

## **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**

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