



First Steering Committee Meeting (SCM1) Mekong River Commission Flash Flood Guidance

(MRCFFG) System

Phnom Penh, Cambodia

29 November-01 December 2016

The Experiences and Lesson Learn on Using of MRC Flash Flood Guidance System In Lao PDR

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Vientiane, 25 November 2016



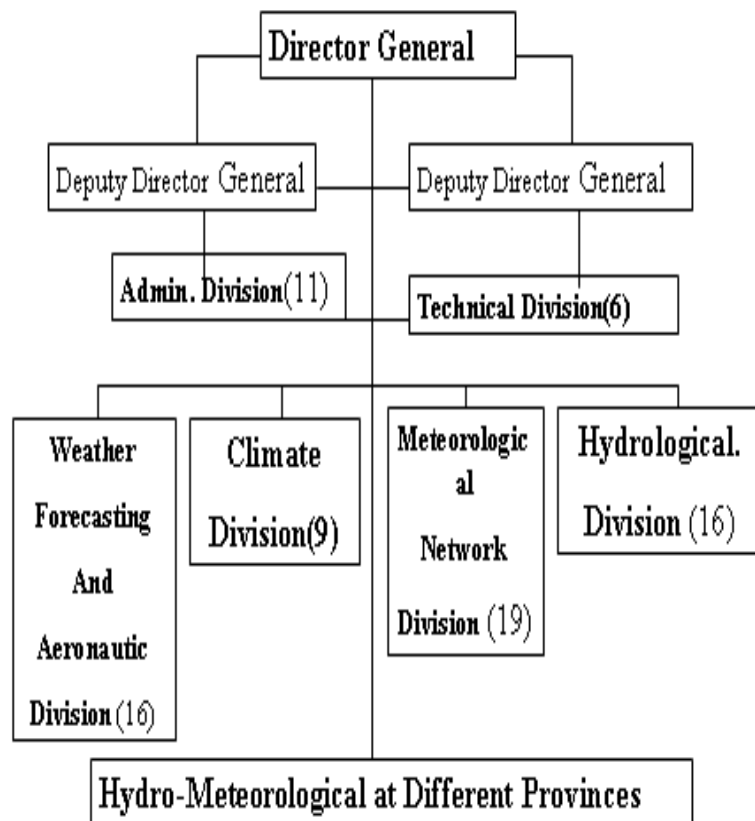
Content

1. General Information
2. Implementation of MRCFFG system
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1. General Information

Organization Chart of DMH



- The organizational structure of the Department of Meteorology and Hydrology (DMH) is composed of two levels: the Central level and the Provincial level
- At the central level is composed of:
 - Administration and Personnel Division



1.1 Organization Chart (Cont.)

- Administration and Finance Division
- Planning and Cooperation Division
- Weather Forecasting and Aeronautical Division
- Meteorological Network and Earthquake Management Division
- Hydrological Division
- Climate Division

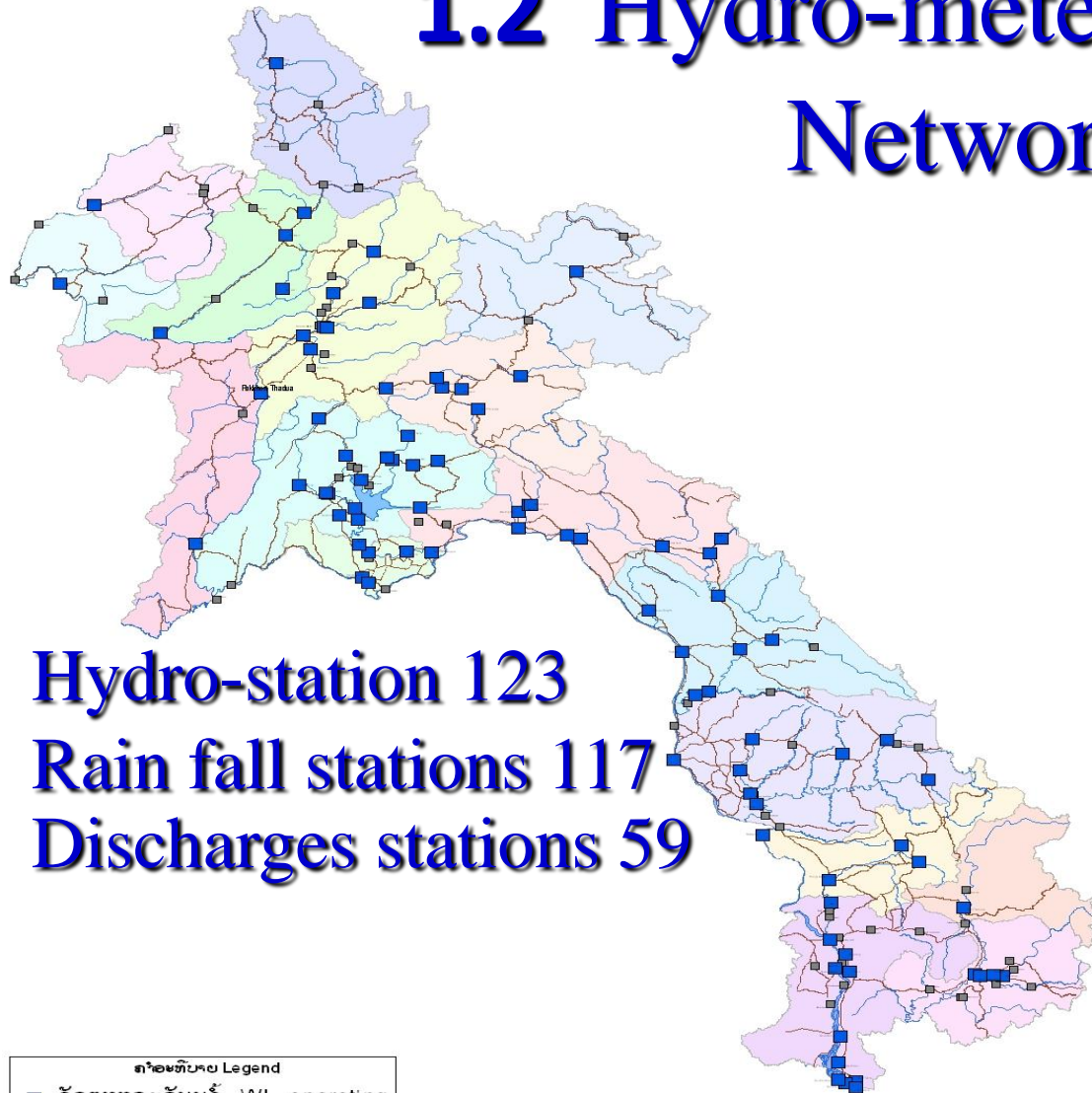


1.1 Organization Chart (Cont.)

- ▶ The provincial level called the hydro-meteorological provincial services is composed of **16** provinces and **1** special zone
- ▶ which manage all hydro-meteorological stations



1.2 Hydro-meteorological Network

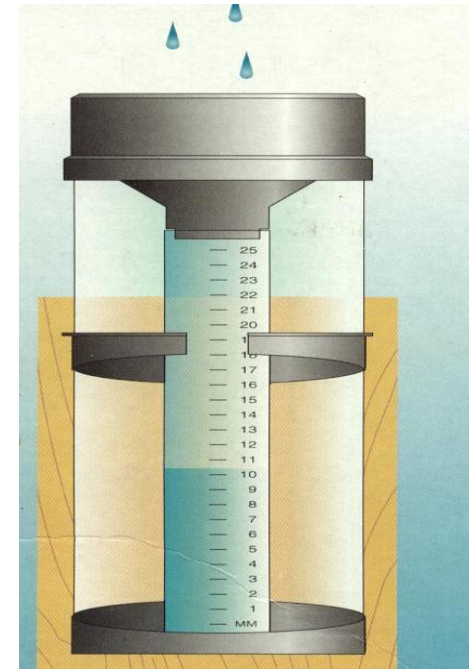


Hydro-station 123
Rain fall stations 117
Discharges stations 59

Slope Gauge

ຄຳອະທິບາຍ Legend

- ວັດແທກລະດັບນ້ຳ WL_operating
- ຍຶດວັດແທກລະດັບນ້ຳ WL_closed
- ແມ່ນ້ຳ River
- ເສັ້ນທາງ Road



Associated rain Gauge

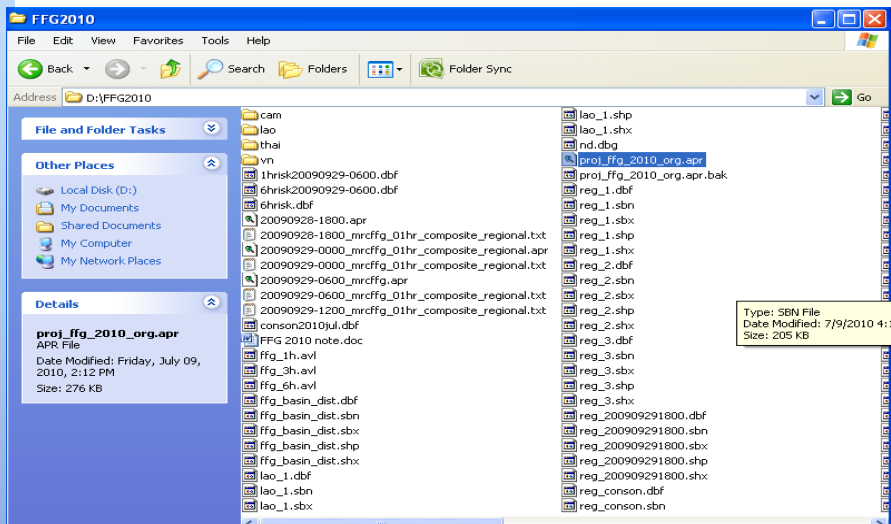


2. Implementation of MRCFFG system

- *National MRCFFG manager (Hydrological division) at DMH*
- *Operator and users*
- *Conducted Training on using of MRCFFGs system and data in February, 2015 with participant hydromet services from differences provinces, TV, mass media, Radios... 40 pers.*

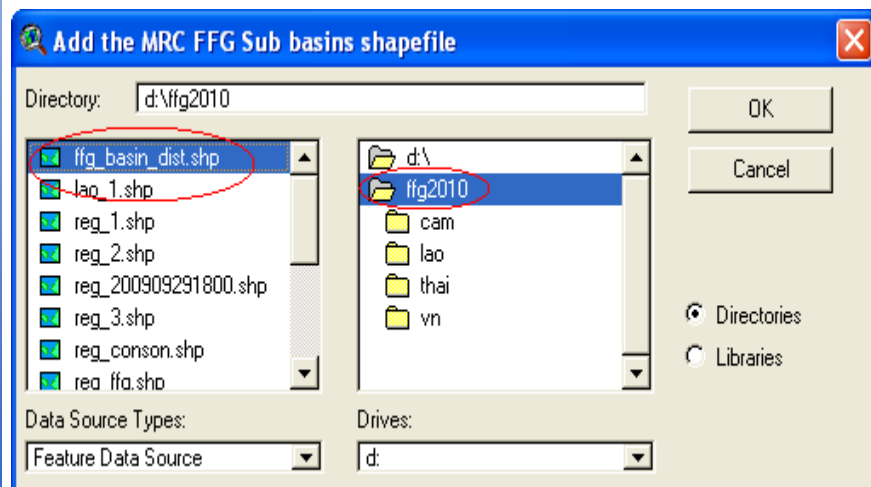


2. Implementation of MRCFFG system(cont.)



Developed and demonstration the users guide in lao language

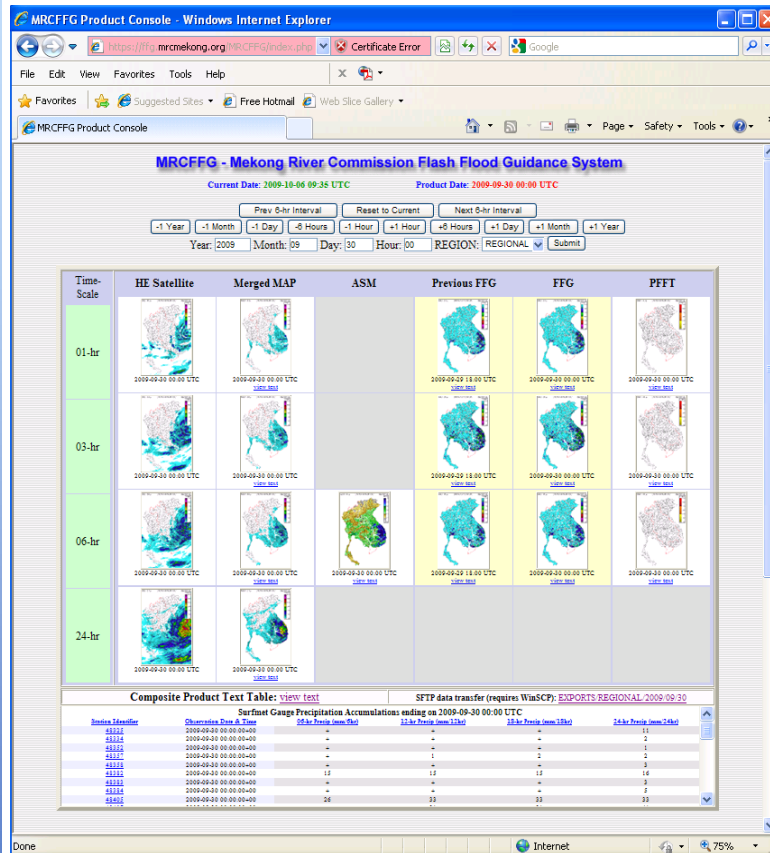
How to use and open ffg2010 folder and interface with Arcview GIS



Map and data composite product report

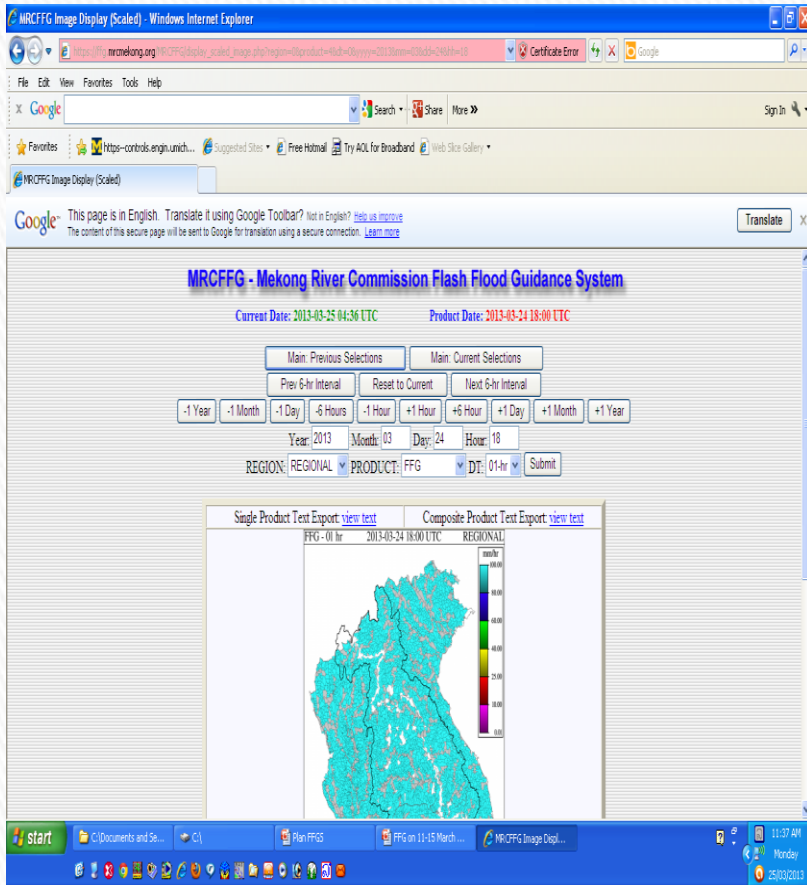


2.1 Capacity of Using FFGS (cont.)

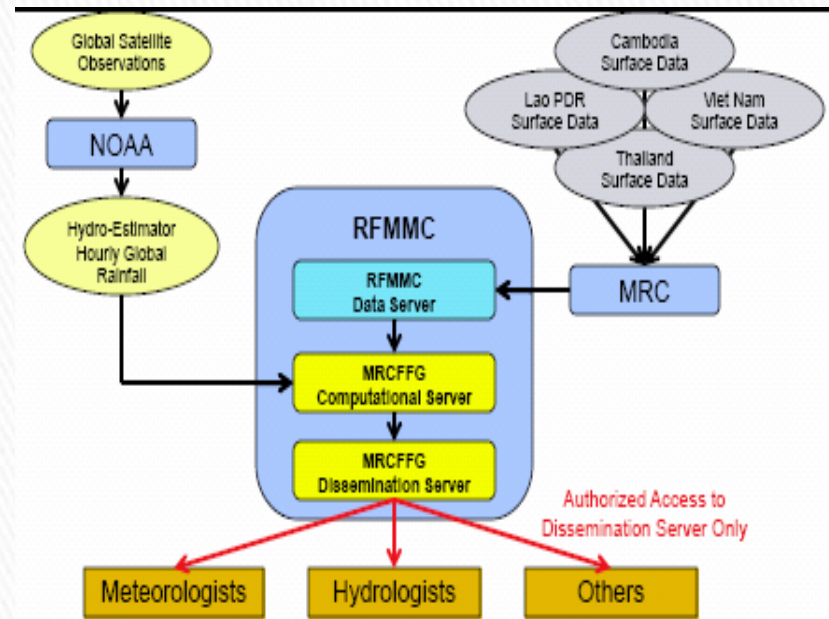


- Access the dissemination server interface with your Internet browser using the following URL:
 - ▶ <https://ffg.mrcmekong.org/MRCFFG> (Note: HTTPS protocol)
- Login Accounts: (Note: All lower-case)
 - ▶ Cambodia
 - ▶ Lao
 - ▶ Thailand
 - ▶ Vietnam
 - ▶ mrcffg (for MRC staffs)
- Password: (Note: All lower-case)
 - ▶ MRCFFG-2009

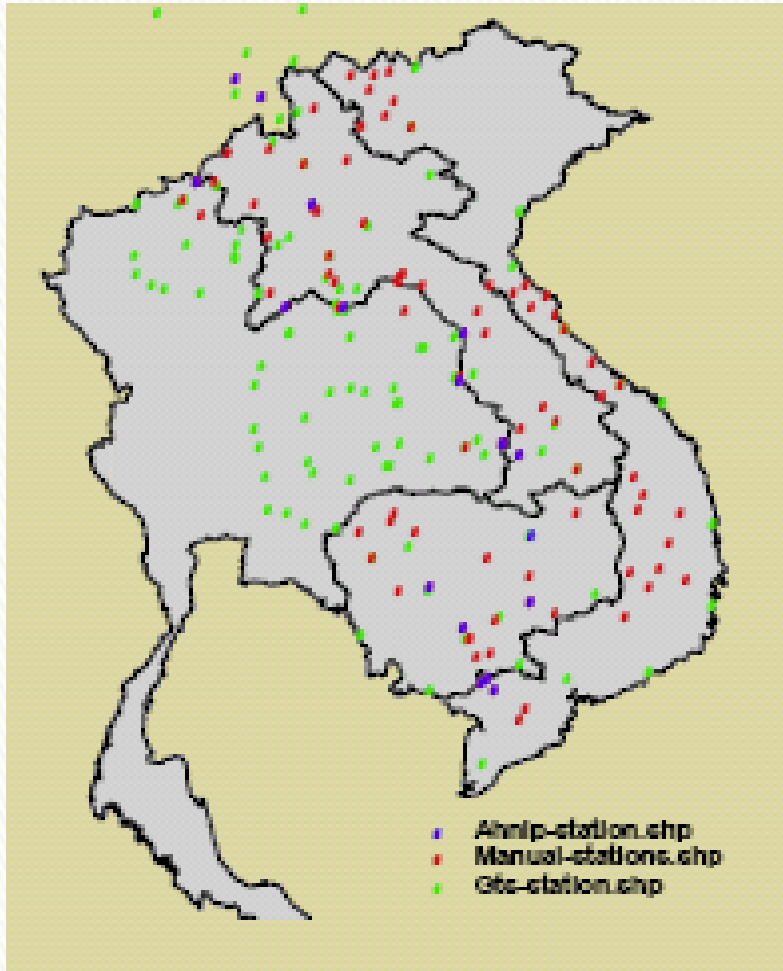
2.1 Capacity of Using FFGS



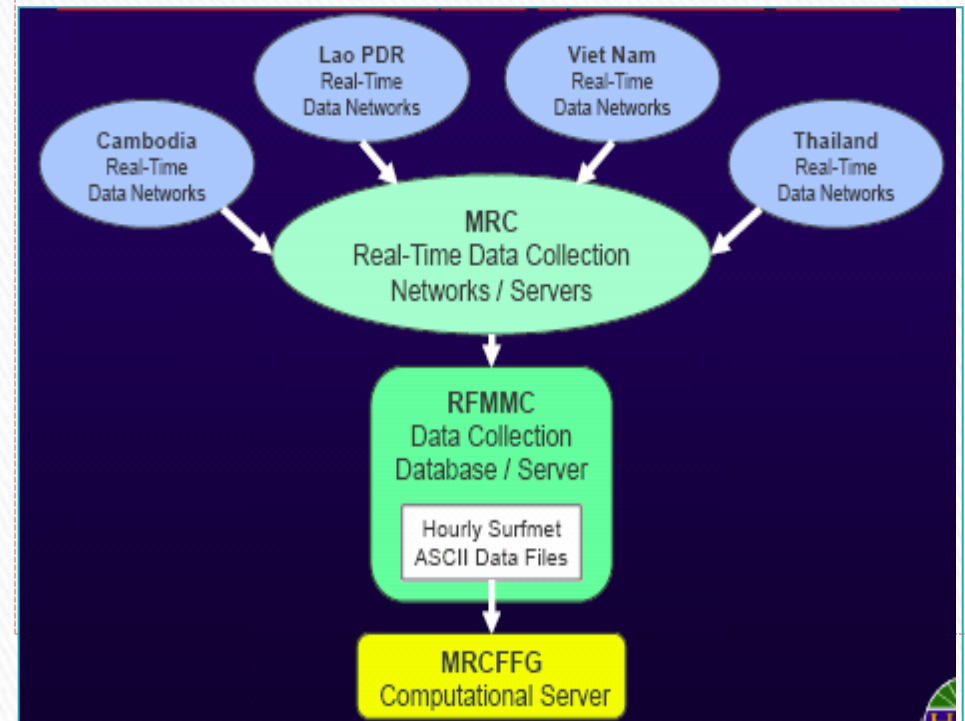
► Data archives via web interface



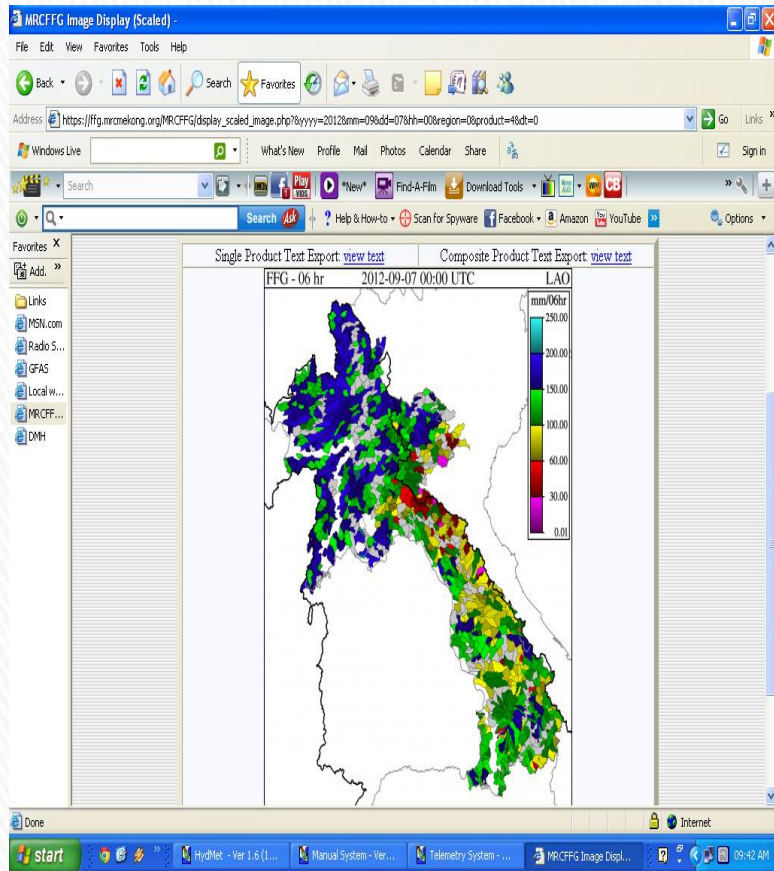
2.1 Capacity of Using FFGS (cont.)



► Real-Time Surfmet (Gauge) Data Acquisition,



2.1 Capacity of Using FFGS (cont.)



- Loading images and data from MRCFFG system
- Real-Time Surfmet (Gauge) Data Acquisition,



2.1 Capacity of Using FFGS (cont.)

View composite products Data Reports

Composite Product Text Table: [view text](#) **SFTP data transfer (requires WinSCP): [EXPORTS/REGIONAL/2009/09/30](#)**

Surfmet Gauge Precipitation Accumulations ending on 2009-09-30 00:00 UTC

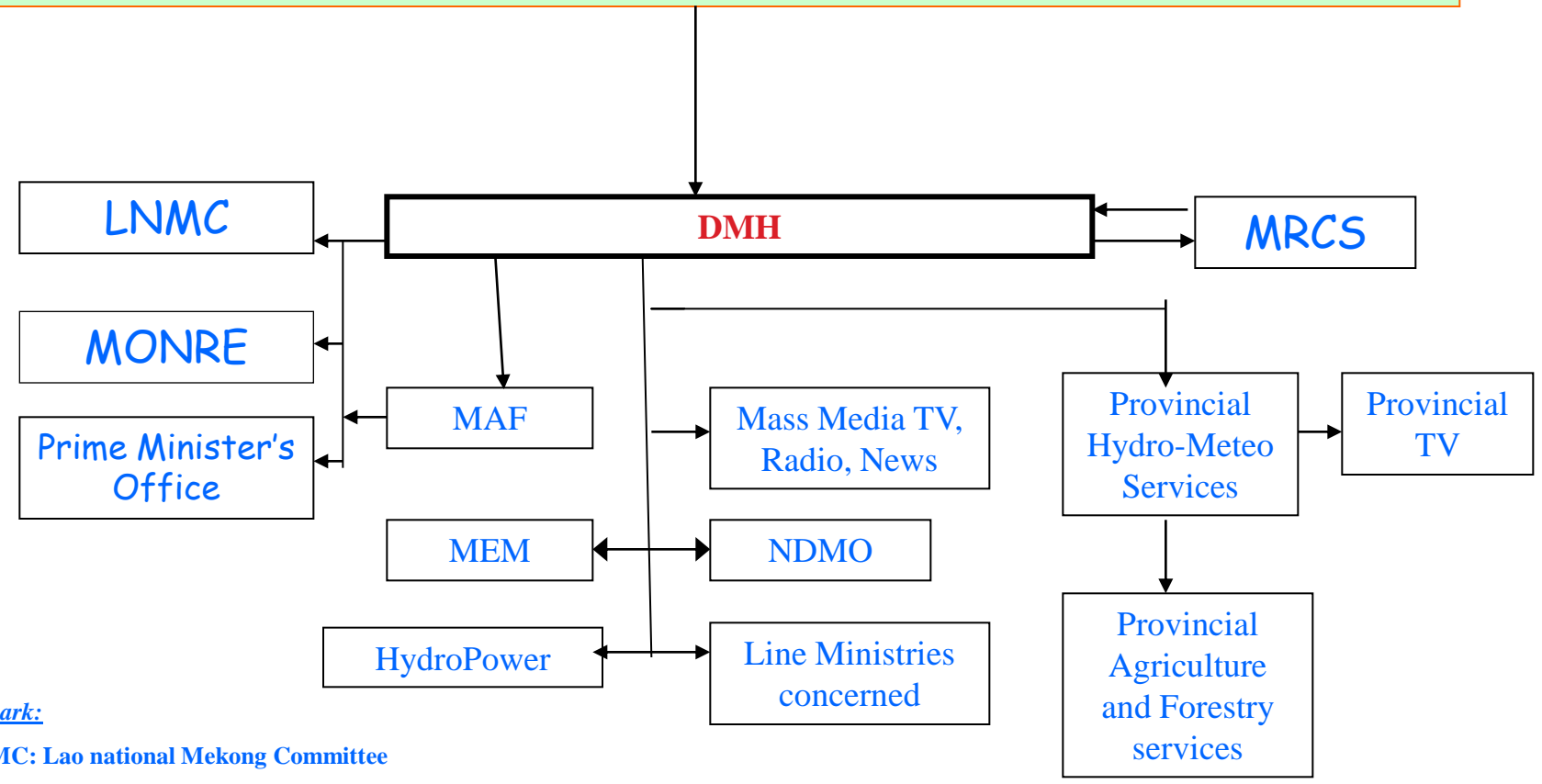
Station Identifier	Observation Date & Time	06-hr Precip (mm/6hr)	12-hr Precip (mm/12hr)	18-hr Precip (mm/18hr)	24-hr Precip (mm/24hr)
43335	2009-09-30 00:00:00+00	-	-	-	11
43334	2009-09-30 00:00:00+00	-	-	-	2
43332	2009-09-30 00:00:00+00	-	-	-	1
43337	2009-09-30 00:00:00+00	-	1	2	2
43339	2009-09-30 00:00:00+00	-	-	-	3
43332	2009-09-30 00:00:00+00	15	15	15	16
43333	2009-09-30 00:00:00+00	-	-	-	3
43334	2009-09-30 00:00:00+00	-	-	-	5
43405	2009-09-30 00:00:00+00	26	33	33	33

24-hr



2.2 Data and Information Dissemination

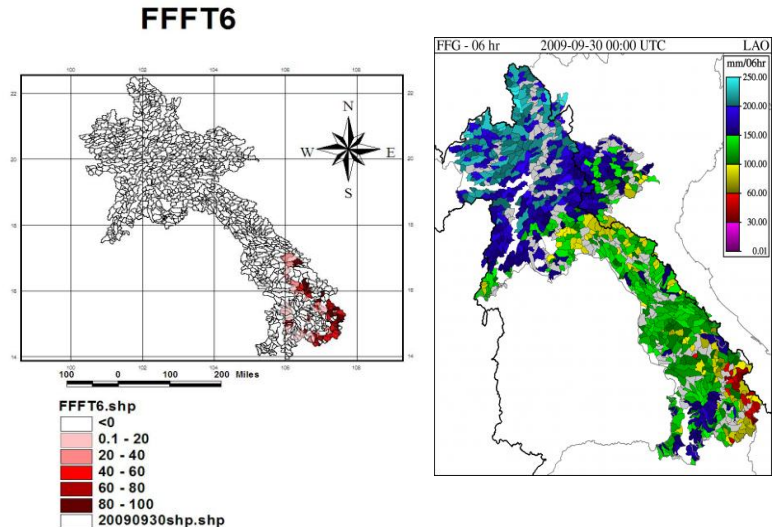
Organization structure for disseminating of weather and flood forecast and warning



- Remark:**
- LNMC: Lao national Mekong Committee
 - MRC: Mekong River Commission
 - MAF: Ministry of agriculture and forestry
 - NDMO: National Disaster Management office
 - MM : Ministry of Energy and Mining
 - MONRE: Ministry of Natural Resources and environment



3. The Experiences and Lesson Learn on Using of MRC Flash Flood Guidance System



- Knowledge and skill of the staff on using FFG system has been improved:
- Used of Arcview GIS software
- Analysis of satellite rainfall data and images of affected and risk areas by flash flood
- enhance awareness and preparedness of flood disasters in lao pdr

4. Recommendations



- Need calibration and test of data between satellite rainfall and ground rainfall station,
- Feedback and reporting from affected and risk areas is not real time,
- Database format for natural disasters events: Flash flood hazard, Extreme flood, storm and thunder storm...

Thank you for your kind
attention

