

SUPPLEMENTARY MATERIAL

Using normative age modelling to isolate subsets of individuals with autism expressing highly age-atypical cortical thickness features

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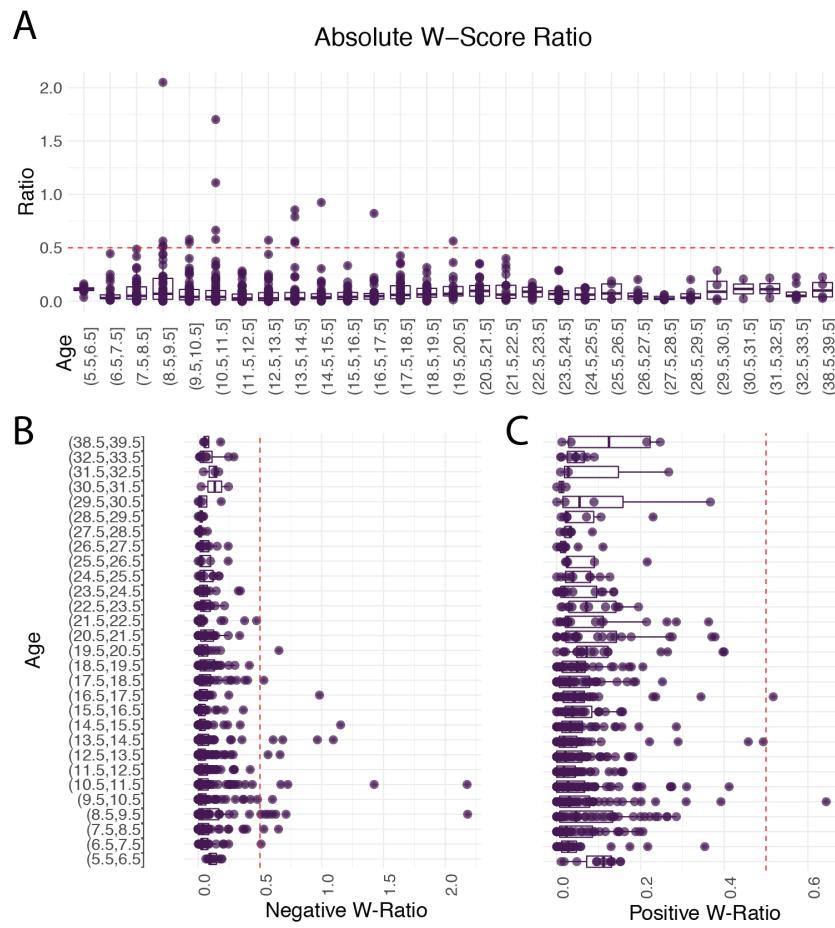
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Supplementary table S1: Number of subject per site from ABIDE I

	CALTECH	CMU	KKI	LEUVEN_1	LEUVEN_2	MAX_MUN	NYU	OHSU	OLIN	PITT	SBL	SDSU	STANFORD	TRINITY	UCLA_1	UCLA_2	UM_1	UM_2	USM	YALE
AUTISM	18	14	20	14	0	22	75	11	18	30	5	14	18	22	41	13	52	13	44	28
CONTROL	17	12	26	15	0	26	90	14	14	26	0	21	15	24	29	12	21	24	28	
OVERALL	35	26	46	29	0	48	165	25	32	56	5	35	33	46	70	25	102	34	68	56

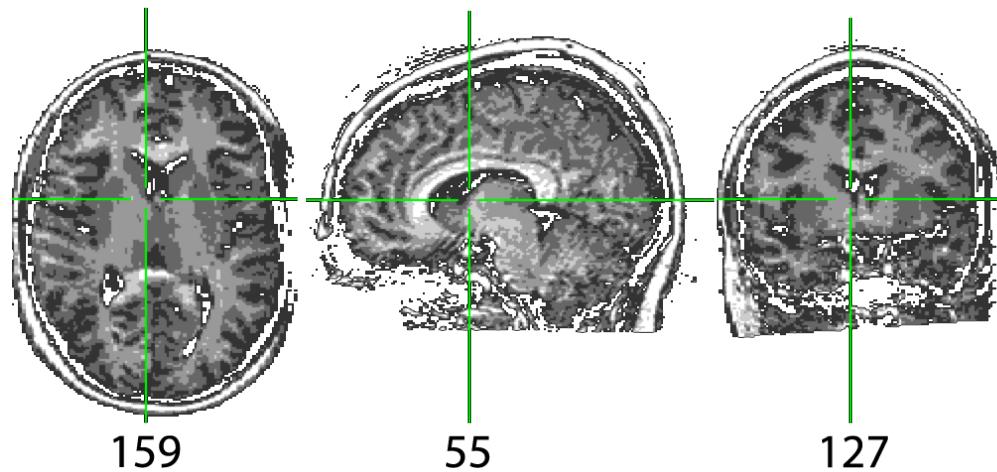
Supplementary table S2: Number of subject per site from ABIDE II

	ABIDEII-BNL_1	ABIDEII-EMC_1	ABIDEII-ETH_1	ABIDEII-GU_1	ABIDEII-IP_1	ABIDEII-IU_1	ABIDEII-KKL_1	ABIDEII-KUL_3	ABIDEII-NYU_1	ABIDEII-NYU_2	ABIDEII-OHSU_1	ABIDEII-OIH_2	ABIDEII-SDSU_1	ABIDEII-SU_2	ABIDEII-TCD_1	ABIDEII-U_MIA_1	ABIDEII-UCD_1	ABIDEII-UCLA_1	ABIDEII-USM_1
AUTISM	29	0	13	49	17	20	54	28	47	27	37	19	32	21	21	10	18	16	12
CONTROL	29	0	22	46	6	16	146	0	24	0	46	34	24	17	16	11	13	14	14
OVERALL	58	0	35	95	23	36	200	28	71	27	83	53	56	38	37	21	31	30	26



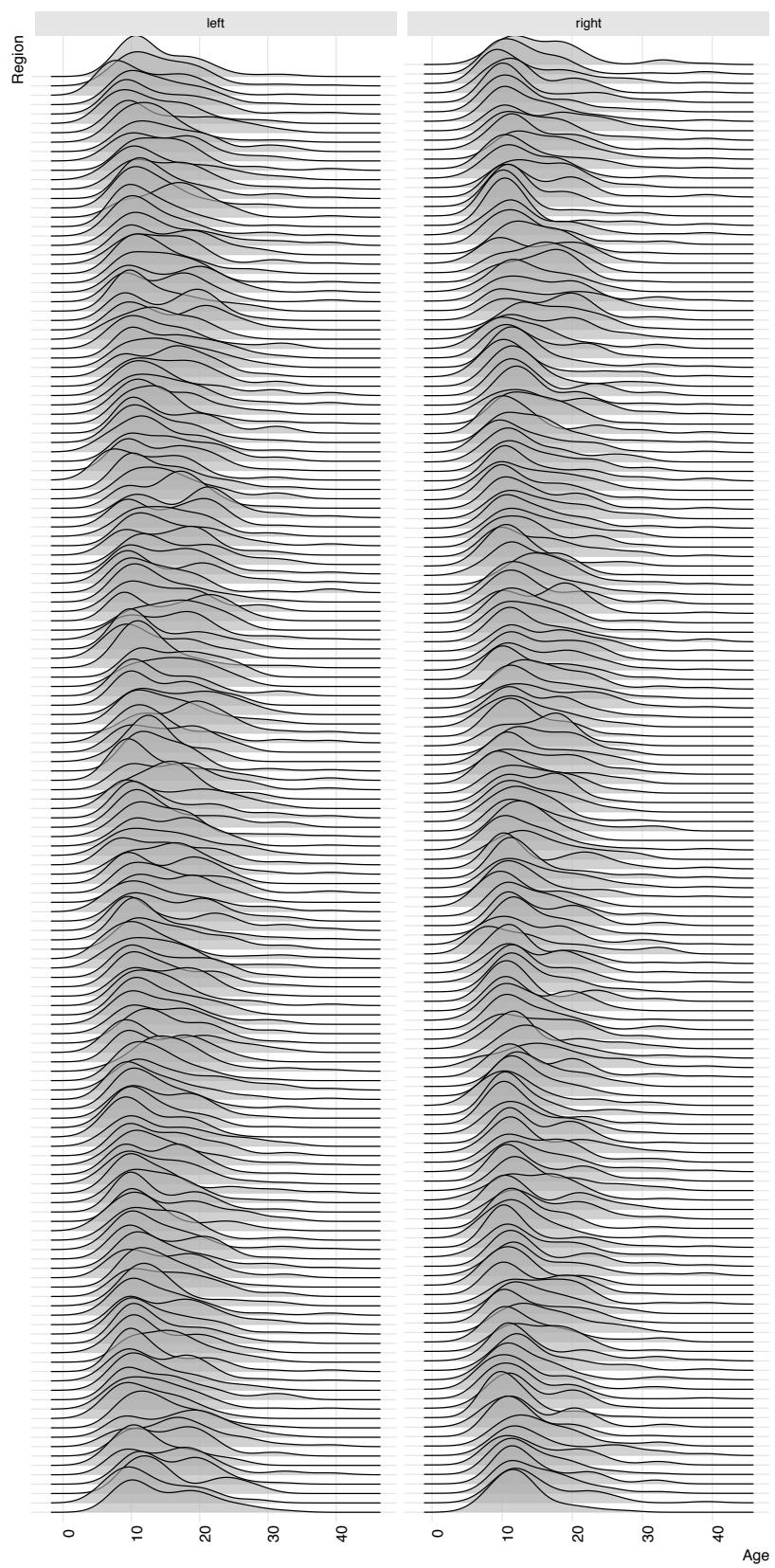
Supplemental Figure S1: Global individual W-Score ratios

Panel A shows the distribution of absolute global ratio scores for each age-bin. There is a total of 18 subjects for which the ratio score exceeds 0.5 meaning they have more atypical than typical regions. Panels B and C show the same but stratified for positive and negative outliers. For the negative outliers the number is 25 subjects of a ratio score larger than 0.5, for positive there are only 2 that exceed this threshold.



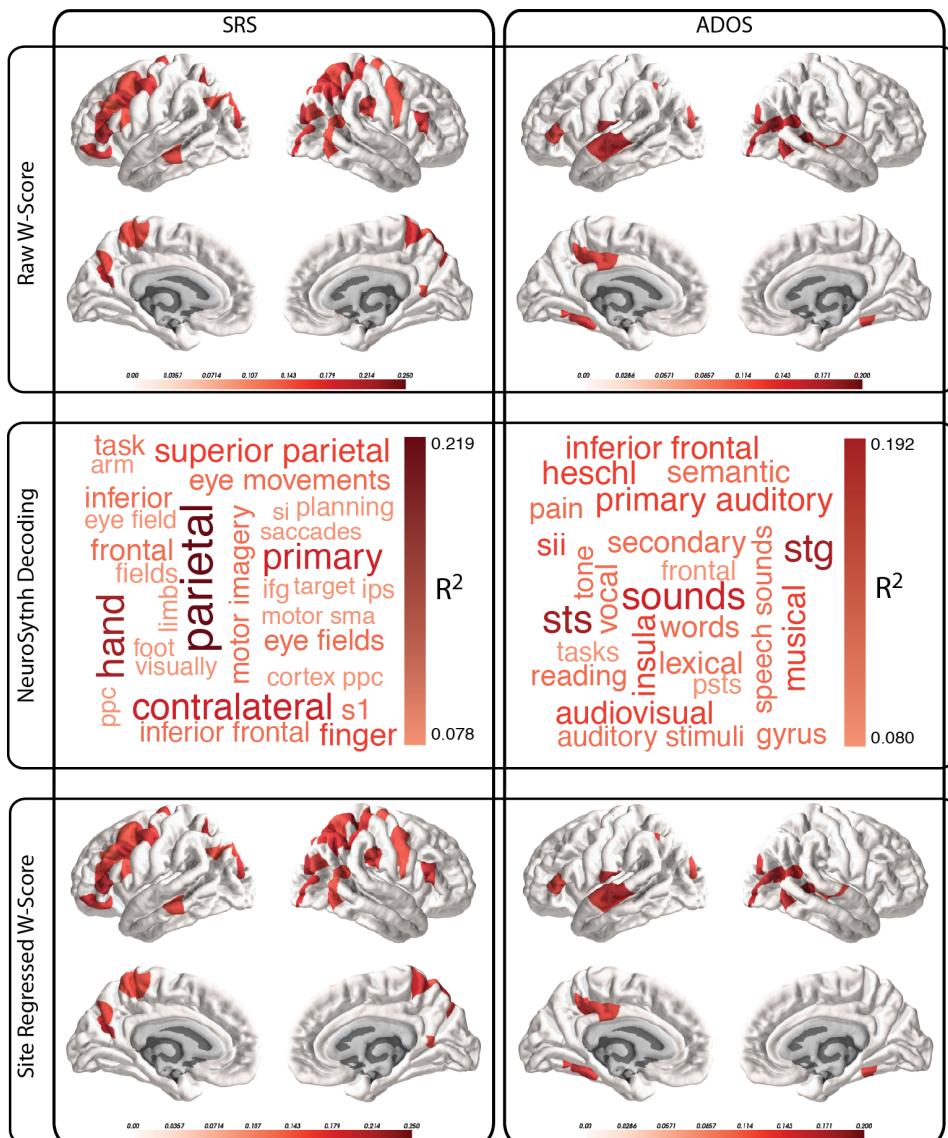
Supplemental Figure S2: Outlier example

Example subject for which the global ratio score exceeded 0.5.



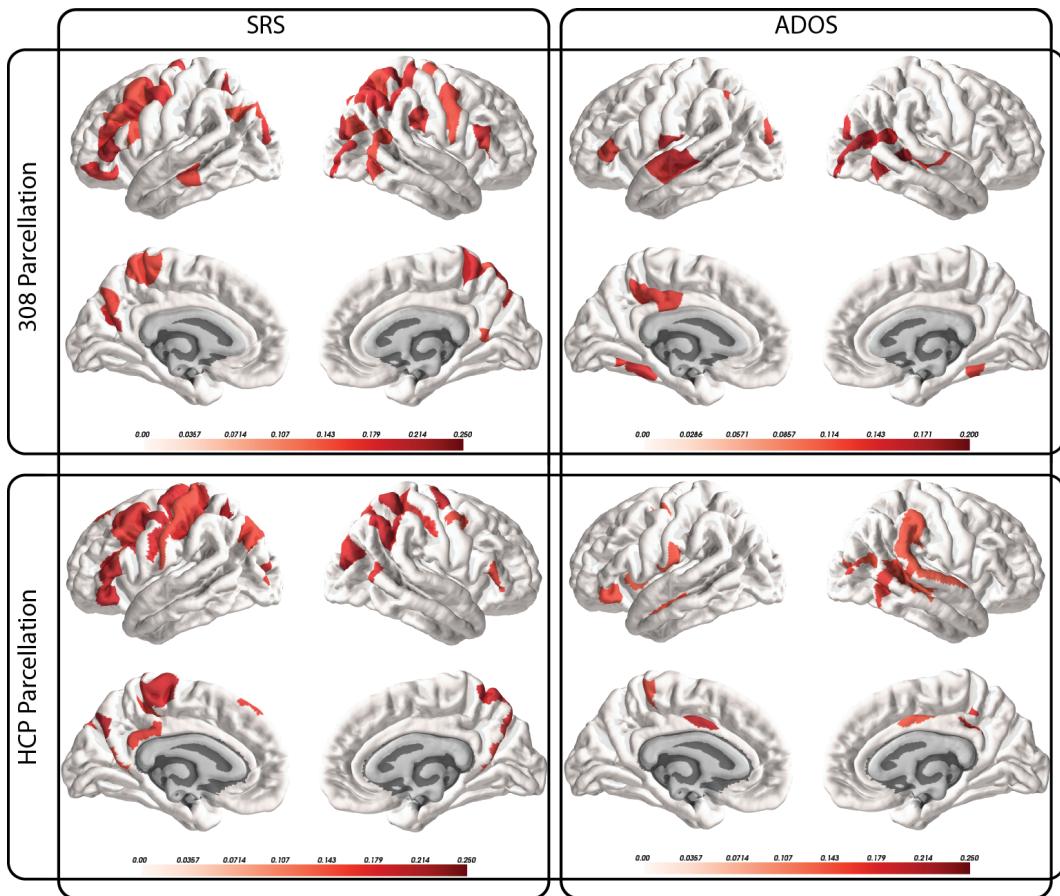
Supplemental Figure S3: Outlier age distribution per brain region

Probability density plots of the age of all outliers for each brain region. Left and right refer to left and right hemisphere.



Supplemental Figure S4: Phenotype – W-Score correlations

Spearman correlations between SRS and w-score, their neurosynth decoding and the correlation after regressing out scanning site are shown in the left panel. The right panel shows the same for the ADOS.



Supplemental Figure S5: Parcellation consistency of correlations

Side by side presentation of the spearman correlations for the two parcellation schemes used.