

# Special Supplement



## COMPUTER SOFTWARE FOR SURVEY ANALYSIS

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Prepared for the Study Group on Computers in Survey  
Analysis by Beverley Rowe, John Hall and Marianne  
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This is a revised consolidation of the supplements of *Newsletters* 20 and 25. It has been prepared on behalf of a working party of the Study Group on Computers in Survey Analysis. The original lists were prepared by John Hall (SSRC Survey Unit, 89, Kingsway, London, WC2 6RH).

This work has been carried out in conjunction with a more comprehensive listing of the systems which it is hoped to publish early next year. Marianne Scheer has been employed by the Polytechnic of North London on an SSRC grant to help with this work.

The Study Group on computers in Survey Analysis was formed in 1972 to co-ordinate and develop the application of computers to survey analysis. It is affiliated to the British Computer Society and to the Market Research Society. It undertakes an annual programme of meetings and conferences. It has working parties concerned with software registration and terminology. The Software Register Working Party that initiated the present lists was originally convened by Anthony Cowling (Taylor, Nelson and Associates). Enquiries about this list should be addressed to Beverley Rowe (Polytechnic of North London, Holloway, London N7 8DB).

The Secretary of the Study Group is Mrs Anne Harrison, Central Statistics Office, Great George Street, London, SW1.

The listing has been shortened by grouping the following entries to form a 'library' of programs: DRS TAB, KENT, LIBRA 3, MULTIPROG, PCLP. A number of items in the previous list have been renamed, withdrawn or superseded, or were thought on reconsideration to be inappropriate. These systems appear in the list under a new name (previous name in parenthesis): DONOVAN (DISKTAB), GLIM (LOGITS), ICES-SUR-TAB (SURVET), MVA (HOPE) and SAL (MRL).

Where the computers cover all or most of a manufacturer's range, the individual model numbers have been omitted. Where all or most of a particular range is referred to this has been abbreviated, eg CDC 6000 for CDC 6400/6500/6600 but otherwise individual models are given. The assembly codes for all computers have been described as 'assembler'.

Column 2 gives a summary of the facilities available. *Data Management* is some, or all of, filing, editing, checking and transformation of data; *Tabulation* includes frequencies, hole counts and cross-tabulation; *Descriptive Statistics* cover means, standard deviation and other statistics of distribution; *Statistical Analysis* implies more complex, multivariate data analysis: regression, analysis of variance, etc. The key is repeated at the bottom of each page.

Name	Function	Language	Hardware	Information from:	Comments
AGB SURVEY PROGRAM	MTD	assembler	Honeywell 200/2000	AGB	General data control and survey analysis: weighting, scaling, quantities, family items. Designed for large surveys and complex analysis.
ANOVAR	MA	PL/1	IBM 360/370	Newcastle University	Analysis of variance and covariance.
ASCOP	MTDA	Fortran & assembler	ICL 1900 Univac 1108	NCC	Integrated system with command language. Wide range of data-editing and statistical operations.
ASP	MTD	Algol 60	ICL 1900 Sys 4	MRC	Algol Survey Program. User-specified requirements in Algol.
BATCHSTAT	MTDA	Fortran & assembler	Univac 1108	Scicon	General multivariate analysis, step-wise and optimal regression, cluster analysis (maximum likelihood), principal components etc. Can create data banks (eg CSO) and a version of ISAP (qv) can analyse these files directly.

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BBC	MTD	Fortran & assembler	ICL 1900	BBC	Suite of interrelated programs. Intermediate mag tape storage. Runs in 13K core.
BMD	MTDA	Fortran & assembler	CDC 6000/7600 IBM 360/370 ICL 1900	ULCC PLU	Large collection of general data management and statistical programs.
CHECK	M	Fortran	ICL 1906A	Nuffield College	Data cleaning.
CIRAS	MTD	Fortran & Cobol	IBM 360/370 ICL 1900, Sys 4	Hoskyns Systems	Census Information Retrieval & Analysis System. Specifically for the 1971 Census enumeration district summary information produced by OPCS.
CLUSTAN	A	Fortran	CDC 6000/7000 LUCS IBM 360/370 ICL 1900		Collection of cluster analysis methods: hierarchical agglomerative, monothetic division, iterative reallocation, BK and mode analysis. Optical graphical output.
CLUSTER	MT	Cobol	IBM 360/370 ICL 1900, Sys 4	Hoskyns Systems	For local authorities to create, maintain and analyse land use and employment files.
COI	MTDA	Fortran	CDC 6000	National Children's Bureau	Up to 300 cards per case, any pattern of punches. Efficient tape-packing for large surveys. Wide range of checks and transformations.
COSMIC	T	Cobol, Fortran & assembler	IBM 360	Computer Projects	For media list ranking, schedule evaluations and optimization, using reading frequency survey data.
CUMULUS	MTDA	assembler	IBM 360/370	Gallup	General survey package with dictionary and text files.
DAEDAL	MTDA	Fortran	CDC 3800 IBM 360/370 ICL 1900	Strathclyde University	English language type instructions. Especially useful on small machines.
DATABLE	MTD	Fortran	Univac 1108	Clunies-Ross	Flexible table layout from multi-punched data. Analysis of interviewer effects. User-routines for aligning mixed data formats or special tabulation requirements.
DATA CLEAN	M	Fortran (assembler on 4130)	IBM 360 ICL 4130	Stirling University	Check that survey data conforms to user supplied rules. Data must be unsigned integers and/or alphanumeric.
DONOVAN	MTD	assembler	IBM 1130, 360/370	Donovan	A versatile and efficient general survey system. Used by a number of market research firms.
DRS TAB	MTD	Fortran & assembler	PDP 15	DRS	Five programs (TAB, MINTAB, POT, SIEVE, SVS) that carry out data handling (including multipunched cards) and tabulation. Special routines for sparse matrices.
EASYTAB	MTD	Fortran & assembler	IBM 370	Libra	Easy to use tabulation program. User needs no experience.
EDITIT	MD	assembler	IBM 360/370	Olympic	High level language for editing/recording data.
FACCOM	A	Fortran	CDC 6000/7000	LSE	Principal component and factor analysis.
FAKAD	MTDA	Fortran	DEC 10 IBM 360 ICL Sys 4	Essex University (KM)	Interactive general data management and statistical analysis.
FILAN	MTDA	Fortran & assembler	ICL 1900	ICL Dataskil (SSP)	High level language, uses disk as core extension. Handles massive data files and hierarchical records. Needs 64K, disks and tape.

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FILE-BUILDER	MT	Fortran & assembler	ICL 1906A	Nuffield College	File generation.
GENSTAT	MTDA	Fortran	CDC 7600 IBM 370 ICL Sys 4	ULCC PLU Rothamsted (JN)	General statistical package, especially analysis of variance, tabulation, data storage and retrieval.
GLIM	MD	Fortran	CDC, IBM, ICL	Rothamsted (JN)	General Linear Interactive Model. Analysis of proportions in multiway tables.
GUMMA	A	Fortran	CDC 6600 IBM 360 ICL 1900, 4130	Institute of Education	Univariate and multivariate analysis of variance and covariance and regression, canonical variates and discriminant analysis, canonical correlations, maximum likelihood factor analysis. Minimum 50K.
ICES-SURTAB	MT	Fortran & assembler	IBM 370	GLC	Command language for cleaning alphanumeric survey data. Extensive use for traffic surveys.
INTERSTAT	MTDA	Fortran & assembler	Univac 1108	Scicon	Provides standard econometric and time series statistics interactively eg. regression, optimal regression, Shiskin type de-seasonalization, partial auto- and cross-correlation functions, fitting and many transformations and editing features. Accesses same type of file as BATCHSTAT (qv) (the Scipac File).
ISAP	MTDA	Fortran	Univac 1108	Scicon	Interactive Survey Analysis Package. English language instructions. Versatile and flexible. Batch or interactive.
ISP/ECTA	A	Fortran	ICL 1906A	Nuffield College	Linear models for contingency tables.
KENT	MT	Algol 60 & assembler	ICL 4130	Kent University	Suite of programs (RECODING, DATACH, FILESORT, SURMT2) for building up and tabulating survey data files. The command language is a sub-set of MVC.
LIBRA 3	MTD	assembler	IBM 360/370	Libra	General survey analysis suite (DES, KNT, VGP, STP, RECODE). Handles multi-punched data with free-format user specification. Scaling, weighting, tabulation. Complex variable transformations.
MARKIT	MTDA	assembler	IBM 360/370	Olympic	General purpose package: hole count, weighting, data editing and library facilities. For complex and large (0.5M) data structures.
MULTAS	MT	Language H & assembler	ICL 4100	Survey Computing	Enables questionnaires to be validated and filed on mag tape from paper tape, cards, OMR or page reader. Complete flexibility of file handling, logic checks, manipulation. Unlimited table formats.
MULTIPROG	MT	assembler & Editit	IBM 360/370	Olympic	Set of utility programs to list multi-punched cards and convert to single punching.
MUTOS	M	Fortran & assembler	CDC 6600/ 7600	LSE	Unscrambles multipunched data.
MVA	MTDA	Fortran	ICL 1906A	Nuffield College	Programs for Keith Hope's book on multivariate analysis.
MVSL	MTDA	special	CDC 6500	LUCS	General survey package.
NESSA	MTDA	Fortran & assembler	IBM 1130	Nestlé	Package of market research editing, tabulating and statistical programs.

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OSIRIS	MTDA	Fortran & assembler	IBM 360/370	PLU	Large number of data-management and statistical programs. Originates from Institute for Social Research, Ann Arbor, Michigan. Includes MCA for cluster analysis and AID for stepwise regression.
PCLP	MTDA	Fortran	CDC 6000	LSHTM	Suite of programs (MULTITAB, CONKER, MODIFY, TABOPS, DECODE). Multiway tables of means and counts. Specification by free-format statements reflecting structure of problem.
PERSEE	MTD	assembler	Univac 1106/8	UCC	General survey package.
PMMD	MTDA	Fortran	IBM 360/370	Nottingham University	Series of programs for general data management and statistical analysis (basic correlations, regressions). Handles large variety of data forms. Useful for work on subsets of populations.
PROBE (DUSTPAN)	MT	Fortran	ICL 4130	Dundee University	Detects features of data that may dictate appropriate further analysis. Associated descriptive material available.
PSI1/PSI2	MTDA	Fortran & assembler	ICL 1900	Ulster College	PSI1 — Data transcription from cards to mag tape with editing facilities. PSI2 — English language type definitions, general statistical package, including linear regression, correlation etc. Especially useful on small machines.
PSST	MTDA	Fortran	CDC 6400/7600	Ingleby	Package of Simple Statistical Tests in which the choice of appropriate test is made by the program.
Q-A-PAK	MTDA	Fortran	CDC 6600	CDC	Programs for processing survey data: data cleaning, manipulation and flexible preparation of cross-tabulations. Handles multipunched data.
QUANTUM	MTDA	assembler	IBM 360/370	Denjon	Generalized tabulation package with flexible editing, input/output, labeling, filtering, weighting, with ability to handle multipunched cards and complex data structures. Retains control and context information.
RGSP	MTDA	Fortran	IBM 360/370 ICL Sys 4	PLU Rothamsted (FY)	Rothamsted General Survey Package. Uses own control of primary data input. Powerful table manipulation and flexible, compact, well annotated table print. Interface to GENSTAT (qv).
SABLE	MTDA	assembler	IBM 360 ICL 1900	Pritchard, Brown & Taylor	Suite of programs. Full diagnostics and forced edit.
SAL	T	assembler	IBM 360/370	Variable Model Programming	Survey Analysis Language. No programming assistance needed. Binary or alphanumeric input. Hierarchical records. Filtering, weighting and scaling. Flexible output. User routines in Fortran or PL/1.
SAMPLE	T	Fortran & assembler	IBM 360	Computer Projects	General survey analysis package.
SAP	MTD	assembler	IBM 360/370	IBM (Marketing)	Survey Analysis Program. IBM in-house program.
SDTAB	MTD	Fortran	CDC 6600/7600 ICL 1900, Sys 4	LSE	Single Digit Tabulations. General purpose tabulation with weighting, recoding, mathematical derivations and automatic error checks.

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SIS	MTD	Cobol, Fortran & assembler	ICL 1906A	Business Statistics Office	Standard In-house Software. Register operating system creates and updates register, samples, prints for despatch and reminders. Data handling system includes validation and seasonal adjustment.
SPAM	TD	assembler	IBM 360	Computer Projects	Media and market research analysis system.
SPS	MTDA	Fortran & assembler	RX Sigma	CRC	Survey Processing System. Free format language with all standard weighting, recode, statistical several multivariate options. Batch or conversational mode.
SPSS	MTDA	Fortran	CDC, DEC, IBM, ICL, Univac	Commercial: SIA, Libra Academic: Essex Univ. (CU) (DEC) PLU (all others)	Statistical Package for the Social Sciences. Most used package for academic survey analysis in UK. Co-ordinated world-wide by SPSS Inc., University of Chicago.
SURVANT	MTDA	Fortran & assembler	RX Sigma 5,7	Atkins	All data read as binary. Batch or time-sharing.
SURVEY 70 /STATPACK	MTDA	assembler	IBM 360/370	IBM Call Centre	Interactive univariate or multivariate statistical routines including edit, transformation, correlation, analysis of variance, regression, discriminant analysis, rank correlation, factor analysis, exponential smoothing, probit and spectral analysis.
TABLEAU	MTD	assembler	Univac 1108	Scicon	General purpose tabulation package with all standard weighting, recode and scaling options. Binary input.
TACTICS	MTDA	Fortran & assembler	RX Sigma 9	Comshare	General purpose, simple to use system for handling alphanumeric data sets, with virtually no limit to number of tables that one simple cross tab. command can generate.
TOSOI	MTD	PL/1	IBM 360/370	Nielsen	Product test program.
TSP	MDA	Fortran	CDC 6000/ 7600 DEC 10	LSE Essex University (Ec)	Time Series Processor.
VERIFY/ MODIFY	M	Fortran & assembler	CDC 6600/ 7600	LSE	Consistency checks.
XDS2/3	DA	assembler	ICL 1900	ICL Dataskil (AS)	General statistical package.
XDSE	MTD	assembler	ICL 1900	ICL Dataskil (AS)	General survey analysis package. Special provisions for traffic surveys.
XTAB	MTDA	Fortran	CDC 6600/ 7600 IBM 360	LSHTM	Package of programs for one and two-way distributions, histograms, scattergrams, correlation, multiple linear regressions.

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