The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Initial Seeds		
Cluster	VALP	HINCP
1	750.000	243700.000
2	800000.000	0.000
3	495000.000	25830.000
4	350000.000	585000.000
5	2267000.000	-5100.000
6	2267000.000	1019000.000
7	380.000	560300.000
8	2267000.000	337000.000
9	900000.000	290000.000
10	650000.000	676000.000
11	1175000.000	475000.000
12	1130000.000	52000.000
13	2267000.000	679230.000
14	600000.000	325000.000
15	300000.000	273900.000
16	120000.000	1425000.000
17	340000.000	1027000.000
18	175000.000	0.000
19	1000000.000	766000.000
20	950000.000	1106000.000

Minimum Distance Between Initial Seeds =	299587.6

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

		Relative Change in Cluster Seeds										
Iteration	Criterion	1	2	3	4	5	6	7	8	9	10	11
1	74712.2	0.3650	0.1063	0.1966	0.1942	0.2392	0.1429	0.3363	0.0515	0.1033	0.2706	0.4636
2	51646.6	0.1278	0.1247	0.0949	0.1210	0.0130	0.1063	0.2010	0.0493	0.1252	0.1852	0.2078
3	46255.0	0.1132	0.1226	0.0390	0.0968	0.00659	0.0371	0.1803	0.00161	0.0563	0.0760	0.0276
4	42053.6	0.0664	0.0655	0.0554	0.0626	0.00538	0	0.1250	0.0188	0.0783	0.0375	0.00806
5	39919.2	0.0279	0.0452	0.0347	0.0307	0.0248	0	0.1042	0.1605	0.0759	0.0232	0.0211
6	39030.6	0.0133	0.0340	0.0221	0.0102	0.0102	0.0391	0.1129	0.1017	0.0973	0.0131	0.0239
7	38538.9	0.00404	0.0326	0.0122	0.0120	0.0151	0.0356	0.0984	0.0470	0.0512	0.00759	0.00349
8	38228.9	0.00173	0.0241	0.00356	0.0186	0.00570	0.0335	0.0821	0.0486	0.0450	0.00497	0.0188
9	37918.6	0.000899	0.0476	0.00554	0.0258	0.00418	0.0312	0.0763	0.0266	0.0377	0.00887	0.0221
10	37587.8	0.000415	0.0738	0.0137	0.0184	0.000675	0.0293	0.0713	0.0575	0.0633	0.0182	0.0132
11	37118.2	0.000214	0.0853	0.0184	0.0437	0.00242	0	0.0528	0.00523	0.0364	0.0272	0.00921
12	36653.3	0.000196	0.0628	0.00907	0.0516	0.00206	0	0.0366	0.00972	0.0352	0.0358	0.0171
13	36377.0	0.000244	0.0436	0.00707	0.0265	0.00432	0	0.0297	0.00826	0.0174	0.0401	0.0454
14	36239.1	0.000455	0.0341	0.00456	0.0247	0.00628	0	0.0212	0.00440	0.0169	0.0317	0.0179
15	36147.9	0.000294	0.0263	0.00442	0.0238	0.00516	0	0.0174	0.00683	0.0125	0.0126	0.0102
16	36087.0	0.000379	0.0163	0.00984	0.0184	0.00516	0	0.0123	0.00417	0.00865	0.0131	0.0113
17	36044.9	0.000285	0.0126	0.0117	0.0221	0.00233	0	0.00957	0	0.00744	0.0130	0.0182
18	36004.9	0.000120	0.00836	0.0133	0.0240	0.00241	0	0.00872	0.00129	0.00479	0.00797	0.00674
19	35965.5	0.000216	0.00742	0.0131	0.0251	0.00176	0	0.00930	0.00226	0.00219	0.0168	0
20	35916.7	0.000162	0.0150	0.0132	0.0228	0.00188	0	0.00924	0.00115	0.00194	0.0141	0.000686
21	35874.5	0.000202	0.0152	0.0120	0.0370	0.00134	0	0.00946	0.00164	0.000997	0.0126	0.000820
22	35821.0	0.000183	0.0202	0.00979	0.0666	0.000719	0	0.0128	0.00417	0.00735	0.0240	0.00369
23	35713.9	0.000156	0.0202	0.0112	0.0719	0.000488	0	0.0155	0.00855	0.00400	0.0257	0.00804
24	35554.8	0.000128	0.0279	0.00661	0.0909	0.00201	0	0.0144	0.0110	0.00622	0.0506	0.0181
25	35318.2	0.000107	0.0233	0.00485	0.0734	0.00233	0	0.0153	0.0128	0.00599	0.0540	0.0388
26	35107.1	0.000074	0.0178	0.00497	0.0565	0.00227	0.0243	0.0156	0.00989	0.00363	0.0638	0.0372
27	34916.8	0.000098	0.0101	0.00687	0.0441	0.000711	0.0257	0.0160	0.00479	0.000224	0.0535	0.0389
28	34777.1	0.000213	0.00622	0.00722	0.0299	0.00144	0.0663	0.0151	0.00148	0.00329	0.0448	0.0443
29	34667.0	0.000190	0.00143	0.00684	0.0367	0.00102	0	0.0144	0.0693	0.00191	0.0266	0.0438
30	34554.2	0.000664	0.00309	0.00851	0.0339	0.00185	0.0205	0.0151	0.0337	0.00262	0.0183	0.0478
31	34444.0	0.000985	0.00549	0.00927	0.0294	0.000393	0.0538	0.0147	0	0.00169	0.0320	0.0299
32	34339.5	0.00113	0.00749	0.00777	0.0239	0.000945	0.0314	0.0136	0.00184	0.000424	0.0481	0.0220
33	34239.8	0.00122	0.00957	0.00602	0.0181	0.00143	0.1054	0.0116	0.00849	0.000636	0.0471	0.0117
34	34154.8	0.00138	0.0114	0.00429	0.0144	0.00144	0.0385	0.00992	0.00303	0.00717	0.0301	0.000524

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Iteration History									
	Relative Change in Cluster Seeds								
Iteration	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
1	0.3388	0.1931	0.1624	0.2925	0.2084	0.3569	0.2420	0.3619	0.4812
2	0.1326	0.0812	0.1710	0.1326	0.0254	0.2848	0.0297	0.0807	0.0746
3	0.0250	0.0343	0.1053	0.0856	0.0313	0.2939	0.0203	0.0114	0.1366
4	0.0417	0.0254	0.0882	0.0478	0.0132	0.1139	0.0363	0.0431	0
5	0.0152	0.0818	0.0442	0.0202	0.000611	0.0873	0.0289	0.0363	0
6	0.0188	0.0200	0.0422	0.0133	0.0128	0.0768	0.0161	0.0543	0.0435
7	0.0245	0.0203	0.0261	0.0131	0	0.0516	0.00565	0.0214	0
8	0.0586	0.0131	0.0121	0.0181	0.00482	0.0614	0.00247	0.0191	0
9	0.0267	0.00467	0.0116	0.0133	0.00745	0.1080	0.000948	0.0127	0.0842
10	0.00659	0.00455	0.0280	0.0132	0.000723	0.1440	0.00175	0.0179	0
11	0.0201	0.00113	0.0149	0.0137	0	0.1971	0.00217	0.0206	0.00535
12	0.0133	0.00272	0.0140	0.0169	0.2824	0.1212	0.00239	0.00132	0.0521
13	0.00465	0.000537	0.00545	0.0111	0.00363	0.0572	0.00229	0.00510	0.0459
14	0.0112	0.000118	0.00589	0.00973	0.000697	0.0414	0.00177	0.00751	0
15	0.00123	0.00581	0.00180	0.0114	0	0.0327	0.00168	0.00832	0
16	0.00286	0.000139	0.00205	0.00646	0	0.0346	0.00194	0.0125	0
17	0.00197	0.00116	0.00289	0.00603	0	0.0324	0.00170	0.0116	0
18	0.000862	0	0.00643	0.00553	0	0.0250	0.00171	0.0216	0.0521
19	0.00349	0.00113	0.00847	0.00491	0	0.0447	0.00157	0.0148	0.0606
20	0.000678	0.00110	0.0110	0.00337	0	0.0171	0.00167	0.0156	0.0197
21	0.00112	0.000468	0.0123	0.00283	0	0.00115	0.00204	0.00688	0
22	0.00110	0	0.0130	0.00221	0	0.0130	0.00208	0.0126	0
23	0.000314	0	0.0148	0.00128	0	0.0161	0.00262	0.0416	0
24	0.00312	0	0.0154	0.000813	0	0.0398	0.00306	0.0894	0
25	0.00111	0.00161	0.0114	0.00113	0	0.0138	0.00303	0.0926	0.0271
26	0.000328	0.000536	0.00751	0.000878	0	0.00461	0.00351	0.1110	0
27	0.00440	0.00455	0.00312	0.00203	0	0.00722	0.00422	0.0680	0.0326
28	0.00421	0.0146	0.00158	0.00152	0	0.0112	0.00444	0.0737	0.0199
29	0.00372	0.00592	0.00286	0.00178	0	0.00316	0.00398	0.0293	0.00306
30	0.00236	0.00120	0.00938	0.00339	0	0.00439	0.00350	0.0376	0
31	0.0253	0.0158	0.00803	0.00488	0	0.00428	0.00408	0.0304	0.0317
32	0.00775	0.00774	0.00579	0.00611	0	0.0249	0.00426	0.0277	0
33	0.00256	0.0371	0.00174	0.00710	0	0.0318	0.00367	0.0288	0.0311
34	0.0127	0.0161	0.00444	0.00655	0	0.0141	0.00317	0.0185	0.00138

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

		Iteration History										
		Relative Change in Cluster Seeds										
Iteration	Criterion	1	2	3	4	5	6	7	8	9	10	11
35	34098.6	0.00107	0.00713	0.00374	0.0126	0.000594	0.00950	0.00914	0.00824	0.00179	0.0438	0.00675
36	34040.6	0.00123	0.00719	0.00471	0.0113	0.00138	0	0.00742	0.0114	0.00126	0.0255	0.000097
37	33994.6	0.000940	0.00604	0.00428	0.0124	0.00115	0	0.00610	0.00465	0.00117	0.0339	0.000108
38	33948.1	0.000701	0.00564	0.00484	0.00878	0.00218	0	0.00470	0.00130	0.000519	0.0236	0.00530
39	33915.3	0.000514	0.00308	0.00545	0.00671	0.00121	0	0.00374	0.00162	0.000878	0.0160	0.000318
40	33889.6	0.000735	0.00339	0.00641	0.00656	0.000623	0	0.00381	0.00152	0.000485	0.00983	0
41	33865.5	0.000549	0.00221	0.00845	0.00498	0.00158	0	0.00300	0.00438	0.000842	0.00665	0.000454
42	33838.1	0.000510	0.00156	0.0115	0.00429	0.00167	0	0.00303	0.00188	0.000505	0.0149	0.000126
43	33805.0	0.000529	0.00266	0.00734	0.00509	0.000311	0	0.00353	0.00101	0.00121	0.0127	0
44	33786.3	0.000448	0.00111	0.00412	0.00330	0.000590	0	0.00277	0	0.00143	0.00793	0
45	33777.4	0.000712	0.000676	0.00283	0.00240	0.000044	0	0.00216	0	0.00102	0.0149	0
46	33769.0	0.00201	0.000470	0.00191	0.00209	0.000014	0	0.00138	0	0.000956	0.0137	0
47	33758.0	0.00340	0.000259	0.00106	0.00160	0.000111	0	0.00160	0	0.00186	0.00836	0
48	33737.8	0.00563	0.000328	0.00110	0.000923	0.00117	0	0.00145	0.00131	0.000872	0.0143	0
49	33698.5	0.00552	0	0.000939	0.00131	0.000042	0	0.00101	0	0.000938	0.00608	0
50	33667.3	0.00256	0.000679	0.00125	0.00155	0.00128	0	0.000473	0	0.00122	0.00558	0
51	33649.4	0.00145	0.000058	0.00241	0.00167	0.000432	0	0.000515	0.00124	0	0.00340	0
52	33639.5	0.000298	0.000145	0.00325	0.00147	0.000949	0	0.000803	0.000527	0	0.00449	0
53	33633.5	0.000139	0.00173	0.00367	0.00169	0.000704	0	0.000674	0	0	0.00201	0
54	33629.1	0.000232	0.00212	0.00339	0.00227	0.000531	0	0.000744	0.00186	0.000061	0	0
55	33625.2	0.000954	0.00332	0.00386	0.00262	0.000295	0	0.000779	0.00105	0.00114	0	0
56	33619.8	0.00228	0.00544	0.00396	0.00216	0.000057	0	0.000799	0	0.000678	0.00156	0
57	33609.3	0.00315	0.00597	0.00421	0.00253	0.000499	0	0.000483	0.00117	0.00119	0.000398	0
58	33594.2	0.00377	0.00696	0.00345	0.00255	4.371E-6	0	0.000651	0	0.00179	0.00188	0
59	33578.7	0.00199	0.00509	0.00264	0.00278	0.000131	0	0.000751	0	0.00115	0.00207	0.000035
60	33570.8	0.00134	0.00304	0.00162	0.00379	0.000186	0	0.00109	0	0.000575	0.00188	0
61	33565.2	0.00129	0.00283	0.00133	0.00392	0.000025	0	0.00110	0	0.000610	0	0
62	33561.1	0.00110	0.00282	0.00129	0.00320	0.000026	0	0.000918	0	0.000641	0	0
63	33558.4	0.000904	0.00385	0.000802	0.00267	0.000032	0	0.00105	0	0.00157	0	0
64	33556.2	0.000731	0.00184	0.00106	0.00348	0.000021	0	0.000824	0	0.000232	0	0
65	33553.5	0.000423	0.00186	0.00147	0.00456	0.000268	0	0.00142	0.00104	0	0	0
66	33550.6	0.000312	0.00238	0.00115	0.00390	0.000061	0	0.00209	0	0	0	0
67	33548.0	0.000368	0.00127	0.000709	0.00472	0	0	0.00247	0	0.000653	0	0
68	33544.7	0.000312	0.000337	0.000554	0.00552	0.000122	0	0.00293	0	0.000117	0	0

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

	Iteration History								
	Relative Change in Cluster Seeds								
Iteration	12	13	14	15	16	17	18	19	20
35	0.00374	0.00383	0.00529	0.00658	0	0.0428	0.00303	0.0168	0.0239
36	0.000909	0	0.00981	0.00609	0.000697	0.0407	0.00194	0.00298	0.0206
37	0.000694	0	0.0112	0.00619	0.00137	0.0384	0.00198	0.00279	0
38	0.000977	0.00365	0.00568	0.00699	0.00226	0.0363	0.00237	0.00690	0
39	0.00109	0	0.00162	0.00744	0	0.0254	0.00236	0.00298	0.0651
40	0.00104	0	0.00193	0.00829	0.00317	0.0167	0.00296	0.00484	0.00371
41	0.00117	0	0.00249	0.00903	0	0.0101	0.00313	0.00308	0
42	0.000028	0	0.00372	0.00954	0	0.0121	0.00337	0.00533	0
43	0.000792	0	0.00276	0.00707	0	0.00796	0.00292	0.0159	0
44	0.000769	0	0.00357	0.00470	0	0.00307	0.00191	0.0121	0
45	0.000120	0	0.00327	0.00353	0	0.00615	0.00198	0.0110	0.0229
46	0	0	0.00361	0.00240	0	0.00796	0.00378	0.0122	0
47	0	0	0.00235	0.00222	0	0.00954	0.00637	0.00402	0
48	0.000134	0	0.00169	0.00298	0.000795	0.0162	0.00979	0	0
49	0	0	0.00110	0.00423	0	0.00640	0.0100	0	0
50	0.000918	0	0.00104	0.00529	0.0145	0.00611	0.00712	0	0
51	0	0	0.000451	0.00504	0.00139	0.00613	0.00489	0	0
52	0	0	0.00154	0.00424	0.000522	0.00639	0.00281	0	0
53	0	0	0.00308	0.00327	0	0.00386	0.00181	0.00229	0
54	0	0	0.00283	0.00277	0	0.00160	0.00145	0	0
55	0.000107	0	0.00269	0.00282	0.00153	0.00157	0.00198	0	0
56	0	0	0.00183	0.00261	0	0.00163	0.00400	0	0
57	0	0	0.00306	0.00292	0	0.00232	0.00550	0	0
58	0.000103	0	0.00315	0.00310	0.00610	0	0.00603	0.00238	0
59	0.000096	0	0.00243	0.00329	0	0.00296	0.00407	0	0
60	0.000593	0	0.00275	0.00256	0	0.00605	0.00304	0	0
61	0.000019	0	0.00278	0.00187	0	0.00172	0.00231	0	0
62	0	0	0.00226	0.00146	0.00335	0.00134	0.00200	0	0
63	0.000362	0	0.00283	0.000894	0.000422	0.00175	0.00125	0	0
64	0	0	0.00321	0.00108	0	0.00335	0.00122	0	0
65	0	0	0.00242	0.00114	0.000825	0.00454	0.000866	0	0
66	0	0	0.00225	0.00103	0	0.00502	0.000642	0	0
67	0.000079	0	0.00201	0.000715	0	0	0.000554	0	0
68	0.000075	0	0.00222	0.000590	0	0	0.000369	0	0

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Iteration History												
		Relative Change in Cluster Seeds										
Iteration	Criterion	1	2	3	4	5	6	7	8	9	10	11
69	33540.6	0.000348	0.000493	0.000835	0.00683	0	0	0.00266	0	0.000643	0	0
70	33534.8	0.000351	0.000226	0.000792	0.00584	0.000204	0	0.00192	0	0.000018	0	0
71	33531.3	0.000168	0.000618	0.000738	0.00329	0.000202	0	0.00194	0	0.000661	0.00188	0
72	33529.6	0.000198	0.000262	0.000412	0.00205	0.000170	0	0.00130	0	0.000699	0.00612	0.000014
73	33528.4	0.000298	0.000131	0.000272	0.00190	0.000188	0	0.00170	0	0.000180	0.00244	0.000676
74	33527.6	0.000134	0.000354	0.000247	0.00132	0.000061	0	0.00103	0	0.000036	0	0
75	33527.2	0.000129	0.000130	0.000322	0.00108	0.000021	0	0.00109	0	0.000061	0	0
76	33526.9	0.000180	0.000059	0.000330	0.000627	0.000042	0	0.00125	0	0.000730	0	0
77	33526.6	0.000153	0.000240	0.000421	0.000970	0.00139	0	0.00104	0.00187	0.000033	0	0
78	33526.2	0.000107	0	0.000293	0.000747	0.000240	0	0.000940	0.00101	0	0	0
79	33526.0	0.000093	0.000333	0.000130	0.000353	0.000097	0	0.000926	0	0	0	0
80	33525.8	0.000150	0.000332	0.000485	0.000796	0.000058	0	0.000896	0.00112	0	0	0
81	33525.6	0.000020	0	0.000164	0.000358	0	0	0.000438	0	0.000063	0	0
82	33525.6	0.000072	0	0.000050	0.000159	0	0	0.000327	0	0	0	0
83	33525.6	0.000122	0	0	0	0	0	0.000670	0	0	0	0
84	33525.5	0.000154	0.000042	0	0.000166	0.000137	0	0.000619	0	0	0	0
85	33525.4	0.000039	0	0.000065	0.000168	0	0	0.000777	0	0.000063	0	0
86	33525.1	0.000094	0.000576	0.000076	0.000251	0	0	0.000563	0	0.000599	0.00189	0
87	33525.0	0.000119	0	0	0.000132	0	0	0.000406	0	0.000210	0	0
88	33525.0	0.000088	0	0.000091	0	0	0	0.000641	0	0	0	0
89	33524.9	0.000163	0	0	0.000502	0.000021	0	0.000898	0	0	0	0
90	33524.8	0.000161	0.000058	0	0.000442	0	0	0.000857	0	0	0	0
91	33524.7	0.000042	0.000241	0.000069	0.000374	0	0	0.000367	0	0.000499	0	0
92	33524.6	0.000060	0	0.000080	0.000327	0.000010	0	0.000520	0	9.281E-6	0	0
93	33524.6	0.000019	0	0.000068	0.000382	0.000098	0	0.000444	0	0	0	0
94	33524.5	0.000021	0	0.000178	0.000302	0	0	0.000423	0	0	0	0
95	33524.5	0.000090	0.000241	0.000292	0.000083	0	0	0.000458	0	0	0	0
96	33524.4	0.000098	0	0.000159	0.000289	0	0	0.000275	0	0	0	0
97	33524.4	2.862E-6	0.000331	0.000360	0.000412	0	0	0.000306	0	0	0	0
98	33524.3	0.000024	0.000330	0.000270	0.000395	0	0	0.000264	0	0	0	0
99	33524.3	0.000019	0	0.000186	0.000300	0	0	0.000131	0	0	0	0
100	33524.3	0	0	0.000254	0.000377	0	0	0.000042	0	0	0	0
101	33524.3	0	0	0.000045	0	0	0	0.000058	0	0	0	0
102	33524.3	0	0	0	0	0	0	0.000283	0	0	0	0

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Iteration	Relative Change in Cluster Seeds								
	12	13	14	15	16	17	18	19	20
69	0.00121	0	0.00521	0.000744	0	0	0.000482	0	0
70	0.000119	0	0.00480	0.000672	0	0.00138	0.000442	0	0
71	0.000072	0	0.00227	0.000611	0	0.00137	0.000437	0	0
72	0	0	0.00319	0.000359	0	0.00151	0.000309	0.00238	0
73	0.000138	0	0.00100	0.000295	0	0.00150	0.000326	0	0
74	0.000091	0	0.000648	0.000338	0	0	0.000278	0	0
75	0	0	0.000456	0.000278	0	0	0.000226	0	0
76	0	0	0.000667	0.000480	0	0	0.000323	0	0
77	0.000091	0	0.000420	0.000581	0	0.000470	0.000385	0	0
78	0	0	0.000113	0.000473	0	0	0.000362	0	0
79	0	0	0	0.000392	0	0.00145	0.000154	0	0
80	0	0	0	0.000210	0	0.000661	0.000211	0	0
81	0	0	0	0.000210	0	0	0.000125	0	0
82	0	0	0	0.000107	0	0	0.000078	0	0
83	0	0	0	0.000200	0	0	0.000088	0	0
84	0	0	0	0.000131	0	0	0.000187	0	0
85	0	0	0	0.000135	0	0.00540	0.000027	0	0
86	0	0	0	0.000144	0	0.00255	0.000040	0	0
87	0.000091	0	0	0.000113	0	0.000437	0.000043	0	0.00368
88	0	0	0	0.000214	0	0	0.000140	0	0
89	0	0	0	0.000161	0	0	0.000061	0	0
90	0	0	0	0.000168	0	0	0.000132	0	0
91	0	0	0.000154	0.000078	0	0	0.000020	0	0
92	0.000024	0	0.000178	0.000120	0	0	0.000031	0	0
93	0	0	0	0.000166	0	0	0.000071	0	0
94	0	0	0.000615	0.000210	0	0	0.000041	0	0
95	0	0	0.000376	0.000161	0	0	0.000099	0	0
96	0	0	0.000739	0.000029	0	0	0.000046	0	0
97	0	0	0.000548	0.000050	0	0	0.000043	0	0
98	0	0	0.000182	0.000028	0	0	0.000022	0	0
99	0	0	0.000035	0.000054	0	0	0.000015	0	0
100	0	0	0.000035	0.000029	0	0	0	0	0
101	0	0	0	0.000034	0	0	0	0	0
102	0	0	0	0.000198	0	0	0	0	0

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Iteration History												
		Relative Change in Cluster Seeds										
Iteration	**Criterion**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
103	33524.3	0.000075	0	0.000037	0.000068	0.000021	0	0.000261	0	0	0	0
104	33524.3	0.000034	0.000047	0	0.000067	0	0	0.000069	0	0	0	0
105	33524.3	0	0	0	0	0	0	0.000137	0	0	0	0
106	33524.3	0	0	0	0	0	0	0	0	0	0	0

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Iteration History									
	Relative Change in Cluster Seeds								
Iteration	12	13	14	15	16	17	18	19	20
103	0	0	0	0.000127	0	0	0.000020	0	0
104	0	0	0	0.000028	0	0	0.000040	0	0
105	0	0	0	0	0	0	0.000081	0	0
106	0	0	0	0	0	0	0	0	0

Convergence criterion is satisfied.

Criterion Based on Final Seeds =	33524.3

Cluster Summary						
Cluster	Frequency	RMS Std Deviation	Maximum Distance from Seed to Observation	Radius Exceeded	Nearest Cluster	Distance Between Cluster Centroids
1	10460	24929.1	131380		18	73609.7
2	7381	40389.7	132325		3	163108
3	4138	34430.4	95318.2		4	110990
4	2770	38406.0	148890		15	108943
5	993	9919.8	93838.8		8	193887
6	45	89821.2	248758		13	259470
7	5070	32766.9	175890		18	73358.2
8	175	28347.5	119751		5	193887
9	794	72169.2	209172		2	247459
10	284	85877.8	379682		17	254765
11	131	84707.4	263209		19	287537
12	294	75685.0	222059		9	267987
13	116	35949.2	141743		6	259470
14	1605	57195.4	186177		3	163831
15	6734	27820.5	92875.5		18	88772.3
16	99	136263	351876		20	769917
17	370	79173.6	293606		4	217126
18	8454	21916.6	67587.3		7	73358.2
19	271	82737.7	220649		11	287537
20	33	140510	337667		19	404065

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

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Statistics for Variables				
Variable	Total STD	Within STD	R-Square	RSQ/(1-RSQ)
VALP	253558	36047	0.979800	48.504474
HINCP	86804	31545	0.867989	6.575103
OVER-ALL	177923	33532	0.964497	27.166577

Pseudo F Statistic =	71772.67

Approximate Expected Over-All R-Squared =	0.96938

Cubic Clustering Criterion =	-34.391

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

Cluster Means		
Cluster	VALP	HINCP
1	46483.703	41993.464
2	472739.484	18972.212
3	322121.722	81571.451
4	248184.379	164348.368
5	2267000.000	57161.229
6	2267000.000	770242.022
7	123634.208	118755.934
8	2267000.000	251048.697
9	683473.364	148692.371
10	384134.276	508055.026
11	958241.935	506124.615
12	951426.357	152965.867
13	2267000.000	510772.259
14	437610.226	197773.358
15	206932.439	63517.540
16	96222.222	1280750.000
17	171629.684	367530.795
18	120010.480	45487.275
19	671310.484	487479.255
20	755272.727	882724.516

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Cluster Standard Deviations		
Cluster	**VALP**	**HINCP**
1	25161.0761	24694.9771
2	54094.6481	18341.7876
3	36376.1783	32367.8871
4	39304.9706	37485.4707
5	0.0000	14028.7506
6	0.0000	127026.3368
7	35500.0658	29783.9219
8	0.0000	40089.4887
9	73097.7439	71228.5531
10	84428.0485	87303.5407
11	81105.7095	88162.1084
12	72476.8338	78762.6181
13	0.0000	50839.8218
14	60801.5354	53346.0863
15	27694.4924	27945.9380
16	37385.6230	189043.8662
17	74550.1753	83541.5542
18	23766.9967	19894.8744
19	80245.7030	85156.8625
20	154745.6124	124659.1219

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Distance Between Cluster Centroids								
Nearest Cluster	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	.	426876.995	278464.960	235910.756	2220568.099	2336886.515	108833.253	2230335.561
2	426876.995	.	163108.477	267505.555	1794666.877	1945193.339	363085.782	1809207.090
3	278464.960	163108.477	.	110989.858	1945031.459	2063205.921	201940.533	1952248.461
4	235910.756	267505.555	110989.858	.	2021659.120	2107776.941	132632.632	2020676.486
5	2220568.099	1794666.877	1945031.459	2021659.120	.	713080.793	2144250.644	193887.468
6	2336886.515	1945193.339	2063205.921	2107776.941	713080.793	.	2240189.957	519193.325
7	108833.253	363085.782	201940.533	132632.632	2144250.644	2240189.957	.	2147444.596
8	2230335.561	1809207.090	1952248.461	2020676.486	193887.468	519193.325	2147444.596	.
9	645864.137	247459.264	367532.621	435570.443	1586169.776	1701140.963	560638.984	1586831.253
10	575518.278	497044.145	430968.440	369616.885	1936101.380	1901032.708	468416.554	1900325.127
11	1023093.739	687771.833	764783.836	788030.924	1383624.152	1335142.568	920122.032	1333383.439
12	911721.492	497086.935	633341.524	703334.089	1319057.444	1453190.924	828498.739	1319224.868
13	2269459.447	1860440.293	1991673.882	2048322.735	453611.030	259469.764	2178920.310	259723.561
14	421007.520	182219.413	163830.638	192352.233	1834785.741	1916869.145	323766.418	1830165.350
15	161886.018	269513.769	116595.516	108943.005	2060077.367	2177920.533	99949.365	2068585.577
16	1239754.683	1316756.786	1220270.370	1126696.544	2491875.928	2229998.779	1162317.352	2402615.436
17	348763.631	460608.508	323141.765	217126.047	2118231.817	2133718.138	253362.384	2098605.451
18	73609.739	353724.185	205307.140	174804.198	2147021.257	2266017.088	73358.216	2156807.710
19	767376.110	508850.951	535438.079	532399.541	1652694.356	1620549.232	660231.922	1613110.176
20	1099641.115	908786.595	910750.255	879319.557	1722461.636	1515906.217	991269.496	1638393.630

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Distance Between Cluster Centroids								
Nearest Cluster	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
1	645864.137	575518.278	1023093.739	911721.492	2269459.447	421007.520	161886.018	1239754.683
2	247459.264	497044.145	687771.833	497086.935	1860440.293	182219.413	269513.769	1316756.786
3	367532.621	430968.440	764783.836	633341.524	1991673.882	163830.638	116595.516	1220270.370
4	435570.443	369616.885	788030.924	703334.089	2048322.735	192352.233	108943.005	1126696.544
5	1586169.776	1936101.380	1383624.152	1319057.444	453611.030	1834785.741	2060077.367	2491875.928
6	1701140.963	1901032.708	1335142.568	1453190.924	259469.764	1916869.145	2177920.533	2229998.779
7	560638.984	468416.554	920122.032	828498.739	2178920.310	323766.418	99949.365	1162317.352
8	1586831.253	1900325.127	1333383.439	1319224.868	259723.561	1830165.350	2068585.577	2402615.436
9	.	467702.264	450838.749	267987.069	1624394.796	250714.232	484092.971	1275311.091
10	467702.264	.	574110.905	669259.752	1882867.685	314856.143	478554.142	824591.337
11	450838.749	574110.905	.	353224.509	1308766.317	605093.278	871990.242	1158931.608
12	267987.069	669259.752	353224.509	.	1363363.277	515766.156	749848.115	1415369.620
13	1624394.796	1882867.685	1308766.317	1363363.277	.	1855972.860	2108059.567	2303289.361
14	250714.232	314856.143	605093.278	515766.156	1855972.860	.	266902.353	1135510.535
15	484092.971	478554.142	871990.242	749848.115	2108059.567	266902.353	.	1222256.771
16	1275311.091	824591.337	1158931.608	1415369.620	2303289.361	1135510.535	1222256.771	.
17	556663.461	254765.109	798728.415	808777.447	2100260.669	315536.426	306056.112	916327.235
18	572836.550	532663.406	956461.569	838334.067	2196828.194	352222.443	88772.279	1235491.757
19	339005.145	287912.377	287536.619	436307.355	1595859.516	372216.761	628800.846	979798.441
20	737535.314	527371.764	427813.025	755661.255	1556813.357	755028.181	985787.574	769916.784

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=20 Maxiter=200 Converge=0

Distance Between Cluster Centroids				
Nearest Cluster	**17**	**18**	**19**	**20**
1	348763.631	73609.739	767376.110	1099641.115
2	460608.508	353724.185	508850.951	908786.595
3	323141.765	205307.140	535438.079	910750.255
4	217126.047	174804.198	532399.541	879319.557
5	2118231.817	2147021.257	1652694.356	1722461.636
6	2133718.138	2266017.088	1620549.232	1515906.217
7	253362.384	73358.216	660231.922	991269.496
8	2098605.451	2156807.710	1613110.176	1638393.630
9	556663.461	572836.550	339005.145	737535.314
10	254765.109	532663.406	287912.377	527371.764
11	798728.415	956461.569	287536.619	427813.025
12	808777.447	838334.067	436307.355	755661.255
13	2100260.669	2196828.194	1595859.516	1556813.357
14	315536.426	352222.443	372216.761	755028.181
15	306056.112	88772.279	628800.846	985787.574
16	916327.235	1235491.757	979798.441	769916.784
17	.	326154.214	513875.992	778500.978
18	326154.214	.	706603.569	1050963.520
19	513875.992	706603.569	.	404064.939
20	778500.978	1050963.520	404064.939	.

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