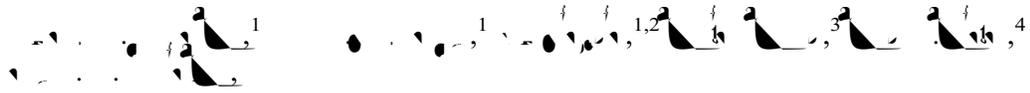


Southern Ocean control of silicon stable isotope distribution in the deep Atlantic Ocean



Brzezinski et al., 2002²
Matsumoto et al., 2002 Crosta et al., 2007.
 δ^{30}
Wüst, 1935 Reid, 1989
Schmitz and McCartney

64 318 64 319 Pelagia (-
2010). Polarstern (/3) 0.45 μ -
(Polarstern), 0.45 μ

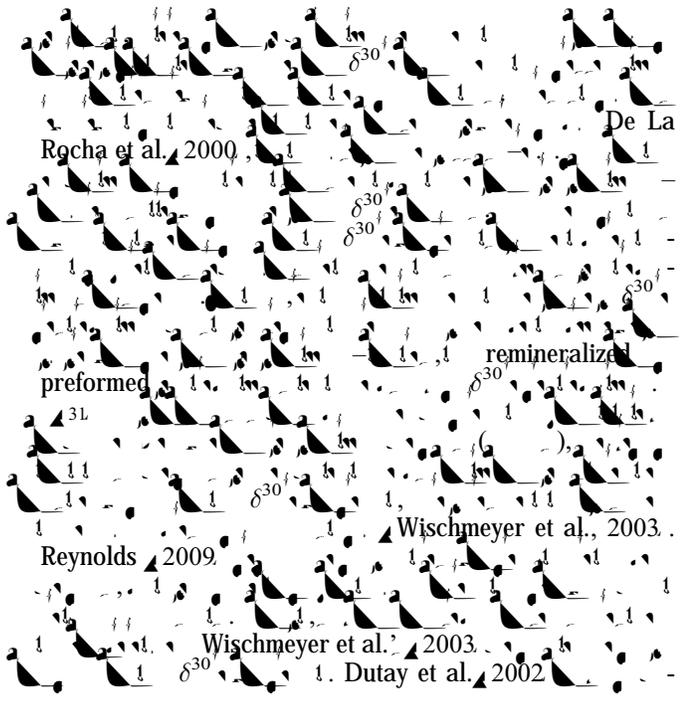
$$\Delta \delta^{30}_{msr-mi}$$

$$\Delta \delta^{30}_{msr-mi} = \delta^{30}_{measured} - \delta^{30}_{mix}$$

$$\Delta \delta^{30}_{msr-mi} = \left(\delta^{30}_{measured} - \delta^{30}_{mix} \right)$$

Reynolds (2009), Toggweiler (1999),

(~30 μ



De La Rocha et al., 2000

De La

remineralized preformed

remineralized

Wischmeyer et al., 2003

Wischmeyer et al., 2003

Wischmeyer et al., 2003

Wischmeyer et al., 2003

Dutay et al., 2002

... (1991), ... Limnol.

