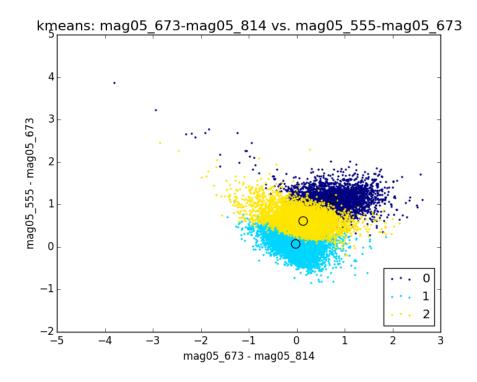
$Clustering\ output, found\ in/home/pauline/Research/m83_clustering/results/broad_narrow/SII_I/clustering/mag05_673-mag05_814_mag05_438-mag05_673_mag05_555-mag05_673$

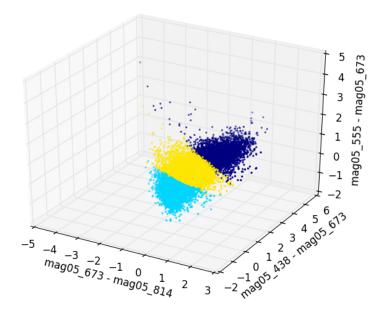
K-means results

Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	5713.83074899	0.439295857276	18882	9928	5952	3002	0	0	0	0	0
4	4654.88026413	0.360345392959	18882	7284	5962	3577	2059	0	0	0	0
5	4003.09263494	0.350674351619	18882	7008	3810	3200	2962	1902	0	0	0
6	3482.53786842	0.317127735439	18882	4958	4893	3649	2598	1546	1238	0	0
7	3142.01825623	0.313087354365	18882	5040	4666	3587	2191	1227	1192	979	0

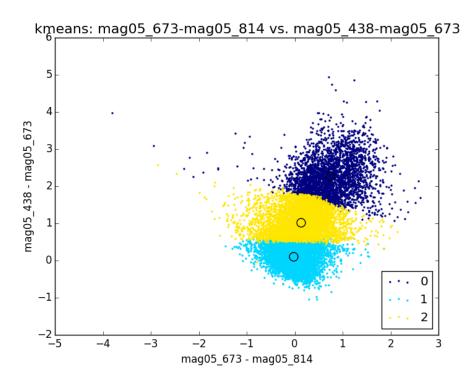


 $Figure \ 1: \ kmeans_3d_3cl_mag05_673-mag05_814vsmag05_555-mag05_673.png$

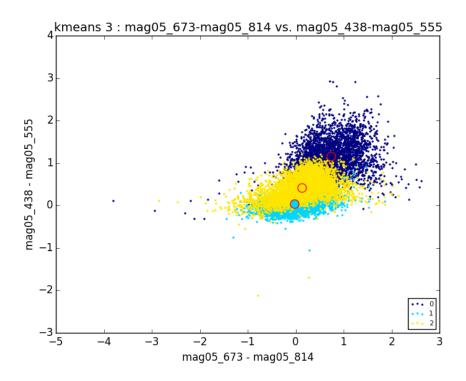
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1
1	3002	0.439295857276	0.39312577879	1.5826	0.9418	7.4437	0.0028	0.7832	0.746110926049
2	9928	0.439295857276	0.531042152157	0.2618	0.5415	3.3354	0.0010	0.2558	-0.0136833199033
3	5952	0.439295857276	0.30954877395	0.7716	0.7331	5.6483	0.0010	0.499	0.133911458333



 $\label{eq:figure 2: kmeans_3d_color_3cl_mag05_673-mag05_814vsmag05_438-mag05_673vsmag05_555-mag05_673.png$



 $Figure \ 3: \ kmeans_3d_3cl_mag05_673-mag05_814vsmag05_438-mag05_673.png$



 $Figure~4:~kmeans_base_color_3cl_mag05_673-mag05_814vsmag05_438-mag05_555.png$

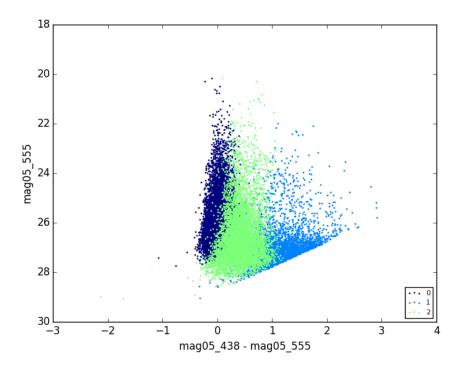
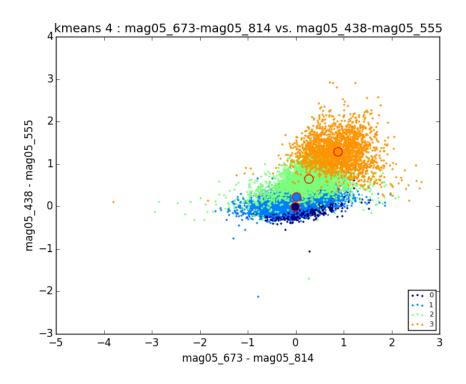
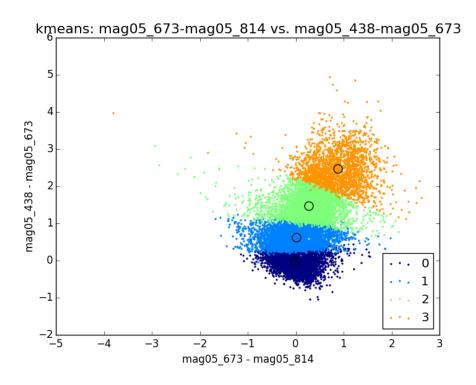


Figure 5: kmeans_CMD_3cl_mag05_438-mag05_555vsmag05_555.png

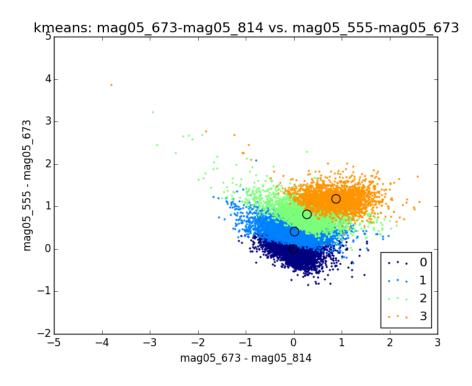


 $Figure~6:~kmeans_base_color_4cl_mag05_673-mag05_814vsmag05_438-mag05_555.png$

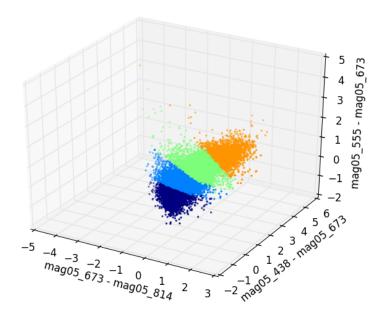
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	7284	0.360345392959	0.469392151151	0.2126	0.4565	2.7414	0.0010	0.2126	-0.00652004393191
2	5962	0.360345392959	0.274089459036	0.5057	0.5789	3.8029	0.0022	0.3666	0.0238663200268
3	3577	0.360345392959	0.282789344377	1.0392	0.7330	6.1936	0.0010	0.5967	0.27624713447
4	2059	0.360345392959	0.359072579526	1.7108	0.8780	7.4437	0.0028	0.8015	0.882993200583



 $Figure~7:~kmeans_3d_4cl_mag05_673-mag05_814vsmag05_438-mag05_673.png$



 $Figure~8:~kmeans_3d_4cl_mag05_673-mag05_814vsmag05_555-mag05_673.png$



 $\label{lem:figure 9: kmeans_3d_color_4cl_mag05_673-mag05_814vsmag05_438-mag05_673vsmag05_555-mag05_673.png$

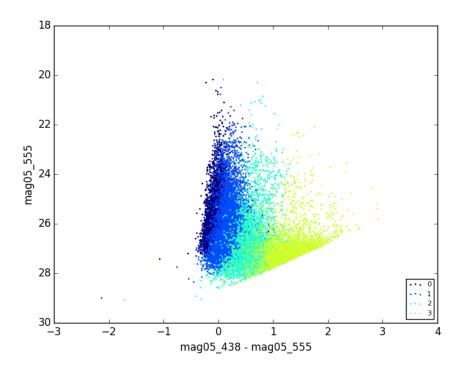
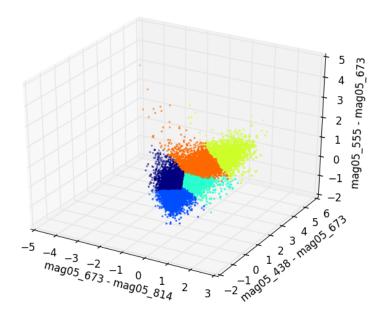
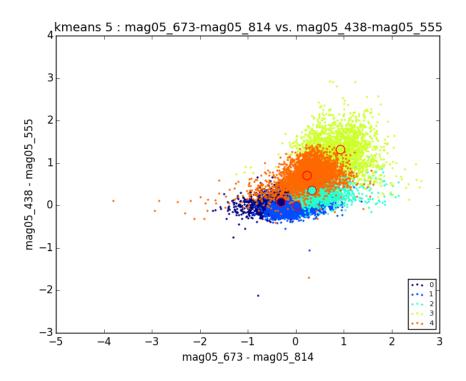


Figure 10: kmeans_CMD_4cl_mag05_438-mag05_555vsmag05_555.png



 $\label{lem:figure 11: kmeans_3d_color_5cl_mag05_673-mag05_814vsmag05_438-mag05_673vsmag05_555-mag05_673.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	3200	0.350674351619	0.263320303576	0.4901	0.5141	2.3775	0.0022	0.4421	-0.307724375	
2	7008	0.350674351619	0.453537495559	0.2006	0.4336	2.2804	0.0010	0.2006	0.0170263984018	-(
3	3810	0.350674351619	0.289389357095	0.5925	0.5246	2.3623	0.0024	0.31	0.338813648294	
4	1902	0.350674351619	0.341370695784	1.7303	0.8616	4.6629	0.0028	0.7931	0.930743953733	
5	2962	0.350674351619	0.286481044236	1.1118	0.6930	6.7972	0.0010	0.6452	0.238102633356	



 $Figure~12:~kmeans_base_color_5cl_mag05_673-mag05_814vsmag05_438-mag05_555.png$

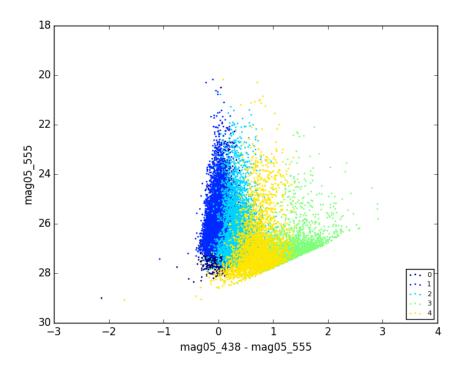
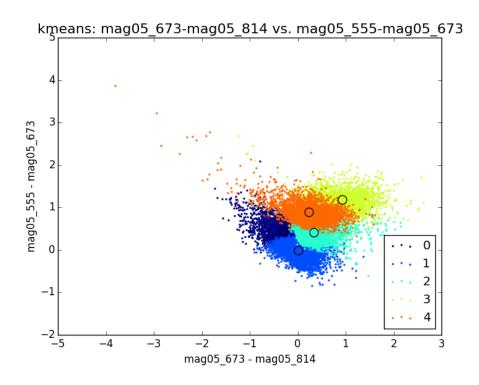
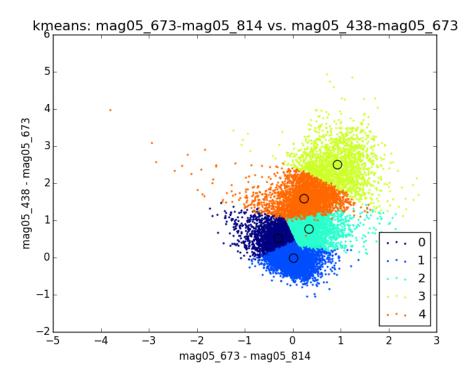


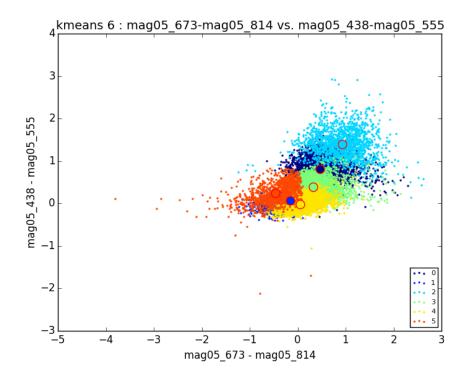
Figure 13: kmeans_CMD_5cl_mag05_438-mag05_555vsmag05_555.png



 $Figure~14:~kmeans_3d_5cl_mag05_673-mag05_814vsmag05_555-mag05_673.png$

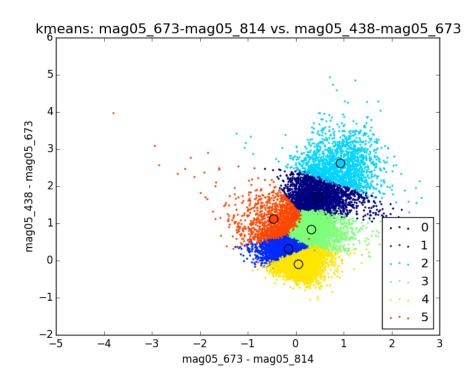


 $Figure~15:~kmeans_3d_5cl_mag05_673-mag05_814vsmag05_438-mag05_673.png$

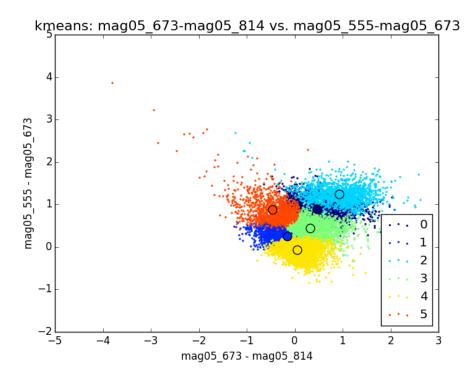


 $Figure~16:~kmeans_base_color_6cl_mag05_673-mag05_814vsmag05_438-mag05_555.png$

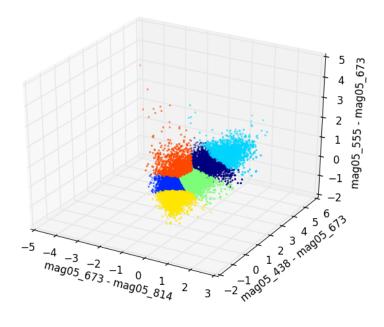
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	2598	0.317127735439	0.315152134961	1.1758	0.6376	3.3240	0.0010	0.5872	0.471050808314
2	4958	0.317127735439	0.306104379552	0.3077	0.4099	1.7535	0.0022	0.2746	-0.142652279145
3	1546	0.317127735439	0.325340819242	1.7985	0.8232	4.5485	0.0028	0.8277	0.936796248383
4	3649	0.317127735439	0.294035063201	0.6203	0.5129	2.3416	0.0024	0.3195	0.329229651959
5	4893	0.317127735439	0.371692790009	0.2050	0.4041	2.5092	0.0010	0.2015	0.0614156958921
6	1238	0.317127735439	0.207569843639	0.9303	0.7197	5.8505	0.0024	0.7784	-0.456910339257



 $Figure~17:~kmeans_3d_6cl_mag05_673-mag05_814vsmag05_438-mag05_673.png$



 $Figure~18:~kmeans_3d_6cl_mag05_673-mag05_814vsmag05_555-mag05_673.png$



 $\label{lem:figure 19: kmeans_3d_color_6cl_mag05_673-mag05_814vsmag05_438-mag05_673vsmag05_555-mag05_673.png$

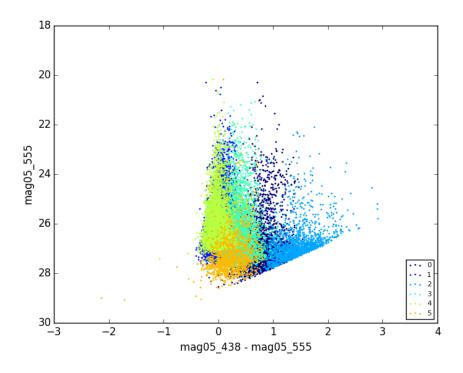
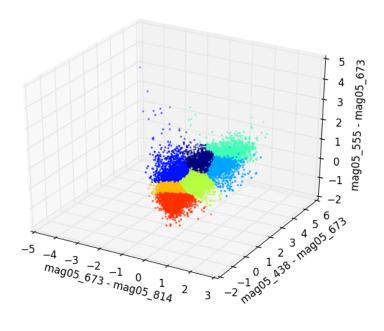
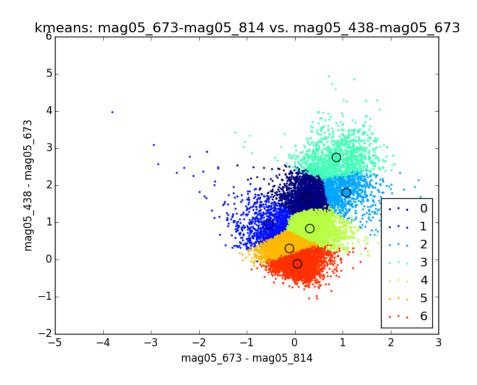


Figure 20: kmeans_CMD_6cl_mag05_438-mag05_555vsmag05_555.png

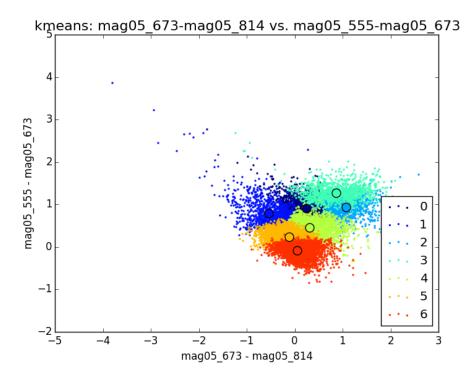


 $\label{lem:color_7cl_mag05_673-mag05_814vsmag05_438-mag05_673vsmag05_555-mag05_673.png} \\ \text{Example 1: kmeans_3d_color_7cl_mag05_673-mag05_814vsmag05_438-mag05_673vsmag05_555-mag05_673.png}$

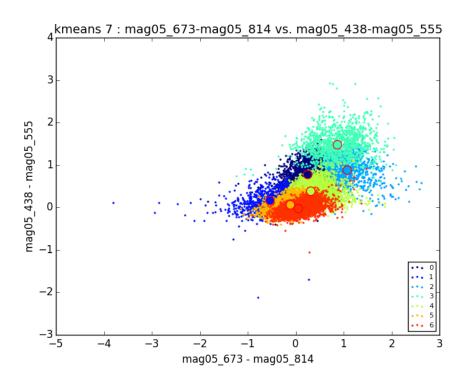
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	2191	0.313087354365	0.321534023077	1.1401	0.5619	3.7131	0.0010	0.6405	0.24539023277	
2	1192	0.313087354365	0.206657089041	0.8491	0.6829	5.9146	0.0024	0.7476	-0.530257550336	0
3	979	0.313087354365	0.270562837629	1.3613	0.6525	2.3113	0.0057	0.4891	1.07900102145	
4	1227	0.313087354365	0.308945906414	1.8549	0.7666	3.7047	0.0028	0.8839	0.867549307253	,
5	3587	0.313087354365	0.295758352835	0.6209	0.4995	2.1521	0.0024	0.3168	0.321582938389	0
6	5040	0.313087354365	0.313982444598	0.2875	0.3945	1.6754	0.0022	0.2527	-0.111898611111	0
7	4666	0.313087354365	0.358676543683	0.2074	0.4014	2.5092	0.0010	0.2025	0.0610932276039	-



 $Figure~22:~kmeans_3d_7cl_mag05_673-mag05_814vsmag05_438-mag05_673.png$



 $Figure~23:~kmeans_3d_7cl_mag05_673-mag05_814vsmag05_555-mag05_673.png$



 $Figure~24:~kmeans_base_color_7cl_mag05_673-mag05_814vsmag05_438-mag05_555.png$

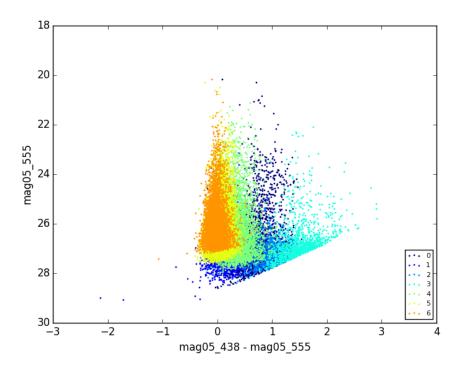
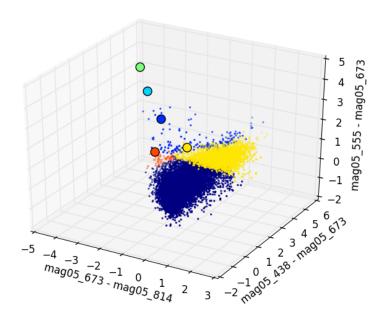


Figure 25: kmeans_CMD_7cl_mag05_438-mag05_555vsmag05_555.png

Meanshift results

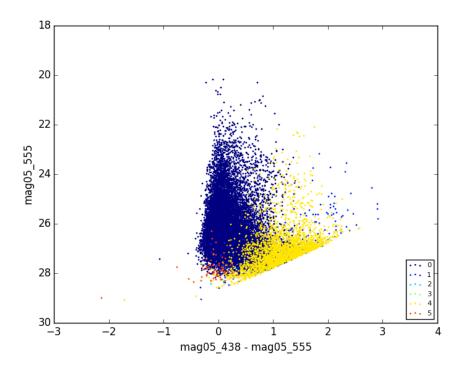
Bandw Nclust TotObj N1N2N10 scoreN3N4N5 N6 N7 N8 N9 0.80716 0.39920711281918882 16181 2449 181 69 1 1 0 0 0 0



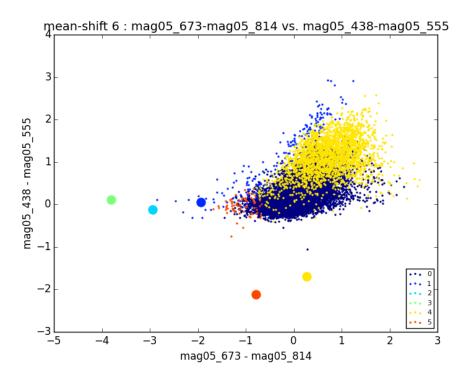
 $\label{eq:figure 26:mag05_673-mag05_814vsmag05_438-mag05_673vsmag05_555-mag05_673.png} \\ \text{Figure 26:} \quad \text{meanshift_3d_color_6cl_mag05_673-mag05_814vsmag05_438-mag05_673vsmag05_555-mag05_673.png} \\ \text{Figure 26:} \quad \text{meanshift_3d_color_6cl_mag05_673-mag05_814vsmag05_438-mag05_673vsmag05_555-mag05_673.png} \\ \text{Figure 26:} \quad \text{meanshift_3d_color_6cl_mag05_673-mag05_814vsmag05_673vsmag05_673vsmag05_673vsmag05_673vsmag05_673.png} \\ \text{Figure 26:} \quad \text{meanshift_3d_color_6cl_mag05_673-mag05_673vsmag05_673vsmag05_673.png} \\ \text{Figure 26:} \quad \text{meanshift_3d_color_6cl_mag05_673-mag05_673.png} \\ \text{Figure 26:} \quad \text{meanshift_3d_color_6cl_mag05_673-mag05_673.png} \\ \text{Figure 26:} \quad \text{meanshift_3d_color_6cl_mag05_673-mag05_673.png} \\ \text{Figure 26:} \quad \text{meanshift_3d_color_6cl_mag05_673-mag05_6$

meanshift results, Ncl=6

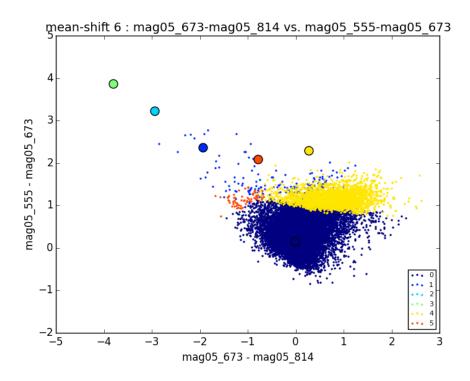
Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	16181	0.399207112819	0.402919761242	0.5381	0.9092	3.8173	0.0010	0.461	-0.0025120139799
2	181	0.399207112819	-0.11765652153	1.9458	1.4427	4.7098	0.0182	1.412	-1.9301
3	1	0.399207112819	0.0	N/A	N/A	N/A	N/A	2.8725	-2.941
4	1	0.399207112819	0.0	N/A	N/A	N/A	N/A	3.6378	-3.799
5	2449	0.399207112819	0.404158556991	1.5987	0.9197	4.0179	0.0028	0.7751	0.271
6	69	0.399207112819	0.720225679997	1.1291	0.4797	1.8263	0.0124	1.0597	-0.779



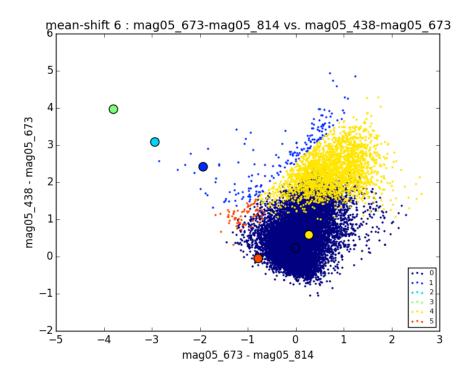
 $Figure~27:~meanshift_CMD_6cl_mag05_438-mag05_555vsmag05_555.png$



 $Figure~28:~meanshift_base_color_6cl_mag05_673-mag05_814vsmag05_438-mag05_555.png$



 $Figure~29:~meanshift_3d_color_6cl_mag05_673-mag05_814vsmag05_555-mag05_673.png$



 $Figure~30:~meanshift_3d_color_6cl_mag05_673-mag05_814vsmag05_438-mag05_673.png$