



WORLD CLIMATE RESEARCH PROGRAMME

41-B Session of the WCRP Joint Scientific Committee

Detlef Stammer and Helen Cleugh (WCRP JSC Chair and Vice Chair)



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DAY 4

Rapporteur: Michel Rixen

Chat Moderator: Narelle van der Wel

Session 7: Way forward and next steps; 15 + 20 min. (Detlef, Helen and Mike)

Session 8: Summary of Regional Consultations – status and feed.; 10 min.

Break for 5 minutes

Session 9: Any Other Business

- a. WCRP Open Science Conference, 15 min. (Detlef and Helen)
- b. Future way of working, incl. an update on WCRP Carbon Footprint WG (Detlef and Pierre; 15 min.)
- c. The WMO Research Board (Jurg Luterbacher; 10 min.)
- d. Collaboration with Future Earth programmes (Detlef, Helen; 5 min.)
- e. Update on WCRP Secretariat (Mike Sparrow; 10 min.)
- f. Existing and planned IPOs (Detlef and Helen; 10 min.)
- g. WCRP Budget update (Mike, Detlef and Helen; 15 min.)
- h. Comments from Co-Sponsors and Partners (15 min.)

General Discussion and Closing Comments – 10 min.



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Goals of the JSC-41B Session

From Session 1:

- *Hear back from the WCRP family on progress toward the implementation of the new WCRP.*
- *Receive their reports and proposals for changes.*
- *Come to conclusions and decisions that will allow the soft implementation of new structures and their respective governance elements.*
- *Decide on additional activities that will be required leading up to the JSC-42 meeting in mid-2021.*

JSC-41B marks the transition to the new WCRP structure, with a “soft transition” starting at the beginning of 2021.



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Session 7: Way forward and next steps

Joint Scientific Committee

WCRP Secretariat

Lighthouse Activities

Major experiments, high visibility projects,
infrastructure building blocks
Ambitious and exciting

International Offices

WCRP Communities Enduring Capabilities, Homes for Expertise

- *Climate and Cryosphere*
- *Climate and Ocean Variability, Predictability and Change*
- *Global Energy and Water Exchanges*
- *Stratosphere-troposphere Processes And their Role in Climate*
- *Earth System Modelling and Observational Capabilities (new)*
- *Regional Climate Information for Societies (new)*

Ongoing and additional
activities and fora



Fixed-term Projects



Conferences and Workshops



Reference Datasets,
Evaluations and Benchmarking



Diversity- and Capacity-
building: ECRs, Regions



Rapid Updates, Syntheses
Assessments, Gap Analyses



Communications and Outreach

Session 7: Way forward and next steps

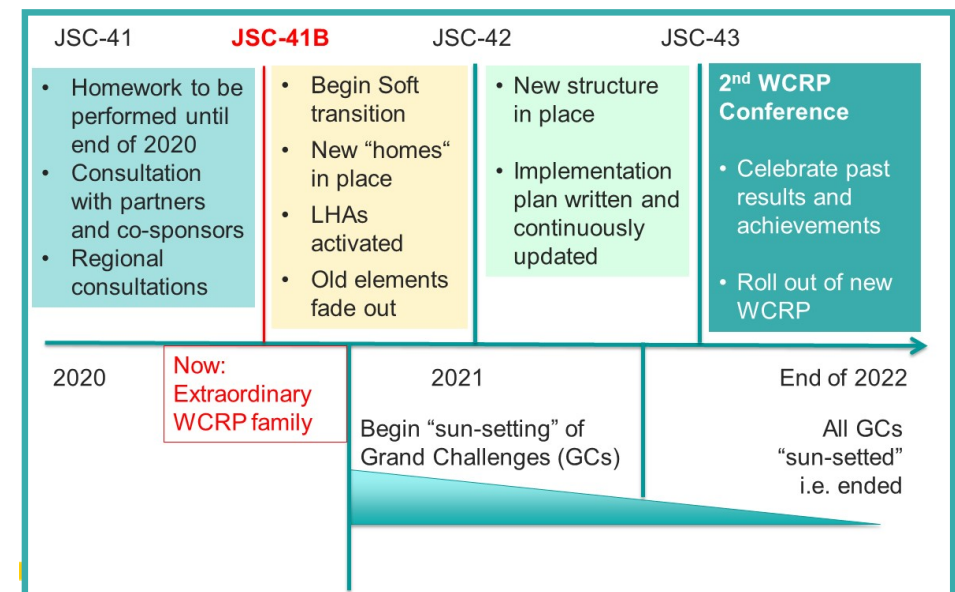
What we think we heard the outcome to be:

1) WCRP family is in agreement with new structure

2) WCRP family is in agreement with soft transition, starting effectively now

3) WCRP family agrees with

- Putting new elements into place*
- Further developing details of science plans until JSC-42*
- Continue with dynamic adjustments and developments afterward*
- Start to sun-set GCs; transition ongoing science to new structure and elements*
- Celebrate success and transition at 2nd pan-WCRP conference, scheduled for 2022/23*



Session 7: Some key next steps (1)

Next 6-months ...

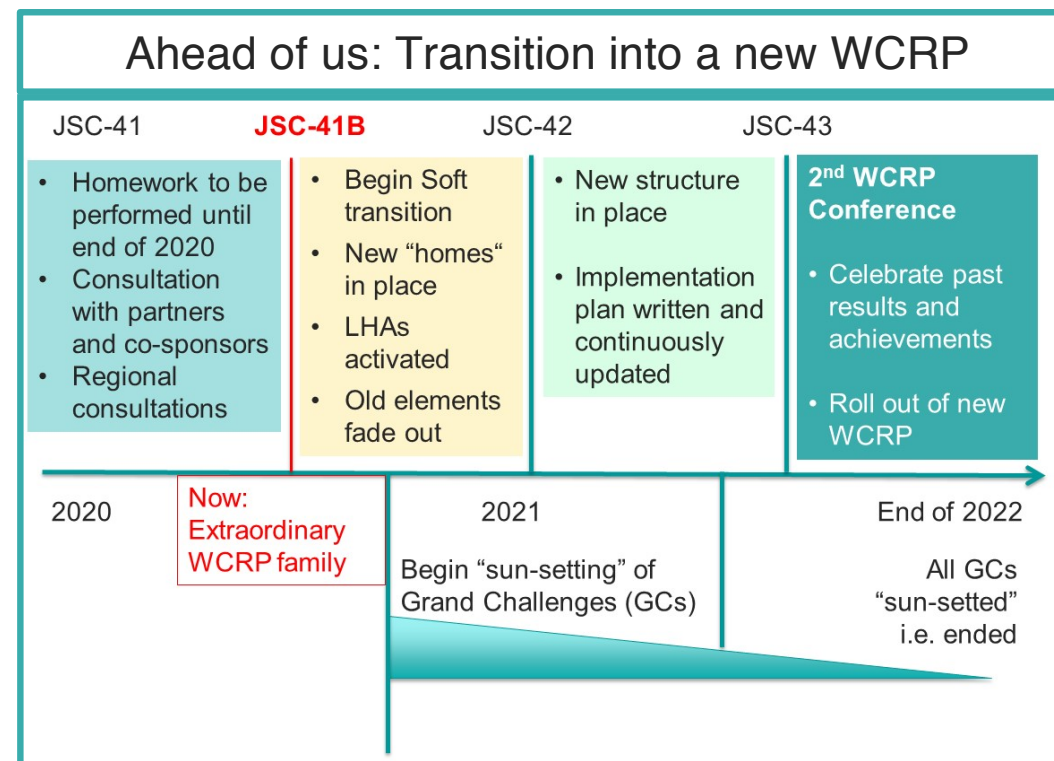
1. Final review of LHAs and Core Project proposals by JSC

2. Implement new structures and governance from early 2021

- Establish a “steering” or “advisory” group: JSC, CP Chairs, LHA Leads to provide guidance; facilitate communication, coordination and collaboration *[New Action]*
- Meeting in early 2021 to establish this group, and review and address questions arising from JSC41-B (incl. those from Core Projects)
- IPOs and Secretariat for support

3. Core Projects, LHAs to continue “homework” tasks, including:

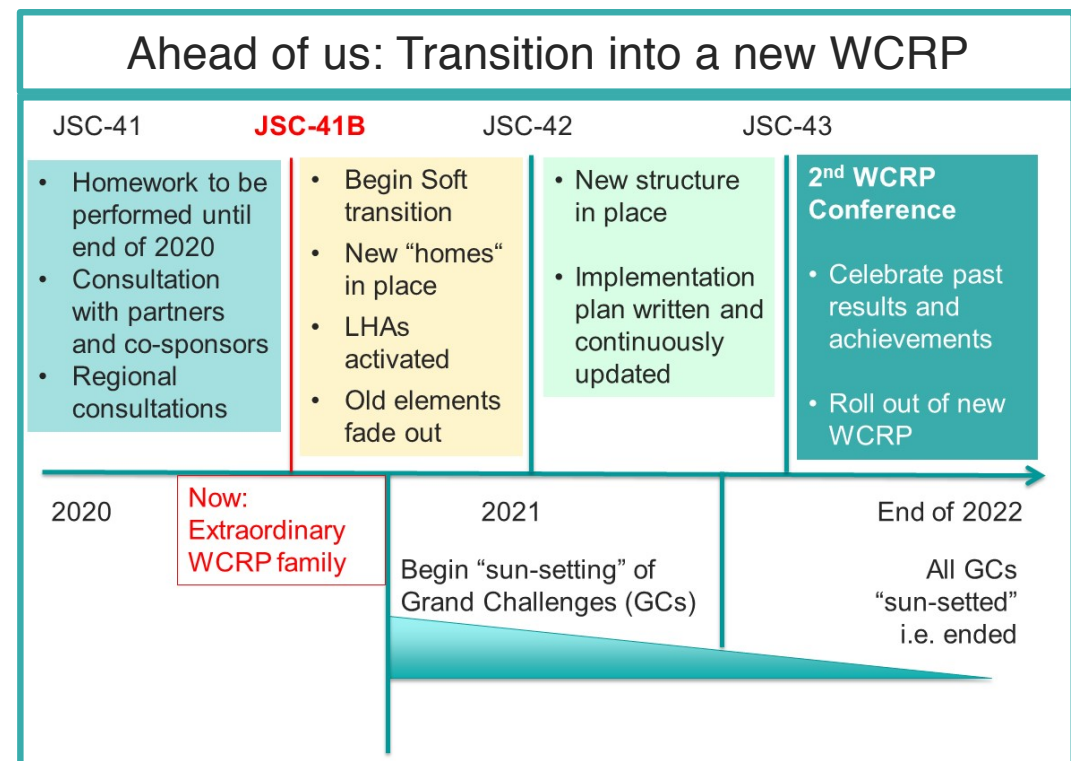
- Core Projects (old and new) finalising reviews and proposals by JSC-42
- LHAs finalising their draft Science Plans by JSC-42
- LHAs identifying “pilot” or “inception” activities - *to more quickly move to “doing” rather than “planning”* *[New Action]*



Session 7: *Some key next steps (2)*

*Next 6-months and **beyond** ...*

4. Rolling out WCRP hosted Climate Research Forums across regions
5. Transition GC science teams to new structures and elements/activities (i.e. Core Projects, LHAs,...) [New Action]
6. Start drafting a “dynamic” or rolling Implementation Plan
 - This includes dynamic nature of LHA Science Plans



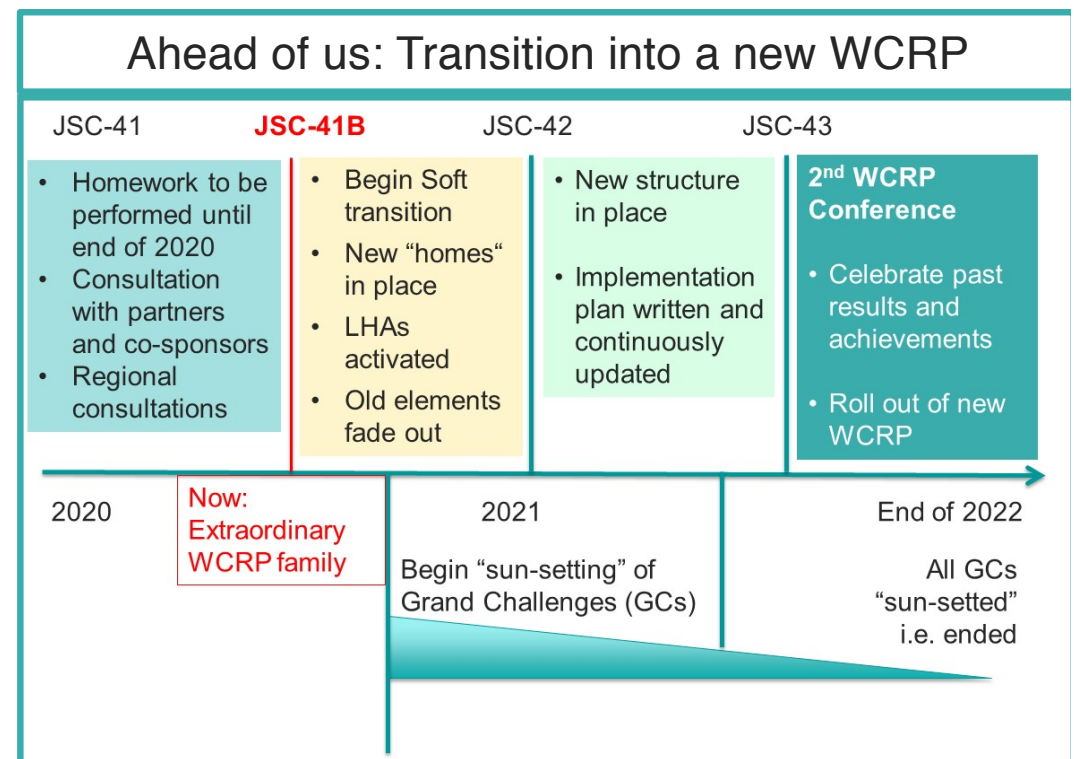
Session 7: Additional Implementation Workshops

Planned for 2021:

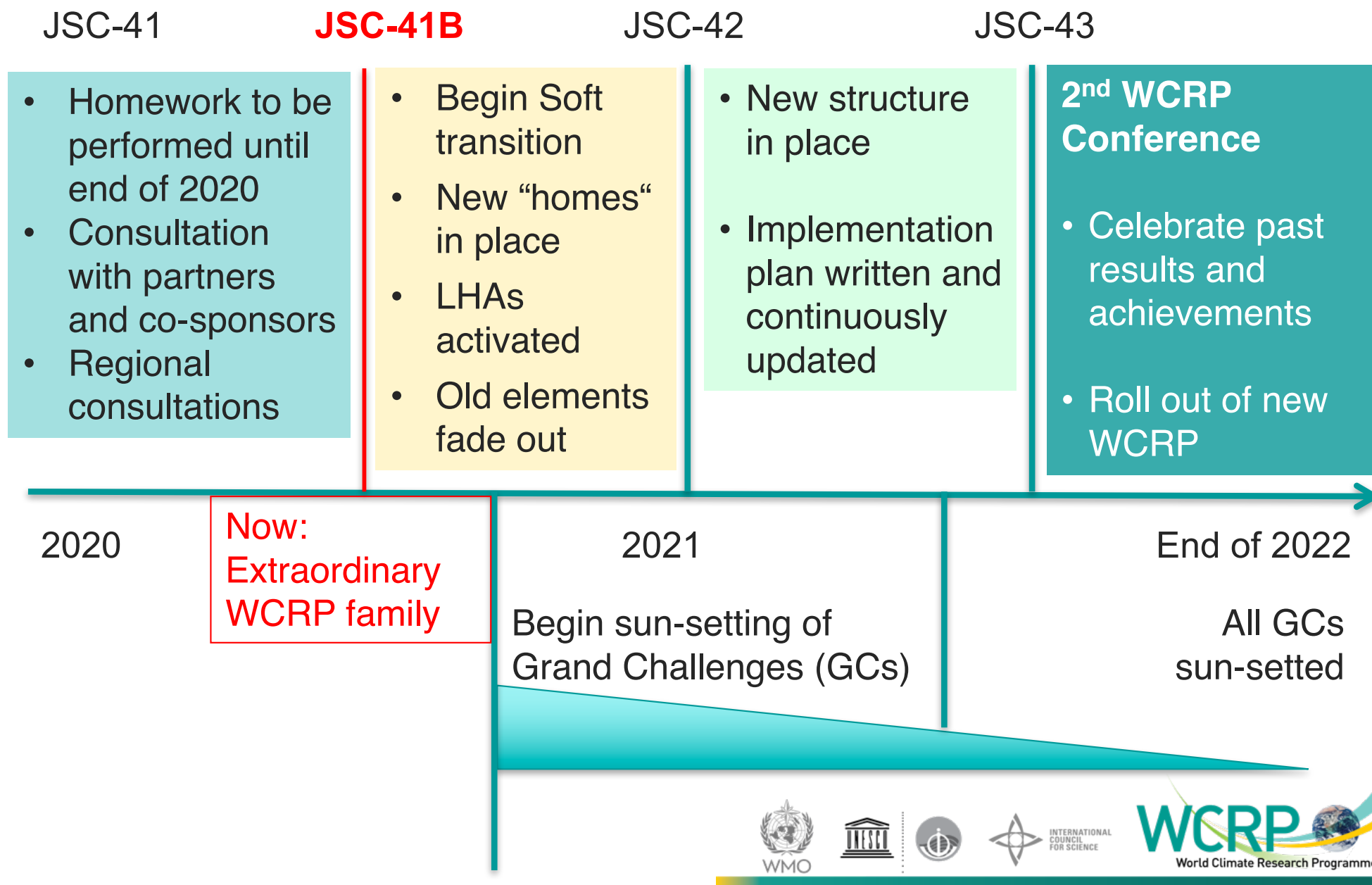
1. Workshop on future modelling challenges, May 2021
2. Regional Climate Information for Societies Workshop. *Date TBD*
3. Partners Workshop, planned with: WWRP, GAW, GCOS, Future Earth Programs (SOLAS, PAGES, AIMES, GCP and others). *Date TBD*

Planned for 2022 / 2023:

2nd Pan-WCRP Conference in 2022 or 2023



Ahead of us: 1. Transition into a new WCRP



Ahead of us: 1. Communication strategy

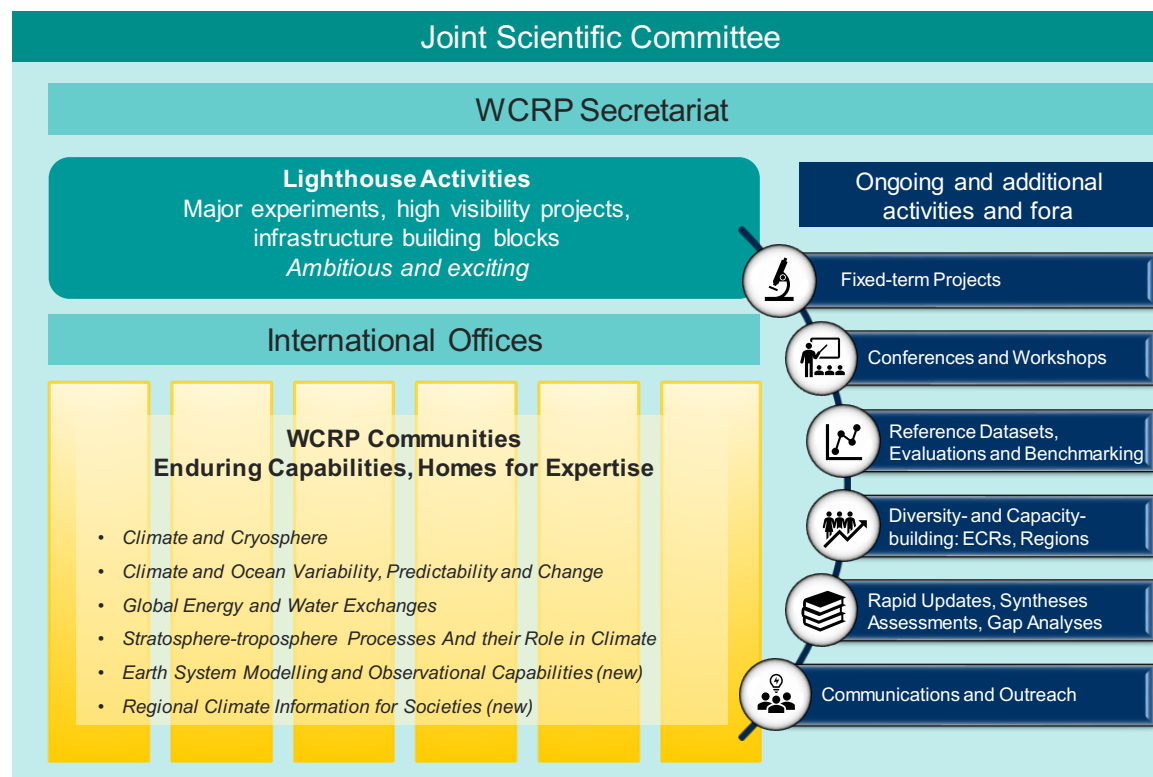
“A future WCRP needs much stronger linkages between its parts” [Detlef]; a focus on connections (people, teams, projects) [Sonya]”

Communication is therefore a critically important element of the WCRP Strategy and Implementation Plan

This includes “why, what, how and who”

For example - **WHO**

- Between Core Projects and LHAs
- Across the WCRP “family”
 - JSC, Secretariat, CP Chairs, LHA Leads and IPO Directors
 - SSGs, WGs, Panels
 - Researchers and their communities
- Externally:
 - Co-Sponsors and Funders
 - Partners and Research Programs
 - Community



Ahead of us: 2. Communication strategy

“A future WCRP needs much stronger linkages between its parts” [Detlef]; a focus on connections (people, teams, projects) [Sonya]”

Communication is therefore a critically important element of the WCRP Strategy and Implementation Plan

This includes “why, what, how and who”

For example - *WHY*

- Information flow and exchange
- Engagement and transparency
- Support collaboration, co-design and co-production
- Communicate and build understanding of our science to allied disciplines and communities

As discussed this week, this means the WCRP needs to work harder on the “how” and “what”

Ahead of us: 3. A Communication strategy

A strategy for Communication that builds and enables connections and collaboration; inclusion and accessibility

- *Principles, mechanisms, governance, support etc*
- *Needs much more consideration and discussion, starting now!*

Some early thoughts

Principles

- Modulate reliance on email; more judicious use videoconferencing!
- Transparency, consistency and accessibility for our community
- Probably no unique solution, rather a consistent “menu” of options
- Learn from 2020; and learn from others (Future Earth, AGU, WCRP)

Infrastructure

- Tools: Github, Tickets, Wikis, ...
- Collaboration Platforms: Microsoft Teams, Slack, ...
- Communication modes: Newsletters, Webinars, ...

Meetings and Workshops

- *In person* still needed, e.g. for building relationships and problem-solving
- *Online* reduces carbon footprint and costs; and can be more inclusive
- *Climate Research Forums* will provide an ongoing platform/forum

Inclusive and accessible language (esp. acronyms!)

Supported by funding, governance and expertise

Sustainable (efficient) and effective

Ahead of us 4: Other Elements

Joint Scientific Committee

WCRP Secretariat

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infrastructure building blocks
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Communications and Outreach

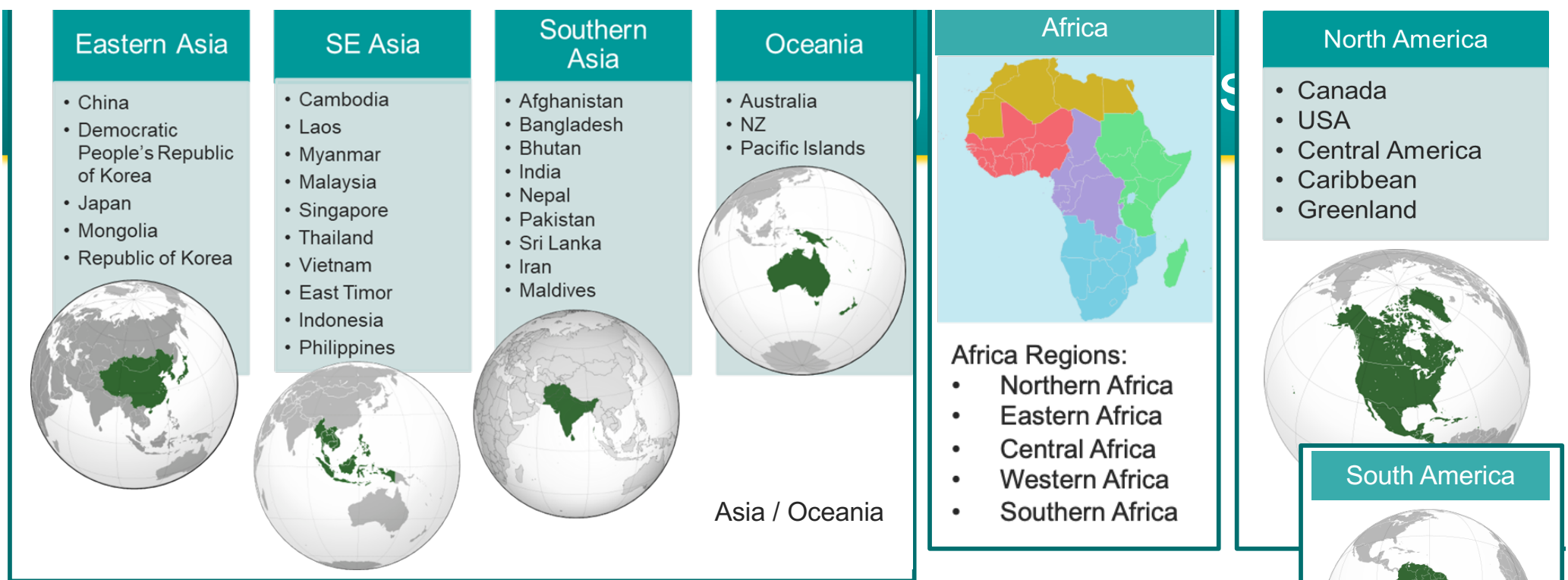
Session 8: Summary of Regional Consultations

JSC-41 ACTION: Put necessary steps in place to “roll out” regional consultations on WCRP evolution.

- There needs to be an identified regional “lead” to make it happen; i.e. establish the process, establish a team from across the JSC/WCRP family to be the local leads, etc.
 - It is intended to draw upon the networks of JSC members, current WCRP Core Projects and core activities, and also YESS
- Chair and Vice Chair to attend these regional consultations to provide a consistent message
 - A package of materials will be developed to support these consultations
- Outcome: consultation outcomes will refine the Lighthouse Activities, their research program as well as the thinking process about WCRPs future structure.

Status and Feedback - Summary

- Regional Focal Points (RFPs) appointed for all defined Regions
- Initial discussions with all RFPs teams across Regions
 - Complete: Asia/Oceania; Africa; South America; North America
 - Pending: Europe and Western Asia, planned for January 2021
- Initial WCRP-hosted “Climate Research Forums” are progressing, but slower than originally planned and so ...
- Proposed webinar for WCRP family in Jan 2021 to provide:
 - Overview: WCRP Strategy, Implementation, LHAs, Structure, Homes
 - Description and Status: Climate Research Forums in five regions



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Session 8: Summary of Regional Consultations

Goal of WCRP Regional Consultations As agreed at JSC-41 (May 2020)

- *“Hold regional and community consultations with the aim of including developing and other countries in the co-production of the new WCRP.”*
- Include members from regional WCRP communities and funding agencies
- An “engagement platform” for raising awareness, enabling a dialogue and providing feedback

Consultation via Climate Research Forums ~~“Virtual Town Halls”~~ in each Region / Sub Region

- Overview of WCRP Strategy, implementation priorities, science activities, draft structure
- Discussion about ongoing engagement with the communities**
- Other talks are possible, as appropriate**

Status and Feedback – some more details

How many and where?

- Multiple Climate Research Forums depending on the region and interests

Duration of each Forum?

- Planning for ca. 90 minutes

Content – needs to attract and engage!

- Overview WCRP presentation – Our Climate Future
- Science talk(s)
- Facilitated Q&A, Panel Discussion, Breakout Groups
- Ways to engage during and beyond the Forums



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Session 8: Summary of Regional Consultations

Who is the audience**?

- WCRP family and science communities
- Co-Sponsor communities
- Partners and allied agencies, groups
- Government / non-government agencies: users of climate information for policy-setting, planning and decisions

Organisation and Approach**

- “Top down” [WCRP leadership] and “bottom-up” [WCRP community]
- RFPs** provide insights and guidance on: participants; engaging content; and initiate or support follow-up discussions
- Support: JSC, WCRP Secretariat, IPOs in each region
- Local support from Co-sponsors and / or partners in each region

Status and Feedback – some more details

Logistics:

- Videoconference Platform
- Registrations via Eventbrite
- IPO or Partner/Co-sponsor to be local Host

Invitations and letting the community know:

- RFPs, IPOs and WCRP Secretariat building a contact database
- Flier and invitations

Facilitating discussion and feedback

- RFPs and IPOs to act as rapporteurs - ‘lessons learned’ report (for us and for the next Forum)
- Keen for ideas on how to continue the conversation

Governance (for communication and clarity)

- “Steering group” comprising WCRP Secretariat + Lead RFPs + IPO Directors
- All material available via a shared drive

Example Climate Research Forum Program

1. Introduction/welcome by WCRP JSC Chair, Vice Chair or Nominee; and RFP (5 mins)
 - a) Outline purpose and program
 - b) How the audience can engage, provide feedback etc
 - c) Technical / housekeeping points
2. Tailored version of WCRP's "Our Climate future" Slide Pack (20 mins)
3. Facilitated Q&A Session (up to 45 mins)

This could be a series of questions and/or a Panel or even Breakout groups (if the videoconferencing platform allows). This is for us to decide
4. Science talk? (up to 20 mins)
5. Concluding discussion:
 - a) How to engage
 - b) What other events might be useful, e.g. follow-up with partners, funders, NGOs, end-users
 - c) Final questions or clarification



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Session 9: Any other business

a. 2nd WCRP Open Science Conference

- Pan WCRP Conference; a decade after the Denver WCRP Open Science Conference.
- Organized in collaboration with partners, focussing on WCRP's science.
- Celebrate past successes; roll out the new WCRP; bring in next generation scientists; global geographic representation; engage with funders and stakeholders.
- Requires input and support from all WCRP efforts
- Requires the following roles and teams to be established:
 - Scientific and Technical Chairs
 - Science Steering team – to organise program and sessions
 - Local Host and Organising team
 - Fund raising
 - ERC Event,



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Session 9: Any other business

b. The future way of working, including a short update on the WCRP Carbon Footprint WG

- COVID-19 has forced us to change how we do business.
- Post COVID-19 WCRP mode of operations will evolve from this new level.
- We envision that from now on at least 50% of interactions and meetings will be virtual.
- This has many benefits, including:
 - Reduced carbon footprint, reduced travel costs
 - Inclusion and better engagement with community...
- Requires also to have a fresh view on WCRP business plans: where should WCRP spending be used for? (Workshops vs. planning/coordination meetings)
- Existing resources will carry us much further along...



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Session 9: Any other business

b. The future way of working, including a short update on the WCRP Carbon Footprint WG (Pierre Friedlingstein)

- Monitor WCRP travel-related carbon emissions
- Online carbon calculator tool developed in collaboration with Cranfield University (Chikage Miyoshi, Neil Harris) – agreement hopefully approved by the World Meteorological Organization soon.
- Need to collaborate with Core Projects/project offices to co-design this activity, defining what information is needed and how it is used.
- Define a baseline to monitor future progress
- Report to the WCRP Joint Scientific Committee on an annual basis.



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Session 9: Any other business

c. The WMO Research Board (Jurg Luterbacher)



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Session 9d: Collaboration with Future Earth

Future Earth – WCRP Joint Statement of Collaboration

Working together: Future Earth and WCRP working together to jointly address major societal challenges

Given the highly complementary nature of our aspirations and purpose, and strengths and expertise, there is great benefit in Future Earth and WCRP harnessing our synergies to jointly investigate and answer the most pressing societal questions, associated with climate and environmental change, through co-design and co-delivery between our respective communities.

The purpose of this statement of intent is to explicitly describe these areas of synergy, and the ways in which we can leverage our historical collaboration to significantly strengthen the partnership between our two research programmes.

Our goal is to achieve a step-change in the breadth and depth of our collaborative work so that we can collectively deliver more relevant, timely, integrated and robust programmes, products, and outcomes to benefit society. This goal is a decadal ambition, but the intent of both programmes is to develop a “roadmap” of shorter- and longer-term actions that will ensure this stronger collaboration begins immediately and grows in breadth and depth over the decade ahead.

Session 9d: Collaboration with Future Earth

Some key steps:

Continue, and formalise, fruitful collaborations with Future Earth Global research projects, especially:

- AIMES (Analysis, Integration and Modeling of the Earth System)
- GCP (Global Carbon Project)
- Past Global Changes (PAGES)
- The international; Surface Ocean – Lower Atmosphere Study (SOLAS)

Through: Reconfirming existing, or establishing new, Agreements; Shared membership on Steering Committees and Working Groups; and ongoing shared communication, joint planning, co-design and co-delivery



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Session 10d: Collaboration with Future Earth

Some key steps:

Some “low-hanging” opportunities for collaboration going forward:

1. Joint Program Review, with a focus on synergies, overlaps and gaps

2. Joint program-focused advancement activities:

- Developing integrated programs and products that serve our common communities and stakeholders

3. Joint activities, working to:

- Ensure support for core programs
- Identify synergies within hosting countries
- Reduce fragmentation for joint funders
- Develop productive structures for shared communities

4. Joint convening

- Future Earth is poised to support a convening platform that will enable co-design by our respective communities

5. Joint products, such as:

- United in Science Report
- 10 New Climate Insights(10NICS)
- GCP Global Carbon Budget

6. Engaging WCRP in Future Earth Governance

3. More broadly: co-develop a “roadmap” of actions in the near- and medium-term to ensure that this stronger collaboration begins immediately and grows in breadth and depth over the decade ahead

WCRP Secretariat: Overall approach

WCRP Secretariat's role is to:

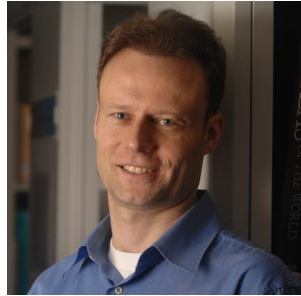
- Empower the JSC and WCRP community
- Engage co-sponsors and partners in WCRP
- Work with the JSC and co-sponsors to reach collective goals, implement joint strategies and mobilize extra budgetary resources
- Coordinate across WCRP activities, facilitate cooperation and build collaboration with partners



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WMO Science and Innovation Department



**Jürg
LUTERBACHER**
Director Science and
Innovation



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WCRP Secretariat Staffing 2020



Michael SPARROW

Head, World Climate
Research Division, WMO &
Head of the WCRP
Secretariat



Michel RIXEN

Senior Scientific Officer



Wenchao CAO

Junior Professional Officer
(joint WCRP/WWRP)



Catherine MICHAUT

WCRP Support Unit (IPSL)



Narelle VAN DER WEL

Consultant (part-time)



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WCRP Secretariat Staffing 2021+



Michael SPARROW

Head, World Climate
Research Division, WMO &
Head of the WCRP
Secretariat



Michel RIXEN

Senior Scientific Officer

(to end March)



Wenchao CAO

Junior Professional Officer
(joint WCRP/WWRP)

(to end Nov.)



Catherine MICHAUT

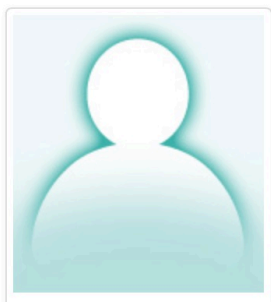
WCRP Support Unit (IPSL)



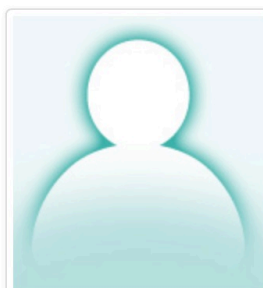
Narelle VAN DER WEL

Consultant (part-time)

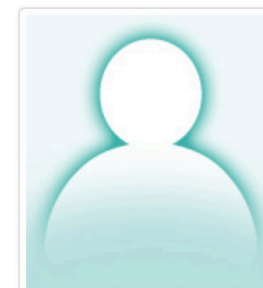
(to end Feb.)



Science Officer 1



Science (50%) /Comms. (50%) Officer
(comms role shared with WWRP and GAW)



Science Officer 2

<https://erecruit.wmo.int/public/>



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Session 9: Any other business

f. Existing and *planned* IPOs (Detlef and Helen)

- SPARC IPO at DLR in Germany
- CliC IPO in Norway (Bjerknes) and possibly US
- CLIVAR joint IPO in China (FIO) and India (IITM)
- GEWEX IPO in USA
- CORDEX IPO at SMHI in Sweden.
- S2S ICO at KMA in Republic of Korea
- CORA at GERICS (in Germany) and BCCR (in Norway)
- *New CMIP Office (TBC at JSC only session)*

This is more than \$3M per annum in national support; it is critically important to WCRP and this support is gratefully acknowledged!

New IPOs to be discussed and decided include:

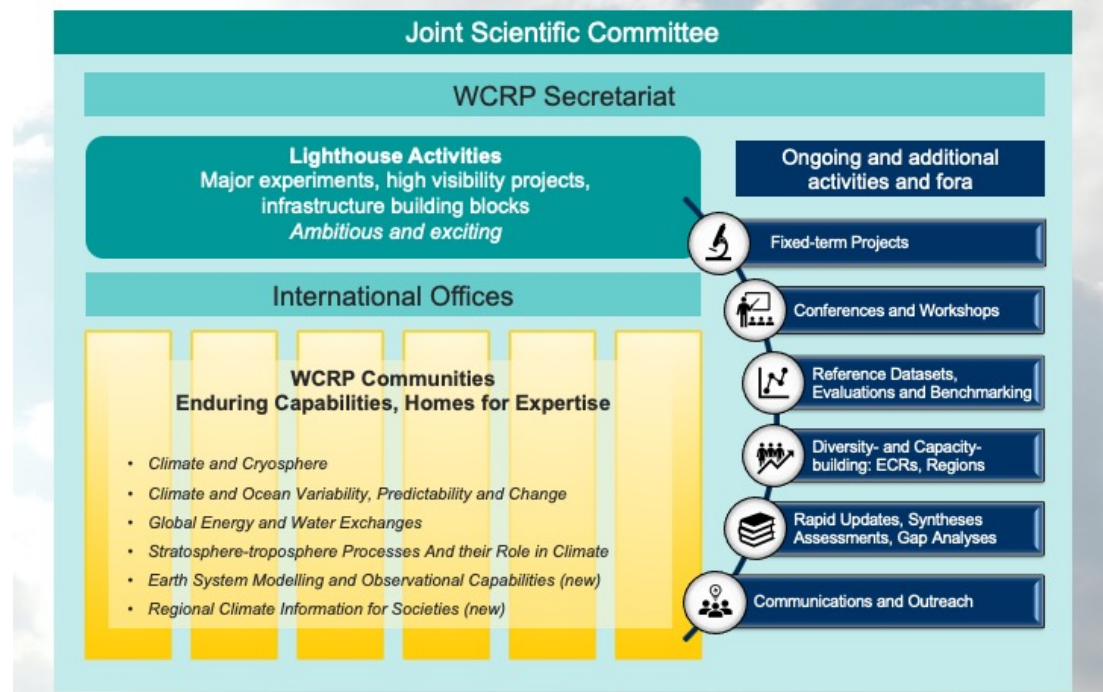
- *Earth System Modelling and Observational Capabilities (Model – Data) Home*
- *Regional Climate Information for Societies Home*
- *Proposed Extremes*

Budget and Finance

2021 Budget to be discussed in detail at JSC only session on the Dec 9.
Some basic assumptions and concepts:

- Likely 50% or more of our meetings will be online
- Assuming a new WCRP structure
- Some activities such as Grand Challenges will sunset by end 2022
- Rather than allow 100% c/f from 2020 to 2021 suggestion is that (a) we increase allocation and (b) consider additional requests on a case-by-case basis
- Expenditure plans should be provided for all activities to WCRP Secretariat

First Draft of a New WCRP Structure



Draft proposed Income and Expenditure 2021

Expenditure	Budget (‘000 CHF)
Geneva Staff Costs	
Temporary staffing (consultant)	15
Geneva Staff Travel and misc. office expenses	60
JSC Annual Meeting and JSC travel/costs	60
Core Activities	
Climate and Ocean Variability, Predictability and Change	85
Climate and Cryosphere	85
Global Energy and Water Exchanges	85
Stratosphere-Troposphere Proc and their Role in Climate	85
Earth System Modelling and Observational Capabilities	85
Regional Climate Information for Societies	85
Lighthouse Activities x 5	150
Fixed-term Projects, capacity building etc.	20
Grand Science Challenges	60
Other e.g. GCOS or other items not in above	25
Implementation activities	50
TOTAL EXPENDITURE	950

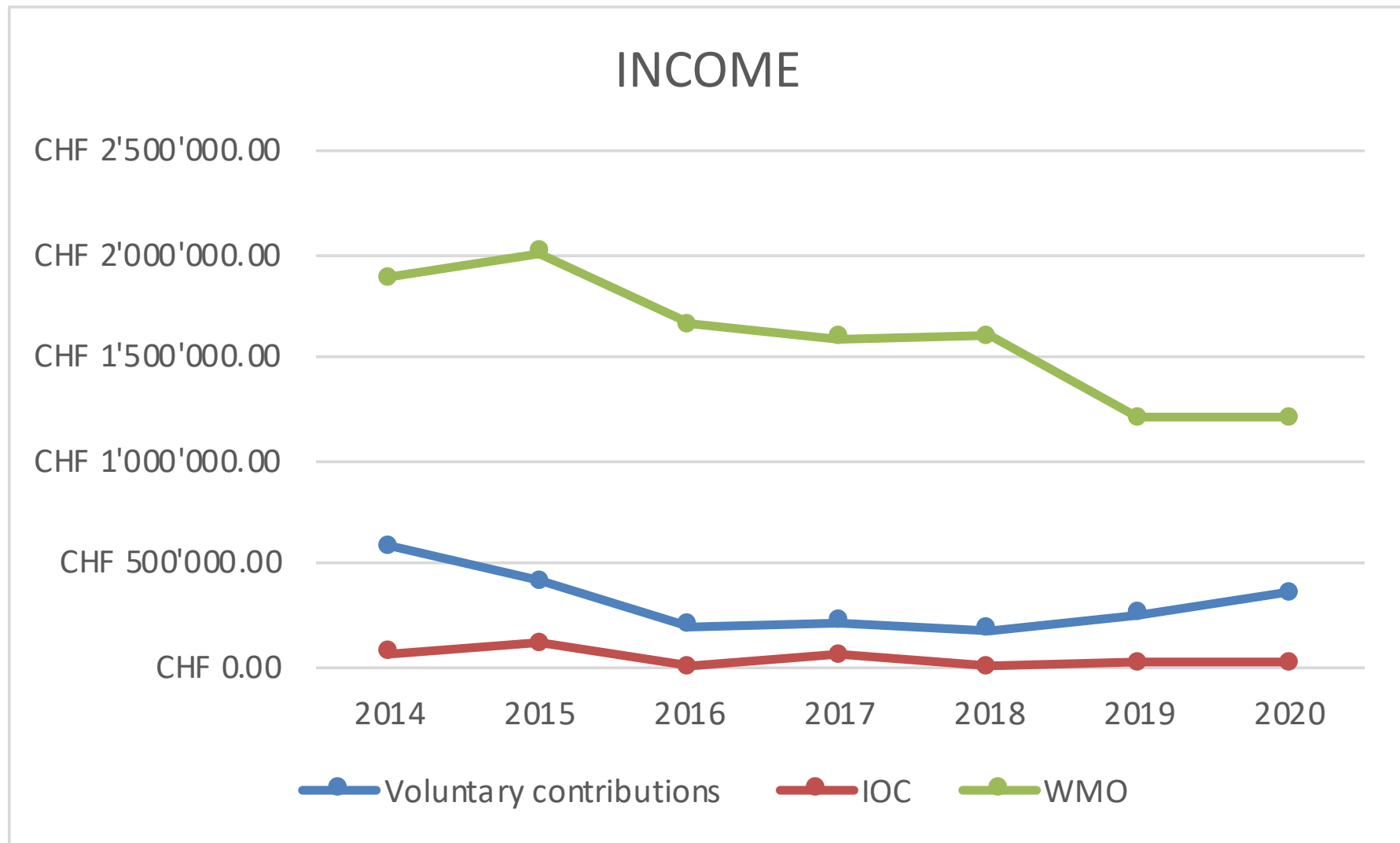
	Budget (‘000 CHF)
Estimated reserve at beginning of 2021 (including unspent funds because of COVID)	905
Income during 2021 (Estimate)	
WMO Contribution to JCRF (trust fund)	280
IOC Contribution to JCRF	23
Voluntary: National (country) contributions	354
TOTAL ESTIMATED INCOME 2021	657
(Note this does not take into account proposals to e.g. USGCRP (350k))	
Estimated Reserve at beginning of 2022 (note quite a few uncertainties in this figure)	612



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Approximate income since 2014



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Budget and Finance

Income for 2020, 2021 and beyond:

- Annual solicitation letters to countries (National Academies i.e. ISC members) were sent in 2020, including to countries that have not provided funds in the past
- Awaiting outcome of USGCRP proposal (350k for 2021+)
- Proposal also submitted to UK Royal Society (30k for 2022)
- Closer interactions with Belmont and national funding agencies are intended to both strengthen the impact of WCRP science and income

Expenditure in 2020:

- Significant underspend on travel because of COVID-19
 - provides us with the opportunity to sustain reduced travel costs (and carbon emissions) in the future – leading to positive climate and financial outcomes
- Higher than budgeted expenditure on temporary staffing because of secretariat staffing issues
- Expenditure overall significantly lower than budgeted



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Session 9: Any other business

h. Comments from Co-Sponsors and Partners



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General Discussion and Closing Comments



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End of Day 4 and JSC-41B

Thank you everyone!



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