## Recent Signs of Water-related Disaster in Vietnam (Presentation on GEOSS – 3 /Water Cycle in the Asia-Oceanic Region)

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## **Historical inundation in Hanoi**

In the North, the Northern-Central of Vietnam from 30 October to 4 November 2008 occurred very heavy rain causing severe inundation in the Red River Delta
Total rainfall at Ha Dong town is 850mm, from which daily total rainfall is 514mm; at Hanoi station is 597mm, Nam Dinh: 559mm
The losses estimated in 5300 milliards VND (3028 millions USD)





## The biggest floods on the Red River system in the August and November 2008

- Floods in the August in the North killed 81 people, 39 people missed, 16 people isured

- From 31 Oct. to 4 Nov., on the Red River system obseved the biggest flood in the November in 60-year records.



In the Mekong Delta was several high floodtide, especialy on 13-16 November and 15 December, at Phu An on SaiGon River was historical tidal peak 1,55m since 1960, causing serious inundation in Ho Chi Minh city and in the Delta.



From 31 Dec. 2008 to 2 Jan 2009, on rivers in Central and Highland occurred big flood. It is historical flood in the end of December and begining of January since 1968 and caused big losses



## Conclusion

- Under climate change impact, more frequently occur extreme heavy rainfall and severe flood

- According to World Bank prediction, Vietnam is one of two most impacted countries from the sea level increase 1 m in 2100. Then will be 10% population directly affected; about 40.000km2 of coastal zone of Vietnam will be under sea water. It is possible in 2030 sea level increase and almost half of the Mekong Delta will be salty

- Period 2010-2020, average temperature in Vietnam will increase 0,3-0,5°C, especially in the Northern and West-Northern parts

- Number of floods in Vietnam will increase 10-20%.