



Analysis of climate changes of Arctic tundra zone with help of Virtual Globe

Valery Tsepelev (1) and Eugeni Panidi (2)

(1) Saint-Petersburg Hydrometeorological Center, St.Petersburg, Russia, v0010200@mail.ru, (2) Saint-Petersburg State University, St.Petersburg, Russia, panidi@yandex.ru

Climatic variations of XXI century are influenced to the Arctic tundra zone. The most important from climate-forming factors of the tundra zone are the thermal and solar-radiation regime, atmospheric circulation regime and other. In order to investigate the role of these factors, authors suggest to use GIS technologies which allows to conduct the historical analysis in the three-dimensional space of Virtual Globe. Datasets of sea ice distributions, solar-radiation, vegetation and hydrometeorological characteristics are used for this aim. Some results flowing out from undertaken attempt are shown.