



# WORLD CLIMATE RESEARCH PROGRAMME

*JSC-42<sup>nd</sup> Session of the WCRP Joint Scientific Committee*

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



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# Session 7: Way Forward and Next Steps

1. Enhancing WCRP's collaboration with our co-sponsors and allied programmes and activities (D. Stammer/H. Cleugh)
2. Preparation for COP 26 and UNFCCC (D. Stammer/M. Sparrow)
3. Forthcoming events, meetings and conferences (Detlef/Helen/Mike)
4. WCRP Secretariat report (M. Sparrow)
5. Regional Consultations / Climate Research Forums (Helen)
6. Update on WCRP Carbon footprint (P. Friedlingstein)
7. New and emerging science issues (H. Cleugh, D. Stammer)
8. Adjustments to finances and governance (D. Stammer, H. Cleugh, M. Sparrow)
9. Implementation plan writing (D. Stammer, H. Cleugh)
10. Wrap-up and close of the open session of JSC-42 (D. Stammer, H. Cleugh)

*Chair H. Cleugh*

**Rapporteur:** *A. Caltabiano*

**Chat Moderator:** *N. Van der Wel*



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# Collaboration with co-sponsors and partners

(D. Stammer/H. Cleugh)

- a) Future Earth and ISC
- b) WMO Research Board and WMO programs (GAW, GCOS, WWRP, et al)
- c) US Global Change Research Program
- d) Belmont Forum
- e) IOC and UN Ocean Decade

*Input from Session 6 (Science Partnerships)*



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# COP 26, UNFCCC, State of the Climate

(D. Stammer/M. Sparrow)

- a) UNFCCC report
- b) COP26 preparation
- c) WMO State of the Climate



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# Preparation for COP 26 and UNFCCC

- Significant and long-term engagement with **UNFCCC** SBSTA (Subsidiary Body for Scientific and Technological Advice) particularly with Research Dialogue
- **COP (Conference of Parties) 26**
  - COVID has meant planning and guidance has come very late
  - Still unclear if side events will be face-to-face or virtual
  - WCRP involved in:
    - Proposal submitted with ISC, Future Earth and others on *Risk* (My Climate Risk involved)
    - Launch event for 10NICS (New Insights in Climate Science)
    - Providing input to WMO UN proposal (theme still to be decided)
    - Discussion on WCRP-led side event with Future Earth; but unlikely considering 2<sup>nd</sup> July deadline.
    - *Propose that for next COP WCRP registers itself as Observer Organisation*



# Forthcoming events, meetings and conferences

(Detlef/Helen/Mike)

- a) Future of Climate Modeling
- b) Observations (with GCOS)
- c) WCRP/IPCC
- d) AGU 2021
- e) WCRP Sea level conference in 2022
- f) WCRP OSC 2023
- g) WMO/ISC/IOC OSC 2025

Within WCRP, we recognise the need to optimize and co-design workshops between groups – first step is to do a “stocktake” of all planned Workshops in coming 18-months

# WCRP Secretariat Report

4. (M. Sparrow)



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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  
  
(Sick Leave)



**Nico CALTABIANO**

Scientific Officer  
  
(started May 17<sup>th</sup>)



**Wenchao CAO**

Junior Professional Officer  
(joint WCRP/WWRP)  
(50% until 31 Oct)



**Catherine MICHAUT**

WCRP Support Unit (IPSL)  
  
(30-50%)



**Narelle VAN DER WEL**

Science and  
Communications Officer  
  
(from 1 June)



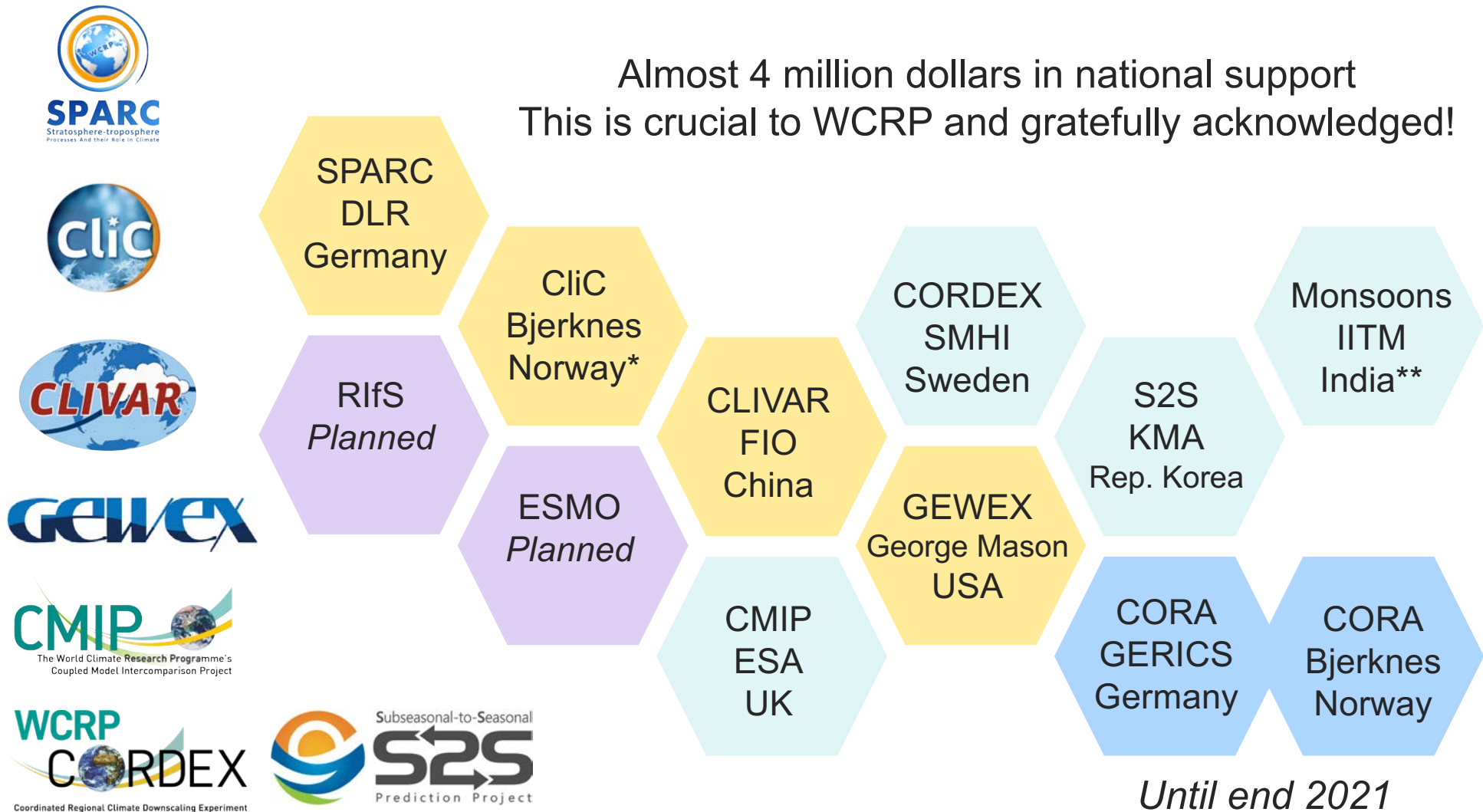
**Hindumathi Palanisamy**

Scientific Officer  
(From 14 July)

- Challenging period over last 18 months because of lack of staff in the Secretariat. Offset in particular by help of colleagues in the IPOs, Catherine from IPSL, and by dedicated Chair/Vice Chair
- New (fantastic) staff starting or about to start
- Additional cross-cutting staff in S&I department
- Consultants supported by NOAA for WCRP OSC 2023
- Looking at additional assistance from JPOs and Interns as well as other countries seconding staff.



# International Project and Support Offices



\*Possible new office in USA (TBC)

\*\* Joint with WWRP

[www.wcrp-climate.org/sponsors](http://www.wcrp-climate.org/sponsors)



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# Income/Expenditure 2020/21 summary

2020	CHF (000s)	2021	CHF (000s)
<b>Expenditure</b> (~42% of allocation) (~20% of science)	<b>328</b>	<b>Expenditure</b> (to date ~ 7%)	<b>75</b>
<b>Income:</b>		<b>Income:</b>	
WMO Direct	333	WMO Direct	418
IOC Direct	23	IOC Direct	23
Voluntary – country - contributions	198*	Voluntary – country - contributions	27**
		NOAA funding for WCRP OSC	210
		Fund from Trust Fund closure	51
<b>Total</b>	<b>554</b>	<b>Total</b>	<b>729</b>
		<b>(the below is assuming 100% exp.)</b>	
<b>End of year assets</b>	<b>880</b>	<b>Predicted end of year assets</b>	<b>782</b>

\* NZ, Canada, Germany, Japan, China, Russia, Finland, US

\*\* Canada, NZ, Australia (several others in process) ... assuming 260k eventually

# Budget 2022 (*DRAFT!*)

Expenditure	CHF
Temporary staffing	15
WCRP Office Operation	120
JSC travel	60
CLIVAR	85
CliC	85
GEWEX	85
SPARC	85
Regional Info. for Society	85
Earth System Mod. & Obs.	85
Lighthouse Activities x 5	150
Grand Science Challenges	60
Fixed Term Proj., Cap. Building etc	20
Other (e.g. GCOS)	25
Implementation Activities	50
WCRP OSC Costs	115
<b>TOTAL EXPENDITURE</b>	<b>1125</b>

Income	CHF
WMO Contribution to JCRF 2022	280
IOC Contribution to JCRF 2022	23
Voluntary - country - contributions	260
(Subtotal)	(563)
C/F from 2021 (estimate)	782
<b>TOTAL ESTIMATED AVAILABLE JCRF FUNDS for 2022</b>	<b>1345</b>
(Predicted C/F to 2023)	220

# Climate Research Forums

## 5. Regional Consultations / Climate Research Forums [10-mins] (H. Cleugh)

**Refer to Session 2 on Day 1 for recap. and progress**

### **Next steps:**

- a) Roll out to South America, NZ, Southern Asia, Africa and Pacific Island nations
- b) Continue analysing feedback
- c) Plan for follow-up Actions
  - Drafting short “activity reports”
  - Approach, key messages and lessons learned
  - Options for ongoing Forums (or not) and links to our other regional activities (RIfS and CORDEX; My Climate Risk ..)
  - Check back in with RFPs ...



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# WCRP Carbon Footprint

6. Update on WCRP Carbon footprint [10 mins]  
(P. Friedlingstein)



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# Emerging science issues

(D. Stammer, H. Cleugh)

*Input from Sessions 5 (Science Gaps) and 6 (Impact of WCRP Science)*



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# Science Gaps

- Budgets and cycles of heat, water, carbon, etc.: cross-cutting project “co-owned” by: SPARC, CLIVAR, GEWEX and perhaps SLC?
- Organize work on extremes as an integrating, cross-cutting, element integrating extremes work and building on a Extremes Platform as support unit.
- Climate intervention: details to be worked out.
- Others:
  - **Human element** in e.g. links with development trends but also other such as geoengineering.
  - **Data Assimilation**: Needs to be cross-cutting: across timescales, coupled



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# Other High-level Science Questions

Considering all scales

How to improve climate modelling and process understanding?

Aggregation and scaling

What is the impact of different forcings?

Aerosols

How can we better understand climate sensitivity?

What fundamental science is needed?

How can we communicate uncertainty better?

Parameterization

How can we make predictions more useful and relevant to society's needs?

How can we improve climate predictions?

Disruptive technology

What opportunities do new technologies provide?

What will happen in the high latitudes?

What will be the impact of Geoengineering?

Is response action needed?

What does society need to know?

Data-model fusion

What can we expect in regional climate hotspots?

Attribution

Prediction

What will happen to low-lying islands?

How will climate extremes occur in the future?

Evolution

How will reservoirs change in the future?

Heat

Carbon

Water

What is the interaction between climate and development trends?

Urbanization

Land-use Change

# Finances and governance

(D. Stammer, H. Cleugh, M. Sparrow)

Project Support for Core Projects and LHAs:

- JSC is committed to move quickly to set up IPOs for ESMO and RIfS **and** explore the option of establishing Project Support Units to support the approved LHAs.
- Finance and budgets to be discussed and approved at JSC-only session.

*Input from Sessions 5 (Coordination and Communication) and 6 (Resources)*



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# Engagement (ECRs, regions, partners)

- **We speak a lot about it, but need to act NOW!** Start by implementing existing rules!  
Who are the people? : people database collected from different workshops, fora etc... and use it to enlarge future contributions and engagements.  
This is more easy for new activities : it is the right time! And the basis for success stories
- **The door is open ... but where is the door?** Communication aspects, but also investment from people who are in to bring in new people  
Different aspects : New people in WCRPs scientific activities, new people in panels and visibility for new leadership.  
Need flexibility and to foster scientific leadership for short time projects with high level outcomes. (true for ECRs, MCRs, and engagements at regional/local scales)
- **Barriers:**  
Lack of turn over in some activities and panels; Languages and confidence in promoting science in non-native language;  
Step appearing too big and need first for personal engagement in small groups (local, regional etc)  
Career development for ECRs and unstable jobs  
Diversity in the way people are working (age, gender, regions, culture, .. ): need to be sensitive to it



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# Communication and Coordination Breakout Group: Main Themes

## **Memberships, Engagement, and Participation**

- Develop a clear description of roles and responsibilities for all WCRP Committees and members (code of conduct)
- Identify and address barriers to inclusive engagement

## **Greater flexibility with our current “governance”**

- Review current organisational structures to determine which aspects might be hampering WCRP’s mission and purpose
- Identify optimal blend of top-down guidance and direction AND “bottom-up” grass roots involvement

## **Coordination across projects and joint activities**

- Consider more widespread utilization of ex-officio members and liaisons to enhance communication
- Encourage workshops/activities on topics spanning groups to create more opportunities for communication/collaboration
- Better use of IPOs to support horizontal communication, coordination and integration

## **Wider and clearer dissemination of information**

- Better use of digital technologies (e.g., Slack Channels) to facilitate information exchange and more informal interactions
- WCRP family database of people and their expertise and research interests
- Network map (web-based) that describes the functional connections between parts of the WCRP

## **Trust**

- Paramount to a culture of collaboration – our science demands it!

# Communication

## Principles

- Communication: quality not quantity
- Solutions tailored to the tasks and groups involved
- Create a foundation of tools that people already widely use and are familiar with
- Consider the institutional frameworks and requirements that we work within
- Review tools used as requirements and technology changes
- Community approach (open access)
- Accessible language (jargon, acronyms, non-English languages)

**Implementing these will be part of the Implementation Plan**



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# Implementation Plan

(D. Stammer, H. Cleugh)

## Recommended Steps and Timeline

- 1) Agree on outline (August 2021)
- 2) Pulling material together (August/September 2021)
- 3) Compilation of first draft (September/October 2021)
- 4) Revision by leadership team (November 2021)
- 5) Final editing and agreement by JSC (December 2021)
- 6) Agreement by co-sponsors (January 2022)

**This will be a dynamic and living document that will be regularly reviewed and refreshed.**

**It should also reflect discussions this week.**

**It will also serve for on-boarding purposes.**

# Implementation Plan

## Tentative Outline

1. WCRP Mission and Science Goals
2. Implementation Strategy and Structure
3. WCRP Elements and their science plans
4. Collaboration with partners and allied programmes
5. Communication and Coordination
6. Finances including investment strategy
7. WCRP Secretariat, International Project Offices and Project Support Units
8. Engagement around the world
9. Diversity and Inclusion – WCRP's principles and approach
10. Capacity Building and Education
11. WCRP's Sustainability Principles
12. Updating the science and implementation plan



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# Wrap-up and Closing

- 1) What we have heard during JSC-42
- 2) What will be picked up at our JSC-only meeting
- 3) Action Items and homework assignments
- 4) Next steps



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# A key message from JSC-42

Pending further discussion with the JSC at our meeting next week (which might provide more detailed feedback and suggestions for actions and homework), the JSC is very satisfied with the science plans and progress presented this week.

WCRP's "soft transition" appears to have worked well and is now complete.

From next week, we are the new WCRP. All of our core activities, including the new initiatives, are strongly encouraged to proceed with your science goals and objectives.

**We are all very eager for the new WCRP to now begin!**



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# Thank you (3)

To CORA, which ends in 2021

And to Neil Harris, who will step down as Co-Chair of the SPARC SSG



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# What we said at our opening Session 1

## ***Welcome to this pivotal JSC-42 session***

- It marks the beginning of the end of the soft transition to the new WCRP structure. Soft transition will be completed by:
  - Finalization of our new “elements” (Core Projects and Lighthouse Activities) – science plans, scope, partnerships, organization.
  - Delivery of an Implementation Plan by the end of 2021.
- The new WCRP is excellent and authoritative in climate science; it aims to be energetic, agile and dynamic, with enhanced diversity and transparent communication and strong community engagement, relevance and profile.
- The new WCRP will be effectively engaged with funding agencies around the world.



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# Goals of JSC-42

1. Hear back from the WCRP family on progress toward the Implementation and new science / business plans; i.e.,
  - a) Receive reports, and proposals for change, from our Core Projects (ongoing and new).
  - b) Receive proposals for science plans of LHAs.
2. Come to decisions that will finalize the soft implementation of new elements and associated organizational structures.
3. Discuss aspects that will be required in the future: coordination mechanisms, communication, new investment strategies (finance), and improved interaction with partners.
4. Initiate a new way of business for the JSC and WCRP family, which is to include an annual session / day dedicated to brainstorming and strategic discussions.



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# JSC-only: Draft Agenda

1. Review of Actions from JSC41 and JSC 41B (M. Sparrow)
2. WCRP Secretariat: Budget, staff planning etc.-(M. Sparrow)
3. *Discussion and final approval of new WCRP core activities (LHAs, new Core Projects), including updates on international project offices and plans for other support units (All)*
4. Missing science and further developments (D. Stammer, H. Cleugh)
5. Strategies for future WCRP resource investments (D. Stammer, H. Cleugh)
6. JSC future membership (D. Stammer, H. Cleugh, M. Sparrow)
7. Core activity memberships (D. Stammer, H. Cleugh, M. Sparrow)
8. Enhancing collaborations and communications (e.g. interactions with Belmont, Future Earth etc.) (D. Stammer, H. Cleugh)
8. AOB (All)
9. Closing (D. Stammer, H. Cleugh)



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Thanks for all WCRP Family members for their  
contributions to an excellent JSC-42

Thanks to all Secretariat and IPO members for an  
excellent preparation and operation of the meeting

See you all hopefully in person at JSC-43 in 2022

Stay safe and healthy.



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End of Session 7



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