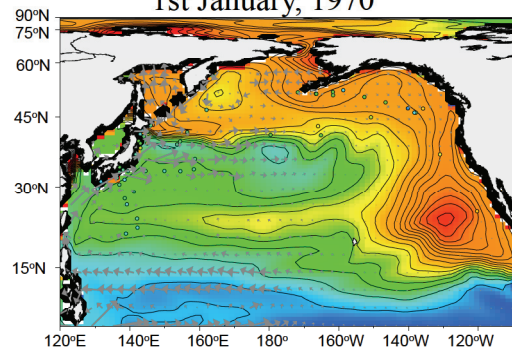
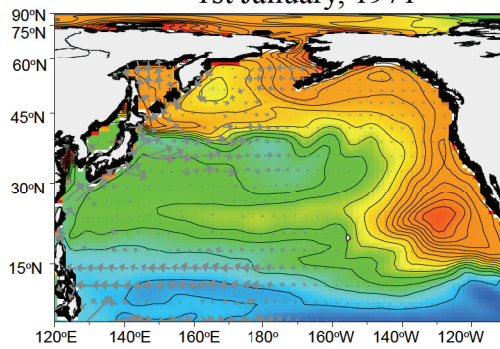


Fig. D1a Horizontal distribution of CRICs concentrations in surface seawater from 1957 to 1970. Circles indicate the measurement data. Gray arrow is climatologically ocean surface current. Unit is in  $\text{Bq m}^{-3}$ .

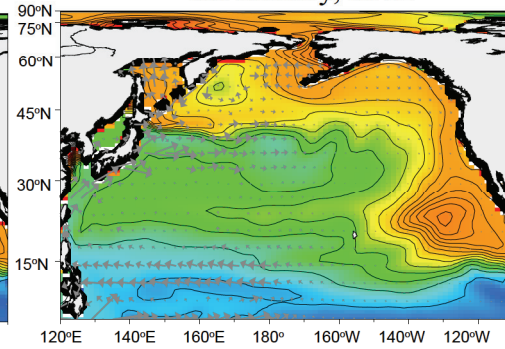
1st January, 1970



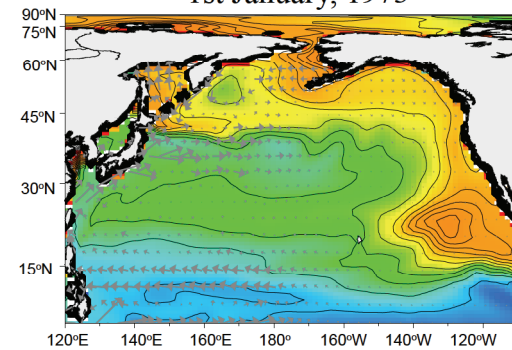
1st January, 1971



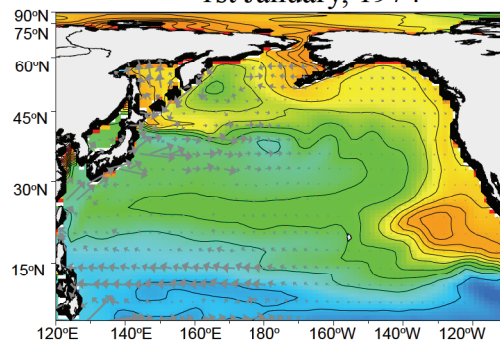
1st January, 1972



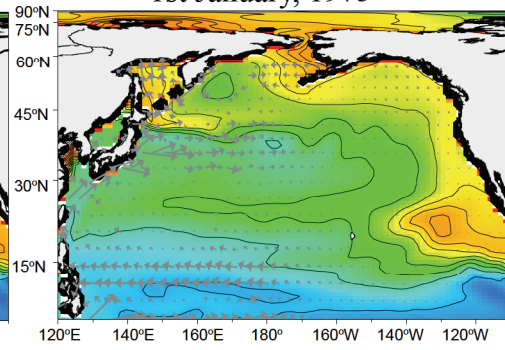
1st January, 1973



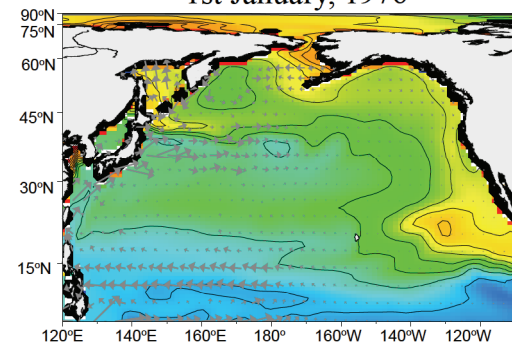
1st January, 1974



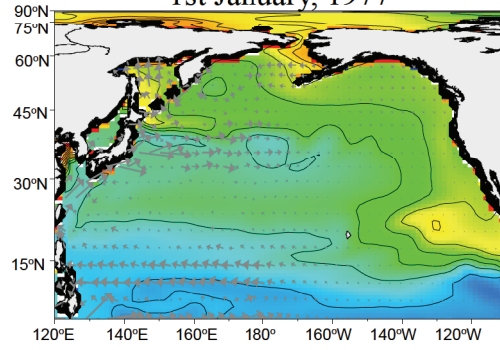
1st January, 1975



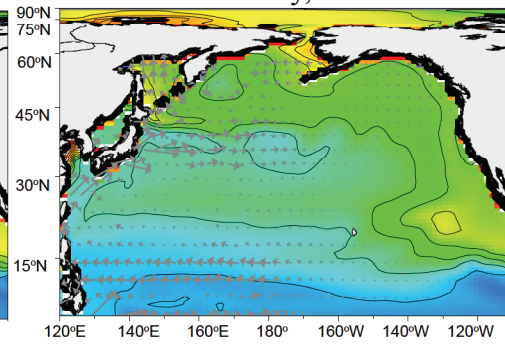
1st January, 1976



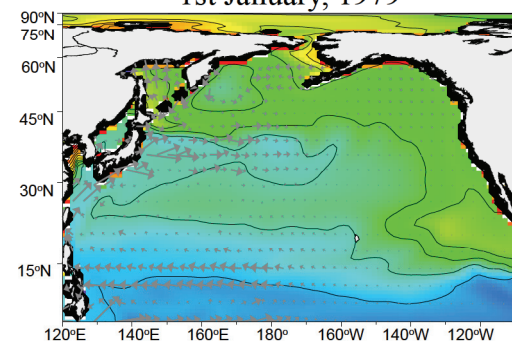
1st January, 1977



1st January, 1978



1st January, 1979



1st January, 1980

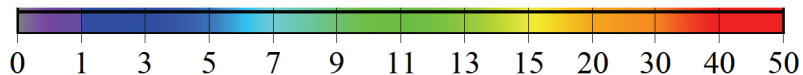
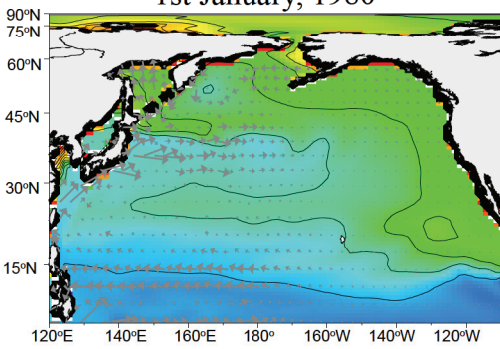


Fig. D1b Horizontal distribution of CRICs in surface seawater from 1970 to 1980. Details are same as for Fig. D1a. It is note that the colour scale is different from Fig. D1a.

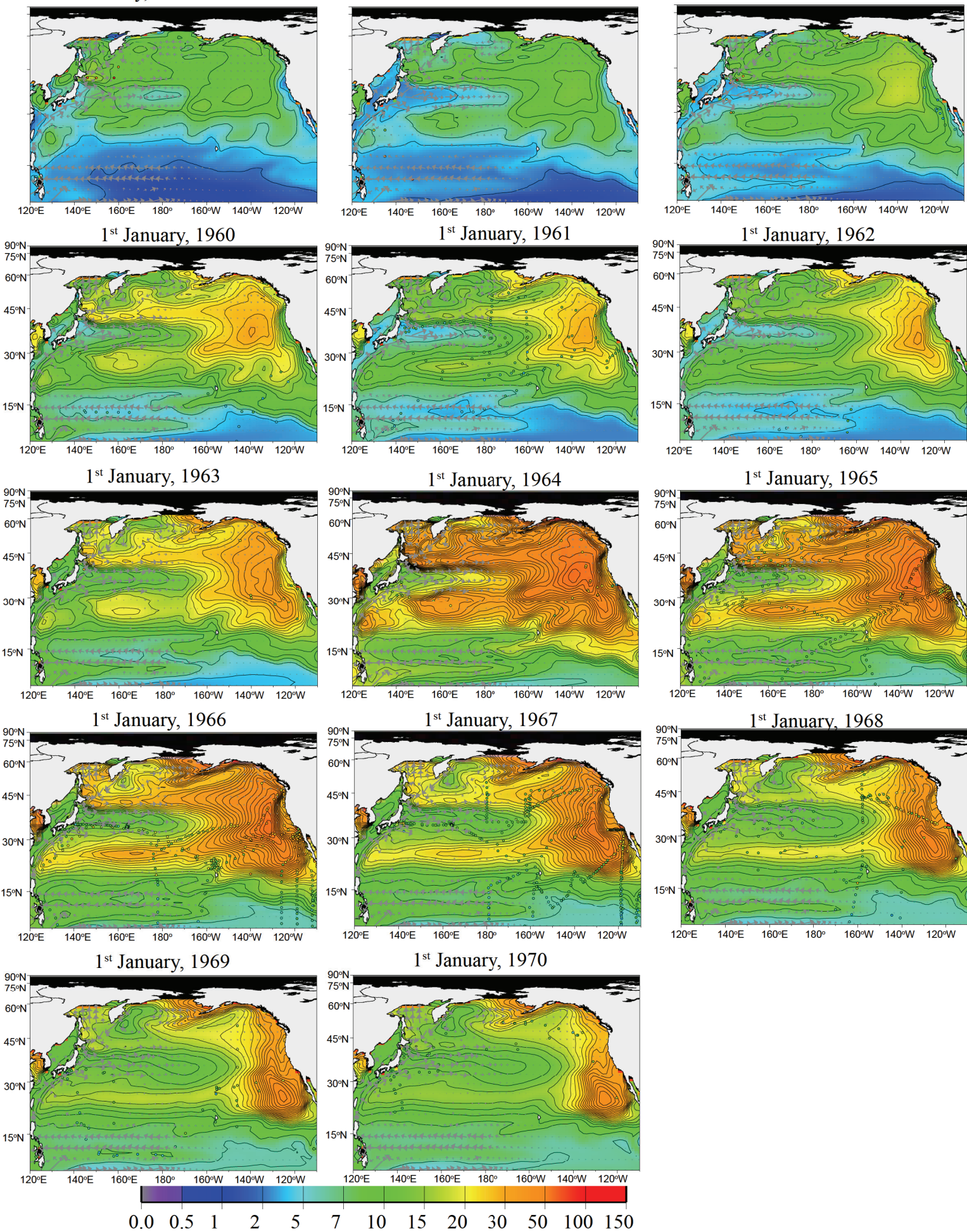


Fig. D2a Horizontal distribution of MRICs in surface seawater from 1957 to 1970. Circles indicate the measurement data. Grey arrow is the climatologically driven ocean surface current. Units are  $\text{Bq m}^{-3}$ .

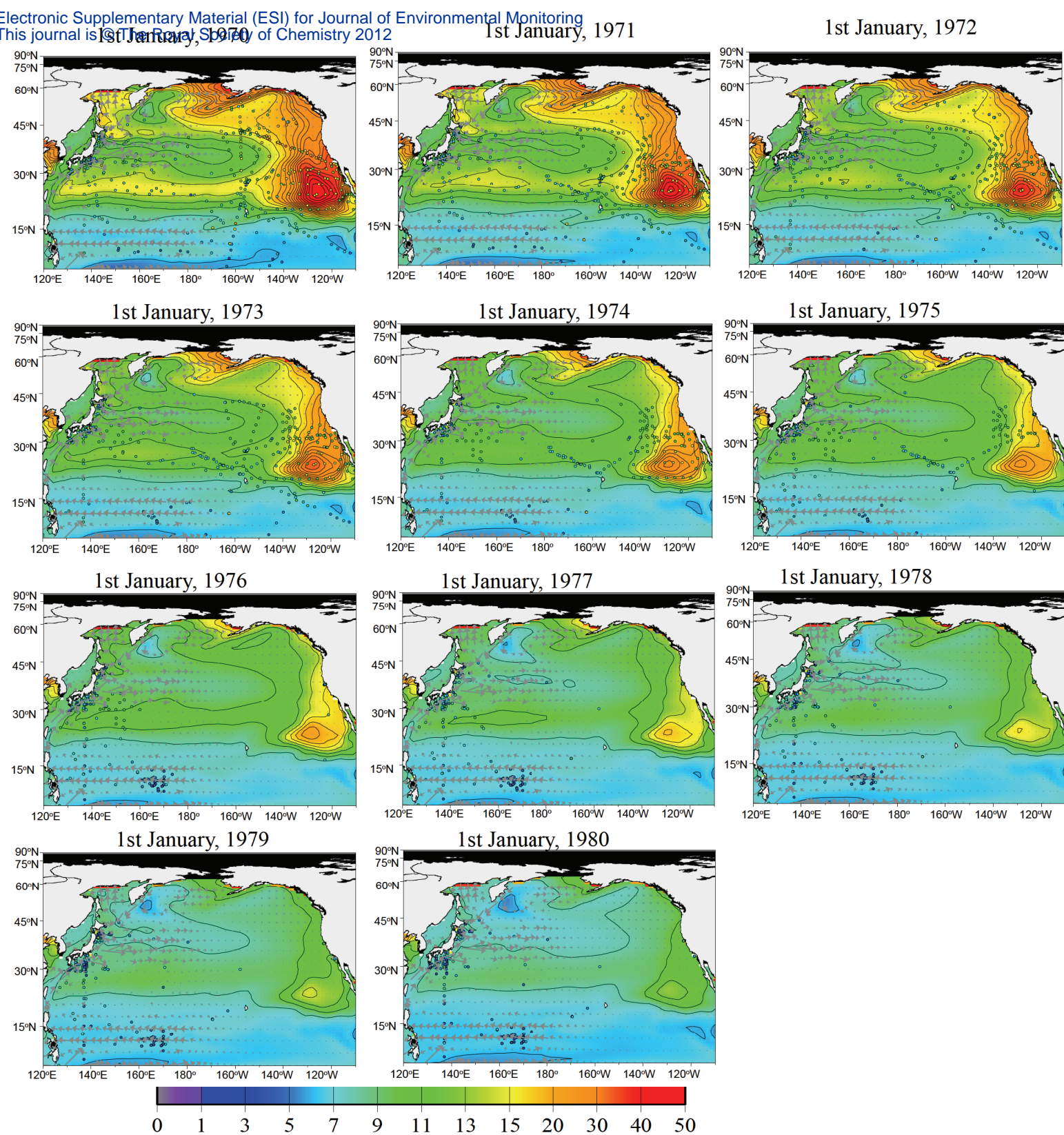
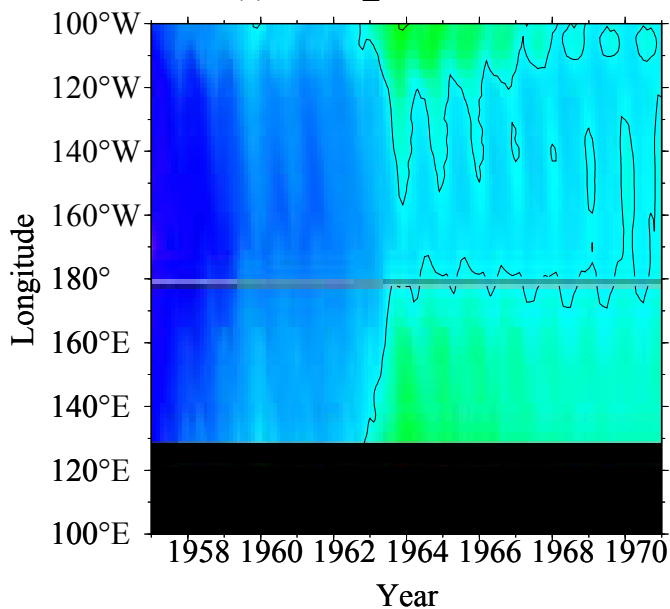
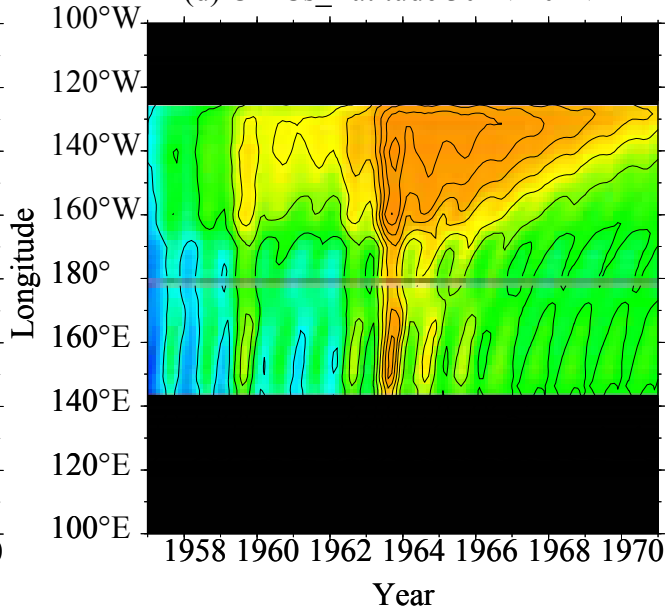


Fig. D2b Horizontal distribution of MRICs in surface seawater from 1970 to 1980.  
Details are same as in Fig. D2a. Note that the colour scale is different from Fig. D2a.

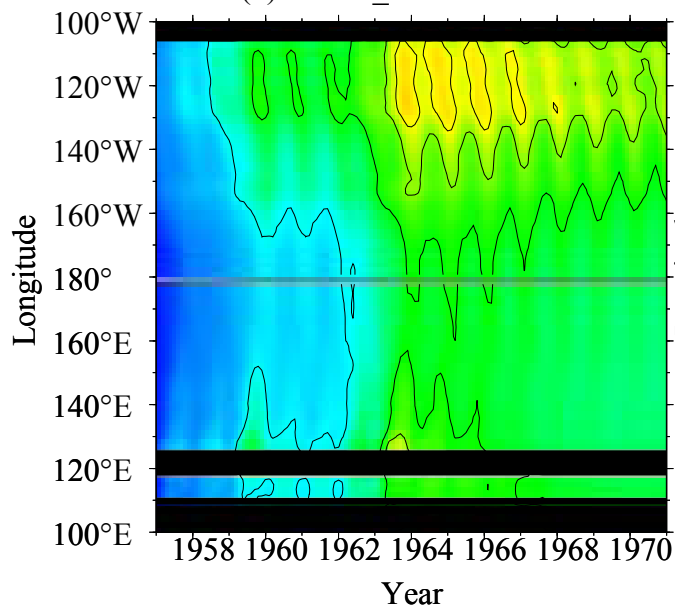
(a) CRICs\_Latitude 0°-10°N



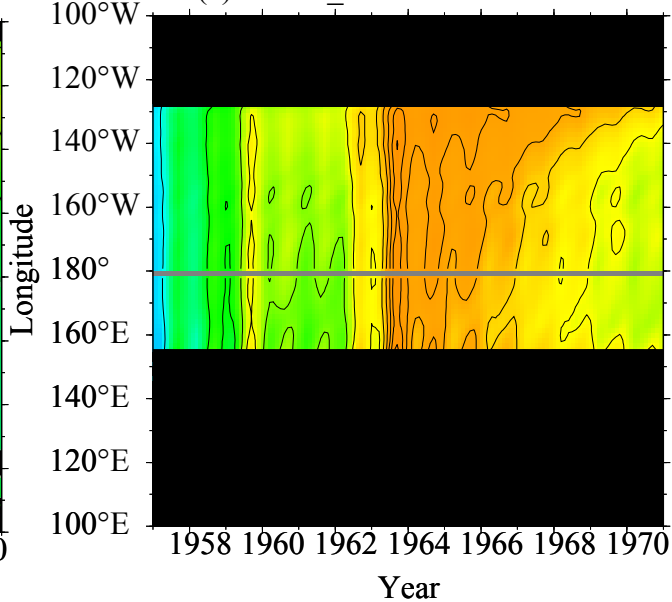
(d) CRICs\_Latitude 30°N-40°N



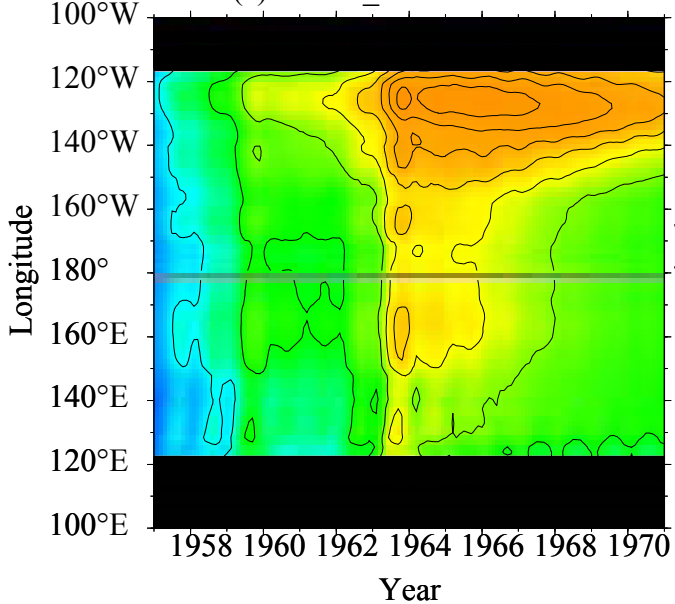
(b) CRICs\_Latitude 10°N-20°N



(e) CRICs\_Latitude 40°N-50°N



(c) CRICs\_Latitude 20°N-30°N



(f) CRICs\_Latitude 50°N-60°N

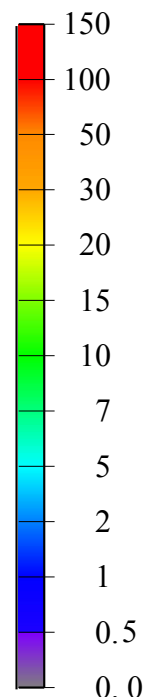
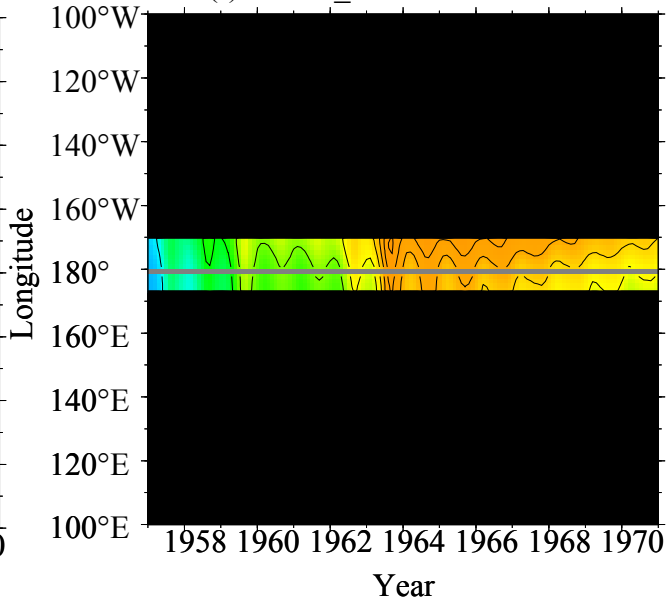
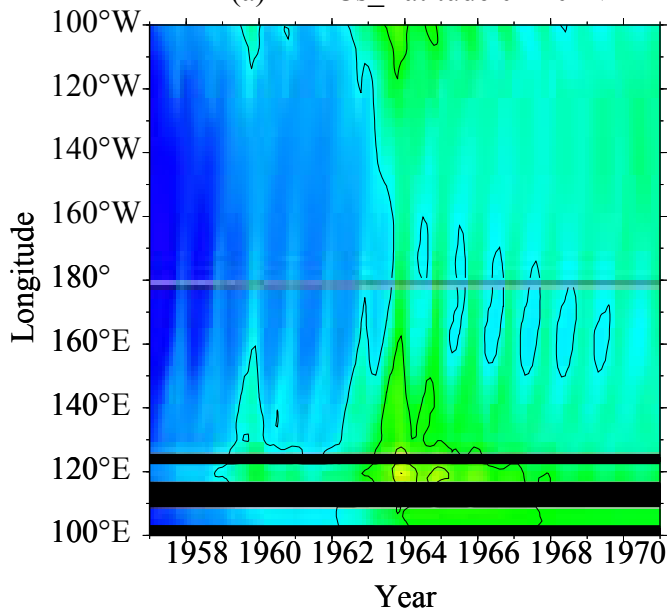
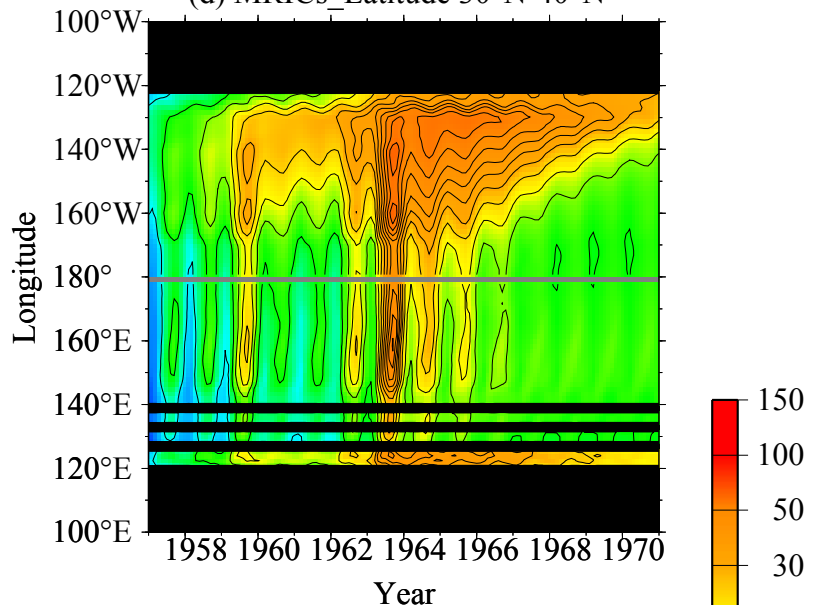


Fig. D3a Time -longitude cross sections of CRICs in the North Pacific Ocean. The units of the colour scale are Bq m<sup>3</sup>.

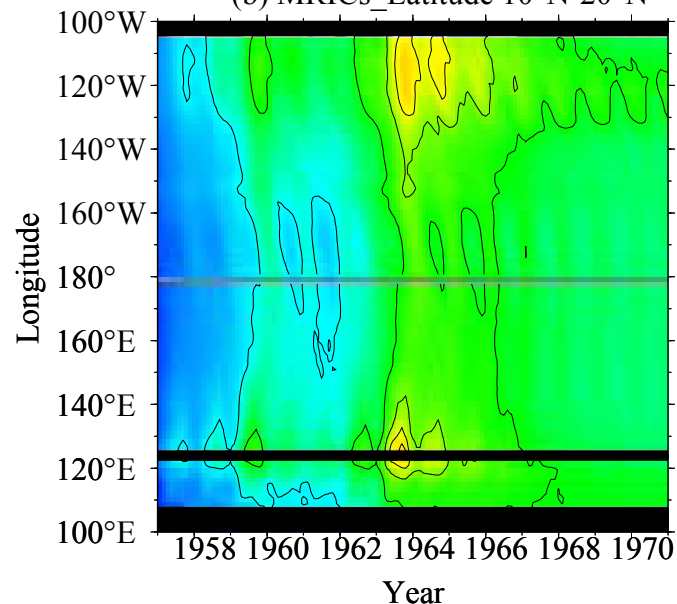
(a) MRICs\_Latitude 0°-10°N



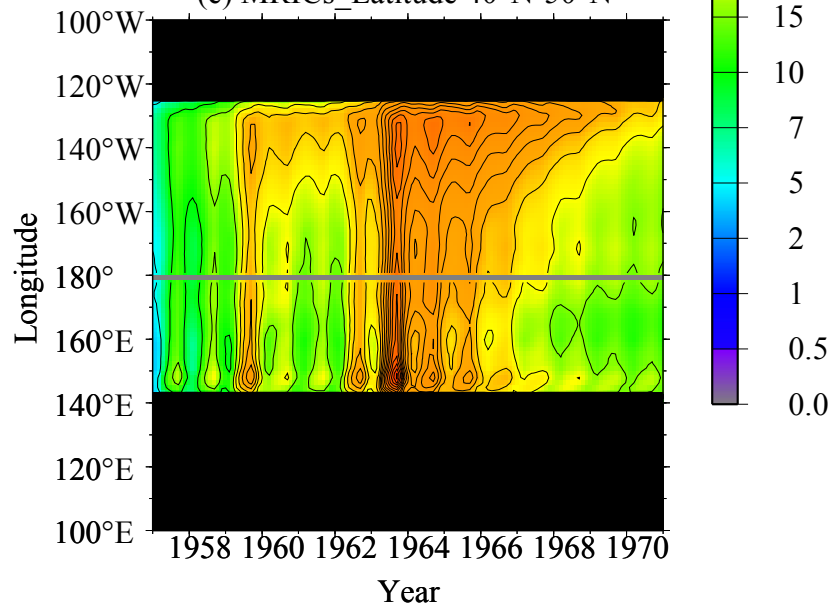
(d) MRICs\_Latitude 30°N-40°N



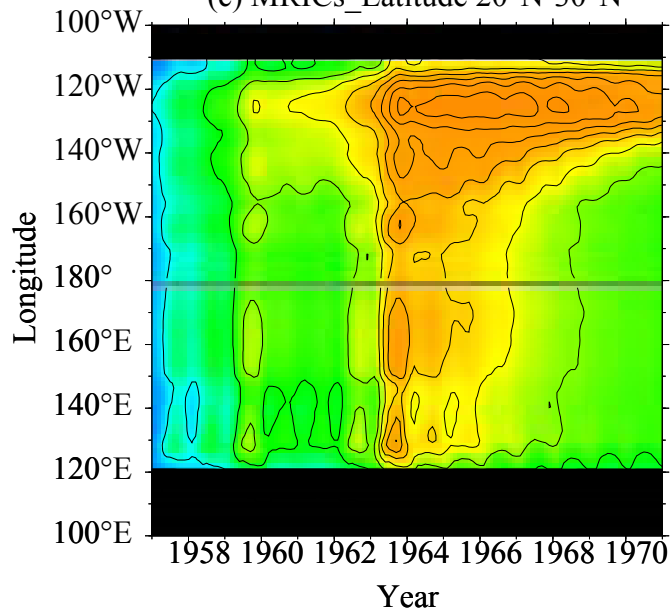
(b) MRICs\_Latitude 10°N-20°N



(e) MRICs\_Latitude 40°N-50°N



(c) MRICs\_Latitude 20°N-30°N



(f) MRICs\_Latitude 50°N-60°N

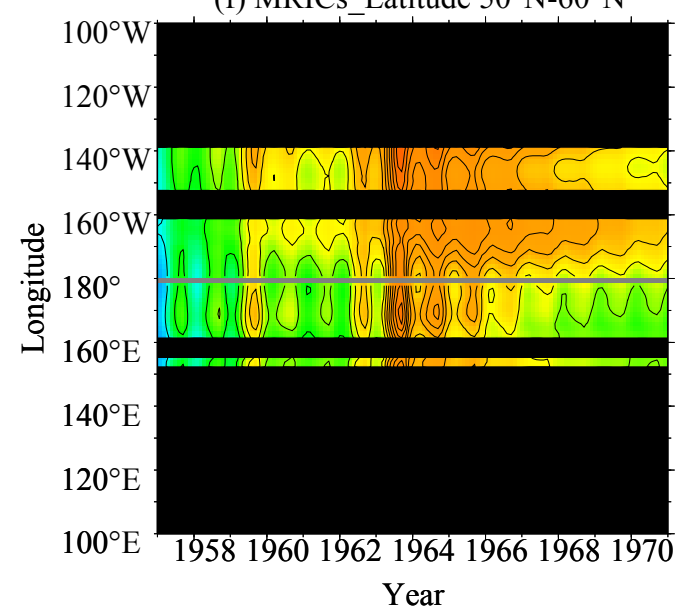


Fig. D3b Time-longitude cross sections of MRICs in the North Pacific

Ocean. The units of the colour scale are  $\text{Bq m}^3$ .

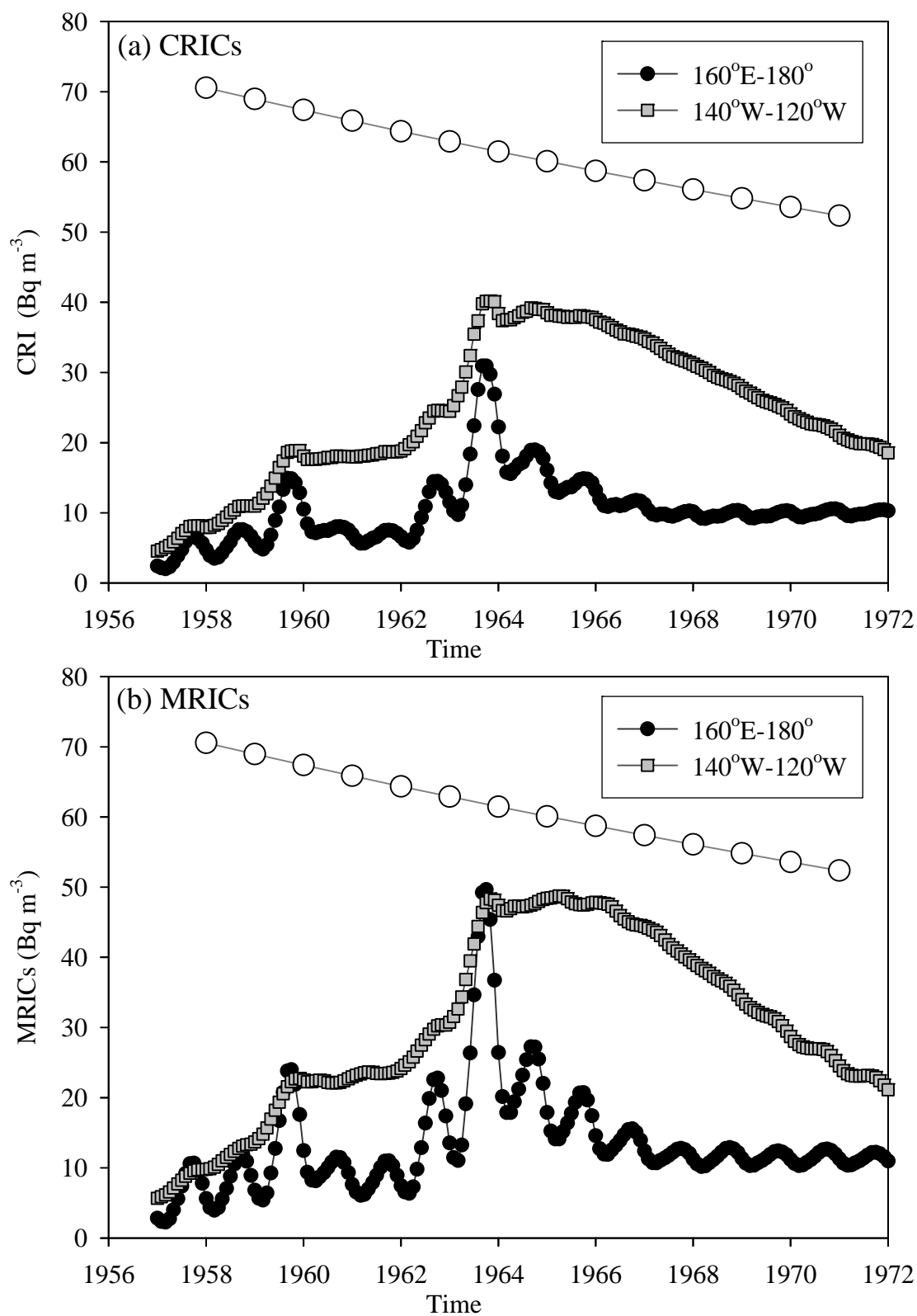


Fig. D4 Temporal variations of simulated <sup>137</sup>Cs concentration at 30°N-40°N along 160°E-180° and 140°W-120°W. The white circles with the line indicate the radioactive decay of <sup>137</sup>Cs. (a) CRICs, (b) MRICs.

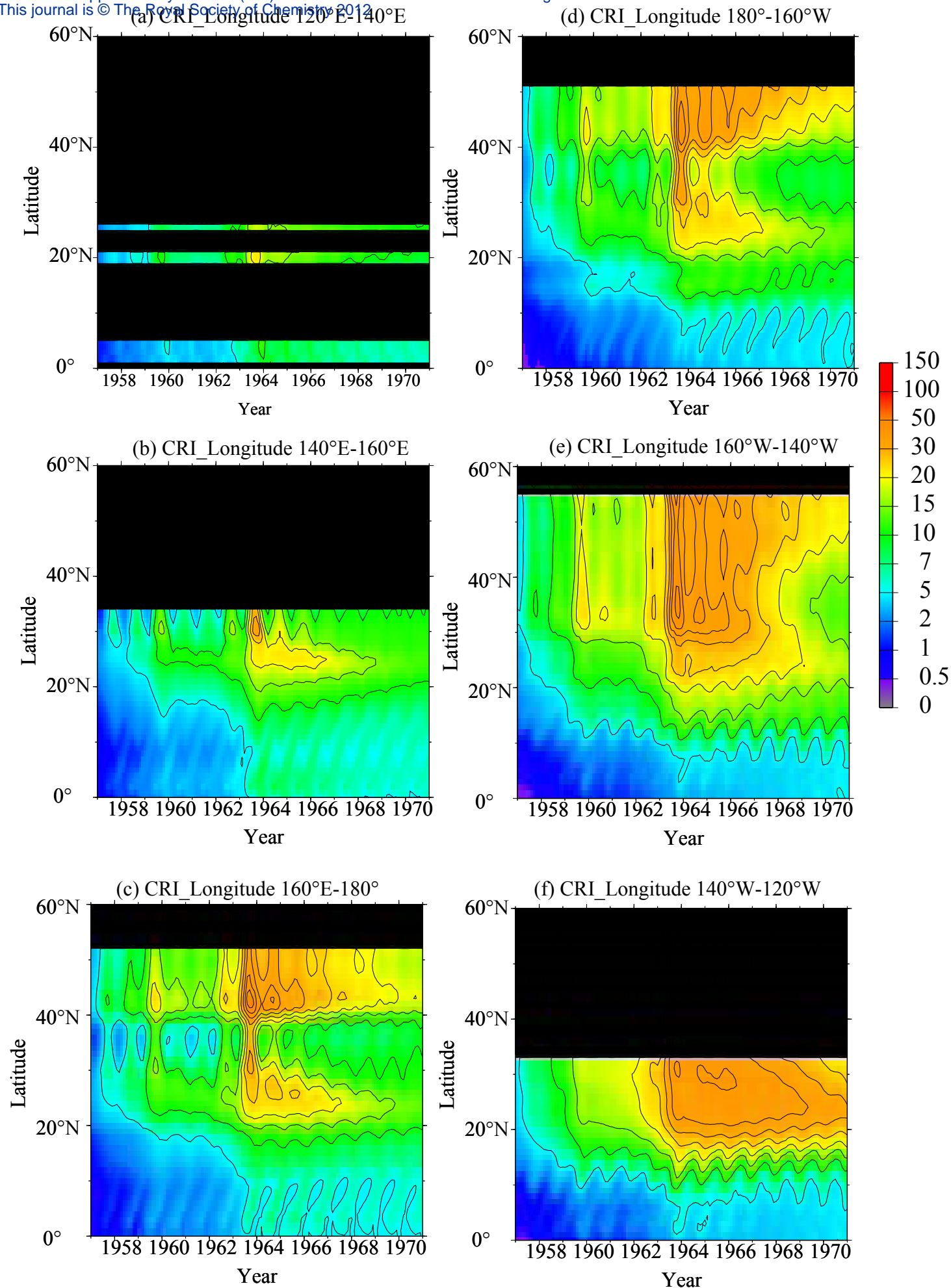


Fig. D5a Time-latitude cross sections of CRICs in the North Pacific Ocean. The units of the colour scale are  $\text{Bq m}^{-3}$ .



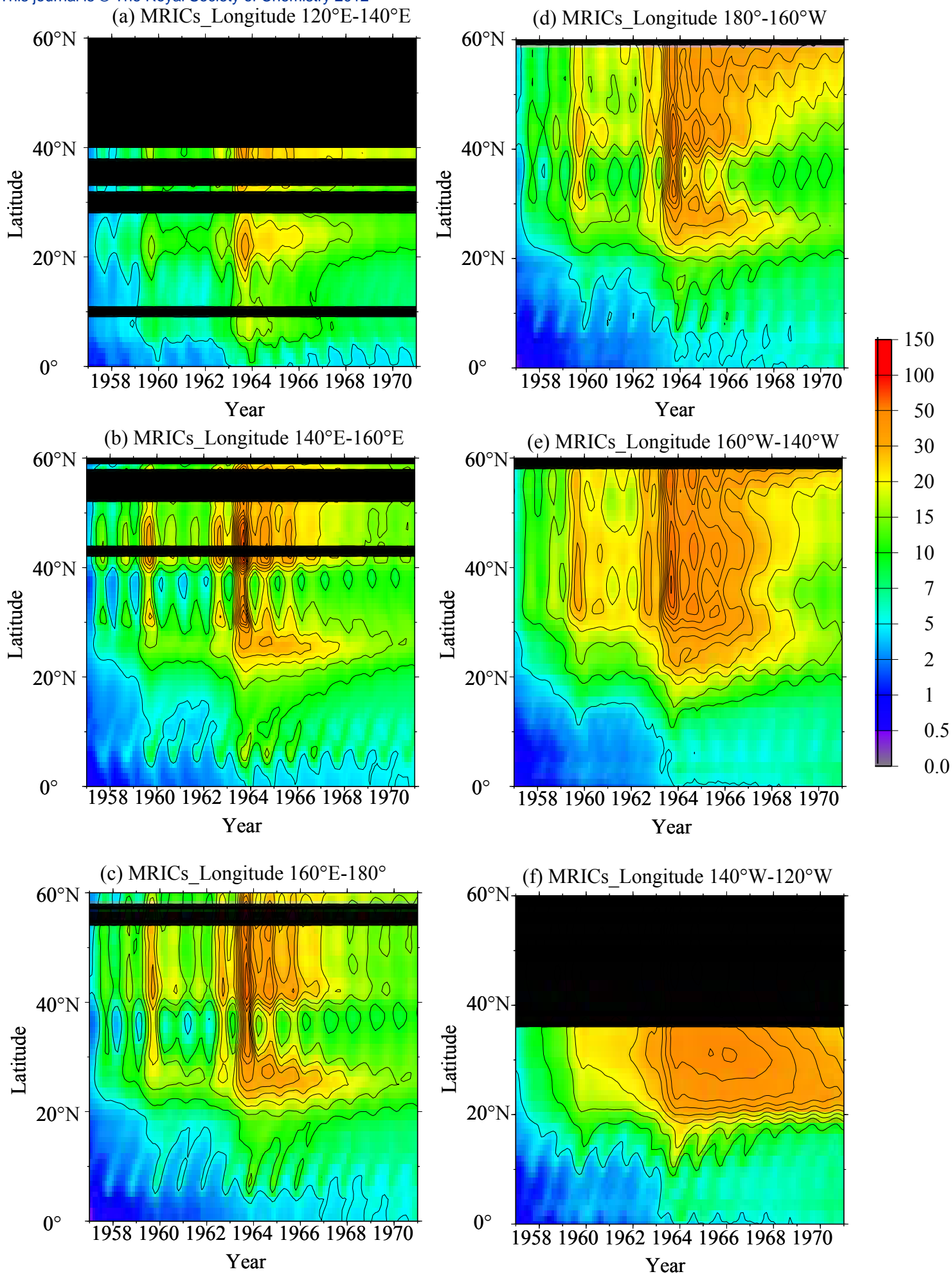


Fig. D5b Time-latitude cross sections of MRICs in the North Pacific Ocean. The units of the colour scale are  $\text{Bq m}^{-3}$ .

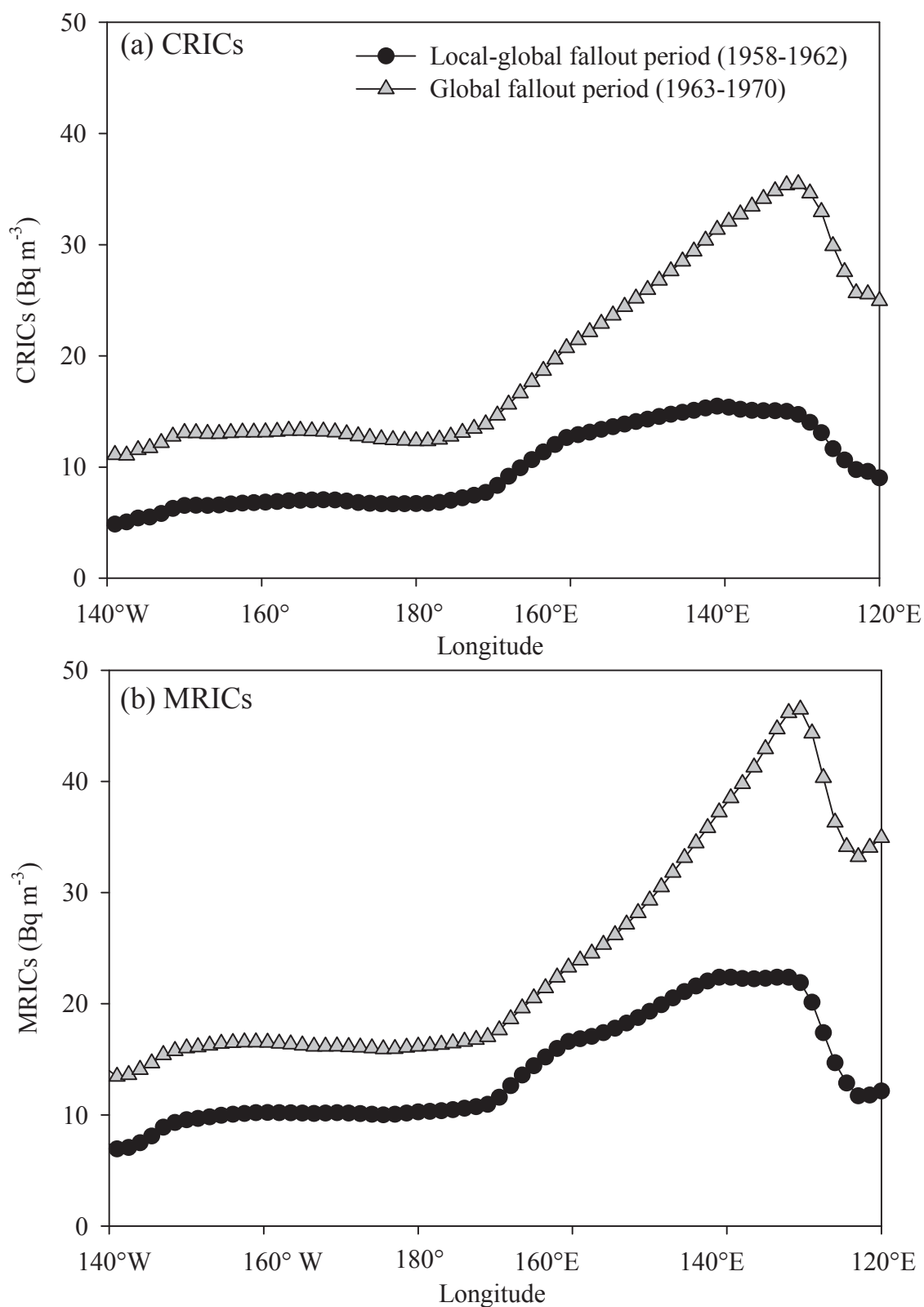


Fig. D6 Longitudinal distributions of simulated  $^{137}\text{Cs}$  concentration at 30°N-40°N due to local-global fallout (1958-1962) and global fallout (1963-1970). (a) CRICs, (b) MRICs.

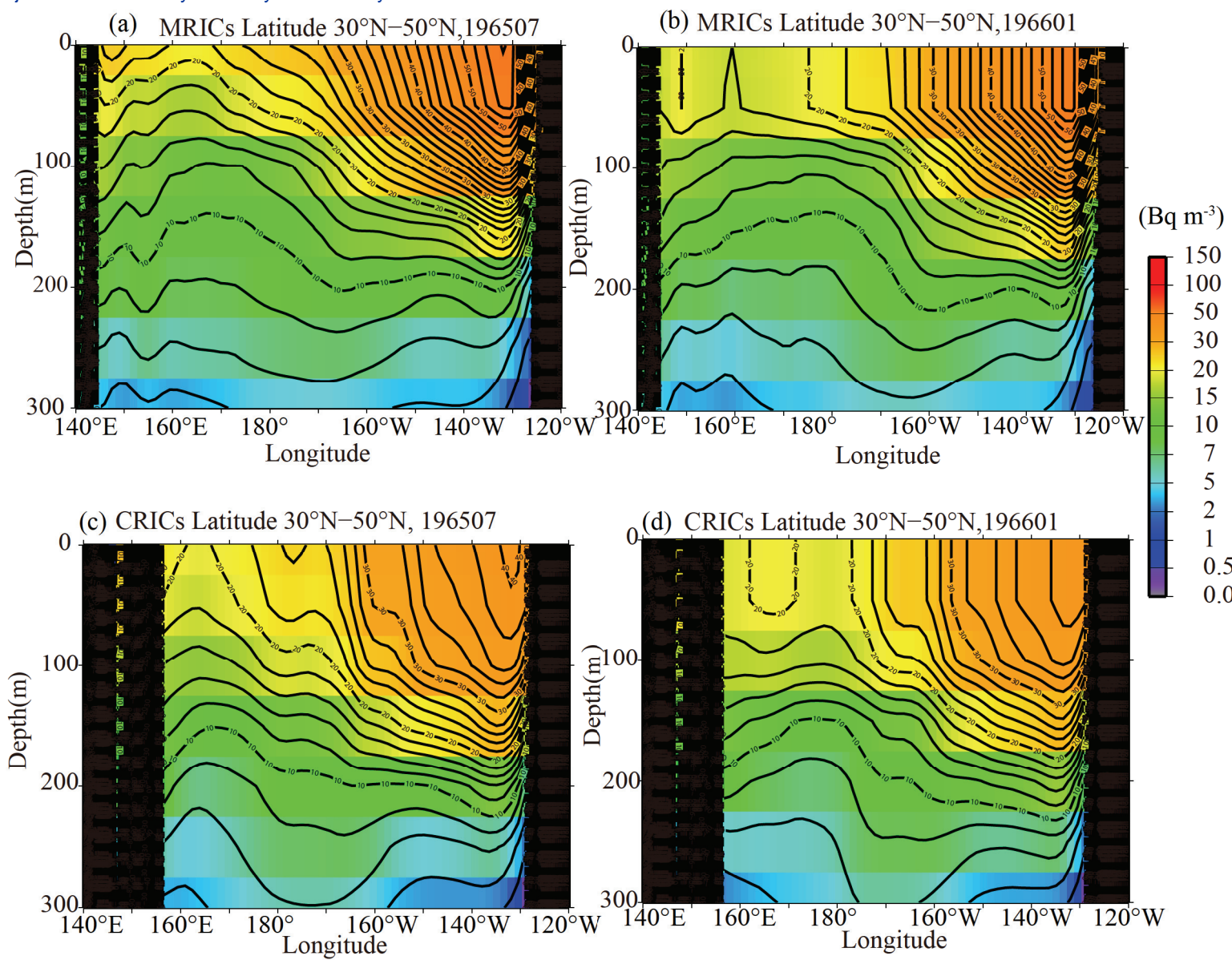


Fig. D7 Comparison of seasonal differences in longitude-depth cross sections of MRICs and CRICs. (a) MRICs, July 1965, (b) MRICs, January 1966, (c) CRICs, July 1965, (d) CRICs, January 1966.