

# Supplementary Information

## ANTS Pediatric template

---

Ghosh et al. (2011). Evaluating the Validity of Volume-Based and Surface-Based Brain Image Registration for Developmental Cognitive Neuroscience Studies in Children 4-to-11 Years of Age. Neuroimage

### Pediatric Template

---

[Creative Commons Attribution 3.0 United States License](https://creativecommons.org/licenses/by/4.0/) 

#### Details

---

##### Participants

31 participants aged 4.2 to 11 years of age.

##### Data acquisition

MPRAGE sequence on a Siemens Magnetom Trio 3T scanner (16 subjects: TR: 2350 ms, TE: 3.45 ms, TI: 1100ms, Flip angle: 7 deg; 15 subjects: TR: 2000 ms, TE: 3.39 ms, TI: 900ms, Flip angle: 9 deg; GRAPPA: x2).

##### Template creation parameters

Processed using [ANTS](https://ants.xislab.org/) circa 2009.

```
=====
TRANSFORMATION SyN[0.5]
ITERATLEVEL    30x99x11
REGULARIZATION Gauss[2,0]
METRIC         PR[ METRICPARAMS=1,2 ]
ITERATIONS     6
=====
```

The following steps were performed to ensure this download was in MNI space.

```
mri_convert template.nii.gz template.nii.gz --out_orientation LAS
flirt -in template.nii.gz -ref MNI152_T1_1mm_brain.nii.gz \
-out ANTS_pediatric.nii.gz
```

#### Comparison

---

The figure below compares SPM 5 template (T1.nii), FreeSurfer affine template (average/711-2C\_as\_mni\_average\_305.4dflp.img) and the above custom ANTS template.

