



WG6: news about our activities

**Massimo Milelli
&
many others**



Outlook

- COSMO software:
 - COSMO/INT2LM report → Uli
 - Fieldextra, EXTPAR, TERRA StandAlone → Jean-Marie
- Priority Projects:
 - PP IMPACT → Carlos
 - PP C2I → Daniel
- ICON/COSMO Test Suite
- Web/Documentation
- Other business



ICON/COSMO Test Suite



- The HPC resources come from a special project “SPITRASP”, renewed for 2021-2023 with $\approx 5 \cdot 10^6$ SBU/year
- **ICON v2.6.1** has been tested (Ines) at the beginning of 2021 at both resolutions (6.6km and 2.5km) for 2 months (July and December 2017) with two different setups of vertical discretization, in both cases with two different number of vertical levels:
 1. 40 vertical levels for ICON-LAM@6.6km and 50 vertical levels for ICON-LAM@2.5km (same as COSMO)
 2. 65 vertical levels for both resolutions, following the general increment of vertical resolution chosen by the Consortium members for the new ICON-LAM configuration
- Horizontal grid steps are comparable for Cosmo and ICON runs (0.0625° , 0.0025° for Cosmo and R3B8, R2B10 for ICON $\Rightarrow \approx 7\text{km}$, $\approx 3\text{km}$)
- Last COSMO version tested: 5.08 - Cost of a full test: $\sim 1.0 \cdot 10^6$ SBU
- Last **ICON** version tested: 2.6.1 - Cost of a full test: $\sim 1.2 \cdot 10^6$ SBU

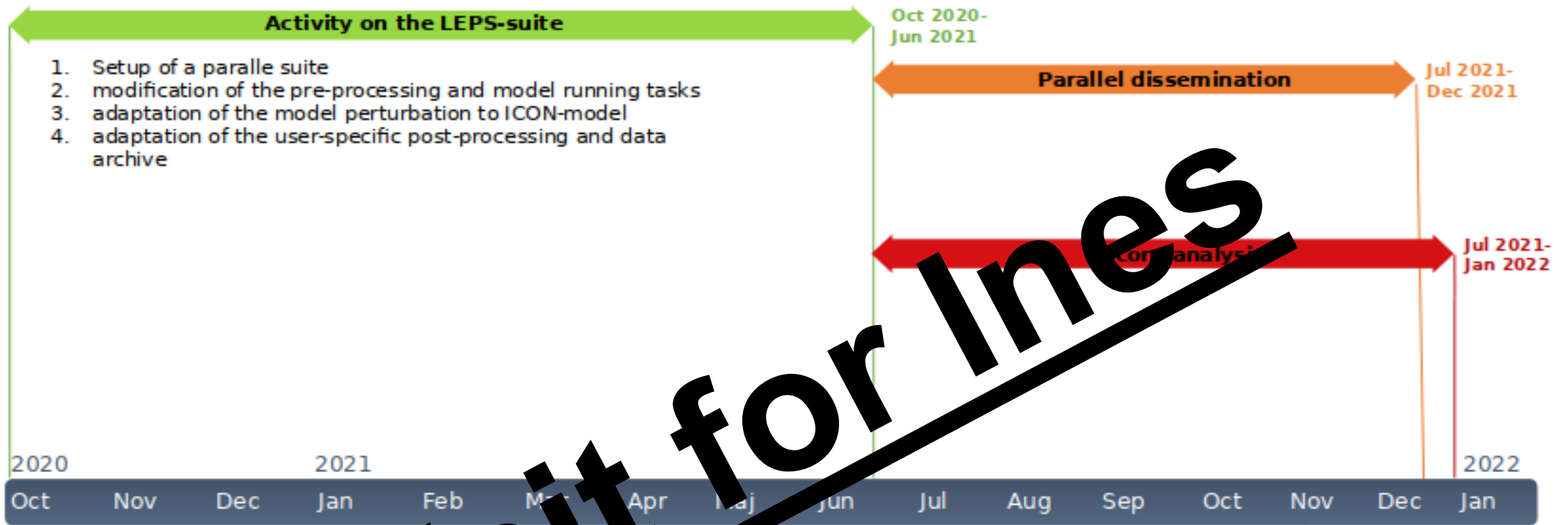


Remaining Issues

- No need to test COSMO v6.0
- For 2021 the **remaining billing units are $\sim 1.0 \cdot 10^6$** , so if we need to run another ICON test, we will have to ask for a small extension (no problem usually)
- The ICON test suite output largely exceeds the archiving storage requested for the project at ECMWF. This issue was discussed and there is an overall agreement on archiving **only a subset of output data** equivalent to the COSMO Test Suite



COSMO-LEPS system update



Wait for Ines

Start of activities to migrate to ICON-LEPS

Start of dissemination of ICON-LEPS products

Migration to ICON-LEPS



Web/Documentation

- New page on **ICON Tech Reports** in the Documentation menu
- New page about “**ICON Transition**” in the home page
- New page added about **ICON tuning parameters** (access from WG3b and WG7 pages):
- Documentation **Part V** (preprocessing) and **VII** (user guide) updated together with the **Release Notes** page and the **EMVORADO** User Guide
- Latest **NWP Test Suite** report uploaded
- Tech Rep 43 (“**The COSMO Priority Project T²(RC)²**”) uploaded
- Update of **MCH operational page**



Web/Documentation

- Improved the **latex template** for Technical Reports
- Publication of the **WG Guidelines** according to STC input
- “Update of Common Plot Activity Content through WG6-SPRT 2021/22” was submitted to the STC 22.07.2021. **Decision is due in September 2021**
- Expected TRs during the COSMO year: PP KENDA-O, **PP CDIC**, PP EX-CELO, PP CEL-ACCEL, PP APSU, PP AWARE, PP CALMO-MAX, PP CARMA, PP CAIR
- Concerning PT AEVUS2, an extended abstract of the paper will be included in the Newsletter
- **DACE** user manual to be updated



Other business

From December, I will leave Arpa Piemonte to work with CIMA Research Foundation (www.cimafoundation.org).

My work in COSMO won't stop because CIMA will join the Consortium (in agreement with our National Met Service), therefore everything is transparent from the COSMO point of view.

EXCEPT THE EMAIL ADDRESS

Please, from now on use the new one (is already active and the COSMO mailing lists have been updated):

massimo.milelli@cimafoundation.org



Advances in the Use of Crowdsourced Data in Numerical Weather Prediction

Guest Editors:

Dr. Massimo Milelli

1. Environmental Risk
Department, Arpa Piemonte,
10135 Torino, Italy
2. Meteorology and Climatology
Department, CIMA Research
Foundation - International
Centre on Environmental
Monitoring, 17100 Savona, Italy

massimo.milelli@
arpa.piemonte.it

Prof. Dr. Gert-Jan Steeneveld

Meteorology and Air Quality,
Wageningen University, 6708 PB
Wageningen, The Netherlands

gert-jan.steeneveld@wur.nl

Deadline for manuscript
submissions:

1 November 2021

Message from the Guest Editors

Dear Colleagues,

As the spatial resolution of numerical weather prediction (NWP) models increases steadily so does the need for weather observations for data assimilation or validation purposes. Since the installation and maintenance of new professional meteorological observing equipment is costly and expensive, it is much more convenient to exploit existing information with observations from non-conventional sources. Examples of data sources include smartphones, personal weather stations, cellular communication networks, and vehicles. Although they are much more available, such data are often less accurate and representative than traditional meteorological observations; therefore, quality control is crucial when using crowdsourced data. The ultimate goal is the improvement of nowcasting forecasts of hazardous weather.

This Special Issue aims to give an overview of the sources of non-conventional data and provide a focus on their use in the most recent NWP applications. Manuscripts on all aspects of crowdsourced data are welcome for this Special Issue, including case studies, measurement campaigns, validation, and data assimilation.

Guest Editors



mdpi.com/si/78127

Special Issue



Thanks for your attention and for your work !

(Hope to drink a beer with you in the near future)