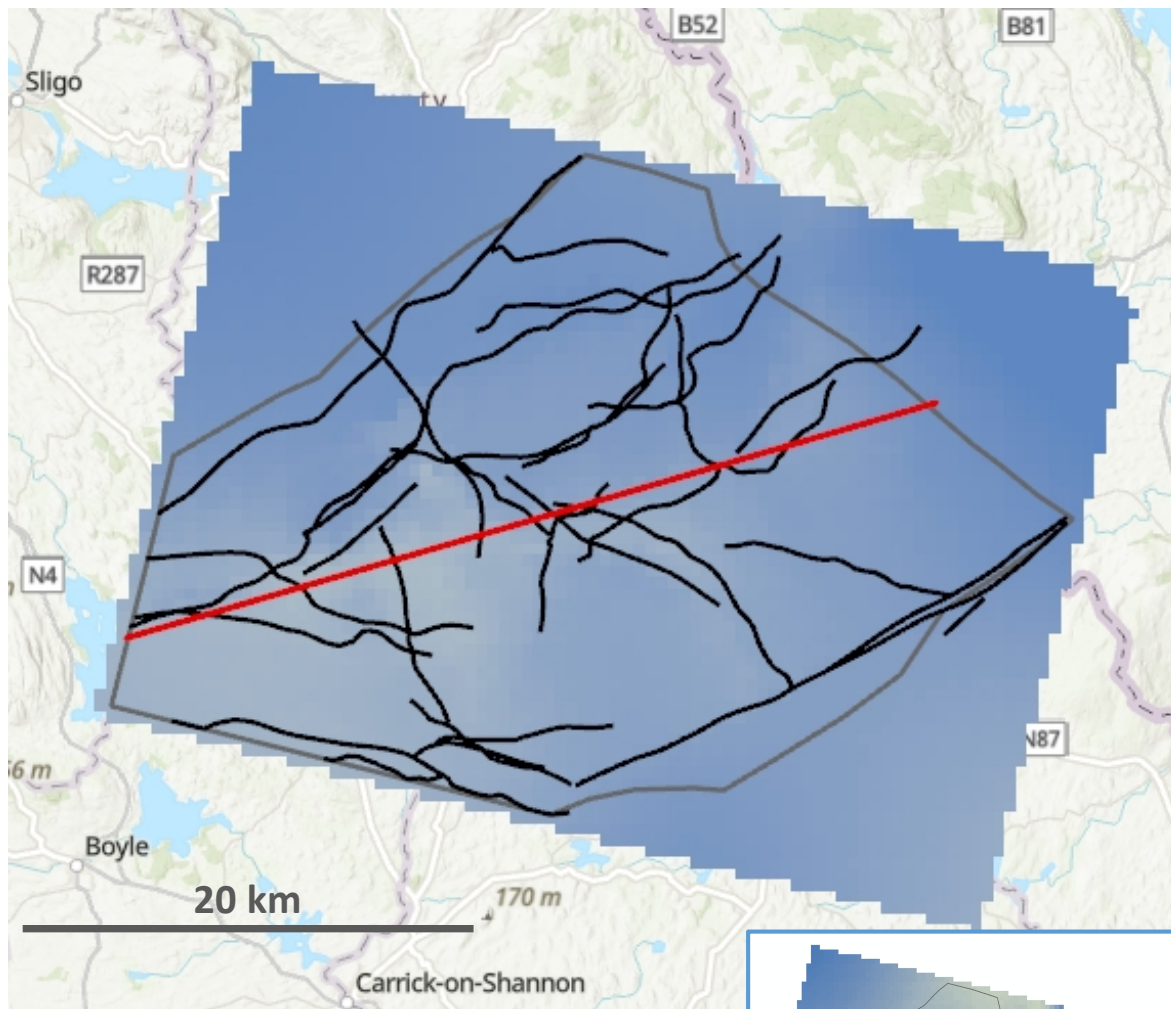
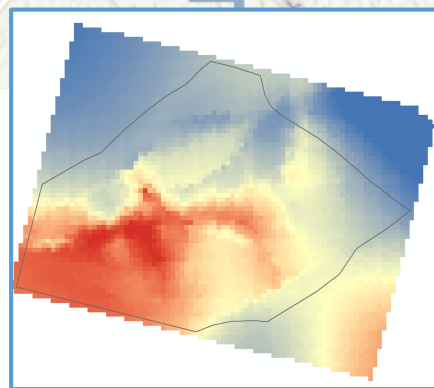
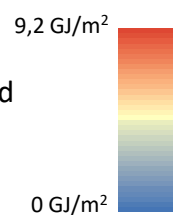




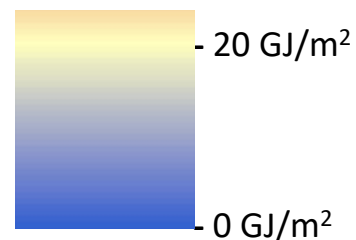
Inset: Distribution of Heat-in-Place application for T_{ref} 18°C (accentuated in a special legend)



HotLime Case Study 3A

Carboniferous carbonates in Lough Allen Basin

- HIP18 distribution
- Fault traces at the surface
- Cross-section line



Distribution of Heat-in-Place applied for T_{ref} 18°C, depicted with local legend (cf. [Factsheet Heat-in-Place](#))

Assessment based on an estimated average geothermal gradient for Ireland of 25°C/km and the reservoir depth and thickness derived from a 3D geological model (see chapter 2.5 in [Report 3.1](#)).

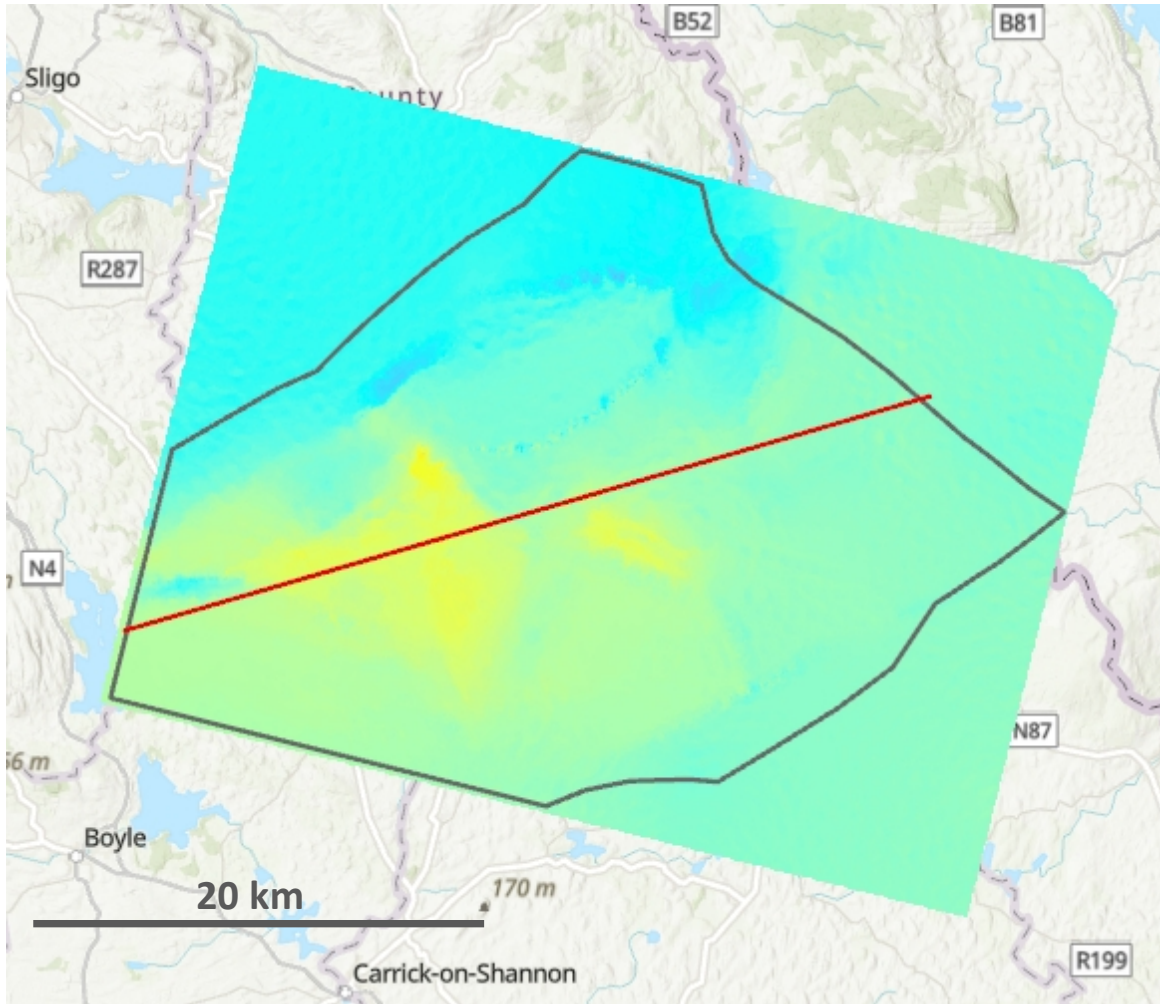
Fault traces at the surface

Primary conduits for hydrothermal fluids and zones of possibly higher, but not quantifiable Heat-in-Place. Fault traces are shown at the surface, because of difficulty predicting their intersection with the geothermal reservoir without 3D seismic. All faults depicted are listed in the [HotLime Tectonic Boundary Objects](#) vocabulary.

Cross-section line

→ [click the line to see the cross-section](#)



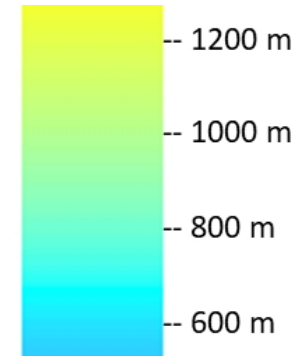


HotLime Case Study 3A

Carboniferous carbonates in Lough Allen Basin



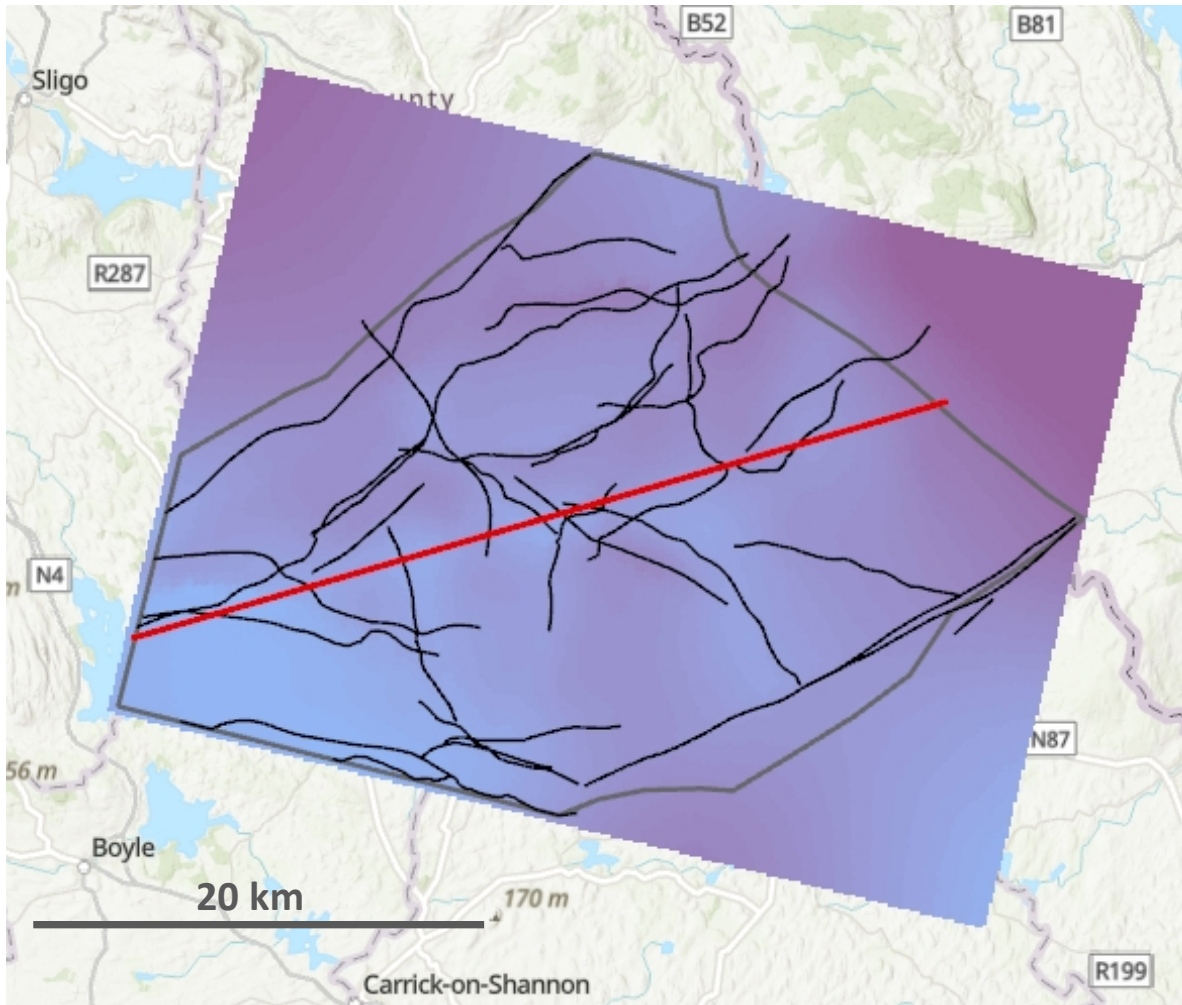
- Gross thickness of reservoir
- Cross-section line



Gross thickness of carbonate geothermal reservoir (as one of the crucial parameters for Heat-in-Place assessment, cf. [Factsheet Heat-in-Place](#))



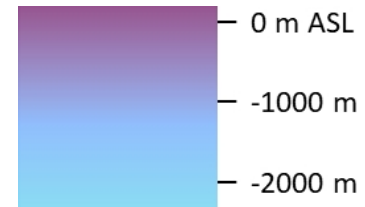
Cross-section line → [click the line to see the thickness variations in the cross-section](#)



HotLime Case Study 3A

Carboniferous carbonates in Lough Allen Basin

- Depth to top of reservoir
- Fault traces at the surface
- Cross-section line



Depth to top of reservoir

(minimum drilling depth to tap the reservoir and base for assessing top of reservoir temperature from the geothermal gradient)



Faults traces at the surface

Fault traces are shown at the surface, because of difficulty predicting their intersection with the geothermal reservoir without 3D seismic.

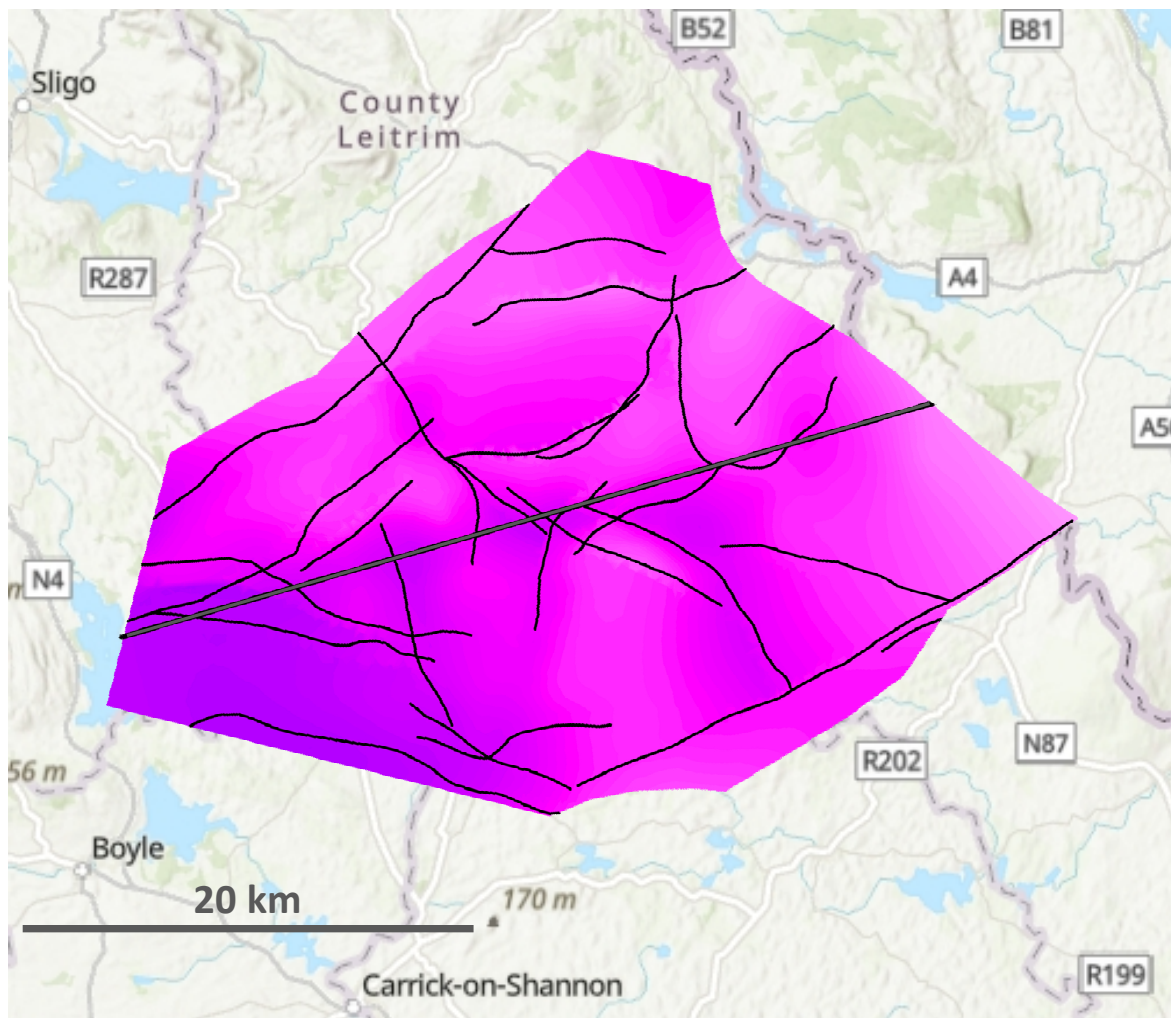
All faults depicted are listed in the [HotLime Tectonic Boundary Objects](#) vocabulary.



Cross-section line

→ [click a line to see the depth changes \(throws\) at faults](#)



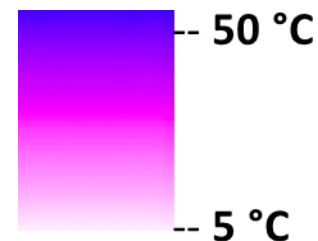


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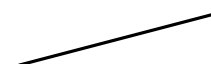
Carboniferous carbonates in Lough Allen Basin



- Temperature on top of reservoir
- Fault traces at the surface
- Cross-section line



Temperature on top of reservoir based on an estimated average geothermal gradient for Ireland of 25°C/km (cf. [Factsheet Temperature](#))
one of the crucial parameters for Heat-in-Place assessment (cf. [Factsheet Heat-in-Place](#))



Principal faults (traces at the surface)

Fault traces are shown at the surface, because of difficulty predicting their intersection with the geothermal reservoir without 3D seismic. All faults shown are listed in the [HotLime Tectonic Boundary Objects](#) vocabulary.



Cross-section line

→ [click the line to see the cross-section](#)