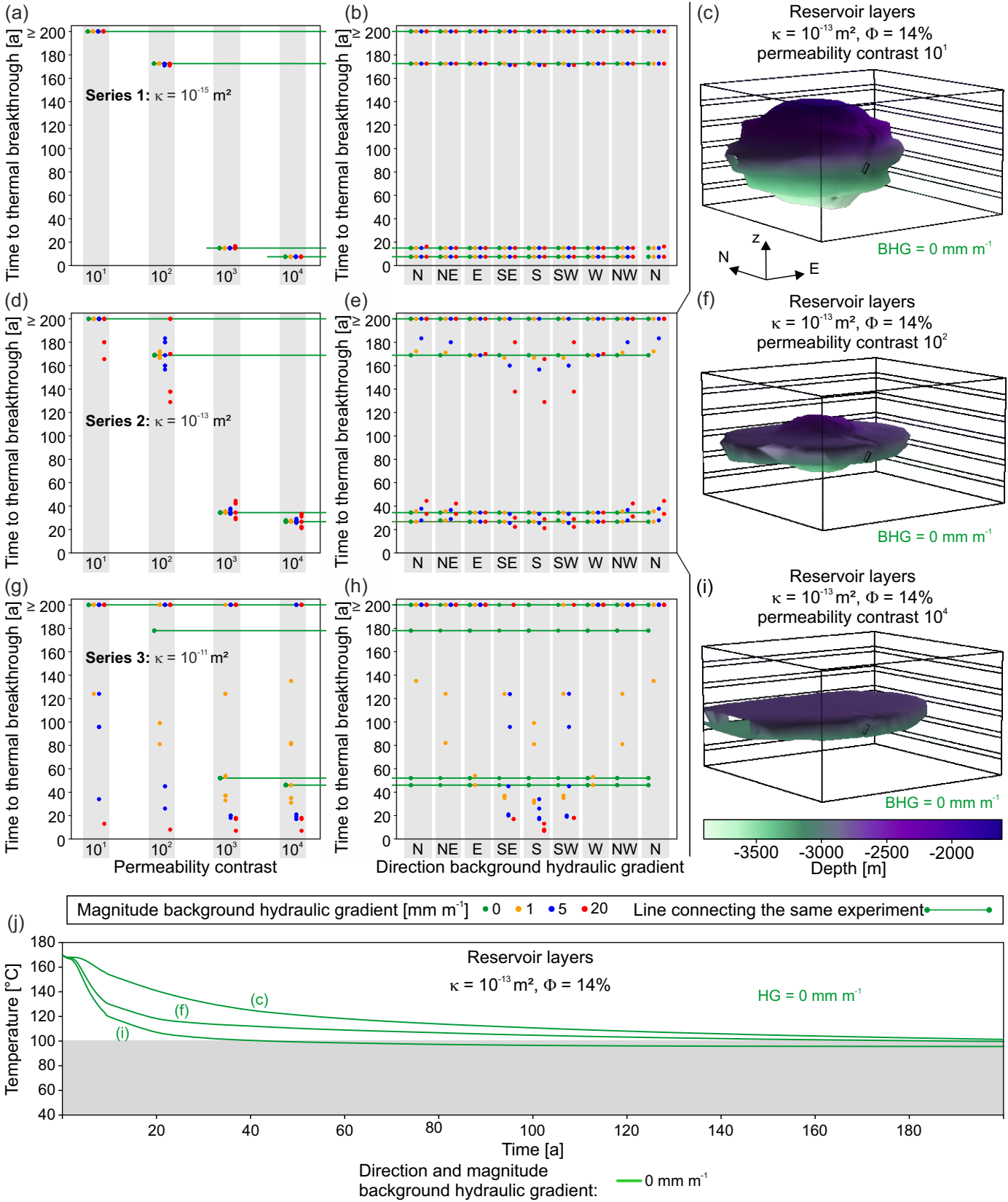
(a)
(b)
(c)
Reservoir layers
κ = 10^-13 m², Φ = 14%
permeability contrast 10^1
Series 1: κ = 10^-15 m²
Time to thermal breakthrough [a]
≥ 200
180
160
140
120
100
80
60
40
20
0
10^1
10^2
10^3
10^4
N NE E SE S SW W NW N
BHG = 0 mm m^-1
z
N
E
(d)
(e)
(f)
Reservoir layers
κ = 10^-13 m², Φ = 14%
permeability contrast 10^2
Series 2: κ = 10^-13 m²
BHG = 0 mm m^-1
(g)
(h)
(i)
Reservoir layers
κ = 10^-13 m², Φ = 14%
permeability contrast 10^4
Series 3: κ = 10^-11 m²
BHG = 0 mm m^-1
-3500
-3000
-2500
-2000
Depth [m]
Permeability contrast
Direction background hydraulic gradient
Magnitude background hydraulic gradient [mm m^-1]
0
1
5
20
Line connecting the same experiment
(j)
Reservoir layers
κ = 10^-13 m², Φ = 14%
HG = 0 mm m^-1
(c)
(f)
(i)
Temperature [°C]
Time [a]
Direction and magnitude background hydraulic gradient:
0 mm m^-1