

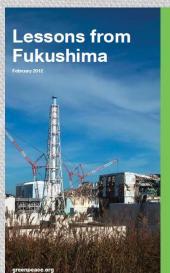
CITIZEN MONITORING



David Boilley acro.eu.org

ACRO:

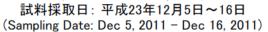
- Is a French NGO/NPO created after Chernobyl
- Operates a laboratory for:
 - Citizen watch of the radioactivity in the environment
 - Expertise
- Participates to several official comities (local and national)
- Has done more than 300 analysis on samples from Japan:
 - · One of the first independent measurements in litate-mura
 - Huge demand on urine analysis
 - House-dust collected by vacuum cleaners
- Is on the verge to open a laboratory in Japan

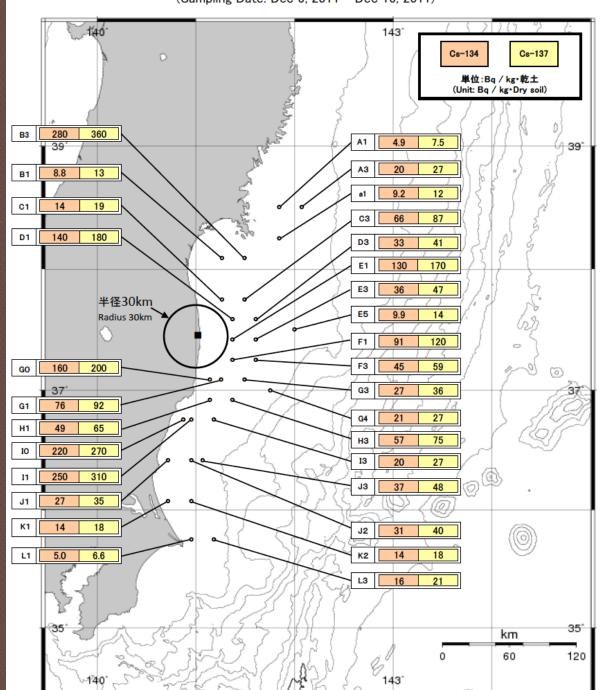


Discredited authorities

- Failure to prevent the accident
- Failure to acknowledge the triple meltdown
- Failure to protect the workers
- Failure to protect the population:
 - SPEEDI software not used
 - People evacuated to more contaminated places
 - Others not immediately evacuated
 - Long time confinement
- Failures in the food monitoring

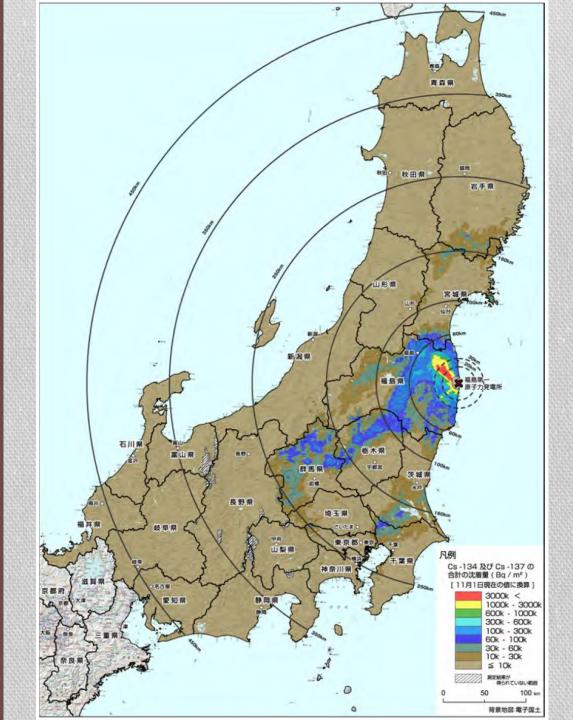
Marine contamination





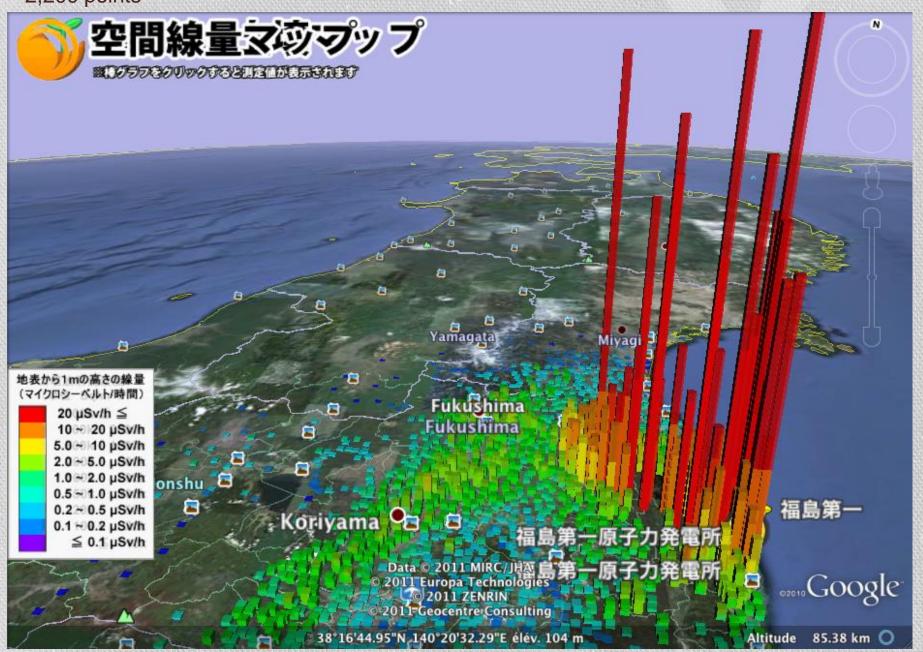
Measurements done from a helicopter

Surface contamination (cesium 137 et 134)



Map of the dose rate done by universities

2,200 points



Map of the surface contamination (Cs137)

2,200 points Cs-137土壌マップ ※棒グラフをクリックすると測定値が表示されます。 東北大震災 震源 M9.0 Yamagata **Fukushima** 土壤放射能濃度 福島第一 (単位 Bq/m²) 2000k ≤ 福島第一原子力発電所 福島第一原子力発電所 1000k ~ 2000k 500k ~ 1000k 200k ~ 500k 100k ~ 200k 50k ~ 100k 50k 20k ~ 20k 10k ~ 10k Europa Technologies 02010 Google 2011 Geocentre Consulting

37°50'19.96"N 140°41'04.86"E élév. 228 m

Altitude 101.43 km



ACCESS TO THE MEASURMENTS

Authorities have laboratories and experts

Populations need laboratories and experts

Various levels

- Individual dosimeters to children and pregnant women in Fukushima
 - Anomalous cases led to further evacuation
 - Many people do not use
- Individual radiameters (Geiger counters)
 - "Amateur work"
 - Official recognition: "From now on, we must offer equipment and ask people to look well beyond Fukushima to find hot spots. [...] Citizens' groups have played a very important role in examining their neighbourhoods closely. I really appreciate their contribution". Masaharu Nakagawa, minister of Education, Culture, Sports, Science and Technology to the Wall Street Journal, 19th of October 2011
- Measurement stations with NaI scintillator
 - Many (more than 100)
 - Network
- ACRO's involvement:
 - Huge demand
 - Various questions
 - New laboratory in Japan to promote quality



CHALLENGES THAT SHOULD BE DEBATED

Evacuation limit

- 20 mSv/y not accepted
 - Some children have not played outside for more than a year...
- 36 000 voluntary evacuation (by Oct. 2011)
 - Total: about 150,000 displaced people
- Same level kept for returning in the 20 km zone
- · Home's interior not taken into account
 - Up to 20,000 Bq/kg in house-dust (ACRO)
- For food, the limit has decreased
 - 500 Bq/kg -> 100 Bq/kg
 - Lower limit for baby food and diary products (50 Bq/kg)

Decontamination?

- Rules for the evacuated zones
 - Over 50 mSv/y: wait
 - Between 20 and 50 mSv/y decontamination in few years
 - Below 20 mSv: decontamination
- Huge amount of radioactive waste
- Inadequacy with the demand of the people
 - Case of farmers
 - Work given to major companies
- Very costy

What energy for today and tomorrow?

- o reactor now
 - No trust in the stress-tests
- Local referendum are asked on nuclear energy issues
- Government unable to decide for other facilities like reprocessing plant and fast breeder reactor

Thank you for your attention!



All our data in French, English and Japanese: acro.eu.org