

Package: ggsegAAL (via r-universe)

May 23, 2026

Title AAL Atlases for the 'ggsegverse' Ecosystem

Version 2.0.2

Description AAL (Automated Anatomical Labeling) atlases for the 'ggseg' ecosystem. Provides unified 'ggseg_atlas' objects for AAL2 (cortical, Rolls et al. 2015) and AAL3 (cortical, subcortical, cerebellum, Rolls et al. 2020), with both 2D polygon geometry and 3D vertex/mesh data for use with 'ggseg' and 'ggseg3d'.

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Encoding UTF-8

Depends R (>= 3.5)

Imports ggseg.formats

Suggests ggseg, ggseg3d, ggplot2, knitr, rmarkdown, testthat (>= 3.0.0), vdiff

Remotes ggsegverse/ggseg

URL <https://github.com/ggsegverse/ggsegAal>

BugReports <https://github.com/ggsegverse/ggsegAal/issues>

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.3

Config/testthat/edition 3

Config/Needs/website ggsegverse/ggseg.docs

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Repository <https://ggsegverse.r-universe.dev>

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RemoteUrl <https://github.com/ggsegverse/ggsegAal>

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Contents

aal	2
aal2	3
aal3_cerebellum	4
aal3_cortical	4
aal3_subcortical	5
Index	6

aal	<i>AAL Cortical Atlas</i>
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Description

Brain atlas for the original Automated Anatomical Labeling parcellation (Tzourio-Mazoyer et al. 2002).

Usage

```
aal()
```

Value

A `ggseg.formats::ggseg_atlas` object (cortical).

References

Tzourio-Mazoyer N, Landeau B, Papathanassiou D, et al. (2002). Automated Anatomical Labeling of Activations in SPM Using a Macroscopic Anatomical Parcellation of the MNI MRI Single-Subject Brain. *NeuroImage*, 15(1):273-289. doi:10.1006/nimg.2001.0978

See Also

Other `ggseg_atlases`: `aal2()`, `aal3_cerebellum()`, `aal3_cortical()`, `aal3_subcortical()`

Other `cortical_atlases`: `aal2()`, `aal3_cortical()`

Examples

```
aal()
## Not run: plot(aal())
```

`aal2`*AAL2 Cortical Atlas*

Description

Brain atlas for the AAL2 parcellation (Rolls et al. 2015) with 41 cortical regions per hemisphere. Contains both 2D polygon geometry for `ggseg::geom_brain()` and 3D vertex indices for `ggseg3d::ggseg3d()`.

Usage

```
aal2()
```

Details

Region names confirmed by Herve Lemaitre (AAL2 co-author), mapping the original generic annotation labels to anatomical AAL2 names.

Value

A `ggseg.formats::ggseg_atlas` object (cortical).

References

Rolls, E. T., Joliot, M., & Tzourio-Mazoyer, N. (2015). Implementation of a new parcellation of the orbitofrontal cortex in the automated anatomical labeling atlas. *Neuroimage*, 122, 1-5. ([PubMed](#))

See Also

Other `ggseg_atlases`: `aal()`, `aal3_cerebellum()`, `aal3_cortical()`, `aal3_subcortical()`

Other `cortical_atlases`: `aal()`, `aal3_cortical()`

Examples

```
aal2()
## Not run: plot(aal2())
```

aal3_cerebellum	<i>AAL3 Cerebellum Atlas</i>
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Description

Cerebellar parcellation from AAL3 (Rolls et al. 2020) with 17 regions including bilateral lobules and midline vermis. Contains both 2D polygon geometry for `ggseg::geom_brain()` and 3D meshes for `ggseg3d::ggseg3d()`.

Usage

```
aal3_cerebellum()
```

Value

A `ggseg.formats::ggseg_atlas` object (subcortical).

References

Rolls, E. T., Huang, C. C., Lin, C. P., Feng, J., & Joliot, M. (2020). Automated anatomical labelling atlas 3. *Neuroimage*, 206, 116189. ([PubMed](#))

See Also

Other `ggseg_atlases`: `aal()`, `aal2()`, `aal3_cortical()`, `aal3_subcortical()`

Examples

```
aal3_cerebellum()  
## Not run: plot(aal3_cerebellum())
```

aal3_cortical	<i>AAL3 Cortical Atlas</i>
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Description

Cortical parcellation from AAL3 (Rolls et al. 2020) with 45 regions per hemisphere. Contains 2D polygon geometry for `ggseg::geom_brain()`.

Usage

```
aal3_cortical()
```

Value

A `ggseg.formats::ggseg_atlas` object (cortical).

References

Rolls, E. T., Huang, C. C., Lin, C. P., Feng, J., & Joliot, M. (2020). Automated anatomical labelling atlas 3. *Neuroimage*, 206, 116189. ([PubMed](#))

See Also

Other ggseg_atlases: [aal\(\)](#), [aal2\(\)](#), [aal3_cerebellum\(\)](#), [aal3_subcortical\(\)](#)

Other cortical_atlases: [aal\(\)](#), [aal2\(\)](#)

Examples

```
aal3_cortical()
## Not run: plot(aal3_cortical())
```

aal3_subcortical	<i>AAL3 Subcortical (Basal Ganglia) Atlas</i>
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Description

Subcortical parcellation from AAL3 (Rolls et al. 2020) covering basal ganglia and thalamic nuclei with 22 regions. Contains both 2D polygon geometry for `ggseg::geom_brain()` and 3D meshes for `ggseg3d::ggseg3d()`.

Usage

```
aal3_subcortical()
```

Value

A `ggseg.formats::ggseg_atlas` object (subcortical).

References

Rolls, E. T., Huang, C. C., Lin, C. P., Feng, J., & Joliot, M. (2020). Automated anatomical labelling atlas 3. *Neuroimage*, 206, 116189. ([PubMed](#))

See Also

Other ggseg_atlases: [aal\(\)](#), [aal2\(\)](#), [aal3_cerebellum\(\)](#), [aal3_cortical\(\)](#)

Examples

```
aal3_subcortical()
## Not run: plot(aal3_subcortical())
```

Index

* **cerebellar_atlases**

aal3_cerebellum, 4

* **cortical_atlases**

aal, 2

aal2, 3

aal3_cortical, 4

* **ggseg_atlases**

aal, 2

aal2, 3

aal3_cerebellum, 4

aal3_cortical, 4

aal3_subcortical, 5

* **subcortical_atlases**

aal3_subcortical, 5

aal, 2, 3–5

aal2, 2, 3, 4, 5

aal3_cerebellum, 2, 3, 4, 5

aal3_cortical, 2, 3, 4, 4, 5

aal3_subcortical, 2–4, 5, 5

ggseg.formats::ggseg_atlas, 2–5

ggseg3d::ggseg3d(), 3–5

ggseg::geom_brain(), 3–5