

## Matlab Script readplot2003on.m

% script to read data from a delimited file and plot selected data with axis labels  
% bmj 041013

clear all

```
% input name of file to read
fileinputname=input('Enter name of file to read: ','s');
% open file to read and select data
datain=dlmread(fileinputname);
datasize=size(datain);
sizeofarray=['data array size is ' num2str(datasize(1)) ' rows by ' num2str(datasize(2)) ' columns'];
fprintf(sizeofarray);
fprintf('\n');
t=(1:1:datasize(1))';
maxcolnumerror=['Too large. Enter number equal to or less than ' num2str(datasize(2)) ' or zero to end:'];
% input column number to plot
colnum=input('Enter column number to plot: ');
while colnum>datasize(2);
    colnum=input(maxcolnumerror);
end
while colnum~=0;
d=datain(:,colnum);
switch colnum
    case(1)
        ylab='Year';
    case(2)
        ylab='Julian Date';
    case(3)
        ylab='Hour of Day';
    case(4)
        ylab='Air Temperature (C)';
    case(5)
        ylab='Module Temperature (C)';
    case(6)
        ylab='Solar Radiation (W/square meter) S at Latitude';
    case(7)
        ylab='Solar Radiation (W/square meter) Horizontal';
    case(8)
        ylab='Solar Radiation (W/square meter) S at Latitude - 16 degrees';
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        case(9)
            ylab='Solar Radiation (W/square meter) S at Latitude + 16 degrees';
        case(10)
            ylab='Solar Radiation(W/square meter) S Vertical';
        otherwise
            ylab='';
    end

    figure(1)
    grid on
    plot(t,d, 'g-')
    xlabel('Hours from Start')
    ylabel(ylab)

    colnum=input('Plot another column? Enter column number or zero to end: ');
    while colnum>datasize(2);
        colnum=input(maxcolnumerror);
    end
end

```