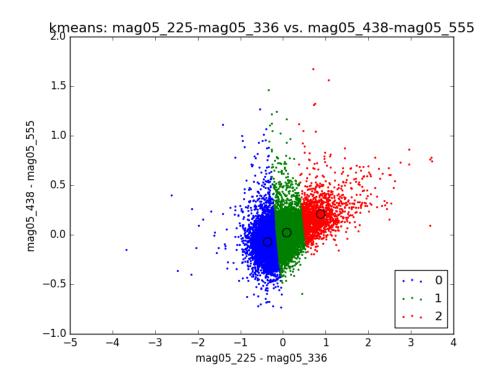
$Clustering\ output, found\ in/home/pauline/Research/m83_clustering/results/broad_narrow/UVW_U/clustering/mag05_22mag05_336_mag05_438-mag05_555$

K-means results

Nclust	inertia	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8
3	1026.59521376	0.415192346418	14943	7423	6112	1408	0	0	0	0	0
4	803.206734734	0.368296498053	14943	6415	4855	2913	760	0	0	0	0
5	676.662219666	0.338693530386	14943	5665	3813	3484	1579	402	0	0	0
6	588.827485106	0.341989052018	14943	4419	3412	3232	1988	1502	390	0	0
7	517.13121876	0.327588810892	14943	4232	3747	2279	2173	1359	977	176	0
8	468.237374409	0.323892699349	14943	3535	3141	2666	2437	1829	815	351	169



 $Figure~1:~kmeans_col_3cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	7423	0.415192346418	0.440149497704	0.3134	0.2735	3.6732	0.0000	0.2251	-0.368031237377	-
2	6112	0.415192346418	0.389768206086	0.1723	0.2790	2.1986	0.0000	0.1643	0.0808353518822	(
3	1408	0.415192346418	0.393981701325	0.7157	0.4900	3.2426	0.0010	0.4622	0.88023257468	

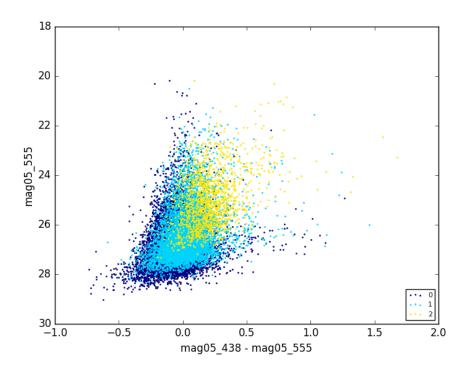


Figure 2: kmeans_CMD_3cl_mag05_438-mag05_555vsmag05_555.png

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1
1	760	0.368296498053	0.369476279595	0.8817	0.5053	3.1599	0.0014	0.5418	1.1240249017
2	4855	0.368296498053	0.369139234697	0.3629	0.2545	3.4887	0.0000	0.2494	-0.453146768217
3	2913	0.368296498053	0.368085377426	0.2955	0.2825	1.9271	0.0000	0.2044	0.335164204741
4	6415	0.368296498053	0.367614794859	0.1513	0.2269	2.2122	0.0000	0.1378	-0.0988557167369

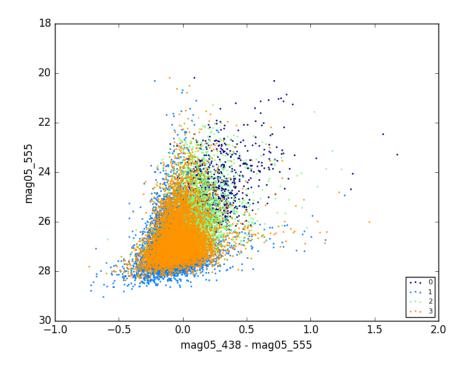
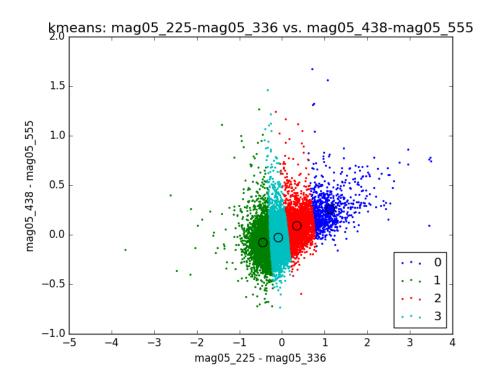


Figure 3: kmeans_CMD_4cl_mag05_438-mag05_555vsmag05_555.png



 $Figure~4:~kmeans_col_4cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

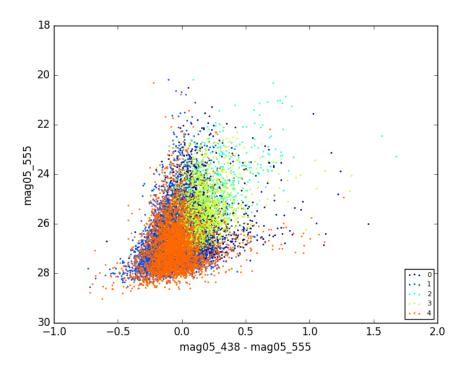
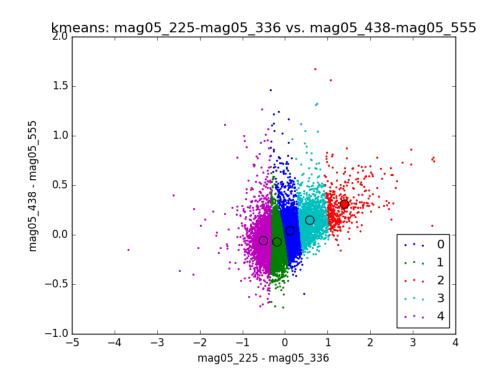


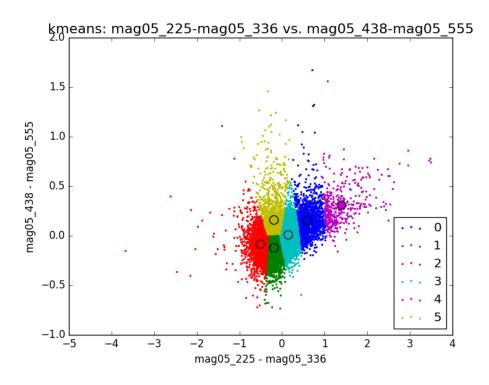
Figure 5: kmeans_CMD_5cl_mag05_438-mag05_555vsmag05_555.png

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	3813	0.338693530386	0.316639001858	0.1635	0.2352	2.1986	0.0000	0.1445	0.106194451714	
2	5665	0.338693530386	0.36142844966	0.1851	0.1975	1.3846	0.0000	0.1298	-0.196406707855	-(
3	402	0.338693530386	0.351163183087	1.0584	0.5255	3.1599	0.0022	0.6345	1.38221890547	
4	1579	0.338693530386	0.390076832198	0.4558	0.2897	1.5763	0.0010	0.2741	0.579896595208	
5	3484	0.338693530386	0.30113714854	0.3999	0.2555	3.5074	0.0000	0.281	-0.510334390314	-(



 $Figure~6:~kmeans_col_5cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	1502	0.341989052018	0.371222520823	0.4678	0.2906	1.9204	0.0010	0.2775	0.595727696405	
2	4419	0.341989052018	0.365297211727	0.1881	0.1732	0.7983	0.0000	0.1047	-0.191855527922	-
3	3232	0.341989052018	0.343521926298	0.3989	0.2276	3.3459	0.0000	0.2653	-0.51667515528	_
4	3412	0.341989052018	0.377366267246	0.1504	0.2020	1.1570	0.0000	0.1293	0.137351564785	(
5	390	0.341989052018	0.349403661584	1.0656	0.5217	2.7922	0.0022	0.6395	1.39265816327	
6	1988	0.341989052018	0.203427465672	0.2379	0.2355	1.4620	0.0000	0.2371	-0.201256165073	



 $Figure~7:~kmeans_col_6cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

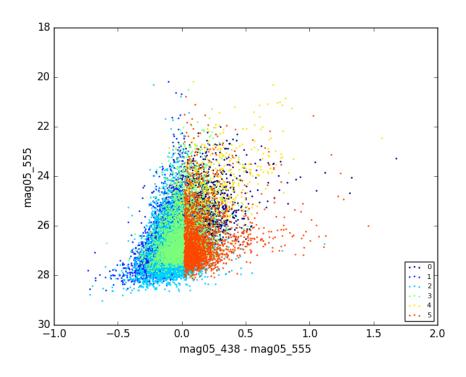
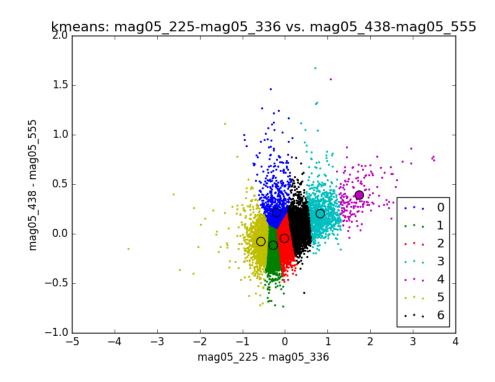


Figure 8: kmeans_CMD_6cl_mag05_438-mag05_555vsmag05_555.png



 $Figure~9:~kmeans_col_7cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1
1	1359	0.327588810892	0.181109298994	0.2723	0.2586	1.4314	0.0000	0.2723	-0.216171680117
2	4232	0.327588810892	0.353101140071	0.2373	0.1678	0.8878	0.0000	0.1298	-0.286783246569
3	3747	0.327588810892	0.355903783296	0.1022	0.1710	0.7014	0.0000	0.0978	-0.0137850293021
4	977	0.327588810892	0.372596038252	0.6265	0.3218	1.9237	0.0010	0.3607	0.818900101937
5	176	0.327588810892	0.402728608748	1.3036	0.5488	2.7922	0.0030	0.7557	1.73267613636
6	2173	0.327588810892	0.287465434228	0.4403	0.2329	3.2755	0.0000	0.2974	-0.576714814815
7	2279	0.327588810892	0.334167446227	0.2563	0.2240	1.3751	0.0000	0.1699	0.303938677179

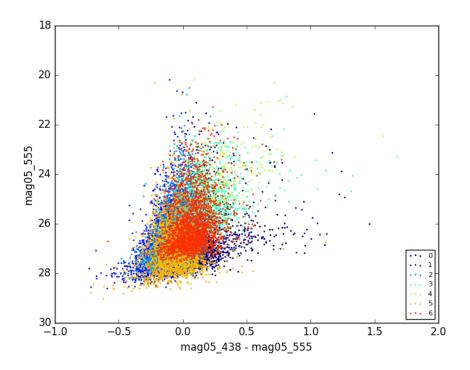


Figure 10: kmeans_CMD_7cl_mag05_438-mag05_555vsmag05_555.png

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	$\operatorname{MinDist}$	Stdev	Cen1	
1	2666	0.323892699349	0.297813952315	0.2383	0.1655	0.7875	0.0000	0.1004	-0.247074101796	
2	815	0.323892699349	0.375937028087	0.6613	0.3148	1.9237	0.0010	0.3747	0.870745098039	
3	3535	0.323892699349	0.327832138612	0.1063	0.1794	0.7684	0.0000	0.1053	0.0443145115754	-
4	169	0.323892699349	0.376667364153	1.3162	0.5497	2.7922	0.0030	0.7641	1.75146153846	
5	1829	0.323892699349	0.346821245752	0.3025	0.2241	1.3049	0.0000	0.1893	0.376046892039	
6	3141	0.323892699349	0.33773712162	0.1917	0.1498	0.4949	0.0000	0.1599	-0.241882259094	
7	2437	0.323892699349	0.312756291696	0.4251	0.2223	3.2999	0.0000	0.2834	-0.55726422094	-
8	351	0.323892699349	0.169997426563	0.4400	0.3841	1.7770	0.0010	0.4244	-0.242428571429	

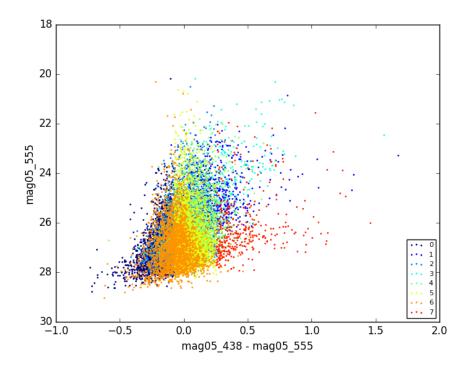
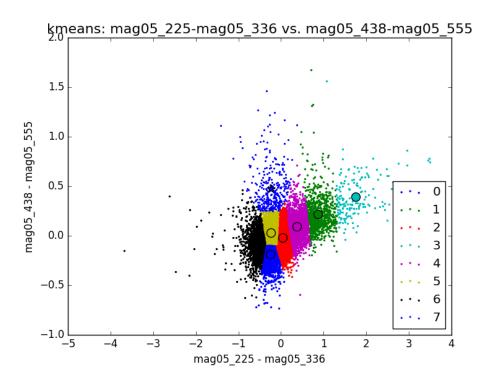


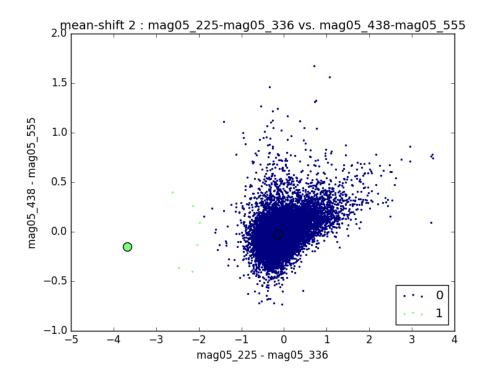
Figure 11: kmeans_CMD_8cl_mag05_438-mag05_555vsmag05_555.png



 $Figure~12:~kmeans_col_8cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

Meanshift results

Bandw	Nclust	score	TotObj	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
0.9000	2	0.787281782562	14943	14936	7	0	0	0	0	0	0	0	0
0.5000	5	0.680163910129	14943	14830	96	14	2	1	0	0	0	0	0
0.6000	4	0.721140091008	14943	14829	106	7	1	0	0	0	0	0	0
0.7000	2	0.787281782562	14943	14936	7	0	0	0	0	0	0	0	0
1.0000	2	0.787281782562	14943	14936	7	0	0	0	0	0	0	0	0
0.8000	2	0.787281782562	14943	14936	7	0	0	0	0	0	0	0	0



 $Figure~13:~meanshift_color_2cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

meanshift results, Ncl=2

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	14936	0.787281782562	0.787339672681	0.3283	0.5111	5.4053	0.0000	0.3264	-0.124930724597	-(
2	7	0.787281782562	0.663760808934	1.7799	0.8186	1.7186	0.2301	1.2765	-3.682	
1	14936	0.787281782562	0.787339672681	0.3283	0.5111	5.4053	0.0000	0.3264	-0.149548927962	-
2	7	0.787281782562	0.663760808934	1.7799	0.8186	1.7186	0.2301	1.2765	-3.682	
1	14936	0.787281782562	0.787339672681	0.3283	0.5111	5.4053	0.0000	0.3264	-0.114919324447	-(
2	7	0.787281782562	0.663760808934	1.7799	0.8186	1.7186	0.2301	1.2765	-3.682	
1	14936	0.787281782562	0.787339672681	0.3283	0.5111	5.4053	0.0000	0.3264	-0.137230769231	-(
2	7	0.787281782562	0.663760808934	1.7799	0.8186	1.7186	0.2301	1.2765	-3.682	

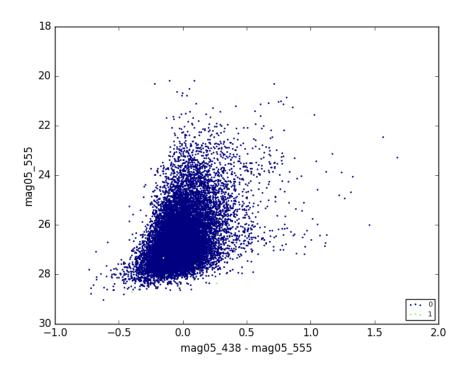


Figure 14: meanshift_CMD_2cl_mag05_438-mag05_555vsmag05_555.png

meanshift results, Ncl=4

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	14829	0.721140091008	0.72188575412	0.3053	0.4882	3.4129	0.0000	0.3021	-0.167256129733	-
2	106	0.721140091008	0.618124570297	1.4458	0.5244	2.0442	0.0030	0.8214	3.179333333333	(
3	7	0.721140091008	0.661618233405	1.7799	0.8186	1.7186	0.2301	1.2765	-3.682	
4	1	0.721140091008	1.0	N/A	N/A	N/A	N/A	1.676	3.443	

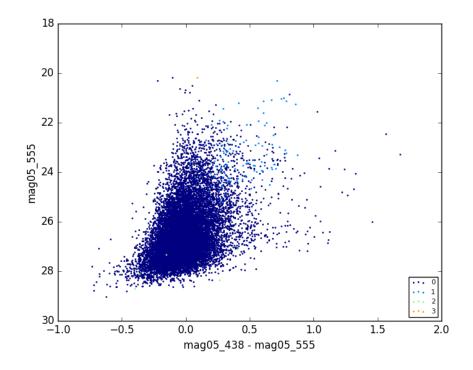
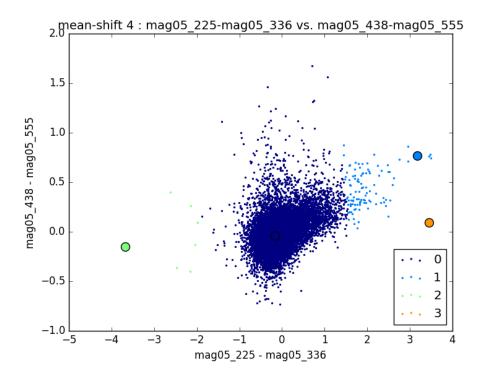
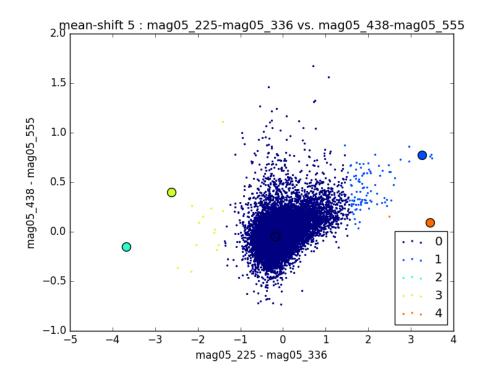


Figure 15: meanshift_CMD_4cl_mag05_438-mag05_555vsmag05_555.png



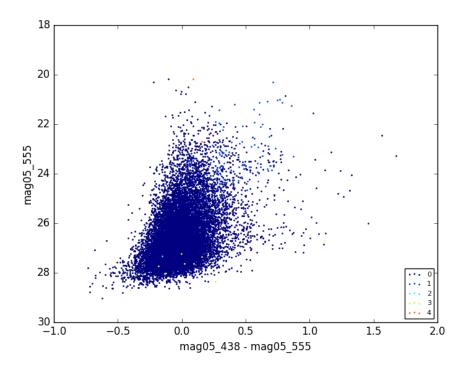
 $Figure~16:~meanshift_color_4cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$



 $Figure~17:~meanshift_color_5cl_mag05_225-mag05_336vsmag05_438-mag05_555.png$

meanshift results, Ncl=5

Cluster	Nobj	tScore	cScore	${ m rms}$	AvgDist	MaxDist	MinDist	Stdev	Cen1	
1	14830	0.680163910129	0.681484255778	0.3053	0.4884	3.0487	0.0000	0.3023	-0.18193714333	-
2	96	0.680163910129	0.503200589298	1.4693	0.5166	2.0439	0.0030	0.8316	3.2652	
3	1	0.680163910129	1.0	N/A	N/A	N/A	N/A	1.765	-3.682	
4	14	0.680163910129	0.559332513599	1.3697	0.6609	1.8164	0.0269	1.0448	-2.621	
5	2	0.680163910129	0.0699420485234	2.1285	0.9482	0.9482	0.9482	1.4624	3.443	



 $Figure~18:~meanshift_CMD_5cl_mag05_438-mag05_555vsmag05_555.png$