

## The UNIVARIATE Procedure

Variable: NEAREST\_LATITUDE (Latitude of Crater Center (nearest whole degree))

| Moments                |            |                         |            |
|------------------------|------------|-------------------------|------------|
| <b>N</b>               | 384343     | <b>Sum Weights</b>      | 384343     |
| <b>Mean</b>            | 28.0038585 | <b>Sum Observations</b> | 10763087   |
| <b>Std Deviation</b>   | 19.2110013 | <b>Variance</b>         | 369.062573 |
| <b>Skewness</b>        | 0.58879073 | <b>Kurtosis</b>         | -0.4734733 |
| <b>Uncorrected SS</b>  | 443254213  | <b>Corrected SS</b>     | 141846247  |
| <b>Coeff Variation</b> | 68.6012655 | <b>Std Error Mean</b>   | 0.03098778 |

| Basic Statistical Measures |          |                            |           |
|----------------------------|----------|----------------------------|-----------|
| Location                   |          | Variability                |           |
| <b>Mean</b>                | 28.00386 | <b>Std Deviation</b>       | 19.21100  |
| <b>Median</b>              | 25.00000 | <b>Variance</b>            | 369.06257 |
| <b>Mode</b>                | 21.00000 | <b>Range</b>               | 86.00000  |
|                            |          | <b>Interquartile Range</b> | 28.00000  |

| Tests for Location: Mu0=0 |           |          |          |        |
|---------------------------|-----------|----------|----------|--------|
| Test                      | Statistic |          | p Value  |        |
| <b>Student's t</b>        | t         | 903.7064 | Pr >  t  | <.0001 |
| <b>Sign</b>               | M         | 188565   | Pr >=  M | <.0001 |
| <b>Signed Rank</b>        | S         | 3.556E10 | Pr >=  S | <.0001 |

| Quantiles (Definition 5) |          |
|--------------------------|----------|
| Quantile                 | Estimate |
| <b>100% Max</b>          | 86       |
| <b>99%</b>               | 74       |
| <b>95%</b>               | 65       |
| <b>90%</b>               | 57       |
| <b>75% Q3</b>            | 41       |
| <b>50% Median</b>        | 25       |
| <b>25% Q1</b>            | 13       |
| <b>10%</b>               | 5        |
| <b>5%</b>                | 2        |
| <b>1%</b>                | 0        |
| <b>0% Min</b>            | 0        |

| Extreme Observations |        |         |        |
|----------------------|--------|---------|--------|
| Lowest               |        | Highest |        |
| Value                | Obs    | Value   | Obs    |
| 0                    | 284438 | 85      | 381141 |
| 0                    | 284323 | 85      | 381146 |
| 0                    | 284280 | 85      | 381586 |
| 0                    | 284230 | 86      | 372616 |
| 0                    | 284074 | 86      | 373860 |

## The UNIVARIATE Procedure

Variable: DIAM\_CIRCLE\_IMAGE (Crater Diameter (in km))

| Moments                |            |                         |            |
|------------------------|------------|-------------------------|------------|
| <b>N</b>               | 384343     | <b>Sum Weights</b>      | 384343     |
| <b>Mean</b>            | 3.5566864  | <b>Sum Observations</b> | 1366987.52 |
| <b>Std Deviation</b>   | 8.59199277 | <b>Variance</b>         | 73.8223398 |
| <b>Skewness</b>        | 23.5265097 | <b>Kurtosis</b>         | 1901.06622 |
| <b>Uncorrected SS</b>  | 33234971.6 | <b>Corrected SS</b>     | 28373025.7 |
| <b>Coeff Variation</b> | 241.572965 | <b>Std Error Mean</b>   | 0.01385908 |

| Basic Statistical Measures |          |                            |          |
|----------------------------|----------|----------------------------|----------|
| Location                   |          | Variability                |          |
| <b>Mean</b>                | 3.556686 | <b>Std Deviation</b>       | 8.59199  |
| <b>Median</b>              | 1.530000 | <b>Variance</b>            | 73.82234 |
| <b>Mode</b>                | 1.010000 | <b>Range</b>               | 1163     |
|                            |          | <b>Interquartile Range</b> | 1.37000  |

| Tests for Location: Mu0=0 |           |          |          |        |
|---------------------------|-----------|----------|----------|--------|
| Test                      | Statistic |          | p Value  |        |
| <b>Student's t</b>        | t         | 256.6322 | Pr >  t  | <.0001 |
| <b>Sign</b>               | M         | 192171.5 | Pr >=  M | <.0001 |
| <b>Signed Rank</b>        | S         | 3.693E10 | Pr >=  S | <.0001 |

| Quantiles (Definition 5) |          |
|--------------------------|----------|
| Quantile                 | Estimate |
| <b>100% Max</b>          | 1164.22  |
| <b>99%</b>               | 37.69    |
| <b>95%</b>               | 12.56    |
| <b>90%</b>               | 6.30     |
| <b>75% Q3</b>            | 2.55     |
| <b>50% Median</b>        | 1.53     |
| <b>25% Q1</b>            | 1.18     |
| <b>10%</b>               | 1.06     |
| <b>5%</b>                | 1.03     |
| <b>1%</b>                | 1.01     |
| <b>0% Min</b>            | 1.00     |

| Extreme Observations |        |         |        |
|----------------------|--------|---------|--------|
| Lowest               |        | Highest |        |
| Value                | Obs    | Value   | Obs    |
| 1                    | 384343 | 467.25  | 227410 |
| 1                    | 384342 | 512.75  | 208706 |
| 1                    | 384341 | 624.50  | 188255 |
| 1                    | 384340 | 1096.65 | 188254 |
| 1                    | 384339 | 1164.22 | 370653 |

## The UNIVARIATE Procedure

Variable: DEPTH\_METERS (Average Elevation of Crater Rim (in meters))

| Moments                |            |                         |            |
|------------------------|------------|-------------------------|------------|
| <b>N</b>               | 384343     | <b>Sum Weights</b>      | 384343     |
| <b>Mean</b>            | 75.8375462 | <b>Sum Observations</b> | 29147630   |
| <b>Std Deviation</b>   | 221.517522 | <b>Variance</b>         | 49070.0126 |
| <b>Skewness</b>        | 4.43316605 | <b>Kurtosis</b>         | 26.744416  |
| <b>Uncorrected SS</b>  | 2.10702E10 | <b>Corrected SS</b>     | 1.88597E10 |
| <b>Coeff Variation</b> | 292.094791 | <b>Std Error Mean</b>   | 0.35731282 |

| Basic Statistical Measures |          |                            |           |
|----------------------------|----------|----------------------------|-----------|
| Location                   |          | Variability                |           |
| <b>Mean</b>                | 75.83755 | <b>Std Deviation</b>       | 221.51752 |
| <b>Median</b>              | 0.00000  | <b>Variance</b>            | 49070     |
| <b>Mode</b>                | 0.00000  | <b>Range</b>               | 5370      |
|                            |          | <b>Interquartile Range</b> | 0         |

| Tests for Location: Mu0=0 |           |          |          |        |
|---------------------------|-----------|----------|----------|--------|
| Test                      | Statistic |          | p Value  |        |
| <b>Student's t</b>        | t         | 212.2441 | Pr >  t  | <.0001 |
| <b>Sign</b>               | M         | 38397    | Pr >=  M | <.0001 |
| <b>Signed Rank</b>        | S         | 1.4751E9 | Pr >=  S | <.0001 |

| Quantiles (Definition 5) |          |
|--------------------------|----------|
| Quantile                 | Estimate |
| <b>100% Max</b>          | 4950     |
| <b>99%</b>               | 1090     |
| <b>95%</b>               | 520      |
| <b>90%</b>               | 260      |
| <b>75% Q3</b>            | 0        |
| <b>50% Median</b>        | 0        |
| <b>25% Q1</b>            | 0        |
| <b>10%</b>               | 0        |
| <b>5%</b>                | 0        |
| <b>1%</b>                | 0        |
| <b>0% Min</b>            | -420     |

| Extreme Observations |        |         |        |
|----------------------|--------|---------|--------|
| Lowest               |        | Highest |        |
| Value                | Obs    | Value   | Obs    |
| -420                 | 316611 | 3800    | 173703 |
| -30                  | 151626 | 4010    | 173715 |
| -30                  | 28970  | 4720    | 266814 |
| -20                  | 331364 | 4750    | 173759 |
| -20                  | 331193 | 4950    | 173697 |