Decoding performance when removing place cells. Normalised within day performance. m135 fov1 Circular Mean Squared Error - normalised within day Mean Directional Accuracy - normalised within day 25 + Without Place Cells Without Place Cells Excluding Random Cells Excluding Random Cells 14 -20 -12 -Sessions decoded Sessions decoded 5 -

0.8

0.9

1.0

MDA

0.7

1.2

1.3

1.4

1.8

2.0

0.8

1.0

1.2

CMSE

1.4

1.6

0.6

0.4