Τηε Γλοβαλ Εαρτη Οβσερωατιον Σψστεμ οφ Σψστεμσ (ΓΕΟΣΣ) Σψμποσιυμ ον Ιντεγρατεδ Οβσερωατιον φορ Συσταιναβλε Δεωελοπμεντ ιν τηε Ασια-Παχιφιχ

Country Report

Myanmar

Htay Htay Than
Dept. of Meteorology and Hydrology
Myanmar

River Basin Description

Location: 17° 30' to 18° 30' (North latitude)

96° 45′ to 97° 10′ (East Longitude)

Catchment outlet: 17° 48' (N. Lat) , 96° 48' (E. Long)

Catchment Area: 1747 km²

MOLTS Point 1 : 17° 52′, 96° 52′

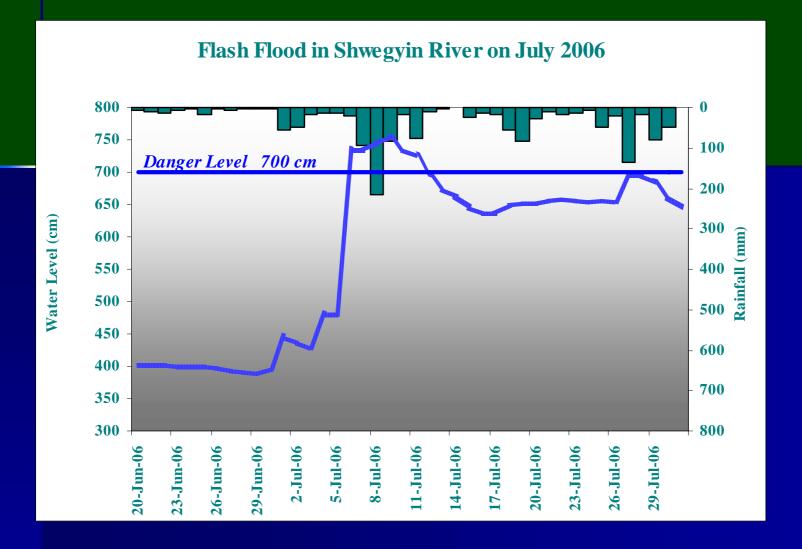
MOLTS Pt. 1 elⁿ : 12 m (above mean sea level)



Available Data at Shwegyin Basin

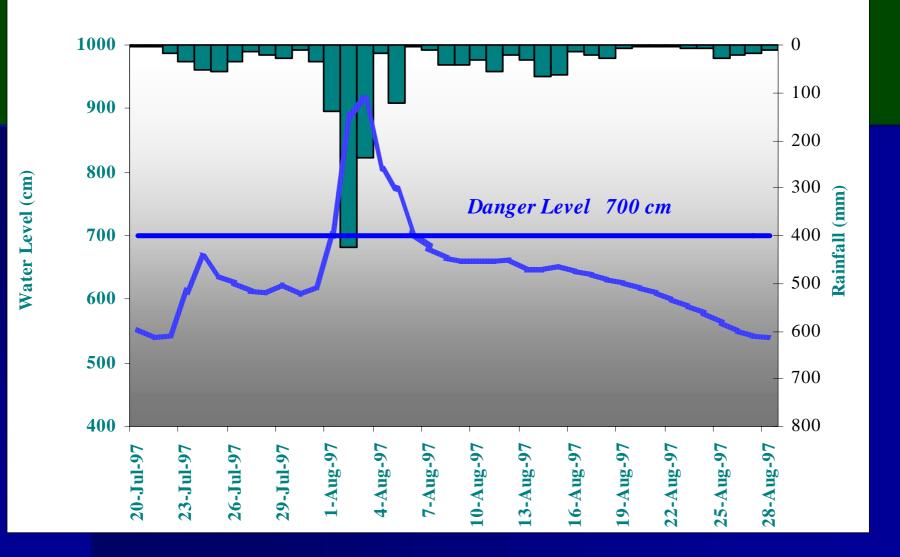
- Rainfall
- water level
- water temperature
- discharge
- sediment discharge
- evaporation
- wind direction
- wind speed
- humidity

Since 1967



Water Level Change within 12 hours: 239 cm

Flash Flood in Shwegyin River on Aug 1997



Water Level Change within 24 hours: 174 cm

Flash Flood Forecasting

- Hydrology plays a large role in flash flood problem
- A given amount of rainfall in a given time may or may not result in a flash flood due to such factor antecedent precipitation, soil permeability, terrain gradients, etc
- Flash floods are result of high precipitation rates persisting for a relatively long time (order of few hours)

Needs related to water resources management

- To install two telemetering stations and one receiving station in Shwegyin river basin, in order to get early warning system
- To develop forecasting technique for flash flood

Requirements: _

- Advance technology for satellite rainfall estimation
- Advance technology transfer for flash flood forecasting
 - Real time data for flood forecasting and warning

Needs related to water resources management

To display the hydrological behavior of watersheds after estimation the geomorphologic parameters from digital elevation model (DEM)

Requirment: _

- High spatial resolution of satellite remote sensing data/ satellite images
- To develop accurate flood inundation maps based on flows the hydrologic model using all available data including GIS data sources

THANKS FOR YOUR ATTENTION