tecplot 360
AND
pytecplot

The Python API in Tecplot 360 lets you directly access your CFD data and control your workflows with the popular and easy-to-use Python language. PyTecplot is included* with Tecplot 360.

PyTecplot gives you direct access to your data so that you can take advantage of Tecplot 360 capabilities with a scripting language. While the Tecplot ADK and macros have similar abilities, neither are as easy to use. PyTecplot takes fewer lines of code than macros to perform the same functions, and it is easier to read, debug and use than Fortran, C or Tecplot macros.

Getting started with PyTecplot is easy. You can record on-screen actions and play them back live in the Tecplot 360 interface. PyTecplot supports the use of Tecplot 360 from within Python to enable batch mode processing and workflow integration.

PyTecplot fully integrates with other Python-compatible tools, making Tecplot part of your engineering ecosystem:

- Automate workflows that use multiple engineering tools, with a single scripting language.
- Perform detailed calculations on all your CFD datasets.
- Access CFD data directly for custom analysis.
- Read any data type supported by Tecplot 360.
- Extract values, figures, and animations directly from CFD datasets.
- Connect Tecplot 360 to other tools and processes.

Learn more about PyTecplot at: *tecplot.com/products/pytecplot/*

Documentation: Installation instructions, a quick start guide, examples of loading layouts, exception handling, slice extraction, NumPy integration, executing equations & line plots, and a complete reference section are included in the PyTecplot documentation (*www.tecplot.com/docs/pytecplot*).

Installation: PyTecplot is hosted on *www.pypi.org* so you simply need to run 'pip install pytecplot' from a command prompt to install it. Easy as Py!

PyTecplot is included in the Tecplot 360 installation so you can install from there if you have an overzealous firewall.

*PyTecplot is available to customers on maintenance.

Try
Tecplot 360:
tecplot.com/360free

Master the View™   **www.tecplot.com**   **1.800.763.7005**

PyTecplot FAQs

What is PyTecplot?

PyTecplot is a Python API used to control capabilities provided by Tecplot 360 from within your Python script.

How does it work?

PyTecplot can run either in batch mode or connected to a running instance of Tecplot 360. Batch mode is ideal for automated image and video creation or complex data analysis and data extraction. Running connected to Tecplot 360 is ideal when you want to automate a portion of your workflow and continue work within Tecplot 360. In connected mode, you can control Tecplot 360 with simple user interfaces (UIs) built with Python GUI toolkits like PyQt!

When should I use PyTecplot instead of the Macro language?

When you need to perform batch processing. In this case, PyTecplot gives you:

- **Direct access to your data** — Use PyTecplot to load any data file format supported by Tecplot 360 and access the data directly to perform post-processing otherwise not possible within Tecplot 360 or with macros.
- **A real programming language** — PyTecplot allows you to use all the utilities afforded by Python such as arrays, string processing, and integration with other Python packages. You can also debug and develop using the same tools you're already using for your existing Python scripts.
- **Integration with other processes** — Python allows you to more easily integrate Tecplot 360's capabilities into existing workflows.

How do I install PyTecplot?

PyTecplot requires an installation of Tecplot 360 2017 R1 or later. PyTecplot is also hosted on *www.pypi.org* so you simply need to run *'pip install pytecplot'* from a command prompt. Easy as Py!

PyTecplot is also included in the Tecplot 360 installation so you can install from there if you have an overzealous firewall or want to ensure the PyTecplot version you're installing is guaranteed to be compatible with your version of Tecplot 360.

What versions of Python do you support?

We officially support the most current version of Python 3 and the two previous dot releases (e.g. 3.11, 3.10, 3.9). That said PyTecplot should work on earlier versions as well. Note that PyTecplot requires the Intel version of Python, so if you're using a macOS Apple Silicon machine with universal2 Python, make sure that you invoke Python from a command line with the `python3-intel64` command instead of just `python3`. **Click here for more information**.

Can I use my favorite Python development environment (IDE)?

Yes. We've tested PyTecplot with PyCharm, Eclipse, Wing, and others. It also works with Jupyter Notebooks (IPython), check them out here: *www.jupyter.org*.

Where can I find tips and examples on getting started?

Check-out the links in the PyTecplot section of our **Getting Started Webpage**. You can also see example scripts in our **GitHub**.

Contact Technical Support:

Email *support@tecplot.com*
Call **425-653-9393**