## Oceanic dispersion of radioactive cesium derived from Fukushima Dai-ichi Nuclear Power Plant accident in the North Pacific during six years

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After the Fukushima Dai-ichi Nuclear Power Plant (FDNPP) accident, many data on radioactive cesium (<sup>134</sup> Cs and <sup>137</sup>Cs) in seawater had been collected and published. Present study summarizes details the radioactive cesium dispersion pattern in the North Pacific based on observational data obtained by FRA. Briefly, the Fukushima-derived radioactive cesium dispersed eastward as surface water, and was also observed via a southward intrusion to subsurface waters as Subtropical Mode Water and Central Mode Water. The radioactive cesium movement related to mode water is important in terms of the circulation of cesium into the ocean interior. The concentration of Fukushima-derived radiocesium in Subtropical Mode Water and water column inventory of <sup>137</sup>Cs were gradually decreased between 2012 and 2015. The most remarkable temporal changes of Fukushima-derived radioactive cesium off the coast near the FDNPP site were observed during the first six months of 2011. After that, continuous decreasing trend has been observed until 2016. Although higher concentrations of radioactive cesium than the background levels measured before the accident are still detected. Continued monitoring is still necessary.

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