

Challenges and Effectiveness of the Space Education and Awareness for disaster mitigation in Vietnam

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VIETNAM



Vietnam is located in South-East Asia

Area: 331,690 km²

Population: 83 millions (2005)

Coastline: 3,200 km length (storm, tsunami, etc)

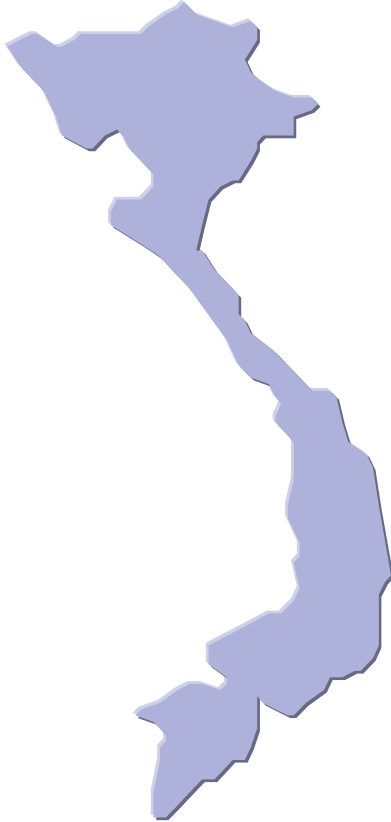
02 large international rivers (flooding):

Red River in the North

Mekong River in the South

Vietnam is the most prone for disasters in South East Asia, especially for flooding, flash flooding, drought, wildfire, storm, etc that needs an early warning system.

DISASTER ZONES IN VIETNAM

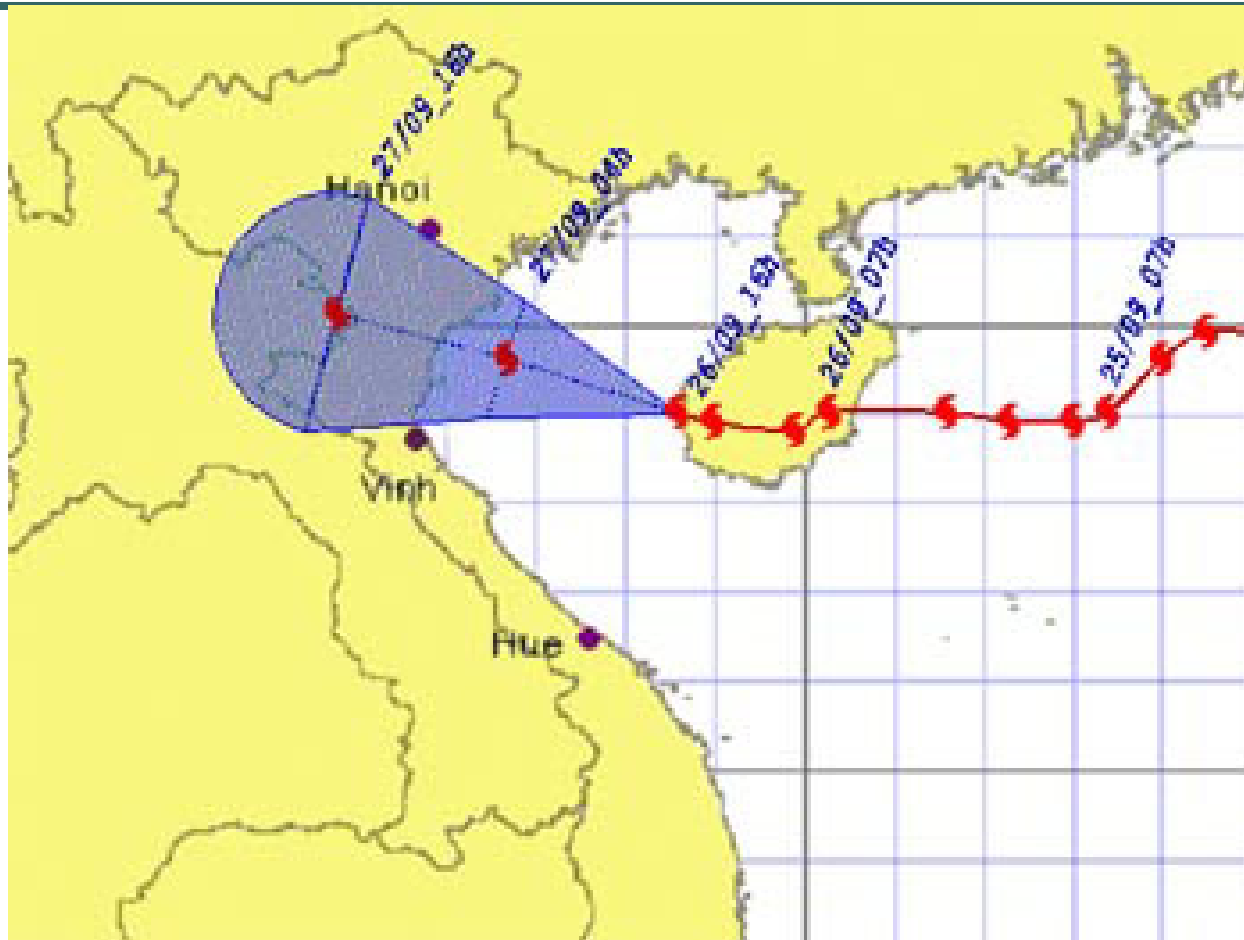


North: Storm, Flood

Center: Storm, Flashflood, Flood

South: Flood

DAMREY storm bullets to Vietnam (27/9/2005)



Coast dyke is broken by Damrey storm and sea water floods in streets - Hai-Phong, Vietnam (27/9/2005)



High wave from the North Vietnam sea during the Damrey storm



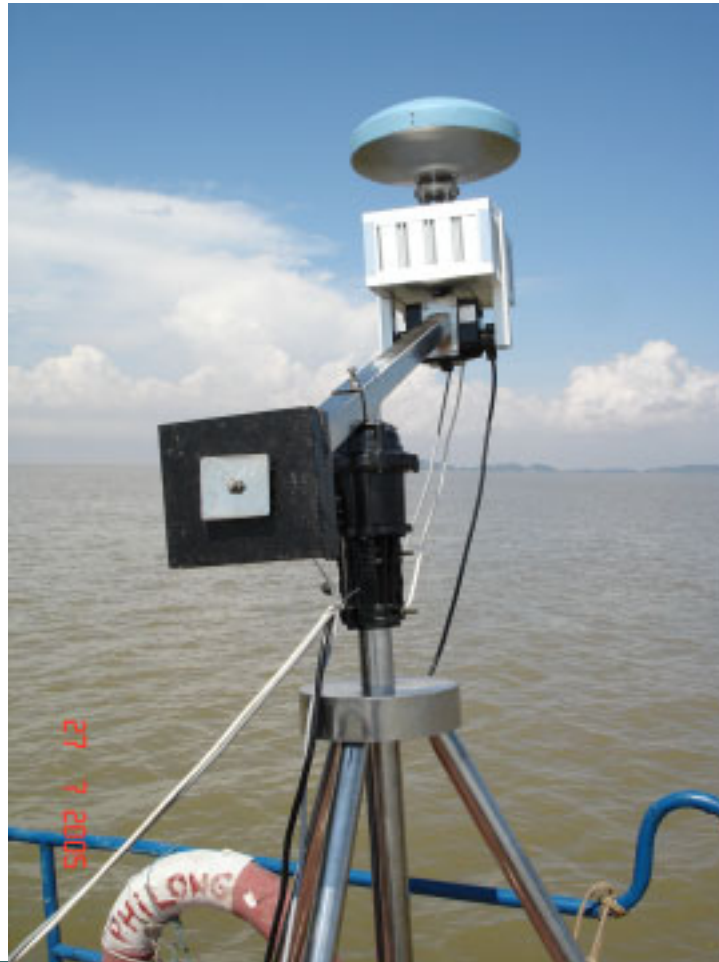
Houses are being destroyed by storm



A L-band Radiometer manufactured by our center (STAC) and its application for survey of sea surface temperature (SST) – 27/7/2005



Calibration of the Radiometer with blue-sky



Survey sea surface by L-band Radiometer



Measurement of the air temperature and wind velocity



LESSONS FROM DISASTER EVENTS

- Issue a good policy for storm and flood control as storm warning regulations, ordinance on storm and flood control, ordinance on dykes and others.
- Promote the public Space Education & Awareness, to understand about the space in order to defend it and mitigate its damages (like natural disasters).
- Promote the International relations and new technology transfers.

Preparedness for water boosted rocket competition 2005 of Vietnam

- In APRSAF-11 section, Vietnam has not participated yet in SEA WG, so has not organized WBR competition in the country.
- In 2005, with the support of JAXA and request of the chairman of SEA WG, VN send 2 participants to the workshop in 15/10/2005.
- Selection of participants:
 - From 2005, VN begin to take the Japanese language studying into the basic educated program of the 2 best secondary schools.
 - Selected participants are of that school.
 - 01 junior student (12 years old) and his curator – a teacher of physic, who will be responsible to get the knowledge & technique for WBR here and study the pupils of his school.
 - Next year, VN will organize WBR competition in the country from that to choose the best competitor to attend the APRSAF's competition.

Comments

- Space education and awareness is very important and useful for school children. It broads their technical skills, to wake and develop their intelligent activities, direct them into useful activities instead of spending time for games on-line or harmful internet access.
- This activity is very appreciated by teachers and pupils in VN.
- Japan has a lot of support and aid programs for developing countries, especially for Asian.
- SEA WG, JAXA activity like WBR competition is an example for that support.
- Question: If JAXA has some small financial support for SEA & WBR activity in the VN school (for trying WBR, competitions) ?

CONCLUSIONS

1. Flood and storm impact may be decreased by the Government attention, public Space Education and Awareness and effective activities of organizations.
2. Necessity of policy and law for early warning system.
3. Application of the new technical equipments.

Therefore the Space Education and Awareness is very important and urgent for a nation as well as for the international community to understand and then mitigate the natural disasters that have been occurring very often nowadays.

THANK YOU FOR YOUR ATTENTION !