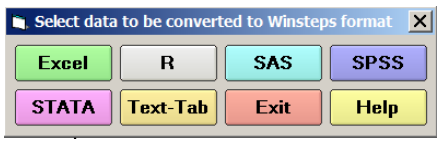
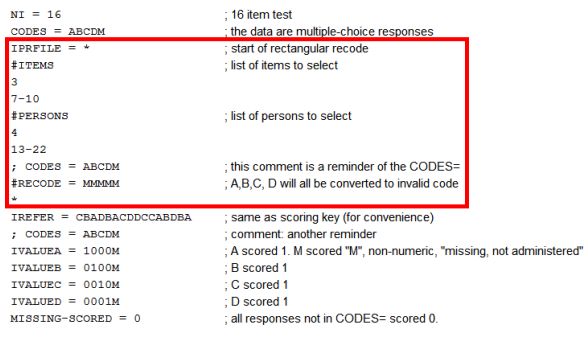
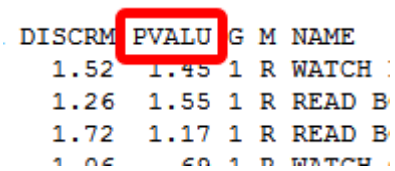
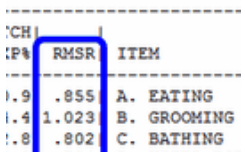
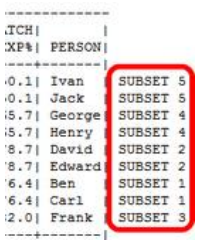
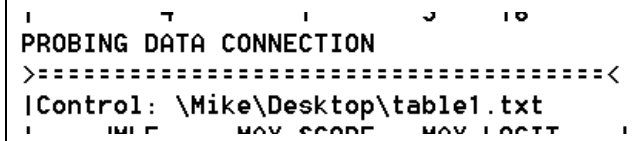
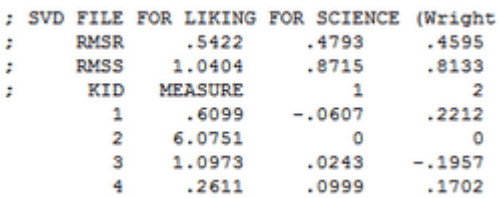
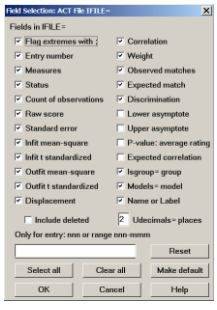
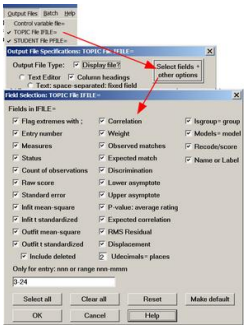
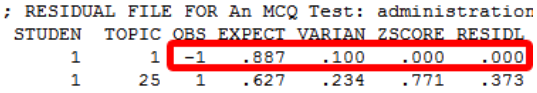
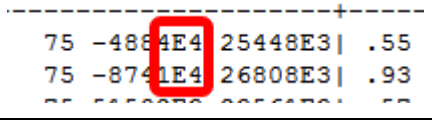
Winsteps Changes 3.69.0 - December 2009	
Program Functioning Improvements	
Bigger capacity:	Was: 9,999,999 persons by 40,000 items Now: 9,999,999 persons by **64,000 items**
Faster speed for large analyses: Only specify DISTRACTORS=Yes and SUBSETS=Yes when needed	Test analysis: 489,000 persons by 17,000 items Revised: Was: 8 days = 192 hours Now: 8 hours (**95%+ less time**)
Alternative input data format. Useful for sparse data. EDFILE= allows entry of additional persons and can operate without any rectangular data Recommendation: Sort the EDFILE= lines into person-entry-number order ascending.	Was: rectangular input dataset Now: rectangular (DATA=) and/or **list** (EDFILE=) in the format: person number, item-number, observation CODES = ABCD EDFILE= * 1 1 A 1 5 B 2 3 A 2 10 C ..... * &END END LABELS . ; one dummy data record
Input numbers can be entered in scientific notation	USCALE = 4E2 (= 400)
Control variable values can be expressions - but no internal spaces	USCALE=2*10 (=20)
Easy data file conversion from Excel, R, SAS, SPSS, STATA and Text files (with Tabs)	
Allow multiple item and person deletion files: *idfile=idfile2.txt+idfile211.txt*	Processing ITEM Deletions from: idfile2.txt Processing ITEM Deletions from: idfile211.txt
EXCAT=0.25 adjustment to extreme category during estimation	Analyze 0,1 data as 0.25, 0.75 data. And 1,2,3,4 data as 1.25,2,3,3.75 data.
IPRFILE= Input/change/edit input observations for blocks of persons and items	

PVALUE=Yes includes p-value (or observed average rating) in the PFILE= and IFILE=	
RMSR= report the root-mean-square on measure tables	
SUBSET= check for disconnected subsets in the data which make the estimated measures incomparable	 
Output Files	
Computation of Singular-Value Decomposition (SVD) of residuals SVDFACTORS= singular-value decomposition factors SVDFILE= singular-value decomposition file SVDMIN= singular-value decomposition minimum improvement per epoch SVDTYPE= R (residuals) or S (standardized residual): singular-value decomposition residual type	Singular-value decomposition (factor analysis) of the residuals 
Person measure file and Item measure file PFILE= and IFILE= Output More output field-selection options: RMS residual Recoding/rescoring indicator	Was:  Now: 
XFILE=, IPMATRIX= compute expected-values, etc. correspond to missing data	
Output Tables	
All Tables: No automatic plural “S” - to avoid language problems	was: KIDS - MAP - TAPS now: KID - MAP - TAP
All Tables: Numbers reported with scientific notation “E” when they would overflow	

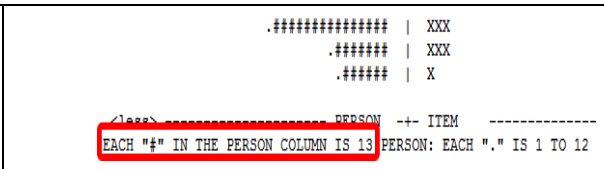
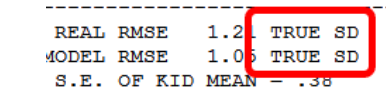
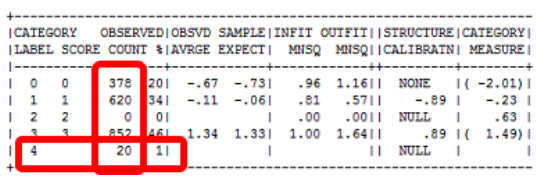
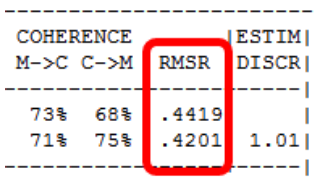
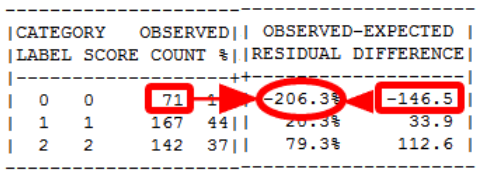
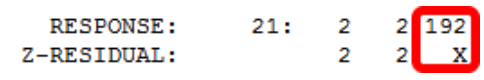
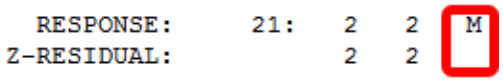
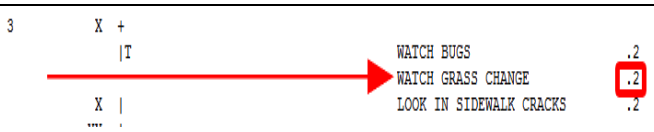
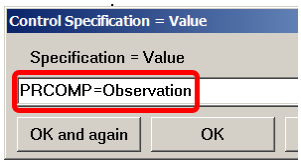
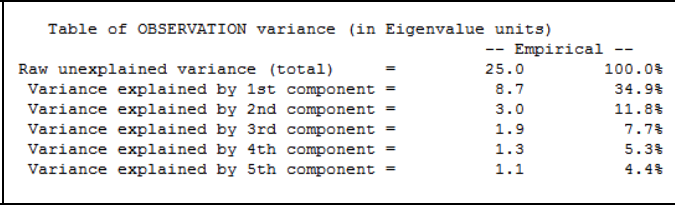
Tables 1, 12, 16 Force exact number of items or persons indicated by "#" using T1P#, T1I#	
Table 3.1 "ADJ. S.D." now shown as "TRUE S.D." to accord with standard terminology	was: ADJ.SD 1.86. now: TRUE SD 1.88 
Table 3.1 USCALE= with 4-decimal display	was: UMEAN=.000 USCALE=1.000 617 now: UMEAN=.0000 USCALE=1.0000 617
Table 3.1 global root-mean-square residual	GLOBAL ROOT-MEAN-SQUARE RESIDUAL (EXCLUDING EXTREME SCORES): .2667
Table 3.2 Observed count includes observations in extreme scores	
Table 3.2 Root-mean-square residual (RMSR) indicating an average difference between the observation and its expectation for each rating-scale-category	
Table 3.2 Residuals as % of observed	
Table 7.1 occasional display problem. Missing data shown as 192, not "M"	Was:  Now: 
Table 12.5, 12.6 - item map with categories. Shows category numbers on continuation lines	
Table 23. PRCOMP= selectable from the Specification pull-down menu, to change options before Tables 23 and 24 (PCA).	
Table 23. & 24. Show PCA eigenvalues observations when PRCOMP=Observations	

Table 23.3 & 24.3
Cluster number, to assist with using Table for splitting the items into two groups

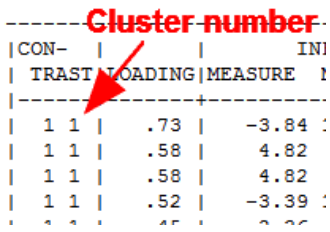


Table 33:
Orient *t*-test with DGF Contrast

Was:

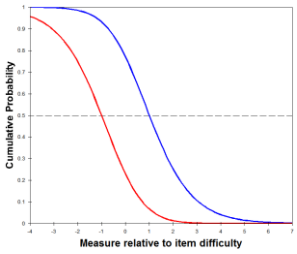
KID CLASS	DGF SIZE	DGF S.E.	KID CLASS	DGF SIZE	DGF S.E.	DGF CONTRAST	JOINT S.E.	t	Welch d.f.	Prob.	TAP CLASS
A	.00	.69	B	-.14	.44	.14	.16	-.84	84	.8696	1
A	.00	.69	C	.08	1.11	-.08	1.31	-.06	28	.9490	1
A	.00	.69	D	.21	.65	-.21	.95	-.22	75	.8256	1
A	.00	.69	E	.00	1.00	.00	1.21	.00	29	1.0000	1

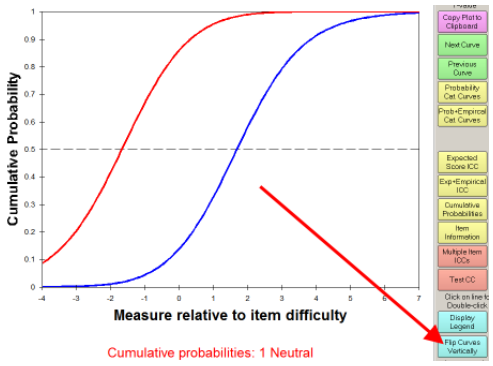
Now:

KID CLASS	DGF SIZE	DGF S.E.	KID CLASS	DGF SIZE	DGF S.E.	DGF CONTRAST	JOINT S.E.	t	Welch d.f.	Prob.	TAP CLASS
A	.00	.69	B	-.14	.44	.14	.16	.84	84	.8696	1
A	.00	.69	C	.08	1.11	-.08	1.31	-.06	28	.9490	1
A	.00	.69	D	.21	.65	-.21	.95	-.22	75	.8256	1
A	.00	.69	E	.00	1.00	.00	1.21	.00	29	1.0000	1

Graphing

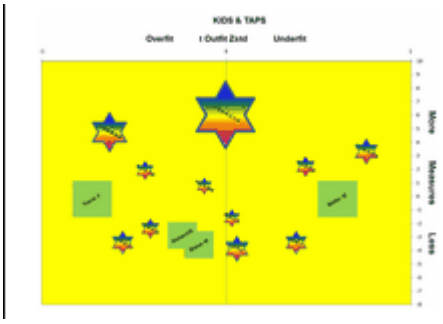
Graphs: flipping of cumulative probability curves





Plots

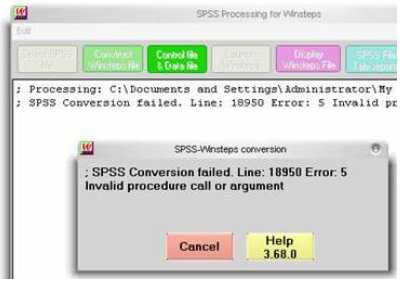
Pathway bubble-charts:
Can be edited to use Excel Autoshapes
Instructions in Winsteps Help

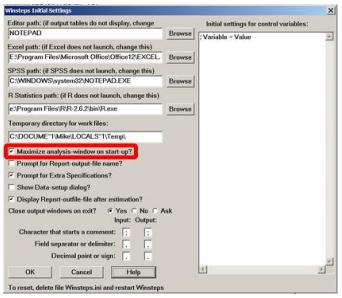
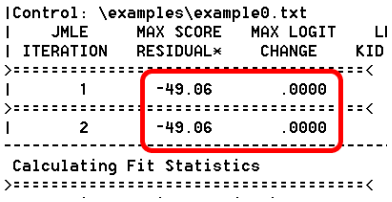
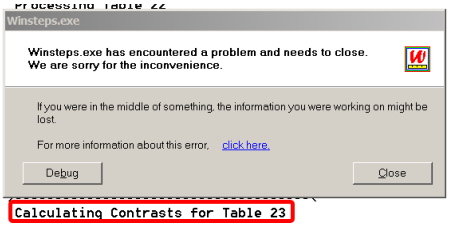
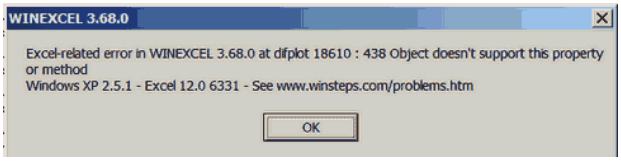


Bug repairs

SPSS file conversion failures.

Repaired.



Windows analysis screen resizing. Now opened in “normal” size. Option to open “maximized” in “Edit Initial Settings”	
Estimation fails with TARGET=Y repaired	
Winsteps may crash when performing large DIF or Dimensionality analyses. Repaired	
Excel interface failure with Excel 2007 Repaired	
Graphing failure when scrolling the screen Repaired