

Acknowledgements

Our Deepest Thanks for your Support &
Brief Report on Japanese Current Status after
Great East Japan Earthquake/Tsunami

On behalf of participants from Japan

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Slides prepared by H. Kawamura (KEK)

German-Japanese Workshop on "Modern Trends in Quantum Chromodynamics"

October 3-5 2011

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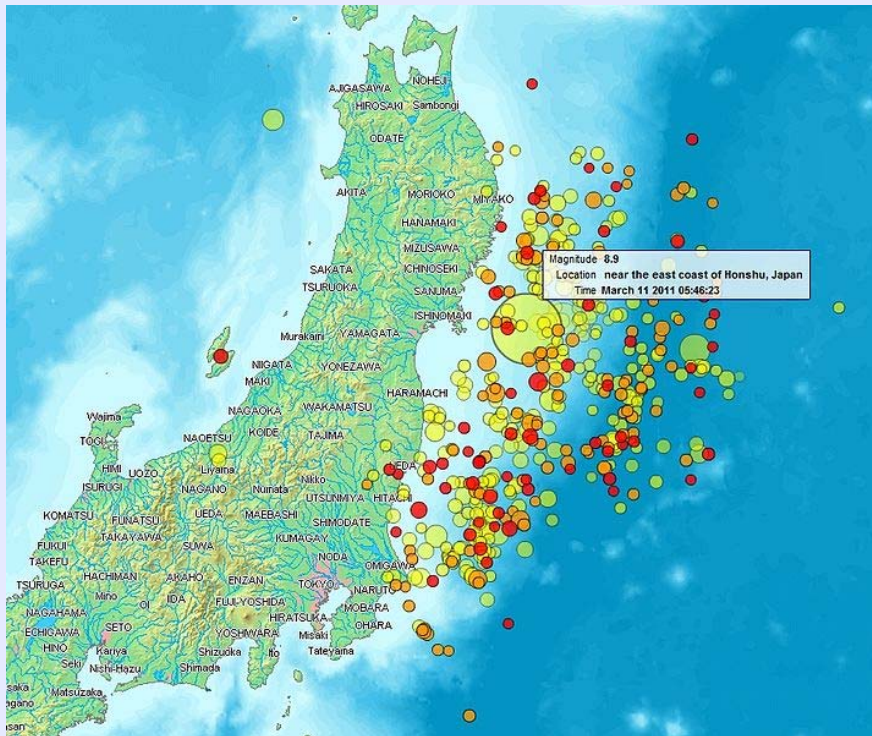
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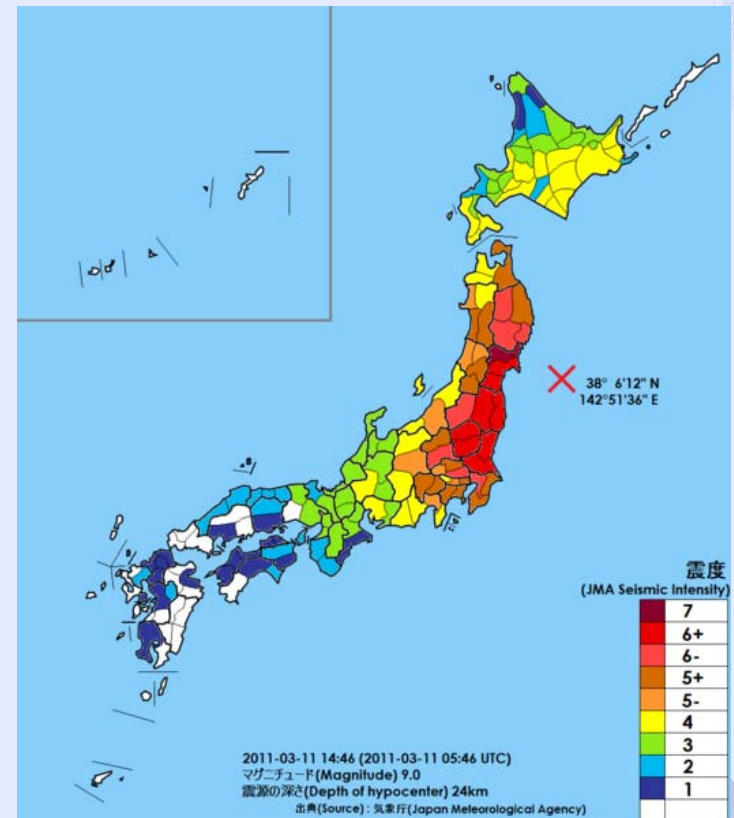
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Great East-Japan Earthquake

- 9.0M earthquake on March 11 at 14:46 JST.
- Lasted more than 5 min. followed by strong aftershocks (even now).
- Biggest recorded earthquake in Japan (“once in a thousand years”).



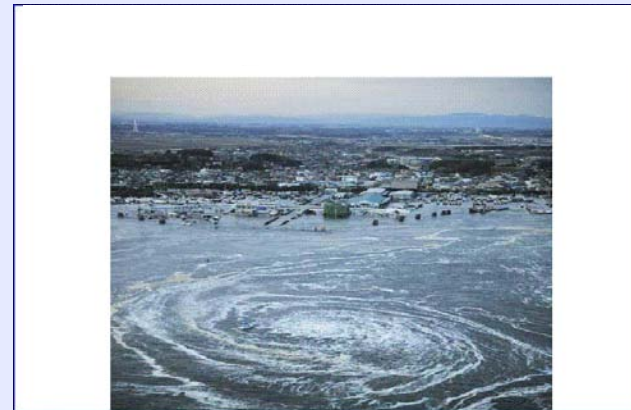
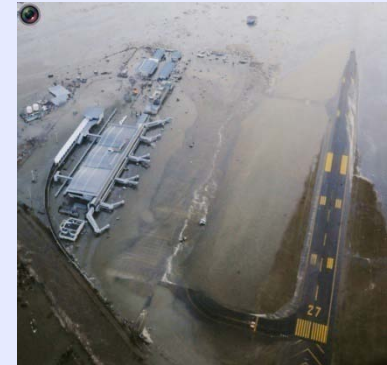
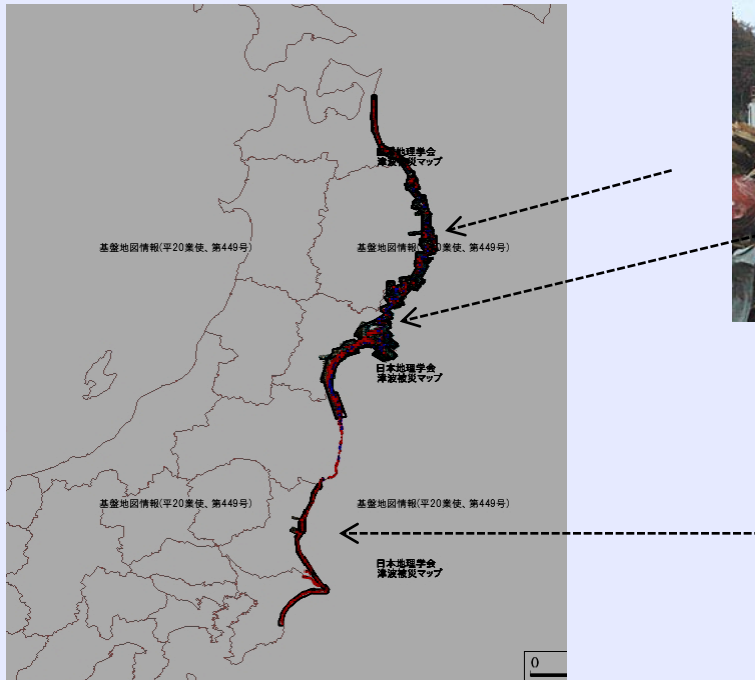
Epicenters (11-14 March)



Seismic intensity

Tsunami caused by Earthquake

- Tsunami attacked the north-east coast of Japan approx. 30-60 min after the quake.
- More than 20,000 of casualties(16,000 dead 4,000 still missing).
- 75,000 are taking refuge (as of Sep. 20).



Fukushima nuclear power plant

- The reactor cooling system stopped working due to power loss caused by 14m-high tsunami at around 15:40 JST.
- Fuel meltdown occurred at reactor 1-3 in 1-4 days.
- 20km from the plant : off-limit zone.

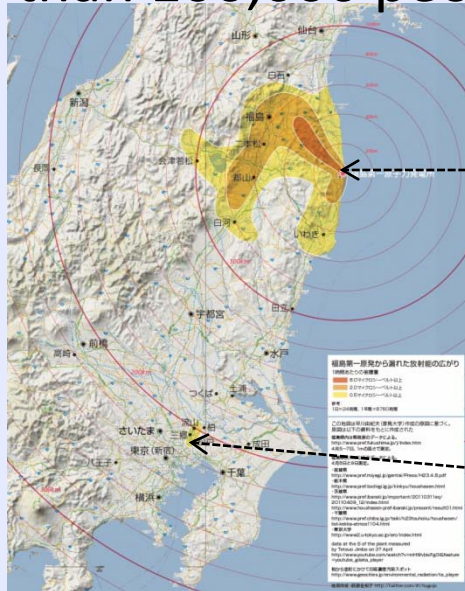
(evacuation condition: $20\mu\text{Sv}/\text{yr}$)

$^{137}\text{Cs}(\tau_{1/2}=30\text{yrs}), ^{134}\text{Cs}(\tau_{1/2}=2\text{yrs})$

More than 100,000 people have left their home.



Fukushima Daiichi power plant



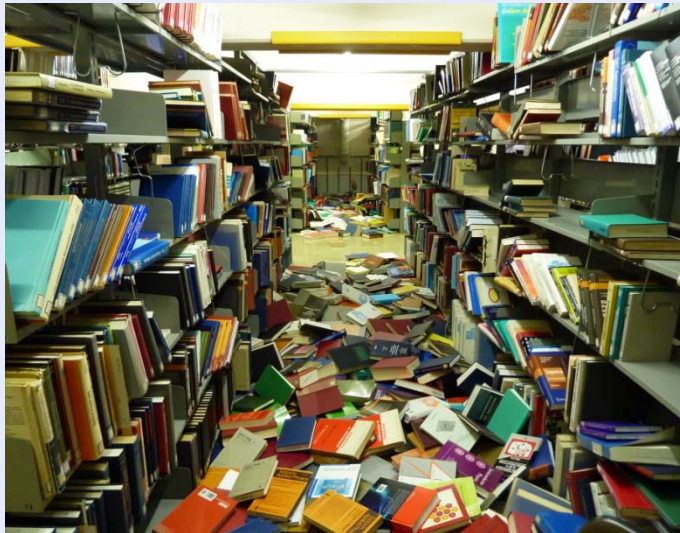
Tokyo

5-7 April



Earthquake affected our activities

- Buildings & facilities are damaged at Tohoku Univ., Tsukuba Univ. and KEK (Tsukuba, Tokai).
- The power shortage affected research activity in East Japan (15% reduction of electricity usage was required by law until Sep. 23).
 - No lights, no heater in the office.
 - Partial usage of the supercomputers.
 - Running of experimental facilities were restricted at KEK.



KEK library



Road in front of Linac
(J-PARC)

A half year after March 11

Recovery in the area struck by tsunami

- Water, fuel, electricity shortage was severe for several weeks after the quake (even in Tokyo). Now the supply is back to normal.
- All the scheduled construction of the temporary housing facilities for 51,000 families will be completed in this month.
- Removal and disposal of Tsunami debris take a few years.



March



Now

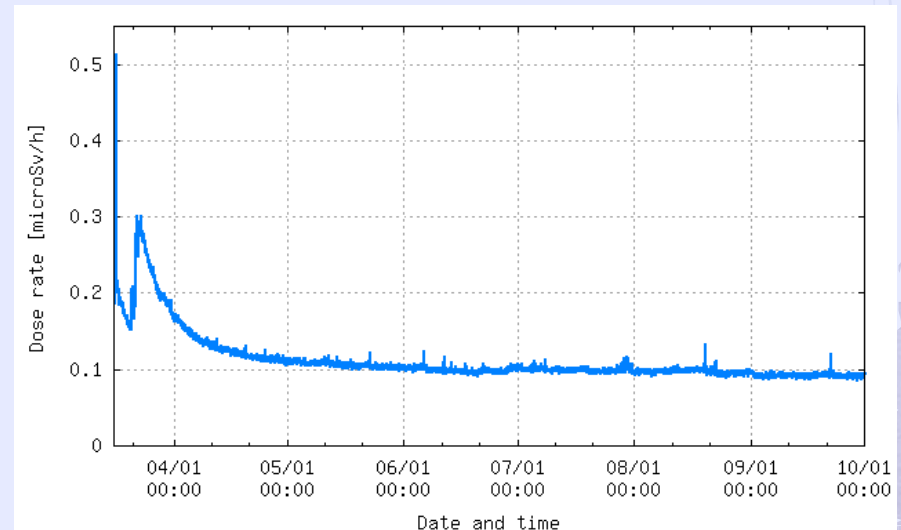
- Now everything is back to normal for theorists.
- Experimentalists working at J-PARC are making efforts to resume their experiments early in 2012. → [Saito-san's Talk](#).

Fukushima nuclear power plant

- Radiation level has greatly decreased, but the reactor cooling system and radioactive leak are not yet under full control.



Radioactive level on 29/09



Monitoring at KEK (165km away)

Final words

- All of us here have once spent some time in Germany and/or have a history of communication and collaboration with QCD physicists in Germany.
- We are very happy to be here to enjoy physics discussions with the German colleagues after the disastrous earthquake.
- Your support organizing this workshop is strengthening the Germany-Japan collaboration in our field.
- We deeply appreciate the encouragement and support from the community, DESY and DFG.

