Establishment of Regional Flash Flood Guidance Systems for South America

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Hydrologic Research Center
• The Hydrologic Research Center is a public benefit nonprofit organization.

• HRC’s goal is to help bridge the gap between scientific research and applications for the solution of important societal problems that involve water.
Global Flash Flood Guidance Program

- The implementation of Flash Flood Guidance systems globally is a program to provide a tool for National Meteorological and Hydrologic Services to develop flash flood alerts, watches and warnings.

- The program addresses the need to provide early warnings for flash floods in the development of regional approaches to flash flood issues.

- The program is a partnership between the Hydrologic Research Center, the World Meteorological Organization, the U.S. Agency for International Development/Office of U.S. Foreign Disaster Assistance, and the U.S. National Oceanic and Atmospheric Administration.

Memorandum Of Understanding is in place since 2008.
Global Flash Flood Guidance

Flash Flood Guidance System (FFGS) With Global Coverage

System Implementation Plan

22 Regions
The Role of the Hydrologic Research Center

• Developed the FFGS concept and system design
• Tailor the FFG systems for the specific of the region (data, geomorphology and hydrometeorology)
• Implement the systems at the selected regional center and provide technical support
• Train forecasters to use the FFGS and in order to produce prompt flash flood warnings.
• Maintain and enhance the FFG Systems
Tailor the FFG systems for the specific of the region

Product Console
System Enhancement
Upcoming FFGS new product:
Land Slide Threat [LST]
Flash Flood Hydrometeorologist Training Program

Step 1
Introductory Regional Workshop (All Trainees, All Countries)

Step 2
eLearning Hydrometeorologist Training Program
All Trainees
All Countries

eLearning Testing
Pass

No
Return to course
Terminate Training

Yes
Complete Core Courses

Earn HRC eLearning Course Certification

Eligible for Step Three

Step 3
Specialized training at HRC
(Simulator Training)

Interactive Testing
Pass

No
Terminate Training

Yes
Complete HRC Training

Earn HRC Certification

Eligible for Step Four

Step 4
Regional Operations Training Workshop
Regional Country Trainers

HRC Trainers and Trained Regional Trainers

Earn WMO Certification

Step 5
Regional Operations Sustainability Workshop
(WMO Certified Trainers)
Flash Flood Hydrometeorologist Training (FFHT) Program

Eight courses
- Elements of Meteorology
- Elements of Hydrology
- Hydrometeorological Statistics
- Fluvial geomorphology
- GIS basics
- Flash Flood Guidance Model Products
- Remote sensing and
- Early warning systems.

Hydrologic Research Center ~ Linking Science and Society
Over 400 people on the distribution list mostly from national meteorological and hydrological services.
Global FFG Development Team at HRC

Dr. Konstantine Georgakakos, Director
Mr. Robert Jubach, General Manager
Mr. Jason Sperfslage
Dr. Theresa Modrick
Dr. Eylon Shamir
Mr. Cris Spencer
Mr. Randall Banks
Dr. Rochelle Graham