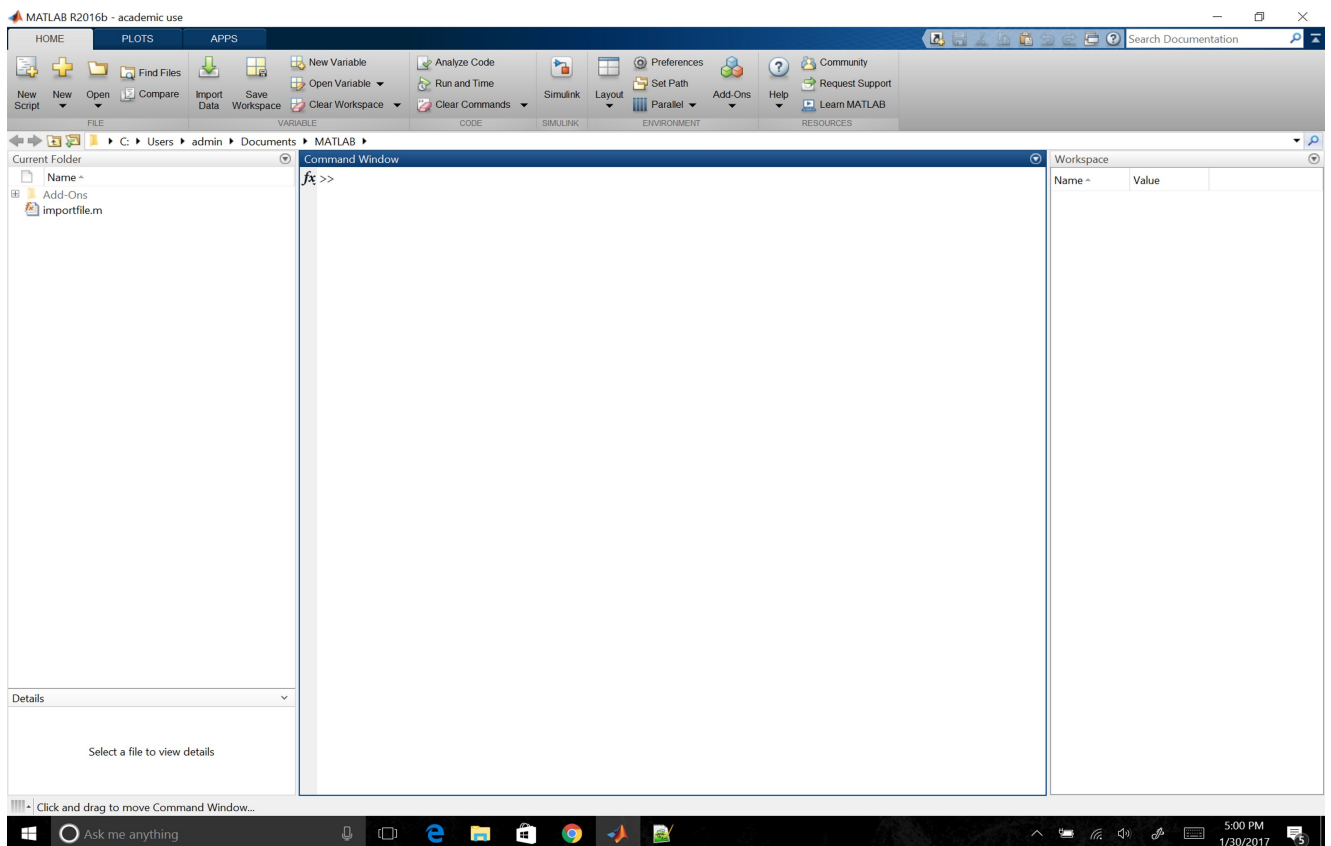Monday, January 30, 2017   5:44 PM
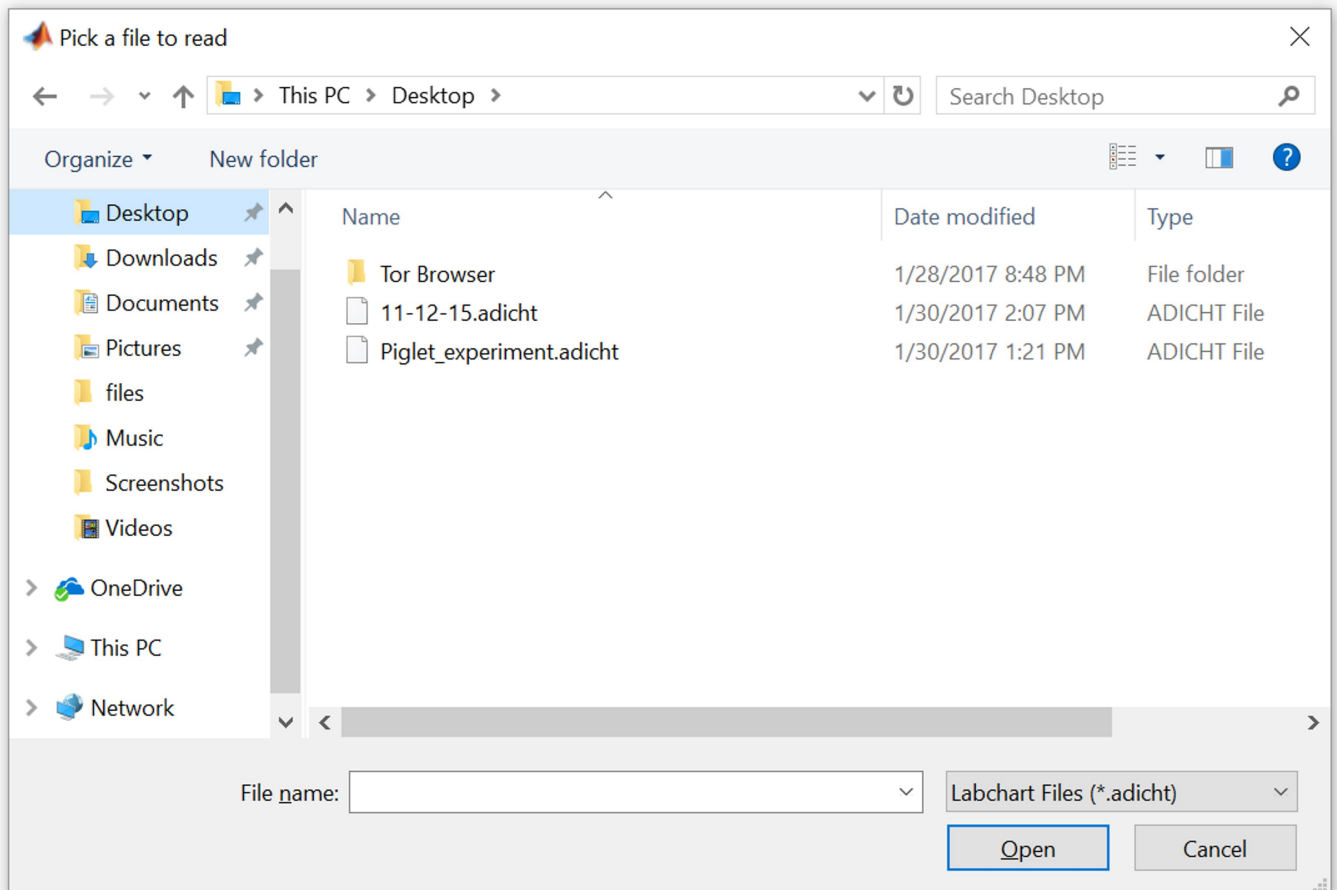
Accessing LabChart data in MatLab

1. Open MatLab

2. Use one of the functions from the LabChart SDK.
    The SDK gives you two options: adi.readFile or adi.convert.
    I will use adi.readFile in this example.
    In the command window, I enter 'f = adi.readFile;'

3. This will open a window for you to select which file you would like to read

4. After opening a file, you can use the command 'disp(f);' to display the properties of the file.

```
Command Window
>> f = adi.readFile;
>> disp(f);
   file with properties:

         file_path: 'C:\Users\admin\Desktop\11-12-15.adicht'
         n_records: 1
        n_channels: 4
           records: [1×1 adi.record]
     channel_specs: [1×4 adi.channel]
     channel_names: {'Channel 1'  'Channel 2'  'Channel 3'  'Channel 4'}

fx >>
```

5. With this information, you can choose which channel you would like to access. You can select a channel by using the command 'pres_channel = f.getChannelByName;'. You can then use 'disp(pres_chanel);' to view the properties of that channel.

```
>> pres_chan = f.getChannelByName('Channel 1');
>> disp(pres_chan);
  channel with properties:

                    id: 1
                  name: 'Channel 1'
                 units: {'mmHg'}
             n_samples: 19656650
                    dt: 1.0000e-03
                    fs: 1000
           data_starts: 7.3628e+05
         record_starts: 7.3628e+05
      downsample_amount: 1

fx >>
```

6. To display the data saved in a channel, you can use 'raw_pres_data = pres_channel.getData(1);' Finally, to display the data you can use 'disp(raw_pres_data(1));'.

```
>> raw_pres_data = pres_chan.getData(1);
>> for i = 1:10
    disp(raw_pres_data(i));
end;
    0

    0.0280

    0.1959

    0.6297

    1.4414

    2.6448

    4.2401

    6.1293

    8.1723

   10.1595

fx >>
```