**Frequency**

15 Clusters: 15 ~ 20,559 (4 (0~100); 5 (100~1000) 4 (1000~10,000) 2(10,000~100,000) )

20 Clusters: 14 ~ 23,836 (6 (0~100); 8 (100~1000) 4 (1000~10,000) 2(10,000~100,000) )

25 Clusters: 8 ~ 15,997 (8 (0~100); 10 (100~1000) 5 (1000~10,000) 2(10,000~100,000) )

100 Clusters: 1 ~ 7,908 (68 (0~100); 17 (100~1000) 15 (1000~10,000)) too much 1 in a group

**RMS Std Deviation**:

15 Clusters: 14, 407.4 ~ 106, 266

20 Clusters: 21, 084.4 ~ 101, 357

25 Clusters: 14, 586.2 ~ 90,588.60 (missing value)

100 Clusters: 6, 025 ~ 37, 330 (missing value)

**Maximum Distance from Seed to Observation:**

15 Clusters: 210,060.00 ~ 294,561.00 84,501

20 Clusters: 139,425.00 ~ 255,462.00 116,037

25 Clusters: 62,225.40 ~ 231,859.00 169,633.6

100 Clusters: 0 ~ 91,841.5

**Distance Between Cluster Centroids**

15 Clusters: 164,052.00 ~ 610,945.00 446,893

20 Clusters: 89,569.30 ~ 586,296.00 496,726.7

25 Clusters: 125,907.00 ~ 349,856.00 223,949

100 Clusters: 60,255.6 ~ 234,400 174,144.4

**Cluster means:**

15 Clusters: 85,229.22 ~ 2,267,000

16,387.65 ~ 1,365,333

20 Clusters: 55,158.43 ~ 2,267,000

16,365.63 ~ 1,365,333

25 Clusters: 68,225.25 ~ 2,267,000

21,305.23 ~ 1,425,000

100 Clusters: 14860.23 ~ 2,267,000

199904.6 ~ 28110.78