

The RSREG Procedure

Coding Coefficients for the Independent Variables		
Factor	Subtracted off	Divided by
temp	27.000000	7.000000
protein	37.500000	12.500000

Response Surface for Variable mean_WBC	
Response Mean	247.770231
Root MSE	13.651492
R-Square	0.8396
Coefficient of Variation	5.5097

Regression	DF	Type I Sum of Squares	R-Square	F Value	Pr > F
Linear	2	4319.881673	0.5310	11.59	0.0060
Quadratic	2	2490.160307	0.3061	6.68	0.0238
Crossproduct	1	20.457529	0.0025	0.11	0.7501
Total Model	5	6830.499509	0.8396	7.33	0.0105

Residual	DF	Sum of Squares	Mean Square
Total Error	7	1304.542564	186.363223

Parameter	DF	Estimate	Standard Error	t Value	Pr >  t	Parameter Estimate from Coded Data
Intercept	1	-615.124100	248.454367	-2.48	0.0425	263.341116
temp	1	47.201664	12.950471	3.64	0.0082	31.844747
protein	1	8.891756	6.587666	1.35	0.2191	8.738313
temp*temp	1	-0.753438	0.212372	-3.55	0.0094	-36.918473
protein*temp	1	-0.052447	0.158297	-0.33	0.7501	-4.589083
protein*protein	1	-0.090355	0.066441	-1.36	0.2160	-14.117981

Factor	DF	Sum of Squares	Mean Square	F Value	Pr > F
temp	3	6381.889267	2127.296422	11.41	0.0044
protein	3	669.216987	223.072329	1.20	0.3784

The RSREG Procedure  
 Canonical Analysis of Response Surface Based on Coded Data

Factor	Critical Value	
	Coded	Uncoded
temp	0.416255	29.913786
protein	0.241822	40.522778
Predicted value at stationary point: 271.025444		

Eigenvalues	Eigenvectors	
	temp	protein
-13.889361	-0.099146	0.995073
-37.147093	0.995073	0.099146
Stationary point is a maximum.		

