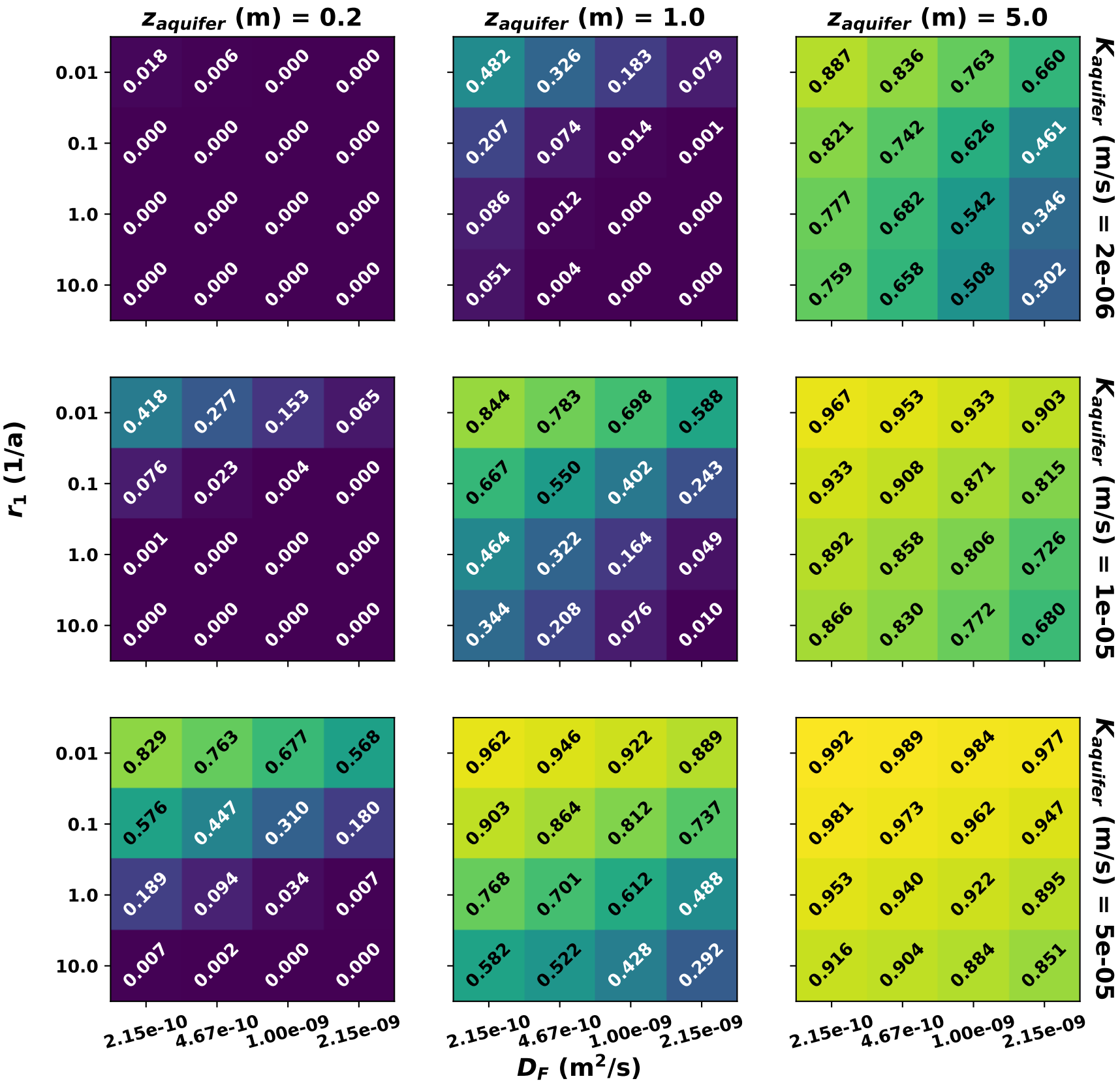
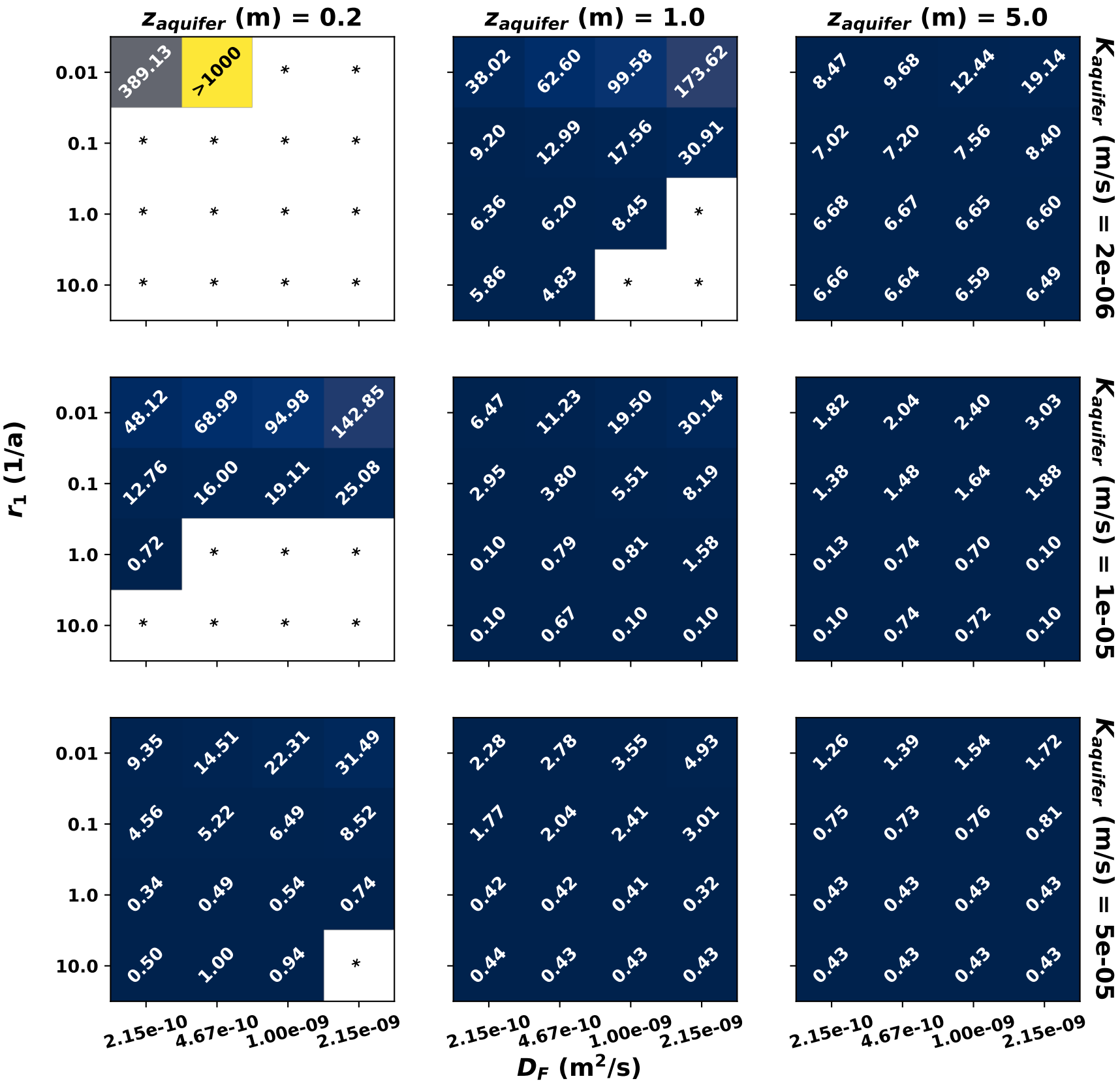
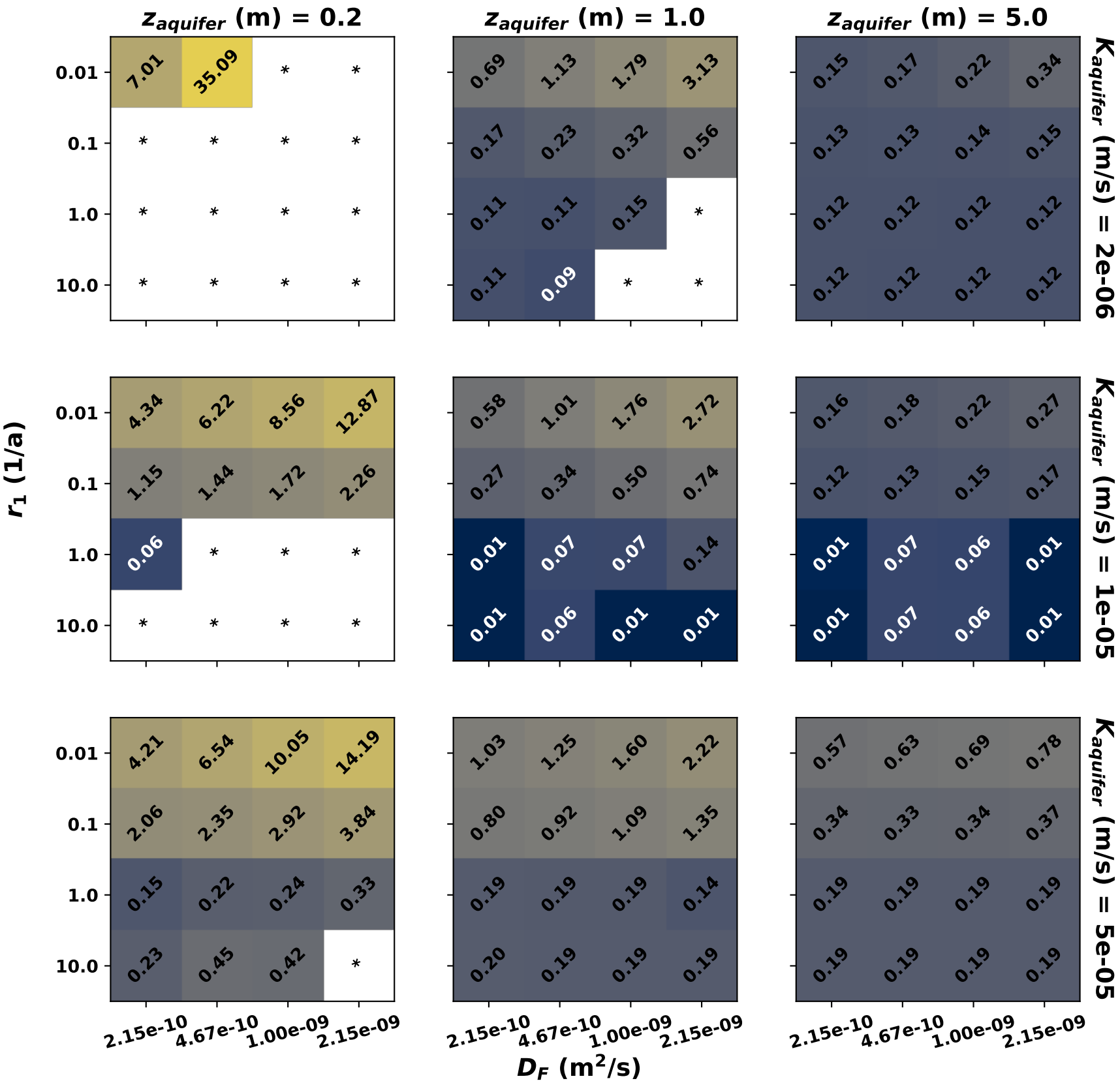
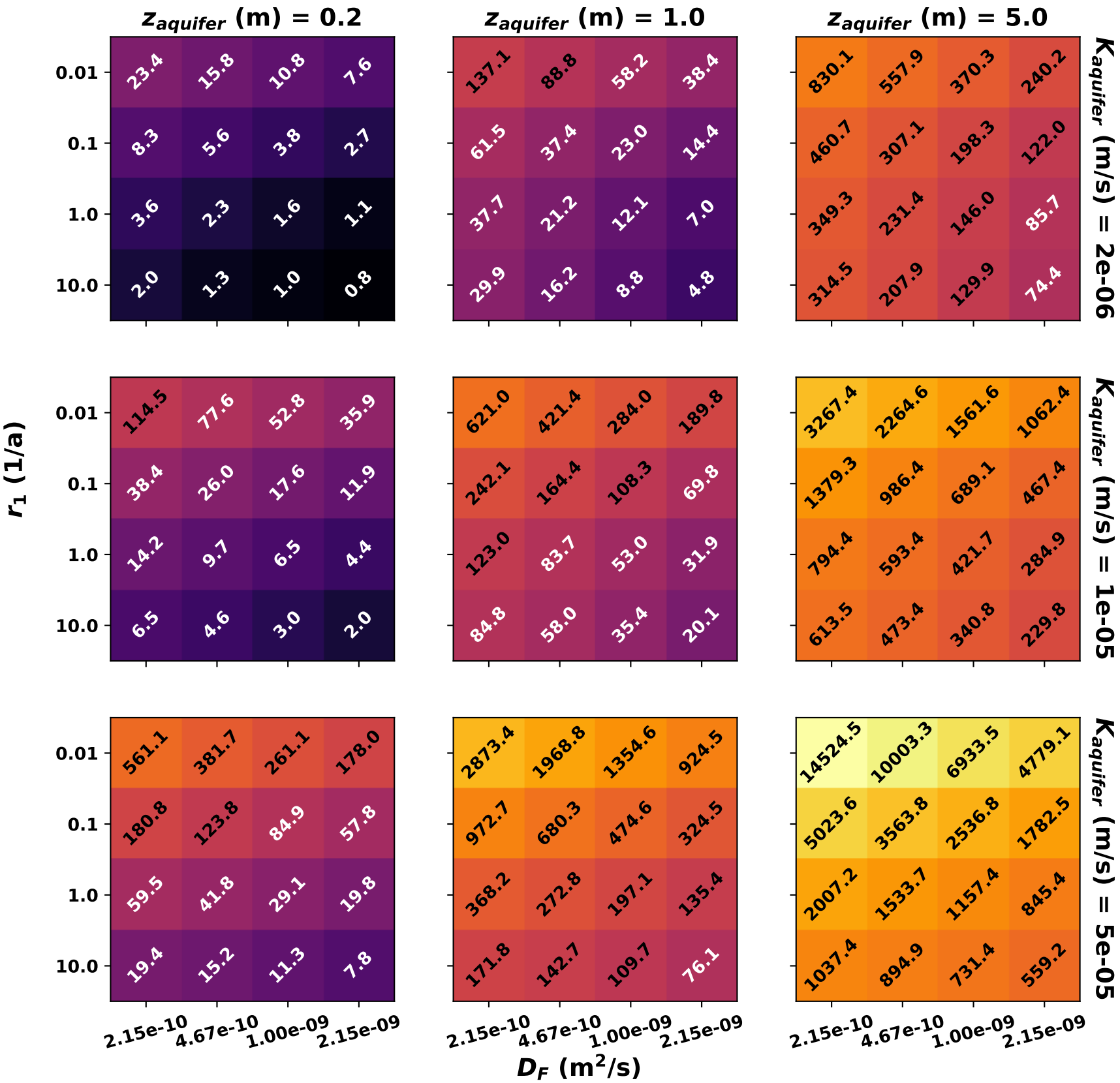
/ScenarioC.csv_OUT_2020.03.04.10.14.02.pdf
f_{re} = 1.35
point # = 5 (@ 100 m)

order of figures:
equilibrium concentration
value of *b* parameter (years)
value of *b* in terms of pore volumes
x_0 for steady-state dcay with length


$z_{aquifer}$ (m) = 0.2
$z_{aquifer}$ (m) = 1.0
$z_{aquifer}$ (m) = 5.0
$K_{aquifer}$ (m/s) = 2e-06
$K_{aquifer}$ (m/s) = 1e-05
$K_{aquifer}$ (m/s) = 5e-05
r_1 (1/a)
0.01
0.1
1.0
10.0
0.018 0.006 0.000 0.000
0.000 0.000 0.000 0.000
0.000 0.000 0.000 0.000
0.000 0.000 0.000 0.000
0.482 0.326 0.183 0.079
0.207 0.074 0.014 0.001
0.086 0.012 0.000 0.000
0.051 0.004 0.000 0.000
0.887 0.836 0.763 0.660
0.821 0.742 0.626 0.461
0.777 0.682 0.542 0.346
0.759 0.658 0.508 0.302
0.418 0.277 0.153 0.065
0.076 0.023 0.004 0.000
0.001 0.000 0.000 0.000
0.000 0.000 0.000 0.000
0.844 0.783 0.698 0.588
0.667 0.550 0.402 0.243
0.464 0.322 0.164 0.049
0.344 0.208 0.076 0.010
0.967 0.953 0.933 0.903
0.933 0.908 0.871 0.815
0.892 0.858 0.806 0.726
0.866 0.830 0.772 0.680
0.829 0.763 0.677 0.568
0.576 0.447 0.310 0.180
0.189 0.094 0.034 0.007
0.007 0.002 0.000 0.000
0.962 0.946 0.922 0.889
0.903 0.864 0.812 0.737
0.768 0.701 0.612 0.488
0.582 0.522 0.428 0.292
0.992 0.989 0.984 0.977
0.981 0.973 0.962 0.947
0.953 0.940 0.922 0.895
0.916 0.904 0.884 0.851
2.15e-10
4.67e-10
1.00e-09
2.15e-09
D_F (m^2/s)

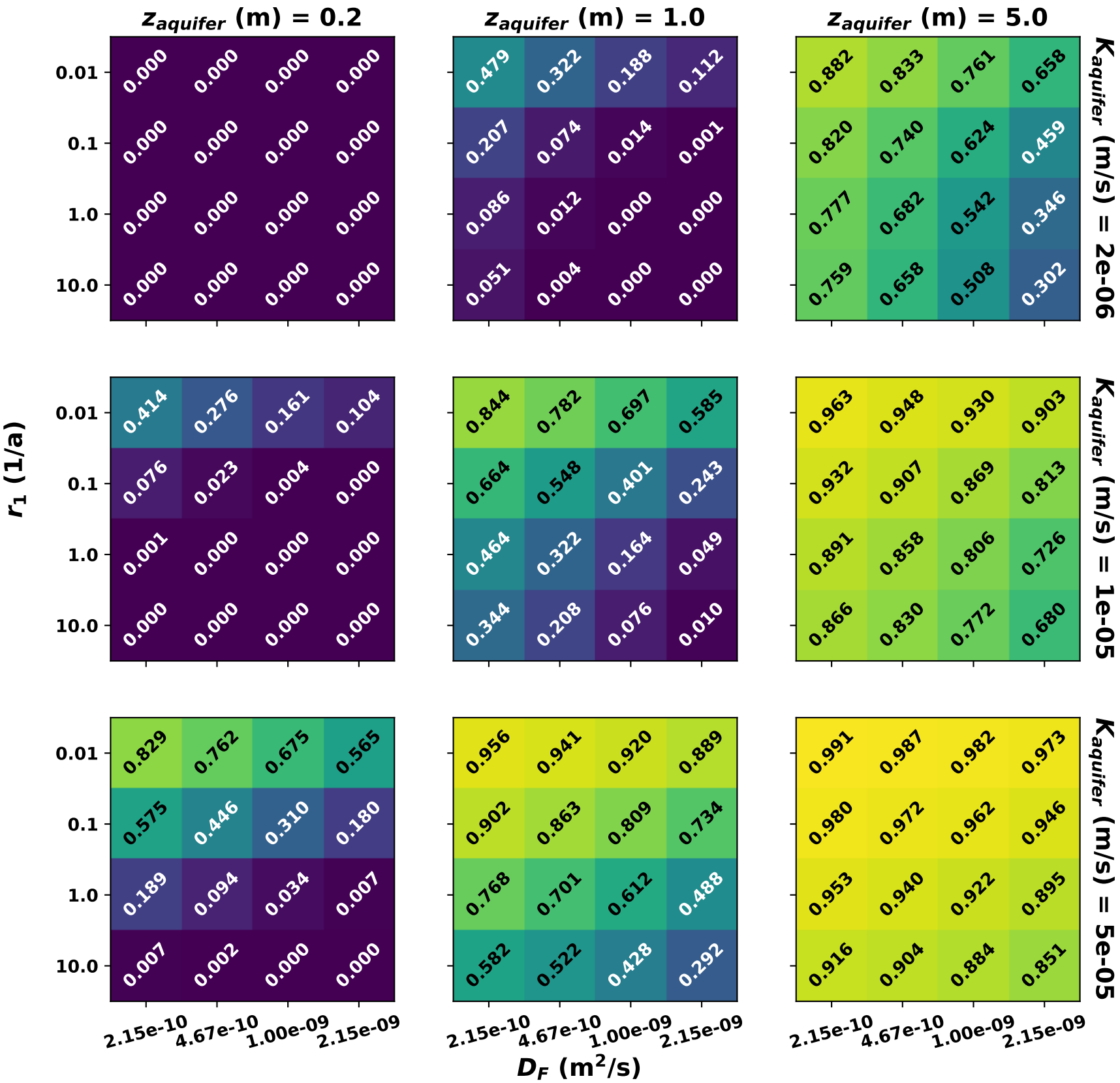

$z_{aquifer}$ (m) = 0.2
$z_{aquifer}$ (m) = 1.0
$z_{aquifer}$ (m) = 5.0
$K_{aquifer}$ (m/s) = 2e-06
$K_{aquifer}$ (m/s) = 1e-05
$K_{aquifer}$ (m/s) = 5e-05
r_1 (1/a)
0.01
0.1
1.0
10.0
389.13
>1000
38.02
62.60
99.58
173.62
9.20
12.99
17.56
30.91
6.36
6.20
8.45
5.86
4.83
8.47
9.68
12.44
19.14
7.02
7.20
7.56
8.40
6.68
6.67
6.65
6.60
6.66
6.64
6.59
6.49
48.12
68.99
94.98
142.85
12.76
16.00
19.11
25.08
0.72
6.47
11.23
19.50
30.14
2.95
3.80
5.51
8.19
0.10
0.79
0.81
1.58
0.10
0.67
0.10
1.82
2.04
2.40
3.03
1.38
1.48
1.64
1.88
0.13
0.74
0.70
0.10
0.74
0.72
9.35
14.51
22.31
31.49
4.56
5.22
6.49
8.52
0.34
0.49
0.54
0.74
0.50
1.00
0.94
2.28
2.78
3.55
4.93
1.77
2.04
2.41
3.01
0.42
0.42
0.41
0.32
0.44
0.43
0.43
0.43
1.26
1.39
1.54
1.72
0.75
0.73
0.76
0.81
0.43
0.43
0.43
0.43
2.15e-10
4.67e-10
1.00e-09
2.15e-09
D_F (m²/s)

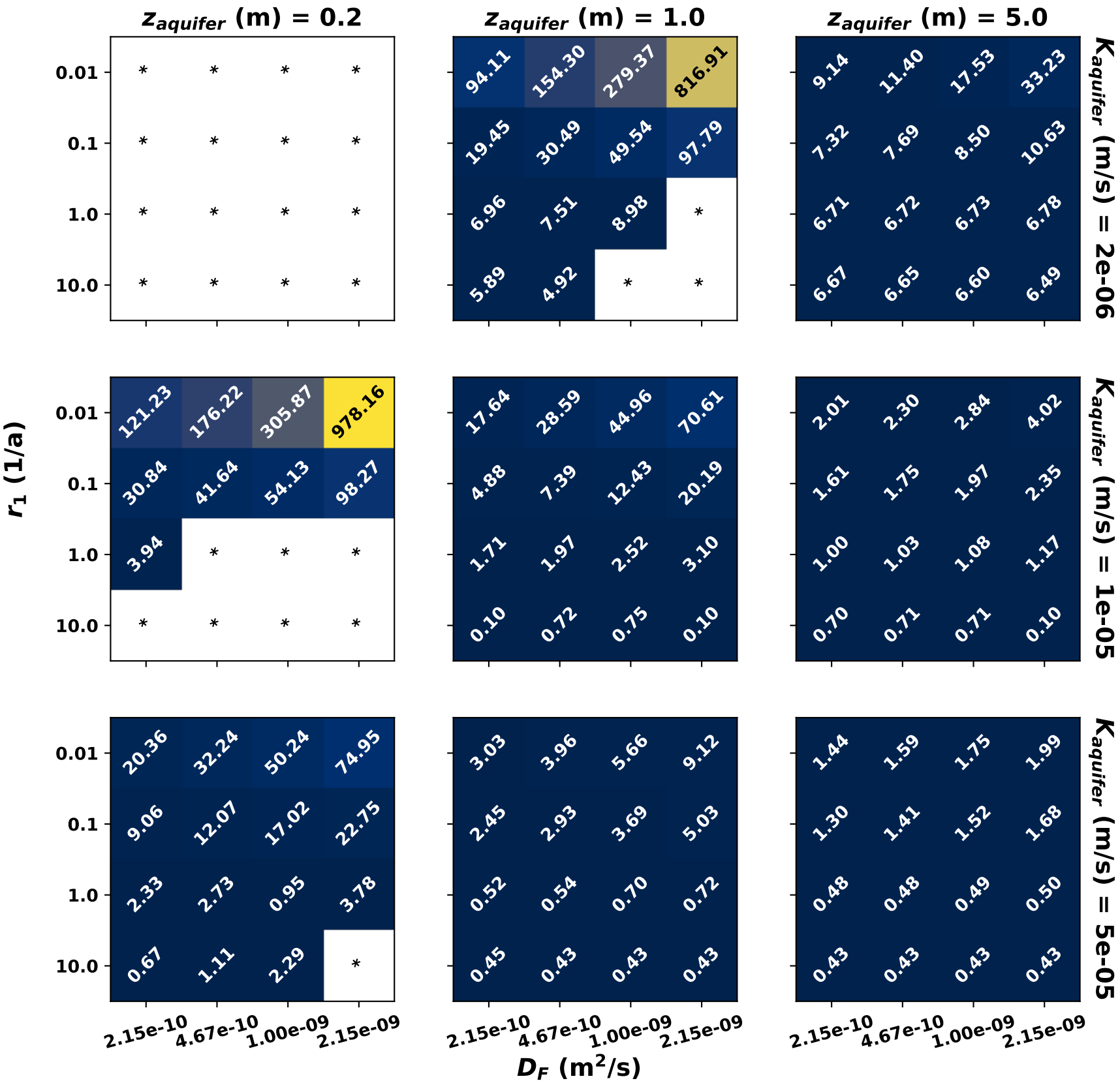

$z_{aquifer}$ (m) = 0.2
$z_{aquifer}$ (m) = 1.0
$z_{aquifer}$ (m) = 5.0
$K_{aquifer}$ (m/s) = 2e-06
$K_{aquifer}$ (m/s) = 1e-05
$K_{aquifer}$ (m/s) = 5e-05
r_1 (1/a)
0.01
0.1
1.0
10.0
7.01
35.09
0.69
1.13
1.79
3.13
0.17
0.23
0.32
0.56
0.11
0.11
0.15
0.11
0.09
0.15
0.17
0.22
0.34
0.13
0.13
0.14
0.15
0.12
0.12
0.12
0.12
0.12
0.12
0.12
0.12
4.34
6.22
8.56
12.87
1.15
1.44
1.72
2.26
0.06
0.58
1.01
1.76
2.72
0.27
0.34
0.50
0.74
0.01
0.07
0.07
0.14
0.01
0.06
0.01
0.01
0.16
0.18
0.22
0.27
0.12
0.13
0.15
0.17
0.01
0.07
0.06
0.01
0.01
0.07
0.06
0.01
4.21
6.54
10.05
14.19
2.06
2.35
2.92
3.84
0.15
0.22
0.24
0.33
0.23
0.45
0.42
1.03
1.25
1.60
2.22
0.80
0.92
1.09
1.35
0.19
0.19
0.19
0.14
0.20
0.19
0.19
0.19
0.57
0.63
0.69
0.78
0.34
0.33
0.34
0.37
0.19
0.19
0.19
0.19
0.19
0.19
0.19
0.19
2.15e-10
4.67e-10
1.00e-09
2.15e-09
D_F (m^2/s)

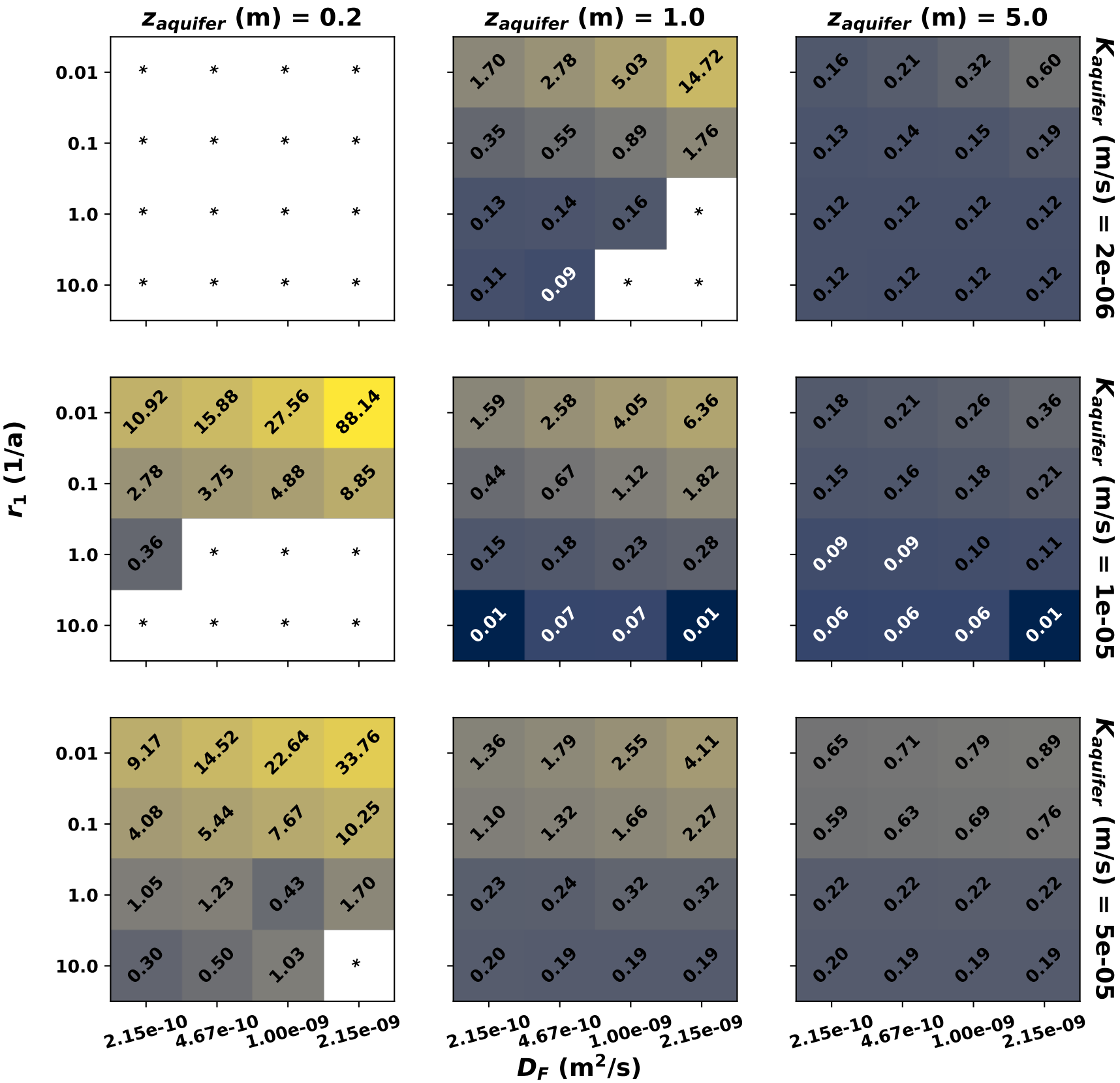

$z_{aquifer}$ (m) = 0.2
$z_{aquifer}$ (m) = 1.0
$z_{aquifer}$ (m) = 5.0
$K_{aquifer}$ (m/s) = 2e-06
$K_{aquifer}$ (m/s) = 1e-05
$K_{aquifer}$ (m/s) = 5e-05
r_1 (1/a)
0.01
0.1
1.0
10.0
23.4 15.8 10.8 7.6
8.3 5.6 3.8 2.7
3.6 2.3 1.6 1.1
2.0 1.3 1.0 0.8
137.1 88.8 58.2 38.4
61.5 37.4 23.0 14.4
37.7 21.2 12.1 7.0
29.9 16.2 8.8 4.8
830.1 557.9 370.3 240.2
460.7 307.1 198.3 122.0
349.3 231.4 146.0 85.7
314.5 207.9 129.9 74.4
114.5 77.6 52.8 35.9
38.4 26.0 17.6 11.9
14.2 9.7 6.5 4.4
6.5 4.6 3.0 2.0
621.0 421.4 284.0 189.8
242.1 164.4 108.3 69.8
123.0 83.7 53.0 31.9
84.8 58.0 35.4 20.1
3267.4 2264.6 1561.6 1062.4
1379.3 986.4 689.1 467.4
794.4 593.4 421.7 284.9
613.5 473.4 340.8 229.8
561.1 381.7 261.1 178.0
180.8 123.8 84.9 57.8
59.5 41.8 29.1 19.8
19.4 15.2 11.3 7.8
2873.4 1968.8 1354.6 924.5
972.7 680.3 474.6 324.5
368.2 272.8 197.1 135.4
171.8 142.7 109.7 76.1
14524.5 10003.3 6933.5 4779.1
5023.6 3563.8 2536.8 1782.5
2007.2 1533.7 1157.4 845.4
1037.4 894.9 731.4 559.2
2.15e-10
4.67e-10
1.00e-09
2.15e-09
D_F (m^2/s)

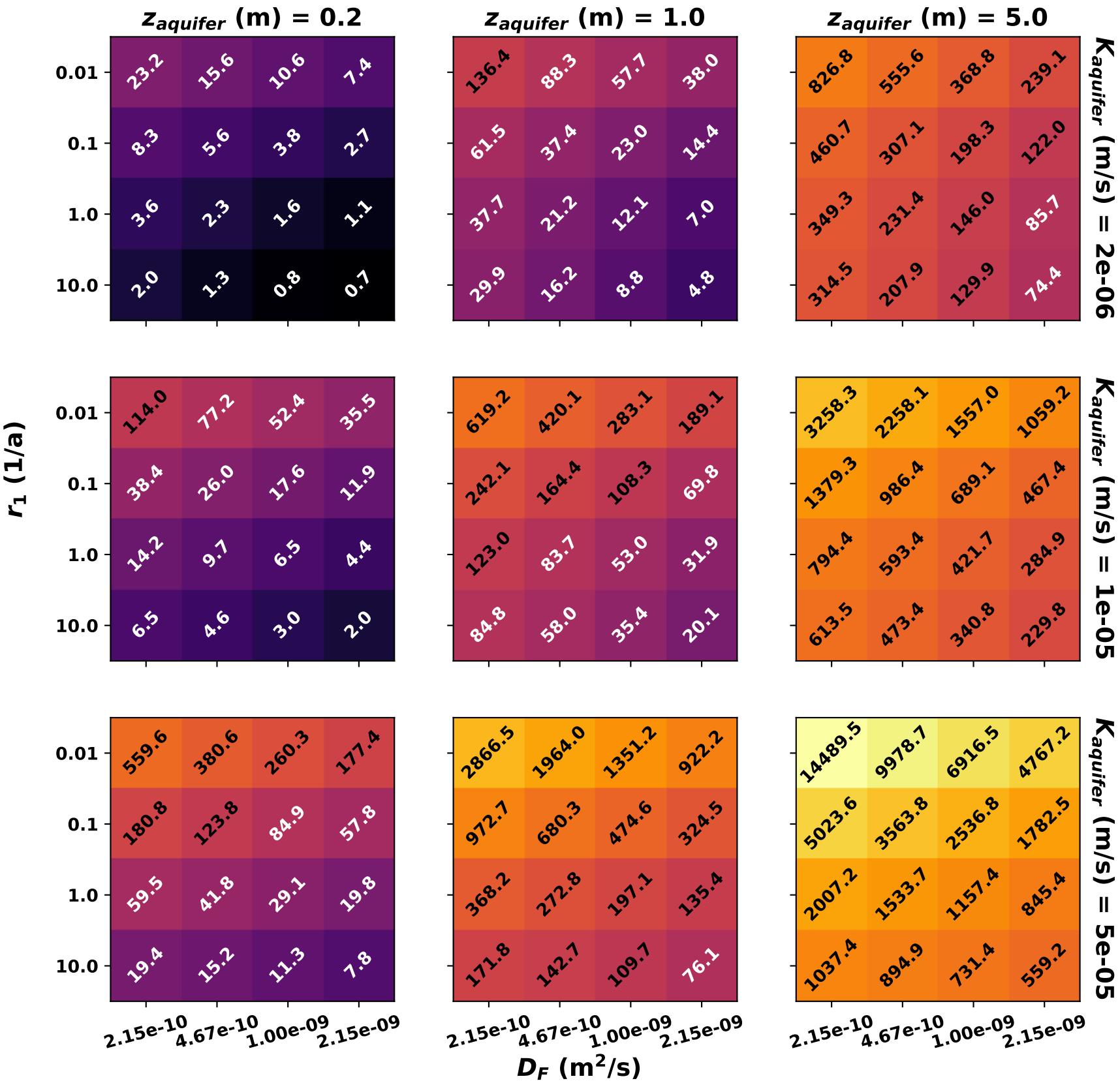
/ScenarioC.csv_OUT_2020.03.04.10.14.02.pdf
f_{re} = 3.5
point # = 5 (@ 100 m)

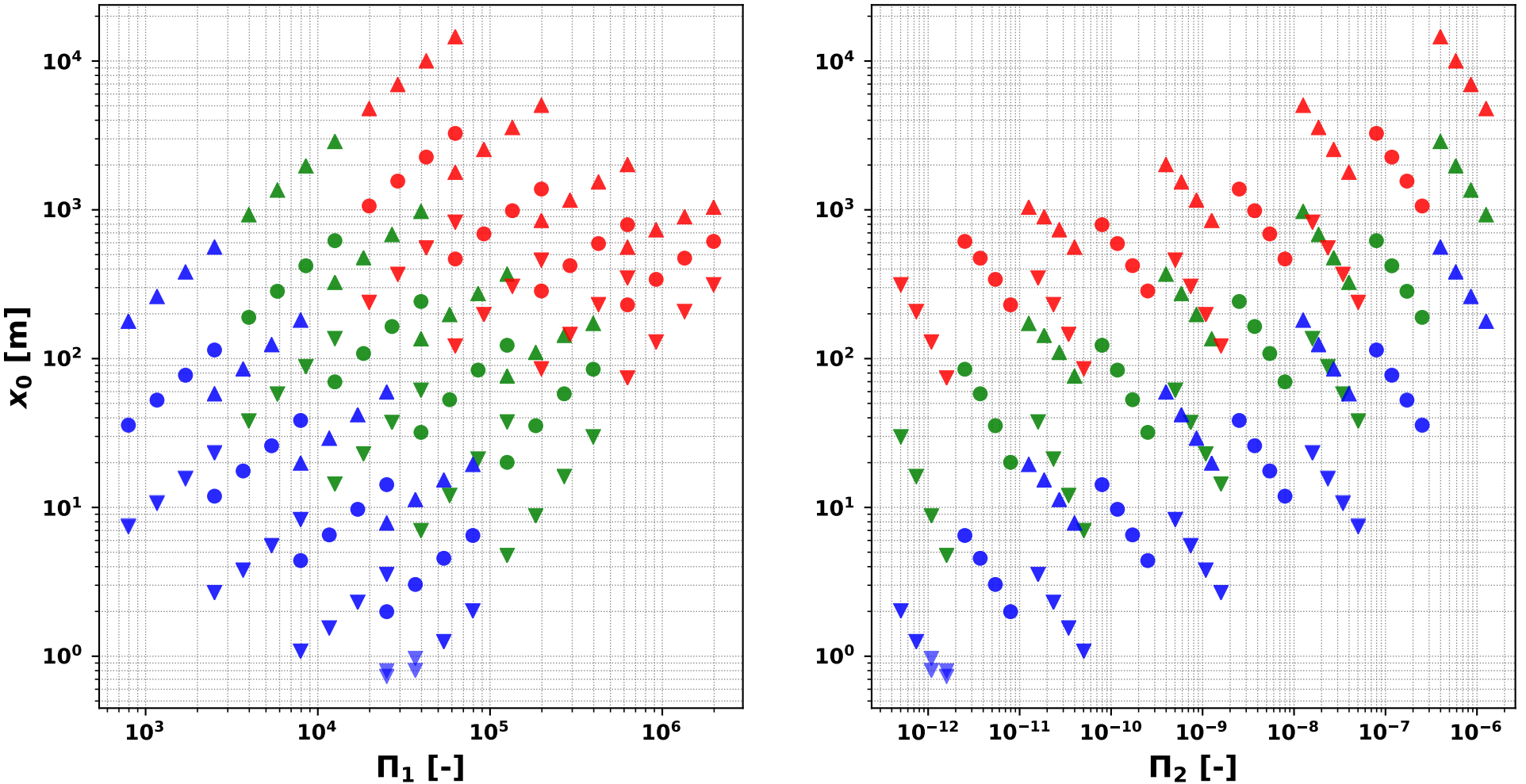
order of figures:
equilibrium concentration
value of *b* parameter (years)
value of *b* in terms of pore volumes
x_0 for steady-state dcay with length

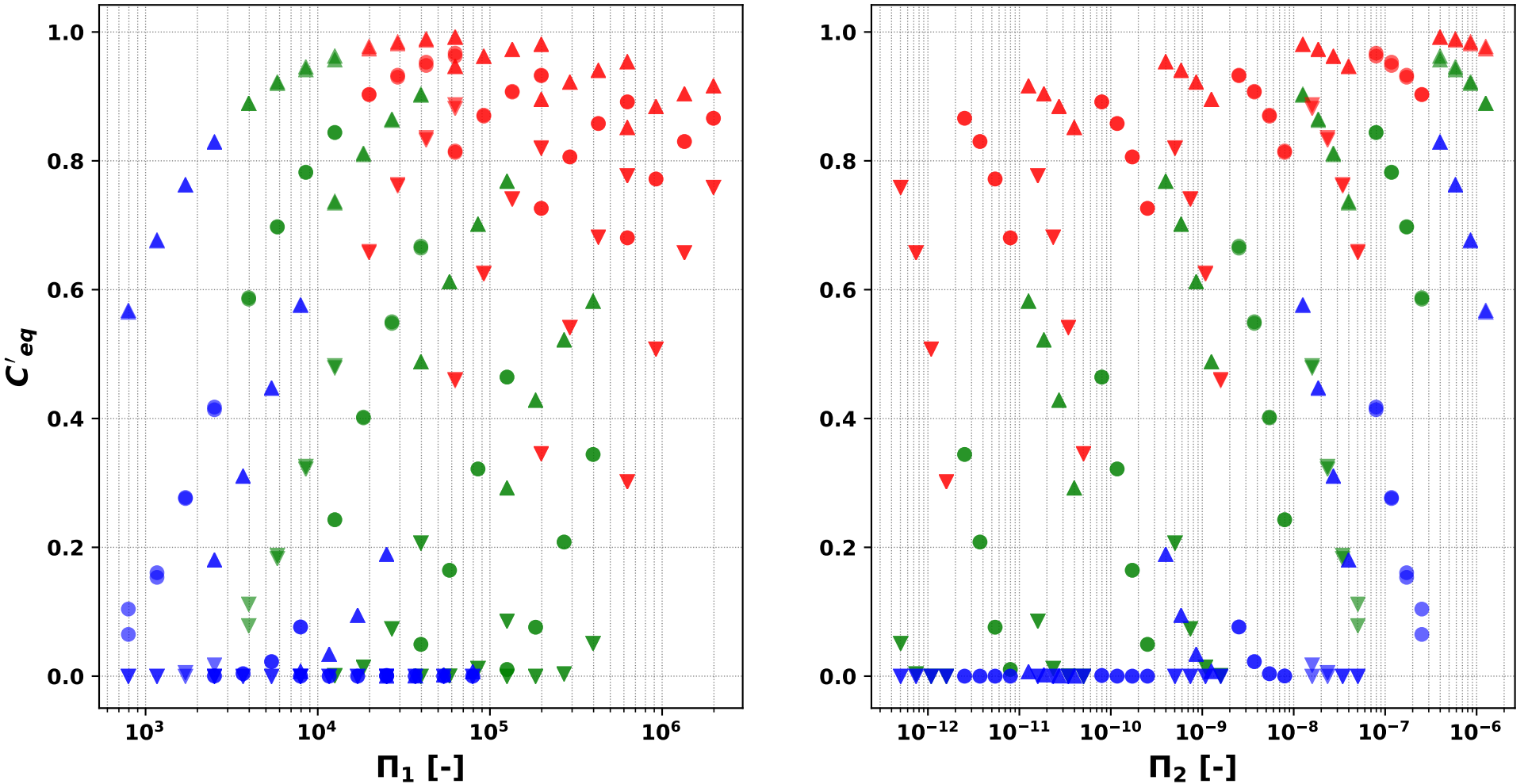

$z_{aquifer}$ (m) = 0.2
$z_{aquifer}$ (m) = 1.0
$z_{aquifer}$ (m) = 5.0
$K_{aquifer}$ (m/s) = 2e-06
$K_{aquifer}$ (m/s) = 1e-05
$K_{aquifer}$ (m/s) = 5e-05
r_1 (1/a)
0.01
0.1
1.0
10.0
0.000 0.000 0.000 0.000
0.000 0.000 0.000 0.000
0.000 0.000 0.000 0.000
0.000 0.000 0.000 0.000
0.479 0.322 0.188 0.112
0.207 0.074 0.014 0.001
0.086 0.012 0.000 0.000
0.051 0.004 0.000 0.000
0.882 0.833 0.761 0.658
0.820 0.740 0.624 0.459
0.777 0.682 0.542 0.346
0.759 0.658 0.508 0.302
0.414 0.276 0.161 0.104
0.076 0.023 0.004 0.000
0.001 0.000 0.000 0.000
0.000 0.000 0.000 0.000
0.844 0.782 0.697 0.585
0.664 0.548 0.401 0.243
0.464 0.322 0.164 0.049
0.344 0.208 0.076 0.010
0.963 0.948 0.930 0.903
0.932 0.907 0.869 0.813
0.891 0.858 0.806 0.726
0.866 0.830 0.772 0.680
0.829 0.762 0.675 0.565
0.575 0.446 0.310 0.180
0.189 0.094 0.034 0.007
0.007 0.002 0.000 0.000
0.956 0.941 0.920 0.889
0.902 0.863 0.809 0.734
0.768 0.701 0.612 0.488
0.582 0.522 0.428 0.292
0.991 0.987 0.982 0.973
0.980 0.972 0.962 0.946
0.953 0.940 0.922 0.895
0.916 0.904 0.884 0.851
2.15e-10
4.67e-10
1.00e-09
2.15e-09
D_F (m^2/s)

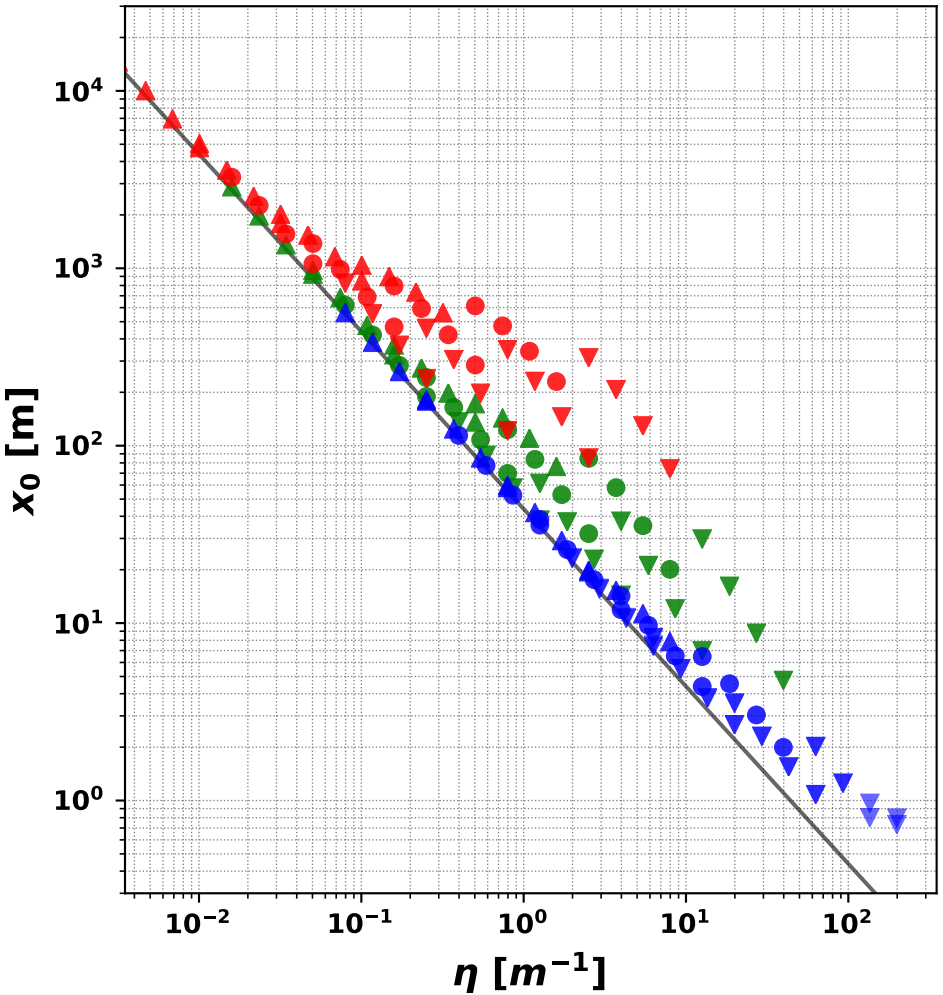

$z_{aquifer}$ (m) = 0.2
$z_{aquifer}$ (m) = 1.0
$z_{aquifer}$ (m) = 5.0
$K_{aquifer}$ (m/s) = 2e-06
$K_{aquifer}$ (m/s) = 1e-05
$K_{aquifer}$ (m/s) = 5e-05
r_1 (1/a)
0.01
0.1
1.0
10.0
94.11 154.30 279.37 816.91
19.45 30.49 49.54 97.79
6.96 7.51 8.98
5.89 4.92
9.14 11.40 17.53 33.23
7.32 7.69 8.50 10.63
6.71 6.72 6.73 6.78
6.67 6.65 6.60 6.49
121.23 176.22 305.87 978.16
30.84 41.64 54.13 98.27
3.94
17.64 28.59 44.96 70.61
4.88 7.39 12.43 20.19
1.71 1.97 2.52 3.10
0.10 0.72 0.75 0.10
2.01 2.30 2.84 4.02
1.61 1.75 1.97 2.35
1.00 1.03 1.08 1.17
0.70 0.71 0.71 0.10
20.36 32.24 50.24 74.95
9.06 12.07 17.02 22.75
2.33 2.73 0.95 3.78
0.67 1.11 2.29
3.03 3.96 5.66 9.12
2.45 2.93 3.69 5.03
0.52 0.54 0.70 0.72
0.45 0.43 0.43 0.43
1.44 1.59 1.75 1.99
1.30 1.41 1.52 1.68
0.48 0.48 0.49 0.50
0.43 0.43 0.43 0.43
2.15e-10
4.67e-10
1.00e-09
2.15e-09
D_F (m^2/s)

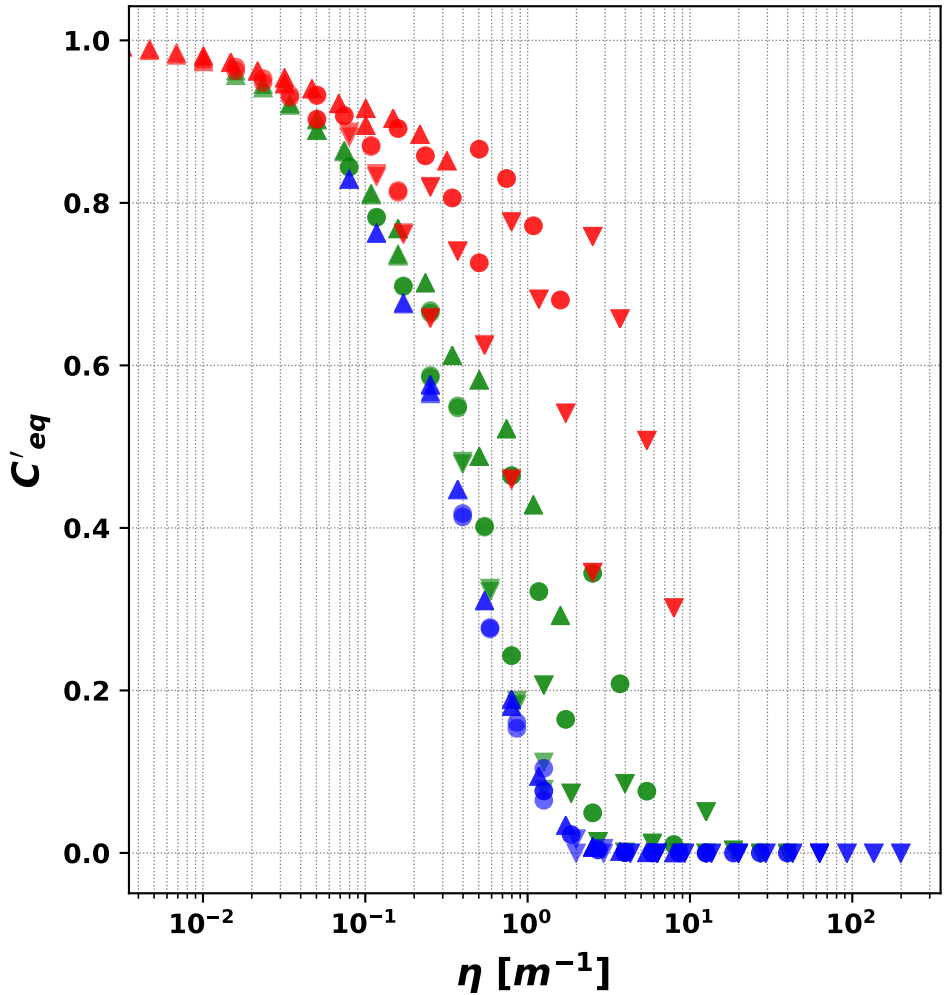

$z_{aquifer}$ (m) = 0.2
$z_{aquifer}$ (m) = 1.0
$z_{aquifer}$ (m) = 5.0
$K_{aquifer}$ (m/s) = 2e-06
$K_{aquifer}$ (m/s) = 1e-05
$K_{aquifer}$ (m/s) = 5e-05
r_1 (1/a)
0.01
0.1
1.0
10.0
1.70 2.78 5.03 14.72
0.35 0.55 0.89 1.76
0.13 0.14 0.16 *
0.11 0.09 * *
0.16 0.21 0.32 0.60
0.13 0.14 0.15 0.19
0.12 0.12 0.12 0.12
0.12 0.12 0.12 0.12
10.92 15.88 27.56 88.14
2.78 3.75 4.88 8.85
0.36 * * *
* * * *
1.59 2.58 4.05 6.36
0.44 0.67 1.12 1.82
0.15 0.18 0.23 0.28
0.01 0.07 0.07 0.01
0.18 0.21 0.26 0.36
0.15 0.16 0.18 0.21
0.09 0.09 0.10 0.11
0.06 0.06 0.06 0.01
9.17 14.52 22.64 33.76
4.08 5.44 7.67 10.25
1.05 1.23 0.43 1.70
0.30 0.50 1.03 *
1.36 1.79 2.55 4.11
1.10 1.32 1.66 2.27
0.23 0.24 0.32 0.32
0.20 0.19 0.19 0.19
0.65 0.71 0.79 0.89
0.59 0.63 0.69 0.76
0.22 0.22 0.22 0.22
0.20 0.19 0.19 0.19
2.15e-10
4.67e-10
1.00e-09
2.15e-09
D_F (m^2/s)


$z_{aquifer}$ (m) = 0.2
$z_{aquifer}$ (m) = 1.0
$z_{aquifer}$ (m) = 5.0
$K_{aquifer}$ (m/s) = 2e-06
$K_{aquifer}$ (m/s) = 1e-05
$K_{aquifer}$ (m/s) = 5e-05
r_1 (1/a)
0.01
0.1
1.0
10.0
23.2 15.6 10.6 7.4
8.3 5.6 3.8 2.7
3.6 2.3 1.6 1.1
2.0 1.3 0.8 0.7
136.4 88.3 57.7 38.0
61.5 37.4 23.0 14.4
37.7 21.2 12.1 7.0
29.9 16.2 8.8 4.8
826.8 555.6 368.8 239.1
460.7 307.1 198.3 122.0
349.3 231.4 146.0 85.7
314.5 207.9 129.9 74.4
114.0 77.2 52.4 35.5
38.4 26.0 17.6 11.9
14.2 9.7 6.5 4.4
6.5 4.6 3.0 2.0
619.2 420.1 283.1 189.1
242.1 164.4 108.3 69.8
123.0 83.7 53.0 31.9
84.8 58.0 35.4 20.1
3258.3 2258.1 1557.0 1059.2
1379.3 986.4 689.1 467.4
794.4 593.4 421.7 284.9
613.5 473.4 340.8 229.8
559.6 380.6 260.3 177.4
180.8 123.8 84.9 57.8
59.5 41.8 29.1 19.8
19.4 15.2 11.3 7.8
2866.5 1964.0 1351.2 922.2
972.7 680.3 474.6 324.5
368.2 272.8 197.1 135.4
171.8 142.7 109.7 76.1
14489.5 9978.7 6916.5 4767.2
5023.6 3563.8 2536.8 1782.5
2007.2 1533.7 1157.4 845.4
1037.4 894.9 731.4 559.2
2.15e-10
4.67e-10
1.00e-09
2.15e-09
D_F (m^2/s)


10^4
10^3
10^2
10^1
10^0
x_0 [m]
10^3
10^4
10^5
10^6
Π_1 [-]
10^4
10^3
10^2
10^1
10^0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
Π_2 [-]


1.0
0.8
0.6
0.4
0.2
0.0
C'_{eq}
10^3
10^4
10^5
10^6
Π_1 [-]
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
Π_2 [-]


10^4
10^3
10^2
10^1
10^0
x_0 [m]
10^{-2}
10^{-1}
10^0
10^1
10^2
η [m^{-1}]


1.0
0.8
0.6
0.4
0.2
0.0
C'_{eq}
10^{-2}
10^{-1}
10^0
10^1
10^2
η [m^{-1}]