The Abdus Salam
International Centre
for Theoretical Physics
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United Nations Educational, Scientific and Cultural Organization

IAEA International Atomic Energy Agency

Advanced School and Workshop on Subseasonal to Seasonal (S2S) Prediction and Application to Drought Prediction

23 November - 4 December 2015

(ICTP, Miramare, Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy is organizing an ***ADVANCED SCHOOL AND WORKSHOP ON SUBSEASONAL TO SEASONAL (S2S) PREDICTION AND APPLICATION TO DROUGHT PREDICTION,*** to be held at ICTP, Trieste, Italy, ***23 November to 4 December 2015.***

From the societal perspective, many management decisions in agriculture and food security, water, disaster risk reduction and health fall into the subseasonal to seasonal (S2S) time range (more than two weeks and less than a season). However, this time scale has long been considered a "predictability desert", and forecasting for this range has received much less attention. Recently, research has indicated important potential sources of predictability for this range, and with this School and Workshop it is intended to help understand better these sources, and also to improve the existing "tools" to translate and obtain more accurate forecasts. For more details on this topic please see http://s2sprediction.net

Topics will cover the scientific and modeling basis for S2S prediction in the opening days of the activity, followed by a focus on the practical application of drought forecasting on weekly to seasonal timescales, including practical sessions involving hands-on analysis:

- **Mechanisms of subseasonal predictability: MJO, stratosphere, atmosphere interactions with land surface and ocean, teleconnections;**
- **Modeling in the subseasonal range: Initialization, ensemble generation, design of forecast systems;**
- **Windows of opportunity for forecast skill through interactions between ENSO, MJO and other sources of predictability;**
- **Subseasonal-to-seasonal precipitation forecasts for applications in tropical developing countries: Focus on drought and prediction of monsoon breaks;**
- **Forecast correction and verification: MOS correction, spread-skill relationships, forecast metrics;**
- **Introduction to the new S2S multi-model database of subseasonal forecasts housed at ECMWF;**
- **Description of other model archives including from the TIGGE, EUROSIP, CHFP databases;**
- **Methodologies for tailoring of forecasts for applications in tropical developing countries;**
- **Practical training sessions on analysis and skill assessment of ensemble prediction systems in the S2S and other databases for the countries of the participants, including drought and high-impact weather events, using open source tools: R, Climate Predictability Tool-CPT.**

This is an advanced School, aimed at junior scientists already in possession of a Ph.D. Participants are expected to be working in a research or operational environment on the problem of S2S prediction, and ***are encouraged to make a poster presentation*** during the second week. If interested, kindly submit a short one-page abstract of the contribution (size A4), attached to the online application.

PARTICIPATION

Scientists and students from all countries that are members of the United Nations, UNESCO or IAEA may attend the School. As it will be conducted in English, participants must have an adequate working knowledge of this language. Although the main purpose of the Centre is to help researchers from developing countries, through a programme of training activities within a framework of international cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.

As a rule, travel and subsistence expenses of the participants are borne by their home institutions. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants, who are nationals of, and working in, a developing country, and who are not more than 45 years old. Such support is available only for those who attend the entire activity. There is no registration fee.

Activity Secretariat: **E-mail: smr2714@ictp.it**
Telephone: +39-040-2240305 Telefax: +39-040-224163
ICTP Home Page: http://www.ictp.it

(Trieste, March 2015)

World Meteorological Organization

ORGANIZERS:

Florian PAPPENBERGER
(ECMWF, Reading, U.K.)

Andrew W. ROBERTSON
(IRI, Columbia University, USA)

Adrian TOMPKINS *
(ICTP, Trieste, Italy)

Frederic VITART
(ECMWF, Reading, U.K.)

*** *Also Local Organizer***

LECTURERS:

Swadhin BEHERA
(JAMSTEC, Japan)

Hai LIN
(Environment Canada)

Franco MOLTENI
(ECMWF, Reading, U.K.)

Steve WOOLNOUGH
(Univ. Reading, U.K.)

DEADLINE to apply:

22 June 2015

TO REQUEST PARTICIPATION:

Online Application Form can be accessed at the following activity website:

http://indico.ictp.it/event/a14264/