

ABSTRACT

The thesis is presented in 55 sheets. It contains 3 appendixes and bibliography of 18 references. Nine figures and 4 tables are given in the thesis.

The aim of the diploma project is the development of software for numerical simulation of the cold film on thermal balance and thermal regime of water to improve the forecasting of weather conditions reserved to zones and waters.

As part of the project is analysis of existing climatological models and methods of presenting cold film.

The developed system decided to build, based on models that operate in accordance with the methodology LAKE as the one that better meets customer requirements.

The results of graduate design software system developed in the programming language Delphi.

Completed tests developed system based on actual measurements. The developed system can be used in climatological models for forecasting weather conditions. The main users of the system are programmers and forecasters.

Keywords: cold foil, heat balance, thermal treatment climatology.