :

GEWEX NewsLetter

GEWEX Scientific Steering Group

Source : GEWEX

08-09-2014 to 12-09-2014

Workshop IEEE 2014

The first international workshop on "Space-based Lidar Remote Sensing Techniques and Emerging Technologies will be held in from **8 to 12 september** 2014 in Paris and vicinity.

The intent of this workshop is to offer a venue and create a framework where scientists and technologists from different coutnries, government agencies, industris and universities can meet and discuss important issues related to current and planned space lidar missions, techniques and associated emerging and enabling technologies. It will also be an opportunity to discuss challenges and common issues, and explore ways to increase collaboration among the space-agencies and organisations to enhance future active space-based remote sensing measurements.

Registration is open until 3**1 July 2014**.

All information concerning the workshop on this site : http://ieee-2014.sciencesconf.org/

Première circulaire IEEE 2014

18-03-2014 to 18-03-2014

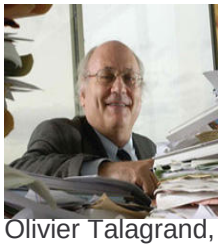
François Forget, recipient of EGU David Bates 2014 medal

François Forget, research director at Laboratoire de Météorologie Dynamqiue, is the rrecipient of the David Bates 2014 medal for his leadership in planetary climate modelling, his contributions to improving global climate models and for establishing the first quantitative framework for comparative planetology.

This medal is reserved for scientists for their exceptional contributions to planetary and solar system sciences.

François Forget

More



18-03-2014 to 18-03-2014

Olivier Talagrand, recipient of EGU Lewis Fry Richardson 2014 medal

Olivier Talagrand, emeritus researcher at Laboratoire de Météorologie Dynamique, is the recipient of Lewis Fry Richardson 2014 medal, for the development of data assimilation techniques, in particular the theoretical formulation of the adjoint method, and the implementation of these techniques in various applications in meteorology, climate and operational weather forecasts.

This medal is reserved for scientists for their exceptional contributions to nonlinear geosciences in general.

Olivier Talagrand

More

16-10-2013 to 18-10-2013

First Workshop on Water Vapor Isotopes

Presentations :

Topic 1 : Surface water vapor measurements & data distribution

Eric Kerstel: Water vapor isotope ratio measurements at low water concentration by means of optical feedback cavity enhanced spectroscopy
Eric Kerstel

Doug Baer : Recent advances in instrumentation for continuous measurements of isotopic water vapor
Doug Baer

Kate Dennis : Utilizing cavity ring-down spectroscopy for high -precision analysis of the triple oxygen isotopic composition of water and water vapor
Kate Dennis

Vladislav Bastrikov : Web database for publishing and sharing water vapor isotopes monitoring data
Vladislav Bastrikov

Topic 2 : Evaporation and oceanic moisture sources

Hans Christian Steen-Larsen : What controls the water vapor isotopic composition of the marine boundary layer ?
Hans Christian Steen-Larsen

Harald Sodemann : To what extend do we understand the moisture source imprint conveyed by isotopic parameters?
Harald Sodemann

Arny Sveinbjörnsdottier : Issues with isotope-enabled General Circulation Model?s ability to simulate observed water vapor isotopic composition in Iceland
Arny Sveinbjörnsdottier & H-C Steen?Larsen

Chun-Ta Lai : Influence of winter storms and Santa Ana winds on the isotopic composition of near-surface atmospheric moisture in San Diego, USA
Chun-Ta Lai

Minghu Ding & Jingfeng Liu : Latitudinal variation of atmospheric water vapor isotopic composition along the Chinese-Antarctica transect (31N-69S) and its significance on the water cycle

Topic 3 : Atmospheric water vapor transport

Xuhui Lee : A large-eddy simulation study of water vapor isotopes in the atmospheric boundary layer
Xuhui Lee

Marion Benetti : Stable isotopes of water vapor during the STRASSE cruise in the sub-tropical North Atlantic. Atmospheric boundary layer composition in relation to local evaporation.

Jean-Louis Bonne : Isotopic observations of water vapour and precipitation in Ivittuut, Southern Greenland
Jean-Louis Bonne

Martin Butzin & Martin Werner : Water vapour isotope monitoring at Kourovka Observatory (Western Siberia), a model-data comparison
Martin Butzin & Martin Werner

Gabriel Bowen : Mapping atmospheric water transport with water and water vapor isotopes
Gabriel Bowen

Samuel Jonson Sutanto : Hydrologic processes governing the changes in isotopic composition of water vapor during ENSO events

Atsushi Okazaki : Interannual variability of ?18
O of water vapor in West Africa and its relation to ENSO
Atsushi Okazaki

Obbe Tuinen : Added value of using IASI q and ?D data to constrain LMDZ processes during different MJO phases and different degrees of convection
Obbe Tuinenburg

Jesper Sjolte : Open questions about deuterium excess: the annual cycle in models and ice cores
Jesper Sjolte

Jing Gao : The controls of precipitation ?18
O in the southern Tibetan Plateau
Jing Gao

Jung-Eun Lee : Stable isotopes over East Asia: modeling and data
Jung-Eun Lee

Topic 4 : Atmospheric water vapor isotopes and interactions with the biosphere

Max Berkelhammer : The nocturnal water cycle in an open-canopy forest elucidated through continuous measurements of the isotopic composition of water vapor
Max Berkelhammer

Christiane Werner : On-line water vapor and chamber based ?18
O measurements to partition evapotranspiration and testing the Craig-Gordon equation in a semi-arid environment
Christiane Werner

Cynthia Gerlein : Isotopic equilibrium between precipitation and water vapor: evidence from continental rains in central Kenya

Topic 5 : Remote sensing of water vapor isotopes in the atmosphere

Matthias Schneider : Do we understand tropospheric ?D remote sensing products? Examples for NDACC/FTIR and METOP/IASI
Matthias Schneider

Cyrille Flamant : Can concentration profiles of water vapour isotopes be measured in the lower troposphere using a differential absorption lidar?

Vyacheslav Zakharov : Regarding retrieval of columnar ?D and ?18
O in the atmosphere from ground-based FTIR spectral measurements in near IR

Jean-Lionel Lacour : ?D observations from IASI/MetOp: retrieval strategy, results across the globe and comparisons with other measurements/instruments
Jean-Lionel Lacour

Topic 6 : Water vapor isotopes and clouds

Elisabeth Moyer : Water isotopic measurements for cloud microphysical studies

Peter Blossey : Clarifying the Amount Effect
Peter Blossey

Camille Risi : The added value of tropospheric water vapor isotopic measurements for process-oriented evaluation of convective and cloud processes in climate models
Camille Risi

David Noone : Signatures of microphysics and transport processes from measurements of isotope ratios in clouds.

Topic 7 : New methods for comparing observations and simulations

Kei Yoshimura : Isotope data assimilations: Possibility and problems to be solved

Amaelle Landais : The added value of 17
O_{excess} measurements in understanding cloud processes
Amaëlle Landais

Martin Werner : Simulated present-day trends and variability of water vapour isotopes

Click on the photo to see the photo album

Download the program

Download the summary of the workshop

26-11-2012 to 28-11-2012

Workshop : "From the stratosphere to the ionosphere: coupling, boundary conditions and assumptions"

Solar radiation is the main source of input energy to the terrestrial atmosphere and, as such, it determines the Earth?s radiative balance and climate. There are multiple evidences showing how variations in the intensity of incident solar radiation at different wavelengths may affect all the layers of the atmosphere and the climate on annual, decadal and millennial timescales. Therefore, there is a strong scientific interest in developing climate models that properly describe all aspects of the solar forcing by also including the thermosphere and ionosphere, where solar UV flux and solar wind energy are essentially deposited.

However, the description of the terrestrial atmosphere from the surface up to the thermosphere and ionosphere is a very complex problem when dealing with the solar forcing on the climate. Thanks to numerous new observations and recent progress in our understanding of how the thermosphere/ionosphere reacts to solar forcing, several models have recently improved the description of the middle and upper atmosphere.

This workshop aims at comparing current numerical models for the middle and upper atmospheres and, in the light of the observations, identifying key issues, lacks and roads for future improvement.

Several leading specialists in the field will attend this workshop and describe their approach,

present the difficulties, and discuss solutions. The programme will cover various aspects such as the ion-neutral chemistry, radiative transfer (linear and non-linear), the dynamic coupling between the stratosphere and the upper atmosphere, the EUV/UV solar flux (description and variability), its interaction with the upper atmosphere (heating and ionization), geomagnetic forcing induced by the solar wind variability and its interaction with the magnetosphere, energetic particle precipitation in the auroral regions and all the observations that could help to constrain these elements.

The goals of this workshop are to highlight the critical issues in model developments, discuss the choices that were made and foster collaborations between different teams.

The program outline is

1. Description of the solar radiative input**(Convener: T. Dudok de Wit)**

Invited speakers : N. Krivova, G. Cessateur, I. Usoskin

2. Modelling solar forcing from the surface to the upper atmosphere (Conveners: S. Bekki, P. Keckhut, A. Hauchecorne)

Invited speakers : S. Melo, A. Seppälä, E. Rozanov, H. Schmidt, F. Forget, A. Hauchecorne, A. Marchaudon, G. Thuiller, K. Semeniuk

3. Radiative transfer and chemistry (Conveners: M. Marchand, F.Lefèvre).

Invited speakers : M. Lopez-Puertas, D. Marsh, M. Sinnhuber,P. Verronen

Contributions to this workshop are welcome up to October 31. Interested scientists should contact the conveners:

Contacts :

T. Dudok De Wit (LPC2e)

S. Bekki (LATMOS)

P. Keckhut (LATMOS)

A. Hauchecorne (LATMOS)

M. Marchand (LATMOS)

F. Lefèvre (LATMOS)

Or the organizers: François Leblanc (LATMOS) and Jean Lilensten (Laboratoire de Planétologie de Grenoble).

Website: http://strattoionwork.sciencesconf.org/

This workshop is supported by the French Solar-Terrestrial Programme (PNST) and by COST Action ES1005 (TOSCA).

29-03-2012 to 29-03-2012

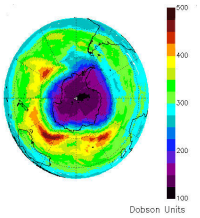
Naomi ORESKES Seminar - "Marchands de doute"

Professor of history on science studies at University of California in San Diego, Naomi Oreskes is the author, together with Erik Conway, of the book "Merchants of doubt". During the seminar she will focus on the strategy that industrials and some american scientists have been developing since the 1960's to mislead the public and deny weel-established scientific knowledge : tobacco and lung cancer, the ozone hole and CFC emissions, acid rains and coal smokes, global warming and the use of fossil resources, etc.

This seminar will take place on **Thursday, March 29, from 11:00 am to 1:00 pm** in Amphitheatre 15, just beside tower 15 (see map) at Université Pierre et Marie Curie, Campus Jussieu, (4 place Jussieu, Paris 5e) métro Jussieu.

- ***This seminar will be presented in English.***
- ***Free access, no reservation required.***

Download the poster



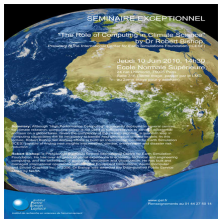
16-09-2011 to 16-09-2011

The 2011 Ozone day

In 1994, United Nations declared September 16 was "the international day for the preservation of the ozone layer" or "Ozone Day". September 16 is the date when the Montreal protocol, related to substances that deplete the ozone layer, was signed, back in 1987. On this occasion, the United Nations Environment Programme (UNEP) broadcasts a short film explaining the history and the science of the ozone layer and actions undertaken to fight this major environmental threat and its drawbacks on the ozone layer and Earth climatic system.

Read UNEP press release

Watch the film (16 min 30)



10-06-2010 to 10-06-2010

Seminar "The role of computing in climate science"

Special Seminar

"The role of computing in climate science"

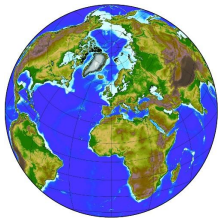
by **Dr. Robert Bishop,** President of the International Center for Earth Simulations Foundation (ICESF)

Thursday, June 10th, 2010 at 2:30 pm at Ecole normale supérieure, 24 rue Lhomond, 75005 Paris, Room 316 (to get there, go through LMD on 1st floor and then go up to the 2nd floor)

Summary: Although ?High Performance Computing? is currently deployed in several centres for climate research, computing power is not used at sufficient levels to achieve substantial success on a global basis. Given the complexity of the climate problem, a quantum leap in computing capabilities will be necessary to handle next-generation climate models. In this lecture, Robert Bishop will discuss efforts to build an International Centre for Earth Simulation (ICES) capable of finding new insights into weather, climate, environment and disaster risk reduction.

Robert Bishop: is President of the newly formed International Centre for Earth Simulation Foundation. He has over 40 years of global experience in scientific, technical and engineering

computing, and the techniques of modelling, simulation and visualization. He has built and managed international operations within Digital Equipment Corporation, Apollo Computer and Silicon Graphics Inc. In 2006, Dr Bishop was awarded the Distinguished Public Service Medal by NASA.



30-05-2010 to 06-06-2010

NICE Spring school

Within the framework of the Research Training Network "Network for Ice sheet and Climate Evolution (NICE)", LSCE organizes the Giens Spring school

Climate changes: Improving our communication about climate change science, impacts, costs and adaptation

This school will take place on the **Presqu'île de Giens, in Hyères (France)**, **from Sunday May 30th to Sunday June 6th, 2010**

The school will focus on:
1. What are the impacts of climate chang
2. How climate changes are presented in the media
3. How it is possible to make our scientific results understood by a larger audience
4. Adaptation and integrated approaches
5. Economic consequences.

This school is aimed at an international and broad audience: all the interested people (scientists and non scientists, PhD students, post-docs and permanent researchers) are invited to register.
See the **school site** and **practical details**
Please return your registration form by email to Céline Moncourtois (nice-register @ lsce.ipsl.fr) by Friday May 7th, 2010

16-09-2009

Ozone Press realease

Twenty two years after the signing of the Montreal protocol, the ozone layer has stabilized but a large Antarctic ozone hole continues to occur on a yearly basis.

IO3C Ozone Presse release

01-01-2009

New IPSL organisation (from January 1st, 2009)

Direction team

Director:

Hervé Le Treut, herve.letreut @ ipsl.jussieu.fr

Deputy directors:

Philippe Bousquet, philippe.bousquet @ lsce.ipsl.fr

Jean-Louis Dufresne, jean-louis.dufresne @ lmd.jussieu.fr

Philippe Keckhut, philippe.keckhut @ latmos.ipsl.fr

Laboratories

- **LATMOS** (Laboratoire Atmosphères, Milieux, Observations Spatiales), né de la fusion entre le Centre d'étude des environnements terrestre et planétaires (CETP) et le Service d'aéronomie (SA) ;
- **LISA** (Laboratoire Inter-universitaire des Systèmes Atmosphériques)

- **LMD** (Laboratoire de météorologie dynamique)
- **LOCEAN** (Laboratoire d'Océanographie et du Climat : Expérimentation et Approches Numériques)
- **LPMAA** (Laboratoire de Physique Moléculaire pour l'Atmosphère et l'Astrophysique)
- **LSCE** (Laboratoire des sciences du climat et de l'environnement)

Statistical and mathematical tools for the study of climate extremes

This school deals with modelling of extreme climatic events. It will take place in Cargèse (Corsica) from **November 9 to 13, 2015.**

A coaching session for ERC projects will be organized (at least 5 lauretes will share their experience).

Registration and information : http://www.mastacc.lsce.ipsl.fr/

Programme école automne novembre 2015