Annual report 2020 for domain Europe

Scientific highlights

1. Finalization of the Euro-CORDEX guidelines on regional climate simulations
2. Publication of a joint Euro-CORDEX publication Jacob et al, 2020
3. Preparation of the Euro-CORDEX Ensemble Matrix Design white paper
4. FPS – Convective phenomena at high resolution over Europe and the Mediterranean:
   - Finalization of evaluation simulations (30 ensemble members) and publishing datasets in FZJ server
   - Ongoing historical/projection simulations
   - Publications in peer review journals (Lavin Guillon et al., 2020; Coppola et al., 2020)
   - Multiple manuscripts in-review or in-prep (Pitchelli et al. and Ban et al. nearing acceptance)
5. FPS- LUCAS (Land Use and Climate Across Scales):
   - Two publications in peer review journals (Davin et al., 2020; Breil et al 2020)
   - 10 RCMs have finalized the coordinated experiments on extreme land use change scenarios, and there are many ongoing multi-model studies based on those experiments, and publishing datasets on FZJ/JSC server
   - Preparation of datasets on LULC change
   - Preparation of high-resolution historical/projection simulations with land use changes

Summary of each workshop/activity held during the year

<table>
<thead>
<tr>
<th>Title, date, short description, location, website, links</th>
<th>Responsible person/-s</th>
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<tbody>
<tr>
<td>FPS-Convection: Annual meeting, 1-2/12/2020, online</td>
<td>S. Sobolowski, Erika Coppola</td>
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<tr>
<td>FPS-LUCAS: PFT Workshop, 30/10/2020, online</td>
<td>P. Hoffman, V. Reinhart</td>
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<tr>
<td>FPS-LUCAS: Annual meeting, 17-18/9/2020</td>
<td>D. Rechid</td>
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<td>FPS LUCAS Interim Meeting 2020, 18th June 2020</td>
<td>D. Rechid</td>
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Domain related publications during the year

<table>
<thead>
<tr>
<th>Title, journal and link to publication</th>
<th>Author/-s</th>
<th>Date</th>
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<tbody>
<tr>
<td>EURO-CORDEX 2020 publication list</td>
<td>EURO-CORDEX modelers</td>
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Planned activities for next year

- Publication of white paper on the GCM/RCM ensemble matrix design (draft to GA 01.2021; final by 05.2021)
- Finalization of the Euro-CORDEX simulation protocol
- Production of the Euro-CORDEX phase II simulations
- FPS-Convection: Finish projection simulations; continue work on community papers; establish a special issue (06.2021); begin publishing simulations on ESGF by end of 2021.
- FPS-LUCAS: GCM-driven simulations including land use changes; joint publications
Additional relevant information

If more space is needed just add rows in the table.
The report should be sent to ipoc@cordex.org before the 15th November each year.