

***Interactive comment on “Direct observation of  
<sup>134</sup>Cs and <sup>137</sup>Cs in surface seawater in the western  
and central North Pacific after the Fukushima  
Dai-ichi nuclear power plant accident” by  
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We thank the referee for the constructive review and valuable comments. It helps us improvement our manuscript. Our responses are detailed below.

P. 2000 Line12 and Fig. 1; Relationship between points of anti-cyclonic eddy and the local minima of concentration is impressive. However it is difficult to find out in Fig. 1a. The authors should provide finer and larger figure for this impressive results.

Answer: We added a new figure as Fig. 2, the area around anti-cyclonic eddy were  
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enlarged from Fig. 1a suggested by referee #2. (see below)

P. 2001 Line 3; Why “Concentration of radioactive Cs at 175.5 degree E transect were almost comparable between two years”? The authors should discuss the contribution of atmospheric deposition for explanation of this sentence.

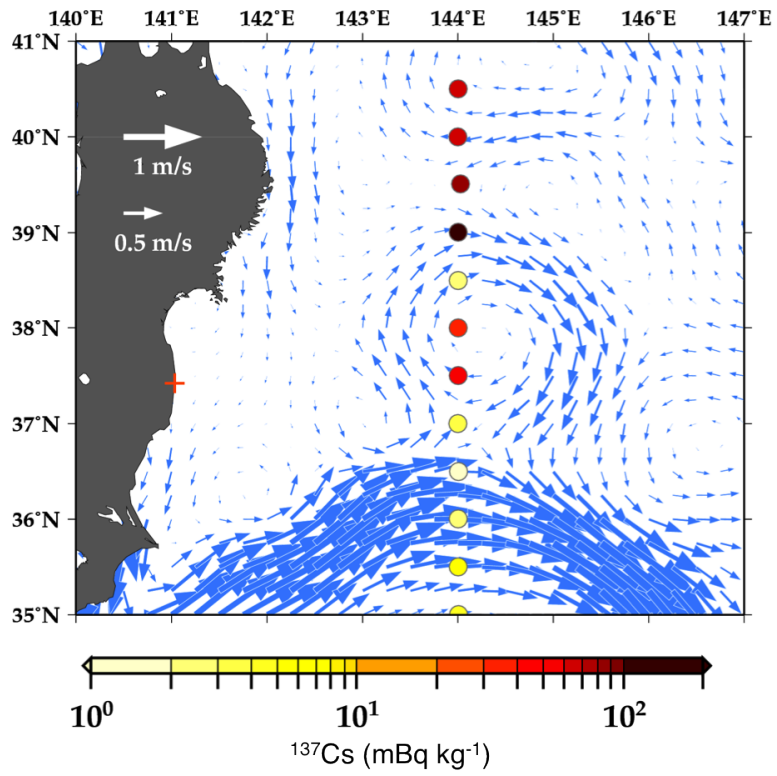
Answer: Although same level of radioactive Cs had been observed at 175.5 degree E transect in two years, the major source of radioactive Cs would be differed each other. The atmospheric deposition seemed to be major source in first year, and eastward dispersion from Kuroshio-Oyashio transition area is main source in second year. In this line, the manuscript had been revised.

P. 2001 Line 22; High temperature area (> 25 degree C) is related to the KE area. The authors should discuss the relationship to the KE area here.

Answer: We have revised the discussion section as suggested by the referee #2.

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**Fig. 1.** New Fig. 2. Sampling locations for surface seawater around the anticyclonic eddy observed in July 2011. Color of the closed circles indicates concentration of  $^{137}\text{Cs}$  in the surface seawater. Blue arro