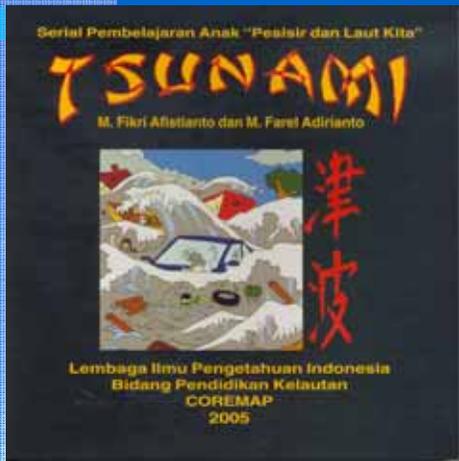


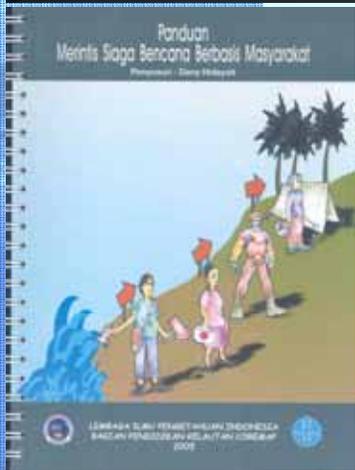
Awareness Materials

Comics, guide books

Billboards



In the market

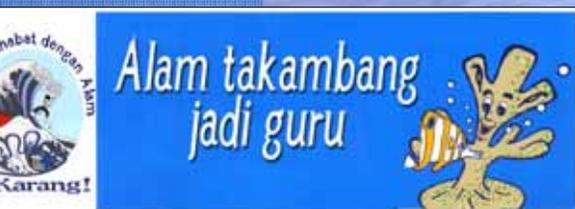


Sticker

Posters



General



At school



Post Disaster Education (Aceh, Pangandaran, Jogjakarta, Klaten)





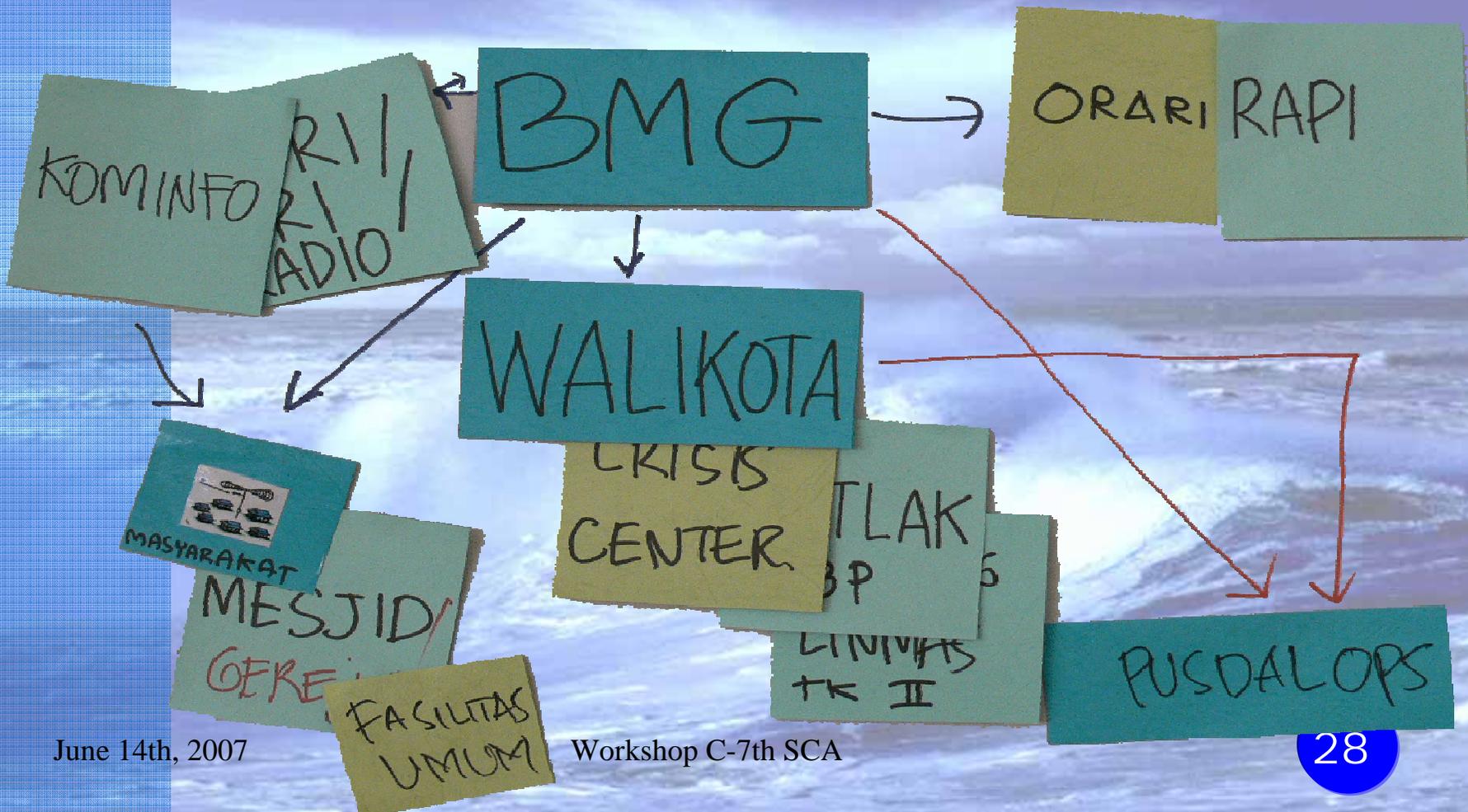
**Training for students, school teacher,
community and government authorities**



INFORMASI

BENCANA

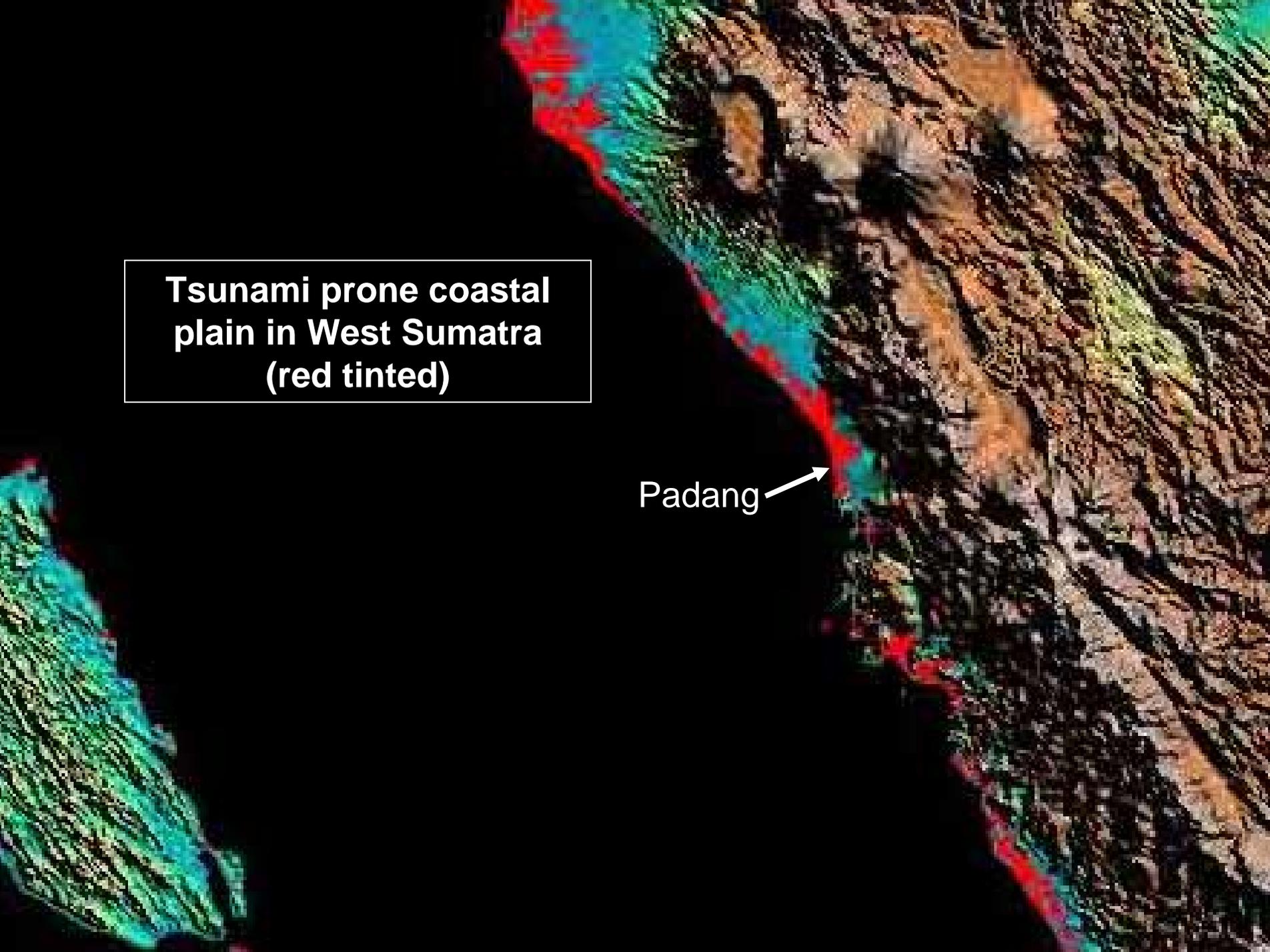
SAT KORLAK





**Tsunami prone coastal plain in West Sumatra
(red tinted)**

Padang



Keys to effective Early Warning System: *Community based response to all hazards*

Warning System Design

- ✓ *Feed back – if not, why?*
- ✓ *IScientist – public interaction*

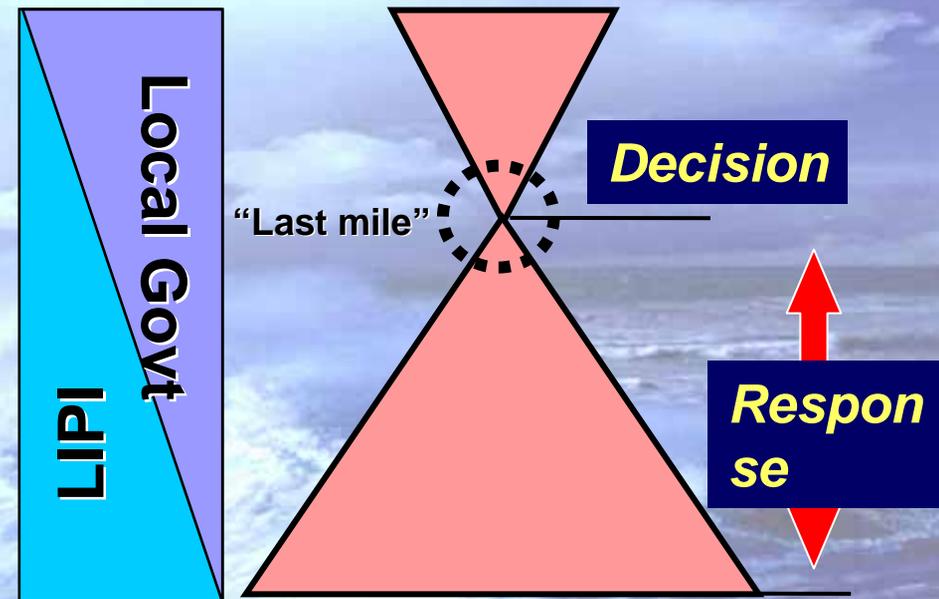
Response system should:

- ✓ *Robust-effective, Rapid*
- ✓ *Well organised*
- ✓ *Customised to local conditions*

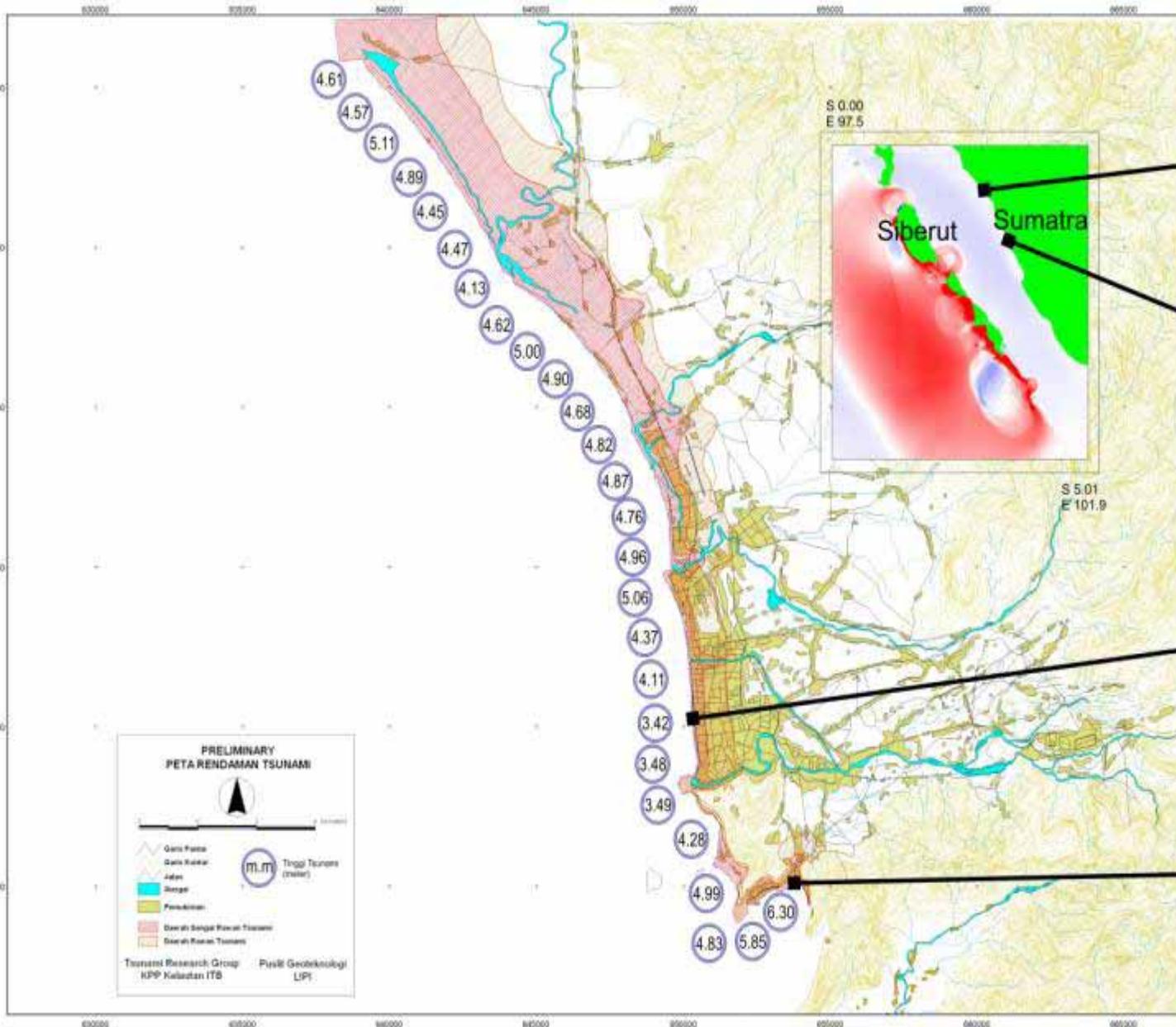
Community issues:

- ✓ *Major impacts*
- ✓ *Specific issues (women, children, poverty)*
- ✓ *Every community is unique*
- ✓ *The community is the first to react*
- ✓ *Empowerment, tolerance to risks*

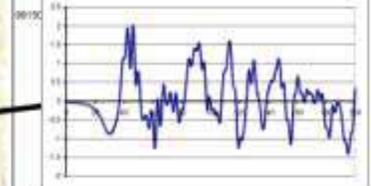
Warning Center:
Science, Technology, Prediction



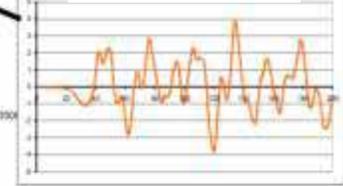
Emergency Center:
Public safety guidance, life saving,
minimum damage



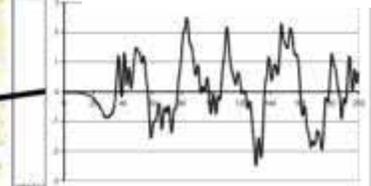
Pariaman -43 min



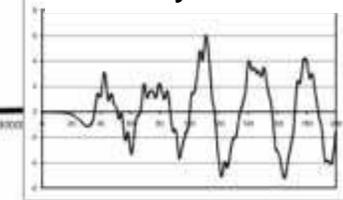
Painan - 43 min



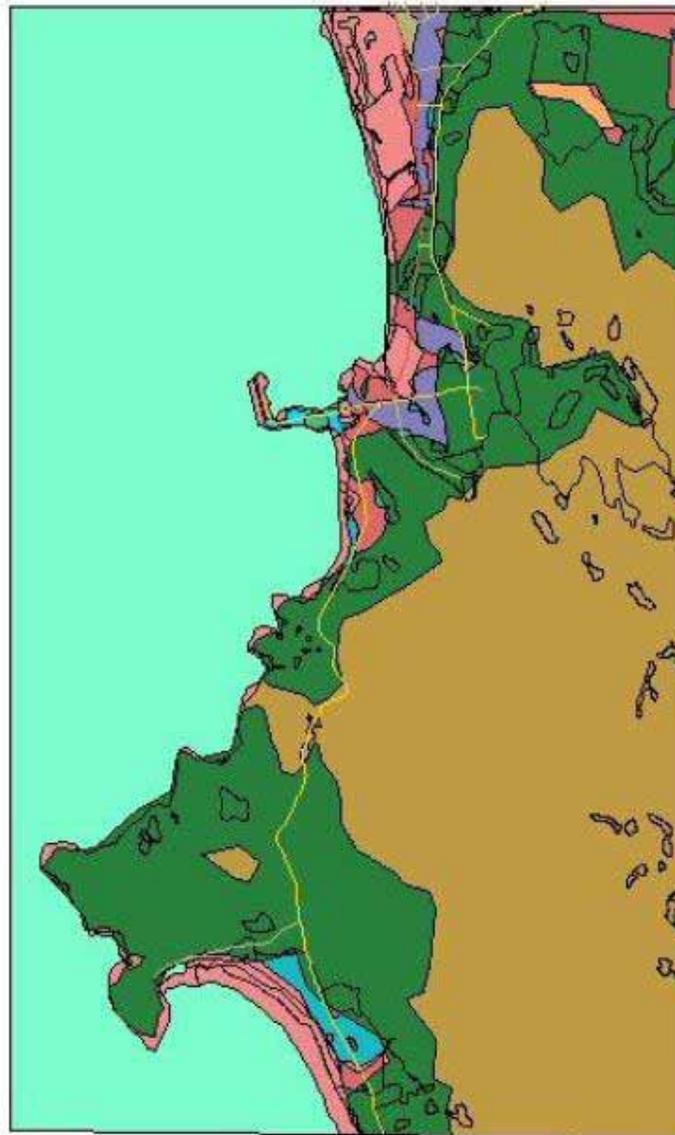
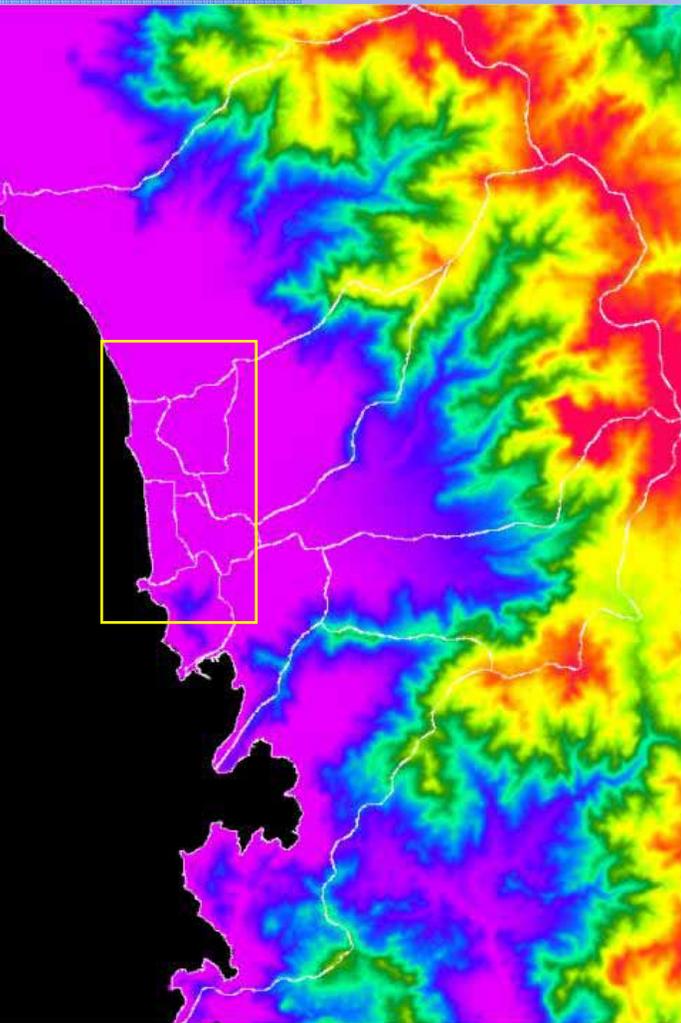
Padang City - 37 min



Teluk Bayur - 43 min



Risk Map of Padang



-  SEA
-  Dangerous Zona 1 (alt : 0 - 10 m, settlement, industry area)
-  Dangerous Zona 2 (alt : 0 - 10 m, cultivation garden)
-  Dangerous Zona 3 (alt : 10 - 20 m, settlement, industry area)
-  Dangerous Zona 4 (alt : 10 - 20 m, paddy field)
-  Dangerous Zona 5 (alt : 10 - 20 m, cultivation field)
-  Dangerous Zona 6 (alt : 10 - 20 m, forest)
-  Safe Zona 1 (alt : 20 - 50 m)
-  Safe Zona 2 (alt : > 50 m)



0.3 0 0.3 0.6 KM





BERITA GEMPABUMI (SIMULASI)

Telah terjadi Gempabumi pada :

- Tanggal : 26 Desember 2005 ; jam 09.16 WIB
- Lokasi : 2.0 Lintang Selatan, 100 Bujur Timur
- Kekuatan : 8.4 Skala Richter (SR)
- Kedalaman : 30 km
- Keterangan : 125 km barat daya Kota Padang

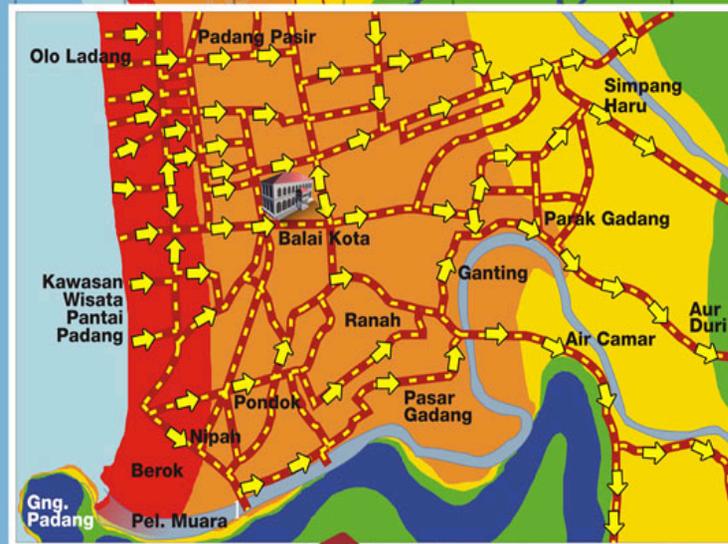


Sign boards, billboards, evacuation map



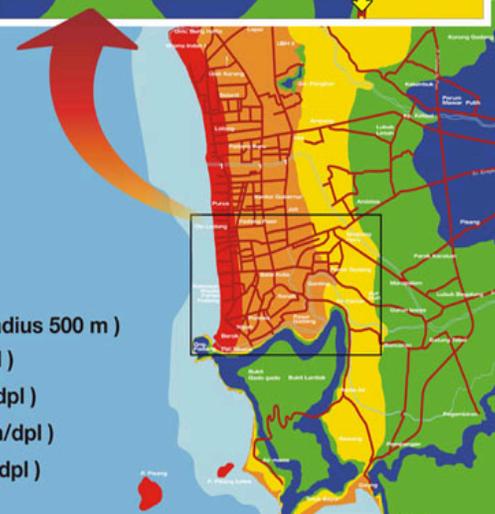
Pelibatan & partisipasi masyarakat
Dalam pembuatan peta evakuasi
 June 14th, 2007

PETA SEBARAN JALUR EVAKUASI



SEKTOR 7 Batang Arau

- Zona Bahaya (Radius 500 m)
- Zona 1 (0-5 m/dpl)
- Zona 2 (5-10 m/ dpl)
- Zona 3 (10 - 25 m/dpl)
- Zona 4 (> 100 m/dpl)





© Jan Sopaheluwakan, 2007

National Framework on Assessing and Recognizing Community Preparedness in Natural Disaster



ASSESSING AND RECOGNIZING COMMUNITY PREPAREDNESS
IN NATURAL DISASTER

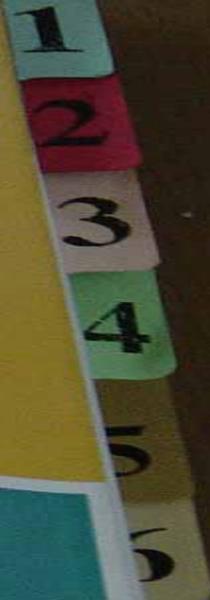
Kajian Kesiapsiagaan Masyarakat Dalam Mengantisipasi Bencana Gempa Bumi & Tsunami



AUG 22 2006



LIPI-UNESCO/ESDR, 20-21 JUNE, 2006



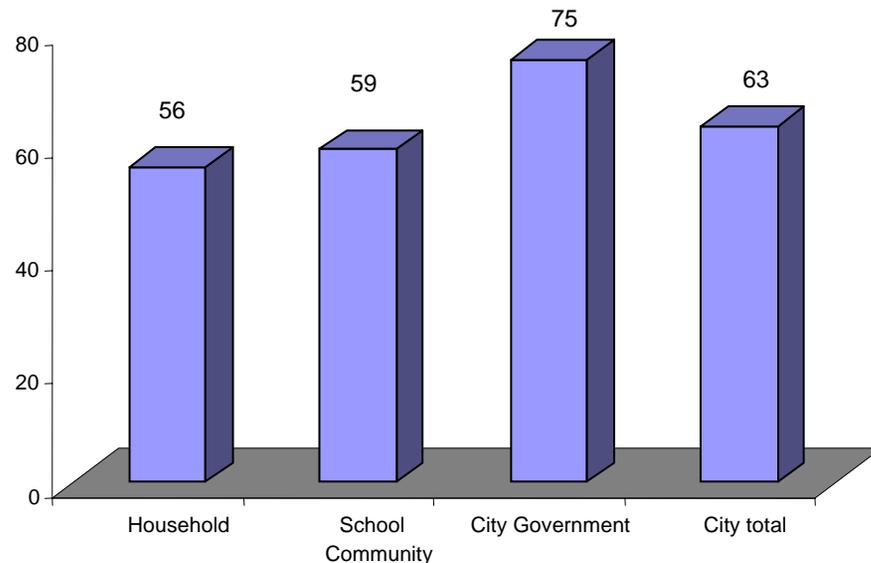


NATIONAL ASSESSMENT FRAMEWORK ON COMMUNITY PREPAREDNESS

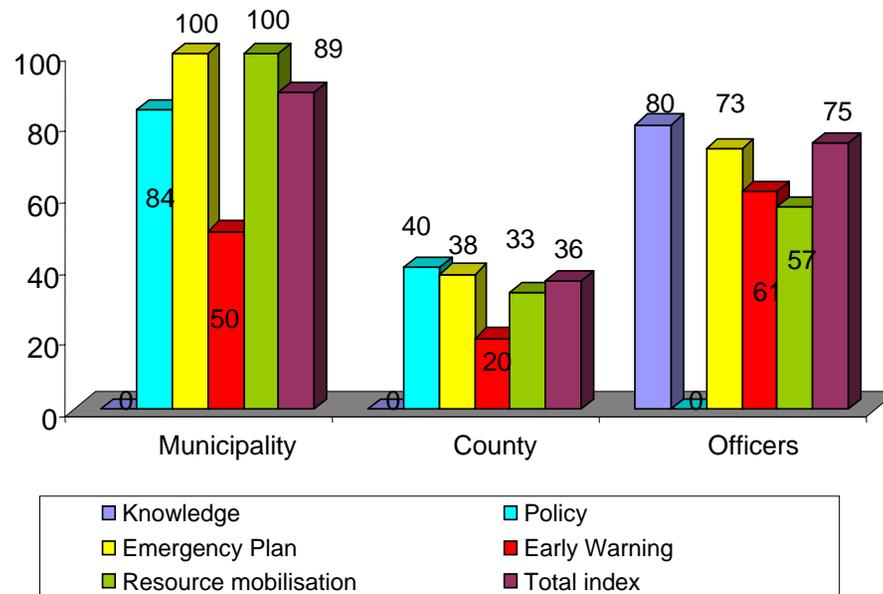
LIPI - UNESCO

1. Knowledge and Attitude
2. Policy Statement
3. Emergency Planning
4. Warning System
5. Resource Mobilization Capacity

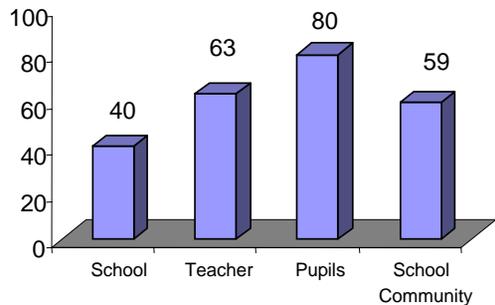
Community Preparedness Index of Padang City



Preparedness Index of Padang Municipality Government

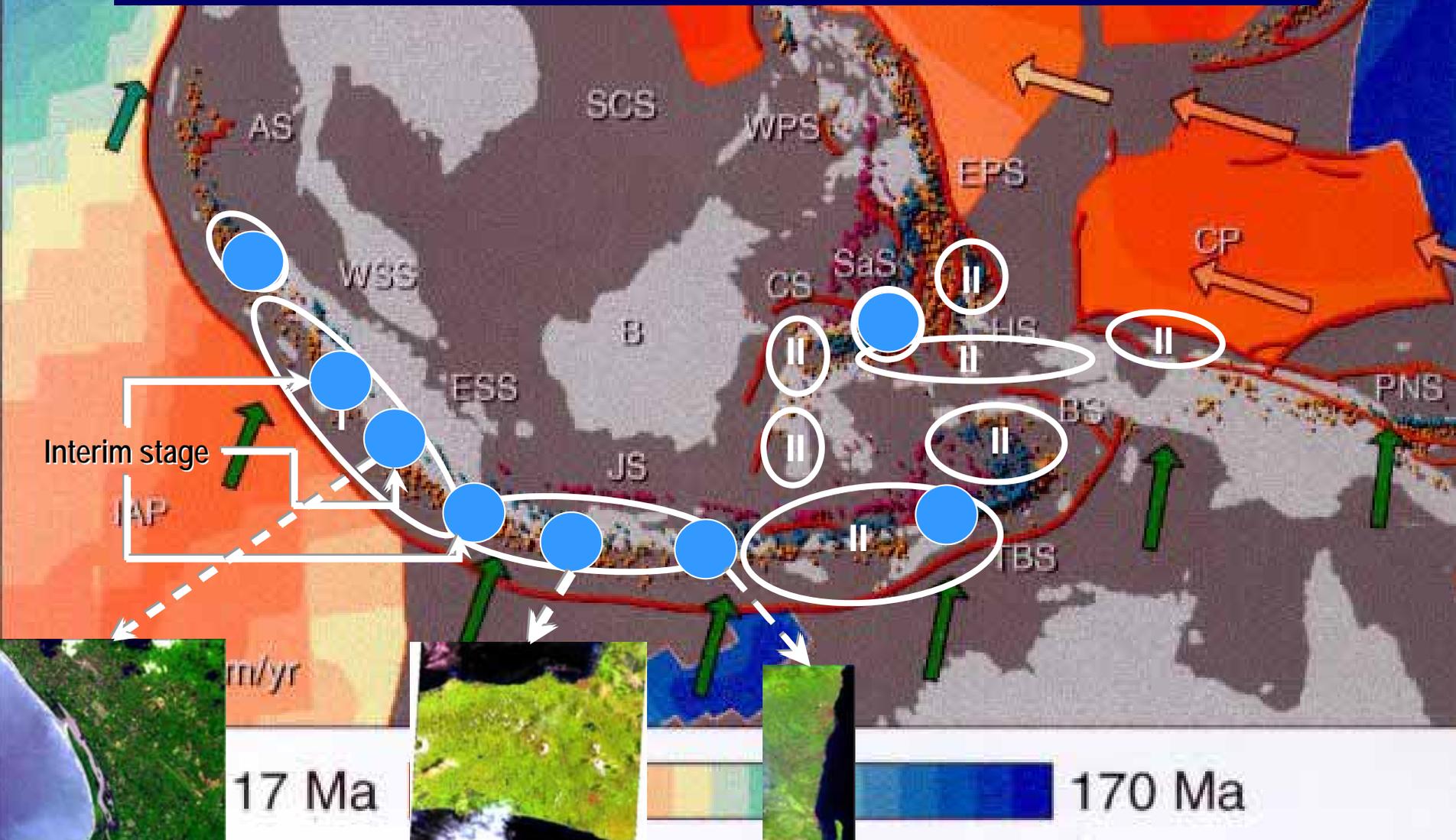


Preparedness index of School Community of Padang



Work

Priority Areas for Community Preparedness in the Indonesian Archipelago

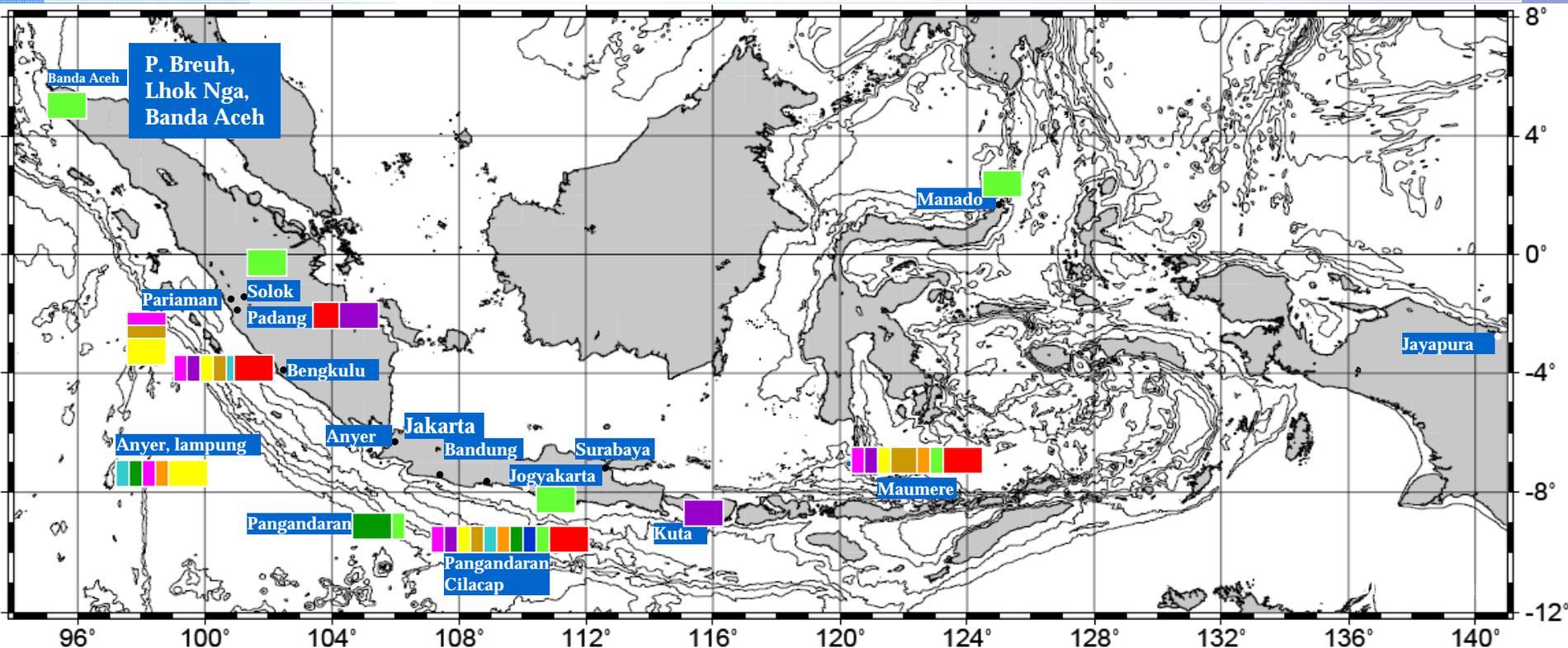


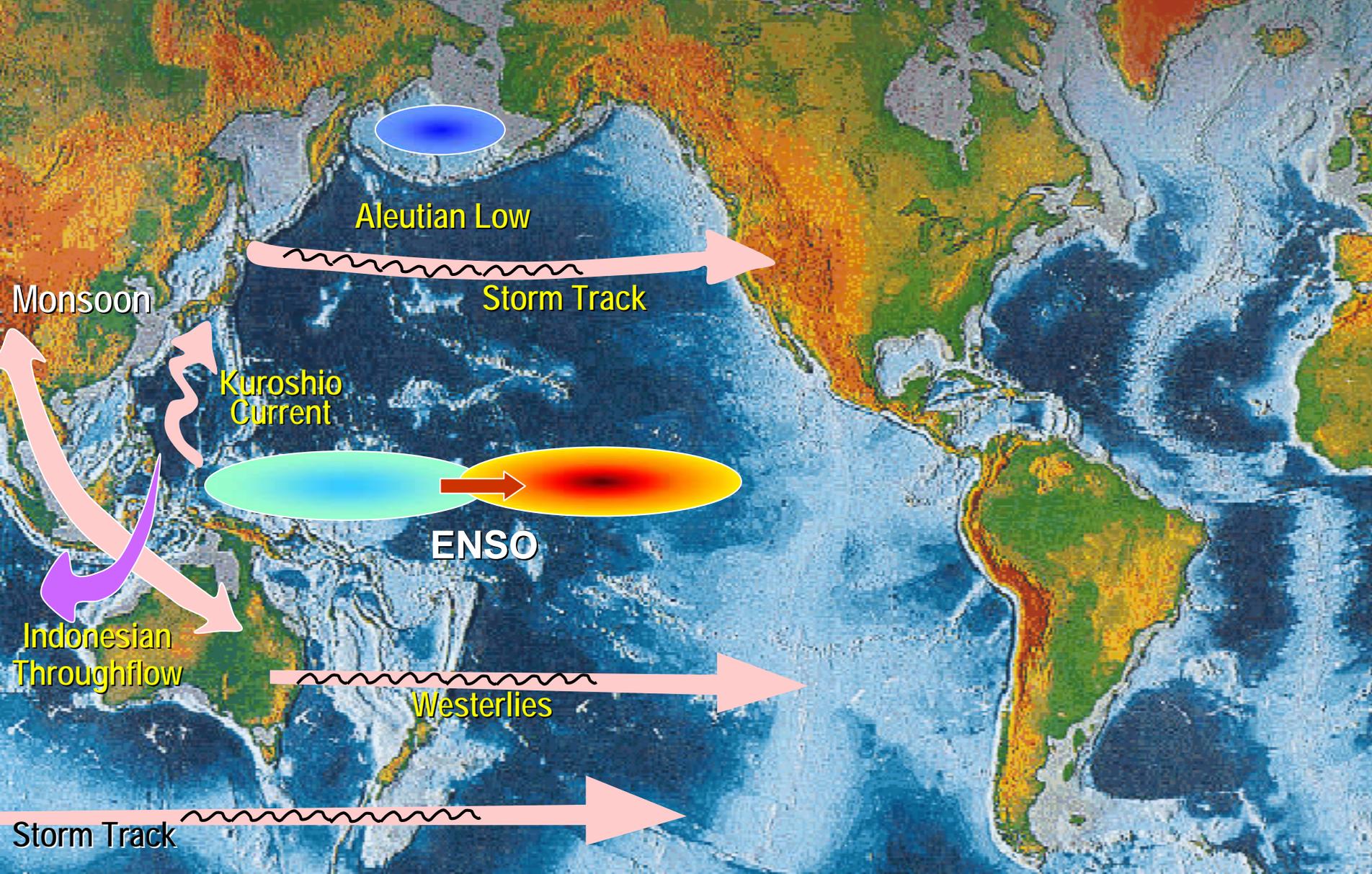
Components of Integrated Research, Public Education and Community Preparedness Activities in 2007 and onward

Locations	Research				Public Education	Community Preparedness
	Vulnerability Assessment	Seismic and earth movement risk assessment	Paleotsunami	Social profiling & Community Preparedness assessment		
Padang						
Padang Pariaman						
Bengkulu						
Lampung / Banten						
Cilacap						
Bali						
Maumere						

Current integrated geoscience, human and social sciences supported project activities in public education and community preparedness in Indonesia

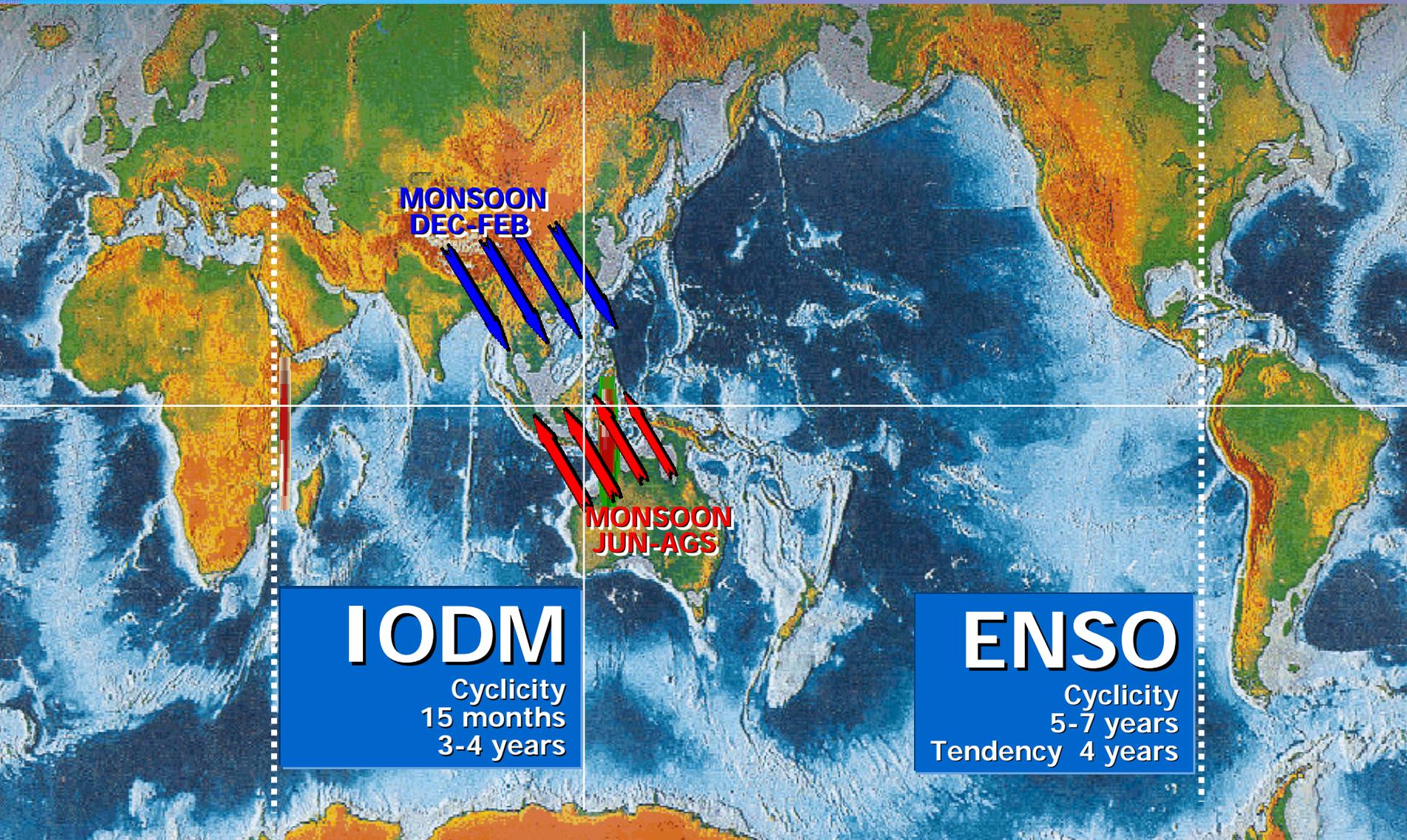
- | | | | | | |
|--|----------------------------------|---|-------------------------------|---|------------------------------|
|  | Paleotsunami & Environment |  | Infrastructure |  | Post Disaster Assesment |
|  | Tsunami Modeling |  | Vulnerability & Risk Modeling |  | Public Education & Awareness |
|  | Engineering geology, groundwater |  | Social Economy |  | Exhibition |
| | | | |  | Bathymetry |





Oceanometeorologic system in Western Pacific Region

World's climate engines in the Indonesian Region



**MONSOON
DEC-FEB**

**MONSOON
JUN-AGS**

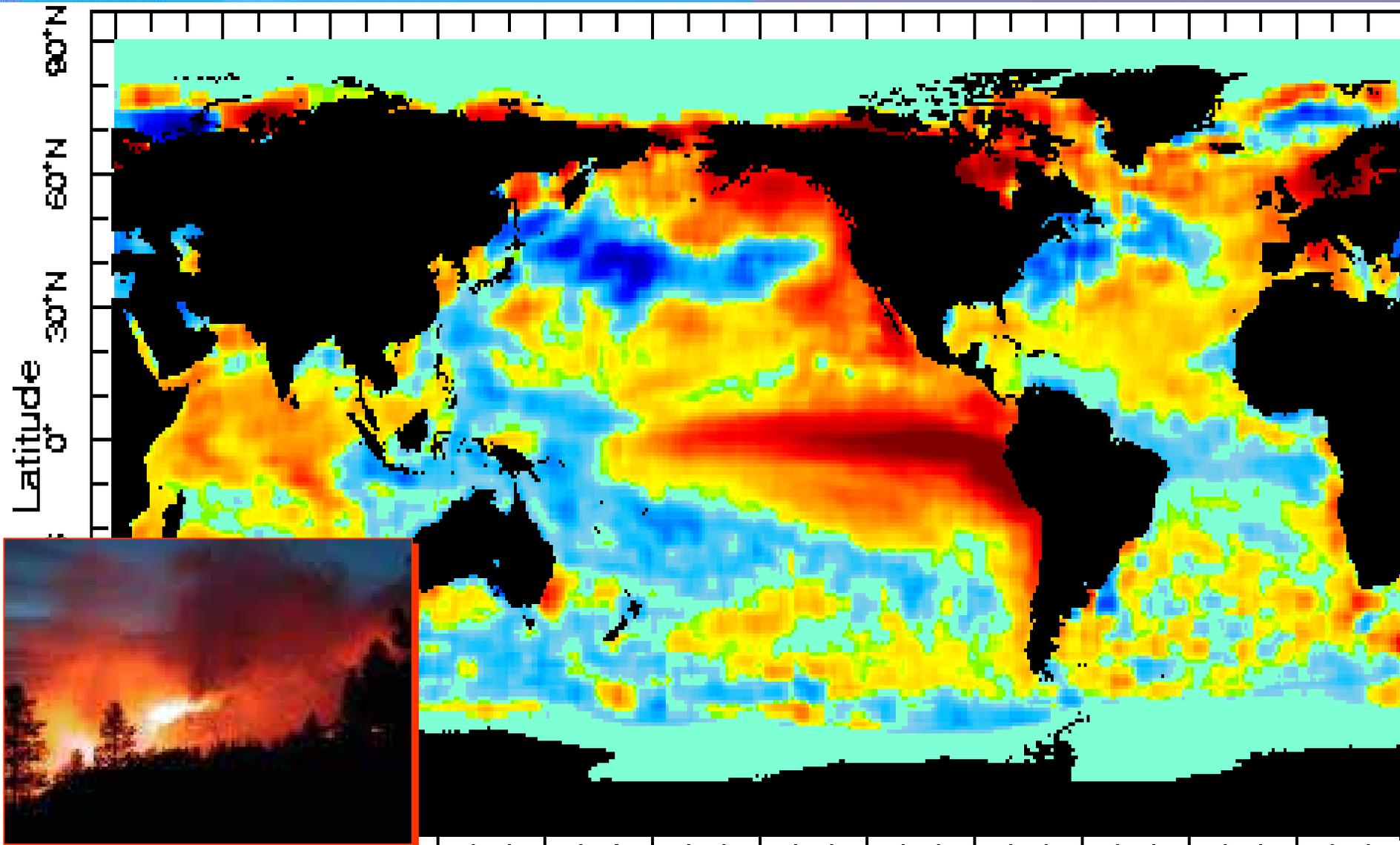
IODM

Cyclicity
15 months
3-4 years

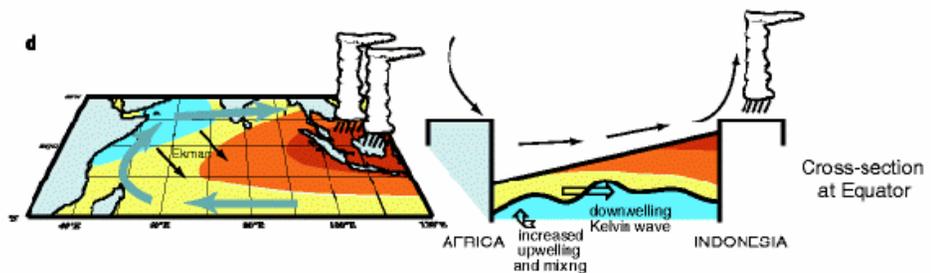
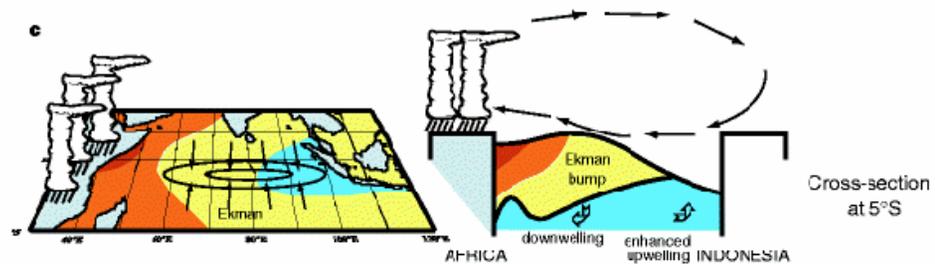
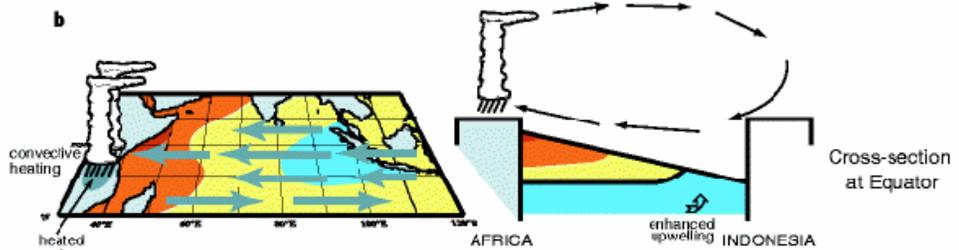
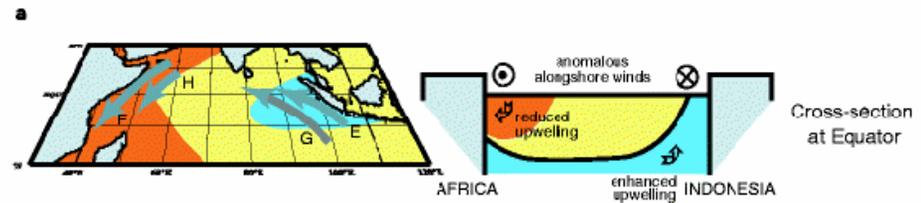
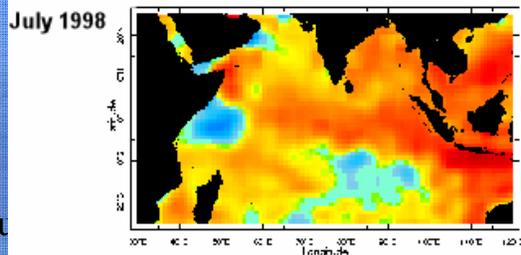
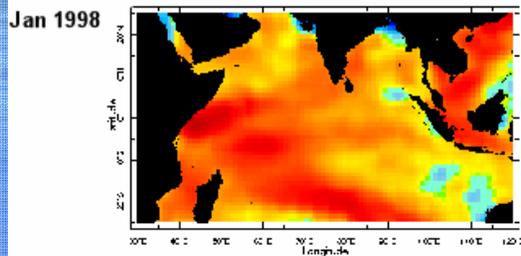
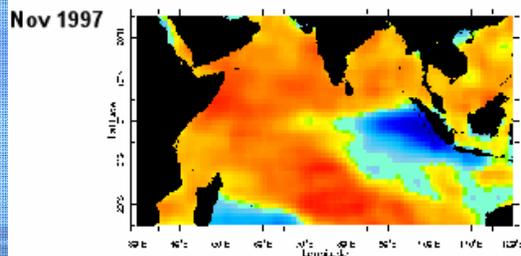
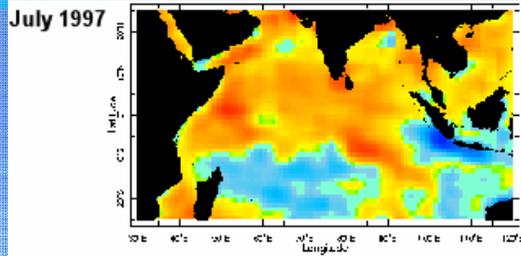
ENSO

Cyclicity
5-7 years
Tendency 4 years

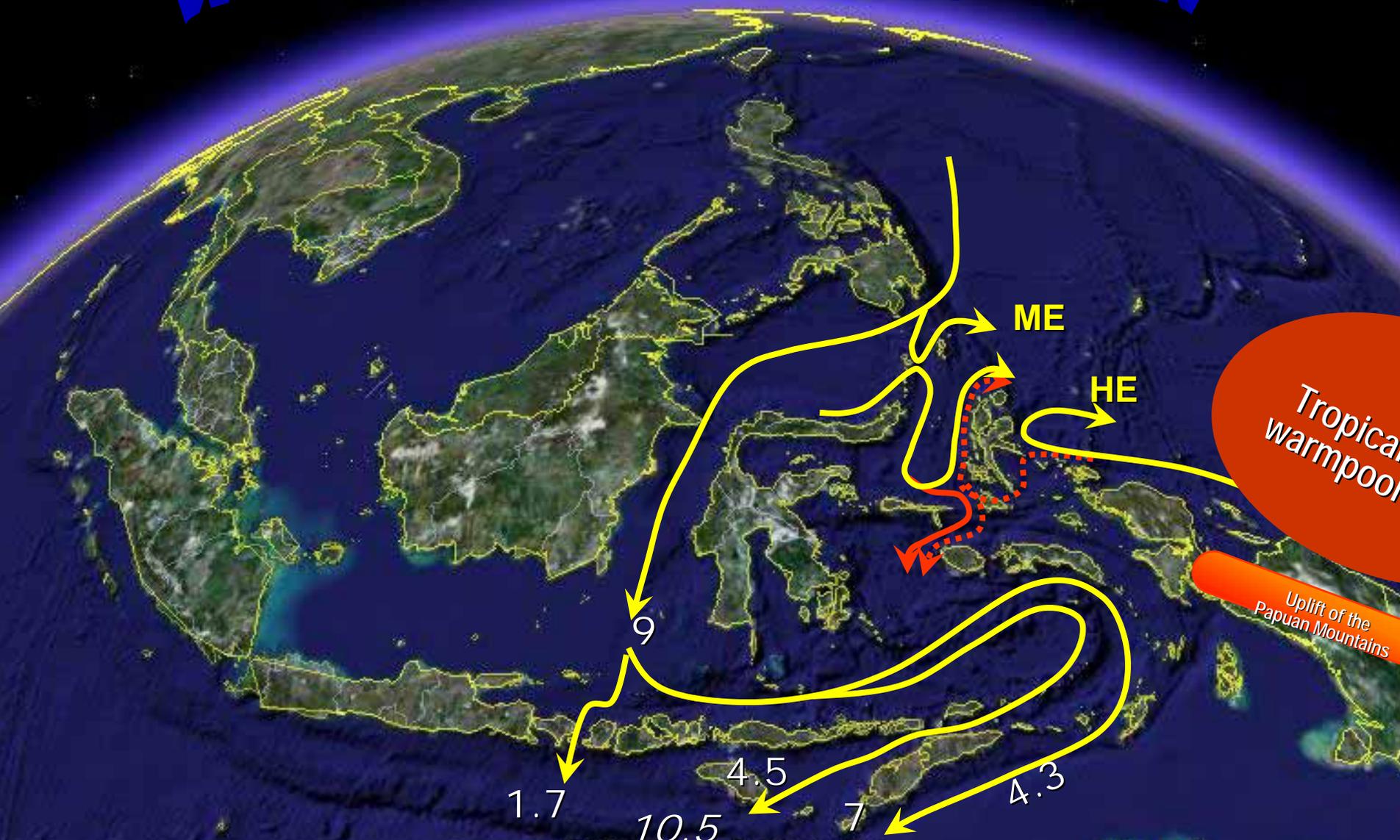
SST anomaly during 1997 El Nino year

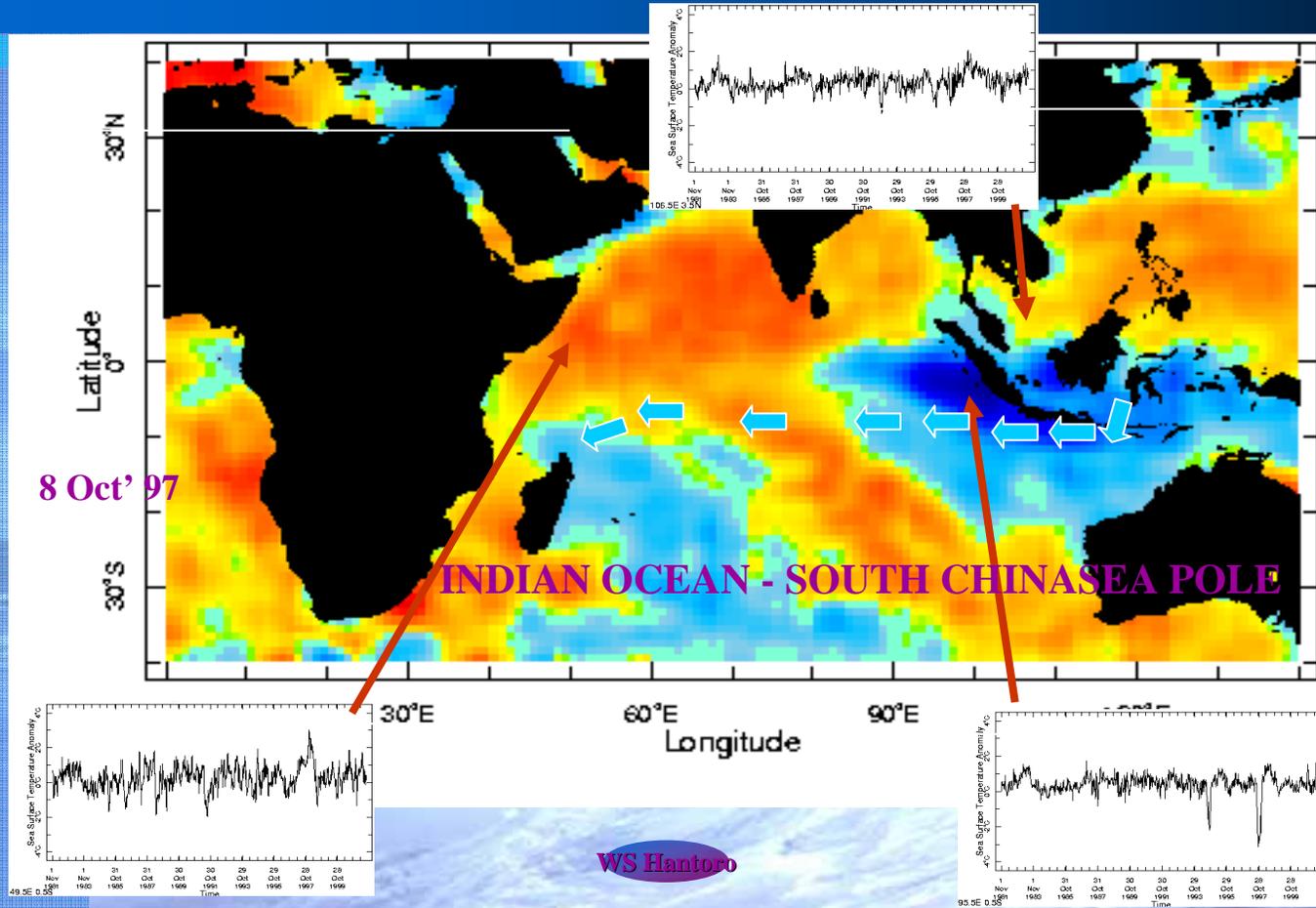


SST in Indian Ocean and diagram showing the end of climatic Indian Ocean Dipole anomaly

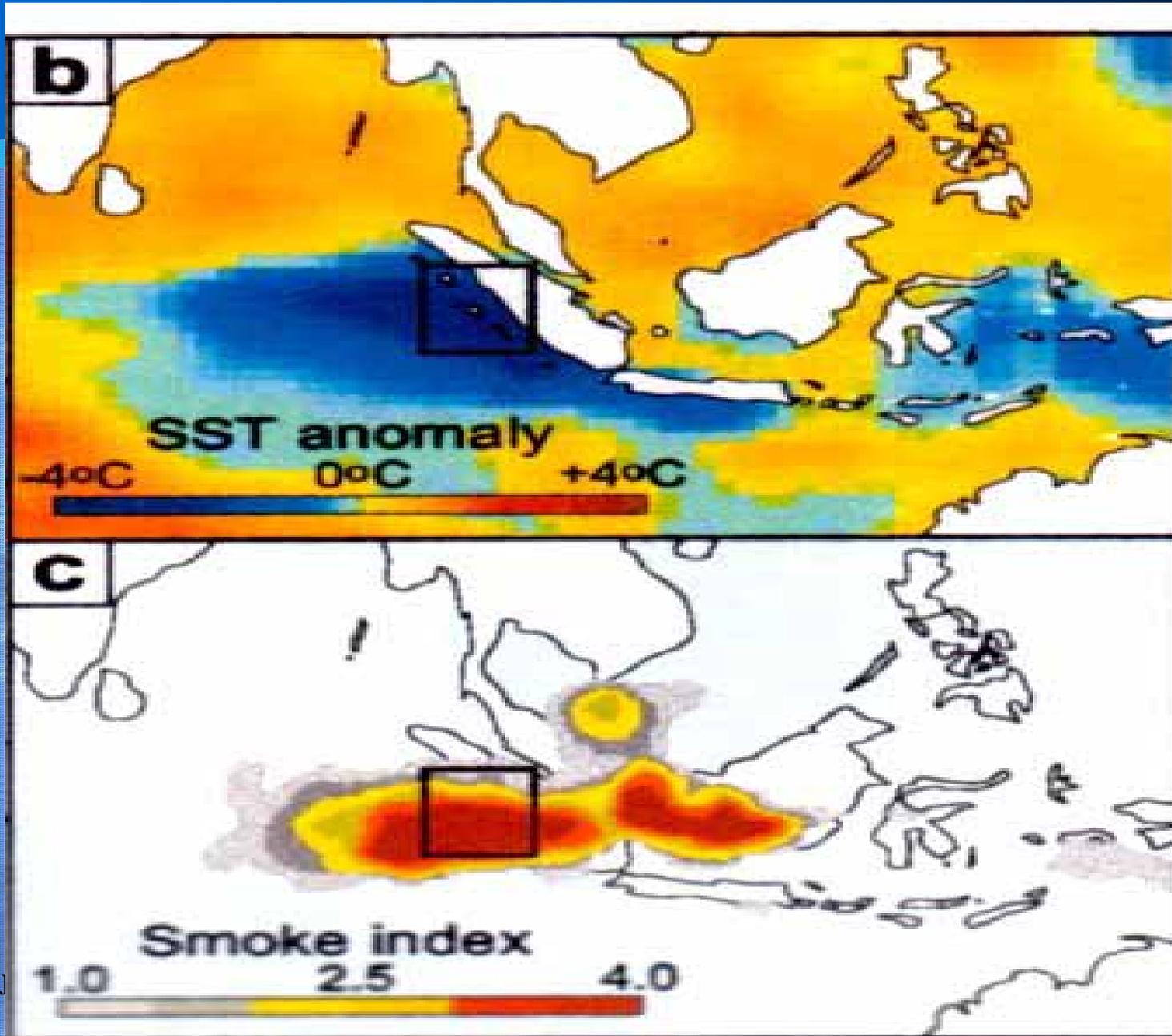


Indonesian Throughflow





Gambar 4 Kondisi perairan Samudra Hindia saat terjadi coupling antara Indian Ocean Dipole dengan El Nino 1997.



Impact of global warming on sea level

Possible average sea level rise (low – high emission GHG scenarios, 2080)



Estimated Lost of land

of total land area of the above map

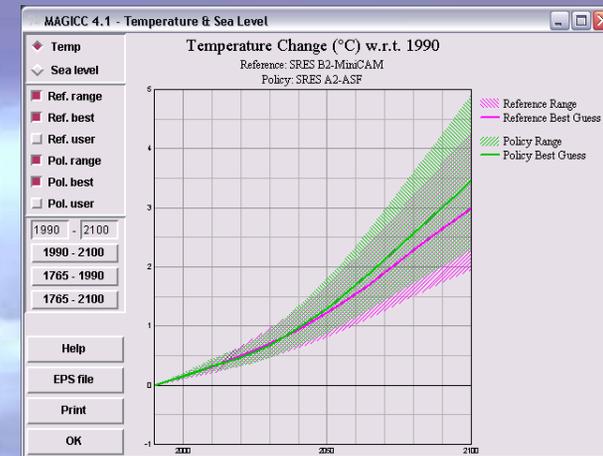
Maximum

5.71 %

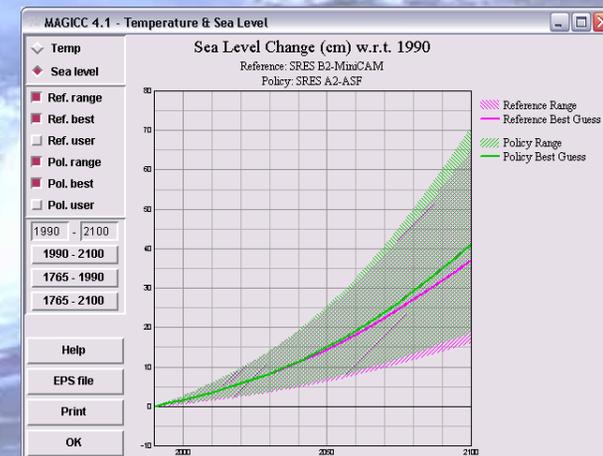
Best guess

0.75 %

Global temperature



Average Sea level rise



Recommendation to SCA

- **Most globally and regionally potentially impacted (rapid onset and slow/onset creeping) disasters can have their origin in Indonesia. Global and regional cooperation is needed to address this issue**
- **Indonesia is ready, willing and able to share and exchange of expertise, experiences, and resources to the success of achieving the aims of construction of safe and secure society in Asia**
- **SCA can play a significant role in facilitating the mutually benefiting cooperation within the Asia region and beyond**
- **Poverty, ignorance, and negligence may increase vulnerability, particularly in developing countries. Human security approach must be prioritized**
- **Disaster risk reduction measures must be must be internalized in the development policy and in equitable regional and global relation**



Thank you