## Site characteristics of the hypoxic zone of the Northern Gulf of Mexico cruise - 2017

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The MissRhoDia 1 cruise was conducted in the Northern part of the Gulf of Mexico (GoM) in the Mississippi Atchafalaya River system (MARS) on the R/V Savannah from July 19<sup>th</sup> 2017 to August 13<sup>th</sup> 2017. Four stations were investigated on the shelf along a  $\approx$  170 km East-West transect from the river mouth to the open shelf (Fig. 1), while 4 other stations were investigated on the slope (Owings et al., in revision). Except station 2bis at the river mouth (65m), the three other stations were located around the 20m isobaths in and around the reported historical hypoxic zone (Rabalais et al., 2019).



Figure 1: Map of the Louisiana continental shelf showing the location of the 4 sampling stations (2-b, MK, 4 and 5-B) covered by the R/V Savannah in July and August 2017. Stations LUMCON-O2 refers to the seasonal monitoring station maintained by LUMCON with bottom water oxygen measurements (Rabalais et al., 2019), while station (1, 8, 9 in white) refer to Berelson et al. (2019) benthic chamber measurements.

	Cores				Bottom water CTD			
Station	Date	Lat (N)	Long (W)	Depth (m)	Temp. (°C)	Density (kg/dm3, kg/L)	O2 bw (µmol/L)	Salinity (PSU)
St. MK	Jul-26- 2017	28°54.235 N	90°17.992 W	20,3	27,8	1,02	64	35,9
St. 4	Jul-29- 2017	28°47.754 N	90°42.152 W	19,2	28,8	1,02	106,2	35,8
St. 5B	Aug-1- 2017	28°48.455 N	91°20.173 W	15,4	28,8	1,02	17,6	34,2
St. 2b	Aug-6- 2017	28°54.033 N	89°35.417 W	64,5	20,9	1,02	108,8	36,5