

Announcing PyHexad – an HDF5 Add-in for Excel (1 May 2015)

The HDF Group, Champaign, IL

We are proud to announce the availability of PyHexad 0.1!

PyHexad is a Python-based Excel add-in for HDF5 that can be used to read or write data in HDF5 files from Microsoft Excel on Windows. This functionality is made available to Excel users through a set of about a dozen user-defined functions and includes endpoints for displaying file contents, reading and writing arrays, tables, and attributes, as well as displaying images stored in HDF5 datasets. (See Figure 1.)

To access HDF5 files from Excel is probably among the all-time TOP 10 most frequently asked for features. PyHexad 0.1 is an attempt to explore this concept with a relatively modest development effort, which builds on Andrew Collette's h5py [1] module and the PyXLL [2] package available from Enthought. While the add-in in its current form will be suitable for only a small fraction of many potential users, we hope to learn as much as we can from this, and if it seems promising, we intend to create a different version aimed at a wider audience.

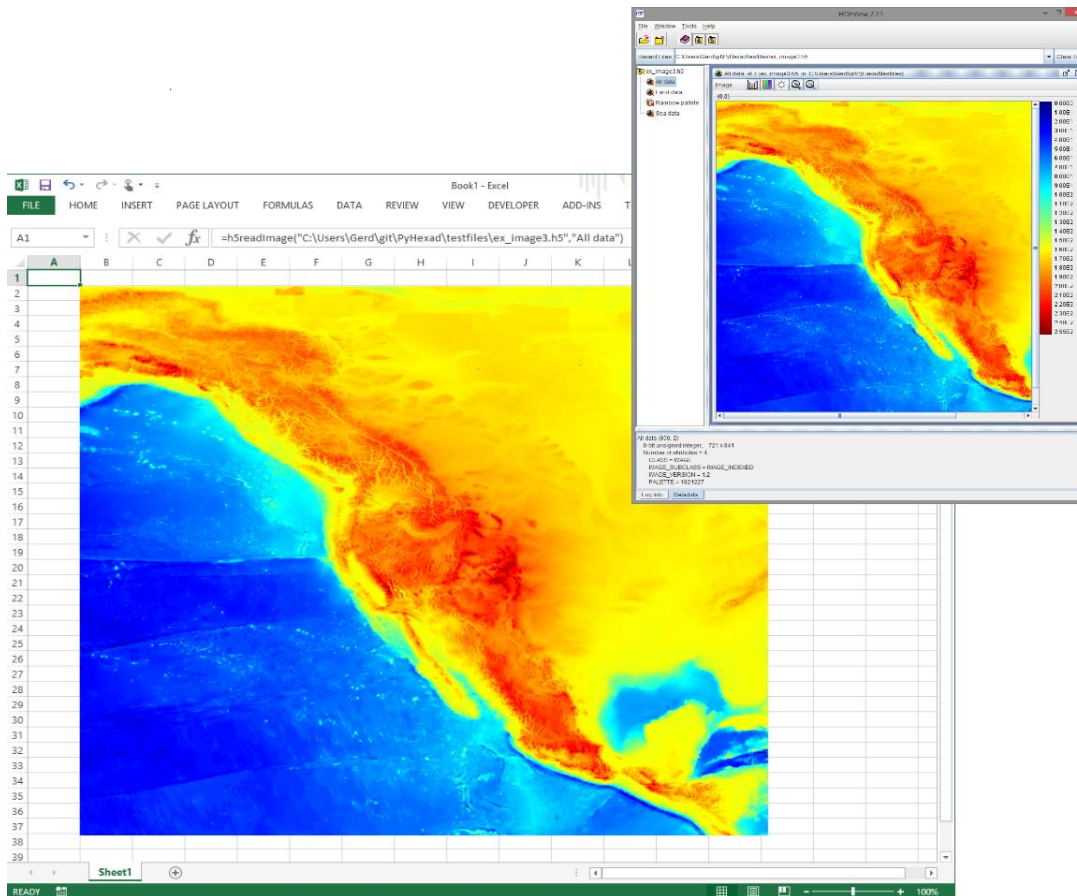


Figure 1. An HDF5 image displayed in Excel (and HDFView).

As you will see, for this first version, the emphasis was on functionality and there are no graphical frills or embellishments. This version is meant for intermediate to advanced users, who are looking for just a few useful functions, which they can integrate into their workbooks. In the end, only an in-depth discussion can

reveal where additional development is needed, and we would like to invite you to participate in that discussion.

Before taking the plunge and trying to install PyHexad, we recommend you watch the introductory PyHexad movies on YouTube [3]. If that whets your appetite, have a look at our blog post <https://hdfgroup.org/wp/2015/06/america-runs-on-excel-and-hdf5/> and the PyHexad installation instructions [6].

We need your help: Please join the discussion on the HDF forum [5], report problems, suggest improvements, submit patches [4], or support the development in other creative ways!

Contact:

HDF Helpdesk, help@hdfgroup.org

HDF Forum, https://www.hdfgroup.org/services/community_support.html

References:

- [1] HDF5 for Python, <http://www.h5py.org/>
- [2] Python for Excel with PyXLL, <https://www.entthought.com/products/pyxll/>
- [3] PyHexad on YouTube, <https://www.youtube.com/playlist?list=PLHhSEakyiryjr5pIDiSIyFXNjnlVzlkLe>
- [4] PyHexad on GitHub, <https://github.com/HDFGroup/PyHexad>
- [5] HDF forum, <http://www.hdfgroup.org/services/support.html>
- [6] PyHexad documentation, <http://pyhexad.readthedocs.org/en/latest/> [PDF]