



#### ISWI Steering Committee, 1 February 2017, Vienna

International Committee on Global Navigation Satellite Systems (ICG): Programme on GNSS applications

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United Nations Office at Vienna
www.unoosa.org

- United Nations Regional Workshops/training courses on the use and applications of GNSS
  - These activities increase awareness among decision and policy makers of the benefits of GNSS, and develop regional and national pilot projects on GNSS applications, including space weather and its effects on GNSS
  - These activities bring together a large number of experts, including those from developing countries, to discuss and act on issues that are also of high relevance to the ICG

**Information Portal:** <a href="http://www.unoosa.org/oosa/en/ourwork/icg/activities.html">http://www.unoosa.org/oosa/en/ourwork/icg/activities.html</a>

Space Weather and GNSS: <a href="http://www.unoosa.org/oosa/en/ourwork/icg/space-">http://www.unoosa.org/oosa/en/ourwork/icg/space-</a>

weather-and-gnss.html



- United Nations/Nepal Workshop on GNSS, 12 16 December 2016, Kathmandu
  - To focus on identifying the needs of users with respect to the compatibility and interoperability of global and regional systems, and space-based augmentations providing and planning to provide GNSS service
  - To incorporate useful user and application sector views and inputs into the Working Groups work plans
  - Seminar on GNSS Spectrum Protection and Interference Detection and Mitigation (IDM) and
- Seminar on Space Weather (A/AC.105/C.1/2017/CRP.19)
  - The importance of space weather to civil aviation and future of space flight was highlighted
  - Participants recommended that:
- (a) space weather discussion forums should be developed to educate the public as well as policy makers about space weather phenomena;
- (b) other workshops should provide opportunities for students and professionals to be involved in space weather data analysis and prediction.

Website: http://www.unoosa.org/oosa/en/ourwork/psa/schedule/2016/2016-nepal-workshop-on-gnss.html



- United Nations/United States of America Workshop on International Space
   Weather Initiative: The decades after the International Heliophysical Year 2007, 31
   July 4 August 2017, Boston
  - In-line with COPUOS' Thematic Priority Area on Space Weather)
- United Nations/Argentina Workshop on the applications of GNSS, 8 12 May 2017, Cordoba

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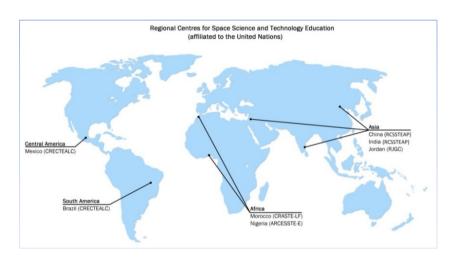


#### **Space Weather and its effects on GNSS**

- CRASTE-LF, Rabat, Morocco:
- Use of GPS data for ionospheric studies, 16 20 January 2017
- ICTP and Boston College, Trieste, Italy
  - URSI-ICTP School, 27 31 March 2017: Terrestrial and aviation applications, Global Navigation Satellite Systems, remote sensing, emergency location systems, natural resource monitoring and many other applications that may have societal benefit, particularly for the developing world
  - Workshop on Space Weather Effects on GNSS Operations, 22 May 2 June 2017: to give theoretical and practical training on the physics of space weather and its main effects on the GNSS operations with particular emphasis on the low latitudes ionospheric processes.



#### Information Centres for ICG



United Nations-affiliated Regional Centres for Space Science and Technology Education

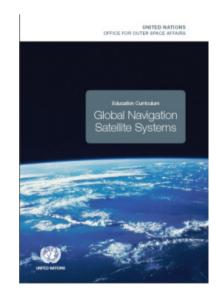
Africa: Morocco and Nigeria

Latin America and the Caribbean: Brazil/Mexico

Asia and the Pacific: India and China

Western Asia: Jordan

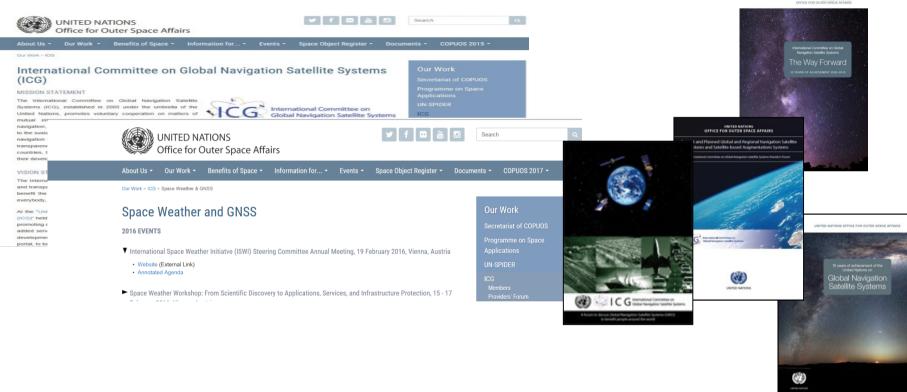
- The Technical Level: explore the benefits of GNSS technologies for regions and to spread their applications; exchange information and knowledge
- The Cooperative level: facilitate collaboration with the GNSS providers (seminars/trainings and educational material), as well as communication and outreach to the wider community through the ICG information portal







## **ICG Information Portal**



- <u>WWW.UNOOSA.ORG</u>
- WWW.UNOOSA.ORG/OOSA/EN/OURWORK/ICG/ICG.HTML





# THANK YOU

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