```
%This program will be used to load images into

n= [];
filename = input('Enter the name of the image files (before the numbers): ','s');
number = input('Enter the number of image files to be processed: ');
firstframe = input('Enter the first frame of the laser pulse: ');
lastframe = input('Enter the last frame of the first laser pulse: ');
%ap = input('Enter the number of the first image to be processed (eg, if the image is
0706180137, enter 137): ');
ap=1;

w = cell(1,number);

if number > 999;
    for j = ap:(number);
        jj = num2str(j);
        if j <10;
            n = ['000' jj];
        elseif 9 < j && j < 100;
            n = ['00' jj];
        elseif 99 < j && j < 1000;
            n = ['0' jj];
        elseif j > 999;
            n = jj;
        end
        w{j-(ap-1)} = imread([filename n '.tif']);
    end
elseif 99 < number
    for j = ap:(number);
        jj = num2str(j);
        if j <10;
            n = ['00' jj];
        elseif 9 < j && j < 100;
            n = ['0' jj];
        elseif j > 99;
            n = jj;
        end
        w{j-(ap-1)} = imread([filename n '.tif']);
    end
else
    for j = ap:(number);
        jj = num2str(j);
        if j <10;
            n = ['0' jj];
        elseif j > 9;
            n = jj;
        end
        w{j-(ap-1)} = imread([filename n '.tif']);
    end
end

for i = 1:firstframe-1;
    xa(:,:,i) = w{i};
end
for i = lastframe+1:number;
    yar(:,:,i-lastframe) = w{i};
end
x = cat(3,xa,yar);

%Added yy
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  sizeofmatrix=size(x);
  %ab = input('Enter the number of seconds over which the movie was collected: ');
  %srate = sizeofmatrix(3)/ab; %Gives sampling rate in images per second
  for xvalue = 1:sizeofmatrix(1)
      for yvalue = 1:sizeofmatrix(2)
          y = x(xvalue,yvalue,:);
              for i = 1:length(y)
                  yy(i) = y(i);
              end
          % filter out quenching
          %regcoeff=polyfit(xax,single(yy),3);
          %regfunction=polyval(regcoeff,xax);
          %newsignal=single(yy)-regfunction;

          % high-pass filter of data
           % [b,a] = buttfilt(5, 0.05/(srate/2), 'high');
  %            highpassfilteredtimecourse = filtfilt_filt(b,a,single(yy));
  %
  %            % Fourier analysis
  %            powerofsignal=abs(fft(highpassfilteredtimecourse));
  %            poweratstimfreq(xvalue,yvalue)=mean(powerofsignal(freqrangevector));
      end
  end
```