### DIDAH and WMO-CCI/CLIVAR/JCOMM ETCCDI WORKSHOP

# ON EXPLORING CHANGES IN TEMPERATURE AND PRECIPITATION EXTREME INDICES FOR INDONESIA

### 7-11 December 2009, Bogor, Indonesia

## - Meeting report -

#### Workshop:

This workshop formed the kick-off for the DIDAH project, in which KNMI and BMKG will jointly digitize climate data for Indonesia over the next 2 years. The workshop was set up according to the proven format developed by the joint WMO-CCI/CLIVAR/JCOMM *Expert Team on Climate Change Detection and Indices* (ETCCDI). It consisted of seminars and hands-on data analysis.

#### Aims:

- 1) improving our understanding of past climate changes in Indonesia by analysing a set of temperature and precipitation extreme indices that are based on daily observations;
- 2) contributing to data rescue (DARE) and data digitization activities in the region;
- 3) providing training on climate data quality control and homogeneity procedures;
- 4) increasing regional research synergies by sharing insights in observed and projected climate change in the region;
- 5) producing a report and a peer-reviewed paper to describe the scientific findings.

## Participants:

24 participants from all over Indonesia, and 3 participants from neighbouring countries Malaysia, Thailand and The Philippines (see photo).



#### Organizers:

Local organizers: Dr. Noer Hayati (BMKG), Mr. Yunus Swarinoto (BMKG). International experts: Dr. Albert Klein Tank (KNMI), Dr. Lisa Alexander (Univ. of New South Wales, Australia), Dr. Rob Allan (Met Office/ACRE, UK), Dr. Theo Brandsma (KNMI), Dr. Geert Jan van Oldenborgh (KNMI), and Dr. Omar Baddour (WMO, Geneva, represented by Albert Klein Tank).

#### Outcome:

The participants brought daily station data series from 80 stations in the region to the workshop. They quality controlled the data and analyzed changes in extremes using the RClimdex software package. The figure below shows a preliminary compilation of the results for the index R95pTOT: precipitation due to very wet days. Positive trends in this index dominate over roughly the last 30 yrs. This indicates a disproportionately large increase in the precipitation extremes relative to the total amounts. After a considerable amount of post-workshop analysis, a journal paper will be prepared. A follow-up workshop may also be part of the future activities of the DIDAH project.

