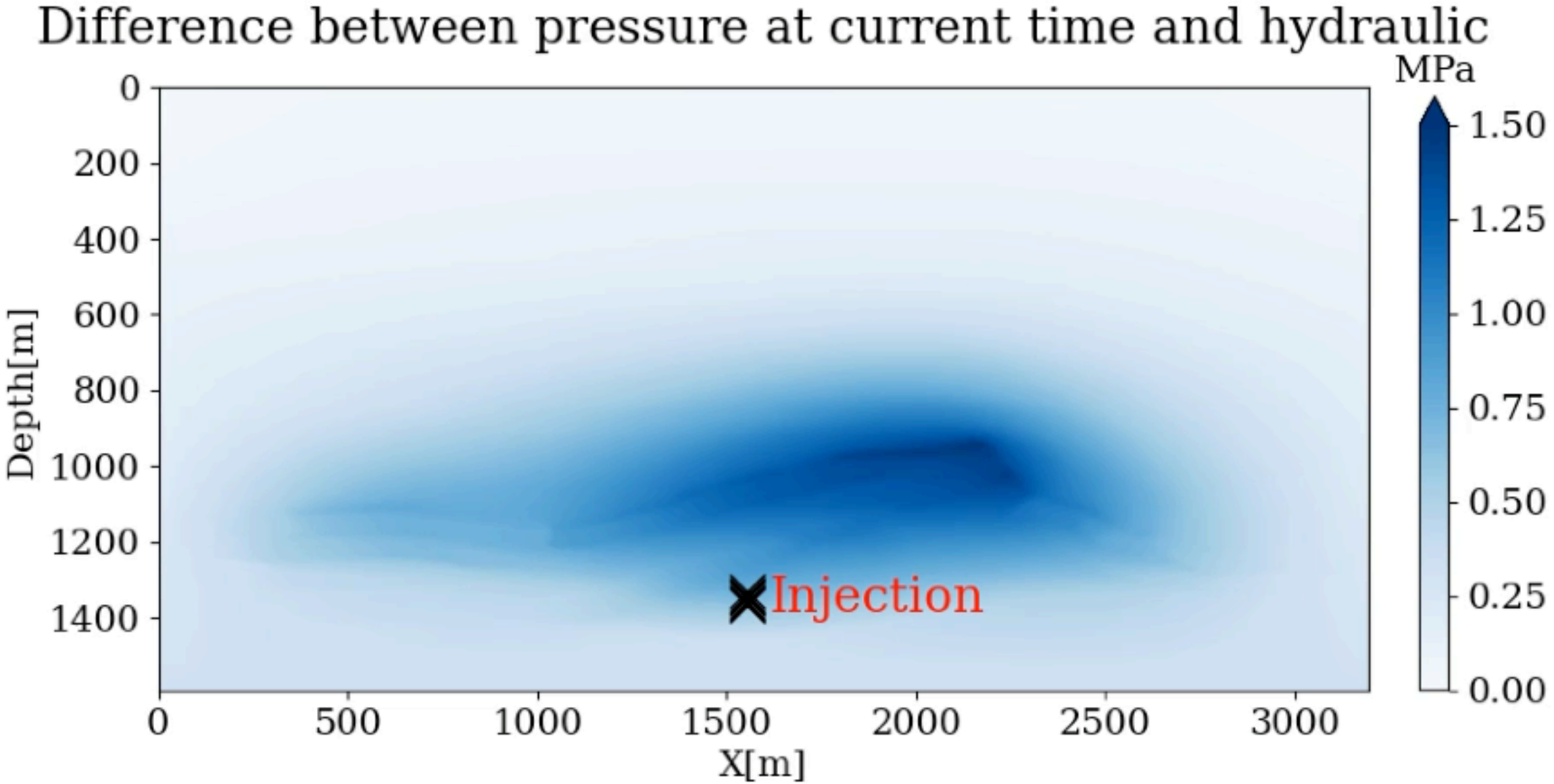
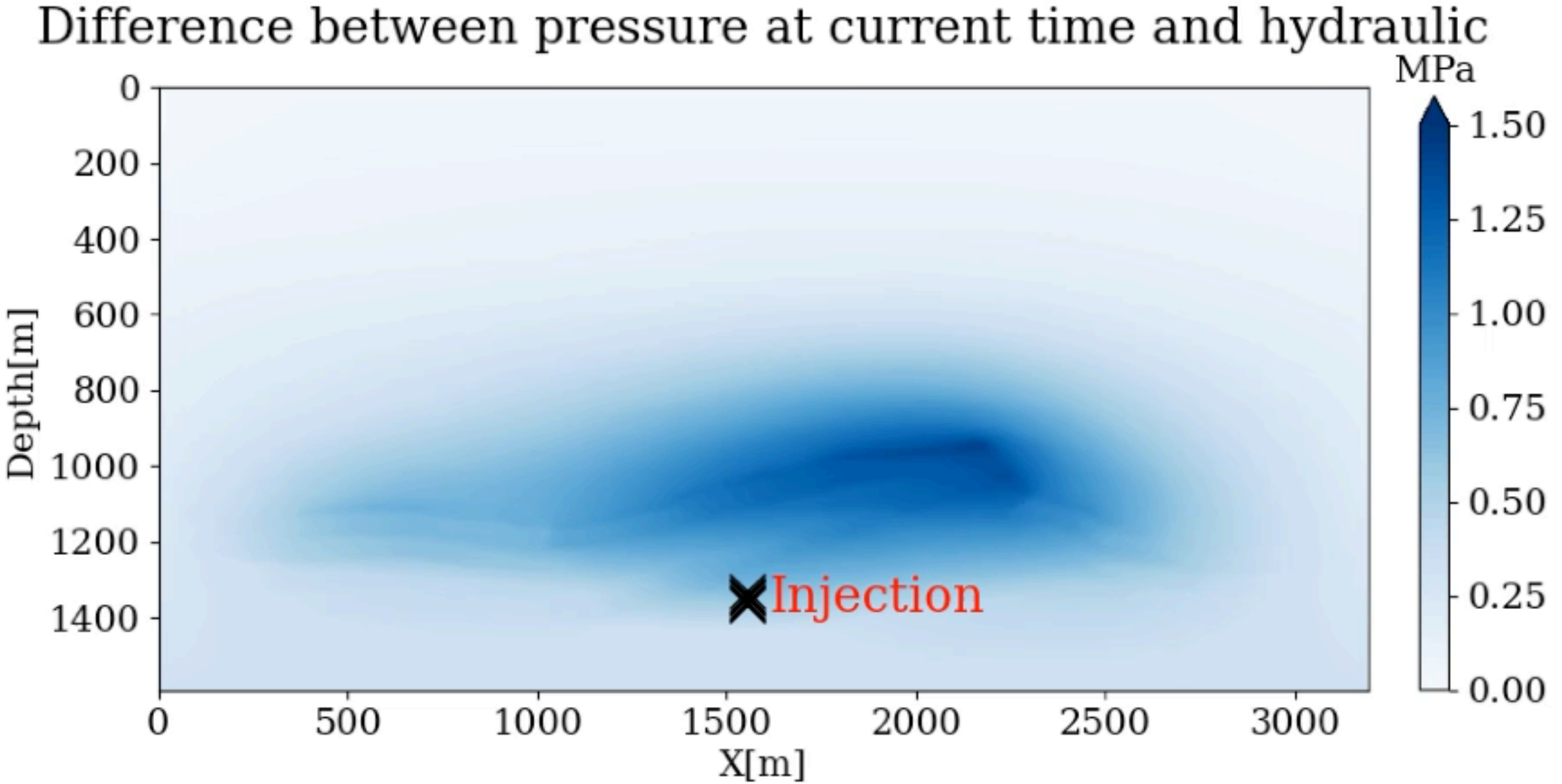
SLIM

Optimized

w/o vs. w/ *pressure* control


Difference between pressure at current time and hydraulic
MPa
1.50
1.25
1.00
0.75
0.50
0.25
0.00
Depth[m]
0
200
400
600
800
1000
1200
1400
Injection
0
500
1000
1500
2000
2500
3000
X[m]


Difference between pressure at current time and hydraulic
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1.25
1.00
0.75
0.50
0.25
0.00
Depth[m]
0
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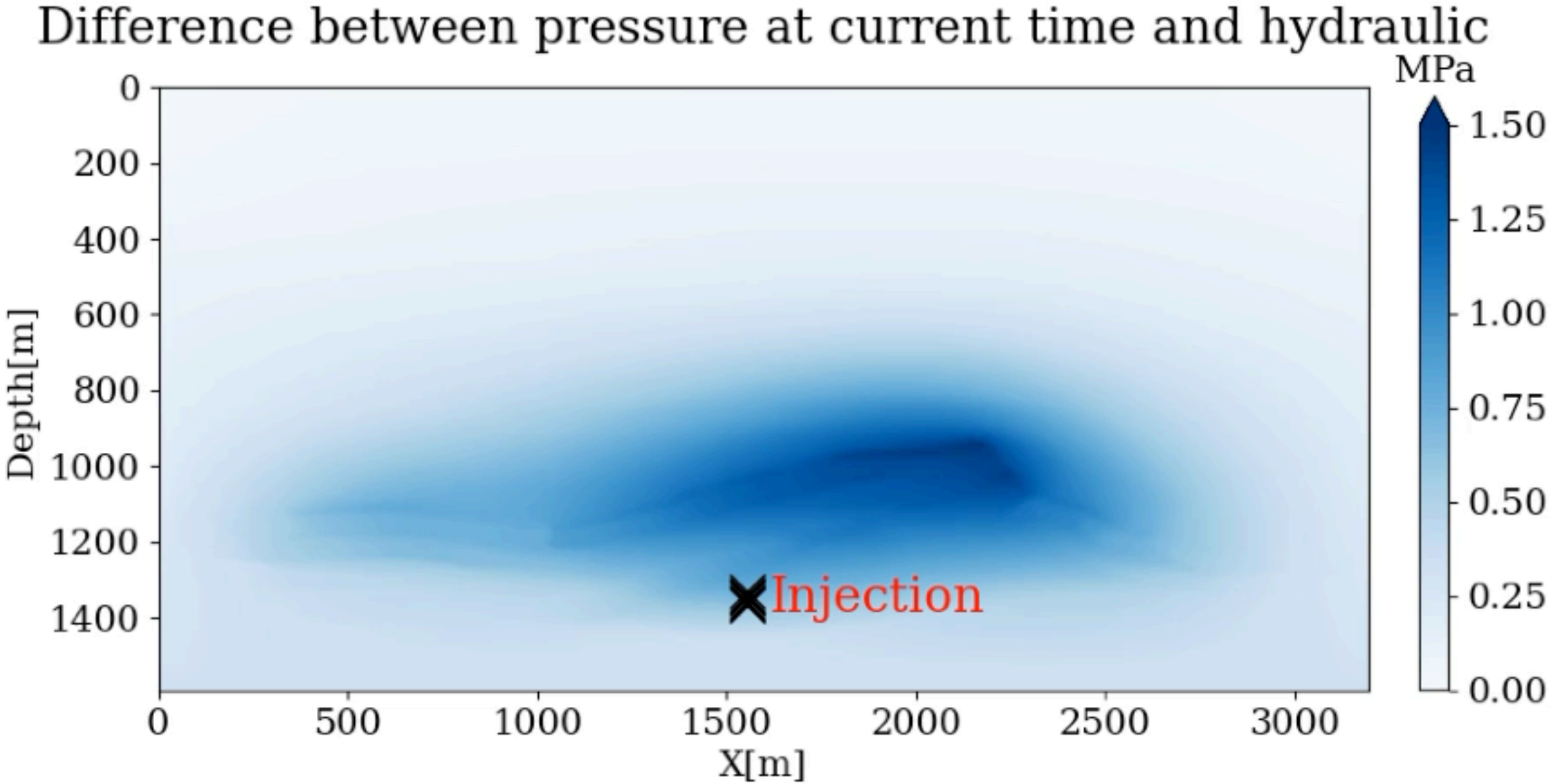
400
600
800
1000
1200
1400
Injection
0
500
1000
1500
2000
2500
3000
X[m]

$\mathbf{x}_4 \sim p(\mathbf{x}_4 \,|\, \bar{\mathbf{y}}_4^{\mathrm{o}})[\,'\delta p'\,] \quad \textit{for} \quad q = 0.0500\mathrm{m}^3/\mathrm{s}$

$\mathbf{x}_4 \sim p(\mathbf{x}_4 \mid \bar{\mathbf{y}}_4^{\mathrm{o}})[\prime\delta p\prime]$ *for* $q = 0.0387\mathrm{m}^3/\mathrm{s}$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Depth[m]
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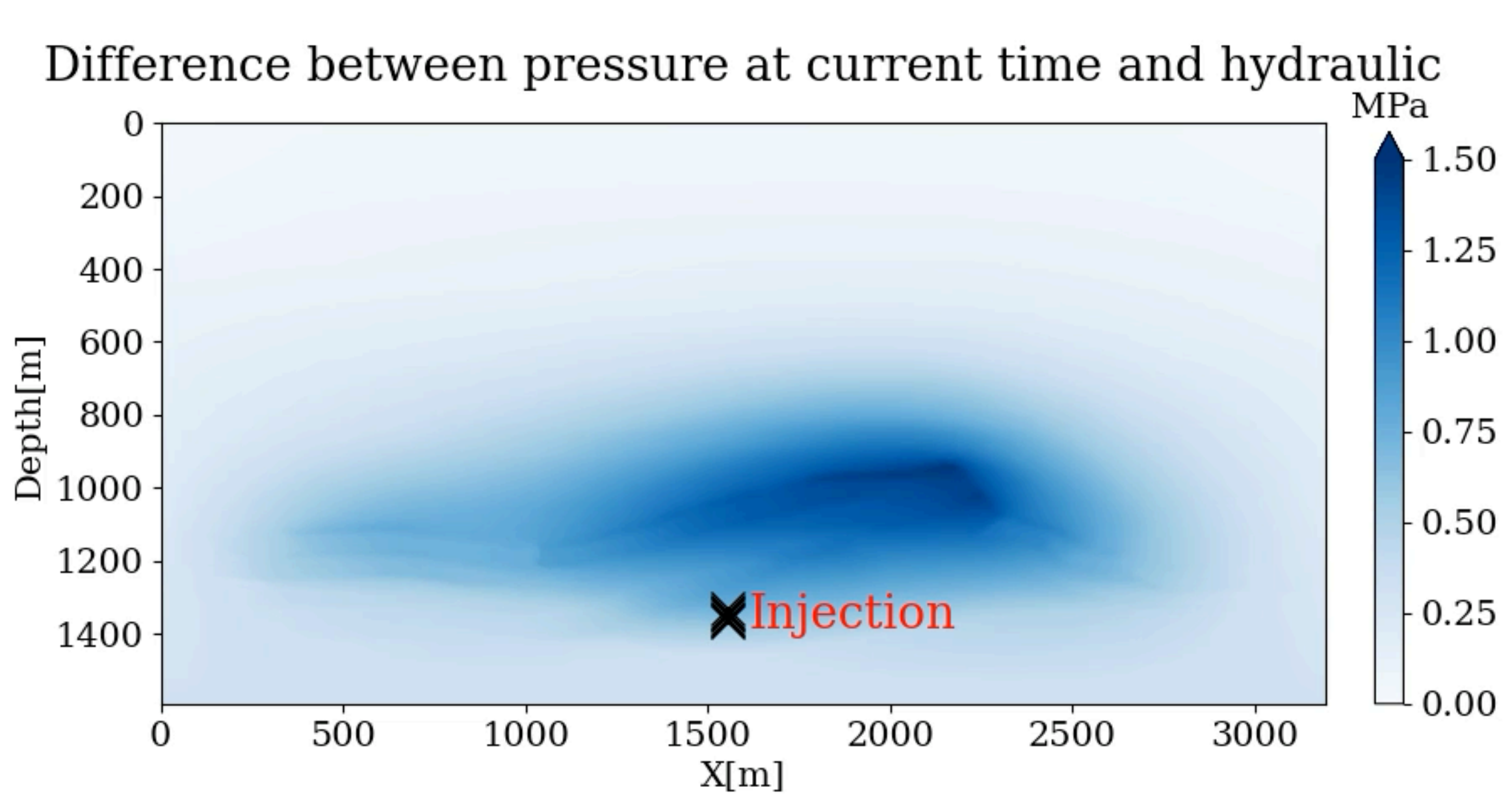
1400
Injection
0
500
1000
1500
2000
2500
3000
X[m]


Difference between pressure at current time and hydraulic
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1.25
1.00
0.75
0.50
0.25
0.00
Depth[m]
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1000
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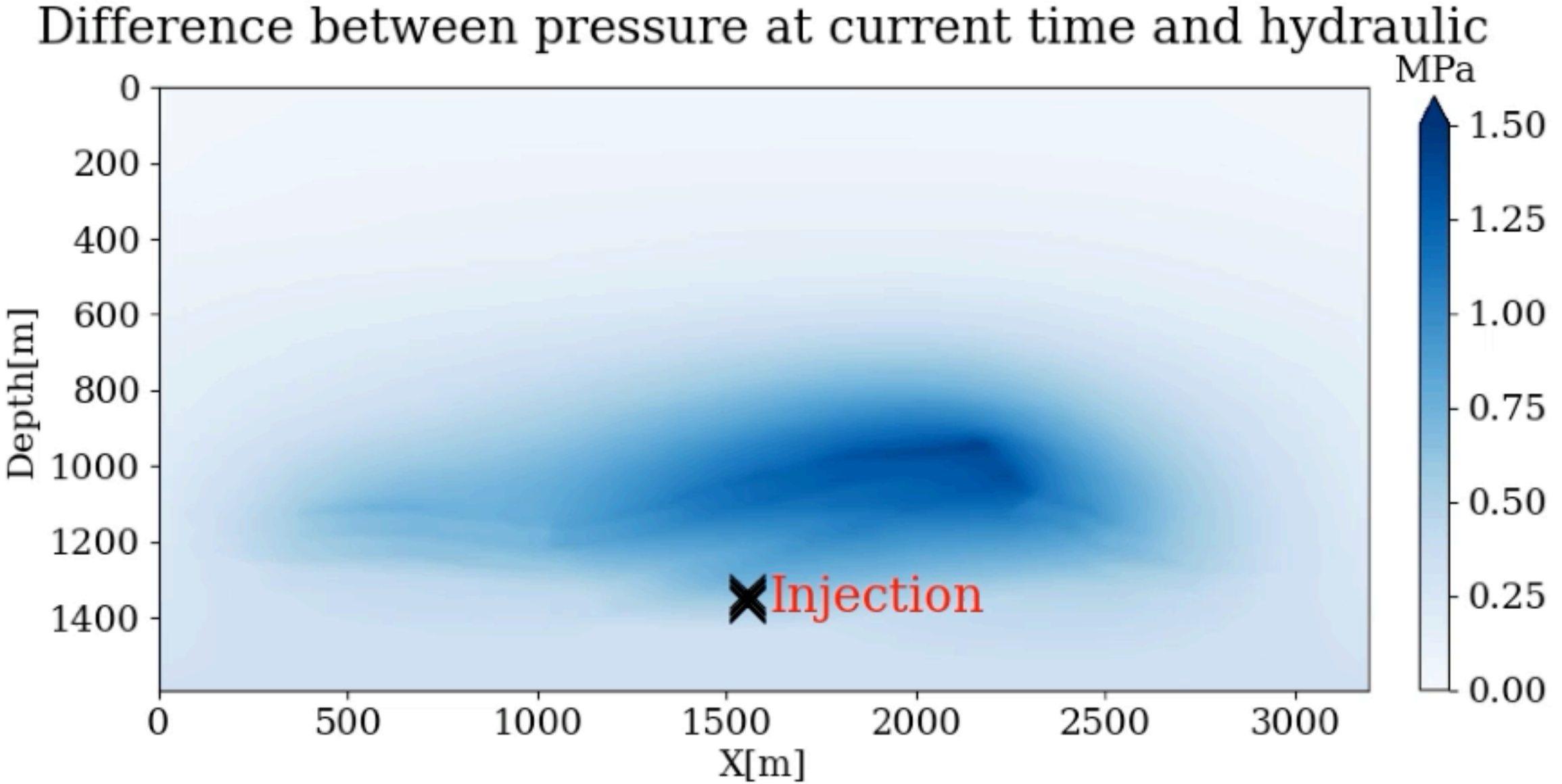
1400
Injection
0
500
1000
1500
2000
2500
3000
X[m]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Injection
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500
1000
1500
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2500
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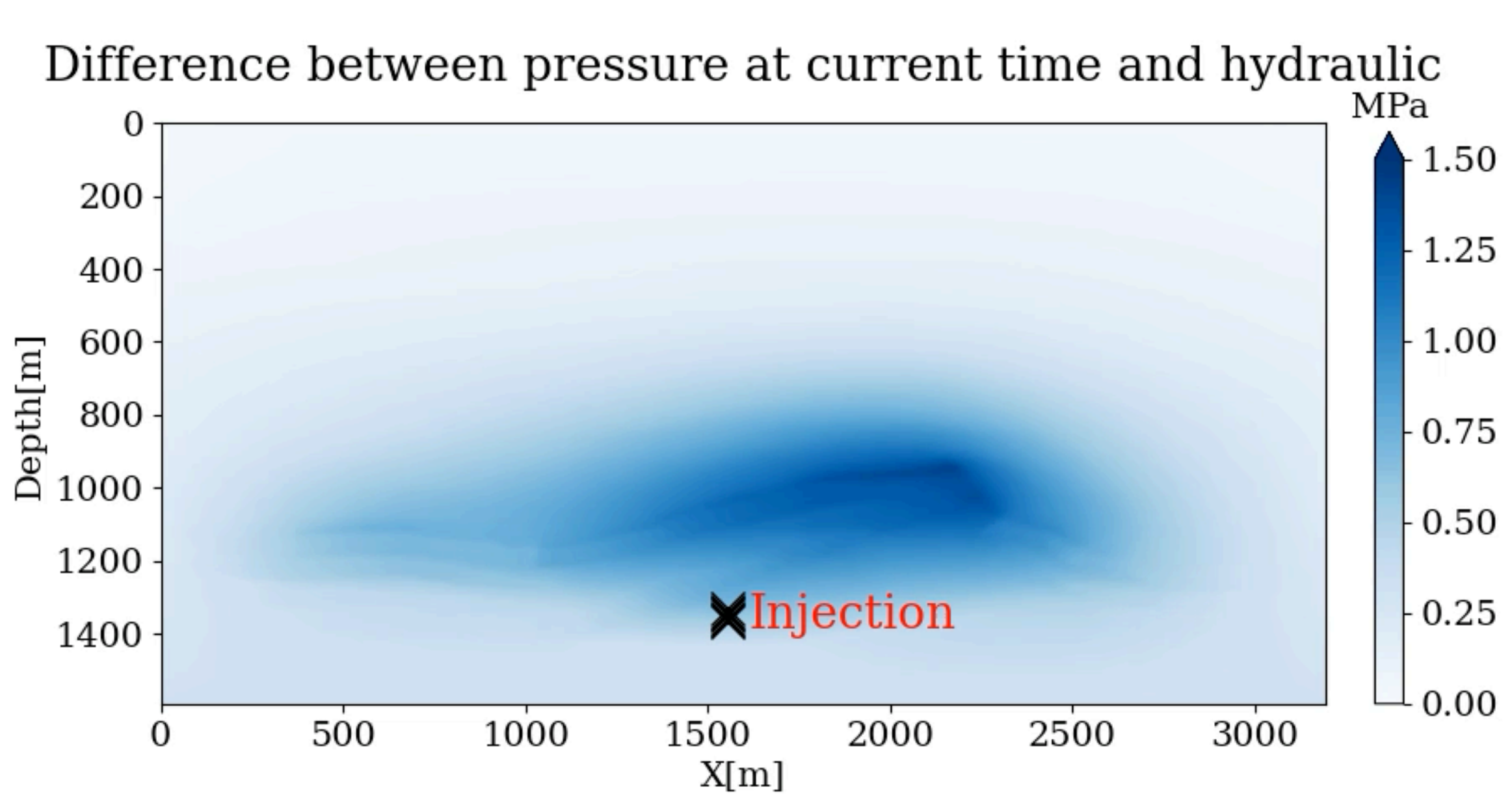
X[m]


Difference between pressure at current time and hydraulic
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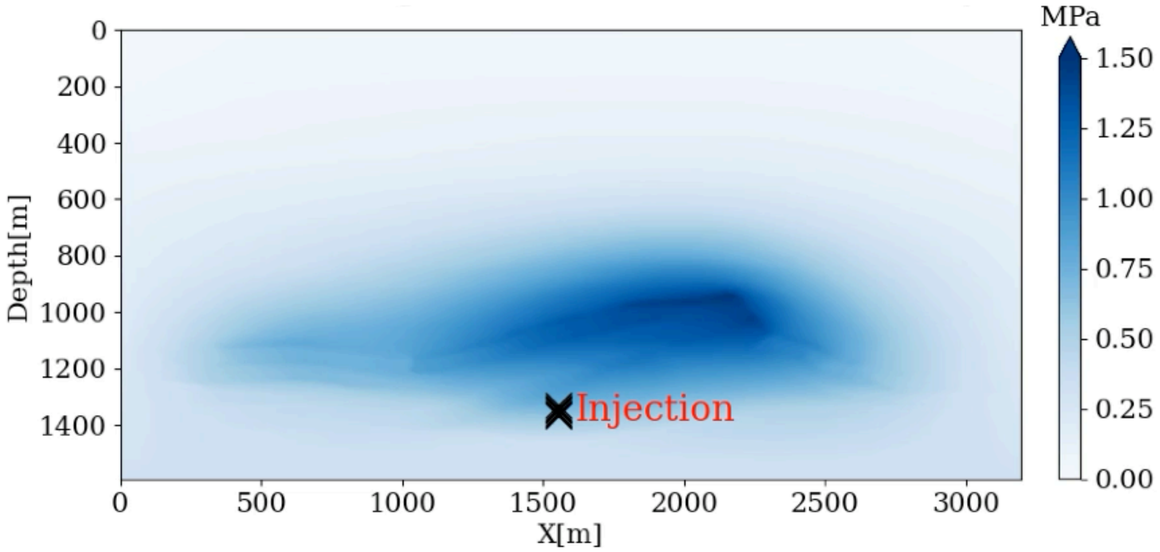
X[m]

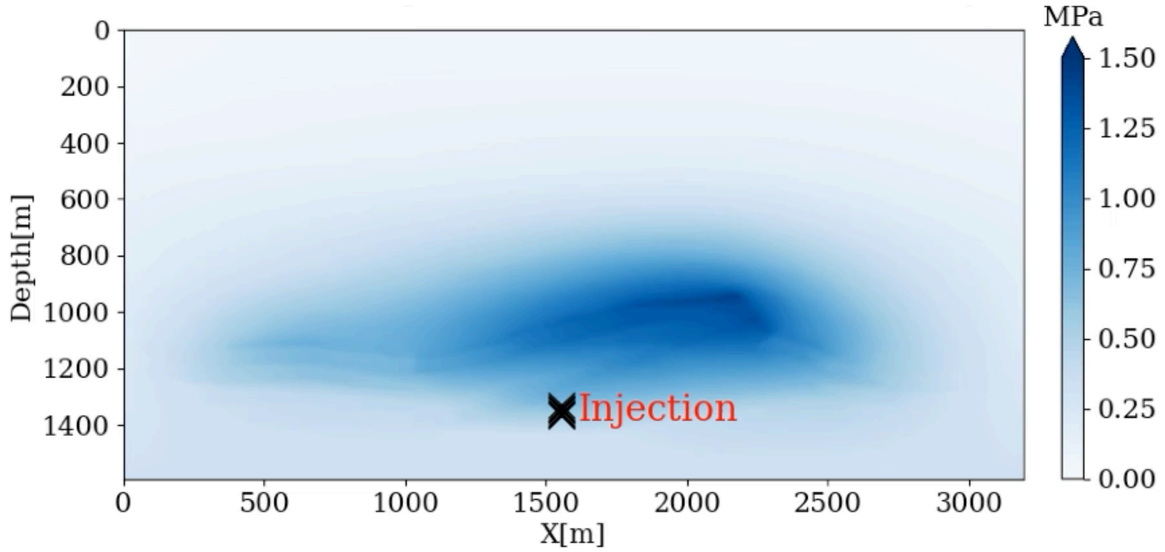
Optimized

w/o vs. w/ *pressure* control

$\mathbf{x}_4 \sim p(\mathbf{x}_4 \,|\, \bar{\mathbf{y}}_4^o)[\prime\delta p\prime]$ *for* $q = 0.0500\mathrm{m}^3/\mathrm{s}$



$\mathbf{x}_4 \sim p(\mathbf{x}_4 \,|\, \bar{\mathbf{y}}_4^o)[\prime\delta p\prime]$ *for* $q = 0.0387\mathrm{m}^3/\mathrm{s}$



Digital Twin w/ *optimized* well locations