Adolists: A New Concept for Stata

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Motivation

I wanted a tool to

1) create a list of installed user ados, switch systems (or upgrade Stata) and easily install the ados on the new system (possibly after editing the list)

2) create thematic lists of user ados that can be shared and easily installed and uninstalled

   => bringing structure into the SSC Archive and other download sites

Examples:

   - 41 User Ados Everyone Should Know

   - The Collected Works of Nicholas J. Cox, A-H

   - lists on data management, graphics, time-series analysis, income inequality, etc., etc.

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New command

- New command called **adolist** to manage (create, install, uninstall) lists of ado packages.

- The command uses meta data only (package names and URLs). The actual contents of the packages is not included in the package lists.

- Heavy use of Mata is made. Therefore, Stata 9 or newer is required.

- **adolist** goes deep into the system and, e.g., parses Stata's user ado track file.

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Syntax

Describe a package list

    adolist <u>describe</u> *pkl* [, <u>from</u>(*path*) ssc ado ...]

Install a package list

    adolist <u>install</u> *pkl* [, <u>from</u>(*path*) ssc <u>replace</u> ...]

Update an installed package list

    adolist <u>update</u> *pkl* [, ...]

Uninstall a package list

    adolist <u>uninstall</u> *pkl* [, ...]

List installed package lists

    adolist [**dir**] [, ...]

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Syntax (continued)

Create a package list

    adolist <u>sto</u>re *pkl* [, *store_options*]

    adolist <u>sto</u>re [*packages*] <u>us</u>ing *pkl* [, *store_options*]

    adolist <u>li</u>st [*packages*] [, *store_options*]

store_options	description
<u>help</u>	produce a help file
<u>tit</u>le(*str*)	include a title
<u>des</u>cription(*str*)	include a description
<u>aut</u>hor(*str*)	identify package list author
<u>pat</u>h(*str*)	specify package list URL
<u>rep</u>lace	overwrite existing files
...	...

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Example

Package list containing programs for the decomposition of wage differentials. The list is called **wagegap** and is located at **net/w** (could also be an URL).

Describe the package list:

    adolist describe wagegap, from(net/w)
    <run>

Install the packages in the list:

    adolist install wagegap, from(net/w)
    <run>

See what's installed:

    adolist dir
    <run>

```
Stata/MP 10.0 - [Results]
File  Edit  Data  Graphics  Statistics  User  Window  Help

Command

. do_example do/1.ihlp, nor

.        adolist describe wagegap, from(net/w)

Package list: wagegap                              (click here to install)
Source file:  wagegap.pkl
Help file:    wagegap.hlp
From:         D:\Home\NASUG07\adolist\net\w

  Wage gap decomposition packages
  This package list comprises ado packages used for the decomposition of
  wage or income differentials and related problems.
  Ben Jann, ETH Zurich, jann@soz.gess.ethz.ch

          Package              From

[ D I ]   oaxaca               D:/Home/NASUG07/adolist/net/o
[ D I ]   decomp               D:/Home/NASUG07/adolist/net/d
[ D I ]   jmpierce2            D:/Home/NASUG07/adolist/net/j
[ D I ]   smithwelch           D:/Home/NASUG07/adolist/net/s

.
end of do-file

.
.

D:\Home\NASUG07\adolist
```

```
Stata/MP 10.0 - [Results]
File  Edit  Data  Graphics  Statistics  User  Window  Help

Command

.
end of do-file

.
.
.
. do_example do/2.ihlp, nor

.        adolist install wagegap, from(net/w)
checking oaxaca consistency and verifying not already installed...
installing into D:\Home\NASUG07\adolist\ado\plus/...
installation complete.
checking decomp consistency and verifying not already installed...
installing into D:\Home\NASUG07\adolist\ado\plus/...
installation complete.
checking jmpierce2 consistency and verifying not already installed...
installing into D:\Home\NASUG07\adolist\ado\plus/...
installation complete.
checking smithwelch consistency and verifying not already installed...
installing into D:\Home\NASUG07\adolist\ado\plus/...
installation complete.

.
end of do-file

.

D:\Home\NASUG07\adolist
```

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Command

```
installing into D:\Home\NASUG07\adolist\ado\plus/...
installation complete.
checking decomp consistency and verifying not already installed...
installing into D:\Home\NASUG07\adolist\ado\plus/...
installation complete.
checking jmpierce2 consistency and verifying not already installed...
installing into D:\Home\NASUG07\adolist\ado\plus/...
installation complete.
checking smithwelch consistency and verifying not already installed...
installing into D:\Home\NASUG07\adolist\ado\plus/...
installation complete.

.
end of do-file

. do_example do/3.ihlp, nor

.          adolist dir

              Package list       From
         _____
[ D U X ]   wagegap                 D:\Home\NASUG07\adolist\net\w

.
end of do-file

.
```

help wagegap

D:\Home\NASUG07\adolist

Viewer (#1) [help NASUG07_adolist]

help NASUG07_adolist

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```
              ┌─── Example (continued) ───┐

   Add another package list called blinderoaxaca, located at
   net/b.

        adolist describe blinderoaxaca, from(net/b)
        <run>

        adolist install blinderoaxaca, from(net/b)
        adolist
        <run>

   Uninstall a list:

        adolist uninstall wagegap
        <run>

   adolist is smart and only removes packages that are not part of
   another installed package list.

   Updating is possible too (download newest versions, add new
   packages, remove discontinued).
```

Stata/MP 10.0 - [Results]

File Edit Data Graphics Statistics User Window Help

```
Command
```

```
.
end of do-file

. do_example do/4.ihlp, nor

.            adolist describe blinderoaxaca, from(net/b)

Package list: blinderoaxaca                        (click here to install)
Source file:  blinderoaxaca.pkl
Help file:    blinderoaxaca.hlp
From:         D:\Home\NASUG07\adolist\net\b

  Blinder-Oaxaca decomposition packages
  This package list comprises ado packages implementing the so-called
  Blinder-Oaxaca decomposition.
  Ben Jann, ETH Zurich, jann@soz.gess.ethz.ch

        Package          From
_____
[ D I ]  oaxaca          D:/Home/NASUG07/adolist/net/o
[ D I ]  decomp          D:/Home/NASUG07/adolist/net/d

.
end of do-file

.
```

D:\Home\NASUG07\adolist

Stata/MP 10.0 - [Results]

File Edit Data Graphics Statistics User Window Help

```
Command
```

```
        Package          From
_____
[ D I ]  oaxaca          D:/Home/NASUG07/adolist/net/o
[ D I ]  decomp          D:/Home/NASUG07/adolist/net/d

.
end of do-file

. do_example do/5.ihlp, nor

.            adolist install blinderoaxaca, from(net/b)
checking oaxaca consistency and verifying not already installed...
all files already exist and are up to date.
checking decomp consistency and verifying not already installed...
all files already exist and are up to date.

.            adolist

        Package list     From
_____
[ D U X ]  blinderoaxaca   D:\Home\NASUG07\adolist\net\b
[ D U X ]  wagegap         D:\Home\NASUG07\adolist\net\w

.
end of do-file

.
```

D:\Home\NASUG07\adolist

```
            Package list          From

[ D U X ]    blinderoaxaca         D:\Home\NASUG07\adolist\net\b
[ D U X ]    wagegap               D:\Home\NASUG07\adolist\net\w

.
end of do-file

. do_example do/6.ihlp, nor

.          adolist uninstall wagegap

package jmpierce2 from D:\Home\NASUG07\adolist\net\j
       'JMPIERCE2': module to compute trend decomposition of outcome differentials

(package uninstalled)

package smithwelch from D:\Home\NASUG07\adolist\net\s
       'SMITHWELCH': module to compute trend decomposition of outcome differentials

(package uninstalled)

.
end of do-file

.
```

D:\Home\NASUG07\adolist

Example (continued)

Creating a package list file from installed packages; first
check what's around:

```
    adolist list
    <run>
```

Store the package list to a file and also produce a help file:

```
    adolist store using mystuff, help replace
    <run>
```

Add other packages, etc.:

```
    adolist store                                    ///
        oaxaca decomp "gdecomp SSC <title>"          ///
            using mystuff,                           ///
                help replace nosort                  ///
                path(SSC) author(Ben Jann)           ///
                title(A bunch of ados)
    <run>
```

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Command

```
.
end of do-file

. do_example do/7.ihlp, nor

.           adolist list
*! Stata package list  14aug2007
decomp.pkg D:\Home\NASUG07\adolist\net\d
oaxaca.pkg D:\Home\NASUG07\adolist\net\o

.
end of do-file

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```

D:\Home\NASUG07\adolist

File Edit Data Graphics Statistics User Window Help

Command

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. do_example do/8.ihlp, nor

.           adolist store using mystuff, help replace
(mystuff.pkl created; containing 2 packages)
(mystuff.hlp created)

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end of do-file

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```
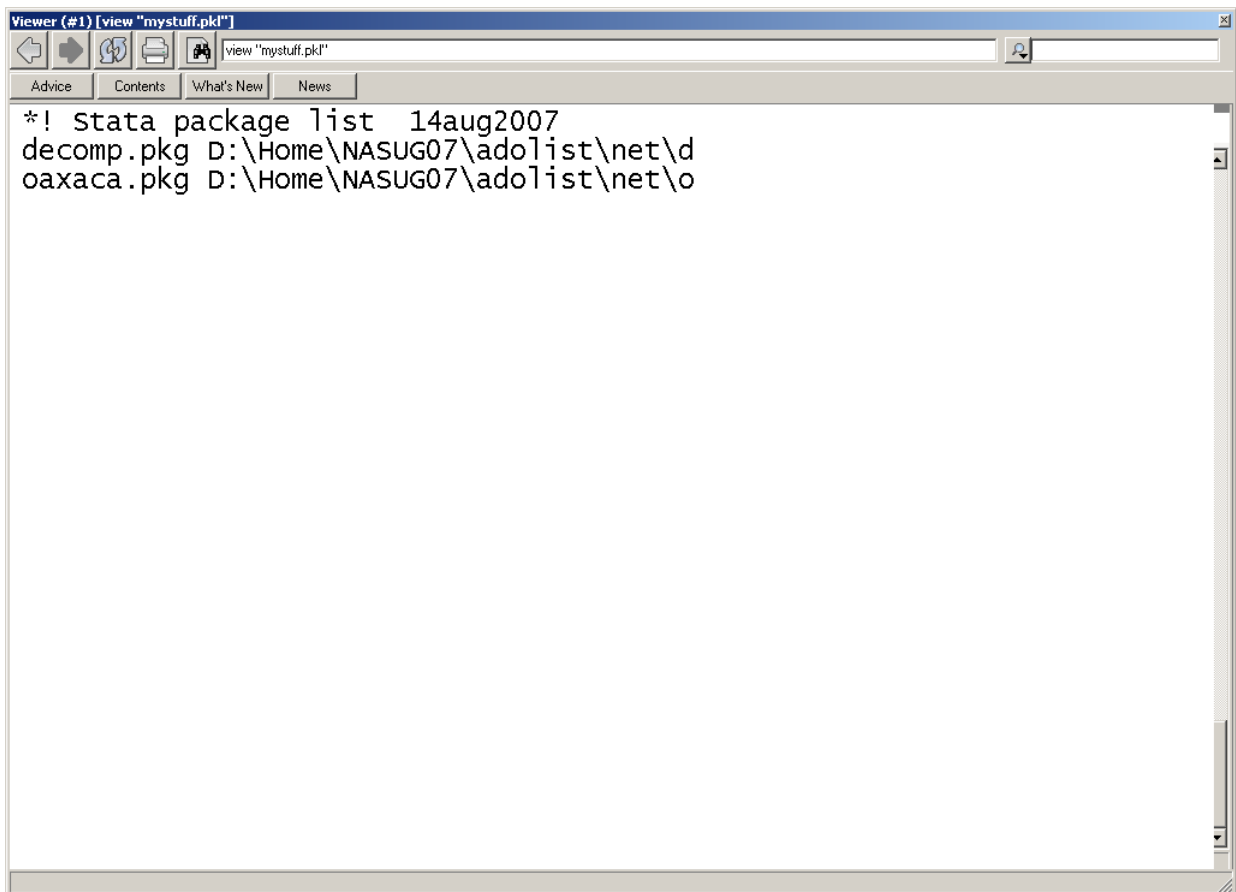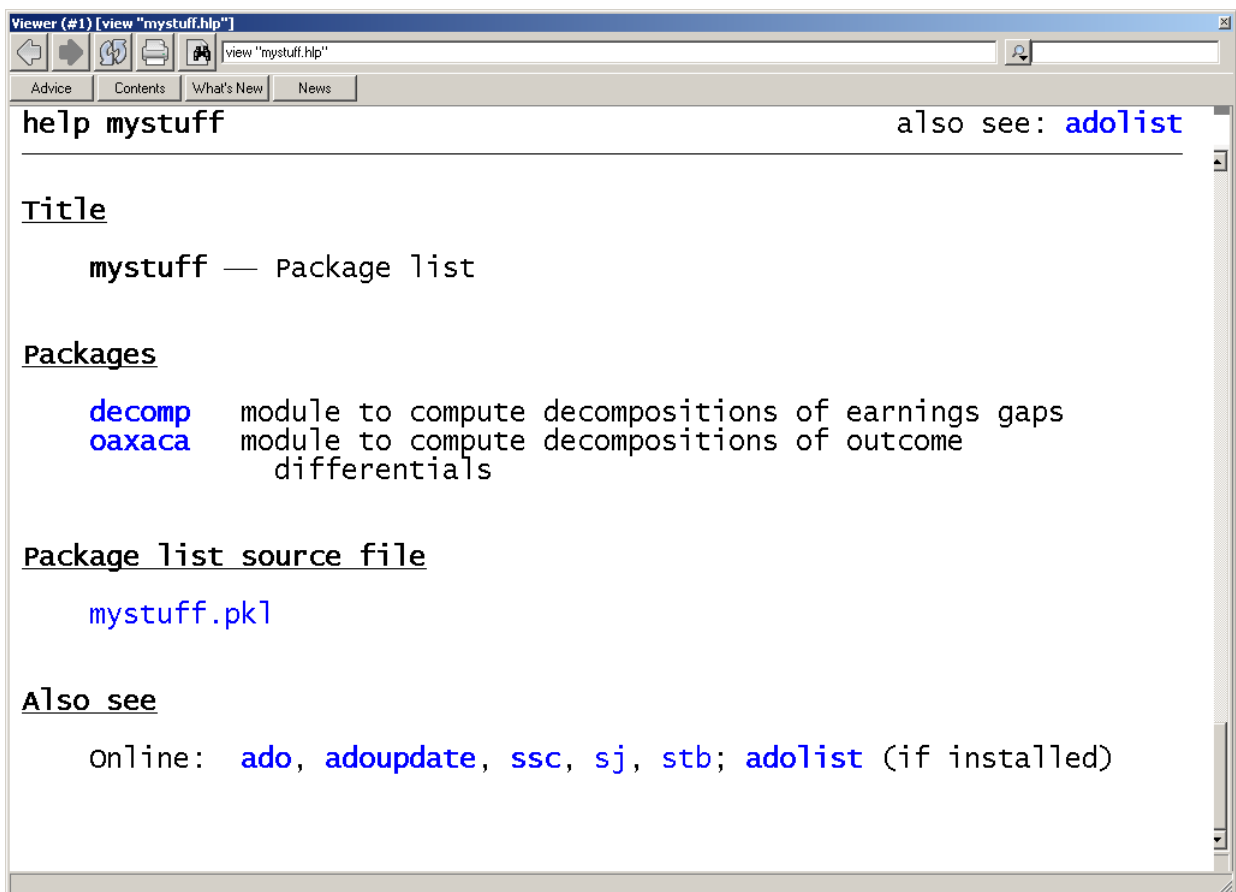
D:\Home\NASUG07\adolist

view "mystuff.pkl"

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```
*! Stata package list  14aug2007
decomp.pkg D:\Home\NASUG07\adolist\net\d
oaxaca.pkg D:\Home\NASUG07\adolist\net\o
```

view "mystuff.hlp"

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help mystuff   also see: **adolist**

Title

    mystuff — Package list

Packages

    decomp   module to compute decompositions of earnings gaps
    oaxaca   module to compute decompositions of outcome
                differentials

Package list source file

    mystuff.pkl

Also see

    Online: **ado**, **adoupdate**, **ssc**, **sj**, **stb**; **adolist** (if installed)

view "mystuff.hlp"

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```
help mystuff                                    also see: adolist
```

Title

mystuff — A bunch of ados

Installation

Type

    . adolist install mystuff, ssc

to install all packages in the list. **adolist** is required. To install **adolist**, type

    . ssc install adolist

Packages

oaxaca   module to compute decompositions of outcome
            differentials
decomp   module to compute decompositions of earnings gaps
gdecomp   <title>

help NASUG07_adolist

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Summary

- **adolist** makes it easy to handle package lists, I believe.

- My hope is that people will pick it up and create lists and post them on SSC. This would tidy up the archive a bit.

- However: I should not have held this talk because providing such functionality would really be Stata Corp's business.

  This stuff is too low in the system to be done by users. In fact, my suggestion would be to renew and generalize the existing -net- technology. For example, it would be useful to be able to include references to other packages (dependencies) in package definitions.

<clean-up>