Evaluating the Effect of Seawater Salinity on Foraminiferal δ^{18} O

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Foraminiferal oxygen isotopic ratio has long been used to infer past temperature and salinity changes. The relationship between seawater temperature, salinity and foraminiferal δ^{18} O is species specific. Though the change in foraminiferal δ^{18} O with varying seawater temperature has been well documented, the effect of salinity is not well constrained. Here, we have analyzed δ^{18} O of planktic foraminifera *Globigerinoides ruber* from surface samples collected from the northern Indian Ocean. The samples were collected from locations that have nearly same seawater temperature, but differing salinity. The study shows that seawater salinity significantly affects the foraminiferal stable oxygen isotopic ratio. Additionally, the effect of dissolution on δ^{18} Oforam is also evaluated.