

Digital Grain Size

Version 2, Jan 2011

Quick start guide for Python users on Windows XP





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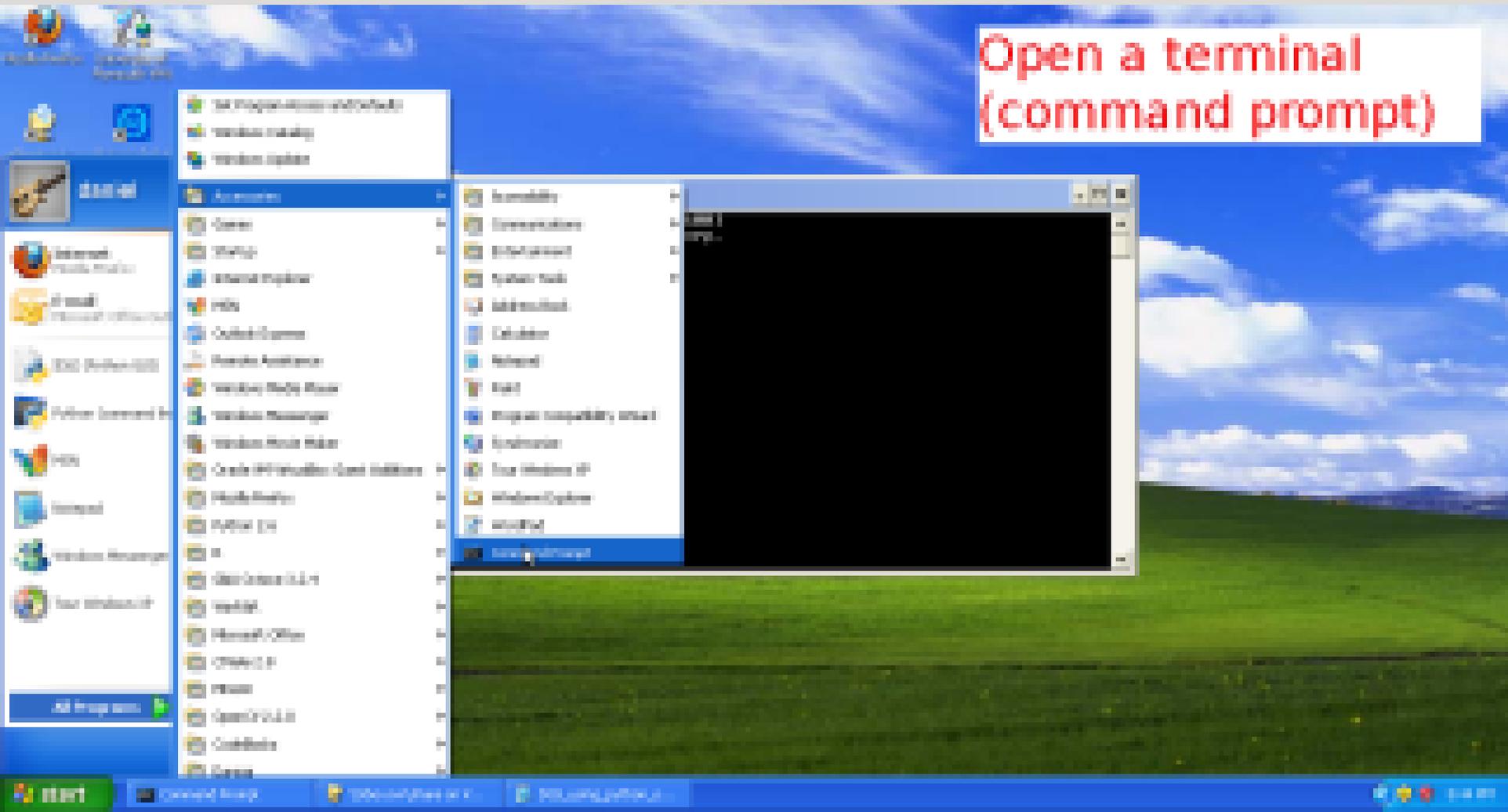
or send a letter to:

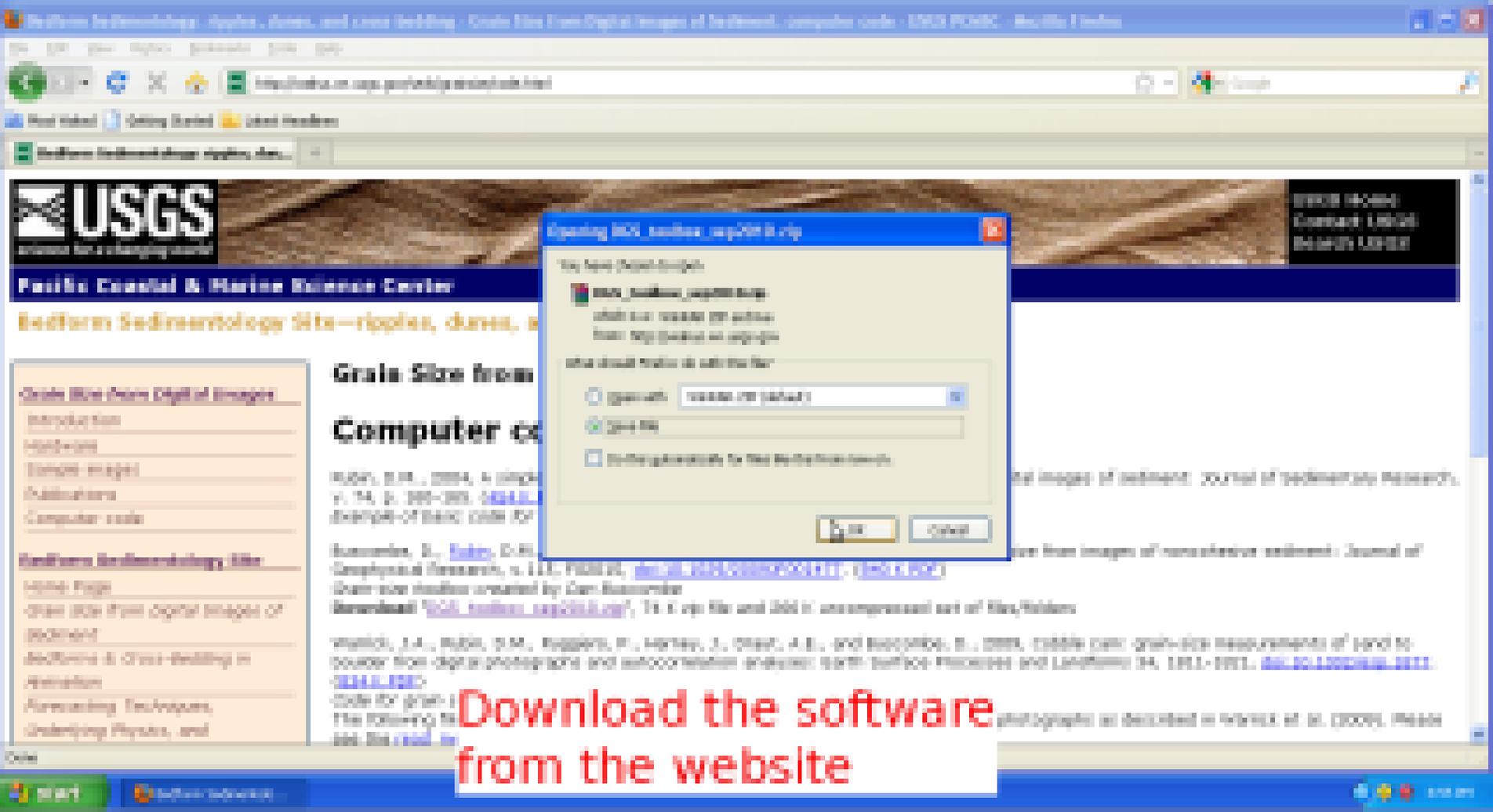
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DGS with Python in Windows XP

Open a terminal
(command prompt)





Pacific Coastal & Marine Science Center

Bedform Sedimentology Site—ripples, dunes, and

Grain Size from

- Introduction
- Methods
- Sample Images
- Calculators
- Computer code

Bedform Sedimentology Site

- Home Page
- Grain Size from Digital Images of Bedform
- Bedforms & Cross-Sectioning in Animation
- Forecasting Techniques, Underlying Physics, and

Grain Size from

Computer Code

Wright, D.M., 2004, A simple
 v. 14, p. 389-395. [DOI:10.1002/1097-4754\(200408\)14:3<389::AID-JGCRA389>3.0.CO;2-1](#)
 download-of basic code for

Rosenzweig, B., [Fahy, C.M.](#),
 Geophysical Research, v. 114, P18016, [doi:10.1029/2005GL021111](#). [DOI:10.1029/2005GL021111](#)
 Grain-size analysis created by Dan Rosenzweig
 Download ["win_usgs_usgs.exe"](#), 10 000 vpb file and 300 kb unzipped set of files/folders

Wentz, J.A., Wright, D.M., Rogers, P., Hayes, J., Ober, A.B., and Rosenzweig, B., 2005, Middle paleo grain-size measurements of sand to
 coarser fine-grained photomicro and microcorrelation analysis: North Atlantic Processes and Landforms 14, 1811-1813. [doi:10.1002/1097-4754\(200511\)14:11<1811::AID-JGCRA1811>3.0.CO;2-1](#)
 Code for grain-
 The following is
 see the [read me](#)

Opening win_usgs_usgs.exe

Do you want to open this file?

win_usgs_usgs.exe
 1000 KB
 from top level in page

What do you want to do with this file?

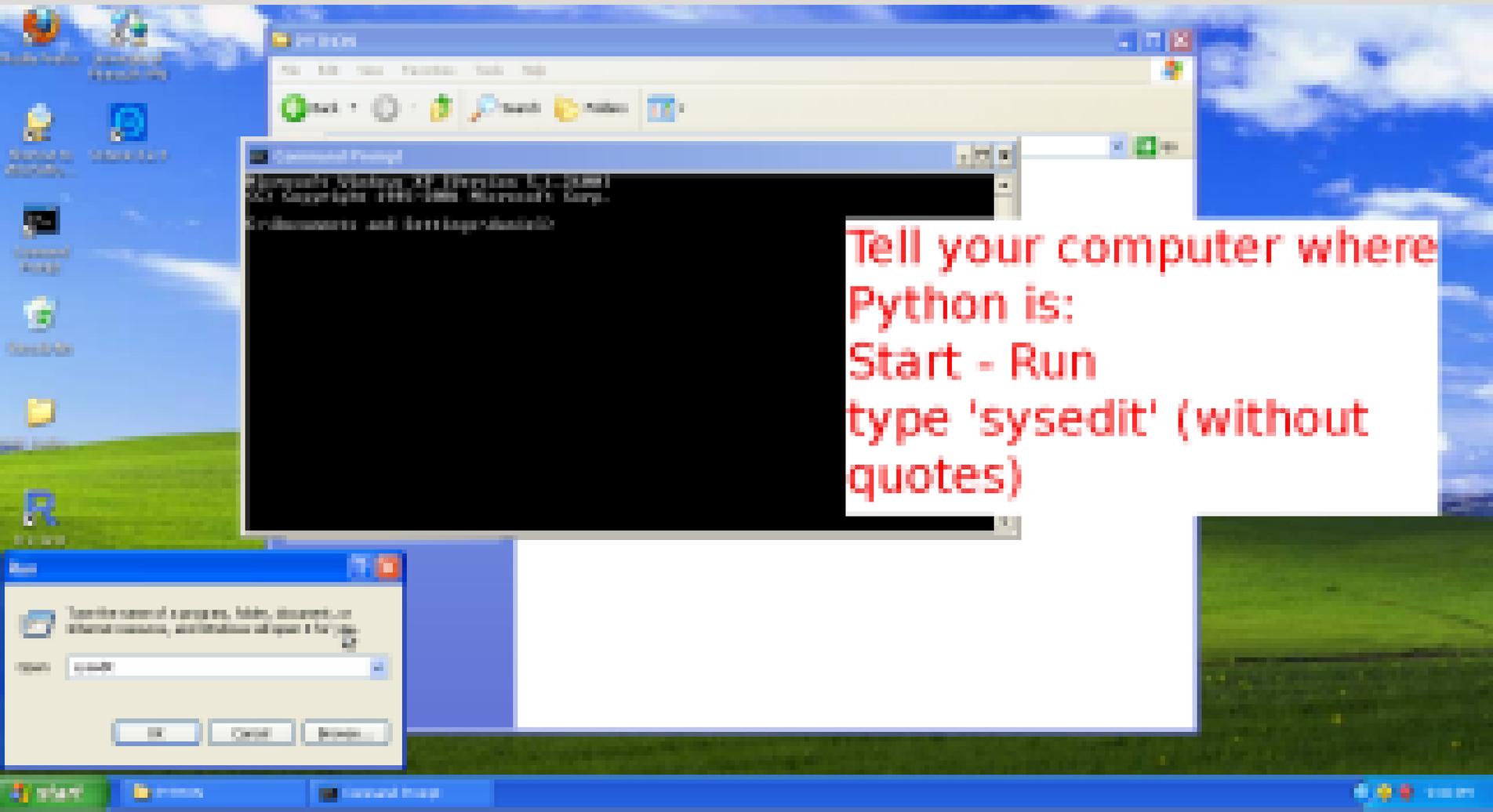
Open with ["win_usgs_usgs.exe"](#)

Open with ["win_usgs_usgs.exe"](#)

Don't open this file. I'll decide what to do later.

[Open](#) [Cancel](#)

**Download the software
 from the website**

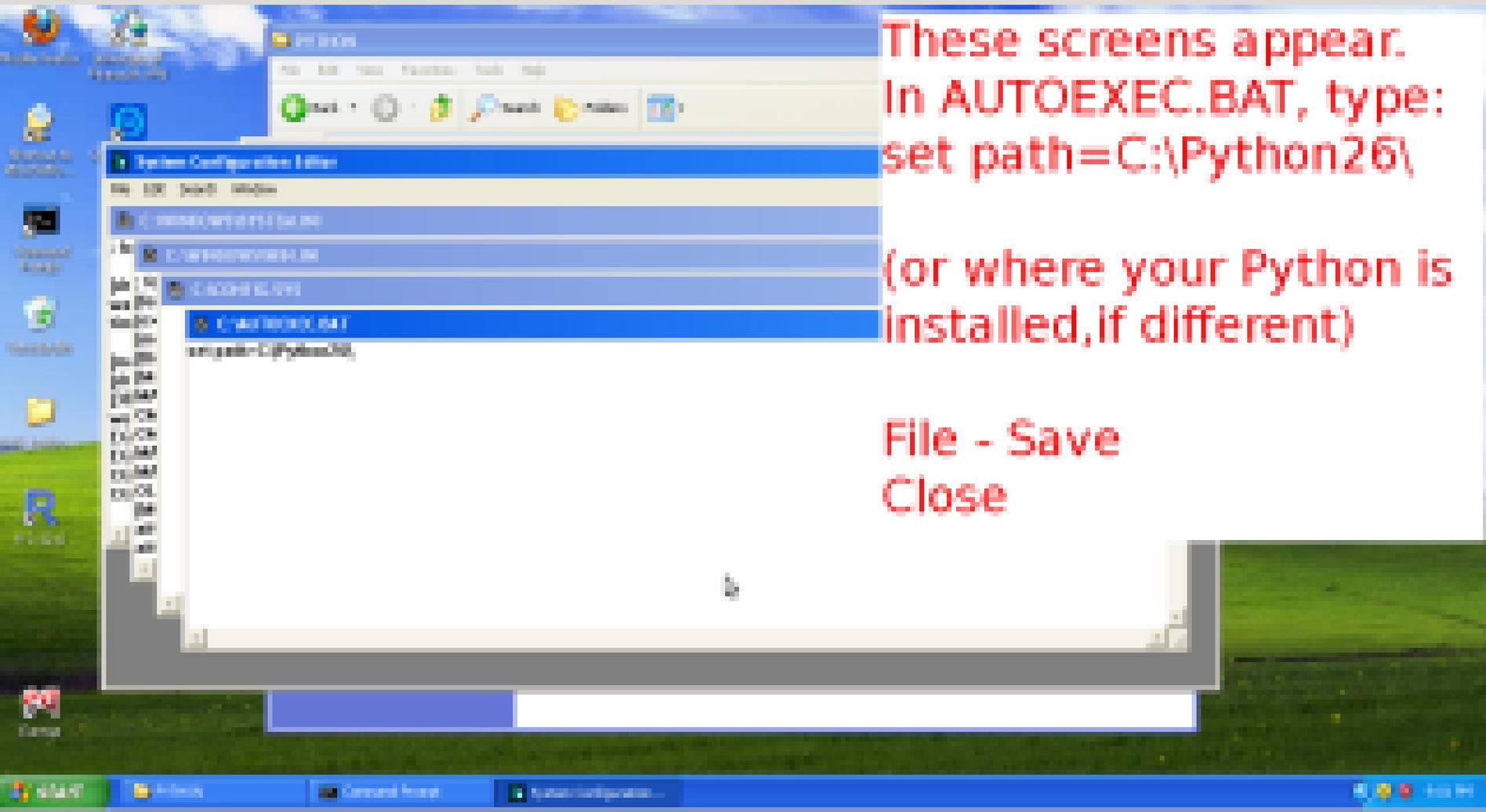


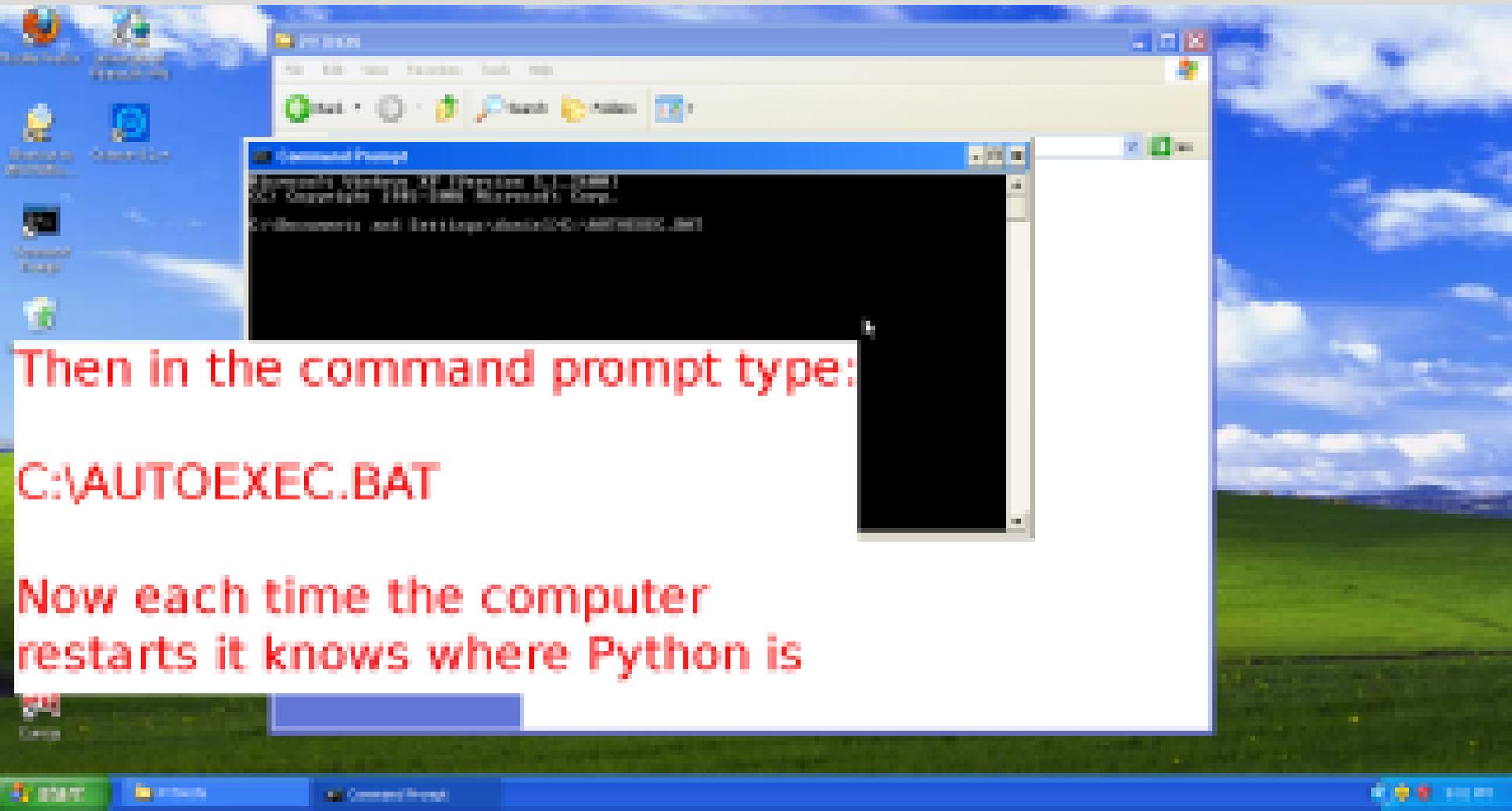
Tell your computer where Python is:
Start - Run
type 'sysedit' (without quotes)

These screens appear.
In AUTOEXEC.BAT, type:
`set path=C:\Python26\`

(or where your Python is
installed, if different)

File - Save
Close





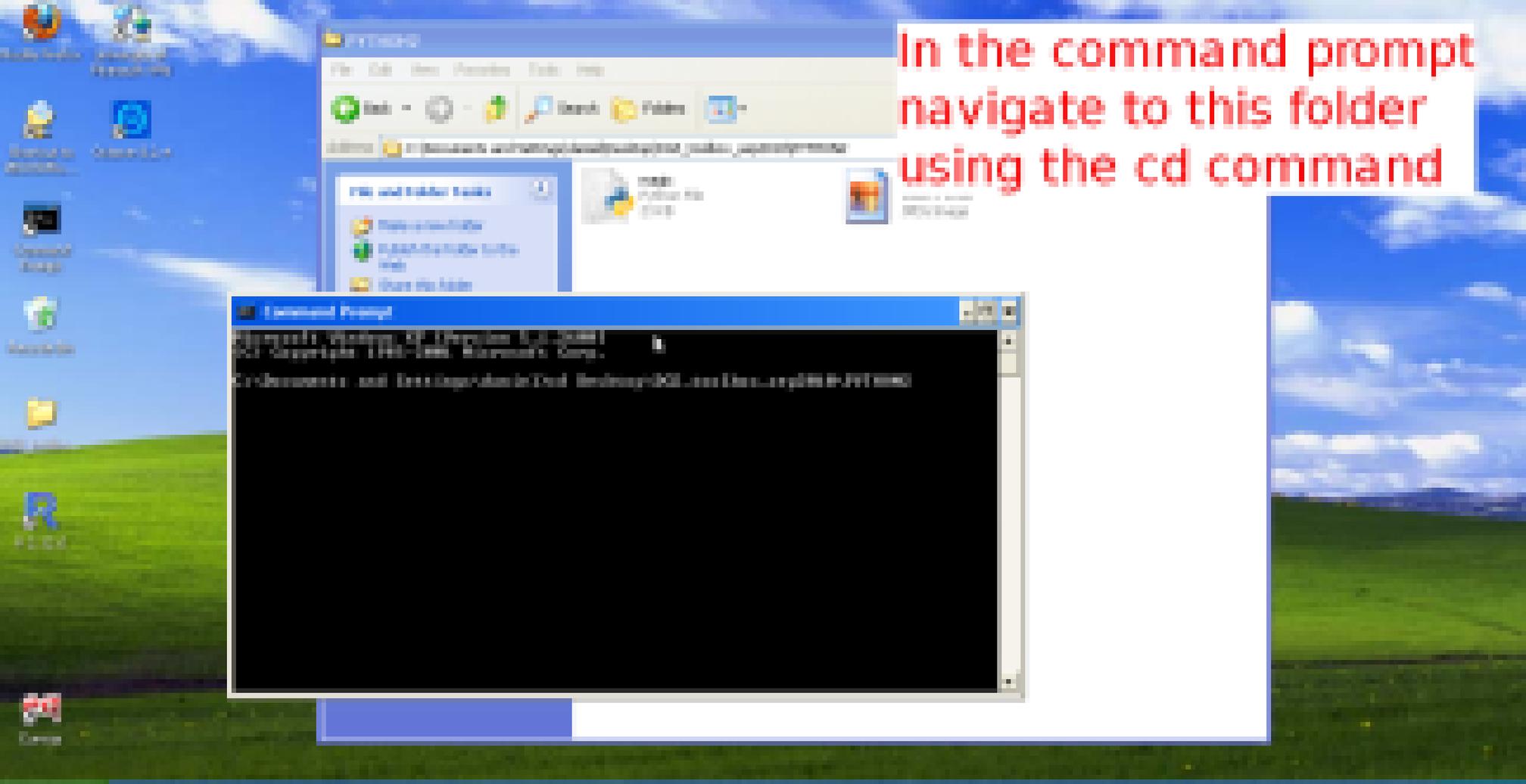
```
Microsoft Windows [Version 5.1.2600.5512]
Copyright (c) 2006 Microsoft Corp.
C:\Documents and Settings\user\Desktop>
```

Then in the command prompt type:

C:\AUTOEXEC.BAT

Now each time the computer restarts it knows where Python is

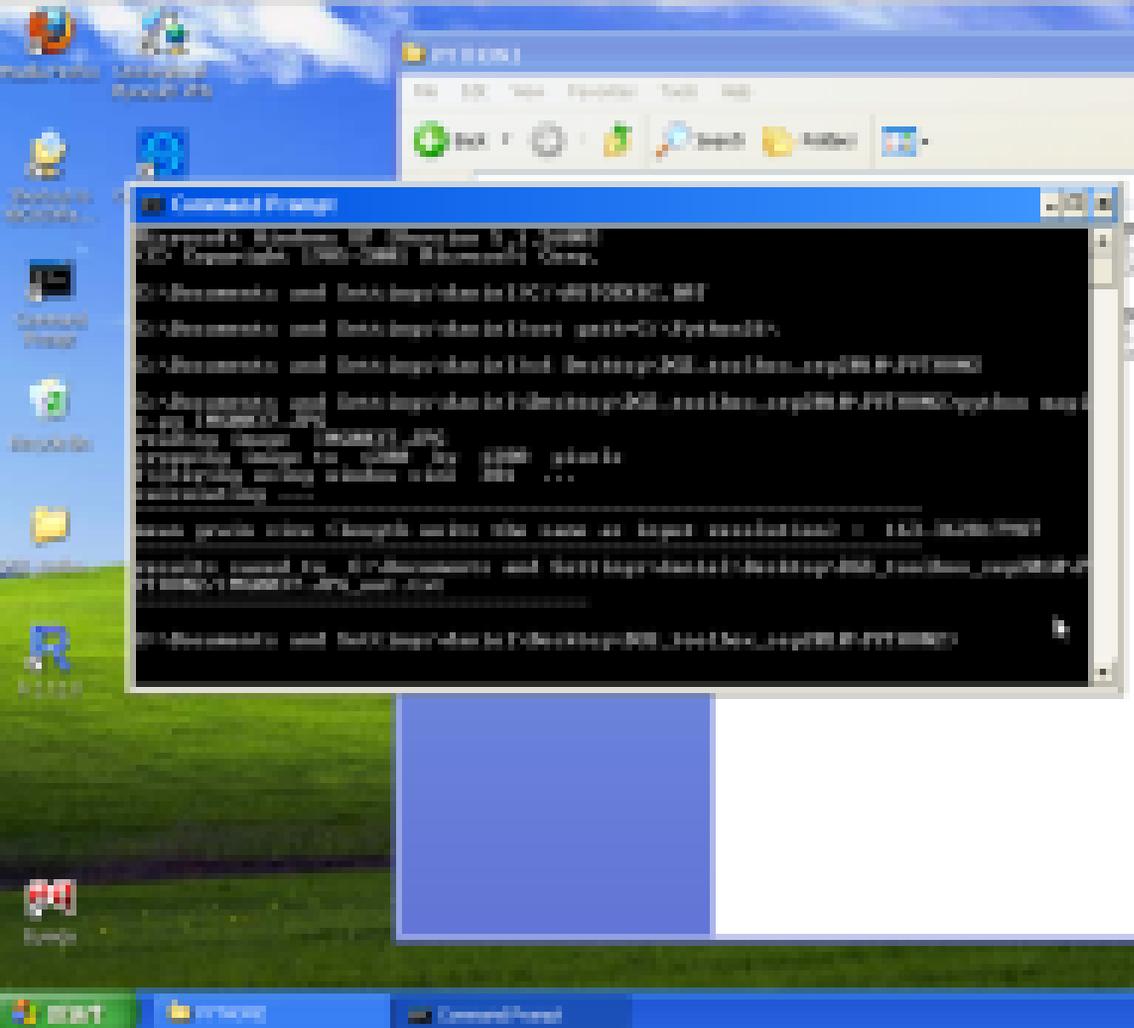
In the command prompt
navigate to this folder
using the cd command



The screenshot shows a Windows XP desktop with a blue sky and green hills background. A File Explorer window is open, displaying a folder named 'FTT1000'. The address bar shows the path 'C:\Documents and Settings\Administrator\Desktop\FTT1000'. Below the address bar, there are several icons representing files and folders. A Command Prompt window is open in the foreground, showing the current directory path: 'C:\Documents and Settings\Administrator\Desktop\FTT1000'. The Command Prompt title bar reads 'Command Prompt'.

```
Microsoft Windows [Version 5.1.2600.5512]
(c) Copyright 1985-2006 Microsoft Corp.

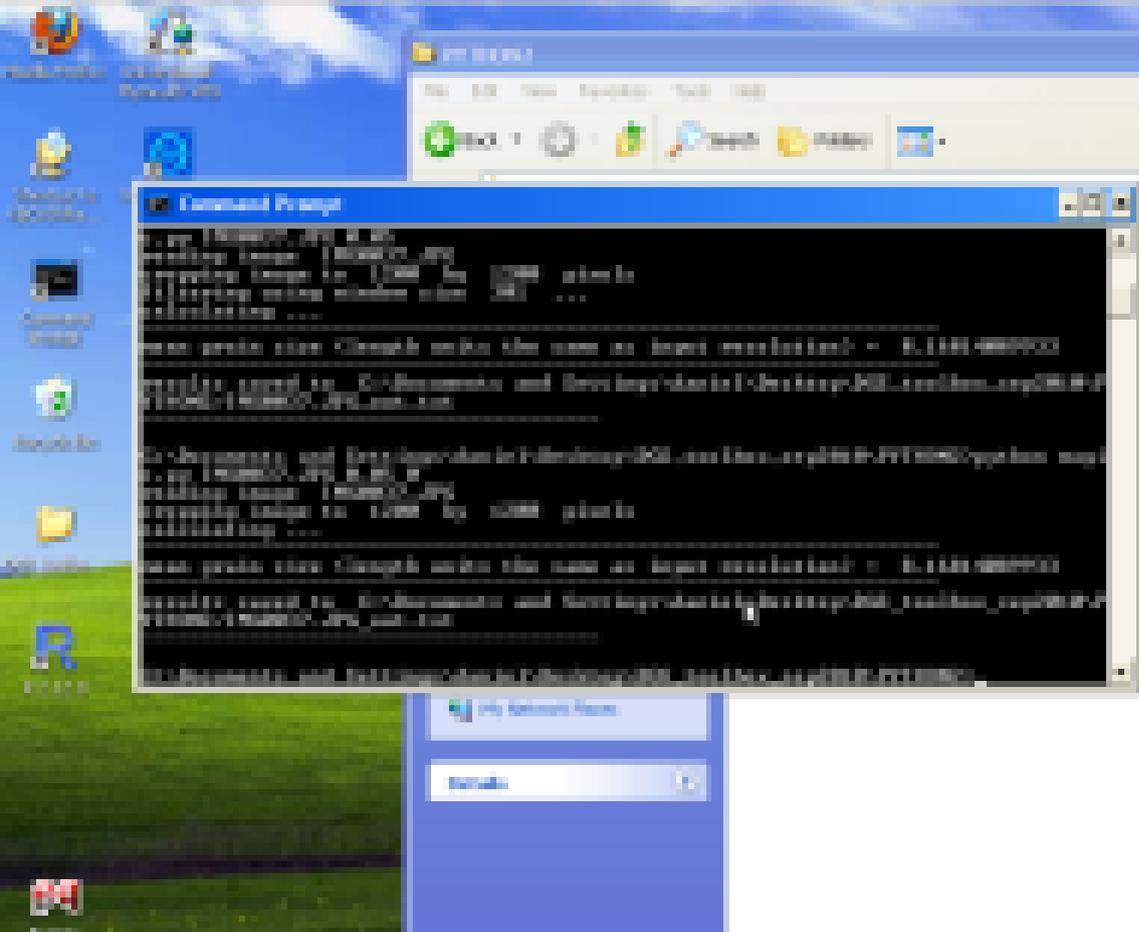
C:\Documents and Settings\Administrator\Desktop\FTT1000>
```



Run the program by typing the following in the command prompt:

```
python magic.py  
yourimagefilename.ext
```

By default, this assumes image resolution is 1 mm/pixel, and applies a simple filter on the image to the image



If for any reason you wish to turn the filtering off, add an extra 0 to the input, e.g.:

python magic.py file.ext
0.05 0

Feedback, Questions and Comments? Email Dan Buscombe:

daniel.buscombe@plymouth.ac.uk

Look out for version 3 featuring an automated statistical estimate of grain size standard deviation (sorting) - coming soon!

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