LOI results summary

## Total Sediment Sample Weights:

Not good regression Δorg\* (using organic weights instead of %) for Δ sed\* and hyporheic flux magnitude in either season. No differences between size ranges, since it’s not size dependent.

## Delta Analysis

### Original Size Range:

### New Size Range:

Spring regression for the coarser sizes (coarse and fine sand) is better with the new size range than the original. The finer size classes remain very similar. Summer regressions are very similar, except that for the new size range, silt regression is better and fine sand regression is worse.

## Lumping Small Sizes (All Traps)

### Original Size Range:

### New Size Range:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| R2 values for each regression | **Original Sizes** | | **New Sizes** | |
| **SPRING** | **SUMMER** | **SPRING** | **SUMMER** |
| **Silt + Clay** | 0.258 | 0.1455 | 0.2585 | 0.1055 |
| **Silt + Clay + Fine Sand** | 0.2554 | 0.3208 | 0.401 | 0.275 |

For the original sizes, the S+C regression is best in spring, but the S+C+FS is best in summer. The difference is most notable in summer, meaning that the S+C+FS relation overall is better (and that fine sand influences the relation considerably).

For the new sizes, both summer and spring regressions are best for the S+C+FS size group.

It’s hard to tell whether original or new size range is best for this, since the best R2 for the original sizes occur for the summer and for the new sizes occur for the spring. Logically, I think it makes more sense for the original sizes, since there were more fines, but the R2 are on average better.

## Lumping by Trap Pair

This means that by trap pair I summed up the weights of both sediment and organics (g) and plotted them against each other.

### Original Size Range:

The fits for fine sand, silt and clay are:

The fits for combined small size groups are:

### New Size Range:

The fits for fine sand, silt and clay are: