

Open Call for new members to join the Working Group on Numerical Experimentation (WGNE)

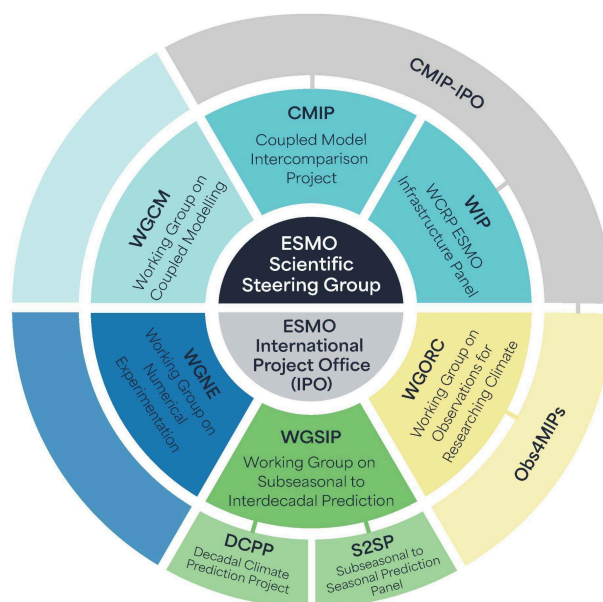
Join WGNE and contribute your expertise to advancing Earth system modelling, numerical experimentation, model evaluation and prediction across timescales within WCRP!

Background

The **Working Group on Numerical Experimentation (WGNE)** advances numerical experimentation and the development, evaluation and improvement of Earth system models for weather, climate, water and environmental prediction across timescales. It provides an international forum for sharing model-development advances, coordinating numerical experiments and benchmarks, and identifying, diagnosing and reducing systematic errors across Earth system components.

Through process-oriented diagnostics and model verification, and in collaboration with WCRP and WMO partner groups, WGNE works to better understand the origins and evolution of systematic errors and their impact on prediction skill.

WGNE is one of the Working Groups of **WCRP's Earth System Modelling and Observations (ESMO)** Core Project, which coordinates and advances all modeling, data assimilation, and observational activities across WCRP. ESMO connects modelling and observations across Earth system components, disciplines and timescales, fostering collaboration within WCRP and with external partners.



Role and expertise

WGNE members share experience and advances in model development, diagnostics and evaluation, and contribute to coordinated activities aimed at understanding and reducing systematic errors in Earth System models and their components. Members also provide regular updates on modelling developments and advances in computational technologies at their respective institutions and research centres, helping WGNE to maintain an overview of the evolution of operational and research modelling capabilities worldwide.

We seek scientists and technical experts working on the development, evaluation or application of Earth system prediction models. Current areas of interest include numerical methods, dynamics and physical parametrizations and their coupling; coupled

Earth-system processes; systematic-error diagnostics; high-resolution and km-scale modelling; ensembles and uncertainty; AI/ML and hybrid models; model verification; and computational scalability.

Applicants should bring expertise relevant to one or more of these areas and be willing to contribute actively to WGNE activities and collaborations.

As a WGNE member, you will:

- Contribute to shaping WCRP priorities and international activities in numerical experimentation, Earth system modelling and prediction;
- Collaborate with scientists across WCRP, WMO and the broader modelling community;
- Help develop and evaluate new approaches to numerical experimentation, model improvement and prediction across timescales.

Term and time commitment

Members are appointed for an initial four-year term, renewable twice for two years each. WGNE membership is voluntary and unpaid. Members are expected to participate actively in WGNE activities and collaborations, attend online meetings approximately every 3-4 months and, where possible, an in-person meeting every 18-24 months, and liaise with relevant ESMO, WCRP and partner activities.

Applicants should ensure that they can commit the necessary time to participate actively in the group.

How to apply

Applicants are asked to complete [this form](#) and provide a one-page CV and a half-page motivation statement. Applications that do not meet these criteria will not be considered.

Deadline: 31 Oct, 2026

Diversity and Inclusion

WCRP is committed to diversity, equity and inclusion, and to building representative scientific communities across its activities. WGNE seeks balanced representation across regions, career stages, gender and scientific expertise, including participation from emerging economies and early-career scientists.

Applications are welcome from all regions. For this call, we particularly encourage applications from women, gender-diverse individuals, early-career researchers, and candidates from regions or areas of expertise that are currently underrepresented or will become underrepresented through membership rotation.