

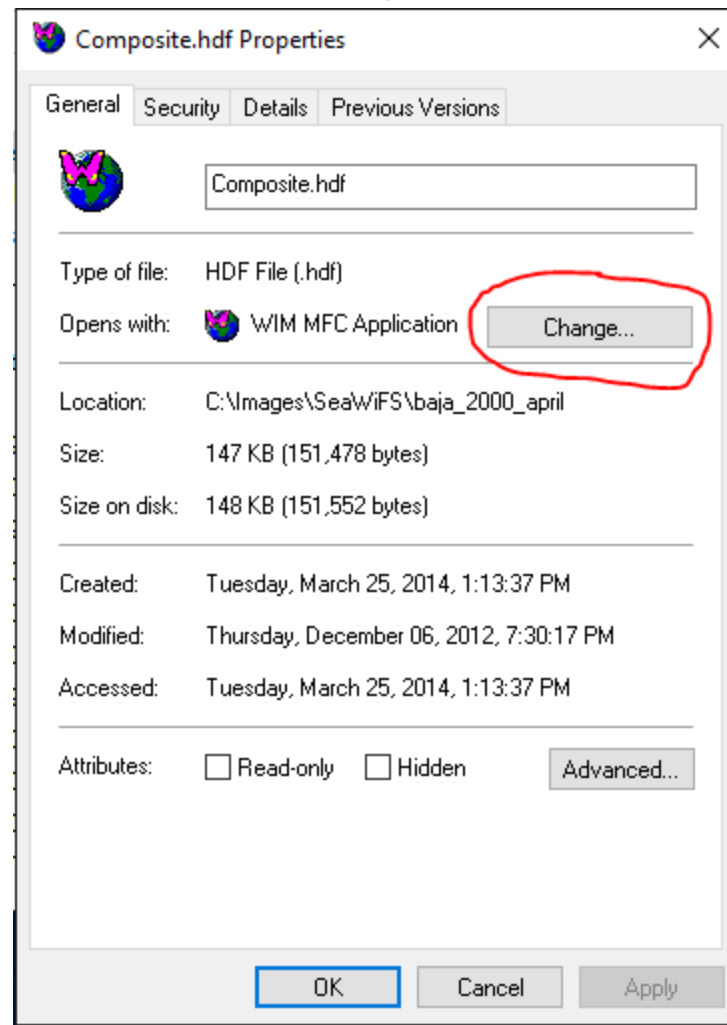
# Computer tips for Windows users

- File associations
- Make file extensions visible
- Easy command line access
- Creating lists by piping output of the *dir* command
- See command syntax options
- Basic batch file commands
- Add a directory to *path* environment variable

# File associations

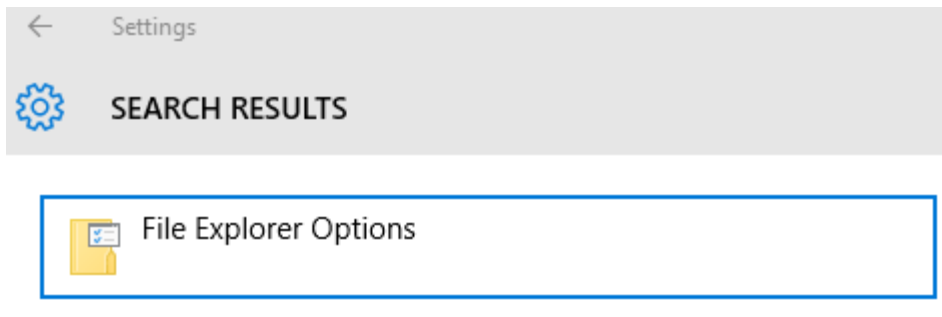
- Each file *type* (specified by its *extension*) must have one or more associated *Programs* that handle that file type.
- It is important to have the right *Program* associated with the file type, for example, the main file type used in WIM is *\*.hdf* which is a *Hierarchical Data Format* version 4 file. If the correct program (e.g. WIM) is associated with *.hdf*, you can just *click* or *double-click* on the file and WIM will open it.
- You can find out the associated program by right-clicking on the file name and checking its *Properties*.
- *\*.hdf* (HDF4) – open with WIM
- *\*.nc* (netCDF) – open with WIM
- *\*.h5* (HDF5) – open with WIM

For example, check out *C:\Images\SeaWiFS\baja\_2000\_april\Composite.hdf*;  
You can change it!



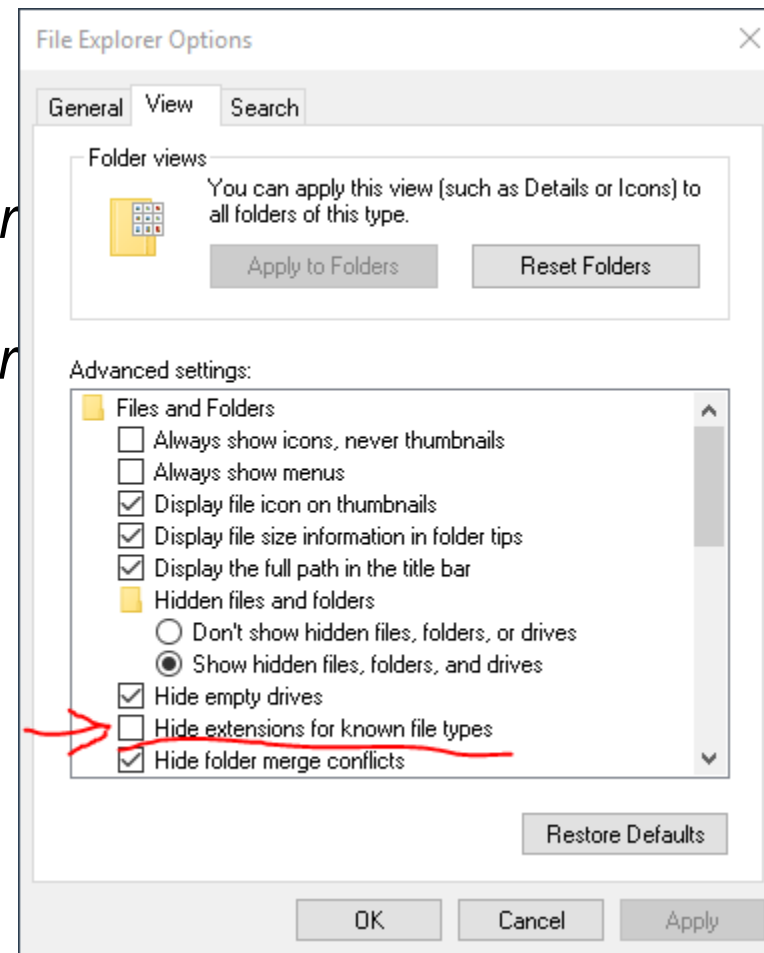
# Make file extensions visible

- Default option in Windows is to ***Hide extensions of known types***
- This creates confusion and misunderstanding
- Uncheck it in the ***File Explorer Options*** dialog!
- Go to *Settings*, search for *file explorer options*, check out *View*. In earlier versions of Windows it was called *Folder options*.



Wimsoft.com

You must uncheck *Hide extensions of known file types!*



# Command line in any folder

- Use **Shift** and **right-click** on a folder, select :
- *Open command window here*
- Most programs in WAM use command line, also use command line to make lists, etc.
- Note: latest Win10 update hides *Command window* and provides *Power Command* – need to fix in *Registry*
- Another option: open *Command* window, copy path in Explorer, cd + Paste (Shift-right-click) to get to the desired folder

## Creating lists by piping the output of *dir*

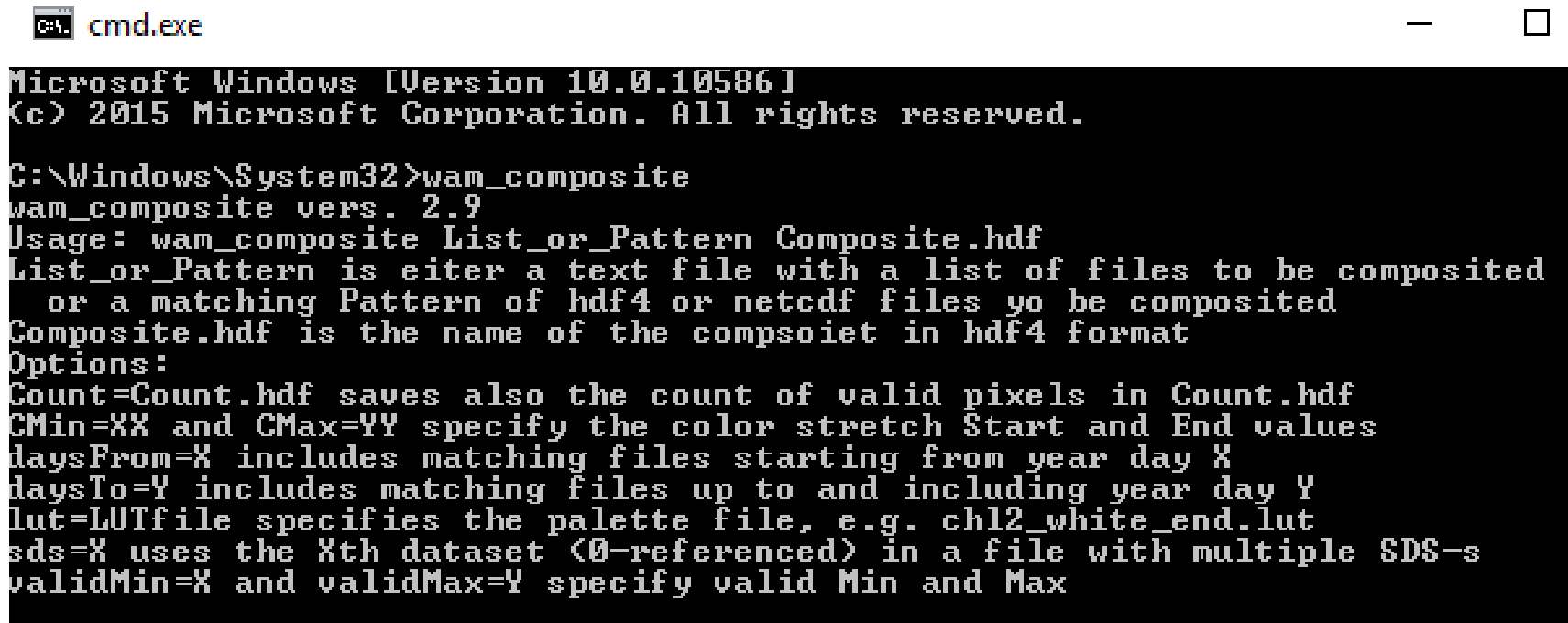
- In WAM we sometimes need a list of files to be processed
- An easy way to create such a list is to pipe the results of *dir* to a text file, e.g.

```
dir /b /s Images\*.hdf > myList.txt
```

- The */b* option outputs just the file name, */s* option adds the full path
- We can use the list in WAM commands, e.g.
- *wam\_composite myList.txt Comp.hdf Count.hdf*

# To see command syntax and version: type the name of the command

For example, to see the version number and options of WAM command *wam\_composite*, open command window and type *wam\_composite*



```
cmd.exe
Microsoft Windows [Version 10.0.10586]
(c) 2015 Microsoft Corporation. All rights reserved.

C:\Windows\System32>wam_composite
wam_composite vers. 2.9
Usage: wam_composite List_or_Pattern Composite.hdf
List_or_Pattern is either a text file with a list of files to be composited
or a matching Pattern of hdf4 or netcdf files to be composited
Composite.hdf is the name of the composite in hdf4 format
Options:
Count=Count.hdf saves also the count of valid pixels in Count.hdf
CMin=XX and CMax=YY specify the color stretch Start and End values
daysFrom=X includes matching files starting from year day X
daysTo=Y includes matching files up to and including year day Y
lut=LUTfile specifies the palette file, e.g. chl2_white_end.lut
sds=X uses the Xth dataset (0-referenced) in a file with multiple SDS-s
validMin=X and validMax=Y specify valid Min and Max
```

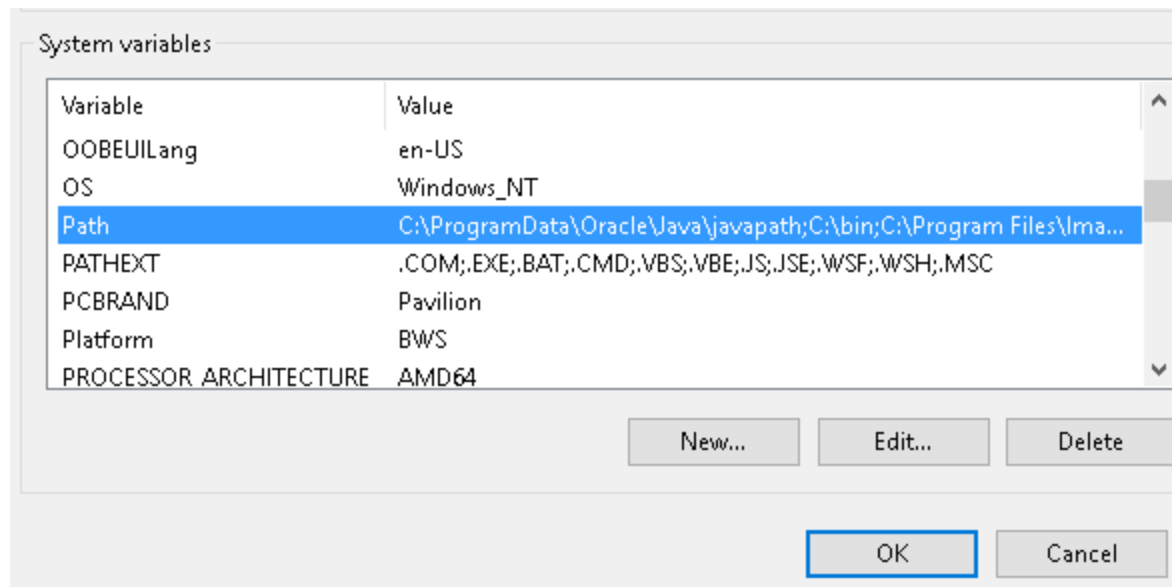
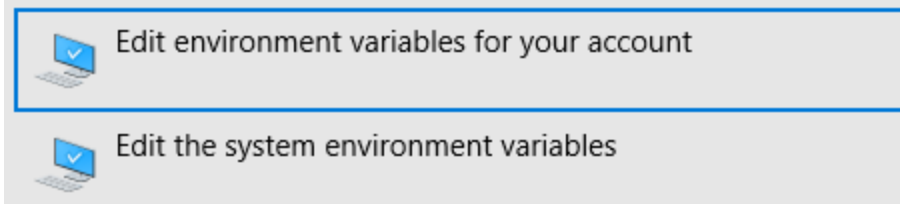
# Basic batch commands

- Open *cmd.com*
- Right click in a folder, *New - Text Document – Readme.txt*  
– use it to record commands and options
- Open it with *Notepad*
- You can make it a batch file by changing the extension from *.txt* to *.bat*
- *set YEAR=2019*
- *echo Year is %YEAR%*
- Save in a batch file *test.bat*, run it by typing *test*
- Open a new command window, *Echo Year is %YEAR%*
- To run a batch file from another batch file, use *call Name of the other batch file*

# Add directory to *path*

- In order to run a command from any directory, the location of the command file has to be in the path.
- When installing WIM, the folder *C:\Program Files (x86)\Wimsoft* is normally added to the path. Sometimes it does not work and you need to manually add this or another directory to the path. You can search in *Settings*, for *environment*.

- Find





# Add directory to *path*

- In order to run a command from any directory, the location of the command file has to be in the path.
- Install 7x (*7z1805-x64.exe* in *tools* folder)
- Check that 7z is available from any command window
- Echo %path%
- Add the directory name where *7z.exe* is to system environment variable *path* if not already there

# Saving HDF files from WIM

## 1. Save as HDF SDS (\*.hdf)

SDS = Scientific Dataset = matrix of numbers

Projection is coded with 4 or more numbers

## 2. Save as HDF with Lat/Lon arrays (\*.hdf)

No projection, geo-location is provided by Lon and Lat values for each pixel

**All MAPS should use (1), i.e. have a projection!**

**Maps have just 1 dataset and not more!**

Coastlines on Chla maps should be with **pixel value 1 = black!** Not with pixel value 0 = transparent, not with 255 = white!