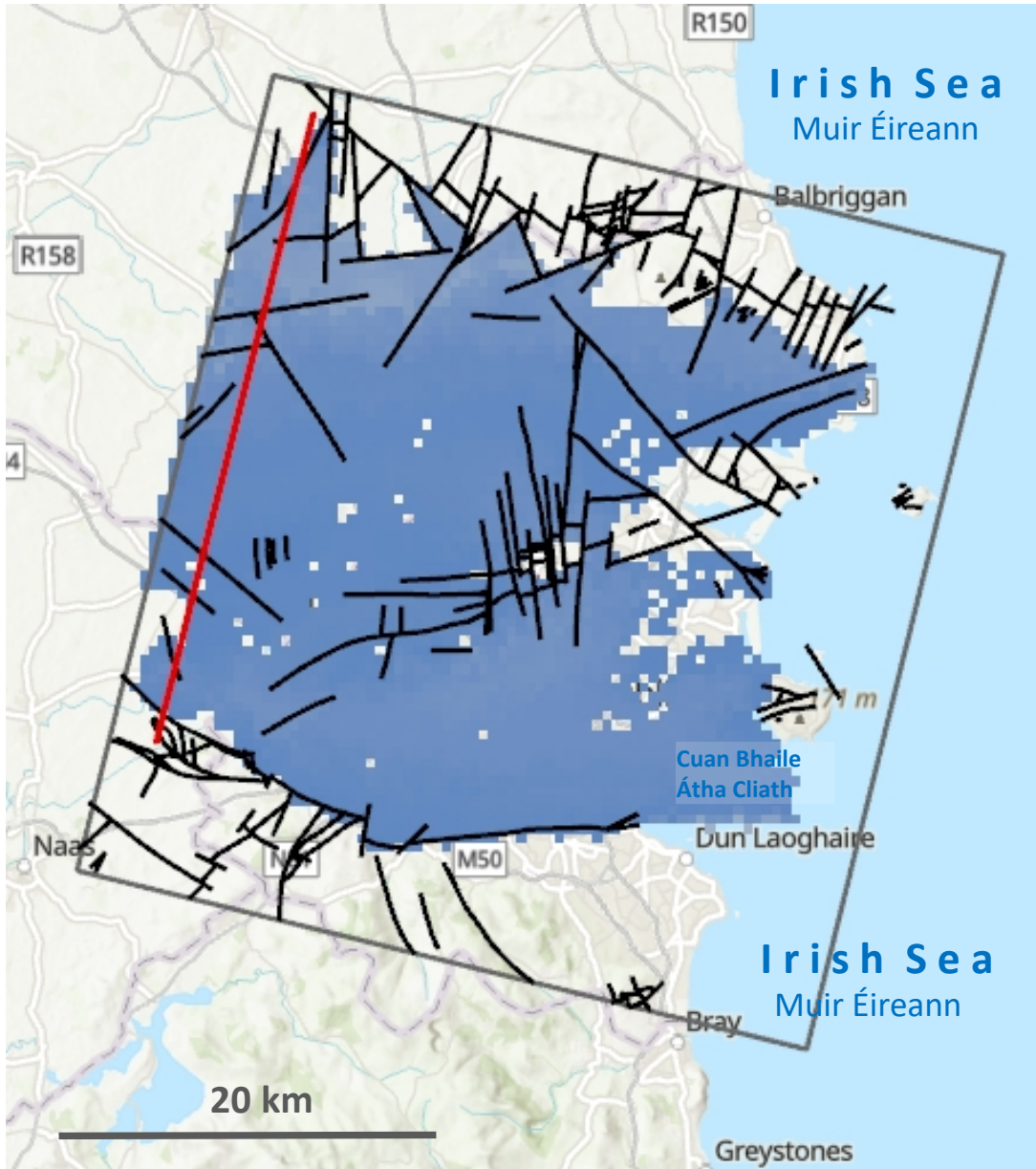
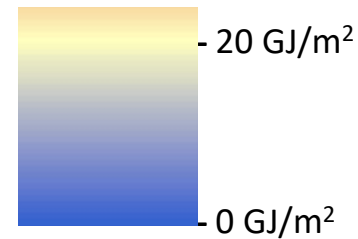




HotLime Case Study 3B

Carboniferous carbonates in Dublin Basin

- HIP18 distribution
- Fault traces
- 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 a combination of estimated average geothermal gradient for Ireland of 25°C/km, observed 32.4°C/km gradient applied in 2.5 km buffer zone around southern faults, and the reservoir depth and thickness derived from a 3D geological model (see chapter 2.5 in [Report 3.1](#)).

Principal faults as inferred for the top of the carbonate geothermal reservoir

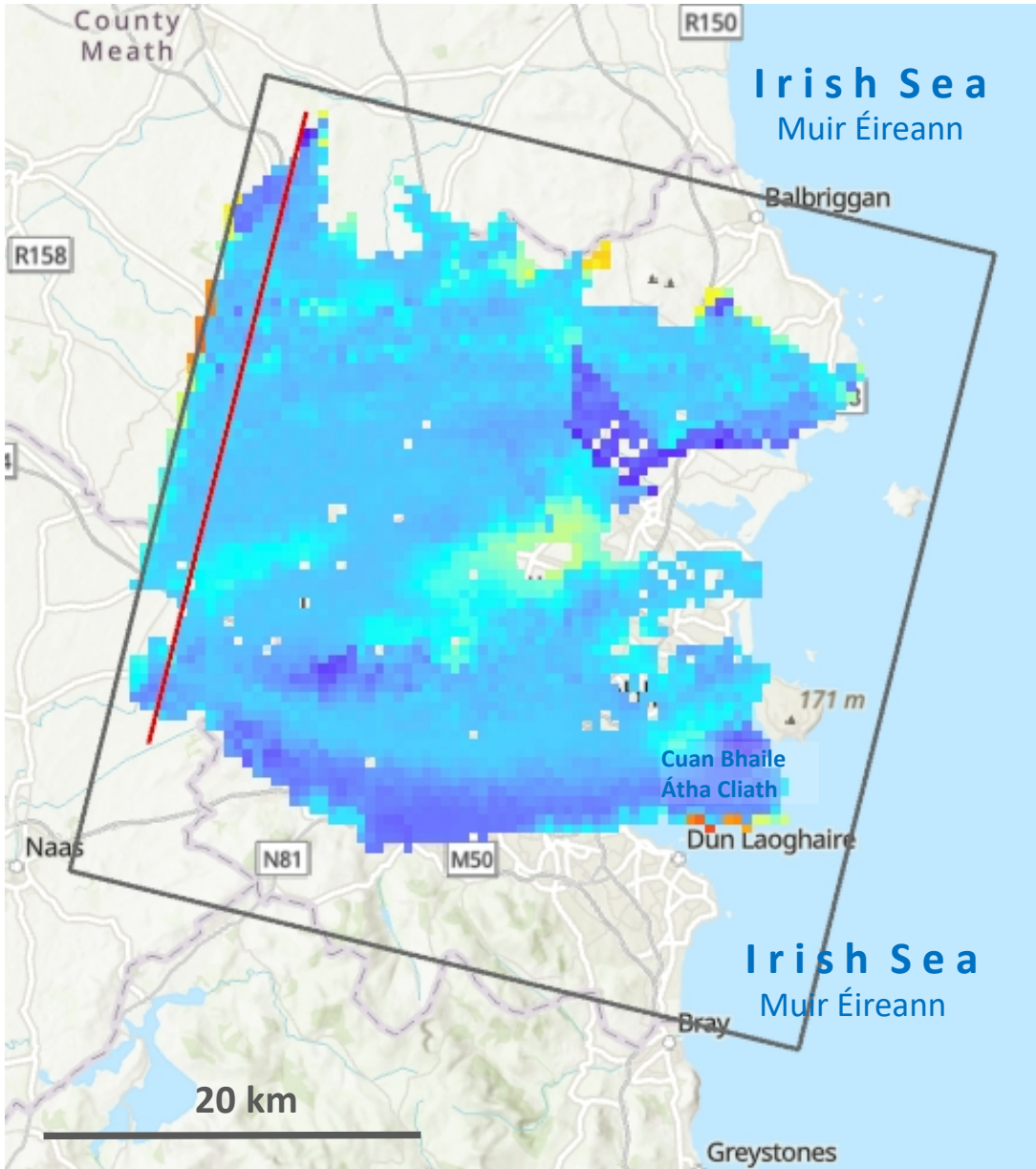
Primary conduits for hydrothermal fluids and zones of possibly higher, but not quantifiable Heat-in-Place. Shown are the faults as modelled to the top of the reservoir (cf. [Factsheet Faults](#) and chapter 8 in [Report 4.1](#)).

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

Cross-section line

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

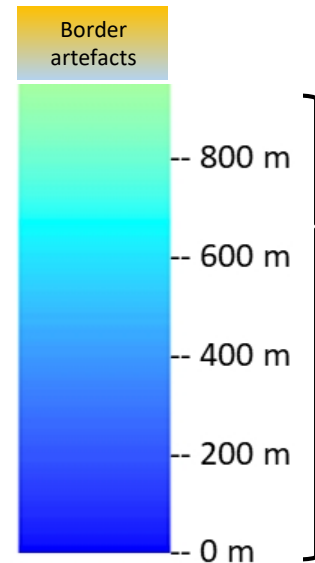




HotLime Case Study 3B

Carboniferous carbonates in Dublin Basin

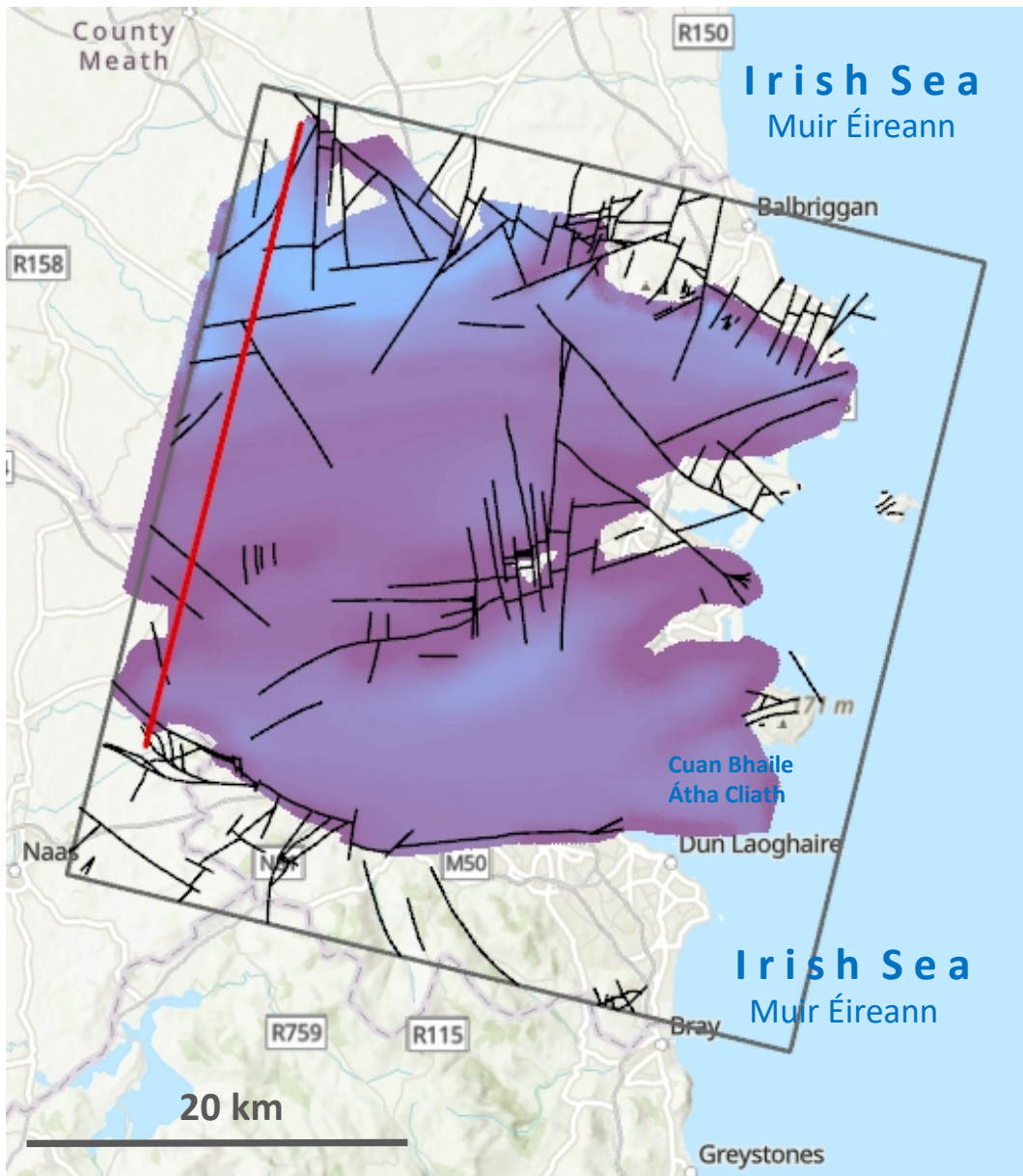
- Gross thickness of reservoir
- Cross-section line



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

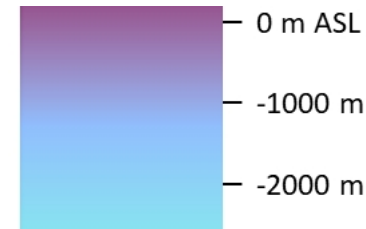




HotLime Case Study 3B

Carboniferous carbonates in Dublin Basin

- Depth to top of reservoir
- Fault traces
- 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 geo-thermal gradient)



Faults traces inferred at the top of the carbonate geothermal reservoir

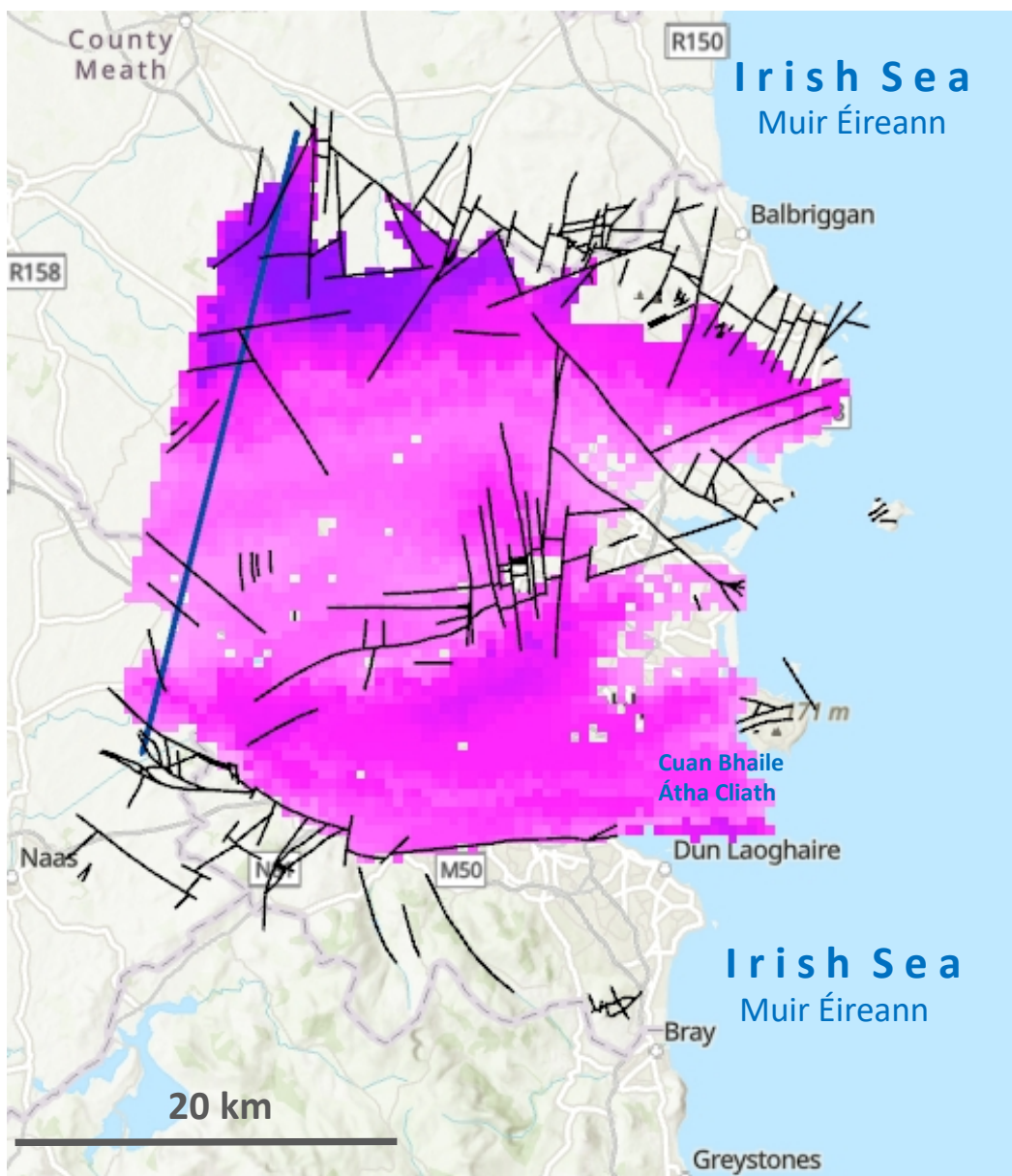
Shown are the faults as modelled to the top of the reservoir (cf. [Factsheet Faults](#) and chapter 8 in [Report 4.1](#)). All faults depicted are listed in the [HotLime Tectonic Boundary Objects](#) vocabulary.



Cross-section line

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



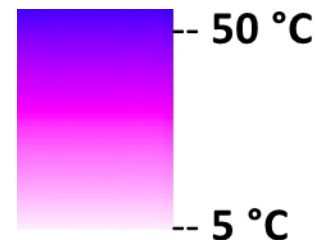


HotLime Case Study 3B

Carboniferous carbonates in Dublin Basin



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



Temperature on top of reservoir

(one of the crucial parameters for Heat-in-Place assessment, cf. [Factsheet Heat-in-Place](#)), based on an estimated average geothermal gradient for Ireland of 25°C/km and observed 32.4°C/km gradient applied in 2.5 km buffer zone around southern faults (see chapter 2.5 in [Report 3.1](#)).

Faults traces inferred at the top of the carbonate geothermal reservoir

Shown are the faults as modelled to the top of the reservoir (cf. [Factsheet Faults](#) and chapter 8 in [Report 4.1](#)). All faults depicted are listed in the [HotLime Tectonic Boundary Objects](#) vocabulary.

Cross-section line

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