

COMMITTENTE:



DIREZIONE LAVORI:



APPALTATORE:



PROGETTAZIONE:

MANDATARIA:



MANDANTI:



IL DIRETTORE DELLA PROGETTAZIONE:

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ORDINE INGEGNERI DELLA PROV. DI TRENTO
Responsabile integrazione fra le varie prestazioni specialistiche
DOCTUS
ISCRIZIONE ALBO N° 2216

PROGETTO ESECUTIVO

PROGETTAZIONE ESECUTIVA ED ESECUZIONE DEI LAVORI DI REALIZZAZIONE DEL LOTTO 1 DEL QUADRUPPLICAMENTO DELLA LINEA FERROVIARIA FORTEZZA-VERONA TRATTA "FORTEZZA – PONTE GARDENA"

RELAZIONE

05 - GEOLOGIA, IDROGEOLOGIA

C - Profili e Sezioni

Sezioni geologiche

Modello geologico 3D del sottoattraversamento della A22 dell'inteconnessione Binario Pari

APPALTATORE		SCALA:
IL DIRETTORE TECNICO Ing. Pietro Gianvecchio		-

COMMESSA	LOTTO	FASE	ENTE	TIPO DOC.	OPERA/DISCIPLINA	PROGR.	REV.
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Rev	Descrizione	Redatto	Data	Verificato	Data	Approvato	Data	Autorizzato Data
A	Emissione	M. Aganetti	13/03/2023	M. Pietrantoni	14/03/2023	D. Buttafoco (Dolomiti)	15/03/2023	IL PROGETTISTA A. Damiano

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APPALTATORE: 	PROGETTAZIONE ESECUTIVA ED ESECUZIONE DEI LAVORI DI REALIZZAZIONE DEL LOTTO 1 DEL QUADRUPPLICAMENTO DELLA LINEA FERROVIARIA FORTEZZA-VERONA TRATTA "FORTEZZA – PONTE GARDENA" PROGETTO ESECUTIVO																	
PROGETTAZIONE: Mandataria: SWS Engineering S.p.A. Mandanti: PINI ITALIA GDP GEOMIN SIFEL SIST M Ingegneria							<table border="1"> <thead> <tr> <th>COMMESSA</th> <th>LOTTO</th> <th>CODIFICA</th> <th>DOCUMENTO</th> <th>REV.</th> <th>FOGLIO.</th> </tr> </thead> <tbody> <tr> <td>IBOU</td> <td>1BEZZ</td> <td>WZ</td> <td>GE0001001</td> <td>A</td> <td>2 di 4</td> </tr> </tbody> </table>						COMMESSA	LOTTO	CODIFICA	DOCUMENTO	REV.	FOGLIO.
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1. PREMESSA

In considerazione della complessità geologica e morfologica del tratto di versante in esame, è stato implementato un modello geologico di sottosuolo in 3D attraverso il software Leapfrog[®]. Leapfrog è un modellatore di dati geologici che consente di interpolare numerosi dati geologici di sottosuolo partendo da un modello di terreno 3D. Nel caso in esame sono stati utilizzati tutti i dati di sondaggio acquisiti nelle precedenti fasi progettuali (contenuti nella documentazione del progetto definitivo) e quelli della campagna di indagine del progetto esecutivo, oltre a quelli di archivio forniti dalla A22 relativi al progetto del viadotto Belprato.

Tutti i dati sono stati inseriti nel database previa attribuzione dei terreni attraversati nei singoli sondaggi alle varie formazioni o unità geologiche che fanno parte del modello geologico concettuale di base. Attraverso regole implementate dal software, ma controllate dai geologi progettisti, i dati sono stati elaborati per creare superfici di contatto tra le varie formazioni.

Il modello così generato è stato controllato e tarato per garantire la coerenza geometrica generale delle elaborazioni con il modello concettuale di base.

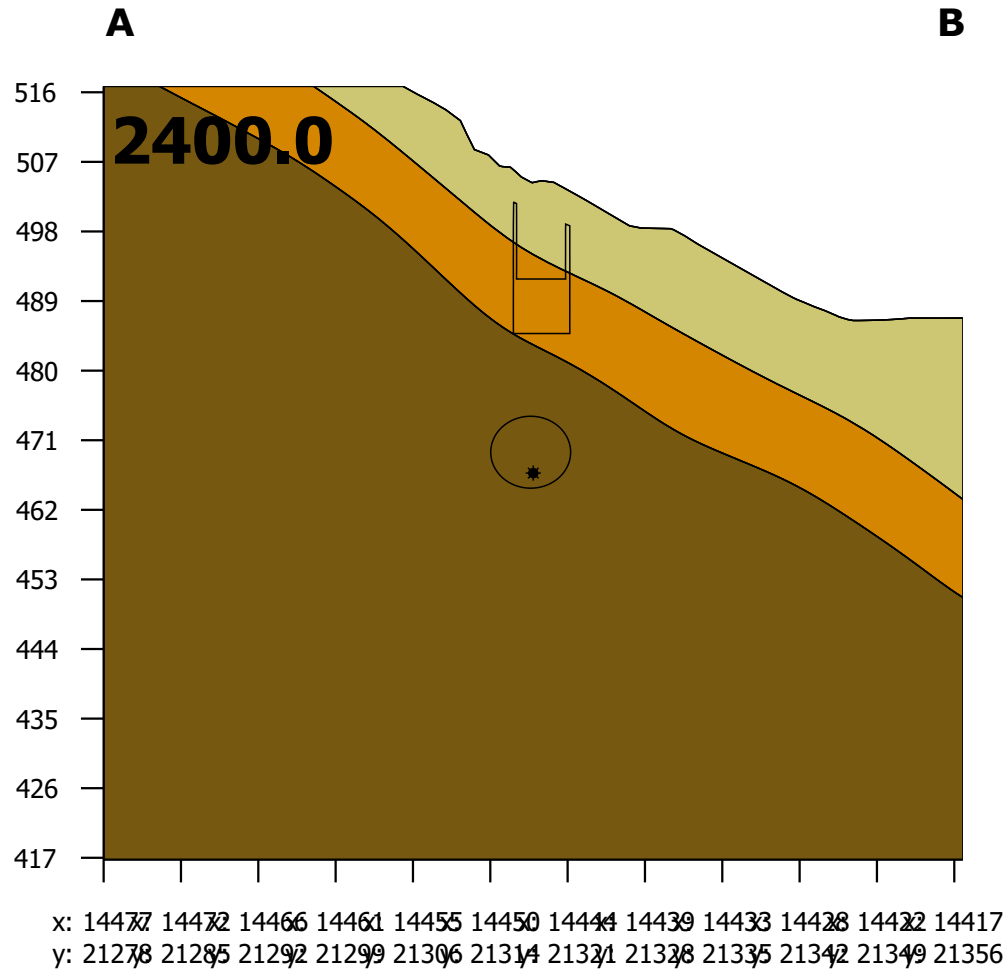
I risultati della modellazione sono verificabili e apprezzabili pienamente mediante il visualizzatore del software disponibile gratuitamente on-line e per tale motivo vengono forniti i files del modello. Per consentire la visione anche in maniera tradizionale, sono allegati nel seguito le singole sezioni geologiche estratte dal modello 3D con frequenza di un metro lungo lo sviluppo della galleria. Le sezioni sono estratte perpendicolarmente all'asse del tracciato.

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2. SEZIONI GEOLOGICHE

Si riportano di seguito le sezioni geologiche estratte dal modello 3D Leapfrog.

Si tratta delle sezioni trasversali, perpendicolari all'asse del tracciato, con passo di 1 m tra le pk 2+400 e 2+460 del binario pari dell'interconnessione di Ponte Gardena. La tratta visualizzata nelle sezioni è rappresentativa del sottopasso da parte dell'opera del viadotto Belprato dell'A22.



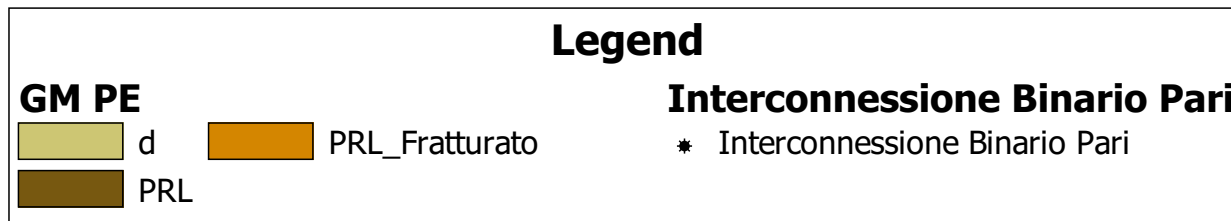
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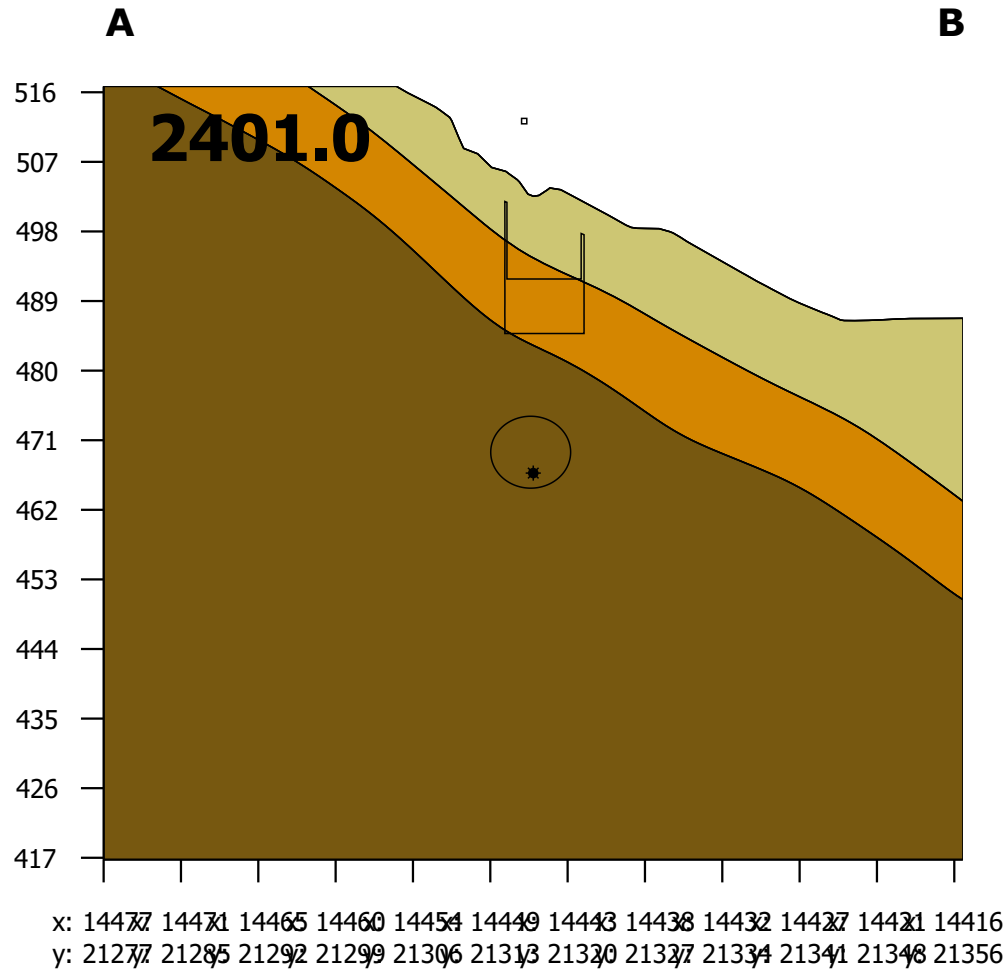
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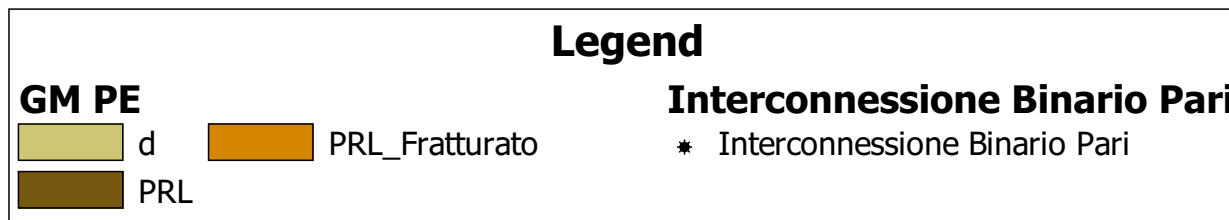
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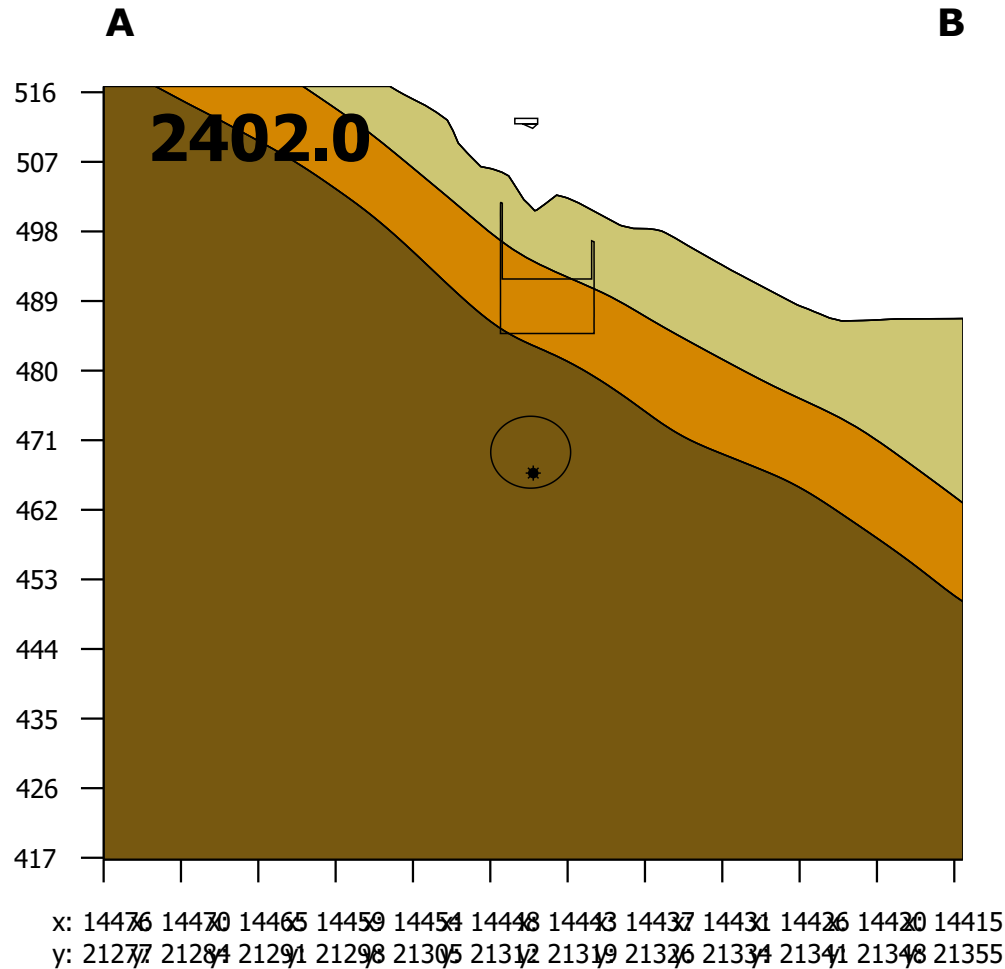
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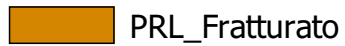
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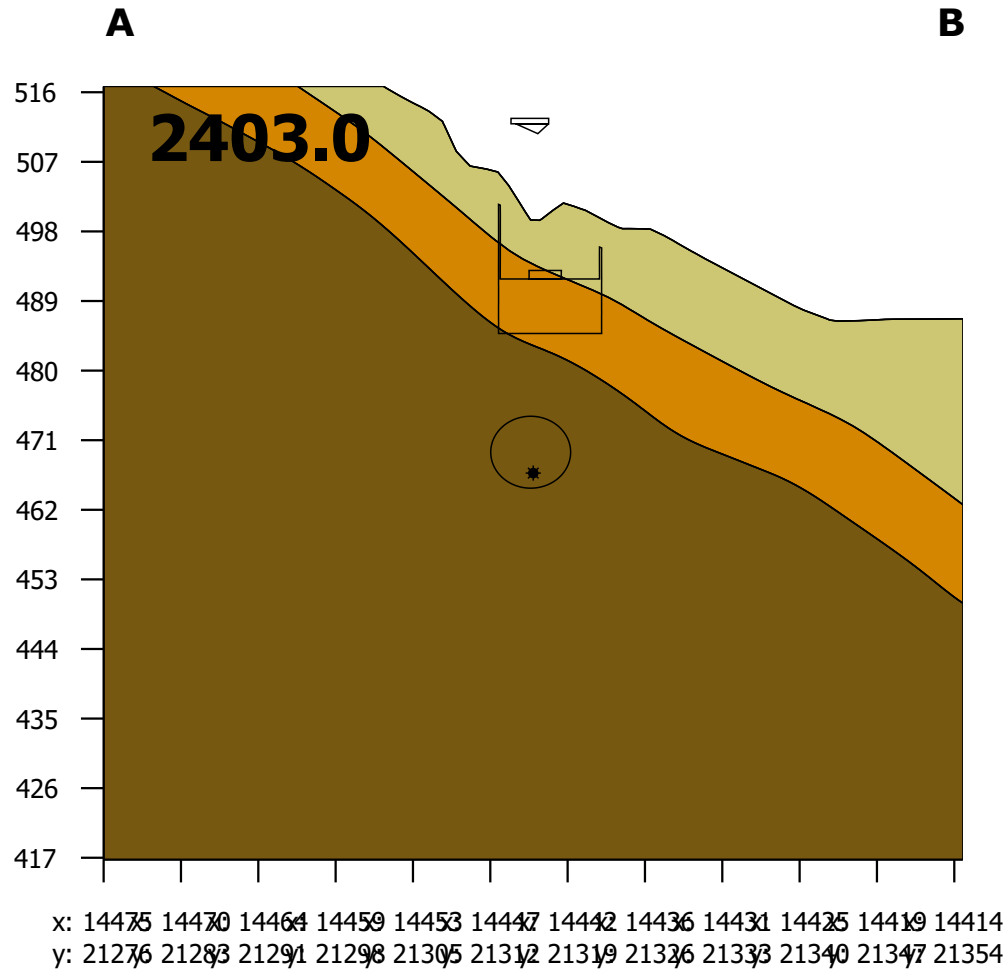
Legend

GM PE



Interconnessione Binario Pari

* Interconnessione Binario Pari

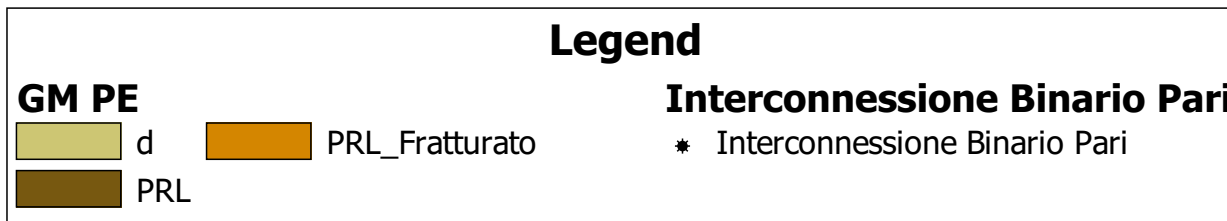


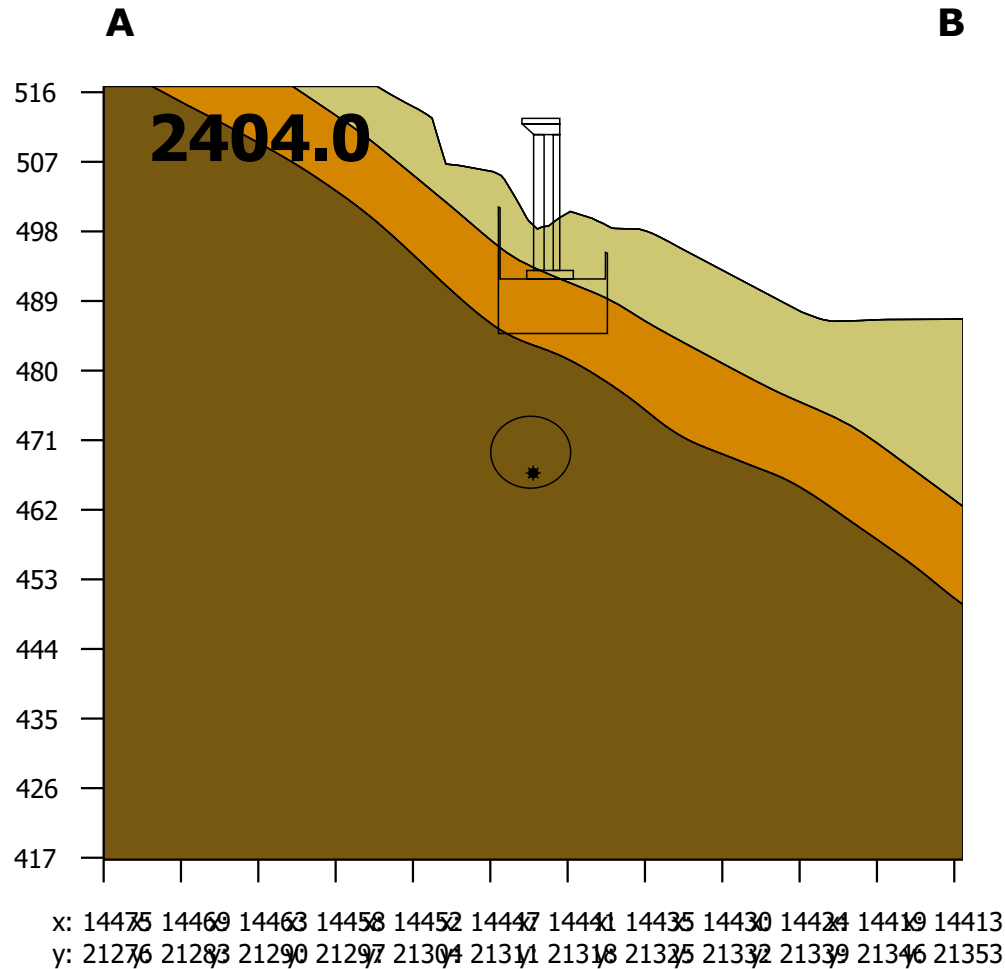
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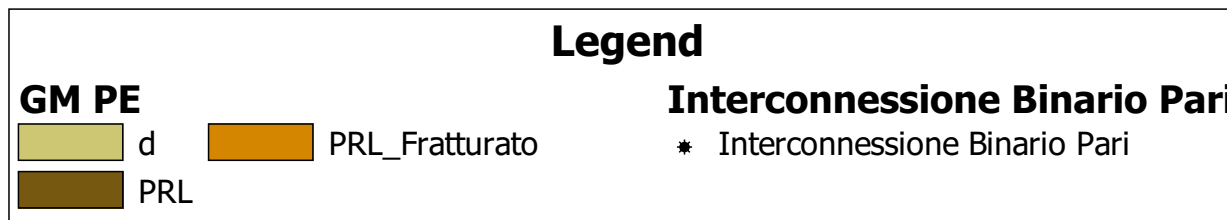
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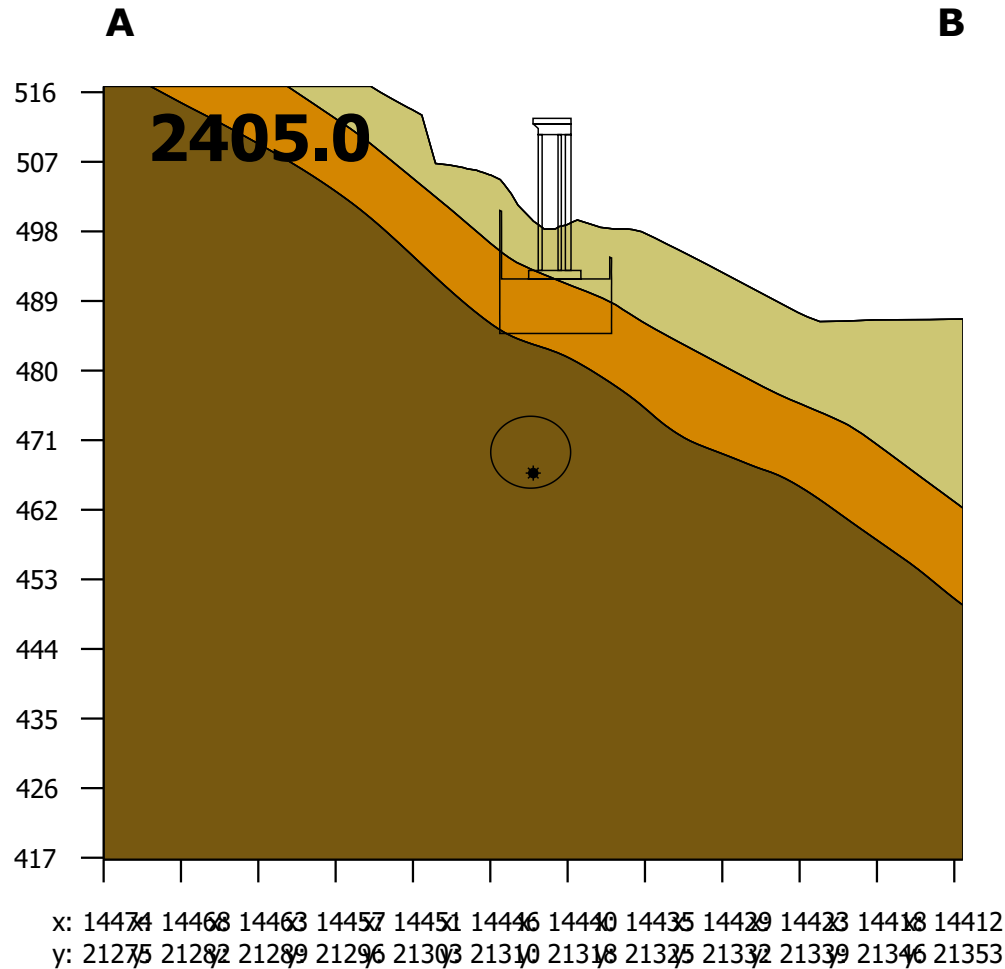
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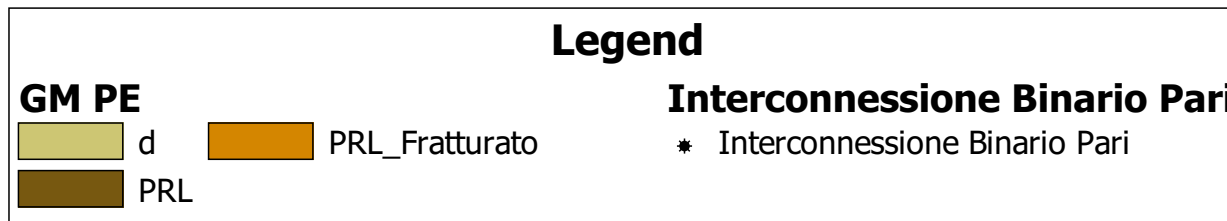
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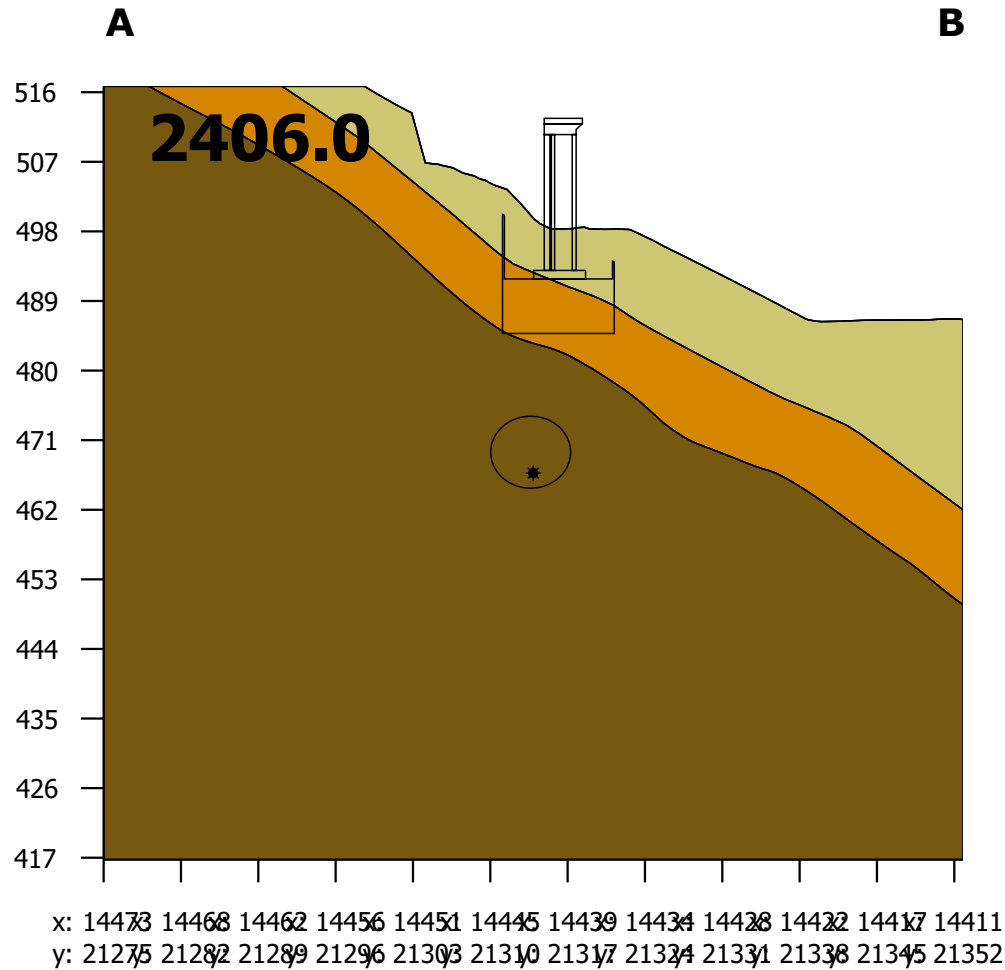
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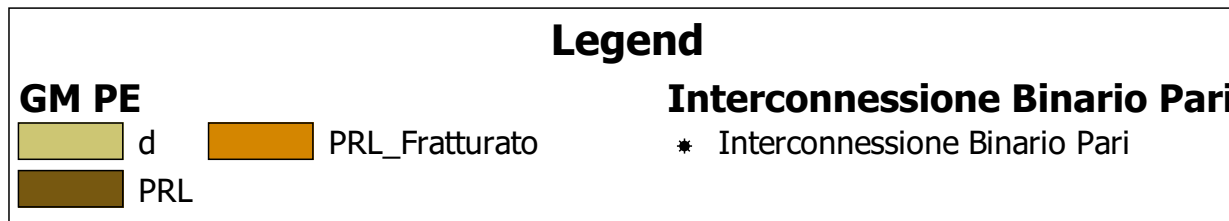
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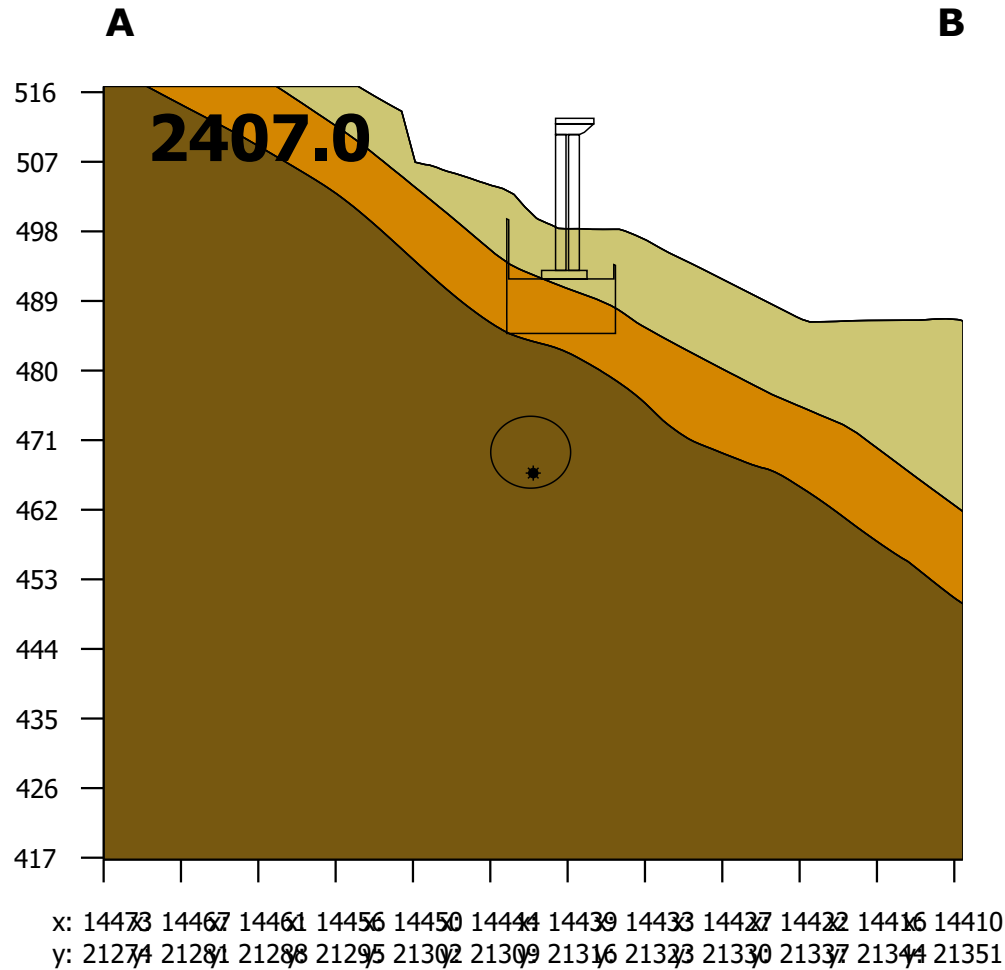
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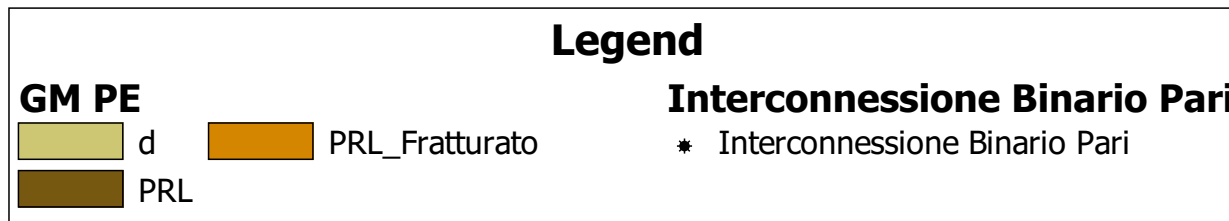
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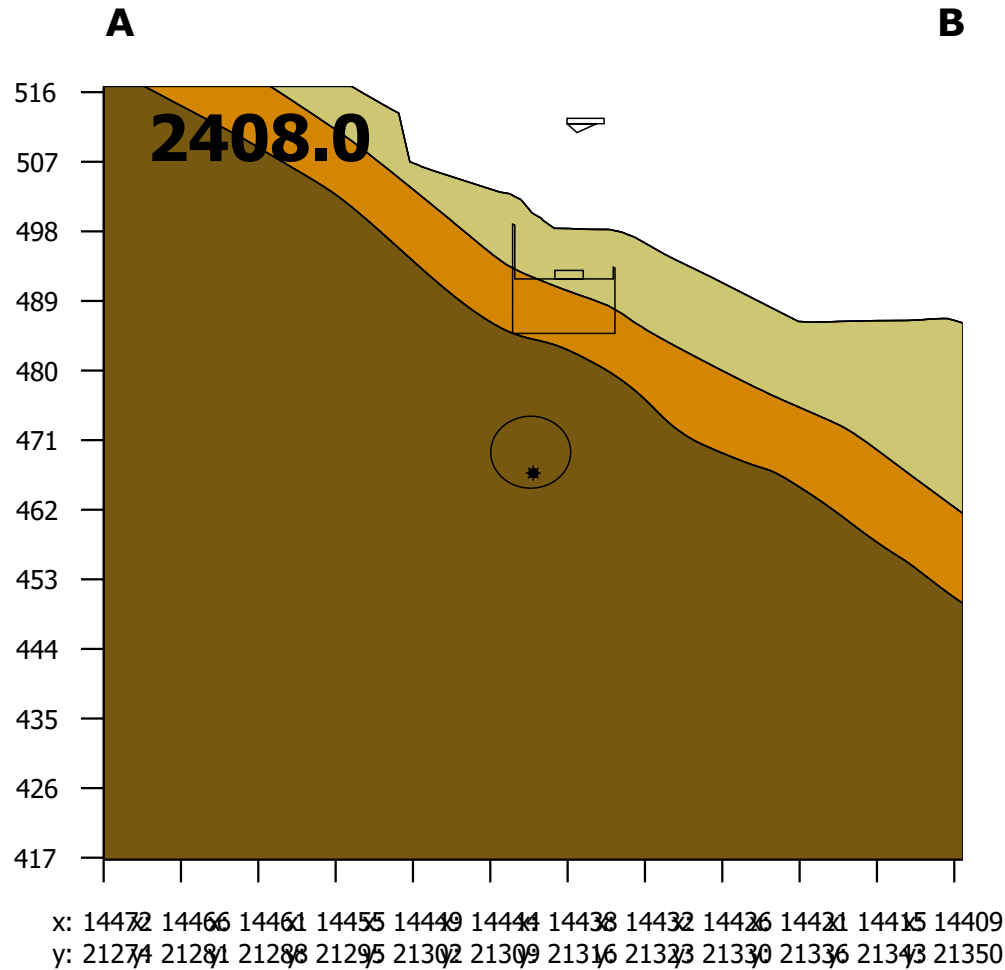
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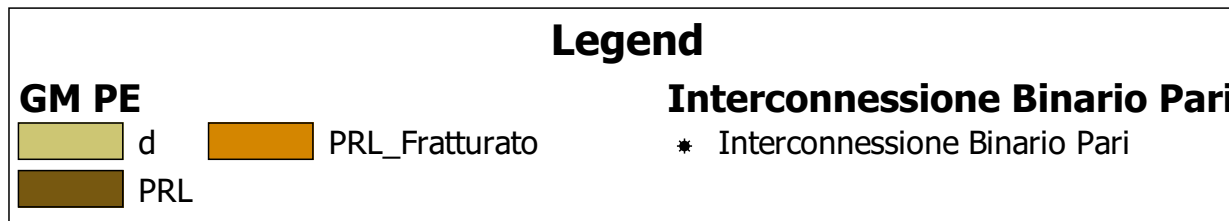


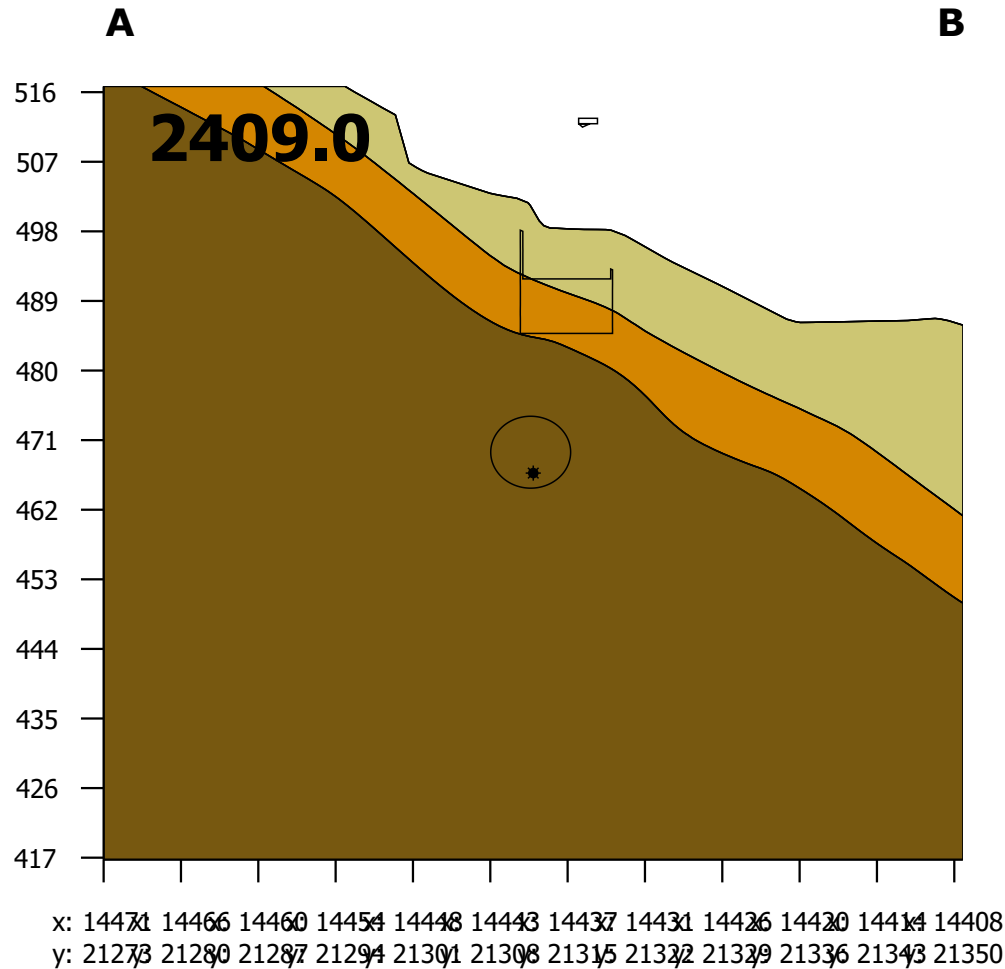
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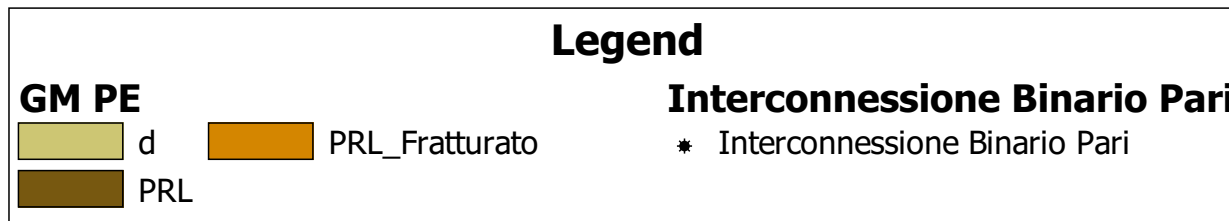
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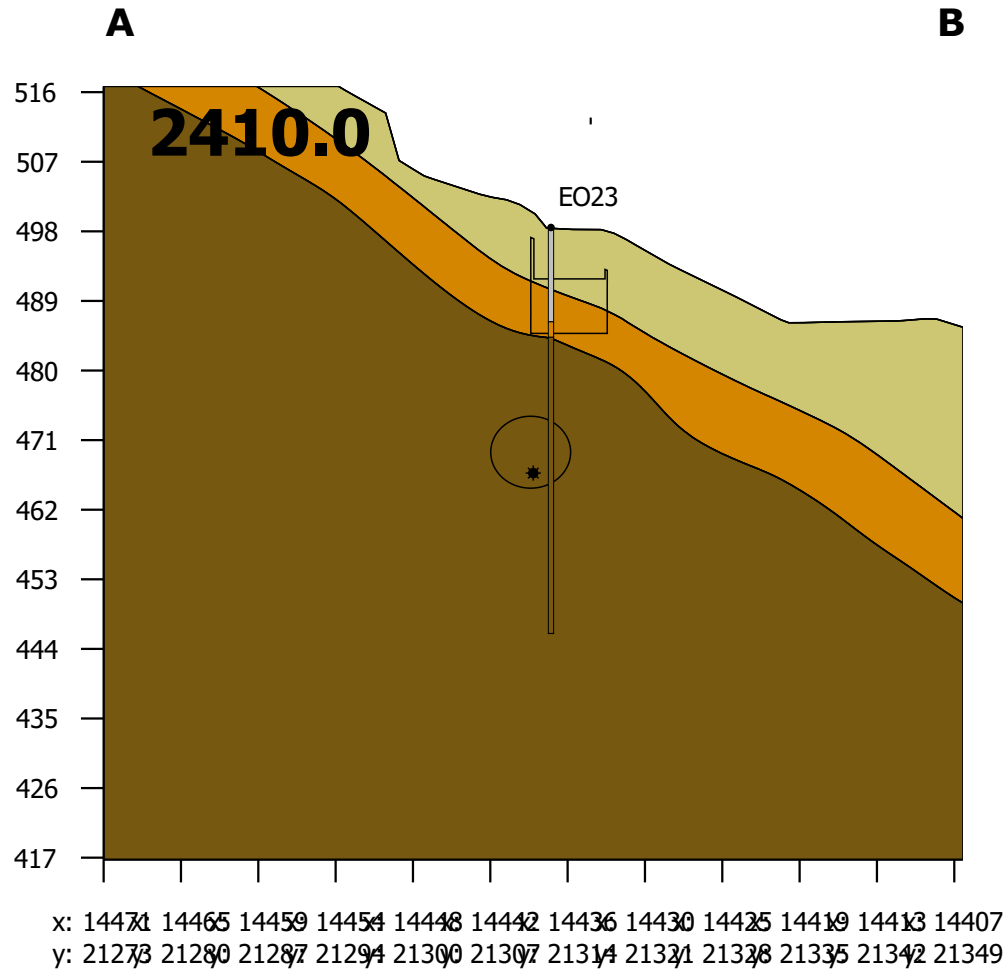
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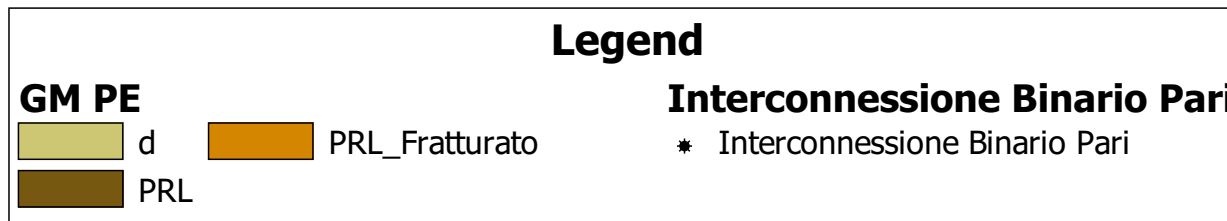
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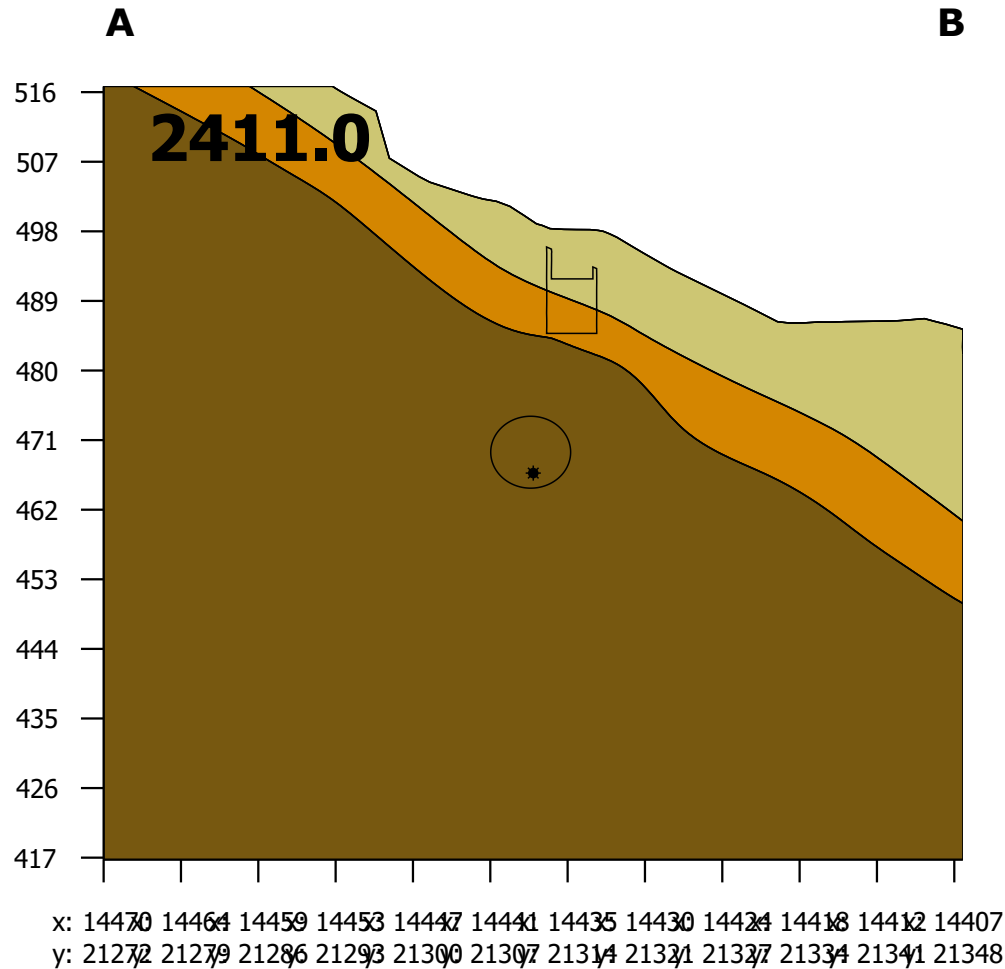
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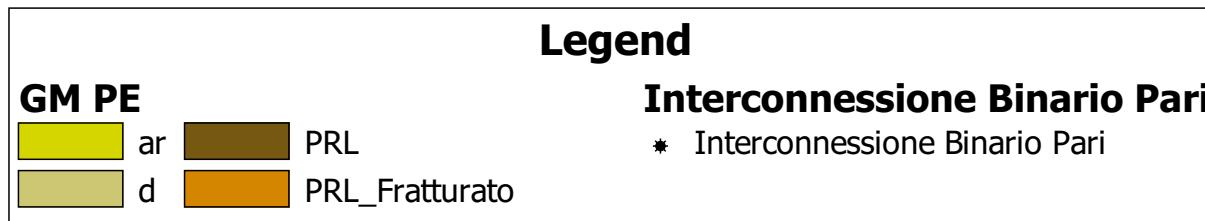
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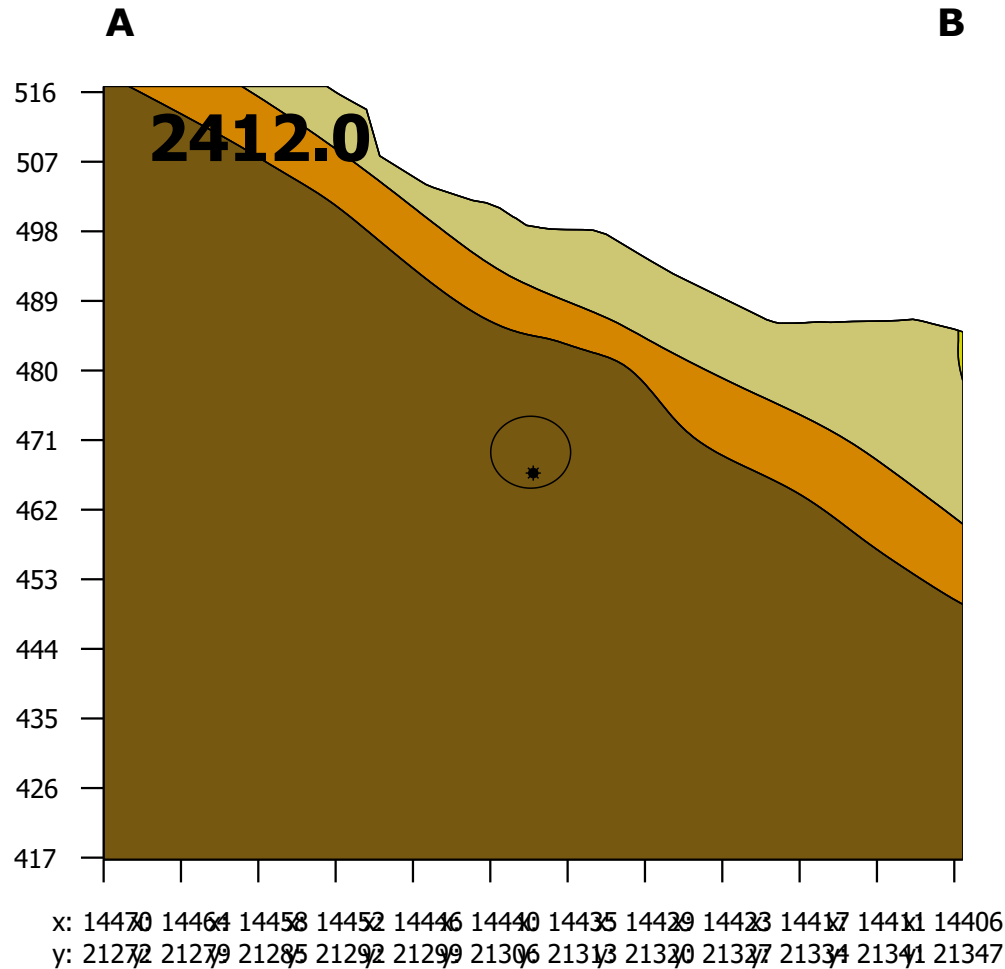
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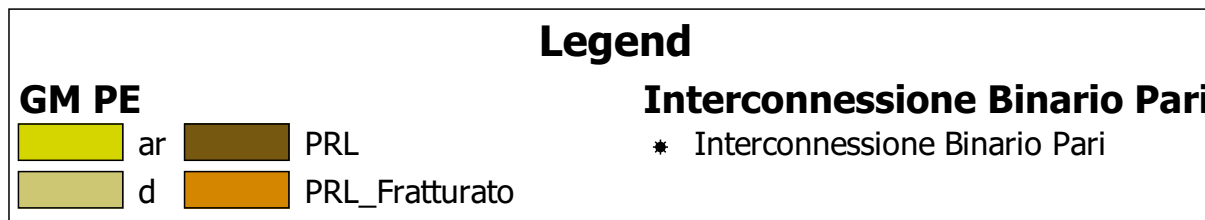
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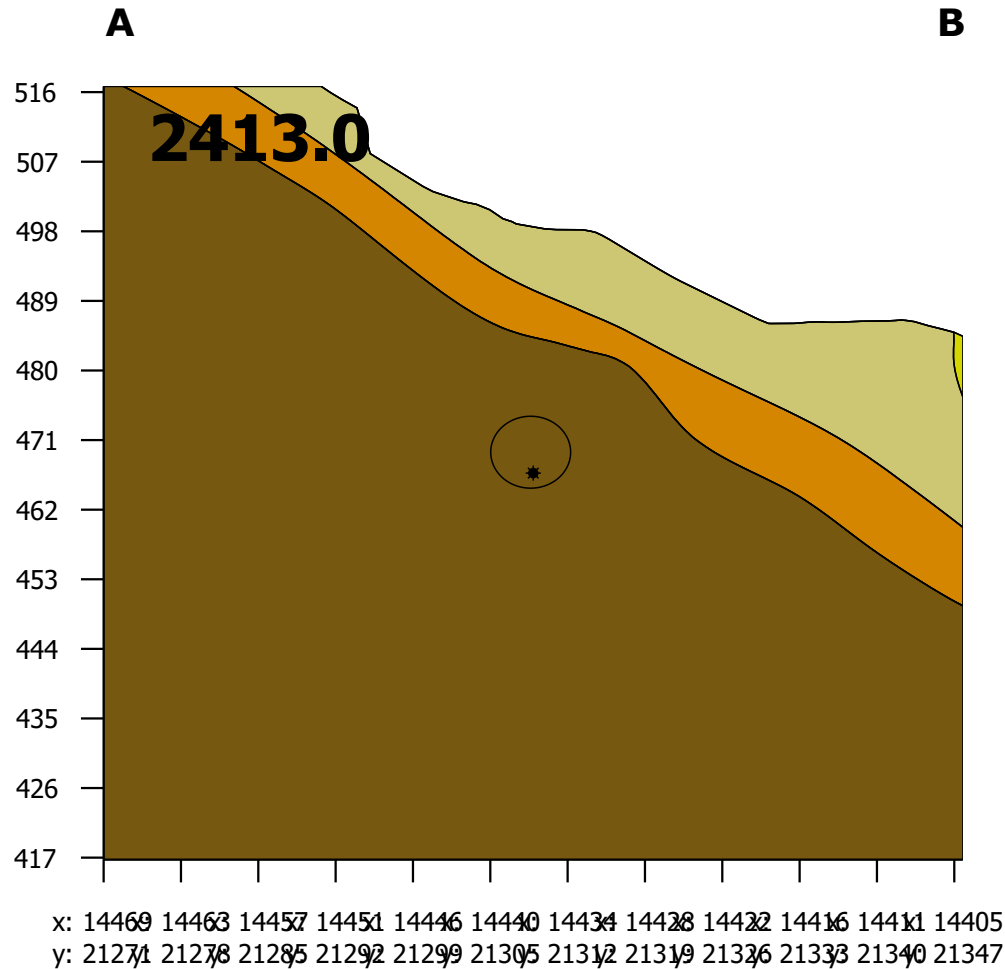
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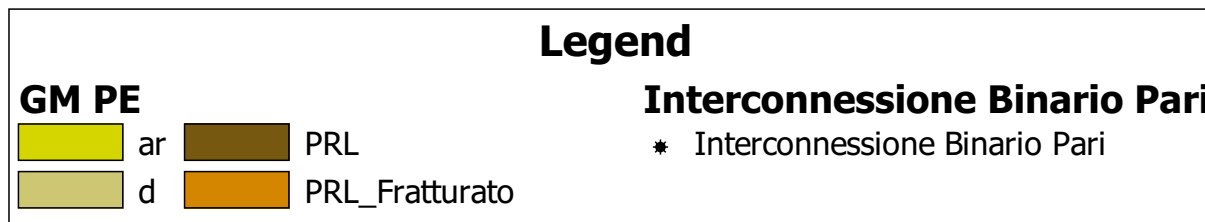
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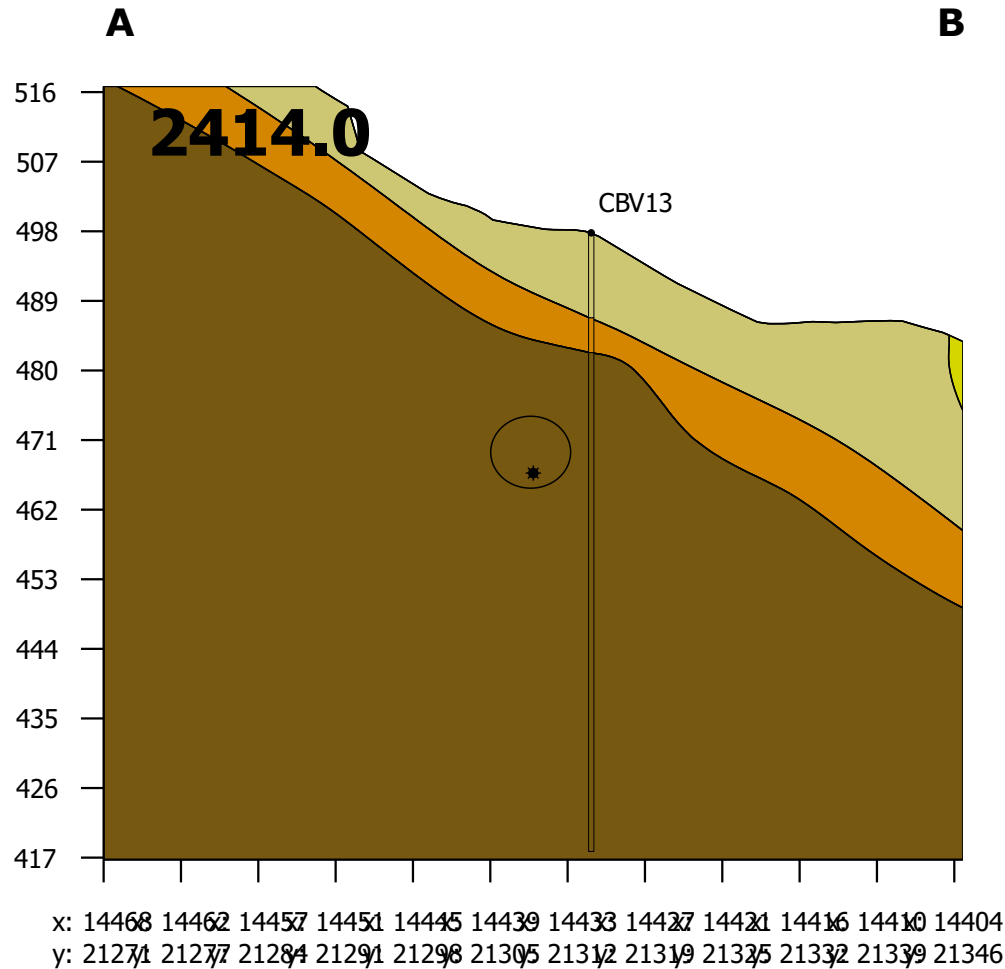
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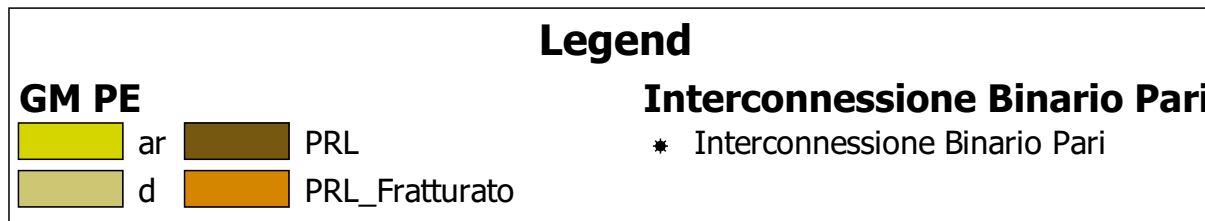
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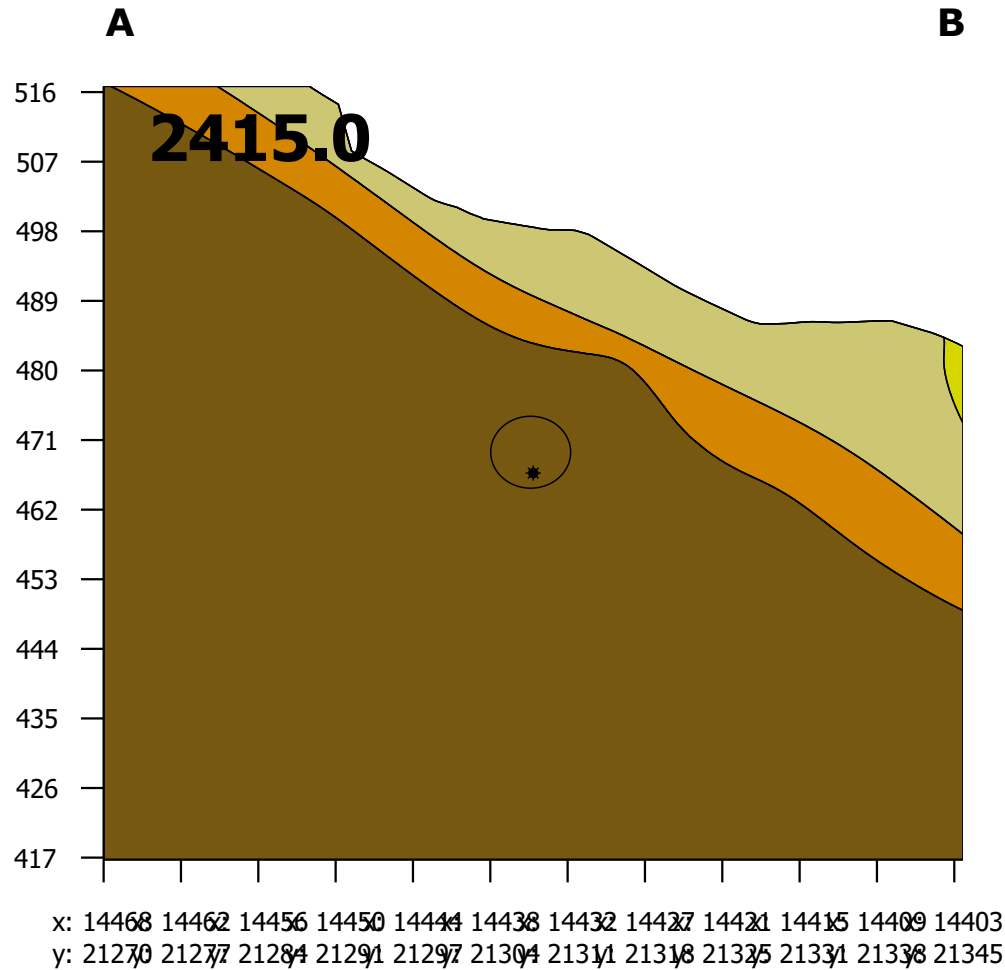
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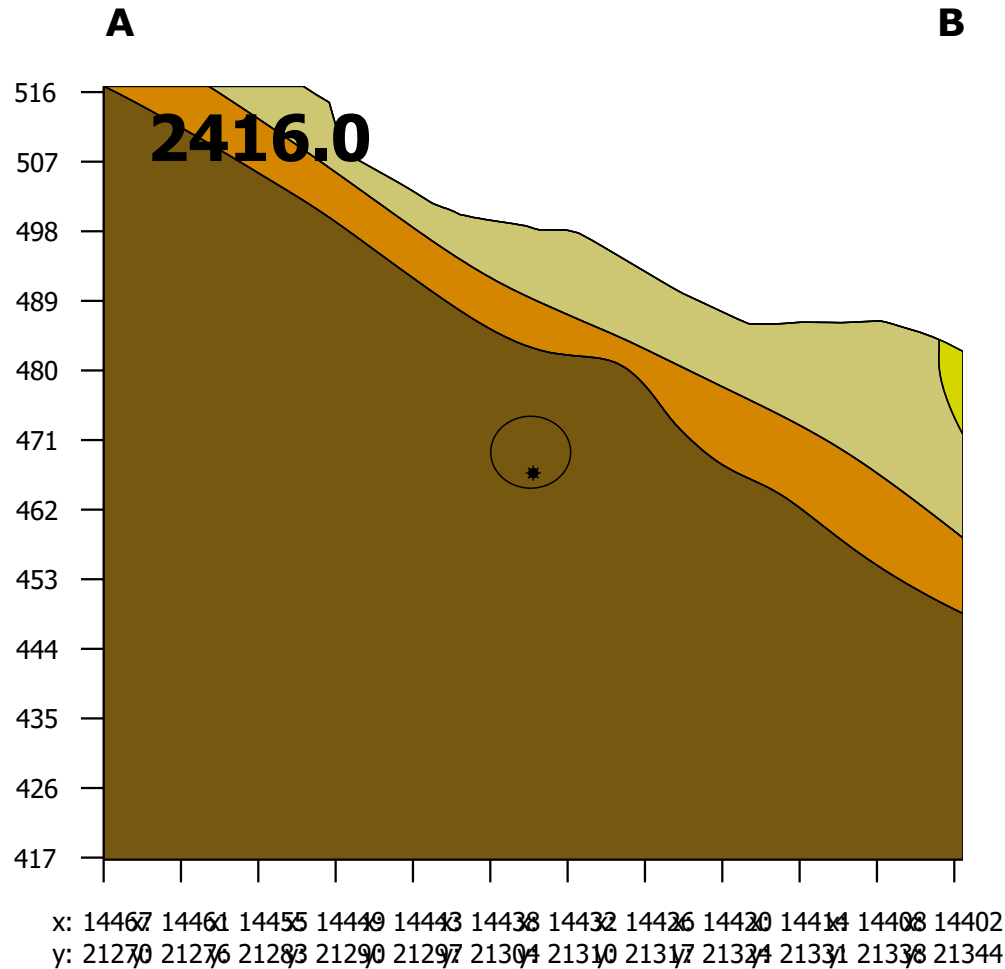
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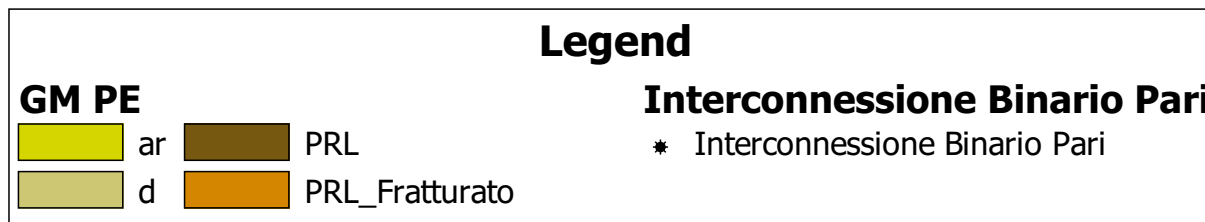
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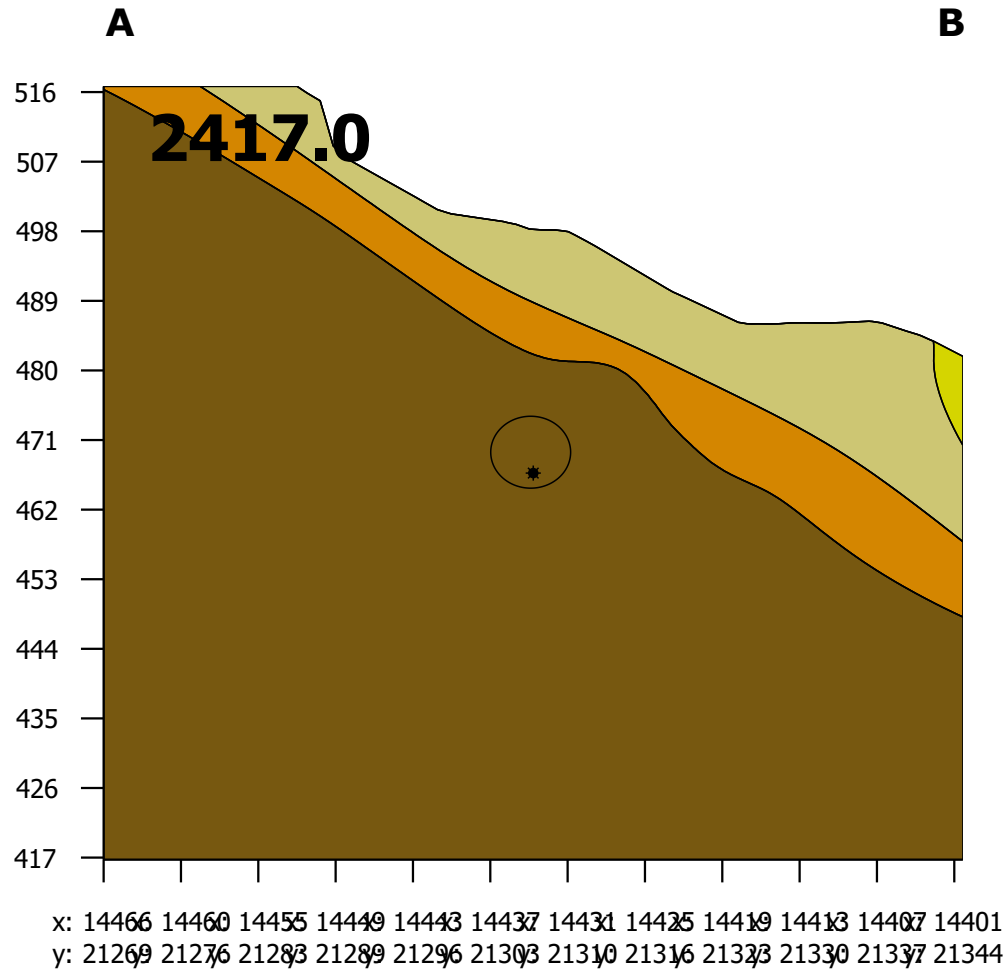
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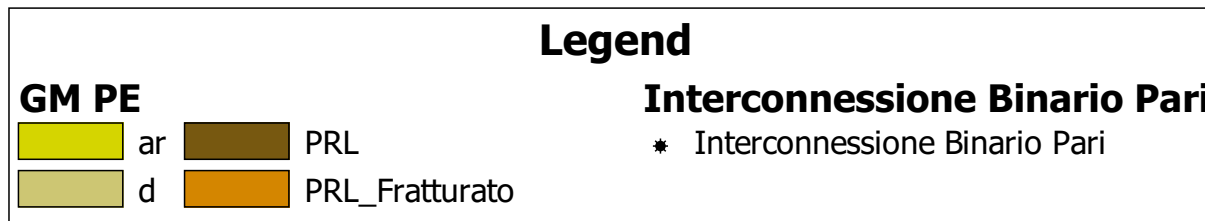
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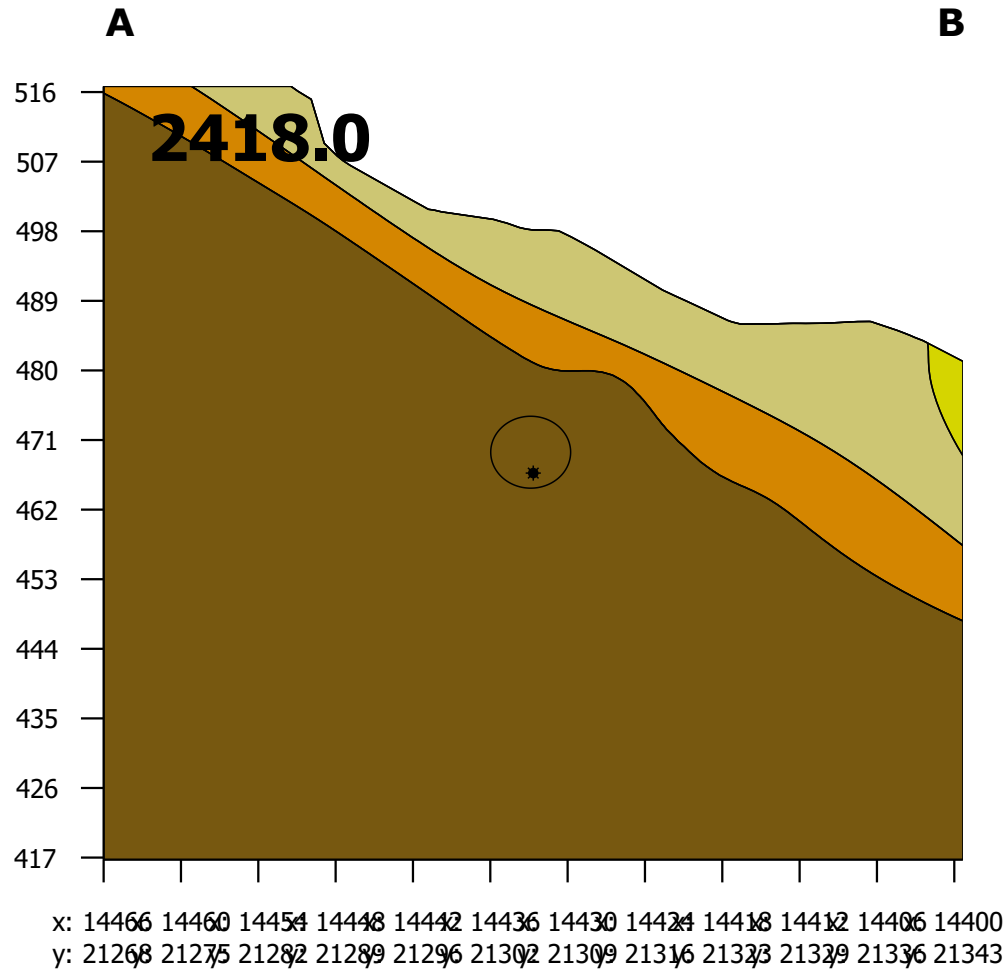
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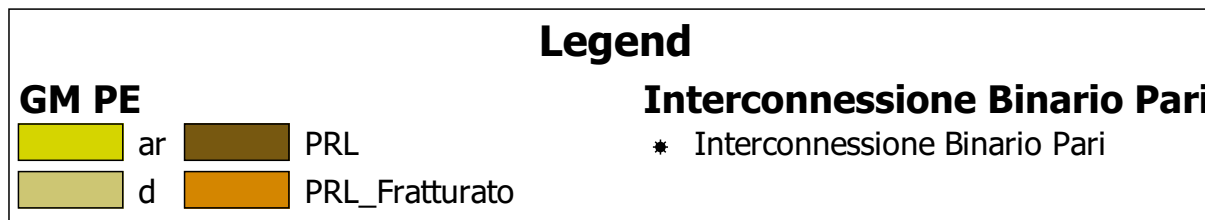
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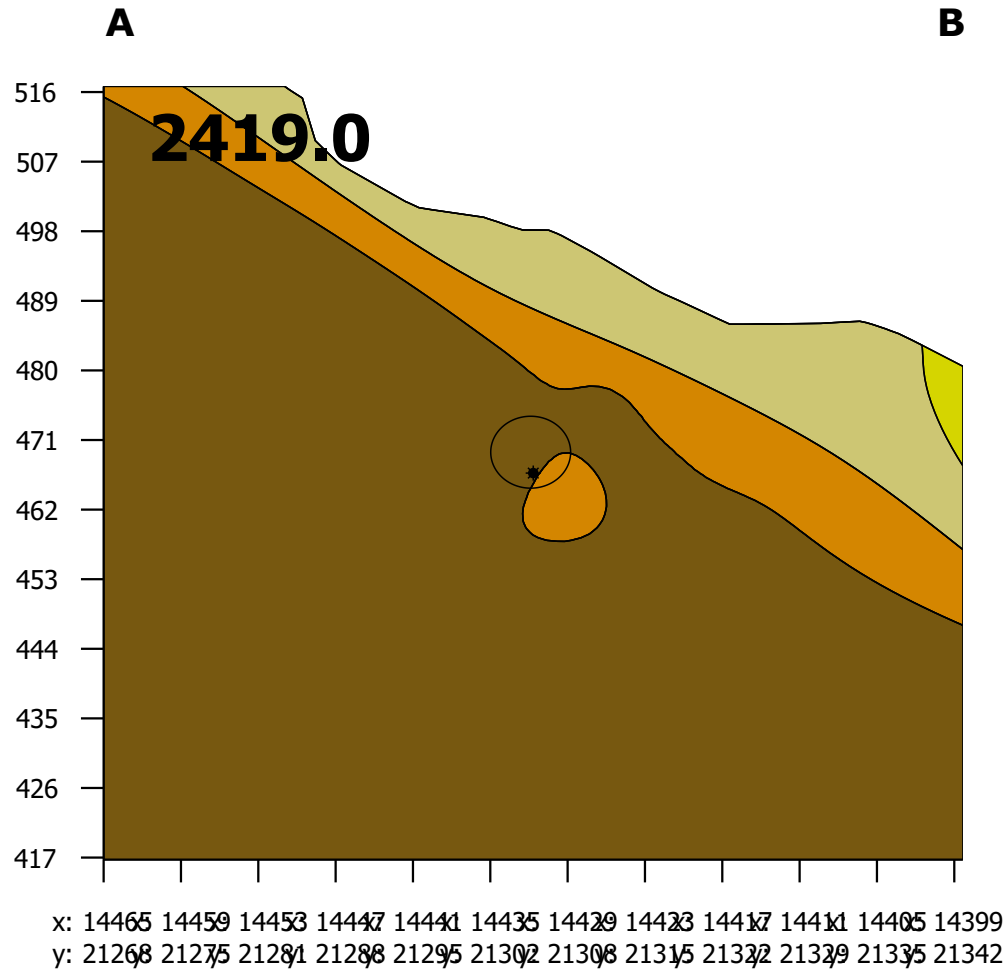
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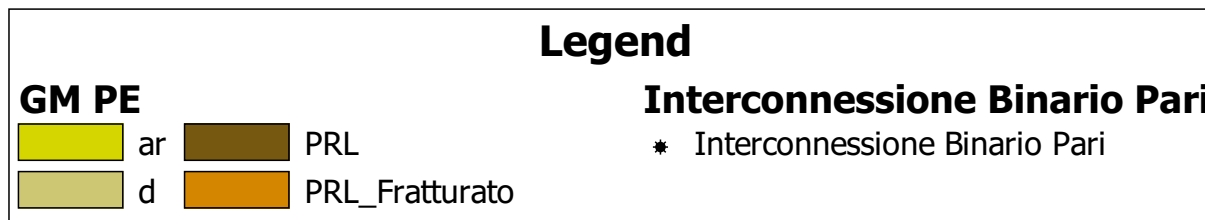
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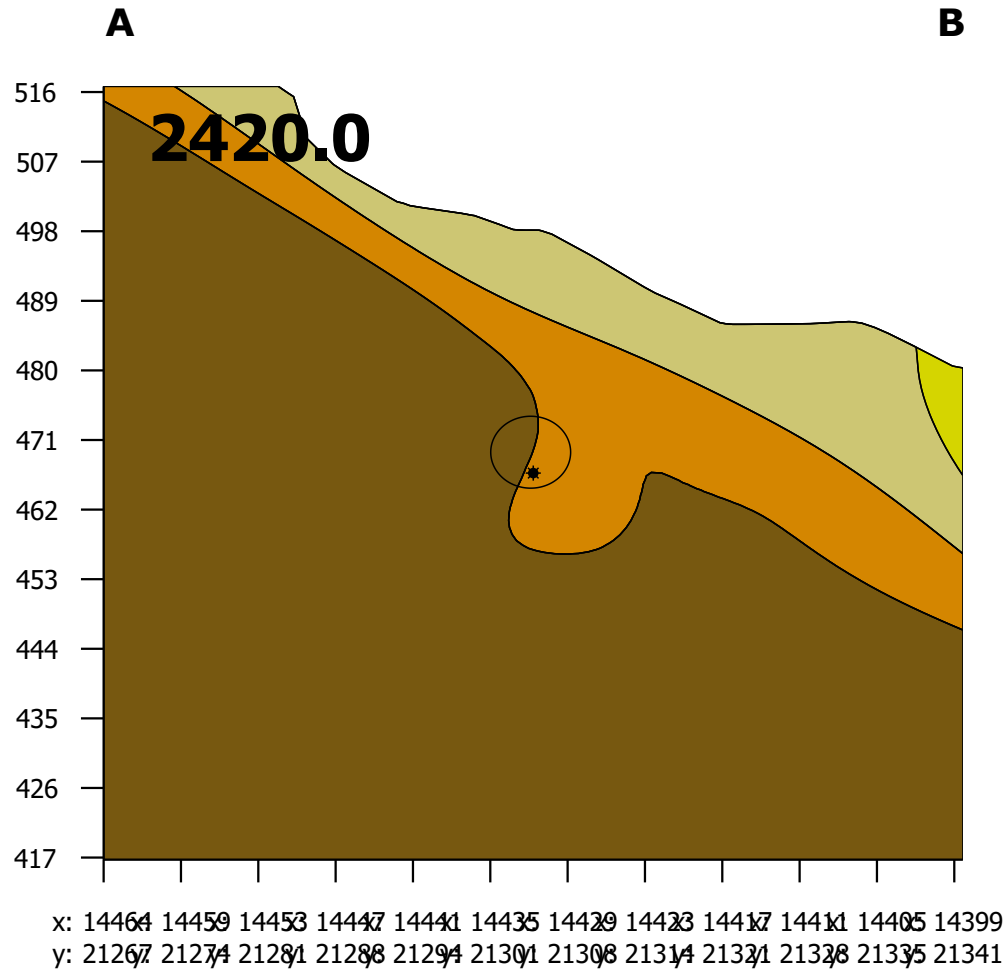
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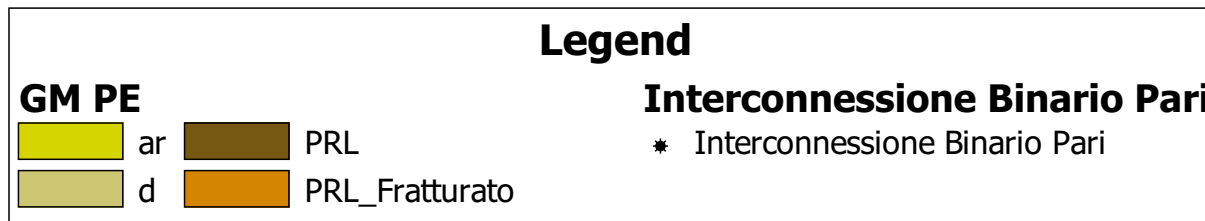
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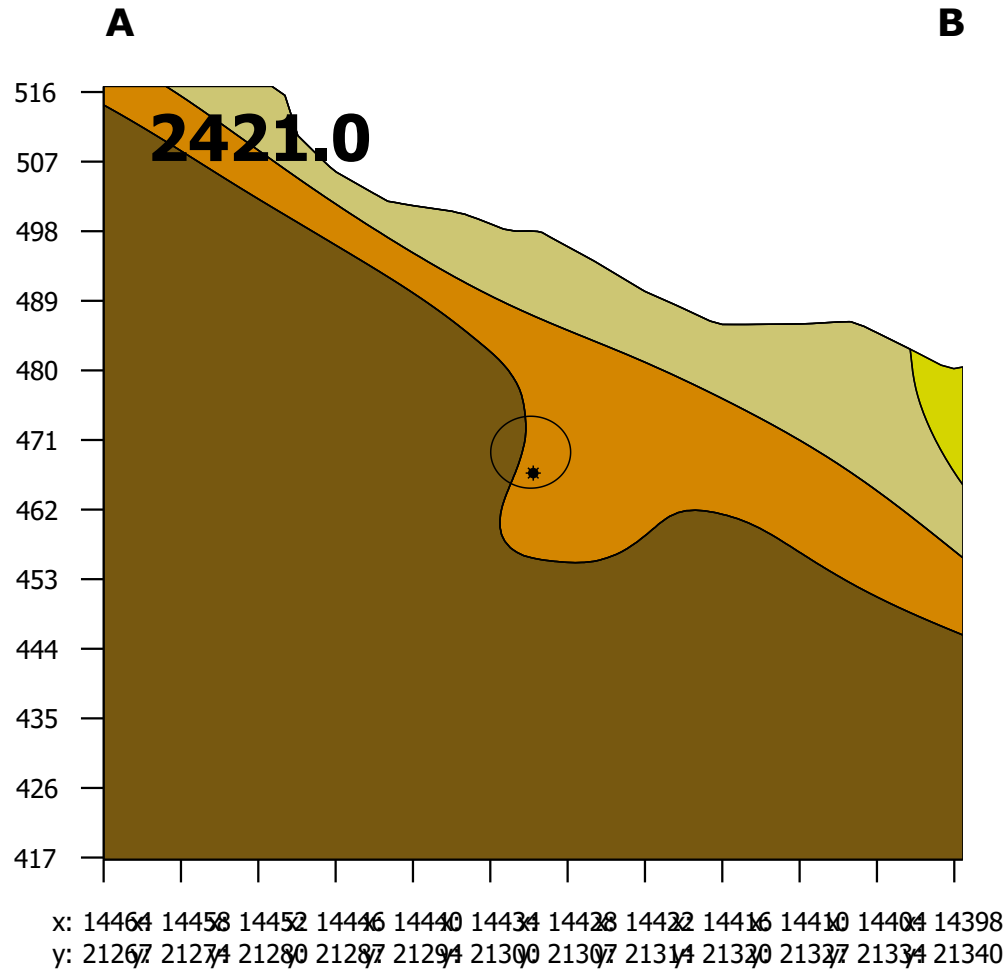
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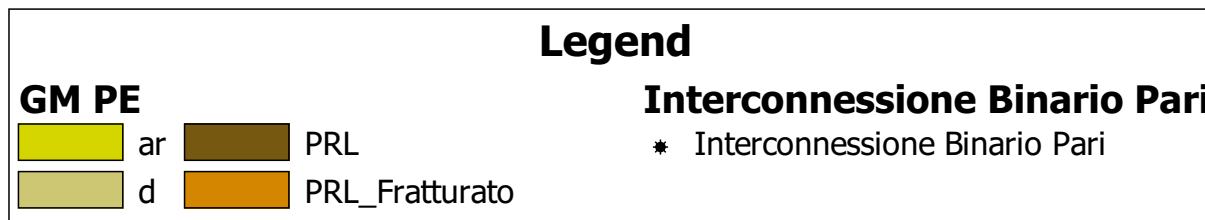
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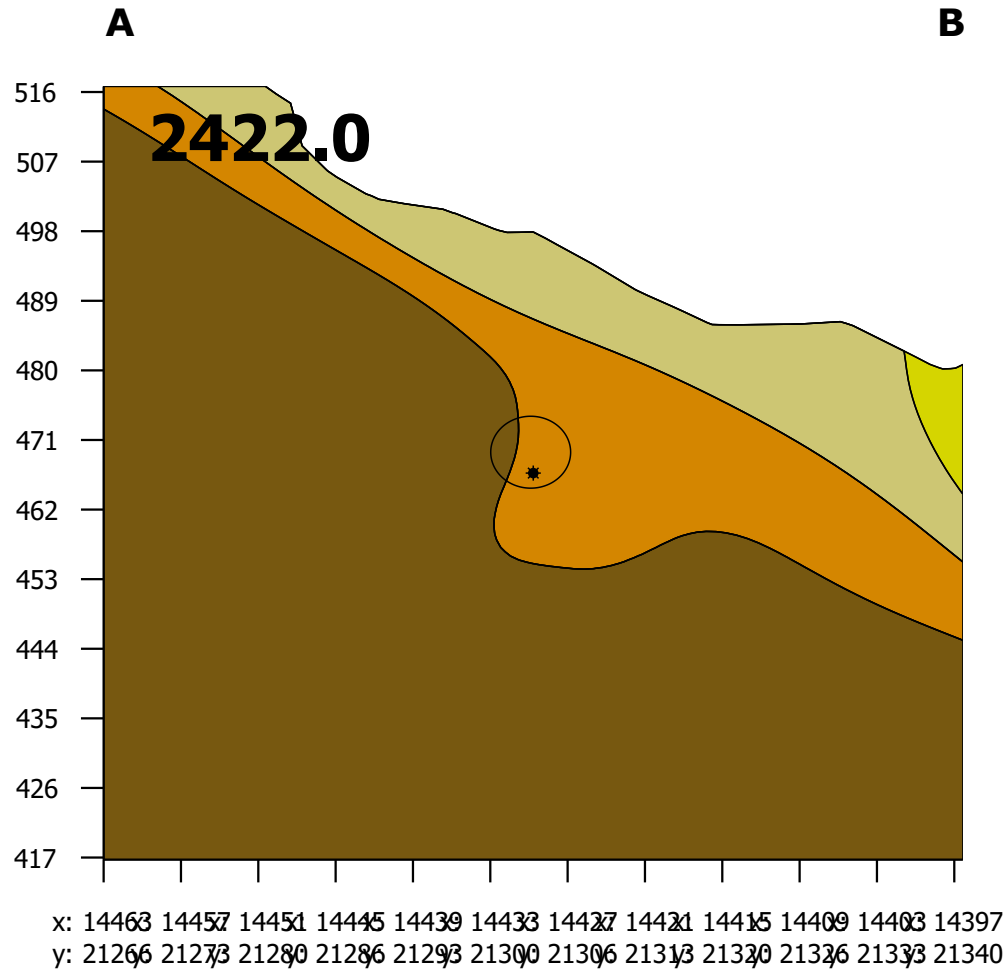
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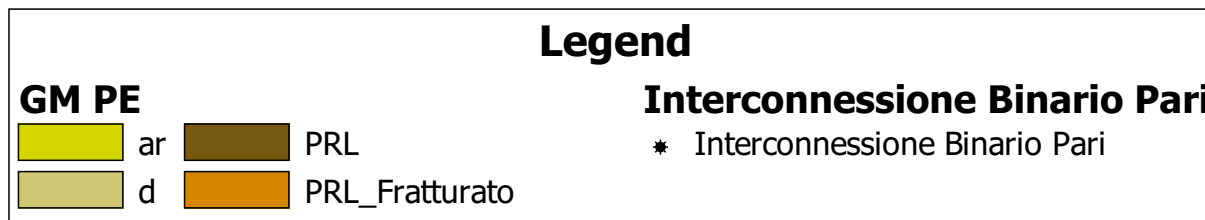
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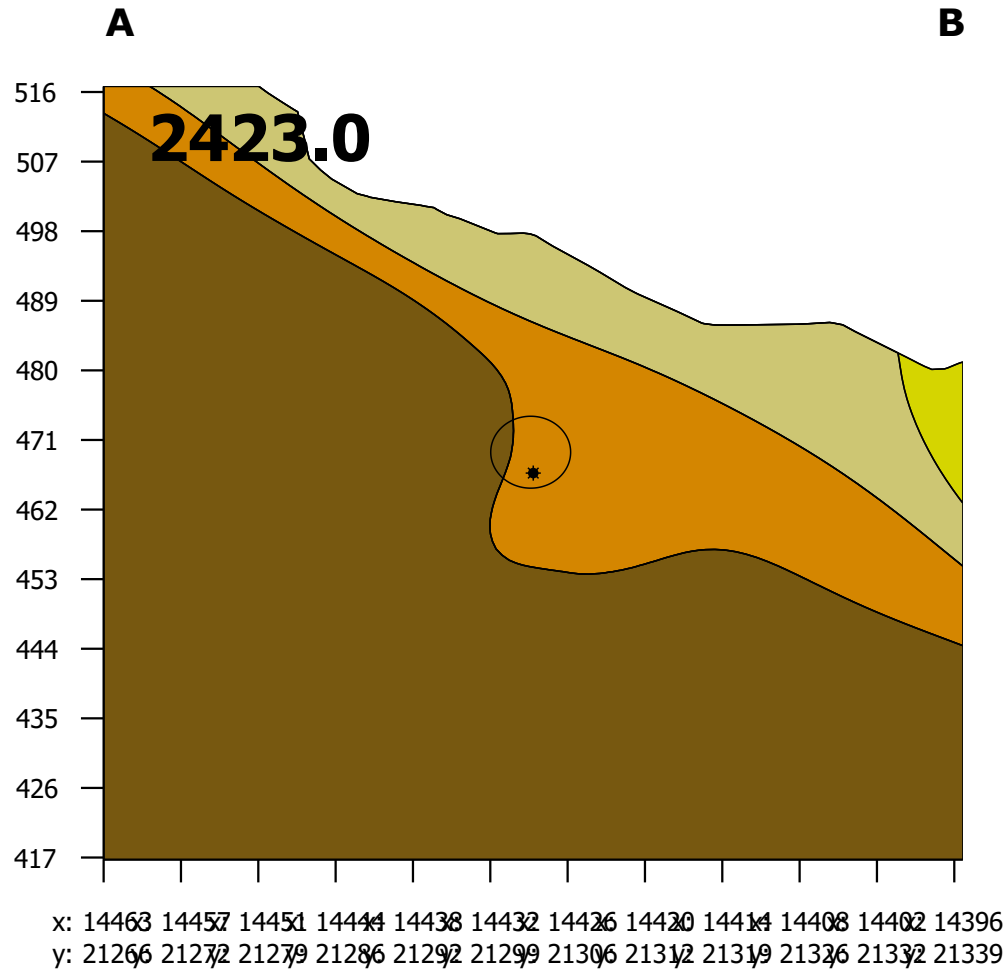
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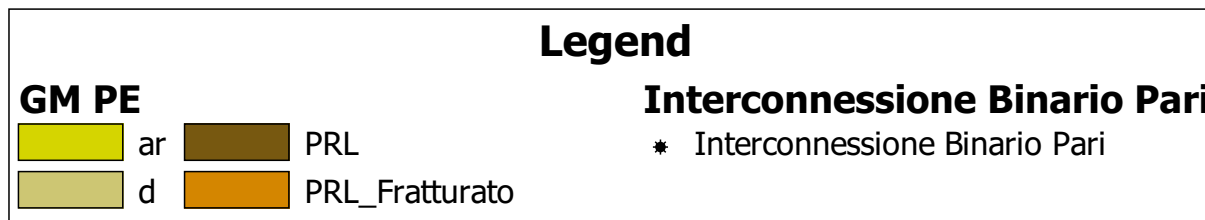
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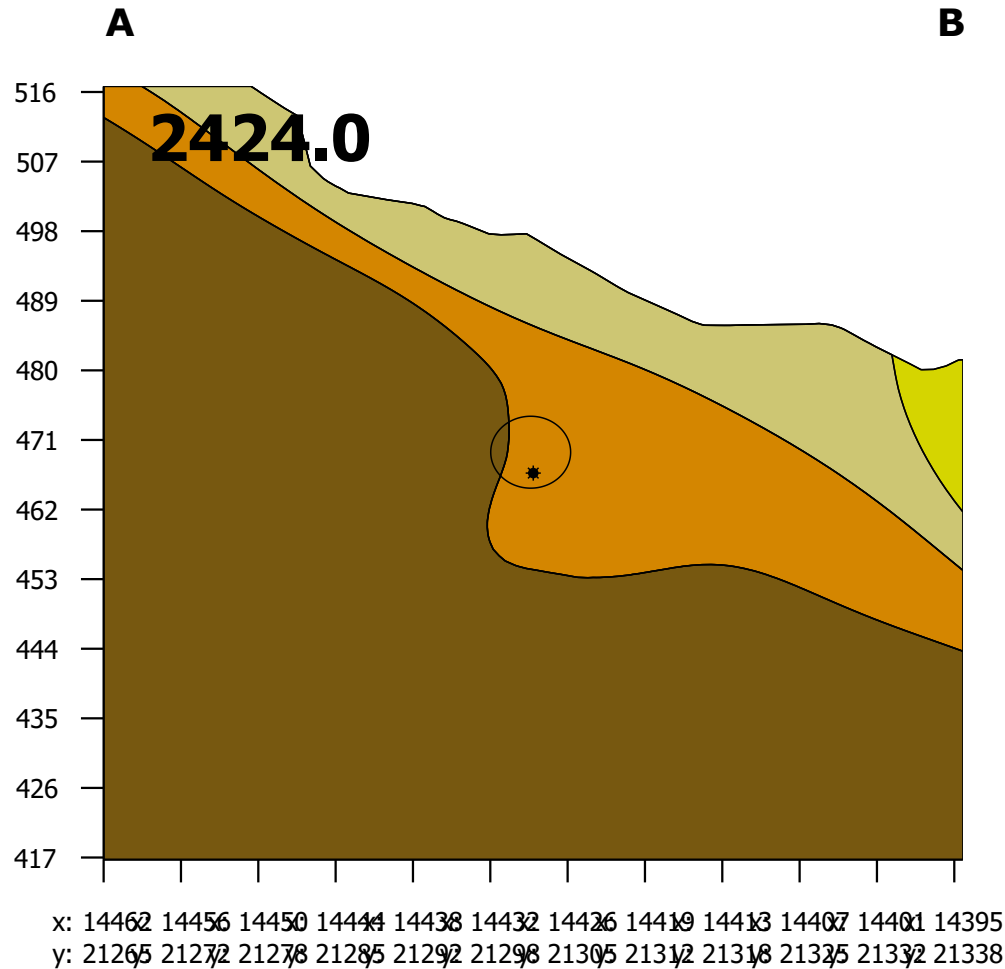
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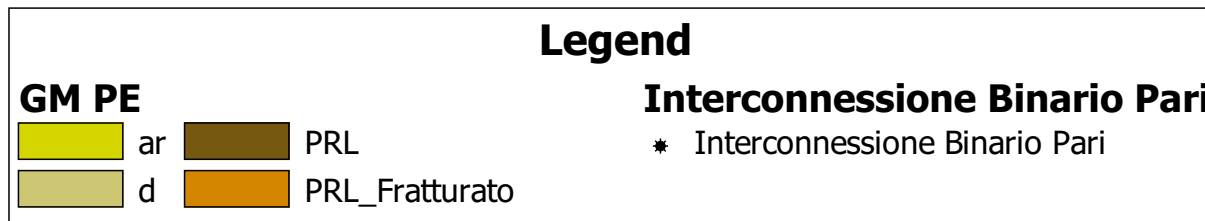
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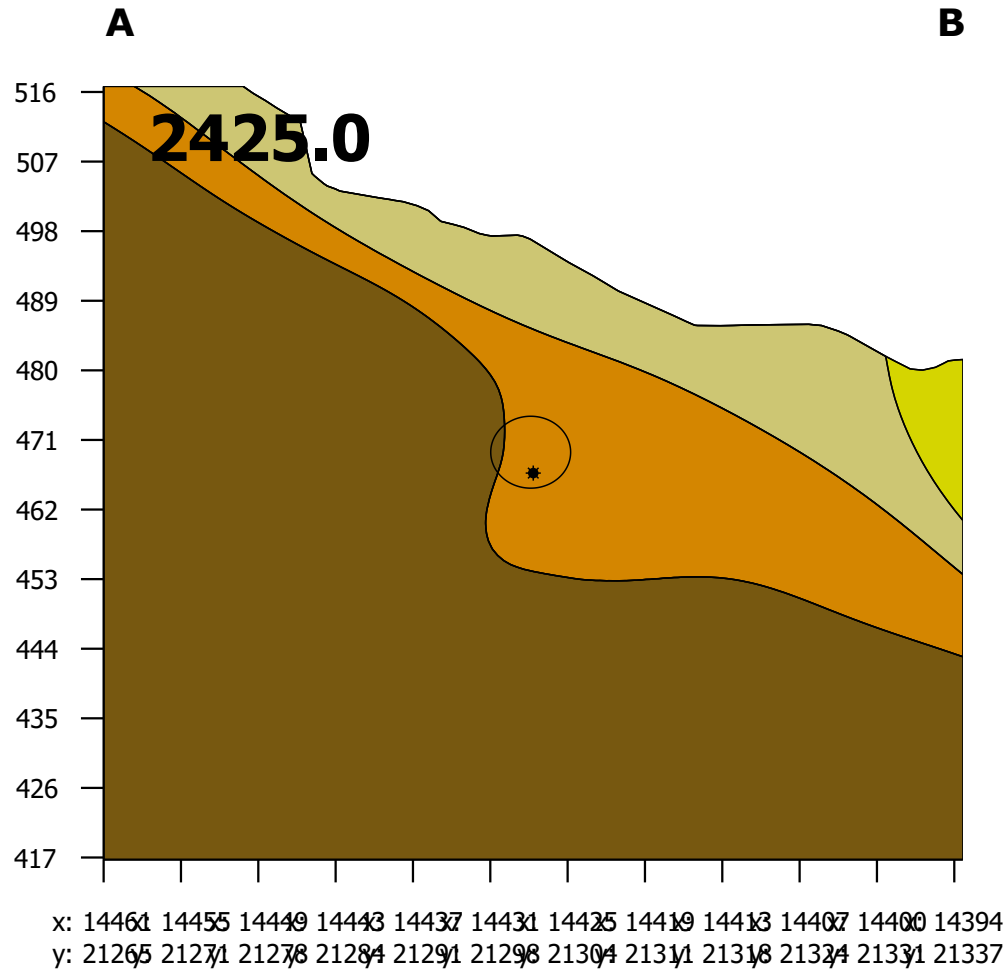
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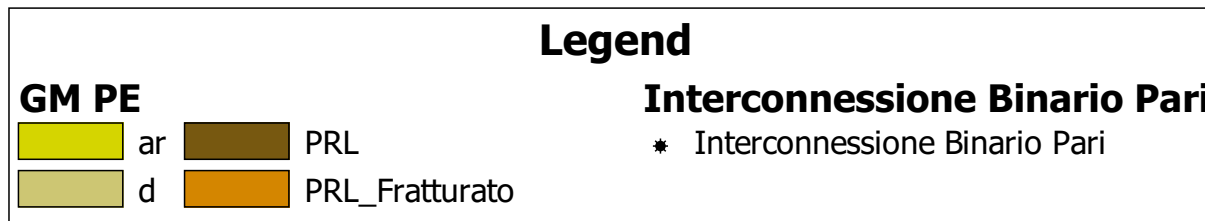
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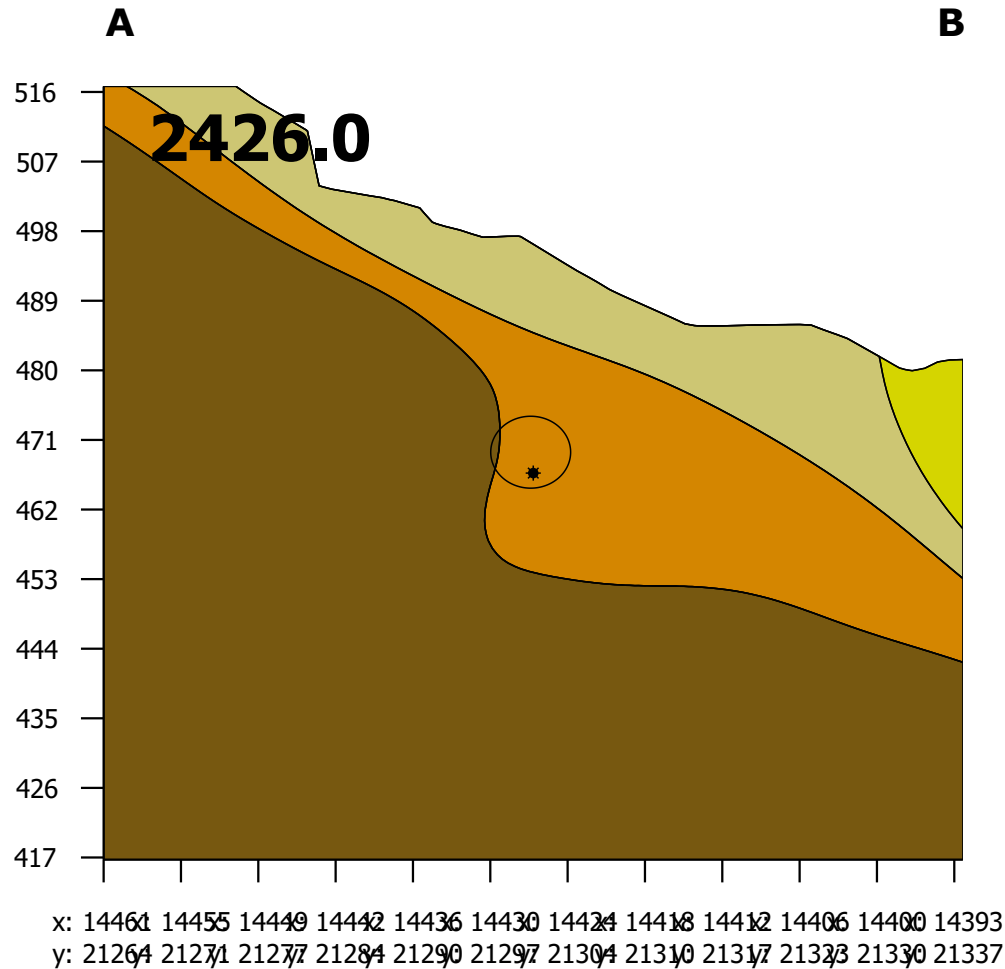
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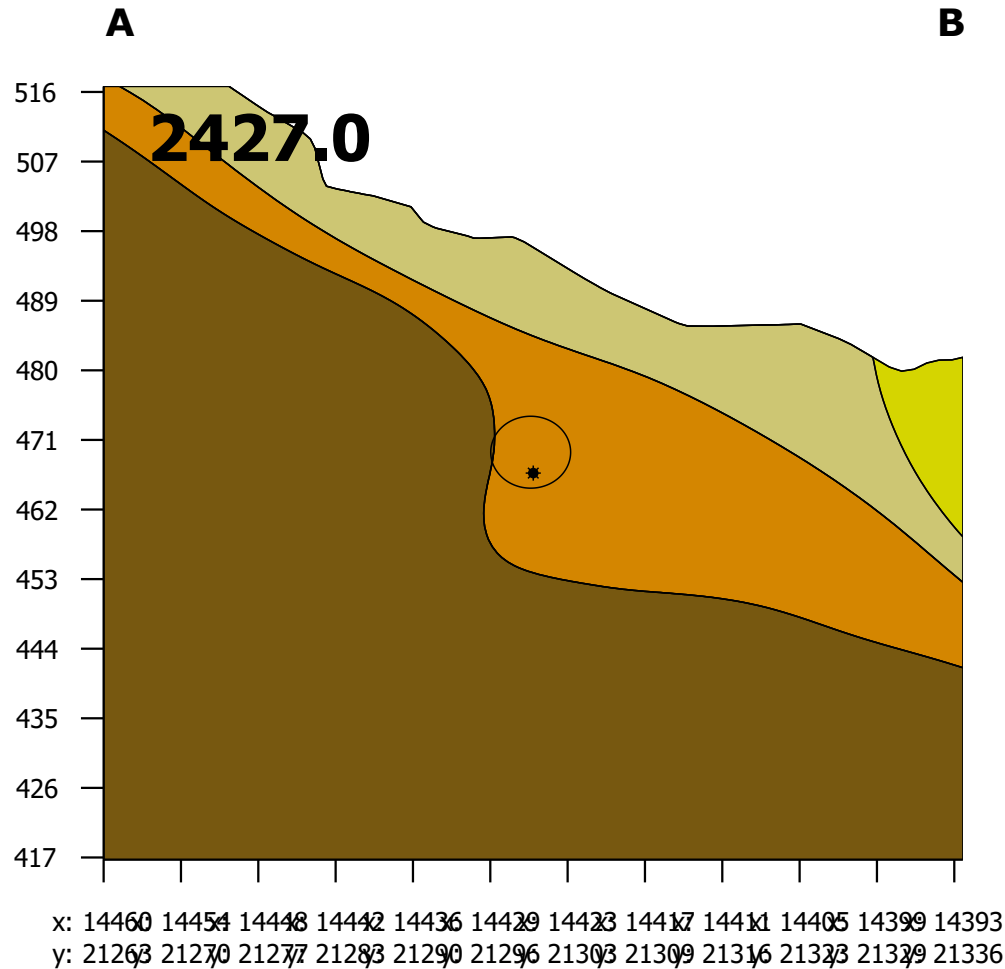
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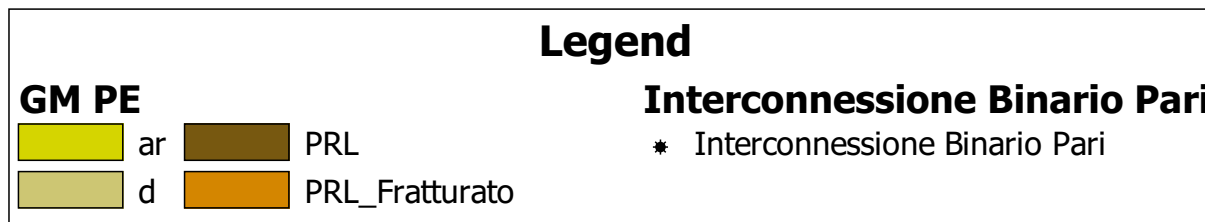
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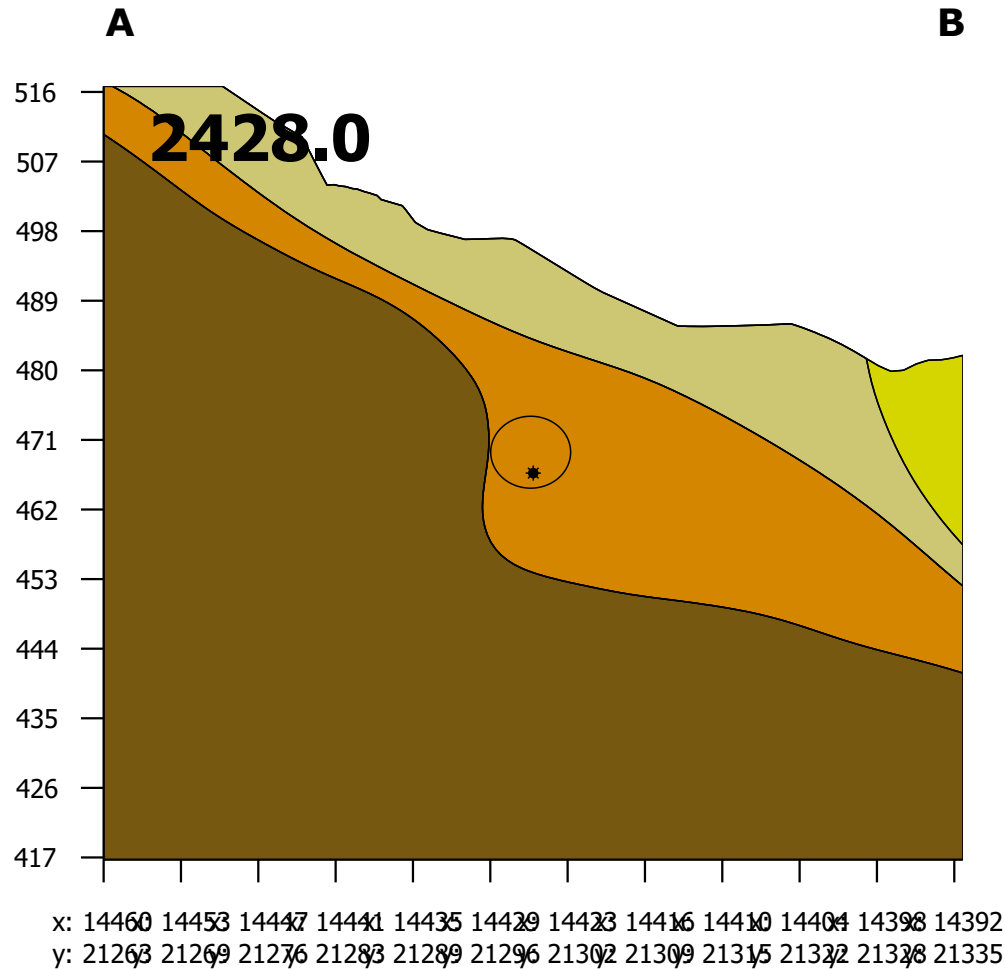
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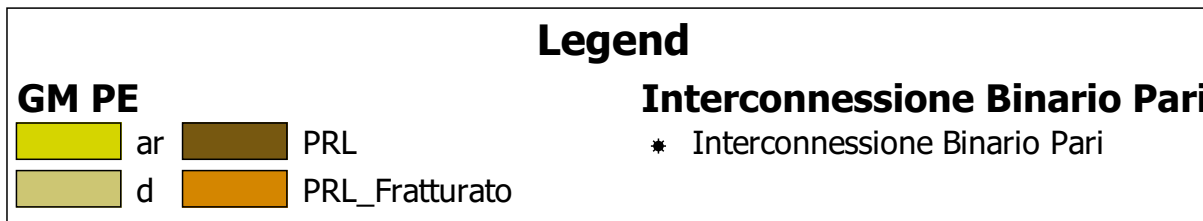
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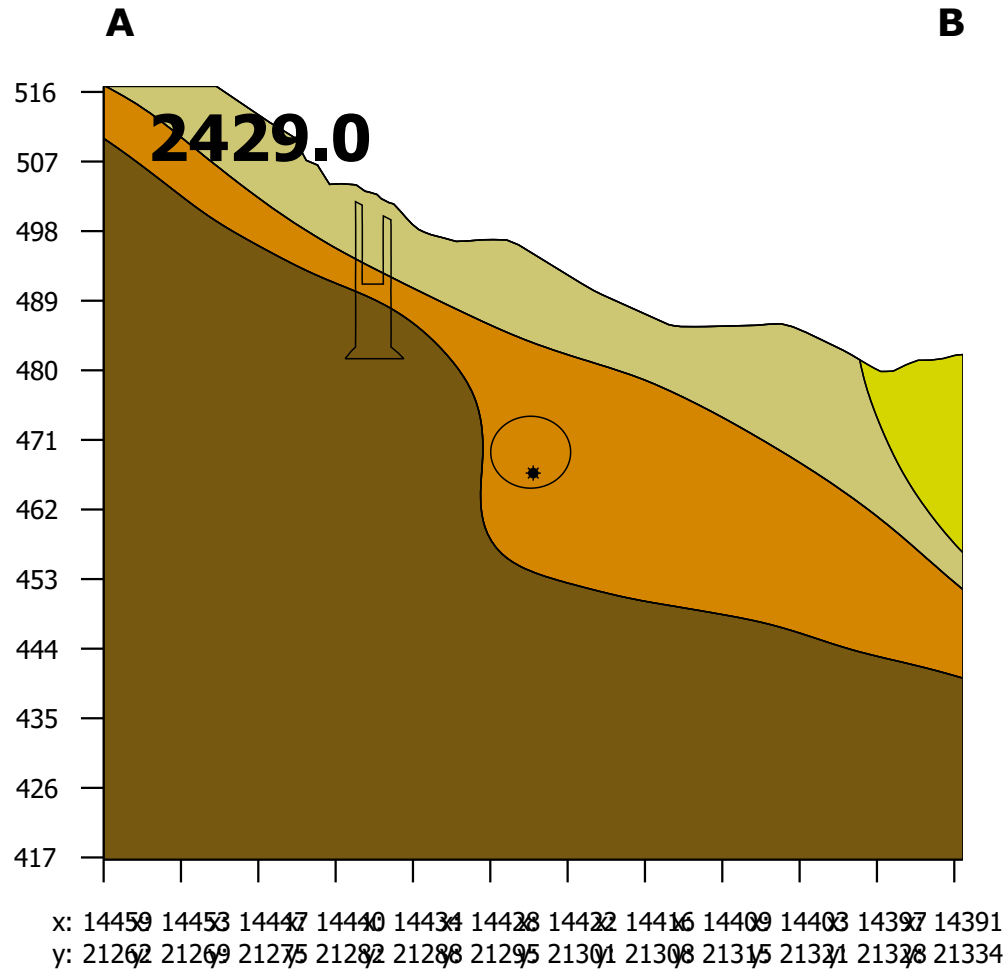
A: 14460, 21263

B: 14391, 21336

Scale: 1:880

Vertical exaggeration: 0.9x

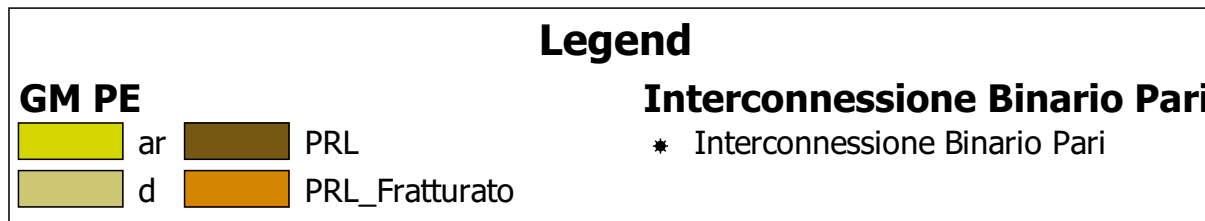


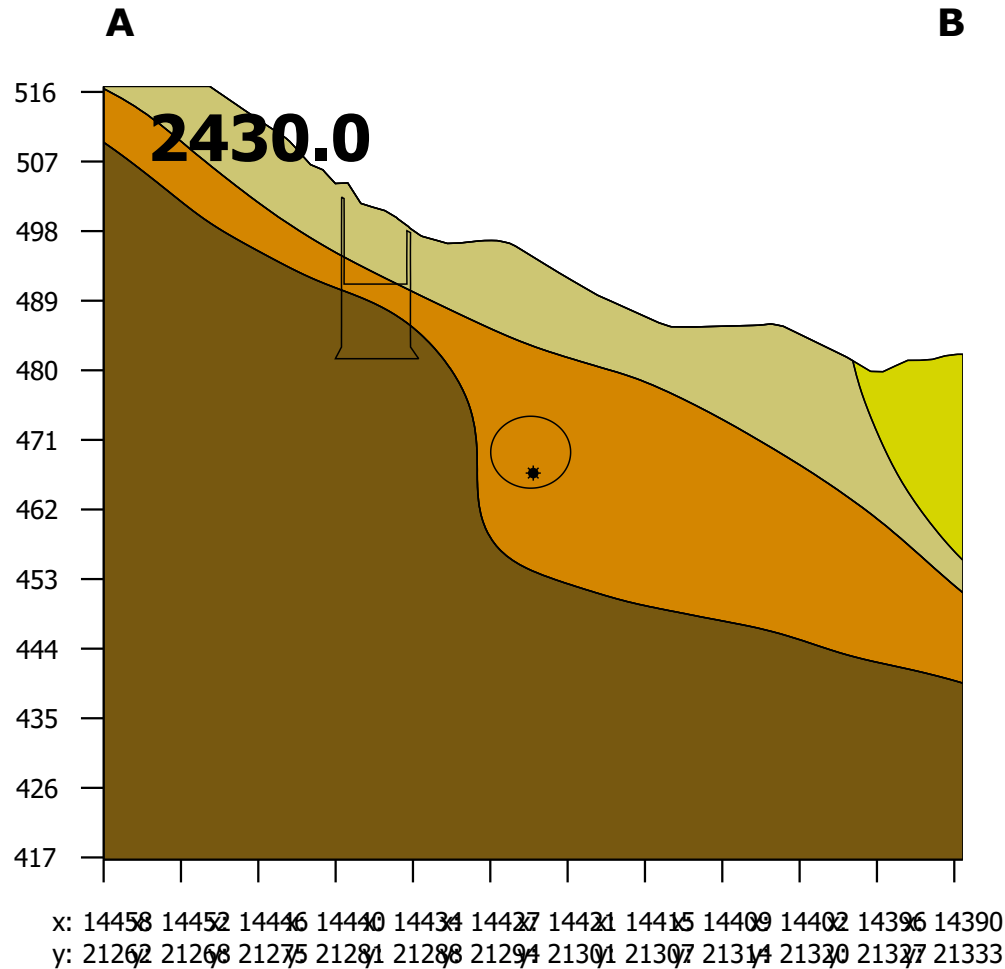


Location

A: 14459, 21262
B: 14390, 21335

Scale: 1:880
Vertical exaggeration: 0.9x





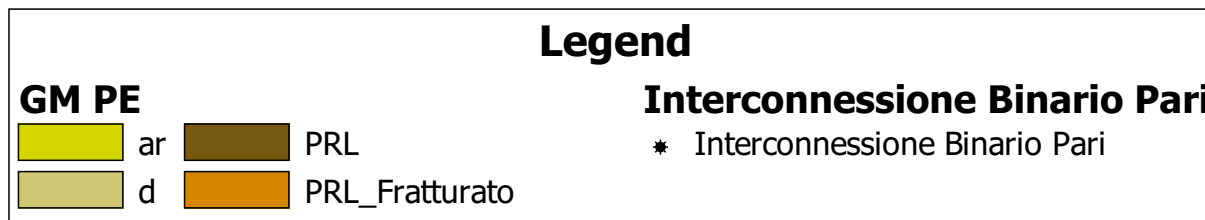
Location

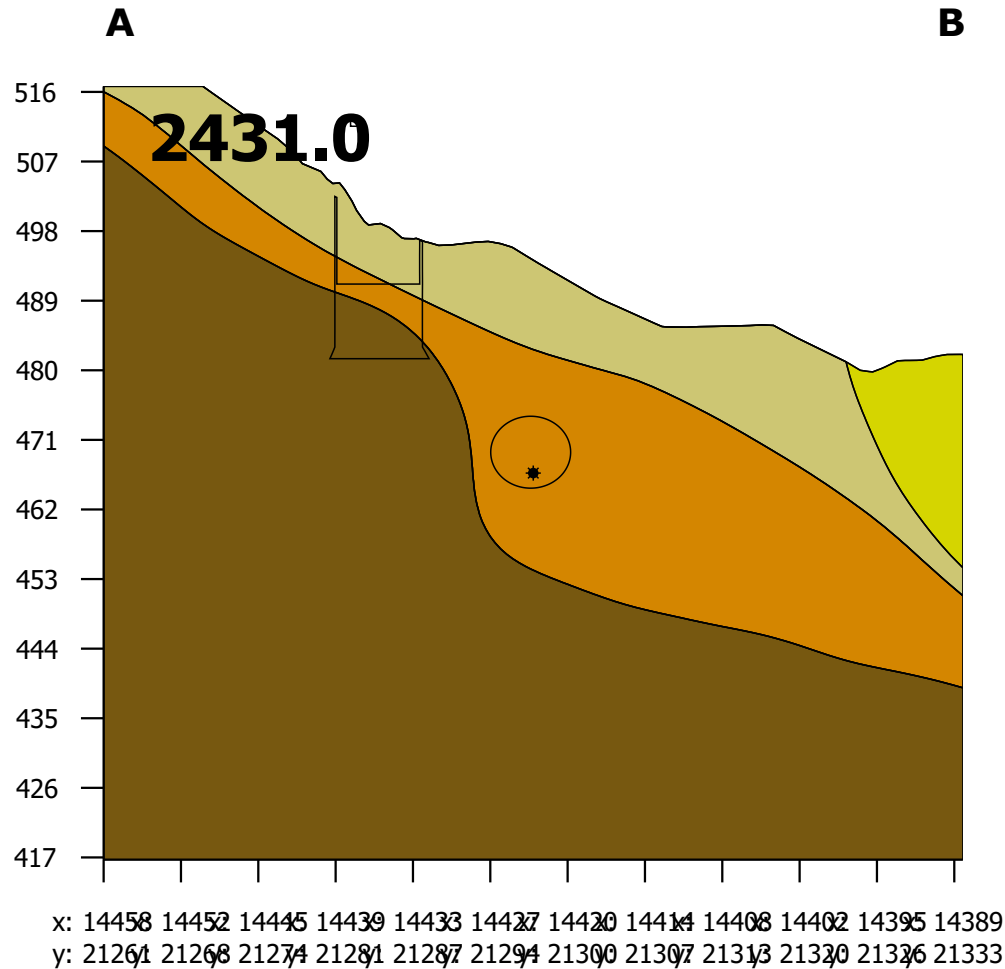
A: 14458, 21262

B: 14389, 21334

Scale: 1:880

Vertical exaggeration: 0.9x





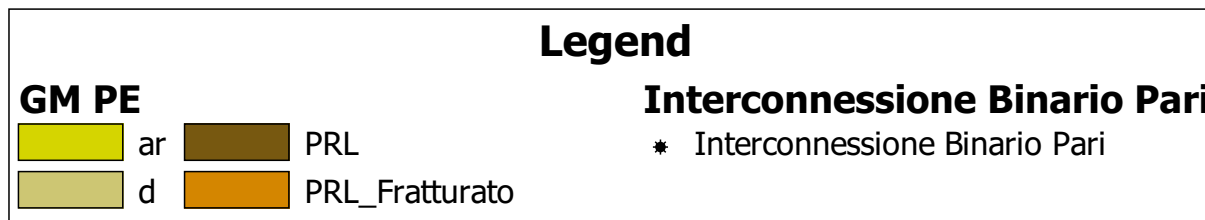
Location

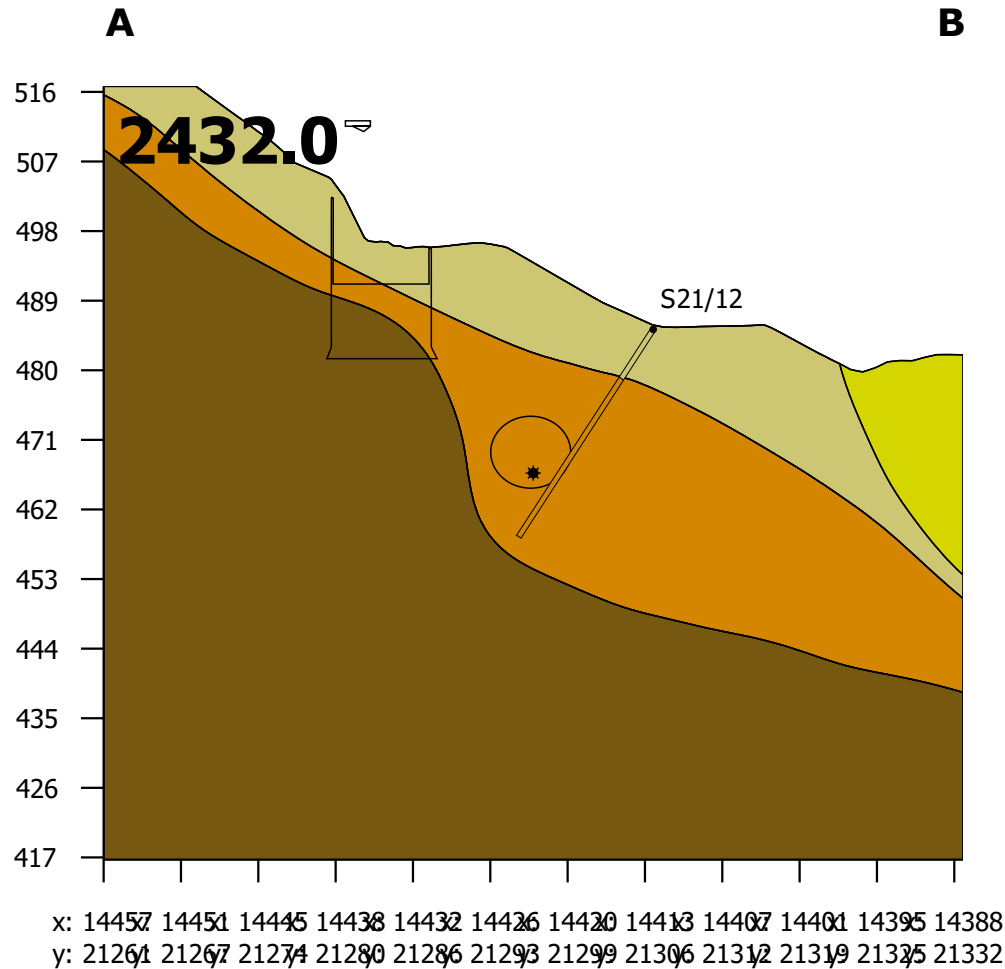
A: 14458, 21261

B: 14389, 21333

Scale: 1:880

Vertical exaggeration: 0.9x





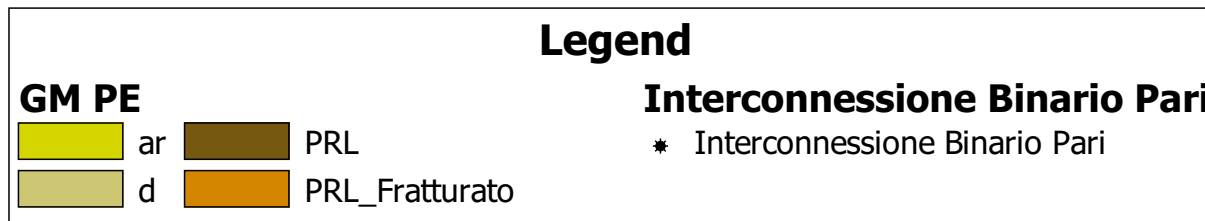
Location

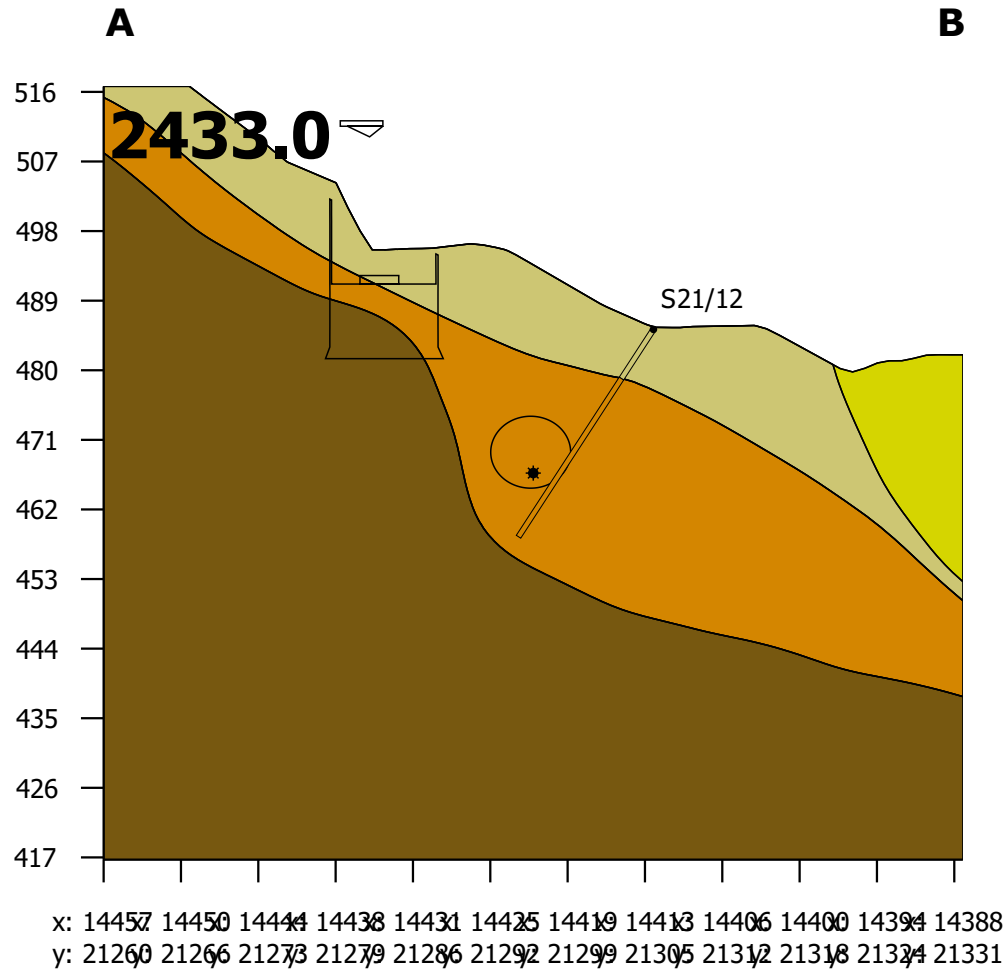
A: 14457, 21261

B: 14388, 21332

Scale: 1:880

Vertical exaggeration: 0.9x





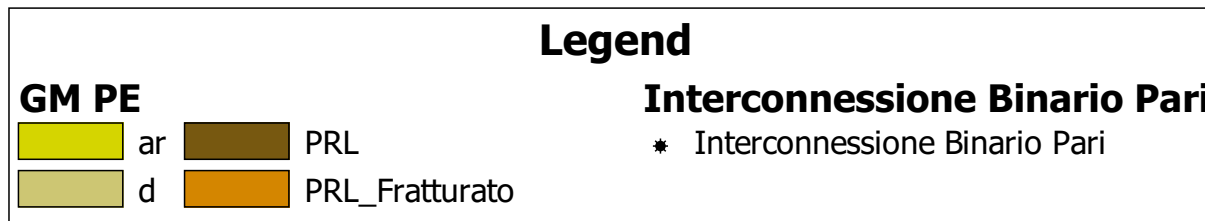
Location

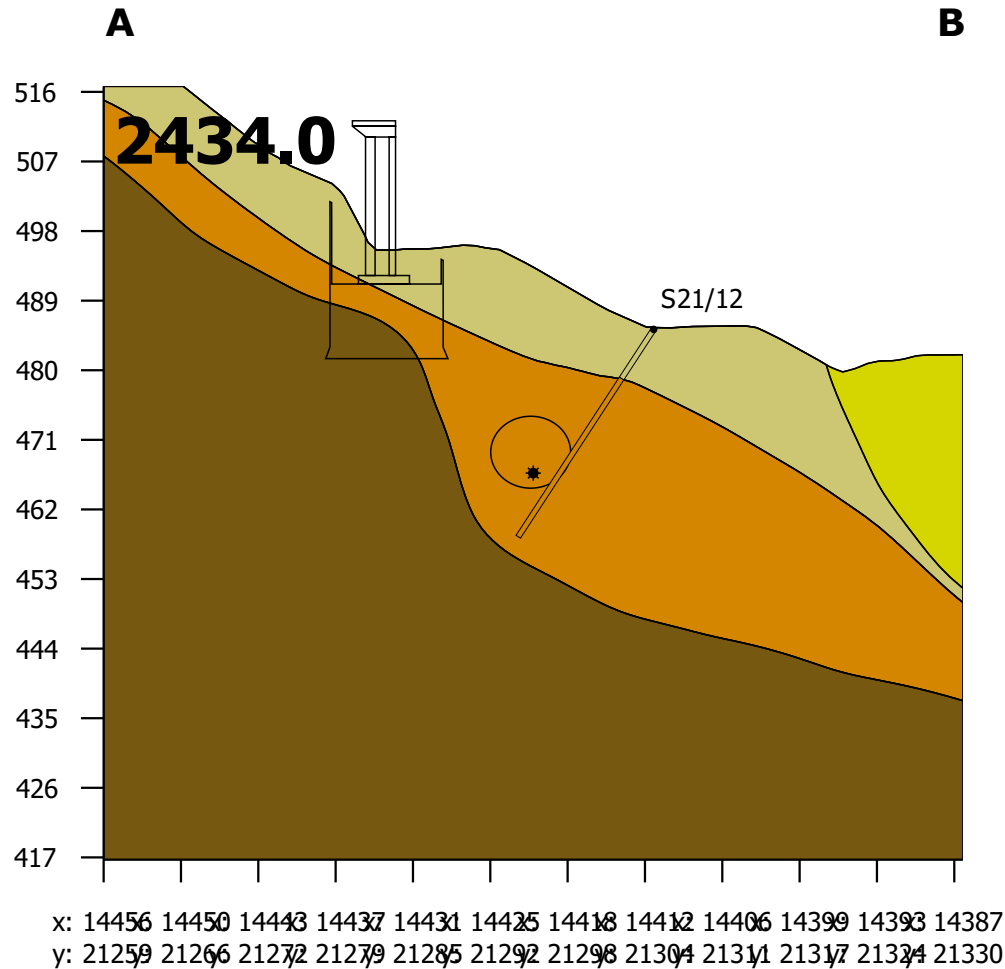
A: 14457, 21260

B: 14387, 21332

Scale: 1:880

Vertical exaggeration: 0.9x





Location

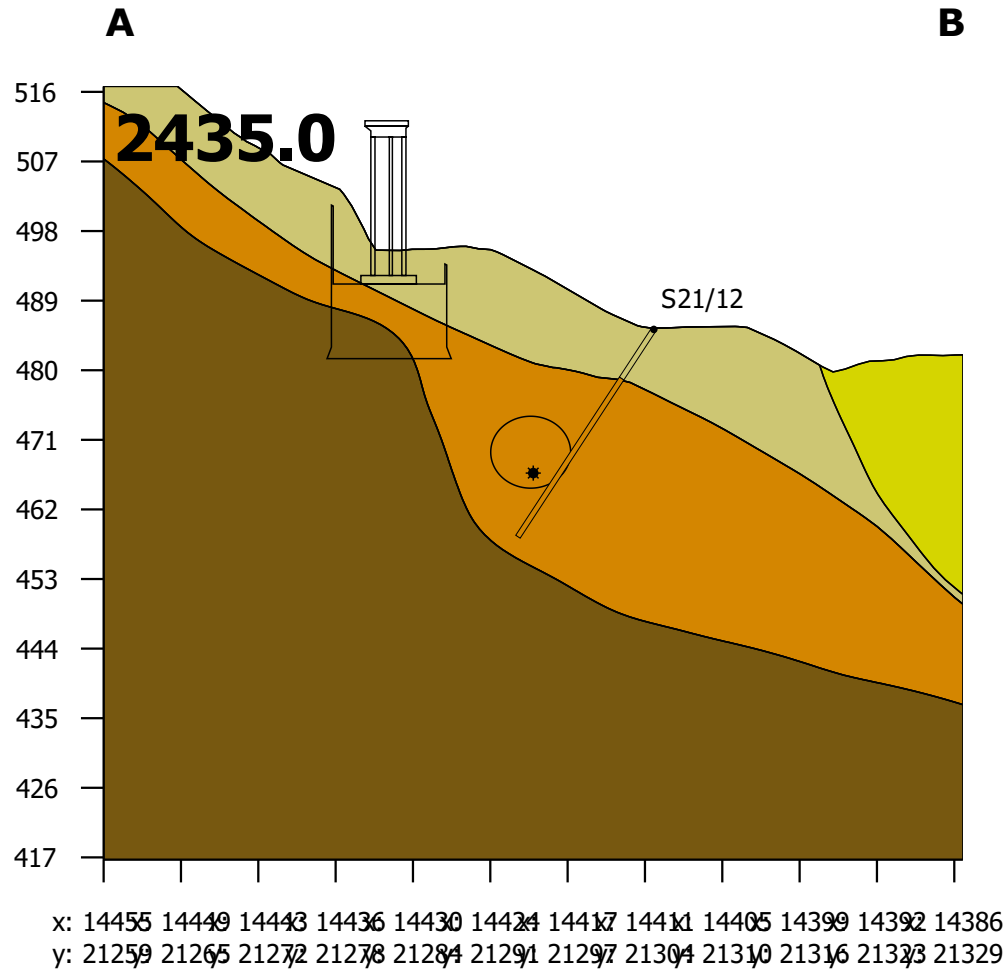
A: 14456, 21259

B: 14386, 21331

Scale: 1:880

Vertical exaggeration: 0.9x





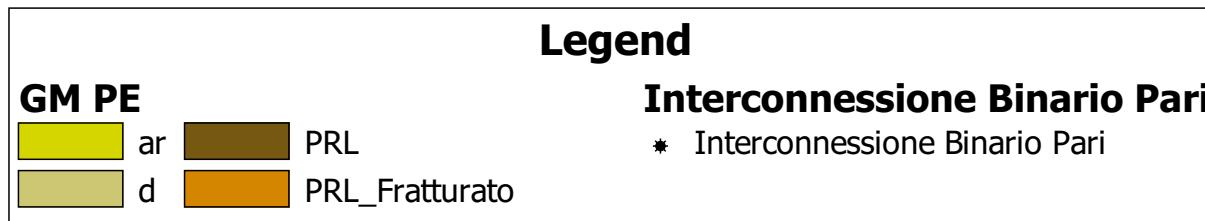
Location

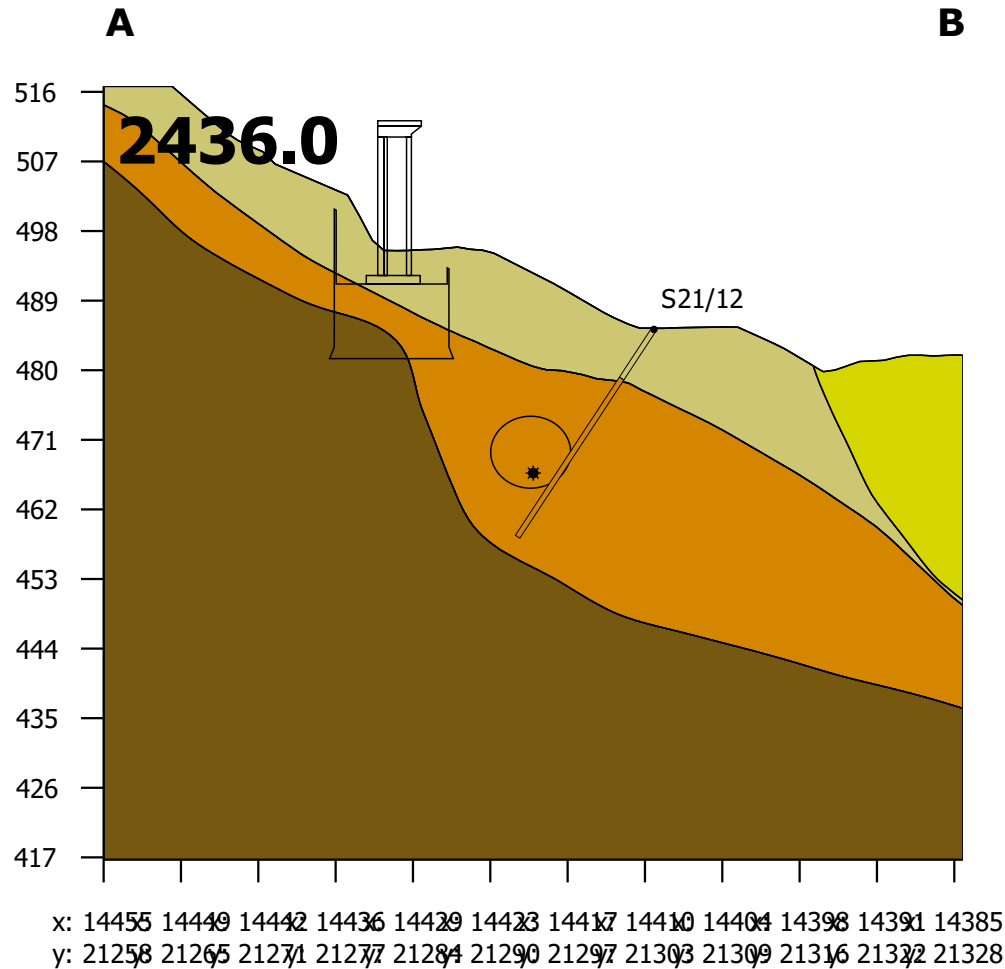
A: 14455, 21259

B: 14385, 21330

Scale: 1:880

Vertical exaggeration: 0.9x





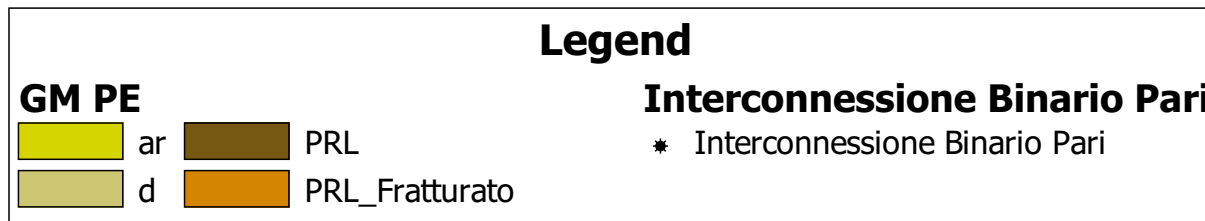
Location

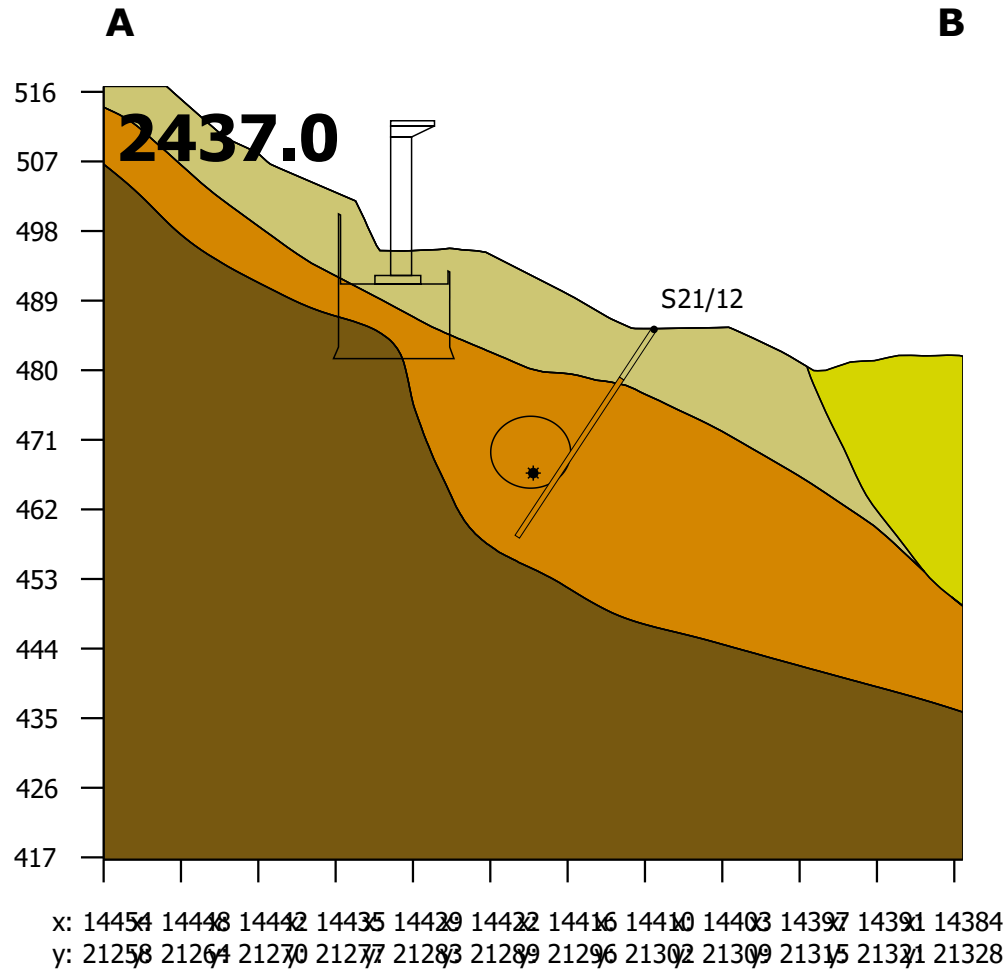
A: 14455, 21258

B: 14384, 21329

Scale: 1:880

Vertical exaggeration: 0.9x





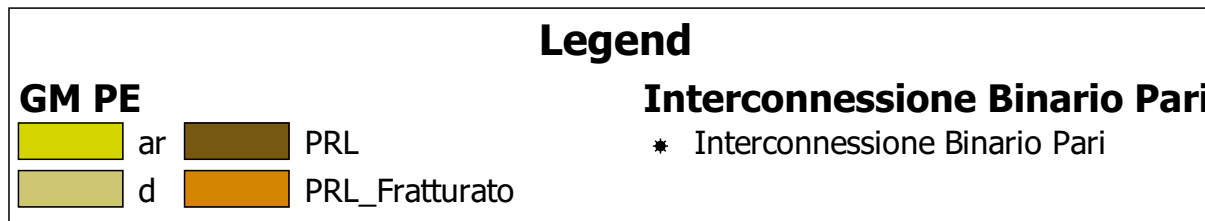
Location

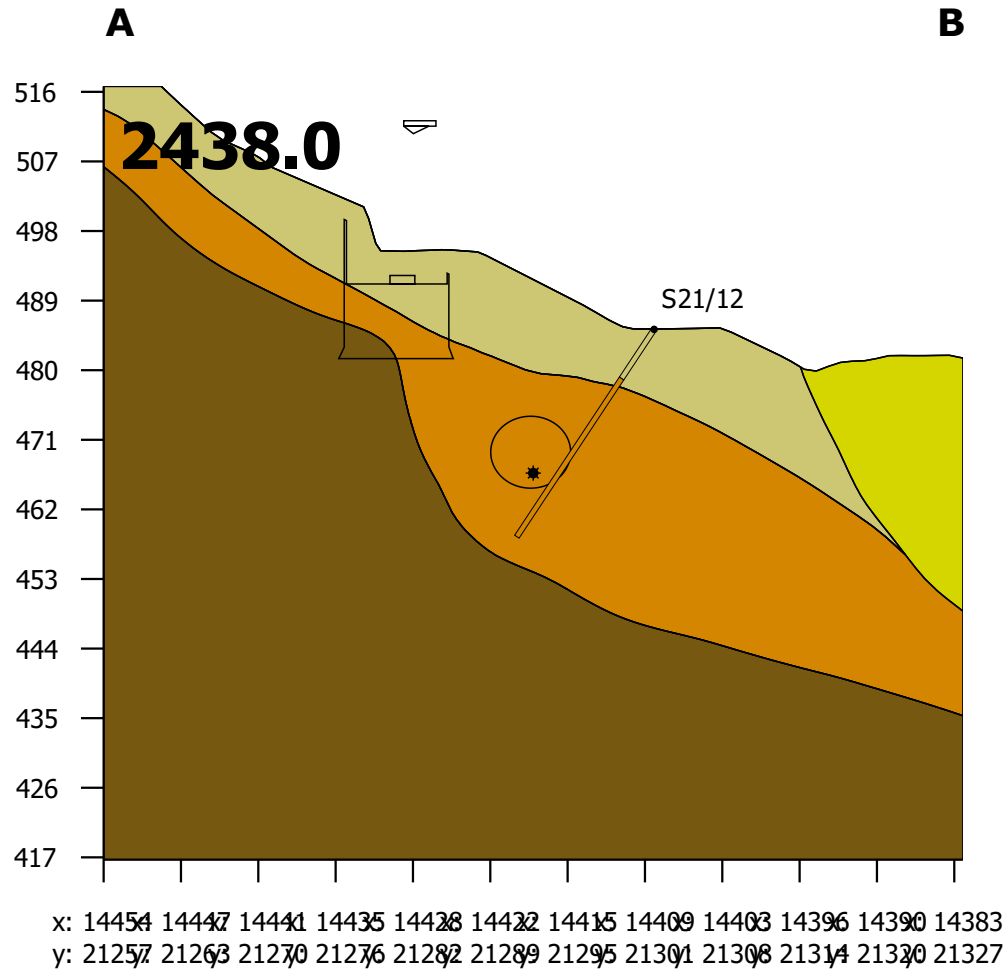
A: 14454, 21258

B: 14384, 21328

Scale: 1:880

Vertical exaggeration: 0.9x





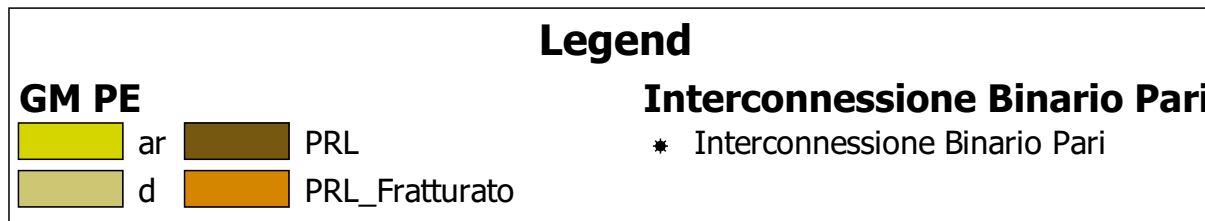
Location

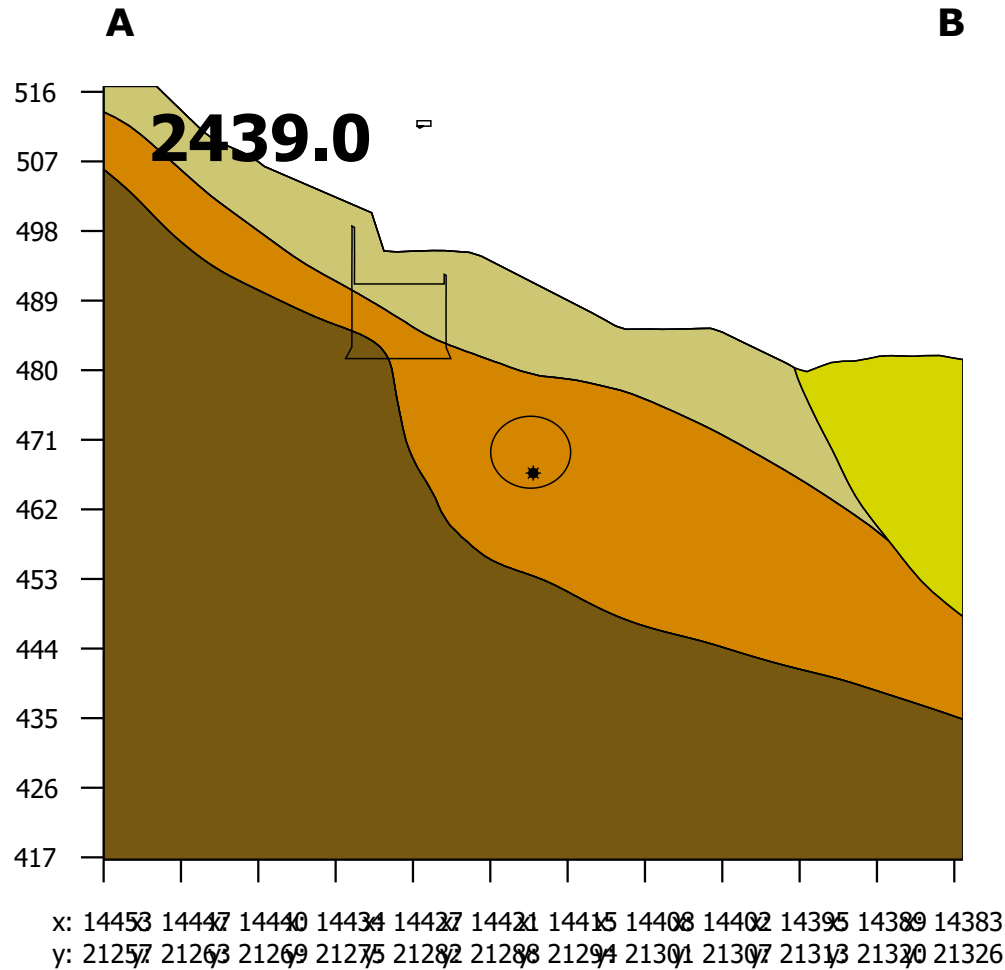
A: 14454, 21257

B: 14383, 21328

Scale: 1:880

Vertical exaggeration: 0.9x





Location

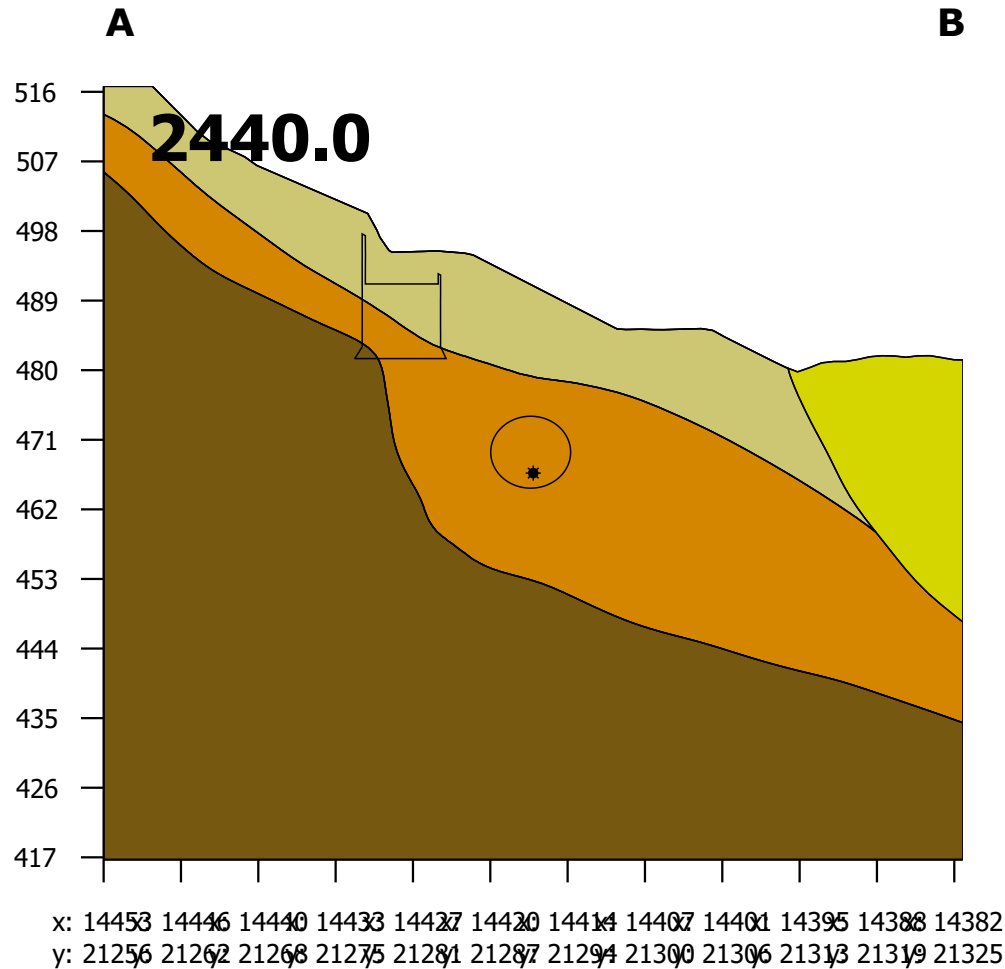
A: 14453, 21257

B: 14382, 21327

Scale: 1:880

Vertical exaggeration: 0.9x



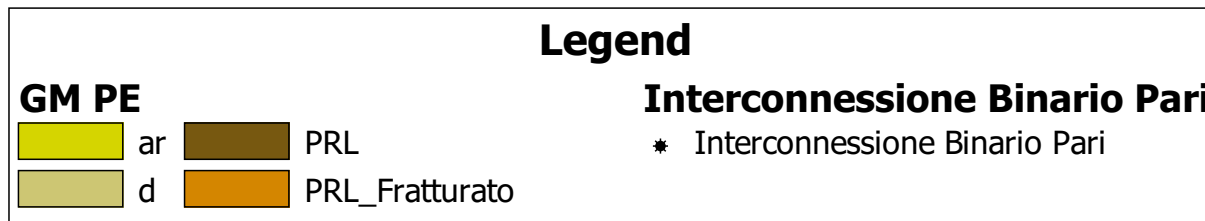


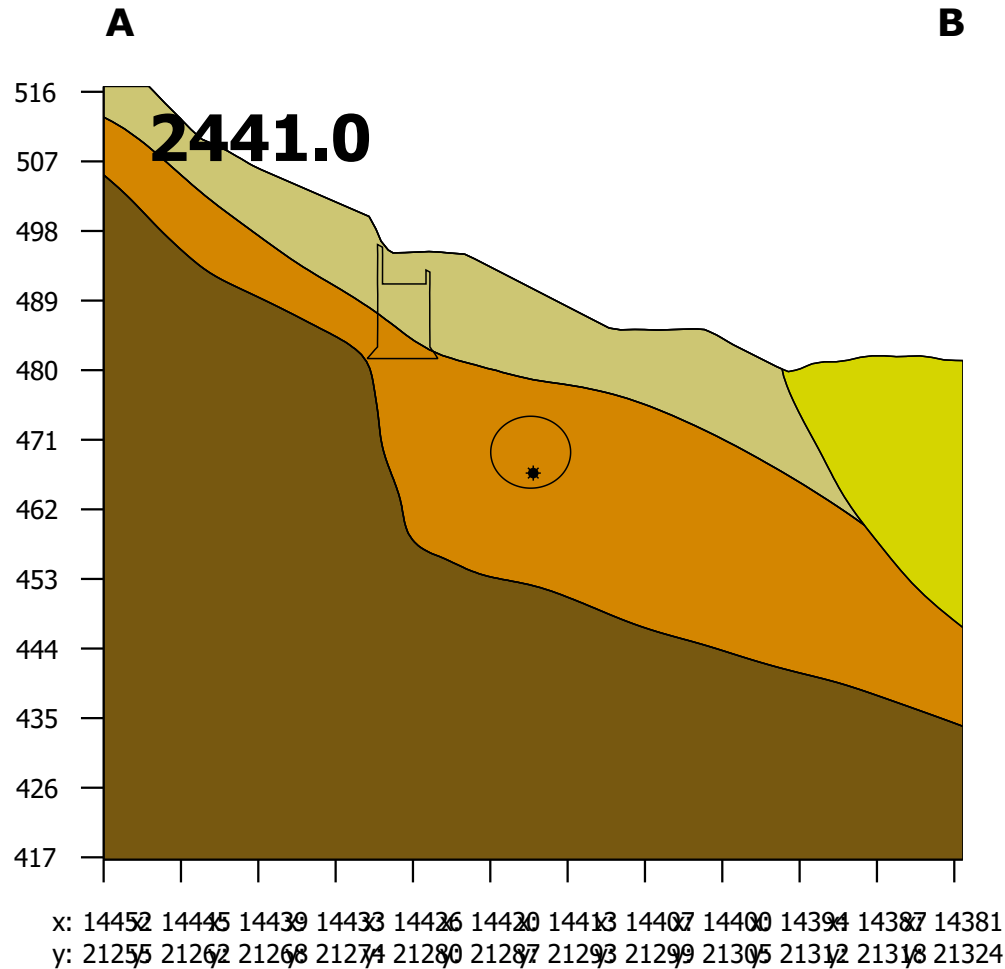
Location

A: 14453, 21256
B: 14381, 21326

Scale: 1:880

Vertical exaggeration: 0.9x





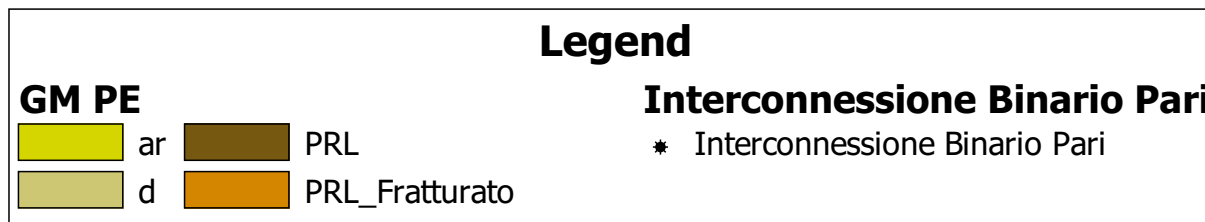
Location

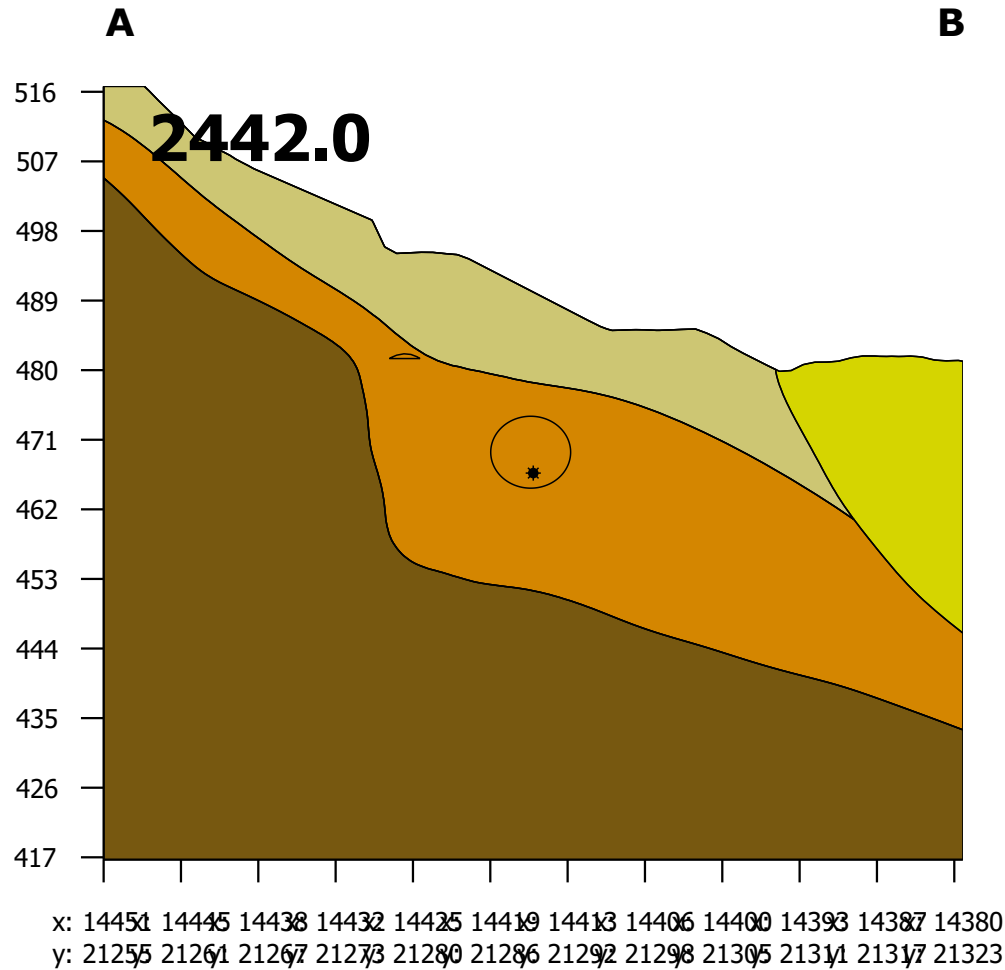
A: 14452, 21255

B: 14380, 21325

Scale: 1:880

Vertical exaggeration: 0.9x





Location

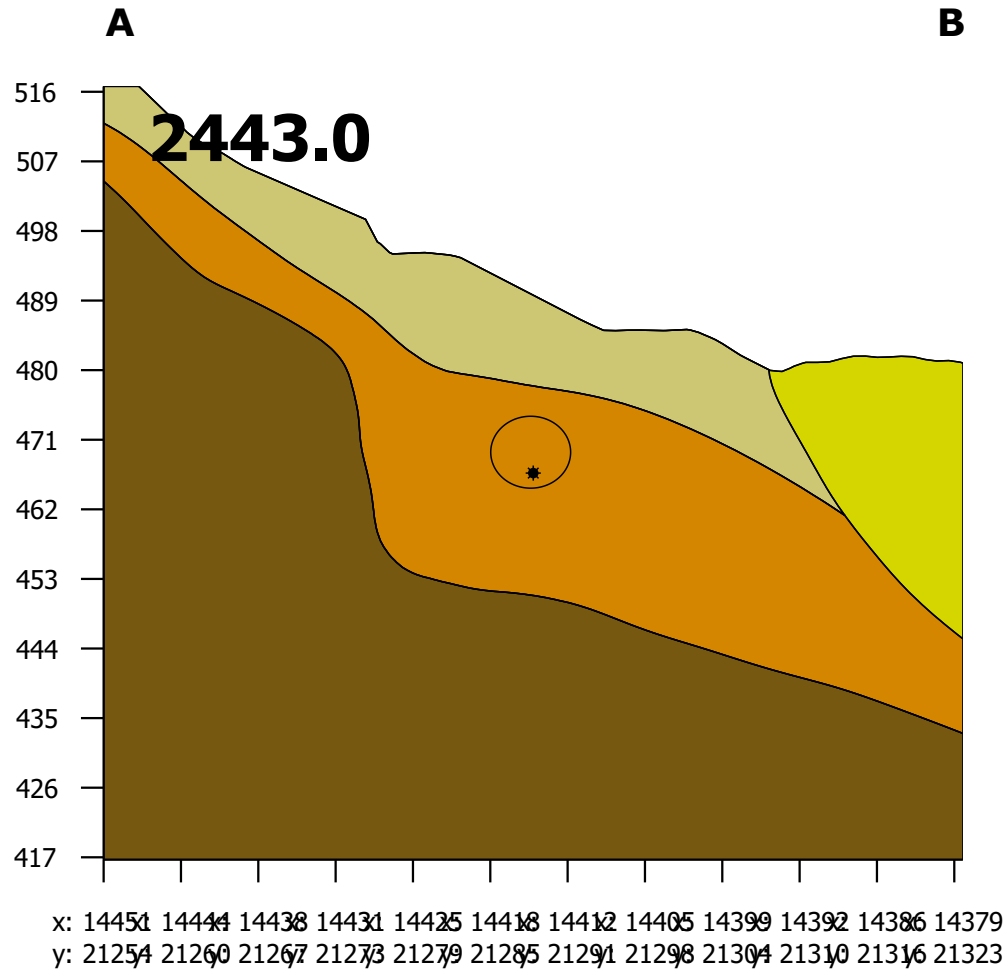
A: 14451, 21255

B: 14379, 21324

Scale: 1:880

Vertical exaggeration: 0.9x





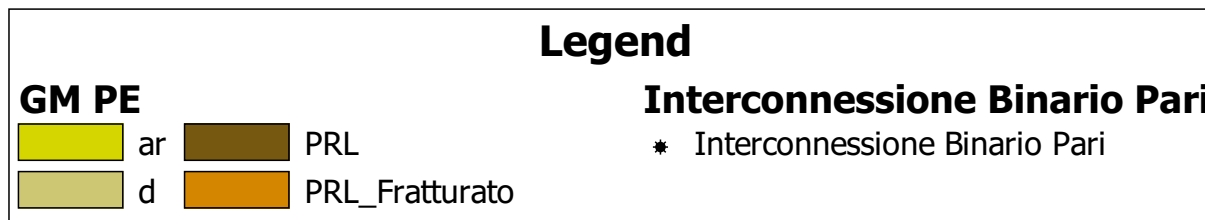
Location

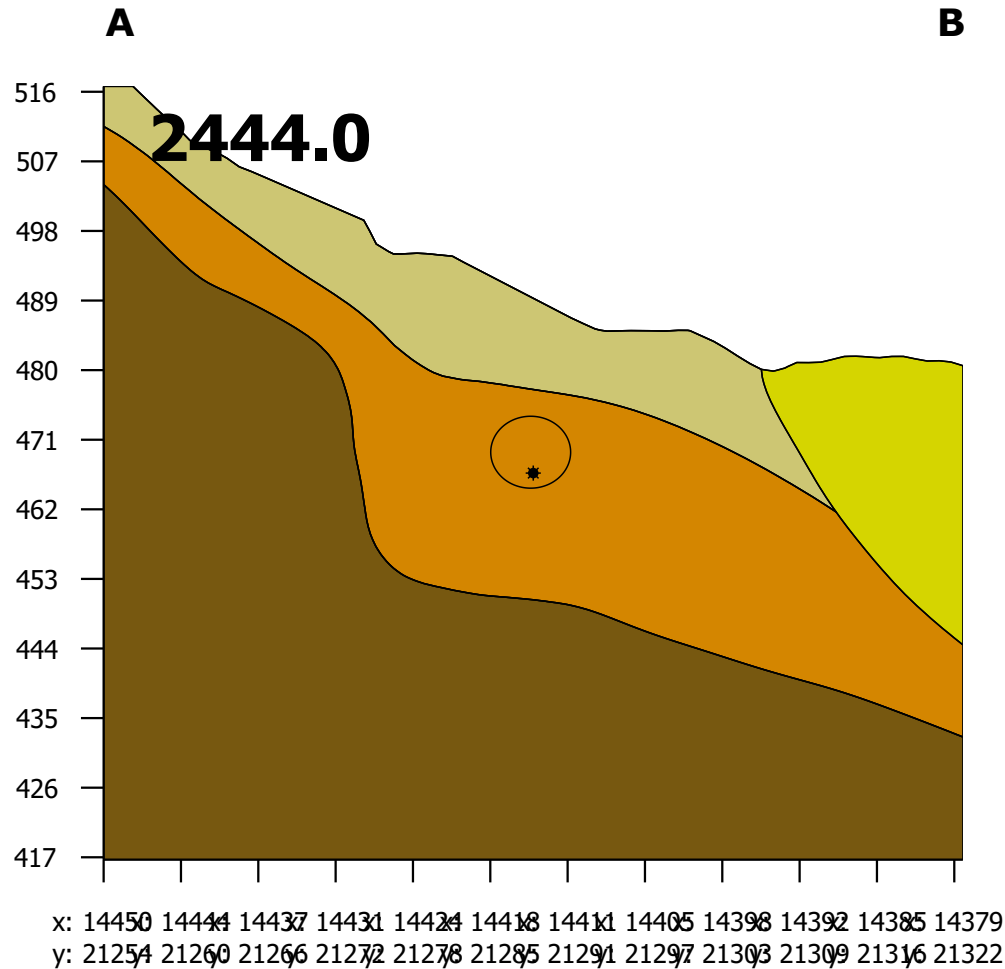
A: 14451, 21254

B: 14379, 21323

Scale: 1:880

Vertical exaggeration: 0.9x





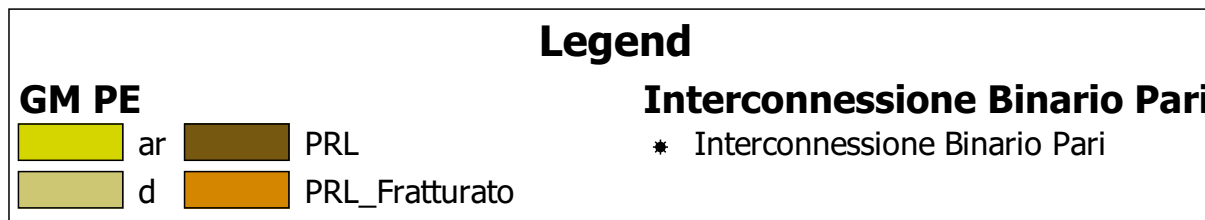
Location

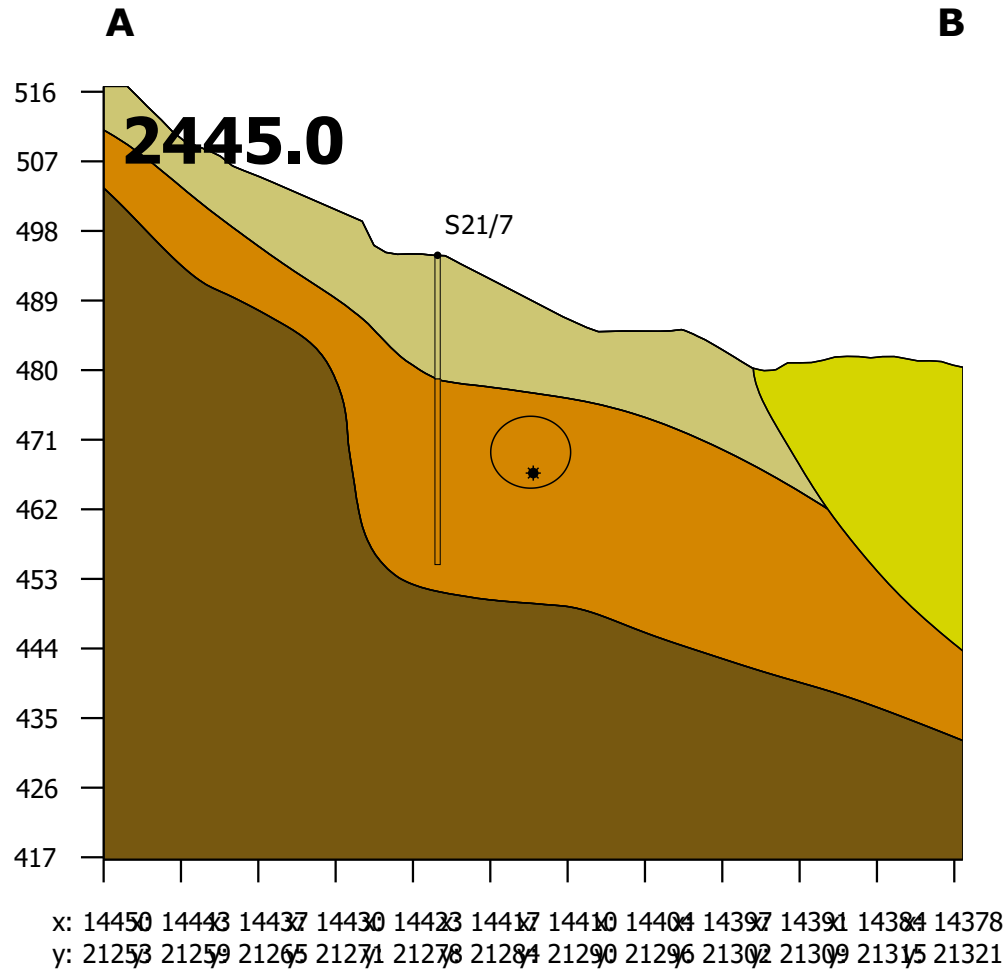
A: 14450, 21254

B: 14378, 21322

Scale: 1:880

Vertical exaggeration: 0.9x

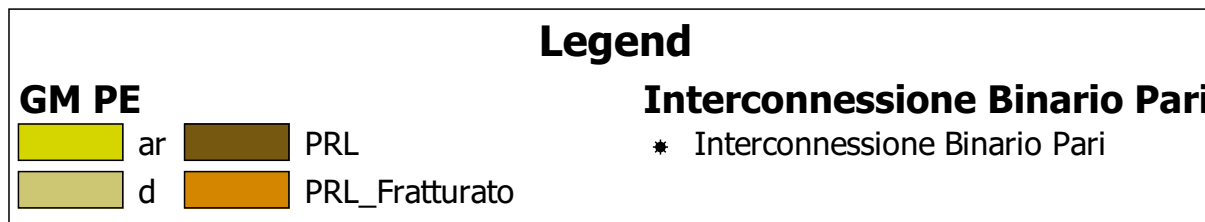


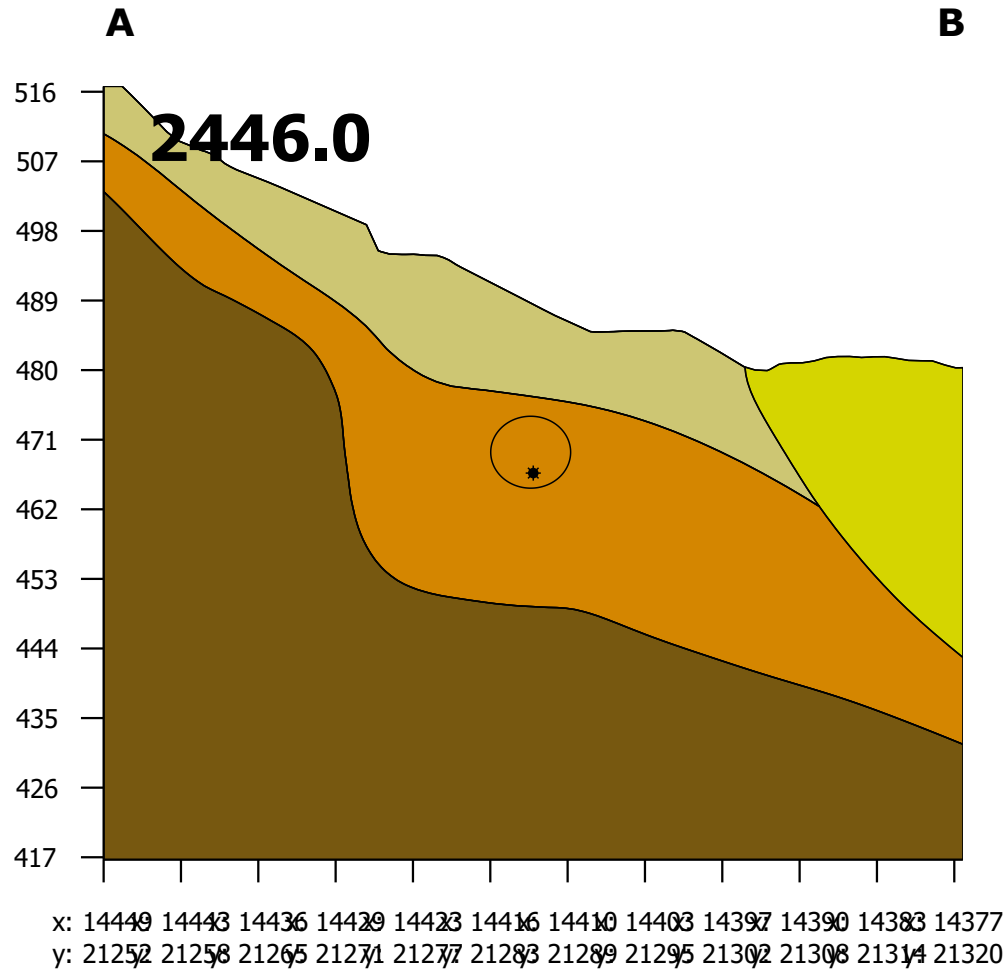


Location

A: 14450, 21253
B: 14377, 21322

Scale: 1:880
Vertical exaggeration: 0.9x





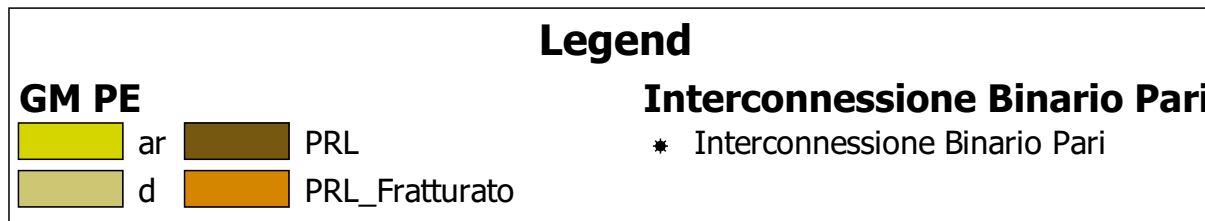
Location

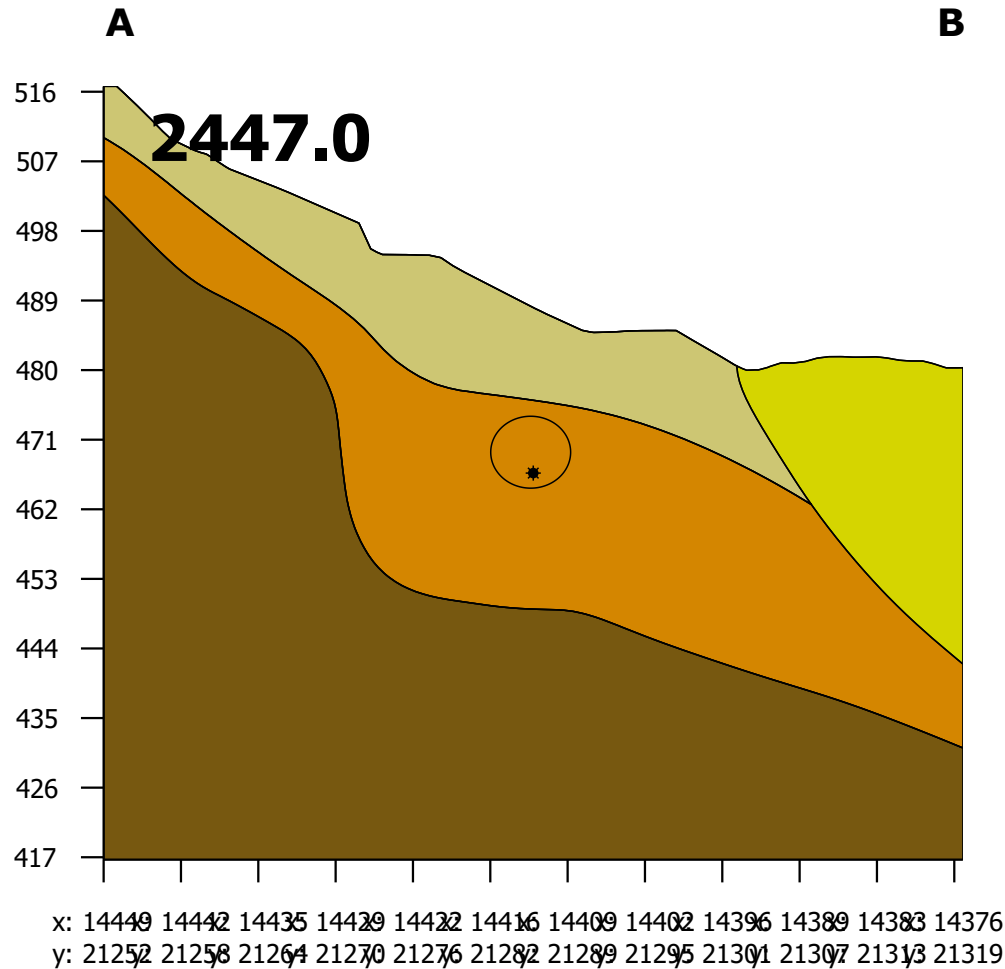
A: 14449, 21252

B: 14376, 21321

Scale: 1:880

Vertical exaggeration: 0.9x



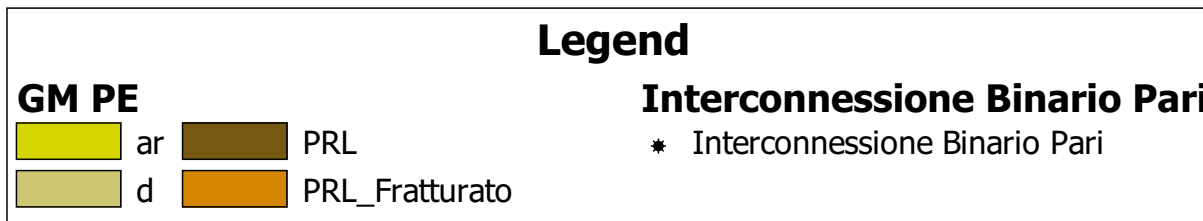


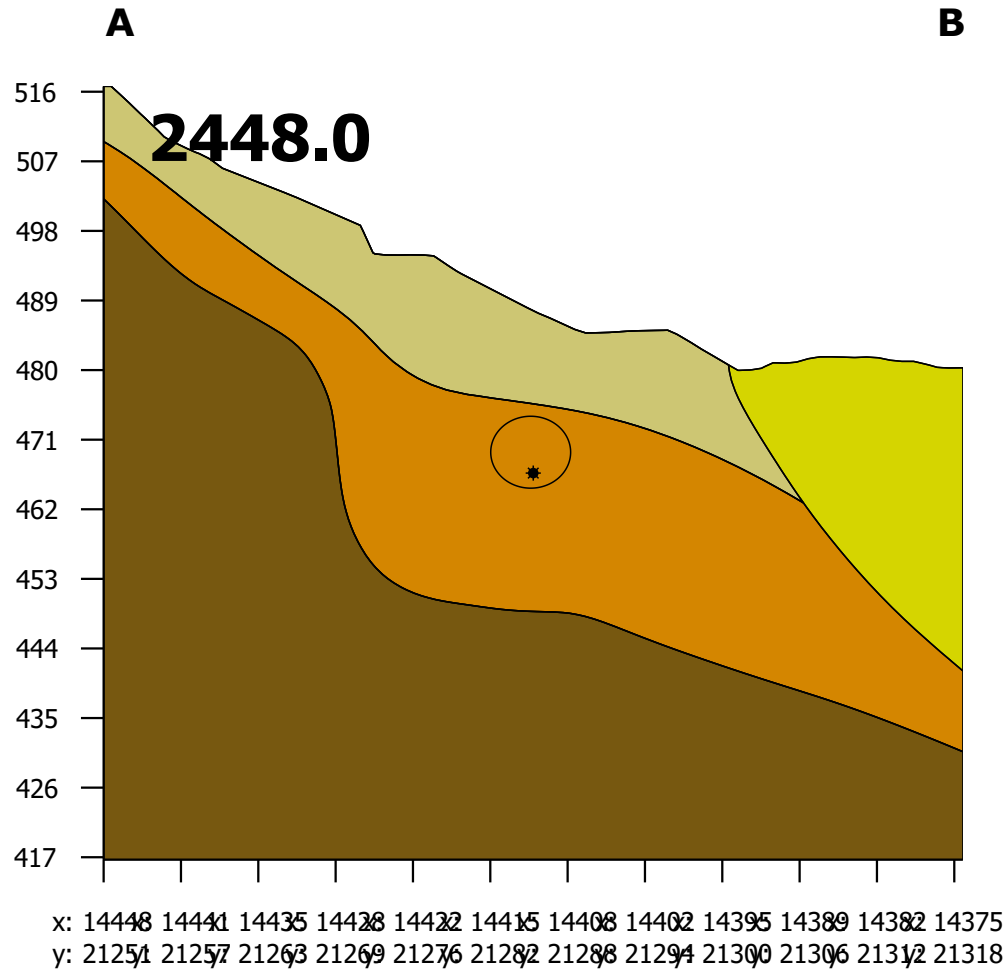
Location

A: 14449, 21252
B: 14375, 21320

Scale: 1:880

Vertical exaggeration: 0.9x

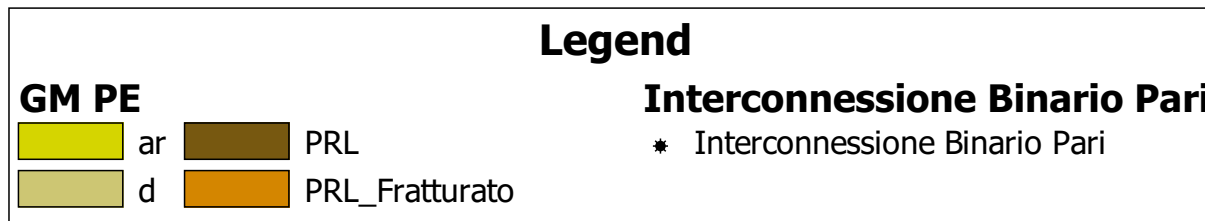


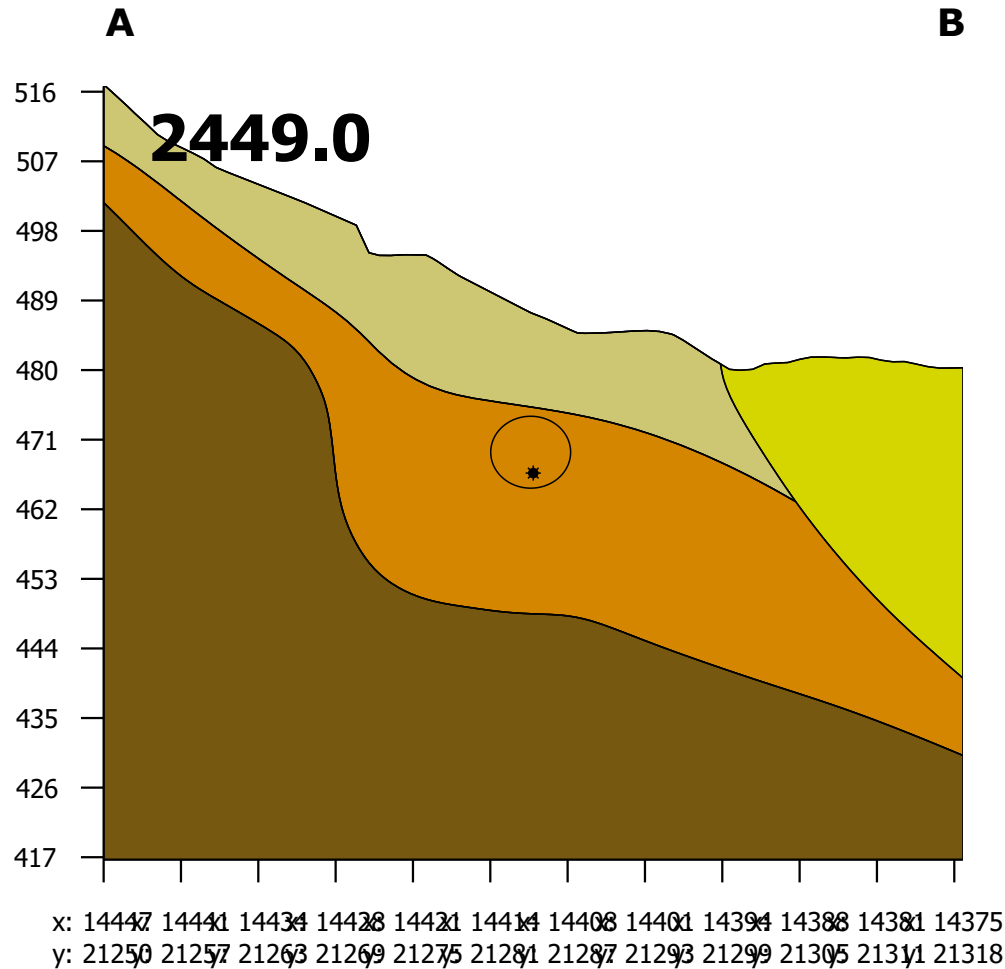


Location

A: 14448, 21251
B: 14375, 21319

Scale: 1:880
Vertical exaggeration: 0.9x





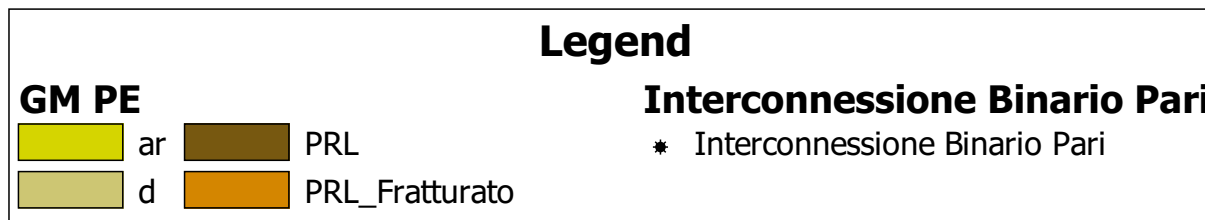
Location

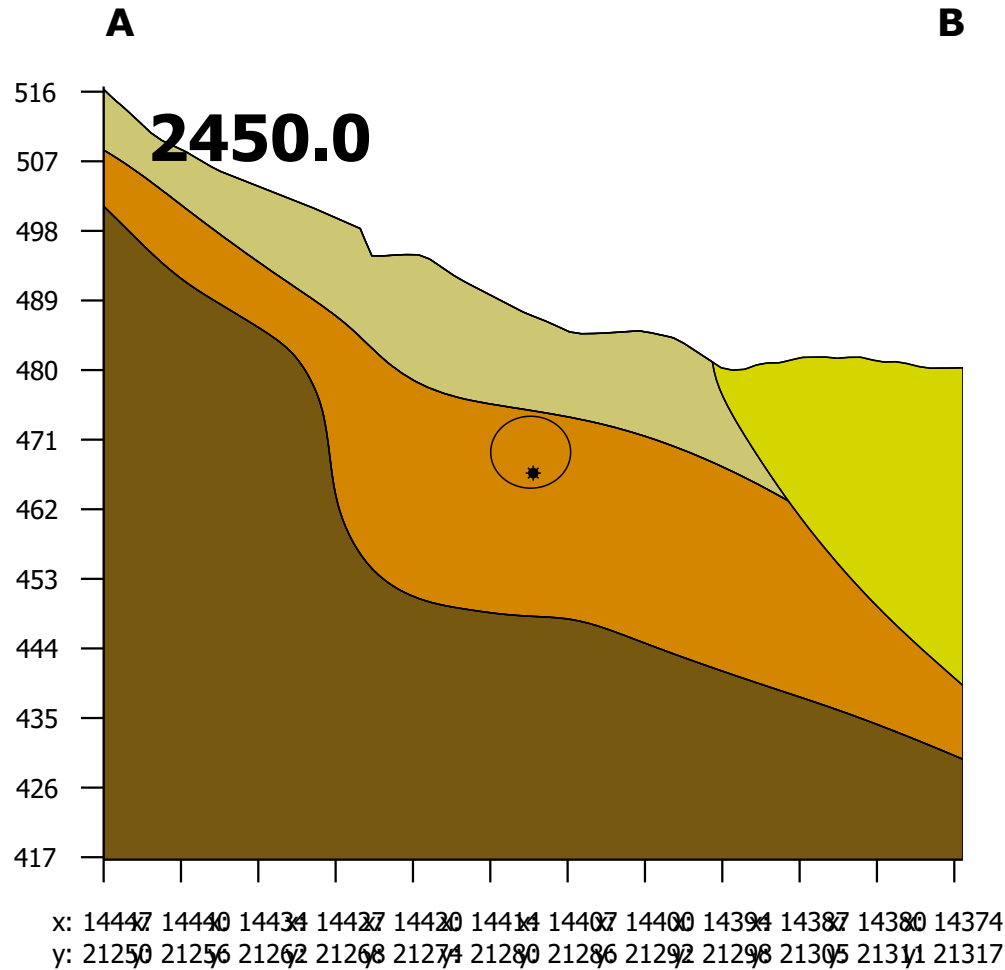
A: 14447, 21250

B: 14374, 21318

Scale: 1:880

Vertical exaggeration: 0.9x





Location

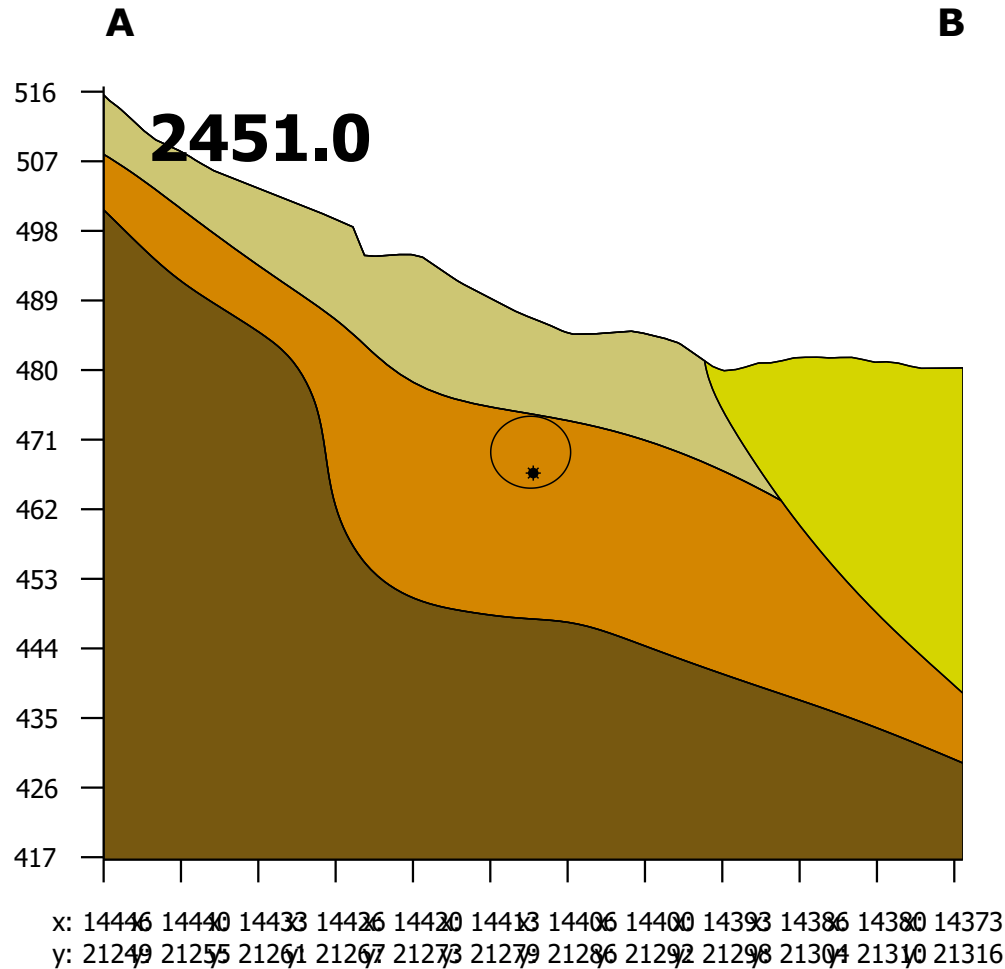
A: 14447, 21250

B: 14373, 21317

Scale: 1:880

Vertical exaggeration: 0.9x



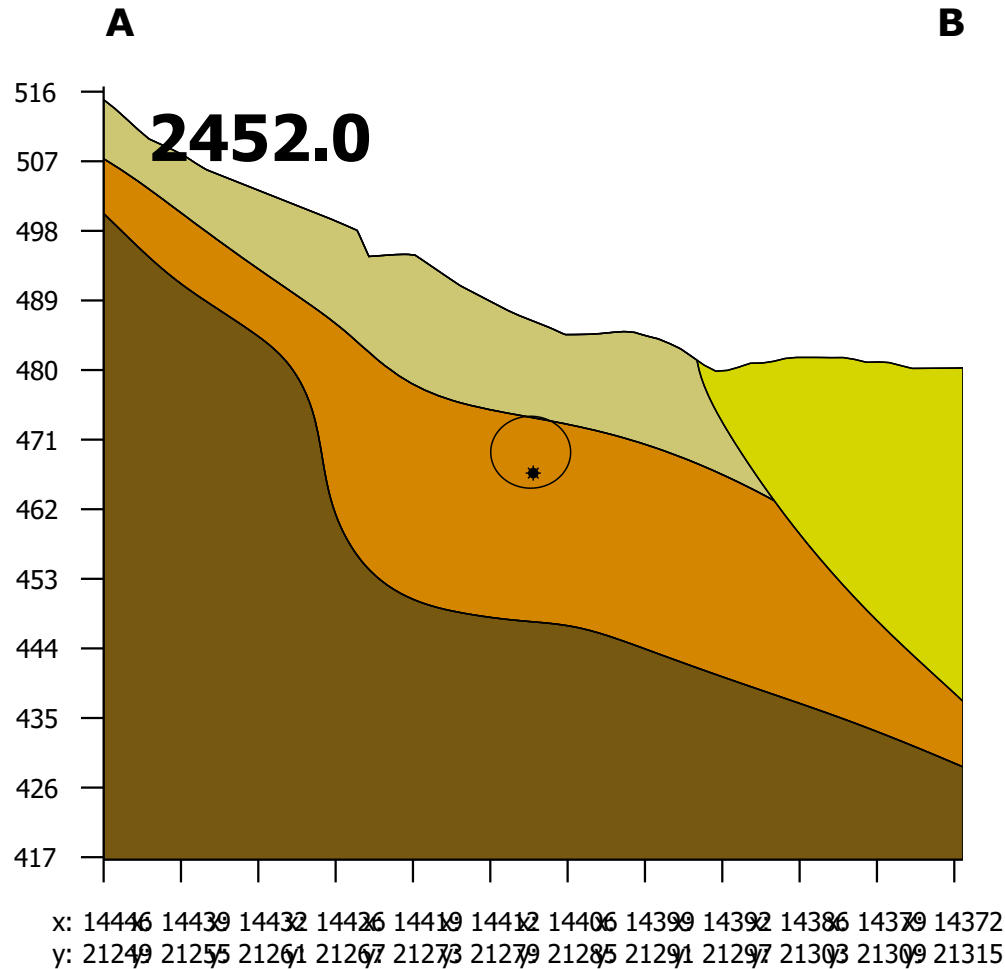


Location

A: 14446, 21249
B: 14372, 21316

Scale: 1:880
Vertical exaggeration: 0.9x





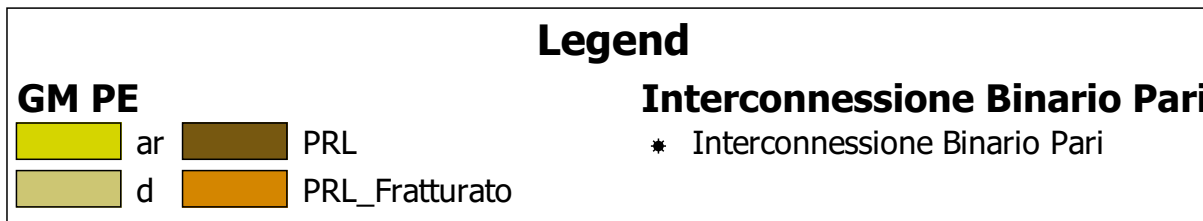
Location

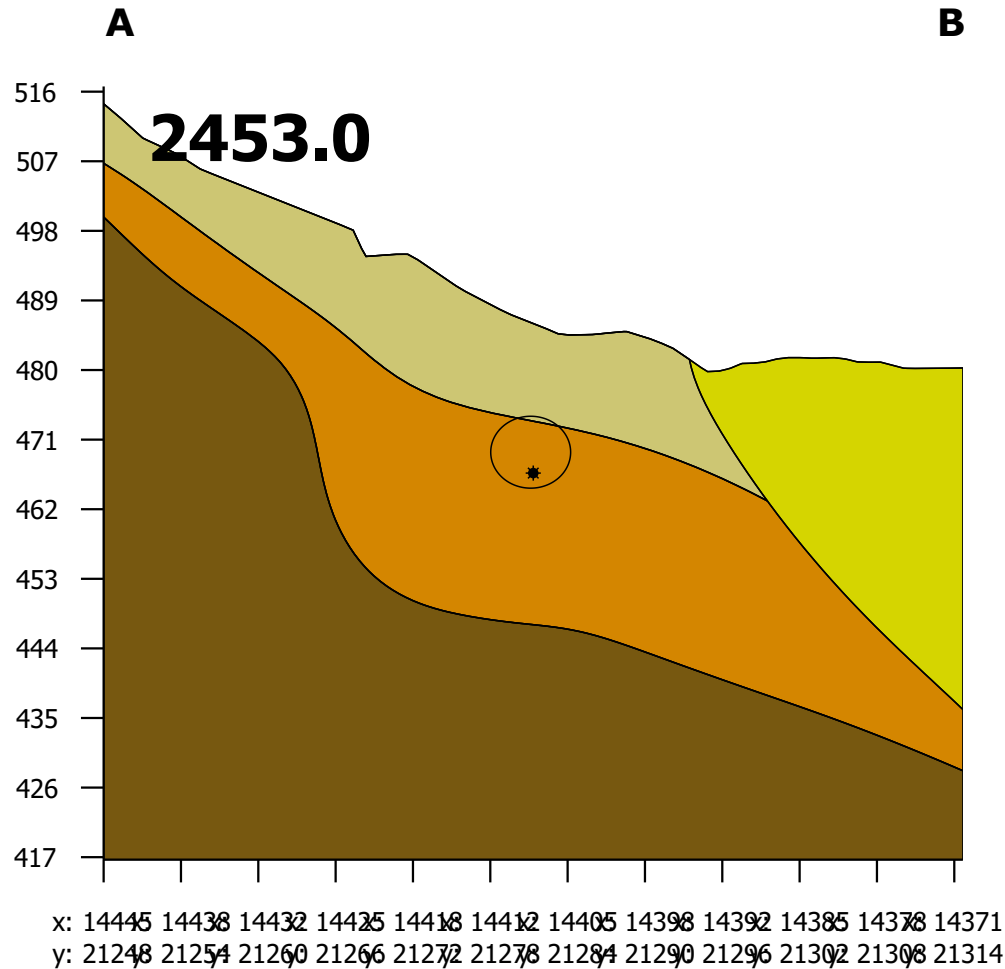
A: 14446, 21249

B: 14371, 21316

Scale: 1:880

Vertical exaggeration: 0.9x





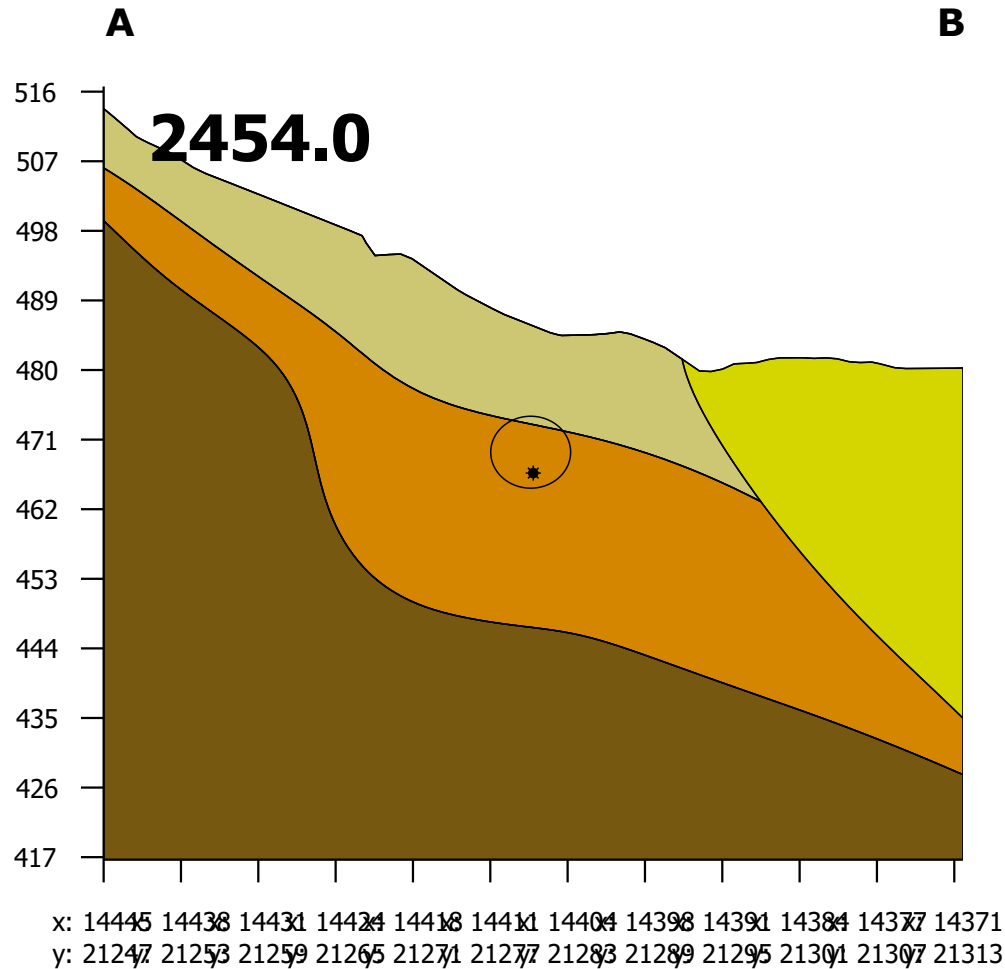
Location

A: 14445, 21248
B: 14371, 21315

Scale: 1:880

Vertical exaggeration: 0.9x





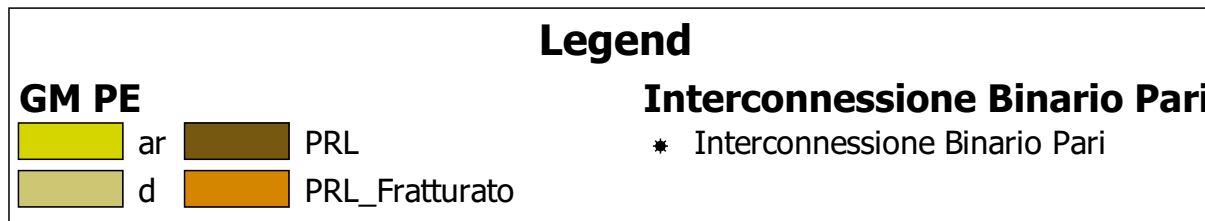
Location

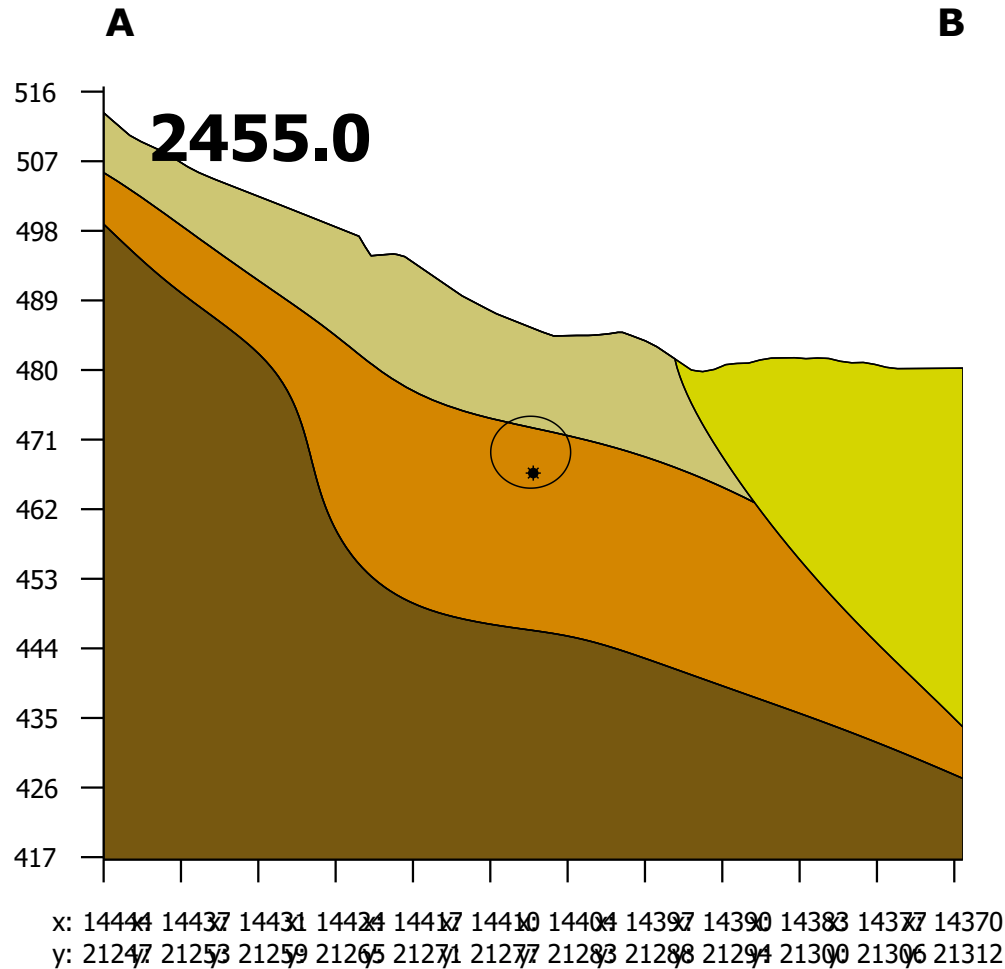
A: 14445, 21247

B: 14370, 21314

Scale: 1:880

Vertical exaggeration: 0.9x





Location

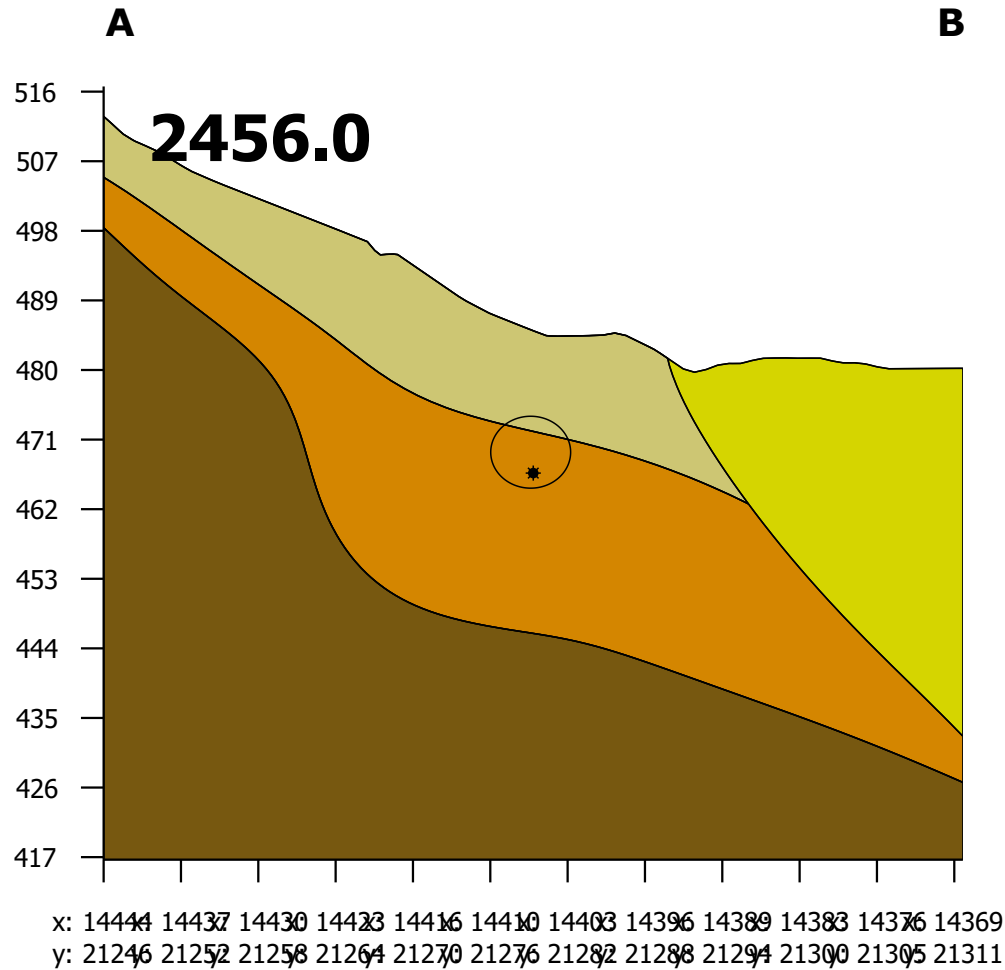
A: 14444, 21247

B: 14369, 21313

Scale: 1:880

Vertical exaggeration: 0.9x





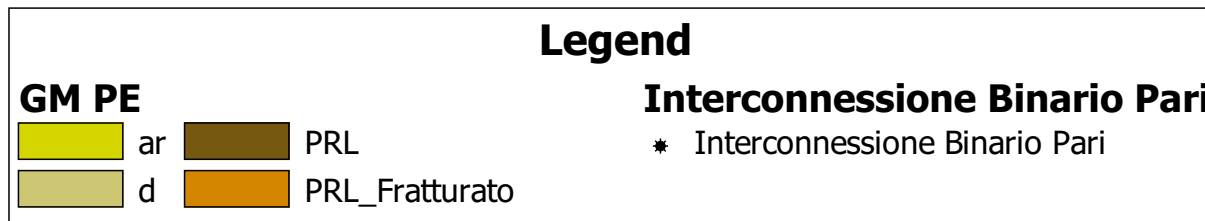
Location

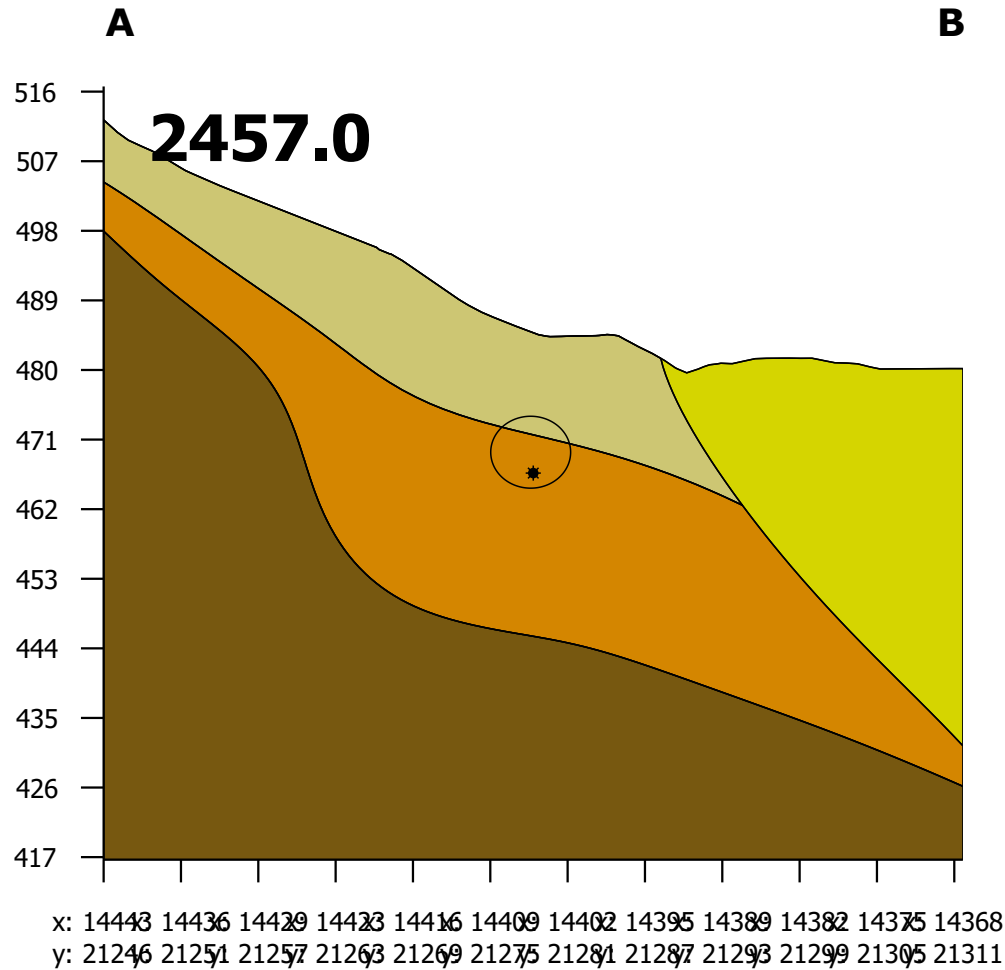
A: 14444, 21246

B: 14368, 21312

Scale: 1:880

Vertical exaggeration: 0.9x



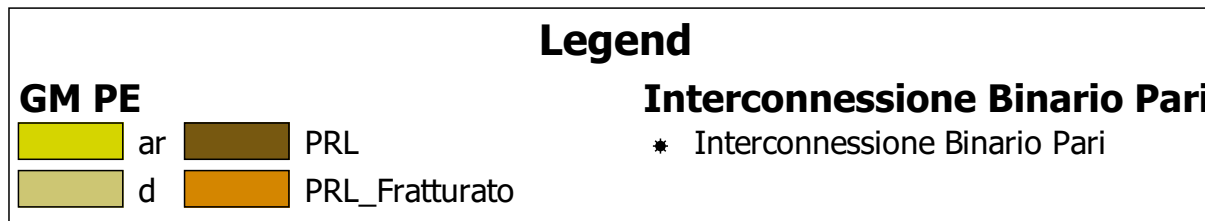


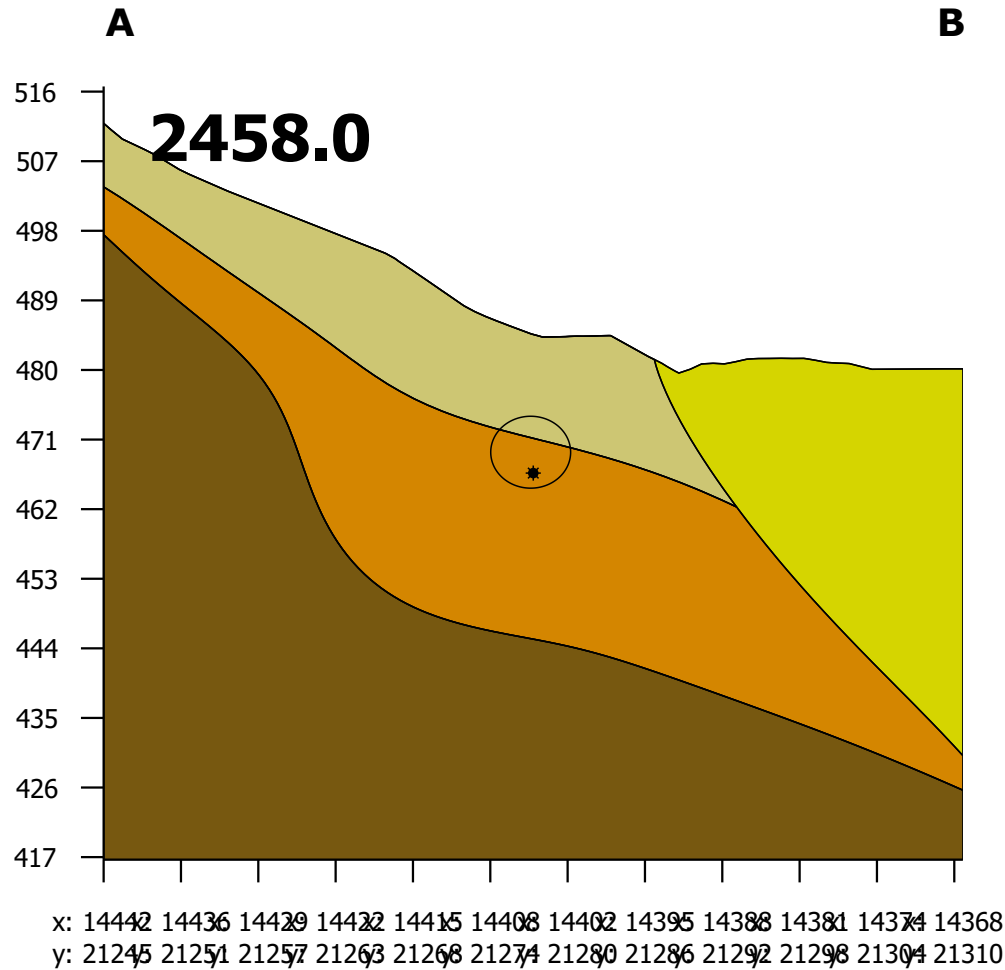
Location

A: 14443, 21246
B: 14368, 21311

Scale: 1:880

Vertical exaggeration: 0.9x

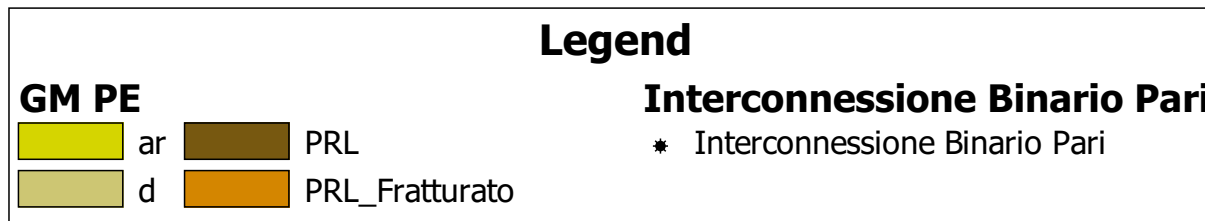


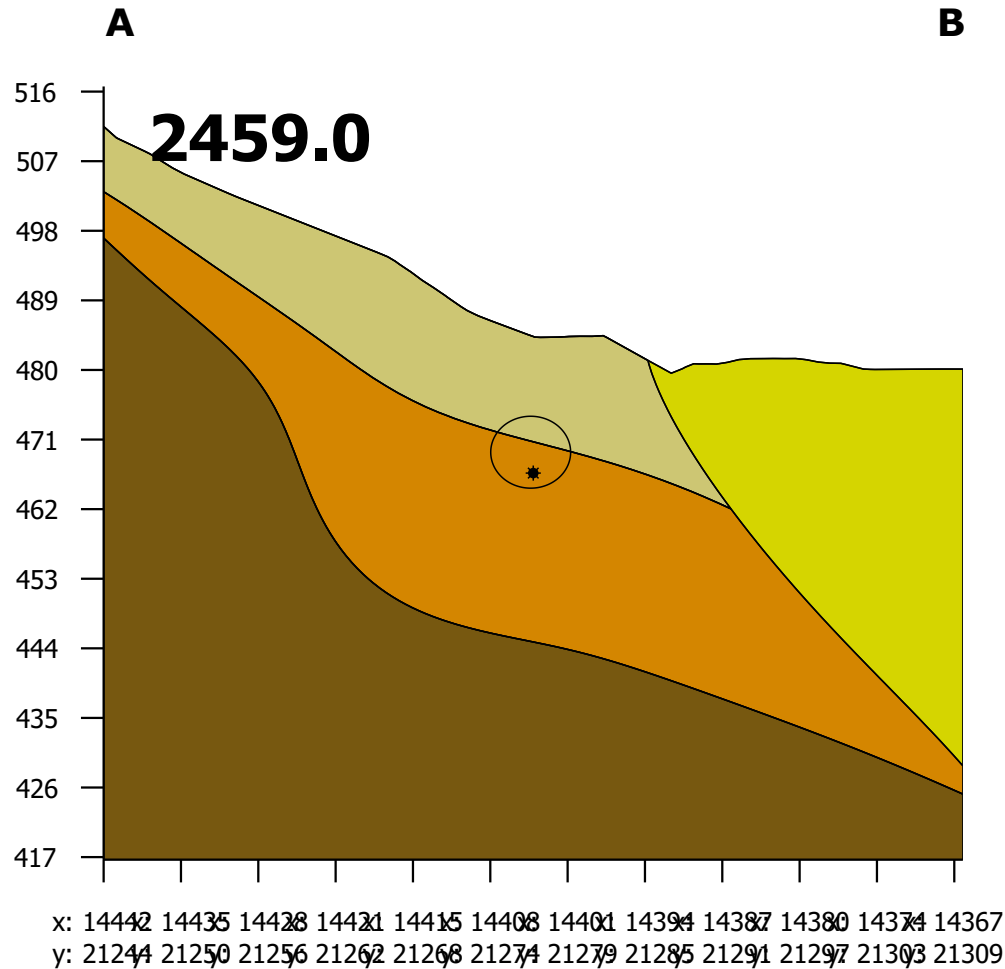


Location

A: 14442, 21245
B: 14367, 21310

Scale: 1:880
Vertical exaggeration: 0.9x



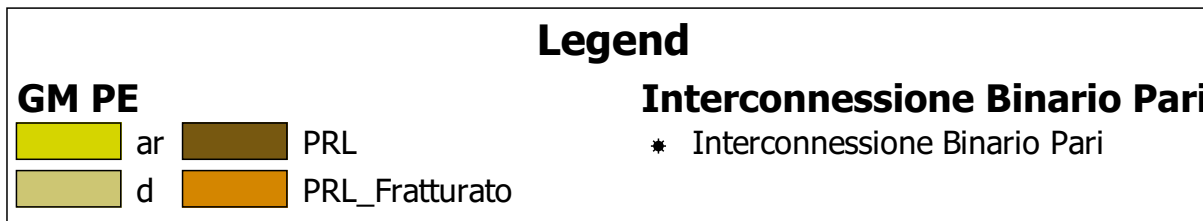


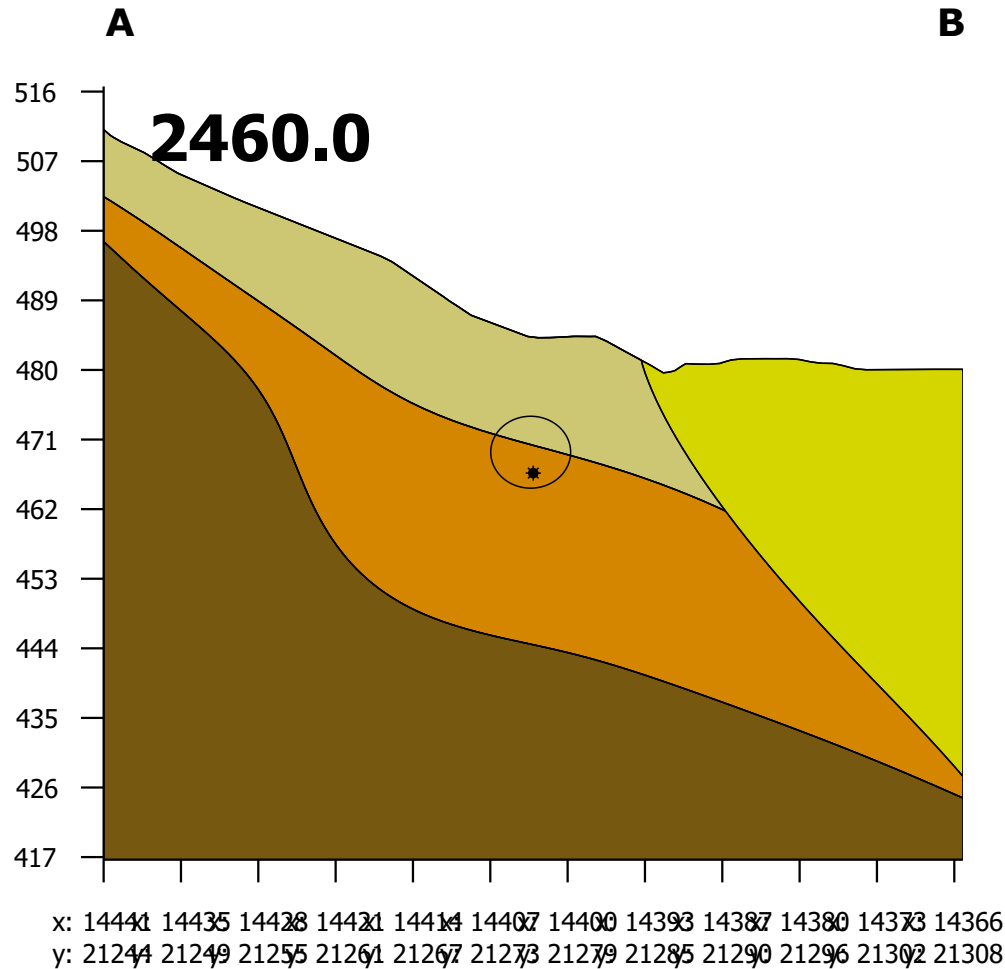
Location

A: 14442, 21244
B: 14366, 21309

Scale: 1:880

Vertical exaggeration: 0.9x





Location

A: 14441, 21244

B: 14365, 21309

Scale: 1:880

Vertical exaggeration: 0.9x

