$Clustering\ output, found\ in/home/pauline/Research/m83\_clustering/results/broad\_narrow/UVW\_U/clustering/mag05\_22mag05\_336\_mag05\_438-mag05\_814$ 

# K-means results

Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	2838.79509379	0.447753773083	14095	9711	3141	1243	0	0	0	0	0
4	2138.98933088	0.355467539787	14095	6233	5599	1474	789	0	0	0	0
5	1756.72636737	0.358400044316	14095	5900	3822	2629	1177	567	0	0	0
6	1492.76824686	0.32624643936	14095	4193	3666	3216	1634	967	419	0	0
7	1306.44530745	0.321623615194	14095	3642	3144	2991	1696	1681	508	433	0
8	1169.67813201	0.322657688857	14095	3323	2998	2167	2062	1899	823	554	269

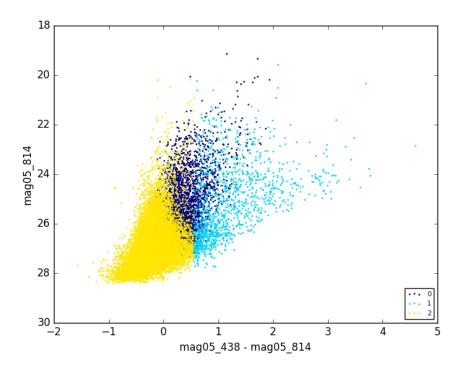
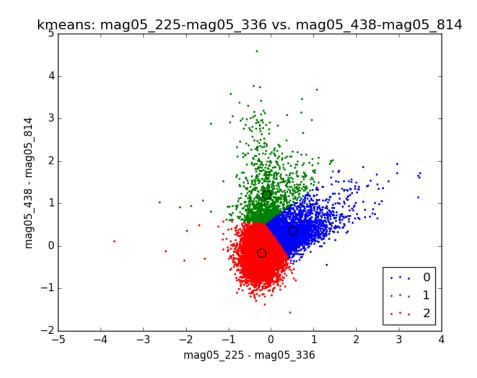


Figure 1: kmeans\_CMD\_3cl\_mag05\_438-mag05\_814vsmag05\_814.png

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	3141	0.447753773083	0.329104812876	0.5770	0.5995	3.8200	0.0010	0.3803	0.507018742058	0
2	1243	0.447753773083	0.270536936274	0.9970	0.8378	4.5446	0.0010	0.8323	-0.109675241158	
3	9711	0.447753773083	0.508814107978	0.3248	0.4575	4.4583	0.0000	0.2627	-0.221879624858	-(



 $Figure~2:~kmeans\_col\_3cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	5599	0.355467539787	0.300780886329	0.2838	0.4327	2.0057	0.0000	0.2705	-0.0284114917916
2	1474	0.355467539787	0.332214680789	0.7922	0.6267	3.4877	0.0010	0.4219	0.837916666667
3	789	0.355467539787	0.306207980047	1.1698	0.8558	4.5446	0.0022	0.9301	-0.0685
4	6233	0.355467539787	0.416326047651	0.3693	0.3821	4.4583	0.0000	0.2223	-0.275770441767

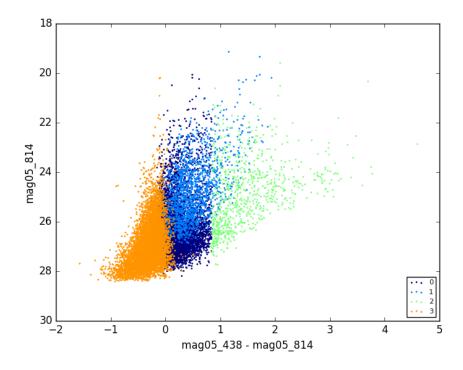
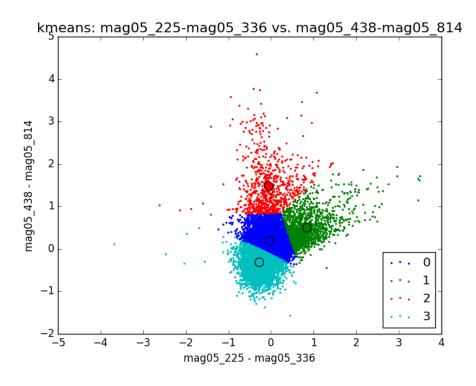
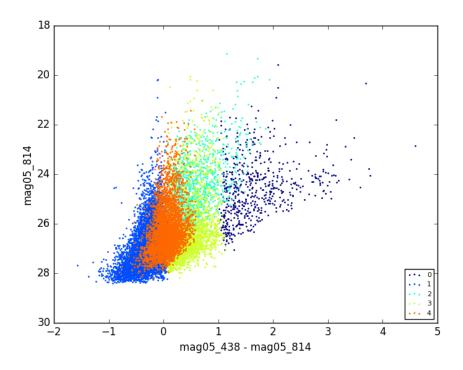


Figure 3: kmeans\_CMD\_4cl\_mag05\_438-mag05\_814vsmag05\_814.png

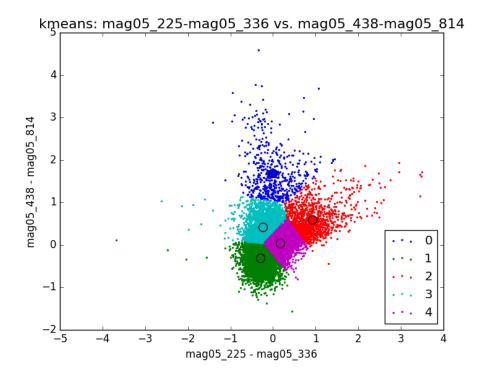


 $Figure~4:~kmeans\_col\_4cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 



 $Figure~5:~kmeans\_CMD\_5cl\_mag05\_438-mag05\_814vsmag05\_814.png$ 

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1
1	567	0.358400044316	0.327944534814	1.2951	0.8325	3.6314	0.0028	0.9832	-0.00828042328042
2	5900	0.358400044316	0.401765512265	0.3716	0.3636	4.4583	0.0000	0.2108	-0.298163043478
3	1177	0.358400044316	0.302738945202	0.8666	0.6422	3.3464	0.0010	0.425	0.916188983051
4	2629	0.358400044316	0.283673294984	0.4198	0.4225	2.9397	0.0010	0.4103	-0.238835798256
5	3822	0.358400044316	0.364517718476	0.2246	0.3376	1.4120	0.0000	0.1995	0.161063824222



 $Figure~6:~kmeans\_col\_5cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	3666	0.32624643936	0.308378292001	0.4172	0.3423	2.7714	0.0000	0.2157	-0.268813387978	
2	1634	0.32624643936	0.300608585478	0.5377	0.4436	3.0700	0.0010	0.4746	-0.145924908425	
3	967	0.32624643936	0.291744505672	0.9354	0.6599	3.2329	0.0010	0.4408	1.00366907216	
4	4193	0.32624643936	0.343840890639	0.2652	0.2935	3.7148	0.0000	0.2202	-0.285914374552	-
5	3216	0.32624643936	0.346123321223	0.2619	0.3402	1.2200	0.0010	0.2059	0.236159900837	
6	419	0.32624643936	0.33355590249	1.4104	0.8189	3.4207	0.0028	1.0652	-0.0252887828162	

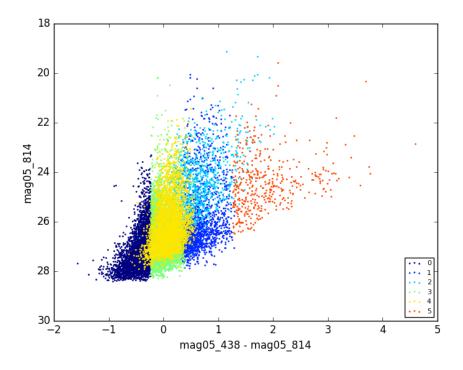
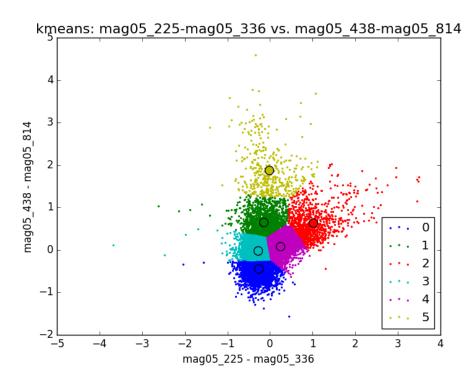
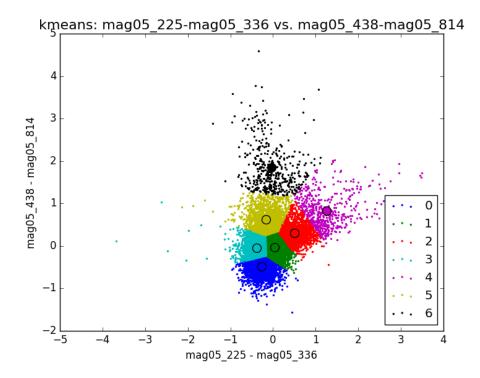


Figure 7: kmeans\_CMD\_6cl\_mag05\_438-mag05\_814vsmag05\_814.png



 $Figure~8:~kmeans\_col\_6cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 



 $Figure~9:~kmeans\_col\_7cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	2991	0.321623615194	0.320436823284	0.4337	0.3219	1.7301	0.0000	0.2122	-0.273872605042
2	3642	0.321623615194	0.338190425295	0.1599	0.2770	1.1072	0.0000	0.1599	0.0390508521165
3	1696	0.321623615194	0.337561337344	0.4646	0.3712	1.6801	0.0010	0.2323	0.501267291911
4	3144	0.321623615194	0.316845660867	0.3244	0.2843	3.5266	0.0000	0.2432	-0.385993979721
5	508	0.321623615194	0.244669144238	1.1420	0.7154	3.0313	0.0010	0.4772	1.24943811395
6	1681	0.321623615194	0.301203816201	0.5172	0.4278	2.5820	0.0010	0.4643	-0.167395820896
7	433	0.321623615194	0.332301299277	1.3933	0.8146	3.4618	0.0028	1.056	-0.0299908256881

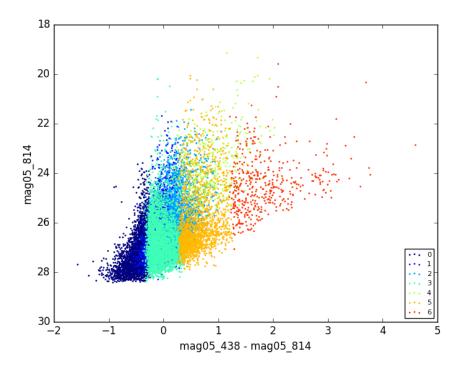
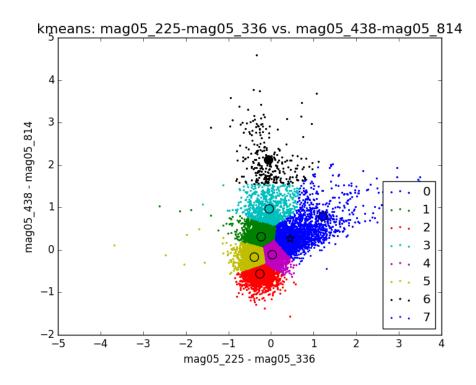


Figure 10: kmeans\_CMD\_7cl\_mag05\_438-mag05\_814vsmag05\_814.png

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	554	0.322657688857	0.254573577448	1.1173	0.7064	3.0002	0.0010	0.4727	1.21940574506
2	2167	0.322657688857	0.299282503777	0.3377	0.3183	2.8331	0.0010	0.3351	-0.236622519612
3	2062	0.322657688857	0.294914220811	0.4674	0.3111	1.6075	0.0010	0.2305	-0.261627974745
4	823	0.322657688857	0.277236067405	0.7497	0.4924	2.2778	0.0010	0.5891	-0.0555563636364
5	3323	0.322657688857	0.350643333736	0.1615	0.2560	0.9648	0.0000	0.1572	0.0254911064215
6	2998	0.322657688857	0.344374823047	0.3435	0.2550	3.5392	0.0000	0.195	-0.40080494322
7	269	0.322657688857	0.323418227966	1.5771	0.7995	3.1344	0.0045	1.1955	-0.0708289962825
8	1899	0.322657688857	0.335639678376	0.4257	0.3618	1.5427	0.0010	0.2221	0.450628211851



 $Figure~11:~kmeans\_col\_8cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 

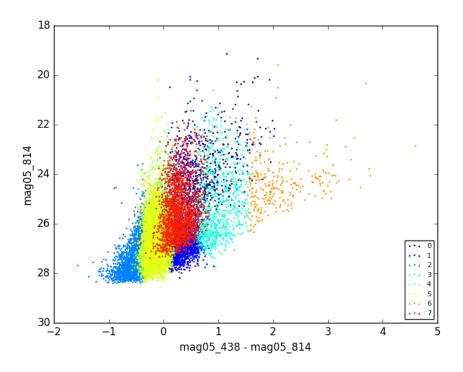
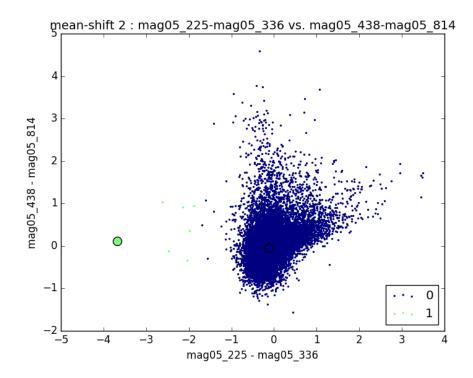


Figure 12: kmeans\_CMD\_8cl\_mag05\_438-mag05\_814vsmag05\_814.png

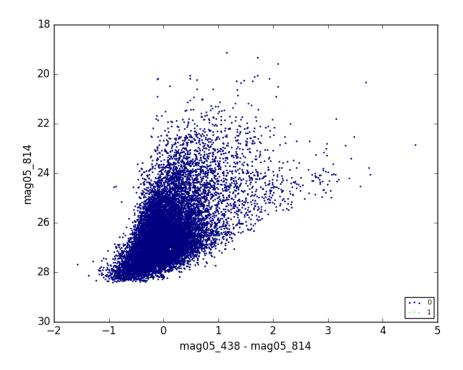
# Meanshift results

Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
1.0000	2	0.690932709706	14095	14088	7	0	0	0	0	0	0	0	0
0.5000	11	0.28269406776	14095	13398	286	185	84	83	45	4	4	3	2
0.6000	7	0.484387568758	14095	13572	341	100	72	5	4	1	0	0	0
0.7000	5	0.54995048941	14095	13739	330	19	6	1	0	0	0	0	0
0.9000	2	0.690932709706	14095	14088	7	0	0	0	0	0	0	0	0
0.8000	4	0.54978102912	14095	13994	81	19	1	0	0	0	0	0	0



 $Figure~13:~meanshift\_color\_2cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	14088	0.690932709706	0.690996447779	0.4827	0.7760	6.2127	0.0000	0.4825	-0.112235709189	
2	7	0.690932709706	0.562655285361	1.8089	1.0842	1.9815	0.2536	1.5134	-3.682	
1	14088	0.690932709706	0.690996447779	0.4827	0.7760	6.2127	0.0000	0.4825	-0.123665903329	-
2	7	0.690932709706	0.562655285361	1.8089	1.0842	1.9815	0.2536	1.5134	-3.682	



 $Figure~14:~meanshift\_CMD\_2cl\_mag05\_438-mag05\_814vsmag05\_814.png$ 

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	$\operatorname{Stdev}$	Cen1	
1	13994	0.54978102912	0.54890513544	0.4580	0.7511	5.1295	0.0000	0.458	-0.134366678047	-0
2	19	0.54978102912	0.367999258234	1.2540	0.9197	2.1313	0.0897	1.1405	-1.9478	
3	1	0.54978102912	1.0	N/A	N/A	N/A	N/A	1.9	-3.682	
4	81	0.54978102912	0.738187088842	2.0288	0.7010	2.6077	0.0050	1.5809	-0.346	

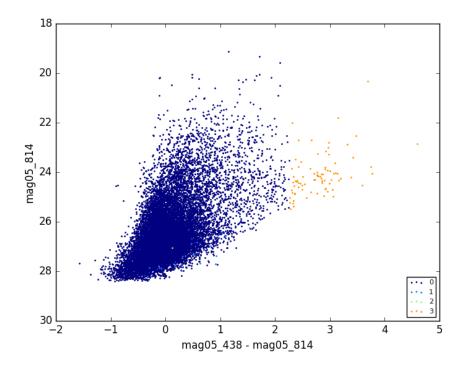
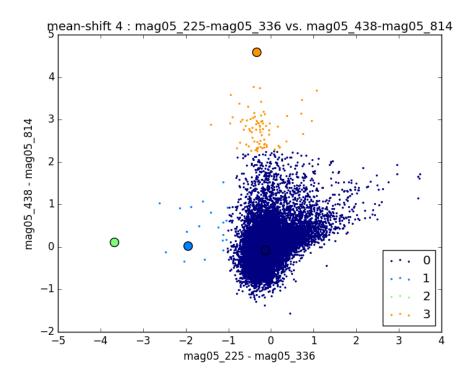
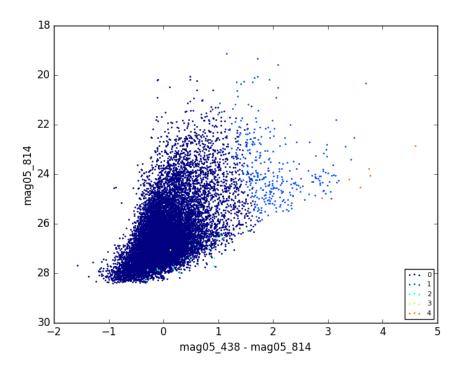


Figure 15: meanshift\_CMD\_4cl\_mag05\_438-mag05\_814vsmag05\_814.png

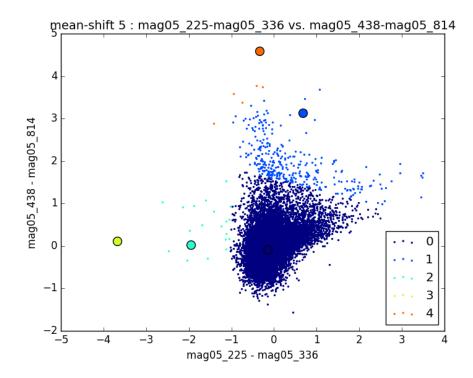


 $Figure~16:~meanshift\_color\_4cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 



 $Figure~17:~meanshift\_CMD\_5cl\_mag05\_438-mag05\_814vsmag05\_814.png$ 

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	13739	0.54995048941	0.555521391718	0.4172	0.7025	3.7540	0.0000	0.417	-0.148946488905	-0
2	330	0.54995048941	0.326438040244	1.5900	1.1860	4.7543	0.0050	1.0562	0.674857142857	9
3	19	0.54995048941	0.365971509072	1.2540	0.9197	2.1313	0.0897	1.1405	-1.9478	
4	1	0.54995048941	1.0	N/A	N/A	N/A	N/A	1.9	-3.682	
5	6	0.54995048941	0.594289243851	2.6742	0.8926	2.0152	0.1430	2.2225	-0.346	



 $Figure~18:~meanshift\_color\_5cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	13572	0.484387568758	0.489099126162	0.3987	0.6778	3.2020	0.0000	0.398	-0.161742302274	-(
2	100	0.484387568758	0.663914027236	1.6419	0.6998	2.2185	0.0060	0.6117	3.217	
3	341	0.484387568758	0.260259755046	1.4780	0.8653	3.2041	0.0028	1.0395	0.573428571429	
4	72	0.484387568758	0.392434367828	1.0654	0.6733	2.3041	0.0041	1.0572	-1.7865	
5	4	0.484387568758	0.416550774747	1.3301	0.7782	1.3485	0.4758	0.8754	-2.022333333333	-
6	1	0.484387568758	1.0	N/A	N/A	N/A	N/A	1.9	-3.682	
7	5	0.484387568758	0.665596919625	2.7479	0.6933	1.2731	0.1430	2.2071	-0.346	

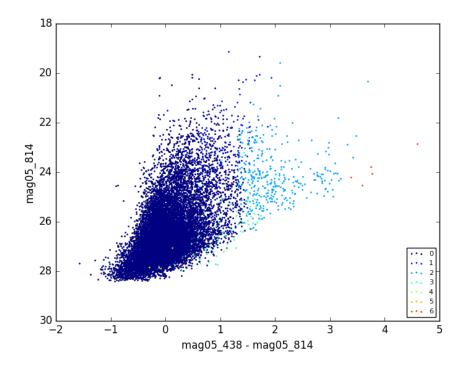
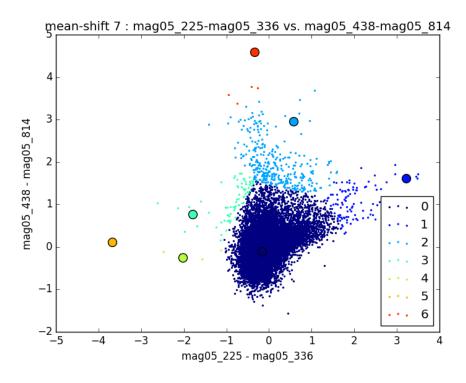
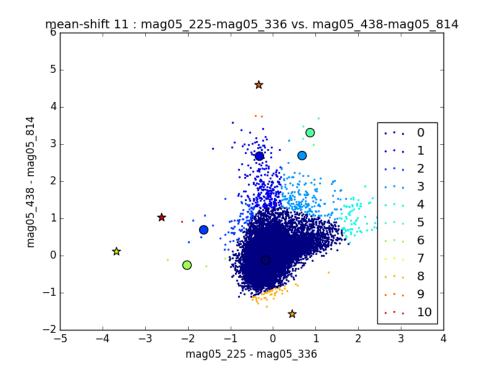


Figure 19: meanshift\_CMD\_7cl\_mag05\_438-mag05\_814vsmag05\_814.png

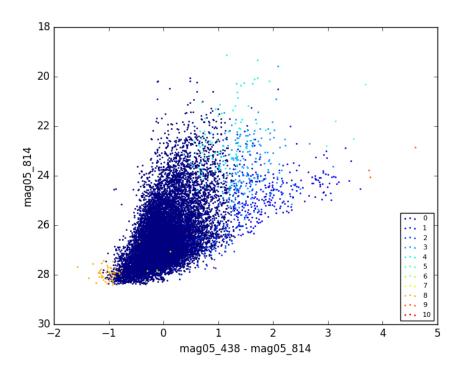


 $Figure~20:~meanshift\_color\_7cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 



 $Figure~21:~meanshift\_color\_11cl\_mag05\_225-mag05\_336vsmag05\_438-mag05\_814.png$ 

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	13398	0.28269406776	0.278066470132	0.3878	0.6608	3.0285	0.0000	0.3867	-0.177379570517	-0
2	286	0.28269406776	0.261432984091	1.4360	0.6896	2.5251	0.0028	1.1496	-0.328578947368	2
3	84	0.28269406776	0.466667398246	0.9184	0.5154	1.8098	0.0041	0.9147	-1.63733333333	0.
4	185	0.28269406776	0.341420140911	1.2628	0.6242	2.3779	0.0085	0.5393	0.6788	
5	83	0.28269406776	0.540261367678	1.6986	0.6889	2.1705	0.0060	0.6398	3.2652	
6	4	0.28269406776	0.651121901752	2.4364	0.4945	0.7215	0.2946	1.2496	0.8625	
7	4	0.28269406776	0.36679049319	1.3301	0.7782	1.3485	0.4758	0.8754	-2.022333333333	-0
8	1	0.28269406776	1.0	N/A	N/A	N/A	N/A	1.9	-3.682	
9	45	0.28269406776	0.643830833376	0.7709	0.4156	1.9321	0.0125	0.5637	0.446	
10	3	0.28269406776	0.589383235406	2.8782	0.6093	0.8576	0.1430	2.2067	-0.346	
11	2	0.28269406776	0.625908484931	1.8272	0.5004	0.5004	0.5004	1.6878	-2.621	



 $Figure~22:~meanshift\_CMD\_11cl\_mag05\_438-mag05\_814vsmag05\_814.png$