

```

CLUSTER   Unnamed7Numeric
/METHOD BAVERAGE
/MEASURE=SEUCLID
/ID=NameoftheStateUT
/PRINT SCHEDULE
/PLOT DENDROGRAM HICICLE.

```

Cluster

Notes

Output Created		17-NOV-2024 16:01...
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	36
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		CLUSTER Unnamed7Numeric /METHOD BAVERAGE /MEASURE=SEUCLID /ID=NameoftheStateUT /PRINT SCHEDULE /PLOT DENDROGRAM HICICLE.
Resources	Processor Time	00:00:00.65
	Elapsed Time	00:00:00.00

Case Processing Summary^{a,b}

Valid		Cases Missing		Total	
N	Percent	N	Percent	N	Percent
36	100.0	0	.0	36	100.0

a. Squared Euclidean Distance used

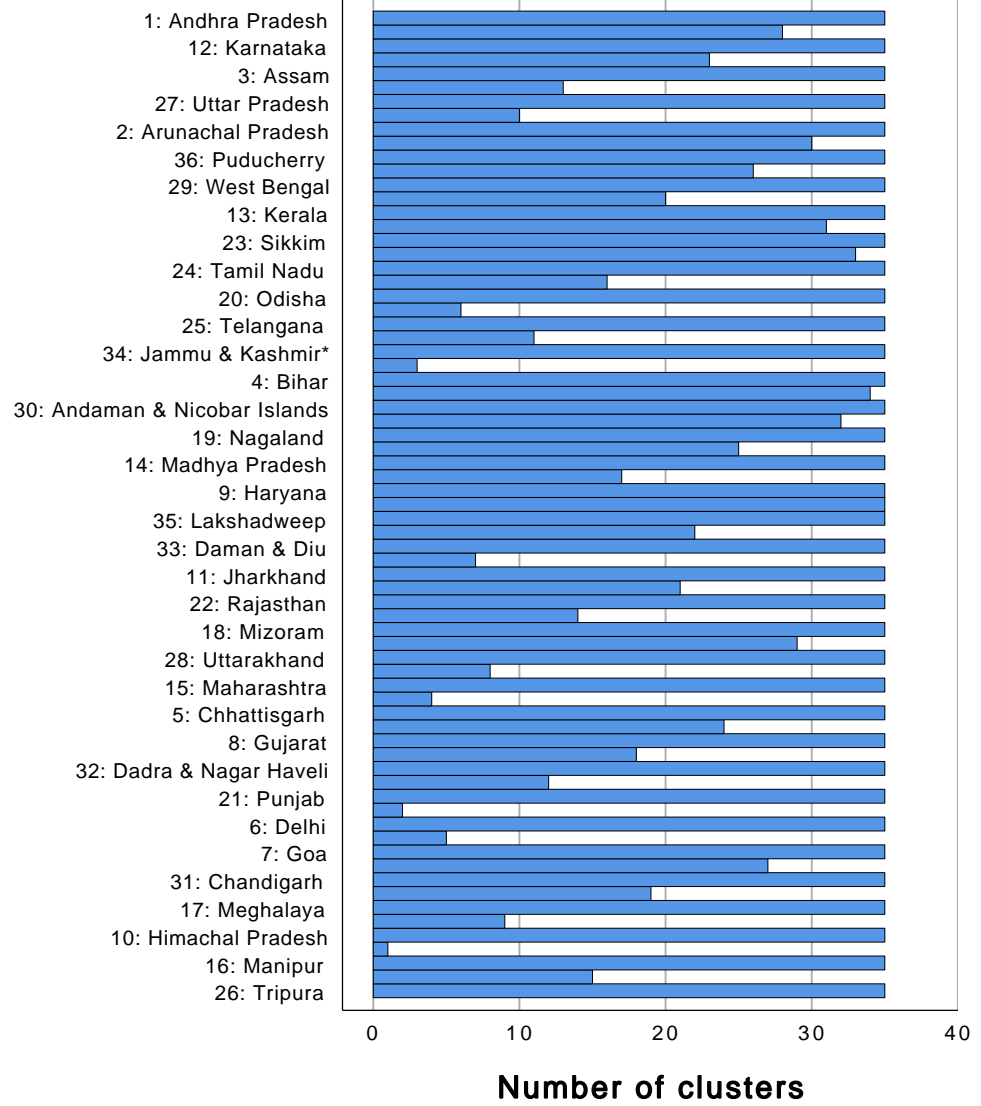
b. Average Linkage (Between Groups)

Average Linkage (Between Groups)

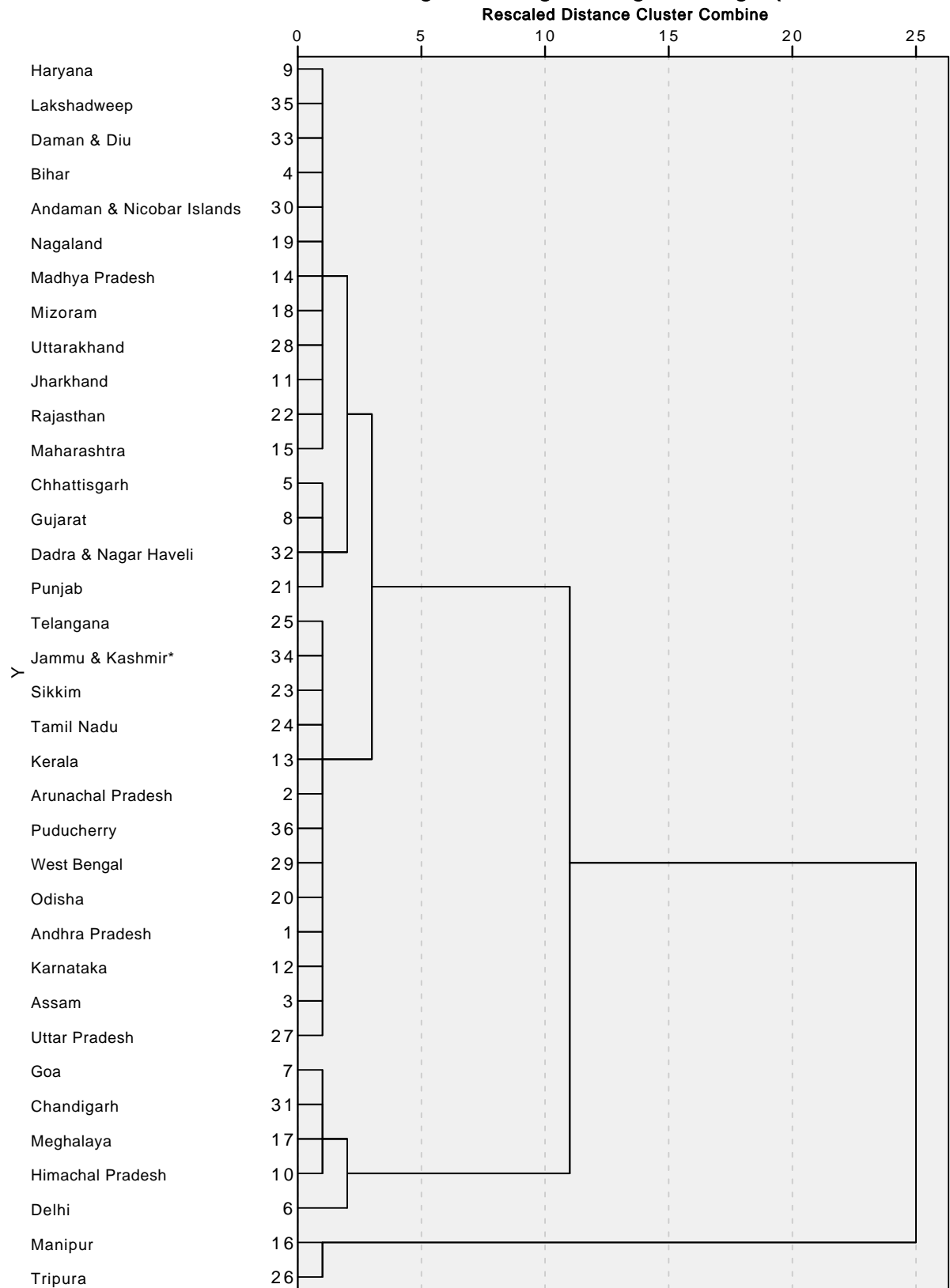
Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	9	35	.000	0	0	14
2	4	30	.000	0	0	4
3	23	24	.010	0	0	5
4	4	19	.010	2	0	11
5	13	23	.025	0	3	16
6	2	36	.040	0	0	10
7	18	28	.040	0	0	22
8	1	12	.040	0	0	13
9	7	31	.090	0	0	17
10	2	29	.100	6	0	16
11	4	14	.137	4	0	19
12	5	8	.160	0	0	18
13	1	3	.170	8	0	23
14	9	33	.250	1	0	19
15	11	22	.360	0	0	22
16	2	13	.393	10	5	20
17	7	17	.445	9	0	27
18	5	32	.530	12	0	24
19	4	9	1.099	11	14	29
20	2	20	1.317	16	0	26
21	16	26	1.440	0	0	35
22	11	18	1.540	15	7	28
23	1	27	1.647	13	0	26
24	5	21	1.913	18	0	32
25	25	34	1.960	0	0	30
26	1	2	3.155	23	20	30
27	7	10	3.977	17	0	31
28	11	15	4.820	22	0	29
29	4	11	9.518	19	28	32
30	1	25	14.518	26	25	33
31	6	7	32.448	0	27	34
32	4	5	33.828	29	24	33
33	1	4	67.631	30	32	34
34	1	6	237.178	33	31	35
35	1	16	563.674	34	21	0

Case



Dendrogram using Average Linkage (Between ...



```

/MISSING=LISTWISE
/CRITERIA=CLUSTER(5) MXITER(10) CONVERGE(0)
/METHOD=KMEANS(NOUPDATE)
/SAVE CLUSTER
/PRINT ID(NameoftheStateUT) INITIAL ANOVA CLUSTER DISTAN.

```

Quick Cluster

Notes

Output Created		17-NOV-2024 16:03...
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	36
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any clustering variable used.
Syntax		QUICK CLUSTER Unnamed7Numeric /MISSING=LISTWISE /CRITERIA=CLUSTER (5) MXITER(10) CONVERGE(0) /METHOD=KMEANS (NOUPDATE) /SAVE CLUSTER /PRINT ID (NameoftheStateUT) INITIAL ANOVA CLUSTER DISTAN.
Resources	Processor Time	00:00:00.01
	Elapsed Time	00:00:00.00
	Workspace Required	528 bytes
Variables Created or Modified	QCL_2	Cluster Number of Case

Initial Cluster Centers

	Cluster				
	1	2	3	4	5
Unnamed: 7 (Numeric)	214.9	201.6	174.6	193.4	185.1

Iteration History^a

Iteration	Change in Cluster Centers				
	1	2	3	4	5
1	.600	2.714	3.300	.194	.171
2	.000	.844	.550	1.361	.805
3	.000	.211	.650	.279	.807
4	.000	.000	.000	.000	.000

- a. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 4. The minimum distance between initial centers is 8.200.

Cluster Membership

Case Number	Name of the State/UT	Cluster	Distance
1	Andhra Pradesh	2	1.031
2	Arunachal Pradesh	2	.231
3	Assam	2	1.531
4	Bihar	4	1.445
5	Chhattisgarh	5	.140
6	Delhi	3	4.500
7	Goa	3	.700
8	Gujarat	5	.540
9	Haryana	4	.145
10	Himachal Pradesh	3	2.600
11	Jharkhand	4	1.255
12	Karnataka	2	1.231
13	Kerala	2	.269
14	Madhya Pradesh	4	1.045
15	Maharashtra	5	1.760
16	Manipur	1	.600
17	Meghalaya	3	.200
18	Mizoram	4	2.255
19	Nagaland	4	1.345
20	Odisha	2	.969
21	Punjab	5	1.440
22	Rajasthan	4	.655
23	Sikkim	2	.169
24	Tamil Nadu	2	.069

Cluster Membership

Case Number	Name of the State/UT	Cluster	Distance
25	Telangana	2	3.769
26	Tripura	1	.600
27	Uttar Pradesh	2	2.531
28	Uttarakhand	4	2.055
29	West Bengal	2	.631
30	Andaman & Nicobar Islands	4	1.445
31	Chandigarh	3	1.000
32	Dadra & Nagar Haveli	5	.360
33	Daman & Diu	4	.645
34	Jammu & Kashmir*	2	2.369
35	Lakshadweep	4	.145
36	Puducherry	2	.431

Final Cluster Centers

	Cluster				
	1	2	3	4	5
Unnamed: 7 (Numeric)	214.3	197.8	179.1	192.0	186.5

Distances between Final Cluster Centers

Cluster	1	2	3	4	5
1		16.469	35.200	22.345	27.760
2	16.469		18.731	5.876	11.291
3	35.200	18.731		12.855	7.440
4	22.345	5.876	12.855		5.415
5	27.760	11.291	7.440	5.415	

ANOVA

	Cluster		Error		
	Mean Square	df	Mean Square	df	F
Unnamed: 7 (Numeric)	598.937	4	2.792	31	214.532

ANOVA

	Sig.
Unnamed: 7 (Numeric)	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

Number of Cases in each Cluster

Cluster	1	2.000
	2	13.000
	3	5.000
	4	11.000
	5	5.000
Valid		36.000
Missing		.000