INS/ESS Training Series:
Using Python for Interactive Astronomical Data Analysis

Presented by Perry Greenfield and Robert Jedrzejewski
Auditorium 12 - 1pm

Apr 5 Tue  Reading, manipulating, and displaying image data
Apr 19 Tue  Reading and plotting 1-D spectral data
May 10 Tue  Advanced topics in using PyFITS and arrays
May 24 Tue  Using PyRAF; writing scripts and programs in Python
Jun 7 Tue  Interfacing with C programs and libraries, and other languages

For up-to-date schedule please visit: http://www.stsci.edu/hst/training

Questions? Contact rmiller@stsci.edu or plee@stsci.edu
Today’s Goals

- IPython usage
- Python loops and conditionals
- More PyFITS usage
- Numeric modules overview
- Stupid array tricks

Handouts:
- IPython manual
- PyFITS draft manual (incomplete)
- Tutorial 3 write-up
Bundled numarray modules

- FFT (numarray.fft)
- Convolve (numarray.convolve)
- Linear Algebra (numarray.linear_algebra)
- Random numbers (numarray.random_array)
- Masked arrays (numarray.ma)
- Image processing (numarray.nd_image)
- Mlab (numarray.mlab)