

Status Report – 2017

International Commission on Remote Sensing (ICRS)

Current Officers

ICRS REMOTE SENSING			
President	Christopher Neale	USA	cneale@nebraska.edu
President-Elect	Yangbo Chen	China	eescyb@mail.sysu.edu.cn
VP	Chris Hopkinson	Canada	c.hopkinson@uleth.ca
VP	Maria Jose Polo Gomez	Spain	mjpolo@uco.es
VP	Zhongbo (Bob) Su	The Netherlands	su@utwente.nl
S	Frédérique Seyler	France	Frederique.Seyler@ird.fr

Activities 2016-2017

ICRS committee meeting

The ICRS committee met personally during the 26th IUGG Congress in Prague in 2015. Since then the meetings have been limited to individual meetings among the committee members and email correspondence among the entire committee. The committee will meet again during the General Assembly in Port Elizabeth, South Africa in July 2017.

Sessions Organized and/or Participation in other conferences:

- ⇒ Professor Yangbo Chen, together with other colleagues, organized a session on 2016 AGU meeting entitled as “Dual impact of urbanization and climate change on watershed hydrological responses”.
- ⇒ Professor Christopher Neale gave multiple presentations related to the ICRS mission:

Remote Sensing and Spatial Analysis in Agriculture Conference, July 14, 2016, University of Nebraska-Omaha. “Remote Sensing of Crop Evapotranspiration and Yield”

Semana da Agronomia, Universidade Federal de Vicosa, Minas Gerais, Brazil, September 16, 2016. “Manejo da Irrigacao em Pivo Central Utilizando Sensoriamento Remoto e Modelagem”

UNL Agronomy Department Seminar Series. November 18, 2016. “Geospatial technologies for the management of water, food production and energy”
2016 International Colloquium: Global Food Security & Sustainability. Colorado State University, November 29-30, 2016. “Remote sensing for farm and regional water management”

Water Week Learning Days, World Bank, Washington DC, March 22, 2017.
Presentation: “Operational Satellite-Based Evapotranspiration Estimates for Monitoring Agricultural Water Use”

“Geospatial Techniques for Irrigation Management of Center Pivots”. C. M. U. Neale, I. Campos, I. Zution Goncalves. Presented at Improving Irrigation Water Management — Latest Methods in Evapotranspiration and Supporting Technologies. Ninth International Conference on Irrigation and Drainage. Fort Collins, Colorado. October 11-14, 2016.

⇒ Professor Christopher Hopkinson has been involved in several remote sensing related activities and presentation through his new position at the University of Lethbridge, Canada.

Earth Observation Summit 2017:

“A mountain water resources monitoring framework using a temporal fusion of optical, lidar and radar image data sources at century to season scales”.

“An online Portal for automated SAR and LiDAR Integration for Surface Water monitoring”

“Connecting Lethbridge: Using Topo-Bathymetric Lidar And Hec Ras To Assess The Effects Of Bridge Development On The Oldman River Floodplain”.

“Fusing Lidar And Runoff Time Series Data To Model Flood Scenarios In The Headwaters Of The Oldman River Basin, Alberta”

Session Chair: Floodplain Mapping with EO, at the Earth Observation Summit, Montreal, Canada, June 20-22

Leading the Panta Rhei working group on Modeling Hydrological processes and changes

ICRS President-elect, Professor Yangbo Chen has initiated and led the Panta Rhei working group on Modeling Hydrological Processes and Changes with most of the ICRS officers involved, there are more than 60 group members coming from 8 countries. This WG organized a workshop on modeling hydrological under changing environment in China, March, 2017, and published a special issue on Hydrology and Earth System Science (HESS) in 2016, and is organizing another special session on HSJ in 2017.

ICRS Vice-President, Professor Maria J. Polo has led the Panta Rhei working group on Water and Energy Fluxes in a Changing Environment, with a significant contribution by the ICRS officers involved.

Remote Sensing and Hydrology Conference 2018

The committee has decided to hold its flagship conference: Remote Sensing and Hydrology on a 4-year cycle, with the next edition to be held in Cordoba, Spain from 8 – 10th of May 2018, hosted by Professor Maria Jose Polo (VP, ICRS) at the Andalusian Institute for Earth System Research (IISTA), University of Cordoba, Spain. The event is already on the IAHS calendar. (<http://iahs.info/uploads/Meetings/RSHS18.pdf>)

Progress: The conference facilities have been reserved for the period. The local committee consists of Dr. Maria Jose Polo and Dr. Maria Pat Gonzalez Dugo, from IFAPA, Cordoba. Professor Christopher Neale visited Cordoba in February, 2017 and several activities were carried out:

- Visit with the local committee to discuss conference structure and timeline
- Visit to the conference facilities at the University of Cordoba, downtown campus
- Meet the local conference support organization.
- Preliminary planning on structure has been conducted and contacts with Copernicus have been made to run the abstract submission.
- The local committee will explore with IAHS journal editors on the possibility of a “pre-conference” special issue on the topic.

Contributions to the Scientific Programme of the IAHS Scientific Assembly, July 2017, Port Elizabeth, South Africa

ICRS is co-sponsoring and collaborating with other commissions in the organization of the following sessions:

W1 Prediction in ungauged basins

Convenor: ICSW

Supporting Commissions: ICSH, ICRS (Maria Jose Polo, Christopher Neale)

W3 Modelling hydrological processes for prediction under change

Conveners: ICSW,

Supporting Commissions: ICRS (Yangbo Chen), ICSH, Panta Rhei

W9 Water Balance and Crop Water Productivity Through Remote Sensing and Modelling

Conveners: ICRS (Christopher Neale, Bob Su, Frederique Seyler)

Supporting commissions: ICSW

W10 Measurements in the 21st century: innovation in hydrological observations

Convenor: MOXXI WG

Supporting Commissions: ICRS (Christopher Neale), ICSIH, ICSH, Panta Rhei, WMO

W19 Probabilistic forecasts and land-atmosphere interactions to advance hydrological predictions

Convenor: ICCLAS

Supporting commission(s) / organisations: HEPEX, GEWEX-GLASS, ICSW, ICWRS, ICRS (Frederique Seyler)

Professor Christopher Neale, President, ICRS

Professor Frederique Seyler, Secretary, ICRS