

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.

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

1. We measured ^{127}I concentration, so $^{129}\text{I}/^{127}\text{I}$ 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 ^{129}I 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
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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 ^{129}I in this study area. There is no report about how much ^{129}I 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.

Fig. 1 Suzuki et al.,

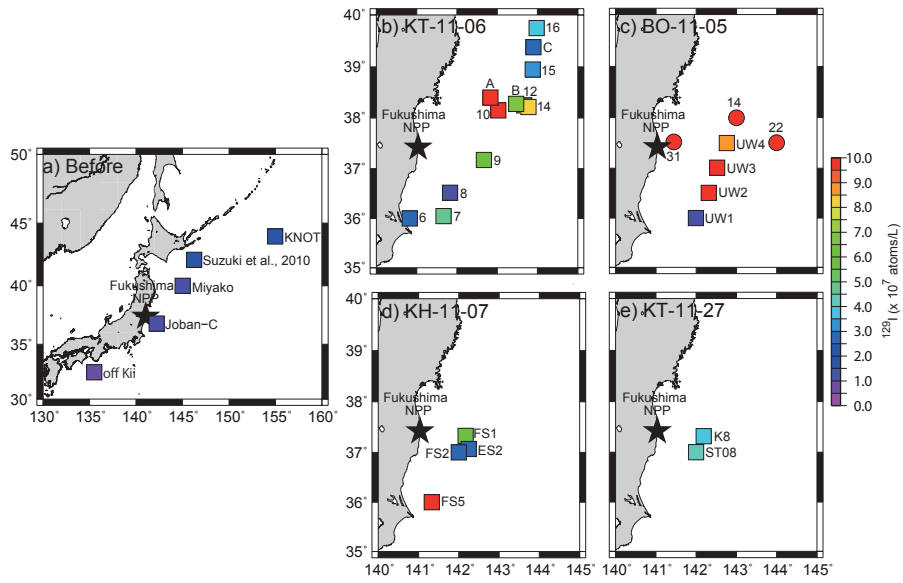


Fig. 1. Map of sampling locations and the result of surface ^{129}I concentrations before the 1FNPP accident (a) and afterwards (b–e). After the accident, seawater sampling was undertaken during four cruises: b)

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Fig. 2 Suzuki et al.,

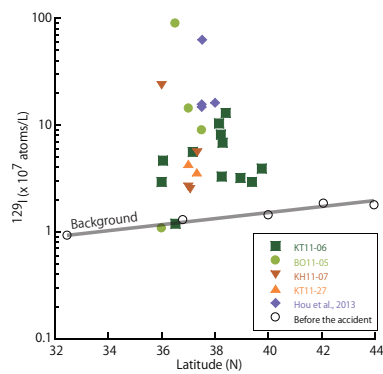


Fig. 2. ^{129}I concentrations in surface seawater before and after the 1FNPP accident as a function of latitude. The dark green, light green, dark orange, and light orange symbols indicate cruises KT-11-06, BO-

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Fig.3 Suzuki et al.,

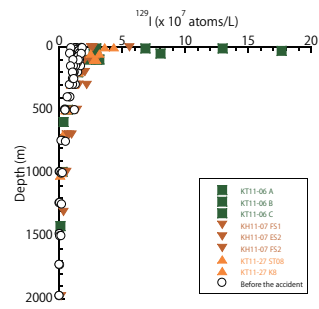


Fig. 3. Depth profiles of ^{129}I before and after the 1FNPP accident. The dark green, dark orange, and light orange symbols indicate cruises KT-11-06, KH11-07, and KT-11-27, respectively, after the 1FNPP accident

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