The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Initial Seeds		
Cluster	**VALP**	**HINCP**
1	490000.000	238800.000
2	750000.000	250000.000
3	655000.000	12000.000
4	200000.000	170000.000
5	550000.000	755000.000
6	135000.000	1246000.000
7	350000.000	1425000.000
8	400000.000	0.000
9	340000.000	1027000.000
10	700000.000	1007600.000
11	430.000	346000.000
12	900000.000	675000.000
13	280000.000	680700.000
14	350.000	606000.000
15	2267000.000	1019000.000
16	1175000.000	475000.000
17	600000.000	488000.000
18	1100000.000	0.000
19	2267000.000	676000.000
20	2267000.000	-5100.000
21	300000.000	415500.000
22	130.000	0.000
23	1000000.000	966000.000
24	2267000.000	337000.000
25	1000000.000	295500.000

Minimum Distance Between Initial Seeds =	250689.5

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History												
		Relative Change in Cluster Seeds										
Iteration	Criterion	1	2	3	4	5	6	7	8	9	10	11
1	67628.6	0.2034	0.1247	0.0996	0.2847	0.2064	0.3669	0.0558	0.2559	0.3354	0.1736	0.2987
2	42915.4	0.0962	0.0895	0.0885	0.0241	0.0879	0.0386	0.1066	0.1164	0.0972	0.0738	0.2046
3	40435.6	0.0363	0.1052	0.1237	0.0210	0.0544	0.0511	0.00636	0.0792	0.1332	0.1230	0.1451
4	38794.7	0.0421	0.0464	0.1033	0.0213	0.0833	0.0289	0.0263	0.0334	0.2326	0.0909	0.1240
5	37425.6	0.0294	0.0362	0.0915	0.0305	0.0481	0.00887	0.00802	0.0166	0.2514	0.0560	0.0842
6	36374.9	0.00973	0.0455	0.0662	0.0283	0.0645	0.0101	0	0.0287	0.2221	0.0428	0.0641
7	35561.6	0.0133	0.0372	0.0490	0.0209	0.0687	0.00554	0.0267	0.0299	0.0963	0.0453	0.0502
8	34968.1	0.0171	0.0407	0.0553	0.0175	0.0769	0.00628	0.00644	0.0264	0.0720	0	0.0298
9	34544.2	0.0196	0.0296	0.0699	0.0152	0.1275	0	0.00752	0.0235	0.0666	0	0.0183
10	34128.0	0.0266	0.0466	0.0708	0.0137	0.0905	0.000916	0	0.0189	0.0380	0.0406	0.0117
11	33779.8	0.0464	0.0519	0.0446	0.0115	0.0500	0.00115	0	0.0138	0.0357	0.0415	0.00900
12	33498.4	0.0360	0.0417	0.0403	0.00953	0.0295	0.00329	0.0383	0.0124	0.0648	0.0611	0.00703
13	33301.0	0.0240	0.0244	0.0228	0.00630	0.0220	0.4106	0.0377	0.0109	0.0651	0	0.00858
14	33157.2	0.0214	0.0207	0.0107	0.00358	0.0243	0.0290	0	0.00785	0.0557	0.0440	0.00988
15	33030.4	0.0209	0.0129	0.0104	0.00265	0.0182	0.00640	0	0.00611	0.0923	0	0.00950
16	32909.4	0.0231	0.00891	0.00386	0.00170	0.0131	0.00203	0	0.0143	0.1057	0.0394	0.00940
17	32730.1	0.0201	0.00655	0.00246	0.00175	0.0122	0	0.0166	0.00564	0.0823	0.0338	0.00828
18	32568.4	0.0187	0.00770	0.000494	0.00109	0.0230	0.00423	0.0299	0.00319	0.0898	0.0772	0.00906
19	32342.6	0.0186	0.00689	0.00334	0.00190	0.0507	0.0264	0.0399	0.00284	0.0324	0.1710	0.00793
20	32103.5	0.0225	0.00822	0.000959	0.00164	0.0479	0.00564	0	0.00346	0.0230	0.1793	0.00729
21	31898.4	0.0227	0.0112	0.00288	0.00199	0.0635	0.0122	0	0.00356	0.0514	0.1952	0.00703
22	31701.9	0.0194	0.00771	0.00303	0.00253	0.0382	0.00217	0	0.00365	0.0465	0.0659	0.00769
23	31558.9	0.0271	0.00490	0.00408	0.00280	0.0186	0.00118	0	0.00281	0.0534	0.0546	0.00631
24	31392.0	0.0223	0.00204	0.000677	0.00345	0.0231	0.00180	0	0.00417	0.0380	0.0491	0.00830
25	31277.8	0.0158	0.00159	0.00195	0.00473	0.0303	0.00273	0	0.00485	0.0317	0.0387	0.00762
26	31194.4	0.0131	0.00189	0.00412	0.00392	0.0309	0.00969	0	0.00462	0.0117	0.0325	0.00795
27	31130.1	0.0129	0.00405	0.00557	0.00341	0.0349	0.000595	0.0259	0.00578	0.00588	0.0248	0.00688
28	31078.3	0.00809	0.00675	0.00705	0.00413	0.0246	0	0.0187	0.00424	0.00702	0.0499	0.00619
29	31030.2	0.00746	0.00289	0.0112	0.00243	0.0316	0.000595	0.0106	0.00507	0.00342	0.0432	0.00477
30	30961.9	0.00626	0.00279	0.00807	0.00167	0.0339	0	0.00406	0.00340	0.0117	0.0631	0.00571
31	30915.9	0.00388	0.00735	0.00300	0.00114	0.0209	0	0	0.00192	0.00758	0.0311	0.00526
32	30885.8	0.00340	0.00807	0.00128	0.00123	0.0147	0	0.00808	0.00126	0.0195	0.0223	0.00499

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History													
	Relative Change in Cluster Seeds												
Iteration	12	13	14	15	16	17	18	19	20	21	22	23	24
1	0.3891	0.2384	0.3762	0.1708	0.5119	0.0621	0.5146	0.2184	0.2859	0.0394	0.3289	0.1499	0.0537
2	0.1799	0.1521	0.1383	0.1271	0.0931	0.0734	0.1035	0.1068	0.00780	0.1622	0.0245	0.0896	0.0550
3	0.1498	0.1550	0.0630	0.0443	0.0590	0.0996	0.0219	0.0542	0.00159	0.2137	0.00344	0.0906	0.0331
4	0.0882	0.1207	0.0828	0	0.0423	0.0921	0.0893	0.1047	0.00532	0.1813	0.00690	0.0883	0.1703
5	0.0756	0.0734	0.0785	0.0467	0.00318	0.1226	0.0614	0.0226	0.00443	0.1261	0.00866	0	0.0824
6	0.0868	0.0590	0.1050	0.0426	0.0891	0.0935	0.0315	0.0252	0.00530	0.0793	0.00769	0	0.0675
7	0.0636	0.0440	0.1037	0.0400	0.0268	0.1071	0.00766	0.0103	0.0109	0.0529	0.00841	0	0.0329
8	0.0352	0.0176	0.0713	0.0373	0.00452	0.0885	0.00613	0.0124	0.00909	0.0404	0.00748	0	0.0202
9	0.00236	0.0229	0.0409	0.0350	0.000243	0.1120	0.0114	0.00769	0.00565	0.0331	0.00769	0	0.00608
10	0.00830	0.0127	0.0321	0	0.00133	0.1036	0.0101	0.00160	0.00475	0.0248	0.00703	0	0.0185
11	0.0161	0.0316	0.0201	0	0.00585	0.0856	0.00752	0.000140	0.00608	0.0225	0.00523	0	0.0214
12	0.00300	0.0387	0.0147	0	0.0156	0.0490	0.0100	0.0128	0.00397	0.0262	0.00403	0	0.0127
13	0.00117	0.0400	0.0109	0	0.000363	0.0324	0.0209	0.00415	0.00197	0.0257	0.00203	0	0.0108
14	0.00941	0.0612	0.00928	0	0	0.0288	0.0318	0.00216	0.00357	0.0248	0.00167	0	0.0107
15	0.00883	0.0607	0.0195	0	0.000219	0.0203	0.0148	0	0.00175	0.0199	0.00176	0	0.00788
16	0.00618	0.0740	0.0272	0	0.000112	0.0242	0.0480	0.00273	0.00193	0.0195	0.00184	0	0.00206
17	0.00108	0.0879	0.0397	0	0.00660	0.0255	0.0188	0.00198	0.000705	0.0160	0.00221	0	0.00227
18	0.0141	0.1252	0.0494	0	0.00767	0.0468	0.0252	0.00160	0.000807	0.0140	0.00170	0	0.0420
19	0.0115	0.1319	0.0528	0	4.208E-6	0.0283	0.0162	0.000331	0.000195	0.0135	0.00185	0.1037	0.00681
20	0.0106	0.0858	0.0542	0	0.00730	0.0135	0.0226	0	0.000077	0.0141	0.00173	0.1476	0.0144
21	0.00808	0.0673	0.0596	0	0.00121	0.0105	0.0258	0.000142	0.00172	0.0147	0.00193	0.2079	0.0185
22	0.00260	0.0518	0.0464	0	0.00478	0.0119	0.0173	0	0.00133	0.0176	0.00204	0.0420	0.0131
23	0.00380	0.0417	0.0567	0	0.0134	0.0141	0.00936	0.0153	0.00316	0.0249	0.00193	0.0459	0.00615
24	0.00376	0.0266	0.0460	0	0	0.0125	1.337E-6	0.000225	0.00116	0.0223	0.00202	0	0.00118
25	0.00359	0.0209	0.0407	0	0.00678	0.0103	0.00587	0	0.00222	0.0171	0.00225	0.0478	0.00192
26	0.00477	0.0193	0.0266	0	0.000335	0.0135	0.00470	0	0.000636	0.0145	0.00247	0	0.0112
27	0.0134	0.0168	0.0210	0	0.000537	0.0119	0.00552	0.00223	0.000703	0.0112	0.00206	0	0.00122
28	0.0178	0.0130	0.0164	0	0.0134	0.0133	0.00355	0.00115	0.0180	0.0103	0.00178	0.0397	0.000389
29	0.0205	0.0130	0.0323	0	0.00925	0.0200	0.00335	0.000395	0.00787	0.00952	0.00155	0	0.0664
30	0.0256	0.0138	0.0248	0	0.0116	0.0131	0.00807	0	0.00442	0.00723	0.00145	0.0391	0.0222
31	0.0375	0.00958	0.0153	0	0.0490	0.00500	0.00282	0	0.00305	0.00623	0.00157	0	0.00373
32	0.0327	0.00597	0.0111	0	0.0243	0.00346	0.00279	0.00203	0.000645	0.00563	0.00124	0	0

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History	
	Relative Change in Cluster Seeds
Iteration	25
1	0.2089
2	0.0840
3	0.0420
4	0.0288
5	0.0123
6	0.0419
7	0.0336
8	0.0279
9	0.0227
10	0.0281
11	0.0303
12	0.0470
13	0.0484
14	0.0457
15	0.0304
16	0.0322
17	0.0329
18	0.0404
19	0.0355
20	0.0334
21	0.0313
22	0.0197
23	0.0170
24	0.00987
25	0.00956
26	0.00721
27	0.0103
28	0.00599
29	0.0202
30	0.0122
31	0.0125
32	0.00914

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History												
		Relative Change in Cluster Seeds										
Iteration	Criterion	1	2	3	4	5	6	7	8	9	10	11
33	30866.2	0.00357	0.00543	0.00130	0.000740	0.0184	0	0	0.00119	0.0141	0.0112	0.00491
34	30848.0	0.00325	0.00420	0.00144	0.000862	0.00821	0.00368	0	0.00107	0.00975	0.0227	0.00882
35	30791.9	0.00225	0.00503	0.00102	0.000590	0.00547	0	0	0.00112	0.0129	0.0144	0.00719
36	30748.4	0.00248	0.00564	0.000554	0.000569	0.00686	0.00368	0	0.000801	0.0165	0.0213	0.00706
37	30692.9	0.00165	0.00368	0.00154	0.00176	0.00746	0	0	0.000455	0.00788	0	0.00498
38	30650.9	0.00299	0.00949	0.00206	0.00127	0.00781	0.000823	0.00475	0.000386	0.00542	0.0108	0.00466
39	30613.4	0.00152	0.0130	0.00251	0.00157	0.00631	0	0	0.000854	0.0104	0	0.00410
40	30580.5	0.00305	0.0104	0.00120	0.00123	0.00461	0	0	0.000798	0.0103	0.0260	0.00420
41	30553.5	0.00355	0.00795	0.00150	0.00142	0.00777	0	0	0.000951	0.0168	0.0121	0.00394
42	30529.9	0.00392	0.00750	0.00140	0.00120	0.0103	0.0108	0	0.000494	0.0139	0.0236	0.00452
43	30511.4	0.00545	0.00541	0.00188	0.00188	0.0112	0.00488	0.0187	0.000911	0	0.0288	0.00381
44	30495.1	0.00473	0.00709	0.00433	0.00120	0.00982	0.000275	0	0.000676	0.00544	0.0112	0.00372
45	30481.2	0.00267	0.00510	0.00134	0.00106	0.00798	0	0	0.000471	0.00420	0.0107	0.00325
46	30469.4	0.00213	0.00838	0.00102	0.00118	0.0142	0.00108	0	0.00104	0.00762	0.0248	0.00322
47	30453.9	0.00247	0.00299	0.00112	0.000747	0.0111	0	0	0.000347	0.0107	0.0345	0.00301
48	30435.5	0.00231	0.00138	0.00293	0.000710	0.0160	0.00112	0	0.000529	0.0150	0.0243	0.00344
49	30408.2	0.00182	0.00148	0.00182	0.000977	0.0153	0.00534	0	0.000599	0.0174	0.0344	0.00444
50	30387.1	0.00241	0.00326	0.00256	0.000910	0.0153	0.00975	0	0.000896	0.0128	0.0241	0.00443
51	30372.1	0.00233	0.00566	0.00151	0.00131	0.0106	0.00376	0	0.000931	0.0169	0.0400	0.00469
52	30350.5	0.00178	0.00895	0.00234	0.00153	0.0138	0	0	0.00114	0.0229	0.0522	0.00601
53	30314.5	0.00909	0.0293	0.00122	0.00200	0.0356	0	0	0.00112	0.0349	0.0959	0.00665
54	30226.8	0.00489	0.0149	0.00116	0.00247	0.0538	0.00541	0	0.00138	0.0392	0.0769	0.00778
55	30141.1	0.00413	0.0192	0.00300	0.00231	0.0684	0	0	0.00119	0.0323	0.0495	0.00664
56	30063.1	0.00452	0.0115	0.00412	0.00260	0.0569	0	0	0.00143	0.0280	0.0234	0.00709
57	29995.1	0.00515	0.0143	0.00154	0.00254	0.0548	0.000884	0.00651	0.00125	0.0132	0.0123	0.00645
58	29929.6	0.00914	0.0193	0.00410	0.00267	0.0400	0	0	0.00143	0.0189	0.0229	0.00606
59	29871.5	0.00722	0.0197	0.000883	0.00330	0.0301	0.0121	0.0390	0.00154	0.0123	0.00813	0.00587
60	29823.1	0.00679	0.0198	0.00426	0.00272	0.0253	0.00106	0.00824	0.00770	0.0132	0.00649	0.0106
61	29766.1	0.00626	0.0180	0.00936	0.00400	0.0206	0.00106	0.00906	0.00316	0.0101	0.0111	0.00741
62	29701.0	0.00757	0.0206	0.00825	0.00430	0.0162	0.3836	0.0546	0.00266	0.0139	0.0110	0.00688
63	29593.7	0.00770	0.0183	0.00465	0.00344	0.0199	0.2444	0.0287	0.00288	0.0131	0.0122	0.00575
64	29496.7	0.00471	0.0103	0.00366	0.00286	0.0155	0.3146	0.00727	0.00260	0.0188	0.0120	0.00591
65	29431.2	0.00176	0.0101	0.0102	0.00202	0.0112	0.5042	0.2403	0.00208	0.0198	0.0122	0.00396

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History												
	Relative Change in Cluster Seeds											
Iteration	12	13	14	15	16	17	18	19	20	21	22	23
33	0.00878	0.00909	0.00851	0	0	0.00247	0.00276	0.00198	0.000305	0.00660	0.00137	0
34	0.00283	0.00727	0.00858	0	0	0.00370	0.0719	0.000581	0.000031	0.00793	0.00145	0
35	0.00534	0.0110	0.0128	0	0.0147	0.00765	0.0515	0.00192	0.000190	0.00662	0.00248	0
36	0	0.0111	0.0163	0	0.0248	0.0102	0.0504	0	0.000136	0.00911	0.00241	0
37	0.00116	0.0172	0.0165	0	0.0196	0.0123	0.0295	0.000571	0	0.00618	0.00223	0
38	0.000133	0.0180	0.0115	0	0.00610	0.0185	0.0213	0	0.000192	0.00510	0.00191	0
39	0.00269	0.0218	0.0128	0	0.000150	0.0191	0.00454	0	0.00124	0.00530	0.00191	0
40	0	0.0159	0.0120	0	0	0.00997	0.00389	0	0.000425	0.00685	0.00183	0
41	0.000161	0.0150	0.0108	0	0	0.00661	0.00196	0	0.000347	0.00674	0.00202	0.0406
42	0	0.0109	0.0107	0	0.00623	0.00628	0.00373	0	0.000705	0.00524	0.00187	0
43	0.00378	0.00905	0.00755	0	0.00622	0.00566	0.00327	0	0.00403	0.00519	0.00174	0
44	0.000407	0.00741	0.00895	0	0.000189	0.00507	0.00452	0	0.00173	0.00555	0.00173	0
45	0	0.00828	0.00687	0	0	0.00488	0.00228	0	0.00117	0.00503	0.00144	0
46	0	0.00812	0.00673	0	0	0.00893	0.000128	0	0.000177	0.00472	0.00153	0
47	0.00361	0.0100	0.00920	0	0.00609	0.0109	0.00202	0	0.000142	0.00371	0.00157	0.0425
48	0.00574	0.0117	0.0219	0	0	0.00563	0.00214	0	0.000087	0.00456	0.00142	0
49	0.00304	0.00610	0.0173	0	0	0.00719	0.00152	0.00135	0.000095	0.00312	0.00163	0
50	0.00304	0.00388	0.0138	0	0.000111	0.00580	0.000256	0.00131	0.000155	0.00148	0.00197	0
51	0.00976	0.00264	0.0112	0	0	0.00450	0	0	0.00145	0.00113	0.00253	0
52	0.00563	0.00246	0.0148	0	0.000036	0.00581	0.000117	0	0.000525	0.00127	0.00289	0
53	0.0109	0.00291	0.0132	0	0.0147	0.00618	0.000440	0	0.000751	0.00115	0.00355	0.0841
54	0.0253	0.00325	0.0121	0.0290	0.000092	0.00863	0.000780	0.00193	0.000155	0.00160	0.00452	0.0341
55	0.0102	0.00515	0.0139	0.0307	0.000092	0.0109	0.00102	0.00611	0.000070	0.00105	0.00426	0.0562
56	0.0107	0.00378	0.0135	0.0792	0.000898	0.0160	0.00214	0.0166	0.000370	0.00123	0.00464	0
57	0.00652	0.00405	0.0140	0	0.000190	0.0230	0.00428	0.000529	0.000821	0.00152	0.00411	0
58	0.000328	0.00225	0.0139	0	0.000420	0.0212	0.000214	0	0.000482	0.00180	0.00315	0
59	0	0.00203	0.0119	0	0	0.0205	0.00184	0.00485	0.000661	0.00137	0.00344	0
60	0.00692	0.000301	0.0149	0.0245	0	0.0138	0.000679	0.00537	0.000258	0.00130	0.00301	0
61	0.00924	0.00576	0.0142	0.0442	0	0.0236	0.00186	0.0109	0.00200	0.00321	0.00419	0
62	0.00374	0.0140	0.0186	0.0576	0.00124	0.0335	0.0136	0.0108	0.000962	0.00450	0.00307	0
63	0.00821	0.0129	0.0170	0.1259	0	0.0311	0.00265	0.0480	0.000321	0.00462	0.00229	0.0562
64	0.00576	0.0114	0.0151	0.0460	0.000630	0.0190	0.00387	0.0241	0.0151	0.00390	0.00151	0
65	0.00286	0.00736	0.0151	0	0.000198	0.0104	0.00449	0.00509	0.00511	0.00425	0.000874	0

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History		
	Relative Change in Cluster Seeds	
Iteration	24	25
33	0	0.00480
34	0.00249	0.00429
35	0.00533	0.0159
36	0.00317	0.0188
37	0	0.0248
38	0.000628	0.0209
39	0.000646	0.0111
40	0.00129	0.00887
41	0.00998	0.0115
42	0.00850	0.00768
43	0.00347	0.00969
44	0.00286	0.00729
45	0.00127	0.00355
46	0	0.00353
47	0.00153	0.00336
48	0.00137	0.00185
49	0.00212	0.00212
50	0.000679	0.000141
51	0.00539	0.000984
52	0.00131	0.00709
53	0.00127	0.00345
54	0.00252	0.00970
55	0.00695	0.00746
56	0.00924	0.00632
57	0.0149	0.00939
58	0.0142	0.0157
59	0.00533	0.0162
60	0.00411	0.00642
61	0.00184	0.00285
62	0.000574	0.00391
63	0.00228	0.00573
64	0.00167	0.00580
65	0.00426	0.00414

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History												
		Relative Change in Cluster Seeds										
Iteration	**Criterion**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
66	29368.6	0.00337	0.0141	0.00700	0.00248	0.00691	0.1688	0.0209	0.00203	0.0172	0.0176	0.00373
67	29327.3	0.00256	0.0113	0.00762	0.00277	0.00991	0.3165	0.00276	0.00169	0.0223	0.0210	0.00357
68	29254.2	0.00212	0.00751	0.00776	0.00293	0.00840	0.2284	0	0.00158	0.0289	0.0365	0.00374
69	29185.9	0.00366	0.0102	0.00447	0.00166	0.0175	0.2177	0.3376	0.00156	0.0396	0.0359	0.00261
70	29067.8	0.00321	0.0126	0.00418	0.00153	0.0103	0.1975	0.2625	0.00182	0.0600	0.0315	0.00187
71	28925.5	0.00252	0.0102	0.00660	0.00121	0.0112	0.1543	0.00720	0.00202	0.1075	0.0331	0.00190
72	28789.2	0.00226	0.0136	0.00637	0.00321	0.0111	0.0520	0	0.00114	0.0625	0.0221	0.00356
73	28725.6	0.00234	0.0148	0.00940	0.00137	0.00984	0.00589	0	0.00141	0.0436	0.00771	0.00244
74	28685.0	0.00229	0.0154	0.0128	0.000563	0.00521	0	0	0.00191	0.0265	0.0118	0.00208
75	28658.7	0.00122	0.0128	0.0126	0.000246	0.00195	0.00818	0	0.00170	0.0199	0.00257	0.00132
76	28642.5	0.00182	0.0109	0.0140	0.000326	0.00449	0.00792	0	0.000968	0.0139	0.00263	0.000967
77	28629.9	0.00126	0.0105	0.0148	0.000340	0.00552	0.00841	0.00633	0.000740	0.0113	0	0.000655
78	28621.3	0.00139	0.00649	0.00899	0.000180	0.00514	0.00399	0	0.00111	0.0119	0	0.000551
79	28616.7	0.000881	0.00339	0.00730	0.000367	0.00546	0.00762	0	0.000629	0.00661	0	0.000608
80	28614.0	0.000637	0.00260	0.00362	0.000302	0.00434	0.00715	0	0.000534	0.00571	0.00391	0.000273
81	28611.9	0.00138	0.00328	0.00453	0.000088	0.00315	0.00377	0	0.000829	0.00411	0	0.000109
82	28610.3	0.000808	0.00319	0.00384	0.000204	0.00228	0	0	0.000577	0.00160	0	0.000208
83	28608.8	0.000701	0.00170	0.00218	0.000055	0.00433	0	0	0.000388	0.00137	0.00204	0.000121
84	28607.8	0.000198	0.000374	0.00213	0.000129	0.00339	0	0	0.000180	0.00231	0.00208	0.000176
85	28606.9	0	0.000605	0.000985	0.000037	0.00159	0	0	0.000132	0.000513	0	0.000130
86	28606.4	0.000095	0	0.000086	0.000154	0	0	0	0.000117	0	0	0.000044
87	28606.2	0	0.000017	0	0.000100	0	0	0	0.000050	0.000920	0	0.000041
88	28606.0	0.000077	0	0	0.000131	0.000084	0	0	0.000124	0.000069	0	0.000014
89	28605.8	0	0	0	0.000040	0.00128	0	0	0.000056	0	0	0.000078
90	28605.7	0.000096	0.000639	0	0.000059	0.000716	0.0413	0	0.000050	0	0	0.000153
91	28601.4	0.000090	0	0	0.000108	0.00121	0.0200	0	0	0.00144	0.00897	0.000118
92	28598.9	0.000091	0	0	0.000038	0.000809	0.0281	0	0.000128	0.00305	0.0143	0.000108
93	28593.1	0.000367	0.000018	0.000403	0.000253	0	0.0352	0	0.000016	0.00148	0.0243	0.000030
94	28587.0	0.000018	0.000328	0.000405	0.000352	0	0.0124	0	0.000012	0.000922	0.0115	0.000155
95	28584.8	0.000180	0	0.000039	0.000144	0	0.0227	0	0.000131	0.00309	0.0104	0.000067
96	28580.8	0.000284	0	0	0.000173	0.00107	0.0101	0	0.000069	0.000767	0.00904	0.000188
97	28579.3	0.000090	0	0	0.000162	0	0.00582	0	0.000058	0.00121	0.00450	0.000145
98	28578.8	0.000093	0	0.000322	0.000153	0	0	0	0.000065	0.00160	0	0.000364

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History												
	Relative Change in Cluster Seeds											
Iteration	12	13	14	15	16	17	18	19	20	21	22	23
66	0	0.00674	0.0128	0	0.000135	0.00773	0.00530	0.000114	0.000507	0.00571	0.000685	0
67	0	0.00595	0.0108	0	0	0.00654	0.0104	0	0.00133	0.00437	0.000314	0
68	0.0120	0.00283	0.00962	0.0222	0.00545	0.00475	0.00973	0	0.000750	0.00352	0.000425	0
69	0.00274	0.00303	0.00856	0	0	0.00429	0.00162	0.000720	0.00185	0.00331	0.000482	0
70	0.00547	0.00369	0.00689	0.00462	0	0.00373	0.00204	0.000720	0.000830	0.00240	0.000192	0.0525
71	0.0113	0.00647	0.00951	0.00858	0.0161	0.00192	0.000959	0	0.00119	0.00416	0.000817	0
72	0.00263	0.0113	0.00890	0.00901	0.000588	0.00213	0.000069	0.000720	0.000459	0.00302	0.000649	0
73	0.00785	0.0124	0.00788	0	0	0.00348	0.000753	0	0.00102	0.00333	0.00139	0
74	0.0136	0.0110	0.00621	0	0	0.00303	0.000060	0	0.000437	0.00215	0.00102	0
75	0.00569	0.00725	0.00441	0	0	0.00249	0.000107	0	0.000071	0.00121	0.000882	0
76	0.00275	0.00491	0.00353	0	0	0.00191	0.0146	0	0.000065	0.00139	0.000613	0
77	0.00410	0.00348	0.00260	0	0	0.00133	0.000240	0	0.000031	0.00142	0.000863	0
78	0.000139	0.00230	0.00228	0	0	0.00114	0.000149	0	0.000012	0.00177	0.000338	0
79	0	0.00209	0.00203	0	0	0.00137	0	0	0	0.00158	0.000546	0
80	0.00413	0.00257	0.00174	0	0	0.00135	0.000061	0	0.000094	0.00157	0.000210	0
81	0	0.00149	0.00179	0	0	0.000281	0.000154	0	0.000097	0.00123	0.000168	0
82	0	0.00143	0.00209	0	0	0.000224	0	0	0.000059	0.00147	0.000257	0
83	0	0.00146	0.00197	0	0	0.000505	0.000137	0	0.000096	0.00139	0.000305	0
84	0.00378	0.000989	0.00195	0	0	0.000271	0.000505	0	0	0.00103	0.000413	0
85	0.00375	0.000714	0.00163	0	0	0.000297	0.000174	0	0	0.00141	0.000288	0
86	0	0.000936	0.000820	0	0	0	0.000019	0	0.000533	0.000866	0.000213	0
87	0	0.000929	0.000868	0	0	0	0	0	0.000174	0.000976	0.000110	0
88	0	0.000953	0.000537	0	0	0.000223	0	0	0.000038	0.000827	0	0
89	0.00304	0.00113	0.000325	0	0	0.000266	0	0	0	0.000640	0.000066	0
90	0.000110	0.000478	0.000619	0	0.000201	0.000273	0	0	0	0.00153	0.000102	0
91	0	0.000565	0.000979	0	4.888E-6	0.000470	0	6.676E-6	0	0.00101	0.000046	0
92	0	0.00112	0.000833	0	0	0.000254	0	0	0	0.000997	0.000034	0
93	0.00281	0.000664	0.00105	0	0	0.000222	0	0	0	0.00117	0.000123	0
94	0.0115	0.000826	0.00101	0	0	0.000476	0.000082	0	0	0.00153	0.000128	0
95	0.00868	0.000332	0.00113	0	0	0	0	0	0.000126	0.000878	0.000173	0.0399
96	0.00440	0.000403	0.00172	0	0	0	0	0.000319	0	0.000945	0.000130	0.0294
97	0	0.000098	0.00126	0	0	0	0	0	0	0.00108	0.000108	0.00343
98	0	0.000369	0.00236	0	0	0	0	0	0	0.00136	0.000156	0

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History		
	Relative Change in Cluster Seeds	
Iteration	24	25
66	0.000483	0.00579
67	0	0.00997
68	0.00134	0.00884
69	0.00316	0.00476
70	0	0.00428
71	0	0.00541
72	0.00111	0.00307
73	0.000713	0.00471
74	0	0.0102
75	0	0.0111
76	0	0.0136
77	0	0.00599
78	0.00235	0.00272
79	0.000598	0.00112
80	0.000245	0.00206
81	0	0.000149
82	0.000232	0.00464
83	0.00172	0.00158
84	0.000242	0.00296
85	0	0.00223
86	0	0
87	0	0.000070
88	0	0.000070
89	0	0
90	0.000234	0
91	0	0
92	0	0
93	0	0.000702
94	0	0.000181
95	0	0
96	0	0.000142
97	0	0.000246
98	0	0.000072

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History												
		Relative Change in Cluster Seeds										
Iteration	**Criterion**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
99	28578.2	0.000449	0	0.000566	0.000604	0	0	0	0.000066	0.00120	0.00169	0.000278
100	28577.9	0.000722	0.000019	0.00119	0.000332	0	0	0	0.000124	0	0	0.000155
101	28577.7	0.000710	0.000320	0.00118	0.000280	0	0	0	0.000063	0	0	0.000062
102	28577.6	0.000674	0.000411	0.000246	0.000074	0	0	0.00633	0.000258	0	0	0.000022
103	28577.5	0.000375	0.000392	0	0.000069	0	0	0	0.000129	0	0	0.000049
104	28577.5	0.000846	0.000055	0	0.000035	0	0	0	0.000377	0.000483	0	0.000025
105	28577.4	0.000813	0.000037	0.000975	0	0	0	0	0.000136	0	0	0
106	28577.4	0.000411	0.000018	0.000387	0.000033	0	0	0	0.000153	0	0	0
107	28577.3	0.000691	0.000727	0.00125	0	0	0	0	0.000442	0	0	0
108	28577.3	0.000379	0	0.000685	0	0	0	0	0.000229	0	0	0
109	28577.3	0.000311	0.000315	0.000403	0	0	0	0	0.000219	0	0	0
110	28577.3	0.000273	0	0	0	0	0	0	0.000183	0	0	0
111	28577.2	0.000139	0	0.000079	0	0	0	0	0	0	0	0
112	28577.2	0	0	0	0	0	0	0	0	0	0	0

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History												
	Relative Change in Cluster Seeds											
Iteration	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**
99	0	0.000498	0.000955	0	0	0	0	0	0.000101	0.00108	0.000240	0
100	0	0.00133	0.000600	0	0	0	0	0	0	0.000762	0.000178	0
101	0	0.000710	0.000075	0	0	0	0.000019	0	0.000077	0.000360	0	0
102	0	0.000891	0.000136	0	0	0.000203	0	0	0	0.000258	0.000039	0
103	0	0.000422	0.000185	0	0	0	0	0	0	0.000322	0	0
104	0	0.000308	0.000013	0	0	0	0	0	0	0.000057	0	0
105	0	0.000466	0	0	0	0.000208	0	0	0.000038	0	0	0
106	0	0.000213	0	0	0	0.000280	0	0	0	0.000052	0	0
107	0	0	0	0	0	0.000245	0	0	0	0	0	0
108	0	0	0	0	0	0	0	0	0.000038	0	0	0
109	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0
111	0	0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	0	0

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Iteration History		
	Relative Change in Cluster Seeds	
Iteration	24	25
99	0	0
100	0	0
101	0	0.000074
102	0	0
103	0	0.000513
104	0	0
105	0	0
106	0	0
107	0	0
108	0	0
109	0	0
110	0	0
111	0	0
112	0	0

Convergence criterion is satisfied.

Criterion Based on Final Seeds =	28577.2

Cluster Summary						
Cluster	Frequency	RMS Std Deviation	Maximum Distance from Seed to Observation	Radius Exceeded	Nearest Cluster	Distance Between Cluster Centroids
1	2536	27449.5	87315.1		8	83431.9
2	1117	42719.4	130376		3	138897
3	5752	24531.4	88787.7		1	98998.1
4	5771	20802.1	65479.5		21	68922.5
5	504	53360.0	167781		2	155322
6	180	83541.3	359995		10	233730
7	22	161279	297214		23	588098
8	3976	23979.5	78851.7		4	81860.9
9	636	57378.6	212444		13	128924
10	257	71716.2	274965		6	233730
11	8114	18859.6	57708.0		22	64371.5
12	201	76492.7	213157		10	262090

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Cluster Summary						
Cluster	Frequency	RMS Std Deviation	Maximum Distance from Seed to Observation	Radius Exceeded	Nearest Cluster	Distance Between Cluster Centroids
13	2145	30438.2	104053		8	95340.2
14	3338	29161.6	193297		11	67714.8
15	50	89827.2	245912		19	271843
16	127	83855.7	260503		12	262676
17	1259	41049.4	154966		1	120992
18	306	74291.8	222682		25	229676
19	104	35026.1	134754		24	270092
20	697	10610.7	85533.6		24	175486
21	4664	25776.4	101602		4	68922.5
22	7659	18375.2	70331.0		11	64371.5
23	30	138541	326941		12	387650
24	133	29954.1	124847		20	175486
25	639	61246.2	203611		5	207952

7989 Observation(s) were omitted due to missing values.

Statistics for Variables				
Variable	Total STD	Within STD	R-Square	RSQ/(1-RSQ)
VALP	253558	30136	0.985884	69.839438
HINCP	86804	27384	0.900531	9.053340
OVER-ALL	177923	28586	0.974202	37.762478

Pseudo F Statistic =	78973.93

Approximate Expected Over-All R-Squared =	0.97551

Cubic Clustering Criterion =	-12.006

WARNING: The two values above are invalid for correlated variables.

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Cluster Means		
Cluster	VALP	HINCP
1	329593.946	84841.596
2	511784.020	94312.479
3	398577.603	13835.383
4	169183.084	46574.440
5	544877.378	246067.952
6	207022.025	530398.467
7	285045.455	1215200.000
8	249923.374	60073.036
9	197038.507	265517.198
10	435413.043	480728.201
11	97818.768	42801.787
12	695819.095	510390.452
13	262680.664	154555.840
14	70351.866	104695.807
15	2267000.000	773088.432
16	958349.593	501653.175
17	388907.599	190297.585
18	952218.750	151422.886
19	2267000.000	501245.885
20	2267000.000	55667.366
21	162469.500	115169.223
22	34278.915	32488.077
23	774966.667	889874.483
24	2267000.000	231153.429
25	722901.826	138589.936

Cluster Standard Deviations		
Cluster	VALP	HINCP
1	30743.2715	23702.2365
2	48842.5229	35557.1031
3	32406.9894	12384.1932
4	21865.2008	19681.7579
5	55160.3381	51496.6683
6	90128.6509	76388.0293
7	61113.8495	219743.4868

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Cluster Standard Deviations		
Cluster	**VALP**	**HINCP**
8	23314.8759	24626.2425
9	63040.0714	51093.6216
10	66699.8020	76403.8602
11	18974.2325	18744.2719
12	71192.7065	81448.4831
13	30877.1709	29992.8592
14	28797.4071	29521.2155
15	0.0000	127034.9079
16	80733.5208	86865.6873
17	37139.1729	44618.1842
18	72165.5980	76358.7956
19	0.0000	49534.4001
20	0.0000	15005.7525
21	26745.1587	24769.7272
22	20106.3423	16463.1291
23	155759.6476	118853.2627
24	0.0000	42361.4621
25	57608.7724	64679.3568

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

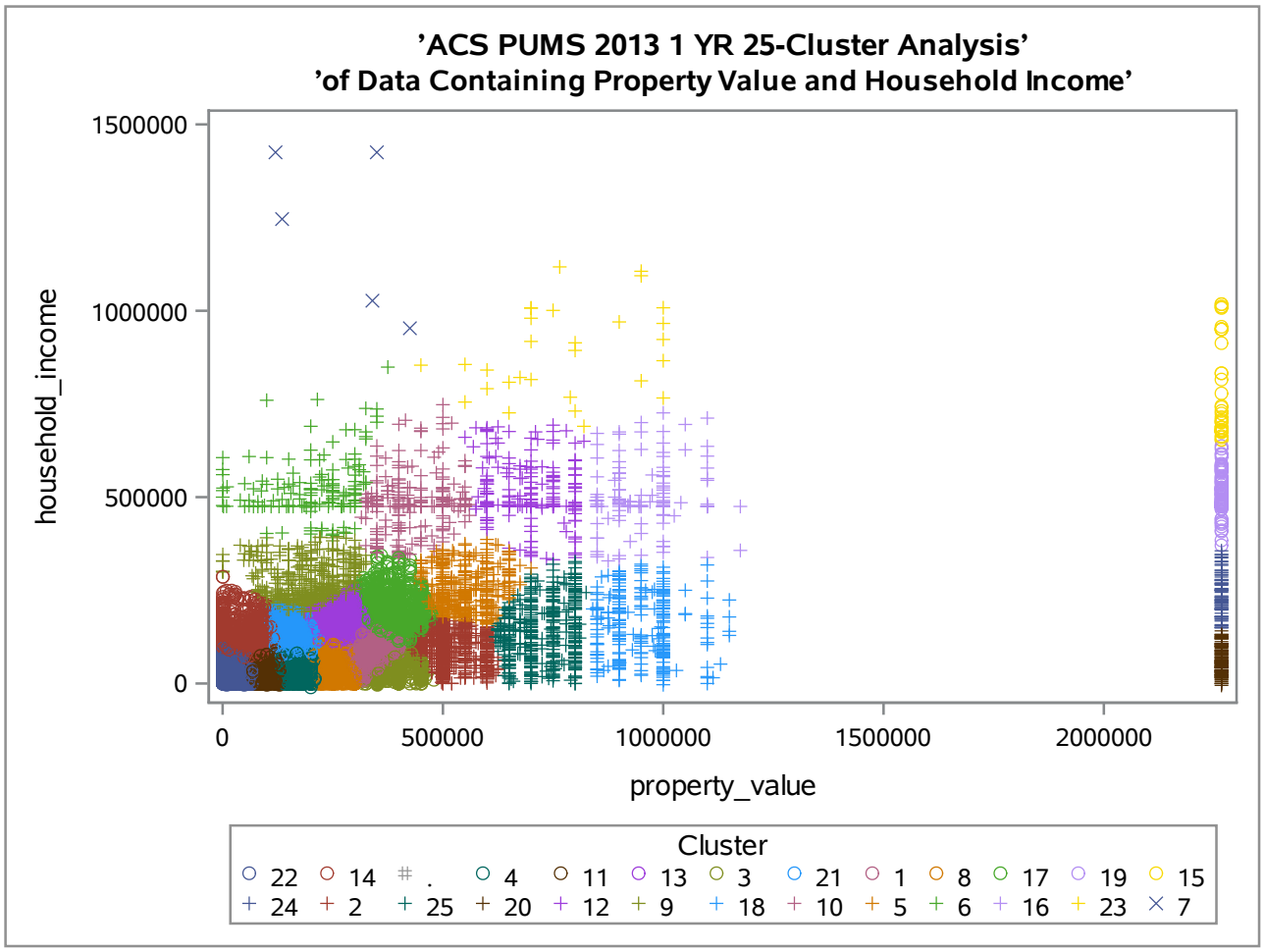
Distance Between Cluster Centroids									
Nearest Cluster	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	.	182436.073	98998.117	164912.158	268962.626	462109.080	1131235.912	83431.898	224086.184
2	182436.073	.	138896.565	345910.858	155321.904	532025.246	1143590.491	264089.639	358295.679
3	98998.117	138896.565	.	231718.992	274473.296	550936.439	1206717.238	155679.158	322430.990
4	164912.158	345910.858	231718.992	.	425374.969	485301.427	1174355.053	81860.897	220707.626
5	268962.626	155321.904	274473.296	425374.969	.	441576.813	1003359.136	348700.406	348382.195
6	462109.080	532025.246	550936.439	485301.427	441576.813	.	689232.033	472278.029	265069.344
7	1131235.912	1143590.491	1206717.238	1174355.053	1003359.136	689232.033	.	1155660.790	953751.879
8	83431.898	264089.639	155679.158	81860.897	348700.406	472278.029	1155660.790	.	212141.728
9	224086.184	358295.679	322430.990	220707.626	348382.195	265069.344	953751.879	212141.728	.
10	409785.170	393890.386	468343.627	509281.729	258936.040	233729.743	749706.100	459735.995	321151.359
11	235556.955	417157.742	302150.508	71463.967	491099.313	499675.769	1187253.723	153082.029	243816.962
12	561438.054	454961.304	578722.249	701762.625	304384.274	489206.395	815776.613	633726.100	555648.258
13	96630.550	256284.499	195627.772	142834.801	296663.871	379941.528	1060879.926	95340.173	128923.682
14	260001.242	441554.255	340569.745	114654.712	495136.895	447103.441	1131067.151	185032.749	204726.708
15	2056021.869	1881892.646	2016796.332	2220058.196	1800959.997	2074224.597	2030666.506	2139389.882	2131283.449
16	754364.339	604439.619	742503.117	910977.735	486089.579	751877.256	981064.491	834781.844	797091.444
17	120992.045	155922.273	176726.957	262555.146	165640.894	385682.476	1030151.594	190460.095	206086.727
18	626174.668	444121.999	570481.236	790024.082	418192.159	836026.705	1255683.860	708211.543	763750.425
19	1981649.502	1801770.777	1930950.867	2146523.220	1740925.645	2060184.247	2106626.284	2064759.452	2083340.730
20	1937625.700	1755641.359	1868890.625	2097836.622	1732616.145	2113972.298	2296227.286	2017081.437	2080571.444
21	169853.895	349936.620	256934.979	68922.540	404190.874	417612.563	1106839.001	103362.324	154270.962
22	299919.753	481490.791	364775.900	135637.607	553468.295	527024.609	1209004.280	217401.616	284241.545
23	920018.918	837964.204	953474.295	1038329.770	683687.012	672148.884	588098.194	981957.687	850777.866
24	1942922.893	1760542.127	1881018.178	2105921.465	1722187.204	2081599.590	2212801.725	2024318.803	2070246.713
25	396963.440	215710.967	347490.864	561312.121	207952.466	647800.815	1162242.416	479451.269	540964.658

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Distance Between Cluster Centroids									
Nearest Cluster	10	11	12	13	14	15	16	17	18
1	409785.170	235556.955	561438.054	96630.550	260001.242	2056021.869	754364.339	120992.045	626174.668
2	393890.386	417157.742	454961.304	256284.499	441554.255	1881892.646	604439.619	155922.273	444121.999
3	468343.627	302150.508	578722.249	195627.772	340569.745	2016796.332	742503.117	176726.957	570481.236
4	509281.729	71463.967	701762.625	142834.801	114654.712	2220058.196	910977.735	262555.146	790024.082
5	258936.040	491099.313	304384.274	296663.871	495136.895	1800959.997	486089.579	165640.894	418192.159
6	233729.743	499675.769	489206.395	379941.528	447103.441	2074224.597	751877.256	385682.476	836026.705
7	749706.100	1187253.723	815776.613	1060879.926	1131067.151	2030666.506	981064.491	1030151.594	1255683.860
8	459735.995	153082.029	633726.100	95340.173	185032.749	2139389.882	834781.844	190460.095	708211.543
9	321151.359	243816.962	555648.258	128923.682	204726.708	2131283.449	797091.444	206086.727	763750.425
10	.	552946.145	262089.987	369086.553	524089.711	1854773.648	523355.032	294130.412	612805.131
11	552946.145	.	759107.076	199169.308	67714.846	2288813.187	975221.974	326324.560	861276.885
12	262089.987	759107.076	.	560559.695	745518.209	1592990.792	262675.850	443457.000	441133.196
13	369086.553	199169.308	560559.695	.	198686.661	2097588.751	777452.133	131189.601	689545.203
14	524089.711	67714.846	745518.209	198686.661	.	2296086.175	972684.489	329856.665	883103.969
15	1854773.648	2288813.187	1592990.792	2097588.751	2296086.175	.	1336504.016	1966437.448	1454344.453
16	523355.032	975221.974	262675.850	777452.133	972684.489	1336504.016	.	649004.228	350283.946
17	294130.412	326324.560	443457.000	131189.601	329856.665	1966437.448	649004.228	.	564650.949
18	612805.131	861276.885	441133.196	689545.203	883103.969	1454344.453	350283.946	564650.949	.
19	1831701.874	2217096.798	1571207.516	2034082.099	2232154.786	271842.547	1308650.470	1903659.610	1360524.114
20	1880262.613	2169219.386	1635659.659	2006757.317	2197195.215	717421.066	1382558.942	1882911.671	1318263.576
21	456214.362	97040.007	663823.479	107673.502	92711.115	2204973.086	884757.011	238575.949	790580.930
22	601521.236	64371.464	816104.215	258974.705	80716.875	2352346.133	1036350.571	388156.340	925612.786
23	531692.903	1084463.660	387649.929	896175.460	1054982.261	1496596.956	429354.262	799030.312	759426.799
24	1848512.469	2177343.234	1595801.601	2005782.439	2200285.107	541935.003	1336314.334	1878536.735	1317196.529
25	446887.450	632379.791	372785.593	460498.022	653429.616	1669379.379	432724.585	337973.112	229675.719

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=25 Maxiter=200 Converge=0

Distance Between Cluster Centroids							
Nearest Cluster	**19**	**20**	**21**	**22**	**23**	**24**	**25**
1	1981649.502	1937625.700	169853.895	299919.753	920018.918	1942922.893	396963.440
2	1801770.777	1755641.359	349936.620	481490.791	837964.204	1760542.127	215710.967
3	1930950.867	1868890.625	256934.979	364775.900	953474.295	1881018.178	347490.864
4	2146523.220	2097836.622	68922.540	135637.607	1038329.770	2105921.465	561312.121
5	1740925.645	1732616.145	404190.874	553468.295	683687.012	1722187.204	207952.466
6	2060184.247	2113972.298	417612.563	527024.609	672148.884	2081599.590	647800.815
7	2106626.284	2296227.286	1106839.001	1209004.280	588098.194	2212801.725	1162242.416
8	2064759.452	2017081.437	103362.324	217401.616	981957.687	2024318.803	479451.269
9	2083340.730	2080571.444	154270.962	284241.545	850777.866	2070246.713	540964.658
10	1831701.874	1880262.613	456214.362	601521.236	531692.903	1848512.469	446887.450
11	2217096.798	2169219.386	97040.007	64371.464	1084463.660	2177343.234	632379.791
12	1571207.516	1635659.659	663823.479	816104.215	387649.929	1595801.601	372785.593
13	2034082.099	2006757.317	107673.502	258974.705	896175.460	2005782.439	460498.022
14	2232154.786	2197195.215	92711.115	80716.875	1054982.261	2200285.107	653429.616
15	271842.547	717421.066	2204973.086	2352346.133	1496596.956	541935.003	1669379.379
16	1308650.470	1382558.942	884757.011	1036350.571	429354.262	1336314.334	432724.585
17	1903659.610	1882911.671	238575.949	388156.340	799030.312	1878536.735	337973.112
18	1360524.114	1318263.576	790580.930	925612.786	759426.799	1317196.529	229675.719
19	.	445578.519	2139650.396	2281398.107	1541815.701	270092.456	1586114.279
20	445578.519	.	2105371.487	2232841.401	1709404.862	175486.063	1546323.162
21	2139650.396	2105371.487	.	152541.790	987583.424	2107724.119	560921.494
22	2281398.107	2232841.401	152541.790	.	1133018.002	2241542.184	696748.964
23	1541815.701	1709404.862	987583.424	1133018.002	.	1630974.217	753086.461
24	270092.456	175486.063	2107724.119	2241542.184	1630974.217	.	1546870.120
25	1586114.279	1546323.162	560921.494	696748.964	753086.461	1546870.120	.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