$Clustering\ output, found\ in/home/pauline/Research/m83_clustering/results/broad_band/U-V_B-I/clustering/mag05_336-mag05_555_mag05_555_mag05_555-mag05_555-mag05_814$

K-means results

Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	7427.2479226	0.374863910751	28931	15638	10577	2716	0	0	0	0	0
4	6230.37888201	0.347658068282	28931	13725	8598	4068	2540	0	0	0	0
5	5281.07545334	0.312548448393	28931	10238	9727	3798	3664	1504	0	0	0
6	4432.21390114	0.319341607461	28931	9597	8751	4606	3881	1225	871	0	0
7	3947.58510206	0.299288221536	28931	8050	7318	5604	3323	2908	1033	695	0
8	3533.63944486	0.295186263482	28931	6861	6125	5221	4987	2167	2166	821	583

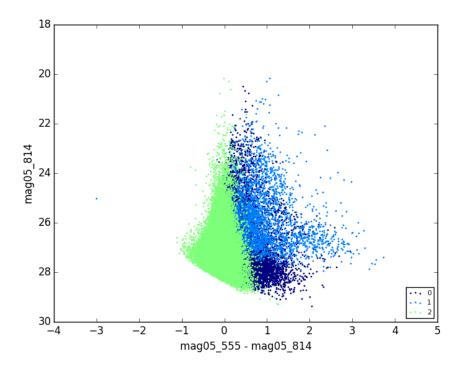
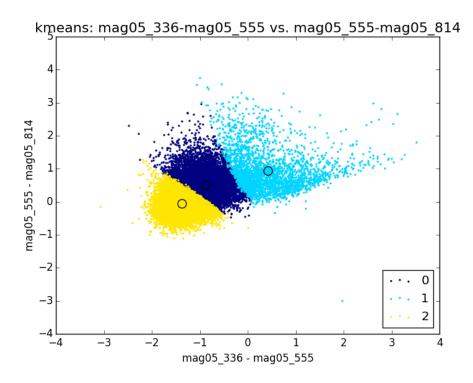
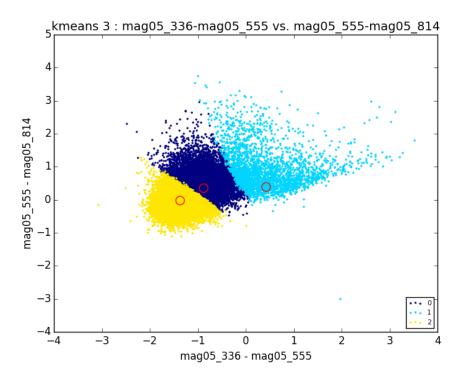


Figure 1: kmeans_CMD_3cl_mag05_555-mag05_814vsmag05_814.png

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1
1	10577	0.374863910751	0.275330905787	0.6598	0.6364	3.7213	0.0014	0.6559	-0.873479625603
2	2716	0.374863910751	0.266694652486	0.8626	1.1336	7.8676	0.0051	0.5816	0.427444035346
3	15638	0.374863910751	0.460971360486	0.8246	0.4853	3.1847	0.001	0.6599	-1.37363921218



 $Figure~2:~kmeans_3d_3cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$



 $Figure~3:~kmeans_base_color_3cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$

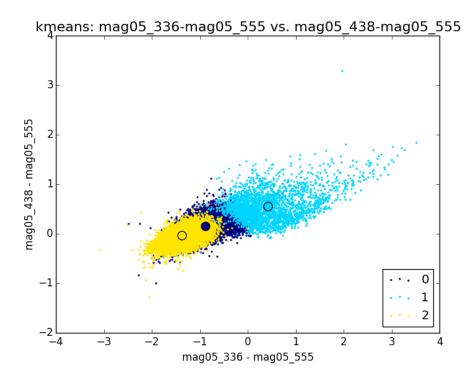
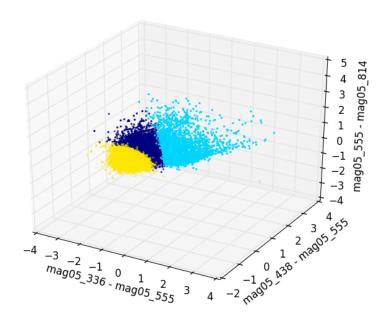
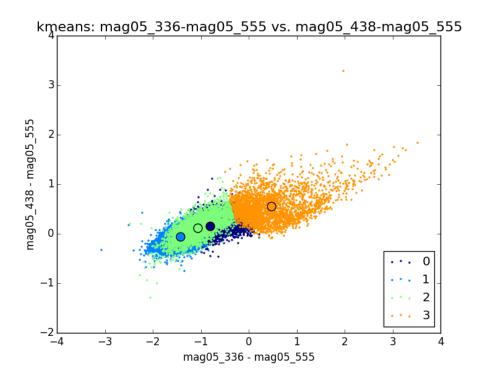


Figure 4: kmeans_3d_3cl_mag05_336-mag05_555vsmag05_438-mag05_555.png

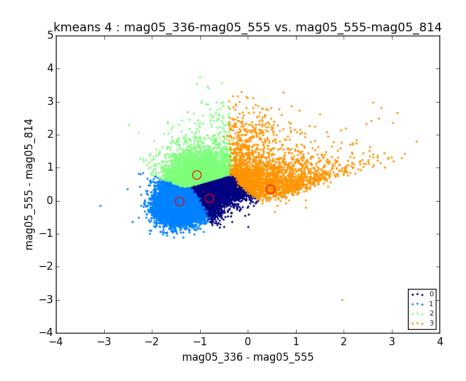


 $\label{eq:figure 5: kmeans_3d_color_3cl_mag05_336-mag05_555vsmag05_438-mag05_555vsmag05_55vsmag05_5$



 $Figure \ 6: \ kmeans_3d_4cl_mag05_336-mag05_555vsmag05_438-mag05_555.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	8598	0.347658068282	0.310582982463	0.5385	0.4893	1.8486	0.001	0.5194	-0.804554198651
2	13725	0.347658068282	0.42530695903	0.849	0.4497	2.3286	0.001	0.6721	-1.42433500911
3	4068	0.347658068282	0.208347067801	0.8647	0.6618	3.3857	0.0014	0.8646	-1.05956342183
4	2540	0.347658068282	0.276696537704	0.8488	1.0861	7.0778	0.0052	0.549	0.479540551181



 $Figure~7:~kmeans_base_color_4cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$

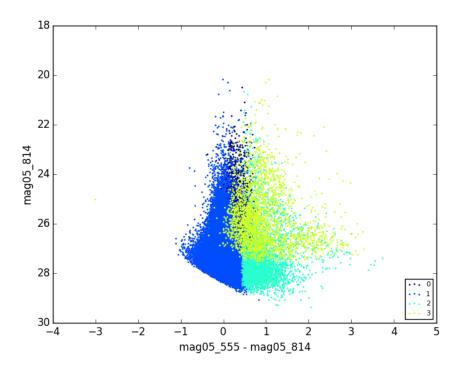


Figure 8: kmeans_CMD_4cl_mag05_555-mag05_814vsmag05_814.png

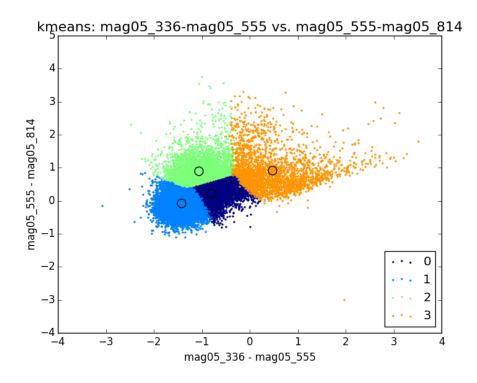
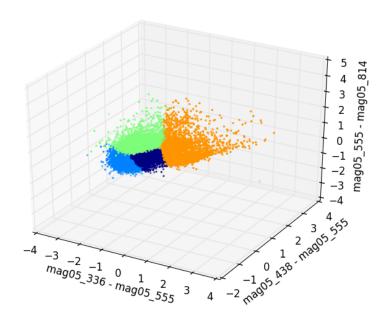
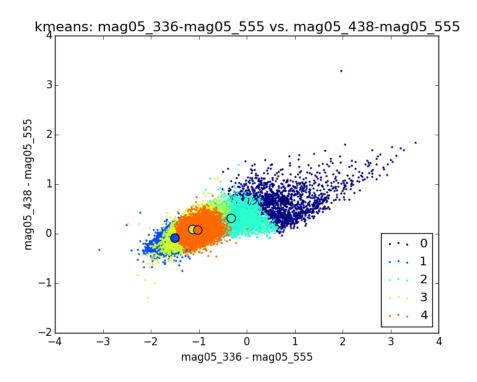


Figure 9: kmeans_3d_4cl_mag05_336-mag05_555vsmag05_555-mag05_814.png



 $\label{lem:figure 10:mag05_36-mag05_555vsmag05_438-mag05_555vsmag05_55vsmag05$



 $Figure~11:~kmeans_3d_5cl_mag05_336-mag05_555vsmag05_438-mag05_555.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1
1	1504	0.312548448393	0.205761411603	1.0128	1.1469	7.0778	0.0064	0.5691	0.788277925532
2	10238	0.312548448393	0.365283440396	0.8891	0.4146	2.3286	0.001	0.6841	-1.49727622583
3	3664	0.312548448393	0.297395639635	0.4907	0.593	2.4457	0.0032	0.4564	-0.321988810044
4	3798	0.312548448393	0.2041186428	0.8808	0.6297	3.4193	0.0014	0.8791	-1.12900105319
5	9727	0.312548448393	0.321599866931	0.6244	0.4103	1.9616	0.001	0.5619	-1.02267595353

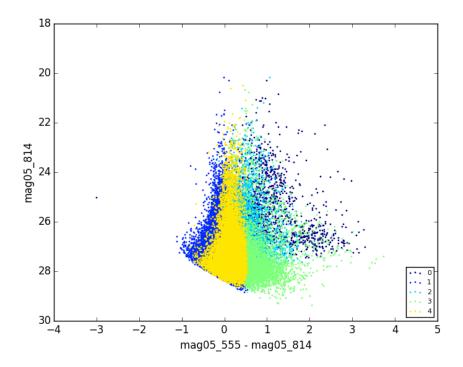
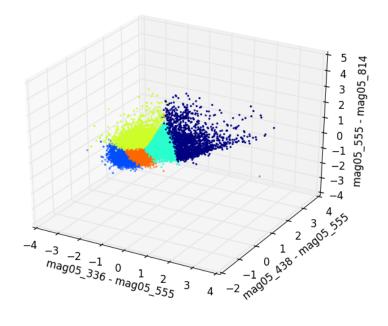
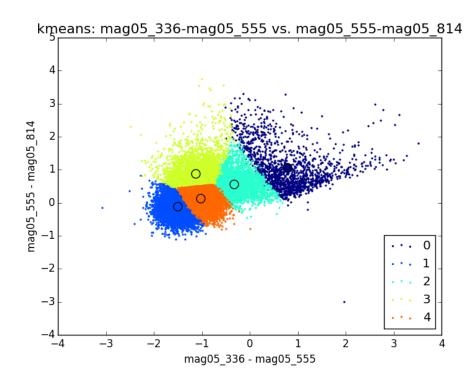


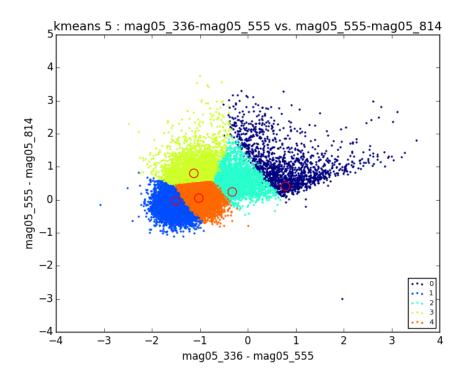
Figure 12: kmeans_CMD_5cl_mag05_555-mag05_814vsmag05_814.png



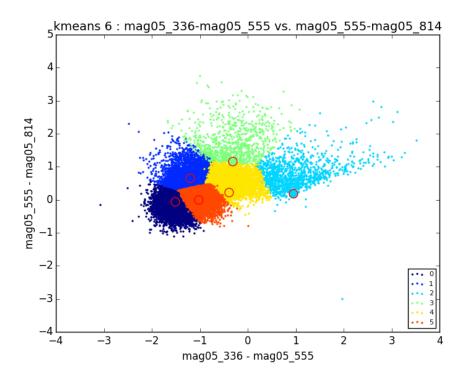
 $\label{lem:figure 13: kmeans_3d_color_5cl_mag05_336-mag05_555vsmag05_438-mag05_555vsmag05_55vsmag05$



 $Figure~14:~kmeans_3d_5cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$

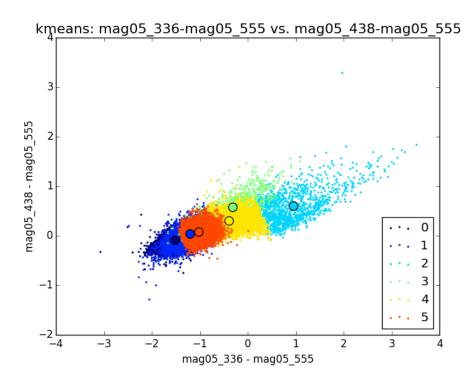


 $Figure~15:~kmeans_base_color_5cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$

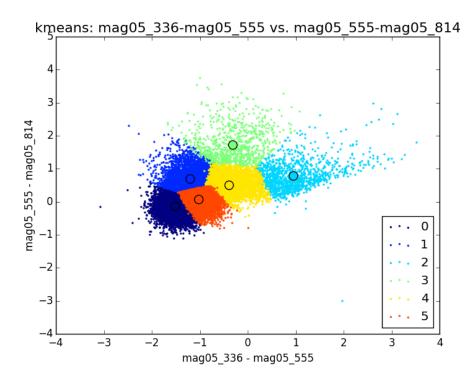


 $Figure~16:~kmeans_base_color_6cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	9597	0.319341607461	0.368709373243	0.8935	0.3978	2.3286	0.001	0.6826	-1.50662498698	-(
2	4606	0.319341607461	0.237252636387	0.8358	0.5229	2.5665	0.0014	0.8204	-1.20296135475	(
3	1225	0.319341607461	0.344921595629	0.909	0.9132	6.218	0.0064	0.4672	0.958448979592	
4	871	0.319341607461	0.255811116756	1.1439	0.9167	3.2227	0.0079	0.9336	-0.310087256028	
5	3881	0.319341607461	0.300737878681	0.4731	0.5454	1.853	0.0032	0.4526	-0.386177273898	
6	8751	0.319341607461	0.319401028766	0.6196	0.3887	1.8284	0.001	0.5465	-1.02435904468	(



 $Figure~17:~kmeans_3d_6cl_mag05_336-mag05_555vsmag05_438-mag05_555.png$



 $Figure~18:~kmeans_3d_6cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$

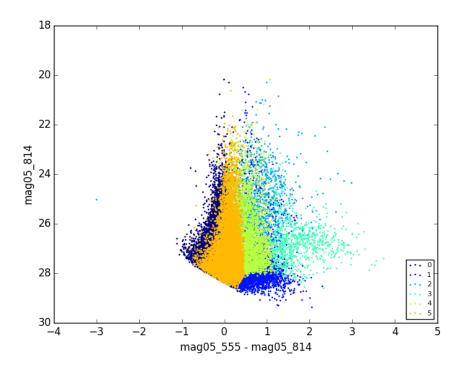
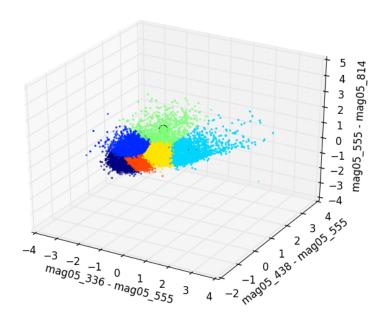
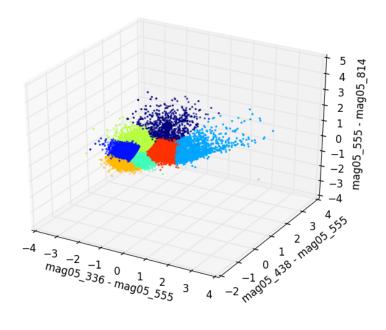


Figure 19: kmeans_CMD_6cl_mag05_555-mag05_814vsmag05_814.png

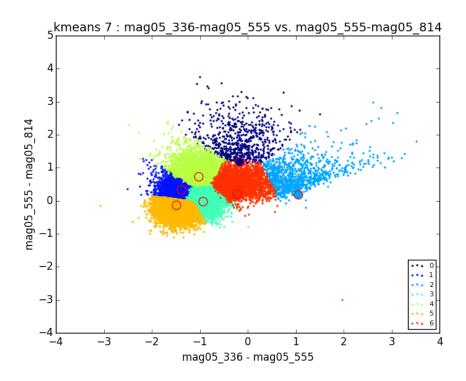


 $\label{lem:color_figure_20:mag05_36-mag05_555vsmag05_438-mag05_555vsmag05_55vsmag05_55vsmag05_555vsmag05_55v$

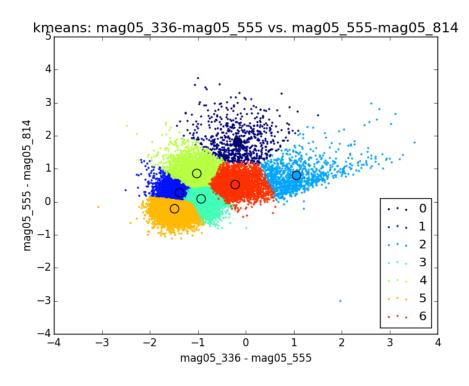


 $\label{lem:figure 21:mag05_336-mag05_555vsmag05_438-mag05_555vsmag05_550vsmag05_555vsmag05_55vsmag0$

Cluster	Nobi	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	695	0.299288221536	0.280139508545	1.1938	0.9069	3.2513	0.0112	0.9149	-0.166094964029	(
$\overline{2}$	5604	0.299288221536	0.279039680609	0.8331	0.3674	2.0462	0.0014	0.738	-1.38543700928	-(
3	1033	0.299288221536	0.336996924415	0.9515	0.8947	6.218	0.0064	0.4731	1.06109680542	(
$\overline{4}$	7318	0.299288221536	0.288308197185	0.5692	0.3934	1.717	0.001	0.5155	-0.926216315933	(
5	3323	0.299288221536	0.247675561293	0.8085	0.5267	2.658	0.0014	0.8084	-1.01978001806	(
6	8050	0.299288221536	0.338428005116	0.8849	0.3754	2.3286	0.001	0.6562	-1.48577254658	-(
7	2908	0.299288221536	0.307752292779	0.453	0.5535	1.8759	0.0032	0.4019	-0.222924690509	(



 $Figure~22:~kmeans_base_color_7cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$



 $Figure~23:~kmeans_3d_7cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$

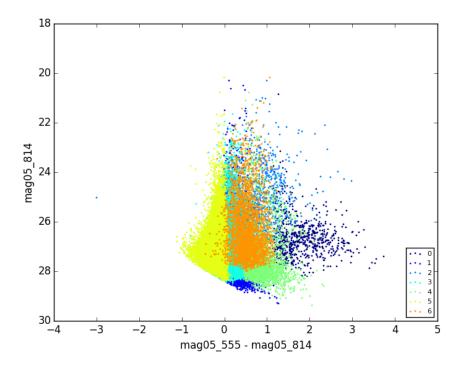
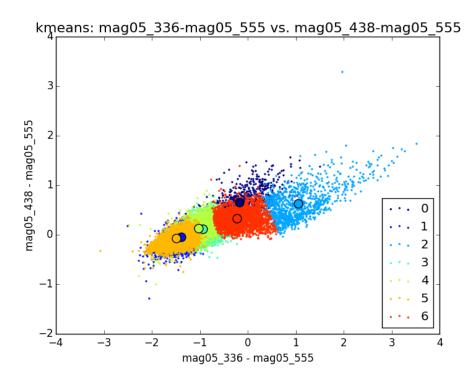
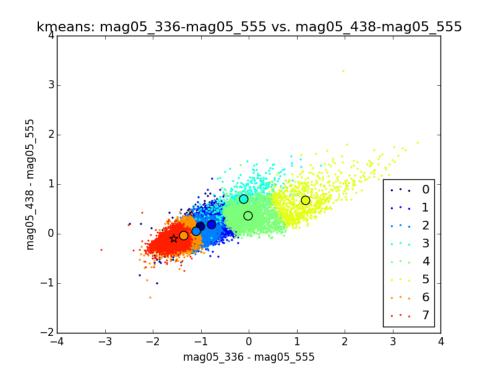


Figure 24: kmeans_CMD_7cl_mag05_555-mag05_814vsmag05_814.png

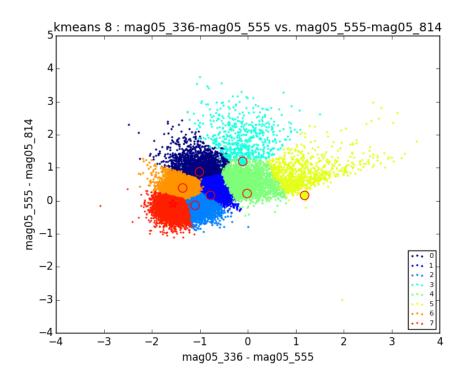


 $Figure\ 25:\ kmeans_3d_7cl_mag05_336-mag05_555vsmag05_438-mag05_555.png$



 $Figure~26:~kmeans_3d_8cl_mag05_336-mag05_555vsmag05_438-mag05_555.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	2166	0.295186263482	0.24072346301	0.8738	0.554	2.5612	0.0042	0.8722	-1.0123176362	
2	4987	0.295186263482	0.291074023289	0.5255	0.3906	1.6207	0.0014	0.519	-0.768414277121	
3	6125	0.295186263482	0.278970917669	0.6516	0.3482	1.6597	0.001	0.5311	-1.09050906122	(
4	583	0.295186263482	0.297207060197	1.2352	0.8874	3.0555	0.0114	0.9157	-0.104150943396	
5	2167	0.295186263482	0.279816049602	0.4732	0.5877	1.8759	0.0032	0.3591	-0.014241347485	
6	821	0.295186263482	0.321420518317	1.0287	0.8888	6.218	0.0064	0.4845	1.19247137637	
7	5221	0.295186263482	0.264805305145	0.8248	0.3774	2.1072	0.0014	0.7486	-1.35218176595	-
8	6861	0.295186263482	0.354507492167	0.9219	0.3522	2.1604	0.001	0.685	-1.55697318175	-



 $Figure~27:~kmeans_base_color_8cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$

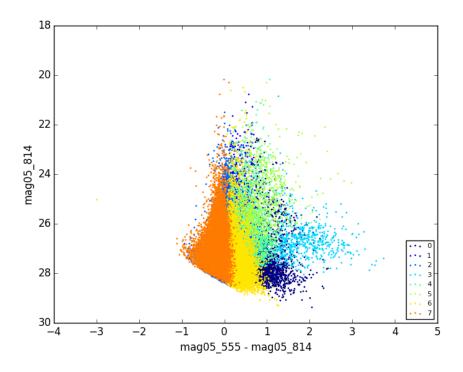
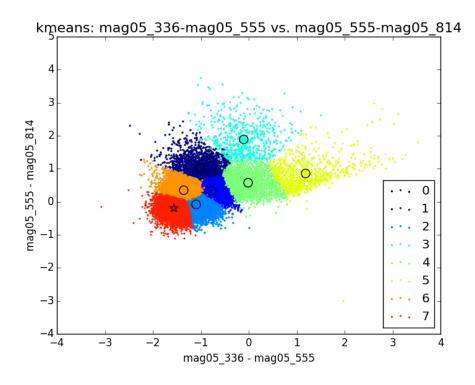
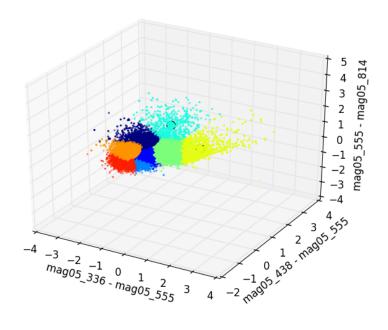


Figure 28: kmeans_CMD_8cl_mag05_555-mag05_814vsmag05_814.png



 $Figure\ 29:\ kmeans_3d_8cl_mag05_336-mag05_555vsmag05_555-mag05_814.png$



 $\label{eq:figure 30:mag05_36-mag05_555vsmag05_55vsmag05$

Meanshift results

Bandw Nclust score TotObj N1 N2 N3 N4 N5 N6 N7 N8 N9 N10