



New WCRP Home on
**“Earth System Modelling and Observational
Capabilities”**

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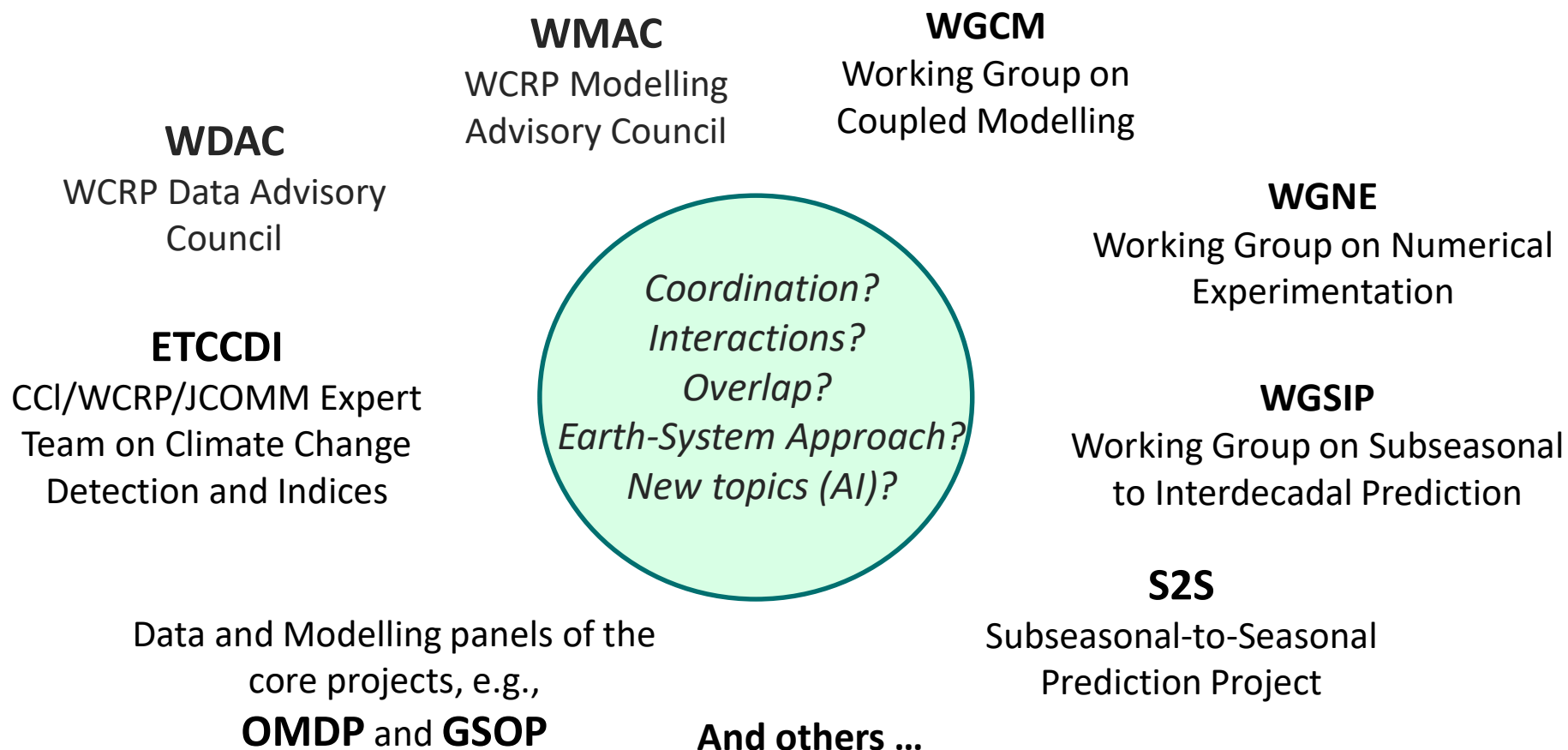


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The situation so far ...

Models, data and observations within the WCRP family



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New model-data home

Vision

Address overall coordination mechanism across all model, data and observations activities within the programme through one home

Challenges

Buy-in from the community, efficient links to other homes, efficient links to LHAs

The way forward

Decision at the last WCRP JSC meeting (41B) to start the establishment of the **new model-data home in 2021**



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Goals and outcomes

1. Research

- Seamless and value-chain model-data-observation approach
- Across Earth system components, fundamental and applied disciplines, time and spatial scales, infrastructures
- Optimise model development
- Formulate observational requirements to monitor, understand and predict the climate system

2. Methodological aspects

- Integrated modelling and data infrastructures
- Data policy, protocols and standards



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Goals and outcomes

3. Access and communication

- Share best practices, data, knowledge, opportunities
- Efficient communication across WCRP constituencies, communities, external partners and stakeholders
- Particular attention to engagement, equal access and inclusion of the 'global south'

4. Strategies

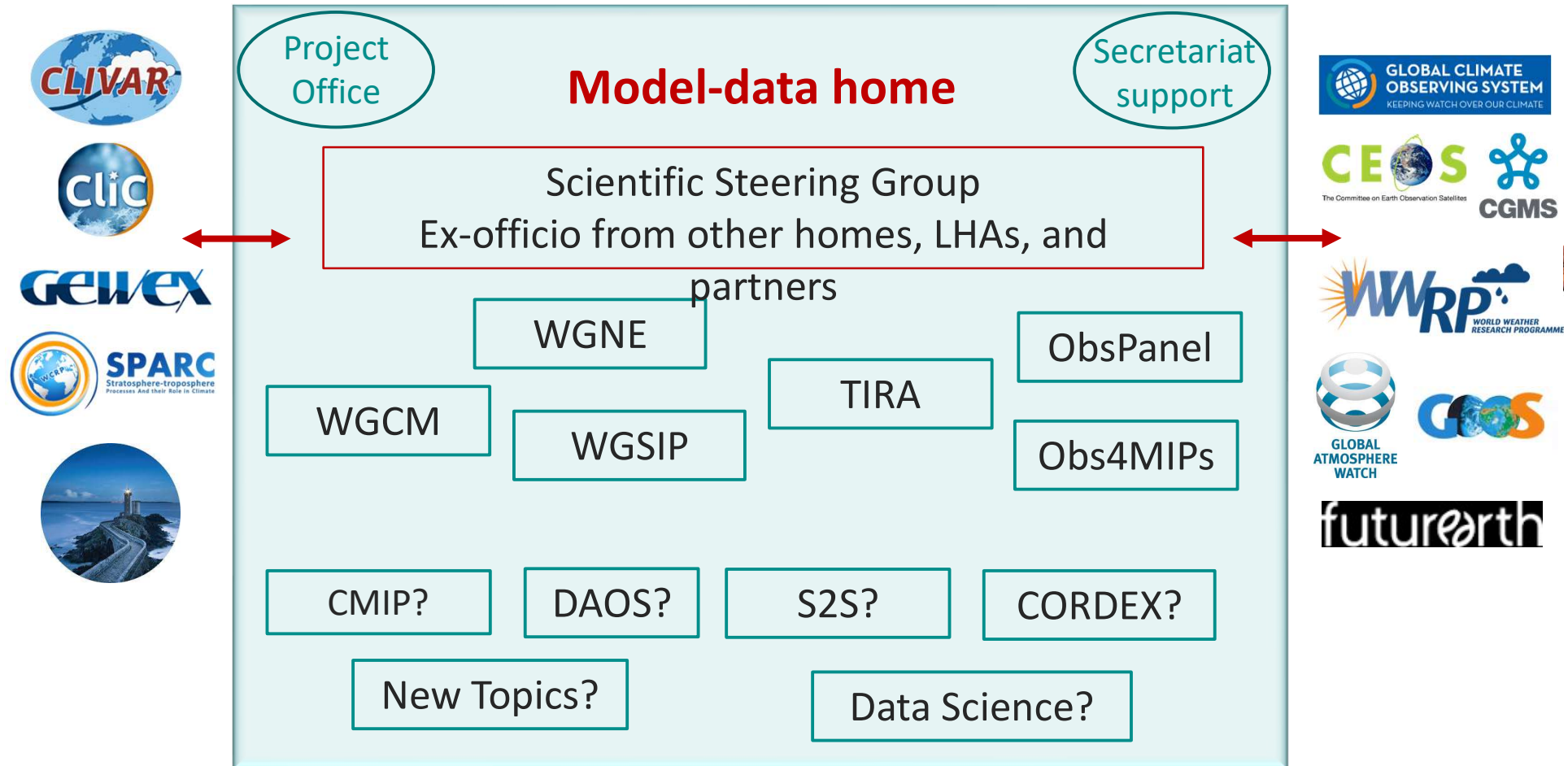
- Identify stakeholders, scientific ambition and resourcing needs
- Develop a risk mapping and mitigation measures
- Remove fragmentation, duplications and suboptimal aspects in the programme



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Potential Structure



Broader stakeholders like UNFCCC, IPCC, GFCS (C3S), IOC-UNESCO, ISC, WMO, NMHSs, Regional Climate Centres, etc.



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Timeline and roadmap

Mar
2021

Set up **Interim SSG** (co-leads from data and modelling communities)

- Model and data councils
- Representatives from working groups and partners

Set the home's **governance**

- Draft zero order draft business plan on terms of reference, governance, structure, timeline and partners

?
2021

Kick-off event and other workshops

- Organise a kick-off event in the second half of 2021

International **Project Office**

- Prepare the solicitation of bids for IPO
- Jointly with WCRP Secretariat and JSC leadership

Next SSG will take over

- Update and revise governance
- Set specific research priorities with the home's constituencies
- Establish the external partnership arrangements

Jan
2022



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Challenges

Scientific communities

- Adopt a common ground, ensure buy-in and merge communities

Existing groups and activities

- Keep current successful activities with their own priorities and momentum intact
- How to ensure successful collaboration with existing model and data panels?

Define high-level **contributions and research priorities**

- E.g., understanding and reduction of systematic errors in Earth system models
- Future role of data science and machine learning
- Will be defined by working groups and partners
- Take into account value-chain and seamless approach

And more ...



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