

2000 SASware Ballot® Results

PART I SAS Language

General

Overall Rank	Part Rank	Number of Votes	Item Number		Overall Rank	Part Rank	Number of Votes	Item Number	
					257.5	29.0	10	12	allow the OUTPUT statement to appear before the REPLACE/REMOVE when using the MODIFY statement
7.0	3.0	371	5	provide the ability to set different linesize and pagesize values for the SAS Log and SAS listing files	265.0	30.0	8	9	allow the VIEW= data set option to use the DATA= naming convention so when specifying data _data_ / view= _data_; the data view is named DATA1 for the first and DATA2 for the second and so on
22.0	5.0	271	1	provide a system option to control the number of decimal places printed for any output					
23.0	6.0	262	6	add the ability to independently center, right-justify, and/or left-justify a TITLE and a FOOTNOTE statement					
99.0	16.0	101	2	provide a functionality similar to AUTOEXEC that allows a set of code to be executed at termination of the SAS session					
156.5	23.0	40	4	provide CPU times on all views which are layered (a view of a view) within the same step, when the SAS system option STIMER is in effect					
169.5	26.0	35	3	add an FTP access method option in the FILENAME statement like the TERMSTR= option that the SOCKET access method has in order to specify what character to use as the end of line					

Functions

Overall Rank	Part Rank	Number of Votes	Item Number	
36.0	7.0	219	17	provide a function to return the value of a variable, given the variable name as a character string
40.5	8.0	210	18	provide a function to calculate the MEDIAN value of a list of arguments
70.5	11.0	141	15	add an option to the ROUND function to round down, round up, or truncate values
118.0	20.0	66	14	provide a function to calculate the probability for the multivariate normal distribution
165.0	24.5	37	16	allow the MIN, MAX, USS, CSS, RANGE, and ORDINAL functions to accept a single argument

DATA Step

Overall Rank	Part Rank	Number of Votes	Item Number	
3.0	1.0	394	13	add an option that will allow you to specify the order of the variables (i.e., ORDER=var1 var2 var3)
81.0	13.0	125	7	provide the number of records read or written to external file(s) as user-accessible information
100.0	17.0	100	10	provide the ability to use the special list variables _NUMERIC_ and _CHARACTER_ in the PUT statement
114.5	18.0	70	8	provide an option, such as RETAIN=NO, to specify whether variables should be initialized to missing for each iteration of the DATA step when using the MODIFY, SET, MERGE, or UPDATE statements
133.0	22.0	53	11	provide an option in the LENGTH statement like the DEFAULT= that would specify default lengths for already existing numeric variables

Informats and Formats

Overall Rank	Part Rank	Number of Votes	Item Number	
85.0	14.0	119	22	provide an MMYyw informat to read month and year values with a width of 4 or 5 and create SAS date values that use the first day of the month for the day portion
117.0	19.0	68	20	provide a format to write time in military form with leading zeros for times before 10:00 a.m.
130.5	21.0	54	21	provide a ZIPCODE format to display the 10-character zipcode including the dash
165.0	24.5	37	23	print a note in the SAS Log to indicate when an overflow has occurred for the PD,ZD, IB, or PIB formats
186.5	27.0	28	19	provide an informat and format like VMSZNw for all systems to be able to read or write zoned decimal values that are produced by other software on ASCII systems

WHERE Statement

Overall Rank	Part Rank	Number of Votes	Item Number	
5.0	2.0	387	24	provide the ability to display the WHERE clause in printed output

Display Manager System (including text editor)

Overall Rank	Part Rank	Number of Votes	Item Number	
9.0	4.0	328	25	add a warning dialog to prompt whether to replace, append, or cancel every time the FILE==>SAVE menu item is chosen to save a file in the Program Editor
42.0	9.0	207	28	allow a file saved by using the FILE command on the command line of the Program Editor window to appear in the list of recently used files
68.5	10.0	144	29	extend the 256 single-line character limit in the Program Editor to allow raw text file editing using the Text Editor commands
75.0	12.0	134	30	allow for preferences, such as "details" and order in which the files are displayed to be saved
86.5	15.0	117	27	provide a utility for searching catalog entries using key-words
209.0	28.0	19	26	add an option to disable all the exit and minimize selections in the AWS windows

PART II Base SAS Procedures**All Procedures**

Overall Rank	Part Rank	Number of Votes	Item Number	
17.0	4.0	294	33	provide an option to allow the page number to be reset when a BY value changes
27.0	7.0	236	31	provide the ability to use -L, -C, and -R with formats in a FORMAT statement to left-align, center, and right-align
49.0	10.0	187	32	provide an option to produce a header line when the input data set contains no observations
72.0	17.0	137	34	add an option to clear all titles after the first page of output

PROC CIMPORT

Overall Rank	Part Rank	Number of Votes	Item Number	
96.0	20.0	103	35	provide the ability to select specific data sets or catalogs from a transport file when importing

PROC COMPARE

Overall Rank	Part Rank	Number of Votes	Item Number	
137.0	32.5	51	36	provide an OUTEQUAL option to output only the observations with all compared variables equal, the opposite of the OUTNOEQUAL option

PROC CORR

Overall Rank	Part Rank	Number of Votes	Item Number	
62.0	13.0	150	38	provide an option to output correlations and p-values in a list structure rather than a matrix structure
105.0	22.0	85	37	provide confidence limits for Pearson correlations
133.0	31.0	53	39	allow variable labels to be printed for the VAR variables in addition to the WITH variables

PROC FORMAT

Overall Rank	Part Rank	Number of Votes	Item Number	
12.0	3.0	317	42	provide a front end to simplify creation and editing of user-written formats
53.0	11.0	167	41	provide JUST and UPCASE functionality for the VALUE statement
66.5	16.0	145	40	enhance the FMTLIB option so that information on all format libraries listed in the FMTSEARCH= option will be printed

PROC FREQ

Overall Rank	Part Rank	Number of Votes	Item Number	
8.0	2.0	347	43	add an option in the TABLE statement to output the number of unique values for a variable
73.0	18.0	136	44	implement the PRELOADFMT option to preload all formats for the variables in the TABLES statement, as in PROC MEANS

PROC PRINT

Overall Rank	Part Rank	Number of Votes	Item Number	
24.0	6.0	260	45	provide an option to force a page eject if all observations in the current BY group will not fit on the remainder of the page
35.0	9.0	220	46	provide an option to insert a blank line after every nth line
94.5	19.0	105	47	provide an option to exclude variables from the BY line if they are listed both in the BY statement and the ID statement

PROC RANK

Overall Rank	Part Rank	Number of Votes	Item Number	
65.0	15.0	146	48	provide the ability to weight ranks with a WEIGHT statement

PROC REPORT

Overall Rank	Part Rank	Number of Votes	Item Number	
57.0	12.0	161	52	provide the ability to print the word 'CONTINUED' when a report spans pages and to print 'END' on the last page
64.0	14.0	147	49	provide the ability to suppress summary lines when there is only one observation for a group
108.0	24.0	83	53	provide the ability to define labels or column names instead of column numbers in an output data set that was created using an ACROSS variable
123.0	27.0	62	51	provide the ability to group by computed columns
156.5	35.0	40	50	add the ability to dynamically align text from LINE statements with report columns

PROC SORT

Overall Rank	Part Rank	Number of Votes	Item Number	
6.0	1.0	375	54	add an option to output observations deleted by the NODUP or NODUPKEY option to an alternate data set

PROC SQL

Overall Rank	Part Rank	Number of Votes	Item Number	
97.5	21.0	102	62	provide a MEDIAN summary function
106.5	23.0	84	55	allow the automatic conversion of variables from character to numeric when performing arithmetic expressions in a query
119.5	26.0	65	58	add a variable to the DICTIONARY.TABLES dictionary table that gives the size of the data set in bytes or megabytes
126.0	28.0	59	56	provide the ability to do index-only reads to enhance performance when doing something like SELECT DISTINCT X (where x is a column of a very large table)
127.5	29.0	56	57	allow calculated columns to inherit the default format of the column used in the calculation (for one-column calculations)
129.0	30.0	55	61	provide character versions of the MIN and MAX functions

Overall Rank	Part Rank	Number of Votes	Item Number	
137.0	32.5	51	60	allow appropriate functions to take advantage of indexes
142.5	34.0	48	59	add SORTEDBY information to DICTIONARY.TABLES
158.5	36.0	39	66	support the ORACLE TO_CHAR, TO_DATE, and TO_NUMBER functions for datatype conversions
178.0	37.0	31	67	add the ROLLUP, CUBE, and GROUPING SETS extensions
195.5	38.0	25	64	create a pseudo-column that returns a number indicating the sequence in which a row was selected from a table or set of joined tables
215.5	39.0	18	63	use the header information contained in a SAS data set for the COUNT(*) function when no subset criteria is given
238.5	40.0	14	65	add the ability to grant privileges to users to data sets and external data sources

PROC TABULATE

Overall Rank	Part Rank	Number of Votes	Item Number	
20.5	5.0	274	69	provide the ability for column widths to be independent of the format widths with a WIDTH= option
31.0	8.0	225	68	add a SPLIT= option
109.5	25.0	82	70	provide the ability to print column names at the bottom of the table and print row labels to the right of the table

PART III SAS Macro Facility

Overall Rank	Part Rank	Number of Votes	Item Number	
13.0	1.0	314	71	add line numbers to MPRINT output, so line numbers are continuous in the SAS Log
19.0	2.0	276	74	allow the IN operator to be used in a macro
29.0	3.0	233	77	provide a macro variable that contains the text of every error or warning in the log
51.0	4.0	182	72	provide the ability to delete macro variables
88.5	5.0	116	78	issue a note confirming the successful compilation of a macro
97.5	6.0	102	73	add a SOURCE option to use with the STORE option to cause the source code to be saved to the same catalog as the compiled macro
173.5	7.0	33	75	allow for an extension other than .SAS when naming auto-call macros
193.0	8.0	26	76	provide an automatic macro variable to return the number of the current batch job

PART IV Output Delivery System (ODS)

Overall Rank	Part Rank	Number of Votes	Item Number	
16.0	1.0	297	79	provide an option to remove the headings produced by procedures

PART V SAS/GRAPH Software

All Procedures

Overall Rank	Part Rank	Number of Votes	Item Number	
2.0	1.0	406	80	provide the ability to define linestyle and color for reference lines on an individual basis for those GRAPH procedures that can generate reference lines

New Procedures

Overall Rank	Part Rank	Number of Votes	Item Number	
114.5	11.0	70	81	provide a procedure to generate a Venn Diagram
165.0	16.5	37	82	provide the ability to produce a WINDROSE or ROSE chart

Global Statements (AXIS, LEGEND, SYMBOL, etc.)

Overall Rank	Part Rank	Number of Votes	Item Number	
38.5	3.0	213	85	provide the ability to specify uneven intervals between tick-marks
43.5	4.0	205	83	provide the ability to only specify either the start point, the end point, or the BY increment when specifying the order in an AXIS statement
52.0	6.0	168	84	provide the ability to order axis values based on the order in which the data is read in
135.0	13.0	52	87	provide the ability to control the height of the symbols for each entry in the LEGEND individually
161.0	15.0	38	86	provide the ability to specify the number of symbols generated in a legend entry

DATA Step Graphics Interface

Overall Rank	Part Rank	Number of Votes	Item Number	
227.0	23.0	16	89	provide the ability to retrieve the BYLINE and DESCRIPTION values associated with a GRSEG entry
232.0	24.0	15	88	provide a complete set of functions to query various aspects of a device for any valid field in a device entry, where the results of the query can be used in a DATA step or macro

Overall Rank	Part Rank	Number of Votes	Item Number	
--------------	-----------	-----------------	-------------	--

257.5	27.5	10	90	provide the ability to determine properties of GRSEG entries created in a previous SAS session, such as background color
-------	------	----	----	--

Graphics Devices

Overall Rank	Part Rank	Number of Votes	Item Number	
--------------	-----------	-----------------	-------------	--

34.0	2.0	222	91	provide a "fit to page" printing option
------	-----	-----	----	---

Image Extensions

Overall Rank	Part Rank	Number of Votes	Item Number	
--------------	-----------	-----------------	-------------	--

124.5	12.0	60	92	provide the ability to import and save an image as a GRSEG entry in a catalog in non-interactive or batch mode
-------	------	----	----	--

PROC GCHART

Overall Rank	Part Rank	Number of Votes	Item Number	
--------------	-----------	-----------------	-------------	--

48.0	5.0	195	93	implement a UNIFORM option to uniformly scale axes across BY groups
56.0	7.0	163	99	provide an option to allow the user to specify the order of subgroup bars
61.0	8.0	151	94	provide the ability to generate bars with varying widths for the same chart based upon the value of a variable in the data set
203.0	20.5	22	95	provide the ability to delete the statistic value on a block chart
203.0	20.5	22	98	provide the ability to specify LABEL=NONE on a block chart
215.5	22.0	18	97	provide the ability to delete the midpoint value on a block chart
244.0	25.0	13	96	provide the ability to angle the statistic value on a block chart

PROC GPLOT

Overall Rank	Part Rank	Number of Votes	Item Number	
--------------	-----------	-----------------	-------------	--

102.0	9.0	94	101	provide the ability to create horizontal box plots
103.0	10.0	91	100	provide an option in the PLOT statement to assign a GROUP variable in order to generate a group axis
178.0	18.0	31	103	provide the ability to produce vector plots
186.5	19.0	28	104	provide the ability to smooth a line with a constraint that interpolated data values cannot be negative or the line joining the points cannot be negative

Overall Rank	Part Rank	Number of Votes	Item Number	
257.5	27.5	10	102	provide the capability to paint the whole bubble surface with a color

PROC G3D

Overall Rank	Part Rank	Number of Votes	Item Number	
142.5	14.0	48	106	provide support for AXIS statements
165.0	16.5	37	105	provide the ability to generate a solid surface plot

PROC G3GRID

Overall Rank	Part Rank	Number of Votes	Item Number	
254.5	26.0	11	107	provide an option to neither extrapolate nor expand the data range of the X/Y/Z variable values when creating the output data set

PART VI SAS/GIS Software

Overall Rank	Part Rank	Number of Votes	Item Number	
139.5	1.0	49	108	provide the ability to delete points from the spatial database

PART VII SAS/AF Software

Overall Rank	Part Rank	Number of Votes	Item Number	
30.0	1.0	231	109	provide the ability to create a computed column in the VIEWTABLE window
43.5	2.0	205	118	provide the ability to save the column order in table-view mode of the VIEWTABLE window via a dialog box
75.0	3.0	134	128	provide an option to navigate the cursor from cell-to-cell via the ENTER key in a Data Table or Table Editor object
77.0	4.0	131	113	provide the ability within BUILD to set editing options such as AUTOSPLIT and AUTOWRAP via the SAS Registry
83.5	5.0	121	123	provide multi-line editing features for the Data Table or Table Editor objects
88.5	6.0	116	124	provide a browse-only option in the OPENMODE argument for VIEWTABLE
119.5	7.0	65	117	provide an UNDO command for FRAME entries
121.5	8.0	64	130	provide the ability to close a data set opened with the OPEN function when the application abends or shuts down prematurely
142.5	9.0	48	112	add a _SELECT_ALL_ method for the FRAME Listbox widget to select all items in the listbox

Overall Rank	Part Rank	Number of Votes	Item Number	
154.0	10.0	41	111	provide a method to fill an SCL list with the values of a SAS table displayed in a Data Form or Data Table object
161.0	11.0	38	115	provide an event type to be triggered by a timer
178.0	12.0	31	132	provide a method for the Data Table object to globally change a data value within a selected column
181.0	13.0	30	114	provide a method for the Table Editor and Data Table classes that reports whether a row or column has been selected
186.5	14.0	28	125	provide a method for the Data Table and Table Editor objects to deselect individual rows when multiple rows are selected
199.5	15.0	23	127	add graphical tooling to FRAME entries with the same facilities as SAS/INSIGHT graphics, but with programmatic control from SCL
222.0	16.5	17	110	provide the ability to bypass host printing and specify options to control the printing of graphical widgets such as ORGCHART, DATA TABLE, and GRAPHICS
222.0	16.5	17	122	provide an option to keep the OUTPUT or LISTING window open when invoking applications using INITCMD
227.0	18.0	16	131	provide an indicator in the object attributes of a widget that shows if the widget is a subclass
238.5	19.0	14	116	provide the ability to specify the maximum number of selections allowed in a Data Table or Table Editor object
249.5	20.5	12	26	provide a method for the Data Form and Data Table objects that initializes all columns in a new row
249.5	20.5	12	129	include Netdraw functionality in the FRAME Entry environment
278.5	22.0	3	119	add another axis of rotation for the FRAME Map Object
281.0	23.0	2	120	increase the maximum number of markers in the FRAME map object
285.0	24.0	1	121	add upper and lower values for each category to the legend for the FRAME Map Object

PART VIII SAS/FSP Software

PROC FSEDIT

Overall Rank	Part Rank	Number of Votes	Item Number	
15.0	1.0	299	133	provide the ability to view the complete active WHERE clause

PART IX SAS Component Language

Overall Rank	Part Rank	Number of Votes	Item Number	
80.0	1.0	126	135	provide the ability to specify the @ modifier in the PUT statement
90.0	2.0	114	140	add an option to the LVAR-LEVEL funtion that permits capture of ALL records or only unique instances
112.0	3.0	73	139	provide a function to save the resulting subset of data created by the WHERE function to a SAS data set
154.0	4.0	41	134	provide the ability to copy a group of items from one SCL list to another by using the COPYLIST function
161.0	5.0	38	136	enhance the FINFO function to return additional information such as file size and modification date/time
276.0	6.0	4	138	provide the ability to change the display font in the SCL Static Analyzer and SCL Dynamic Performance Analyzer applications
281.0	7.0	2	137	provide an argument in the _RESIZE_REGION_ method to return a message when the widget cannot be resized

PART X SAS/EIS Software

Overall Rank	Part Rank	Number of Votes	Item Number	
63	1.0	149	150	provide a way to save multi-dimensional reports to RTF format or to an MSWord file
66.5	2.0	145	142	provide the ability to generate tab-delimited Excel files
94.5	3.0	105	146	provide a means for displaying all possible crossings in a dimension rather than just all valid crossings
215.5	4.5	18	144	provide the ability to display a single overall TOTAL column when there are multiple hierarchies or columns in a dimension rather than TOTAL columns for each individual column value
215.5	4.5	18	148	provide a weighted average statistic for computed values
227.0	6.0	16	149	provide the ability to have overlay plots or charts when a group or subgroup variable is specified

Overall Rank	Part Rank	Number of Votes	Item Number	
244.0	7.0	13	141	provide the ability to compute averages for analysis variables that are not additive over time
261.0	8.0	9	147	provide a means for displaying just a specified computed value in a report excluding the values that make up the computation
265.0	9.0	8	145	provide the ability to specify which computation takes precedence when computed values exist for both rows and columns in a Multidimensional Report
281.0	10.0	2	143	provide the ability to retain the setting for the POPULATE option of the Multidimensional Database Object

PART XI SAS/STAT Software

All Procedures

Overall Rank	Part Rank	Number of Votes	Item Number	
4.0	1.0	389	151	calculate confidence intervals for all appropriate parameters
10.0	2.0	326	156	provide support for missing value imputation methods in applicable procedures
58.5	5.0	158	153	provide power analysis and sample-size determination in applicable hypothesis tests
60.0	6.0	157	152	provide more extensive non-parametric statistics and tests, including multiple comparisons
104.0	8.0	90	154	provide one-tailed tests where appropriate
148.5	13.0	43	155	add a NORMALIZE option to all procedures having a WEIGHT statement to normalize the weights to sum to the actual sample size

New Procedures

Overall Rank	Part Rank	Number of Votes	Item Number	
14.0	3.0	308	157	provide a procedure for multivariate outlier detection based on robust methods
25.0	4.0	251	162	add a sample survey procedure for logistic models
127.5	12.0	56	159	add tree-based CART methodology
151.5	14.0	42	158	add a procedure for fitting nested or mixed logit (discrete choice) models
249.5	20.0	12	161	add a procedure to fit 2-stage probit and Heckman models
276.0	25.0	4	160	add PROC OVERCLUS

PROC CALIS

Overall Rank	Part Rank	Number of Votes	Item Number	
269.0	24.0	7	163	add standardized effects and compute tests of significance for all effects

PROC CATMOD

Overall Rank	Part Rank	Number of Votes	Item Number	
238.5	18.0	14	164	provide a way to score observations with missing responses (like PROC REG and PROC GLM) or to score observations in a separate data set

PROC GENMOD

Overall Rank	Part Rank	Number of Votes	Item Number	
186.5	15.0	28	165	allow reference level to be set in the CLASS statement

PROC GLM/PROC ANOVA

Overall Rank	Part Rank	Number of Votes	Item Number	
249.5	20.0	12	166	provide multiple comparisons using the SLICE option
254.5	22.0	11	167	provide an option in the LSMEANS and MEANS statements to give Hsu's MCB (multiple comparison with the best) test

PROC LOGISTIC

Overall Rank	Part Rank	Number of Votes	Item Number	
116.0	10.0	69	168	allow fitting of generalized logit models (for nominal, categorical responses)
199.5	16.5	23	169	print the Gini statistic

PROC PHREG

Overall Rank	Part Rank	Number of Votes	Item Number	
124.5	11.0	60	172	compute the survival function for the Cox model with time-dependent covariates when they are specified by SAS programming statements
249.5	20.0	12	170	compute the robust variance estimator and the global influence function
265.0	23.0	8	171	add a WEIGHT statement for incorporating case weights

PROC REG

Overall Rank	Part Rank	Number of Votes	Item Number	
101.0	7.0	95	173	provide a test for lack-of-fit
113.0	9.0	72	175	provide a BOUNDS statement so parameters can be restricted to a range of values
199.5	16.5	23	174	implement an all possible regression selection method based on PRESS statistics

PART XII SAS/ETS Software**Functions**

Overall Rank	Part Rank	Number of Votes	Item Number	
257.5	17.0	10	176	support seasonality values greater than 12 when computing seasonal Dickey-Fuller test p-values with the DFP-VALUE function

All Procedures

Overall Rank	Part Rank	Number of Votes	Item Number	
38.5	1.0	213	177	support ranking estimators for all forecasting procedures

New Procedures

Overall Rank	Part Rank	Number of Votes	Item Number	
146.0	6.0	45	178	provide a procedure to analyze panel data when the response variable is categorical
186.5	8.0	28	180	provide a procedure to estimate threshold models
190.5	9.0	27	179	provide a procedure to estimate a system of nonlinear equations on pooled time-series cross-sectional data

Time Series Forecasting System

Overall Rank	Part Rank	Number of Votes	Item Number	
203.0	10.0	22	181	provide a way to get one-step ahead predictions based on a rolling regression when using a hold-out sample, rather than simply computing forecasts based on the in-sample parameter estimates
215.5	12.5	18	182	provide an option to generate multi-step forecasts for hold-out samples
265.0	18.0	8	183	provide a smoothing model for intermittent (zero-inflated) time series data

PROC ARIMA

Overall Rank	Part Rank	Number of Votes	Item Number	
86.5	3.0	117	185	support an option to compute and output additional statistics of fit, such as MAPE R-square, and Theil statistics
91.0	4.0	113	184	allow restrictions to be imposed on the model parameters
92.0	5.0	112	187	support a TREND= option in the ESTIMATE statement to automatically build and include a time-trend variable in the model
249.5	15.5	12	188	copy all variables from the input data set to the OUT= data set
276.0	21.0	4	186	support automatic intervention detection techniques

PROC EXPAND

Overall Rank	Part Rank	Number of Votes	Item Number	
272.0	20.0	6	189	provide a transformation operator which returns the rank of the current observation relative to a moving time window

PROC FORECAST

Overall Rank	Part Rank	Number of Votes	Item Number	
215.5	12.5	18	190	provide the ability to simultaneously model and forecast the total and the components of that total

PROC MODEL

Overall Rank	Part Rank	Number of Votes	Item Number	
47.0	2.0	199	191	support BY-group processing with the PARMSDATA= and ESTDATA= data sets so different starting values can be specified for each BY group
249.5	15.5	12	192	compute the marginal effect of each independent variable
269.0	19.0	7	193	support the Hausman-Taylor specification test

PROC SPECTRA

Overall Rank	Part Rank	Number of Votes	Item Number	
181.0	7.0	30	194	support wavelet analysis

PROC SYSLIN

Overall Rank	Part Rank	Number of Votes	Item Number	
209.0	11.0	19	195	compute the value of the log-likelihood function

PROC TSCSREG

Overall Rank	Part Rank	Number of Votes	Item Number	
238.5	14.0	14	196	support polynomial distributed lag models for panel data

PART XIII SAS/OR Software**New Procedures**

Overall Rank	Part Rank	Number of Votes	Item Number	
37.0	1.0	216	199	add a procedure to convert MPX (Microsoft Project format) to SAS data sets for PROC CPM
197.0	3.0	24	198	provide an Internet-based client/server application for scheduling and project management
261.0	5.0	9	197	add a procedure that supports the interior point method

PROC NLP

Overall Rank	Part Rank	Number of Votes	Item Number	
183.0	2.0	29	200	provide heuristic algorithms such as tabu search, simulated annealing, and genetic algorithms
238.5	4.0	14	201	add support for sparse methods for larger problems

PART XIV SAS/QC Software**New Procedures**

Overall Rank	Part Rank	Number of Votes	Item Number	
33.0	1.0	223	202	provide a procedure for analysis of means

PROC CAPABILITY

Overall Rank	Part Rank	Number of Votes	Item Number	
209.0	3.5	19	204	provide overlaid and comparative versions of all graphical displays
209.0	3.5	19	205	allow multiple distributions from the same family to be plotted on one histogram
272.0	7.0	6	203	provide the ability to fit the Pearson system of distributions

PROC RELIABILITY

Overall Rank	Part Rank	Number of Votes	Item Number	
238.5	5.0	14	206	model the scale parameter in life distributions with the linear model
274.0	8.0	5	207	support parametric models for repairable systems analysis

PROC SHEWHART

Overall Rank	Part Rank	Number of Votes	Item Number	
151.5	5.0	42	235	provide the ability to capture SAS/INSIGHT settings for a window that can be used when running PROC INSIGHT
83.5	2.0	121	209	add an OVERLAY option for plotting multiple process variables on one control chart with one set of control limits
244.0	6.0	13	208	provide options to suppress control limits within phases
165.0	6.0	37	231	provide statistics and plots for multivariate outlier detection
190.5	7.0	27	232	provide the ability to do complex subsetting of data based on the values of two or more variables

PART XV SAS/IML Software

Overall Rank	Part Rank	Number of Votes	Item Number	
199.5	8.0	23	236	provide the ability to specify simple IF or WHEN clauses when creating new variables
205.5	9.0	20	230	provide a calculator to create new variables
209.0	10.0	19	228	provide the ability to have two cumulative distributions on the same set of axes
227.0	11.0	16	239	provide the ability to save the data set with a new name and automatically be in the new data set for edit instead of the old
232.0	13.0	15	233	add support for spatial, geo-statistical, and lattice data analysis
232.0	13.0	15	237	add an option to compute confidence limits for predicted values in regression plots
232.0	13.0	15	240	provide an option to allow the data set name to be used in the title
265.0	15.0	8	241	provide an option to draw a 45-degree reference line based on the data
272.0	16.0	6	234	provide the ability to resize the variable selection window to view the entire variable name
28.0	1.0	234	220	support multidimensional matrices (beyond two dimensions)
75.0	2.0	134	218	implement BY-group processing
78.0	3.0	130	225	provide more flexibility in formatting matrices on PRINT and PUT statements
79.0	4.0	127	215	implement a method to name and access matrices x1, x2, x3, without having to use CALL EXECUTE
158.5	5.0	39	211	support sparse matrices
169.5	6.0	35	210	support complex matrices
176.0	7.0	32	214	add an efficient function to sort a matrix
186.5	8.0	28	224	allow modules or functions to call themselves recursively
193.0	9.0	26	212	support wavelet functions and subroutines
205.5	10.0	20	222	update INV routines to be more efficient and to support special matrix structures (diagonal, triangular, etc.)
222.0	11.0	17	219	support 2- and 3-dimensional integration
227.0	12.0	16	223	support matrices of data types other than just double (binary, int, float, unsigned int, etc.)
232.0	13.0	15	216	add a function to create an upper or lower triangular matrix directly from another matrix or vector
238.5	14.0	14	213	support signal processing functions and subroutines
249.5	15.0	12	217	add a function that removes n rows or columns from a specified starting position
261.0	16.0	9	221	add a SINGULAR= option to control the level of precision when checking for singularity

PART XVII SAS/LAB Software

Overall Rank	Part Rank	Number of Votes	Item Number	
154.0	1.0	41	242	add nonparametric statistics

PART XVIII Data File Management**General**

Overall Rank	Part Rank	Number of Votes	Item Number	
50.0	1.0	183	243	provide the ability to establish a secondary SASWORK area to allow the program to continue processing when the current WORK location runs out of space
145.0	3.0	47	244	produce a NOTE in the SAS Log on all platforms when submitting a FILENAME _ALL_ LIST statement that lists the fileref(s) and physical name(s) of any FILENAME assigned, or a NOTE if there are not any

PART XVI SAS/INSIGHT Software

Overall Rank	Part Rank	Number of Votes	Item Number	
1.0	1.0	574	226	provide the ability to record and replay all user actions
139.5	2.0	49	229	provide the ability to cut and paste
148.5	3.5	43	227	provide the ability to add legends to charts and plots
148.5	3.5	43	238	provide the ability to name a new data set something other than WORK.A

EFI

Overall Rank	Part Rank	Number of Votes	Item Number	
285.0	4.0	1	245	provide a delete button to delete templates that are stored in various repositories

SQL Query Window

Overall Rank	Part Rank	Number of Votes	Item Number	
55.0	2.0	165	246	include SAS functions in the interface

PART XIX Communication Access Methods

Overall Rank	Part Rank	Number of Votes	Item Number	
20.5	1.0	274	247	enhance the server-form LIBNAME syntax for TCP/IP usage in specifying: SERVER=<remote-host-name><tcpip port#>

PART XX SAS/CONNECT Software

Overall Rank	Part Rank	Number of Votes	Item Number	
46.0	1.0	202	248	provide the ability to pass a LAN userid and password to the remote system
222.0	2.0	17	249	enable Kerberos authentication and secure shell communication for sessions on non-Windows systems

PART XXI SAS/SHARE Software**General**

Overall Rank	Part Rank	Number of Votes	Item Number	
106.5	2.0	84	250	enable system security tokens to be automatically exchanged between a SAS client and SAS secured servers and thereby eliminate userid and password prompting

PROC OPERATE

Overall Rank	Part Rank	Number of Votes	Item Number	
238.5	3.0	14	251	provide the ability to send administrator-type messages to client sessions that are seen as being connected to the server

PROC SERVER

Overall Rank	Part Rank	Number of Votes	Item Number	
54.0	1.0	166	252	add the ability to disconnect a user from a SAS server after a specified period of inactivity

PART XXII SAS/ACCESS Software**All Interfaces**

Overall Rank	Part Rank	Number of Votes	Item Number	
121.5	3.0	64	253	support "commit and roll back" transaction-level processing verbs within DATA step MODIFY processing when used against relational databases such as ORACLE or SYBASE

New Interfaces

Overall Rank	Part Rank	Number of Votes	Item Number	
215.5	4.0	18	254	add an interface to Visual Fox Pro
269.0	5.0	7	255	provide the ability to access Informix files on the PC without using ODBC

Interface to PC File Formats

Overall Rank	Part Rank	Number of Votes	Item Number	
11.0	1.0	320	256	provide the ability to specify a worksheet name when creating Excel files from SAS data sets
18.0	2.0	279	257	display a warning message when there is data in an Excel field, but SAS reads it in as missing data

PART XXIII SAS/Warehouse Administrator

Overall Rank	Part Rank	Number of Votes	Item Number	
133.0	1.0	53	258	allow the ability to change the order of columns displayed in the columns tab of object and mapping properties

PART XXIV SAS/IntrNet Software**Application Dispatcher**

Overall Rank	Part Rank	Number of Votes	Item Number	
68.5	1.0	144	260	provide an option for the Application Load Manager to display a list of requests that are awaiting execution
171.0	2.0	34	259	provide the ability for the Application Broker to launch a new SAS server session on a remote machine by using Launch Service

PART XXV Future Directions

New SAS Products

Overall Rank	Part Rank	Number of Votes	Item Number	
109.5	1.0	82	261	provide the ability to enter data and/or programs with speech to text, and also to hear results from the computer with translation from text to speech

PART XXVI SAS System for Mainframes

General

Overall Rank	Part Rank	Number of Votes	Item Number	
173.5	3.5	33	262	enhance the INFILE statement FILEVAR= option to allow the user to specify a single tape device (UNIT=AFF)
193.0	5.0	26	263	add a security feature that would limit SAS product usage based on RACF userid
285.0	2.0	1	262	enhance the INFILE statement FILEVAR= option to allow the user to specify a single tape device (UNIT=AFF)

SAS System under MVS

Overall Rank	Part Rank	Number of Votes	Item Number	
130.5	1.0	54	265	provide a check to see if a file is already allocated to a libref before allowing a FILENAME statement, FILE command or anything else to reference it as an external flat file
173.5	3.5	33	264	provide source control management system capability

PROC SOURCE

Overall Rank	Part Rank	Number of Votes	Item Number	
137.0	2.0	51	266	provide the ability to read and write records longer than 80 bytes

PART XXVII IT Service Vision Software

Overall Rank	Part Rank	Number of Votes	Item Number	
70.5	1.0	141	267	provide the ability to create a dynamic graph from a Web browser and drill down into the raw data that produced the graph
278.5	2.0	3	269	add the ability to automatically update the sitelib with new holidays, by country

Overall Rank	Part Rank	Number of Votes	Item Number	
285.0	3.5	1	268	allow a FILENAME statement or DDname in CMPROCESS
285.0	3.5	1	270	add SAS/EIS holap extensions to the %CPEISSUM macro

PART XXVIII SAS System under OpenVMS

General

Overall Rank	Part Rank	Number of Votes	Item Number	
195.5	1.0	25	271	provide transparent access of catalogs and catalog entries between OpenVMS for VAX and AXP host systems

PART XXIX SAS System for UNIX

General

Overall Rank	Part Rank	Number of Votes	Item Number	
82.0	1.0	122	275	add a system option to limit the amount of workspace used by a SAS process
148.5	2.0	43	272	provide support to fully utilize SMP boxes
168.0	3.0	36	274	add the ability to write performance information to a flat file or to a SAS data set
222.0	4.0	17	273	add a numeric data type that has greater than 16 digits of precision to allow transparent access to databases with large numeric values, like Oracle's DECIMAL data type

PART XXX SAS System for Personal Computers

General

Overall Rank	Part Rank	Number of Votes	Item Number	
26.0	1.0	247	277	implement an option to specify the directory to which all saved files should reside, regardless of where a file was last opened
32.0	2.0	224	276	provide more file extension options when choosing FILE==>SAVE AS in order to save the contents of a window
40.5	3.0	210	282	allow the SAS System Viewer to display values using user-defined formats
45.0	4.0	204	283	allow the variables in the SAS System Viewer to be rearranged in a different order
58.5	5.0	158	278	add cut-and-paste capabilities on the command lines and in the FSEDIT window

Overall Rank	Part Rank	Number of Votes	Item Number		Overall Rank	Part Rank	Number of Votes	Item Number	
93.0	6.0	111	286	provide an option that will allow users to save output as a text file with only line feeds at the end of each line	173.5	9.0	33	279	enhance the SAS ODBC driver to prompt for both the client's ID and password when attaching to a secured SAS server by way of a SAS data source definition
111.0	7.0	76	285	implement an option that prints the note 'PROCEDURE name PRINTED PAGES n-nn' to the log during an interactive session	181.0	10.0	30	284	add a JMP engine for the SAS System
142.5	8.0	48	281	allow the -emailsys, -emaildlg, -emailid, and -emailpw options to be set during run time	215.5	11.0	18	280	enhance the SAS ODBC driver to push across the connecting client's ID to be captured into the remote SHARE*Net server's SAS Log

Distribution of Respondent Job Functions

13%	Manager/Staff End User Department
34%	SAS Software Representative
58%	Applications Programmer
21%	SAS Software Consultant
17%	Systems Analyst
6%	SAS Software Training Coordinator
15%	Systems Manager
51%	Statistician
4%	Manager/Staff Information Center

Useful features

	Votes	Percent
1. the ability to delimit all procedure output with a user-supplied delimiter (such as tabs or commas) rather than blanks	100	18.76
2. a direct interface to MS Word and MS Excel	433	81.24