spmatrix drop — List and delete weighting matrices stored in memory

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Description

spmatrix dir lists the Sp weighting matrices stored in memory. spmatrix drop deletes a single Sp matrix from memory. spmatrix clear deletes all Sp matrices from memory.

Quick start

List weighting matrices stored in memory spmatrix dir

Drop weighting matrix Wd spmatrix drop Wd

Drop all weighting matrices spmatrix clear

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Syntax

List the Sp weighting matrices stored in memory

spmatrix dir

Drop an Sp matrix from memory

spmatrix drop spmatname

Drop all weighting matrices from memory

spmatrix clear

spmatname is the name of an Sp weighting matrix stored in memory.

collect is allowed with spmatrix dir; see [U] 11.1.10 Prefix commands.

Remarks and examples

Remarks are presented under the following headings:

spmatrix dir Save and drop matrices you are not using

spmatrix dir

The spatial weighting matrices that you create are stored in memory. You create them with the following commands:

spmatrix create spmatrix import spmatrix fromdata spmatrix userdefined spmatrix spfrommata

spmatrix dir lists spatial weighting matrices names:

. spmatrix dir

| Weighting matrix name | N x N | Туре | Normalization |
|-----------------------|-----------|------------|---------------|
| Wc | 254 x 254 | contiguity | spectral |
| Wd | 254 x 254 | idistance | spectral |

When spmatrix dir reports that a matrix is a contiguity matrix, as it does with Wc, contiguity is used in its ex post sense. See [SP] **spmatrix summarize** or the [SP] **Glossary** for the definition of ex post contiguity matrices.

Save and drop matrices you are not using

Spatial weighting matrices are stored in memory, and they can consume a lot of it. The ones above consume a mere $254 \times 254 = 517128$ bytes each. Had the matrices been 3000×3000 , they would have consumed 69 megabytes each.

Spatial weighting matrices can be saved on disk. Any that you are not currently using, you can save to disk and drop from memory:

```
    spmatrix save Wc using wc
(matrix Wc saved in file wc.stswm)
    spmatrix drop Wc
```

All spatial weighting matrices are dropped when you type

. spmatrix clear

or

```
. clear mata
```

or

. clear all

The clear mata command also clears any Mata functions or objects in memory. The clear all command also clears any data in memory.

Stored results

```
spmatrix dir stores the following in r():
```

Macros r(names) space-separated list of matrix names

Also see

- [SP] spmatrix Categorical guide to the spmatrix command
- [SP] spmatrix summarize Summarize weighting matrix stored in memory
- [SP] Intro Introduction to spatial data and SAR models
- [D] clear Clear memory

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