

Package: ggsegHO (via r-universe)

October 14, 2026

Title Harvard-Oxford Atlas for the 'ggseg' Ecosystem

Version 2.1.0

Description Harvard-Oxford cortical and subcortical atlases for the 'ggseg' ecosystem. Includes the original Harvard-Oxford atlas (FSL) and the Harvard-Oxford Atlas 2.0 (HOA-2, Rushmore et al. 2022) as 'ggseg_atlas' objects with 2D polygon and 3D mesh geometry.

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Encoding UTF-8

Depends R (>= 3.5)

Imports ggseg.formats, lifecycle

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

Remotes ggsegverse/ggseg

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

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

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.3

Config/testthat/edition 3

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

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ho_cort	<i>Harvard-Oxford Cortical Atlas</i>
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Description

Cortical parcellation with 48 regions per hemisphere from the Harvard-Oxford atlas distributed with FSL. Contains 2D polygon geometry for `ggseg::geom_brain()` and 3D vertex indices for `ggseg3d::ggseg3d()`.

Usage

```
ho_cort()
```

Value

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

References

Makris, et al. (2006) Schizophrenia research 83(2-3):155-151 ([doi:10.1016/j.schres.2005.11.020](https://doi.org/10.1016/j.schres.2005.11.020))

See Also

Other `ggseg_atlas`s: `ho2_cort()`, `ho2_sub()`, `ho_sub()`

Other cortical_atlas: `ho2_cort()`

Examples

```
ho_cort()
plot(ho_cort())
```

ho_sub	<i>Harvard-Oxford Subcortical Atlas</i>
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Description

Subcortical segmentation from the Harvard-Oxford atlas distributed with FSL, drawn on a grey-brain anatomical context. Contains 2D polygon geometry for `ggseg::geom_brain()` and 3D mesh data for `ggseg3d::ggseg3d()`.

Usage

```
ho_sub()
```

Value

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

References

Makris, et al. (2006) Schizophrenia research 83(2-3):155-151 ([doi:10.1016/j.schres.2005.11.020](https://doi.org/10.1016/j.schres.2005.11.020))

See Also

Other `ggseg_atlas`s: `ho2_cort()`, `ho2_sub()`, `ho_cort()`

Other `subcortical_atlas`s: `ho2_sub()`

Examples

```
ho_sub()
plot(ho_sub())
```

`ho2_cort`*Harvard-Oxford Atlas 2.0 Cortical*

Description

Cortical parcellation with 49 regions per hemisphere from the Harvard-Oxford Atlas 2.0 (HOA-2), based on 50 HCP subjects. Contains 2D polygon geometry for `ggseg::geom_brain()` and 3D vertex indices for `ggseg3d::ggseg3d()`.

Usage

```
ho2_cort()
```

Value

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

References

Rushmore RJ, et al. (2022). Frontiers in Neuroanatomy 16:1035420. ([doi:10.3389/fnana.2022.1035420](https://doi.org/10.3389/fnana.2022.1035420))

See Also

Other `ggseg_atlas`s: `ho2_sub()`, `ho_cort()`, `ho_sub()`

Other `cortical_atlas`s: `ho_cort()`

Examples

```
ho2_cort()
plot(ho2_cort())
```

ho2_sub*Harvard-Oxford Atlas 2.0 Subcortical*

Description

Subcortical segmentation with 23 structures from the Harvard-Oxford Atlas 2.0 (HOA-2), based on 100 HCP subjects: the deep grey structures, the brain-stem, and the cerebellum split into grey and white matter. Drawn in four views: two axial, one coronal and a left-hemisphere sagittal. Contains 2D polygon geometry for `ggseg::geom_brain()` and 3D mesh data for `ggseg3d::ggseg3d()`.

Usage

```
ho2_sub()
```

Details

HOA-2 divides the cerebellum into cortex and white matter only, which is a tissue segmentation like the rest of the subcortical volume rather than a cerebellar parcellation, so it belongs to this atlas. For a parcellated cerebellum see the SUI and Buckner atlases in `ggsegCerebellum`.

Value

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

References

Rushmore RJ, et al. (2022). Frontiers in Neuroanatomy 16:1035420. ([doi:10.3389/fnana.2022.1035420](https://doi.org/10.3389/fnana.2022.1035420))

See Also

Other `ggseg_atlases`: `ho2_cort()`, `ho_cort()`, `ho_sub()`

Other subcortical_atlases: `ho_sub()`

Examples

```
ho2_sub()
plot(ho2_sub())
```

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