P69. AVAILABILITY OF NUMERICAL MATHEMATICAL MODELS TO SOLVE THE APPLIED PROBLEMS OF WATER QUALITY MANAGEMENT OF SHELF ECOSYSTEMS

Kira Slepchuk\textsuperscript{1}, Tatyana Khmara\textsuperscript{1}

\textsuperscript{1}Marine Hydrophysical Institute RAS, Russia
slepchuk@mhi.ras.ru

The problems appeared during development and calibration of one-dimensional (vertical resolution) biogeochemical block of water quality model, are discussed. It is extremely useful in the initial stage of shelf ecosystems research because of its simplicity in as implementation as result interpretation. To describe the environmental parameters dynamics we used the Model for Estuarine and Coastal Circulation Assessment, which consists of hydrodynamic model; model of conservative impurity transport; chemical and biological model. The seasonal of biogenic elements and phytoplankton variability in the Sevastopol Bay is studied as an example.