

3.4.1 High Resolution Hydrological Modelling

For investigating the impact of present day climate and climate change on distributed runoff and other hydrological variables, high resolution hydrological modelling is needed. It could be accomplished by 1) conducting (or adapting) compatible nationwide hydrological studies in all Baltic countries using basin-based hydrological models with sub-basin resolutions of 200-500 km², or 2) using macro scale hydrological models that cover the Baltic Sea basin with horizontal grid resolutions approaching 0.2 to 0.1 degrees. This would provide comprehensive, detailed mapping of runoff, groundwater recharge and other hydrological variables, as well as a platform to perform a wide range of hydrological modelling activities.