

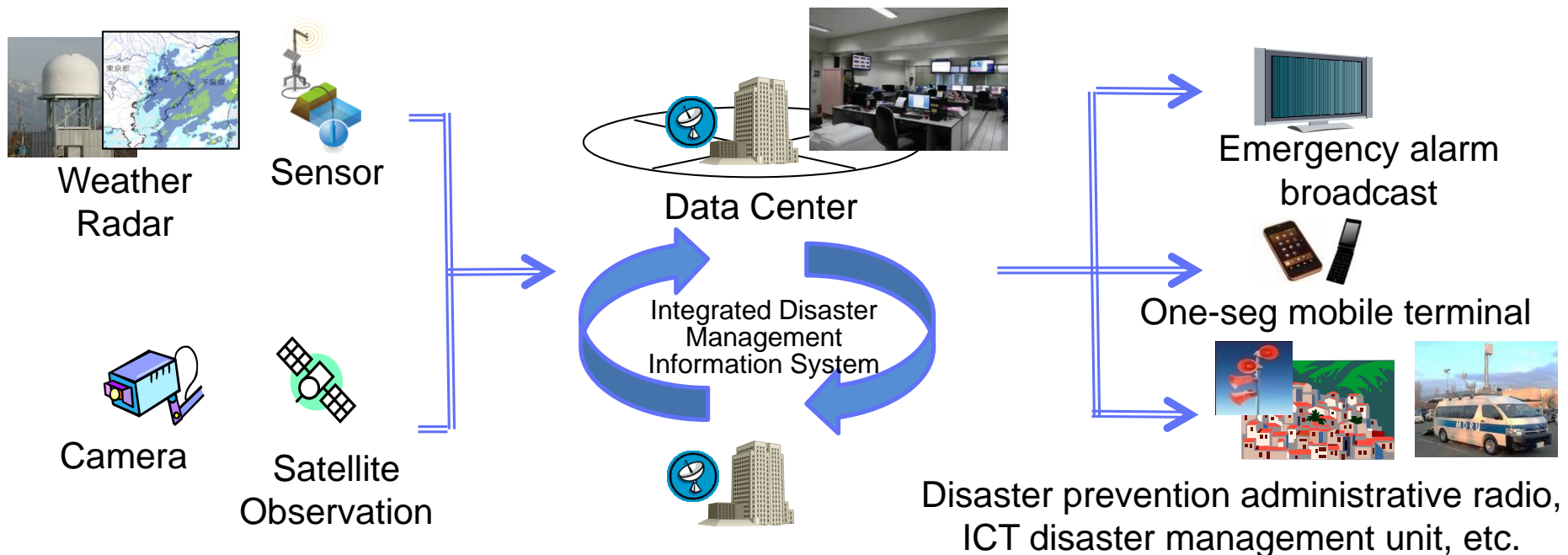
- Information distribution is an important factor for disaster management.
- Effective and efficient disaster management is made possible by ICT.
- ICT for disaster management can be classified into 4 stages.

Monitor /
Transfer

Analyze

Accumulate

Distribute

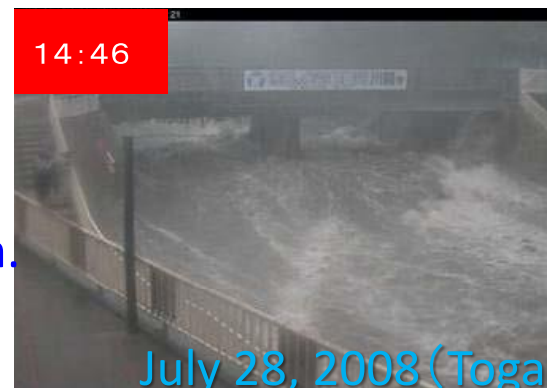


Real-time bigdata analysis

- For Localized torrential rainfall

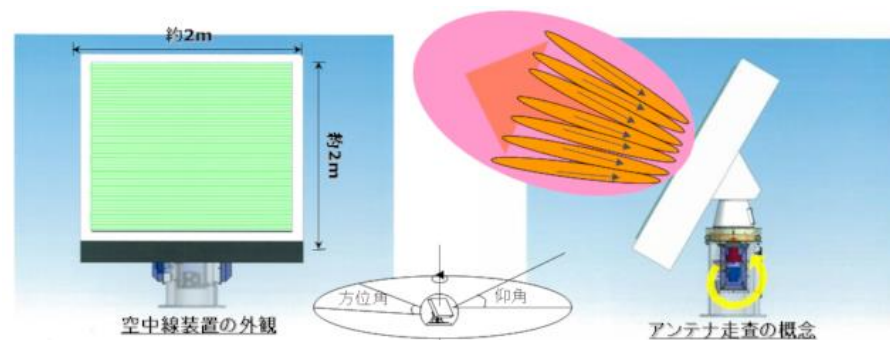


After
10 min.



July 28, 2008 (Toga river, Kobe)

- Target > Alerting 20 min before the rain start. 20 min = a baby of a cloud grows up to a cumulonimbus and start to rain.
- Censor > Phased Array Weather Rader: X-band radar to find particles of water in air with 3-D.



- Challenge > Bigdata analysis (collect, transfer, calculate, store) in real-time. Data size = 500MB/30sec, 1.5TB/day. Real-time = 1min.

SNS as a sensor for disaster management

- Under a disaster, SNS (e.g. twitter) is a useful tool to share information between victims, their families, rescues and governments. However...
- Challenge > large, massive, mess, non-structured data.
- DISAANA (DISaster information ANALyzer)

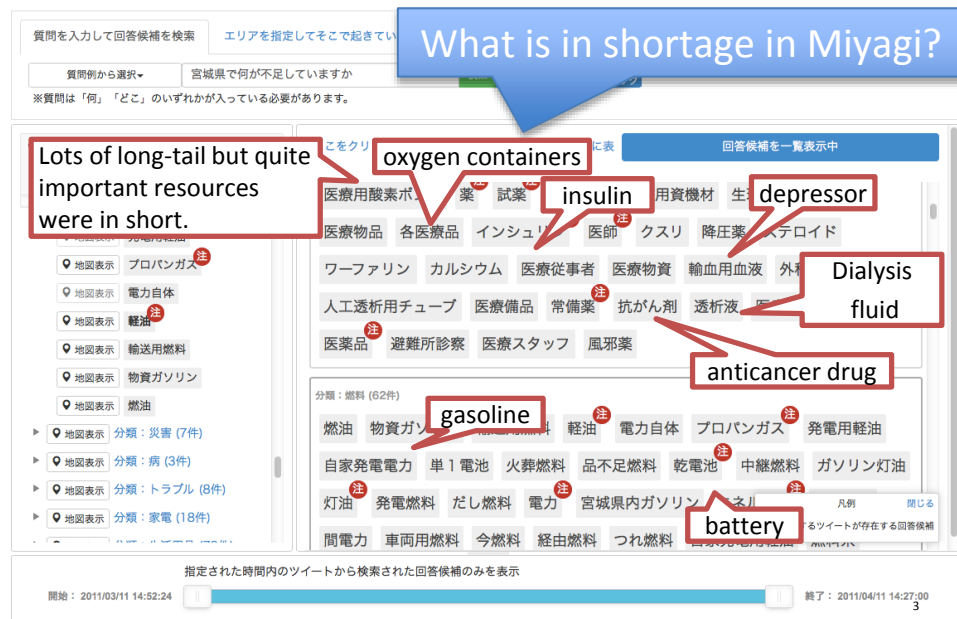


DISAANA - 対災害SNS情報分析システム

Where is flooded in Miyagi?

宮城県のごどこで浸水していますか

回答候補に関する地点を地図に表示中



What is in shortage in Miyagi?

What is in shortage in Miyagi?

lots of long-tail but quite important resources were in short.

oxygen containers

insulin

depressor

Dialysis fluid

anticancer drug

gasoline

battery

- Basically Real-time QA service using Twitter
- Available for public use through the Web and smartphones
- The government used DISAANA to collect the victims' needs in the damaged area and local governments were instructed according to the DISAANA's output

