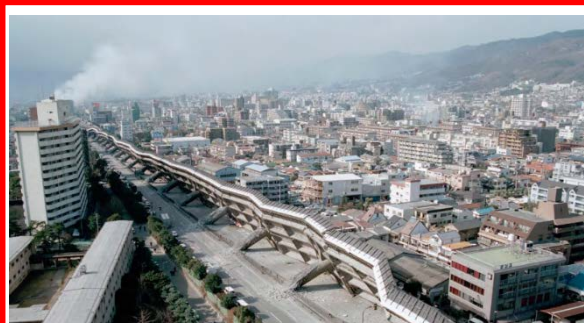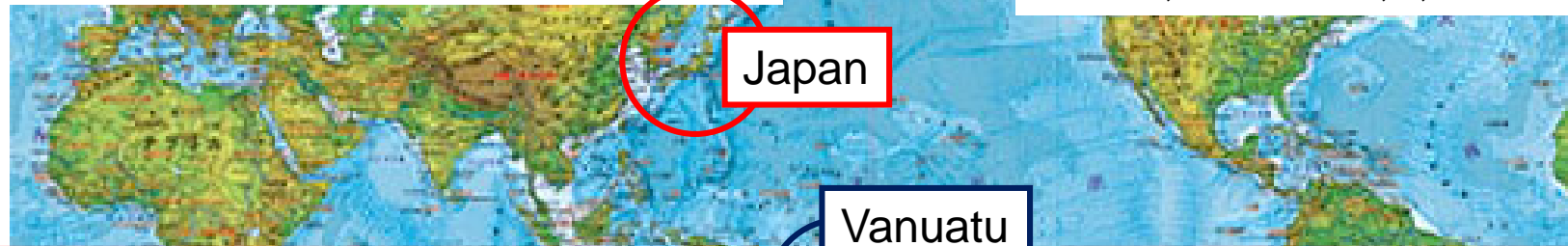# Japan under frequent serious disasters

Earthquake : January, 1995
6,500 dead, 44,000 wounded, 640,000 houses broken

Typhoon : September, 2015
40 dead, 80 wounded, 7,500 houses broken

世界地図

Japan

Vanuatu

Earthquake : April, 2016
258 dead, 2,800 wounded, 195,000 houses broken

Heavy rain : July, 2018
225 dead, 12 missing, 10,000 houses broken

Protection of staffs

- Pocket-manual for physical safety
  - evacuation, safety check, …
  - to whom / what / how you should report
  - how to manually unlock electrically locked doors, to unlock electrically locked safety boxes, ...
  - manuals in smartphones & on paper

- Survival kit
  - food/water/gloves/helmet/…for every employee + more are stored under all office desks
  - sleeping bags/radios/flush lights/… are equipped for office stayers

- Basic drills
  - periodical evacuation drills
  - periodical emergency messaging drills
    - caution! email or SMS addresses are often changed but not reported to the manager

my desk

space to cover me and equipped with 3-day survival kit

Continuity of services

JPRS
JAPAN REGISTRY SERVICES

- Typical decision on relief ("how domain names should be handled")
  - Expiration dates of domain names registered by registrants / registrars in the disaster-affected area are automatically deferred with no charge
    - Because renewal before expiration dates may be impossible or difficult
- Preparation for continuing service
  - for each employee, multiple e-mail accounts under multiple TLDs
  - for each service operation site, satellite phones and taxi-radio talkies
  - Remote work environment
    - remote-access software on PC
    - shared data on the Internet
    - scheme to manage employees in remote working environment
- Disaster Recovery sites
  - 2 sites (Tokyo and Osaka (500Km away)) are operated by the registry
  - both systems and staff teams are semi-duplicated
  - periodical drills to switch the active site
- JP-DNS servers run by all regional big ISP networks (under experiment)
  - so that regions with no Internet outage can keep using JP domain names