

Interactive
Comment

Interactive comment on “Iodine-129 concentration in seawater near Fukushima before and after the accident at the Fukushima Daiichi Nuclear Power Plant” by T. Suzuki et al.

T. Suzuki et al.

suzuki.takashi58@jaea.go.jp

Received and published: 4 April 2013

We appreciate the constructive comments of the reviewer. Our responses and changes of this manuscript are detailed below.

1. We measured 127I concentration, so 129I/127I data also presented in Table 1.
2. We evaluated internal dose only via seafood (not all pathways). In addition, because annual dose limit defined the unit of Svyr-1, we evaluate internal dose via seafood with the highest value keeping for one year. Even if 129I concentration in the coastal area was higher than that in offshore area, the high concentration might not keep its concentration during a year. So we evaluate it to take worse case in account. So the

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



sentence for conclusion in the Section 3.3 was changed like “we concluded that the internal dose from the ingestion of seafood is negligibly small”.

3. Referee #1 also suggested that Fig. 4 was not clear and eliminated it. Fig. 4 in the new manuscript after the technical correction was eliminated.

4. Thank you for teaching us new paper. We compared data in Section 3.1.2., Fig. 1 and Fig.2.

5. We think also that it is nice to discuss the contribution of atmospheric and sea discharged ¹²⁹I in this study area. There is no report about how much ¹²⁹I released to air and sea from this accident at this time, it is difficult to discuss it at this time.

Please also note the supplement to this comment:

<http://www.biogeosciences-discuss.net/10/C761/2013/bgd-10-C761-2013-supplement.zip>

Interactive comment on Biogeosciences Discuss., 10, 1401, 2013.

BGD

10, C761–C765, 2013

Interactive
Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



Fig. 1 Suzuki et al.,

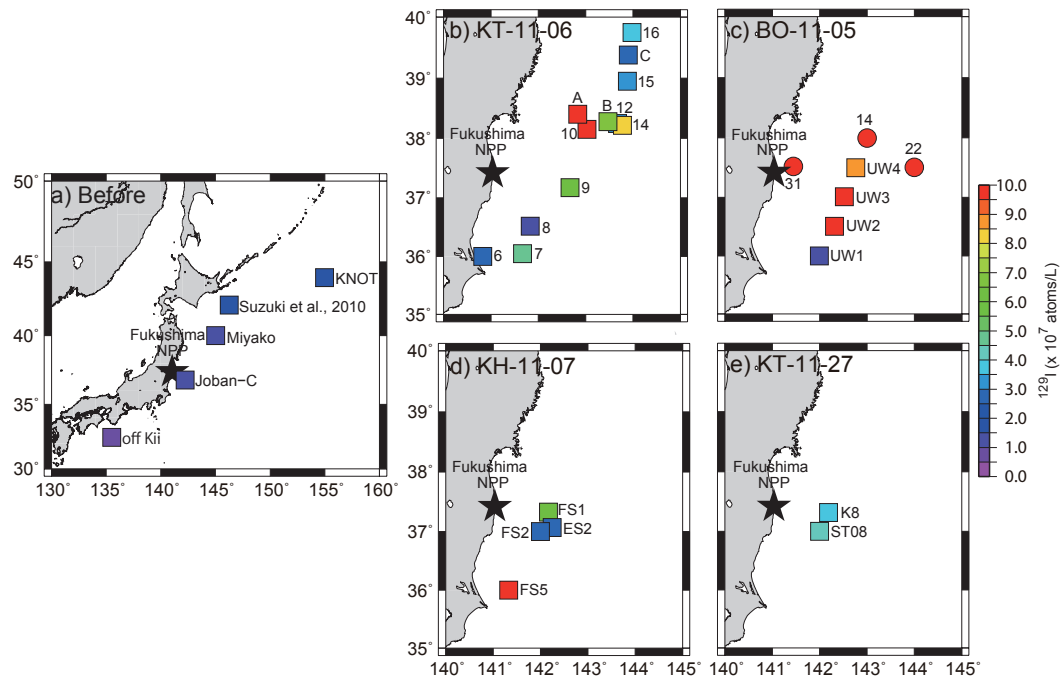


Fig. 1. Map of sampling locations and the result of surface ^{129}I concentrations before the 1FNPP accident (a) and afterwards (b–e). After the accident, seawater sampling was undertaken during four cruises: b)

Fig. 2 Suzuki et al.,

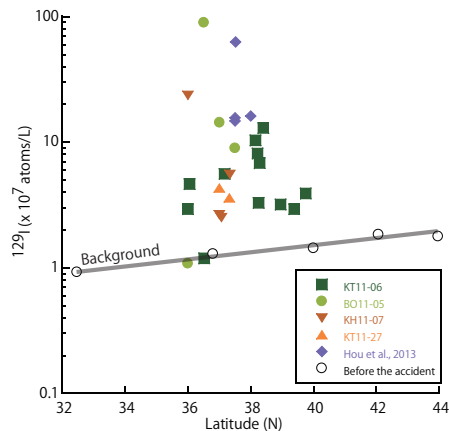


Fig. 2. ^{129}I concentrations in surface seawater before and after the 1FNPP accident as a function of latitude. The dark green, light green, dark orange, and light orange symbols indicate cruises KT-11-06, BO-

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



Fig.3 Suzuki et al.,

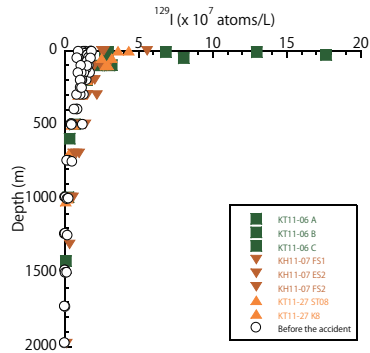


Fig. 3. Depth profiles of ^{129}I before and after the 1FNPP accident. The dark green, dark orange, and light orange symbols indicate cruises KT-11-06, KH11-07, and KT-11-27, respectively, after the 1FNPP accident

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper