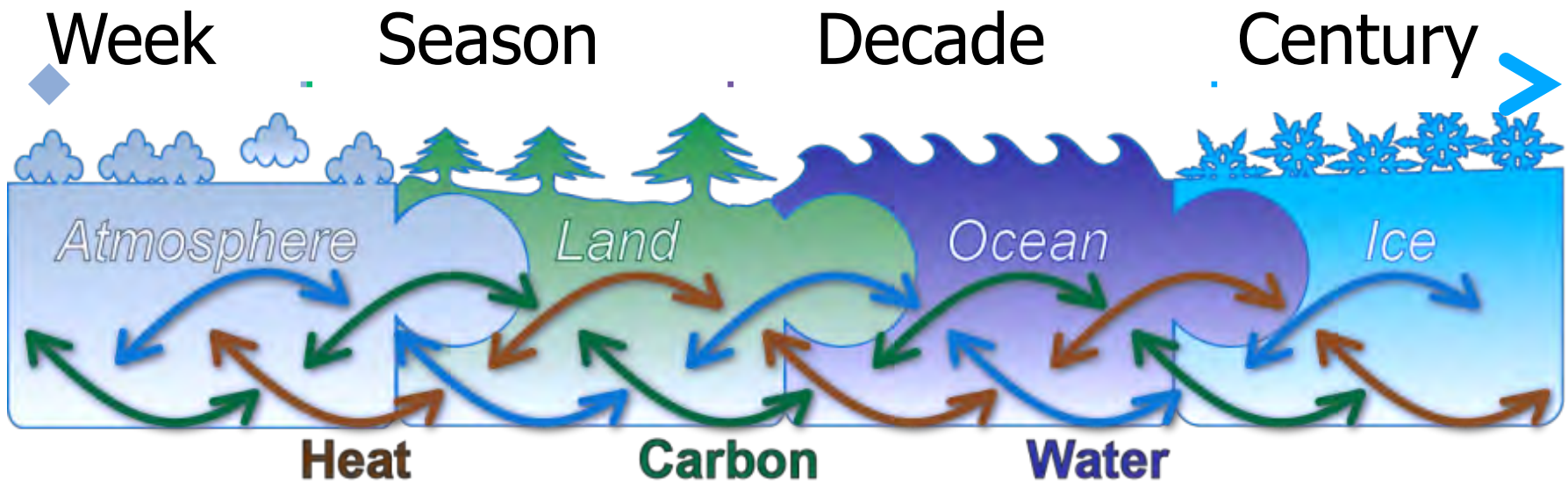
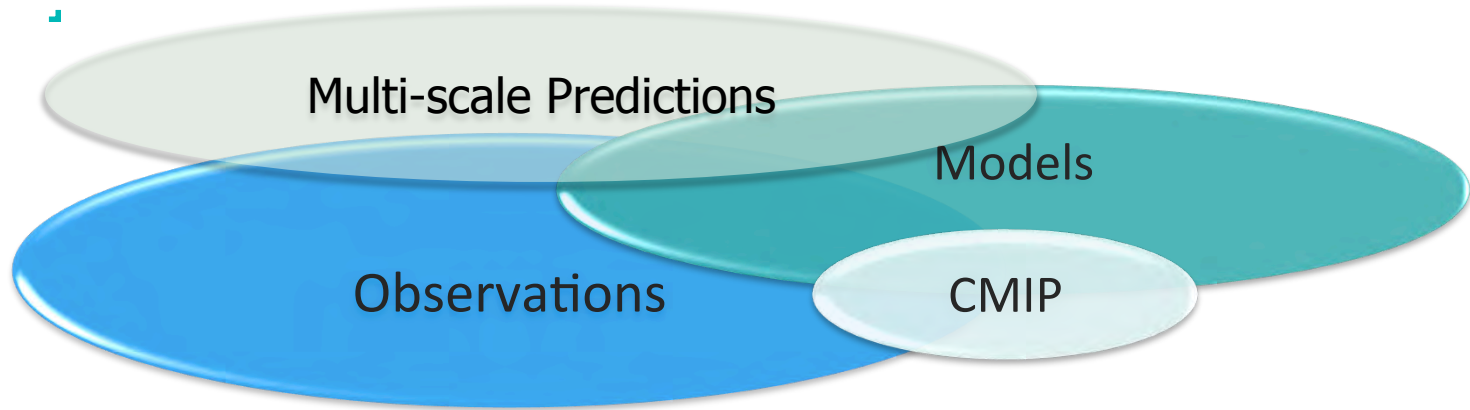


WCRP Update

Boram Lee, WCRP (blee@wmo.int)
29th GEWEX Scientific Steering Group
6 February 2016, Sanya, China



Role of WCRP



WCRP Structure

Joint Scientific Committee

Joint Planning Staff

Modeling Advisory Council

Data Advisory Council

Working Groups on: Numerical Experimentation (WGNE), Seasonal to Interannual Prediction (WGSIP), Coupled Modeling (WGCM), Regional Climate (WGRC)

CLIC

CLIVAR

GEWEX

SPARC

CORDEX

Cryosphere

Ocean-
Atmosphere

Land-
Atmosphere

Troposphere -
Stratosphere

Regional
Climate
Downscaling



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WCRP Structure

Joint Scientific Committee

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Modeling Advisory Council

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Working Groups on: Numerical Experimentation (WGNE), Seasonal to Interannual Prediction (WGSIP), Coupled Modeling (WGCM), Regional Climate (WGRC)

CIIC

Water for
Food
Baskets

Carbon
&
Climate

CLIVAR

Weather
&
Climate
Extremes

GEWEX

Melting Ice
& Global
Consequences

SPARC

Near-Term
Prediction
(Decadal)

Clouds,
Circulation &
Climate
Sensitivity

CORDEX

Regional
Sea Level
& Coastal
Impacts



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JSC-37 (Apr'16)

- Reviewed progress of WCRP activities, particularly CMIP6
- Approved two new GCs
 - Near-term climate prediction
 - Carbon feedback in the climate system
- Endorsed the Young Earth System Scientists (YESS) network
- Initiated a scoping exercise on WCRP regional activities



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JSC-37 (Apr'16)

- Agreed to move ahead with a WCRP summary document (“achievements, review and strategy for future”)
 - Refreshing WCRP coordination
 - (Re-) Consideration on the Status of WCRP with Sponsors and partners
 - Streaming and re-confirming general WCRP directions
 - (JPS) Initiated improvement in WCRP Communication strategy
 - (JPS) Strengthen outreach, web/online publications, etc.



JSC-37 Actions (excerpt)

(GEWEX)

- To organize a session during the High Resolution Modelling workshop (Sep.'16) on “modelling for prediction”, both high & low resolutions (GEWEX IPO & co-chairs; Sept. '16)
- To pursue establishing/reforming GEWEX/GASS jointly with WWRP (GEWEX co-chairs, WWRP leaders; ASAP)
- To consolidate GEWEX involvement in the GC-Near Term Climate Predictions



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JSC-37 Actions (excerpt)

(Grand Challenges)

- To develop overall expectation, monitoring and evaluation guidelines for the Grand Challenges
 - Explore labelling/branding of GCs in connection with Core Projects (communications + strategy)
 - Instigate review process of GCs with 2020 as a date to decide on future of these activities (e.g. to compile a synthesis paper).
 - Define lifetime/criteria for GCs
 - Consider developing a simple matrix to measure progress of GCs



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WCRP Co-Sponsors' Review

- Initiated a review committee of 6 members (planned a JSC interaction in April 2017)
- “WCRP Ahead” as a base document for review...



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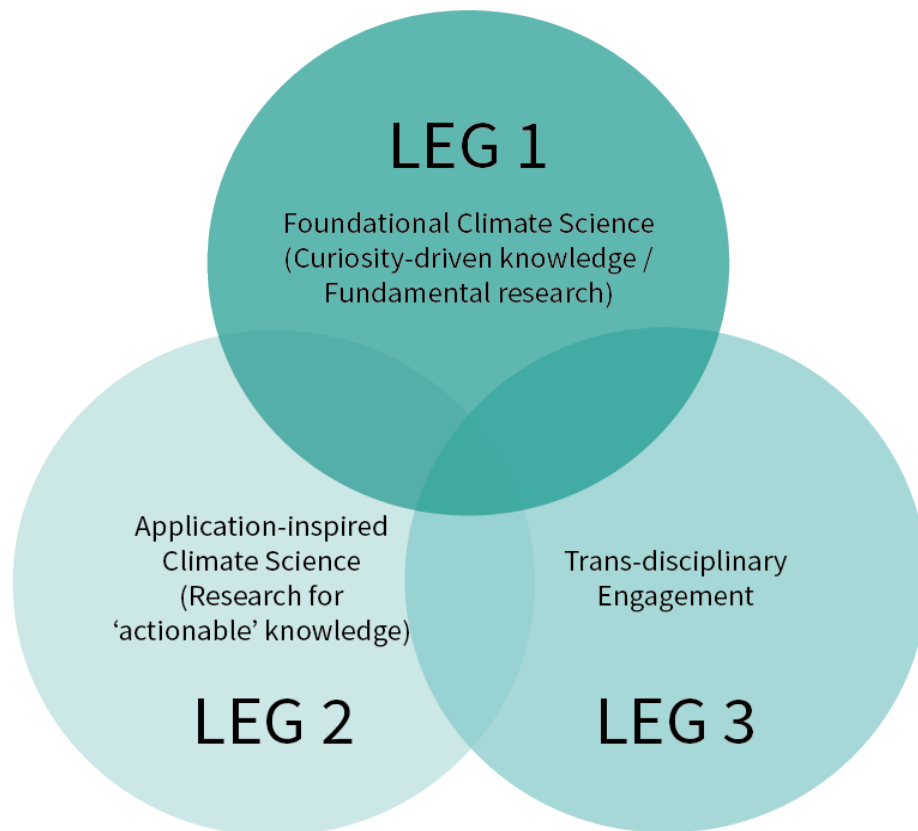
Scoping WCRP Regional Activities

- WCRP focuses on facilitating **creation of reliable climate information for regions.**

“...The scope of WCRP activities does not include climate services, but includes providing science-based, reliable and

locally relevant information on which climate services and impact assessments can be built...”

A “region” in the context of this discussion is not necessarily defined as a specific geographic area, but as **an area covering respective scientific and socio-ecological interests.**



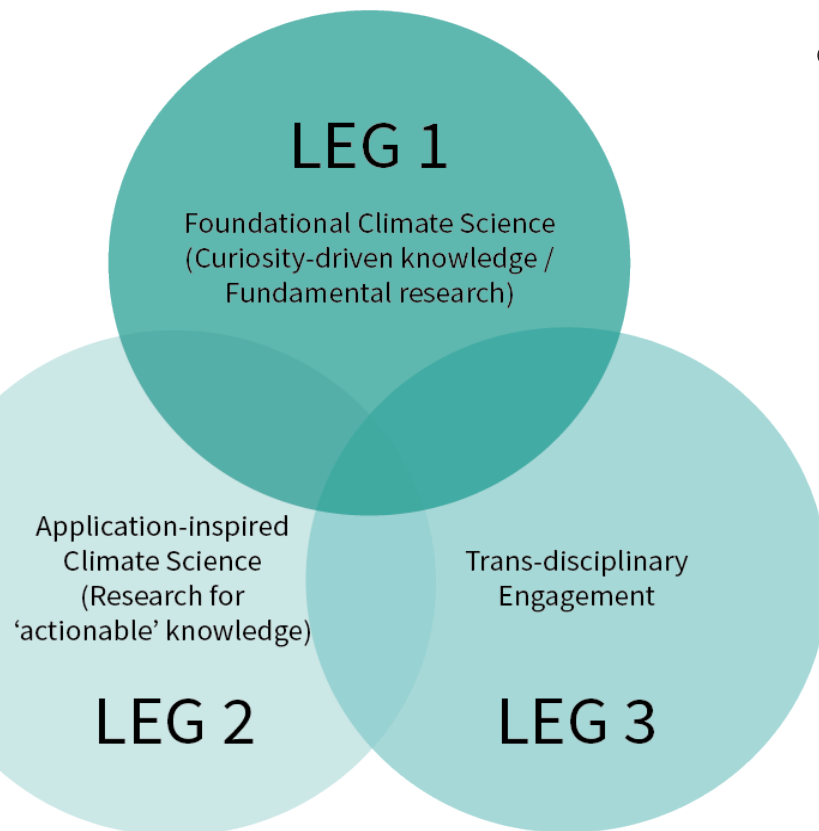
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Scoping WCRP Regional Activities

- WCRP's focus remains on **enhancing the scientific basis** for identifying, quantifying and delivering high quality, reliable and accessible climate information.



- WCRP recognizes the **substantial gaps in climate data** to be ready to produce climate information in need, particularly of different regions.

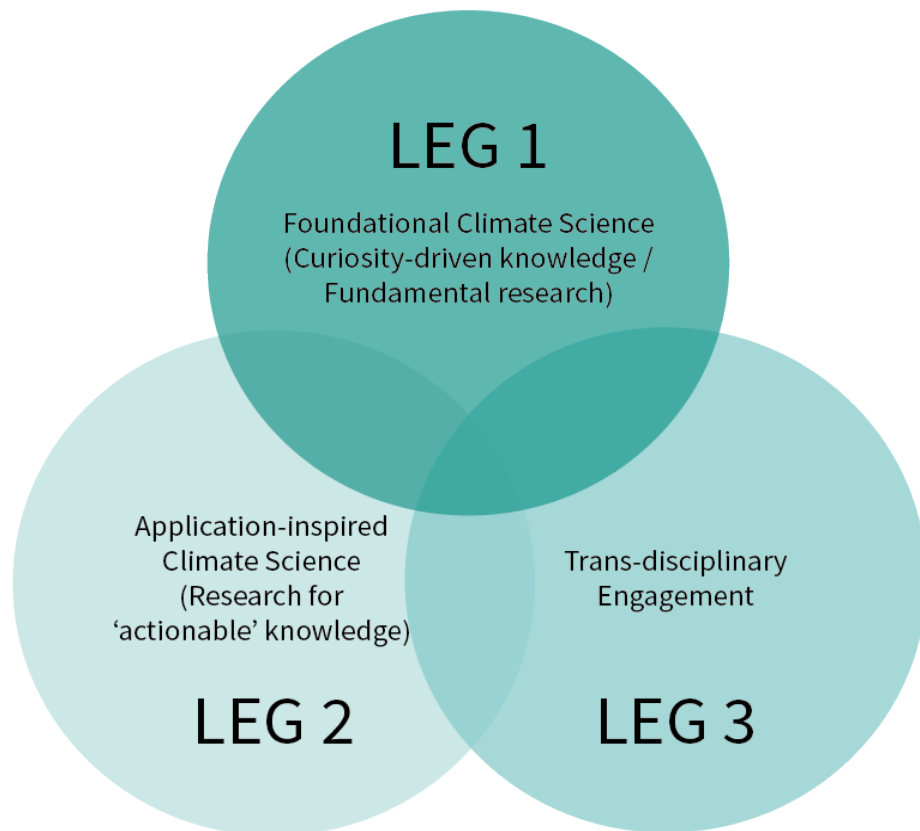


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Scoping WCRP Regional Activities

- **WCRP works with partners** contributing to climate services and impact assessment:
by producing science-based, reliable and locally relevant climate and climate change information.



Information ≠ data:

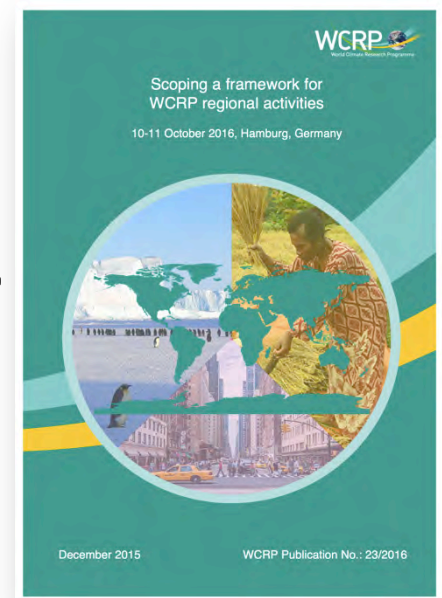
information is an understanding that builds messages of relevance to the concerned users that are backed by clear and robust physical analyses



Scoping WCRP Regional Activities

Recommendations to JSC & Follow-up

- Need a “go-to place” to coordinate and support regional initiatives
→ **open call for supporting a coordinator for WCRP regional activities**
- Enhance WCRP-wide integration and coordination (JSC guidance and leading coordination by region-focused groups)
- Need to acknowledge, lessons learnt from, and build on past/ongoing regional activities within CPs, WGs and other groups → **cataloguing WCRP regional activities** (online, under development)



Promoting Climate Science

- In addition to ongoing development through Core Projects, Grand Challenges, modelling activities, etc.:
- Three guiding questions for “Climate research to sharpen its view”

1. Where does the carbon go?

2. How does the weather change with climate?

3. How does climate influence the habitability of the Earth and its regions?

– Published article at Nature climate change

– A side event with ICSU at COP22, urging for the need in fundamental climate science



WHO



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Promoting Climate Science

- Promoting regional and topical science initiatives at COP22
 - Proposal on African Climate Change Impact Atlas
 - Promoting Grand Challenge on Water for Food Baskets



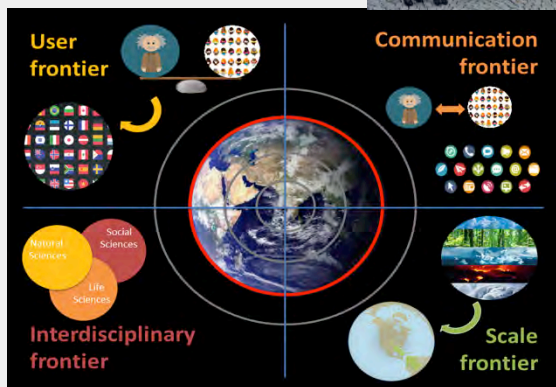
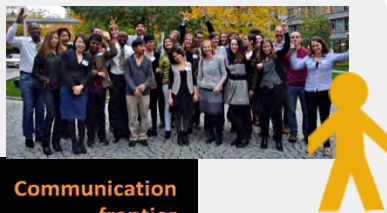
- Joint planning for **Cities and Climate Conference, 2018**



Capacity Development

- Empower **long-term achievements** in climate research, promoting current and **future leadership** in climate research
- Stimulating **opportunities** corresponding to **specific regional requirements**

Early career researchers' perspective on future challenges:



Principles for WCRP Capacity Development



WCRP JNU Training school on Monsoon Variability (Jan '17)



ICRC CORDEX ECS side event (May '16)



CLIVAR ECS Symposium (Sept '16)



CLIVAR ECS Poster Competition (Sept '16)



Capacity Development

WCRP-JNU Training school on Monsoon Variability (Jan '17)



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Capacity Development

Early Career Scientists Symposium at CLIVAR OSC

(18 and 24-25 September 2016, Qingdao)

- 135 early career scientists from 34 countries
- ECS perspective on future of ocean & climate science:
 - **Improved understanding** of 1) regional climate change and variability, 2) internal variability, 3) ocean carbon and heat uptakes, and 4) climate processes and feedbacks
 - **Increased interdisciplinarity**
 - **Improving international collaboration**, bridging gap between global North and South, equal & open access to data and journals, exchange of scientists (visa issues)



Budget / Planning major activates

- Small increase in national contributions (Canada)
- **Funding pressure intensifies** from Co-sponsors
- Continue with 2-year planning for 2017-2018 budget, taking into account planned major events
 - CLIVAR/GC-Sea Level Workshop (2017)
 - GEWEX OSC / GC-Extremes / GC-Food Baskets (2018)
 - SPARC General Assembly (2018)
 - CliC participation in Polar 2018
 - WCRP OSC (2020)



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Budget / Planning major activates

- Prioritization required for near-term, mediam-term activity plans
- Future of WCRP...
 - Scientific requirements
 - Community requirements
 - Co-sponsors' requirements



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Thank You

