

**Judith
Perlwitz**
Co-Chair



Neil Harris
Co-Chair



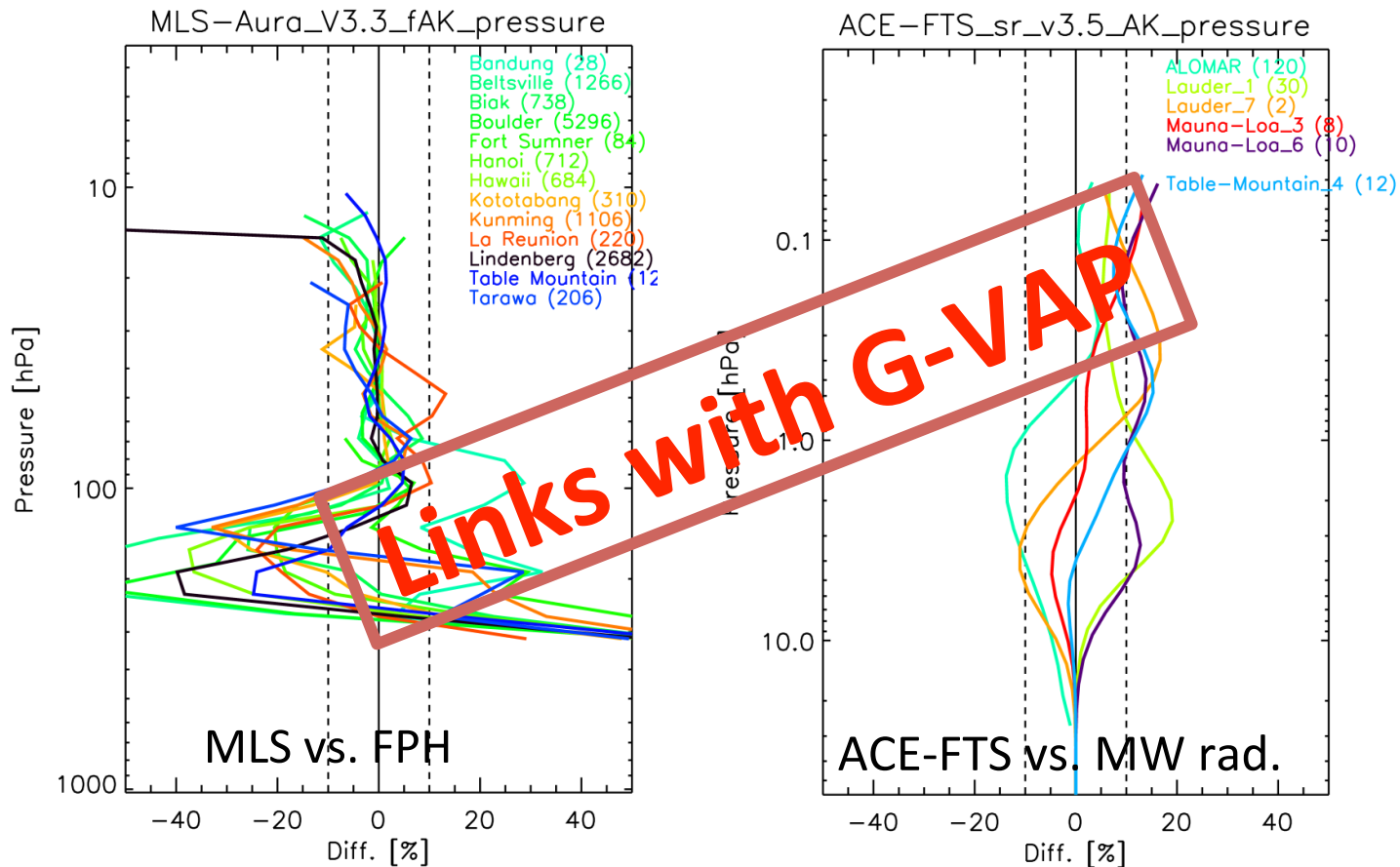
Boram Lee
WCRP Liaison

The SSG



**SPARC
Office**
Zurich

Water Vapour Assessment - II



“Assessing availability and quality of chemical composition measurements in the upper troposphere/lower stratosphere (UTLS) from multiple instrument platforms”

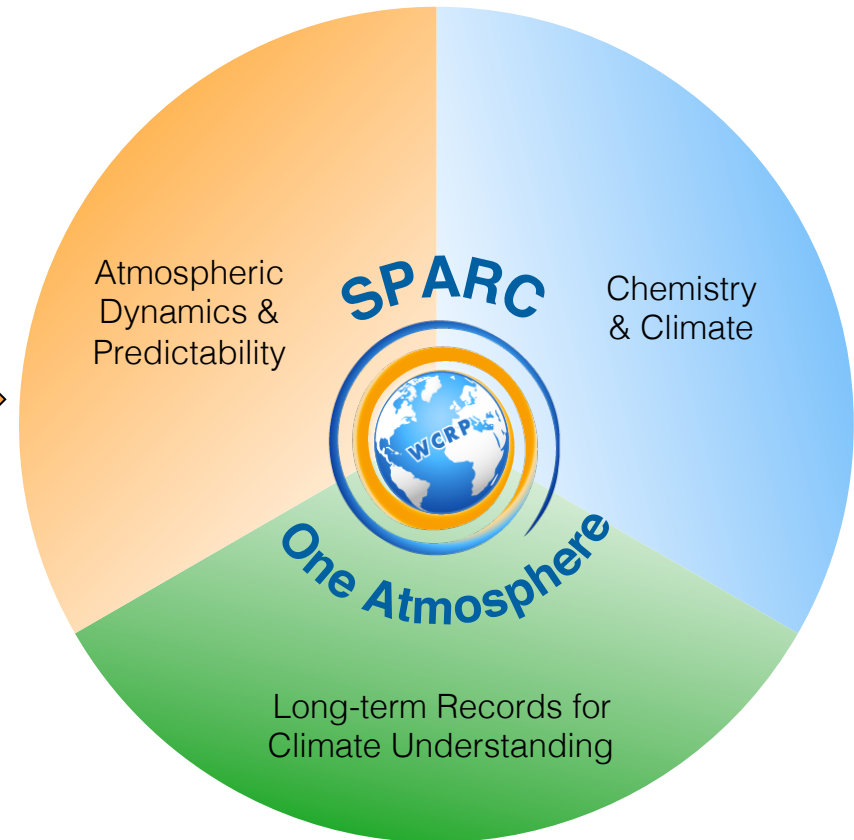
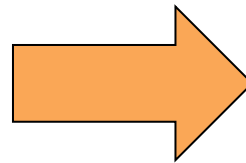
24-27 May 2016

WMO, Geneva, Switzerland

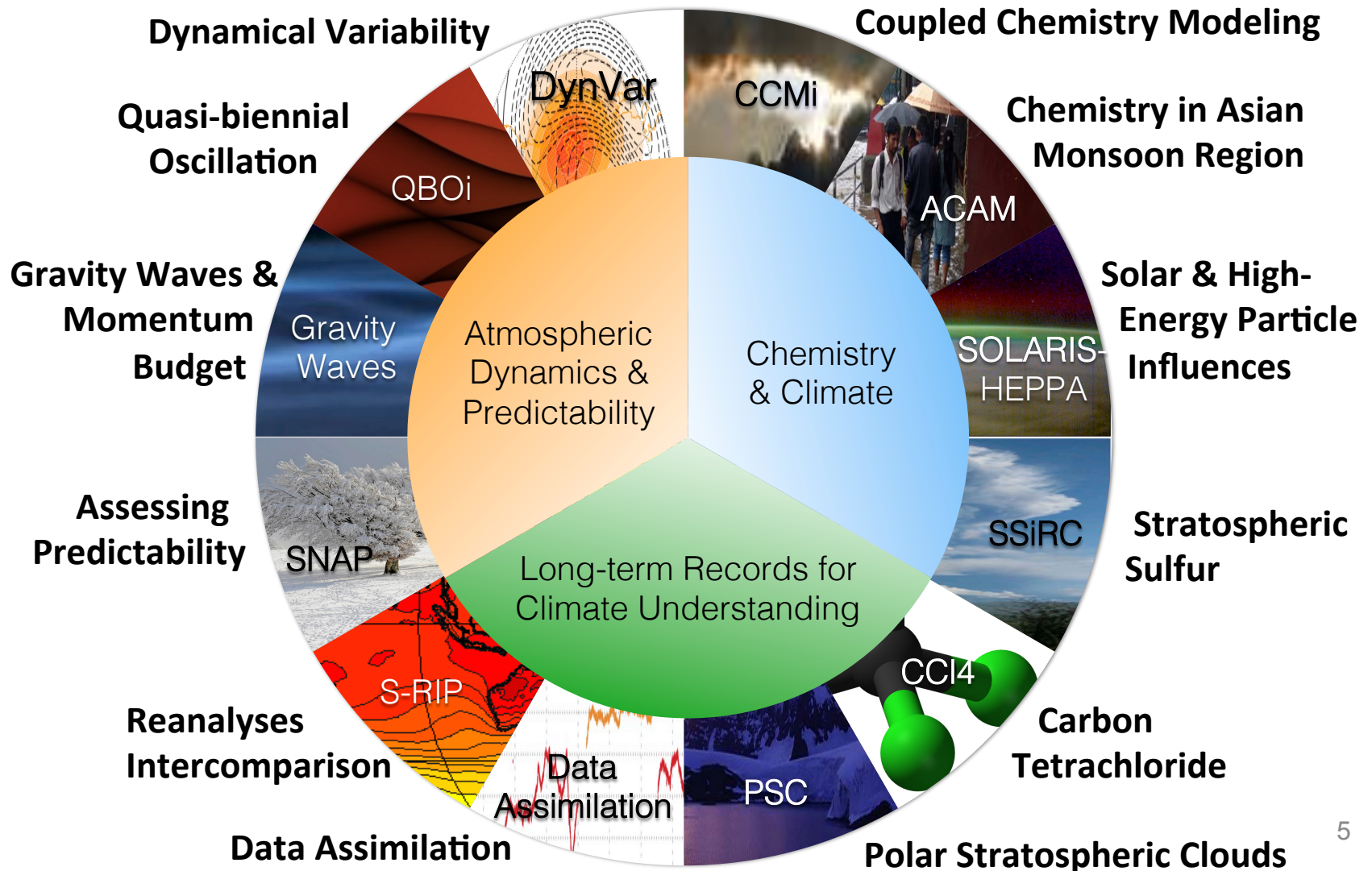
Workshop Organizers:

Geir Brathen, Michaela Hegglin, Thierry Leblanc, Gabriele Stiller, Johanna Tamminen, Susann Tegtmeier, and Christiane Voigt

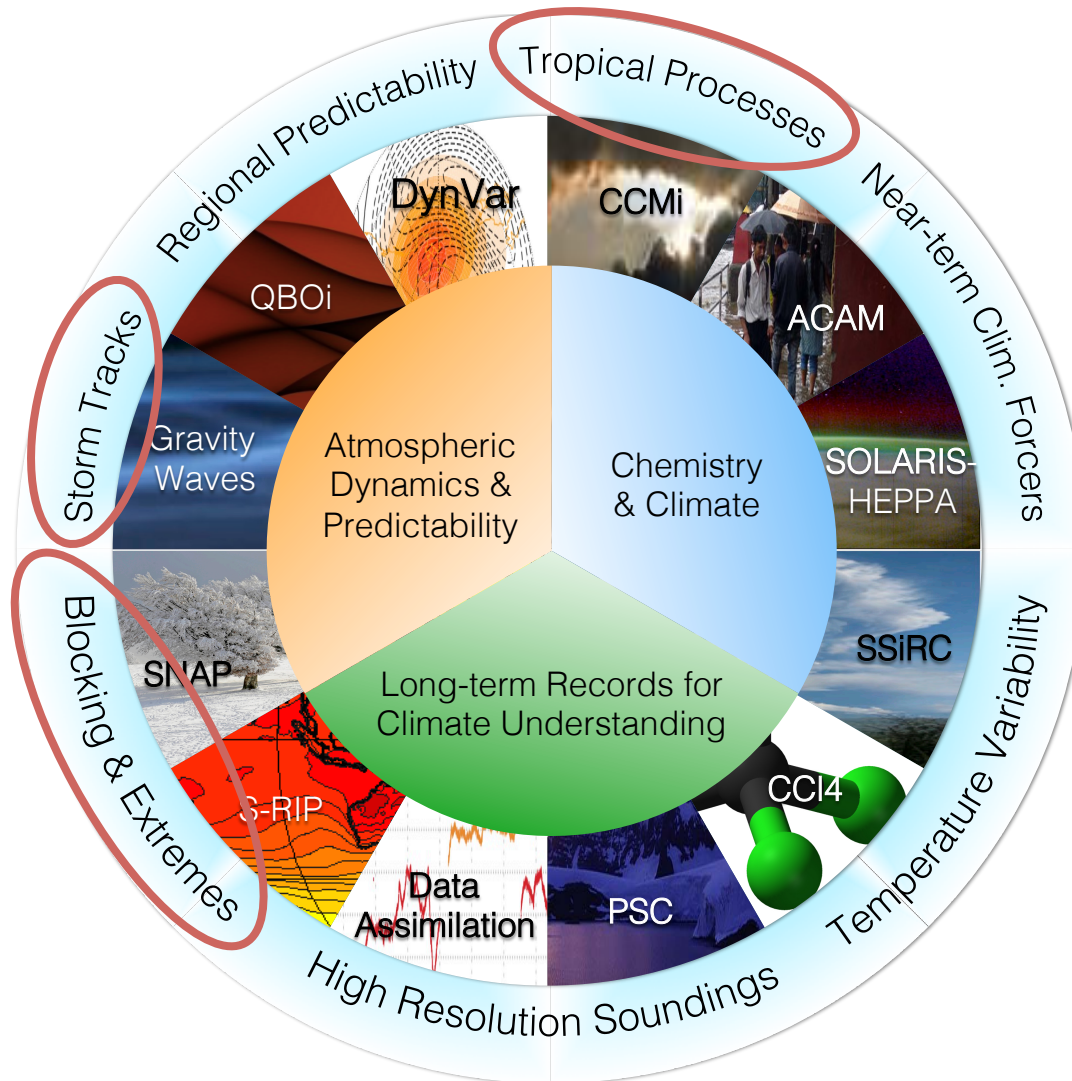
SPARC Implementation Plan 2016-2020



New Implementation Plan



Future Focus



Tropical Processes

- **Chemistry and transport processes controlling tropical tropospheric and stratospheric composition**
 - Chemical and dynamical processes controlling ozone concentrations from the surface to the stratosphere
 - Impact of deep convection on tropical tropospheric and stratospheric composition
 - Halogen budgets/partitioning/sources/transport/etc.
- **Clouds and water vapour**
 - Tropical wave interactions
 - Processes controlling variability in stratospheric humidity
 - TTL cirrus formation processes
 - Radiative, dynamical, and chemical impacts of TTL cirrus
- **Measurement and model comparisons**
 - Ground-based and airborne measurements for evaluation of satellite retrievals
 - Ground-based, airborne, and satellite measurements for evaluation of global models
 - Evaluation of convective parameterizations using composition measurements

Links with UTCC-PROES

WCRP Grand Challenges



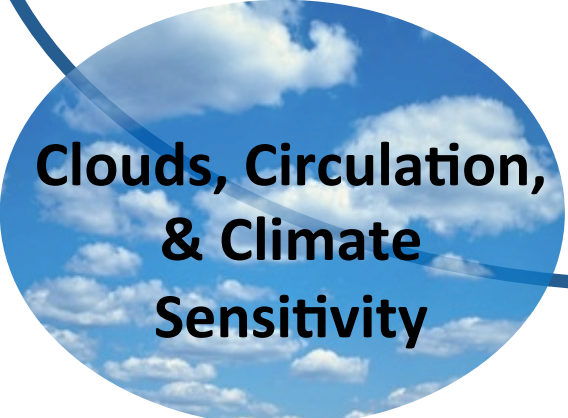
**Water
Availability**



**Regional Sea
Level Rise &
Coastal Impacts**



**Melting Ice &
Global
Consequences**



**Clouds, Circulation,
& Climate
Sensitivity**



**Climate
Extremes**



WCRP
World Climate Research Programme




Clouds, Circulation, & Climate Sensitivity

SPARC Workshop on Storm Tracks
24-28 August 2015, Grindelwald, Switzerland

SPARC co-leading the Polar Climate
Predictability Initiative (PCPI)



Melting Ice & Global Consequences



Climate Extremes

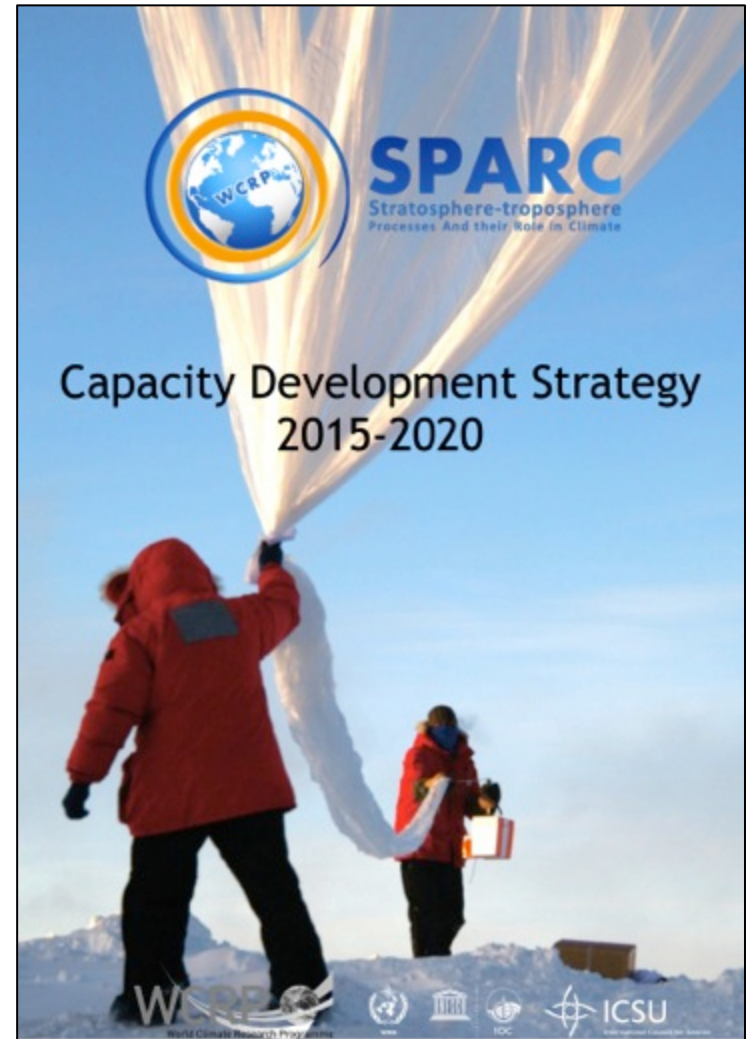
SPARC Workshop on Atmospheric Blocking
6-8 April 2016, Reading, UK

Coordination of first scoping workshop
21 September, Reading, UK



Biogeochemistry

SPARC Implementation Plan 2016-2020





SPARC
Stratosphere-troposphere
Processes And their Role in Climate

Capacity Development

WCRP
World Climate Research Programme



Regional Working Groups



Early Career Researchers

Training Schools



Capacity Development

- Establishment of regional contact groups to foster and coordinate involvement in SPARC activities
- Capacity Development needs to become a fundamental aspect of SPARC culture
- SSG members responsible for Capacity Development
 - Dedicated session during the SSG meeting
 - Mechanisms for assessing progress
- Going beyond workshops: creating a 'fellows' programme? → building confidence
 - Reviewing abstracts, scientific articles, and proposals
 - Establish a mentor-mentee programme
- Early Career Researchers association