

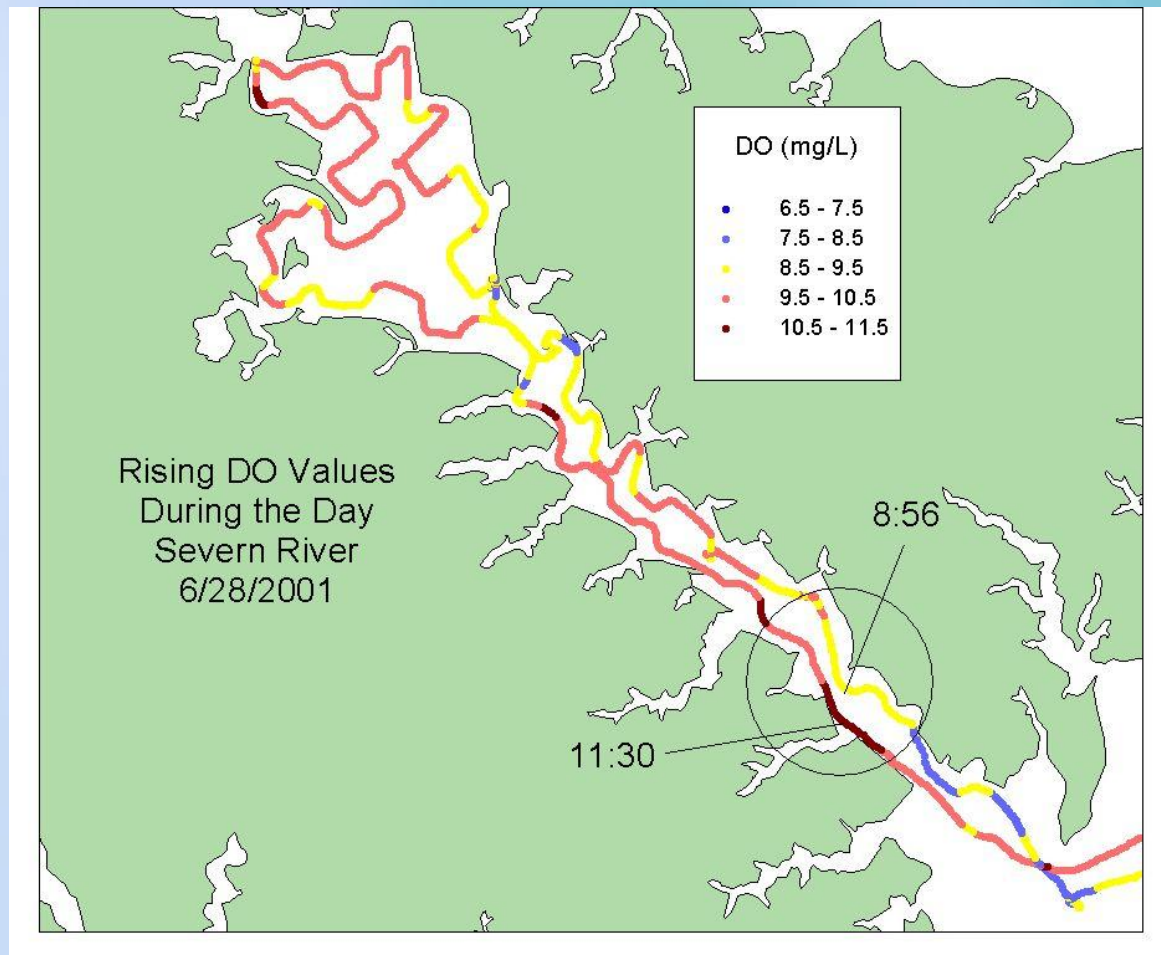


Review of Water Quality Mapping Dissolved Oxygen Temporal Standardization

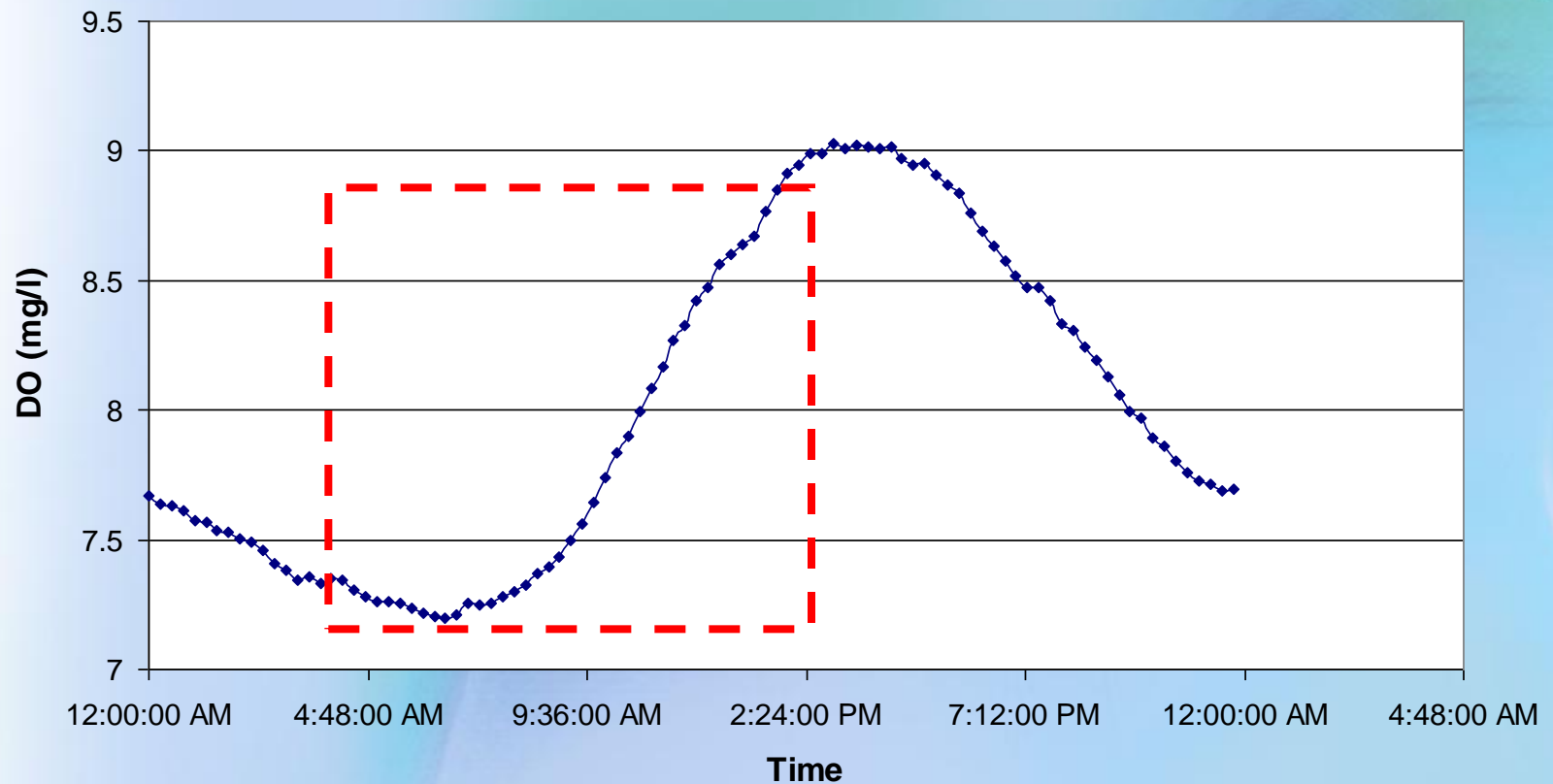
**Mark Trice
Maryland DNR**

**Larger presentation originally shown to CBP on January 30, 2006
Subset of slides shown here May 7, 2013**

Time of Day Influences

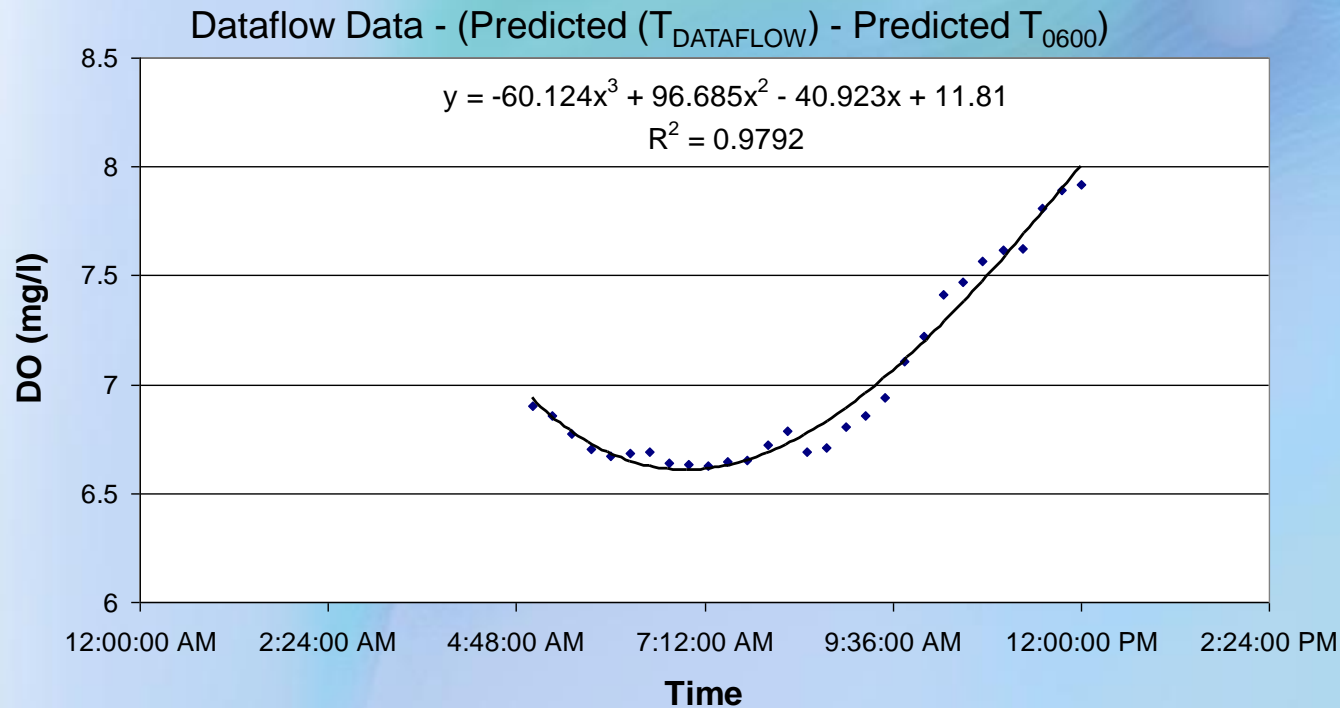


Time of Day Averaged 2001 Continuous Monitoring DO April 15 - October 31



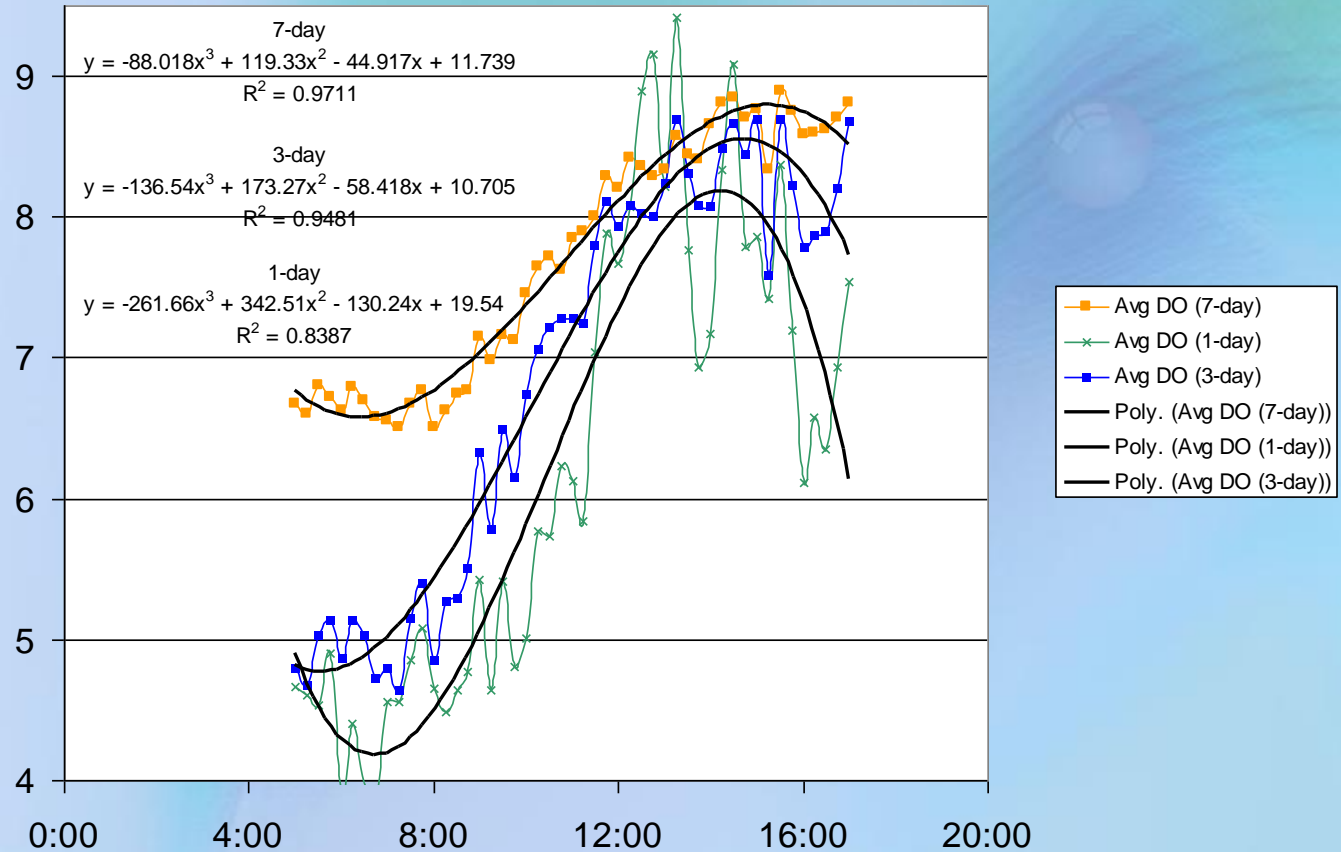
Correcting for Time of Day in Dataflow DO data

- Average 15-minute intervals of Continuous Monitoring DO data from a 3-day period surrounding a DATAFLOW cruise.
- Perform 3rd-order polynomial regression of averaged continuous monitoring DO data from 5am to 1-hr after DATAFLOW cruise.
- Use regression equation to obtain time-based correction factor for DATAFLOW data. DATAFLOW data corrected to minimum.

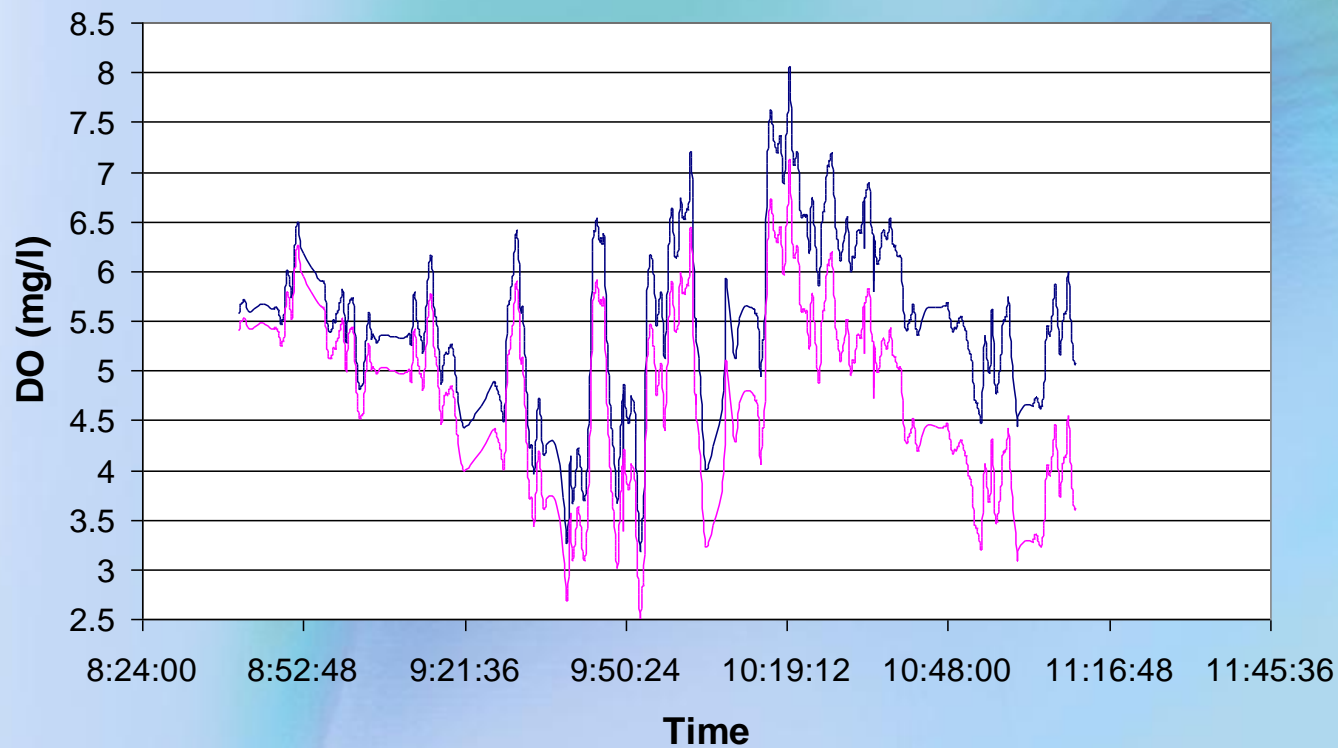


Dissolved Oxygen

Why a three day window?

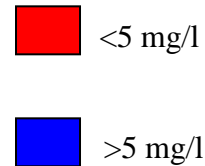
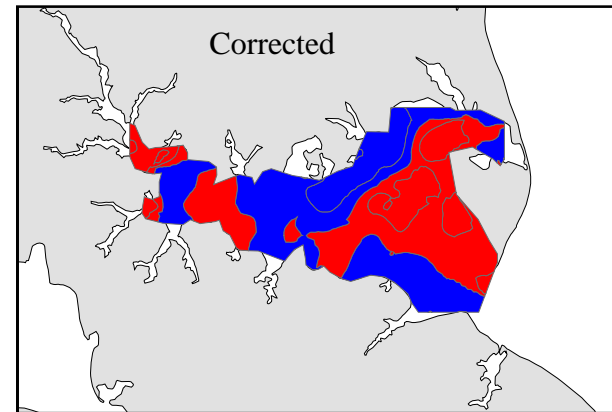
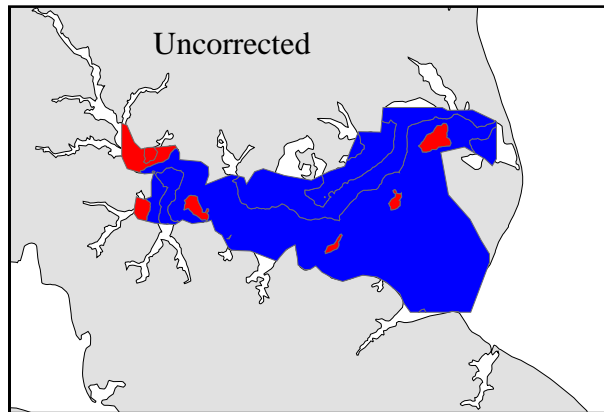


Corrected vs Non-Corrected Data



Corrected vs Non-Corrected Spatial Data

Minimum DO Cruise



08/22/01 Magothy River

