Sep 10, 07 1:31 **x2_3.sas** Page 1/1

```
/* x2_3.sas */
/* Purpose:  */

title1 'Example 2.3. (note: analysis on type=corr data)';

data a (type=corr);
  length _type_ $ 8 _name_ $ 8;
  input _type_ _name_ C3S C3A BLAINE STYRKE3 STYRKE28;
cards;
CORR C3S       1      -0.309  0.091  0.158  0.344
CORR C3A      -0.309  1       0.192  0.120 -0.166
CORR BLAINE    0.091  0.192  1       0.745  0.320
CORR STYRKE3   0.158  0.120  0.745  1       0.464
CORR STYRKE28  0.344 -0.166  0.320  0.464  1
;

proc print data=a;
title2 'List of data.';

proc princomp data=a;
  var C3S C3A STYRKE3 STYRKE28;
  partial BLAINE;
title2 'Compute partial correlations.';

run;
```

Example 2.3. (note: analysis on type=corr data) 1
List of data.

Obs	_type_	_name_	C3S	C3A	BLAINE	STYRKE3	STYRKE28
1	CORR	C3S	1.000	-0.309	0.091	0.158	0.344
2	CORR	C3A	-0.309	1.000	0.192	0.120	-0.166
3	CORR	BLAINE	0.091	0.192	1.000	0.745	0.320
4	CORR	STYRKE3	0.158	0.120	0.745	1.000	0.464
5	CORR	STYRKE28	0.344	-0.166	0.320	0.464	1.000

Example 2.3. (note: analysis on type=corr data) 2
Compute partial correlations.

The PRINCOMP Procedure

Observations	10000
Variables	4
Partial Variable	1

Regression Statistics

	C3S	C3A	STYRKE3	STYRKE28
R-Square	0.008281	0.036864	0.555025	0.1024
RMSE	0.9959006937	0.9814440039	0.6670978237	0.9474649218

Standardized Regression Coefficients

	C3S	C3A	STYRKE3	STYRKE28
BLAINE	0.0910000000	0.1920000000	0.7450000000	0.3200000000

Partial Correlation Matrix

	C3S	C3A	STYRKE3	STYRKE28
C3S	1.0000	-.3340	0.1358	0.3337
C3A	-.3340	1.0000	-.0352	-.2446
STYRKE3	0.1358	-.0352	1.0000	0.3570
STYRKE28	0.3337	-.2446	0.3570	1.0000

Eigenvalues of the Partial Correlation Matrix

	Eigenvalue	Difference	Proportion	Cumulative
1	1.74313179	0.70762621	0.4358	0.4358
2	1.03550558	0.38496351	0.2589	0.6947
3	0.65054206	0.07972149	0.1626	0.8573
4	0.57082057		0.1427	1.0000

Eigenvectors

	Prin1	Prin2	Prin3	Prin4
C3S	0.539864	-.317920	0.713095	-.314595
C3A	-.454061	0.572187	0.665857	0.151872
STYRKE3	0.400920	0.714031	-.219203	-.530446
STYRKE28	0.584499	0.248370	0.008979	0.772394