

Perugia, Italy July 2-13, 2007



UNION LECTURES

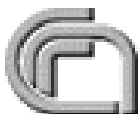
Excerpt of "Earth: Our Changing Planet. Proceedings of IUGG XXIV General Assembly Perugia, Italy 2007"
Compiled by Lucio Ubertini, Piergiorgio Manciola, Stefano Casadei, Salvatore Grimaldi

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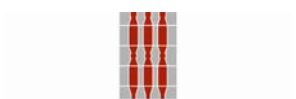
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Abbreviations

IAG	International Association of Geodesy
IAGA	International Association of Geomagnetism and Aeronomy
IAHS	International Association of Hydrological Sciences
IAMAS	International Association of Meteorology and Atmospheric Sciences
IAPSO	International Association for the Physical Sciences of the Oceans
IASPEI	International Association of Seismology and Physics of the Earth's Interior
IAVCEI	International Association of Volcanology and Chemistry of the Earth's Interior
CLiC	Climate and Cryosphere
Ev-K2-CNR	Everest-K2 CNR Committee
GEWEX	Global Energy and Water Experiment
HKH-FRIEND	Hindu Kush-Himalayan Flow Regimes from International Experimental and Network Data
IABO	International Association for Biological Oceanography
IACS	International Association of Cryospheric Sciences
ICACGP	International Commission on Atmospheric Chemistry and Global Pollution
ICASVR	International Commission on Atmosphere-Soil-Vegetation Relations
ICCE	International Commission on Continental Erosion
ICCL	International Commission on Climate
ICCLAS	International Commission on the Coupled Land-Atmosphere System
ICCP	International Commission on Clouds and Precipitation
ICDM	International Commission on Dynamic Meteorology
ICGW	International Commission on Groundwater
ICIMOD	International Center for Integrated Mountain Development
ICMA	International Commission on the Middle Atmosphere
ICRS	International Celestial Reference System
ICSIH	International Commission on Snow and Ice Hydrology
ICSW	International Commission on Surface Water
ICT	International Commission on Trac
ICWQ	International Commission on Water Quality
ICWRS	International Commission on Water Resources Systems
IGAC	International Global Atmospheric Chemistry
IGS	International Glaciological Society
ILP	International Lithosphere Program
INQUA	International Union for Quaternary Research
ION	International Ocean Network

IRC	International Radiation Commission
PUB	Prediction in Ungauged Basins
SCAR	Scientific Committee on Antarctic Research
SEDI	Study of the Earth's Deep Interior
SPARC	Stratospheric Processes and their Role in Climate
UCCS	Union Commission for the Cryospheric Sciences
UNESCO	United Nation Educational, Scientific and Cultural Organization
UNITAR	United Nations Institute for Training and Research
WMO	World Meteorological Organization

Session code naming

The first letter of the session codes indicates whether the session is a Union, a Joint Interassociation or a single Association sponsored event, the second letter indicates the type of event: Symposium (S) or Workshop (W). For Joint events, the second letter indicates the Lead Association (with the abbreviations listed below) and the third indicates whether a session is a Symposium (S) or a Workshop (W). In some cases (namely IAGA, IAHS) Association session codes have an extra codification referring to a specific Theme or Division.

U	UNION
J	JOINT
G	IAG
A	IAGA
H	IAHS
M	IAMAS
P	IAPSO
S	IASPEI
V	IAVCEI

Some examples:

US002

is a **Union Symposium**; **JGW001** is a **Joint IAG Workshop** with IAG as the Lead Association;

MS003

is an Association (IAMAS) **Symposium**. **AS III 020** is an Association (IAGA) **Symposium** sponsored by its **III Division**.

UL001 **Lecture** 0

Invited Speaker : Robert W. Corell - global@dmv.com

Our Changing Climate: A Global Policy Issue

UL002 **Lecture** 0

Invited Speaker : Maria Zuber - zuber@mit.edu

Inside the terrestrial planets

UL003 **Lecture** 0

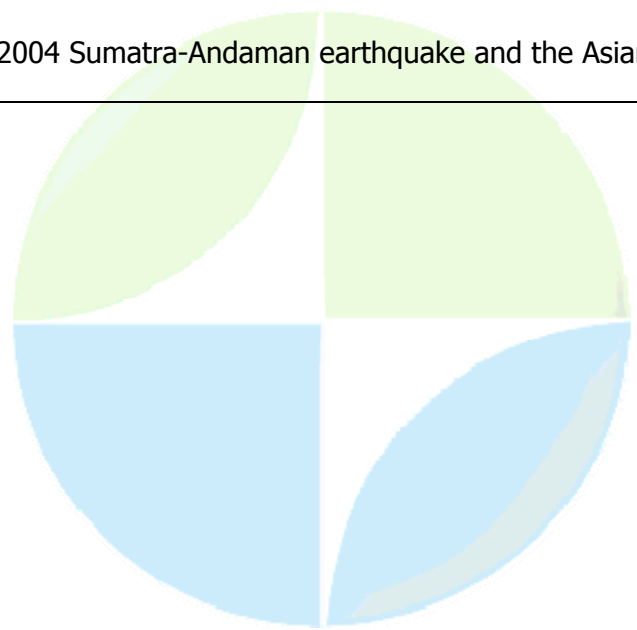
Invited Speaker : Claudio Faccenna - faccenna@uniroma3.it

Subduction and Mantle Convection in the Mediterranean

UL004 **Lecture** 0

Invited Speaker : Kenji Satake - kenji.satake@aist.go.jp

Lessons from the 2004 Sumatra-Andaman earthquake and the Asian tsunami



(U) - IUGG - *International Union of Geodesy and Geophysics*

UL001

Lecture

Our Changing Climate: A Global Policy Issue

Invited Speaker : Robert W. Corell - global@dmv.com

Earth's climate is changing, with the global temperature now rising at a rate unprecedented in the experience of modern human society.

While some historical changes in climate have resulted from natural causes and variations, the strength of the trends an

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UL002

Lecture

Inside the terrestrial planets

Invited Speaker : Maria Zuber - zuber@mit.edu

The internal structure and dynamics of planetary interiors is closely linked to thermal evolution and the geology preserved at the surfaces. Abundant new spacecraft observations combined with experimental results on properties of planetary materials, geoc



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UL003

Lecture

Subduction and Mantle Convection in the Mediterranean

Invited Speaker : Claudio Faccenna - faccenna@uniroma3.it

One century of geological and geophysical studies have been devoted to understand the geodynamic evolution of the Mediterranean and of its Alpine belt. For example, the discovery in the Alps of the large scale overthrust and of the presence of oceanic rock



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UL004

Lecture

Lessons from the 2004 Sumatra-Andaman earthquake and the Asian tsunami

Invited Speaker : Kenji Satake - kenji.satake@aist.go.jp

The December 26, 2004, Sumatra earthquake (M 9.0) generated tsunamis that propagated across the Indian Ocean and caused the worst tsunami disaster in history: more than 200,000 casualties in many countries around the Indian Ocean. The tragedy was caused by



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