Innovative and Multidisciplinary Data for Hydrological Sciences

Tecnical/Scientific session – Perugia, 22/11/2018

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Outline

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  - The group
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MOXXI: introduction

- Measurements and Observations in the XXI Century working group of IAHS
- Established in 2013 (I am Chair since 2015)
- Objectives:
  - What are the key gaps in our understanding of hydrologic change?
  - How can we advance our monitoring and data analysis capabilities to predict and manage hydrologic change?
MOXXI: the beginning

2008

Scientists must leave their ivory computers

2010

XXV IUGG General Assembly (Melbourne)

2011

Water Resources Research

Hydrologic Measurement Methods

Water Resources Research, vol. 46, no. 4, 2010

We believe that this special section of Water Resources Research on Hydrologic Measurement Methods marks a turning point in appreciation of the essential and unlimited business of learning how to get the right data upon which our understanding of hydrology rests.

Regular Article

Improved extraction of hydrologic information from geophysical data through coupled hydrogeophysical inversion


Abstract | Article | PDF (338K) | References

International Strategic Workshop on Future IAHS Science Initiative (Nanjing)

2012

2013

XXVI IUGG General Assembly (Prague)

International Workshop

OPEN BIG DATA AND CITIZEN SCIENCE
FOR MANAGING THE WATER, FOOD, ENERGY
AND ENVIRONMENT NEXUS

IAHS, IAPSO, IASPEI Joint Assembly (Gothenburg)
MOXXI: the group

- More than 130 MOXXI friends from more than 15 countries

- Mostly from universities but also from research centers and private companies

- First Topical Conference November 2016 at ESA campus (Frascati, Italy)

- Second Topical Conference December 2017 at WMO (Geneva, Switzerland)

- Third Topical Conference March 2019 at NYU (NY, USA)
MOXXI: research questions

- **Panta Rhei Science Questions 1 and 5:**
  - What are the key gaps in our understanding of hydrologic change?
  - How can we advance our *monitoring* and data analysis capabilities to predict and manage hydrologic change?
MOXXI: the objectives

- Growing community with broad research interests
MOXXI: the objectives

Measurements and Observations in the XXI century (MOXXI): innovation and multi-disciplinarity to sense the hydrological cycle


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MOXXI: sample initiatives

- Participation in a COST Action on the harmonization of drones for scientific observations

- Proposal and paper writing

- Facilitating coordination between National Services and scientists/startups:
  - First call of the HydroHub, the Global Hydrometry Support Facility of WMO
MOXXI: future perspectives

- Participate in IAHS Forum on Unsolved Questions in Hydrology
  - MOXXI is taking a leading role in the forum
  - Every friend has been asked to participate
MOXXI: join us in NYC!

MEASUREMENTS AND OBSERVATIONS IN THE 21° CENTURY
MOXXI 2019 Topical Conference
Citizen and Hydrology (CandHy) Kickoff Meeting

11-13 March 2019
New York University, New York, NY, USA
Contact info

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