rostral

Central sulcus

Lester beta attenuation map : for 2 arrays



ms

Time since Go cue for beta envelope to decay to 20%

Lester beta attenuation orientation (blue) and somatotopic gradient (black) on somatotopic map for two arrays



1: shoulder

2: elbow

3: wrist

4: hand

somatotopic

BAO

lmmodel\_whole\_beta\_20 =

Linear regression model:

decay\_whole\_for\_fitting\_20 ~ 1 + xposition + yposition

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept) 0.17011 0.002807 60.602 2.1982e-92

xposition -0.0017007 0.00043084 -3.9474 0.00013308

yposition -0.00096971 0.00021202 -4.5736 1.1675e-05

Number of observations: 124, Error degrees of freedom: 121

Root Mean Squared Error: 0.0109

R-squared: 0.235, Adjusted R-Squared 0.223

F-statistic vs. constant model: 18.6, p-value = 9.01e-08

BAO 2.6234 rad or 150.3852 deg

somatotopic gradient direction: -1.7938 rad or -102.7792 degrees, R-squared: 0.612

Angle Diff 106.8356deg

Lester beta attenuation map: for upper array (medial of lateral array)



ms

Time since Go cue for beta envelope to decay to 20%

Lester beta attenuation orientation (blue) and somatotopic gradient (black) on somatotopic map : for upper array (medial of lateral array)



BAO

1: shoulder

2: elbow

3: wrist

4: hand

somatotopic

lmmodel\_up\_beta\_20 =

Linear regression model:

decay\_up\_for\_fitting\_20 ~ 1 + xposition + yposition\_up

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept) 0.1756 0.0037623 46.675 1.9319e-49

xposition -0.0041726 0.00055623 -7.5016 3.1739e-10

yposition\_up 0.00030952 0.00055623 0.55647 0.57993

Number of observations: 64, Error degrees of freedom: 61

Root Mean Squared Error: 0.0102

R-squared: 0.481, Adjusted R-Squared 0.464

F-statistic vs. constant model: 28.3, p-value = 2.03e-09

BAO -3.0675 rad or -175.8468 deg

somatotopic gradient direction: -2.2493 rad or -128.8761 deg, R-squared: 0.189

Angle Diff 46.9707 deg

Lester beta attenuation map: for lower array (lateral of lateral array



ms

Time since Go cue for beta envelope to decay to 20%

Lester beta attenuation orientation (blue) and somatotopic gradient (black) on somatotopic map: for lower array (lateral of lateral array)



1: shoulder

2: elbow

3: wrist

4: hand

somatotopic

BAO

lmmodel\_down\_beta\_20 =

Linear regression model:

decay\_down\_for\_fitting\_20 ~ 1 + xposition + yposition\_down

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept) 0.17054 0.0055238 30.875 2.8223e-37

xposition 0.00098547 0.00040368 2.4412 0.017767

yposition\_down -0.0020148 0.0004 -5.0369 5.0758e-06

Number of observations: 60, Error degrees of freedom: 57

Root Mean Squared Error: 0.00702

R-squared: 0.365, Adjusted R-Squared 0.343

F-statistic vs. constant model: 16.4, p-value = 2.42e-06

BAO 1.1159 rad or 63.9685 deg

Somatotopic gradient direction: -1.4731 rad or -84.4018 deg, R-squared: 0.258

Angle diff. 211.6297deg