

## APPLICATIONS WORKING GROUP

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### 1. EXPANSION OF USE OF PRECIPITATION PRODUCTS; TRAINING

#### **IPWG recommendation to CGMS:**

The IPWG recommends that CGMS endorse developing an initiative or tasking an existing initiative to interface between providers and users.

- IPWG recommends that CGMS ask WMO to identify and alleviate barriers in integrating satellite-derived precipitation products in operational activities in close cooperation with the IPWG. The co-chairs of IPWG will act as a point of contact for this initiative.
- IPWG recommends that CGMS encourages the WMO Space Program to advertise, organize, and provide information on existing relevant training events and online resources in organizations worldwide for training in the use of satellite precipitation products in NMHS and other applications. IPWG will provide assistance in technical content and lectures for such training activities.

**Action (IPWG members):** Actively participate in developing training materials and volunteering to make presentations at training venues, and if possible become proactive in developing training materials.

**Action (IPWG members):** Provide links to training materials to IPWG webmaster, make sure current links work

**Action (Co-Chairs):** Act as a point of contact for incoming requests for experts providing training materials and presentations to the user community

### 2. TIMELY DISSEMINATION OF RAIN GAUGE DATA

The IPWG has identified the lack of availability of rain gauge data sets in near real time to the precipitation research community as a major barrier in progress in developing and evaluating precipitation products.

#### **IPWG recommendation to CGMS:**

IPWG recommends that CGMS encourages WMO to facilitate the access to rain gauge data from NMHS and intensify data sharing activities from data sparse regions like

Africa, South America, and Asia. For example, we see projects like the WIFA initiative in Africa could be useful for satellite precipitation community.

### 3. GLOBALLY-MERGED IR DATASETS

The availability of the globally merged IR-brightness temperature data sets from geostationary satellites, as they are generated by NOAA-CPC, is essential for the generation of many precipitation products. Currently data can only be provided with a delay of 3 days due to a limitation by the EUMETSAT data policy. New satellite algorithms require these data sets in near real time.

**Action (Thomas Heinemann):** EUMETSAT will work with CPC to check availability of full resolution IR data in near real time for this data set.

#### 4.1 WEB PAGE CONTENT

Various problems concerning the web page content were identified. In particular, there are inconsistencies between the lists of products and algorithms on the IPWG page. We should:

- a. update the product list to be current,
- b. add metadata to the product list, part of this can be taken from the algorithm inventory, and
- c. present product information in a table format for easier perusal by the users.

**Action (TBD):** Provide a template for products which can be based on template for algorithms (consult existing algorithm template, streamline ISO guidance), including definition of keywords (such as biosphere, agriculture, nowcasting).

**Action (IPWG members):** Product generators should update the current list of their products to the IPWG.

**Action (IPWG webmaster):** Create a table of products and corresponding metadata.

#### 4.2 WEB PAGE VISIBILITY

The IPWG web page is difficult to find with search engines even if the keyword "IPWG" is known. Users searching for information on precipitation remote sensing in general will hardly find the IPWG web-page at all. An increased visibility of our web page is highly desirable.

**Action (TBD):** Investigate ways to make our web presence more visible. Add HTML tags to move link up on search engines. Shorten domain name by obtaining an org.int domain name.

**Action (IPWG webmaster):** Clean up data section. Main page should be made more user-friendly, information about IPWG should be on a separate page.

**Action (Zhong Liu):** Add 'frequently asked questions' section.

**Action (Steve Nesbitt):** Create links from Wikipedia to IPWG web page. First create IPWG Wikipedia page template in English, then provide it for translation in other languages.

## 5. USER REQUIREMENTS LIST

Operational agencies and some algorithm developers have collected requirements of various user communities. This information should be made available to all algorithm developers and product providers to help them to address the right user communities with their products or to improve the algorithm in the right direction.

**Action (Thomas Heinemann):** Create a user requirements list.

**Action (IPWG members):** Provide list of existing user requirements of various user groups to Thomas.Heinemann@eumetsat.int .

**Action (IPWG webmaster):** Include user requirements list on the IPWG web page.

## 6. DATA ARCHIVING AND REPROCESSING

IPWG recognizes the utility of homogeneous satellite precipitation datasets in the creation of climate data records.

### **IPWG recommendation to CGMS:**

The IPWG recommends that CGMS members support reprocessing activities of all available satellite product archives as advances in algorithms or user requirements are made in order to maintain homogeneity in data records. These activities should cover both, current operational, and decommissioned L1 and L2 data products. The former would include primary operational GEO and LEO satellites (e.g., POES, MetOP, JPSS, etc.) and research satellites (e.g., EOS, TRMM, etc.) while the latter would include heritage data sets that span several satellites (e.g., MSU/AMSU, AVHRR, HIRS, etc.). When reprocessing occurs, we recommend that the existing archive of the prior version is kept available for at least 2 years for version intercomparison.