

PRIMAVERA Fourth General Assembly (GA4)

26-29 March 2019

PROGRAMME [v5 18-03-19]

Tuesday 26 March

Venue: Room Aula Màster – A3 building <https://bit.ly/2DUWLVR>
 Universidad Politecnica de Catalunya - UPC
 Calle Jordi Girona, 1-3, 08034, Barcelona

09:00 - 09:30 Registration

09:30 - 09:45 Welcome from BSC and PRIMAVERA science coordinators

09:45 – 12:30 Plenary session - PRIMAVERA High Resolution Climate Modelling Results: WPs 1-3

Presentations by each WP on:

- Overview - Progress and Key Results from WP specific research
- Applying what has been learned
- Deliverables (recent and future)
- Future directions towards the project's goals
- Specific issues that require cross-WP interactions
- Outreach and community engagement, IPCC AR6, CLIVAR, etc

WP1 Development and application of metrics for process-based evaluations 45 minutes

- 1.1 Overview of WP1 work and results – *Panos Athanasiadis*
- 1.2 ESMValTool and PRIMAVERA metrics: what we give and what we get – *Javier Vegas*
- 1.3 Relationships between ocean heat transport and Arctic sea ice – *David Docquier*
- 1.4 Summer temperature trends over western Europe in new high-resolution climate models: consistency with observations and role of large scale circulation – *Julien Boé*
- 1.5 Representation of blocking in a multi-model ensemble of high-resolution coupled global climate models – *Reinhard Schiemann*

10:30 - 11:00 Refreshment break and Posters

WP2 Added value of high resolution in the atmosphere and the ocean 45 minutes

- 2.1 Overview on WP2 progress – *Torben Koenigk / Louis-Phillipe Caron*
- 2.2 Decadal-scale response of the AMOC to reduced and increased wind stress forcing - *Katja Lohmann*
- 2.3 Air-sea interactions in the Gulf Stream region during extreme events - *Victor Rousseau*
- 2.4 Impact of increased resolution and stochastic physics on Euro-Atlantic Weather Regimes - *Federico Fabiano*
- 2.5 Water budget of tropical cyclones in the PRIMAVERA ensemble - *Benoit Vanniere*

WP3 The role of model physics 45 minutes

- 3.1 Overview of WP3 – *Adrian New/Pier-Luigi Vidale* [8 mins inc Q+A]
- 3.2 Extratropical cloud feedbacks across model resolutions - *Daniel McCoy* [7 mins]
- 3.3 Using rivers in JULES to understand HadGEM precip biases at catchment scale – *Omar Muller* [9 mins]

- 3.4 HYDROS: an improved representation of river discharge in global coupled models - *Daniele Peano* [7 mins]
- 3.5 Progress in the implementation of the IDEMIX surface boundary layer model – *Oliver Gutjahr* [7 mins]
- 3.6 Progress in the implementation of the OSMOSIS surface boundary layer model - *George Nurser* [3 mins]
- 3.7 Effect of improved sea ice processes on representing Arctic sea ice – *Dorotea Iovino* [Poster introduction – 1 slide/2 mins]

12:30 - 14:00 Lunch (pre-booked at the University restaurant) *Please pay €10 in advance on the day*

14:00 - 16:00 Plenary session - PRIMAVERA Data and Stakeholder Work WPs 4-6

WP4 Frontiers of climate modelling 40 minutes

- 4.1 WP4 Overview – *Malcolm Roberts / Jin-Song von Storch*
- 4.2 Stochastic physics - *Kristian Strommen*
- 4.3 EC-Earth3P eddy-resolving coupled simulation - *Thomas Arsouze*
- 4.4 4xCO2 simulations with eddy-resolving model - *Dian Putrasahan*
- 4.5 Latest results from the AWI model - *Dmitry Sein or Tido Semmler*

WP5 Drivers of variability and change 40 minutes (Q&A included in the individual times)

- 5.1 WP5 Overview – *Dan Hodson* [4 mins]
- 5.2 AMV impact on Euro-Mediterranean summer temperature - *Emilia Sanchez-Gomez* [9 mins]
- 5.3 AMV impacts on Pacific ocean: importance of the mean state - *Yohan Ruprich-Robert* [9 mins]
- 5.4 Tropical North Atlantic as a potential non-stationary modulator of the ENSO impact on spring European rainfall - *Jorge Lopez-Parages* [9 mins]
- 5.5 Towards attribution of regional climate change: the recent Eurasian cooling - *Laurent Terray* [9 mins]

WP6 Flagship simulations 40 minutes (Q&A at the end)

- 6.1 Overview of the Stream 1 and 2 data delivery to JASMIN – *Jon Seddon* [4 mins]
- 6.2 Status of Stream 1 simulations – *Rein Haarsma* [10 mins]
- 6.3 Stream 2 simulations: motivation, plans, status – *Rein Haarsma* [10 mins]
- 6.4 HighResMIP status – *Rein Haarsma* [10 mins]
- 6.5 2 Posters [2 mins]
- 6.6 Q&A [4 mins]

16:00 - 16:30 Refreshment break and Posters

16:30 - 18:00 Plenary session - PRIMAVERA “end to end” Results

This session on “end to end” results is to show the research linking the themes and WPs in the project, e.g:

1. Better evaluation of a modelled climate process, leads to:
2. Better understanding and representation of that process, leads to:
3. Better characterisation of that process in climate projections, leads to:
4. An uptake of new and better PRIMAVERA data by a stakeholder sector

Each of the topics in this session aims to demonstrate such research value

Topic 1: European Storms [Panos] 30 minutes

- 1. Brief introduction - *Panos Athanasiadis* [2 mins]
- 2. Impacts of increasing model resolution on the North Atlantic eddy-driven jet and blocking - *Panos Athanasiadis* [6 mins]
- 3. North Atlantic post-tropical cyclones - *Alex Baker and Rein Haarsma* [7 mins]
- 4. Analyses of characteristics of extratropical cyclones over Europe for the insurance sector using PRIMAVERA and CMIP5 GCMs - *Galia Guentchev* [7 mins]
- 5. Questions & Answers – *All* [8 mins]

Topic 2: Arctic sea ice and feedbacks [Torben] 30 minutes

1. Increasing Atlantic Ocean Heat Transport in the Latest Generation Coupled Climate Models and related changes in air-sea heat fluxes - *Jeremy Grist*
2. Relationships between ocean heat transport and Arctic sea ice - *David Docquier*
3. Local and remote atmospheric responses to sea ice variations in Stream1 simulations - *Ramon Fuentes Franco*
4. Northern Hemisphere atmospheric response to Arctic summer sea ice loss and impact of model resolution - *Emilia Sanchez-Gomez*

Topic 3: SST gradients [Rein] 30 minutes (Q&A at the end)

1. Introduction – *Rein Haarsma* [2 mins]
 2. Resolution dependence of oceanic forcing – *Rein Haarsma* [6 mins]
 3. Air-Sea interactions in the Gulfstream region. Alessio – *Alessio Bellucci* [6 mins]
 4. Impact of Gulf stream interaction of Europe Sybren – *Sybren Drijfhout* [6 mins]
- Questions & Answers – *All* [10 mins]

18:00 End of meeting day 1

19:00 Icebreaker reception held with CMIP6 workshop attendees at MACBA – Museu d’Art Contemporani de Barcelona – see local information sheet for location and transport options

Wednesday 27 March

CMIP6 workshop

Auditori and Vertex Building, Universidad Politecnica de Catalunya - UPC
Plaça d’Eusebi Güell, 6, 08005, Barcelona
WP10/11 side meeting in the **Vèrtex room**

Thursday 28 March

Venue: Room Aula Màster – A3 building
Universidad Politecnica de Catalunya - UPC
Calle Jordi Girona, 1-3, 08034, Barcelona

10:00 - 13:00 Plenary session - PRIMAVERA Data and Stakeholder Work WPs 9-11

10:00 - 11:30 **WP10 Climate Risk Assessment and WP11 User engagement and dissemination**

1. Overview of WPs 10 and 11 – *Gerard van der Schrier / Erika Palin*
2. Extreme future central European summer droughts in a high-resolution global climate model - *Gerard van der Schrier, Eveline van der Linden, Rein Haarsma*
3. Creating a wind storm event set from PRIMAVERA data for the (re)insurance industry - *Julia Lockwood*
4. Comparison of statistics of selected meteorological events in CMIP5, CORDEX and in PRIMAVERA models - *Gerard van der Schrier, Gustav Strandberg, Paula Gonzalez, Galia Guentchev*
5. A three-step participatory approach to climate services co-production - *Dragana Bojovic*
6. Developments on the PRIMAVERA UIP - *Markel Garcia Diez, Daniel San Martin*

11:30 – 12:00 Refreshment break and Posters

12:00 - 13:00 **WP9 HPC and Data Management**

- 9.1 Overview and Data Availability – *Jon Seddon*
- 9.2 Plenary discussion on “Data access and data issues”

13:00 - 14:30 Lunch (pre-booked at the University restaurant) *Please pay €10 in advance on the day*

14:30 - 16:00 BREAKOUT GROUPS for WP / topic meetings in parallel

Four Break Out Groups meeting in parallel

Suggested groups:

- | | all rooms in Vèrtex building |
|--------------------------------------|-------------------------------------|
| 1. WP1, WP2, <i>et al.</i> | Room VS216 (seats 36) |
| 2. WP3, WP4, WP6, WP9, <i>et al.</i> | Room VS208 (seats 60) |
| 3. WP5, <i>et al.</i> | Room VS214 (seats 22) |
| 4. Currently free | Room VS215 (seats 22) |

BOGs to discuss *inter alia*:

- stream 1 and 2 results
- exploitation of results inc. CMIP/IPCC
- any changes to the plan
- communicating results / feedback to other WPs
- other (e.g. data, papers, meetings, ...)

16:00 – 16:30 Refreshment break and Posters (by plenary room Aula Màster)

16:30 - 18:15 Plenary session – feedback and discussion

16:30 - 17:15 Feedback from BOGs

The Chairperson from each BOG will report back to plenary on the relevant discussion and outcomes, ~10 minutes per BOG

17:15 - 18:15 Feedback from EEAB and Expert Reviewer

Discussion of the feedback – this session continues Friday morning

19:30

Conference dinner [Can Vador Diputació restaurant, Carrer de la Diputació, 367 08009 Barcelona]

https://www.eltenedor.es/restaurante/can-vador-diputacio/300787#st_t

See local information sheet for location and transport options

Friday 29 March

Venue: Room Aula Màster, The University
Carrer de Jordi Girona, 1,
08034 Barcelona, Spain

10:00 – 12:30 Plenary session – expert feedback, exploitation of results, and next steps

10:00 – 10:30 Feedback from EEAB and Expert Reviewer

Discussion of the feedback

10:30 – 11:15 Further exploitation of PRIMAVERA outputs (CLIVAR, CMIP, IPCC, papers, etc.)

11:15 - 11:45 Refreshment break and Posters

11:45 - 12:30 Summary and next steps

12:30 PRIMAVERA General Assembly ends

12:45 Restaurant opens (for those staying on)

14:00 - 16:00 **PRIMAVERA EMB** – only EEAB and WP Leads to attend

Room: Vèrtex room, BSC

<https://bit.ly/2G9CSN3>