$Clustering\ output, found\ in/home/pauline/Research/m83_clustering/results/broad_narrow/B_HBeta/clustering/mag05_487_mag05_555-mag05_814$

K-means results

Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	1714.71042408	0.43073980747	13147	7379	4509	1259	0	0	0	0	0
4	1399.28061237	0.362254991353	13147	5659	4668	2202	618	0	0	0	0
5	1173.58508313	0.360509018725	13147	5177	4751	2108	561	550	0	0	0
6	1015.43972538	0.327902270091	13147	4589	4029	2605	1176	399	349	0	0
7	900.48877256	0.322755792623	13147	3547	3397	2514	1845	1107	392	345	0
8	807.249030217	0.308414564153	13147	3572	2533	2283	1722	1689	766	329	253

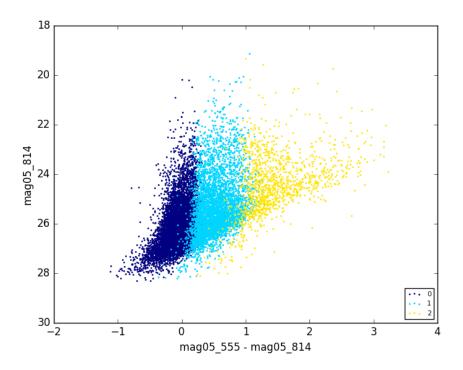
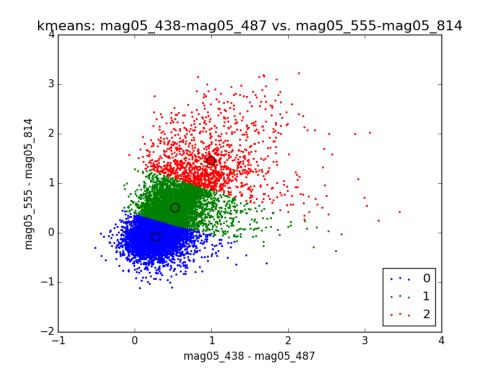


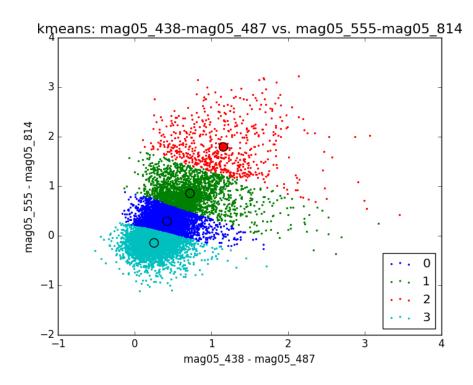
Figure 1: kmeans_CMD_3cl_mag05_555-mag05_814vsmag05_814.png

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	7379	0.43073980747	0.511762994576	0.2786	0.3338	2.2572	0.0000	0.2588	0.275728753733	-0.0
2	4509	0.43073980747	0.34380662369	0.5776	0.4282	3.1002	0.0000	0.2524	0.523999778712	0.5
3	1259	0.43073980747	0.267206549341	1.3428	0.8253	3.9597	0.0010	0.5387	0.995080824089	1.

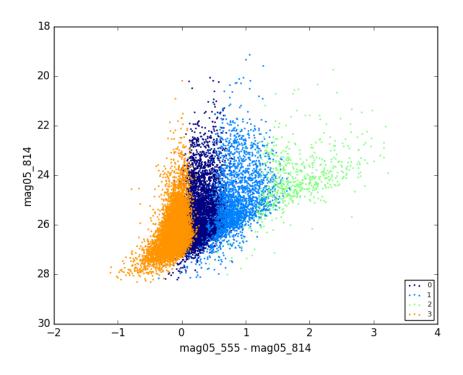


 $Figure~2:~kmeans_col_3cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$

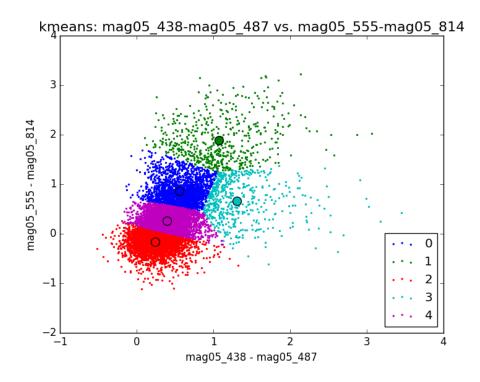
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	4668	0.362254991353	0.349274466639	0.4088	0.3209	2.1395	0.0000	0.1947	0.416628987369	0.3
2	2202	0.362254991353	0.259175879295	0.8518	0.5178	3.5075	0.0010	0.3193	0.715567665758	0.8
3	618	0.362254991353	0.270616109449	1.5876	0.8404	3.9597	0.0014	0.5852	1.15043203883	1.
4	5659	0.362254991353	0.423079540413	0.2697	0.3044	2.2572	0.0000	0.2636	0.251422206506	-0.



 $Figure~3:~kmeans_col_4cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$



 $\label{eq:figure 4: kmeans_CMD_4cl_mag05_555-mag05_814vsmag05_814.png} Figure \ 4: \ kmeans_CMD_4cl_mag05_555-mag05_814vsmag05_814.png$



 $Figure~5:~kmeans_col_5cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	2108	0.360509018725	0.339650084411	0.7599	0.4001	1.4182	0.0000	0.2731	0.5571111111111	0.
2	550	0.360509018725	0.318721843591	1.5953	0.7655	2.9662	0.0014	0.5973	1.07341454545	1
3	5177	0.360509018725	0.403884245233	0.2689	0.2969	1.8714	0.0000	0.2652	0.244901759814	-0
4	561	0.360509018725	0.184054986247	1.1060	0.6572	2.5840	0.0010	0.5011	1.30637076649	0.
5	4751	0.360509018725	0.348172825176	0.3754	0.2959	1.4526	0.0000	0.1813	0.397228631579	0.

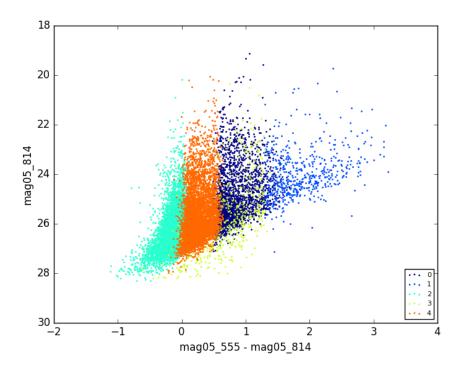
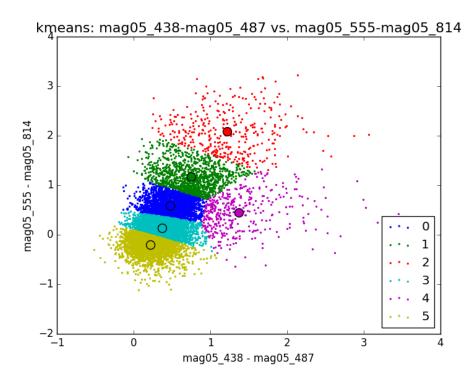


Figure 6: kmeans_CMD_5cl_mag05_555-mag05_814vsmag05_814.png

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	2605	0.327902270091	0.341702428511	0.5596	0.3088	1.2187	0.0000	0.1821	0.473725038402	0.
2	1176	0.327902270091	0.285293603061	1.0198	0.4763	1.6719	0.0010	0.3434	0.747614468085	1
3	349	0.327902270091	0.290934441998	1.7601	0.7737	2.9039	0.0028	0.6149	1.21673352436	2
4	4589	0.327902270091	0.324653897515	0.3162	0.2626	1.4057	0.0000	0.1874	0.367022870834	0.
5	399	0.327902270091	0.219976353637	1.0947	0.6682	2.5706	0.0010	0.6077	1.37090523691	0
6	4029	0.327902270091	0.349006607189	0.2684	0.2841	1.5952	0.0000	0.2682	0.219360069531	-0



 $Figure~7:~kmeans_col_6cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$

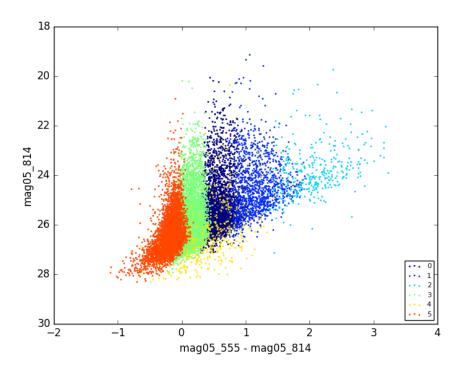


Figure 8: kmeans_CMD_6cl_mag05_555-mag05_814vsmag05_814.png

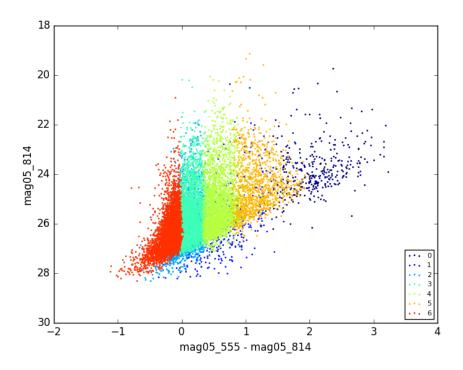
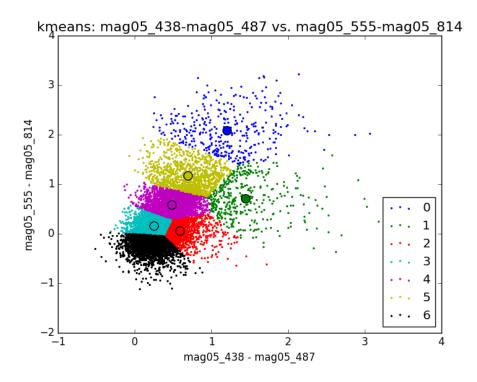


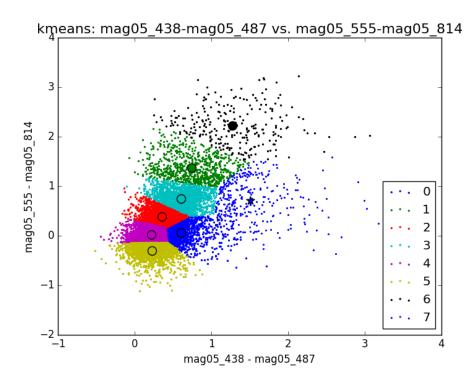
Figure 9: kmeans_CMD_7cl_mag05_555-mag05_814vsmag05_814.png

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	345	0.322755792623	0.301400302428	1.7584	0.7598	2.9039	0.0028	0.618	1.20050289017	2.
2	392	0.322755792623	0.199744376129	1.2011	0.6676	2.5223	0.0022	0.5338	1.44067346939	0.
3	1845	0.322755792623	0.242573936723	0.4500	0.2797	1.5420	0.0010	0.3121	0.588344360087	0.0
4	3397	0.322755792623	0.360398830864	0.2453	0.2154	0.8308	0.0000	0.1305	0.254017678256	0.
5	2514	0.322755792623	0.336708948229	0.5604	0.2970	1.2310	0.0000	0.1746	0.481034962257	0.
6	1107	0.322755792623	0.292144990839	0.9962	0.4489	1.4469	0.0010	0.3504	0.689814914645	1.
7	3547	0.322755792623	0.343747663779	0.2649	0.2634	1.5228	0.0000	0.2648	0.211543349336	-0.



 $Figure \ 10: \ kmeans_col_7cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	1689	0.308414564153	0.237032059354	0.4600	0.2813	1.5305	0.0010	0.3201	0.603064497041	0.0
2	766	0.308414564153	0.278148923582	1.1351	0.4825	1.5578	0.0010	0.4137	0.743418300654	1
3	2533	0.308414564153	0.342394221379	0.3971	0.2336	1.0101	0.0000	0.1339	0.355539795114	0.
4	1722	0.308414564153	0.297465921404	0.7081	0.3229	1.2581	0.0000	0.1962	0.606817653891	0.
5	3572	0.308414564153	0.361593955532	0.1927	0.2004	0.8703	0.0000	0.1493	0.218233118521	0.0
6	2283	0.308414564153	0.272141984335	0.3054	0.2653	1.4718	0.0010	0.3034	0.225759771629	-0.
7	253	0.308414564153	0.316407423604	1.8656	0.7428	2.9039	0.0028	0.6349	1.27807905138	2.
8	329	0.308414564153	0.209213781843	1.2497	0.6817	2.4057	0.0022	0.563	1.51137537538	0.



 $Figure~11:~kmeans_col_8cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$

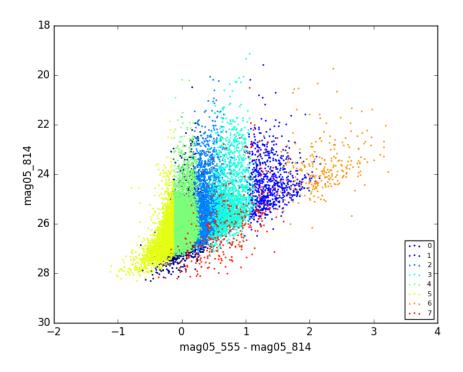
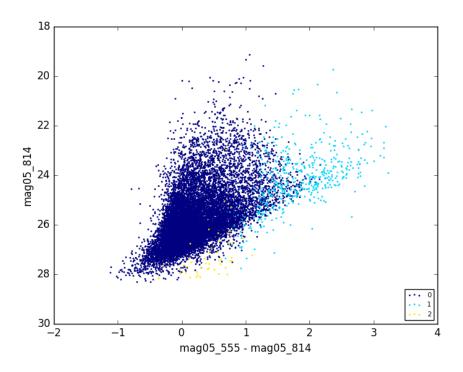


Figure 12: kmeans_CMD_8cl_mag05_555-mag05_814vsmag05_814.png

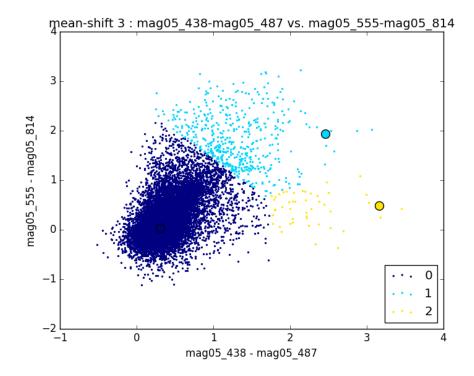
Meanshift results

Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
0.4629	3	0.626230796029	13147	12604	497	46	0	0	0	0	0	0	0
0.2500	32	0.327740372139	13147	11237	838	367	313	85	73	49	31	29	20
0.3000	22	0.406610449395	13147	11629	720	402	112	85	42	38	26	25	23
0.3500	8	0.531854854074	13147	12409	427	185	56	52	9	7	2	0	0
0.4000	6	0.559539955932	13147	12447	439	193	37	29	2	0	0	0	0



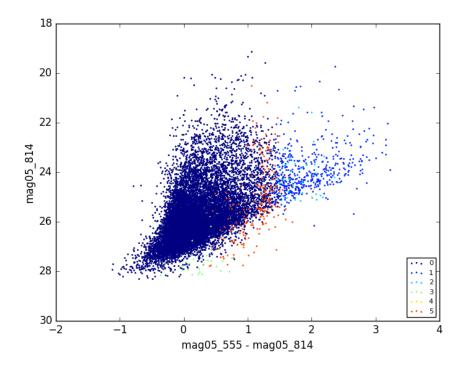
 $Figure~13:~meanshift_CMD_3cl_mag05_555-mag05_814vsmag05_814.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	12604	0.626230796029	0.632247695895	0.4778	0.6004	3.2850	0.0000	0.3694	0.306935953079	0.
2	497	0.626230796029	0.473194470643	1.6444	0.8275	2.9039	0.0014	0.5465	2.462	1
3	46	0.626230796029	0.631057922199	1.6497	0.6313	1.7148	0.0256	0.969	3.161	

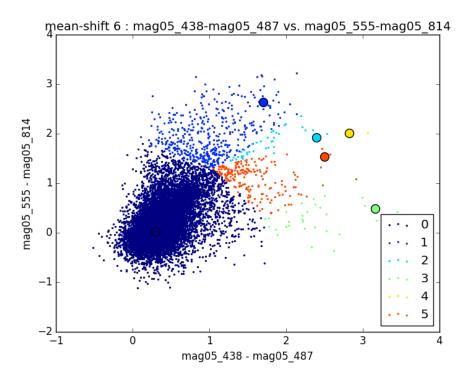


 $Figure~14:~meanshift_color_3cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$

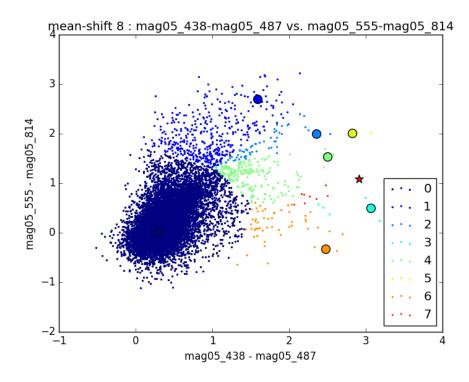
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	12447	0.559539955932	0.577938599151	0.4598	0.5786	2.9249	0.0000	0.3549	0.300479468281	(
2	439	0.559539955932	0.176582618164	1.6103	0.7083	2.4105	0.0014	0.6358	1.70248275862	
3	37	0.559539955932	0.303763576775	1.7757	0.4718	1.3664	0.0146	0.281	2.394333333333	
4	29	0.559539955932	0.481973655409	1.7023	0.6287	1.7314	0.0354	1.0912	3.161	
5	2	0.559539955932	0.84242553787	2.5353	0.2022	0.2022	0.2022	0.4848	2.822	
6	193	0.559539955932	0.30180802175	1.3721	0.5021	1.8733	0.0020	0.3609	2.496333333333	



 $Figure~15:~meanshift_CMD_6cl_mag05_555-mag05_814vsmag05_814.png$

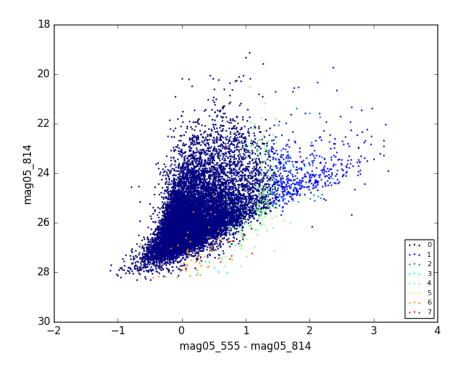


 $Figure~16:~meanshift_color_6cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$

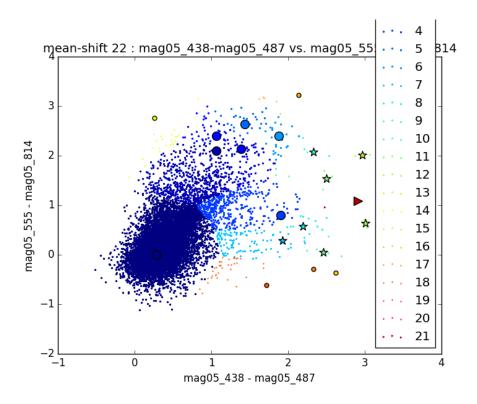


 $Figure~17:~meanshift_color_8cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$

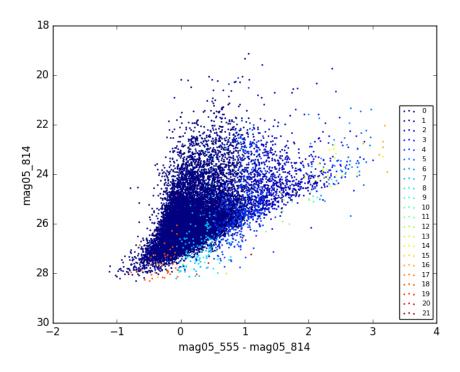
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	12409	0.531854854074	0.550574460278	0.4561	0.5740	2.8187	0.0000	0.3516	0.292950591716	
2	427	0.531854854074	0.164146789686	1.6045	0.7030	2.4671	0.0022	0.6491	1.59257142857	
3	56	0.531854854074	0.225997194137	1.7210	0.4964	1.5373	0.0014	0.3054	2.3586	
4	7	0.531854854074	0.0957717692544	2.0683	0.5573	1.0824	0.0894	1.22	3.063	
5	185	0.531854854074	0.293940765885	1.3526	0.4430	1.5533	0.0020	0.3045	2.496333333333	
6	2	0.531854854074	0.851909115748	2.5353	0.2022	0.2022	0.2022	0.4848	2.822	
7	52	0.531854854074	0.318641132241	1.3254	0.5361	1.5060	0.0202	0.8833	2.474	
8	9	0.531854854074	0.460907296936	1.7606	0.3550	0.9882	0.0340	0.8126	2.911	



 $Figure~18:~meanshift_CMD_8cl_mag05_555-mag05_814vsmag05_814.png$

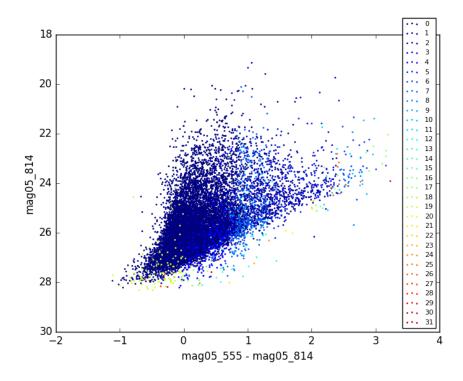


 $Figure~19:~meanshift_color_22cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$

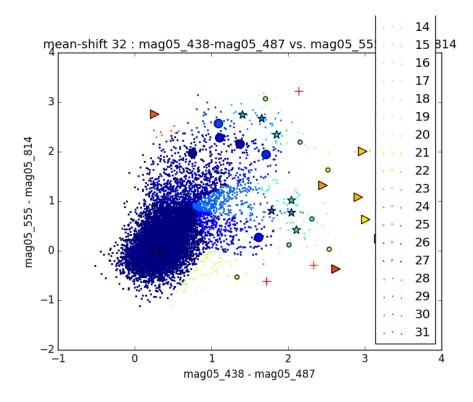


 $Figure~20:~meanshift_CMD_22cl_mag05_555-mag05_814vsmag05_814.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	11629	0.406610449395	0.428242105049	0.3965	0.5013	2.4454	0.0000	0.3084	0.285064093608
2	720	0.406610449395	0.191488363199	1.1769	0.4921	1.4157	0.0010	0.4525	1.06191525424
3	85	0.406610449395	0.248473675706	1.6734	0.4074	0.9969	0.0064	0.2937	1.38804166667
4	42	0.406610449395	0.348137705287	1.9042	0.3170	0.7600	0.0061	0.7881	1.0655
5	402	0.406610449395	0.253216896983	1.1158	0.4351	1.3250	0.0010	0.2866	1.90722222222
6	26	0.406610449395	0.260907262167	2.1843	0.3124	0.7094	0.0326	0.6656	1.43692
7	25	0.406610449395	0.272775406274	2.1165	0.3249	0.8606	0.0234	0.291	1.8770555556
8	112	0.406610449395	0.283461784555	1.0196	0.3870	1.1921	0.0010	0.5981	1.92370588235
9	13	0.406610449395	0.455183127329	1.6456	0.2685	0.5529	0.0331	0.8256	2.189533333333
10	6	0.406610449395	0.201537971553	2.1558	0.3744	0.7436	0.0702	0.212	2.332
11	5	0.406610449395	0.201741085725	1.7552	0.3055	0.4631	0.1347	1.1867	2.45775
12	5	0.406610449395	0.120240754747	1.9594	0.4552	0.7325	0.1527	0.4164	2.496333333333
13	2	0.406610449395	0.595402672205	2.1739	0.1620	0.1620	0.1620	1.1889	3.0075
14	2	0.406610449395	0.730580508282	2.5353	0.2022	0.2022	0.2022	0.4848	2.968
15	23	0.406610449395	0.387331950079	1.6659	0.4036	1.8212	0.0210	0.9879	0.26
16	1	0.406610449395	1.0	N/A	N/A	N/A	N/A	1.494	2.621
17	6	0.406610449395	0.497270485679	2.5510	0.2948	0.5262	0.0316	0.6697	2.138
18	1	0.406610449395	1.0	N/A	N/A	N/A	N/A	1.3095	2.327
19	38	0.406610449395	0.464376899896	0.8902	0.3427	1.0070	0.0030	0.77	1.718
20	1	0.406610449395	1.0	N/A	N/A	N/A	N/A	1.4645	3.174
21	1	0.406610449395	1.0	N/A	N/A	N/A	N/A	1.515	3.455
22	2	0.406610449395	-0.00223970608768	2.0435	0.4574	0.4574	0.4574	0.8495	2.911



 $Figure~21:~meanshift_CMD_32cl_mag05_555-mag05_814vsmag05_814.png$



 $Figure~22:~meanshift_color_32cl_mag05_438-mag05_487vsmag05_555-mag05_814.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	11237	0.327740372139	0.348563208823	0.3752	0.4745	2.1742	0.0000	0.2934	0.276104593487	-(
2	838	0.327740372139	0.128238397282	1.1112	0.4971	1.4675	0.0010	0.4558	0.753215686275	
3	49	0.327740372139	0.165969702707	1.6945	0.3173	0.8621	0.0028	0.3802	1.37155263158	
4	29	0.327740372139	0.375040479336	1.7541	0.2357	0.5493	0.0112	0.6233	1.1048	
5	313	0.327740372139	0.215140047668	0.8759	0.3972	1.1998	0.0010	0.3959	1.61080769231	
6	73	0.327740372139	0.164813211901	1.6190	0.3628	0.8664	0.0064	0.2176	1.709375	
7	31	0.327740372139	0.161188413791	2.0170	0.3069	0.8066	0.0061	0.8334	1.088875	
8	367	0.327740372139	0.28056129026	1.0780	0.3631	1.1384	0.0010	0.2234	1.78286956522	
9	14	0.327740372139	0.277933495545	2.2185	0.2128	0.5096	0.0264	0.4853	1.64994444444	
10	6	0.327740372139	0.517796943763	1.5509	0.1545	0.2852	0.0340	0.6342	2.04170588235	
11	9	0.327740372139	0.442582455113	2.2223	0.1815	0.3981	0.0326	0.7154	1.399933333333	
12	10	0.327740372139	0.280140107752	2.1251	0.2250	0.4922	0.0414	0.2665	1.84785714286	
13	20	0.327740372139	0.129244364545	1.5825	0.3103	0.6758	0.0228	0.3939	2.03654545455	
14	9	0.327740372139	0.235110936595	1.5204	0.2331	0.4011	0.0331	0.8417	2.10236363636	
15	7	0.327740372139	0.264419177194	1.7528	0.2401	0.4512	0.0894	0.8522	2.31	
16	7	0.327740372139	0.198536968008	1.3948	0.2731	0.6171	0.0354	0.9598	2.005375	
17	7	0.327740372139	0.242149289539	2.1822	0.2431	0.3901	0.0269	0.124	2.15671428571	
18	7	0.327740372139	0.373217879721	2.4775	0.2222	0.4092	0.0316	0.6682	1.6995	
19	4	0.327740372139	0.212249187831	1.7950	0.2940	0.4292	0.1704	1.2099	2.53	(
20	85	0.327740372139	0.412325680874	0.7458	0.4103	1.3247	0.0030	0.6906	1.329	
21	3	0.327740372139	0.159218196177	2.1797	0.2979	0.4222	0.1527	0.4019	2.519	
22	2	0.327740372139	0.555407040574	2.1739	0.1620	0.1620	0.1620	1.1889	3.0075	
23	2	0.327740372139	0.613513606069	2.5353	0.2022	0.2022	0.2022	0.4848	2.968	
24	1	0.327740372139	1.0	N/A	N/A	N/A	N/A	0.9095	2.911	
25	1	0.327740372139	1.0	N/A	N/A	N/A	N/A	0.56	2.451	
26	1	0.327740372139	1.0	N/A	N/A	N/A	N/A	1.4645	3.174	
27	9	0.327740372139	0.643040930477	1.7564	0.2326	0.4658	0.0502	1.0308	0.26	
28	1	0.327740372139	1.0	N/A	N/A	N/A	N/A	1.494	2.621	
29	1	0.327740372139	1.0	N/A	N/A	N/A	N/A	1.3095	2.327	
30	1	0.327740372139	1.0	N/A	N/A	N/A	N/A	0.546	2.138	
31	2	0.327740372139	0.330604194934	1.2459	0.3595	0.3595	0.3595	1.0753	1.718	
32	1	0.327740372139	1.0	N/A	N/A	N/A	N/A	1.515	3.455	