



NEWMDSX: CONSTITUENT PROGRAMS AND THEIR CHARACTERISTICS

(February 2006)

PROGRAM NAME	Source	DATA	TRANS .	MODEL	INT EXT	Hi ?	Represent- ation	Notes	TUG refs
BBDIAM	Brusco	2W1M LTM	Ord.	Ultra-metric distance	I	n	single set (partitions)	Branch & Bound Discrete / Cluster	
CANDECOMP	Bell	3-7 way	Linear.	Product ¹ *	I & E	n	Vector	*Model aka Vector, Factor, Composition	7.1.1 7.2.2

¹Model aka Vector, Scalar Products, Factor, Composition

CONJOINT	Roskam	N-way Table	Ordinal ² .	Simple composition models	I	n	Unidimensional Scale values for each way	aka UNICON ADDIT, MONANOVA	5.3.1 6.1.8
CONPAR	Brusco	Partition, + separate PoV MINISSA scalings	O	1) BBDIAM part. 2) SSA Distance scalings	I	n	Separate scalings	PoV = Points of View	
CORRESP	(AB)	2-way Table	Linear	Chi-square distance	I	n	N-mode point	Simple Correspondence Analysis	--
HICLUS	Bell/ Johnson	2W1M	Ord.	Ultra-metric distance	I	n	set of inclusive partitions	Discrete / Cluster	4.3.3 6.1.6
INDSCAL-S	Bell	3W2M	Linear	Weighted Euclidean Distance / product composition	I	n	stim Points subj weights	Indiv. Diffs. Scaling (cf CANDECOMP)	7.1.1 7.2 A7.2
MDPREF	Bell	2W2M	Linear	product*	I	n	Stim Points, subj vectors	akin to CORRESP.	5.3.2 6.2.2
MDSORT	Takane	2W1M	Linear	Product	I	n	Point		(Coxon 1999)

² aka Monotonic

MINI-RSA	Roskam	2W2M	Ord.	Distance	I	n	Point-point	Unfolding	5.3.3.1, 6.2.3
MINI-SSA(N)	Roskam	2W1M	Ord.	Distance	I	n	Point	Basic Model	3.5, 6.1.1
MRSCAL	Roskam	2W1M	Lin. & Log- Lin.	Minowski Metric	I	n	Point	Basic Metric Model	5.2.3, 6.1.4
PARAMAP	Bell	2W2M (Profiles)	Cont.	Smoothness	I,E	n	Point (1 mode)	Parametric mapping	5.2.2, 6.1.5
PINDIS	Roskam Lingoes	2W2M Config. Co- ordinates	Linear	Distance and product	I,E	y 6	Point (dist), Vector	Procrustean IndDiffs Scaling	7.3-7.6 A7.1
PREFMAP	Bell	2W2M	Lin., Ord.	Distance & Product	E,I	y 4	Point, vector	Preference Mapping	4.2,4.4 6.2.1, 7.5
PRINCOMP	(AB)	2W1M	Linear	Product	I	N	vector	Principal Components	--
PROCRUSTES	Roskam Lingoes	2W2M Config. Co- ordinates	Linear	Euclidean Distance	I,E	y	Point (dist),	Procrustean Similarity (= PINDIS0)	A7.1
PROFIT	Bell	2W2M	Linear, non-lin	Product	E	n	vector	property- fitting	5.22, 6.2.1
TRISOSCAL	Roskam, Prentice	triadic	ord.	Distance	I	n	point	integral fitting of triads	2.1.4, 6.1.3

WOMBATS								Utility for producing measures	2.2
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NOTES:

- Program: As named by originator
- Source: Source of original program (numerical sub-routines etc. updated by MDSX staff)
- Data: Usually: Way and Mode (see Carroll & Arabie)
- Model: As specified by originator's documentation
- Transform: Transformation Function, aka Level of Measurement
- Int/External: External (with user-supplied configuration), or internal (derived from input data) analysis
- Hierarchy: Single program , or hierarchy of models/phases
- Representation: How mode/s are represented in the configuration according to the model
- TUG: Section of The Users Guide to multidimensional scaling in which the program is discusses.
N.b. all programs are also separately documented in The User Manual