



Téléphone: Int'l + 41 (0) 22 730 81 11
Facsimilé: Int'l + 41 (0) 22 730 81 81
Télégrammes: METEOMOND GENEVE
Télex: 41 41 99 OMM CH

SECRÉTARIAT
GENÈVE - SUISSE

7 bis, avenue de la Paix
Case postale No. 2300
CH-1211 Genève 2

Our ref.: R/WWRP/SSC-IV

Your ref.:

Annex(es): 1

GENEVA, 11 January 2002

Dear Dr Jansa,

The Science Steering Committee of the World Weather Research Program held its Fourth Session in Geneva during late October 2001. On behalf of the Committee, I am pleased to communicate a resolution passed by the Committee concerning MEDEX.

If you have any questions or concerns associated with these recommendations, please do not hesitate to contact me or your designated WWRP SSC liaison, Dr Philippe Bougeault. I may be reached via email at carbone@ucar.edu. In addition, Roger Pielke, Jr. and Gerhardt Bertz are available to advise on societal impacts aspects of projects.

I am pleased to report that WWRP projects are generally progressing at a satisfactory to exceptional rate. We are beginning to make a difference in the understanding of weather systems and in the transfer of technologies to the benefit of members.

I will summarize our progress to the Commission on Atmospheric Sciences (CAS XIII) in February 2002. In preparing to do so in the weeks ahead, I may request visuals or updated information from you in order to convey the most informative message possible. If you are mindful of material that might be useful in this application, please inform me of this. I will welcome new material until 31 January when I begin specific preparations. This is an opportunity for the delegations of approximately 80 nations to gain some familiarity with your achievements.

I urge you to persevere and to accelerate, wherever possible, your efforts toward improved forecasts, ultimately defined by the enhanced use and value to society.

My best regards to you and your colleagues.

Yours sincerely,

(Richard Carbone)

Chairmen, WWRP Science Steering Committee

cc: Drs Alpert and Buzzi

WWRP/ WGNE Resolution on MEDEX

The WWRP SSC was pleased to see that the MEDEX community has been highly responsive to its previous recommendations and that work has started on several objectives.

The Science Plan was approved, subject to the following recommendations:

- (1) The program in societal impacts research should be clarified and expanded to include additional expertise in the related social sciences.
- (2) Precise plans should be developed for numerical experimentation on the set of selected cases.
- (3) MEDEX should strengthen its link to THORPEX in view of benefiting from and/or contributing to an upstream North Atlantic observing systems test.
- (4) MEDEX should establish contact with the Coordination Group for Meteorological Satellites (CGMS) in order to benefit from recent information on rain and cloud fields retrieved from various satellites (see attached V. Levizzani - A. Jansa correspondence).
- (5) MEDEX should develop an objective system to measure the quality of the forecast of Mediterranean cyclones and its progress in the future.
- (6) The Committee encourages formal communication from the WMO to all Mediterranean countries urging more complete participation in the exchange of data (mainly surface data) that have historically been unavailable via the GTS.

Attachment

CGMS support to MEDEX: a proposal.

V. Levizzani, CGMS-IPWG

CGMS IPWG products that can be provided as a support to MEDEX are as follows:

1. IR/VIS imagery from geostationary and polar orbiting sensors (Meteosat, MSG, AVHRR, MODIS, ...);
2. Rainfall estimation maps in rapid update over the whole Mediterranean (using IR and MW data);
3. MODIS atmospheric products.

Note that products from other CGMS groups can be very appealing:

1. Satellite-derived wind vectors (Winds Working Group, especially EUMETSAT);
2. Vertical soundings from TOVS (TOVS Working Group) helping to fill in gaps in radiosoundings.

Activities to directly assimilate precipitation fields in Local Area Models are on their way: e.g. activities on BOLAM by Buzzi, Levizzani and Turk. It is expected that before MEDEX Phase 2 some conclusions can be drawn on their performance and possible applications to MEDEX.

MEDEX data can also be very helpful to IPWG for validating satellite rainfall products over the Mediterranean. In this sense MEDEX is a unique opportunity for the satellite meteorology community.

The IPWG is more than available to help in conceiving MEDEX strategies of satellite data usage. This should, however, be done well in advance in order to avoid asking for products and support when the project is running: it would be very difficult at that stage because procedures need time to be put into place.

MEDEX possible use of satellite precipitation data.

A. Jansa, MEDEX Chairman

Precipitation measurements and estimations constitute key information for the MEDEX activities for MEDEX activities concerning both the (a) the dynamic climatological aspects, and (b) the sensitivity study to factors based on selected cases.

Although the information based on non-GTS raingauge networks can be enough for a good description of the precipitation fields over land and the radar networks provide a good complementary tool for it, there are areas, mainly marine, in which the lack of information on rainfall is evident. There are events in which the maximum (or largest amount) of precipitation is over the sea. Skipping or mis-considering these events would imply a loss of systematics on the climatological aspects. Regarding the experiment on sensitivity to factors, lack of information makes it impossible the accurate consideration of a factor, which can be a priority considered important in the Mediterranean, that is the latent heat release.

Recognizing that space-based precipitation estimations can be useful for MEDEX activities, the WWRP SSC recommends the MEDEX management to keep in contact with CGMS IPWG as to exchange on information and data.