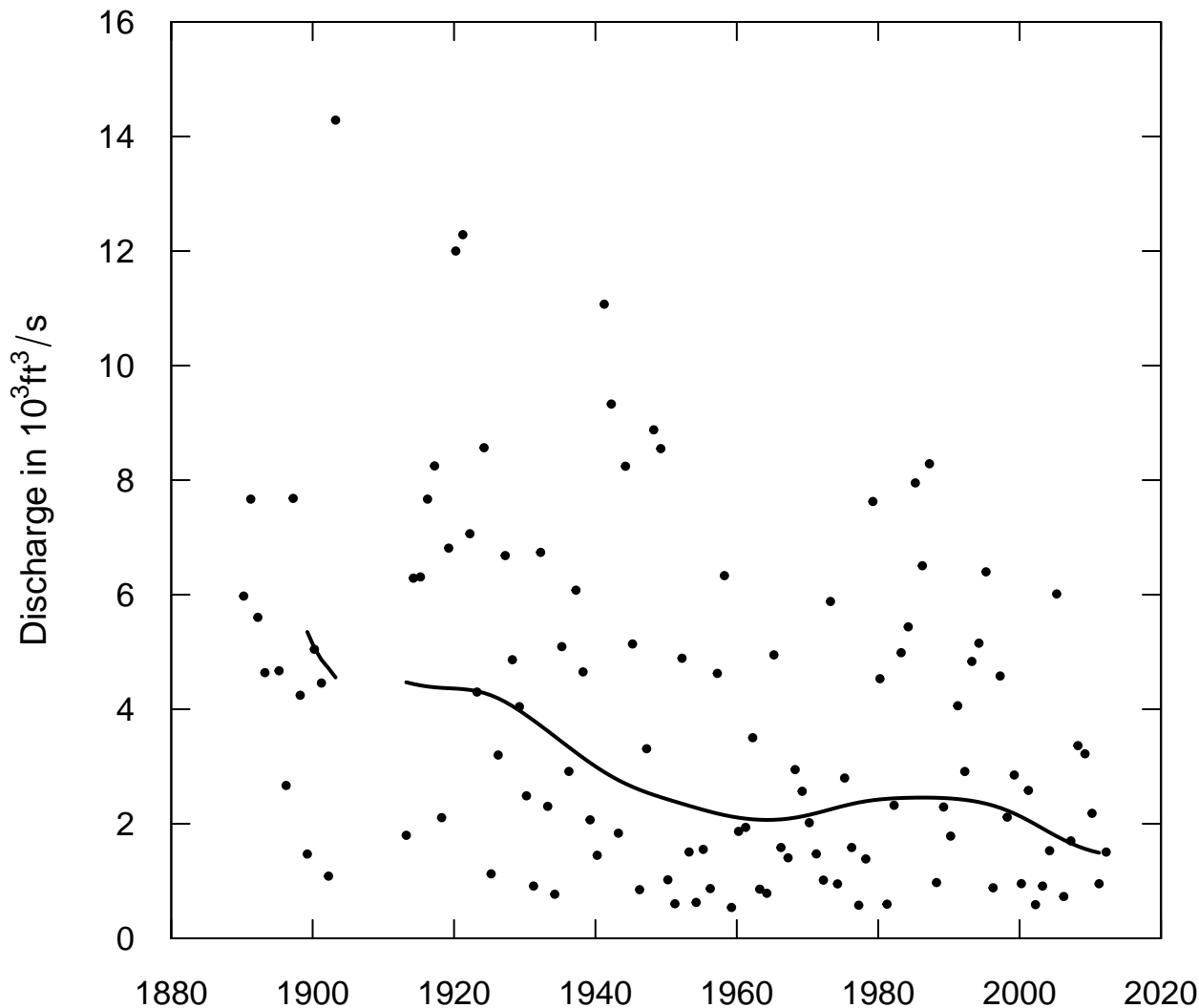
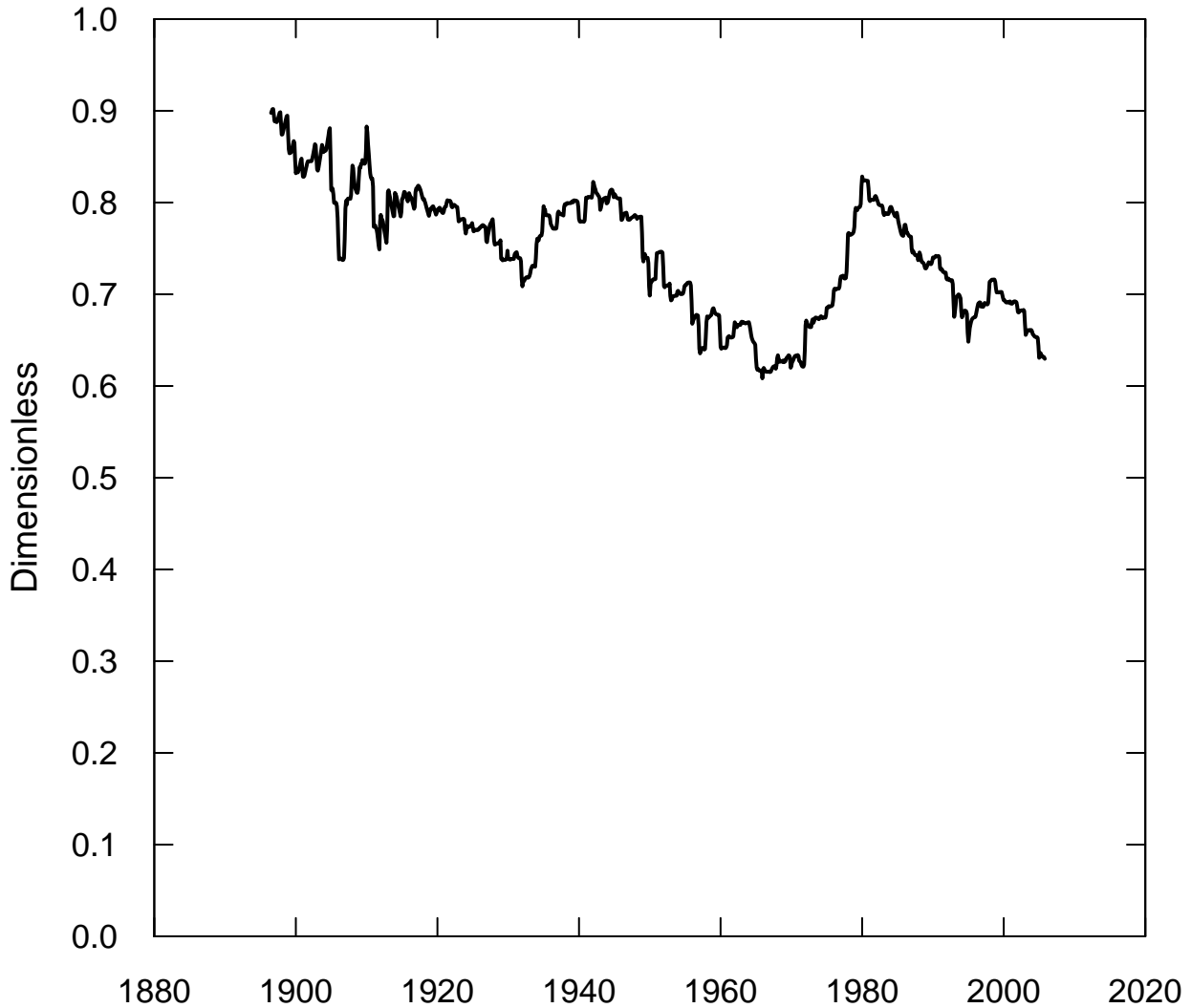


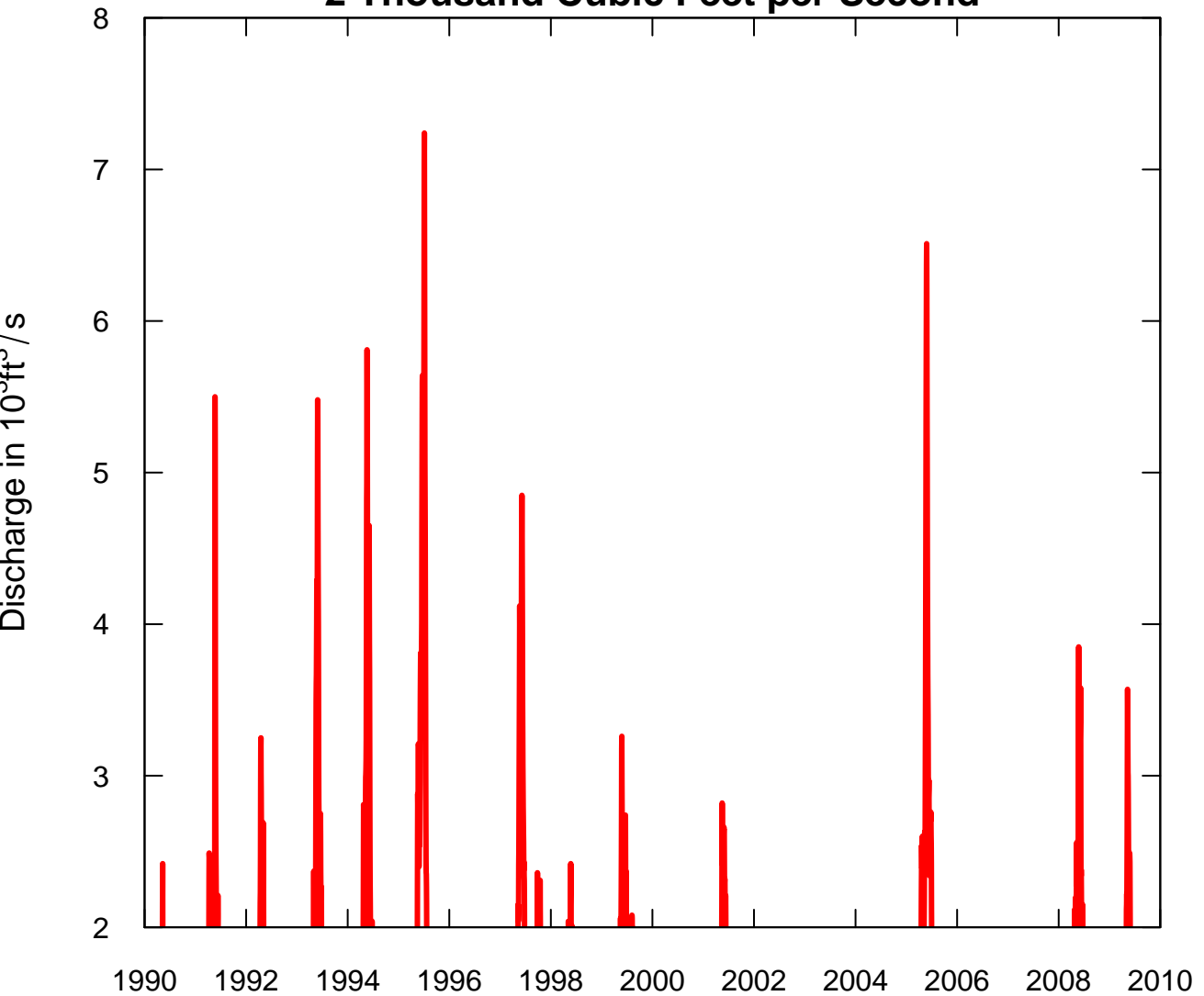
Rio Grande at Embudo, NM  
Water Year  
7-day maximum



**Rio Grande at Embudo, NM**  
**Water Year**  
**Discharge variability: Standard Deviation of Log(Q)**



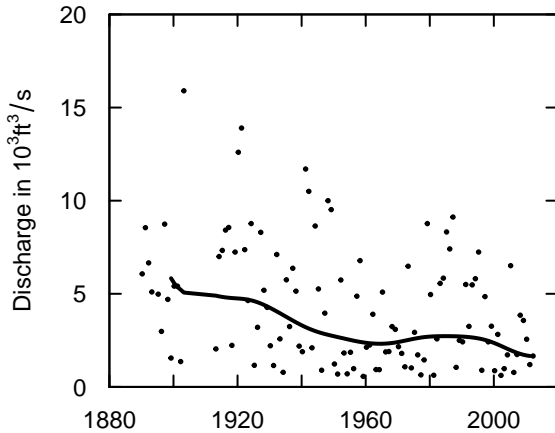
**Rio Grande at Embudo, NM**  
**Daily discharge above a threshold of**  
**2 Thousand Cubic Feet per Second**



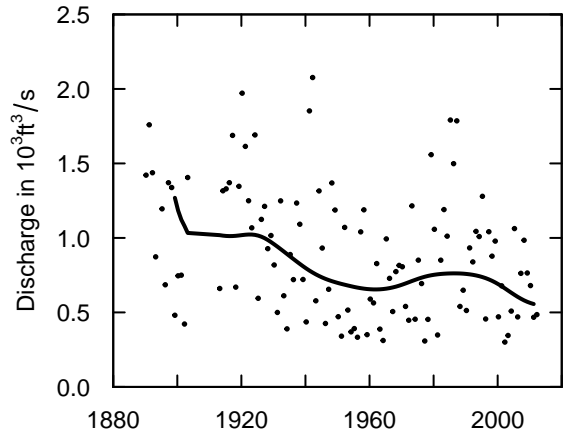
# Rio Grande at Embudo, NM

## Water Year

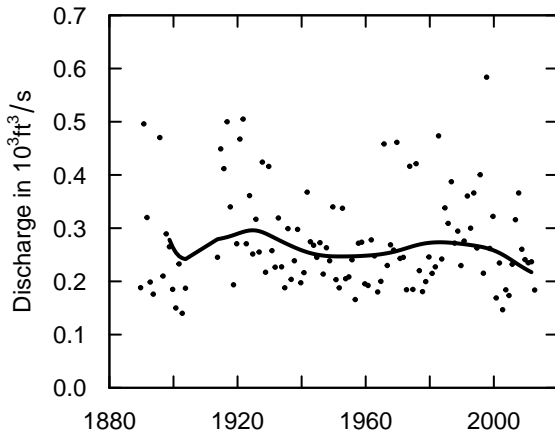
maximum day



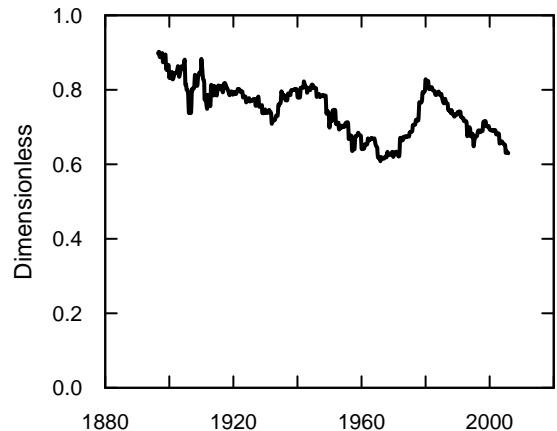
mean daily



7-day minimum



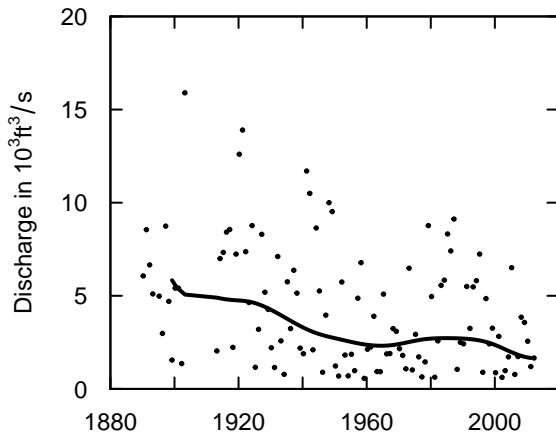
Discharge variability: Standard Deviation of Log(Q)



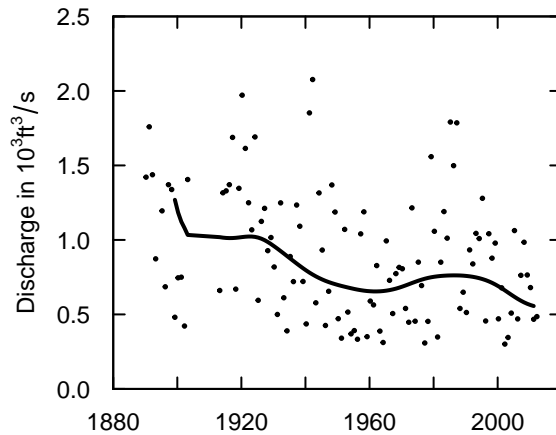
# Rio Grande at Embudo, NM

## Water Year

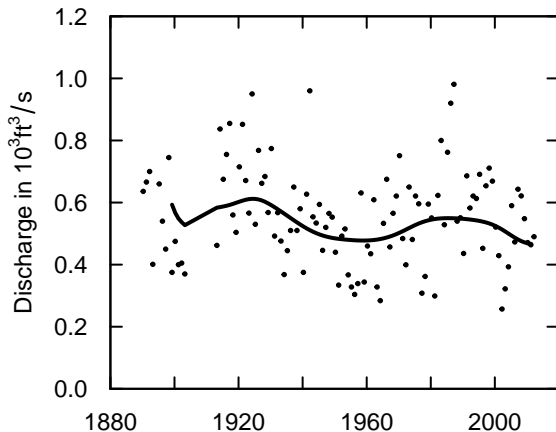
maximum day



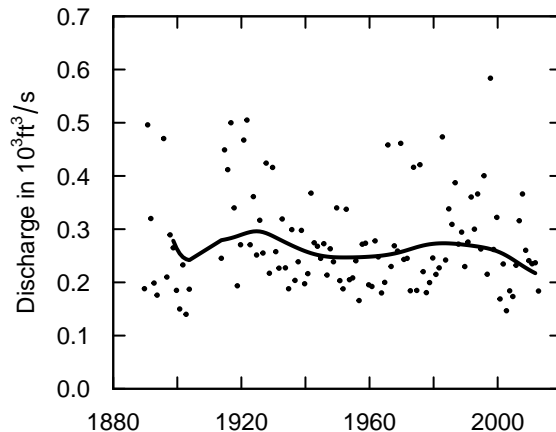
mean daily



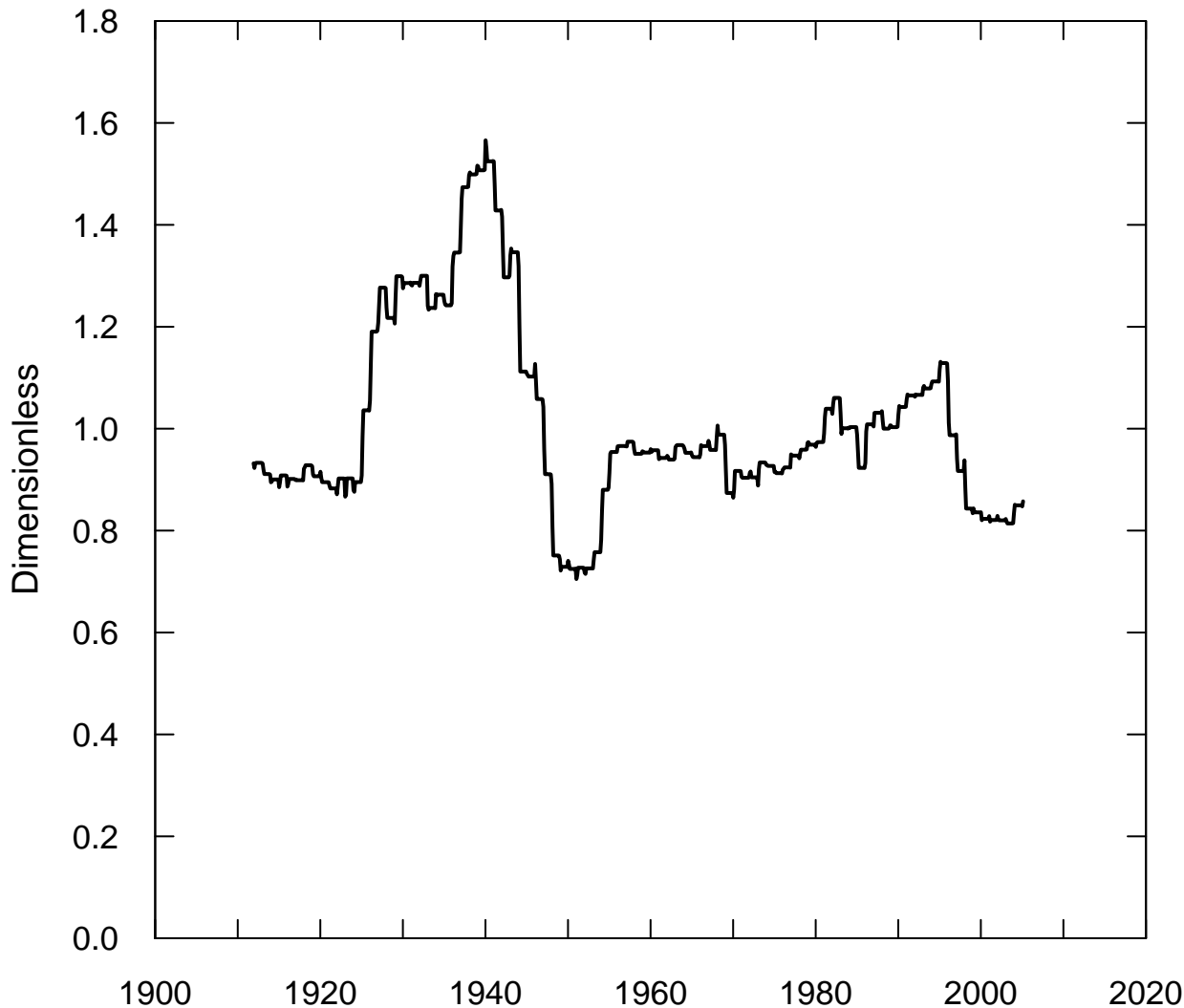
median daily



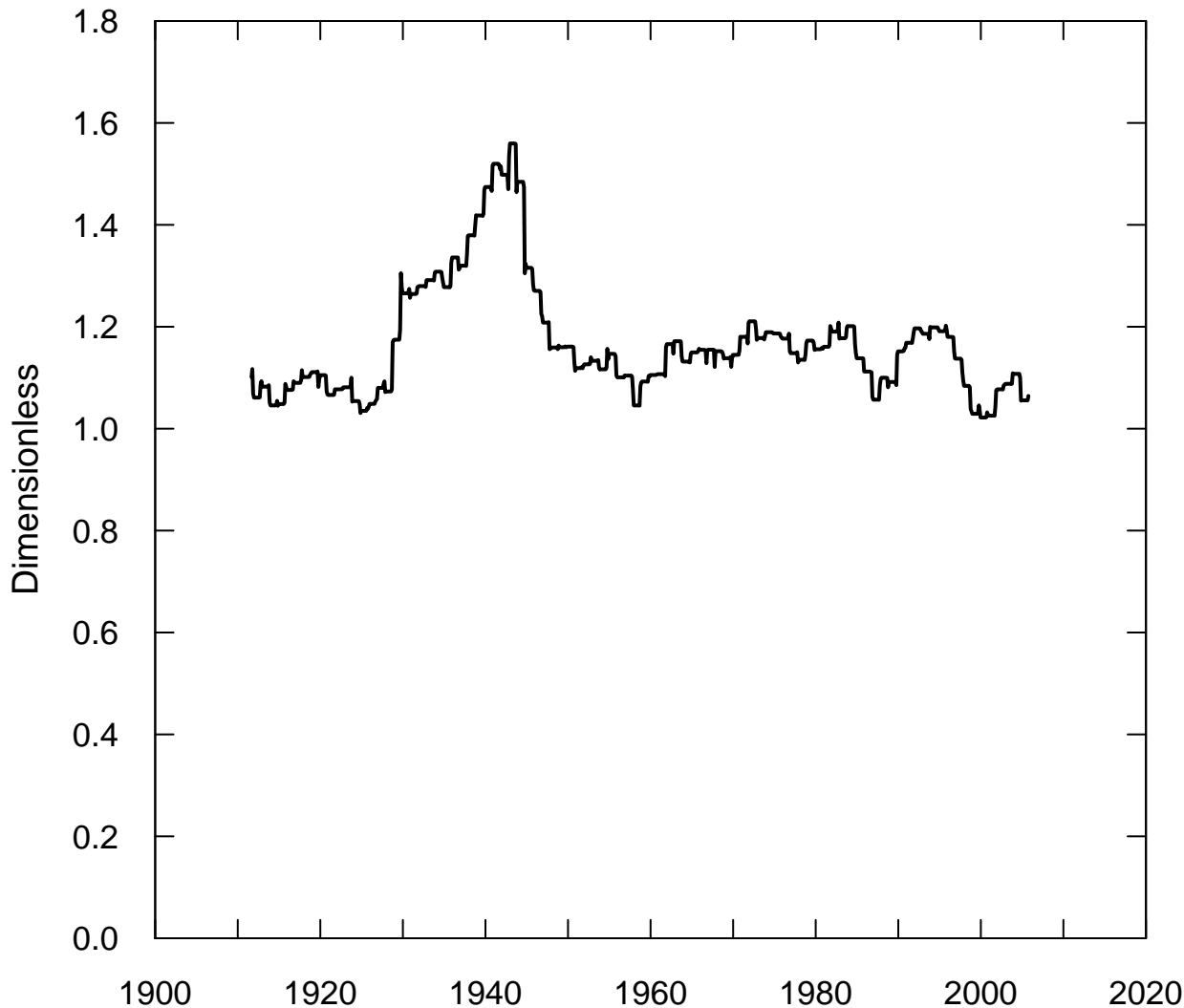
7-day minimum



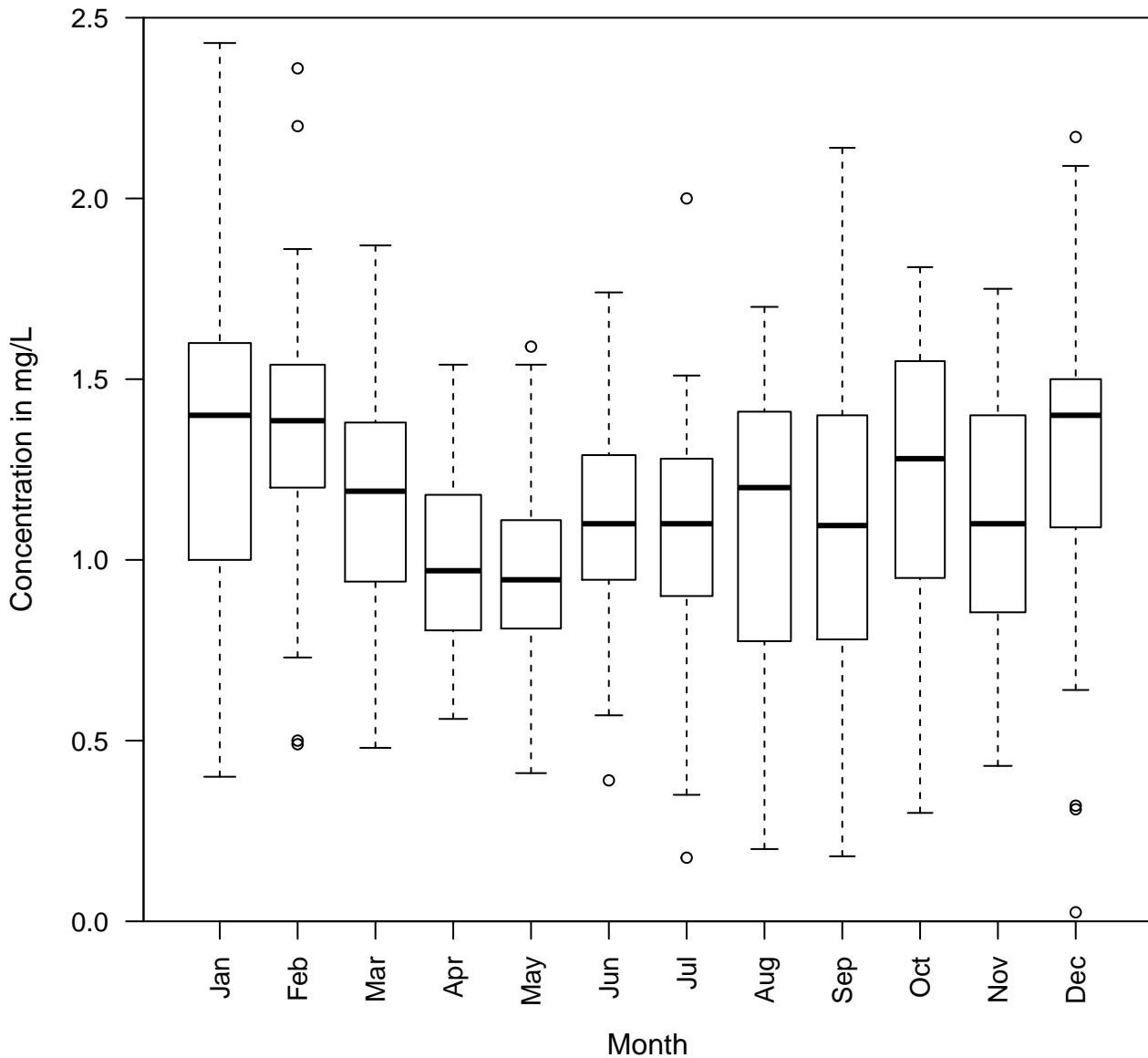
**Season Consisting of Jun Jul Aug**  
**Discharge variability: Standard Deviation of Log(Q)**



**Rio Grande at Embudo, NM**  
**Season Consisting of Mar Apr May**  
**Discharge variability: Standard Deviation of Log(Q)**

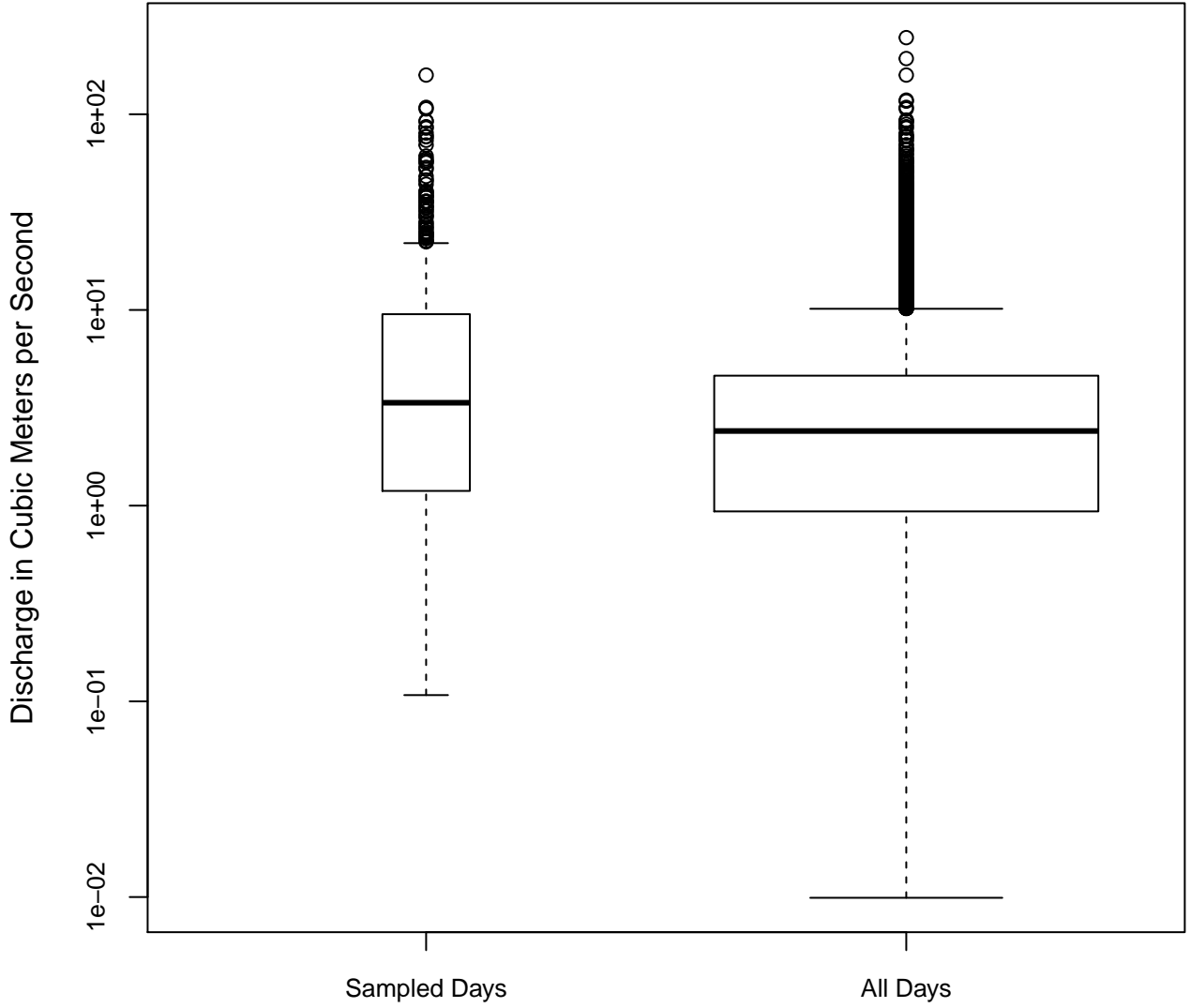


**Choptank River**  
**Inorganic nitrogen (nitrate and nitrite)**  
**Boxplots of sample values by month**

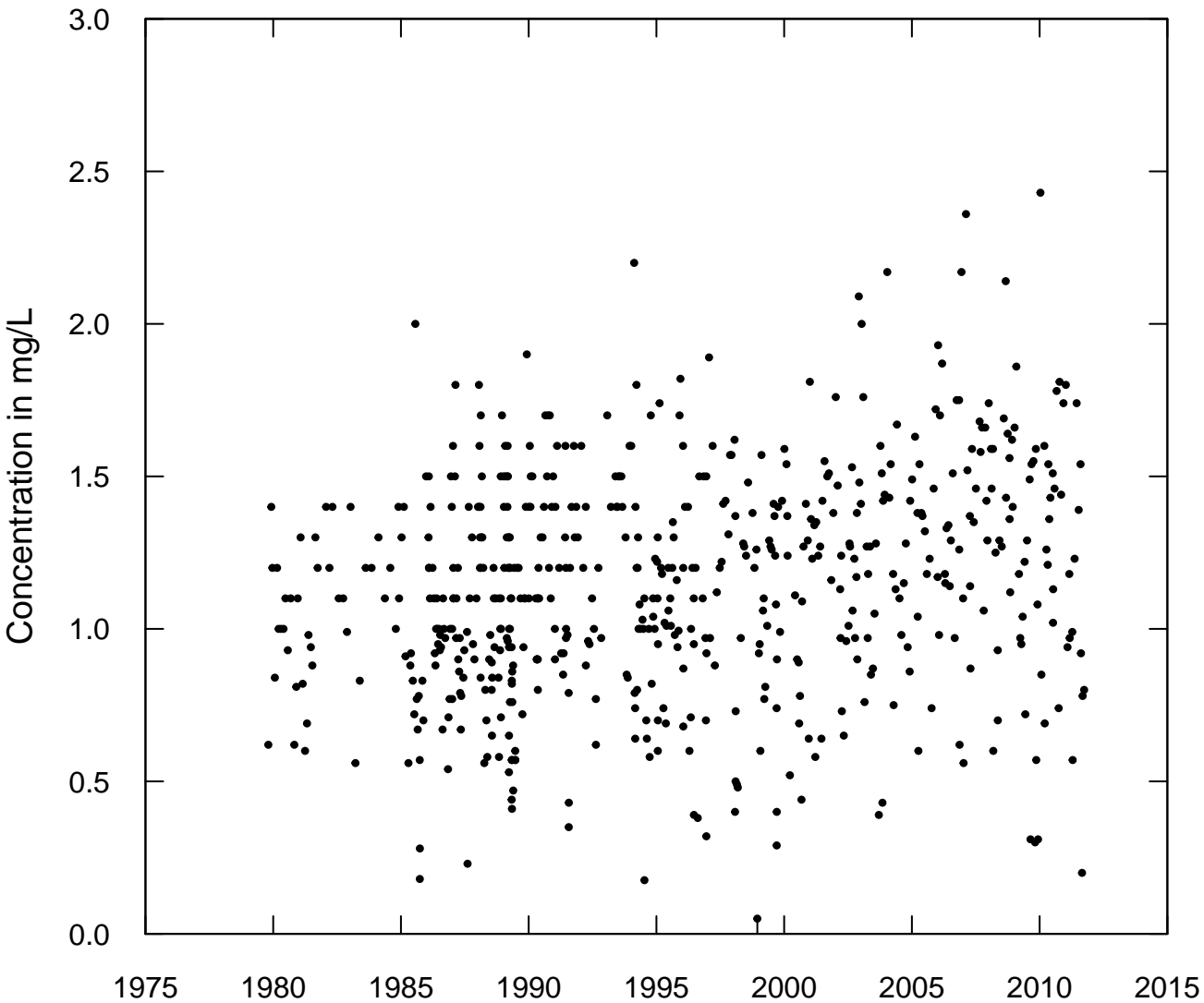




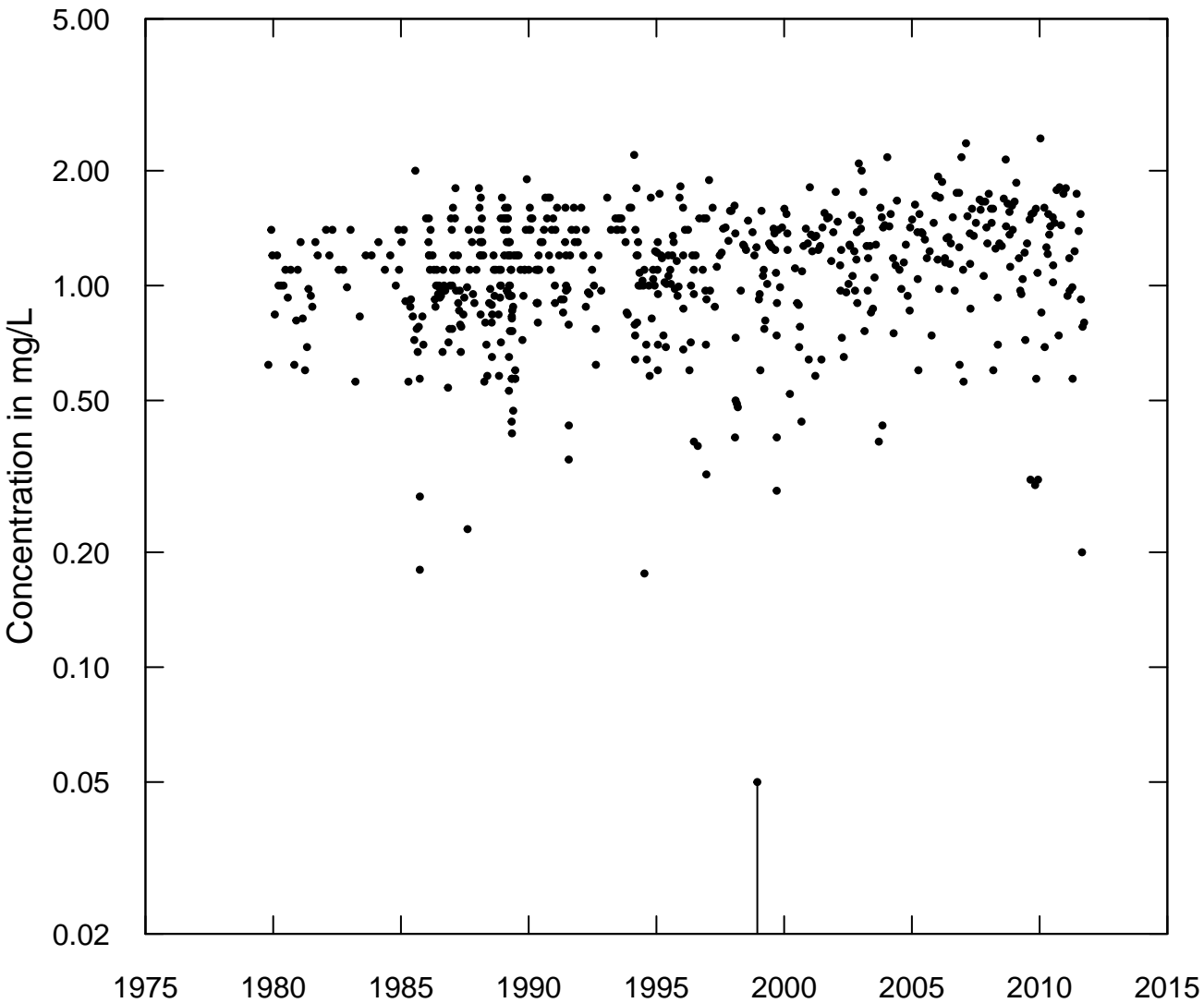
**Choptank River , Inorganic nitrogen (nitrate and nitrite)**  
**Comparison of distribution of**  
**Sampled Discharges and All Daily Discharges**



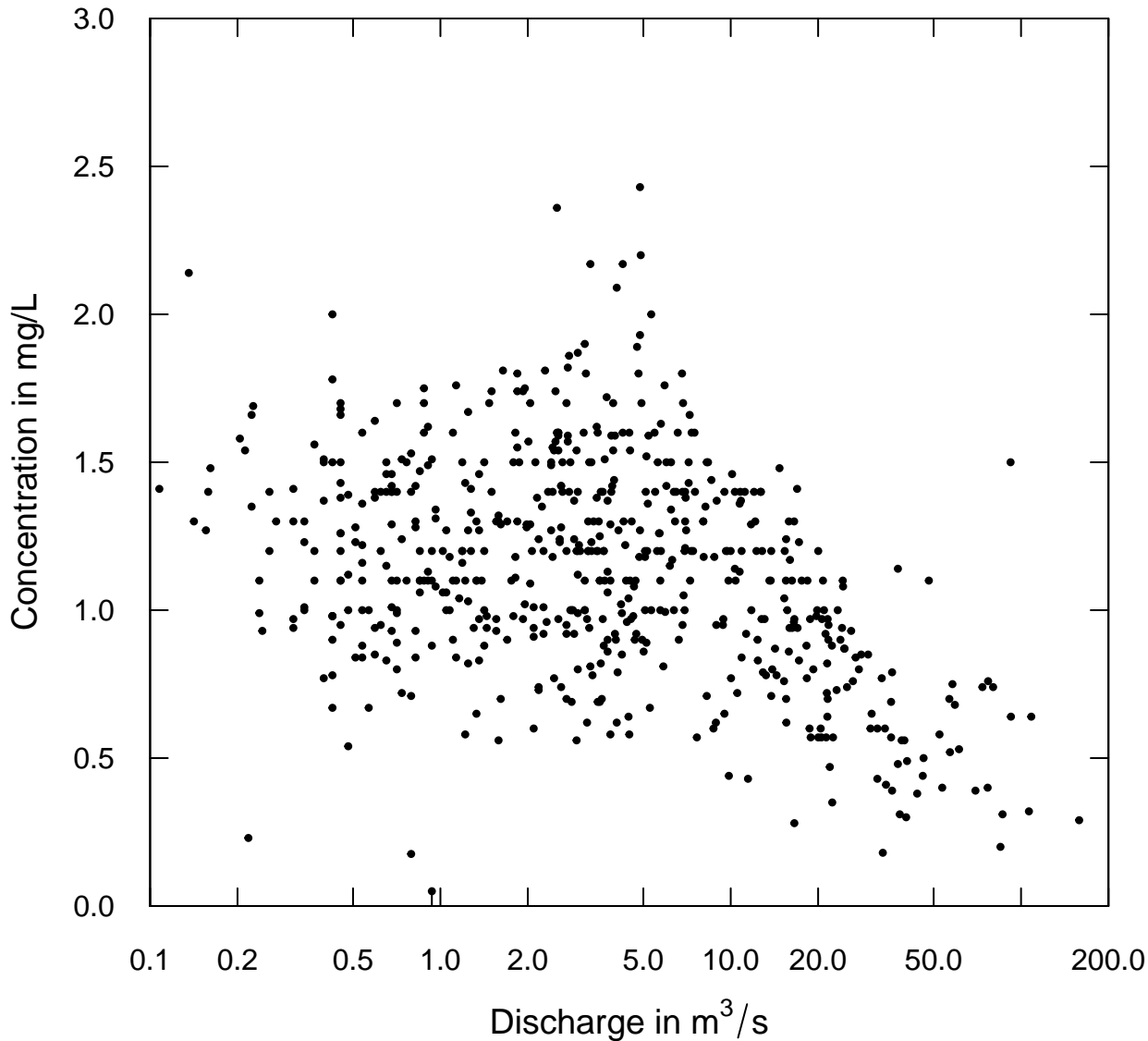
# Choptank River , Inorganic nitrogen (nitrate and nitrite)



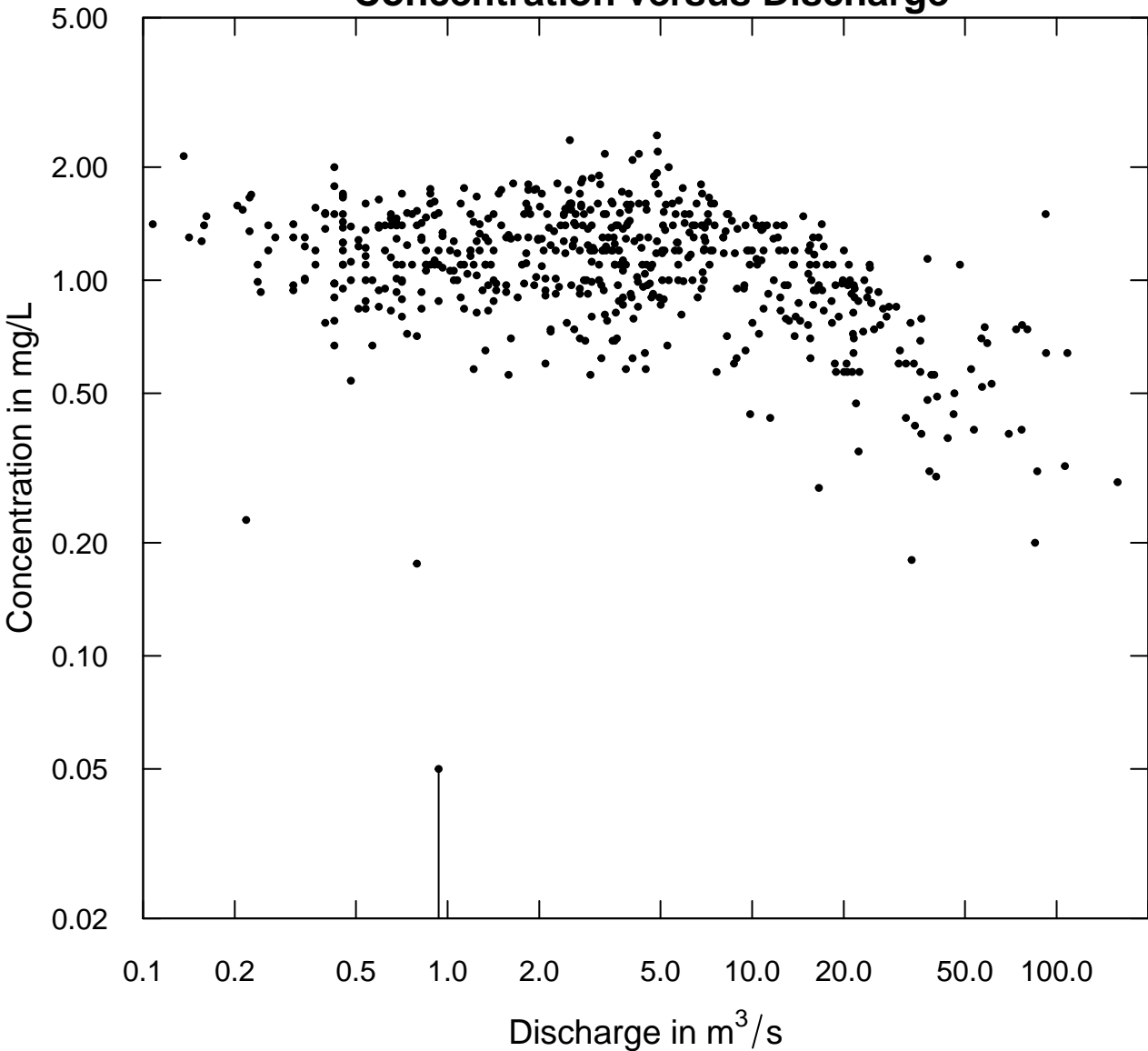
# Choptank River , Inorganic nitrogen (nitrate and nitrite)



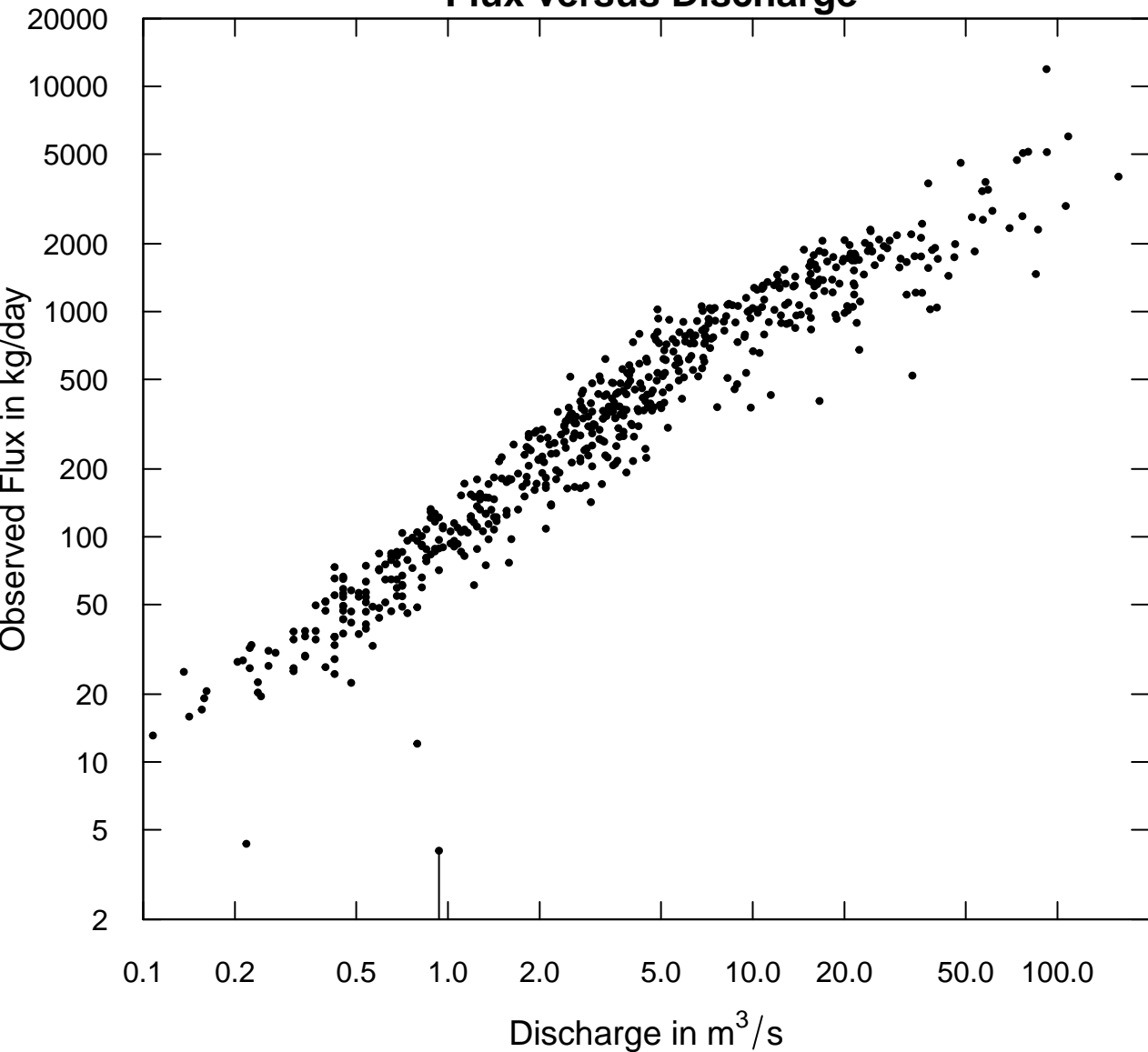
**Choptank River**  
**Inorganic nitrogen (nitrate and nitrite)**  
**Concentration versus Discharge**



**Choptank River**  
**Inorganic nitrogen (nitrate and nitrite)**  
**Concentration versus Discharge**

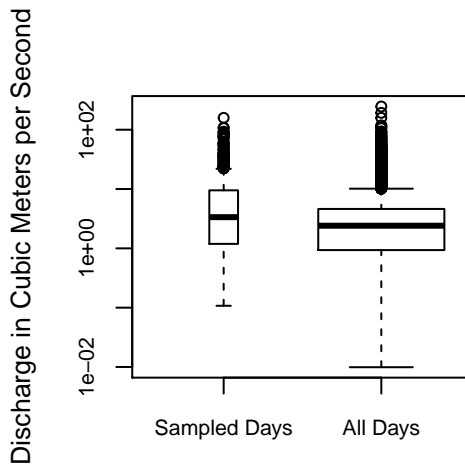
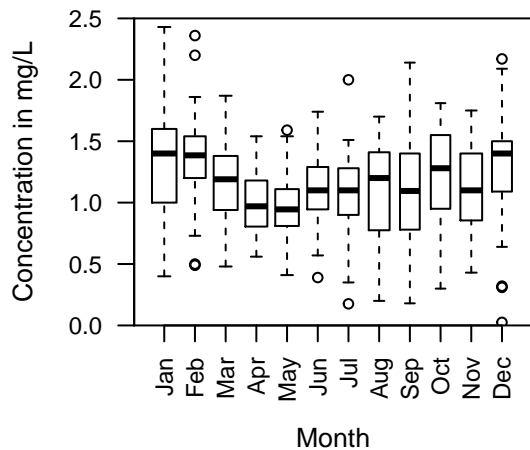
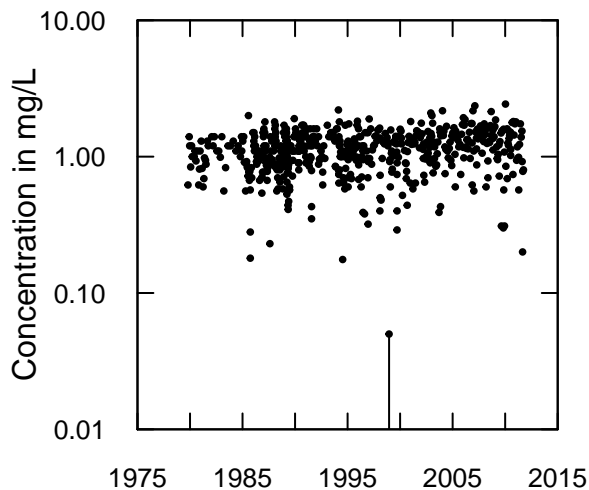
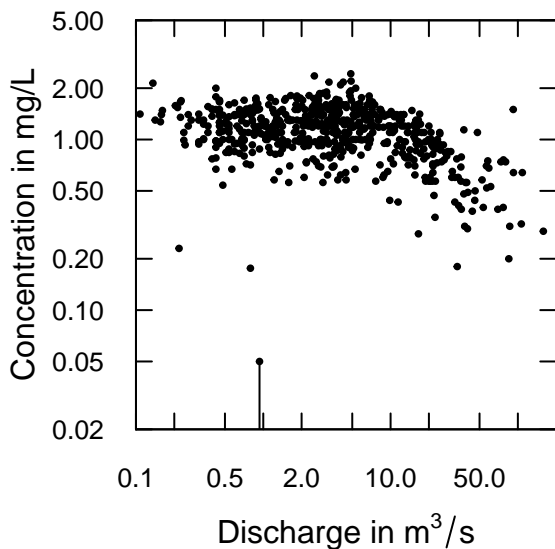


**Choptank River**  
**Inorganic nitrogen (nitrate and nitrite)**  
**Flux versus Discharge**

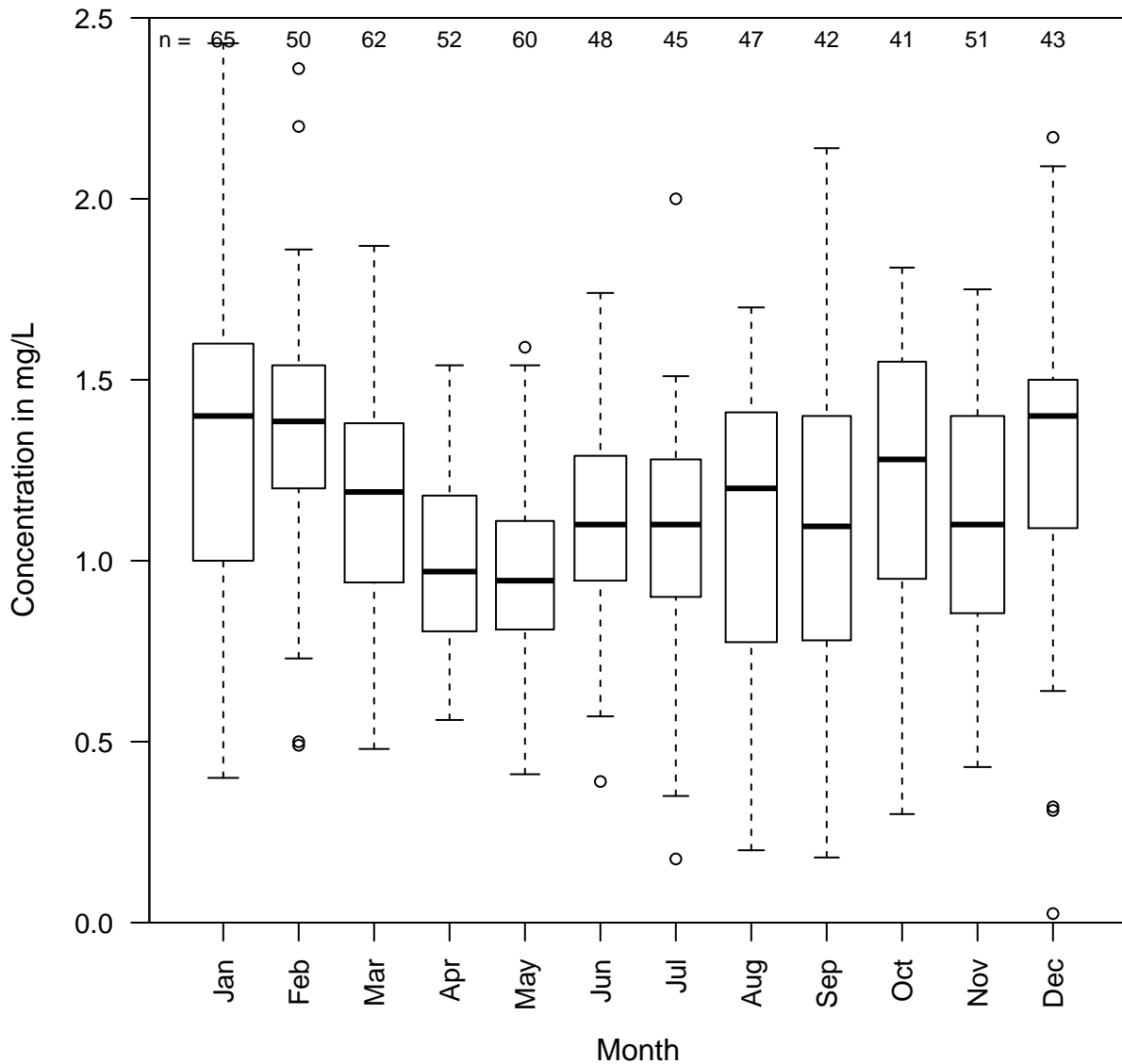


# Choptank River

## Inorganic nitrogen (nitrate and nitrite)

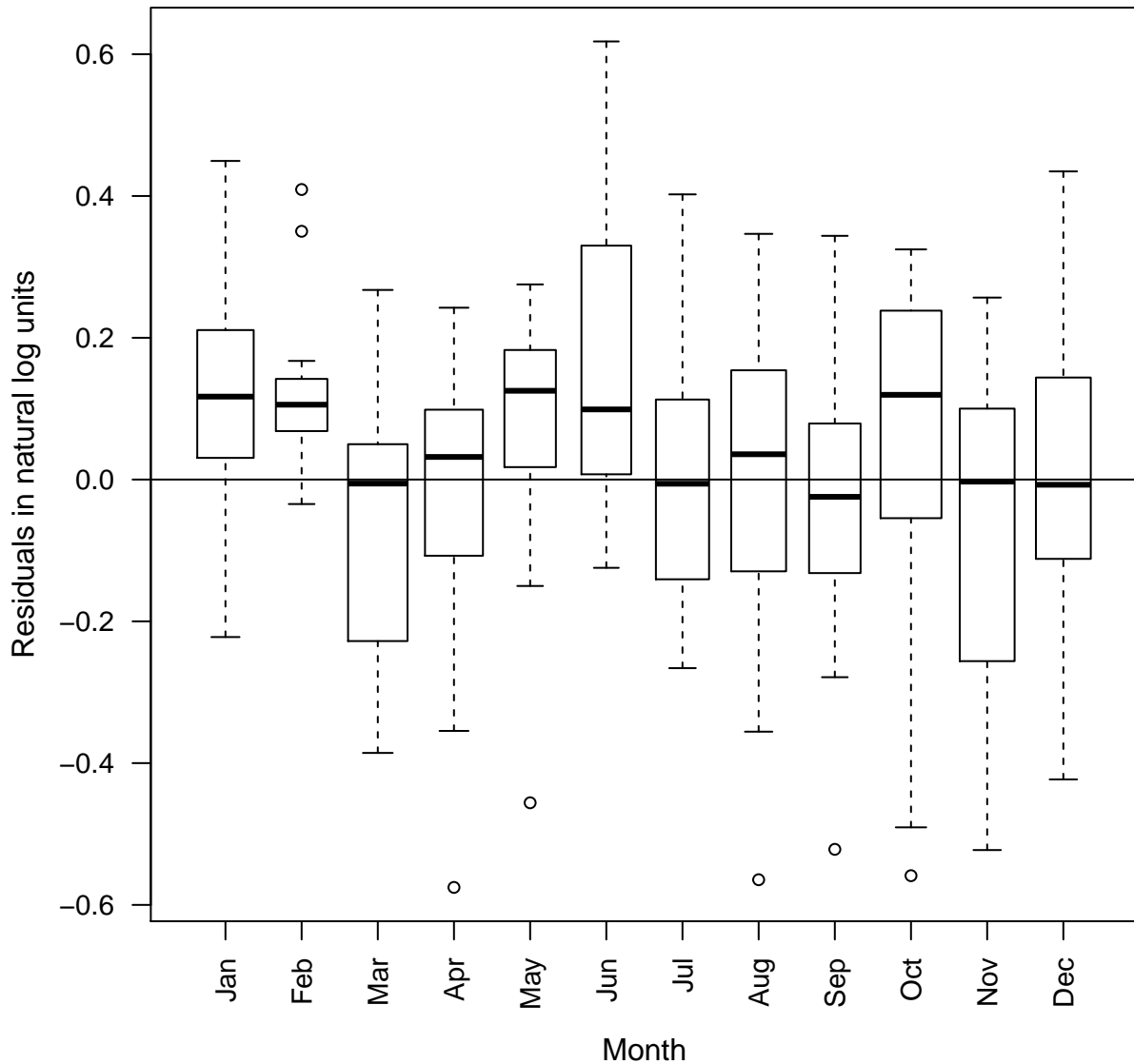


**Choptank River**  
**Inorganic nitrogen (nitrate and nitrite)**  
**Boxplots of sample values by month**





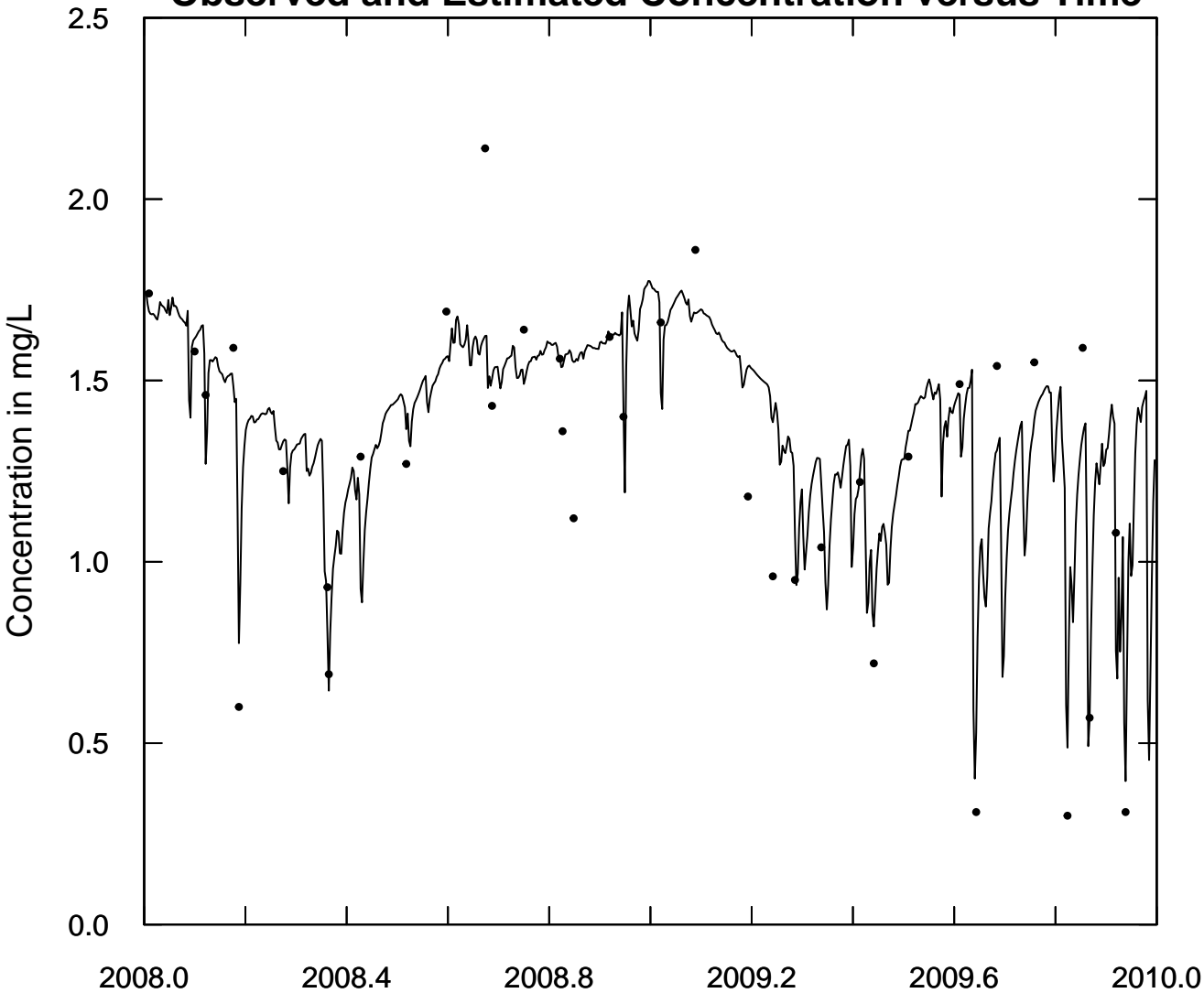
**Choptank River near Greensboro, MD**  
**Nitrate as N**  
**Boxplots of residuals by month**



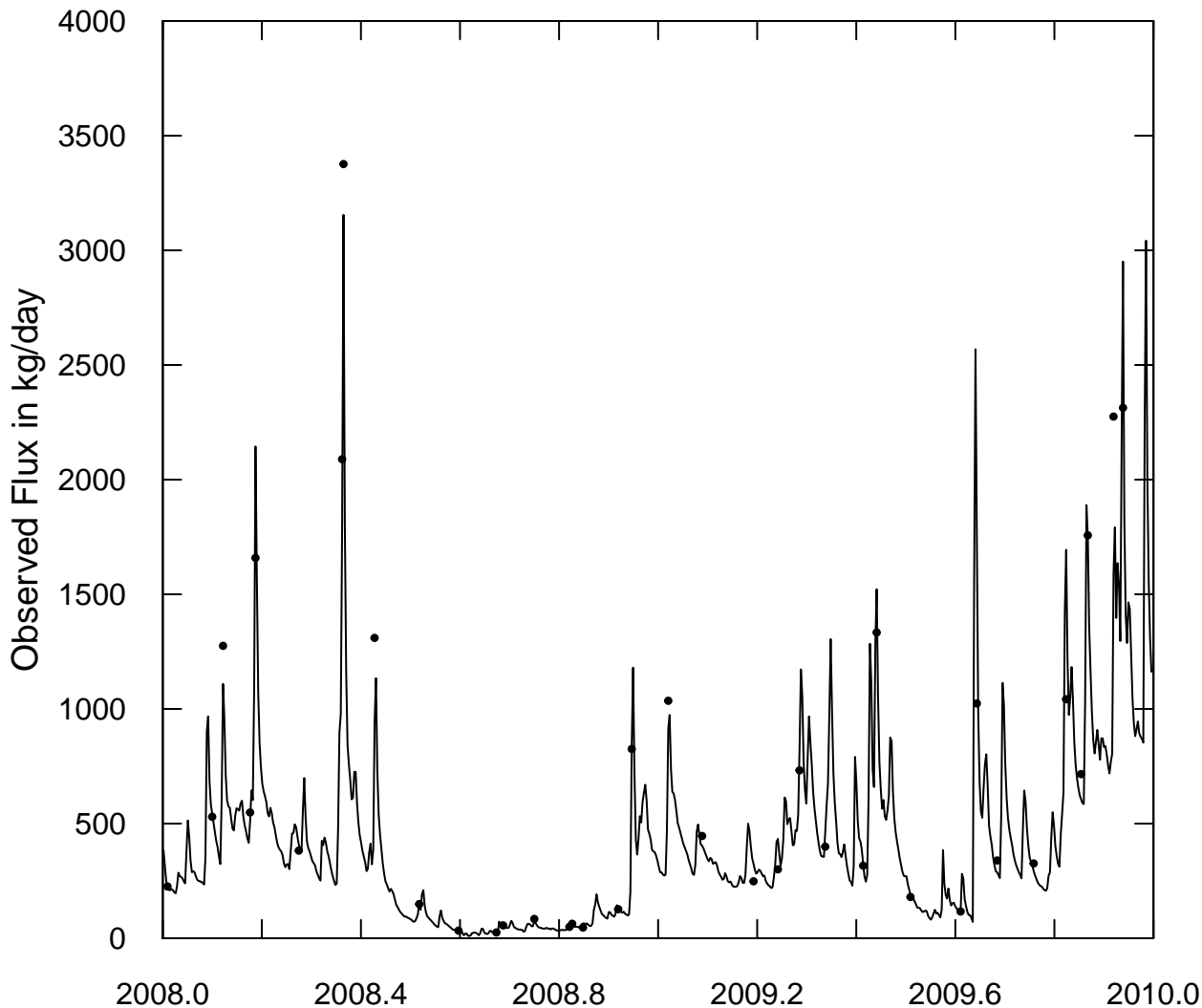
# Choptank River near Greensboro, MD

## Nitrate as N

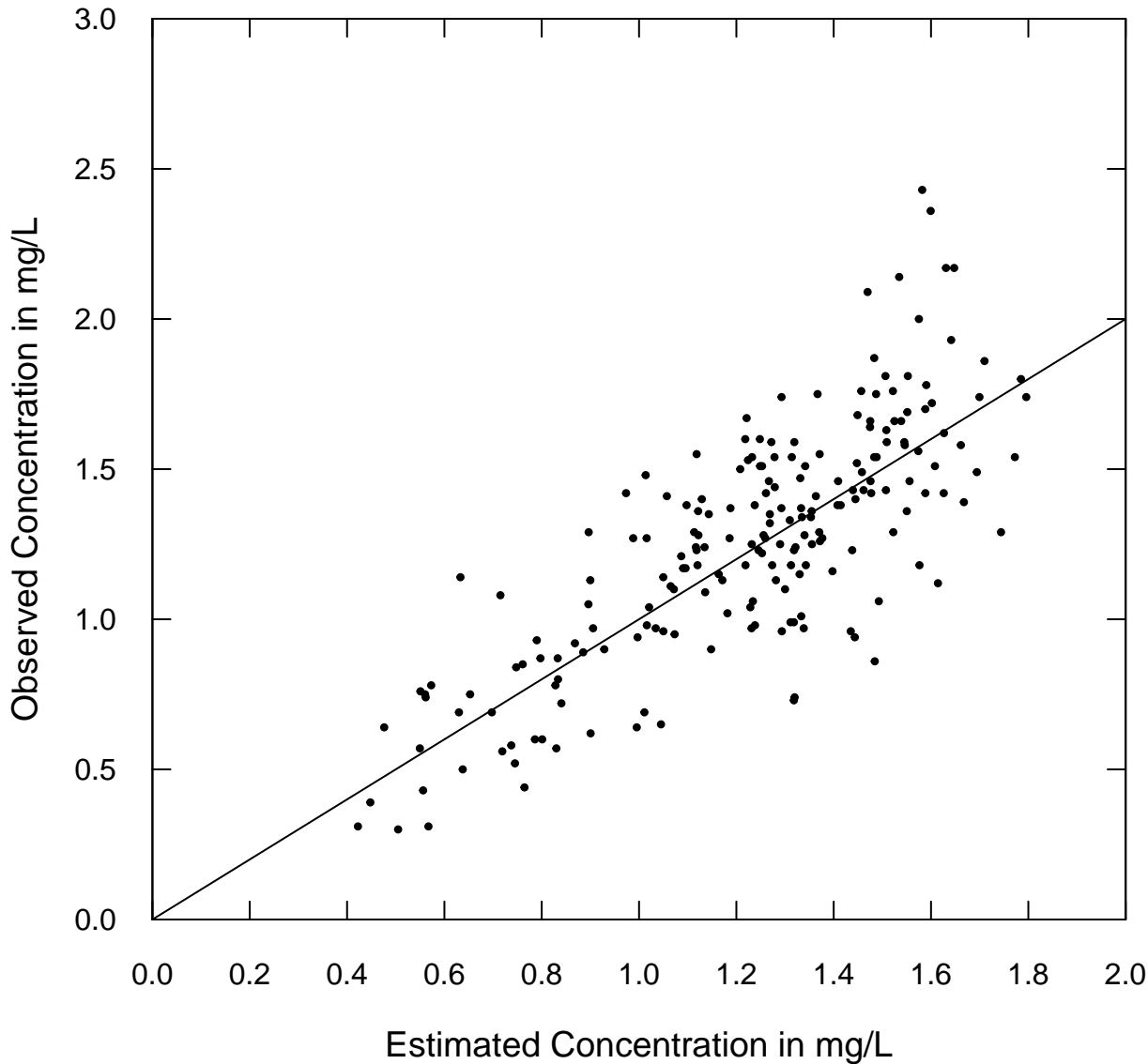
### Observed and Estimated Concentration versus Time



**Choptank River near Greensboro, MD**  
**Nitrate as N**  
**Observed and Estimated Flux versus Time**



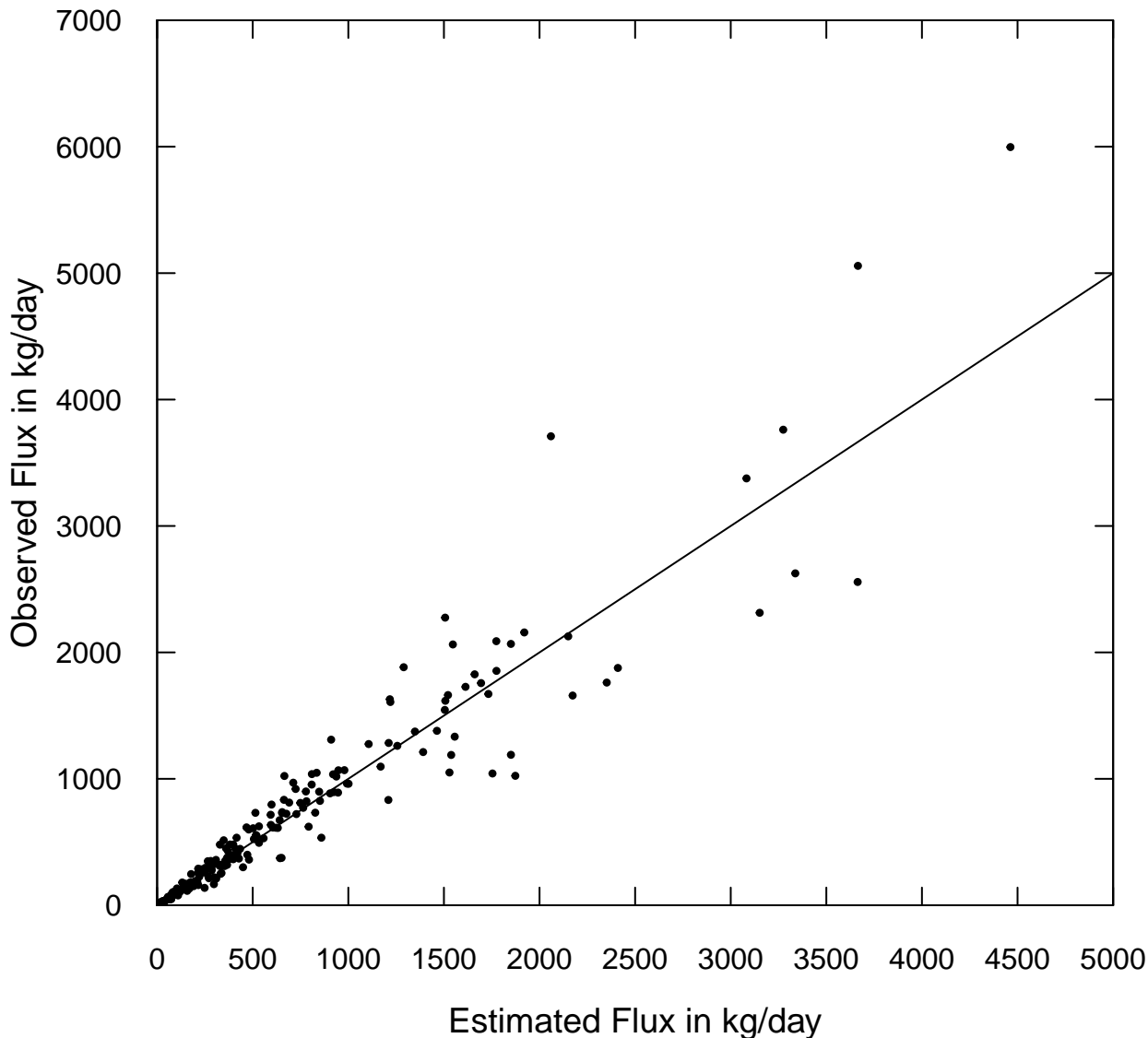
**Choptank River near Greensboro, MD**  
**Nitrate as N**  
**Observed versus Estimated Concentration**



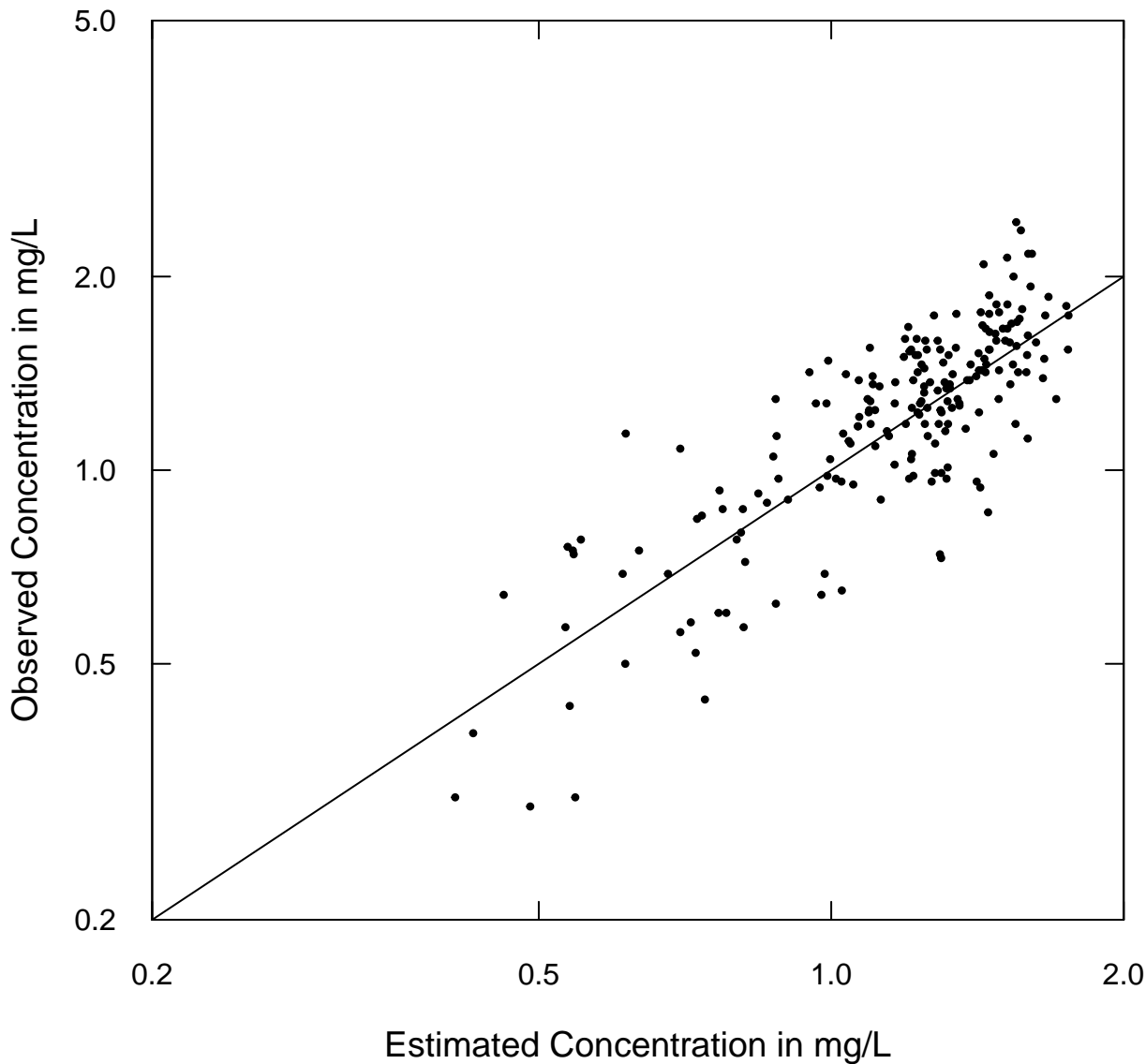
# Choptank River near Greensboro, MD

Nitrate as N

Observed vs Estimated Flux



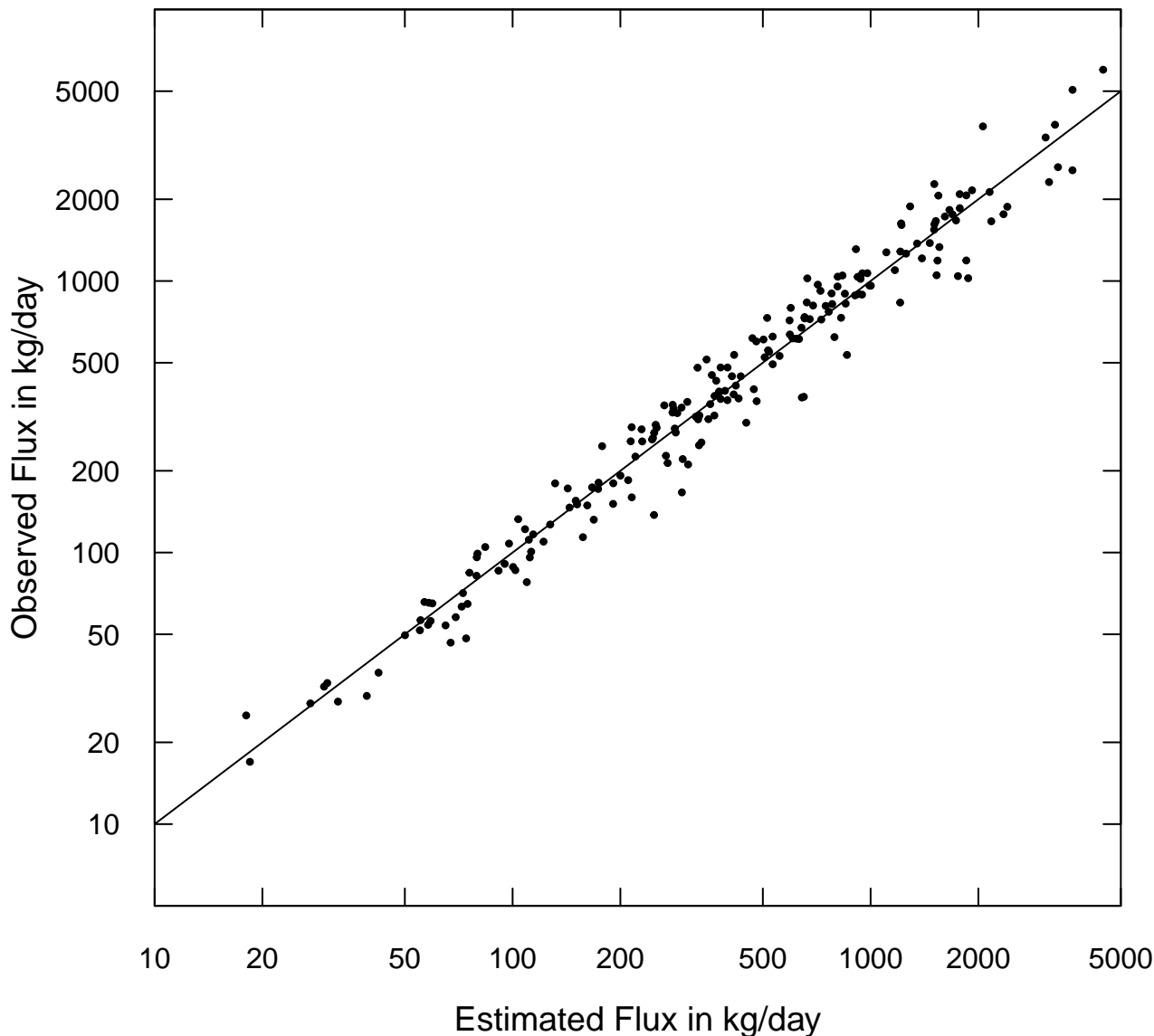
**Choptank River near Greensboro, MD**  
**Nitrate as N**  
**Observed versus Estimated Concentration**



# Choptank River near Greensboro, MD

## Nitrate as N

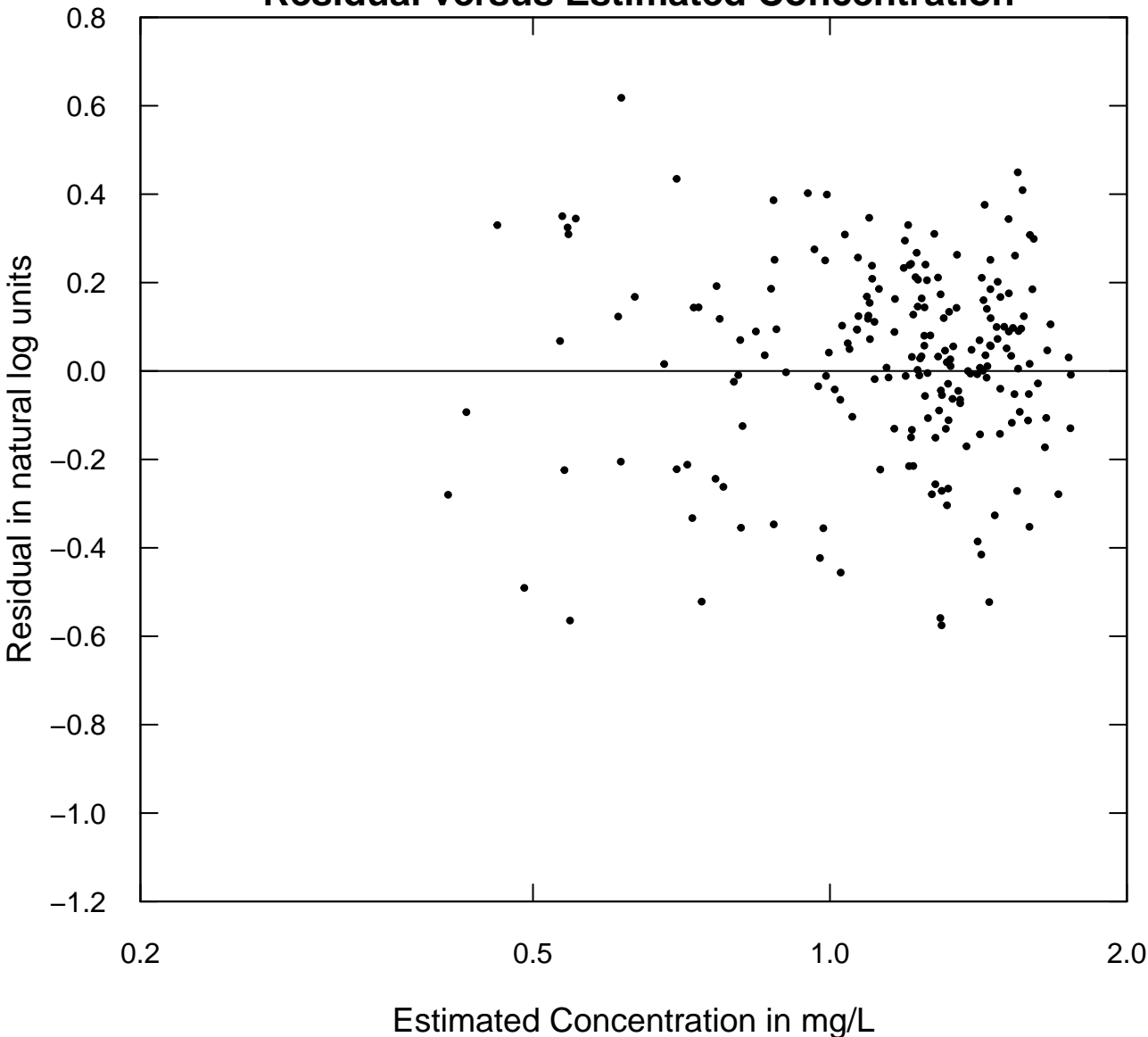
### Observed vs Predicted Flux



# Choptank River near Greensboro, MD

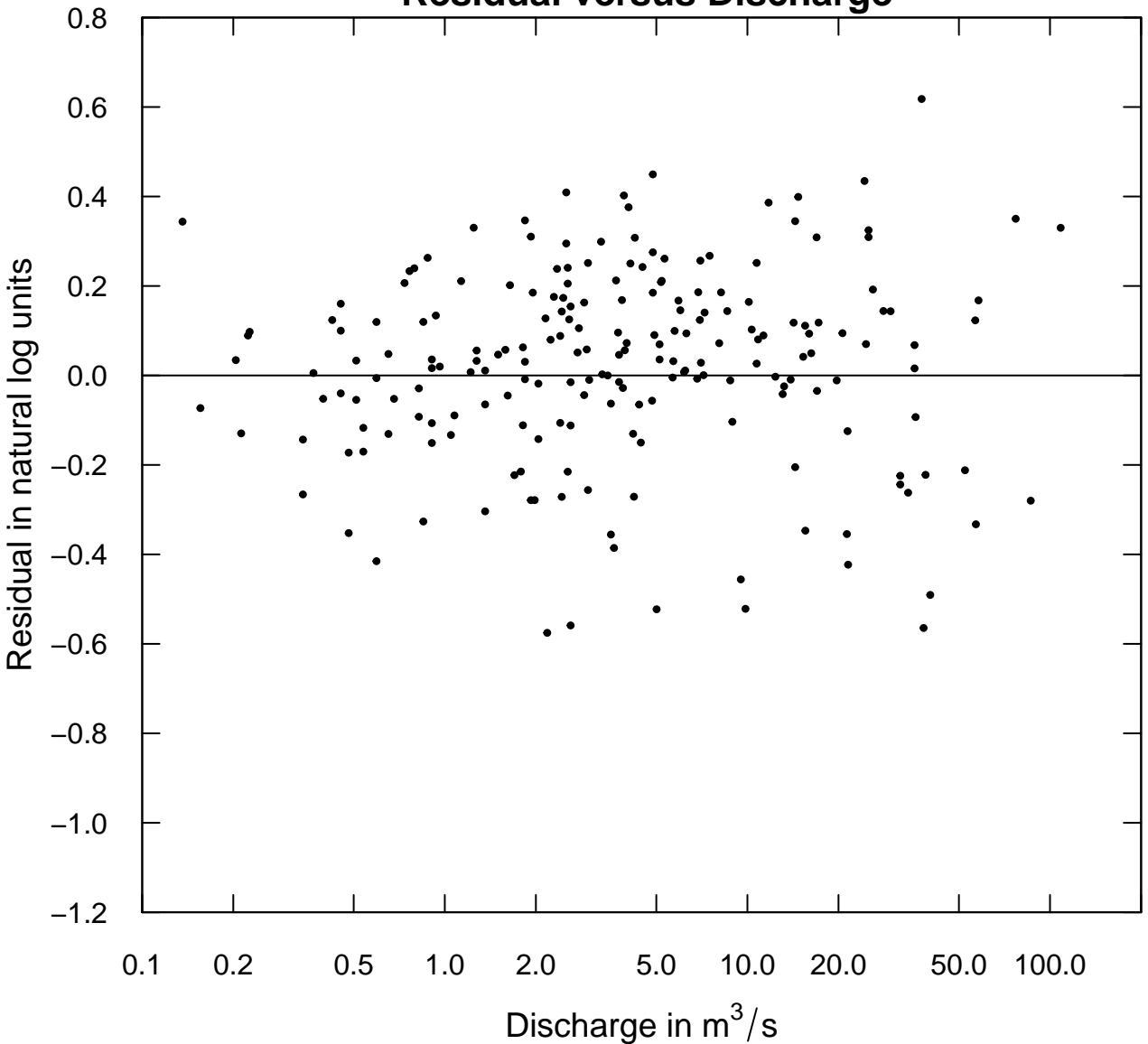
## Nitrate as N

### Residual versus Estimated Concentration





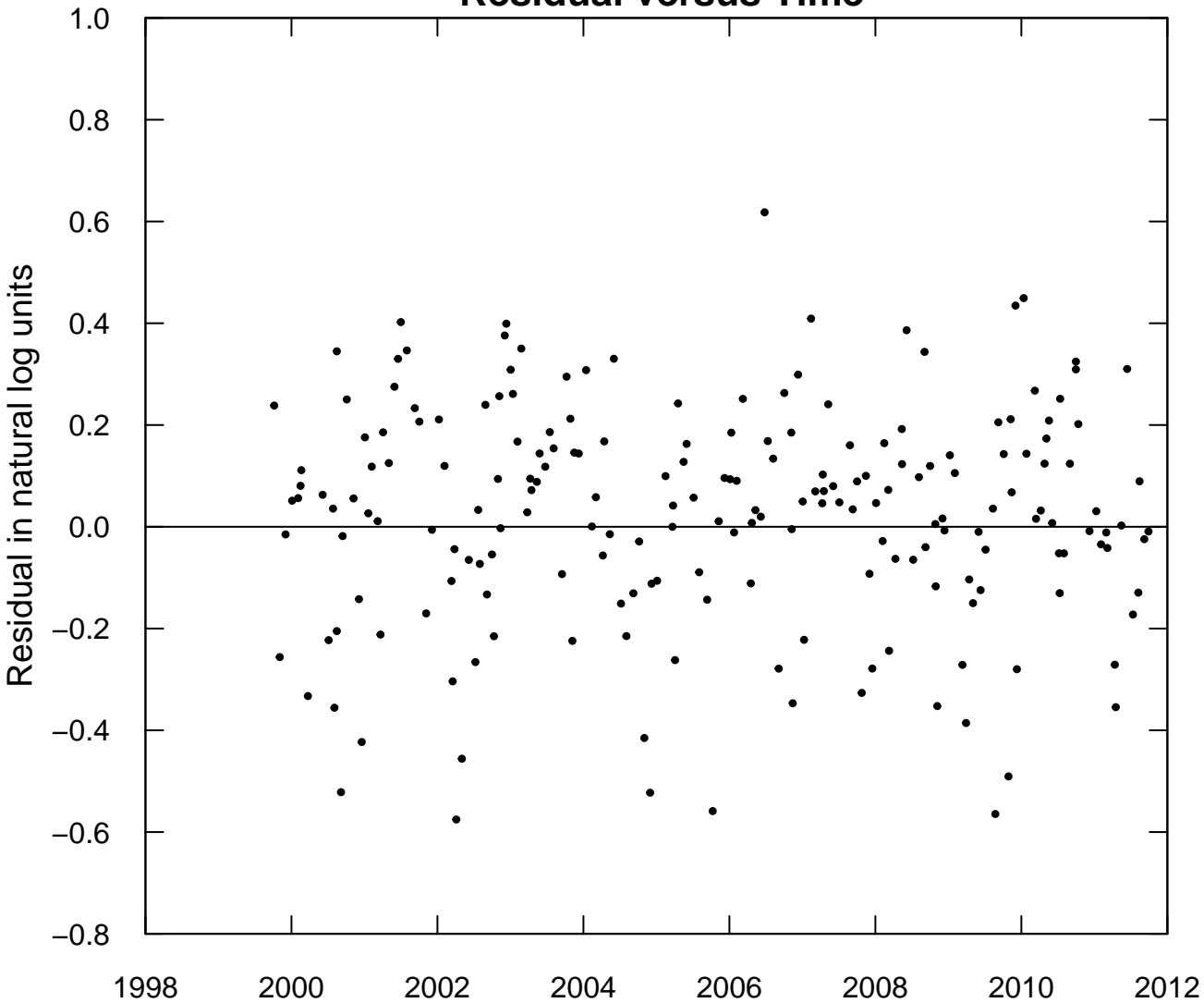
**Choptank River near Greensboro, MD**  
**Nitrate as N**  
**Residual versus Discharge**



# Choptank River near Greensboro, MD

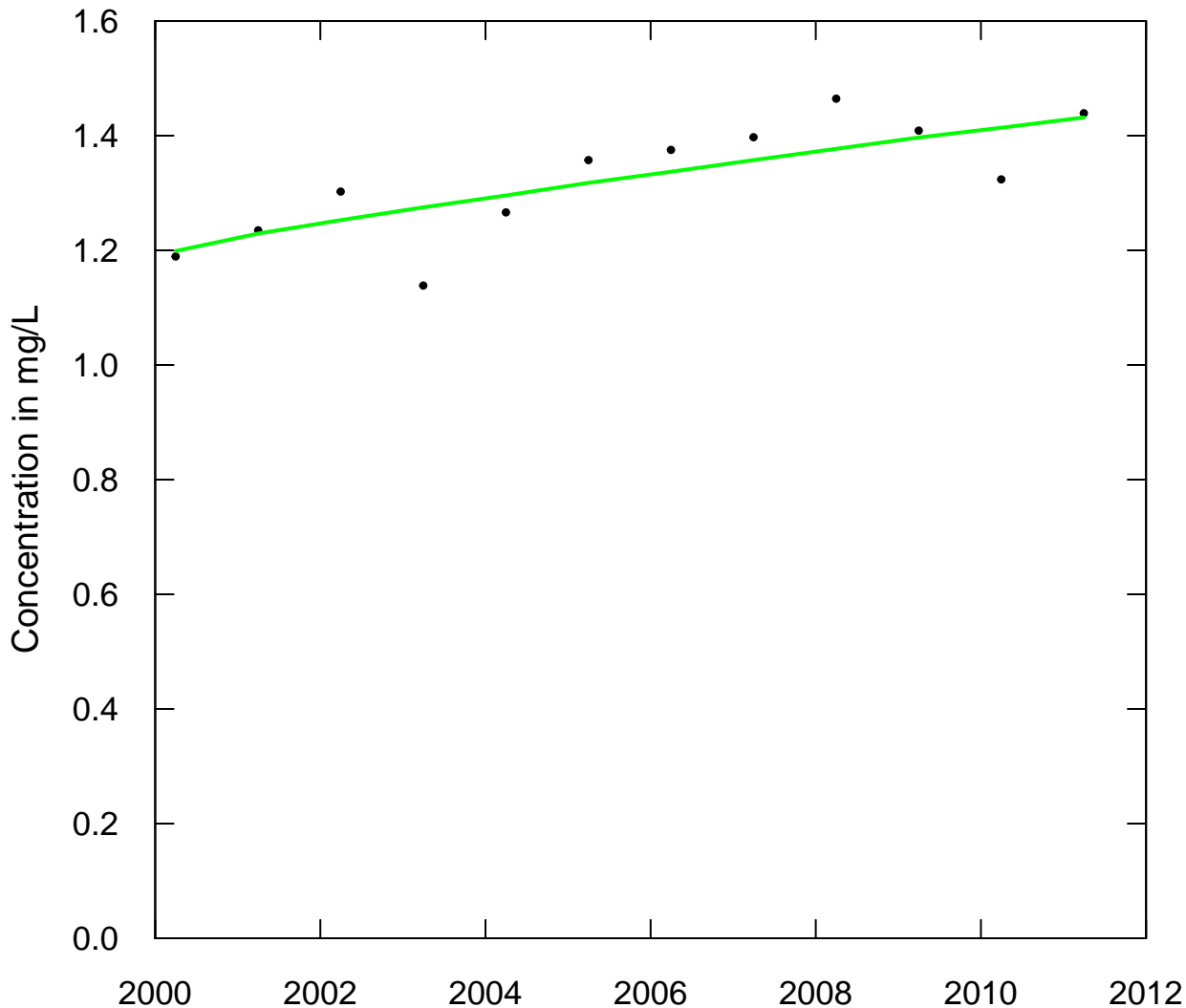
## Nitrate as N

### Residual versus Time

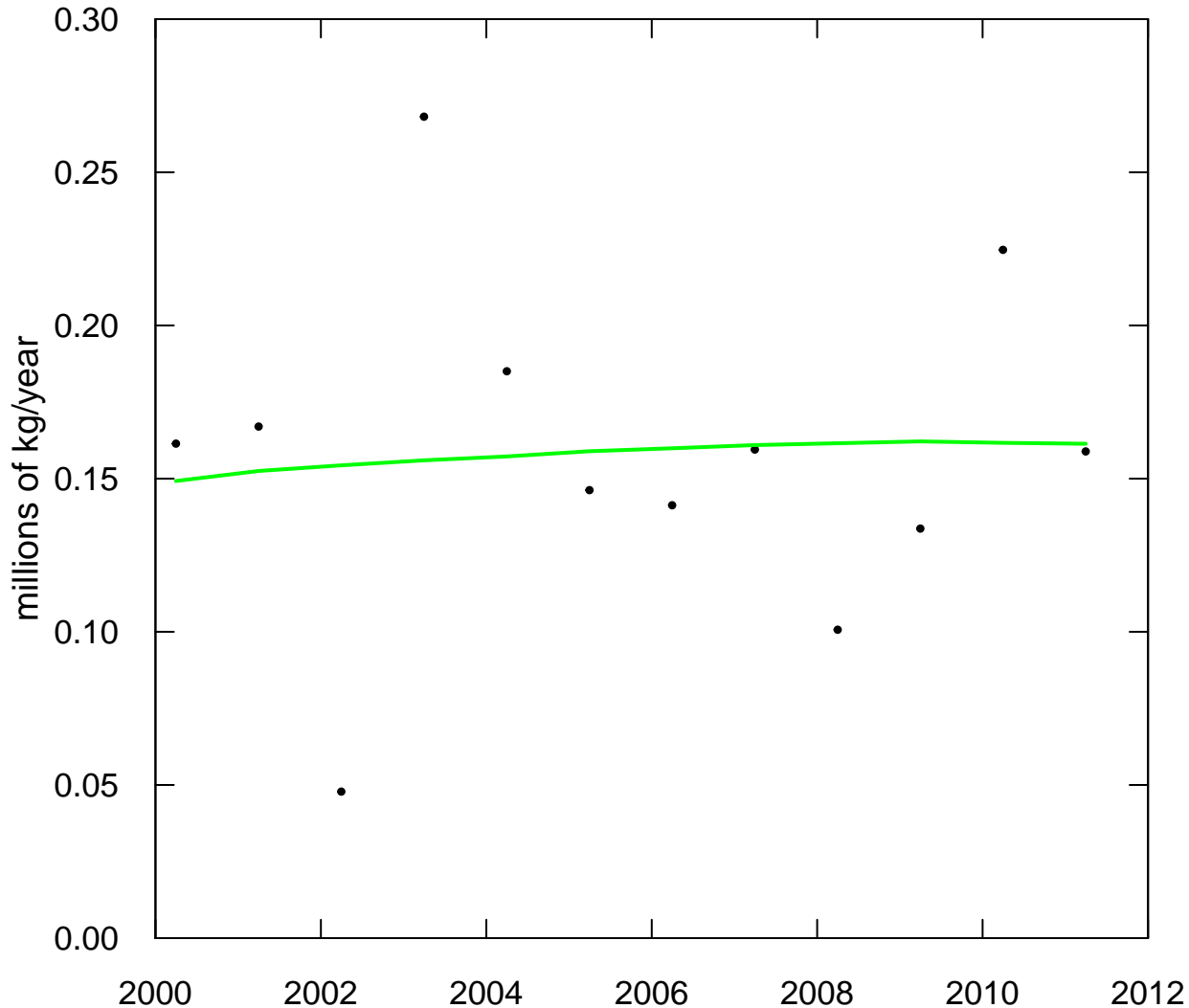


**Choptank River near Greensboro, MD Nitrate as N**  
**Water Year**

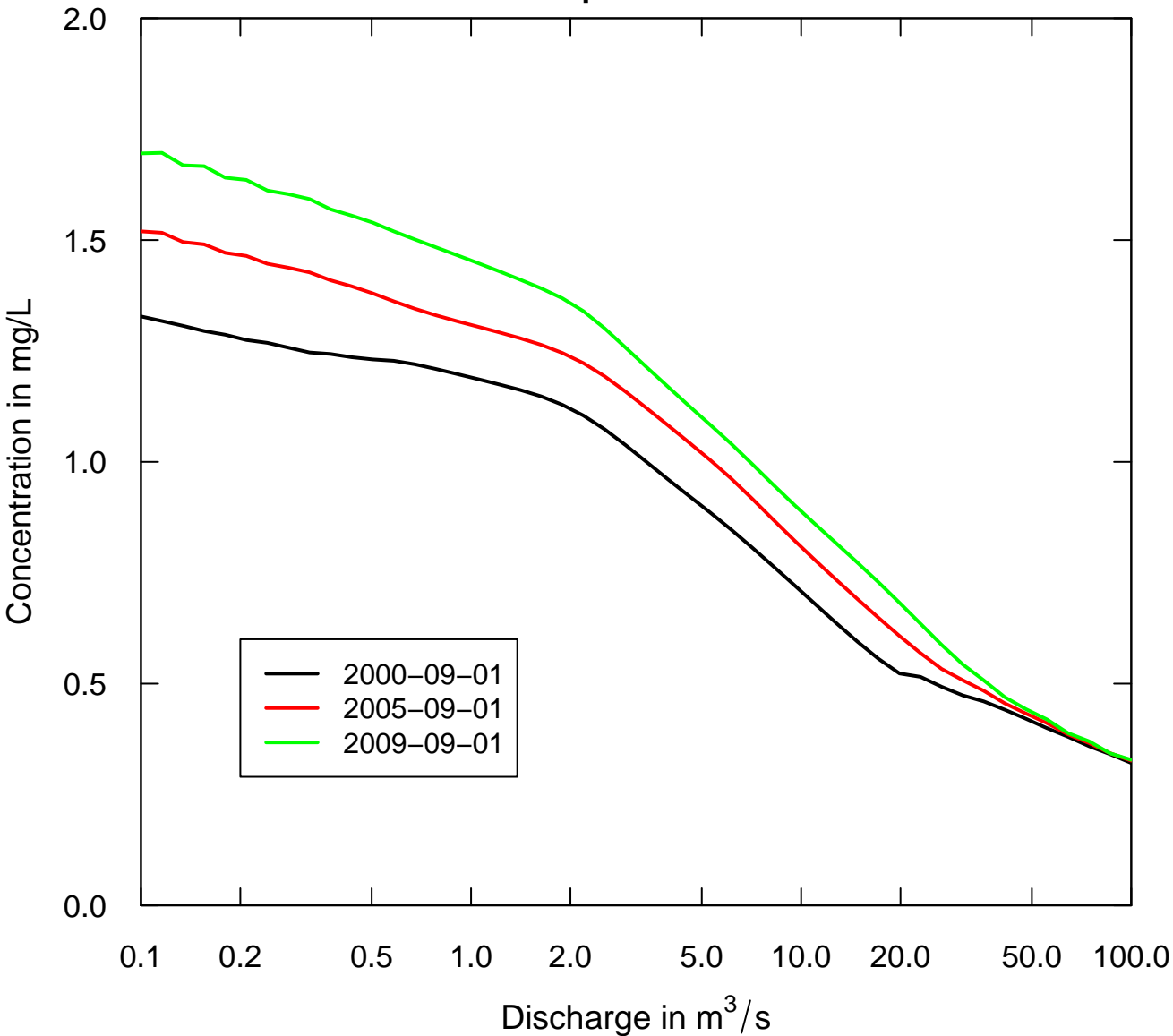
**Mean Concentration (dots) & Flow Normalized Concentration (line)**



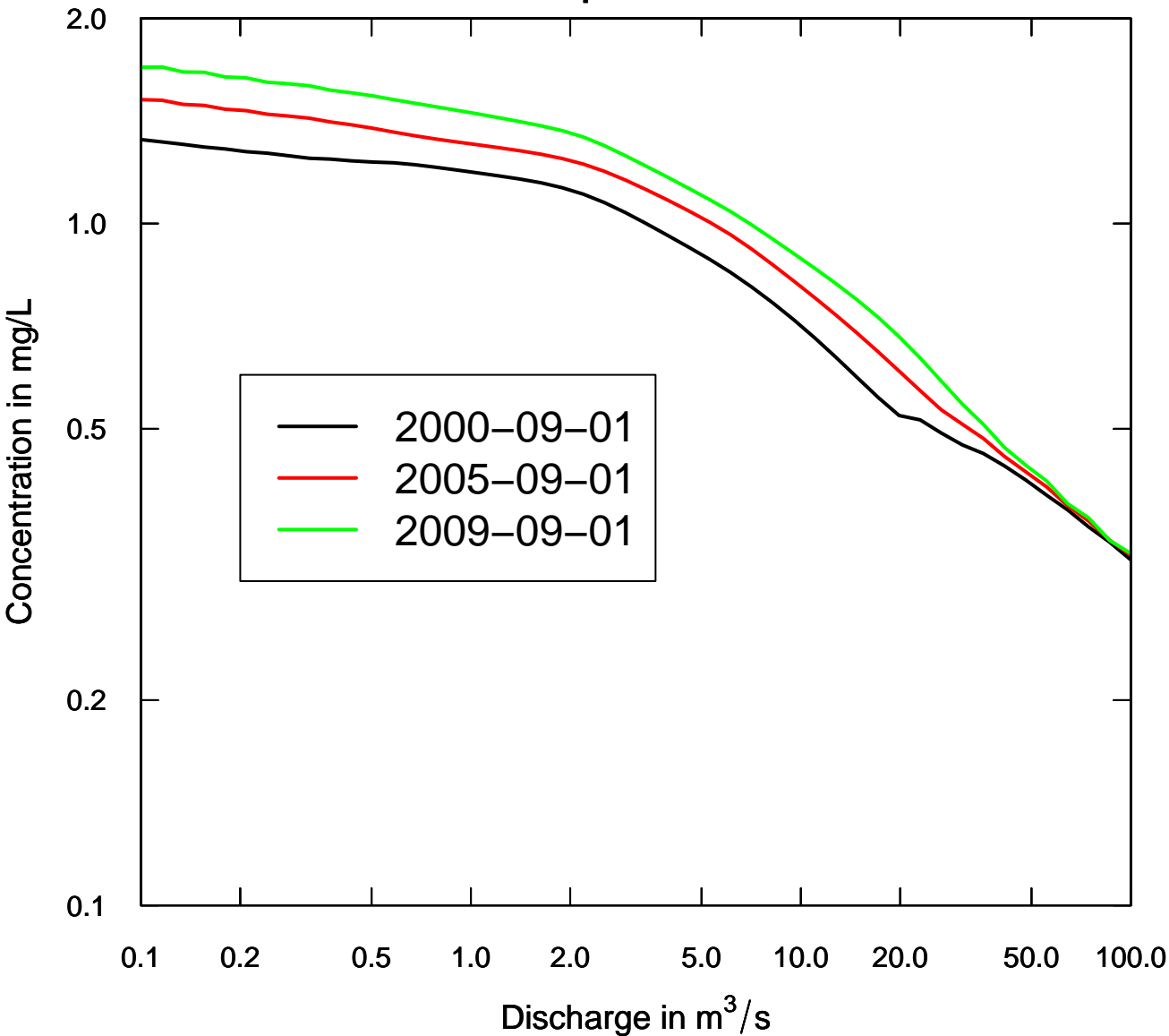
**Choptank River near Greensboro, MD Nitrate as N**  
**Water Year**  
**Flux Estimates (dots) & Flow Normalized Flux (line)**



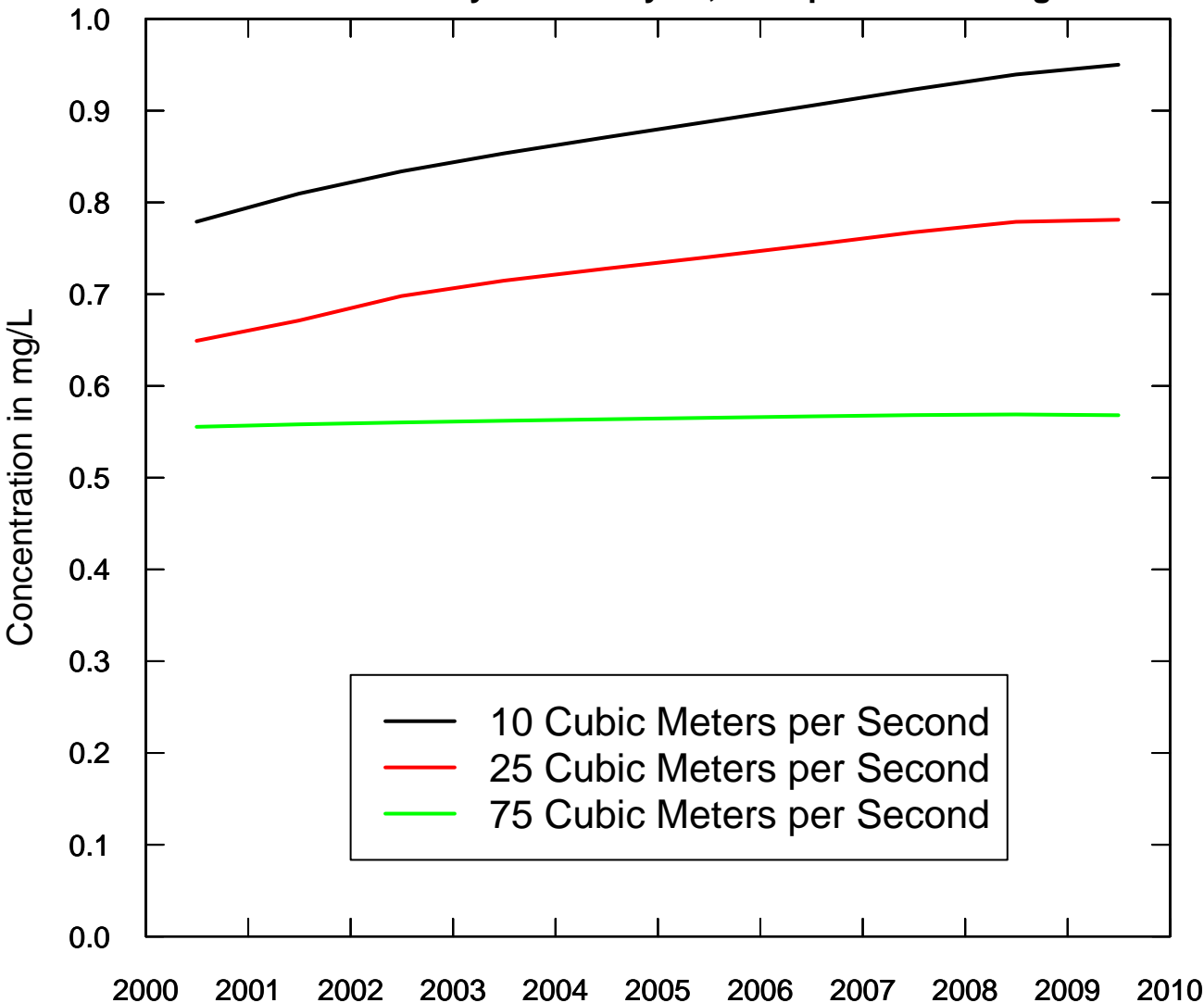
**Choptank River near Greensboro, MD Nitrate as N**  
**Estimated Concentration Versus Discharge Relationship**  
**at 3 specific dates**



**Choptank River near Greensboro, MD Nitrate as N**  
**Estimated Concentration Versus Discharge Relationship**  
**at 3 specific dates**

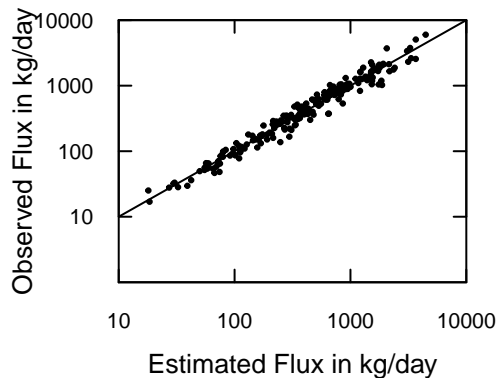
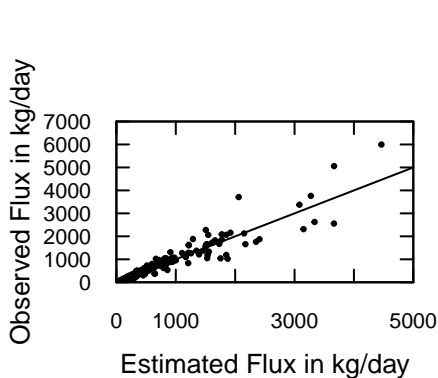
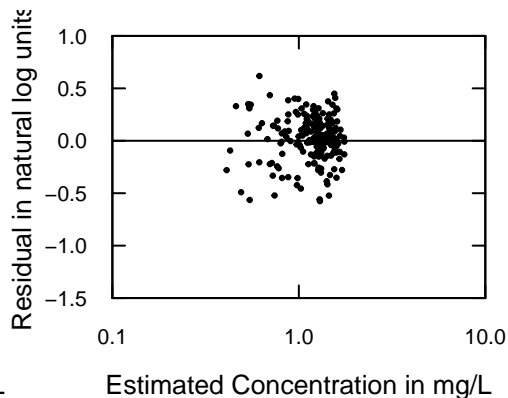
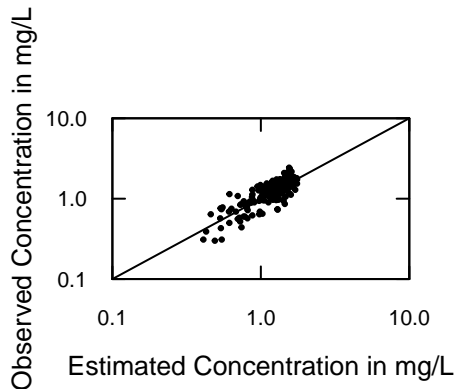
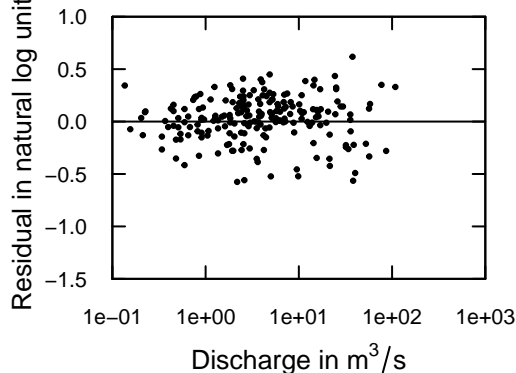
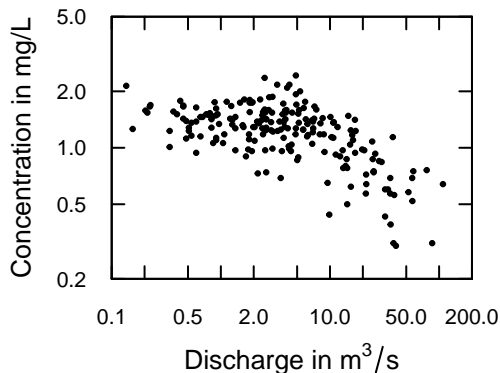


**Choptank River near Greensboro, MD Nitrate as N**  
**Estimated Concentration Versus Year**  
**Centered on July 1 of each year, at 3 specific discharges**



# Choptank River near Greensboro, MD Nitrate as N

## Flux Bias Statistic $-0.03025$ ( $-0.03025$ , $-0.03025$ )

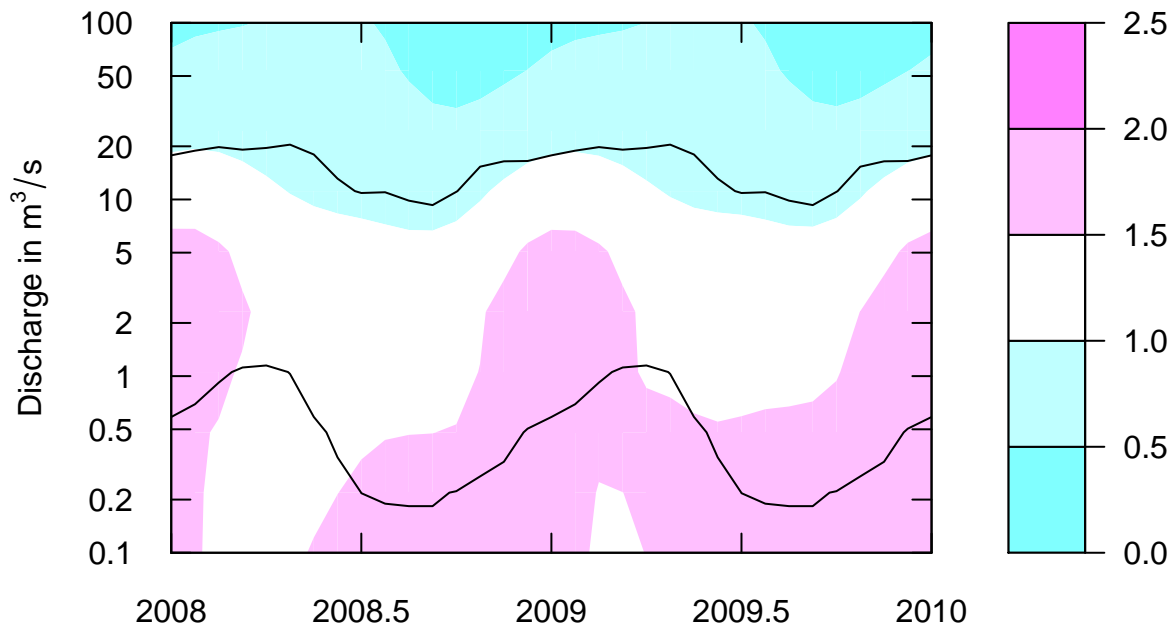




**Choptank River near Greensboro, MD Nitrate as N**

**Estimated Concentration Surface in Color**

**Black lines are 5 and 95 flow percentiles**



**Choptank River near Greensboro, MD Nitrate as N**  
**Estimated Concentration change from 2000 to 2010**  
**Black lines are 5 and 95 flow percentiles**

