## March 11, 2003 Tuesday

*Welcome*

    9:15-9:35      Tony Hollingsworth,  Arnie Gruber

*Introduction*

    9:35-10:00    Masao Kanamitsu (SIO/UCSD)

***Session I-a.  Precipitation analysis procedures (GPCP, CMAP)***

Chair person:  Arnie Gruber

**1**    10:00-10:40    George Huffman and Bob Adler (GSFC/NASA)

    (1) The Current Approach to GPCP Monthly and Daily Precipitation Estimates.

    (2) The Multi- satellite Precipitation Analysis (MPA) in Real and Post-Real Time.

**Break (10:40-11:00)**

**2**    11:00-11:25    Pingping Xie, Yelena Yarosh, John Janowiak (NCEP/NOAA), and Phillip A. Arkin (ESSIC/UMD)

    Techniques used to create CMAP and their potential improvements

***Session I-b.  Precipitation analysis procedures (NWP data assimilation)***

Chair person: Peter Bauer

**3**    11:25-11:50    Philippe Lopez (ECMWF)

    Precipitation assimilation at ECMWF

**4**    11:50-12:15    Arthur Hou (DAO/NASA/GSFC)

    Precipitation assimilation at NASA Goddard

**5**    12:15-12:40    Bruce MacPherson (Met Office)

    Precipitation assimilation at the Met Office (UK) and COST-717  collaboration in Europe

*Lunch (12:40-1:50)*

**6**    1:50-2:15    Peter Bauer (ECMWF)

    Estimation of rainfall and its error characteristics from satellite observations

**7**    2:15-2:40    Ko Koizumi (JMA)

    Precipitation assimilation to JMA mesoscale model using a 4D-Var method

**8**    2:40-3:05    Per Kallberg (ECMWF)

    The precipitation in ERA-40

***Session I-c.  Precipitation analysis procedures (Other methods)***

Chair person:  Yukari Takayabu

**9**    3:05-3:30    Murray Salby (U. Colorado)

    Gridding of Global precipitation from satellite measurements

**Break  (3:30-4:05)**

**10**    4:05-4:30    Evgeny Yarosh, Wayne Higgins and Wei Shi (NCEP/NOAA)

    High-resolution daily precipitation analysis over U.S. at CPC/NCEP

**11**    4:30-4:55    Joe Turk (NRL)

    Blending precipitation data sets from multiple sources at short time scales

**12**    4:55-5:20    E. Ebert (BMO)

    The Australian Operational Daily Rain Gauge Analysis

**13**    5:20-5:45    Jurgen Grieser (DWD)

    Towards an adaptive method for spatial interpolation of global rain gauge data

    5:45-      *Cocktails*

## March 12, 2003 Wednesday

**14**    9:15-9:40    Xiaogang Gao, Soroosh Sorooshian, and Kuolin Hsu
Strategy of Error Analysis and Reduction in the PERSIANN System

*Session II - Observation characteristics (rain gauge and satellite)*
Chair person:  Beth Ebert

**15**    9:40-10:05    Udo Schneider (GPCC/DWD)
Operational processing, quality control and analysis of precipitation data at GPCC

**16**    10:05-10:30    Yukari Takayabu (CCSR/Univ. Tokyo) -  Characteristics of precipitation as observed by TRMM PR

*Session III.  Validation and Collaboration*
Chair person:  Pingping Xie

**Break (10:30-10:50)**

**17**    10:50-11:15    Efi Foufoula (Univ. Minn.) - Multisensor-multiscale precipitation datasets and model Verification

**18**    11:15-11:40    A. Ghelli (ECMWF) - The relevance of gridded rainfall observations to verify ECMWF precipitation forecasts

**19**    11:40-12:05    Krajewski (U. Iowa) - Error characteristics of rain gauge and radar estimates and validation issues

**20**    12:05-12:30    Mark Serreze (NSIDC) - Monitoring Precipitation over the Arctic drainage: Data requirements, shortcomings and applications of atmospheric reanalysis

**Lunch (12:30-1:45)**

**21**    1:45-2:10    V. Levizzani (CNR, Italy) and Arnie Gruber (NESDIS/NOAA) -  The international Precipitation working Group:  Opportunities and perspectives

**Discussions**

2:15 -5:30    Guidance to Working Group and breakout
- Analysis procedure
- Data assimilation
- Observation error characteristics

5:30-    *Informal buffet in the ECMWF Restaurant*


## March 13, 2003 Thursday

9:15 – 10:45    Working Group discussions continue
10:45– 11:00    *Break*
11:00 – 1:00    Plenary Session – Report of Working Group and Recommendations