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# *Stratospheric Processes and their Role in Climate (SPARC)*

*A Core Project of the World Climate  
Research Programme*

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## The WCRP



Aim: to understand the predictability of climate and human influence on climate

*for use in an increasing range of practical applications of direct relevance, benefit and value to society*

Core projects: CliC, CLIVAR, GEWEX, SPARC

Working Groups: WGNE, WGCM, WGSIP

Panels: WMP, WOAP

Managed by JSC, supported by JPS

Annual JSC meeting held each spring



## SPARC: Overall Aim & Modus Operandi



To bring knowledge of the stratosphere to bear on relevant issues in climate variability and climate prediction

To identify gaps and define “bite sized” deliverables, bringing in relevant partners, in a well-defined strategic plan for evolution

SPARC resources:

- WCRP allocation to support travel
- SPARC Office
- **Its participating scientists**



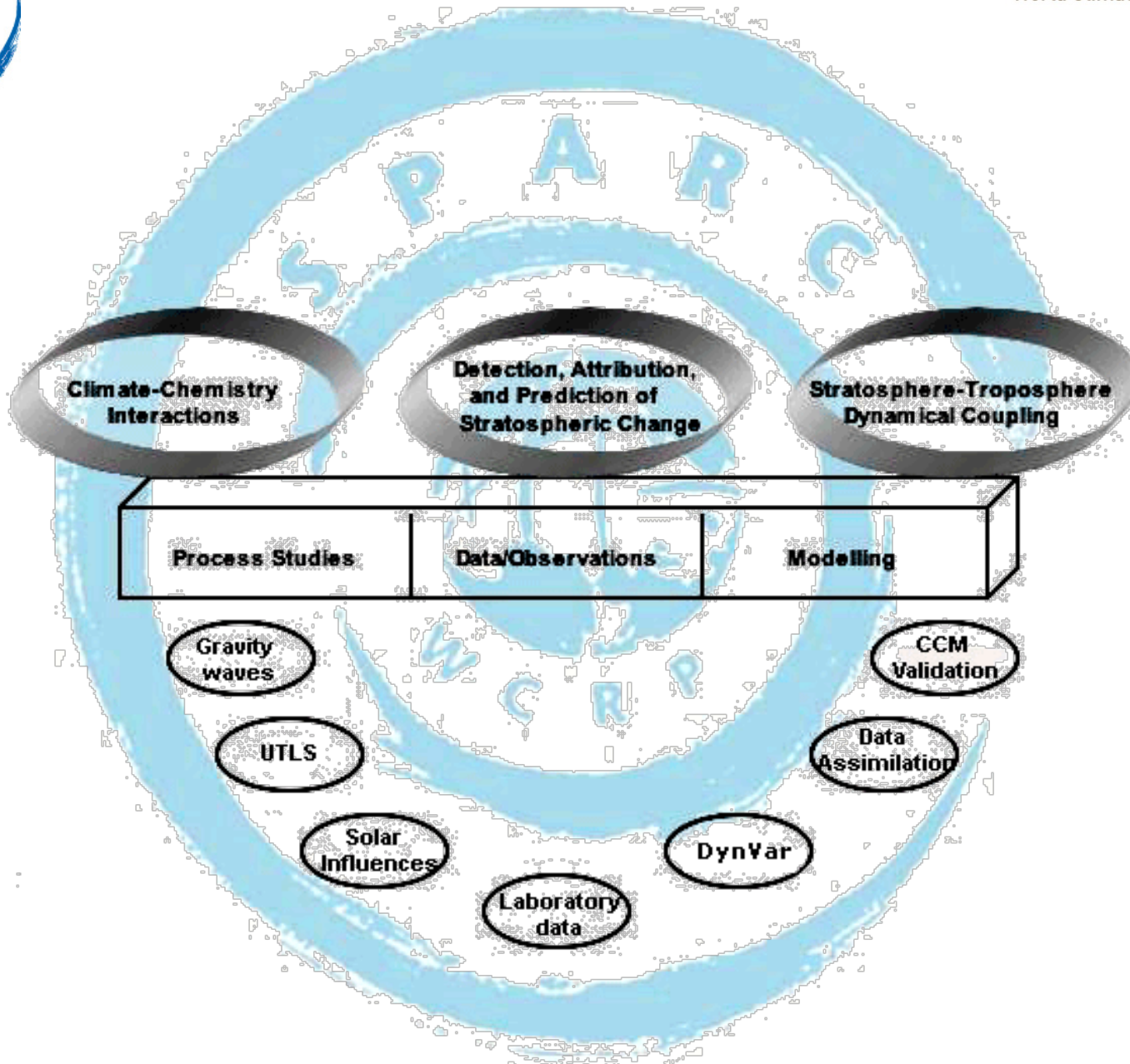
- SPARC vehicles include
  - SPARC Newsletter (266 citations in the WoS)
  - SPARC Reports (174 citations in the WoS)
  - Refereed review papers
  - Papers from SPARC activities (e.g. CCMVal)
  - Interdisciplinary workshops to cross boundaries
  - Working groups, e.g. data assimilation
  - General Assemblies (every 4 years)



- SPARC Reports have had a particularly important role in past assessments
  - Ozone profile trends
  - Stratospheric temperature trends
  - Water vapour trends
  - Aerosol assessment
- Provided direct input into the last three WMO/ UNEP Ozone Assessments  
(14 citations in WMO/UNEP 2006; 7 citations in AR4)



# Current SPARC Structure





## SPARC SSG



- Co-Chairs
  - Thomas Peter (Switzerland; 2007-2010)
  - Ted Shepherd (Canada; 2007-2010)
- Members
  - Greg Bodeker (New Zealand; 2007-2010)
  - John Burrows (Germany; 2004-2012)
  - P.C.S. Devara (India; 2008-2011)
  - Roseanne Diab (South Africa; 2009-2012)
  - Veronika Eyring (Germany; 2009-2012)
  - David Fahey (USA; 2008-2011)
  - Peter Haynes (UK; 2005-2010)
  - Elisa Manzini (Italy; 2005-2010)
  - Masato Shiotani (Japan; 2009-2012)
  - Anne Thompson (USA; 2007-2010)



## Some general points on SPARC structure

- Themes are based on scientific foci (not tools), but do not involve a separate layer of organization (such as panels)
- Specific activities (the “pearls”) with well-defined goals meet separately as needed, and report back at SSG meetings
- SSG meetings involve SSG members, ex-officio members and observers (representing partners and users), and theme and activity leaders (typically ~40 in all), **who act collectively**
- Activities are initiated at SSG meetings, usually following an initial workshop, and are pan-SPARC
- Integration happens at the SSG level
- Prioritization and phasing out happen naturally
  - Prioritization involves: time allocation at SSG meeting, and allocation of travel funds
- We try to engage emerging (or latent) talent as activity leaders





## Purpose of SSG meetings

- Review existing activities, provide feedback
- When appropriate, initiative new activities (including General Assemblies)
- Decide on priorities (i.e. travel support)
- Provide feedback to WCRP on long-term evolution (e.g. Implementation Plan: see last SPARC Newsletter)
- Nominate new SSG members for consideration by JSC

### **This year also:**

- Develop closer links with IGAC, where appropriate
- Discuss future of SPARC Office