GENERAL INFORMATION	
Parameter name	**Thermal capacity - open loop systems**
	Thermal capacity - open loop systems, Girona
Name of shapefile	PP03_ICGC_therm_capacity_ols.tif
Category	Resources for closed-loop systems
Definition	Thermal capacity of a well doublet for heating and/or cooling depending on the hydraulic productivity and the thermal productivity.
Harmonized unit	kW
Description	The power [kW] available to be used with a groundwater heat exchanger, which depends on the pumping rate and the temperature shift (temperature difference between pumping and injection well).
Data type	Discrete data classes based on a joint legend: (the legend yet needs to be defined)
Data format	Raster
Projection	EPSG: 3034
Dataset selected for pilot area	Bratislava (TBC), Ljubljana, Cardiff (TBC), Vienna**, Girona**

ATTRIBUTES	
Unit	kW

DATA SOURCE	
Pilot area	Urban area of Girona city (Catalonia, NE Spain)
Data source	ICGC
Contact data owner	geotermia@icgc.cat
Last Update	August 2021

Explanatory text English
Raster dataset which represents the sum of thermal capacities (for OLS - open loop systems) of the three aquifers existing in the Girona urban pilot area: the detrital Quaternary unconfined aquifer, the Neogene confined aquifer (consisting on detrital sediments associated with alluvial fan deposits) and the Eocene confined aquifer (consisting of nummulitic limestones). Thermal capacity for OLS for each aquifer was calculated by multiplying maximum groundwater flux pumped out by a totally-penetrating well (with a maximum limit set to 100 l/s), groundwater heat capacity and temperature differential as a result of heat exchange (fixed to 5°C). Groundwater flux was calculated for each aquifer separately considering aquifer type (unconfined or confined), hydraulic transmissivity, the drawdown (maximum fixed at 25% of saturated aquifer thickness), radius of influence (250m for unconfined aquifer and 2500m for confined aquifer) and a well radius of 0.25m.

Explanatory text national language	
Language	Catalan
Conjunt de dades ràster que representa la suma de capacitats tèrmiques (per a OLS - sistemes oberts d'intercanvi de calor) dels tres aqüífers existents a la zona pilot: l'aqüífer detrític quaternari de tipologia	

lliure, l'aqüífer confinat neogen (format per sediments detrítics associats a dipòsits de ventalls al·luvials) i l'aqüífer confinat de l'Eocè (format per calcàries nummulítiques). La capacitat tèrmica per a sistemes d'intercanvi de calor oberts, s'ha calculat per cada aqüífer multiplicant el cabal màxim d'extracció d'aigua subterrània d'un pou totalment penetrant (amb un límit màxim establert de 100 l/s), la capacitat calorífica de l'aigua i el diferencial de temperatura com a resultat de l'intercanvi de calor fixat en 5 °C. El cabal màxim d'extracció s'ha calculat per a cada aqüífer considerant el tipus d'aqüífer (no confirmat o confinat), la transmissivitat hidràulica, el descens (fixat amb un màxim del 25% del gruix de l'aqüífer saturat), el radi d'influència (250m per a l'aqüífer no confinat i 2500m per als aqüífers confinats) i un radi de pou de 0,25m.