WCRP workshop on attribution of multi-annual to decadal changes in the climate system

Format: virtual workshop (free registration and attendance)

When: 22-24 September 2021

Abstract submission deadline: 30 June 2021

Registration: details to follow

Understanding the drivers of multi-annual to decadal changes in the climate system is essential for building confidence in forecasts, for quantifying hazards, and for developing robust adaptation and mitigation policies. However, our capability in this regard is very immature, as highlighted by the recent debate around the temporary slowdown in global surface warming. Hence, the WCRP Lighthouse Activity on Explaining and Predicting Earth System Change is being developed to address this need.

The aim of this workshop is to document current research, identify challenges, and explore potential pathways towards building an operational capability to attribute multi-annual to decadal changes in the climate system on global-to-regional scales. Key areas to be addressed include:

- To what extent is the observing system adequate for the task and how best to use the observations
- Approaches to assess the roles of internal variability and external factors including greenhouse gases, aerosols, solar variations, volcanic eruptions, ozone, land use etc
- To what extent are models adequate for the task and how to account for model errors, including underestimated signals
- To what extent responses to different forcings add linearly
- Analysis of physical processes
- Linking large scale circulation to regional weather and climate hazards
- Steps needed to build an operational capability

Organising committee

Lijing Cheng, Institute of Atmospheric Physics, Chinese Academy of Sciences
Nathan Gillett, Environment and Climate Change Canada
June-Yi Lee, Research Center for Climate Sciences, Pusan National University
Flavio Lehner, Earth and Atmospheric Sciences, Cornell University
Shoshiro Minobe, Hokkaido University
Scott Osprey, University of Oxford
Doug Smith, Met Office Hadley Centre
Rowan Sutton, National Centre for Atmospheric Science, University of Reading
Narelle van der Wel, WCRP
Lin Wang, Institute of Atmospheric Physics, Chinese Academy of Sciences

Email contact: Narelle van der Wel, nvanderwel@wmo.int