Scientific Computing Group
Programming with Python:
Aliasing, Read Measurements Project
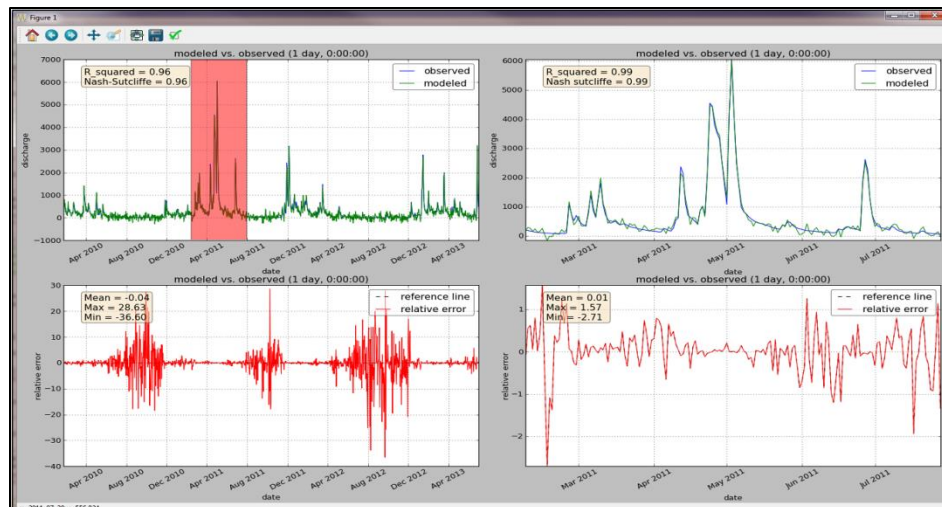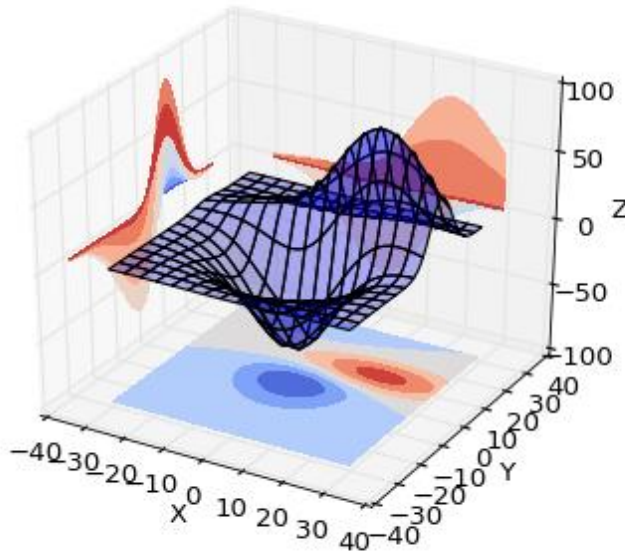
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Last Meeting

- Introduced functions
- Wrote functions and showed the various ways to write the parameters

Today's Objective

- Show GitHub site for Scientific Computing Group

- Understand aliasing in Python

- Define debugging and debugger.

- Start to implement functions in read_measurements.py script

Aliasing

- Alias – a second name for the same piece of data
- Example:

```
>>> variable1 = 5
>>> variable2 = variable1
>>> print(variable2)

>>> list1 = [1, 2, 3]
>>> list2 = list1
>>> list1.append(50)
>>> print(list2)
```

Debugging and Debugger

- Debugging – a methodical process of finding and reducing the number of bugs in a computer program thus making it behave as expected.

- Debugger – a computer program that is used to test and debug other programs.

Video – Python

- Software Carpentry, Greg Wilson
  - Python: Alias
    - http://software-carpentry.org/v4/python/alias.html
  - Python: Using a Debugger
    - http://software-carpentry.org/v4/python/debugger.html

Practice – aliasing

- Create an alias for a string variable
- Create an alias for a list of numbers

Functions that could be applied in readmeasurements project

- Let's take a look at the readmeasurements project and think of some potential functions that we could use.

Next meeting

- Implement functions for the read_measurements.py script.