

The 5th GEOSS Asia-Pacific Symposium
2-4 April 2012 Tokyo ,Japan

AWCI Phase 2 Implementation Plan

Thada Sukhapunnaphan
THAILAND

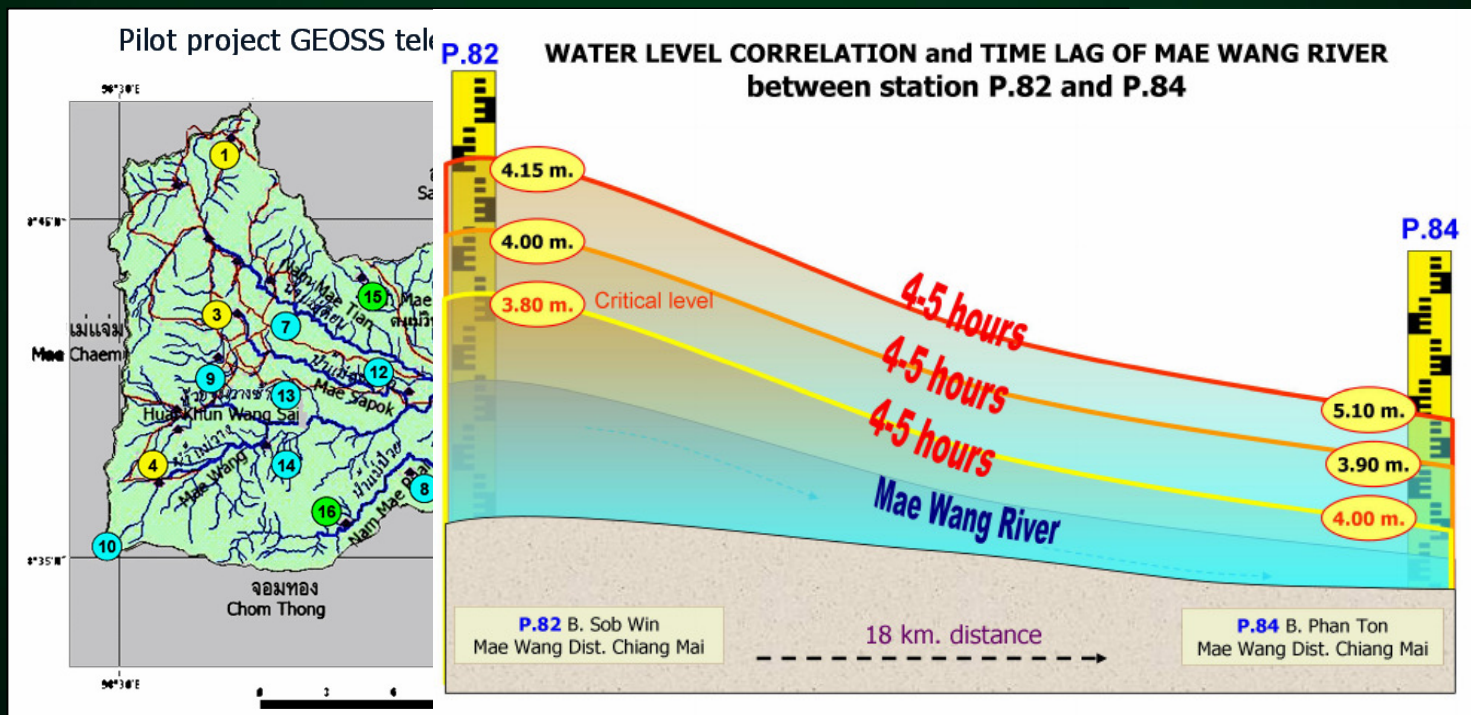
ISSUES

Water-related disasters :
extreme floods and debris flows

THE LACK OF CAPABILITY:
climate change assessment and adaptation
at river basin scale / regional scale.

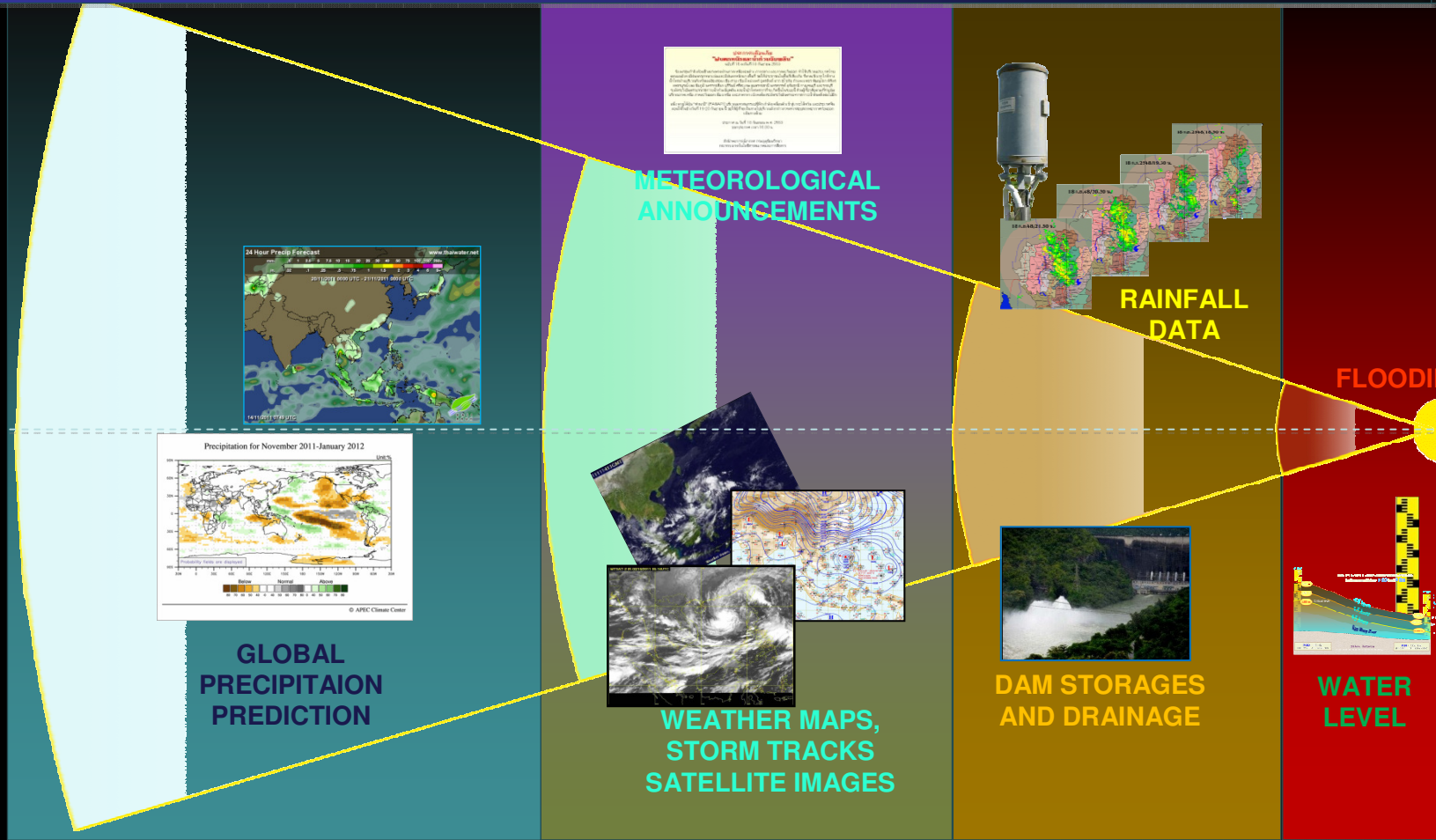
CURRENT PROJECT AND OPERATION

Flood monitoring and early warning system :



EXTENDED RANGES OF EARLY WARNING IN ADVANCE WITH OUTSOURCE INFORMATION

Long range forecast



Flood and Landslide Disaster Management System with Public Participation Model

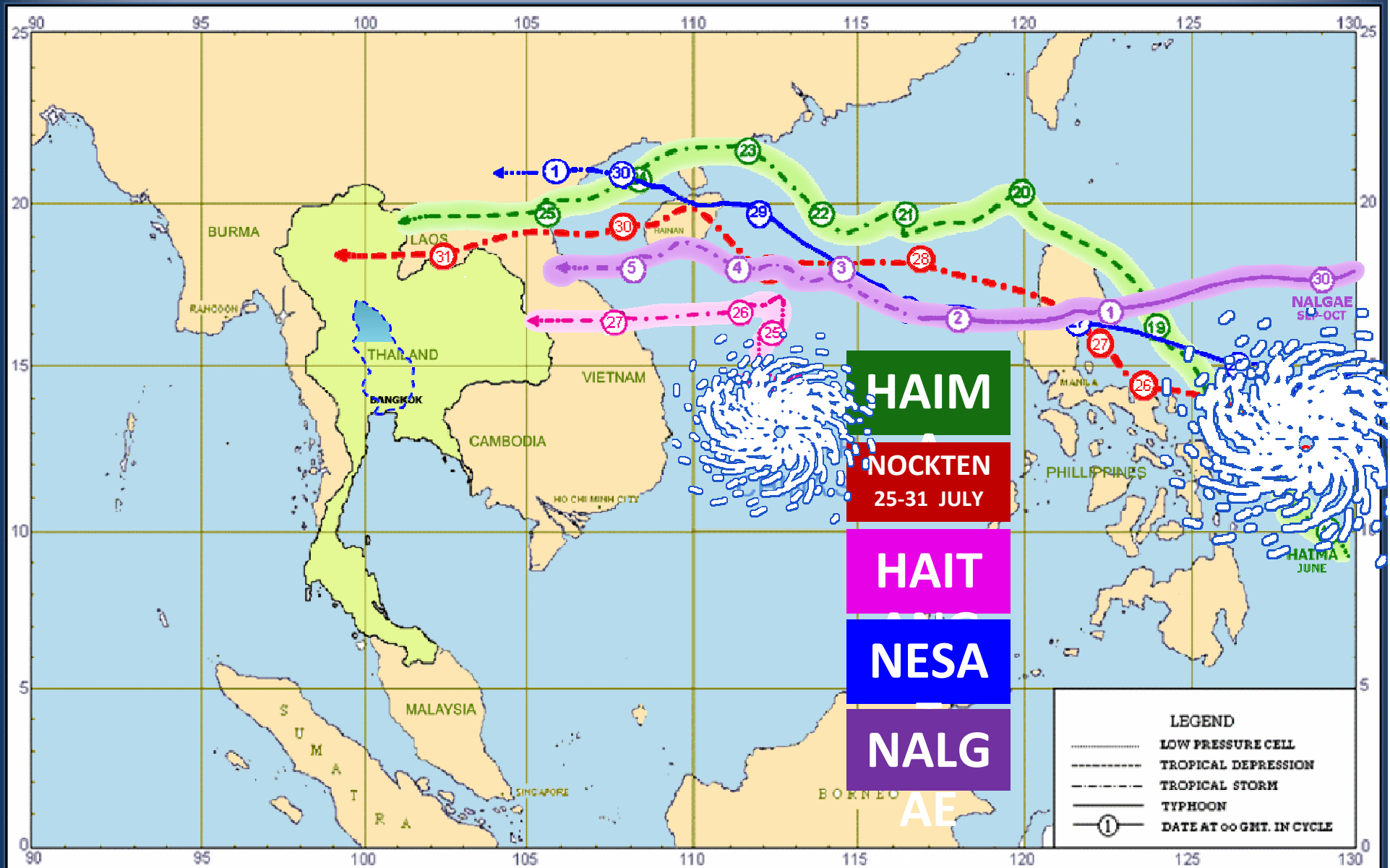
Activity 1 : Finding the appropriate type of observation stations, data survey- collection and report methods with geoinformatic and disaster management system preparing for communities.

Activity 2 : Rainfall analysis and runoff yield assess by satellite images model.

Activity 3 : Real-time flood and landslide assessment model for upstream area

Activity 4 : Symbolic disaster warning system, technics and steps of warning for public sector.

TROPICAL STORMS AFFECTED THAILAND 2011

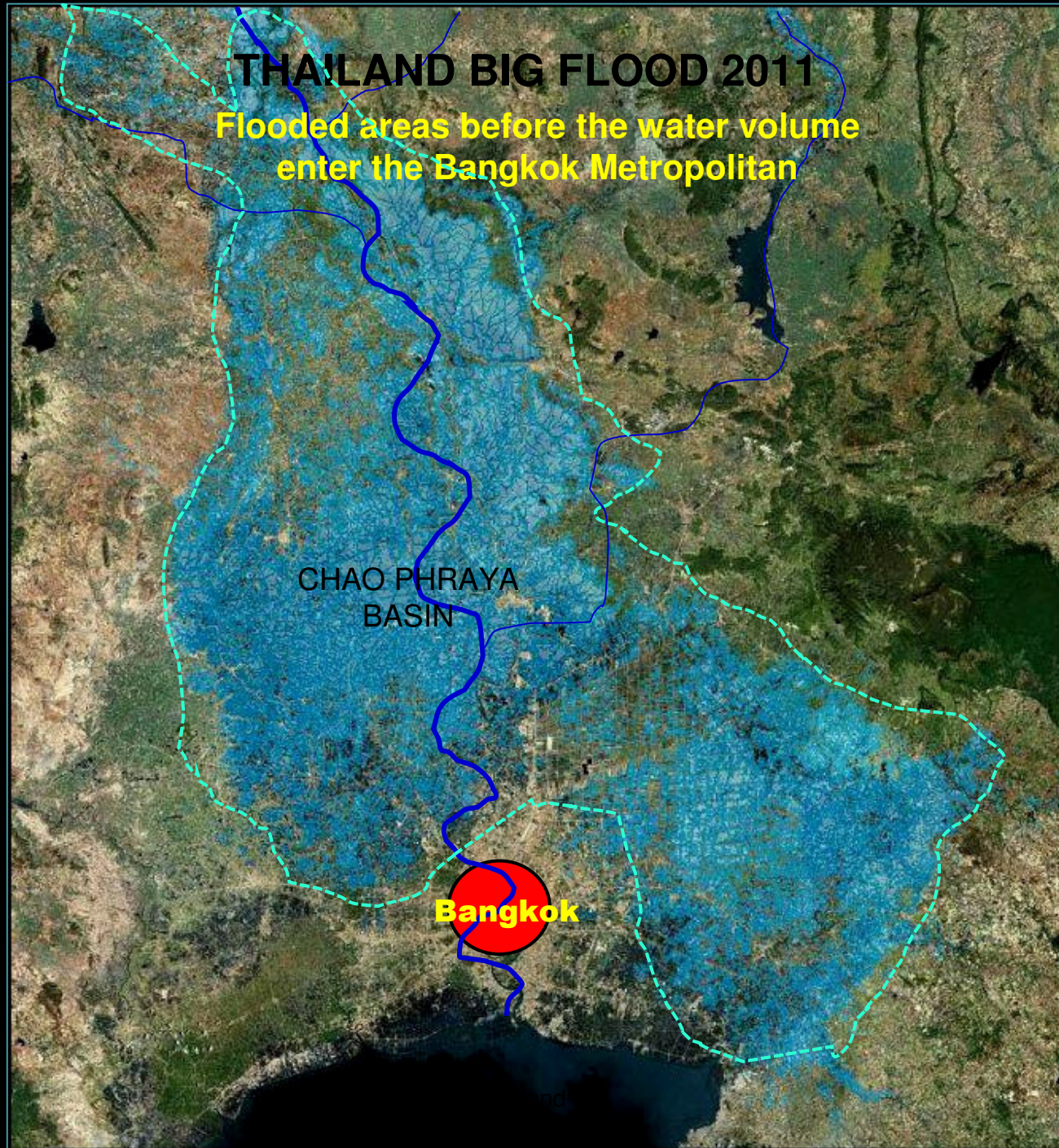


THAILAND BIG FLOOD 2011

Flooded areas before the water volume enter the Bangkok Metropolitan

CHAO PHRAYA
BASIN

Bangkok





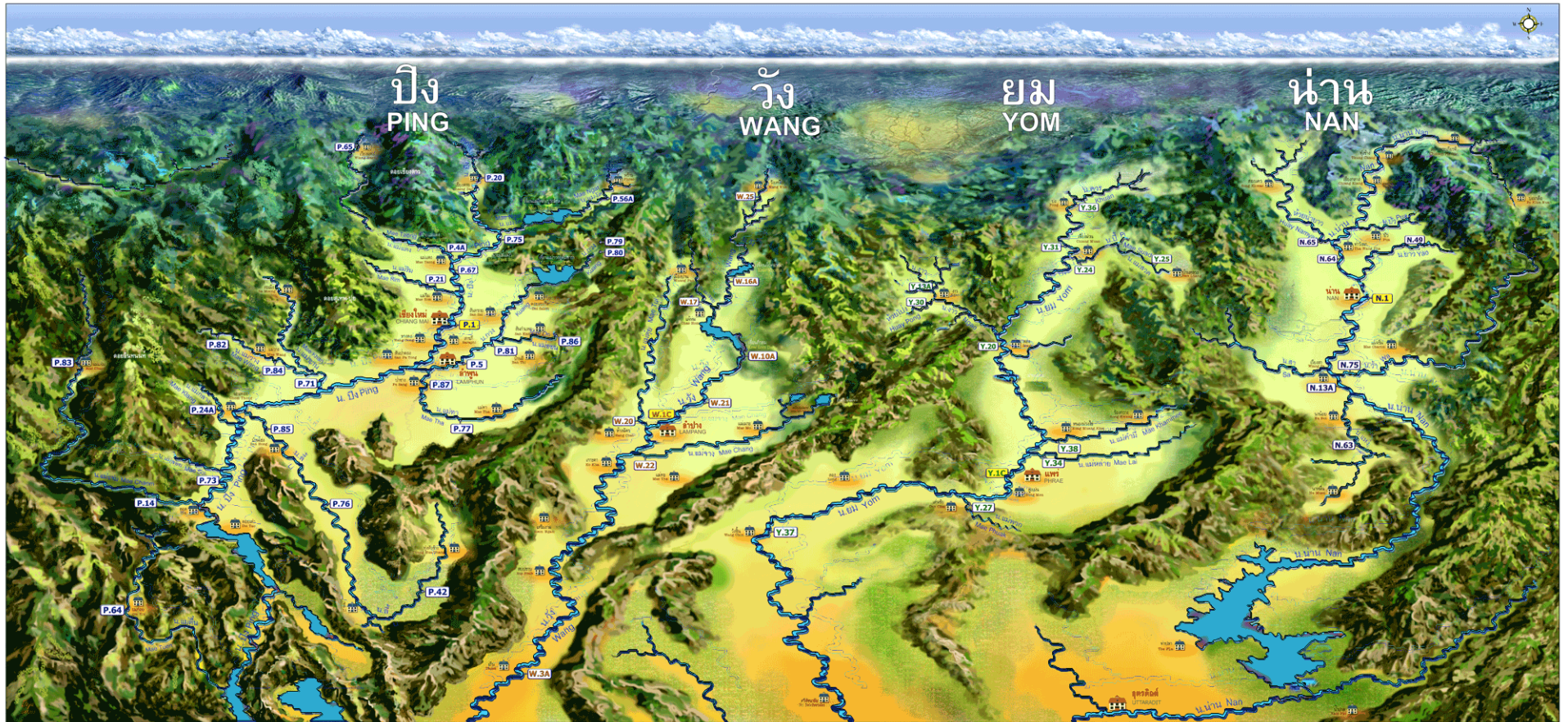
CHAO PHRAYA BASIN

Source Rivers :

Ping, Wang, Yom
and Nan
in Northern
Thailand



Source Rivers : Ping, Wang, Yom and Nan in the Northern Thailand





CHAO PHRAYA BASIN

*DOWNSTREAM
BASIN :*

Chao Phraya, Sakae
Krang and Pa Sak
rivers
in Central Plain.

CHAO PHRAYA BASIN CENTRAL PLAIN



สะแกกรัง
SAKAE KRANG

ป่าสัก
PASAK

นครสวรรค์
NAKHON SAWAN

อุทัยธานี
UTTHAI THANI

ชัยนาท
CHAI NATH

สิงห์บุรี
SING BURI

ลพบุรี
LOP BURI

อ่างทอง
ANG THONG

สระบุรี
SARABURI

สุพรรณบุรี
SUPHAN BURI

อยุธยา
AYUTTHAYA

กาญจนบุรี
KANCHARANABURI

นครนายก
NAKHON NAYOK

นครปฐม
NAKHON PATHOM

ปทุมธานี
PATHUM THANI

นนทบุรี
NONTHABURI

กรุงเทพฯ
BANGKOK

ปราจีนบุรี
PRACHIN BURI

ราชบุรี
RATCHABURI

สมุทรสงคราม
SAMUT SONGKHRAN

สมุทรสาคร
SAMUT SAKHON

สมุทรปราการ
SAMUT PRAKAN

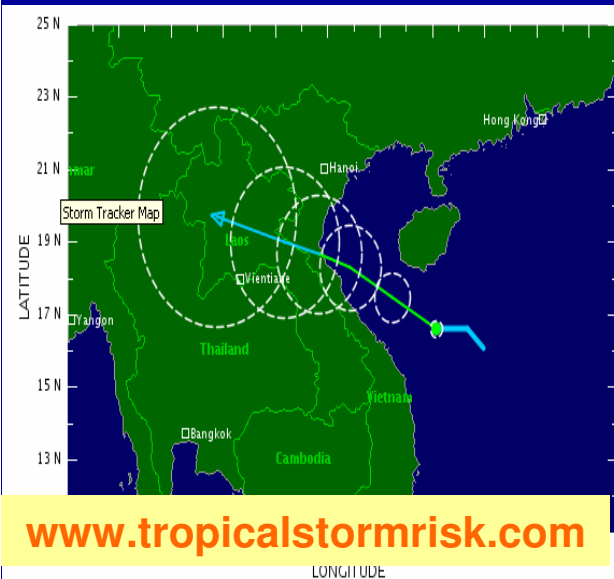
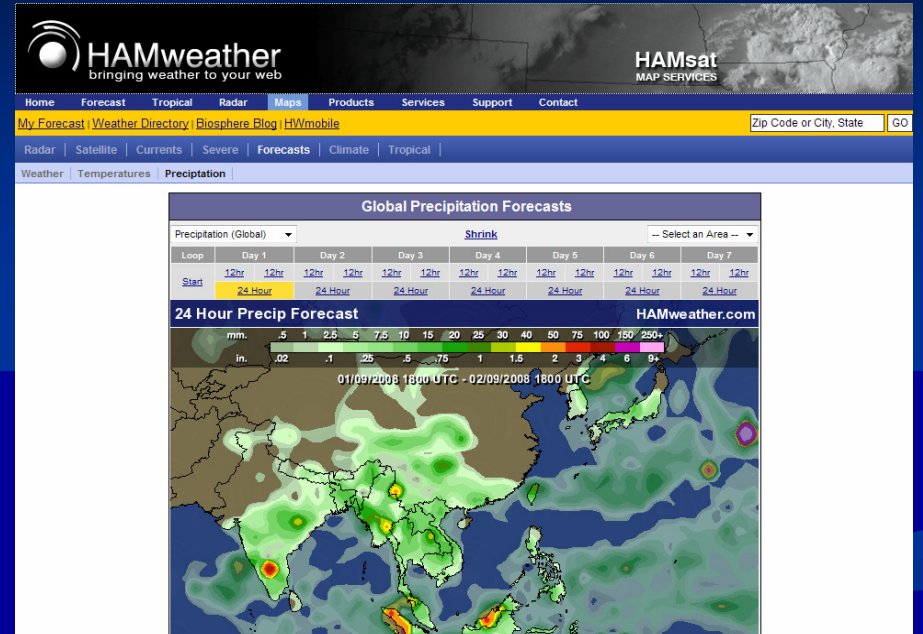
ฉะเชิงเทรา
CHACHENGSAO

อ่าวไทย
(Bight of Bangkok)
GULF OF THAILAND

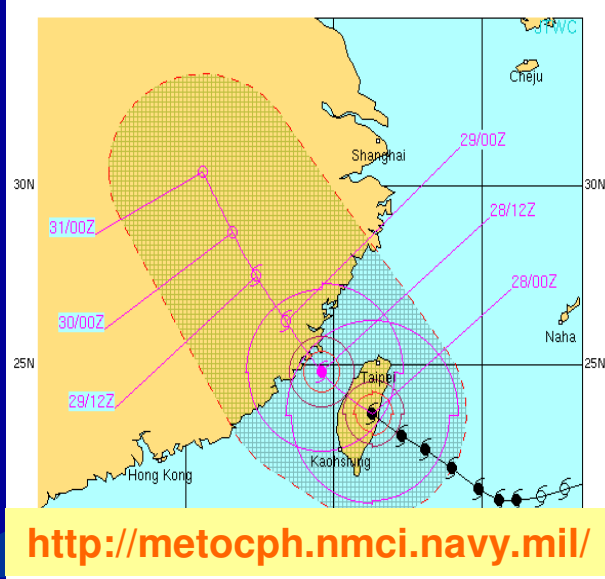
-To develop a radar rainfall and flood forecasting system - for both urban and rural area



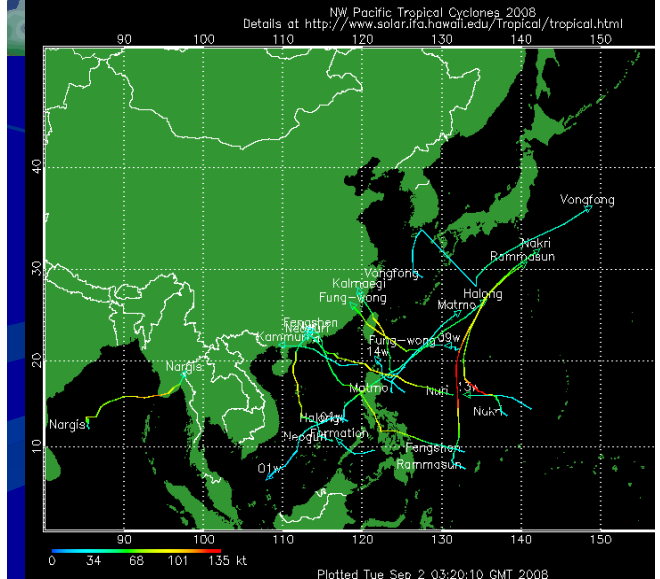
www.tmd.go.th



www.tropicalstormrisk.com



<http://metocph.nmci.navy.mil/>



IMPLEMENTATION PROPOSAL :

- **Efficient early warning system**
- **Flood and landslide predicting and forecasting model for local area**
- **Data access, data interpretation and data dissemination systems for public sector**

NEED :

- **Capacity building in enhanced observations, data integration, modeling and downscaling to local conditions**
- **Satellite Data Processing, Interpretation and its Application in Flood Forecasting and Warning**

**Thank you
for your attention**

