

Python applications in Stata 16

BPLIM

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- Stata 16 has been recently released and one of its new features is the ability to embed and execute Python code from within Stata
- This requires that Python is installed in your computer. Stata will search for Python installations on the system and choose the one with the most recent version
- You can use Python interactively (just like Mata) and embed Python code in do-files and ado-files
- In this presentation, we show two examples of ado-files with Python code:
 - **adrcheck**
 - **ineuse**

- This command gets suggestions for addresses stored in a Stata variable by going to Google Maps and returning the first suggestion for each observation. The current version only supports interface with Google Chrome.
- The suggestions from Google Maps are stored in the variable `_msug`.

Syntax

```
adrcheck var, [options]
```

The [help file](#) lists all the options available.

Dependencies

- Python 3.4+
 - Selenium

Selenium requires a driver to interface with Chrome. To run the code, you will need to install [ChromeDriver](#) and specify the path to the executable file in the option *execpath*.

Limitations / Future developments

- The current version only supports the interface with Google Chrome, but we intend to extend it to other browsers
- Generalize the command to work with any string (not just addresses) and use Google to get suggestions

- This package allows users to interface with [Statistics Portugal's \(INE\) API](#), to import data from a vast list of indicators directly into Stata. It includes two ado-files:
 - **command version:** *ineuse* allows the user to programmatically import and save data for more than one indicator. To run *ineuse*, the user must specify the code of the indicator(s). All the information available for that indicator(s) will be imported.
 - **menu version:** *inedlg* launches a menu that allows the user to choose an indicator and select the levels for a particular dimension(s) of the indicator.
- The data is available in English and Portuguese.

ineuse

Syntax

```
ineuse code, [en]
```

Dependencies

- Python 3.5+
 - requests, pandas

inedlg

Syntax

```
inedlg
```

Dependencies

- Python 3.5+
 - requests, pandas, ttkthemes
- Ancillary files
 - Indicadores_en.csv, Indicadores_pt.csv

Limitations

- INE's API, in its current state, does not allow users to specify more than one level for a dimension(s) in the script. In order to import all available data for one indicator or for multiple levels of a dimension(s), the user must call the script multiple times in a loop.
- This slows the process of importing data (specially when importing monthly data for all available periods) and may even result in INE blocking the request because of multiple calls made to the API.

- Thank you for your attention