Supplementary Table 5: The fraction of unexplained taxonomic units per sample and averaged per habitat, as it was derived during the functional profiling using UProC KEGG Ortholog reference profiles in long read mode. FTU: fraction of unexplained taxonomic units. R: River. L: Lagoon. S: Sea. AR: Arachthos. ARO: Arachthos Neochori. ARDelta: Arachthos Delta. LOin: Logarou station inside the lagoon. LOout: Logarou station in the channel connecting the lagoon to the gulf. Kal: Kalamitsi. A, B, C: replicate samples.

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| --- | --- | --- | --- |
| **Samples** | **FTU (%)** | **Average FTU per location (%)** | **Average FTU per habitat (%)** |
| R\_AR\_A | 54.68 | 50.93 | 56.85 |
| R\_AR\_Β | 51.49 |
| R\_AR\_C | 46.61 |
| R\_ARO\_A | 49.98  | 48.29 |
| R\_ARO\_Β | 47.68 |
| R\_ARO\_C | 47.21 |
| R\_ARDelta\_A | 76.16 | 71.32 |
| R\_ARDelta\_Β | 69.64 |
| R\_ARDelta\_C | 68.17 |
| L\_LOin\_A | 67.68 | 66.95 | 67.51 |
| L\_LOin\_B | 67.94 |
| L\_LOin\_C | 65.22 |
| L\_LOout\_A | 75.18 | 68.06 |
| L\_LOout\_B | 66.04 |
| L\_LOout\_C | 62.97 |
| S\_Kal\_A | 37.9 | 38.91 | 38.91 |
| S\_Kal\_B | 39.92 |
| S\_Kal\_C | 38.92 |