Groundwater project report contents

* Describing Uhlirska catchment site (precipitation amounts, geology, topography, land cover, soils, aquifer)
* Short description of Modflow program and GWVistas software (use web with citations)
* Design of Uhlirska Model in Modflow/GWVistas – one layer, how many rows and columns, local coordinates, infiltration=recharge of aquifer (BFlow baseflow analysis from excel), rivers, top elevation, bottom elevation, hydraulic conductivity map
* Calibration of the steady state model using piezometer heads and other supporting points of groundwater table (hilly parts), describe procedure of calibration (manual, automatic GV calibration), results (figure or table)
* Optional bonus, use of Modpath and particles from the hilly parts towards the valleys
* Figures – map of catchment, map of top elevation, bottom elevation, groundwater table with velocity vectors, map of hydraulic conductivity, calibration map with targets (circles of calibration), crossplot of measure and modelled groundwater heads

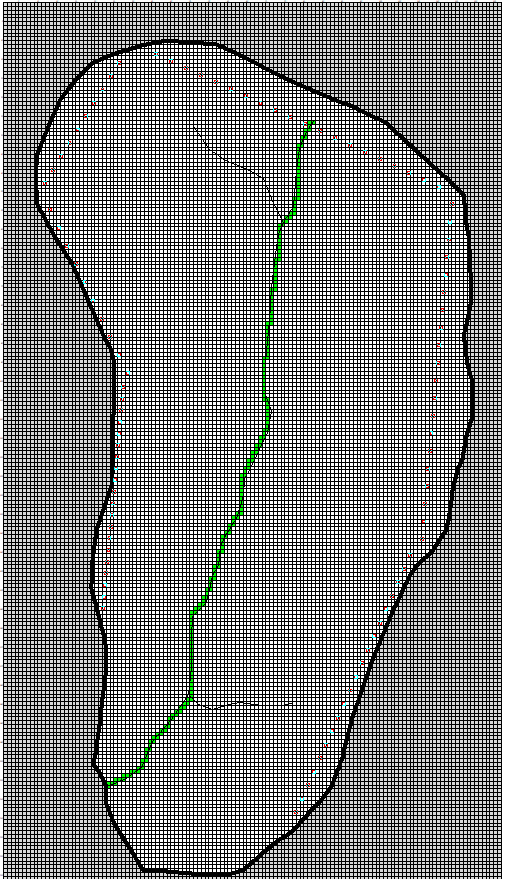


Fig. *xx-number yourselve* Map of finite differences and streams in the model

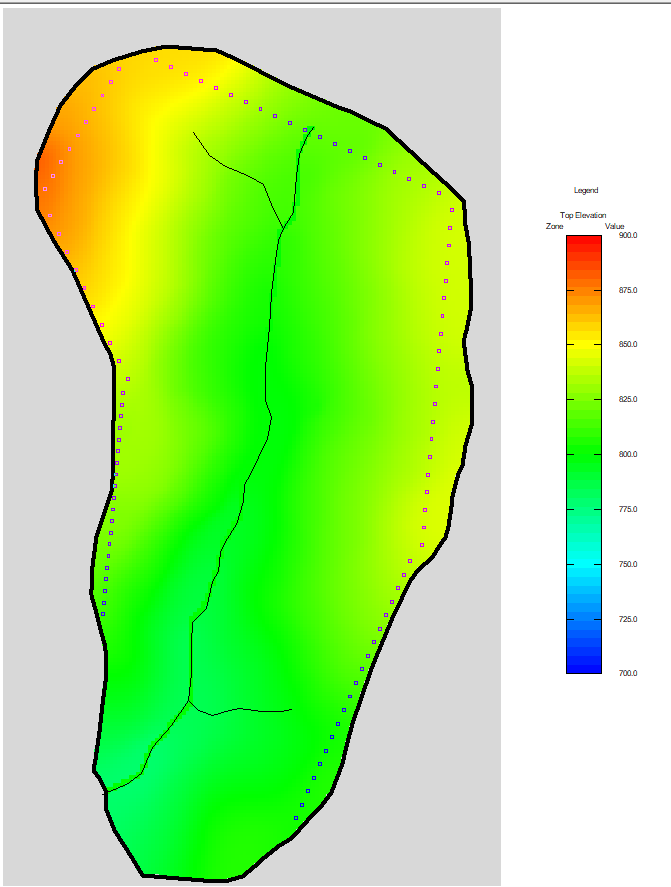


Fig. *xx-number yourselve* Map of top elevation

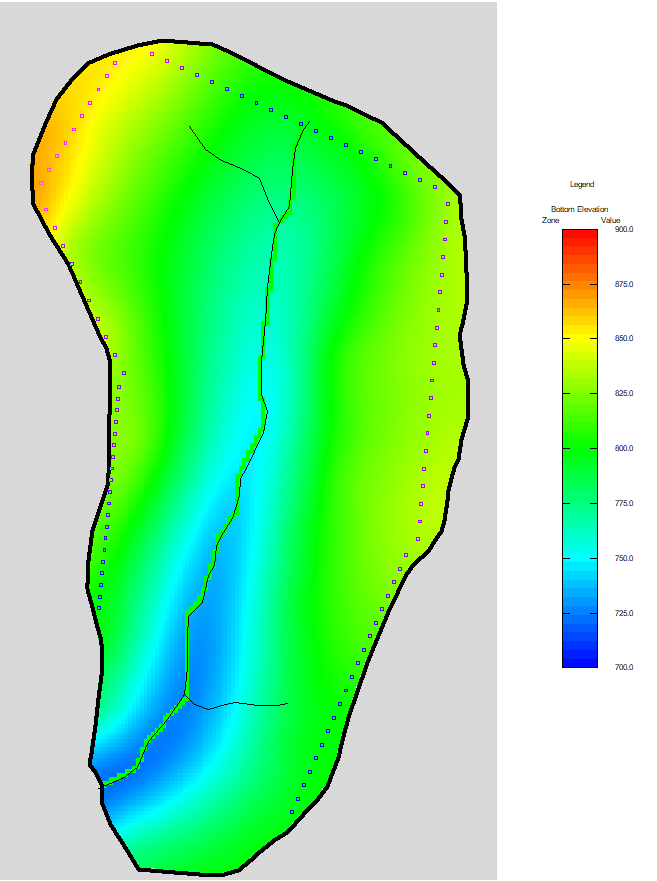


Fig. *xx-number yourselve* Map of bottom elevation

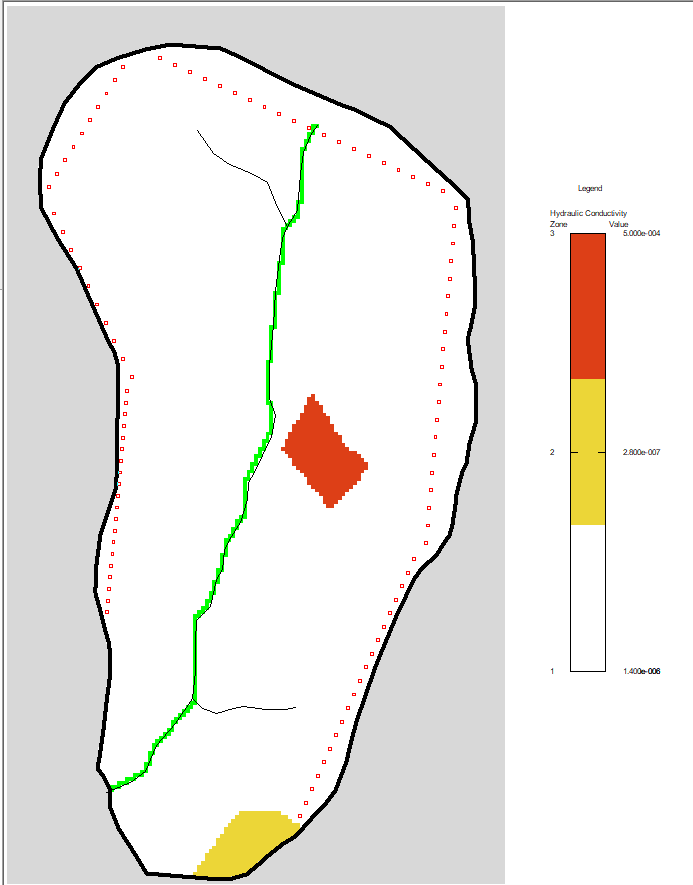


Fig. *xx-number yourselve* Map of saturated hydraulic conductivity zones

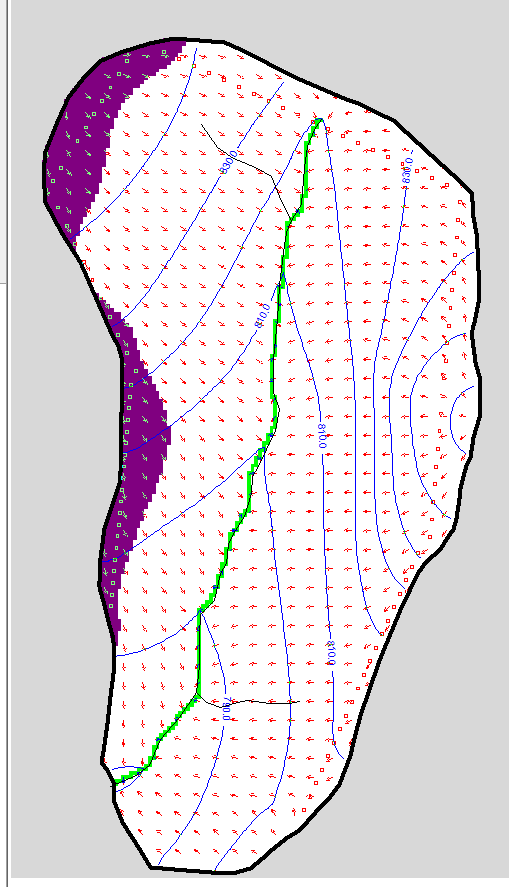


Fig. *xx-number yourselve* Map of modelled water table and velocity vectors

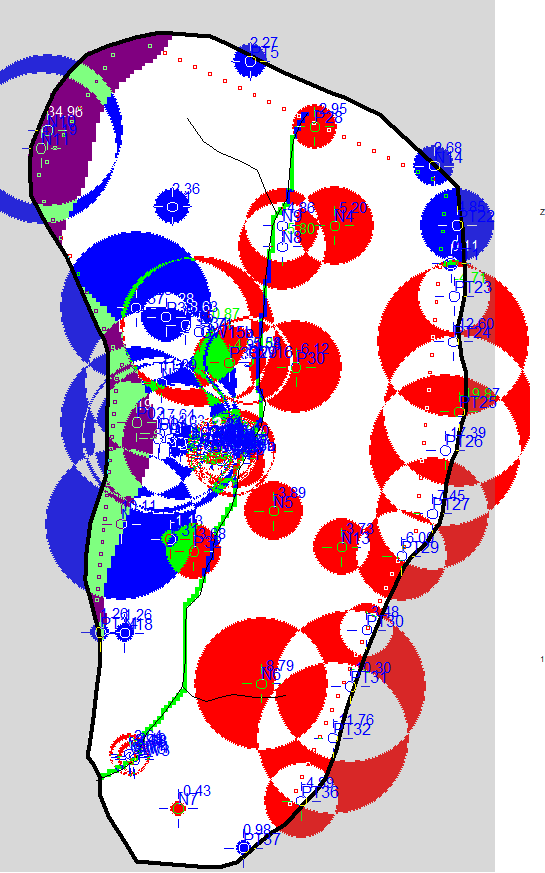


Fig. *xx-number yourselve* Map of calibration results

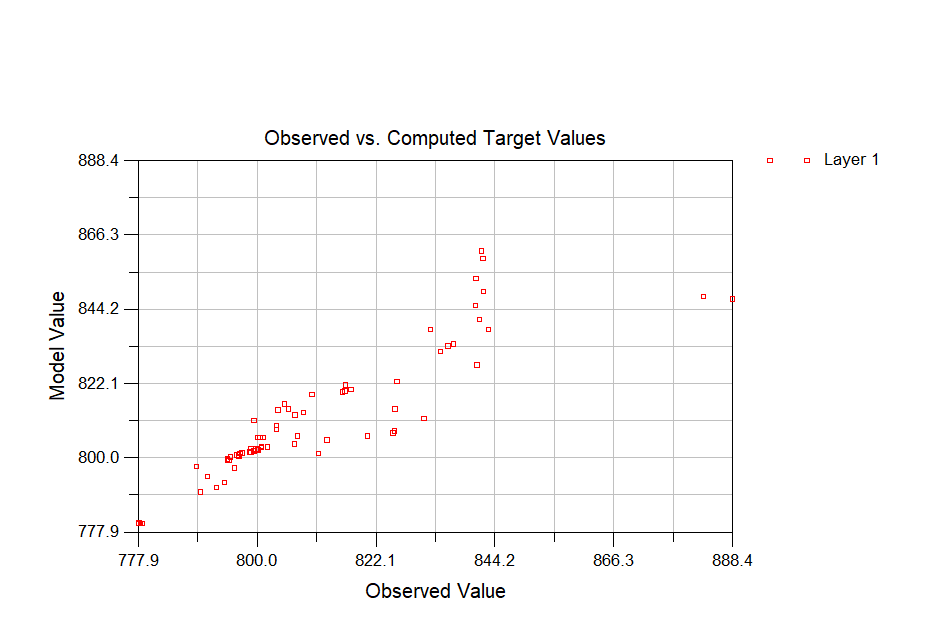


Fig. *xx-number yourselve* Modeled and observed values of groundwater

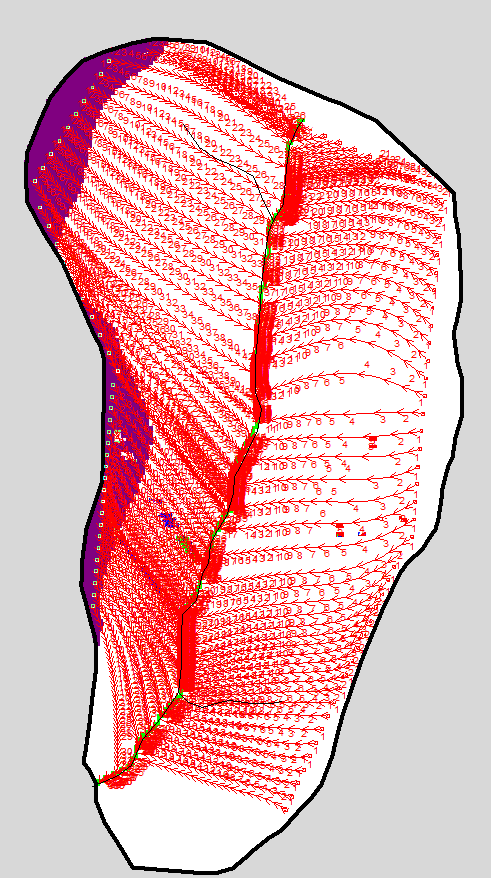


Fig. *xx-number yourselve* Map of pathlines and traveltimes (years)..*use Props – porosity 0.01*

Conclusion

Results comments. Your experience with modelling