

Point – 1:

Parameters	Hooghly	Sundarbans	Reference
Nutrients (postmonsoon)	DIN: 14.72 ± 1.77 to 27.20 ± 2.05 μM DIP: 1.64 ± 0.23 to 2.11 ± 0.46 μM DSi: 77.75 ± 6.57 to 117.38 ± 11.54 μM	DIN: 11.70 ± 7.65 μM DIP: 1.01 ± 0.52 μM DSi: 75.9 ± 36.9 μM	Biswas et al. (2004) Mukhopadhyay et al. (2006)
Chla (postmonsoon)	Chl-a: 2.35 – 2.79 mgm ⁻³	Chla: 7.88 ± 1.90 mgm ⁻³	Mukhopadhyay et al. (2006), Dutta et al. (2015)
Population density (districts located on banks of the River Hooghly)	North 24 Parganas and Hooghly: 2500 km ² Kolkata: 22000 km ² Howrah: 3300km ² South 24 Parganas: 820km ²	No major Cities and town	
Freshwater inflow (postmonsoon)	3070 - 7301 million m ³	No information available	Rudra et al. (2014)

Point – 2:

Conservative $\delta^{13}\text{C}_{\text{DIC}}$ mixing line was calculated using the expression given by Mook and Tan (1991) as given below:

$$\delta^{13}\text{C}_{\text{DIC(CM)}} = \frac{\text{Sal}_S [\text{DIC}_F \delta^{13}\text{C}_{\text{DIC(F)}} - \text{DIC}_M \delta^{13}\text{C}_{\text{DIC(M)}}] + \text{Sal}_F \text{DIC}_M \delta^{13}\text{C}_{\text{DIC(M)}} - \text{Sal}_M \text{DIC}_F \delta^{13}\text{C}_{\text{DIC(F)}}}{\text{Sal}_S (\text{DIC}_F - \text{DIC}_M) + \text{Sal}_F \text{DIC}_M - \text{Sal}_M \text{DIC}_F}$$

Here, ‘Sal’ denotes salinity, the suffixes CM, F, M and S denote conservative mixing, freshwater end member, marine end member and sample, respectively. $F_F = \text{freshwater fraction} = 1 - (\text{Sal}_S / \text{Sal}_M)$ and $F_M = \text{marine water fraction} = (1 - F_F)$. This is a commonly used expression for such studies and has been followed by many other workers (Samanta et al. (2015); Bouillon et al. (2003))