Obs	Name	Height_Ft	Height_In	Weight	Position	TeamYrs	DOB	DateJoin	Weight_kg	Height_m	weight_plusequip	age
1	Gary Jones	6	3	200	Pitcher	4	12404	19221	90.718	1.9050	202.0	29
2	Arnold Johnson	5	9	189	Infielder	4	11718		85.729	1.7526	191.0	31
3	Donald Gubonsky	5	11	187	Infielder	1	12561	20356	84.822	1.8034	189.0	28
4	Sam James	6	2	217	Outfielder	2	12449		98.430	1.8796	219.5	29
5	Jack Cowherd	6	0	233	Catcher	4	11718	19596	105.687	1.8288	243.0	31
6	Lenny Lee	6	3	210	Catcher	2	12796		95.254	1.9050	220.0	28
7	Bennie Openhem	5	11	198	Pitcher	1	13262		89.811	1.8034	200.0	26
8	Jack Yancy	6	1	212	Outfielder	3	11638	20008	96.162	1.8542	214.5	31

Obs	Name	Height_Ft	Height_In	Weight	Position	TeamYrs	DOB
1	Jack Cowherd	6	0	233	Catcher	4	Friday, January 31, 1992
2	Lenny Lee	6	3	210	Catcher	2	Friday, January 13, 1995
3	Arnold Johnson	5	9	189	Infielder	4	Friday, January 31, 1992
4	Donald Gubonsky	5	11	187	Infielder	1	Monday, May 23, 1994
5	Jack Yancy	6	1	212	Outfielder	3	Tuesday, November 12, 1991
6	Sam James	6	2	217	Outfielder	2	Monday, January 31, 1994
7	Gary Jones	6	3	200	Pitcher	4	Friday, December 17, 1993
8	Bennie Openhem	5	11	198	Pitcher	1	Tuesday, April 23, 1996

Obs	DateJoin	Weight_kg	Height_m	weight_plusequip	age
1	Monday, August 26, 2013	105.687	1.8288	243.0	31
2		95.254	1.9050	220.0	28
3		85.729	1.7526	191.0	31
4	Friday, September 25, 2015	84.822	1.8034	189.0	28
5	Sunday, October 12, 2014	96.162	1.8542	214.5	31
6		98.430	1.8796	219.5	29
7	Thursday, August 16, 2012	90.718	1.9050	202.0	29
8		89.811	1.8034	200.0	26

## Analysis

Variable : Weight				
Mean	Std Dev			
205.7500000	15.3599665			

### **Problem 1e Output**

Analysis Variable : Weight						
Position	N Obs	Mean	Std Dev			
Catcher	2	221.5000000	16.2634560			
Infielder	2	188.0000000	1.4142136			
Outfielder	2	214.5000000	3.5355339			
Pitcher	2	199.0000000	1.4142136			

### **Problem 2c Output**

Obs	Flavor	Height	Brand
1	Devil's Food	39.0	Duncan
2	Devil's Food	36.5	Duncan
3	White	30.5	Duncan
4	White	34.5	Duncan
5	Yellow	37.0	Duncan
6	Yellow	35.0	Duncan
7	Devil's Food	35.5	Betty
8	Devil's Food	36.0	Betty
9	Yellow	32.5	Betty
10	Yellow	32.5	Betty
11	White	35.5	Betty
12	White	37.5	Betty

### **Problem 2e Output**

Analysis Variable : Height						
Flavor	N Obs	Mean	Std Dev			
Devil's Food	4	36.7500000	1.5545632			
White	4	34.5000000	2.9439203			
Yellow	4	34.2500000	2.1794495			

Obs	Flavor	Height	Brand	Height_Mean	Height_StdDev
1	Devil's Food	39.0	Duncan	36.75	1.55456
2	Devil's Food	36.5	Duncan	36.75	1.55456
3	Devil's Food	35.5	Betty	36.75	1.55456
4	Devil's Food	36.0	Betty	36.75	1.55456
5	White	30.5	Duncan	34.50	2.94392
6	White	34.5	Duncan	34.50	2.94392
7	White	35.5	Betty	34.50	2.94392
8	White	37.5	Betty	34.50	2.94392
9	Yellow	37.0	Duncan	34.25	2.17945
10	Yellow	35.0	Duncan	34.25	2.17945
11	Yellow	32.5	Betty	34.25	2.17945
12	Yellow	32.5	Betty	34.25	2.17945

### Problem 3a.1 Output

Obs	id	WeightMes1	WeightMes2	WeightMes3
1	2	157.200	157.200	157.200
2	16	267.800	268.000	268.000
3	21	220.200	220.200	220.200
4	27	192.400	192.400	192.400
5	29	234.200	234.200	234.200

Obs	id	wgt2
1	2	157.200
2	16	267.933
3	21	220.200
4	27	192.400
5	29	234.200

### **Problem 3c Output**

Obs	id	wgt2	Frequency
1	2	157.200	2
2	16	267.933	4
3	21	220.200	4
4	27	192.400	1
5	29	234.200	2

## Thursday, March 2, 2023 06:01:25 PM 11 Problem 3d Output: Differences in Age, BMI, and AUA Score between Waves 1 and 2

Variable	N	N Miss	Mean	Median
agediff	170	4	4.4882353	4.0000000
wgtdiff	163	11	1.8081797	2.1999969
auascorediff	160	14	-0.0562500	0

#### The MEANS Procedure

Mean and median Age

Analysis Variable : AGE Age (From Master) at entry		
Mean Median		
26.8022207	27.0000000	

Analysis Variable : AER Albuminuri (mg/24hr, Form 23b)			
Sex (From N Master) Obs Median			
F	680	10.0800000	
М	761	11.5200000	

## Number of Subjects of each Gender

#### The FREQ Procedure

Sex (From Master)					
SEX	Frequency Percent Cumulative Cumulative Percent				
F	680	47.19	680	47.19	
м	761	52.81	1441	100.00	

#### The UNIVARIATE Procedure Variable: AGE (Age (From Master) at entry)

Moments				
N	N 1441 Sum Weights			
Mean	26.8022207	Sum Observations	38622	
Std Deviation	7.11271518	Variance	50.5907173	
Skewness	-0.2091168	Kurtosis	-0.8711398	
Uncorrected SS	1108006	Corrected SS	72850.6329	
Coeff Variation	26.5377831	Std Error Mean	0.18737145	

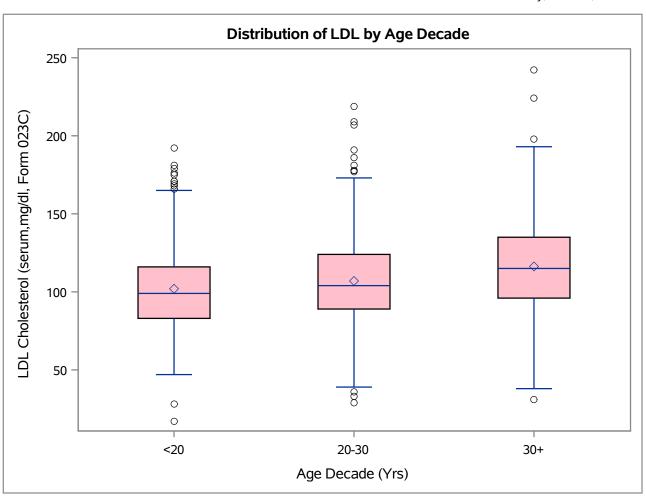
	Basic Statistical Measures				
Loc	Location Variability				
Mean	26.80222	Std Deviation	7.11272		
Median	27.00000	Variance	50.59072		
Mode	27.00000	Range	26.00000		
		Interquartile Range	10.00000		

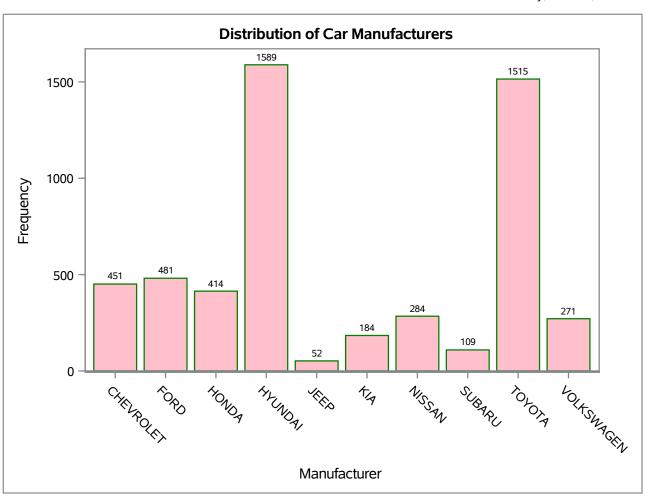
Tests for Location: Mu0=0					
Test	Statistic p Value				
Student's t	t 143.0432		Pr >  t	<.0001	
Sign	М	720.5	Pr >=  M	<.0001	
Signed Rank	S	519480.5	Pr >=  S	<.0001	

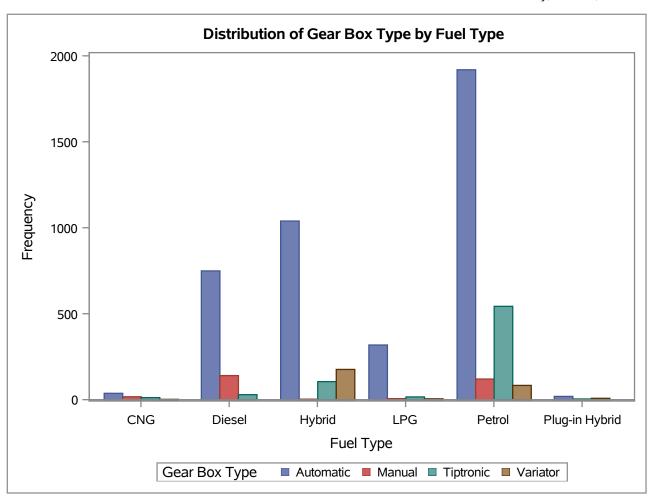
Quantiles (Definition 5)	
Level	Quantile
100% Max	39
99%	39
95%	38
90%	36
75% Q3	32
50% Median	27
25% Q1	22
10%	16
5%	14
1%	13
0% Min	13

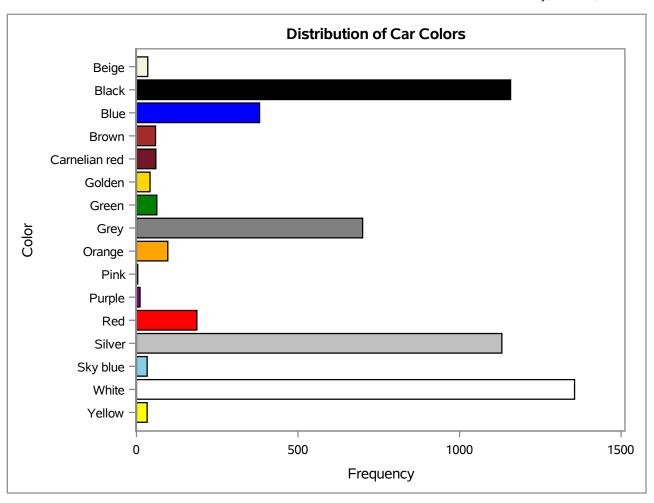
#### The UNIVARIATE Procedure Variable: AGE (Age (From Master) at entry)

Extreme Observations				
Low	Lowest		est	
Value	Obs	Value	Obs	
13	1430	39	1311	
13	1301	39	1392	
13	1299	39	1405	
13	1264	39	1414	
13	1205	39	1437	

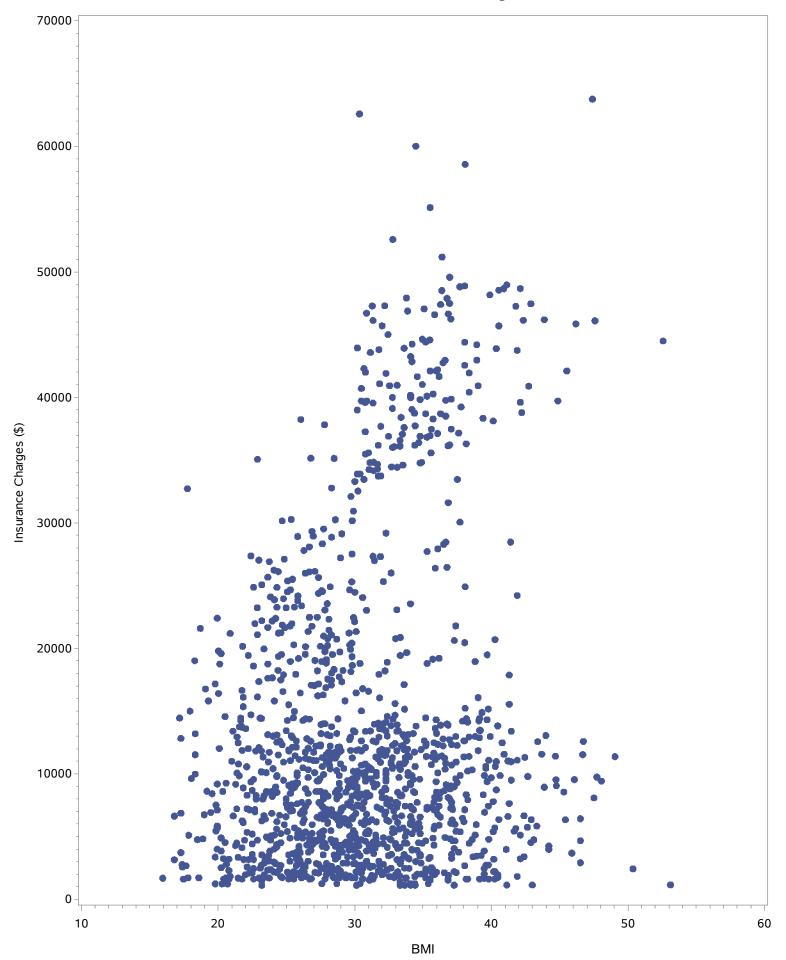


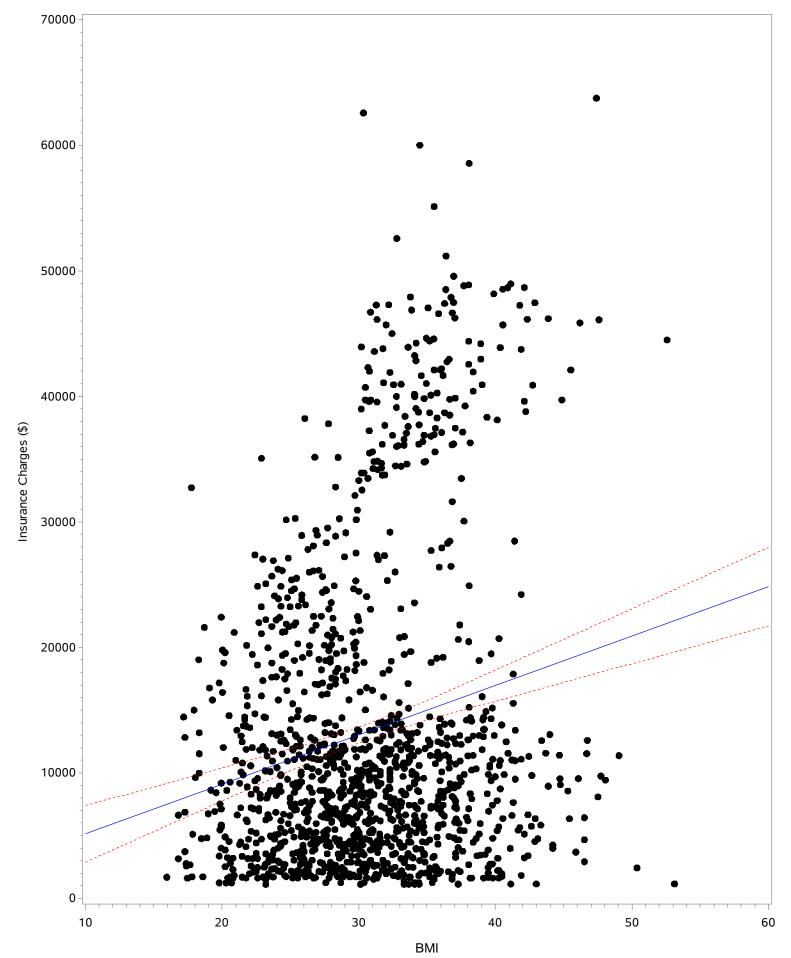




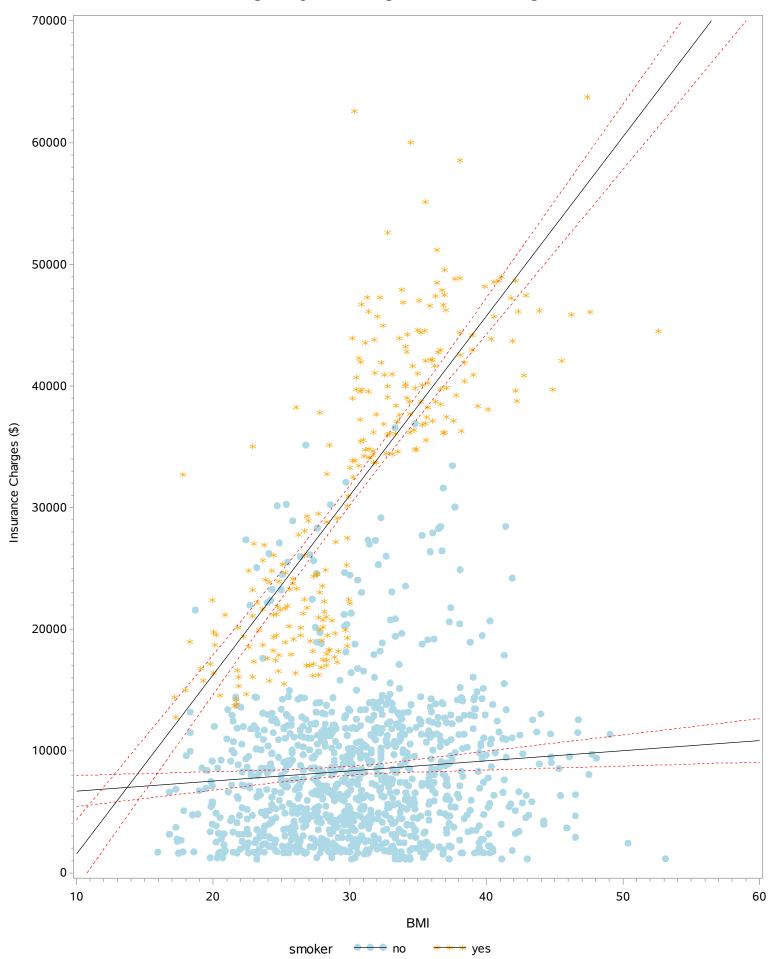


## **BMI Versus Insurance Charges**



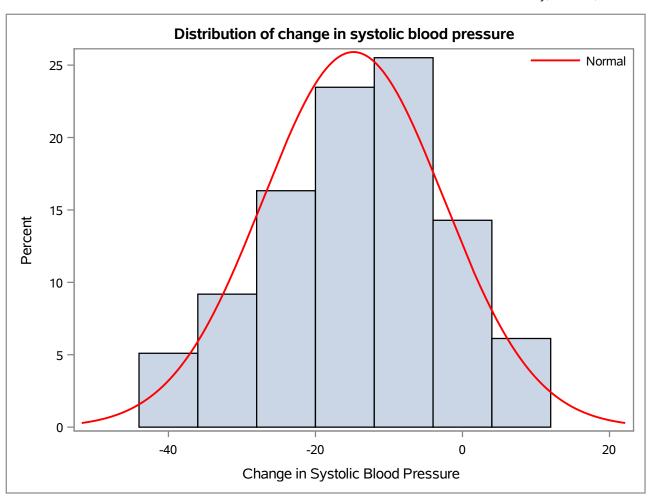


## BMI Versus Insurance Charges by Smoking Status with Regression Lines and 95% CI



# Thursday, March 2, 2023 06:01:25 PM **24 BMI Versus Insurance Charges by Smoking Status with Regression Lines and 95% CI**

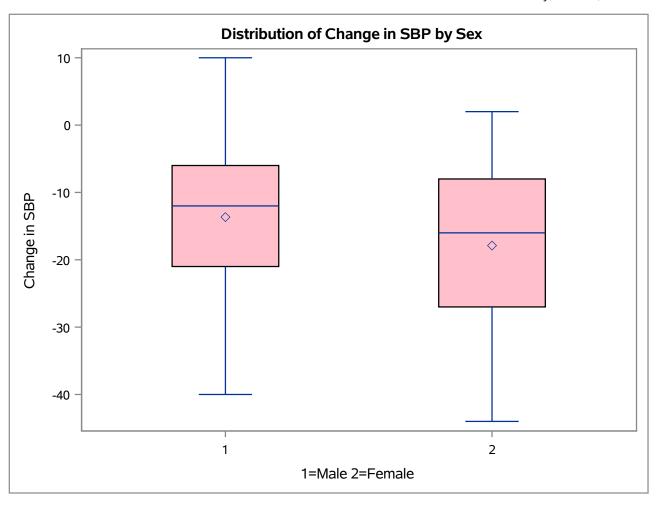
Variable	Label	Mean	N Miss	N
sbpdif	Change in systolic blood pressure	-14.8265306	2	98
wtdif	Change in weight	-11.5112245	2	98

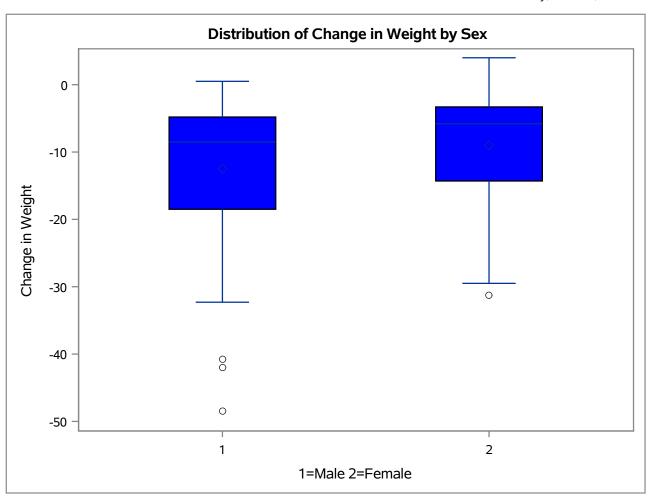


Thursday, March 2, 2023 06:01:25 PM **26** 

## Distribution of change in systolic blood pressure

1=Male 2=Female	N Obs	Variable	Mean
1	73	sbpdif wtdif	-13.6619718 -12.4619718
2	27	sbpdif wtdif	-17.8888889 -9.0111111





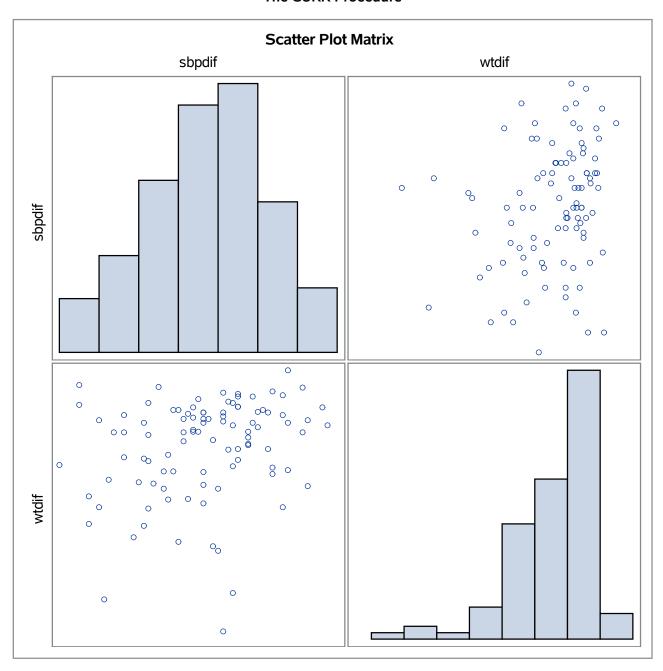
#### The CORR Procedure

2 Variables: sbpdif wtdif

Simple Statistics							
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	
sbpdif	98	-14.82653	12.32048	-1453	-44.00000	10.00000	
wtdif	98	-11.51122	10.00913	-1128	-48.50000	4.00000	

Pearson Correlation Coefficients, N = 98 Prob >  r  under H0: Rho=0					
	sbpdif wtdif				
sbpdif	1.00000	0.24775 0.0139			
wtdif	0.24775 0.0139	1.00000			

#### The CORR Procedure

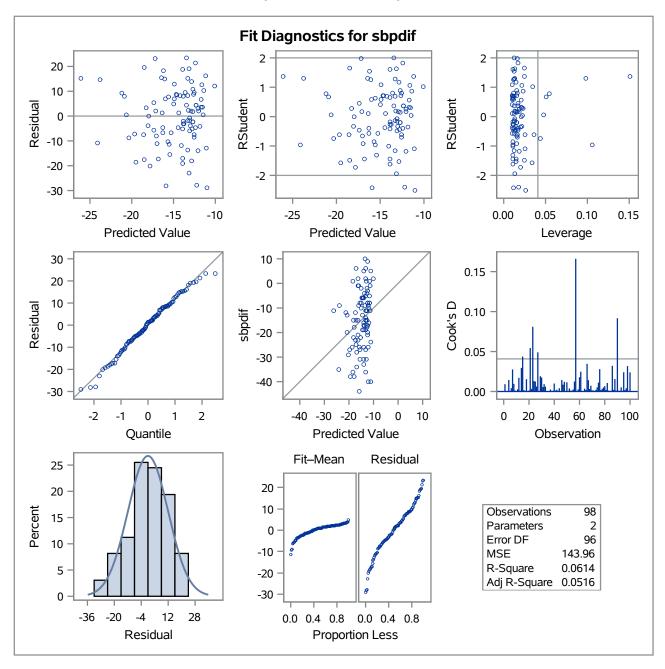


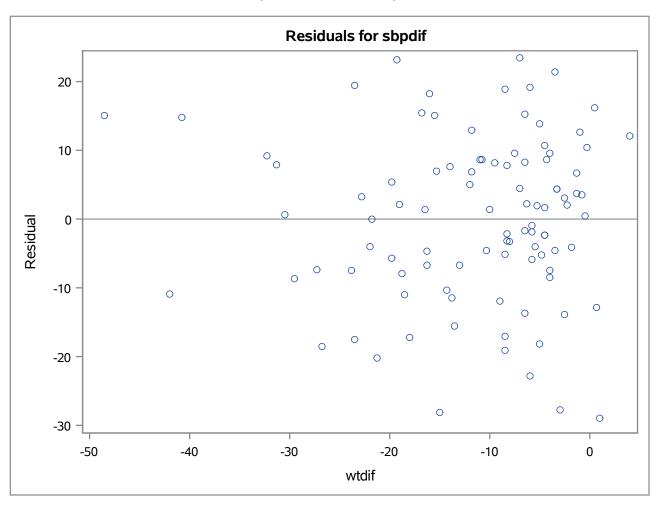
Number of Observations Read	100
Number of Observations Used	98
Number of Observations with Missing Values	2

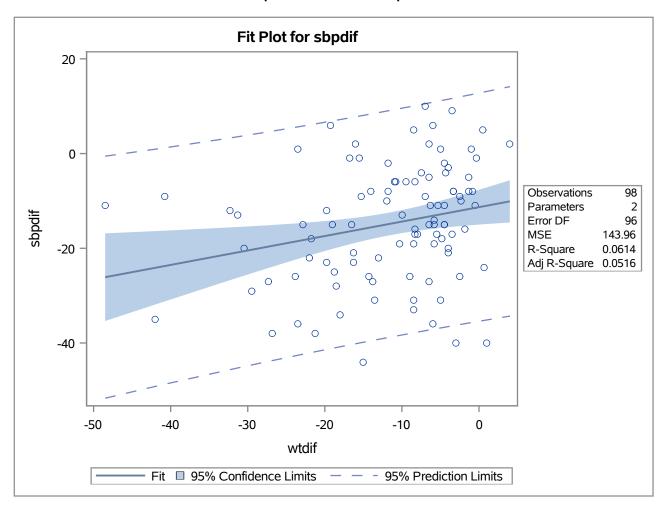
Analysis of Variance						
Source DF Sum of Mean Square F Value Pr						
Model	1	903.73873	903.73873	6.28	0.0139	
Error	96	13820	143.96159			
Corrected Total	97	14724				

Root MSE	11.99840	R-Square	0.0614
Dependent Mean	-14.82653	Adj R-Sq	0.0516
Coeff Var	-80.92520		

Parameter Estimates							
Variable	ariable DF Estimate Standard t Value Pr >						
Intercept	1	-11.31610	1.85257	-6.11	<.0001		
wtdif	1	0.30496	0.12171	2.51	0.0139		







#### The UNIVARIATE Procedure Variable: wtdif

Moments						
	IVIO	ments				
N	98	Sum Weights	98			
Mean	-11.511224	Sum Observations	-1128.1			
Std Deviation	10.0091286	Variance	100.182656			
Skewness	-1.3215315	Kurtosis	1.93002663			
Uncorrected SS	22703.53	Corrected SS	9717.71765			
Coeff Variation	-86.951033	Std Error Mean	1.01107468			

	Basic Statistical Measures						
Loc	Location Variability						
Mean	-11.5112	Std Deviation	10.00913				
Median	-8.4000	Variance	100.18266				
Mode	-8.5000	Range	52.50000				
		Interquartile Range	12.00000				

Note: The mode displayed is the smallest of 3 modes with a count of 4.

Tests for Location: Mu0=0						
Test	Statistic p Value					
Student's t	t	-11.3851	Pr >  t	<.0001		
Sign	М	-45	Pr >=  M	<.0001		
Signed Rank	s	-2392	Pr >=  S	<.0001		

Quantiles (Definition 5)				
Level	Quantile			
100% Max	4.0			
99%	4.0			
95%	-0.3			
90%	-1.3			
75% Q3	-4.5			
50% Median	-8.4			
25% Q1	-16.5			
10%	-23.8			
5%	-31.3			
1%	-48.5			
0% Min	-48.5			

## The UNIVARIATE Procedure Variable: wtdif

Extreme Observations						
Lowest Highest						
Value	Obs	Value	Obs			
-48.5	57	-0.3	32			
-42.0	21	0.5	100			
-40.8	90	0.7	88			
-32.3	60	1.0	23			
-31.3	48	4.0	29			

Missing Values				
		Percent Of		
Missing Value	Count	All Obs	Missing Obs	
	2	2.00	100.00	

#### The FREQ Procedure

Frequency Percent Row Pct Col Pct

Table of marital by sex					
marital(Marital Status - Form	sex(1=Male 2=Female)				
25 Q5)	1	2	Total		
1	4 4.00 57.14 5.48	3 3.00 42.86 11.11	7 7.00		
2	1 1.00 100.00 1.37	0 0.00 0.00 0.00	1 1.00		
3	3 3.00 50.00 4.11	3 3.00 50.00 11.11	6 6.00		
4	1 1.00 100.00 1.37	0 0.00 0.00 0.00	1 1.00		
5	64 64.00 75.29 87.67	21 21.00 24.71 77.78	85 85.00		
Total	73 73.00	27 27.00	100 100.00		

