



D-PHASE

a WWRP Forecast Demonstration Project

Minutes of the MAP D-PHASE *telephone conference* of the WG chairs, 4 February 2008

Participants: Manfred Dorninger, Andrea Montani, Roberto Ranzi, Mathias Rotach, and Marco Arpagaus (MD coordinator; minutes)

Excused: Christoph Hegg

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1 Opening, agenda, minutes

Mathias Rotach welcomed all participants to the telephone conference. – Christoph Hegg was unfortunately not able to participate since he received a baby-alarm shortly before the meeting: All the best for the childbirth!

On request from Andrea, the item 'future of the VP' will be discussed under 'any other business'. With this addition, the agenda was adopted unanimously.

The minutes of the last telephone conference (12 October) have been approved with thanks to the author.

2 Verification: Status

Status of DA for atmospheric model data:

- 80% of the metadata checking has been done (missing are essentially the hopefully bug-free metadata files for the Swiss and French models).
- Andrea will contact all data providers to sort out the remaining problems or inconsistencies (majority of cases: surface parameters in GRIB files does not match with description in metadata file). The metadata checking is expected to be completed by mid February.
- Many thanks to Andrea for this tedious work!

Status of DA for hydrological (model and observational) data:

- Some hydrological model data are available on the DA, but quite a few models have not uploaded their data yet. – New tasks for Roberto and Christoph (WG-DI 15 and WG-HEU 22; included by the MD-Coordinator without consultation): remind all hydrological modellers to upload their data to the DA as soon as possible and check the respective metadata information on the DA.
- 60% of the Italian hydrological observations (mainly run-off data and lake level data) are available from Roberto. The remaining Italian data should be available until the Bologna meeting in May.
- No information on availability of Swiss and German hydrological observations. – Uwe Ehret has promised to provide German data.
- Whether or not the hydrological observations should be transferred into NetCDF and uploaded onto the DA is not yet clear. To be decided by Roberto and Christoph (new task WG-VER 13; included by the MD-Coordinator without consultation).

Excursion: additional atmospheric observational data

- Roberto asked, whether anyone was collecting hourly precipitation data (note: the COSMO data set only contains 3-hrly precipitation data). – Hourly precipitation data should at least be collected for interesting events and for the impact regions, for which a hydrological model was providing forecasts.
- Chiara Marsigli agreed to request the additional data (interesting events / impact regions of interest to be defined by Roberto and Christoph) from the COSMO data providers. Within Italy, Stefano Mariani (APAT) will help to collect data from the national institutions. If provided to Manfred in due time, these additional meteorological observational data will also be transformed into NetCDF and uploaded to the DA (cf. also point 4 on the agenda).

Status of offline verification:

- Manfred provided a list of 'who is doing what', which can be found in appendix 2.
- Manfred has re-submitted a proposal to the Austrian Science Foundation to intercompare all models.
- Marco has invited everybody to inform on new verification results. Mathias added that already existing verification results could be included into the BAMS article, if they reach him within the next two weeks.
- There is no funding to put the SRNWP verification toolbox to the DA. Instead, Manfred tries to put the MET toolbox onto the DA (project proposal to the Austrian Science Foundation).

End user feedback:

- In Switzerland, the end user feedback has been collected through a workshop in late November. Results of the feedback will be presented at the Bologna meeting in May.
- In Italy, no feedbacks have been received so far. – Marco sends the four Italian end user feedbacks, which are available in electronic form (collected on the VP), to Roberto and Christoph.

3 Ongoing and future D-PHASE-related projects: Status

- Ongoing: Assessment of end user feedbacks by social scientists at the WSL (Jacqueline Frick; MeteoSwiss funding).
- Ongoing: COST 731 PhD position on conceptual nowcasting models at MeteoSwiss (Luca Panziera).
- Probably funded: SPP PQP (German Research Foundation), preliminary information (official decisions expected in Feb or Mar 2008):
 - 25% position for 2 yrs for MeteoSwiss (verification) funded (Rotach).
 - PhD position for Uni Vienna (data upload, quality control, data gridding; verification) reduced to 25% position for 6 month (Dorninger). – Fate of this project to be decided by Dorninger et al (it will depend on the acceptance of the projects proposed to the Austrian Science Foundation, see below).
 - PhD position for Uni Hamburg (verification) funded (Ament).
 - PhD position for Uni Mainz (verification) funded (Wernli).
- Probably funded: 2 yr Post-Doc position at MeteoSwiss (internal funding) to continue the work of Felix Ament.
- Planned: Project proposal submitted to the Austrian Science Foundation to install the MET verification toolbox on the DA and perform an intercomparison of all the D-PHASE models (cf. agenda item 3; decision by ASF expected for June 2008).
- Roberto asked whether there are any plans to submit a FP7 proposal related to some of the D-PHASE issues. – No-one has any concrete plans so far.

4 Observational data: Status

- Collection of observational data (meteorological!) is ongoing.
 - The only country with no positive answer yet to our request is Slovakia. Mathias will contact Slovakia once again. – Note added in proof: Slovakian letter will come these days. Problem of internal communication.
 - There are still some (technical) problems to get the DWD data (contact person at DWD is Kurt Winkler, Geschäftsbereich Wettervorhersage, Referat Datenservice). – Manfred and Mathias will talk with the DWD colleagues at the COPS workshop in Hohenheim at the end of this month.
- Transformation of the data into NetCDF is ongoing, too.
- The uploading of the NetCDF data to the DA has to be postponed until all observational data are collected and transformed. – Claudia Wunram (DA) does not have the capacity to update already uploaded data, but would like to receive the *final* data only.
- No work has been done on quality control and data gridding. Will only be done if the model intercomparison project will be funded by the Austrian Science Foundation (see agenda item 3).

5 Joint 2nd MAP D-PHASE Scientific Meeting and COST 731 Midterm Seminar in Bologna: Status and actions needed

- Please advertise our 2nd scientific meeting, submit your abstracts and register as soon as possible (conference web-site at <http://www.smr.arpa.emr.it/dphase-cost>; deadline for abstracts is the 28th of February)!
- The submitted abstract will be review after February 28. A first version of the conference programme should be published until the 15th of March.
- We should plan for two overview talks on MAP D-PHASE and COST 731, respectively (key-notes). – Mathias and Andrea Rossa will both submit an abstract.
- Mathias will check the status of the invitations for Tom Keenan and B08FDP/RDP, respectively.
- Manfred plans for a WG-VER side-meeting on Tuesday evening (20.5). – Andrea will organise an appropriate room (approx. 20 people).
- T-shirts will possibly turn out to be too complicate to organise. Alternative give-aways are an umbrella (Note added in proof: Rain in Bologna in May? – I hope not!) or a bag. Andrea will let Mathias know as soon as this issue is decided.

6 Publications: Status and actions needed

- BAMS paper (task MD-Ch 5): Work is ongoing, most contributions have been submitted. Mathias will do the editorial work in about two weeks from now, until when further contributions are welcome (i.e., Roberto's input as well as additional verification results by e.g. Chiara Marsigli and Andrea on COSMO-SREPS et al.).
- ICAM 2007 proceedings (task MD-Ch 6): This paper has been cancelled in favour of the BAMS article.
- HEPEX proceedings (task MD-Ch 7): Massimiliano Zappa has submitted a paper to Atmospheric Science Letters (co-authors: WG-chairs, MD-Co, and some other key persons). – Thanks to Massimiliano for his effort!
- Paper in HESS or similar hydrological journal (task MD-Ch 8): Roberto Ranzi and Christoph Hegg take care of the issue.
- D-PHASE session at EGU 2009 (task WG-MD 9): Options are a joint atmospheric/hydrological session of two individual disciplinary sessions. The session should advertise D-PHASE to other communities rather than being an internal D-PHASE session. – Roberto will send a mail to the WG chairs detailing all the options, and will then discuss the options with the meeting organisers and report at the MD-SC meeting in Bologna.
- The collection of published papers, conference talks, media articles etc (task MD-Co 12) is ongoing. Collection for up until 2007 should be available in March.

7 Next meeting of the WG chairs

The next meeting of the WG chairs will be a joint meeting with the MD-SC, Thursday 22 May – Friday 23 May 2008 (noon to noon, at most), in Bologna.

8 Any other business

Future of the VP:

- Andrea requested an update concerning the future of the VP. Based on this, ARPA-SIM will decide about the future status of their model and radar data that is still being delivered to the VP.
- Marco quickly summarised that the platform will continue to run as is (until maybe mid 2009), displaying the data that is still flowing in. The status of the platform is still and will remain experimental, but access rules have been slightly changed (please note that Swiss institutions are paying for the maintenance of the VP, hence rights are somewhat asymmetric concerning Switzerland and all the other countries):
 - In general, no new passwords will be issued for the VP.
 - Access remains free of charge for all civil protection agencies in Switzerland.
 - Access remains free of charge for research and development.
 - Access for commercial users will be subject to a fee as of 1 April 2008.
 - Data providers are very welcome to continue delivering their data. The Swiss institutions running the VP will however not be able to pay for the data nor will they share any of the (probably minimal) revenues with the data providers, but will use the money for the maintenance of the VP. Nonetheless, data providers will 'earn' the following rights:
 - Free access to the VP for the data provider institution.
 - Free access to the VP for all civil protection agencies specified by the data provider. – Explicitly excluded as privileged users are commercial companies.
 - All holders of a password for the VP not covered above are also subject to a fee as of 1 April 2008.

With this arrangement, the data delivery should hopefully remain to be an interesting option for all data providers: civil protection agencies can continue to benefit from the common D-PHASE Visualisation Platform without the need to establish an individual solution within each country! – As stated above, the VP will however be turned off by approximately mid 2009, when a new and operational warning platform will be put into service in Switzerland.

With no other business to discuss, Mathias thanked all participants for the fruitful meeting and closed the telephone conference shortly before 16:00.

Appendix 1: Updated action list

Updated action list (status as of MAP D-PHASE telephone conference of the WG chairs, 4 February 2008)

Identifier	Action	Responsible	Due date	Remarks
WG-DI 13	Check metadata information of atmospheric models on the DA for accuracy and completeness (cross-check with the actual file content!).	Montani	asap	Ongoing (80% completed)
WG-DI 15	Check metadata information of hydrological models on the DA for accuracy and completeness (cross-check with the actual file content!).	Ranzi / Hegg	asap	Andrea Montani may help.
WG-HEU 6	Search for specific sites where cost/loss analysis can be carried out.	WG-HEU / Hegg	asap	Mattmark? Sylvensteinspeicher?
WG-HEU 20	Work out detailed specification of feedback assessment.	WG-HEU	asap	See MD-IP section 9.3.
WG-HEU 21	Make feedback assessment.	WG-HEU	05.2008	See MD-IP section 9.3.
WG-HEU 22	Remind all hydrological modellers to upload their data to the DA.	Ranzi / Hegg	asap	
WG-VER 3	Work out detailed specification of offline verification.	WG-VER	asap	See MD-IP section 9.2.
WG-VER 4	Make offline verification.	WG-VER	05.2008	See MD-IP section 9.2.
WG-VER 9	Collect all meteorological observational data of interest, i.e., surface station data and radiosonde data, GTS as well as non-GTS data, from the Met Services.	Dorninger	asap	ongoing
WG-VER 10	Collect all (Italian / Swiss and German) hydrological observational data of interest.	Ranzi / Hegg	asap	ongoing
WG-VER 11	Transform all collected meteorological observational data (surface station data and radiosonde data) into NetCDF.	Dorninger	asap	ongoing
WG-VER 13	Decide whether or not the hydrological observations (mainly run-off and lake level data) should be transferred into NetCDF and uploaded onto the DA, and by whom.	Ranzi / Hegg	asap	
WG-DP 5				
MD-Ch 3	Prepare WWRP FDP and/or MAP D-PHASE letter of recommendation for possible proposals to national funding bodies.	Rotach	on request	
MD-Ch 5	Publish paper in BAMS. Authors: Rotach (lead), WG chairs, and MD-Co.	Rotach	asap	Submission expected by the end of February.
MD-Ch 8	Publish paper in HESS or similar hydrological journal (JoH? JoHM?). Authors: Ranzi & Hegg (lead), WG chairs, and MD-Co.	Ranzi/Hegg	asap	

Updated action list (status as of MAP D-PHASE telephone conference of the WG chairs, 4 February 2008)

Identifier	Action	Responsible	Due date	Remarks
MD-Ch 9	Inquire options for extra D-PHASE session at EGU 2009 (joint meteorology/hydrology session or two disciplinary sessions?).	Ranzi	05.2008	Report at MD-SC in Bologna.
MD-Ch 10	Invite Tom Keenan to Joint 2 nd MAP D-PHASE Scientific Meeting / COST 731 Midterm Seminar in Bologna.	Rotach	asap	Funding to be decided.
MD-Ch 11	Invite B08FDP/RDP to Joint 2 nd MAP D-PHASE Scientific Meeting / COST 731 Midterm Seminar in Bologna.	Rotach	asap	No funding.
MD-Co 11	Collect input for and edit MD-IP.	Arpagaus	ongoing	
MD-Co 12	Collect list of published papers, conference talks and proceedings, media articles, etc. – Responsibility: Marco Arpagaus, Andrea Montani, Manfred Dorninger, Michael Denhard (tbc), and Evelyne Richard (tbc) for Switzerland, Italy, Austria, Germany, and France, respectively.	Arpagaus	yearly	Ongoing for publications until 2007.
MD-DA 8				
MD-VP 7				
MD-meeting 1	Produce a D-PHASE T-shirt. – To be sold at the 2 nd MAP D-PHASE Scientific Meeting in Bologna.	Montani	05.2008	May also be an umbrella or a bag ...
COPS-Ch 1	Provide software that generates atmospheric model products. <i>Still missing:</i> <i>- Ensemble-meteograms</i>	Wulfmeyer	asap	See MD-IP section 3.1.4.

Appendix 2: List of verification activities (status as of 4 February 2008)

Methods	Models	Parameters	Name (Institution)
Atmospheric models			
Ensemble Verification	COSMO-SREPS COSMO-LEPS SRNWP-PEPS MOGREPS	precipitation T2m MSLP	Marsigli (ARPA-SIM)
Classical and spatial metrics (PQP)	COSMO	surface observations radiosondes	Keil (DLR) in cooperation with MeteoSwiss
Fuzzy verification	???	precipitation	Ament (MeteoSwiss)
CRA Power spectrum Skill scores Multi-model forecast	probably all (N-Italy)	precipitation	Mariani (APAT)
CRA	???	precipitation	Ebert (BoM)
Neighbourhood verification	???	???	Evert (BoM)
Empirical evaluation of predictability of convection	MM5 BOLAM/MOLOCH	precipitation others?	Davolio (ISAC)
Grid-point verification Intercomparison Scale decomposition Error propagation	probably all	several	Dorninger/Gorgas (IMGW)
FC against observation (multivariate verification, PQP)	???	hydrological cycle	Ament (Uni Hamburg)
Toolbox: Verification Toolbox	SRNWP-PEPS	several	Denhard (DWD)
Toolbox: MET	probably all	several	Dorninger (IMWG), Brown (NCAR)
Hydrological models			
Radar ensemble	PREVAH other hydrological models in Switzerland	run-off	Zappa (WSL)