# CBP DataHub

https://datahub.chesapeakebay.net/FileDownloads

- Time range: 1990-2019
- ~675,000 records
  - ~515,000 at CBP 144
  - ~150,000 at supplementary sites
- ~102,000 events

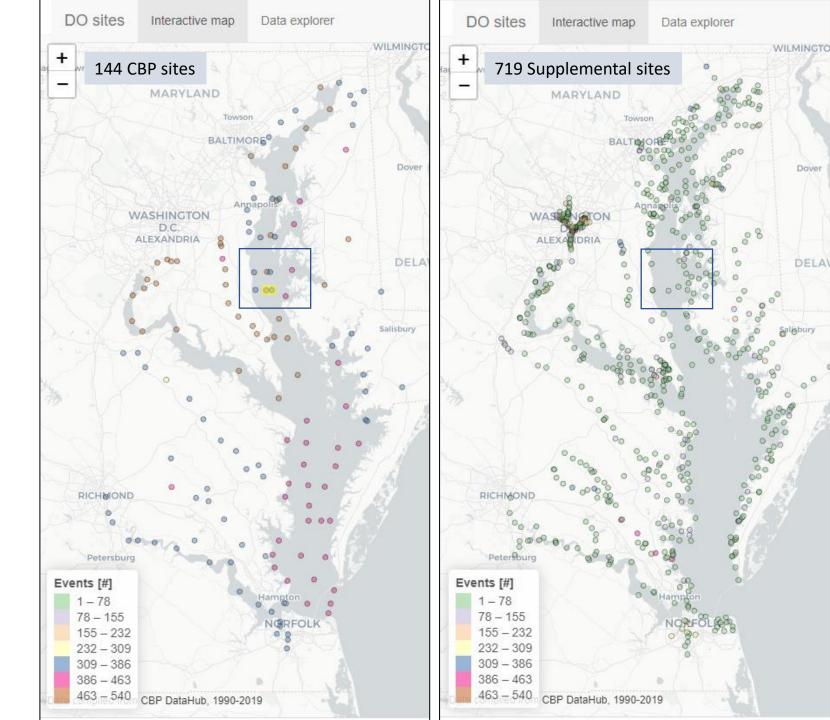
÷	MonitoringLocation All	EventId	SampleDate	SampleTime	TotalDepth <sup>‡</sup>	Depth <sup>‡</sup>	DO ÷	PH <sup>‡</sup>	SPCOND <sup>‡</sup>	WTEMP <sup>‡</sup>	SALINITY <sup>‡</sup>
		All			All	All	All	All	All	All	All
258149	EE2,2	112065	2010-05-11	2010-05-11 10:00:00	12.7	1.0	8.9	8.10	16800	16.3	9.65
258150	EE2,2	112065	2010-05-11	2010-05-11 10:00:00	12.7	2.0	8.9	8.10	16800	16.3	9.65
258151	EE2,2	112065	2010-05-11	2010-05-11 10:00:00	12.7	3.0	8.8	8.10	16800	16.2	9.65
258152	EE2,2	112065	2010-05-11	2010-05-11 10:00:00	12.7	4.0	8.7	8.10	16900	16.3	9.72
258153	EE2.2	112065	2010-05-11	2010-05-11 10:00:00	12.7	5.0	8.4	8.10	17000	16.4	9.78
258154	EE2.2	112065	2010-05-11	2010-05-11 10:00:00	12.7	6.0	8.0	8.00	17300	16.4	9.98
258155	EE2.2	112065	2010-05-11	2010-05-11 10:00:00	12.7	7.0	7.4	8.00	17700	16.4	10.24
258156	EE2.2	112065	2010-05-11	2010-05-11 10:00:00	12.7	8.0	6.5	7.90	18700	16.2	10.89
258157	EE2.2	112065	2010-05-11	2010-05-11 10:00:00	12.7	9.0	6.2	7.80	19000	16.1	11.08
258158	EE2.2	112065	2010-05-11	2010-05-11 10:00:00	12.7	10.0	5.8	7.80	19100	16.1	11.15
258159	EE2.2	112065	2010-05-11	2010-05-11 10:00:00	12.7	11.0	4.7	7.60	20100	15.8	11.80
258160	EE2.2	112065	2010-05-11	2010-05-11 10:00:00	12.7	11.7	4.7	7.60	20900	15.8	12.33

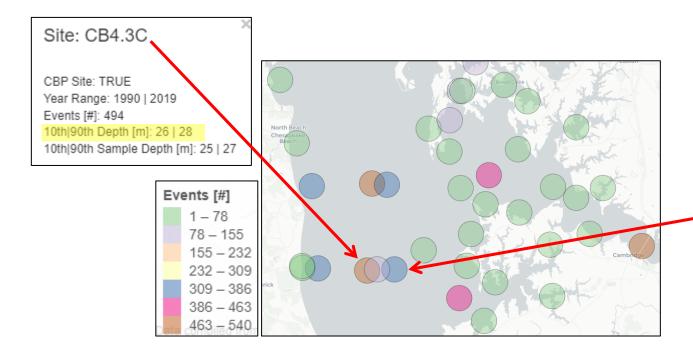


# CBP DataHub

- Time range: 1990-2019
- ~675,000 DO observations
  - ~515,000 obs. at CBP 144
  - ~150,000 obs. at supplementary sites

https://tetratech-wtr-wne.shinyapps.io/CBP\_DO\_Sites/





Site: CB4.3E

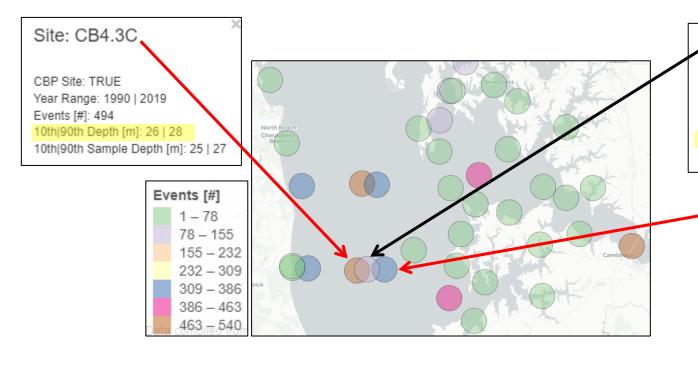
CBP Site: TRUE

Year Range: 1990 | 2019

Events [#]: 365

10th|90th Depth [m]: 22 | 23

10th|90th Sample Depth [m]: 21 | 22



Site: XEF3551

Dominion | Gooses Reef

CBP Site: FALSE

Year Range: 2010 | 2019

Events [#]: 98

10th|90th Depth [m]: 11 | 11

10th|90th Sample Depth [m]: 10 | 11

Site: CB4.3E

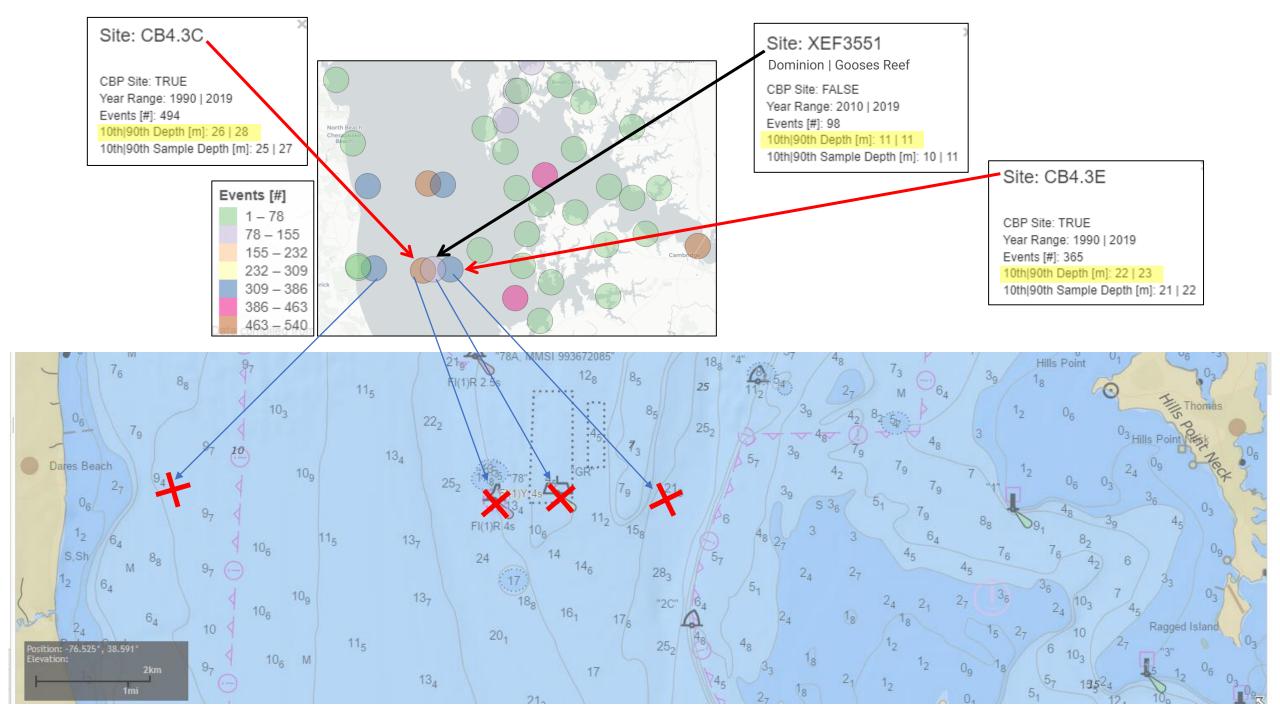
CBP Site: TRUE

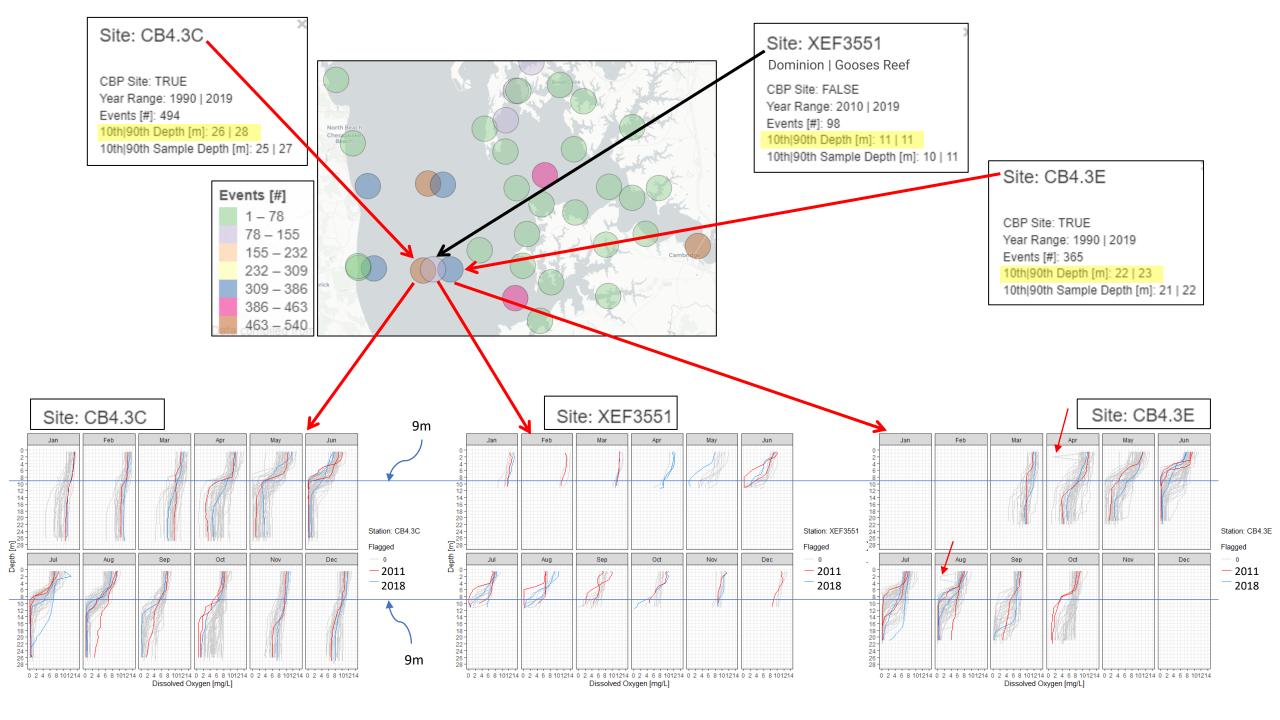
Year Range: 1990 | 2019

Events [#]: 365

10th|90th Depth [m]: 22 | 23

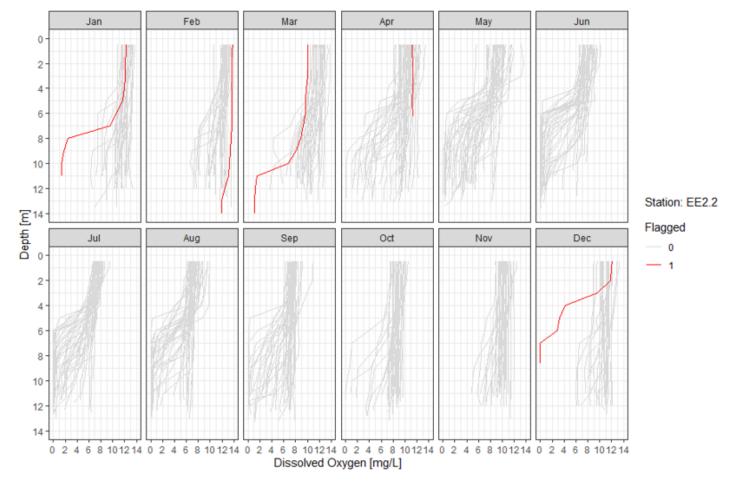
10th|90th Sample Depth [m]: 21 | 22





### EE2.2

- 1) March 5, 1997 (identified in cluster analysis). This event was identified by Dr. Perry as an event with a large residual error when compared to preliminary model results. As shown in Figure 9, the low March DO is supported by corresponding low February DO although the stratification is occurring at a shallower depth. We also note that this event is associated with a relatively deeper maximum sample depth of 14 m albeit not atypical (see Figure 10).
- 2) January 11, 2006 (identified in cluster analysis). This event was also identified by Dr. Perry as an event with a large residual error when compared to preliminary model results. This low DO event is notable given the January time frame. The preceding December event does show a slight decrease in DO relative to the surface waters, but the next event (February 8) does not have samples below 8 m (see Figure 11).
- **3) December 9, 2019 (identified in cluster analysis).** Like the previous example, this is another low DO event in the winter. Figure 12 displays water quality profiles from the preceding events.
- 4) February 14, 1996 and 5) April 3, 1990. These events have maximum sample depths of 14 and 7.2 m, respectively but are otherwise unremarkable.



# Mouth of Little Choptank

# CB5.3

- 1) September 15, 2003. One observation of 0.49 mg/L is reported among values above and below of 4.9 mg/L. We generally see observations of this type as "low hanging" fruit and propose to delete observations of this type.
- **2) April 20, 1998 (identified in cluster analysis).** The DO profile on this day represents an "earlier than normal" reduced dissolved oxygen environment that is more typical of May. Nevertheless, a more detailed examination of the water quality profiles from March 23—October 13, 1998 (see Figure 4) show a nominal progression of salinity and dissolved oxygen over time.
- 3) June 19, 1995 and 4) November 18, 1996. The maximum sample depths associated with these June and November events are 29 and 21 m, respectively. Theses depths are unusual for this station (see Figure 5) where the typical maximum sample depth is typically 25—26 m and the reported total depth is 26—28 m. One possible explanation is that both observations are from the early part of the data record and cruises might have been more likely to have drifted to deeper or more shallow channels. When viewed with other events in the same time period (+/- a few months), both events appear plausible (see Figure 6 and Figure 7).

