

# Supplementary Material:

## Connectivity of the cingulate sulcus visual area (CSv) in macaque monkeys

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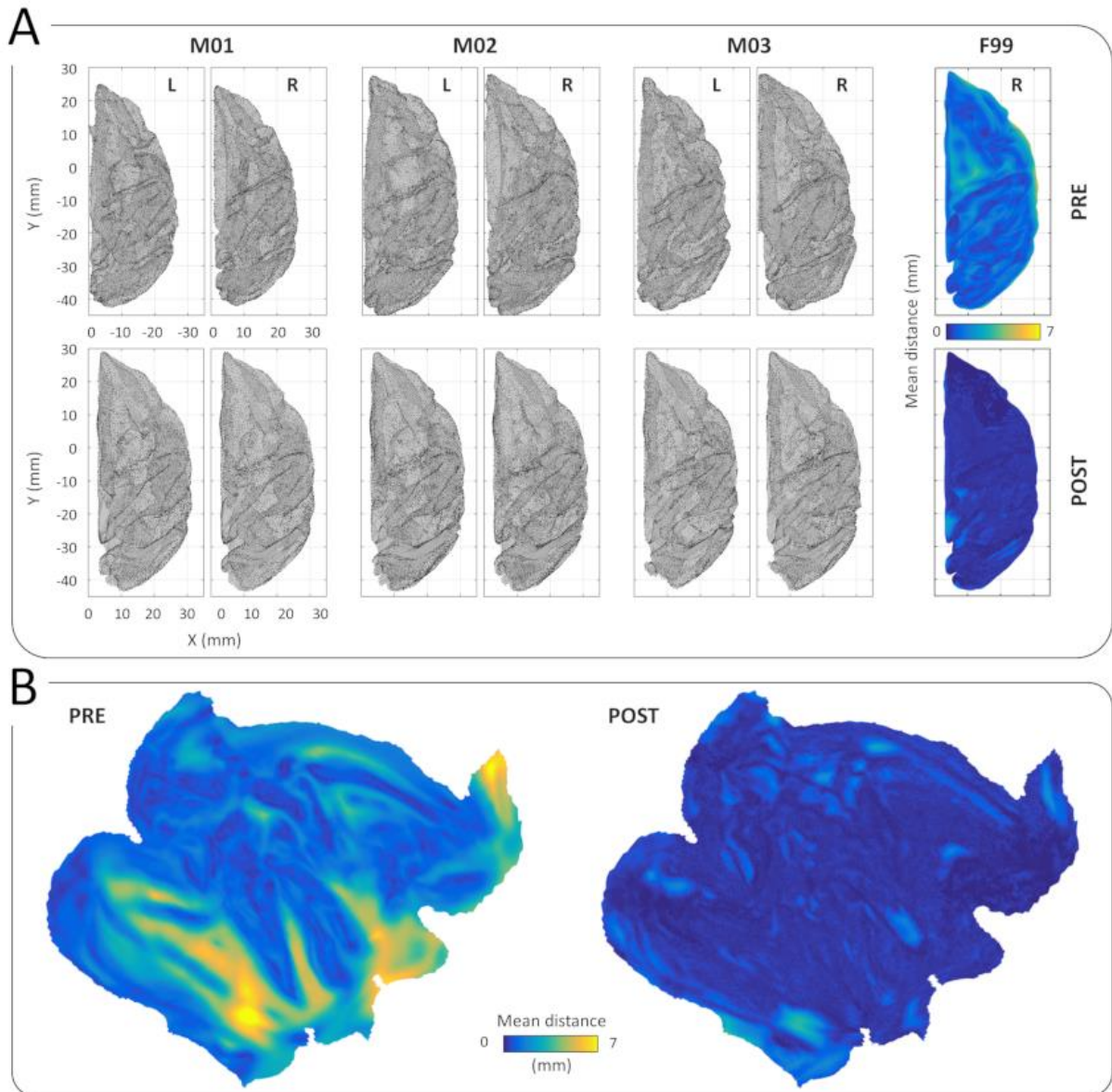
**Supplementary Figure 1.** Registration of the cortical surfaces.

**Supplementary Figure 2.** Functional connectivity: negative correlation maps.

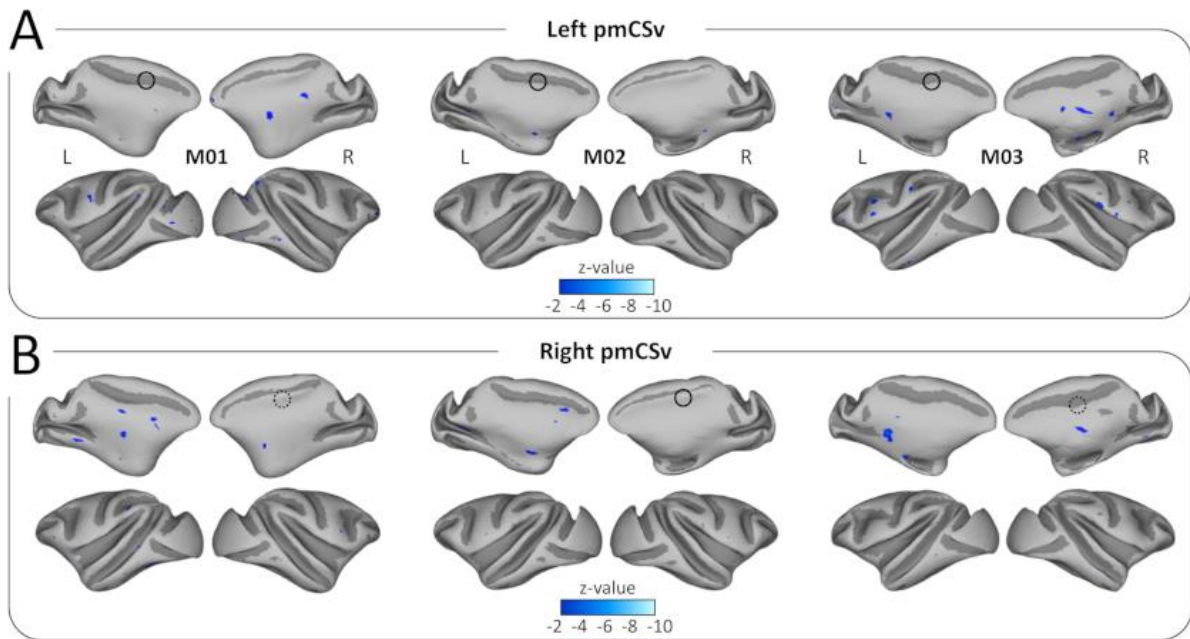
**Supplementary Figure 3.** Test-retest analyses.

**Supplementary Figure 4.** ROI-based analysis of pmCSv/V6 connectivity.

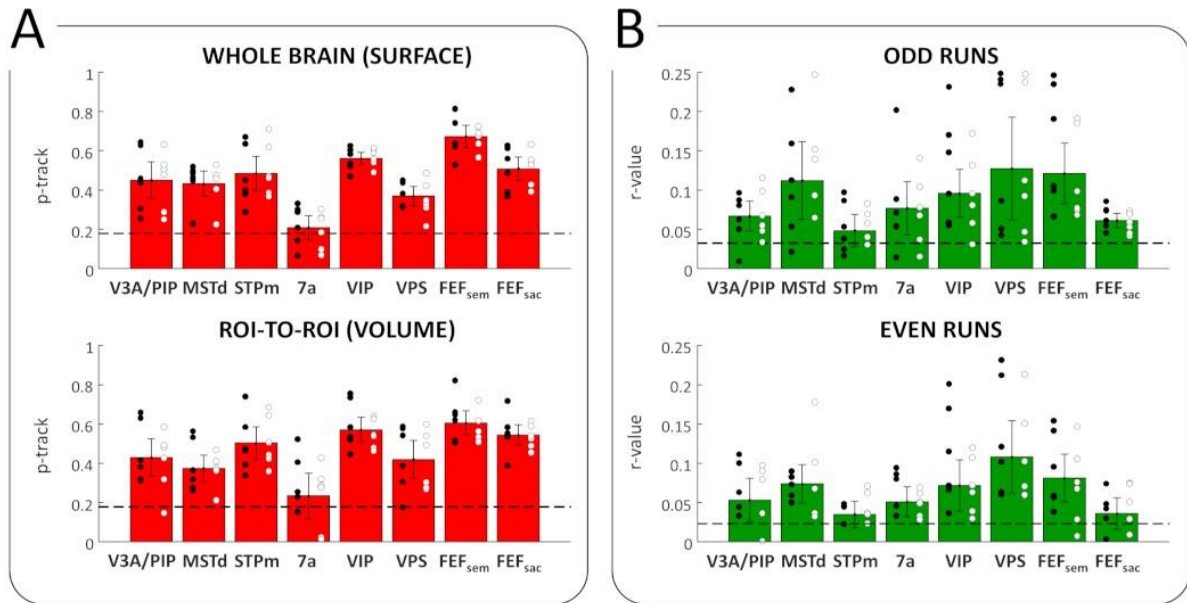
**Supplementary Table 1.** Connectivity strength between pmCSv and the atlas-defined areas.



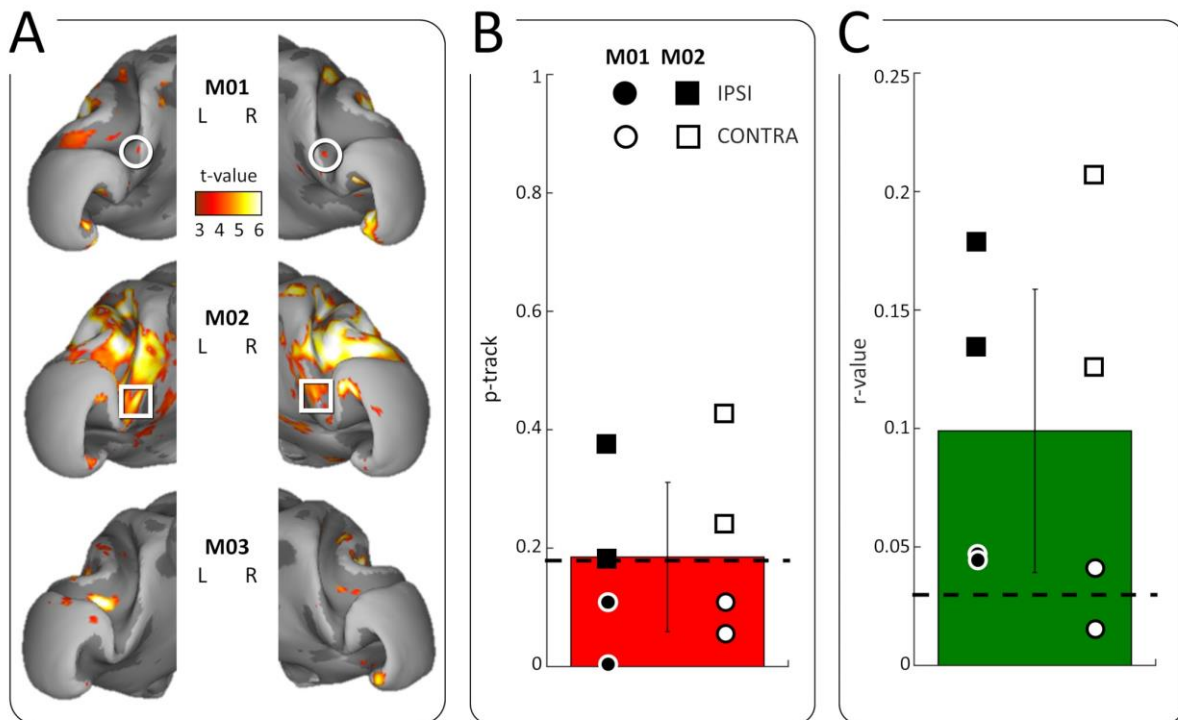
**Supplementary Figure 1. Registration of the cortical surfaces.** (A) Individual left (L) and right (R) fiducial surfaces for monkeys M01, M02, M03. Surfaces are shown in their original version (upper row) and after registration to the right cortical surface of monkey F99 (non-rigid iterative closest point registration; lower row). Mean distance of the individual surfaces to that of monkey F99 before (PRE) and after (POST) registration are shown in the rightmost panels. (B) Mean distances PRE and POST registration on flattened representations of the right cortical surface of monkey F99.



**Supplementary Figure 2. Functional connectivity: negative correlation maps.** Whole-brain resting-state functional connectivity of the left pmCSv (**A**) and the right pmCSv (**B**). Individual z-value maps are projected onto medial and lateral views of the inflated left and right cortical surfaces for the 3 monkeys (threshold: z-value < -1.96).



**Supplementary Figure 3. Test-retest analyses.** (A) Bar graphs of pmCSv structural connectivity with target areas, determined separately from the whole brain probabilistic map projected onto the right cortical surface of monkey F99 (upper row) and from the ROI-to-ROI analysis conducted in volumetric diffusion space. (B) Bar graphs of pmCSv functional connectivity with target areas, determined separately from odd (upper row) and even (lower rows) runs. Same conventions as those of **Figure 6B**.



**Supplementary Figure 4. ROI-based analysis of pmCSv/V6 connectivity. (A)** Location of V6 based on the sensitivity to egomotion-consistent optic flow in M01 (circles) and M02 (squares). M03 did not show significant activations in the parieto-occipital cortex. **(B)** Strength of structural connectivity ( $p$ -track) between individually-defined pmCSv and V6 ROIS. Measures from ipsilateral and contralateral hemispheres are shown as filled and open symbols respectively, for both M01 (circles) and M02 (squares). The bars indicate the mean and 95% CI. The horizontal dashed line corresponds to the V1/V2/V3 baseline. **(C)** Strength of functional connectivity ( $r$ -value), with the same conventions as (B).

**Supplementary Table 1. Connectivity strength between pmCSv and the atlas-defined areas.** Mean structural (p-track) and functional (r-value) connectivity of pmCSv with the atlas-defined areas, with standard deviation (SD) across both contralateral and ipsilateral hemispheres (n=12). Areas are ordered as a function of their cumulated ranks in structural and functional connectivity strengths.

AREA	STRUCTURAL (p-track)			FUNCTIONAL (r-value)		
	Mean	± SD	Rank	Mean	± SD	Rank
<b>23</b>	0.69	0.05	1	0.13	0.06	4
<b>F3</b>	0.63	0.05	6	0.20	0.11	1
<b>24d</b>	0.69	0.08	2	0.13	0.07	7
<b>F1</b>	0.53	0.09	8	0.17	0.09	2
<b>3</b>	0.49	0.09	13	0.13	0.06	5
<b>F2</b>	0.52	0.07	10	0.12	0.08	8
<b>7op</b>	0.44	0.13	16	0.11	0.06	11
<b>1</b>	0.39	0.09	25	0.14	0.05	3
<b>31</b>	0.67	0.06	3	0.05	0.05	25
<b>7m</b>	0.40	0.08	23	0.13	0.08	6
<b>8m</b>	0.52	0.06	9	0.06	0.05	20
<b>VIP</b>	0.50	0.11	11	0.07	0.05	18
<b>F4</b>	0.50	0.06	12	0.06	0.04	22
<b>F6</b>	0.39	0.09	24	0.10	0.09	13
<b>24b</b>	0.64	0.06	4	0.04	0.03	34
<b>TPt</b>	0.33	0.10	33	0.11	0.09	12
<b>8r</b>	0.41	0.08	20	0.05	0.04	29
<b>7B</b>	0.35	0.13	29	0.06	0.05	21
<b>AIP</b>	0.45	0.13	15	0.04	0.03	38
<b>F7</b>	0.42	0.12	17	0.04	0.03	36
<b>9-46d</b>	0.33	0.15	31	0.05	0.06	23
<b>LIP</b>	0.31	0.11	38	0.06	0.04	19
<b>MST</b>	0.30	0.11	41	0.08	0.06	16
<b>8B</b>	0.38	0.09	26	0.04	0.05	33
<b>8l</b>	0.47	0.07	14	0.03	0.02	46
<b>2</b>	0.31	0.11	37	0.05	0.03	24
<b>24c</b>	0.41	0.08	21	0.03	0.03	42
<b>46d</b>	0.33	0.10	35	0.04	0.04	31

<b>24a</b>	0.59	0.04	7	0.02	0.01	62
<b>STPc</b>	0.25	0.10	52	0.07	0.05	17
<b>SII</b>	0.40	0.15	22	0.02	0.03	49
<b>V6</b>	0.28	0.10	43	0.05	0.04	28
<b>44</b>	0.41	0.05	19	0.02	0.01	53
<b>MT</b>	0.28	0.12	42	0.04	0.03	30
<b>5</b>	0.19	0.08	65	0.12	0.05	9
<b>PO</b>	0.28	0.08	44	0.04	0.04	32
<b>Insula</b>	0.35	0.08	30	0.02	0.02	48
<b>MIP</b>	0.17	0.08	69	0.12	0.07	10
<b>7A</b>	0.19	0.11	66	0.09	0.06	14
<b>45B</b>	0.37	0.07	27	0.02	0.01	54
<b>LB</b>	0.27	0.18	46	0.04	0.03	35
<b>PIP</b>	0.22	0.09	59	0.05	0.04	27
<b>F5</b>	0.41	0.06	18	0.01	0.01	69
<b>MB</b>	0.27	0.11	47	0.03	0.02	43
<b>FST</b>	0.33	0.15	34	0.02	0.01	57
<b>V6A</b>	0.13	0.07	76	0.08	0.06	15
<b>PBc</b>	0.25	0.18	53	0.03	0.04	39
<b>29-30</b>	0.63	0.10	5	0.00	0.02	87
<b>Prostriate</b>	0.37	0.13	28	0.01	0.02	66
<b>9-46v</b>	0.33	0.10	32	0.01	0.02	63
<b>Aud-core</b>	0.26	0.15	49	0.03	0.02	47
<b>46v</b>	0.30	0.10	39	0.02	0.02	60
<b>V3A</b>	0.20	0.09	63	0.04	0.03	37
<b>V3</b>	0.22	0.07	57	0.03	0.02	44
<b>DP</b>	0.05	0.07	79	0.05	0.05	26
<b>PGa</b>	0.23	0.08	56	0.02	0.01	51
<b>V2</b>	0.20	0.06	64	0.03	0.02	45
<b>32</b>	0.32	0.09	36	0.01	0.01	75
<b>11</b>	0.28	0.11	45	0.01	0.01	67
<b>9</b>	0.23	0.12	55	0.02	0.04	58
<b>V1</b>	0.15	0.04	72	0.03	0.02	41
<b>V4t</b>	0.14	0.11	73	0.03	0.02	40
<b>STPi</b>	0.20	0.14	61	0.02	0.02	55
<b>13</b>	0.30	0.07	40	0.01	0.01	80
<b>45A</b>	0.25	0.11	50	0.01	0.02	70

<b>V4</b>	0.16	0.08	70	0.02	0.02	50
<b>TEOm</b>	0.18	0.18	68	0.02	0.03	52
<b>12</b>	0.25	0.10	51	0.01	0.01	72
<b>MEDIAL</b>	0.26	0.06	48	0.01	0.01	76
<b>Pi</b>	0.14	0.09	74	0.02	0.01	56
<b>ProM</b>	0.25	0.11	54	0.01	0.02	81
<b>TEO</b>	0.06	0.05	78	0.02	0.01	61
<b>25</b>	0.22	0.13	58	0.00	0.02	82
<b>TEam-p</b>	0.05	0.07	81	0.02	0.02	59
<b>Temporal-pole</b>	0.02	0.03	84	0.01	0.01	64
<b>14</b>	0.21	0.12	60	0.00	0.02	92
<b>TEpd</b>	0.01	0.01	87	0.01	0.01	65
<b>10</b>	0.13	0.09	75	0.01	0.01	79
<b>STPr</b>	0.01	0.02	86	0.01	0.01	68
<b>Gu</b>	0.20	0.12	62	-0.01	0.02	93
<b>PBr</b>	0.10	0.12	77	0.01	0.01	78
<b>IPa</b>	0.02	0.02	83	0.01	0.01	74
<b>OPRO</b>	0.19	0.12	67	0.00	0.01	91
<b>THTF</b>	0.02	0.02	85	0.01	0.01	73
<b>Piriform</b>	0.05	0.08	82	0.01	0.02	77
<b>TEpv</b>	0.00	0.01	89	0.01	0.01	71
<b>OPAI</b>	0.15	0.09	71	0.00	0.02	90
<b>Subiculum</b>	0.05	0.03	80	0.00	0.01	89
<b>TEam-a</b>	0.00	0.00	88	0.00	0.01	83
<b>TEav</b>	0.00	0.00	90	0.00	0.02	84
<b>TEad</b>	0.00	0.00	91	0.00	0.01	85
<b>Entorhinal</b>	0.00	0.00	92	0.00	0.01	86
<b>Perirhinal</b>	0.00	0.00	93	0.00	0.01	88