

Climate precursor for cholera outbreaks over Bengal Delta region

*Tomomichi Ogata¹, Marie-Fanny Racault, Masami Nonaka¹, Swadhin Behera¹

1. JAMSTEC Application Lab

In this study, we investigated climate precursor of the SWM over the northern Bay of Bengal (BoB) with a lagged correlation analysis among SST, rainfall anomalies over India, and SWM anomaly over BoB. The results suggest that the positive rainfall anomaly by monsoon-ENSO relationship (i.e. enhanced rainfall over India during La Nina) can increase the turbidity and turbid river discharge over the Bengal Delta. The La Nina signal can be traced back two seasons ahead of March-May season and hence could be a useful predictor. The multiple regression model explains the SWM variability better than single regression cases. However, it should be noted that the monsoon-ENSO relationship is not stable but interdecadal variable.