Contour Maps of Radioactivity Concentrations in Soil Samples Collected at Fukushima, Ibaraki Prefectures and Near Sites.

- Procedures
- Contour Maps of ^{131}I, ^{129m}Te, ^{137}Cs, ^{134}Cs (kBq m^{-2} on 3/29)
- Contour Map of $^{131}I/^{137}Cs$
- Effective dose rate monitors
  - Fukushima-shi
  - Iwaki-shi
  - Kashiwa-campus at the University of Tokyo
- AMeDAS
  - 3/15
  - 3/21

University of Tsukuba

Keisuke Sueki
Norikazu Kinoshita
Kimikazu Sasa
etc.

Procedures

- **Collection of surface soil samples from surface to 5 cm below**

  at the end of March in Ibaraki and Chiba

  at middle of April in Fukushima

  at beginning of May in Tochigi and Saitama

- **γ-ray spectrometry**

  High-pure Ge detector: ORTEC GEM type

- **Radioactivity concentration**

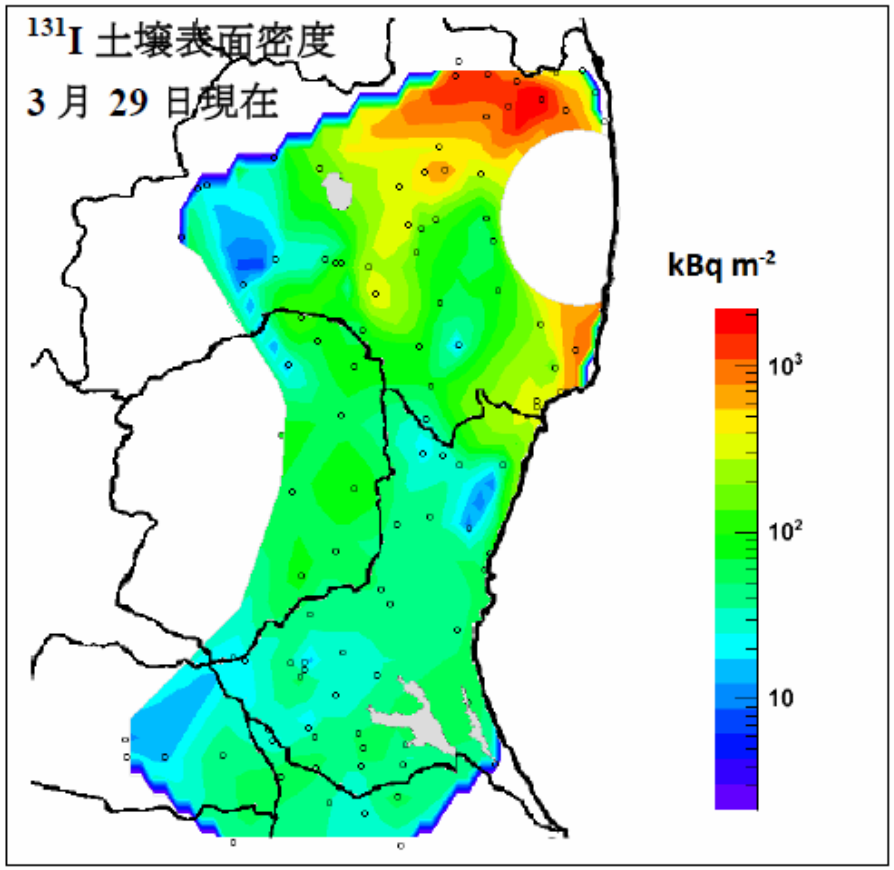
  Evaluated nuclides

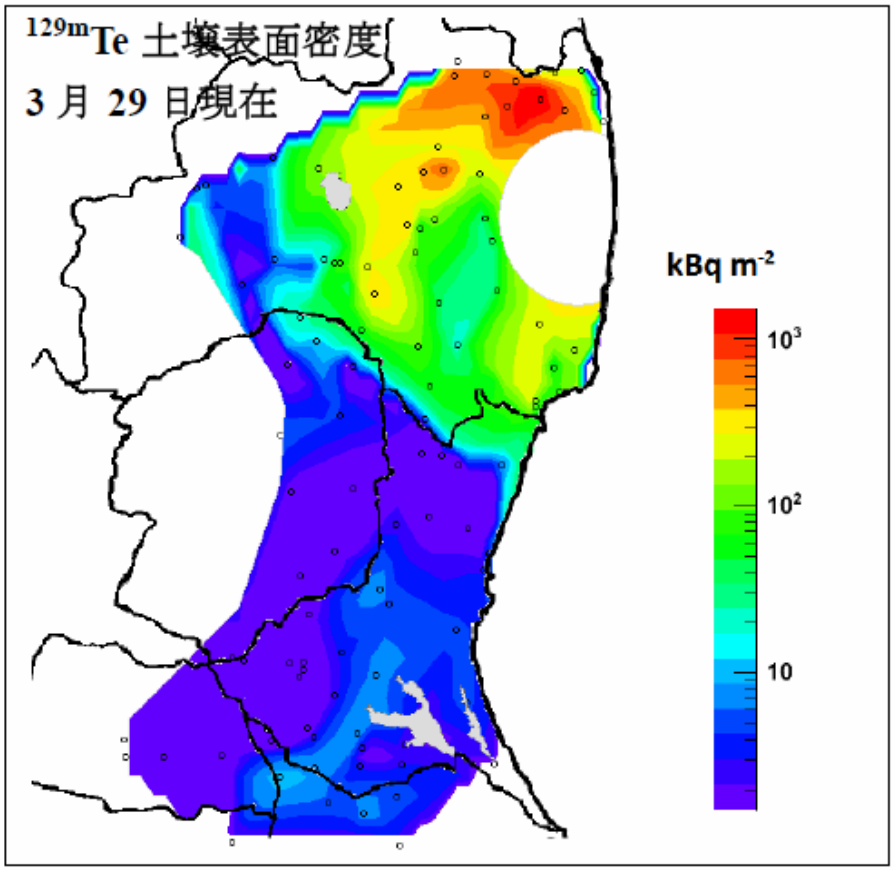
  ^{129m}Te ($T_{1/2}$ = 33.6 d), ^{131}I ($T_{1/2}$ = 8.02 d), ^{134}Cs ($T_{1/2}$ = 2.06 yr) and ^{137}Cs ($T_{1/2}$ = 30.07 yr)

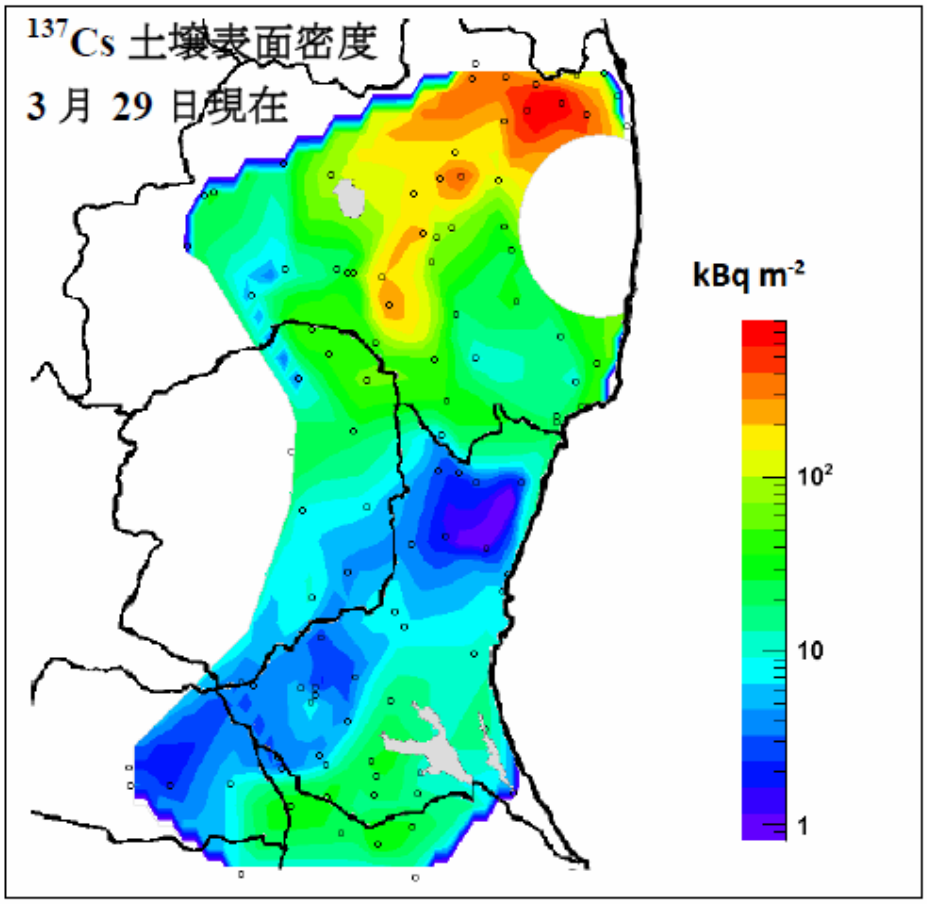
  Radioactivity

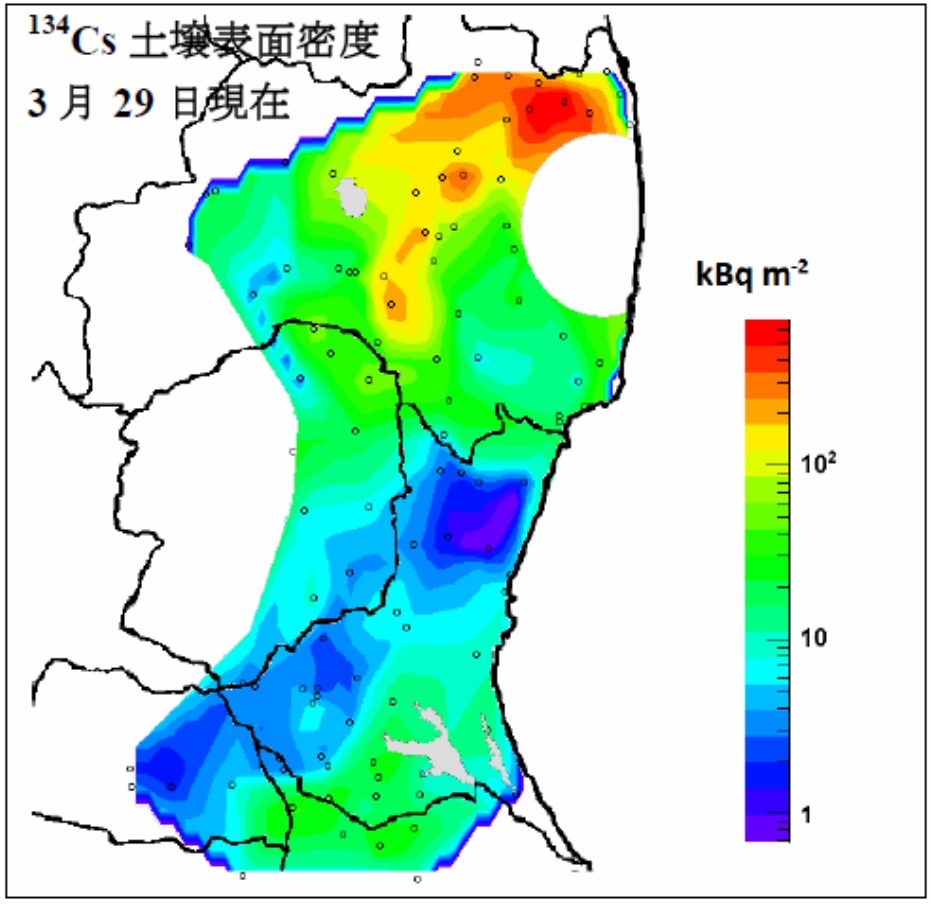
  Radioactivity in unit area on 29th March, 2011, corrected for decay loss during the measurement

  1σ statistical error in the each activity was less than 5% for ^{131}I, ^{134}Cs, and ^{137}Cs, 10-30% for ^{129m}Te.


131I 土壌表面密度
3 月 29 日現在
kBq m-2
10³
10²
10

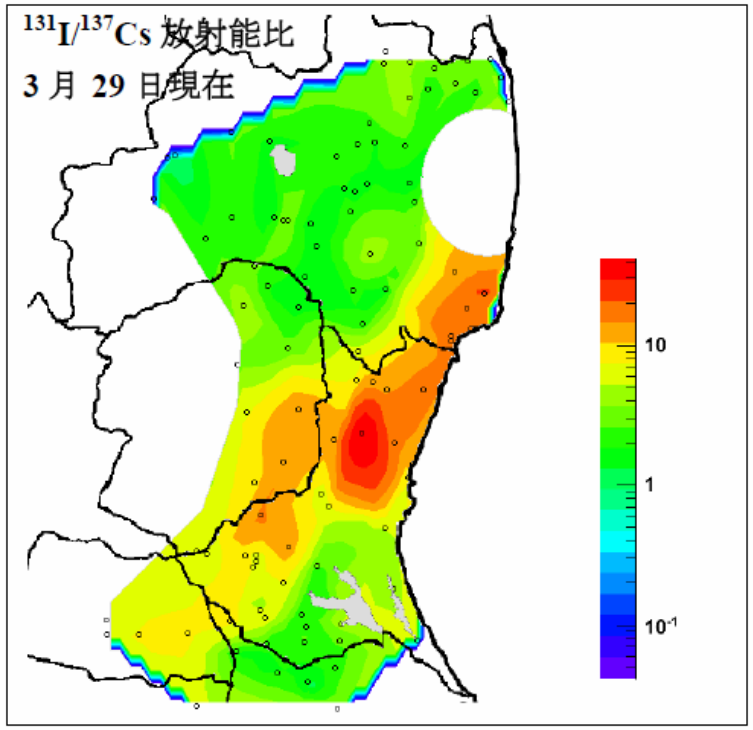

129mTe 土壌表面密度
3 月 29 日現在
kBq m-2
10³
10²
10

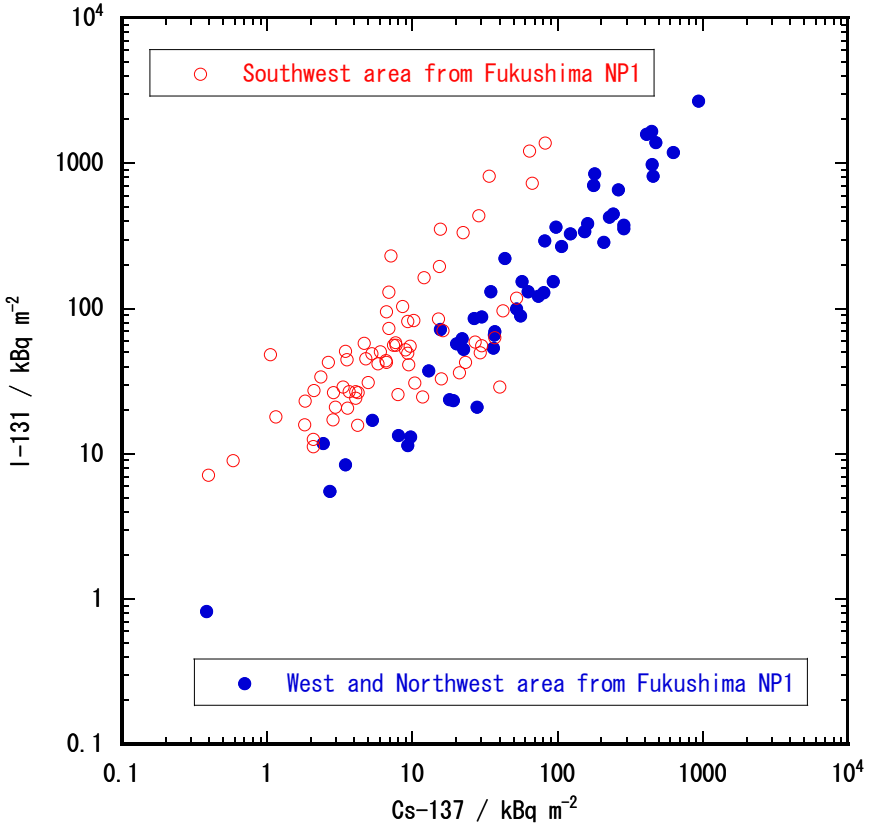




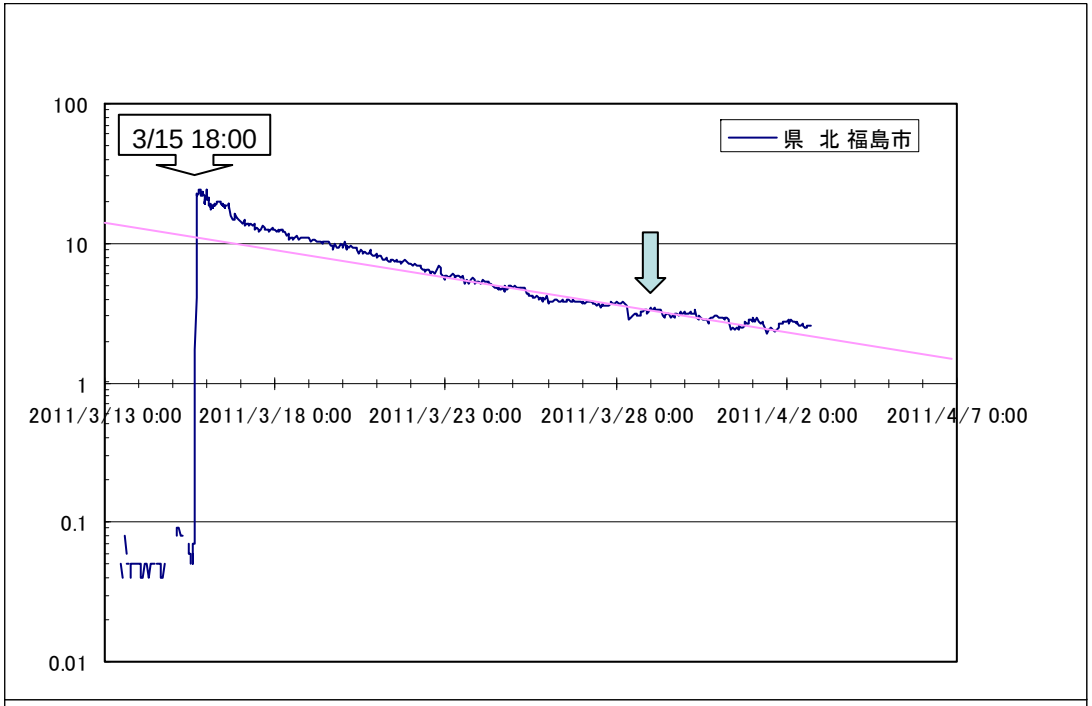
チェルノブイリ基準 (^{137}Cs)

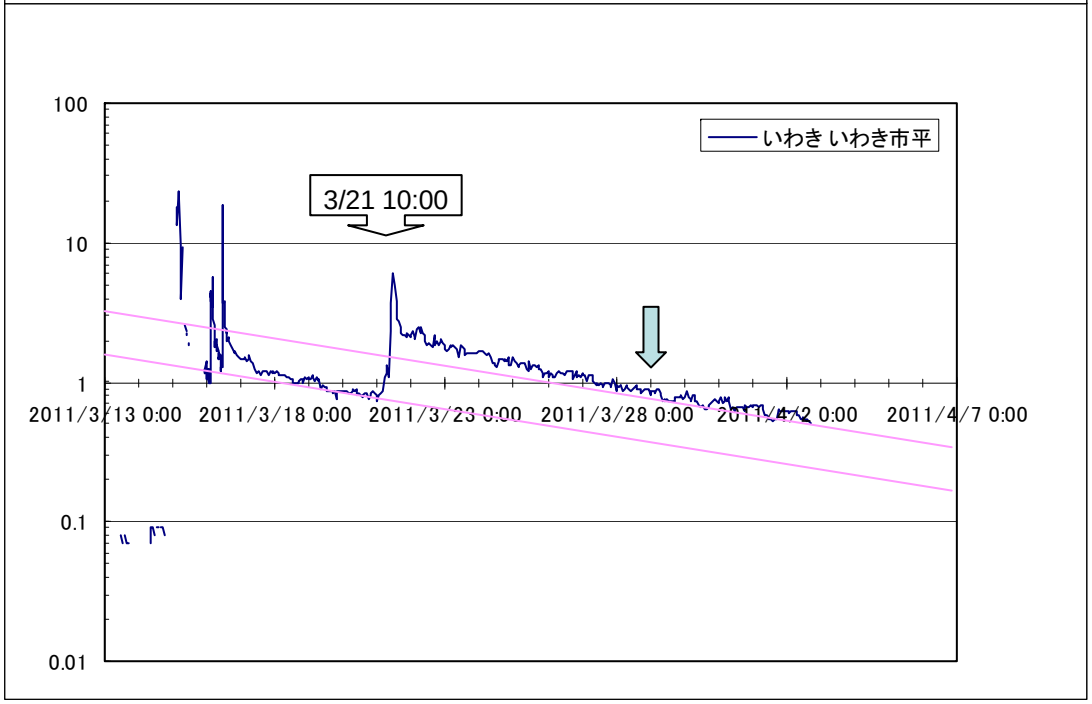
37 ― 185 kBq/m^2	Unnamed Zone
185 ― 555 kBq/m^2	Periodic Control Zone
555 ― 1480 kBq/m^2	Permanent Control Zone
1480 ― kBq/m^2	Confiscated/Closed Zone


$^{131}I/^{137}Cs$ 放射能比
3 月 29 日現在
10
1
10^{-1}

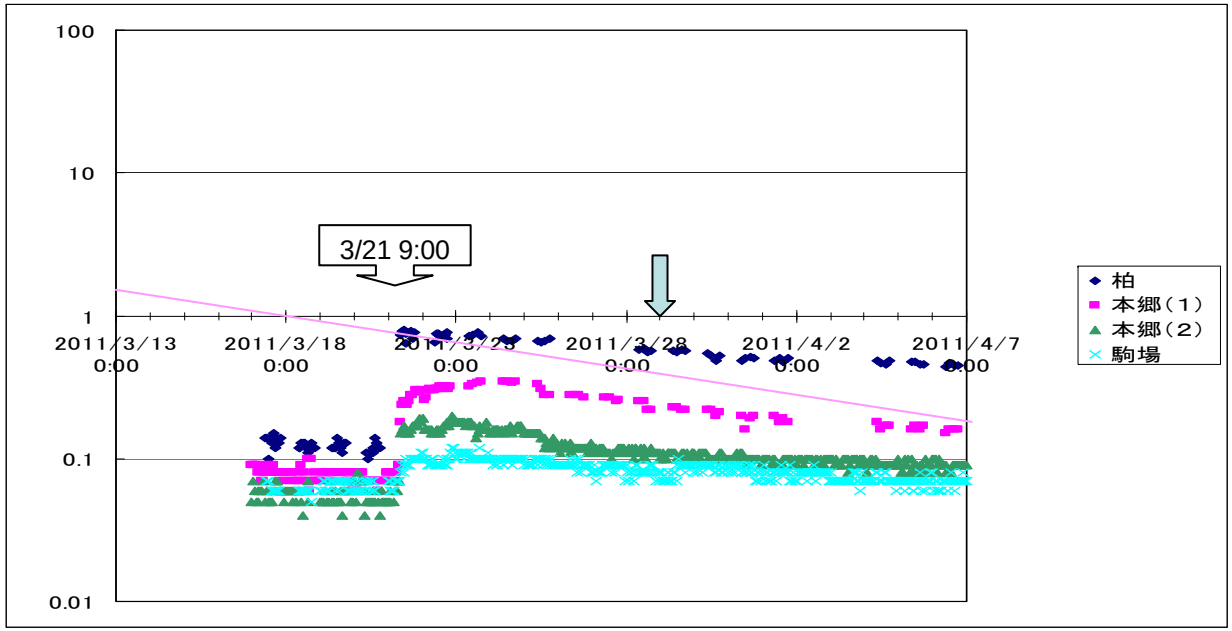

Southwest area from Fukushima NP1
West and Northwest area from Fukushima NP1
I-131 / kBq m^{-2}
Cs-137 / kBq m^{-2}
10^4
1000
100
10
1
0.1
0.1
1
10
100
1000
10^4

空間線量率の変化



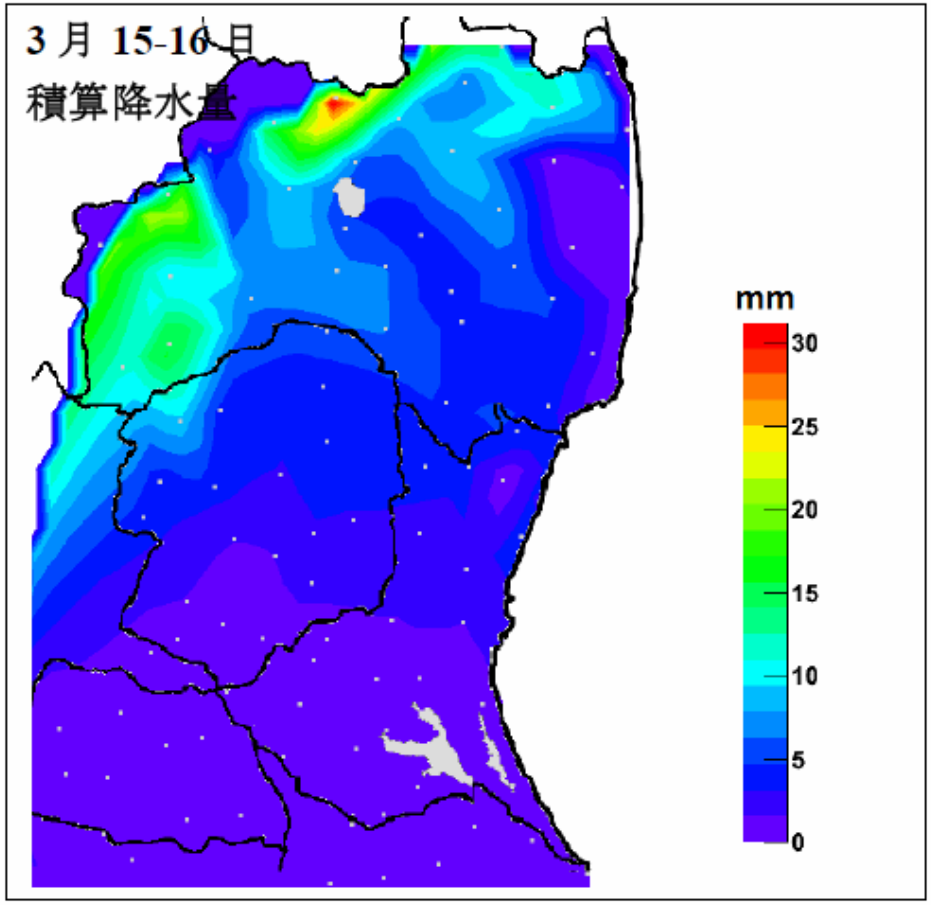


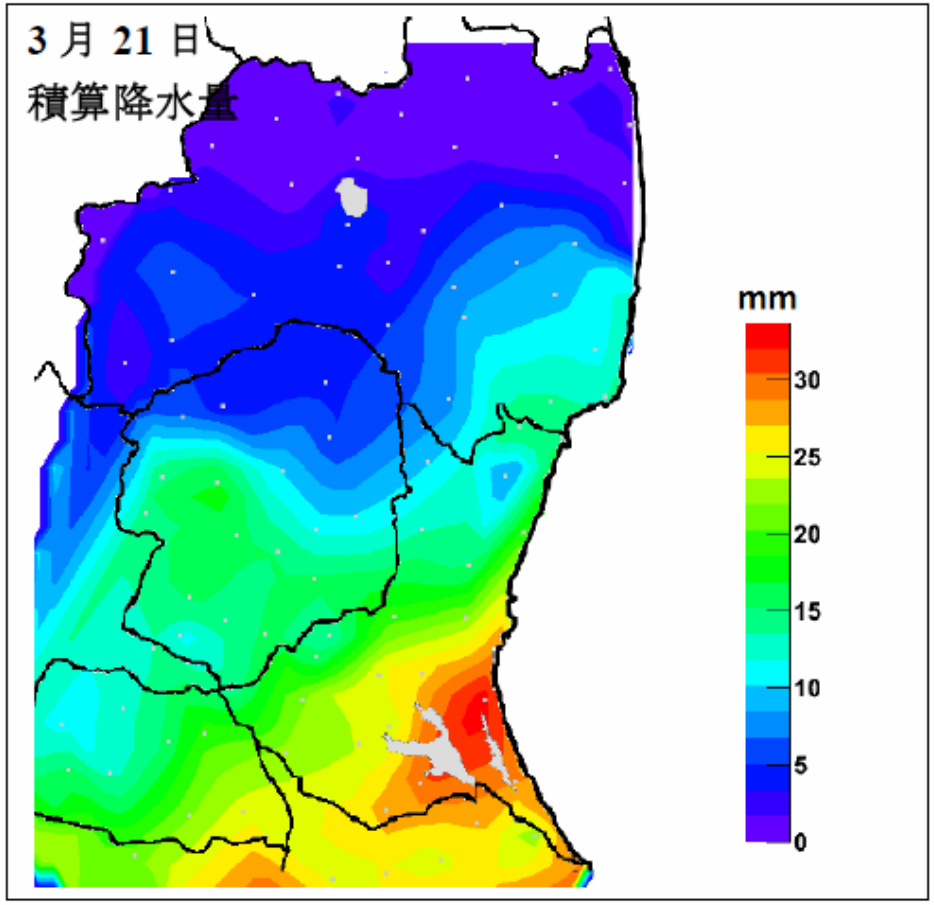
Data source:
http://www.pref.fukushima.jp/j/7houbu0311-0331.pdf



Data source: http://www2.u-tokyo.ac.jp/erc/report_201103_j.html

AMeDAS情報から


3 月 15-16 日
積算降水量
mm
30
25
20
15
10
5
0


3 月 21 日
積算降水量
mm
30
25
20
15
10
5
0