

## CAF dataset for Allen Reference Atlas

<http://mouse.brain-map.org/launchviewer.do>

1. Fetch AtlasAnnotation?25.sva sparse volume file from <http://community.brain-map.org/confluence/download/attachments/525267/data.zip?version=1>
2. Coordinates in this volume are expressed in Mouse ABAvoxel 1.0 (ABAvoxel, INCF:0100) SRS, in which units of measurements are voxels. In order to express coordinates in stereotaxic coordinates (with bregma point defined as origin of the coordinate system), the volume has to be transformed into Mouse ABReference 1.0 SRS (ABReference, INCF:0101).
3. Such transformation is given by the TransfomPOI INCF DAI service ie. [this](#) request.
4. Transformation may be calculates from 4 points in ABAvoxel SRS ( $p_1, p_2, p_3, p_4$ ) and 4 corresponding point in ABReference SRS ( $p_1', p_2', p_3', p_4'$ ) by solving following equation: