

Figure S 1. Flowchart of smoothing algorithm

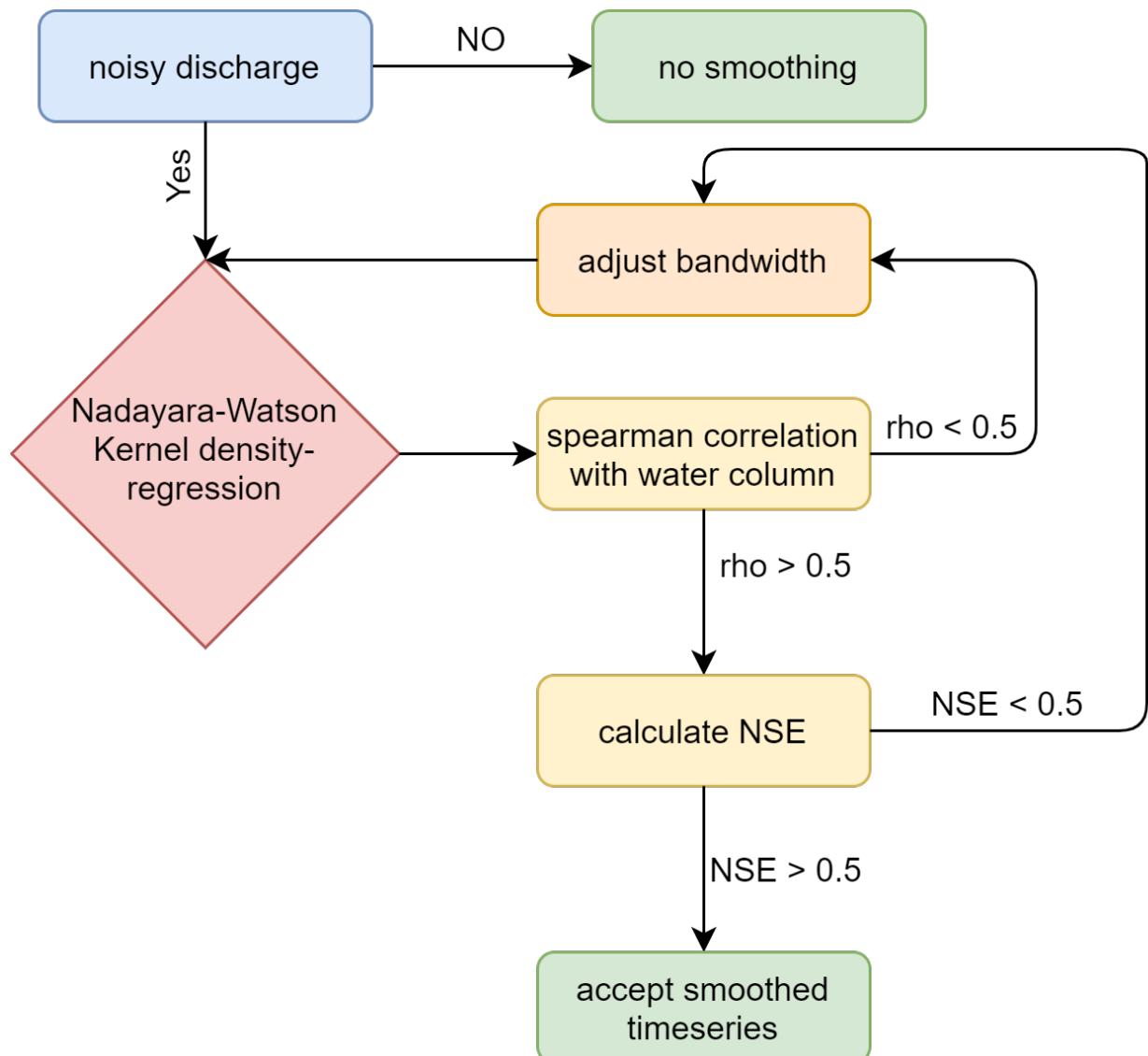


Figure S 2. Local meteoric waterline

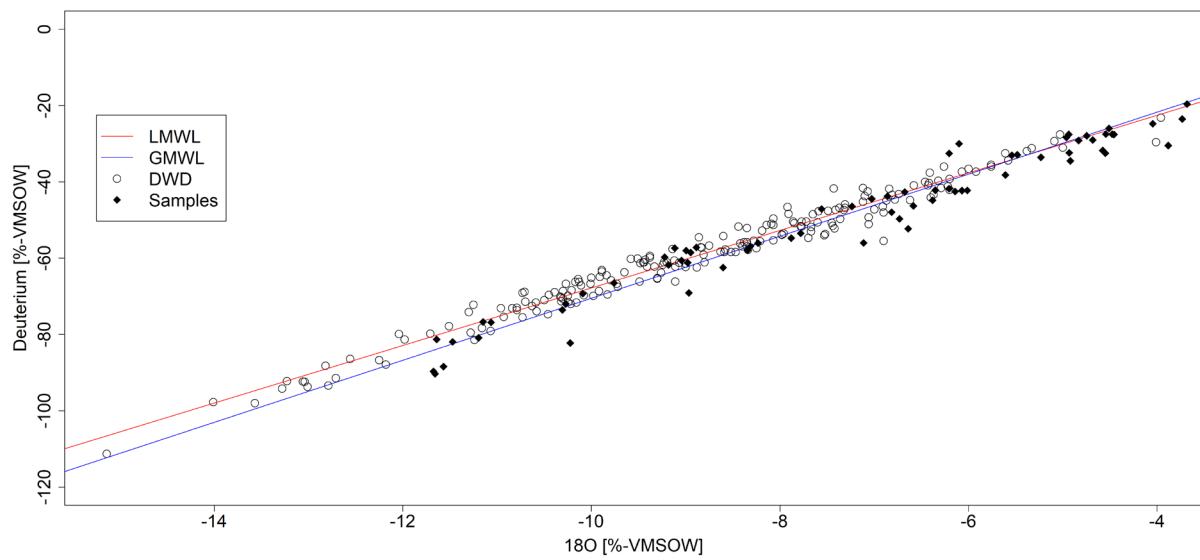


Figure S 3. Scree plot example

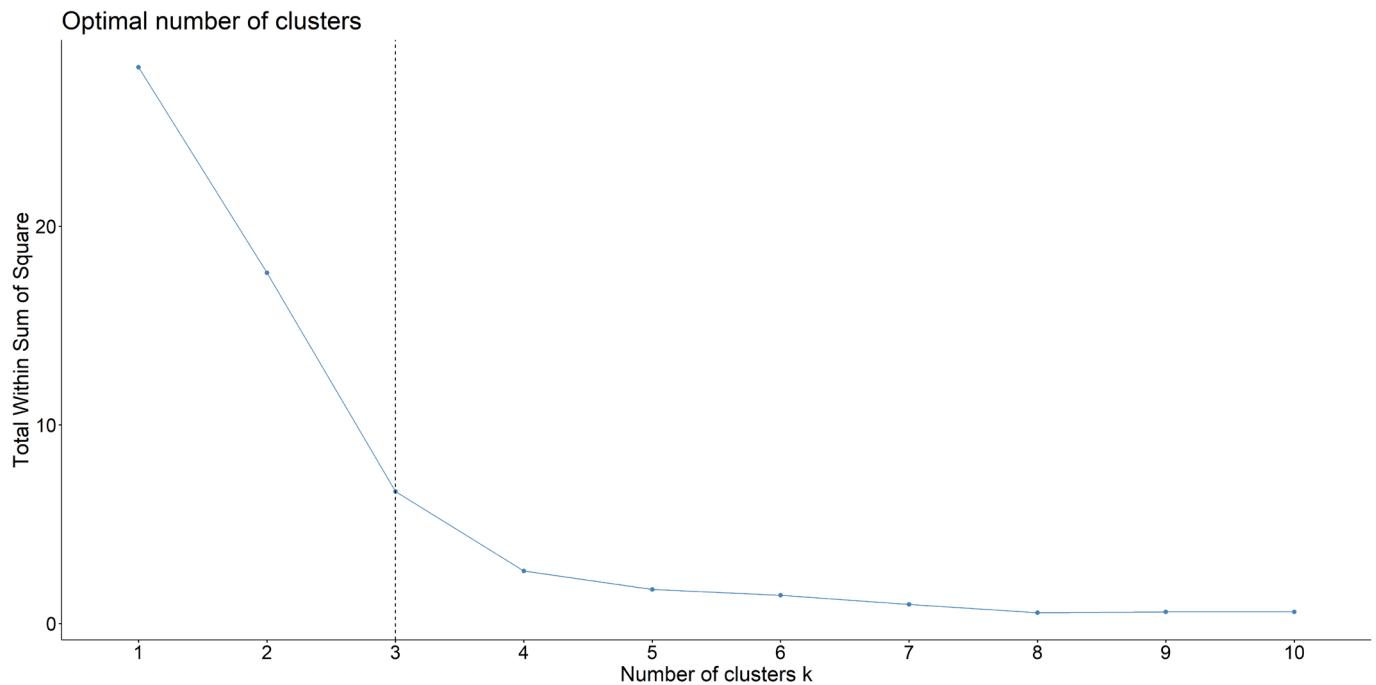


Figure S 4. Discharge functions per cluster a) blue cluster, b) red cluster, c) green cluster.

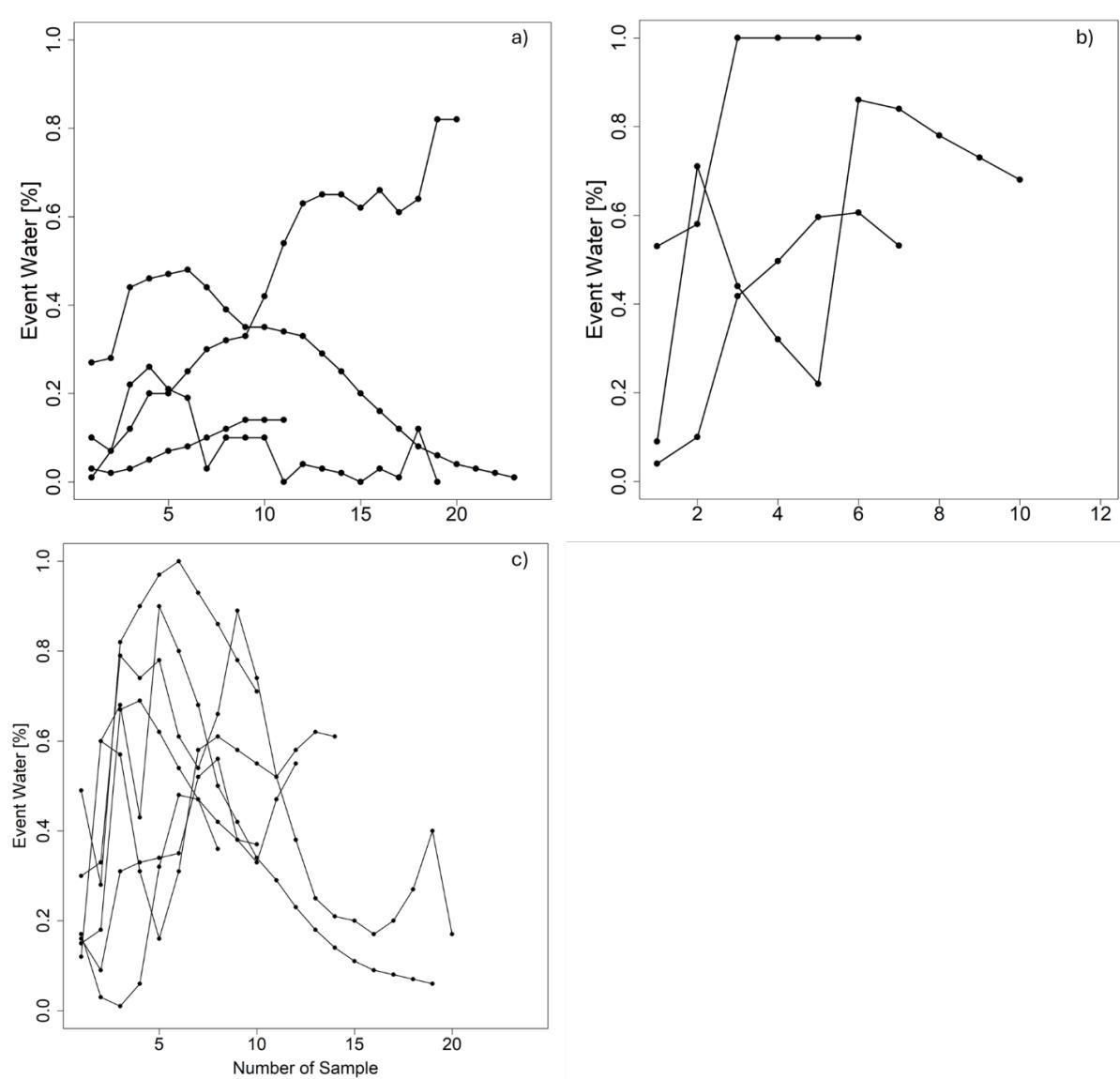


Table S 1. Table of areas under the curve for each event and nutrients nitrate and P_{tot}.

| EVENT | Area NO ₃ ⁻ event | Area NO ₃ ⁻ total | Area P_event | Area P total |
|-------|---|---|--------------|--------------|
| 1 | 0.39 | 0.45 | 0.50 | 0.56 |
| 2 | 0.19 | 0.40 | 0.42 | 0.58 |
| 3 | 0.55 | 0.45 | 0.65 | 0.54 |
| 4 | 0.48 | 0.42 | 0.59 | 0.53 |
| 5 | 0.44 | 0.41 | 0.5 | 0.46 |
| 6 | 0.53 | 0.50 | 0.54 | 0.51 |
| 7 | 0.60 | 0.47 | 0.59 | 0.46 |
| 8 | 0.56 | 0.52 | 0.40 | 0.38 |
| 9 | 0.52 | 0.48 | NA | NA |
| 10 | NA | NA | 0.27 | 0.41 |
| 11 | 0.50 | 0.45 | 0.61 | 0.56 |
| 12 | 0.72 | 0.57 | 0.77 | 0.62 |
| 13 | 0.28 | 0.40 | 0.54 | 0.62 |
| 14 | 0.70 | 0.50 | 0.75 | 0.56 |