Interactive comment on “Cesium, iodine and tritium in NW Pacific waters – a comparison of the Fukushima impact with global fallout” by P. P. Povinec et al.

Anonymous Referee #1

Received and published: 25 April 2013

The manuscript reports the contamination status of 3H, 129I, 137Cs in June 2011, 3 months after the failure of Fukushima nuclear reactors in the NW Pacific Ocean and compares Fukushima total input to the ocean with other earlier releases from atmospheric nuclear weapon tests, Chernobyl, and European nuclear fuel reprocessing plants.

The manuscript provides a global and historical perspective on the contamination with anthropogenic radionuclides from various sources. I have not found any major issues for the authors to address further. The manuscript is well written.

I have a few minor following points for the authors to consider for their final submission.
(1) Table 1 may be expanded to include the amount of radionuclides released from
Tokai reprocessing facility and other radionuclides such as 14Cs, 134Cs and 90Sr, if
possible.

(2) Station numbers mentioned in the text and figures are difficult to follow for the wider
audience, therefore, a map showing those stations mentioned in the text may be added.

(3) A few references on 129I in the Pacific may be useful to the authors. Shima et al.
2006. Distribution of anthropogenic radionuclides in the water column off Rokkasho,
Japan. Radioactivity in the Environment 8, 83-95. Toyama et al. 2102. Variations of

Interactive comment on Biogeosciences Discuss., 10, 6377, 2013.