# Summary of PSHA Activities in Korea

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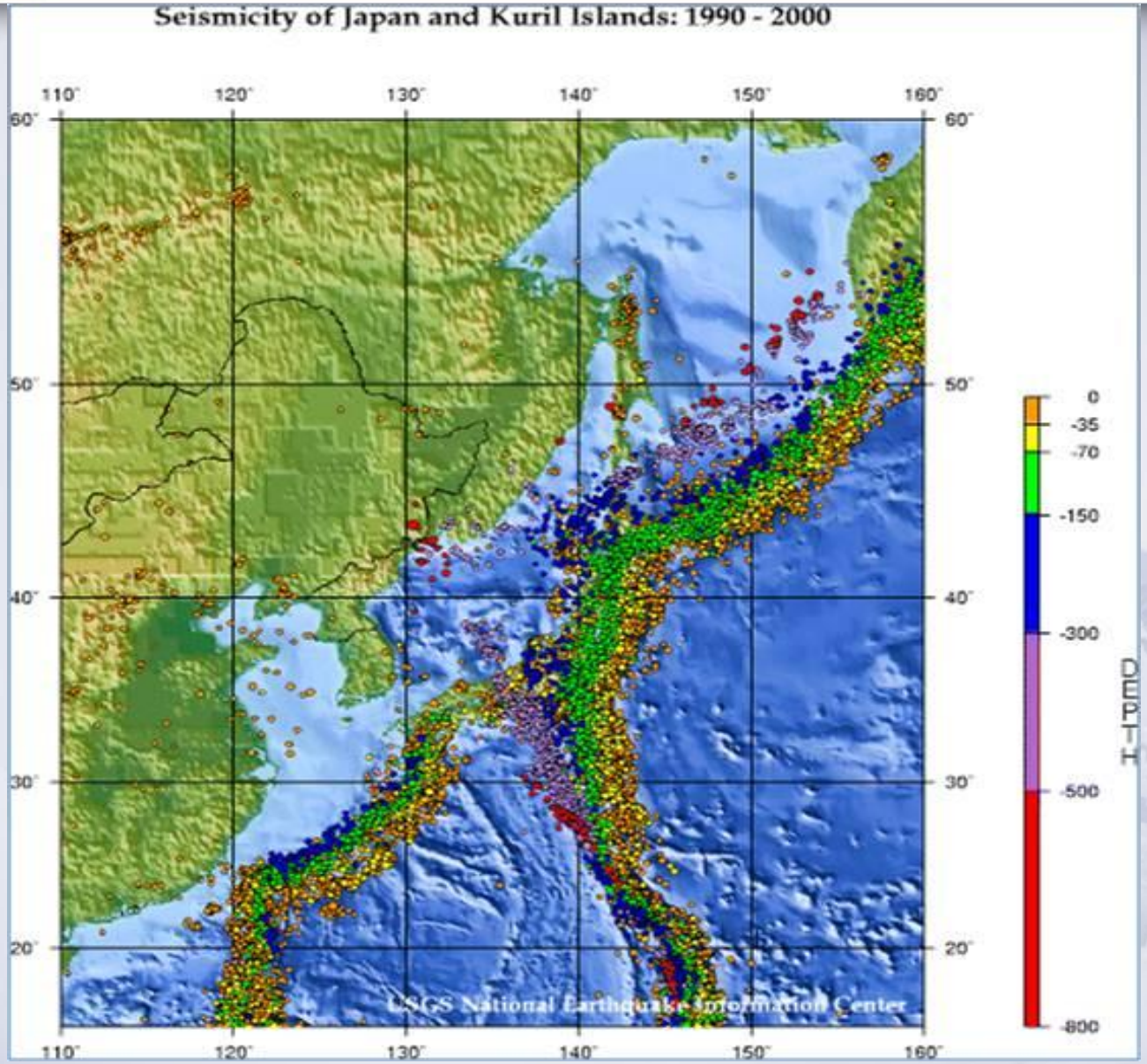
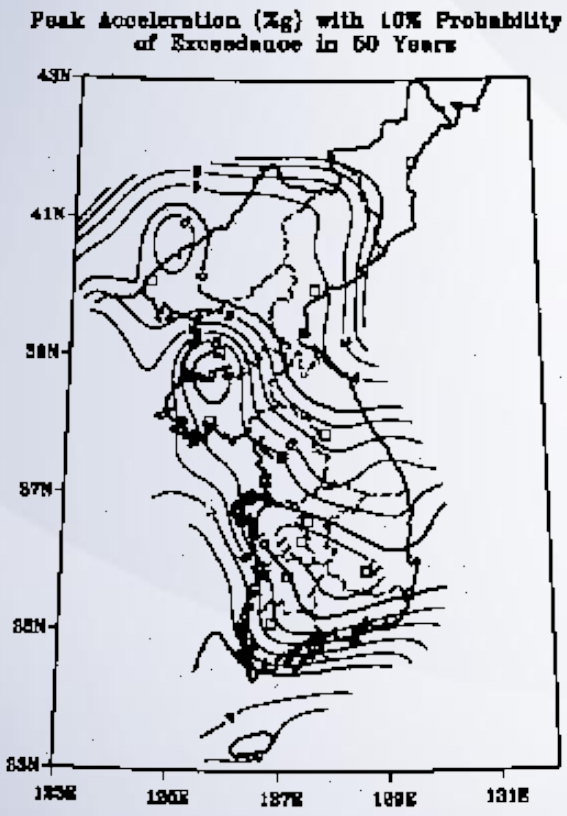

Seismicity of Japan and Kuril Islands: 1990 - 2000
110°
120°
130°
140°
150°
160°
60°
50°
40°
30°
20°
USGS National Earthquake Information Center
0
-35
-70
-150
-300
-500
-800
DEPTH

# ‘97 PSHM




☐ **Seismic Source**

- Only using Historical & Instrumental Earthquake Catalog
- Without considering line sources
- Without considering the geological & geodetic data
- Without considering the incompleteness of historical earthquake catalog

☐ **Path**

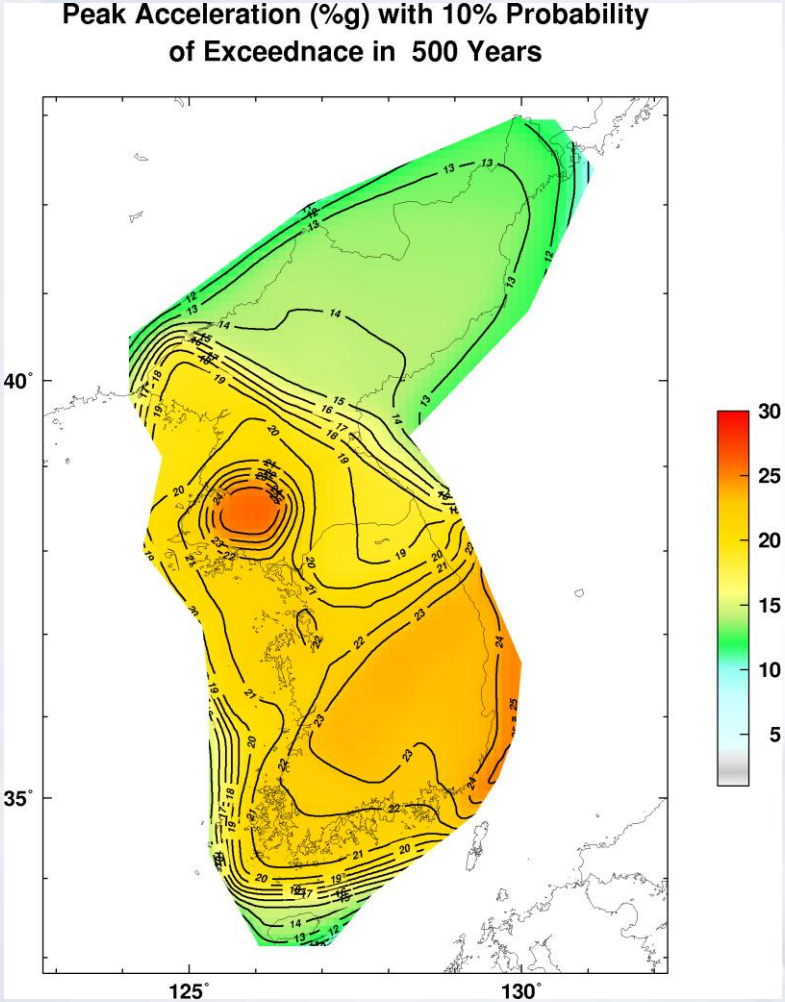
- Because of no adequate seismic attenuation formula for Korean peninsula,
- Using the attenuation formula of US Eastern region
- Without considering the frequency dependency

☐ **Site effect**

- Without considering the site amplification

# 4. ‘2012 PSHM

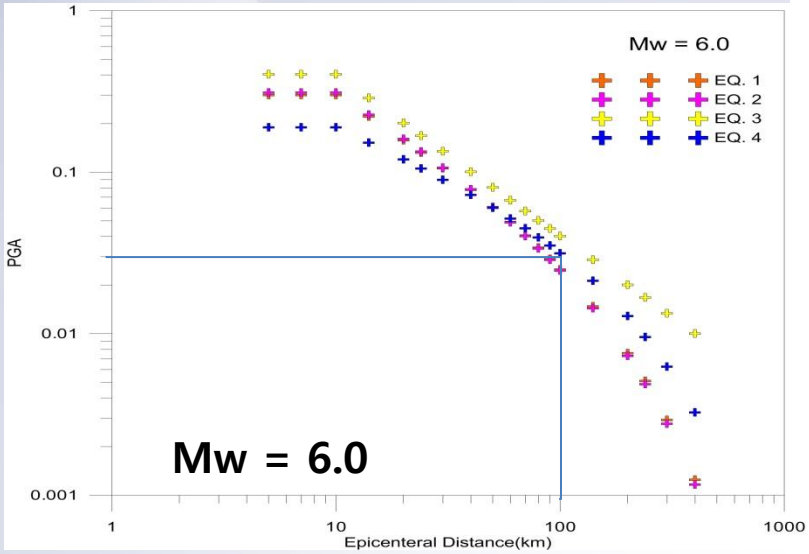
- By Seismic Source



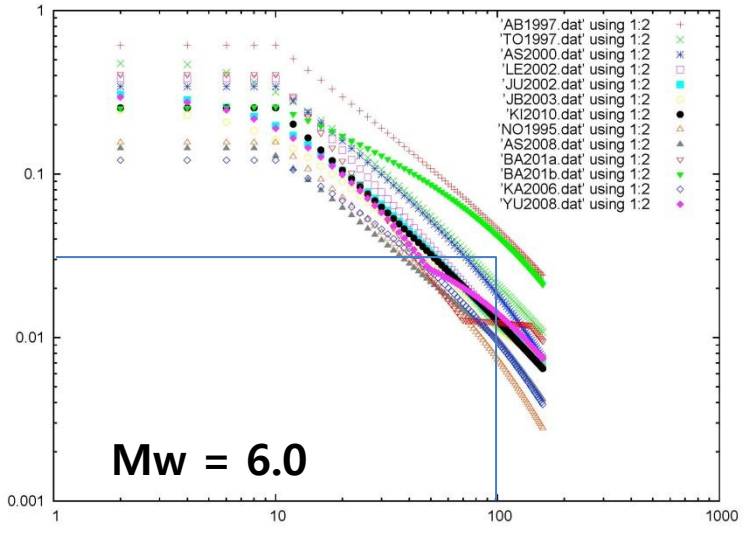

Return period : 4,800 yr

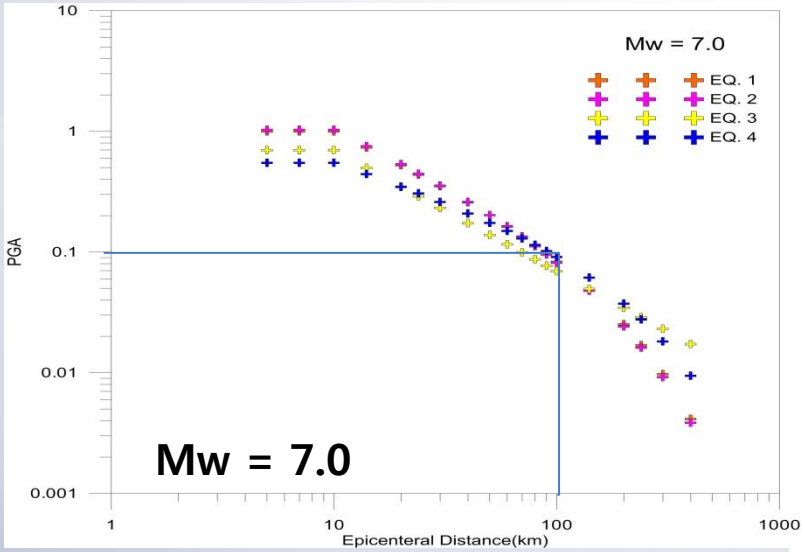
# 4-1. Comparison of PSHM

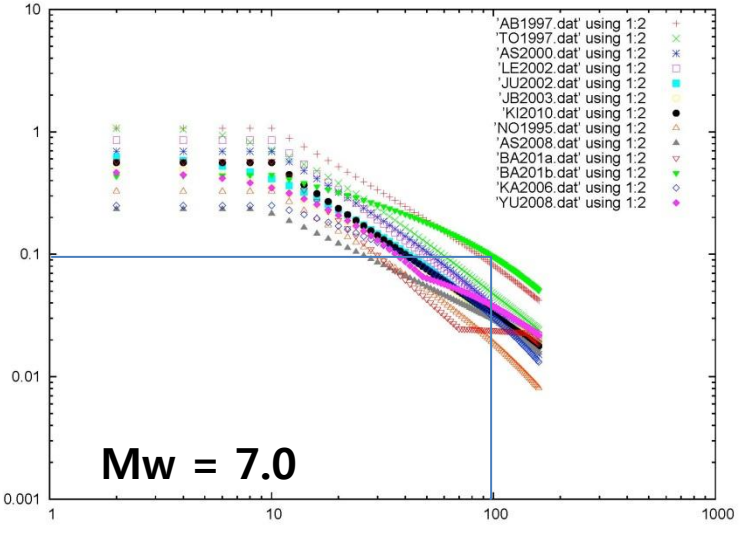
1997




2012



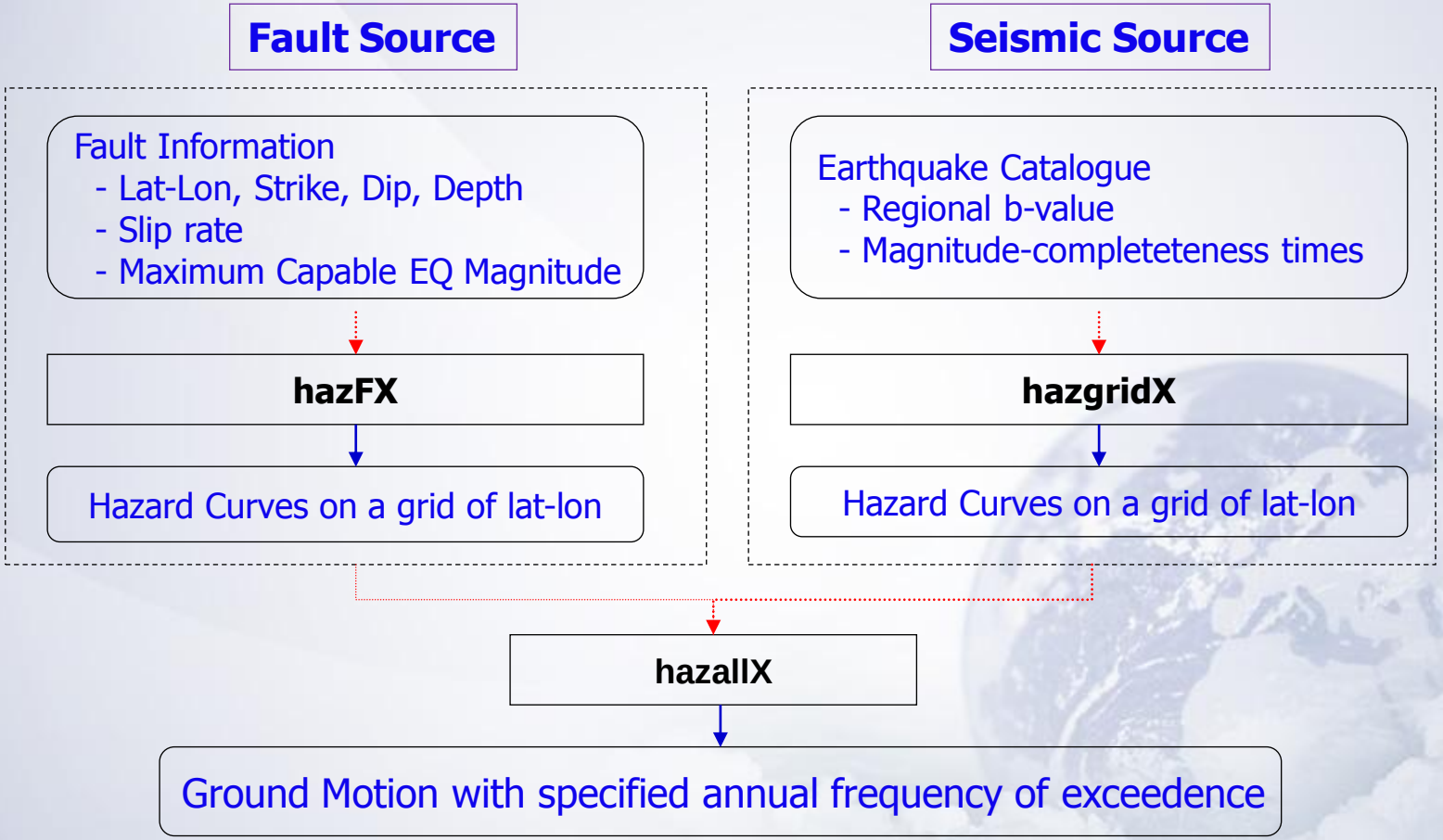



# 5. PSHM calculated from Fault Source

KIGAM

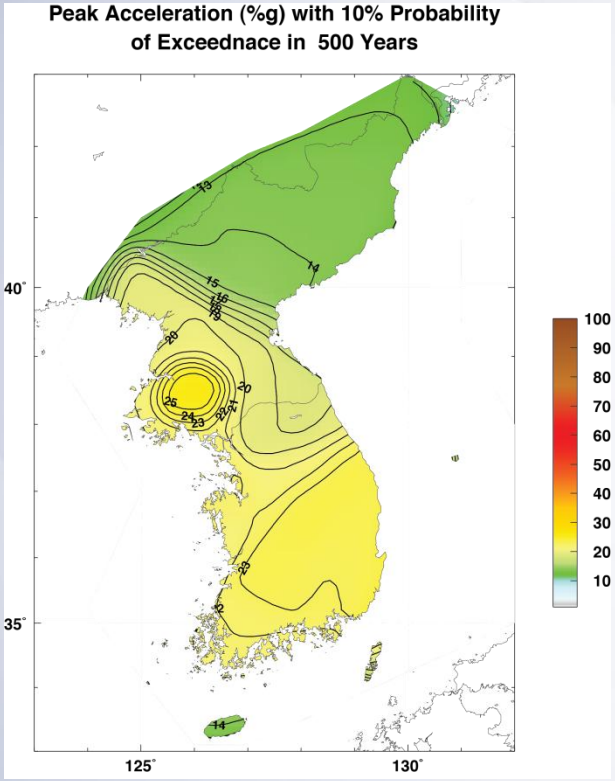
## USGS PSHA Method



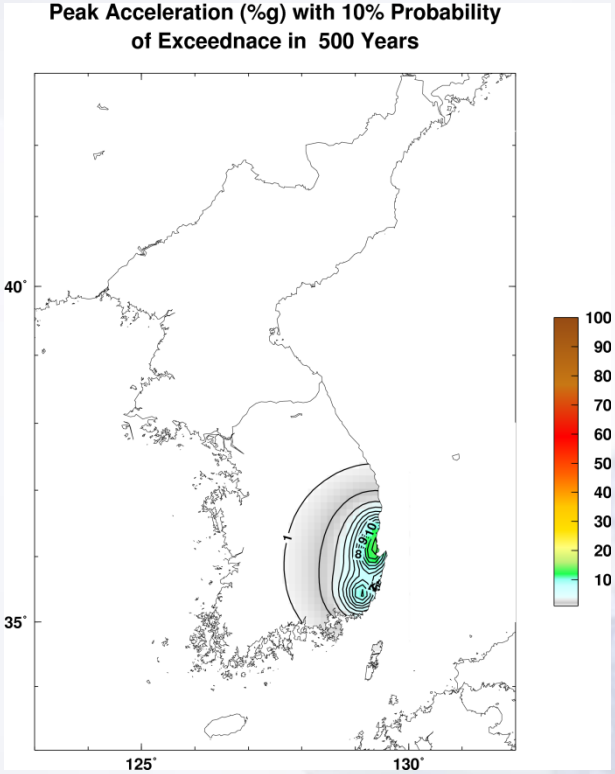
# 5. PSHM calculated from Fault Source

KIGAM

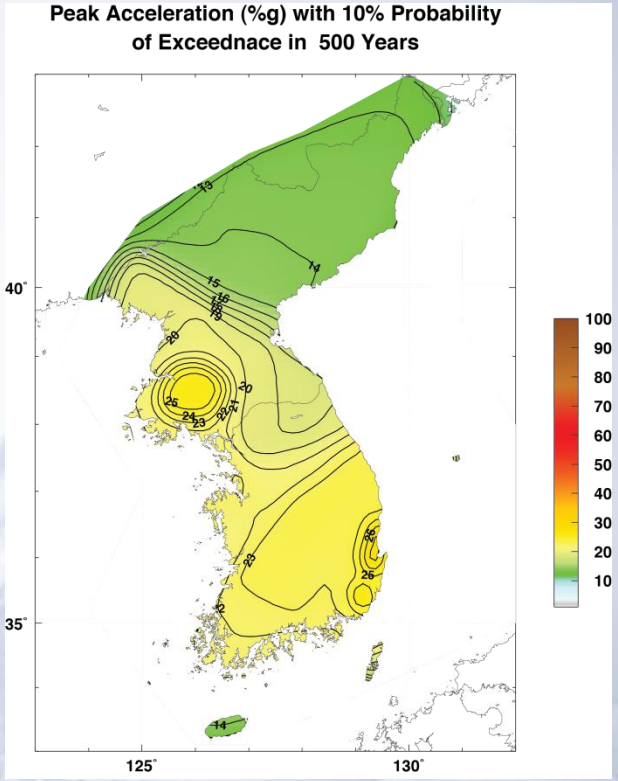
**Return period : 4,800 yr**




Seismic Source




Fault Source




Seismic + Fault Source

# Thank You !!