

GENERAL INFORMATION	
Parameter name	Hydraulic transmissivity
Name of the layer in EGDI Map Viewer	Hydraulic transmissivity of the Neogene aquifer, Girona
Original name of the layer uploaded to EGDI database	PP03_ICGC_hydraulic_transmissivity_Neog.tif
Category	Resources for open-loop systems
Definition	The rate of groundwater flow laterally through an aquifer, determined by hydraulic conductivity and container thickness.
Harmonized unit	m ² /d
Relevance for shallow geothermal energy	Property relevant for designing open-loop installations of shallow geothermal energy systems .
Data type	Continuous data layer
Data format	raster
Projection	EPSG: 3034
Dataset selected for pilot area	Cork, Zaragoza, Girona

ATTRIBUTES	
Unit	m ² /d

DATA SOURCE	
Pilot area	Urban area of Girona city (Catalonia, NE Spain)
Data source	Hydrogeological map of Catalonia at 1:25.000 scale and local hydrogeological studies
Contact data owner	geotermia@icgc.cat
Last Update	March 2021

Explanatory text English
Raster dataset which represents the weighted hydraulic transmissivity of one the main three aquifers existing in the Girona urban pilot area: The Neogene aquifer consisting on detrital sediments associated with alluvial fan deposits and characterised by clay, sand and gravel in different proportions and consolidation degree. Hydraulic transmissivity has been calculated by multiplying the weighted hydraulic conductivity of the Neogene deposits by the saturated thickness. This last has been obtained by the intersection between the representative groundwater table heigh in m asl and the Neogene uppermost and lowermost limits heigh in m asl which come from the 3D geological model developed by the ICGC in the framework of the MUSE project.

Explanatory text national language

Language	Catalan
	Conjunt de dades ràster que representa la transmissivitat hidràulica equivalent d'un dels tres principals aquífers existents a la zona urbana de Girona; l'aquífer neogen format per dipòsits detritics associats a ventalls al·luvials i caracteritzats per argiles, sorres i graves en diferents proporcions i grau de consolidació variable. Aquesta capa s'ha calculat multiplicant la conductivitat hidràulica equivalent dels dipòsits neògens pel seu gruix saturat. Aquest darrer s'ha obtingut mitjançant la intersecció entre la superfície piezomètrica representativa del nivell d'aigua en m snm i les cotes del sostre i la base del Neogen en m snm provinents del model geològic en 3D elaborat per l'ICGC en el marc del projecte MUSE.