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Fit the GLM to a white noise run

```
alex_test = glm_fit_from_WN(800, '2015-03-09-2/d05-27-norefit/data008-from-d05-d27/data008-from-d05-d27', 'BW-10-8-0.48-11111-32x32');
```

Examining 213 cells (RRS v.32) ... extracted 212 cells.

Stimulus information synchronized.

!!
!!! WARNING! STIMULUS PARAMETERS WERE GUESSED! !!!

given parameters:

```
interval: 8
field_height: 32
field_width: 32
independent: 'nil'
refresh_period: 66.6192
stixel_height: 10
stixel_width: 10
```

guessed parameters:

```
interval: 8
field_height: 32
field_width: 32
independent: 'nil'
refresh_period: 66.6192
stixel_height: 10
stixel_width: 10
x_start: 160
x_end: 480
y_start: 80
y_end: 400
monitor_x: 640
monitor_y: 480
monitor_refresh: 120
```

!!! WARNING! STIMULUS PARAMETERS WERE GUESSED! !!!
!!

Cell ids synchronized.
Using BW-10-8-0.48-11111-32x32 XML file
Loading Stimulus Movies

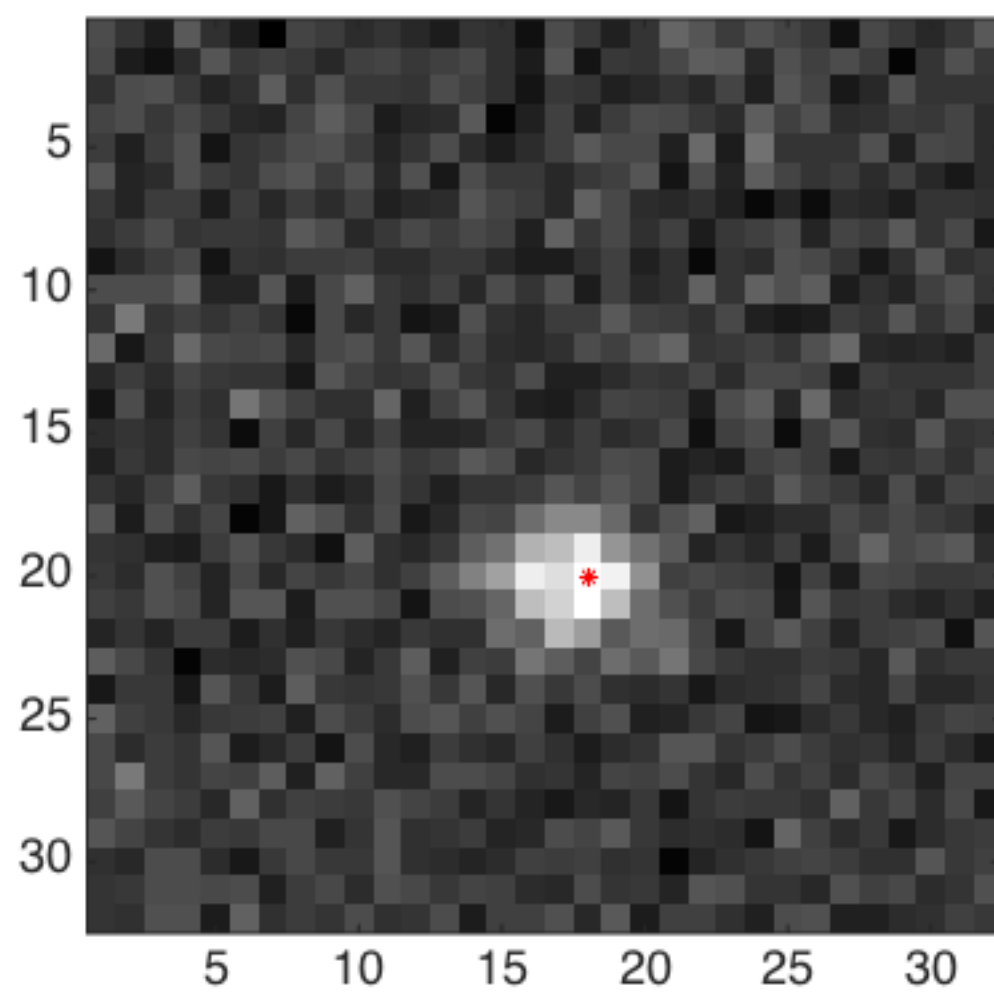
Iteration	f(x)	Norm of step	First-order optimality	CG-iterations
0	7661.37		7.68e+03	
1	7661.37	10	7.68e+03	4
2	4138.01	2.5	2.56e+04	0
3	-9808.9	0.252425	8.84e+03	1
4	-14467.9	0.625	2.8e+03	4
5	-16137.7	1.25	802	4
6	-16454.4	1.33077	393	4

Local minimum possible.

fminunc stopped because the final change in function value relative to its initial value is less than the selected value of the function tolerance.

Elapsed time is 43.868115 seconds.

The red dot should be over the center of the STA



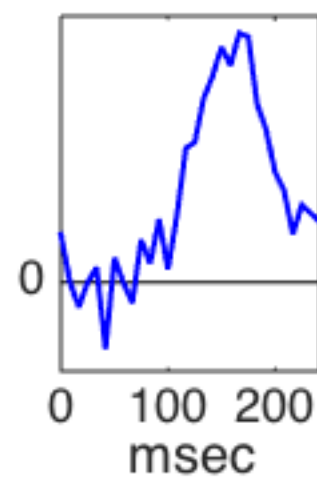
Look at the model output

```
plotfilters(alex_test)
```

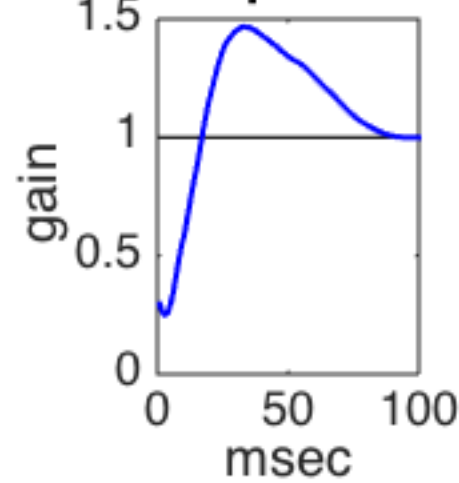
Space Filter



Time Filter



Post Spike Filter



Load up the Natural Scenes test movie

```
idx = 1:120;
for i = 1:30
    load([' /Volumes/Data/Stimuli/movies/eye-movement/current_movies/NSbrownian_6000/matfiles/movie_chunk_' num2str(i) '.mat']);
    testmovie(:, :, idx) = movie;
    idx = idx+120;
end
% Downsample and take the middle to match the white noise run
testmovie_cut = imresize(testmovie(81:240, :, :), 0.2);
```

Make predictions!

```
xval = glm_predict(alex_test, testmovie_cut);
plotrasters(xval, alex_test)
```

