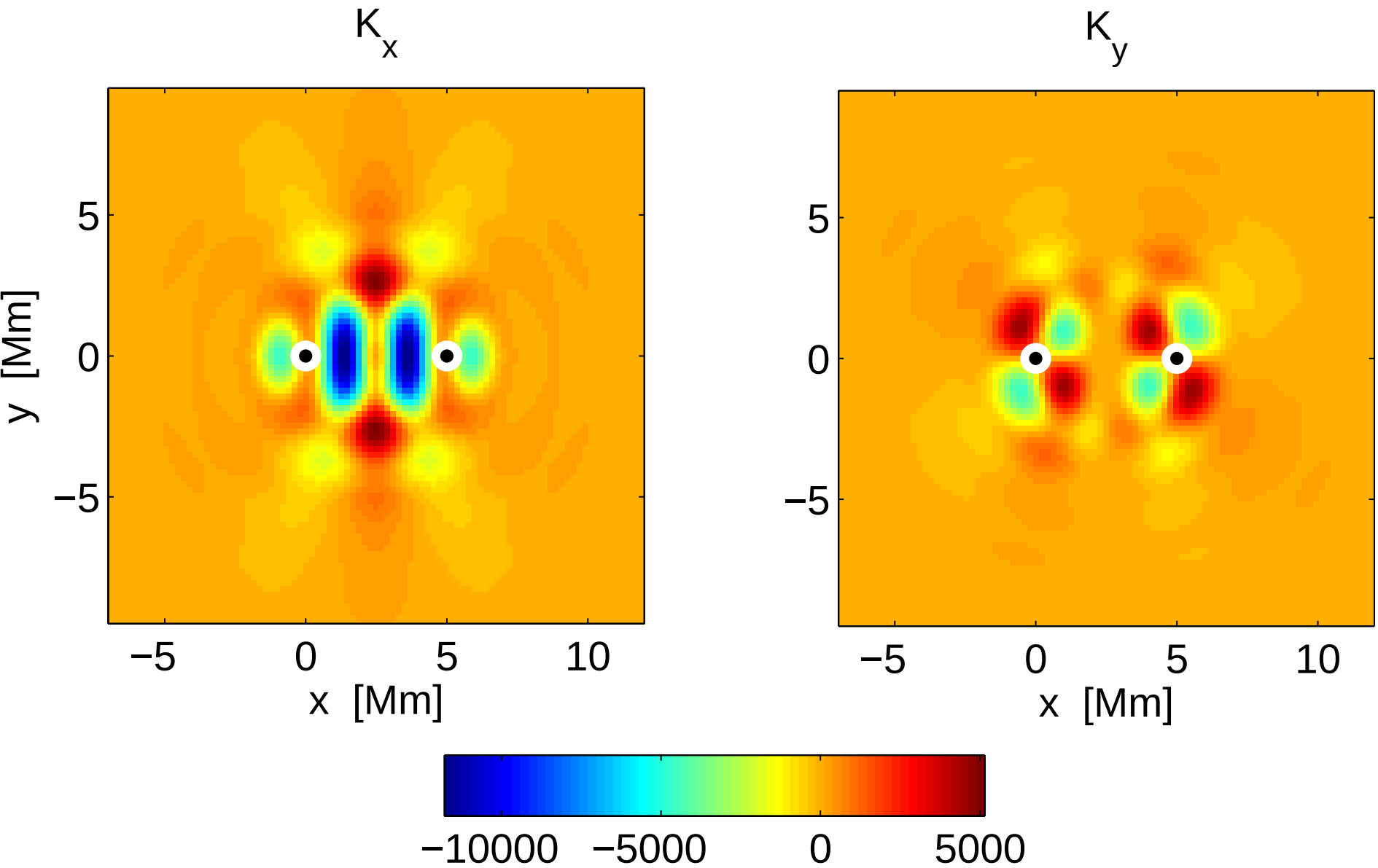
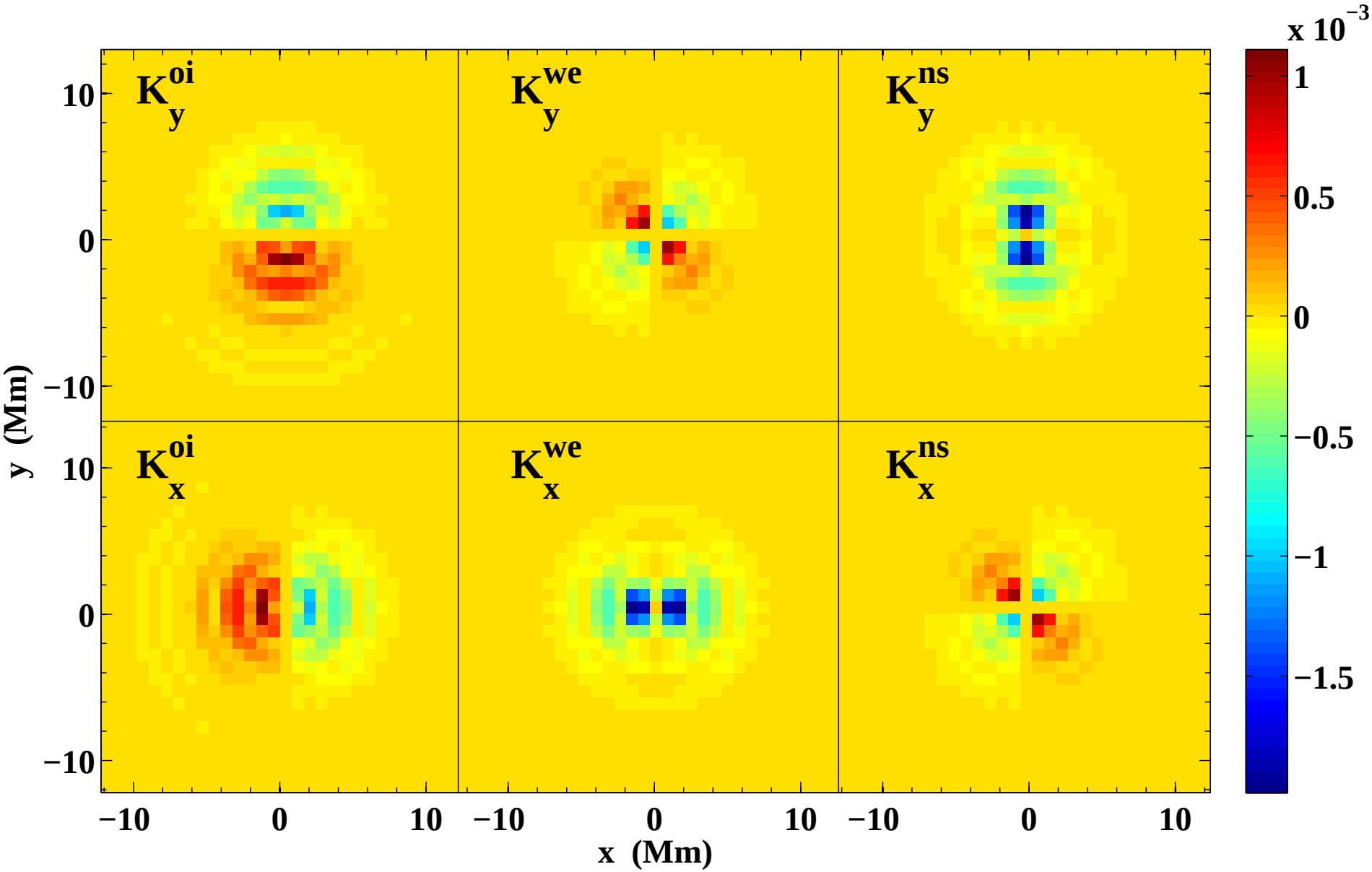
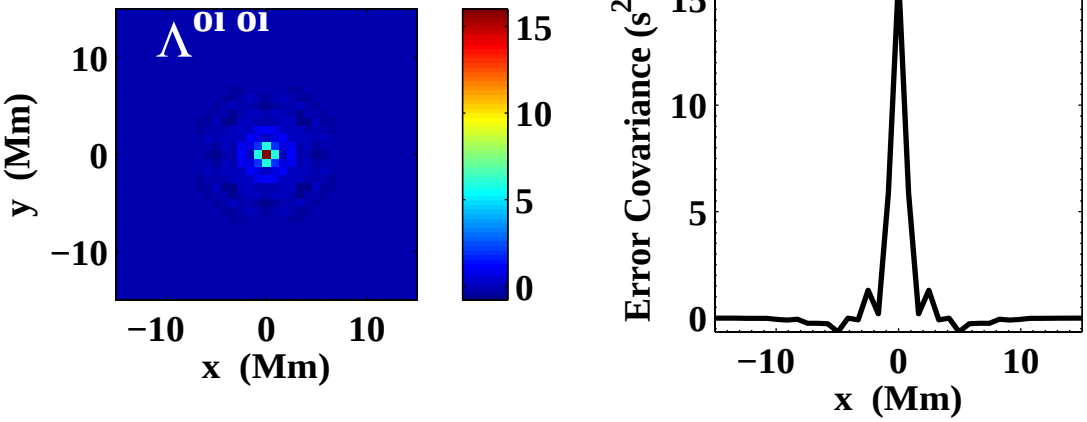
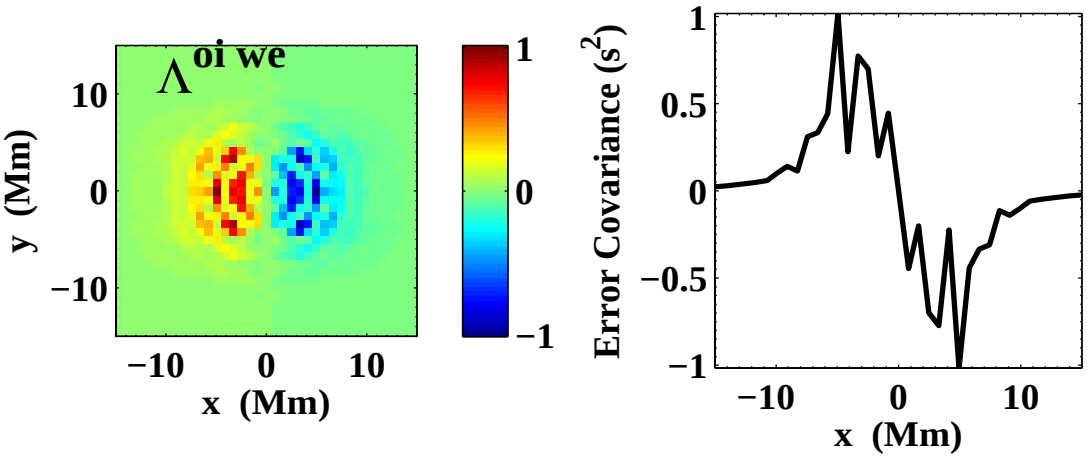
Sensitivity kernels, Δ=5 Mm, (point to point)

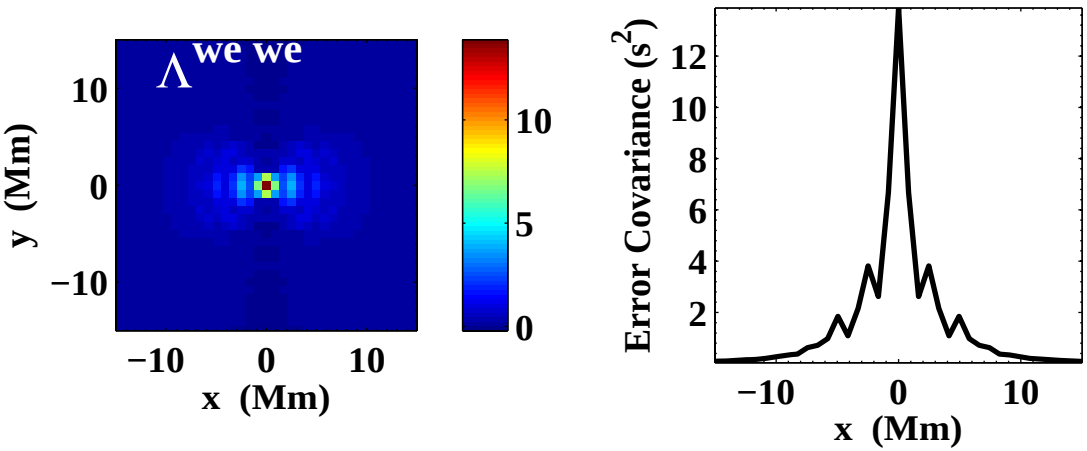


Annulus/quadrant sensitivity kernels



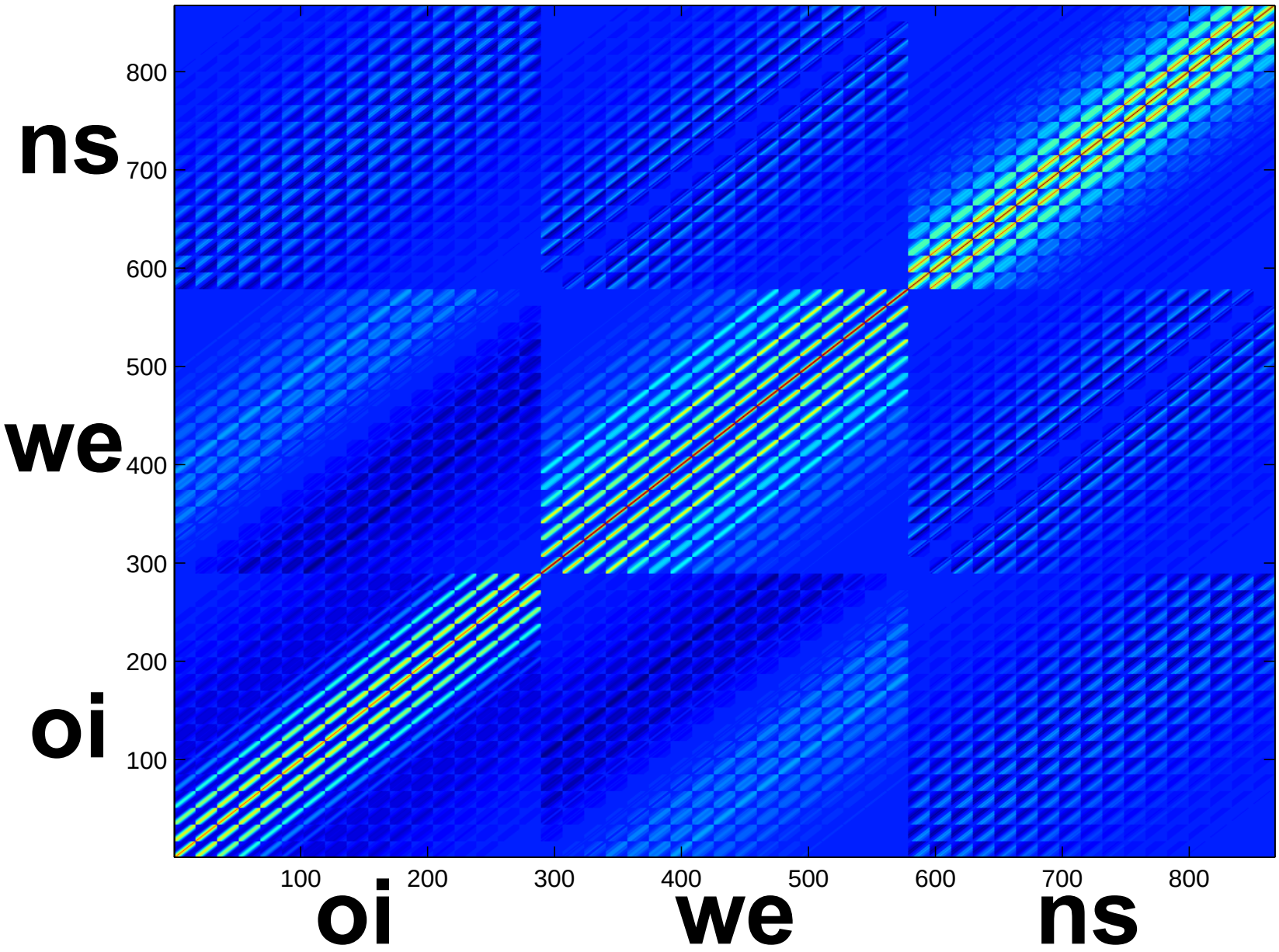




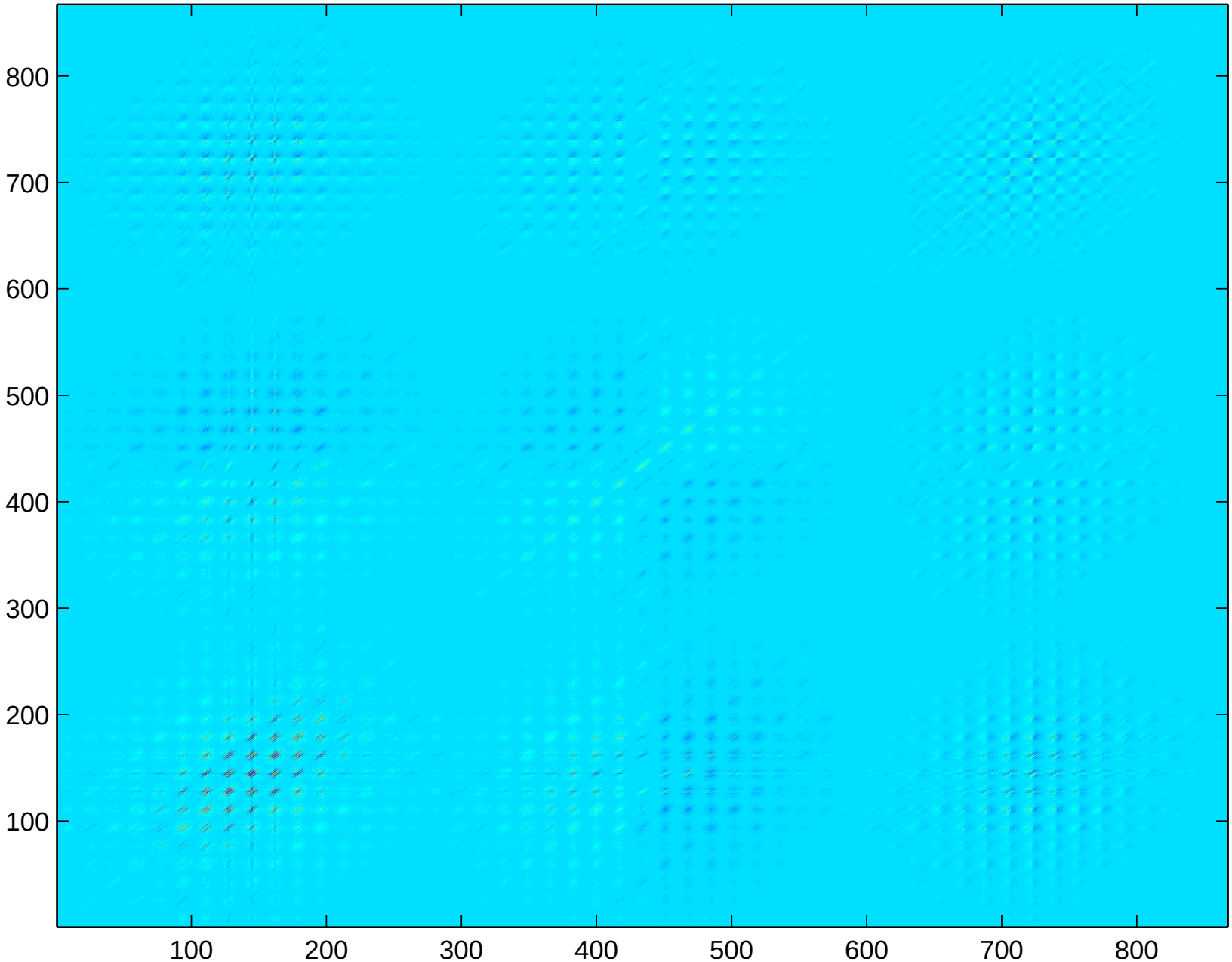


Examples of noise-covariance

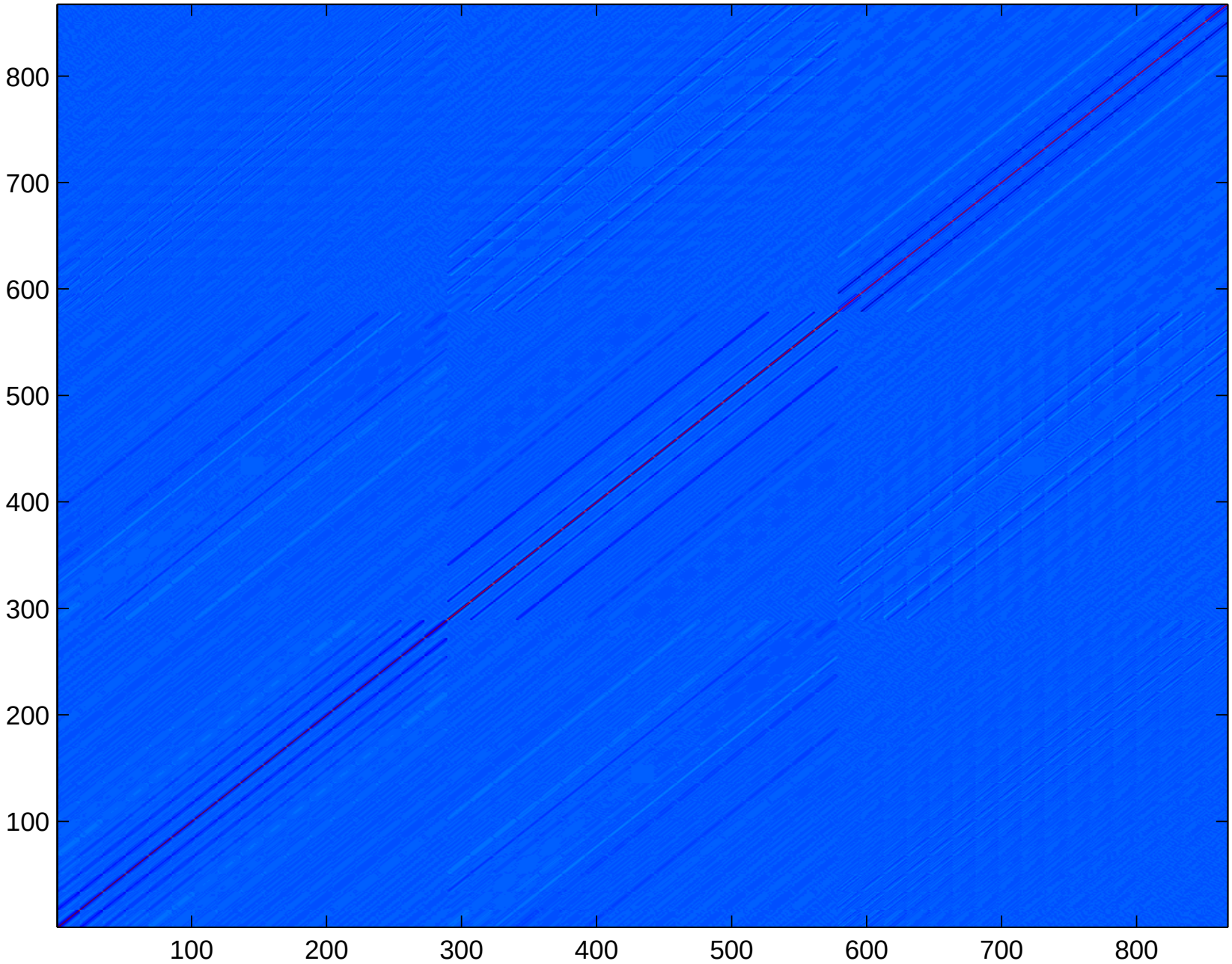
Kernel overlap matrix



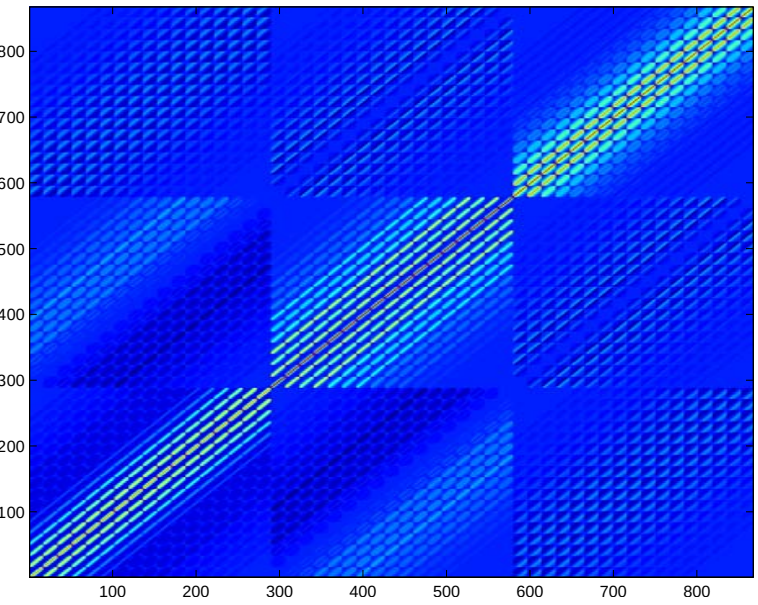
Inverse of kernel overlap matrix



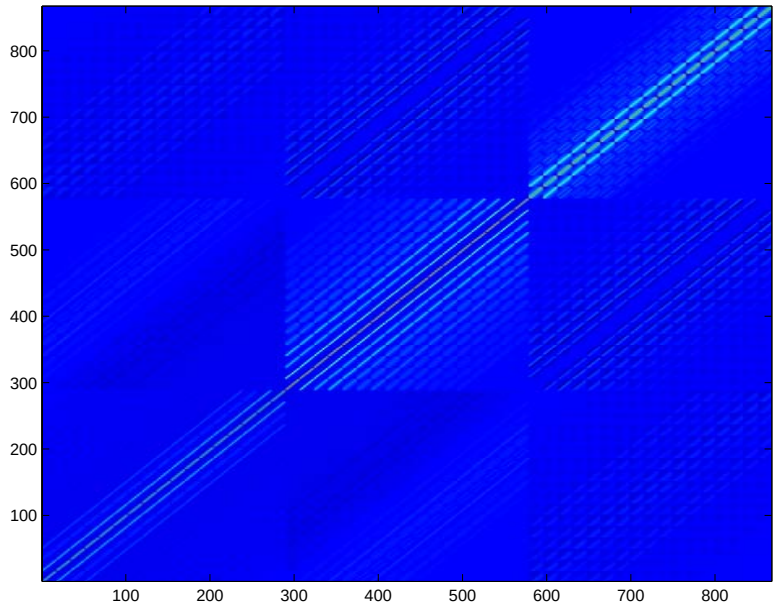
Inverse of regularized overlap matrix



Find the inverse of ...



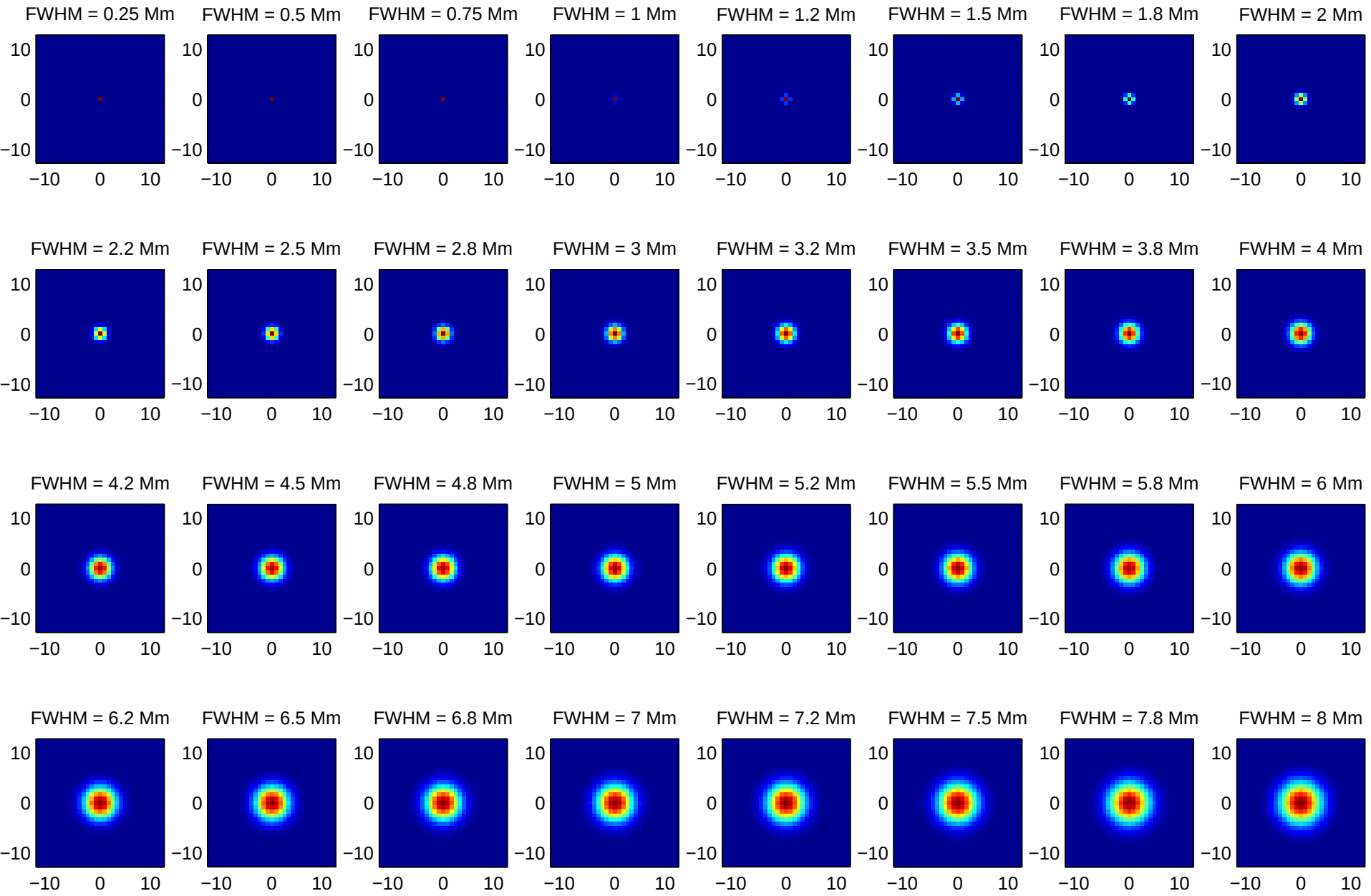
+ μ



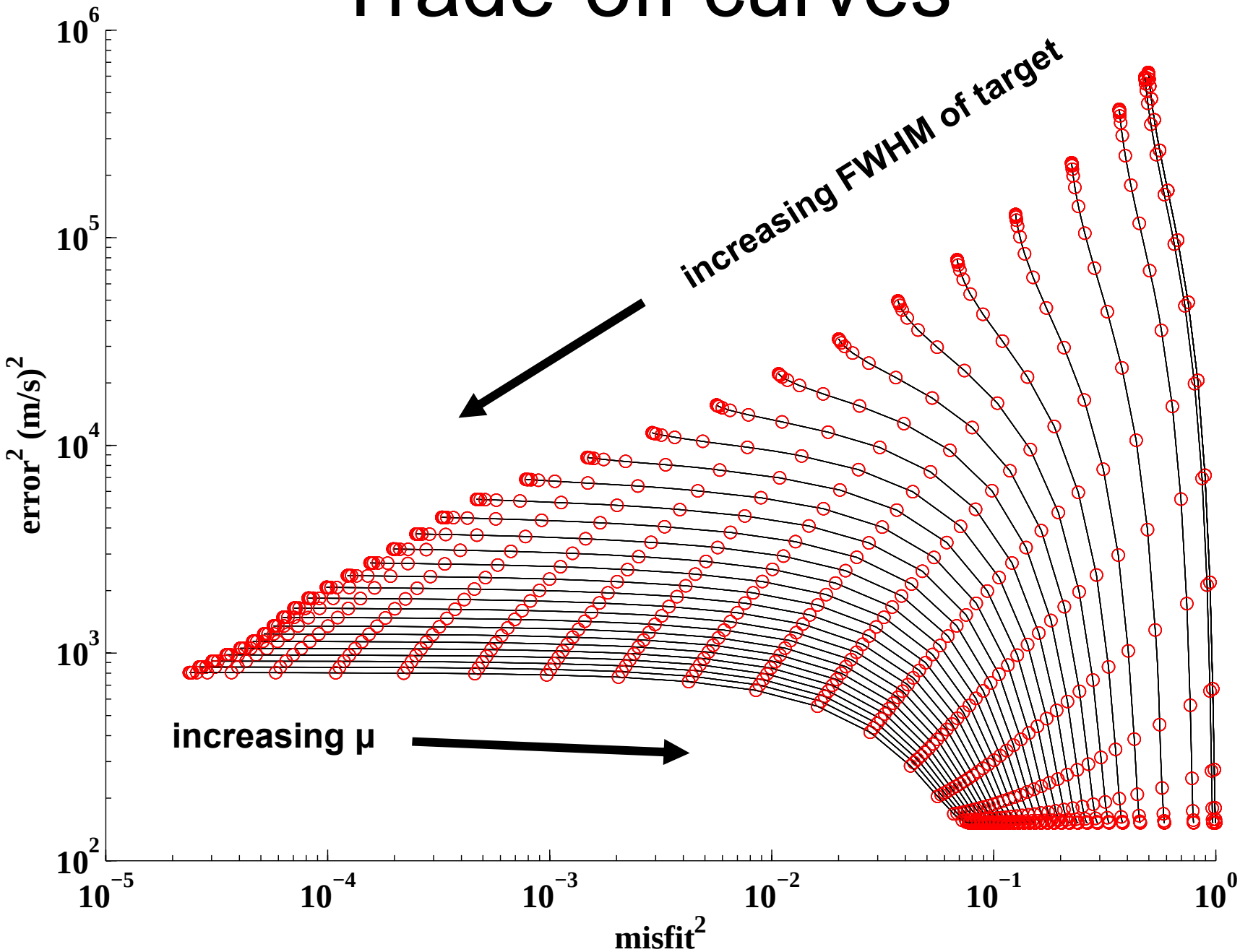
regularized kernel overlap matrix

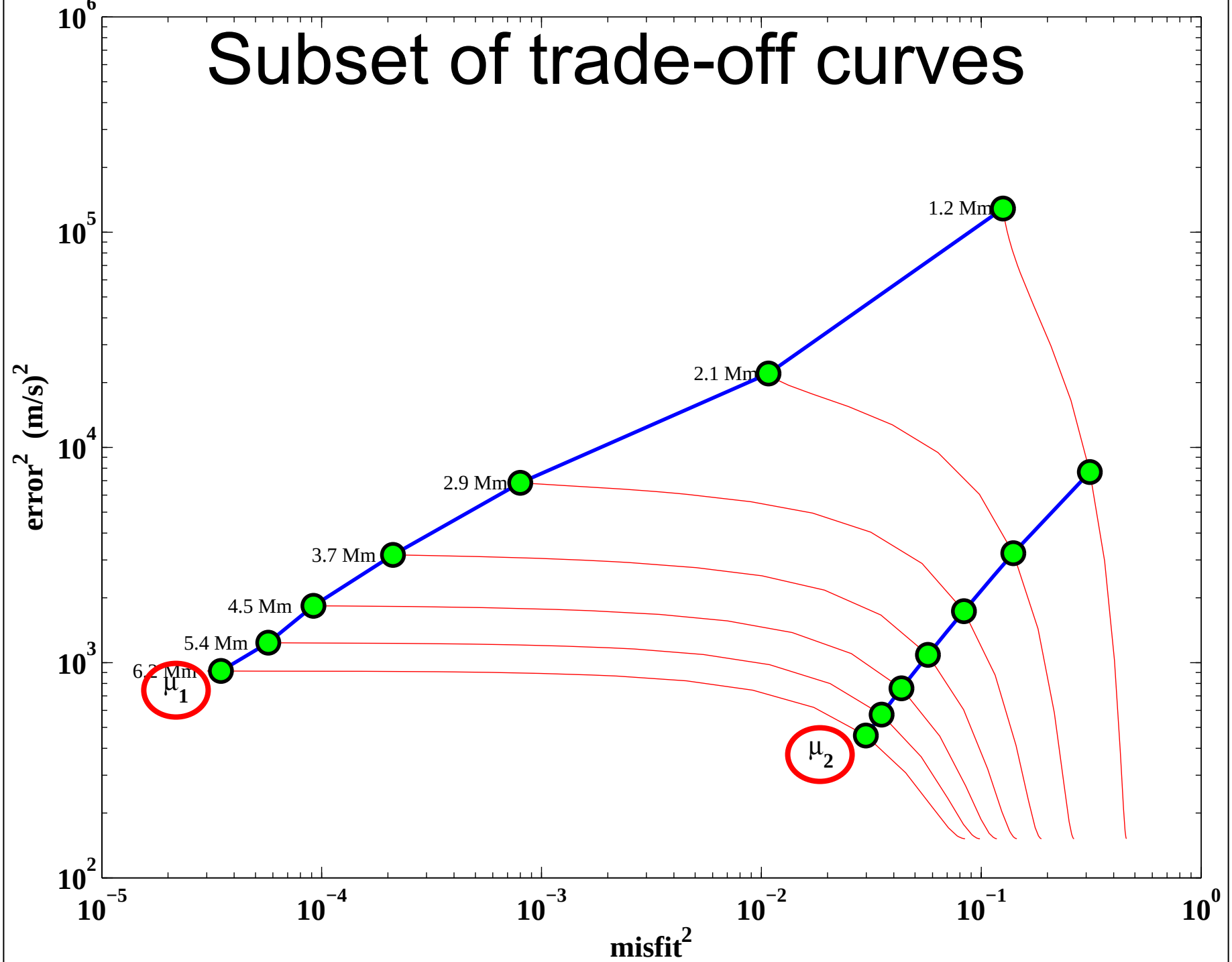
regularized error-covariance matrix

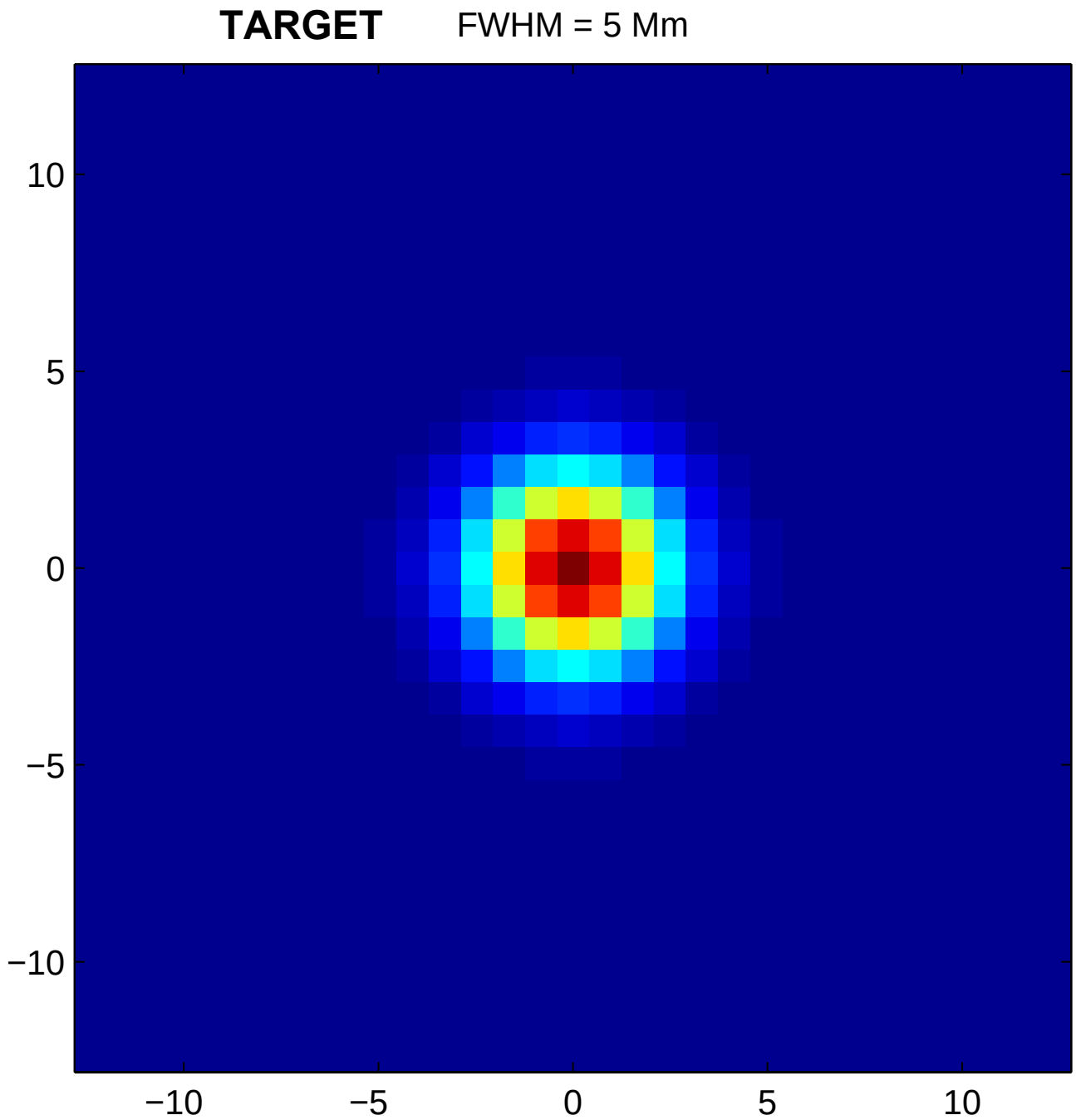
Target functions T_x



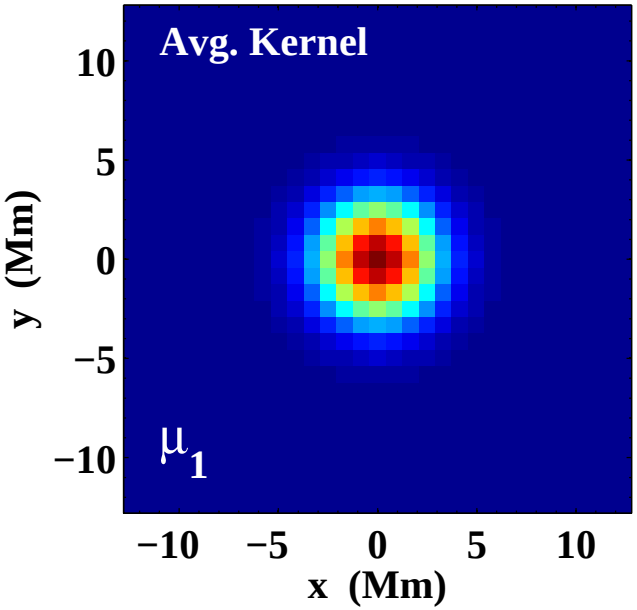
Trade-off curves

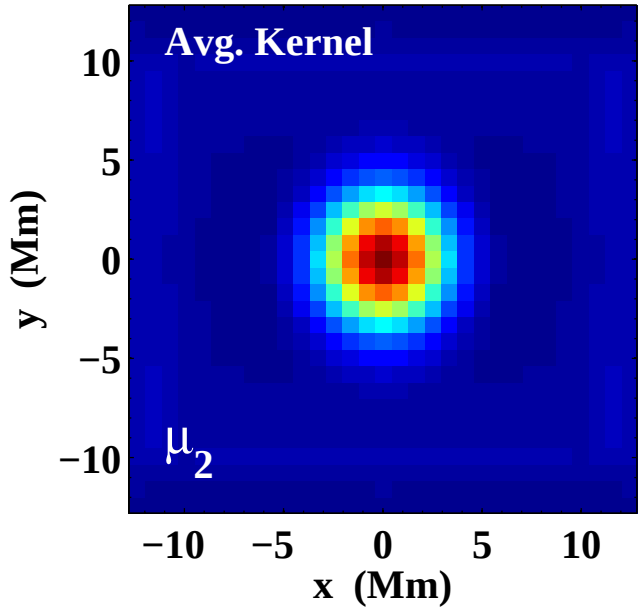


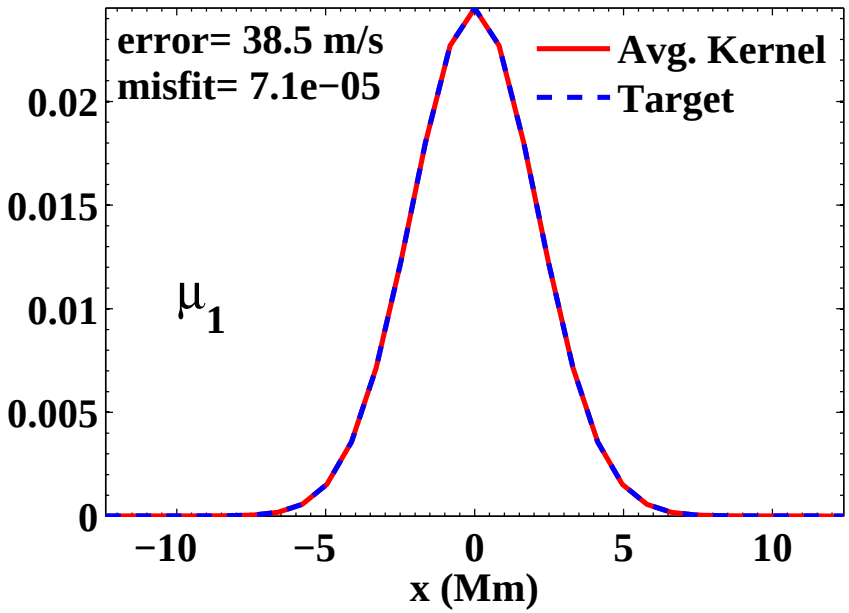

Subset of trade-off curves
error^2 (m/s)^2
misfit^2
10^6
10^5
10^4
10^3
10^2
10^{-5}
10^{-4}
10^{-3}
10^{-2}
10^{-1}
10^0
1.2 Mm
2.1 Mm
2.9 Mm
3.7 Mm
4.5 Mm
5.4 Mm
6.2 Mm
μ_1
μ_2

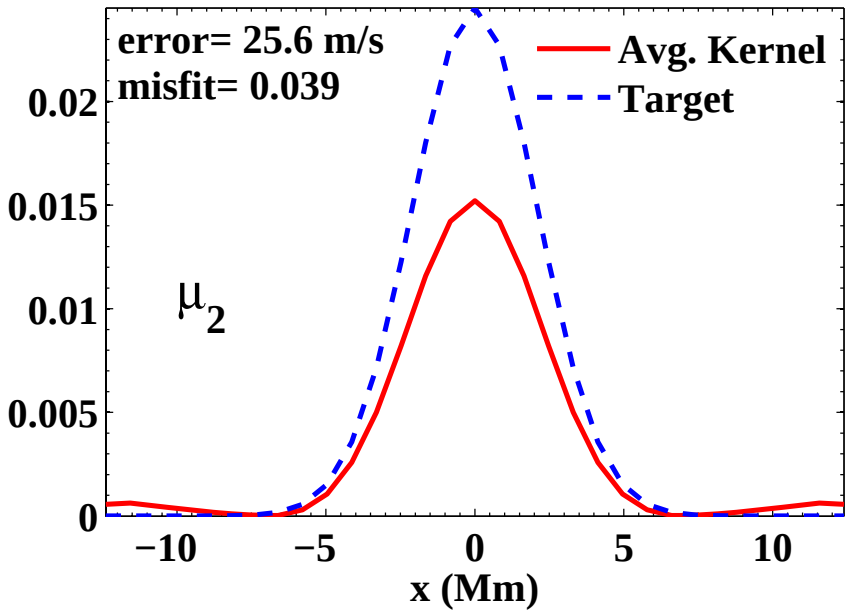

TARGET
FWHM = 5 Mm
10
5
0
−5
−10
−10
−5
0
5
10

Averaging kernels



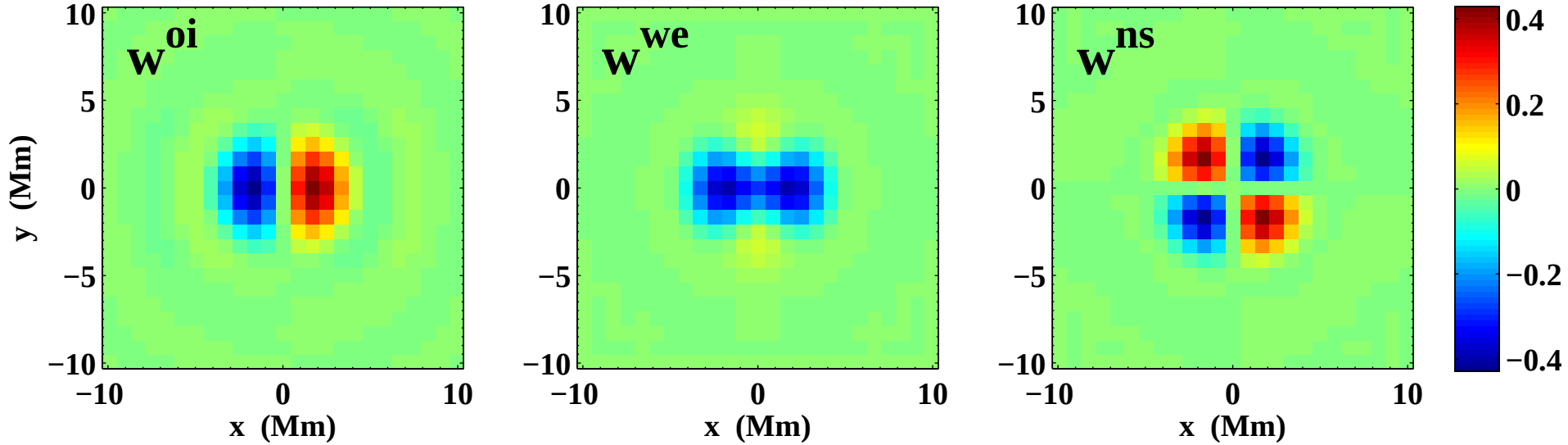


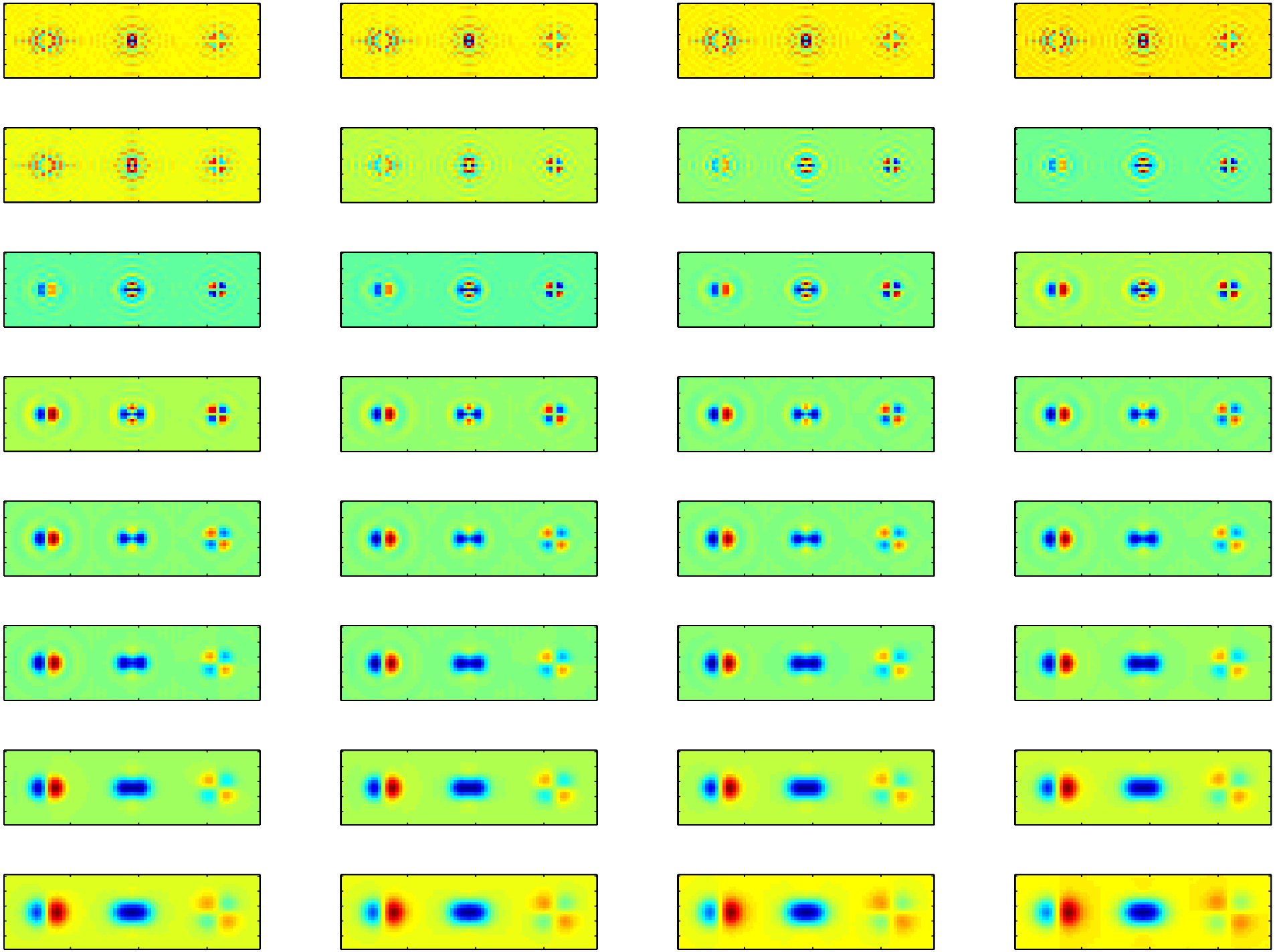




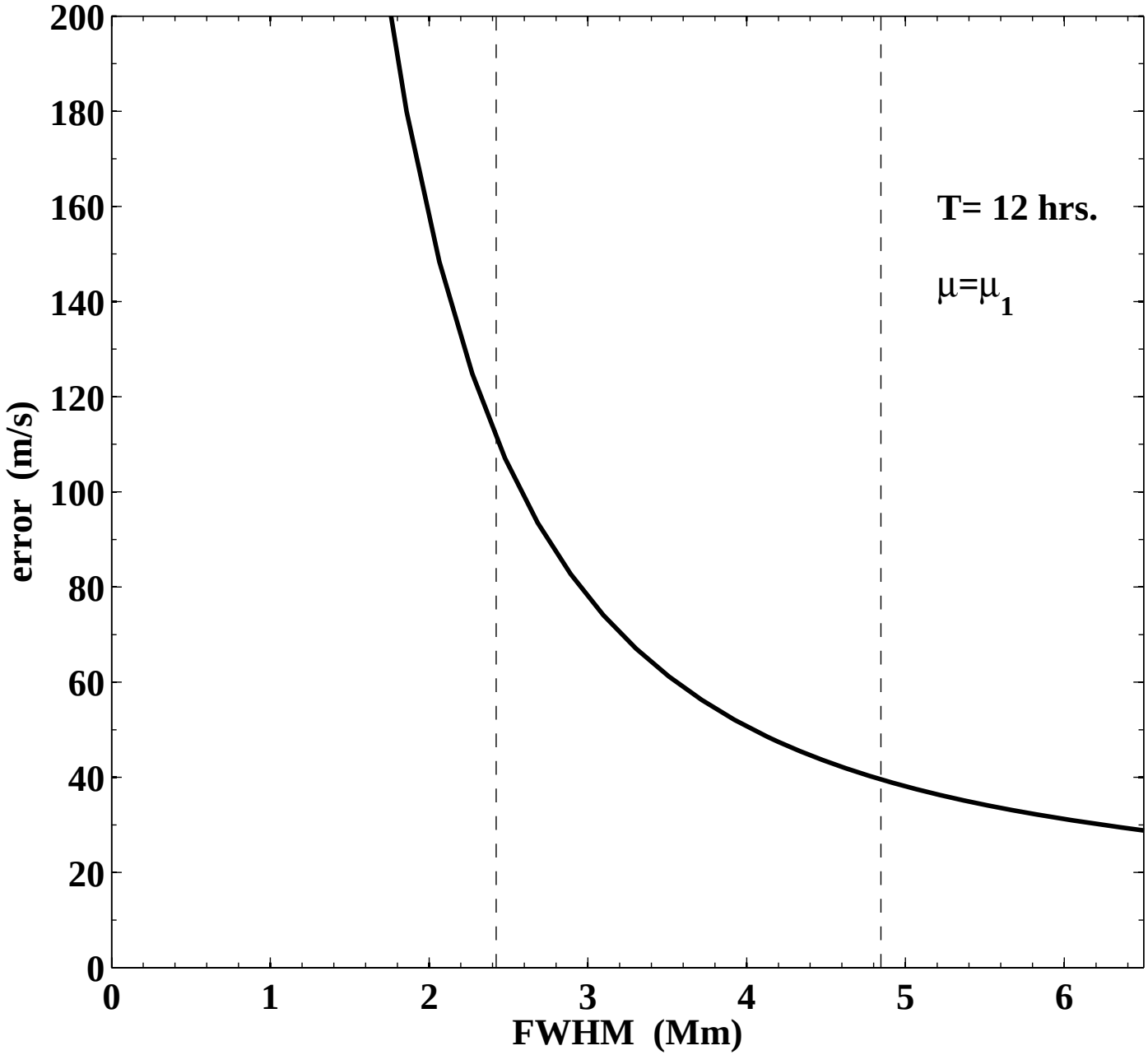
Inversion coefficients (weights)

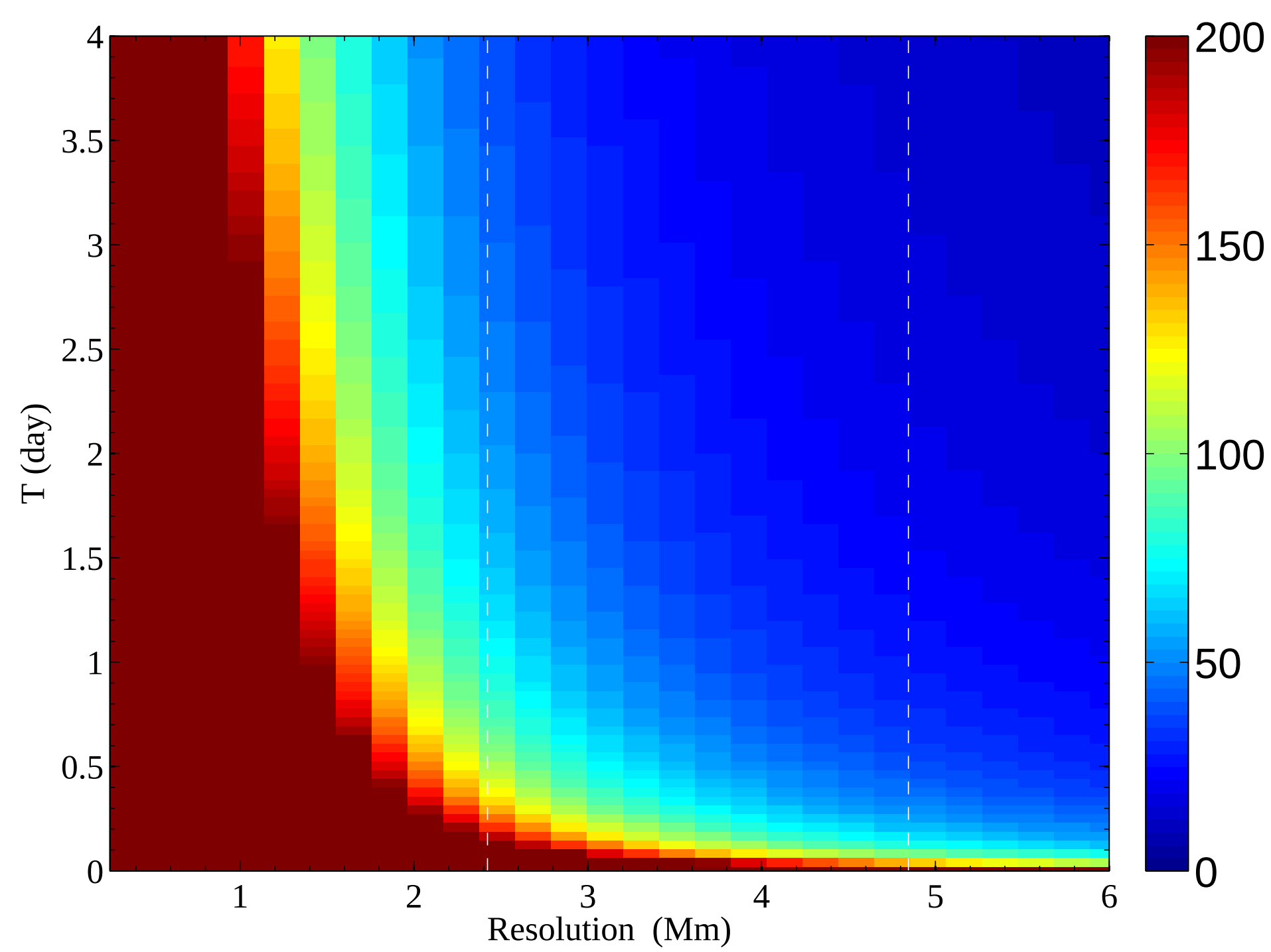
FWHM=5 Mm, $\mu = \mu_1$

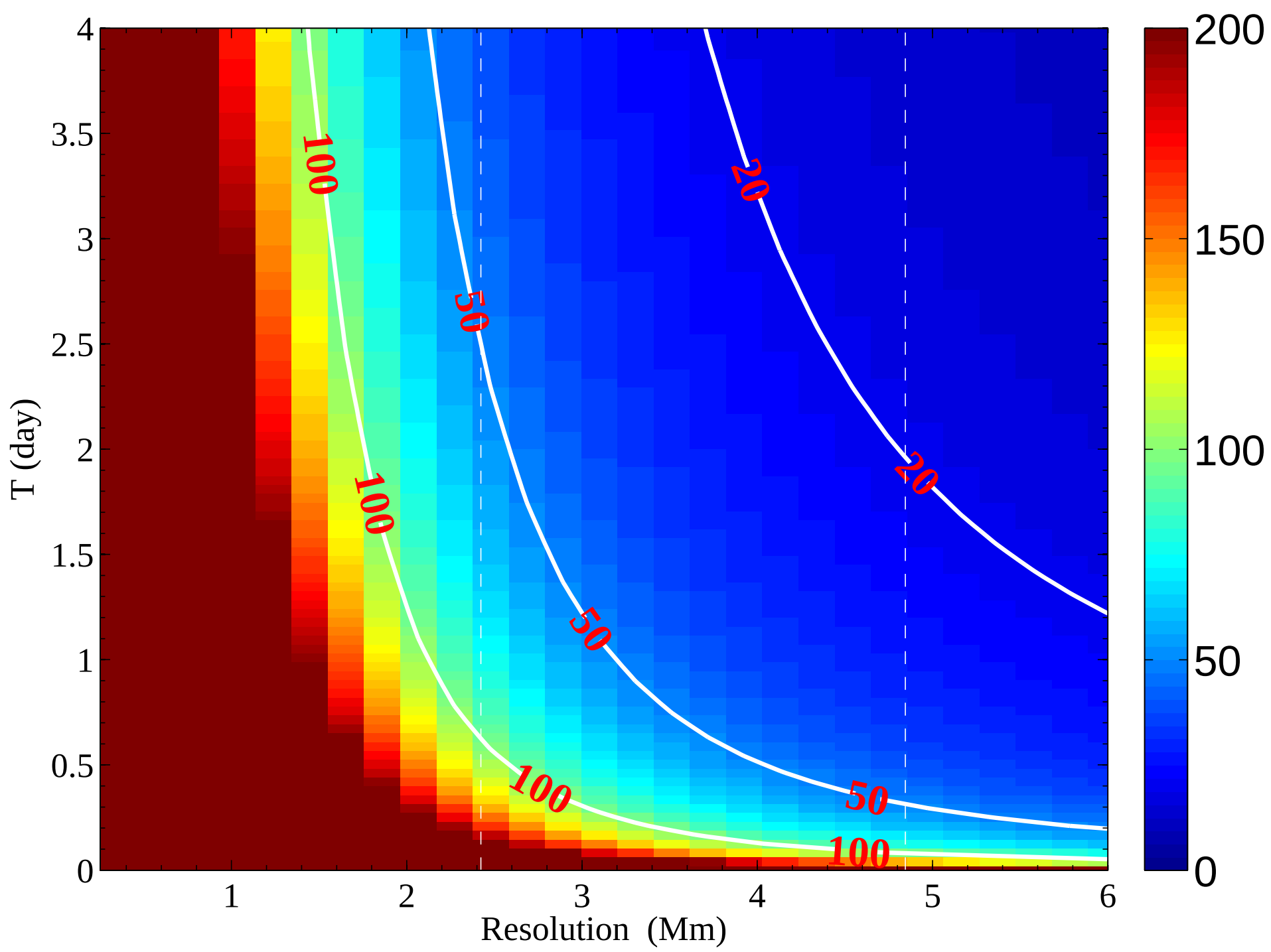




Error vs. width




T (day)
Resolution (Mm)
0
0.5
1
1.5
2
2.5
3
3.5
4
1
2
3
4
5
6
200
150
100
50
0


T (day)
Resolution (Mm)
0
0.5
1
1.5
2
2.5
3
3.5
4
1
2
3
4
5
6
100
100
50
100
50
20
20
50
100
200
150
100
50
0