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Overview of Naus et al. (2018)

This manuscript analyzes ground water salinity variations in southwestern Bangladesh using geological reconstruction, lithological sampling and modeling. The manuscript addresses a very important issue of water resource problem that the southwestern Bangladesh currently facing. According to the script ground water salinity mostly depends on the surface elevation. In the higher lying area with a thin surface clay layer always have a clear pattern of fresh ground water which stored by directly infiltration or via rainfed pond. The fresh ground water is bordered by brackish-saline water at greater depth under the higher area. On the other hand, lower area often flooded by tides and tidal surges and in the direction of the adjacent lower area saline ground water is found only at relatively shallow depth below aqua cultural ponds. So, here we can find that it is possible to clear the pattern in ground water salinity by using salinity data, PHREEQC-interpreted cation exchange data and to identify the hydrological process and geographical and geological control. Thickness, relative elevation and land used are the most common geographical controlling factor in which the ground water salinity depends.

Fig. 1.