Initial Seeds						
Cluster	VALP	HINCP				
1	8.12156746	7.50487629				
2	-0.81876503	5.70542512				
3	3.51906446	2.98666406				
4	8.12156746	4.65132920				
5	2.19786609	11.96894371				
6	3.12467689	9.06931592				
7	1.21189716	4.06956041				
8	0.65975455	8.87116893				
9	-0.81829176	-0.12378292				
10	8.12156746	10.83190254				
11	-0.81651702	2.37494282				
12	3.51906446	5.37134007				
13	1.62600411	6.66735964				
14	1.54712659	-0.88987449				
15	-0.28677563	13.44698203				
16	8.12156746	-0.96590764				
17	0.56115766	15.50909317				
18	1.44852970	1.50056161				
19	3.71625825	0.57894769				
20	8.12156746	1.80008614				

Criterion Based on Final Seeds = 0.3640

	Cluster Summary								
Cluster	Frequency	RMS Std Deviation	Maximum Distance from Seed to Observation	Radius Exceeded	Nearest Cluster	Distance Between Cluster Centroids			
1	44	0.4379	1.5673		4	2.3254			
2	238	0.4181	1.5691		7	1.5346			
3	256	0.5062	1.4042		19	1.9998			
4	120	0.3205	1.4123		1	2.3254			
5	14	0.6589	1.6308		6	2.4364			
6	13	0.7782	1.8772		8	1.8908			
7	354	0.6315	1.6526		2	1.5346			
8	17	0.7060	1.6678		6	1.8908			
9	29427	0.3398	1.1452		14	1.1618			

	Cluster Summary								
Cluster	Frequency	RMS Std Deviation	Maximum Distance from Seed to Observation	Radius Exceeded	Nearest Cluster	Distance Between Cluster Centroids			
10	11	0.3102	0.7394		1	3.2493			
11	1614	0.4770	1.5808		18	0.9596			
12	162	0.4797	1.5171		13	1.7517			
13	112	0.6052	1.6249		12	1.7517			
14	9713	0.3386	1.4389		9	1.1618			
15	22		0.0374		17	2.1440			
16	2491	0.0809	0.9190		20	2.0825			
17	49	0.1102	0.6565		15	2.1440			
18	4050	0.4427	1.5095		11	0.9596			
19	1368	0.4093	1.4946		3	1.9998			
20	142	0.3441	1.4674		16	2.0825			

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

Statistics for Variables							
Variable Total STD Within STD R-Square RSQ							
VALP	1.00000	0.32491	0.894488	8.477584			
HINCP	1.00000	0.37215	0.861559	6.223305			
OVER-ALL	1.00000	0.35285	0.875554	7.035606			

Pseudo F Statistic =	18587.70
----------------------	----------

Approximate Expected Over-All R-Squared = 0.95004

> Cubic Clustering Criterion = -217.217

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

Cluster Means							
Cluster	Cluster VALP H						
1	8.12156746	7.08932846					
2	0.03373441	5.09626783					
3	2.38736083	2.40348153					
4	8.12156746	4.76389301					
5	2.25843275	10.91072147					
6	2.68903031	8.51262566					

	Cluster Means						
Cluster	VALP	HINCP					
7	1.05849282	3.95392385					
8	0.82423737	8.20024167					
9	-0.32735427	-0.19976031					
10	8.12156746	10.33863068					
11	-0.11026050	1.57483124					
12	2.66138749	4.91746193					
13	1.58468556	6.29924530					
14	0.75126853	-0.63152078					
15	-0.27619887	13.44698203					
16	8.12156746	-0.36349228					
17	0.31060082	15.50909317					
18	0.63624397	0.97189702					
19	2.58413649	0.41339083					
20	8.12156746	1.71897251					

Cluster Standard Deviations						
Cluster	VALP	HINCP				
1	0.0000000000	0.6192237945				
2	0.3614502602	0.4678549637				
3	0.5097549266	0.5025804186				
4	0.0000000000	0.4532508221				
5	0.6864394011	0.6302099290				
6	0.5877601459	0.9304715460				
7	0.5027854573	0.7381736835				
8	0.6016362165	0.7967840398				
9	0.2861017234	0.3861804782				
10	0.0000000000	0.4387444611				
11	0.3461767669	0.5790301964				
12	0.4643440588	0.4944928247				
13	0.6176179894	0.5924246073				
14	0.4164103588	0.2364068246				
15	0.0101383117					
16	0.0000000000	0.1144171403				
17	0.1559039032	0.000000000				
18	0.4418034397	0.4435036703				

Monday, February 29, 2016 09:30:36 PM **4**

Cluster Standard Deviations						
Cluster VALP HINC						
19	0.4529718557	0.3603378936				
20	0.0000000000	0.4865617627				

	Distance Between Cluster Centroids							
Nearest Cluster	1	2	3	4	5	6	7	8
1		8.32978596	7.40528778	2.32543545	6.99852793	5.61589128	7.72772835	7.38140600
2	8.32978596		3.57640257	8.09465975	6.22552439	4.32690388	1.53462685	3.20305301
3	7.40528778	3.57640257		6.20102153	8.50821685	6.11658782	2.04199941	6.00381405
4	2.32543545	8.09465975	6.20102153		8.49469533	6.60041335	7.10936519	8.06594809
5	6.99852793	6.22552439	8.50821685	8.49469533		2.43644777	7.05952470	3.06653178
6	5.61589128	4.32690388	6.11658782	6.60041335	2.43644777		4.84153021	1.89077668
7	7.72772835	1.53462685	2.04199941	7.10936519	7.05952470	4.84153021		4.25277447
8	7.38140600	3.20305301	6.00381405	8.06594809	3.06653178	1.89077668	4.25277447	
9	11.15863313	5.30832356	3.76118946	9.79908835	11.40741425	9.21977469	4.37877429	8.47857279
10	3.24930222	9.63822658	9.79018476	5.57473767	5.89097924	5.73120879	9.52110837	7.60419187
11	9.90821230	3.52437940	2.63149646	8.82797295	9.63169529	7.48124458	2.65067274	6.69099019
12	5.87627174	2.63372972	2.52887090	5.46233913	6.00679053	3.59527001	1.87020773	3.76188296
13	6.58445566	1.96280520	3.97759512	6.71476966	4.66043429	2.47358646	2.40362466	2.04745419
14	10.67393176	5.77255727	3.44790328	9.13410073	11.64022767	9.34721000	4.59572510	8.83206388
15	10.53291214	8.35646375	11.36016961	12.07967360	3.58566243	5.75677486	9.58642559	5.36089958
16	7.45282073	9.75817728	6.36688854	5.12738528	12.70764511	10.40662912	8.27811001	11.25115841
17	11.48493090	10.41650549	13.26913670	13.28422096	4.99390344	7.38968771	11.57934716	7.32687742
18	9.66711100	4.16814735	2.26182326	8.39102504	10.07033902	7.81514685	3.01177325	7.23078889
19	8.67359700	5.33234355	1.99979540	7.04201753	10.50238228	8.09991405	3.85525131	7.98325065
20	5.37035595	8.76465442	5.77491803	3.04492050	10.90250419	8.69863110	7.40824074	9.76001416

	Distance Between Cluster Centroids							
Nearest Cluster	9	10	11	12	13	14	15	16
1	11.15863313	3.24930222	9.90821230	5.87627174	6.58445566	10.67393176	10.53291214	7.45282073
2	5.30832356	9.63822658	3.52437940	2.63372972	1.96280520	5.77255727	8.35646375	9.75817728
3	3.76118946	9.79018476	2.63149646	2.52887090	3.97759512	3.44790328	11.36016961	6.36688854
4	9.79908835	5.57473767	8.82797295	5.46233913	6.71476966	9.13410073	12.07967360	5.12738528
5	11.40741425	5.89097924	9.63169529	6.00679053	4.66043429	11.64022767	3.58566243	12.70764511
6	9.21977469	5.73120879	7.48124458	3.59527001	2.47358646	9.34721000	5.75677486	10.40662912
7	4.37877429	9.52110837	2.65067274	1.87020773	2.40362466	4.59572510	9.58642559	8.27811001
8	8.47857279	7.60419187	6.69099019	3.76188296	2.04745419	8.83206388	5.36089958	11.25115841
9		13.50710787	1.78782126	5.92608983	6.77443504	1.16182797	13.64683822	8.45050806
10	13.50710787		12.02360895	7.69432492	7.68423446	13.21610870	8.95457020	10.70212296
11	1.78782126	12.02360895		4.34225891	5.01925595	2.36859061	11.87331040	8.45695510
12	5.92608983	7.69432492	4.34225891		1.75174551	5.86854015	9.02120429	7.59618606
13	6.77443504	7.68423446	5.01925595	1.75174551		6.98069497	7.38600239	9.33396469
14	1.16182797	13.21610870	2.36859061	5.86854015	6.98069497		14.11594597	7.37517089
15	13.64683822	8.95457020	11.87331040	9.02120429	7.38600239	14.11594597		16.16328184
16	8.45050806	10.70212296	8.45695510	7.59618606	9.33396469	7.37517089	16.16328184	
17	15.72180220	9.36722383	13.94061619	10.84937097	9.29755827	16.14662834	2.14397673	17.69039764
18	1.51700444	11.99023633	0.95958251	4.43493954	5.41111644	1.60753827	12.50840909	7.60350789
19	2.97535422	11.36545326	2.93406186	4.50473353	5.97010762	2.10979744	13.34376326	5.59166246
20	8.66405297	8.61965817	8.23308983	6.32802496	7.98183712	7.73602773	14.42458618	2.08246479

Distance Between Cluster Centroids							
Nearest Cluster	17	18	19	20			
1	11.48493090	9.66711100	8.67359700	5.37035595			
2	10.41650549	4.16814735	5.33234355	8.76465442			
3	13.26913670	2.26182326	1.99979540	5.77491803			
4	13.28422096	8.39102504	7.04201753	3.04492050			
5	4.99390344	10.07033902	10.50238228	10.90250419			
6	7.38968771	7.81514685	8.09991405	8.69863110			
7	11.57934716	3.01177325	3.85525131	7.40824074			
8	7.32687742	7.23078889	7.98325065	9.76001416			
9	15.72180220	1.51700444	2.97535422	8.66405297			
10	9.36722383	11.99023633	11.36545326	8.61965817			
11	13.94061619	0.95958251	2.93406186	8.23308983			
12	10.84937097	4.43493954	4.50473353	6.32802496			
13	9.29755827	5.41111644	5.97010762	7.98183712			
14	16.14662834	1.60753827	2.10979744	7.73602773			
15	2.14397673	12.50840909	13.34376326	14.42458618			
16	17.69039764	7.60350789	5.59166246	2.08246479			
17		14.54084301	15.26594883	15.84861596			
18	14.54084301		2.02637964	7.52251218			
19	15.26594883	2.02637964		5.68926052			
20	15.84861596	7.52251218	5.68926052				

