

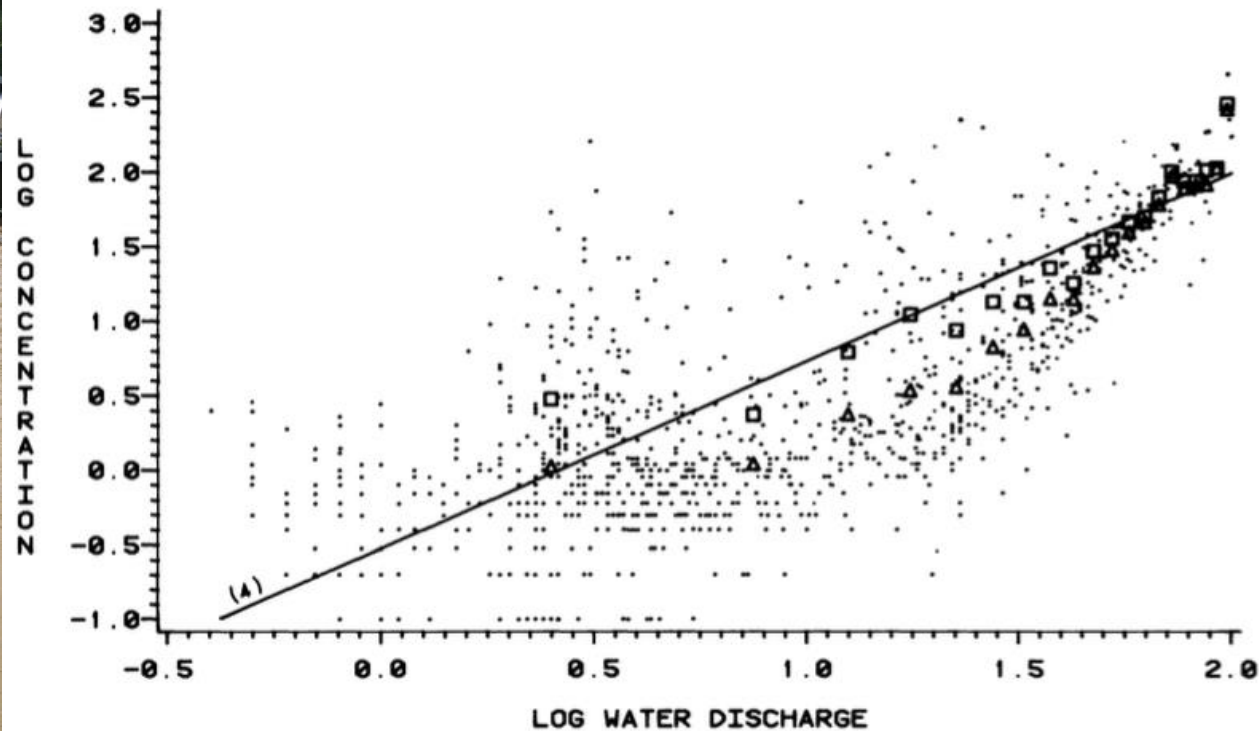
Hydrological Threshold Example

1

- Suspended Sediment/Particulate Phosphorus in Watersheds



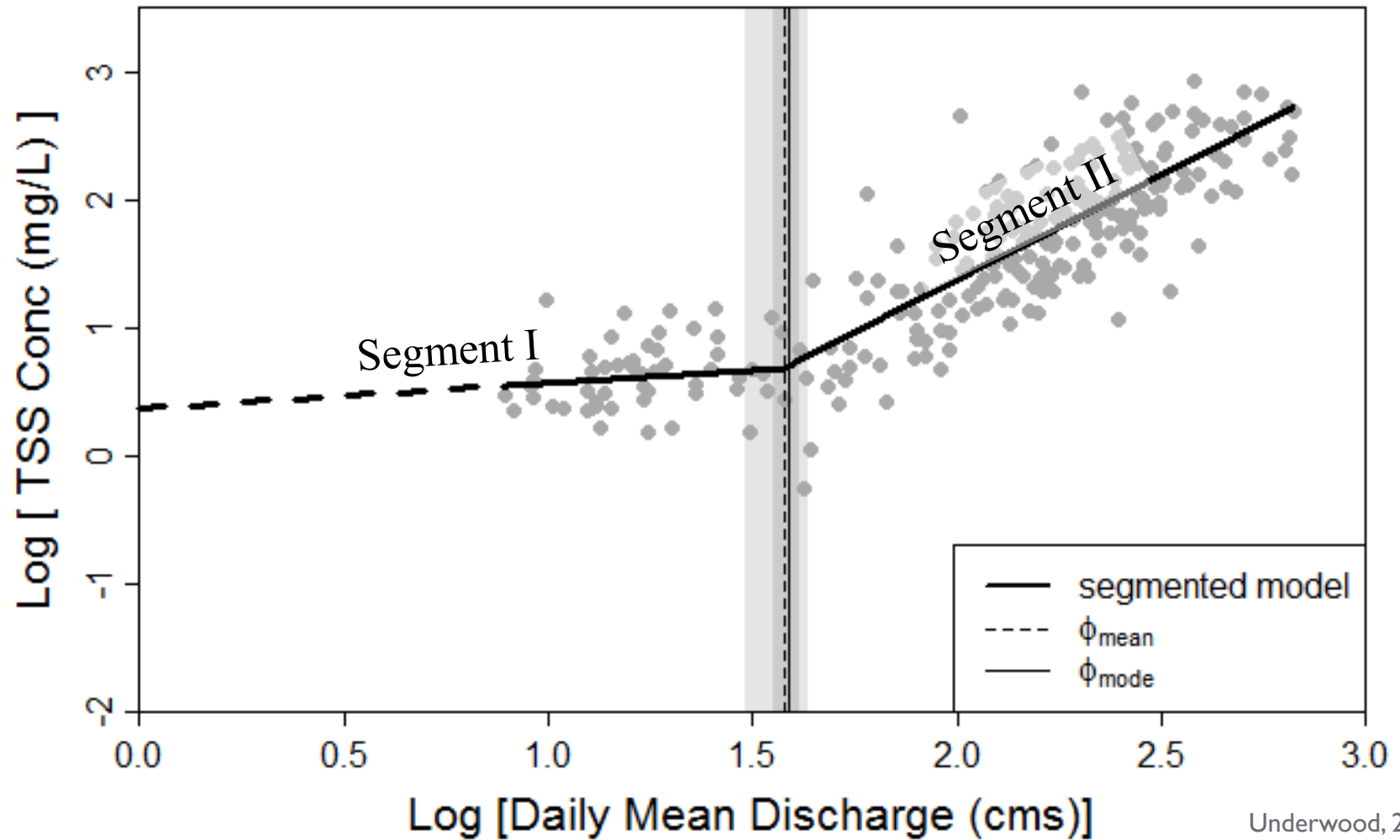
Concentration-Discharge Relationships



Threshold Models

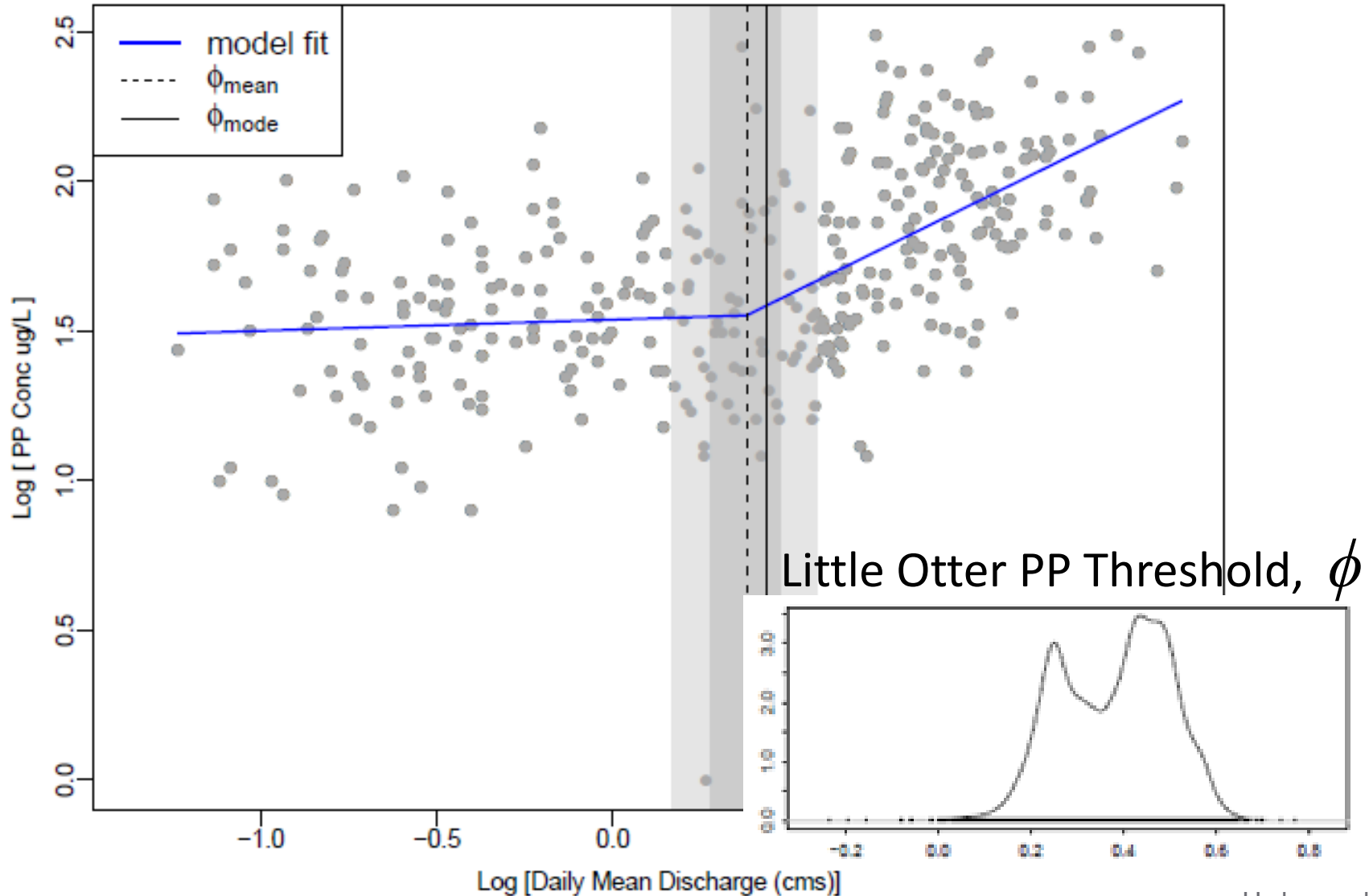
2

□ Bayesian Linear Methods



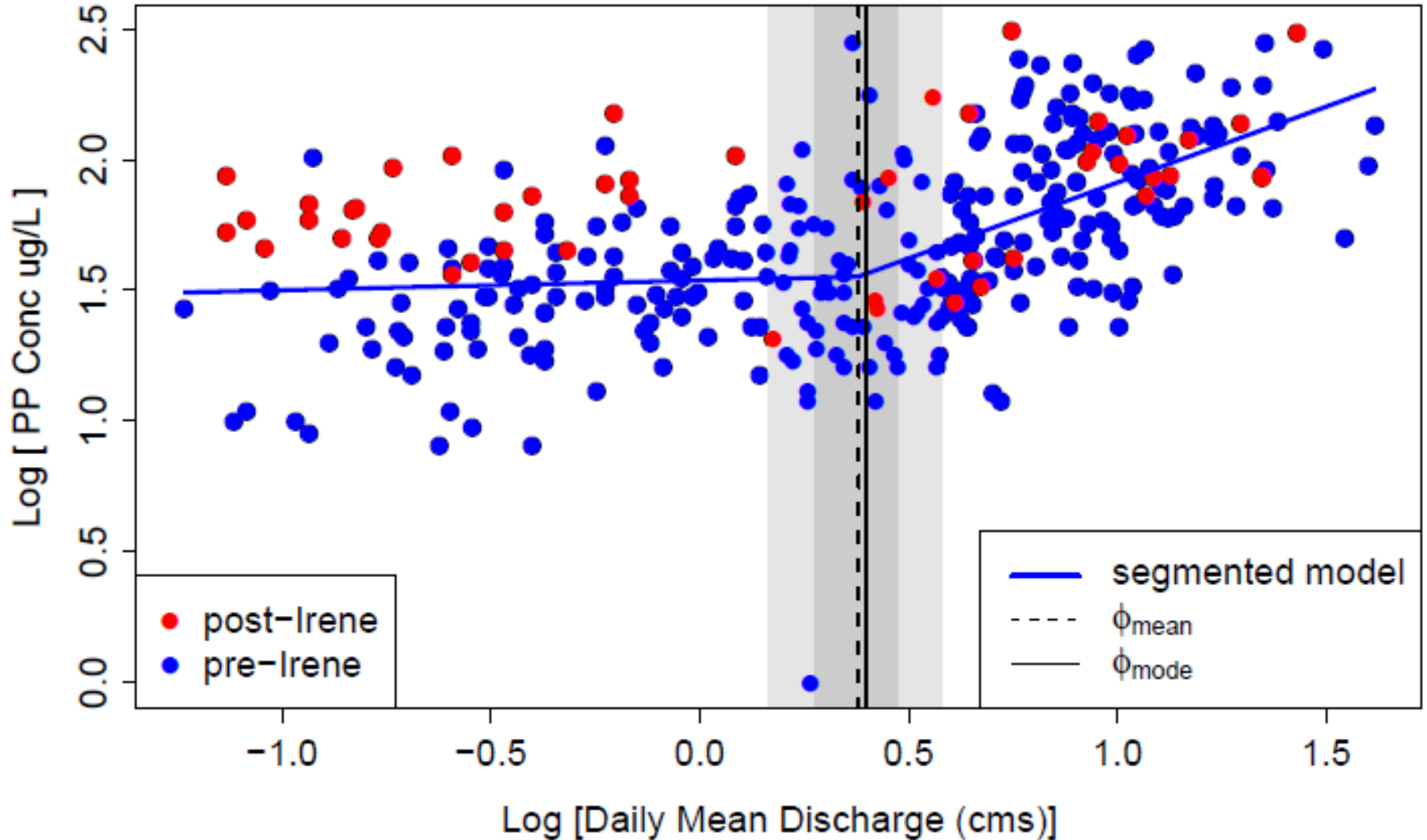
Little Otter Creek DEC Long-Term Monitoring Data

3



Tropical Storm Irene Effect on Little Otter Creek

4



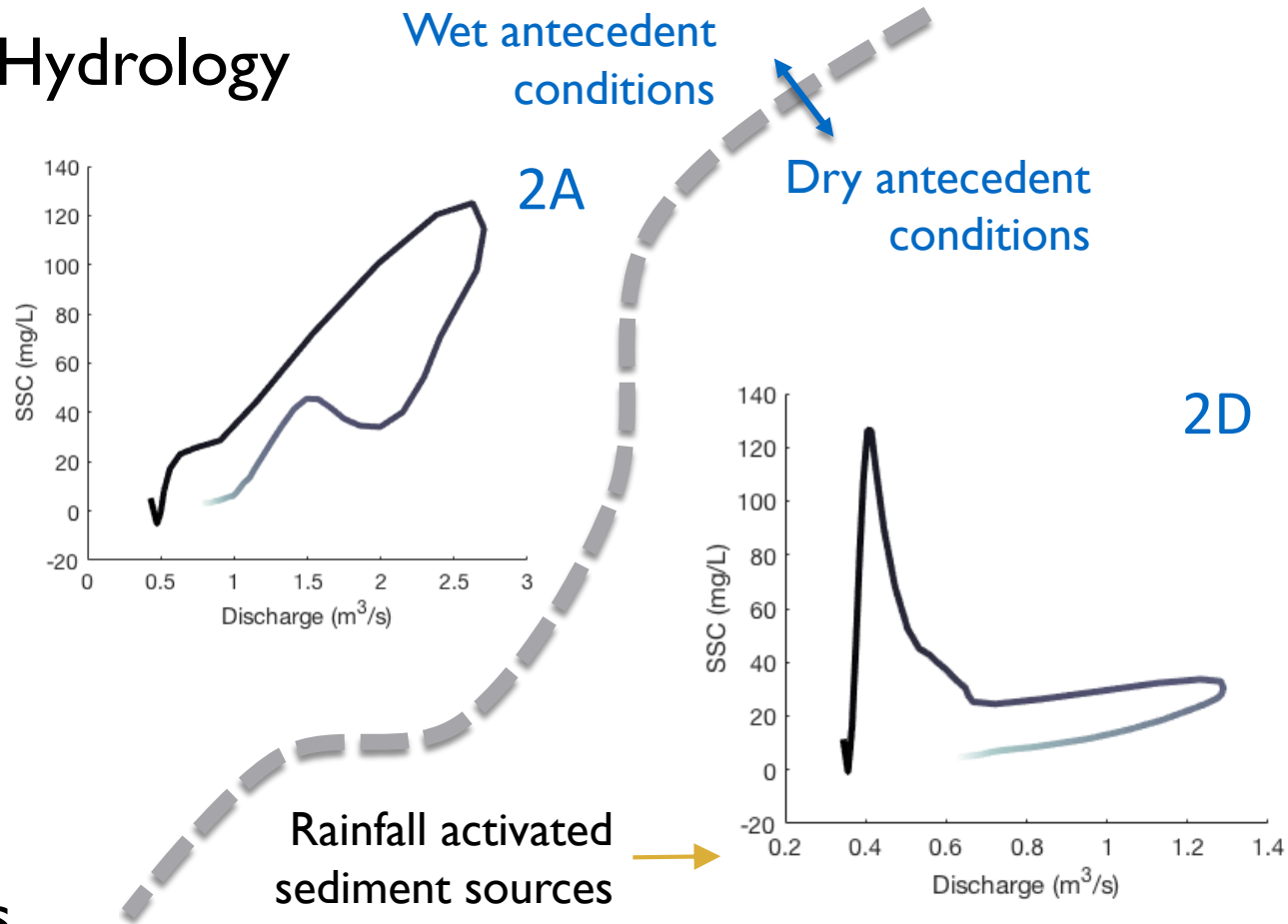
Suggests a higher background supply of PP (TSS) after Irene

Analysis of Individual Storm Event Concentration-Discharge Relationships

5

- Changes in Storm Event Sediment Response
 - ▣ Land Use / Infrastructure
 - ▣ Climate / Hydrology

Streamflow activated sediment sources →

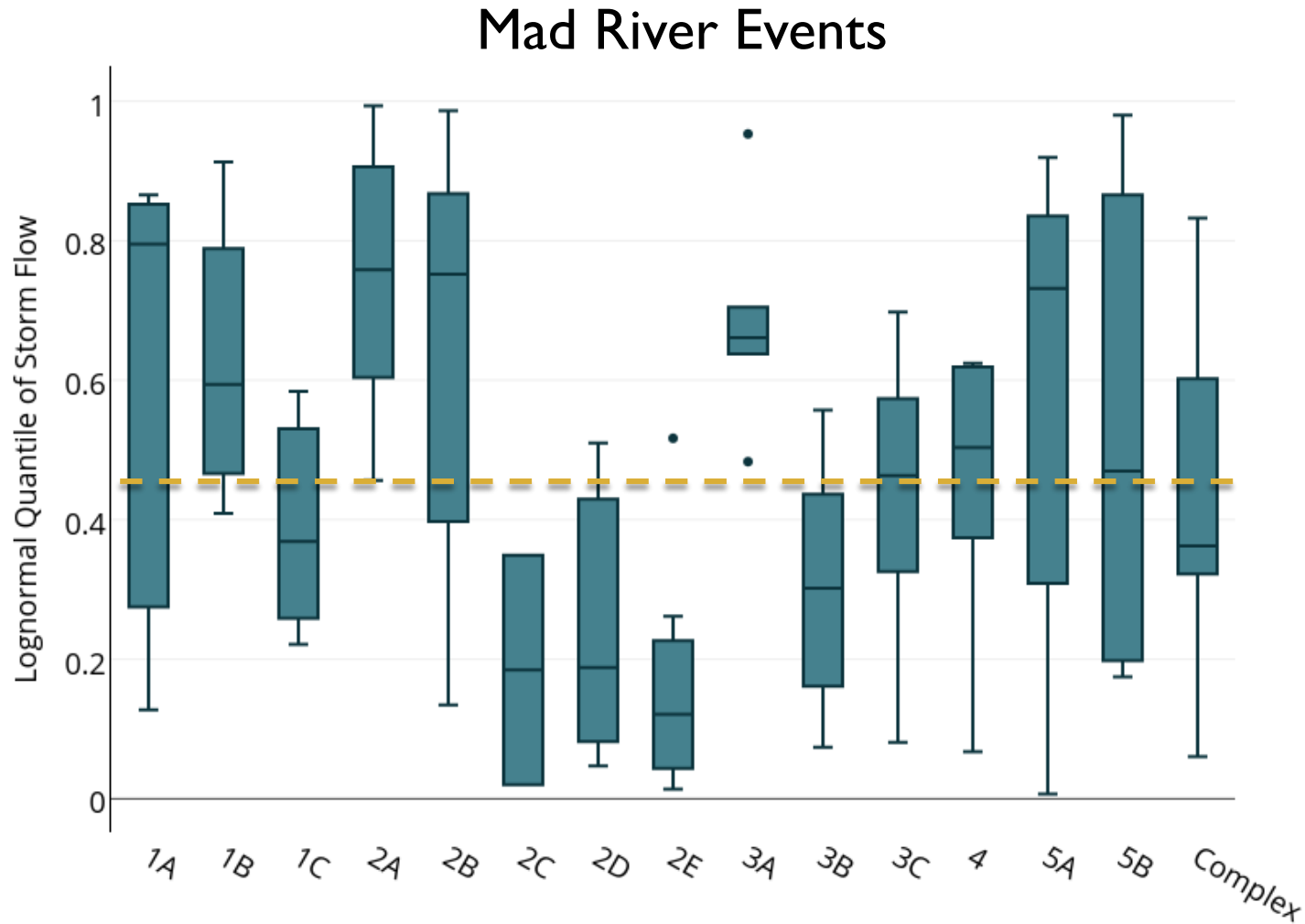


Hysteresis patterns help to infer watershed processes

→ Rainfall activated sediment sources

Hysteresis types and size of discharge event

6



Seasonal trends in hysteresis types

7

Mill Brook, Shepard Brook, Folsom Brook, and Freeman Brook

