Using METHOD=AVERAGE

The CLUSTER Procedure
Average Linkage Cluster Analysis

|	Eigenvalues of the Covariance Matrix			
	Eigenvalue	**Difference**	**Proportion**	**Cumulative**
1	8.94336402	4.54991146	0.4106	0.4106
2	4.39345257	1.88766914	0.2017	0.6124
3	2.50578342	1.21769435	0.1151	0.7274
4	1.28808908	0.23901607	0.0591	0.7865
5	1.04907301	0.09841346	0.0482	0.8347
6	0.95065955	0.11459159	0.0436	0.8784
7	0.83606797	0.08972330	0.0384	0.9167
8	0.74634467	0.05896644	0.0343	0.9510
9	0.68737823	0.47818391	0.0316	0.9826
10	0.20919431	0.11986510	0.0096	0.9922
11	0.08932921	0.04637658	0.0041	0.9963
12	0.04295263	0.01972804	0.0020	0.9983
13	0.02322459	0.00908623	0.0011	0.9993
14	0.01413835	0.01350527	0.0006	1.0000
15	0.00063308		0.0000	1.0000

Root-Mean-Square Total-Sample Standard Deviation	1.204981

Root-Mean-Square Distance Between Observations	6.599952

Cluster History						
Number of Clusters	**Clusters Joined**		**Freq**	**Pseudo F Statistic**	**Pseudo t-Squared**	**Norm RMS Distance**	**Tie**
64	99727	99736	2	66E3	.	0.0039	
63	99759	99766	2	21E3	.	0.009	
62	78547	78548	2	5803	.	0.0211	
61	90201	90255	2	850	.	0.0669	
60	78574	78589	2	552	.	0.0693	
59	99749	99751	2	451	.	0.0697	
58	CL59	99773	3	343	1.7	0.0859	
57	90280	91331	2	302	.	0.0859	
56	57752	68039	2	277	.	0.0865	
55	78538	78557	2	245	.	0.1031	
54	CL60	79927	3	206	3.4	0.1152	
53	CL57	91744	3	177	2.5	0.1263	
52	CL55	79849	3	159	1.8	0.1309	
51	92316	92335	2	145	.	0.1446	
50	57772	85542	2	130	.	0.1654	
49	CL52	CL54	6	102	4.6	0.1671	
48	92336	92337	2	97.2	.	0.1673	
47	95121	95148	2	94.0	.	0.1675	
46	CL61	CL53	5	82.8	5.8	0.1737	

45	CL64	99763	3	78.5	2863	0.1816	
44	96762	96792	2	76.9	.	0.1883	
43	85350	88063	2	75.2	.	0.1964	
42	CL45	CL58	6	66.1	6.7	0.2035	
41	93033	93627	2	65.6	.	0.2047	
40	92704	95111	2	65.1	.	0.2095	
39	78046	CL49	7	62.9	3.0	0.2167	
38	93638	93930	2	62.3	.	0.2267	
37	90003	90059	2	61.4	.	0.2466	
36	11575	11798	2	60.6	.	0.2492	
35	CL46	93239	6	57.9	4.3	0.2597	
34	CL56	CL50	4	54.5	7.1	0.2658	
33	CL51	CL40	4	50.8	4.6	0.3023	
32	90011	CL35	7	48.7	3.6	0.3056	
31	CL39	CL43	9	40.8	11.9	0.372	
30	60623	CL37	3	39.5	2.8	0.3773	
29	92113	CL33	5	38.0	2.7	0.3863	
28	CL42	CL63	8	33.5	16.6	0.3922	
27	CL31	CL38	11	30.8	5.5	0.4011	
26	23511	23521	2	31.0	.	0.4122	
25	CL34	86053	5	30.5	4.7	0.4175	
24	CL32	CL41	9	28.3	9.1	0.4299	
23	CL29	CL48	7	26.8	5.3	0.4595	
22	CL27	CL62	13	24.8	6.8	0.4792	
21	CL24	95122	10	24.8	3.3	0.4855	
20	84004	84042	2	25.2	.	0.5253	
19	CL22	CL21	23	19.5	14.3	0.5388	
18	CL19	CL23	30	17.3	7.0	0.5456	
17	CL25	CL44	7	17.1	8.4	0.5557	
16	CL18	CL28	38	14.5	10.6	0.5744	
15	CL17	CL16	45	13.3	6.8	0.6013	
14	11717	60165	2	14.1	.	0.6239	
13	32215	CL30	4	14.8	4.7	0.6331	
12	33039	CL15	46	15.6	2.3	0.6919	
11	CL26	CL13	6	16.1	4.0	0.7051	
10	CL12	CL47	48	16.1	5.3	0.7467	
9	CL11	CL10	54	13.8	11.9	0.8227	
8	CL14	CL9	56	14.5	4.0	0.8328	
7	CL8	96819	57	15.8	3.1	0.9201	
6	CL7	99734	58	17.3	3.8	1.0177	
5	44627	CL20	3	19.7	6.2	1.164	
4	CL6	CL5	61	16.7	16.0	1.3642	
3	10952	96135	2	21.8	.	1.5642	
2	CL36	CL4	63	22.0	17.2	1.6902	
1	CL3	CL2	65	.	22.0	2.2884	

Criteria for the Number of Clusters
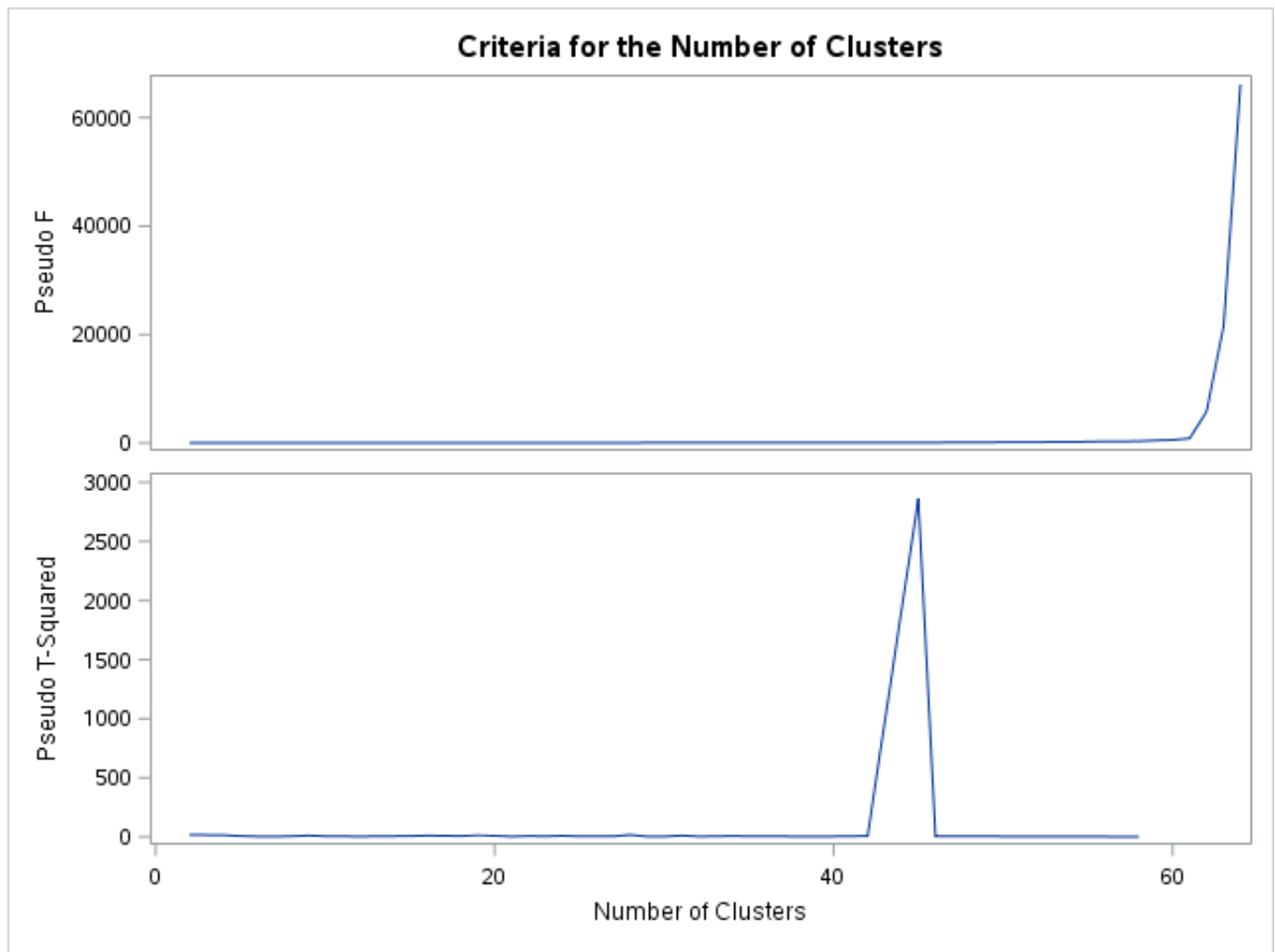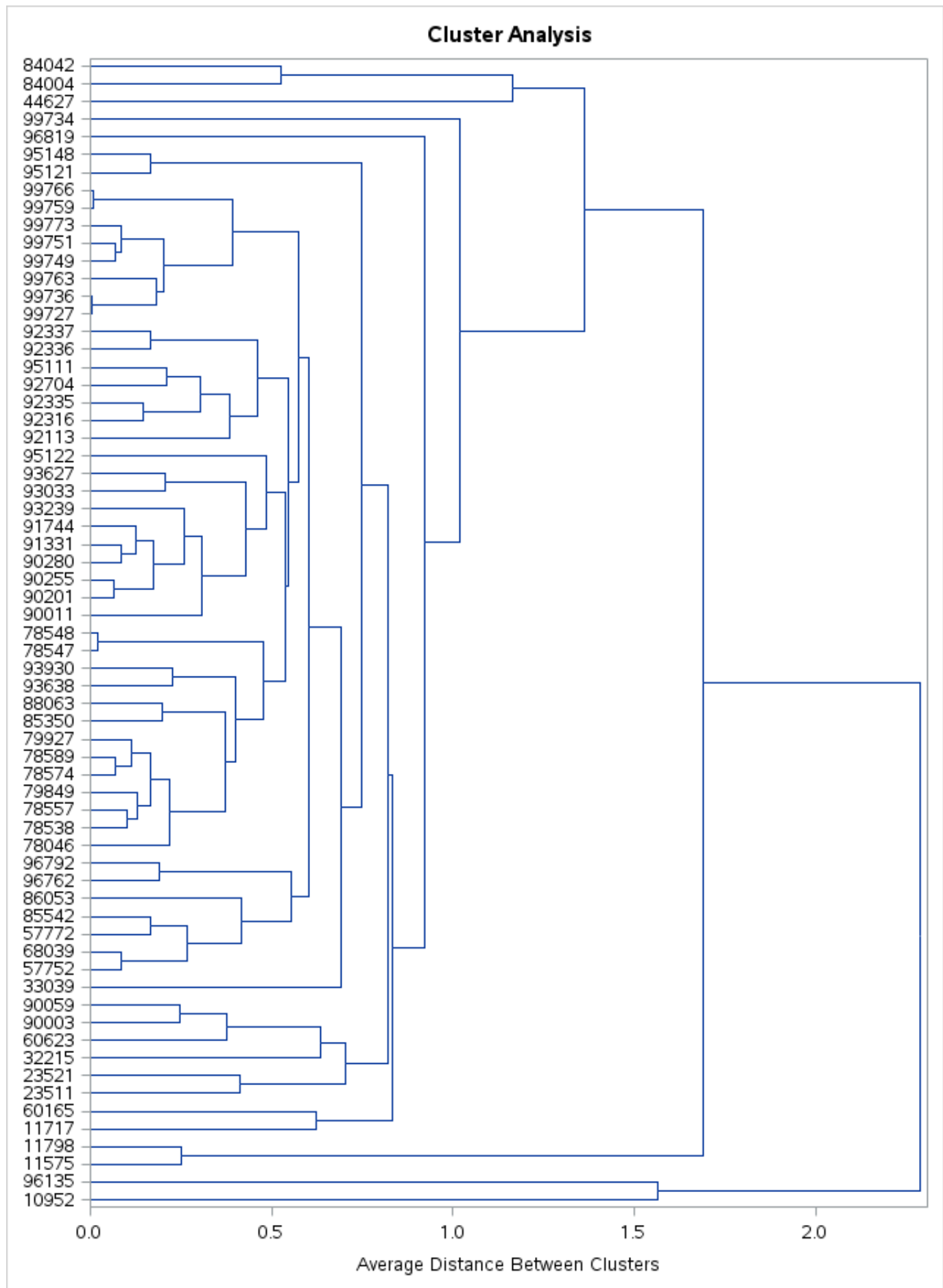
Cluster Analysis

The TREE Procedure
Average Linkage Cluster Analysis

PLOTTING HORIZONTAL TREE DIAGRAM WITH RESPECT TO R_SQUARED

Zipcode

```
10952 ──────────────────────────────────────────────┐
96135 ──────────────────────────────────────────────┤
11575 ──────────────────────────────────┐           │
11798 ────┤                              │           │
11717 ──────────────────┐               │           │
60165 ──────────────────┤               │           │
23511 ────┐             │               │           │
23521 ────┤            │               │           │
32215 ──────────┐      │               │           │
60623 ──┐       │      │               │           │
90003 ──┤       │      │               │           │
90059 ──┘       │      │               │           │
33039 ──────────────────────────┐      │           │
57752 ──┐                        │      │           │
68039 ──┤                        │      │           │
57772 ──┐                        │      │           │
85542 ──┤                        │      │           │
86053 ──────────┐               │      │           │
96762 ──┐       │               │      │           │
96792 ──┤                        │      │           │
78046 ──┐                        │      │           │
78538 ──┤                        │      │           │
78557 ──┤                        │      │           │
79849 ──┤                        │      │           │
78574 ──┤                        │      │           │
78589 ──┤                        │      │           │
79927 ──┤                        │      │           │
85350 ──┐                        │      │           │
88063 ──┤                        │      │           │
93638 ──┐                        │      │           │
93930 ──┤                        │      │           │
78547 ──┤                        │      │           │
78548 ──┘                        │      │           │
90011 ──┐                        │      │           │
90201 ──┤                        │      │           │
90255 ──┤                        │      │           │
90280 ──┤                        │      │           │
91331 ──┤                        │      │           │
91744 ──┤                        │      │           │
93239 ──┤                        │      │           │
93033 ──┤                        │      │           │
93627 ──┤                        │      │           │
95122 ──┘                        │      │           │
92113 ──┐                        │      │           │
92316 ──┤                        │      │           │
92335 ──┤                        │      │           │
92704 ──┤                        │      │           │
95111 ──┤                        │      │           │
92336 ──┤                        │      │           │
92337 ──┘                        │      │           │
99727 ──┐                        │      │           │
99736 ──┤                        │      │           │
99763 ──┤                        │      │           │
99749 ──┤                        │      │           │
99751 ──┤                        │      │           │
99773 ──┤                        │      │           │
99759 ──┤                        │      │           │
99766 ──┘                        │      │           │
95121 ──┐                        │      │           │
95148 ──┤                        │      │           │
96819 ──────────────────────────┘      │           │
99734 ──────────────────────────────────┘           │
44627 ──────────────────────────────────────────────┤
84004 ──┐                                            │
84042 ──┘
```

```
     1.0        0.8        0.6        0.4        0.2        0.0
                            R-Squared
```

PLOTTING HORIZONTAL TREE DIAGRAM WITH RESPECT TO R_SQUARED