

Composition and patterns of taxa assemblages in the Western Channel assessed by 18S sequencing, microscopy and flow cytometry.

Appendix 2: Nutrient analysis Methods from WCO station L4

The nutrient samples were collected weekly where the weather conditions permitted using a CTD/rosette sampling system deployed from the RV Plymouth Quest. The samples are taken in clean, acid washed, HDPE bottles and stored in the cool and dark, and returned to Plymouth Marine Laboratory for analysis as soon as possible. If necessary then the samples are frozen for later analysis. The analysis is carried out by colorimetric analysis techniques using a segmented-flow 5-channel SEAL autoanalyser. The analysis is carried out for Nitrate+Nitrite, Nitrite, Silicate, Phosphate and Ammonium, according to the methods described in [1]. Clean sample handling and manipulation is observed and is in accordance to the International GO-SHIP nutrient protocols where possible [2]. The up to date nutrient data are available on the Western Channel Observatory website (Western Channel Observatory) [3]

References

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2. Susan Becker, Michio Aoyama, E. Malcolm S. Woodward, Karel Bakker, Stephen Coverly, Claire Mahaffey, Toste Tanhua. (2020). GO-SHIP Repeat Hydrography Nutrient Manual: The precise and accurate determination of dissolved inorganic nutrients in seawater, using Continuous Flow Analysis methods. *Frontiers in Marine Science, Analysis Methods*, October 2020, Volume 7, Article 581790. doi: 10.3389/fmars.2020.581790.
3. Woodward E.M.S., Harris C. (2022). Micromolar Nutrient concentration profiles from the long-term time series at Station L4 in the Western English Channel from 2000 to 2021. NERC EDS British Oceanographic Data Centre NOC doi:10.5285/d61b955c-93b2-681f-e053-6c86abc0378e