

# **Goal 3 : Breakout Session Report**

Arun Kumar  
20 July 2012

**GOAL 3: Improve practices for the development, evaluation, and communication of climate science and information**

**GOAL 3: Improve practices in the development, validation, provision and uses of climate information and forecasts.**

**Improve practices for the development, evaluation, and communication of climate information**

- **Foster better coordination between the science and operational community (with a focus on defining infrastructure needed to do so)**
- **Develop data-constrained dynamically and kinematically consistent coupled ocean/atmosphere/ice (and eventually other components of the Earth system) models for monitoring, understanding, and predicting climate variability**

**Improve practices for the development, evaluation, and communication of climate information**

- **Develop, and promote, standardization of data formats and data distribution from new observing systems**
- **Promote unification of QC procedures**
- **Ensure continuity of climate records and observations**
- **Develop a process to communicate CLIVAR science (e.g., achievements of WGs; AMOC Science Team)**

## **Improve practices for the development, evaluation, and communication of climate information**

- **Develop pathways to engage modelers and observationalists in strategies to synergize development and improvement of the global observing system for evaluation of climate and for improving forecasts**
- **Develop methods to assess the relative improvement of advancements in climate information to address decision-maker needs**
- **Develop evaluation metrics for periodic assessment of prediction skill of new generation of models and communicating it to the user community**

## Improve practices for the development, evaluation, and communication of climate information

- **Construct framework to evaluate (and judge reliability of) confidence limits & probability forecasts**
- **Evaluate the effectiveness of communication (e.g., how effective is CLIVAR Variations)**

## **Improve practices for the development, evaluation, and communication of climate information**

- **Define pathways to foster participation and exchange of knowledge across science (e.g., models and data products) and applications communities**
- **Develop, strengthen, and consider, alternate strategies for communication/dissemination/usability of CLIVAR science and climate information**
  - **Getting the right (relevant) information to the users; Educate users about the limitations/uncertainty in the climate information**
  - **Actual messaging of the information; messaging medium; entrain entities to be CLIVAR hubs**
- **Showcase examples that followed best practices (e.g., real-time forecast system; tangible benefits for the user community)...Collect, and showcase, successful use of climate information**
- **Define pathways for feedback from users to providers**

## **Improve practices for the development, evaluation, and communication of climate information**

- **Develop best practices for communicating the role of natural variability and anthropogenic forcing in the evolution of current state of climate**
- **Develop pathways for communicating confidence limits & educating users about the use of probability forecasts**
- **Promote mutual exchange of observational data with industries with interest in climate information**