Convection Working Group splinter meeting - Minutes

EUMETSAT conference 2014, 24 September, Geneva, Switzerland

Agenda

- a. Welcome and adoption of agenda
- b. Review of actions from last meeting in Zagreb (http://essl.org/cwg/res/pdf/CWG_workshop_zagreb_2014_minutes.pdf)
- c. Best Practice Document updates, call for BP contributions
- d. Next meetings 2015 and 2016
- e. GOES-R update (Folmer or and Terborg)
- f. Any Other Business
- g. Closing

Participant List

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Meeting begins at 14:00

After Tour de table Minutes of the last meeting have been reviewed and the actions r evised:

1. Concerning providing the NearCast model products using SEVIRI data in real time over Europe for testing and evaluation and <u>action</u> to Ralph Petersen to coordinate CI MSS activities Ralph Petersen reports that the area was redefined covering all Europ e but it was not operationally implemented yet.

Web page will be created, also output in GRIB which was requested. 3D loops can be also created.

Progress is made, operational use is planned before the end of the year.

Open items: contact points in Europe have to be defined. Since only a small fraction of the CWG group was present at the splinter meeting, a message will be sent out to all participants and the response will be required by mid December, <u>action</u> to co-chai rs. When new developments are done, they will be put on CWG website.

Training material will be provided for forecasters (through the assigned contacts).

- 2. Concerning the theory of Thomas Krennert, who proposes that conditional symme tric instability may be of importance for the initiation of orographically induced pulse c onvection and the <u>action</u> to Thomas that symmetric instability theoretical paper will b e provided by the end of November this item was not discussed since Thomas was not present at the splinter meeting.
- 3. Concerning <u>Action</u> to Humberto Barbosa who was asked to add new conceptual m odels to the Best Practices document (The African Easterly Waves and their influenc e on hurricane activity in the tropical North Atlantic): This action stays open since Humberto was not present at the meeting.
- 4. Concerning the offer of Ivan Smiljanić, EUMETRAIN TSO, to have monthly CWG briefings through teleconferencing software organized by Eumetrain and the <u>action</u> to Ivan to provide CWG with information about this plan it has been concluded that monthly CWG briefings will be discussed in the next Eumetrain meeting to be held in Langen, 14-16 October 2014.
- 5. Regarding the <u>action</u> to Ralph Petersen to provide contact information across all NWP providers ("The CWG will together with ESSL transmit a request to WMO Working Group on Numerical Experimentation with the goal of coordinating the calculation of stability parameters required for forecaster training and satellite product development/validation") Ralph reports that contacts have already been made to ECMWF, the rest is pending.

6. Regarding CWG and ESSL submitting separate requests to the WMO Air-Born Observation Program (contact: Dean Lockett) requesting expansion of high-quality aircraft moisture observations (especially profiles) for use in validating satellite-based moisture profiles and product and action to Ralph Petersen to provide respective WMO contact information it has been reported that Dean Lockett has been informed but there have not been any requests sent.

<u>Action remains</u>:Vesa and Martin will contact Marianne and then approach Dean concerning the topic

7. A discussion about the use of lightning data and the <u>action</u> to Jochen Grandell to look whether he may contribute lightning data for 20 June 2013 and 29 July 2013 cases according to the legal text for his use – the question was whether LINET data can used for research purposes. Martin reports on problems when requesting LINET data for the above mentioned case studies (problems of bilateral nature, between LINET and CHMI). Nataša reports, that there were problems with NOWCAST requiring approval of the results when publishing the data.

Recommendation stays: in case of need for LINET lightning data, Jochen Grandell s hould be contacted

Additionally, Davide offers data for the Italian region for all who are interested.

8. A discussion followed on the reporting in Severe Weather Database (ESWD) of E SSL - most western countries are well covered as regards reports and their validatio n, while fewer reports are available in the central and eastern European countries. M ateja suggests that there should be promotion and then more people will provide dat a. Report collection should be more serious. Problems with authorization of the data were mentioned, since these data are mainly inserted by the amateur community. Maja reports that in Serbia reports are available locally, but not in ESWD. In Slovakia there is no contact to amateur community. Concerning Hungarian reports, it has been reported that the service has contact to stormchasers.

In Ukraine the reports are based on station data only but they are not available in ES WD.

An idea arose that we could issue a CWG website call: CWG should encourage all N WS and other national meteorological communities to provide data into ESWD for the purpose of various case studies and for validation of CWG tools and methods.

<u>Action:</u> stimulate European NWS and other weather-related institutions to collect/vali date severe weather reports and increase the number of events being inserted into E SWD, and to stimulate their links and mutual relations with the amateur meteorologic al community.

Best Practice Document

Martin suggests title of the document to be changed, since we cannot guarantee that the practices described in the document are really "the best" ones.

Some ideas for the new name were discussed at the meeting, however a letter will be sent to propose the new title. <u>ACTION:</u> Vesa will set up a doodle for suggestions a nd then for a vote on the new title.

It was agreed that all should contribute to the document. Davide mentions that the do cument was upgraded with NEFODINA description after the Zagreb workshop. Contributions to the BP document will be strongly requested from all CWG members (it will be included in the letter for title change)

<u>Updates of the CWG website.</u>

There were several contributions to the website: McVcast installation file, JanKanak contribution, newsletter posted on the page...

After reviewing all actions from the last meeting Michael Folmer, satellite liason (NO AA) reported on the activities concerning the introduction of various nowcast product into operation (OT detection, NearCast, CI, Lightning Imager products (lightning den sity grids made from vaisala lightning data to prepare forecasters for LI data), 1 min imagery (compared to 5 min to show capabilities)... Training of forecasters for the coming GOES R data and products is ongoing.

Amanda Terborg, satellite liason (NOAA) reported on the activities for the aviation for ecasters mentioning that OT and CI algorithms are having robust convection in mind, whereas for aviation also weaker signals are important. Nearcast can be used, also CTH for weaker convection. Lightning information is also important.

GOES R algorithms should be updated for general covection in order to be more use d for aviation.

They offer help in CWG activities.

<u>Simultaneous satellite and radar observations.</u> The group discussed briefly the to pic of validating satellite storm top observations and products by their comparison wit h radar data. Martin has mentioned that most of the operational weather radars acro ss Europe may not be quite suitable for detailed storm-top studies (due to the radar p arameters, their setup and scanning "strategy"), and that more sophisticated and adv anced radars might be needed for this. It was discussed that namely the overshootin g top studies and products would benefit strongly on such simultaneous observations

, and that the U.S. colleagues are the most likely to be able to perform such observations, e.g. combining the GOES 1-minute data with ground-based radar observations. **Recommendation:** support and encourage all the activities of combining radar data and rapid scan satellite data. Simultaneous satellite and radar experiments might be recommended to NOAA to be conducted in the U.S., e.g. by phased array radars. E UMETSAT might consider issuing a call for cooperation with NOAA or other U.S. par tners in the research of the OT by simultaneous use of radar and rapid scan satellite data.

Numerical cloud modelling experiments are also encouraged.

Other:

Vesa to contact Michael concerning the case studies (ocean cases)

Next Meetings:

Next CWG splinter meeting is planned to take a place during the next ECSS confere nce, 14-18 Sep 2015 in Wiener Neustadt, Austria.

Next regular CWG workshop is planned to be held in Italy. Davide reports that Floren ce in Mid April 2016 is the probable place and time. Details will be provided at the 20 15 splinter meeting in Wiener Neustadt.

Meeting ends at ~ 15:30