```
clear all; close all; clc;
tic;
% Read in Animation Frames and store in CellArray
load('ErrorPerTile.mat');

% set x and y ticks
xtick = [1 2 3 4 5 6];
ytick = [1 2 3 4 5];

%figures are saved with test names
testName_vec =
    {'C','Emis','Filt','Grease','H','RawModel','Amb','Black'};

cmap = colormap('parula');
for i = 1:8

avgerror = TimeAvgError{i};
stderror = TimeStdError{i};
```

## **Average Error**

```
%setup figure and video object
h1 = figure('visible','off');
h1.InvertHardcopy = 'off';
ax1 = gca;
c1 = colorbar;
c1.FontSize = 14;
%plot
imagesc(avgerror);
%set plot properties
set(ax1,'color',0*[1 1 1], 'XTick', xtick, 'YTick',
 ytick, 'FontSize', 14, 'FontName', 'TrebuchetMS')
axis image; colorbar; c1 = colorbar; c1.FontSize = 14; %caxis(ax1,
[minC maxC]);
colormap(ax1,cmap)
title(c1,'^\circC','FontName','TrebuchetMS')
title('Avg Temperature Difference ( ^\circC ) Over
Time','FontSize',14,'FontName','TrebuchetMS')
xlabel('Tile Columns','FontName','TrebuchetMS')
ylabel('Tile Rows','FontName','TrebuchetMS')
%add Temps
for x = 1:5
    for y = 1:6
 text(y-0.2,x,num2str(round(avgerror(x,y),3)),'FontSize',14,'FontName','TrebuchetM
    end
end
%draw and save frame
drawnow;
```

## **Std Error**

```
%setup figure and video object
h2 = figure('visible','off');
h2.InvertHardcopy = 'off';
ax1 = gca;
c1 = colorbar;
c1.FontSize = 14;
%plot
imagesc(stderror);
%set plot properties
set(ax1,'color',0*[1 1 1], 'XTick', xtick, 'YTick',
ytick, 'FontSize',14, 'FontName', 'TrebuchetMS')
axis image; colorbar; c1 = colorbar; c1.FontSize = 14; %caxis(ax1,
[minC maxC]);
colormap(ax1,cmap)
title(c1, '^\circC', 'FontName', 'TrebuchetMS')
title('Std of Temperature Difference ( ^\circC ) Over
Time','FontSize',14,'FontName','TrebuchetMS')
xlabel('Tile Columns', 'FontName', 'TrebuchetMS')
ylabel('Tile Rows','FontName','TrebuchetMS')
%add Temps
for x = 1:5
    for y = 1:6
 text(y-0.2,x,num2str(round(stderror(x,y),3)), 'FontSize',14, 'FontName', 'TrebuchetM
    end
end
%draw and save frame
drawnow;
saveas(h1, sprintf('%s/ErrorFigs/errorPerTile/avgerror_
%s.png',pwd,testName_vec{i}),'png')
saveas(h2, sprintf('%s/ErrorFigs/errorPerTile/stderror_
%s.png',pwd,testName_vec{i}),'png')
end
Weights = [ 0 , 120, 195, 192, 121,
            782, 472, 230, 253, 494,
                                      875;...
           1119, 488, 269, 270, 527, 1173;...
           1203, 535, 280, 286, 585, 1182;...
            992, 485, 273, 258, 510, 932];
%setup figure and video object
```

```
h3 = figure;%('visible','off');
h2.InvertHardcopy = 'off';
ax1 = gca;
c1 = colorbar;
c1.FontSize = 14;
%plot
imagesc(Weights);
%set plot properties
set(ax1,'color',0*[1 1 1], 'XTick', xtick, 'YTick',
ytick,'FontSize',14,'FontName','TrebuchetMS')
axis image; colorbar; c1 = colorbar; c1.FontSize = 14; %caxis(ax1,
[minC maxC]);
colormap(ax1,cmap)
title(c1,'^\circC','FontName','TrebuchetMS')
title('Number of Pixels Per
Tile','FontSize',14,'FontName','TrebuchetMS')
xlabel('Tile Columns', 'FontName', 'TrebuchetMS')
ylabel('Tile Rows','FontName','TrebuchetMS')
%add Temps
for x = 1:5
    for y = 1:6
 text(y-0.2,x,num2str(round(Weights(x,y),3)), 'FontSize',14, 'FontName', 'TrebuchetMS
    end
end
%draw and save frame
drawnow;
saveas(h3, sprintf('%s/ErrorFigs/errorPerTile/
numPxPerTile.png',pwd),'png')
toc;
```

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