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Analysis of data from more than 21,000 soldiers measured in U.S. military anthropometric surveys since 1966 indicates that 0.47% exceed the upper limits of fit for the size Large PASGT helmet in one or more head dimensions. Although this frequency is relatively low, it suggests that at least 3,650 individuals in the active duty Army may be disaccommodated by the current PASGT sizing system, and that a size Extra-Large helmet will be needed if all soldiers must be fit within the system.

Several alternative methods for deriving the dimensional attributes of an Extra-Large helmet are discussed in this report, and a 6.3-mm (0.25 in) radial expansion of the existing size Large headform is recommended for developing the size Extra-Large helmet. Radial expansion was chosen in order to maintain the current shape of the PASGT helmet headform and to minimize the added weight due to the helmet size increase. The proposed Extra-Large limits of fit will accommodate the largest known individuals from the 1988 anthropometric survey as well as all prior military surveys. Keywords:


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## PREFACE

This report was prepared in response to a request from the Armor Section, Life Support Systems Division, Individual Protection Directorate for anthropometric guidance in the development of an Extra-Large PASGT Helmet. The project officer for the PASGT helmet program is Mr. George Schultheiss. This work was performed under OM&A project number 728012-12.

The authors would like to express their appreciation to the following individuals for their contributions to this effort: Dr. Kenneth Parham for his assistance in the data analysis and review of the manuscript; Dr. Carolyn Bensel for her input during the initial discussions of this project; Dr. Larry Symington, (Chief, Materiel Systems Human Factors Branch, SATD) and Dr. Herbert Meiselman (Chief, Behavioral Sciences Division, SATD) for their comments regarding the final manuscript; and Mr. Philip Durand (Armor Section, Life Support Systems Division, IPD) for his input concerning the derivation of the original PASGT helmet sizing system. Finally, we wish to thank Mrs. Edna S. Albert, Technical Publications Editor (Natick), for her assistance in editing this manuscript.

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# DERIVATION OF AN EXTRA-LARGE PASGT HELMET

## INTRODUCTION

As requested by Mr. George Schultheiss,[1] the project officer for the PASGT helmet program, this research explores the need for and feasibility of developing an Extra-Large PASGT helmet in order to accommodate soldiers who are currently unable to fit into the Large size helmet.[2] Thus the purpose of this report is to estimate the number of U.S. Army personnel who are currently disaccommodated within the existing PASGT helmet sizing system and to derive a set of design values necessary to construct an Extra-Large PASGT helmet.

### U.S. Army Soldiers Disaccommodated within the Existing PASGT Sizing System

In order to estimate the maximum number of soldiers who exhibit head dimensions that exceed the design limits for the size Large PASGT, a numerical analysis was undertaken. Pooling U.S. Army and U.S. Air Force data from eight anthropometric surveys,[3-8] the percentage of individuals who exceed the upper limits for one or more of the three PASGT helmet key dimensions (head circumference, head length, and head breadth) was calculated. Since the maximum values of these key dimensions for the size Large helmet are head circumference (611 mm), head length (210 mm), and head breadth (166 mm)(see Table 1 for size prediction chart), those individuals who fell above any one of these values were identified as disaccommodated within the existing PASGT sizing system. While it is not standard practice to pool different sources of anthropometric data into a single data set, given the facts that we are investigating soldiers who fall into the upper limits of the distribution for head size, and these indivduals tend to be few in number, we did not want to underestimate the frequency of their occurrence in the Army. By pooling these data we were able to formulate an estimate of the percentage of soldiers whose head dimensions exceed the size Large PASGT helmet dimensions, based on a sample adequately represented by individuals at the upper tail of the distribution.

TABLE 1. Size Prediction Chart for the PASGT Helmet*
(Head Dimensions in mm)

| HELMET SIZE | HEAD CIRCUM. | HEAD LENGTH | HEAD BREADTH |
|---|---|---|---|
| EXTRA-SMALL | 535 | 180 | 142 |
| SMALL | 555 | 193 | 151 |
| MEDIUM | 576 | 200 | 159 |
| LARGE | 611 | 210 | 166 |

*These values represent the maximum head dimensions for each helmet size. If ANY dimension is greater than that specified for a given helmet size, and equal to or smaller than the next larger size, the correct helmet is the larger size. The largest of the three dimensions will determine the helmet size.

Combining these eight anthropometric surveys leads to an estimate of approximately 3.26% of individuals (695 out of 21,343) being disaccommodated within the existing PASGT sizing system. Based solely on the 1966 Survey of Army Personnel,* only 2.83% (189 out of 6682) of the soldiers would be disaccommodated by the PASGT sizing system. However, it was noted by Mr. Leonard Flores, Chief, Armor and Special Projects Branch, (IPD) that loss of up to 2.5 mm of helmet standoff at any point on the head would not significantly impair the PASGT helmet's protective capabilities. Using this 2.5-mm value, new head size limits for the size Large PASGT helmet are calculated as follows: head circumference (627 mm), head length (215 mm), and head breadth (171 mm). The head length and head breadth values were determined by adding 5 mm to the existing size Large PASGT helmet head size limits. These are based on loss of standoff estimates for the front and back of the head (2 * 2.5 mm) for head length and for each side of the head (2 * 2.5 mm) for head breadth. The increase in the head circumference limit from 611 mm is based on a change in head size accommodation estimated as ($2\pi$ r), which yields a head circumference value of 627 mm, 611 + ($2\pi$ * 2.5 mm). By permitting an increase in the upper limits of these key dimensions, the percentage of individuals who would be disaccommodated in the PASGT sizing system dropped to 0.47% (101 out of 21,343 individuals).

For comparative purposes, the number of individuals who would theoretically be disaccommodated in the M1 infantry helmet was also estimated. Since the M1 helmet is a "one-size-fits-all" item, key sizing dimensions are not used to issue the helmet. Thus it was necessary to estimate the maximum head size that could fit into the M1. This was accomplished by using a steel tape to measure the maximum circumference of the leather suspension band within the helmet liner. Head length and head breadth were not used in this analysis since it was not possible to record accurate linear measurements of the suspension band, which would closely correspond to actual head dimensions. The maximum head circumference that can be accommodated in the M1 helmet was estimated at 599 mm. Based on the referenced eight anthropometric surveys, 13.64% (2,912 individuals out of 21,343) would exceed the design limits for the M1 infantry helmet.

In sum, it is evident that the percentage of individuals successfully accommodated within the existing PASGT sizing system far surpasses the percentage accommodated in the M1 infantry helmet. Moreover, when the 2.5-mm loss of standoff estimate is incorporated into the PASGT sizing criteria, 1st to 99th percentile coverage of the three key dimensions is realized. Therefore, out of a total active duty U.S. Army population of 776,661 individuals as of September 1987,* we estimate that only 0.47%, 3,650 individuals, would be disaccommodated within the existing PASGT sizing system.

## Derivation of the Original PASGT Sizing System

Having specified the number of individuals who are currently disaccommodated in the PASGT sizing system, the next step was to derive design values to be used in the development of a helmet large enough to accommodate them. In order to accomplish this, a review of the derivation of the original PASGT helmet sizing system was initially undertaken. The

overall development and sizing of the helmet has been reported in Claus et al.[10] and McManus et al.,[11] and indicates that the sizing system proceeded in two separate steps. In the first step, sizing algorithms were derived by Goulet and Sacco,[12,13] of the Ballistics Research Laboratories (BRL), using anthropometric data from the 1959 Survey of Army Aviators[9] and the 1966 Survey of Army personnel.[8] Of the various sizing systems generated by BRL, the helmet developers selected a nine-size system which they then refined into a three-size system for the PASGT helmet as shown below in Table 2. This was done because overlap in the head dimensions among the original nine sizes was too great to yield an efficient sizing system.[11]

TABLE 2. BRL's Original Nine-Size System as Refined by the PASGT Helmet Developers (Head Dimensions in mm)

| Original Size | PASGT Size | Head Circumference | Head Length | Head Breadth | Head Height |
|---|---|---|---|---|---|
| 1 | Large | 611 | 218 | 170 | 146 |
| 2 | | 605 | 213 | 168 | 141 |
| 3 | | 599 | 209 | 165 | 139 |
| 4 | | 591 | 207 | 163 | 137 |
| 5 | | 582 | 205 | 161 | 133 |
| 6 | Medium | 581 | 201 | 159 | 132 |
| 7 | | 573 | 200 | 158 | 129 |
| 8 | | 570 | 197 | 155 | 126 |
| 9 | Small | 557 | 193 | 152 | 123 |

Having settled on a three-size system (small, medium, and large), which would satisfy sizing requirements, the next step was to collect head shape data that could be used to derive design values for each of the three helmet sizes. Helmet design values were derived from a sample of 106 U.S. Army personnel from Ft. Devens, MA using data gathered by means of an innovative head measuring device, a Three-Dimensional Surface Descriptor. This device consists of a hemispherical shell upon which 27 movable probes are inserted at various points in order to quantify the three-dimensional shape of an individual's head.[11] After sorting these 106 individuals into the three helmet sizes, design values were calculated as the within-size mean values of these 27 probe readings. Plaster headforms were then shaped by a sculptor to conform to the 27 probe design values. The headforms thus reflect nude head dimensions and do not include the 0.5-in. standoff margin that was incorporated in the helmet molds.

Finally, it is important to note that the size Large helmet design values were based on the within-size mean plus one standard deviation.[10] The within-size mean value plus one standard deviation was used to set the design values for size Large, because, without the addition of one standard deviation, design values for the Large helmet were too small to accommodate the size Large key dimensions. This situation occurred because the probe values are so poorly correlated with the head dimensions used to derive the sizing system.

Derivation of Extra-Large PASGT Helmet Design Values

The most direct approach to derive a set of Extra-Large design values would have been to use exactly the same methods employed in development of the other PASGT helmet sizes. Unfortunately, this requires access to probe data for individuals beyond the size Large limits (of which there was only one in the Ft. Devens data base). The possibility of acquiring such data was considered. However, because Extra-Large individuals are relatively rare (3 per 1000 on the average), and because the probe data did not work well in developing the size Large helmet,[11] acquisition of additional probe data was not pursued.

A second approach considered was the use of regression equations to predict appropriate probe design values for an Extra-Large helmet. This method uses the mathematical relationships between key dimensions specified in the sizing algorithm (head circumference, head length, and head breadth) and the probe values to predict the proportionally appropriate probe values for a size Extra-Large head. Accordingly, appropriate multiple regression equations were calculated, and the results are reported in Table 3. Head circumference, head length, and head breadth were entered as the independent variables used to predict each of the 26 probe values, (data from probe #27 were not available for analysis). As mentioned earlier, the multiple correlation coefficients between the key dimensions and the probe values are quite low, and in some cases not even statistically significant. This indicates that sorting individuals into PASGT helmet sizes using the algorithms derived in ref 12 does <u>not</u> guarantee that they will have similar probe values within a size and different probe values between sizes. This explains why the original PASGT developers found that the mean probe values for individuals wearing a size Large helmet were 'too small' for the Large headform to meet the key dimension limits. That is, with such low correlation between overall head size and probe values (Table 4), probe value means should not be very different among the three sizes. The solution used on the size Large helmet was an arbitrary one; as discussed above, the developers added a standard deviation to each probe's mean value, and that brought the headform in line with expected key dimension limits.

Such low correlation between key sizing dimensions and probe values contraindicates the use of regression analysis to derive Extra-Large design values. Futhermore, it also suggests that acquisition of additional probe data on Extra-Large heads would <u>not</u> be helpful since these probe values may not be very different from those seen on Large or even Medium size heads. At this point we concluded that a completely different approach must be taken.

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TABLE 3. Summary Data for the Regression Equations Used to Predict Probe Lengths. Head Circumference, Head Length, and Head Breadth Used as Predictor Variables

| Probe # | Head Circum. | Head Length | Head Breadth | Head Height |
|---|---|---|---|---|
| 1 | 0.2742* | 0.1181 | 0.2475* | 0.0952 |
| 2 | 0.4098** | 0.2708* | 0.2554* | 0.2294* |
| 3 | 0.3204** | 0.3670** | 0.0041 | 0.1500 |
| 4 | 0.1513 | 0.0678 | 0.1294 | 0.1259 |
| 5 | 0.0697 | -0.0510 | 0.1917 | 0.0805 |
| 6 | 0.4765** | 0.5014** | 0.0223 | 0.1998 |
| 7 | 0.2659* | 0.2755* | 0.0259 | 0.1574 |
| 8 | 0.2609* | 0.1984 | 0.2591* | 0.3299** |
| 9 | 0.2142 | 0.1674 | 0.2782* | 0.3653** |
| 10 | 0.2669* | 0.1797 | 0.3602** | 0.4969** |
| 11 | 0.3551** | 0.3069** | 0.3191** | 0.4555** |
| 12 | 0.4224** | 0.4547** | 0.2325* | 0.3951** |
| 13 | 0.3711** | 0.3545** | 0.0614 | 0.1960 |
| 14 | 0.3819** | 0.3254** | 0.2445* | 0.2769* |
| 15 | 0.3377** | 0.2504* | 0.3101** | 0.2142 |
| 16 | 0.1824 | 0.0272 | 0.2670* | 0.0983 |
| 17 | 0.3187** | 0.1940 | 0.3857** | 0.2733* |
| 18 | 0.2281* | 0.1157 | 0.2629* | 0.0769 |
| 19 | 0.3832** | 0.3836** | 0.1379 | 0.1575 |
| 20 | 0.2188 | 0.1937 | 0.0442 | 0.1134 |
| 21 | 0.1977 | 0.1739 | 0.0785 | 0.1168 |
| 22 | 0.2031 | 0.0994 | 0.2829* | 0.2260* |
| 23 | 0.0651 | -0.1172 | 0.3304** | 0.0517 |
| 24 | 0.1197 | -0.0092 | 0.3175** | 0.2548* |
| 25 | -0.0027 | -0.0876 | 0.1857 | -0.0169 |
| 26 | 0.5020** | 0.5855** | 0.0498 | 0.2003 |

* Significant at the 0.01 level
** Significant at the 0.001 level

**TABLE 4. Correlations Between Head Dimensions and the Twenty-Six Probe Lengths**

| Probe # | Head Circum. | Head Length | Head Breadth | Head Height |
|---|---|---|---|---|
| 1 | 0.274* | 0.1181 | 0.2475* | 0.0982 |
| 2 | 0.4098** | 0.2708* | 0.3524* | 0.2294* |
| 3 | 0.3204** | 0.3670** | 0.0041 | 0.1503 |
| 4 | 0.1513 | 0.0676 | 0.1294 | 0.1239 |
| 5 | 0.0692 | -0.0510 | 0.1917 | 0.0605 |
| 6 | 0.4782** | 0.[illegible]** | 0.0223 | 0.1998 |
| 7 | 0.2653* | 0.2752* | 0.0229 | 0.1574 |
| 8 | 0.2603* | 0.1984 | 0.2591* | 0.3293** |
| 9 | 0.2142 | 0.1624 | 0.2782* | 0.3653** |
| 10 | 0.2663* | 0.1792 | 0.3602** | 0.4963** |
| 11 | 0.3521** | 0.3063** | 0.3191** | 0.4553** |
| 12 | 0.4224** | 0.4547** | 0.3325* | 0.3351** |
| 13 | 0.3711** | 0.3545** | 0.0614 | 0.1960 |
| 14 | 0.3815** | 0.3254** | 0.2445* | 0.2788* |
| 15 | 0.3577** | 0.2504* | 0.3101** | 0.2142 |
| 16 | 0.1824 | 0.0272 | 0.2670* | 0.0983 |
| 17 | 0.3183** | 0.1943 | 0.3857** | 0.2733* |
| 18 | 0.2281* | 0.1197 | 0.2628* | 0.0769 |
| 19 | 0.3832** | 0.3836** | 0.1379 | 0.1575 |
| 20 | 0.2188 | 0.1957 | 0.0442 | 0.1134 |
| 21 | 0.1977 | 0.1739 | 0.0785 | 0.1168 |
| 22 | 0.2031 | 0.0994 | 0.2829* | 0.2260* |
| 23 | 0.0651 | -0.1172 | 0.3304** | 0.0517 |
| 24 | 0.1197 | -0.0092 | 0.3175** | 0.2548* |
| 25 | -0.0027 | -0.0876 | 0.1857 | -0.0169 |
| 26 | 0.5020** | 0.5853** | 0.0498 | 0.2003 |

* Significant at the 0.01 level
** Significant at the 0.001 level

As indicated previously, relatively few individuals in our existing military data bases actually exceed the size Large limits. Moreover, as presented in Table 5, these Extra-Large subjects do not exceed existing design limits by very much. An alternative approach might thus be to keep the same shape as is present in the size Large headform, but expand it radially sufficiently to accommodate the largest head expected to wear a PASGT helmet.

TABLE 5. Percentage of Individuals Disaccommodated in the PASGT Helmet Sizing System Based on Size Large Upper Limits of 611 mm (Head Circumference), 210 mm (Head Length), and 166 mm (Head Breadth)

| Anthropometric Survey | N Total | N Disaccom. | Percent Disaccom. | Max Circ. | Max Lgth. | Max Brdth. |
|---|---|---|---|---|---|---|
| Army Aviators (1959) | 500 | 20 | 4.00 | 612 | 222 | 173 |
| A.F. Personnel (1965) | 3869 | 138 | 3.57 | 618 | 222 | 174 |
| Army Personnel (1966) | 6682 | 189 | 2.83 | 637 | 223 | 174 |
| U.S. Navy (1966) | 4095 | 89 | 2.17 | 624 | 219 | 173 |
| U.S. Marines (1966) | 2008 | 44 | 2.19 | 615 | 221 | 174 |
| A.F. Aviators (1967) | 2420 | 179 | 7.40 | 620 | 226 | 176 |
| Army Aviators (1970) | 1482 | 33 | 2.23 | 615 | 217 | 172 |
| Army Personnel (1977) | 287 | 4 | 1.39 | 610 | 214 | 167 |

The data confirm the initial expectation that radial expansion of the existing Large headform by a value of 0.25 in (6.3 mm) would serve to accommodate all of the individuals who, based on the eight anthropometric surveys examined, would require an Extra-Large PASGT helmet. Specifically, soldiers exhibiting head dimensions up to 650 mm in circumference, 223 mm in length, and 179 mm in breadth could be accommodated.

Out of the 21,343 individuals represented in the pooled survey population, only one individual who exhibits a head length of 226 mm would be disaccommodated in the proposed Extra-Large helmet. However, if a 2.5-mm loss of standoff is permitted, this individual will also be accommodated. Therefore, it is concluded that pursuing a 0.25-in (6.3-mm) radial increase in the size Large PASGT headform is the most practical solution to the problem of developing an Extra-Large PASGT helmet.

Assessment of PASGT Helmet Standoff

While a 0.25-in radial increase in the size Large headform will certainly accommodate the largest head breadths, lengths, and circumferences known, it is unclear whether a 0.25-in. radial increase will provide sufficient helmet standoff at skull locations other than those used to define the key dimensions. That is, it is theoretically possible to provide the necessary standoff at the points of maximum breadth and length, and to provide sufficient circumference to accommodate the head at the level of maximum circumference, yet still have too little standoff at other points on the head. Thus an analysis of available standoff at probe locations was undertaken on both the standard PASGT helmet and the proposed Extra-Large helmet.

To accomplish this, the 106 Ft. Devens fit test subjects were first sorted into their respective helmet sizes based on values of the three key sizing dimensions currently used to issue the helmets: head circumference, head length, and head breadth. This procedure yielded the following distribution of individuals in each of the three size categories: Small-21, Medium-54, Large-30, and one individual who exhibited head dimensions that placed him beyond the range of size Large. Next, the 26 probe length values used in construction of the original head forms were subtracted from each individual's actual probe values. These differences were obtained for all individuals within each of the three size categories. The resulting differences between the two sets of values are then a reflection of the amount of standoff afforded each individual at the various probe locations. Positive differences indicate that a head value is larger than its corresponding form value and, therefore, the 0.5-in (12.7 mm) standoff between an individual's head and the helmet made over that headform will be violated. Thus if only one probe out of the 26 is positive for each individual, the 0.5-in standoff has not been maintained. Differences calculated between Ft. Devens subjects' head values and PASGT helmet headform values are summarized by size category in Appendixes A through G.

Upon review, it is clear that individuals in all size categories have at least one probe location without a 0.5-in standoff. Even if the 2.5-mm loss of standoff suggested by Mr. Flores is permitted, only one individual (a size Medium) is afforded the minimum required standoff for all 26 probe locations. It must be noted that the overall trend apparent in these data strongly suggests that the 0.5-in standoff is not consistently maintained in any of the three PASGT helmet sizes, and therefore, an Extra-Large helmet designed according to our recommended 0.25-in radial increase in the size Large headform may also demonstrate a lack of uniform standoff, even if it does retain the shape characteristics of the size Large headform.

This possibility was examined using the only relevant probe data available -- that of the single individual in the Extra-Large size category. Appendix G reports the results of comparisons between his head values and those of the size Large headform with the proposed 0.25-in radial increase. As can be seen from Appendix G, loss of the minimum recommended standoff does not occur at any of the 26 probe locations. Therefore in terms of standoff loss at probe locations, the proposed Extra-Large helmet may be an improvement over the existing sizes of the PASGT helmet. However this conclusion is based on a single subject, and so a fit test of the proposed Extra-Large helmet will need to be conducted.

## Conclusion and Recommendations

Upon reviewing U.S. military anthropometric survey data from over 21,000 soldiers, it is concluded that approximately 3.0% of these individuals exhibit head dimensions that place them beyond the range of head sizes currently accommodated within the PASGT helmet sizing system. The percentage of individuals disaccommodated falls to 0.47% if a standoff loss of 2.5-mm is permitted. Having examined several approaches for deriving a set of design values useful in manufacturing a size Extra-Large PASGT helmet, the following recommendations are forwarded.

(1) Based on statistical analyses described herein, it is recommended that the proposed Extra-Large helmet incorporate a 0.25-in (6.3-mm) radial increase over the existing size Large helmet. This approach will result in an Extra-Large helmet design that should accommodate the total number of U.S. Army soldiers who are currently unable to fit into the Large PASGT helmet.

(2) It is further recommended that, upon completion and delivery of an Extra-Large prototype helmet, a fit test be conducted on individuals whose head dimensions exceed the size Large PASGT helmet limits in order to verify the range of head sizes actually accommodated. Moreover, a human factors evaluation and equipment compatibility study is also recommended for this item. This will provide insight into the extent to which the 0.25-in radial increase in helmet size will potentially impact upon head mobility, vision, and equipment integration around the head and face.

This document reports research undertaken at the US Army Natick Research, Development and Engineering Center and has been assigned No. NATICK/TR-88/066 in the series of reports approved for publication.

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APPENDIX A

PROBE DELTAS (PROBE VALUE - SMALL HEADFORM VALUE)
FOR SUBJECTS IN THE SIZE SMALL PASGT HELMET

## APPENDIX A

### PROBE DELTAS (PROBE VALUE - SMALL HEADFORM VALUE) FOR SUBJECTS IN THE SIZE SMALL PASGT HELMET

Line 1 P1DELTA P2DELTA P3DELTA P4DELTA P5DELTA P6DELTA P7DELTA

Line 2: P8DELTA P9DELTA P10DELTA P11DELTA P12DELTA P13DELTA P14DELTA

Line 3: P15DELTA P16DELTA P17DELTA P18DELTA P19DELTA P20DELTA P21DELTA

Line 4: P22DELTA P23DELTA P24DELTA P25DELTA P26DELTA

Note: Delta Values Greater Than 2.5 mm Indicate Loss of Recommended Standoff at a Given Probe Location.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=2 | -.24 | 3.26 | 2.01 | -3.59 | -7.98 | 2.87 | 4.52 |
| | 16.04 | 10.57 | 10.74 | 10.24 | 4.52 | 7.98 | 9.11 |
| | 10.28 | 6.27 | 11.83 | -4.76 | .80 | .24 | 2.17 |
| | -.71 | 3.01 | .62 | -11.41 | -2.97 | | |
| ID=3 | 5.31 | 4.06 | 1.22 | 1.17 | -2.43 | .49 | 2.93 |
| | -15.71 | 9.77 | 10.74 | 12.62 | 12.46 | 6.39 | 7.52 |
| | 10.28 | 9.44 | 13.41 | 7.14 | -.79 | -.55 | 2.96 |
| | 1.67 | -6.52 | 3.00 | 20.34 | -.59 | | |
| ID=6 | 3.72 | 1.67 | -3.54 | -2.00 | -7.98 | -1.89 | -8.98 |
| | -14.92 | -13.24 | -16.25 | -15.16 | -10.56 | .04 | -8.36 |
| | -8.77 | 22.94 | -10.40 | 23.02 | 1.59 | 1.04 | -7.36 |
| | -8.64 | -6.52 | -13.67 | 15.57 | -3.76 | | |
| ID=12 | -8.98 | -3.09 | 8.36 | 8.32 | 5.51 | -11.41 | 6.11 |
| | 8.89 | 4.22 | 5.18 | .71 | -3.42 | 1.63 | 3.55 |
| | -.04 | -8.02 | -4.05 | -16.67 | -15.87 | 8.18 | 6.93 |
| | 10.41 | 9.36 | 8.56 | 4.46 | -3.76 | | |
| ID=26 | 4.52 | -.71 | -7.51 | -8.35 | -6.39 | 6.84 | -9.77 |
| | -1.43 | -2.13 | -3.55 | -.08 | 2.93 | -4.72 | -5.18 |
| | -2.42 | 24.52 | -1.67 | -1.59 | 2.39 | -7.69 | -7.36 |
| | -4.68 | -6.52 | -6.53 | -1.89 | 7.35 | | |
| ID=37 | -3.42 | -.71 | 2.01 | 3.56 | .75 | -.30 | -.24 |
| | .96 | 1.04 | .42 | -.08 | -1.04 | 2.42 | .37 |
| | 3.14 | .71 | 3.09 | 1.59 | -.79 | 2.63 | -1.80 |
| | -1.50 | -6.52 | -.97 | -4.27 | -2.18 | | |
| ID=44 | .55 | -3.09 | -5.13 | -7.56 | -6.39 | 6.84 | -1.04 |
| | 4.13 | 5.81 | 5.18 | 11.03 | 10.87 | -3.13 | 4.34 |
| | 7.90 | 7.06 | 12.62 | 12.70 | 11.12 | -5.31 | -4.18 |
| | -3.88 | -9.69 | -3.35 | -12.21 | -.59 | | |
| ID=49 | -8.98 | 2.47 | 2.81 | 7.52 | 2.34 | -6.65 | 7.69 |
| | 9.69 | 6.60 | 5.18 | 3.09 | 11.66 | 6.39 | 8.31 |
| | 5.52 | .71 | 3.09 | -7.94 | -9.52 | 7.39 | 8.52 |
| | 7.23 | 6.18 | 6.97 | -1.89 | -1.38 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=51 | 3.72 | 5.64 | -7.51 | -4.38 | -13.84 | .49 | -8.18 |
| | -11.74 | -13.24 | -13.08 | -8.81 | -5.80 | 5.60 | -13.12 |
| | -8.77 | .71 | -5.64 | 2.30 | 2.39 | -8.49 | -10.53 |
| | -13.41 | -8.11 | -15.26 | -14.59 | -5.35 | | |
| ID=54 | -2.63 | -3.88 | -2.75 | -8.35 | -7.19 | -.30 | -.24 |
| | 2.54 | 5.81 | 6.77 | 3.89 | -.24 | -2.34 | .37 |
| | -.04 | -2.46 | 3.89 | -2.38 | -.79 | -2.93 | -1.01 |
| | -.71 | -4.14 | 1.41 | -3.48 | .21 | | |
| ID=66 | 1.34 | -.71 | .42 | -2.79 | -2.43 | -5.86 | 6.90 |
| | 8.10 | 9.77 | 11.53 | 7.06 | -1.04 | 4.81 | 9.90 |
| | 12.66 | 5.47 | 13.41 | -.79 | -6.34 | 2.63 | 2.96 |
| | .88 | -8.11 | 5.38 | -8.24 | -5.35 | . | |
| ID=71 | -4.21 | -5.47 | -7.51 | -.43 | 3.92 | 2.87 | -5.80 |
| | -5.39 | -6.10 | -4.34 | -1.67 | -1.83 | -7.10 | -7.56 |
| | 2.34 | -10.40 | -10.40 | -8.73 | -4.76 | -2.93 | -2.59 |
| | -2.29 | .62 | -.97 | 6.05 | 5.76 | | |
| ID=79 | -1.04 | 3.26 | -2.75 | -1.21 | -1.63 | -4.27 | -5.01 |
| | -2.22 | -1.34 | 2.01 | .71 | 2.14 | -3.13 | -2.80 |
| | .76 | 1.51 | -2.46 | -5.56 | 9.53 | -4.52 | -5.77 |
| | .09 | 5.39 | 3.00 | 3.67 | 1.00 | | |
| ID=83 | -5.80 | -3.09 | 7.57 | 7.52 | 5.51 | -5.86 | 7.69 |
| | 6.51 | 3.42 | 2.01 | -1.67 | -3.42 | 2.42 | 1.17 |
| | 1.55 | -6.43 | -31.04 | -3.97 | -9.52 | 8.97 | 9.31 |
| | 8.02 | 4.59 | 6.17 | 2.88 | -.59 | | |
| ID=89 | -9.77 | -4.68 | 1.22 | 8.32 | 17.42 | -13.00 | 2.93 |
| | -2.22 | -2.93 | -5.14 | -7.23 | -14.53 | .84 | -1.21 |
| | -7.18 | -11.99 | -12.78 | -15.88 | -21.42 | 5.01 | 6.14 |
| | 7.23 | 11.74 | 6.17 | 9.22 | -4.56 | | |
| ID=91 | 9.28 | 6.44 | 2.01 | -2.79 | -8.77 | -5.86 | -.24 |
| | 4.13 | 6.60 | 7.56 | 7.86 | 6.11 | 3.22 | 2.76 |
| | 7.90 | 7.06 | 15.79 | 11.91 | 5.56 | -2.93 | -4.98 |
| | -6.26 | -10.49 | -.17 | -13.79 | -19.64 | | |
| ID=96 | -18.50 | -10.23 | 2.01 | 16.26 | 18.21 | -9.83 | 4.52 |
| | .96 | 2.63 | .42 | -4.84 | -8.18 | -3.92 | -5.18 |
| | -11.15 | -12.78 | -12.78 | -24.61 | -21.42 | 8.97 | 9.31 |
| | 13.58 | 20.47 | 12.53 | 13.99 | -7.73 | | |
| ID=99 | 1.34 | -2.29 | 4.39 | -4.38 | 1.54 | 1.29 | .55 |
| | -5.39 | -7.69 | -8.31 | -5.64 | -4.21 | .04 | -1.21 |
| | -7.18 | -7.23 | -7.23 | -5.56 | -4.76 | -.55 | -.21 |
| | -3.09 | -.17 | -4.14 | -.30 | 1.79 | | |
| ID=104 | -10.56 | -8.64 | .42 | 1.17 | 16.62 | -5.06 | .55 |
| | -8.57 | -14.83 | -17.04 | -14.37 | -8.18 | -4.72 | -3.59 |
| | -19.88 | -19.13 | -24.69 | -23.02 | -15.08 | 2.63 | 6.93 |
| | .88 | 6.97 | -4.94 | 11.61 | 2.59 | | |
| ID=111 | -1.04 | -1.50 | -2.75 | -3.59 | -4.01 | 4.46 | -2.63 |
| | .96 | .25 | -1.17 | 1.51 | 6.11 | -3.13 | -2.80 |
| | -.83 | -3.26 | -.08 | -3.18 | 2.39 | -6.90 | -.21 |
| | .88 | -.96 | .62 | 2.08 | 9.73 | | |
| ID=112 | -7.39 | -8.64 | -6.72 | -4.38 | -4.81 | 9.22 | .55 |
| | 5.72 | 7.39 | 9.15 | 9.44 | 9.28 | -6.31 | .37 |
| | -.83 | -8.02 | 6.27 | -.00 | 7.15 | -4.52 | -.21 |
| | -.71 | -4.93 | 4.59 | -1.89 | 6.56 | | |

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APPENDIX B

PROBE DELTA FREQUENCIES AND DESCRIPTIVE STATISTICS
FOR SUBJECTS IN THE SIZE SMALL PASGT HELMET

## APPENDIX B

### PROBE DELTA FREQUENCIES AND DESCRIPTIVE STATISTICS FOR SUBJECTS IN THE SIZE SMALL PASGT HELMET

P1DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -18.50 | 1 | 4.8 | 4.8 | 4.8 |
| -10.56 | 1 | 4.8 | 4.8 | 9.5 |
| -9.77 | 1 | 4.8 | 4.8 | 14.3 |
| -8.98 | 2 | 9.5 | 9.5 | 23.8 |
| -7.39 | 1 | 4.8 | 4.8 | 28.6 |
| -5.80 | 1 | 4.8 | 4.8 | 33.3 |
| -4.21 | 1 | 4.8 | 4.8 | 38.1 |
| -3.42 | 1 | 4.8 | 4.8 | 42.9 |
| -2.63 | 1 | 4.8 | 4.8 | 47.6 |
| -1.04 | 2 | 9.5 | 9.5 | 57.1 |
| -.24 | 1 | 4.8 | 4.8 | 61.9 |
| .55 | 1 | 4.8 | 4.8 | 66.7 |
| 1.34 | 2 | 9.5 | 9.5 | 76.2 |
| 3.72 | 2 | 9.5 | 9.5 | 85.7 |
| 4.52 | 1 | 4.8 | 4.8 | 90.5 |
| 5.31 | 1 | 4.8 | 4.8 | 95.2 |
| 9.28 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P1DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -2.512 | Std Err | 1.440 | Median | -1.038 |
| Mode | -8.975 | Std Dev | 6.600 | Variance | 43.554 |
| Range | 27.781 | Minimum | -18.500 | Maximum | 9.281 |

Valid Cases 21

P2DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -10.23 | 1 | 4.8 | 4.8 | 4.8 |
| -8.64 | 2 | 9.5 | 9.5 | 14.3 |
| -5.47 | 1 | 4.8 | 4.8 | 19.0 |
| -4.68 | 1 | 4.8 | 4.8 | 23.8 |
| -3.88 | 1 | 4.8 | 4.8 | 28.6 |
| -3.09 | 3 | 14.3 | 14.3 | 42.9 |
| -2.29 | 1 | 4.8 | 4.8 | 47.6 |
| -1.50 | 1 | 4.8 | 4.8 | 52.4 |
| -.71 | 3 | 14.3 | 14.3 | 66.7 |
| 1.67 | 1 | 4.8 | 4.8 | 71.4 |
| 2.47 | 1 | 4.8 | 4.8 | 76.2 |
| 3.26 | 2 | 9.5 | 9.5 | 85.7 |
| 4.06 | 1 | 4.8 | 4.8 | 90.5 |
| 5.64 | 1 | 4.8 | 4.8 | 95.2 |
| 6.44 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P2DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -1.424 | Std Err | 1.019 | Median | -1.500 |
| Mode | -3.088 | Std Dev | 4.668 | Variance | 21.793 |
| Range | 16.669 | Minimum | -10.231 | Maximum | 6.438 |

Valid Cases 21

P3DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -7.51 | 3 | 14.3 | 14.3 | 14.3 |
| -6.72 | 1 | 4.8 | 4.8 | 19.0 |
| -3.13 | 1 | 4.8 | 4.8 | 23.8 |
| -3.54 | 1 | 4.8 | 4.8 | 28.6 |
| -2.75 | 3 | 14.3 | 14.3 | 42.9 |
| .42 | 2 | 9.5 | 9.5 | 52.4 |
| 1.22 | 2 | 9.5 | 9.5 | 61.9 |
| 2.01 | 4 | 19.0 | 19.0 | 81.0 |
| 2.81 | 1 | 4.8 | 4.8 | 85.7 |
| 4.39 | 1 | 4.8 | 4.8 | 90.5 |
| 7.57 | 1 | 4.8 | 4.8 | 95.2 |
| 8.36 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P3DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.558 | Std Err | 1.028 | Median | .425 |
| Mode | 2.013 | Std Dev | 4.709 | Variance | 22.171 |
| Range | 15.875 | Minimum | -7.513 | Maximum | 8.362 |

Valid Cases 21

P4DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -8.35 | 2 | 9.5 | 9.5 | 9.5 |
| -7.56 | 1 | 4.8 | 4.8 | 14.3 |
| -4.38 | 3 | 14.3 | 14.3 | 28.6 |
| -3.59 | 2 | 9.5 | 9.5 | 38.1 |
| -2.79 | 2 | 9.5 | 9.5 | 47.6 |
| -2.00 | 1 | 4.8 | 4.8 | 52.4 |
| -1.21 | 1 | 4.8 | 4.8 | 57.1 |
| -.41 | 1 | 4.8 | 4.8 | 61.9 |
| 1.17 | 2 | 9.5 | 9.5 | 71.4 |
| 3.56 | 1 | 4.8 | 4.8 | 76.2 |
| 7.52 | 2 | 9.5 | 9.5 | 85.7 |
| 8.32 | 2 | 9.5 | 9.5 | 95.2 |
| 16.26 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P4DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .003 | Std Err | 1.408 | Median | -2.000 |
| Mode | -4.381 | Std Dev | 6.451 | Variance | 41.622 |
| Range | 24.606 | Minimum | -8.350 | Maximum | 16.256 |

Valid Cases 21

P5DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -13.54 | 1 | 4.8 | 4.8 | 4.8 |
| -8.77 | 1 | 4.8 | 4.8 | 9.5 |
| -7.98 | 2 | 9.5 | 9.5 | 19.0 |
| -7.19 | 1 | 4.8 | 4.8 | 23.8 |
| -6.39 | 2 | 9.5 | 9.5 | 33.3 |
| -4.81 | 1 | 4.8 | 4.8 | 38.1 |
| -4.01 | 1 | 4.8 | 4.8 | 42.9 |
| -2.43 | 2 | 9.5 | 9.5 | 52.4 |
| -1.63 | 1 | 4.8 | 4.8 | 57.1 |
| .75 | 1 | 4.8 | 4.8 | 61.9 |
| 1.54 | 1 | 4.8 | 4.8 | 66.7 |
| 2.34 | 1 | 4.8 | 4.8 | 71.4 |
| 3.92 | 1 | 4.8 | 4.8 | 76.2 |
| 5.51 | 2 | 9.5 | 9.5 | 85.7 |
| 14.62 | 1 | 4.8 | 4.8 | 90.5 |
| 17.42 | 1 | 4.8 | 4.8 | 95.2 |
| 18.21 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P5DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.082 | Std Err | 1.934 | Median | -2.425 |
| Mode | -7.981 | Std Dev | 8.862 | Variance | 78.533 |
| Range | 31.750 | Minimum | -13.538 | Maximum | 18.213 |

Valid Cases 21

P6DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -13.00 | 1 | 4.8 | 4.8 | 4.8 |
| -11.41 | 1 | 4.8 | 4.8 | 9.5 |
| -9.83 | 1 | 4.8 | 4.8 | 14.3 |
| -6.68 | 1 | 4.8 | 4.8 | 19.0 |
| -5.86 | 3 | 14.3 | 14.3 | 33.3 |
| -5.06 | 1 | 4.8 | 4.8 | 38.1 |
| -4.27 | 1 | 4.8 | 4.8 | 42.9 |
| -1.89 | 1 | 4.8 | 4.8 | 47.6 |
| -.30 | 2 | 9.5 | 9.5 | 57.1 |
| .49 | 2 | 9.5 | 9.5 | 66.7 |
| 1.29 | 1 | 4.8 | 4.8 | 71.4 |
| 2.97 | 2 | 9.5 | 9.5 | 81.0 |
| 4.46 | 1 | 4.8 | 4.8 | 85.7 |
| 6.84 | 2 | 9.5 | 9.5 | 95.2 |
| 9.22 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P6DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -1.661 | Std Err | 1.336 | Median | -.300 |
| Mode | -5.856 | Std Dev | 6.123 | Variance | 37.496 |
| Range | 22.225 | Minimum | -13.000 | Maximum | 9.225 |

Valid Cases 21

P7DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -9.77 | 1 | 4.8 | 4.8 | 4.8 |
| -8.98 | 1 | 4.8 | 4.8 | 9.5 |
| -8.18 | 1 | 4.8 | 4.8 | 14.3 |
| -5.80 | 1 | 4.8 | 4.8 | 19.0 |
| -5.01 | 1 | 4.8 | 4.8 | 23.8 |
| -2.63 | 1 | 4.8 | 4.8 | 28.6 |
| -1.04 | 1 | 4.8 | 4.8 | 33.3 |
| -.24 | 3 | 14.3 | 14.3 | 47.6 |
| .55 | 3 | 14.3 | 14.3 | 61.9 |
| 2.93 | 2 | 9.5 | 9.5 | 71.4 |
| 4.52 | 2 | 9.5 | 9.5 | 81.0 |
| 6.11 | 1 | 4.8 | 4.8 | 85.7 |
| 6.90 | 1 | 4.8 | 4.8 | 90.5 |
| 7.69 | 2 | 9.5 | 9.5 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P7DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .134 | Std Err | 1.167 | Median | .550 |
| Mode | -.244 | Std Dev | 5.346 | Variance | 28.580 |
| Range | 17.463 | Minimum | -9.769 | Maximum | 7.694 |

Valid Cases 21

P8DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -15.71 | 1 | 4.8 | 4.8 | 4.8 |
| -14.92 | 1 | 4.8 | 4.8 | 9.5 |
| -11.74 | 1 | 4.8 | 4.8 | 14.3 |
| -8.57 | 1 | 4.8 | 4.8 | 19.0 |
| -5.39 | 2 | 9.5 | 9.5 | 28.6 |
| -2.22 | 2 | 9.5 | 9.5 | 38.1 |
| -1.43 | 1 | 4.8 | 4.8 | 42.9 |
| .96 | 3 | 14.3 | 14.3 | 57.1 |
| 2.54 | 1 | 4.8 | 4.8 | 61.9 |
| 4.13 | 2 | 9.5 | 9.5 | 71.4 |
| 5.72 | 1 | 4.8 | 4.8 | 76.2 |
| 6.51 | 1 | 4.8 | 4.8 | 81.0 |
| 8.10 | 1 | 4.8 | 4.8 | 85.7 |
| 8.89 | 1 | 4.8 | 4.8 | 90.5 |
| 9.69 | 1 | 4.8 | 4.8 | 95.2 |
| 16.04 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P8DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .049 | Std Err | 1.803 | Median | .956 |
| Mode | .956 | Std Dev | 8.261 | Variance | 68.251 |
| Range | 31.750 | Minimum | -15.713 | Maximum | 16.037 |

Valid Cases 21

P9DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -14.83 | 1 | 4.8 | 4.8 | 4.8 |
| -13.24 | 2 | 9.5 | 9.5 | 14.3 |
| -7.69 | 1 | 4.8 | 4.8 | 19.0 |
| -6.10 | 1 | 4.8 | 4.8 | 23.8 |
| -2.93 | 1 | 4.8 | 4.8 | 28.6 |
| -2.13 | 1 | 4.8 | 4.8 | 33.3 |
| -1.34 | 1 | 4.8 | 4.8 | 38.1 |
| .25 | 1 | 4.8 | 4.8 | 42.9 |
| 1.04 | 1 | 4.8 | 4.8 | 47.6 |
| 2.63 | 1 | 4.8 | 4.8 | 52.4 |
| 3.42 | 1 | 4.8 | 4.8 | 57.1 |
| 4.22 | 1 | 4.8 | 4.8 | 61.9 |
| 5.81 | 2 | 9.5 | 9.5 | 71.4 |
| 6.60 | 2 | 9.5 | 9.5 | 81.0 |
| 7.39 | 1 | 4.8 | 4.8 | 85.7 |
| 9.77 | 2 | 9.5 | 9.5 | 95.2 |
| 10.57 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P9DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .590 | Std Err | 1.707 | Median | 2.631 |
| Mode | -13.244 | Std Dev | 7.824 | Variance | 61.213 |
| Range | 25.400 | Minimum | -14.831 | Maximum | 10.569 |

Valid Cases 21

P10DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -17.04 | 1 | 4.8 | 4.8 | 4.8 |
| -16.25 | 1 | 4.8 | 4.8 | 9.5 |
| -13.08 | 1 | 4.8 | 4.8 | 14.3 |
| -8.31 | 1 | 4.8 | 4.8 | 19.0 |
| -5.14 | 1 | 4.8 | 4.8 | 23.8 |
| -4.34 | 1 | 4.8 | 4.8 | 28.6 |
| -3.55 | 1 | 4.8 | 4.8 | 33.3 |
| -1.17 | 1 | 4.8 | 4.8 | 38.1 |
| .42 | 2 | 9.5 | 9.5 | 47.6 |
| 2.01 | 2 | 9.5 | 9.5 | 57.1 |
| 5.18 | 3 | 14.3 | 14.3 | 71.4 |
| 6.77 | 1 | 4.8 | 4.8 | 76.2 |
| 7.56 | 1 | 4.8 | 4.8 | 81.0 |
| 9.15 | 1 | 4.8 | 4.8 | 85.7 |
| 10.74 | 2 | 9.5 | 9.5 | 95.2 |
| 11.53 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P10DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .381 | Std Err | 1.884 | Median | 2.006 |
| Mode | 5.181 | Std Dev | 8.631 | Variance | 74.501 |
| Range | 28.575 | Minimum | -17.044 | Maximum | 11.531 |

Valid Cases 21

P11DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -15.16 | 1 | 4.8 | 4.8 | 4.8 |
| -14.37 | 1 | 4.8 | 4.8 | 9.5 |
| -8.81 | 1 | 4.8 | 4.8 | 14.3 |
| -7.23 | 1 | 4.8 | 4.8 | 19.0 |
| -5.64 | 1 | 4.8 | 4.8 | 23.8 |
| -4.84 | 1 | 4.8 | 4.8 | 28.6 |
| -1.67 | 2 | 9.5 | 9.5 | 38.1 |
| -.08 | 2 | 9.5 | 9.5 | 47.6 |
| .71 | 2 | 9.5 | 9.5 | 57.1 |
| 1.51 | 1 | 4.8 | 4.8 | 61.9 |
| 3.09 | 1 | 4.8 | 4.8 | 66.7 |
| 3.89 | 1 | 4.8 | 4.8 | 71.4 |
| 7.06 | 1 | 4.8 | 4.8 | 76.2 |
| 7.86 | 1 | 4.8 | 4.8 | 81.0 |
| 9.44 | 1 | 4.8 | 4.8 | 85.7 |
| 10.24 | 1 | 4.8 | 4.8 | 90.5 |
| 11.03 | 1 | 4.8 | 4.8 | 95.2 |
| 12.62 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P11DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .410 | Std Err | 1.717 | Median | .712 |
| Mode | -1.669 | Std Dev | 7.868 | Variance | 61.900 |
| Range | 27.781 | Minimum | -15.163 | Maximum | 12.619 |

Valid Cases 21

P12DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -14.53 | 1 | 4.8 | 4.8 | 4.8 |
| -10.56 | 1 | 4.8 | 4.8 | 9.5 |
| -8.18 | 2 | 9.5 | 9.5 | 19.0 |
| -5.80 | 1 | 4.8 | 4.8 | 23.8 |
| -4.21 | 1 | 4.8 | 4.8 | 28.6 |
| -3.42 | 2 | 9.5 | 9.5 | 38.1 |
| -1.83 | 1 | 4.8 | 4.8 | 42.9 |
| -1.04 | 2 | 9.5 | 9.5 | 52.4 |
| -.24 | 1 | 4.8 | 4.8 | 57.1 |
| 2.14 | 1 | 4.8 | 4.8 | 61.9 |
| 2.93 | 1 | 4.8 | 4.8 | 66.7 |
| 4.52 | 1 | 4.8 | 4.8 | 71.4 |
| 6.11 | 2 | 9.5 | 9.5 | 81.0 |
| 9.28 | 1 | 4.8 | 4.8 | 85.7 |
| 10.87 | 1 | 4.8 | 4.8 | 90.5 |
| 11.66 | 1 | 4.8 | 4.8 | 95.2 |
| 12.46 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P12DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .172 | Std Err | 1.647 | Median | -1.038 |
| Mode | -8.181 | Std Dev | 7.549 | Variance | 56.995 |
| Range | 26.987 | Minimum | -14.531 | Maximum | 12.456 |

Valid Cases 21

P13DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -7.10 | 1 | 4.8 | 4.8 | 4.8 |
| -6.31 | 1 | 4.8 | 4.8 | 9.5 |
| -4.72 | 2 | 9.5 | 9.5 | 19.0 |
| -3.92 | 1 | 4.8 | 4.8 | 23.8 |
| -3.13 | 3 | 14.3 | 14.3 | 38.1 |
| -2.34 | 1 | 4.8 | 4.8 | 42.9 |
| .04 | 2 | 9.5 | 9.5 | 52.4 |
| .84 | 1 | 4.8 | 4.8 | 57.1 |
| 1.63 | 1 | 4.8 | 4.8 | 61.9 |
| 2.42 | 2 | 9.5 | 9.5 | 71.4 |
| 3.22 | 1 | 4.8 | 4.8 | 76.2 |
| 4.81 | 1 | 4.8 | 4.8 | 81.0 |
| 5.60 | 1 | 4.8 | 4.8 | 85.7 |
| 6.39 | 2 | 9.5 | 9.5 | 95.2 |
| 7.98 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P13DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .157 | Std Err | .988 | Median | .044 |
| Mode | -3.131 | Std Dev | 4.527 | Variance | 20.494 |
| Range | 15.081 | Minimum | -7.100 | Maximum | 7.981 |

Valid Cases 21

P14DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -13.12 | 1 | 4.8 | 4.8 | 4.8 |
| -8.36 | 1 | 4.8 | 4.8 | 9.5 |
| -7.56 | 1 | 4.8 | 4.8 | 14.3 |
| -5.18 | 2 | 9.5 | 9.5 | 23.8 |
| -3.59 | 1 | 4.8 | 4.8 | 28.6 |
| -2.80 | 2 | 9.5 | 9.5 | 38.1 |
| -1.21 | 2 | 9.5 | 9.5 | 47.6 |
| .37 | 3 | 14.3 | 14.3 | 61.9 |
| 1.17 | 1 | 4.8 | 4.8 | 66.7 |
| 2.76 | 1 | 4.8 | 4.8 | 71.4 |
| 3.55 | 1 | 4.8 | 4.8 | 76.2 |
| 4.34 | 1 | 4.8 | 4.8 | 81.0 |
| 7.52 | 1 | 4.8 | 4.8 | 85.7 |
| 8.31 | 1 | 4.8 | 4.8 | 90.5 |
| 9.11 | 1 | 4.8 | 4.8 | 95.2 |
| 9.90 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P14DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.154 | Std Err | 1.320 | Median | .375 |
| Mode | .375 | Std Dev | 6.047 | Variance | 36.563 |
| Range | 23.019 | Minimum | -13.119 | Maximum | 9.900 |

Valid Cases 21

P15DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -19.88 | 1 | 4.8 | 4.8 | 4.8 |
| -11.15 | 1 | 4.8 | 4.8 | 9.5 |
| -8.77 | 2 | 9.5 | 9.5 | 19.0 |
| -7.18 | 2 | 9.5 | 9.5 | 28.6 |
| -2.42 | 1 | 4.8 | 4.8 | 33.3 |
| -.83 | 2 | 9.5 | 9.5 | 42.9 |
| -.04 | 2 | 9.5 | 9.5 | 52.4 |
| .76 | 1 | 4.8 | 4.8 | 57.1 |
| 1.55 | 1 | 4.8 | 4.8 | 61.9 |
| 2.34 | 1 | 4.8 | 4.8 | 66.7 |
| 3.14 | 1 | 4.8 | 4.8 | 71.4 |
| 5.52 | 1 | 4.8 | 4.8 | 76.2 |
| 7.90 | 2 | 9.5 | 9.5 | 85.7 |
| 10.28 | 2 | 9.5 | 9.5 | 95.2 |
| 12.66 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P15DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.226 | Std Err | 1.778 | Median | -.038 |
| Mode | -8.769 | Std Dev | 8.149 | Variance | 66.400 |
| Range | 32.544 | Minimum | -19.881 | Maximum | 12.662 |

Valid Cases 21

P16DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -19.13 | 1 | 4.8 | 4.8 | 4.8 |
| -12.78 | 1 | 4.8 | 4.8 | 9.5 |
| -11.99 | 1 | 4.8 | 4.8 | 14.3 |
| -10.40 | 1 | 4.8 | 4.8 | 19.0 |
| -8.02 | 2 | 9.5 | 9.5 | 28.6 |
| -7.23 | 1 | 4.8 | 4.8 | 33.3 |
| -6.43 | 1 | 4.8 | 4.8 | 38.1 |
| -3.26 | 1 | 4.8 | 4.8 | 42.9 |
| -2.46 | 1 | 4.8 | 4.8 | 47.6 |
| .71 | 3 | 14.3 | 14.3 | 61.9 |
| 1.51 | 1 | 4.8 | 4.8 | 66.7 |
| 5.47 | 1 | 4.8 | 4.8 | 71.4 |
| 6.27 | 1 | 4.8 | 4.8 | 76.2 |
| 7.06 | 2 | 9.5 | 9.5 | 85.7 |
| 9.44 | 1 | 4.8 | 4.8 | 90.5 |
| 22.94 | 1 | 4.8 | 4.8 | 95.2 |
| 24.52 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P16DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.157 | Std Err | 2.395 | Median | .712 |
| Mode | .712 | Std Dev | 10.975 | Variance | 120.457 |
| Range | 43.656 | Minimum | -19.131 | Maximum | 24.525 |

Valid Cases 21

P17DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -31.04 | 1 | 4.8 | 4.8 | 4.8 |
| -24.69 | 1 | 4.8 | 4.8 | 9.5 |
| -12.78 | 2 | 9.5 | 9.5 | 19.0 |
| -10.40 | 2 | 9.5 | 9.5 | 28.6 |
| -7.23 | 1 | 4.8 | 4.8 | 33.3 |
| -5.64 | 1 | 4.8 | 4.8 | 38.1 |
| -4.05 | 1 | 4.8 | 4.8 | 42.9 |
| -2.46 | 1 | 4.8 | 4.8 | 47.6 |
| -1.67 | 1 | 4.8 | 4.8 | 52.4 |
| -.08 | 1 | 4.8 | 4.8 | 57.1 |
| 3.09 | 2 | 9.5 | 9.5 | 66.7 |
| 3.89 | 1 | 4.8 | 4.8 | 71.4 |
| 6.27 | 1 | 4.8 | 4.8 | 76.2 |
| 11.83 | 1 | 4.8 | 4.8 | 81.0 |
| 12.62 | 1 | 4.8 | 4.8 | 85.7 |
| 13.41 | 2 | 9.5 | 9.5 | 95.2 |
| 15.79 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P17DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -1.896 | Std Err | 2.731 | Median | -1.669 |
| Mode | -12.781 | Std Dev | 12.513 | Variance | 156.574 |
| Range | 46.831 | Minimum | -31.037 | Maximum | 15.794 |

Valid Cases 21

P18DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -24.61 | 1 | 4.8 | 4.8 | 4.8 |
| -23.02 | 1 | 4.8 | 4.8 | 9.5 |
| -16.67 | 1 | 4.8 | 4.8 | 14.3 |
| -15.88 | 1 | 4.8 | 4.8 | 19.0 |
| -8.73 | 1 | 4.8 | 4.8 | 23.8 |
| -7.94 | 1 | 4.8 | 4.8 | 28.6 |
| -5.56 | 2 | 9.5 | 9.5 | 38.1 |
| -4.76 | 1 | 4.8 | 4.8 | 42.9 |
| -3.97 | 1 | 4.8 | 4.8 | 47.6 |
| -3.18 | 1 | 4.8 | 4.8 | 52.4 |
| -2.38 | 1 | 4.8 | 4.8 | 57.1 |
| -1.59 | 1 | 4.8 | 4.8 | 61.9 |
| -.79 | 1 | 4.8 | 4.8 | 66.7 |
| -.00 | 1 | 4.8 | 4.8 | 71.4 |
| 1.59 | 1 | 4.8 | 4.8 | 76.2 |
| 2.38 | 1 | 4.8 | 4.8 | 81.0 |
| 7.14 | 1 | 4.8 | 4.8 | 85.7 |
| 11.91 | 1 | 4.8 | 4.8 | 90.5 |
| 12.70 | 1 | 4.8 | 4.8 | 95.2 |
| 23.02 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P18DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -3.137 | Std Err | 2.492 | Median | -3.175 |
| Mode | -5.556 | Std Dev | 11.421 | Variance | 130.448 |
| Range | 47.625 | Minimum | -24.606 | Maximum | 23.019 |

Valid Cases 21

P19DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -21.42 | 2 | 9.5 | 9.5 | 9.5 |
| -15.87 | 1 | 4.8 | 4.8 | 14.3 |
| -15.08 | 1 | 4.8 | 4.8 | 19.0 |
| -9.52 | 2 | 9.5 | 9.5 | 28.6 |
| -6.34 | 1 | 4.8 | 4.8 | 33.3 |
| -4.76 | 2 | 9.5 | 9.5 | 42.9 |
| -.79 | 3 | 14.3 | 14.3 | 57.1 |
| .80 | 1 | 4.8 | 4.8 | 61.9 |
| 1.59 | 1 | 4.8 | 4.8 | 66.7 |
| 2.39 | 3 | 14.3 | 14.3 | 81.0 |
| 5.56 | 1 | 4.8 | 4.8 | 85.7 |
| 7.15 | 1 | 4.8 | 4.8 | 90.5 |
| 9.53 | 1 | 4.8 | 4.8 | 95.2 |
| 11.12 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P19DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -3.244 | Std Err | 2.048 | Median | -.787 |
| Mode | -.787 | Std Dev | 9.385 | Variance | 88.073 |
| Range | 32.544 | Minimum | -21.425 | Maximum | 11.119 |

Valid Cases 21

P20DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -8.49 | 1 | 4.8 | 4.8 | 4.8 |
| -7.69 | 1 | 4.8 | 4.8 | 9.5 |
| -6.90 | 1 | 4.8 | 4.8 | 14.3 |
| -5.31 | 1 | 4.8 | 4.8 | 19.0 |
| -4.52 | 2 | 9.5 | 9.5 | 28.6 |
| -2.93 | 3 | 14.3 | 14.3 | 42.9 |
| -.55 | 2 | 9.5 | 9.5 | 52.4 |
| .24 | 1 | 4.8 | 4.8 | 57.1 |
| 1.04 | 1 | 4.8 | 4.8 | 61.9 |
| 2.63 | 3 | 14.3 | 14.3 | 76.2 |
| 5.01 | 1 | 4.8 | 4.8 | 81.0 |
| 7.39 | 1 | 4.8 | 4.8 | 85.7 |
| 8.18 | 1 | 4.8 | 4.8 | 90.5 |
| 8.97 | 2 | 9.5 | 9.5 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P20DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .017 | Std Err | 1.199 | Median | -.550 |
| Mode | -2.931 | Std Dev | 5.494 | Variance | 30.188 |
| Range | 17.462 | Minimum | -8.487 | Maximum | 8.975 |

Valid Cases 21

P21DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -10.53 | 1 | 4.8 | 4.8 | 4.8 |
| -7.36 | 2 | 9.5 | 9.5 | 14.3 |
| -5.77 | 1 | 4.8 | 4.8 | 19.0 |
| -4.98 | 1 | 4.8 | 4.8 | 23.8 |
| -4.18 | 1 | 4.8 | 4.8 | 28.6 |
| -2.59 | 1 | 4.8 | 4.8 | 33.3 |
| -1.80 | 1 | 4.8 | 4.8 | 38.1 |
| -1.01 | 1 | 4.8 | 4.8 | 42.9 |
| -.21 | 3 | 14.3 | 14.3 | 57.1 |
| 2.17 | 1 | 4.8 | 4.8 | 61.9 |
| 2.96 | 2 | 9.5 | 9.5 | 71.4 |
| 6.14 | 1 | 4.8 | 4.8 | 76.2 |
| 6.93 | 2 | 9.5 | 9.5 | 85.7 |
| 8.52 | 1 | 4.8 | 4.8 | 90.5 |
| 9.31 | 2 | 9.5 | 9.5 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P21DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .430 | Std Err | 1.295 | Median | -.213 |
| Mode | -.213 | Std Dev | 5.933 | Variance | 35.195 |
| Range | 19.844 | Minimum | -10.531 | Maximum | 9.312 |

Valid Cases 21

P22DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -13.41 | 1 | 4.8 | 4.8 | 4.8 |
| -8.64 | 1 | 4.8 | 4.8 | 9.5 |
| -6.26 | 1 | 4.8 | 4.8 | 14.3 |
| -4.68 | 1 | 4.8 | 4.8 | 19.0 |
| -3.88 | 1 | 4.8 | 4.8 | 23.8 |
| -3.09 | 1 | 4.8 | 4.8 | 28.6 |
| -2.29 | 1 | 4.8 | 4.8 | 33.3 |
| -1.50 | 1 | 4.8 | 4.8 | 38.1 |
| -.71 | 3 | 14.3 | 14.3 | 52.4 |
| .09 | 1 | 4.8 | 4.8 | 57.1 |
| .88 | 3 | 14.3 | 14.3 | 71.4 |
| 1.67 | 1 | 4.8 | 4.8 | 76.2 |
| 7.23 | 2 | 9.5 | 9.5 | 85.7 |
| 8.02 | 1 | 4.8 | 4.8 | 90.5 |
| 10.41 | 1 | 4.8 | 4.8 | 95.2 |
| 13.58 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P22DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .239 | Std Err | 1.393 | Median | -.706 |
| Mode | -.706 | Std Dev | 6.383 | Variance | 40.740 |
| Range | 26.987 | Minimum | -13.406 | Maximum | 13.581 |

Valid Cases 21

P23DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -10.49 | 1 | 4.8 | 4.8 | 4.8 |
| -9.69 | 1 | 4.8 | 4.8 | 9.5 |
| -8.11 | 2 | 9.5 | 9.5 | 19.0 |
| -6.52 | 4 | 19.0 | 19.0 | 38.1 |
| -4.93 | 1 | 4.8 | 4.8 | 42.9 |
| -4.14 | 1 | 4.8 | 4.8 | 47.6 |
| -.96 | 1 | 4.8 | 4.8 | 52.4 |
| -.17 | 1 | 4.8 | 4.8 | 57.1 |
| .62 | 1 | 4.8 | 4.8 | 61.9 |
| 3.01 | 1 | 4.8 | 4.8 | 66.7 |
| 4.59 | 1 | 4.8 | 4.8 | 71.4 |
| 5.39 | 1 | 4.8 | 4.8 | 76.2 |
| 6.18 | 1 | 4.8 | 4.8 | 81.0 |
| 6.97 | 1 | 4.8 | 4.8 | 85.7 |
| 9.36 | 1 | 4.8 | 4.8 | 90.5 |
| 11.74 | 1 | 4.8 | 4.8 | 95.2 |
| 20.47 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P23DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.207 | Std Err | 1.785 | Median | -.963 |
| Mode | -6.519 | Std Dev | 8.178 | Variance | 66.877 |
| Range | 30.956 | Minimum | -10.488 | Maximum | 20.469 |

Valid Cases 21

P24DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -15.26 | 1 | 4.8 | 4.8 | 4.8 |
| -13.67 | 1 | 4.8 | 4.8 | 9.5 |
| -6.53 | 1 | 4.8 | 4.8 | 14.3 |
| -4.94 | 1 | 4.8 | 4.8 | 19.0 |
| -4.14 | 1 | 4.8 | 4.8 | 23.8 |
| -3.35 | 1 | 4.8 | 4.8 | 28.6 |
| -.97 | 2 | 9.5 | 9.5 | 38.1 |
| -.17 | 1 | 4.8 | 4.8 | 42.9 |
| .62 | 2 | 9.5 | 9.5 | 52.4 |
| 1.41 | 1 | 4.8 | 4.8 | 57.1 |
| 3.00 | 2 | 9.5 | 9.5 | 66.7 |
| 4.59 | 1 | 4.8 | 4.8 | 71.4 |
| 5.38 | 1 | 4.8 | 4.8 | 76.2 |
| 6.17 | 2 | 9.5 | 9.5 | 85.7 |
| 6.97 | 1 | 4.8 | 4.8 | 90.5 |
| 8.56 | 1 | 4.8 | 4.8 | 95.2 |
| 12.53 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

P24DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .430 | Std Err | 1.495 | Median | .619 |
| Mode | -.969 | Std Dev | 6.851 | Variance | 46.932 |
| Range | 27.781 | Minimum | -15.256 | Maximum | 12.525 |

Valid Cases 21

P25DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -14.59 | 1 | 4.8 | 4.8 | 4.8 |
| -13.79 | 1 | 4.8 | 4.8 | 9.5 |
| -12.21 | 1 | 4.8 | 4.8 | 14.3 |
| -11.41 | 1 | 4.8 | 4.8 | 19.0 |
| -8.24 | 1 | 4.8 | 4.8 | 23.8 |
| -4.27 | 1 | 4.8 | 4.8 | 28.6 |
| -3.48 | 1 | 4.8 | 4.8 | 33.3 |
| -1.89 | 3 | 14.3 | 14.3 | 47.6 |
| -.30 | 1 | 4.8 | 4.8 | 52.4 |
| 2.08 | 1 | 4.8 | 4.8 | 57.1 |
| 2.88 | 1 | 4.8 | 4.8 | 61.9 |
| 3.67 | 1 | 4.8 | 4.8 | 66.7 |
| 4.46 | 1 | 4.8 | 4.8 | 71.4 |
| 6.05 | 1 | 4.8 | 4.8 | 76.2 |
| 9.22 | 1 | 4.8 | 4.8 | 81.0 |
| 11.61 | 1 | 4.8 | 4.8 | 85.7 |
| 13.99 | 1 | 4.8 | 4.8 | 90.5 |
| 15.57 | 1 | 4.8 | 4.8 | 95.2 |
| 20.34 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

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P25DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .758 | Std Err | 2.146 | Median | -.300 |
| Mode | -1.888 | Std Dev | 9.832 | Variance | 96.669 |
| Range | 34.925 | Minimum | -14.588 | Maximum | 20.337 |

Valid Cases 21

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P26DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -19.64 | 1 | 4.8 | 4.8 | 4.8 |
| -7.73 | 1 | 4.8 | 4.8 | 9.5 |
| -5.35 | 2 | 9.5 | 9.5 | 19.0 |
| -4.56 | 1 | 4.8 | 4.8 | 23.8 |
| -3.76 | 2 | 9.5 | 9.5 | 33.3 |
| -2.97 | 1 | 4.8 | 4.8 | 38.1 |
| -2.18 | 1 | 4.8 | 4.8 | 42.9 |
| -1.38 | 1 | 4.8 | 4.8 | 47.6 |
| -.59 | 3 | 14.3 | 14.3 | 61.9 |
| .21 | 1 | 4.8 | 4.8 | 66.7 |
| 1.00 | 1 | 4.8 | 4.8 | 71.4 |
| 1.79 | 1 | 4.8 | 4.8 | 76.2 |
| 2.59 | 1 | 4.8 | 4.8 | 81.0 |
| 5.76 | 1 | 4.8 | 4.8 | 85.7 |
| 6.56 | 1 | 4.8 | 4.8 | 90.5 |
| 7.35 | 1 | 4.8 | 4.8 | 95.2 |
| 9.73 | 1 | 4.8 | 4.8 | 100.0 |
| TOTAL | 21 | 100.0 | 100.0 | |

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P26DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -1.117 | Std Err | 1.361 | Median | -.588 |
| Mode | -.588 | Std Dev | 6.237 | Variance | 38.894 |
| Range | 29.369 | Minimum | -19.638 | Maximum | 9.731 |

Valid Cases 21

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APPENDIX C

PROBE DELTAS (PROBE VALUE - MEDIUM HEADFORM VALUE)
FOR SUBJECTS IN THE SIZE MEDIUM PASGT HELMET

## APPENDIX C

### PROBE DELTAS (PROBE VALUE - MEDIUM HEADFORM VALUE) FOR SUBJECTS IN THE SIZE MEDIUM PASGT HELMET

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Line 1: P1DELTA P2DELTA P3DELTA P4DELTA P5DELTA P6DELTA P7DELTA

Line 2: P8DELTA P9DELTA P10DELTA P11DELTA P12DELTA P13DELTA P14DELTA

Line 3: P15DELTA P16DELTA P17DELTA P18DELTA P19DELTA P20DELTA P21DELTA

Line 4: P22DELTA P23DELTA P24DELTA P25DELTA P26DELTA

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Note: Delta Values Greater Than 2.5 mm Indicate Loss of Recommended Standoff at a Given Probe Location.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=1 | -8.00 | -4.01 | -2.96 | 11.98 | 16.34 | -16.00 | 1.83 |
| | -6.60 | -9.48 | -13.08 | -11.90 | -16.83 | -4.64 | -2.42 |
| | -10.58 | -6.64 | -13.49 | -15.50 | 3.05 | 8.77 | 7.22 |
| | 9.90 | 16.00 | 3.59 | 14.00 | -8.94 | | |
| ID=5 | 2.32 | .76 | .21 | -10.24 | -11.44 | 14.96 | -20.39 |
| | -20.89 | -18.21 | -15.46 | -11.11 | -2.54 | -9.41 | -19.09 |
| | -13.75 | -7.43 | -11.11 | 18.63 | 11.78 | -15.04 | -23.74 |
| | -22.64 | -15.75 | -17.84 | -4.26 | 12.49 | | |
| ID=7 | 7.08 | -.83 | -4.55 | -3.89 | -.33 | -.92 | 1.83 |
| | .5[illegible] | 2.42 | 2.79 | 1.59 | 1.42 | -3.85 | -.04 |
| | 1.[illegible] | 2.09 | 5.56 | 4.34 | .67 | -3.93 | -.72 |
| | .37 | .92 | 2.01 | -1.08 | -.21 | | |
| ID=8 | [illegible] | -.04 | 8.94 | 4.04 | 2.05 | 1.46 | 9.77 |
| | [illegible] | 6.39 | 2.79 | 3.97 | 3.01 | 4.88 | 8.69 |
| | [illegible] | -1.88 | 2.38 | -2.01 | -3.30 | 2.42 | 10.39 |
| | 5 | 4.89 | 2.80 | .51 | -1.80 | | |
| ID=9 | -6.41 | -4.01 | -1.38 | 1.66 | 4.43 | 3.05 | -2.14 |
| | -6.60 | -5.51 | -1.97 | .01 | 1.42 | -7.03 | -4.01 |
| | -4.23 | -1.88 | -5.56 | -5.18 | -4.89 | .04 | 4.04 |
| | 2.76 | 9.65 | 4.39 | 7.65 | 6.93 | | |
| ID=10 | -4.03 | -6.39 | 1.01 | -1.51 | 12.37 | -16.00 | -2.14 |
| | -1.04 | -4.72 | -5.14 | -8.73 | -12.07 | -3.06 | -.83 |
| | -3.43 | -3.46 | -5.56 | -9.94 | -17.59 | -1.55 | .87 |
| | 1.96 | 7.27 | 2.01 | 5.27 | -11.33 | | |
| ID=11 | -2.44 | -1.63 | -10.11 | 2.46 | -.33 | 11.78 | -7.69 |
| | -1.04 | 2.42 | 8.35 | 10.32 | 8.57 | -9.41 | -6.39 |
| | -8.99 | -1.08 | 3.17 | -.42 | 7.02 | -5.52 | -4.69 |
| | 6.72 | -1.46 | 5.97 | 2.09 | 9.31 | | |
| ID=15 | -2.44 | -1.63 | -3.76 | 7.22 | 5.22 | -10.44 | -2.93 |
| | -1.04 | 2.42 | 3.59 | -.79 | -7.31 | -2.26 | -3.21 |
| | -1.84 | 6.06 | 0.0 | -5.98 | -11.24 | 2.42 | 2.46 |
| | 4.34 | 10.44 | 3.59 | -.29 | -8.15 | | |
| ID=16 | 3.11 | -.04 | -6.93 | -7.07 | -6.68 | 8.61 | -6.11 |
| | -8.19 | -9.48 | -13.08 | -8.73 | -4.13 | -5.44 | -3.21 |
| | -3.43 | .51 | -4.76 | -.42 | 7.81 | -7.11 | -4.69 |
| | -5.98 | -9.40 | -8.31 | -9.02 | 3.76 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=18 | 2.32 | 7.90 | 11.33 | 12.78 | 10.78 | -19.18 | 11.36 |
| | 6.89 | 7.19 | 8.97 | -.79 | -4.93 | 13.61 | 8.69 |
| | 2.92 | 11.62 | 3.17 | 20.22 | 6.22 | 15.91 | 9.60 |
| | 7.52 | 6.47 | 9.15 | 2.89 | -14.50 | | |
| ID=19 | 13.43 | 9.49 | 4.97 | -2.31 | -1.92 | -4.89 | 4.21 |
| | 3.72 | -.78 | .41 | -2.38 | -4.13 | 11.23 | 7.11 |
| | 7.68 | 10.03 | 7.14 | 4.34 | 8.43 | .04 | -.72 |
| | -5.18 | -.67 | -5.93 | -11.40 | -.21 | | |
| ID=20 | -7.21 | -7.18 | -1.38 | -.72 | 4.43 | 5.43 | -1.34 |
| | -3.43 | .04 | 2.00 | 3.97 | 3.01 | -3.06 | -4.01 |
| | -7.40 | -5.05 | -4.76 | -6.77 | -.13 | 1.83 | .87 |
| | 1.17 | .92 | 2.80 | 5.27 | 6.14 | | |
| ID=23 | 7.88 | 5.52 | -2.96 | -3.10 | -4.30 | 4.64 | -3.73 |
| | -2.63 | -2.34 | -.38 | .80 | 3.81 | -3.06 | -4.01 |
| | -1.05 | 3.68 | 3.97 | 7.52 | 5.43 | -3.14 | -5.48 |
| | -3.59 | -8.61 | -1.17 | .51 | 2.17 | | |
| ID=24 | 1.52 | 3.93 | 6.94 | 4.04 | -3.51 | -.92 | 8.18 |
| | 3.72 | 2.42 | 2.00 | 3.18 | .63 | 4.88 | 7.11 |
| | 5.30 | .51 | 6.35 | 5.14 | 3.05 | 4.01 | 8.01 |
| | 1.96 | -9.40 | -6.73 | -11.40 | -10.53 | | |
| ID=25 | 3.11 | 2.34 | 6.56 | .87 | -3.51 | -.92 | 8.18 |
| | 11.66 | 12.74 | 13.91 | 8.74 | 3.81 | 2.50 | 7.90 |
| | 8.47 | 3.68 | 12.70 | -2.80 | -1.71 | 2.42 | 4.84 |
| | 5.93 | -3.84 | 8.36 | -4.26 | -4.18 | | |
| ID=27 | 1.52 | -2.42 | -8.52 | -5.48 | -5.89 | 5.43 | -11.66 |
| | -5.01 | -3.93 | -1.97 | .80 | -.16 | -7.03 | -10.36 |
| | -5.02 | .51 | .79 | 7.52 | 7.02 | -7.11 | -10.24 |
| | -9.15 | -6.23 | -8.31 | -2.67 | .58 | | |
| ID=28 | 2.32 | 2.34 | -.58 | 2.46 | 51.26 | -.92 | 5.80 |
| | 6.10 | 4.01 | 7.56 | 7.15 | 6.98 | -.68 | 31.71 |
| | 4.51 | 3.68 | 7.94 | 7.52 | -.13 | 2.42 | 8.81 |
| | 5.93 | 3.30 | 4.39 | 3.68 | -1.01 | | |
| ID=29 | 3.91 | 3.93 | 3.39 | -7.07 | -7.48 | -4.09 | 5.01 |
| | 2.92 | 1.63 | -.38 | -1.58 | -3.34 | 4.88 | 7.90 |
| | 6.89 | 7.65 | 3.17 | 3.55 | -4.89 | -2.34 | -.72 |
| | -3.59 | -2.26 | -3.55 | -7.43 | -5.77 | | |
| ID=34 | 7.88 | -5.59 | -4.55 | -10.24 | -.33 | .67 | -2.93 |
| | 2.13 | .84 | 2.00 | 4.77 | 3.81 | -7.03 | -4.01 |
| | 1.33 | -1.08 | 2.38 | 1.17 | -.92 | -8.69 | -7.07 |
| | -2.80 | -5.43 | -.38 | -.29 | 1.37 | | |
| ID=50 | 3.11 | -4.01 | -7.72 | -8.66 | -6.68 | 3.84 | -3.73 |
| | -6.60 | -5.51 | -1.17 | .80 | 1.42 | -5.44 | -4.01 |
| | -5.02 | -1.88 | 3.17 | 2.76 | 3.84 | -3.93 | -3.89 |
| | -4.39 | -.67 | -.38 | 2.09 | 2.96 | | |
| ID=52 | -2.44 | .76 | 6.56 | 4.84 | 4.43 | -3.30 | 8.18 |
| | -1.04 | .04 | -.38 | -1.58 | -2.54 | 5.67 | 3.93 |
| | -2.64 | 2.89 | -4.76 | -6.77 | -8.86 | 7.97 | 8.01 |
| | 1.96 | -2.26 | -1.96 | -3.46 | -5.77 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=53 | 9.46 | 6.31 | 6.56 | 7.22 | 2.05 | -10.44 | 9.77 |
| | 3.72 | 4.01 | .41 | -2.38 | -8.10 | 6.47 | 7.11 |
| | 2.92 | 6.06 | .79 | -2.01 | -12.03 | 7.97 | 7.22 |
| | 1.17 | 2.51 | -1.17 | -2.67 | -10.53 | | |
| ID=55 | 9.46 | 2.34 | -2.17 | -6.27 | -5.89 | 3.05 | -2.14 |
| | -1.84 | .04 | -1.97 | .01 | 4.60 | 4.09 | .76 |
| | 2.13 | 2.09 | 2.38 | 18.63 | 7.81 | -2.34 | -7.07 |
| | -9.15 | -12.58 | -13.87 | -11.40 | -3.39 | | |
| ID=56 | -.86 | 3.93 | 1.01 | .08 | -2.71 | -.13 | -.55 |
| | .54 | .04 | 2.00 | 1.59 | 1.42 | 1.71 | -.04 |
| | 2.92 | 2.09 | .79 | -2.01 | -.92 | .83 | .87 |
| | 1.17 | 1.71 | -.38 | -1.88 | -.21 | | |
| ID=57 | 10.26 | 2.34 | -6.14 | -6.27 | -5.09 | 1.46 | -9.28 |
| | -8.19 | -9.48 | -9.91 | -9.52 | -7.31 | -3.06 | -5.59 |
| | -2.64 | 5.27 | -.79 | 5.93 | .67 | -7.90 | -11.83 |
| | -13.91 | -7.81 | -10.69 | -6.64 | -1.01 | | |
| ID=58 | .73 | -.83 | -4.55 | -5.48 | -1.92 | 5.43 | -6.90 |
| | -9.78 | -9.48 | -5.94 | -2.38 | -.16 | -4.64 | -4.01 |
| | -5.02 | -1.88 | -3.97 | -3.59 | 2.26 | -5.52 | -9.45 |
| | -9.15 | -7.02 | -11.49 | .51 | 5.34 | | |
| ID=59 | .73 | -5.59 | -9.31 | -6.27 | -4.30 | 3.84 | -10.87 |
| | .54 | 4.01 | 2.00 | 4.77 | 7.77 | -8.61 | -10.36 |
| | -2.64 | -1.08 | 5.56 | 10.69 | 8.61 | -10.28 | -9.45 |
| | -3.59 | -9.40 | .42 | -5.84 | -2.59 | | |
| ID=60 | 14.22 | 6.31 | .21 | -13.42 | -17.00 | 4.64 | -3.73 |
| | 3.72 | 3.22 | 5.17 | 8.74 | 11.74 | -3.06 | -.83 |
| | 7.68 | 9.24 | 12.70 | 16.25 | 10.19 | -8.69 | -11.04 |
| | -9.15 | -18.93 | -7.52 | -11.40 | -5.77 | | |
| ID=63 | .73 | 4.72 | 5.77 | .87 | .46 | -3.30 | 4.21 |
| | -4.22 | -7.10 | -11.49 | -10.31 | -7.31 | 5.67 | 4.72 |
| | 1.33 | 2.89 | -6.35 | -2.01 | -4.89 | 2.42 | .07 |
| | -7.56 | -4.64 | -11.49 | -7.43 | -6.56 | | |
| ID=64 | 3.91 | 2.34 | 3.39 | -4.69 | -2.71 | .67 | .24 |
| | -1.84 | -2.34 | -1.97 | .01 | -.96 | 4.88 | 1.55 |
| | 3.71 | 2.89 | 2.38 | 2.76 | 2.26 | .83 | -1.51 |
| | -4.39 | -6.23 | -3.55 | -6.64 | -.21 | | |
| ID=65 | 11.84 | -1.63 | -10.11 | -12.63 | -12.24 | 9.40 | -14.04 |
| | -10.57 | -6.31 | -.38 | 3.97 | 7.77 | -8.61 | -10.36 |
| | -2.64 | 4.47 | 7.14 | 12.28 | 14.96 | -11.08 | -15.80 |
| | -19.47 | -16.54 | -12.28 | -16.96 | -1.01 | | |
| ID=67 | -.06 | -1.63 | -1.38 | 4.04 | 7.61 | -2.51 | -7.69 |
| | -7.39 | -7.10 | -4.35 | -1.58 | .63 | -6.23 | -8.77 |
| | -6.61 | -.29 | -3.97 | -4.39 | -2.51 | .04 | -6.28 |
| | -2.01 | 4.89 | -.38 | 3.68 | -1.01 | | |
| ID=68 | 9.46 | -.83 | -8.52 | -11.04 | -7.48 | 4.64 | -7.69 |
| | -1.04 | -.75 | -2.76 | 1.59 | 1.42 | -4.64 | -.83 |
| | 5.30 | 13.21 | 8.73 | 18.63 | 8.61 | -8.69 | -9.45 |
| | -8.36 | -10.19 | -8.31 | -7.43 | -1.80 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=69 | 5.49 | 1.55 | -6.14 | -7.86 | -12.24 | 10.99 | -2.93 |
| | -5.01 | -3.13 | -1.97 | .01 | 1.42 | -3.85 | -.04 |
| | .54 | 3.68 | 4.76 | 11.49 | 12.57 | -7.11 | -7.86 |
| | -6.77 | -3.84 | -7.52 | -8.23 | 6.93 | | |
| ID=72 | 1.52 | -2.42 | -6.14 | -6.27 | -3.51 | 5.43 | -3.73 |
| | -3.43 | -.75 | 1.21 | 3.18 | 2.22 | -4.64 | -1.63 |
| | -1.05 | 1.30 | 5.56 | 6.72 | 7.02 | -7.11 | -3.89 |
| | -6.77 | -13.37 | -1.17 | -6.64 | -.21 | | |
| ID=74 | -3.24 | -.83 | -2.17 | -5.48 | .46 | -.13 | 2.63 |
| | 7.69 | 7.98 | 8.35 | 5.56 | 3.01 | -1.47 | 3.14 |
| | 3.71 | -1.88 | 7.94 | -2.01 | -.92 | -4.72 | -3.10 |
| | .37 | 1.71 | 5.97 | 2.09 | 14.07 | | |
| ID=78 | -14.35 | -4.80 | 8.15 | 17.54 | 27.45 | -19.97 | 11.36 |
| | 10.07 | 7.98 | 8.35 | .80 | -8.89 | 4.09 | 3.14 |
| | -3.43 | -3.46 | -13.49 | -22.64 | -27.91 | 15.12 | 16.74 |
| | 19.42 | 22.35 | 21.85 | 20.35 | -5.77 | | |
| ID=82 | -.86 | -.04 | -4.55 | -3.10 | 1.26 | -1.71 | -6.90 |
| | -5.81 | -6.31 | -8.32 | -8.73 | -7.31 | -5.44 | -6.39 |
| | -4.23 | .51 | -3.97 | .38 | -4.09 | -6.31 | -7.86 |
| | -7.56 | 7.27 | -8.31 | -1.88 | -5.77 | | |
| ID=84 | -.86 | 3.14 | 2.59 | .08 | -1.13 | 4.64 | 1.83 |
| | 5.31 | 8.77 | 6.76 | 10.32 | 10.95 | .91 | 10.28 |
| | 8.47 | 2.89 | 7.94 | 5.14 | 13.37 | .04 | -3.10 |
| | 5.93 | .12 | 5.18 | 3.68 | 3.76 | | |
| ID=85 | -7.21 | -2.42 | -2.17 | 12.78 | 16.34 | -17.59 | 1.83 |
| | 2.13 | 4.01 | 3.59 | -2.38 | -12.86 | -5.44 | -4.80 |
| | -7.40 | -11.40 | -5.56 | -12.33 | -16.79 | 4.80 | 8.81 |
| | 13.87 | 13.62 | 13.91 | 9.24 | -13.71 | | |
| ID=86 | -3.24 | -2.42 | 2.59 | 3.25 | 4.43 | 3.05 | -3.73 |
| | -11.36 | -11.86 | -13.08 | -10.31 | -6.51 | -.68 | -4.80 |
| | -8.99 | -8.23 | -13.49 | -11.53 | -4.09 | 1.63 | -3.10 |
| | -4.39 | 1.71 | -9.11 | 5.27 | 5.34 | | |
| ID=87 | -4.83 | -3.21 | 1.80 | -1.51 | .46 | 2.26 | .24 |
| | -2.63 | -3.13 | -.38 | -.79 | -.96 | .12 | -.83 |
| | -.26 | -8.23 | -1.59 | -4.39 | 11.78 | 3.21 | 2.46 |
| | .37 | -.67 | 3.59 | 4.47 | 2.96 | | |
| ID=88 | 2.32 | -.83 | -4.55 | 5.63 | 5.22 | 7.02 | -7.69 |
| | -5.81 | -2.34 | -.38 | .01 | -.16 | -6.23 | -8.77 |
| | -.26 | -2.67 | -3.97 | 21.81 | -2.51 | -2.34 | 4.84 |
| | -.42 | 4.09 | 4.39 | 8.44 | 7.72 | | |
| ID=90 | 3.91 | 10.28 | 4.97 | 3.25 | -2.71 | -4.09 | 11.36 |
| | 5.31 | 3.22 | 1.21 | -4.76 | -10.48 | 9.64 | 12.66 |
| | 8.47 | 9.24 | .79 | -5.18 | -.13 | 4.01 | 7.22 |
| | 2.76 | 3.30 | -.38 | -1.88 | -8.15 | | |
| ID=92 | -8.00 | -7.18 | -10.11 | 4.84 | 9.19 | 4.64 | -7.69 |
| | -8.19 | -6.31 | -2.76 | .80 | 1.42 | -7.03 | -8.77 |
| | -12.16 | -3.46 | -8.73 | -2.80 | -1.71 | -.76 | .87 |
| | 4.34 | 9.65 | 5.18 | 11.62 | 6.93 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=95 | -8.00 | -5.59 | 2.59 | .87 | 3.64 | 5.43 | -2.14 |
| | -3.43 | -4.72 | -6.73 | -4.76 | .63 | -4.64 | -4.80 |
| | -7.40 | -12.99 | -7.94 | -8.36 | -.13 | -.76 | -1.51 |
| | -2.01 | -3.05 | -1.17 | 8.44 | 7.72 | | |
| ID=97 | -8.00 | -.83 | 10.53 | 2.46 | 2.05 | -2.51 | 4.21 |
| | 5.31 | 4.81 | 4.38 | 3.97 | 3.01 | 4.88 | 3.93 |
| | .54 | -.29 | -3.17 | -8.36 | 11.78 | 6.39 | 5.63 |
| | 6.72 | 5.68 | 7.86 | 10.82 | 8.52 | | |
| ID=98 | -11.17 | -8.77 | 2.59 | 4.04 | 6.02 | -4.89 | 5.80 |
| | 3.72 | 5.60 | 5.97 | .80 | -3.34 | -2.26 | .76 |
| | -1.84 | -9.02 | -2.38 | -13.12 | -12.03 | 6.39 | 6.42 |
| | 9.11 | 5.68 | 9.94 | 6.06 | 1.37 | | |
| ID=100 | -8.00 | -4.80 | 11.33 | 15.95 | 13.16 | -16.00 | 14.53 |
| | 6.10 | 5.60 | 3.59 | -3.17 | -9.69 | 4.09 | 3.93 |
| | -4.23 | -10.61 | -3.97 | -17.88 | -19.97 | 17.50 | 18.33 |
| | 14.66 | 15.21 | 10.74 | 3.68 | -10.53 | | |
| ID=102 | -4.83 | .76 | -.58 | -.72 | -4.30 | .67 | 4.21 |
| | .54 | .04 | -1.17 | -.79 | -.16 | .91 | 4.72 |
| | .54 | .51 | -.79 | -3.59 | -3.30 | -1.55 | .07 |
| | -1.21 | .12 | .42 | .51 | 1.37 | | |
| ID=103 | 7.08 | 5.52 | 2.59 | .08 | -1.92 | -2.51 | 8.18 |
| | 2.13 | 1.63 | 4.38 | .80 | -1.75 | 5.67 | 8.69 |
| | 6.09 | 5.27 | 8.73 | 3.55 | 2.26 | 3.21 | 7.22 |
| | 3.55 | 12.03 | 3.59 | -3.46 | -8.94 | | |
| ID=107 | -4.03 | -.83 | -.58 | 4.04 | 2.84 | 4.64 | 1.04 |
| | -4.22 | -5.51 | -4.35 | -2.38 | -.16 | -3.06 | -3.21 |
| | -8.19 | -6.64 | -9.53 | -8.36 | -5.68 | .04 | .87 |
| | 1.17 | 5.68 | 6.77 | 10.82 | 11.69 | | |
| ID=109 | -6.41 | -7.18 | 4.18 | 4.04 | 6.02 | -1.71 | 5.01 |
| | 6.10 | 5.60 | 2.79 | .01 | 1.42 | -1.47 | -1.63 |
| | -3.43 | -10.61 | -3.17 | -7.56 | -6.48 | 5.59 | 4.84 |
| | 5.14 | 4.89 | 5.97 | 11.62 | 2.17 | | |
| ID=110 | -16.73 | -10.36 | 3.39 | 7.22 | 13.96 | -12.03 | 5.80 |
| | 2.92 | 3.22 | 1.21 | -1.58 | -7.31 | .91 | 1.55 |
| | -3.43 | -12.19 | -6.35 | -17.09 | -22.35 | 11.15 | 11.98 |
| | 15.46 | 16.79 | 13.12 | 13.21 | -4.98 | | |

Number of cases read = 54

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APPENDIX C

PROBE DELTA FREQUENCIES AND DESCRIPTIVE STATISTICS
FOR SUBJECTS IN THE SIZE MEDIUM PASGT HELMET

P1DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -16.73 | 1 | 1.9 | 1.9 | 1.9 |
| -14.35 | 1 | 1.9 | 1.9 | 3.7 |
| -11.17 | 1 | 1.9 | 1.9 | 5.6 |
| -8.00 | 5 | 9.3 | 9.3 | 14.8 |
| -7.21 | 2 | 3.7 | 3.7 | 18.5 |
| -6.41 | 2 | 3.7 | 3.7 | 22.2 |
| -4.83 | 2 | 3.7 | 3.7 | 25.9 |
| -4.03 | 2 | 3.7 | 3.7 | 29.6 |
| -3.24 | 2 | 3.7 | 3.7 | 33.3 |
| -2.44 | 4 | 7.4 | 7.4 | 40.7 |
| -.86 | 3 | 5.6 | 5.6 | 46.3 |
| -.06 | 1 | 1.9 | 1.9 | 48.1 |
| .73 | 3 | 5.6 | 5.6 | 53.7 |
| 1.52 | 3 | 5.6 | 5.6 | 59.3 |
| 2.32 | 4 | 7.4 | 7.4 | 66.7 |
| 3.11 | 3 | 5.6 | 5.6 | 72.2 |
| 3.91 | 3 | 5.6 | 5.6 | 77.8 |
| 5.49 | 1 | 1.9 | 1.9 | 79.6 |
| 7.08 | 2 | 3.7 | 3.7 | 83.3 |
| 7.88 | 2 | 3.7 | 3.7 | 87.0 |
| 9.46 | 3 | 5.6 | 5.6 | 92.6 |
| 10.26 | 1 | 1.9 | 1.9 | 94.4 |
| 11.84 | 1 | 1.9 | 1.9 | 96.3 |
| 13.43 | 1 | 1.9 | 1.9 | 98.1 |
| 14.22 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P1DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .084 | Std Err | .934 | Median | .731 |
| Mode | -8.000 | Std Dev | 6.866 | Variance | 47.148 |
| Range | 30.956 | Minimum | -16.731 | Maximum | 14.225 |

Valid Cases 54

P2DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -10.36 | 1 | 1.9 | 1.9 | 1.9 |
| -8.77 | 1 | 1.9 | 1.9 | 3.7 |
| -7.18 | 3 | 5.6 | 5.6 | 9.3 |
| -6.39 | 1 | 1.9 | 1.9 | 11.1 |
| -5.59 | 3 | 5.6 | 5.6 | 16.7 |
| -4.80 | 2 | 3.7 | 3.7 | 20.4 |
| -4.01 | 3 | 5.6 | 5.6 | 25.9 |
| -3.21 | 1 | 1.9 | 1.9 | 27.8 |
| -2.42 | 4 | 7.4 | 7.4 | 35.2 |
| -1.63 | 4 | 7.4 | 7.4 | 42.6 |
| -.83 | 7 | 13.0 | 13.0 | 55.6 |
| -.04 | 3 | 5.6 | 5.6 | 61.1 |
| .76 | 3 | 5.6 | 5.6 | 66.7 |
| 1.55 | 1 | 1.9 | 1.9 | 68.5 |
| 2.34 | 5 | 9.3 | 9.3 | 77.8 |
| 3.14 | 1 | 1.9 | 1.9 | 79.6 |
| 3.93 | 3 | 5.6 | 5.6 | 85.2 |
| 4.72 | 1 | 1.9 | 1.9 | 87.0 |
| 5.52 | 2 | 3.7 | 3.7 | 90.7 |
| 6.31 | 2 | 3.7 | 3.7 | 94.4 |
| 7.90 | 1 | 1.9 | 1.9 | 96.3 |
| 9.49 | 1 | 1.9 | 1.9 | 98.1 |
| 10.28 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P2DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.449 | Std Err | .624 | Median | -.831 |
| Mode | -.831 | Std Dev | 4.586 | Variance | 21.035 |
| Range | 20.638 | Minimum | -10.356 | Maximum | 10.281 |

Valid Cases 54

P3DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -10.11 | 3 | 5.6 | 5.6 | 5.6 |
| -9.31 | 1 | 1.9 | 1.9 | 7.4 |
| -8.52 | 2 | 3.7 | 3.7 | 11.1 |
| -7.72 | 1 | 1.9 | 1.9 | 13.0 |
| -6.93 | 1 | 1.9 | 1.9 | 14.8 |
| -6.14 | 3 | 5.6 | 5.6 | 20.4 |
| -4.55 | 5 | 9.3 | 9.3 | 29.6 |
| -3.76 | 1 | 1.9 | 1.9 | 31.5 |
| -2.96 | 2 | 3.7 | 3.7 | 35.2 |
| -2.17 | 3 | 5.6 | 5.6 | 40.7 |
| -1.38 | 3 | 5.6 | 5.6 | 46.3 |
| -.58 | 3 | 5.6 | 5.6 | 51.9 |
| .21 | 2 | 3.7 | 3.7 | 55.6 |
| 1.01 | 2 | 3.7 | 3.7 | 59.3 |
| 1.80 | 1 | 1.9 | 1.9 | 61.1 |
| 2.59 | 5 | 9.3 | 9.3 | 70.4 |
| 3.39 | 3 | 5.6 | 5.6 | 75.9 |
| 4.18 | 1 | 1.9 | 1.9 | 77.8 |
| 4.97 | 2 | 3.7 | 3.7 | 81.5 |
| 5.77 | 1 | 1.9 | 1.9 | 83.3 |
| 6.56 | 3 | 5.6 | 5.6 | 88.9 |
| 8.15 | 1 | 1.9 | 1.9 | 90.7 |
| 8.94 | 2 | 3.7 | 3.7 | 94.4 |
| 10.53 | 1 | 1.9 | 1.9 | 96.3 |
| 11.33 | 2 | 3.7 | 3.7 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P3DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.155 | Std Err | .795 | Median | -.581 |
| Mode | -4.550 | Std Dev | 5.844 | Variance | 34.158 |
| Range | 21.431 | Minimum | -10.106 | Maximum | 11.325 |

Valid Cases 54

P4DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -13.42 | 1 | 1.9 | 1.9 | 1.9 |
| -12.63 | 1 | 1.9 | 1.9 | 3.7 |
| -11.04 | 1 | 1.9 | 1.9 | 5.6 |
| -10.24 | 2 | 3.7 | 3.7 | 9.3 |
| -8.66 | 1 | 1.9 | 1.9 | 11.1 |
| -7.86 | 1 | 1.9 | 1.9 | 13.0 |
| -7.07 | 2 | 3.7 | 3.7 | 16.7 |
| -6.27 | 4 | 7.4 | 7.4 | 24.1 |
| -5.48 | 3 | 5.6 | 5.6 | 29.6 |
| -4.69 | 1 | 1.9 | 1.9 | 31.5 |
| -3.89 | 1 | 1.9 | 1.9 | 33.3 |
| -3.10 | 2 | 3.7 | 3.7 | 37.0 |
| -2.31 | 1 | 1.9 | 1.9 | 38.9 |
| -1.51 | 2 | 3.7 | 3.7 | 42.6 |
| -.72 | 2 | 3.7 | 3.7 | 46.3 |
| .08 | 3 | 5.6 | 5.6 | 51.9 |
| .87 | 3 | 5.6 | 5.6 | 57.4 |
| 1.66 | 1 | 1.9 | 1.9 | 59.3 |
| 2.46 | 3 | 5.6 | 5.6 | 64.8 |
| 3.25 | 2 | 3.7 | 3.7 | 68.5 |
| 4.04 | 6 | 11.1 | 11.1 | 79.6 |
| 4.84 | 2 | 3.7 | 3.7 | 83.3 |
| 5.63 | 1 | 1.9 | 1.9 | 85.2 |
| 7.22 | 3 | 5.6 | 5.6 | 90.7 |
| 11.98 | 1 | 1.9 | 1.9 | 92.6 |
| 12.78 | 2 | 3.7 | 3.7 | 96.3 |
| 15.95 | 1 | 1.9 | 1.9 | 98.1 |
| 17.54 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.013 | Std Err | .959 | Median | .075 |
| Mode | 4.044 | Std Dev | 7.047 | Variance | 49.658 |
| Range | 30.956 | Minimum | -13.419 | Maximum | 17.537 |

Valid Cases 54

P5DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -17.00 | 1 | 1.9 | 1.9 | 1.9 |
| -12.24 | 2 | 3.7 | 3.7 | 5.6 |
| -11.44 | 1 | 1.9 | 1.9 | 7.4 |
| -7.48 | 2 | 3.7 | 3.7 | 11.1 |
| -6.68 | 2 | 3.7 | 3.7 | 14.8 |
| -5.89 | 2 | 3.7 | 3.7 | 18.5 |
| -5.09 | 1 | 1.9 | 1.9 | 20.4 |
| -4.30 | 3 | 5.6 | 5.6 | 25.9 |
| -3.51 | 3 | 5.6 | 5.6 | 31.5 |
| -2.71 | 3 | 5.6 | 5.6 | 37.0 |
| -1.92 | 3 | 5.6 | 5.6 | 42.6 |
| -1.13 | 1 | 1.9 | 1.9 | 44.4 |
| -.33 | 3 | 5.6 | 5.6 | 50.0 |
| .46 | 3 | 5.6 | 5.6 | 55.6 |
| 1.26 | 1 | 1.9 | 1.9 | 57.4 |
| 2.05 | 3 | 5.6 | 5.6 | 63.0 |
| 2.84 | 1 | 1.9 | 1.9 | 64.8 |
| 3.64 | 1 | 1.9 | 1.9 | 66.7 |
| 4.43 | 4 | 7.4 | 7.4 | 74.1 |
| 5.22 | 2 | 3.7 | 3.7 | 77.8 |
| 6.02 | 2 | 3.7 | 3.7 | 81.5 |
| 7.61 | 1 | 1.9 | 1.9 | 83.3 |
| 9.19 | 1 | 1.9 | 1.9 | 85.2 |
| 10.78 | 1 | 1.9 | 1.9 | 87.0 |
| 12.37 | 1 | 1.9 | 1.9 | 88.9 |
| 13.16 | 1 | 1.9 | 1.9 | 90.7 |
| 13.96 | 1 | 1.9 | 1.9 | 92.6 |
| 16.34 | 2 | 3.7 | 3.7 | 96.3 |
| 27.45 | 1 | 1.9 | 1.9 | 98.1 |
| 51.26 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P5DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | 1.785 | Std Err | 1.437 | Median | .066 |
| Mode | 4.431 | Std Dev | 10.557 | Variance | 111.457 |
| Range | 68.263 | Minimum | -17.000 | Maximum | 51.262 |

Valid Cases 54

P6DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -19.97 | 1 | 1.9 | 1.9 | 1.9 |
| -19.18 | 1 | 1.9 | 1.9 | 3.7 |
| -17.59 | 1 | 1.9 | 1.9 | 5.6 |
| -16.00 | 3 | 5.6 | 5.6 | 11.1 |
| -12.03 | 1 | 1.9 | 1.9 | 13.0 |
| -10.44 | 2 | 3.7 | 3.7 | 16.7 |
| -4.89 | 2 | 3.7 | 3.7 | 20.4 |
| -4.09 | 2 | 3.7 | 3.7 | 24.1 |
| -3.30 | 2 | 3.7 | 3.7 | 27.8 |
| -2.51 | 3 | 5.6 | 5.6 | 33.3 |
| -1.71 | 2 | 3.7 | 3.7 | 37.0 |
| -.92 | 4 | 7.4 | 7.4 | 44.4 |
| -.13 | 2 | 3.7 | 3.7 | 48.1 |
| .67 | 3 | 5.6 | 5.6 | 53.7 |
| 1.46 | 2 | 3.7 | 3.7 | 57.4 |
| 2.26 | 1 | 1.9 | 1.9 | 59.3 |
| 3.05 | 3 | 5.6 | 5.6 | 64.8 |
| 3.84 | 2 | 3.7 | 3.7 | 68.5 |
| 4.64 | 6 | 11.1 | 11.1 | 79.6 |
| 5.43 | 5 | 9.3 | 9.3 | 88.9 |
| 7.02 | 1 | 1.9 | 1.9 | 90.7 |
| 8.61 | 1 | 1.9 | 1.9 | 92.6 |
| 9.40 | 1 | 1.9 | 1.9 | 94.4 |
| 10.99 | 1 | 1.9 | 1.9 | 96.3 |
| 11.78 | 1 | 1.9 | 1.9 | 98.1 |
| 14.96 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P6DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.654 | Std Err | 1.083 | Median | .669 |
| Mode | 4.637 | Std Dev | 7.955 | Variance | 63.289 |
| Range | 34.925 | Minimum | -19.969 | Maximum | 14.956 |

Valid Cases 54

P7DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -20.39 | 1 | 1.9 | 1.9 | 1.9 |
| -14.04 | 1 | 1.9 | 1.9 | 3.7 |
| -11.66 | 1 | 1.9 | 1.9 | 5.6 |
| -10.87 | 1 | 1.9 | 1.9 | 7.4 |
| -9.28 | 1 | 1.9 | 1.9 | 9.3 |
| -7.69 | 5 | 9.3 | 9.3 | 18.5 |
| -6.90 | 2 | 3.7 | 3.7 | 22.2 |
| -6.11 | 1 | 1.9 | 1.9 | 24.1 |
| -3.73 | 5 | 9.3 | 9.3 | 33.3 |
| -2.93 | 3 | 5.6 | 5.6 | 38.9 |
| -2.14 | 4 | 7.4 | 7.4 | 46.3 |
| -1.34 | 1 | 1.9 | 1.9 | 48.1 |
| -.55 | 1 | 1.9 | 1.9 | 50.0 |
| .24 | 2 | 3.7 | 3.7 | 53.7 |
| 1.04 | 1 | 1.9 | 1.9 | 55.6 |
| 1.83 | 4 | 7.4 | 7.4 | 63.0 |
| 2.63 | 1 | 1.9 | 1.9 | 64.8 |
| 4.21 | 4 | 7.4 | 7.4 | 72.2 |
| 5.01 | 2 | 3.7 | 3.7 | 75.9 |
| 5.80 | 3 | 5.6 | 5.6 | 81.5 |
| 8.18 | 4 | 7.4 | 7.4 | 88.9 |
| 9.77 | 2 | 3.7 | 3.7 | 92.6 |
| 11.36 | 3 | 5.6 | 5.6 | 98.1 |
| 14.53 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P7DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.109 | Std Err | .989 | Median | -.153 |
| Mode | -7.694 | Std Dev | 7.264 | Variance | 52.773 |
| Range | 34.925 | Minimum | -20.394 | Maximum | 14.531 |

Valid Cases 54

P8DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -20.89 | 1 | 1.9 | 1.9 | 1.9 |
| -11.36 | 1 | 1.9 | 1.9 | 3.7 |
| -10.57 | 1 | 1.9 | 1.9 | 5.6 |
| -9.78 | 1 | 1.9 | 1.9 | 7.4 |
| -8.19 | 3 | 5.6 | 5.6 | 13.0 |
| -7.39 | 1 | 1.9 | 1.9 | 14.8 |
| -6.60 | 3 | 5.6 | 5.6 | 20.4 |
| -5.81 | 2 | 3.7 | 3.7 | 24.1 |
| -5.01 | 2 | 3.7 | 3.7 | 27.8 |
| -4.22 | 2 | 3.7 | 3.7 | 31.5 |
| -3.43 | 3 | 5.6 | 5.6 | 37.0 |
| -2.63 | 2 | 3.7 | 3.7 | 40.7 |
| -1.84 | 2 | 3.7 | 3.7 | 44.4 |
| -1.04 | 5 | 9.3 | 9.3 | 53.7 |
| .54 | 4 | 7.4 | 7.4 | 61.1 |
| 2.13 | 3 | 5.6 | 5.6 | 66.7 |
| 2.92 | 2 | 3.7 | 3.7 | 70.4 |
| 3.72 | 5 | 9.3 | 9.3 | 79.6 |
| 5.31 | 3 | 5.6 | 5.6 | 85.2 |
| 6.10 | 3 | 5.6 | 5.6 | 90.7 |
| 6.89 | 1 | 1.9 | 1.9 | 92.6 |
| 7.69 | 1 | 1.9 | 1.9 | 94.4 |
| 10.07 | 1 | 1.9 | 1.9 | 96.3 |
| 10.86 | 1 | 1.9 | 1.9 | 98.1 |
| 11.66 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P8DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.823 | Std Err | .856 | Median | -1.044 |
| Mode | -1.044 | Std Dev | 6.289 | Variance | 39.548 |
| Range | 32.544 | Minimum | -20.888 | Maximum | 11.656 |

Valid Cases 54

P9DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -18.21 | 1 | 1.9 | 1.9 | 1.9 |
| -11.86 | 1 | 1.9 | 1.9 | 3.7 |
| -9.48 | 4 | 7.4 | 7.4 | 11.1 |
| -7.10 | 2 | 3.7 | 3.7 | 14.8 |
| -6.31 | 3 | 5.6 | 5.6 | 20.4 |
| -5.51 | 3 | 5.6 | 5.6 | 25.9 |
| -4.72 | 2 | 3.7 | 3.7 | 29.6 |
| -3.93 | 1 | 1.9 | 1.9 | 31.5 |
| -3.13 | 2 | 3.7 | 3.7 | 35.2 |
| -2.34 | 3 | 5.6 | 5.6 | 40.7 |
| - 75 | 3 | 5.6 | 5.6 | 46.3 |
| .04 | 5 | 9.3 | 9.3 | 55.6 |
| .84 | 1 | 1.9 | 1.9 | 57.4 |
| 1.63 | 2 | 3.7 | 3.7 | 61.1 |
| 2.42 | 4 | 7.4 | 7.4 | 68.5 |
| 3.22 | 3 | 5.6 | 5.6 | 74.1 |
| 4.01 | 4 | 7.4 | 7.4 | 81.5 |
| 4.81 | 1 | 1.9 | 1.9 | 83.3 |
| 5.60 | 3 | 5.6 | 5.6 | 88.9 |
| 6.39 | 1 | 1.9 | 1.9 | 90.7 |
| 7.19 | 1 | 1.9 | 1.9 | 92.6 |
| 7.98 | 2 | 3.7 | 3.7 | 96.3 |
| 8.77 | 1 | 1.9 | 1.9 | 98.1 |
| 12.74 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P9DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.632 | Std Err | .819 | Median | .044 |
| Mode | .044 | Std Dev | 6.020 | Variance | 36.243 |
| Range | 30.956 | Minimum | -18.213 | Maximum | 12.744 |

Valid Cases 54

P10DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -15.46 | 1 | 1.9 | 1.9 | 1.9 |
| -13.08 | 3 | 5.6 | 5.6 | 7.4 |
| -11.49 | 1 | 1.9 | 1.9 | 9.3 |
| -9.91 | 1 | 1.9 | 1.9 | 11.1 |
| -8.32 | 1 | 1.9 | 1.9 | 13.0 |
| -6.73 | 1 | 1.9 | 1.9 | 14.8 |
| -5.94 | 1 | 1.9 | 1.9 | 16.7 |
| -5.14 | 1 | 1.9 | 1.9 | 18.5 |
| -4.35 | 2 | 3.7 | 3.7 | 22.2 |
| -2.76 | 2 | 3.7 | 3.7 | 25.9 |
| -1.97 | 5 | 9.3 | 9.3 | 35.2 |
| -1.17 | 2 | 3.7 | 3.7 | 38.9 |
| -.38 | 6 | 11.1 | 11.1 | 50.0 |
| .41 | 2 | 3.7 | 3.7 | 53.7 |
| 1.21 | 3 | 5.6 | 5.6 | 59.3 |
| 2.00 | 5 | 9.3 | 9.3 | 68.5 |
| 2.79 | 3 | 5.6 | 5.6 | 74.1 |
| 3.59 | 3 | 5.6 | 5.6 | 79.6 |
| 4.38 | 2 | 3.7 | 3.7 | 83.3 |
| 5.17 | 1 | 1.9 | 1.9 | 85.2 |
| 5.97 | 2 | 3.7 | 3.7 | 88.9 |
| 6.76 | 1 | 1.9 | 1.9 | 90.7 |
| 7.56 | 1 | 1.9 | 1.9 | 92.6 |
| 8.35 | 3 | 5.6 | 5.6 | 98.1 |
| 13.91 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P10DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.337 | Std Err | .827 | Median | .016 |
| Mode | -.381 | Std Dev | 6.077 | Variance | 36.933 |
| Range | 29.369 | Minimum | -15.463 | Maximum | 13.906 |

Valid Cases 54

P11DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -11.90 | 1 | 1.9 | 1.9 | 1.9 |
| -11.11 | 1 | 1.9 | 1.9 | 3.7 |
| -10.31 | 2 | 3.7 | 3.7 | 7.4 |
| -9.52 | 1 | 1.9 | 1.9 | 9.3 |
| -8.73 | 3 | 5.6 | 5.6 | 14.8 |
| -4.76 | 2 | 3.7 | 3.7 | 18.5 |
| -3.17 | 1 | 1.9 | 1.9 | 20.4 |
| -2.38 | 5 | 9.3 | 9.3 | 29.6 |
| -1.58 | 4 | 7.4 | 7.4 | 37.0 |
| -.79 | 4 | 7.4 | 7.4 | 44.4 |
| .01 | 6 | 11.1 | 11.1 | 55.6 |
| .80 | 7 | 13.0 | 13.0 | 68.5 |
| 1.59 | 3 | 5.6 | 5.6 | 74.1 |
| 3.18 | 2 | 3.7 | 3.7 | 77.8 |
| 3.97 | 4 | 7.4 | 7.4 | 85.2 |
| 4.77 | 2 | 3.7 | 3.7 | 88.9 |
| 5.56 | 1 | 1.9 | 1.9 | 90.7 |
| 7.15 | 1 | 1.9 | 1.9 | 92.6 |
| 8.74 | 2 | 3.7 | 3.7 | 96.3 |
| 10.32 | 2 | 3.7 | 3.7 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P11DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.376 | Std Err | .718 | Median | .006 |
| Mode | .800 | Std Dev | 5.274 | Variance | 27.811 |
| Range | 22.225 | Minimum | -11.900 | Maximum | 10.325 |

Valid Cases 54

P12DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -16.83 | 1 | 1.9 | 1.9 | 1.9 |
| -12.86 | 1 | 1.9 | 1.9 | 3.7 |
| -12.07 | 1 | 1.9 | 1.9 | 5.6 |
| -10.48 | 1 | 1.9 | 1.9 | 7.4 |
| -9.69 | 1 | 1.9 | 1.9 | 9.3 |
| -8.89 | 1 | 1.9 | 1.9 | 11.1 |
| -8.10 | 1 | 1.9 | 1.9 | 13.0 |
| -7.31 | 5 | 9.3 | 9.3 | 22.2 |
| -6.51 | 1 | 1.9 | 1.9 | 24.1 |
| -4.93 | 1 | 1.9 | 1.9 | 25.9 |
| -4.13 | 2 | 3.7 | 3.7 | 29.6 |
| -3.34 | 2 | 3.7 | 3.7 | 33.3 |
| -2.54 | 2 | 3.7 | 3.7 | 37.0 |
| -1.75 | 1 | 1.9 | 1.9 | 38.9 |
| -.96 | 2 | 3.7 | 3.7 | 42.6 |
| -.16 | 5 | 9.3 | 9.3 | 51.9 |
| .63 | 3 | 5.6 | 5.6 | 57.4 |
| 1.42 | 8 | 14.8 | 14.8 | 72.2 |
| 2.22 | 1 | 1.9 | 1.9 | 74.1 |
| 3.01 | 4 | 7.4 | 7.4 | 81.5 |
| 3.81 | 3 | 5.6 | 5.6 | 87.0 |
| 4.60 | 1 | 1.9 | 1.9 | 88.9 |
| 6.98 | 1 | 1.9 | 1.9 | 90.7 |
| 7.77 | 2 | 3.7 | 3.7 | 94.4 |
| 8.57 | 1 | 1.9 | 1.9 | 96.3 |
| 10.95 | 1 | 1.9 | 1.9 | 98.1 |
| 11.74 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P12DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -1.000 | Std Err | .819 | Median | -.163 |
| Mode | 1.425 | Std Dev | 6.020 | Variance | 36.243 |
| Range | 28.575 | Minimum | -16.831 | Maximum | 11.744 |

Valid Cases 54

P13DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -9.41 | 2 | 3.7 | 3.7 | 3.7 |
| -8.61 | 2 | 3.7 | 3.7 | 7.4 |
| -7.03 | 4 | 7.4 | 7.4 | 14.8 |
| -6.23 | 2 | 3.7 | 3.7 | 18.5 |
| -5.44 | 4 | 7.4 | 7.4 | 25.9 |
| -4.64 | 5 | 9.3 | 9.3 | 35.2 |
| -3.85 | 2 | 3.7 | 3.7 | 38.9 |
| -3.06 | 6 | 11.1 | 11.1 | 50.0 |
| -2.26 | 2 | 3.7 | 3.7 | 53.7 |
| -1.47 | 2 | 3.7 | 3.7 | 57.4 |
| -.68 | 2 | 3.7 | 3.7 | 61.1 |
| .12 | 1 | 1.9 | 1.9 | 63.0 |
| .91 | 3 | 5.6 | 5.6 | 68.5 |
| 1.71 | 1 | 1.9 | 1.9 | 70.4 |
| 2.50 | 1 | 1.9 | 1.9 | 72.2 |
| 4.09 | 3 | 5.6 | 5.6 | 77.8 |
| 4.88 | 5 | 9.3 | 9.3 | 87.0 |
| 5.67 | 3 | 5.6 | 5.6 | 92.6 |
| 6.47 | 1 | 1.9 | 1.9 | 94.4 |
| 9.64 | 1 | 1.9 | 1.9 | 96.3 |
| 11.23 | 1 | 1.9 | 1.9 | 98.1 |
| 13.61 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P13DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -1.013 | Std Err | .747 | Median | -2.659 |
| Mode | -3.056 | Std Dev | 5.488 | Variance | 30.114 |
| Range | 23.019 | Minimum | -9.406 | Maximum | 13.612 |

Valid Cases 54

F14DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -19.09 | 1 | 1.9 | 1.9 | 1.9 |
| -10.36 | 3 | 5.6 | 5.6 | 7.4 |
| -8.77 | 3 | 5.6 | 5.6 | 13.0 |
| -6.39 | 2 | 3.7 | 3.7 | 16.7 |
| -5.59 | 1 | 1.9 | 1.9 | 18.5 |
| -4.80 | 3 | 5.6 | 5.6 | 24.1 |
| -4.01 | 6 | 11.1 | 11.1 | 35.2 |
| -3.21 | 3 | 5.6 | 5.6 | 40.7 |
| -2.42 | 1 | 1.9 | 1.9 | 42.6 |
| -1.63 | 2 | 3.7 | 3.7 | 46.3 |
| -.83 | 4 | 7.4 | 7.4 | 53.7 |
| -.04 | 3 | 5.6 | 5.6 | 59.3 |
| .76 | 2 | 3.7 | 3.7 | 63.0 |
| 1.55 | 2 | 3.7 | 3.7 | 66.7 |
| 3.14 | 2 | 3.7 | 3.7 | 70.4 |
| 3.93 | 3 | 5.6 | 5.6 | 75.9 |
| 4.72 | 2 | 3.7 | 3.7 | 79.6 |
| 7.11 | 3 | 5.6 | 5.6 | 85.2 |
| 7.90 | 2 | 3.7 | 3.7 | 88.9 |
| 8.69 | 3 | 5.6 | 5.6 | 94.4 |
| 10.28 | 1 | 1.9 | 1.9 | 96.3 |
| 12.66 | 1 | 1.9 | 1.9 | 98.1 |
| 31.71 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

F14DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.038 | Std Err | 1.046 | Median | -.831 |
| Mode | -4.006 | Std Dev | 7.686 | Variance | 59.081 |
| Range | 50.800 | Minimum | -19.088 | Maximum | 31.712 |

Valid Cases 54

P15DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -13.75 | 1 | 1.9 | 1.9 | 1.9 |
| -12.16 | 1 | 1.9 | 1.9 | 3.7 |
| -10.58 | 1 | 1.9 | 1.9 | 5.6 |
| -8.99 | 2 | 3.7 | 3.7 | 9.3 |
| -8.19 | 1 | 1.9 | 1.9 | 11.1 |
| -7.40 | 3 | 5.6 | 5.6 | 16.7 |
| -6.61 | 1 | 1.9 | 1.9 | 18.5 |
| -5.02 | 3 | 5.6 | 5.6 | 24.1 |
| -4.23 | 3 | 5.6 | 5.6 | 29.6 |
| -3.43 | 5 | 9.3 | 9.3 | 38.9 |
| -2.64 | 4 | 7.4 | 7.4 | 46.3 |
| -1.84 | 2 | 3.7 | 3.7 | 50.0 |
| -1.05 | 2 | 3.7 | 3.7 | 53.7 |
| -.26 | 2 | 3.7 | 3.7 | 57.4 |
| .54 | 3 | 5.6 | 5.6 | 63.0 |
| 1.33 | 3 | 5.6 | 5.6 | 68.5 |
| 2.13 | 1 | 1.9 | 1.9 | 70.4 |
| 2.92 | 3 | 5.6 | 5.6 | 75.9 |
| 3.71 | 3 | 5.6 | 5.6 | 81.5 |
| 4.51 | 1 | 1.9 | 1.9 | 83.3 |
| 5.30 | 2 | 3.7 | 3.7 | 87.0 |
| 6.09 | 1 | 1.9 | 1.9 | 88.9 |
| 6.89 | 1 | 1.9 | 1.9 | 90.7 |
| 7.68 | 2 | 3.7 | 3.7 | 94.4 |
| 8.47 | 3 | 5.6 | 5.6 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P15DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -1.050 | Std Err | .753 | Median | -1.447 |
| Mode | -3.431 | Std Dev | 5.534 | Variance | 30.622 |
| Range | 22.225 | Minimum | -13.750 | Maximum | 8.475 |

Valid Cases 54

P16DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -12.99 | 1 | 1.9 | 1.9 | 1.9 |
| -12.19 | 1 | 1.9 | 1.9 | 3.7 |
| -11.40 | 1 | 1.9 | 1.9 | 5.6 |
| -10.61 | 2 | 3.7 | 3.7 | 9.3 |
| -9.02 | 1 | 1.9 | 1.9 | 11.1 |
| -8.23 | 2 | 3.7 | 3.7 | 14.8 |
| -7.43 | 1 | 1.9 | 1.9 | 16.7 |
| -6.44 | 2 | 3.7 | 3.7 | 20.4 |
| -5.05 | 1 | 1.9 | 1.9 | 22.2 |
| -3.46 | 3 | 5.6 | 5.6 | 27.8 |
| -2.67 | 1 | 1.9 | 1.9 | 29.6 |
| -1.88 | 5 | 9.3 | 9.3 | 38.9 |
| -1.08 | 3 | 5.6 | 5.6 | 44.4 |
| -.29 | 2 | 3.7 | 3.7 | 48.1 |
| .51 | 5 | 9.3 | 9.3 | 57.4 |
| 1.30 | 1 | 1.9 | 1.9 | 59.3 |
| 2.09 | 3 | 5.6 | 5.6 | 64.8 |
| 2.89 | 4 | 7.4 | 7.4 | 72.2 |
| 3.68 | 4 | 7.4 | 7.4 | 79.6 |
| 4.47 | 1 | 1.9 | 1.9 | 81.5 |
| 5.27 | 2 | 3.7 | 3.7 | 85.2 |
| 6.06 | 2 | 3.7 | 3.7 | 88.9 |
| 7.65 | 1 | 1.9 | 1.9 | 90.7 |
| 9.24 | 2 | 3.7 | 3.7 | 94.4 |
| 10.03 | 1 | 1.9 | 1.9 | 96.3 |
| 11.62 | 1 | 1.9 | 1.9 | 98.1 |
| 13.21 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P16DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.199 | Std Err | .838 | Median | .506 |
| Mode | -1.875 | Std Dev | 6.161 | Variance | 37.961 |
| Range | 26.194 | Minimum | -12.988 | Maximum | 13.206 |

Valid Cases 54

P17DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -13.49 | 3 | 5.6 | 5.6 | 5.6 |
| -11.11 | 1 | 1.9 | 1.9 | 7.4 |
| -9.53 | 1 | 1.9 | 1.9 | 9.3 |
| -8.73 | 1 | 1.9 | 1.9 | 11.1 |
| -7.94 | 1 | 1.9 | 1.9 | 13.0 |
| -6.35 | 2 | 3.7 | 3.7 | 16.7 |
| -5.56 | 3 | 5.6 | 5.6 | 22.2 |
| -4.76 | 3 | 5.6 | 5.6 | 27.8 |
| -3.97 | 5 | 9.3 | 9.3 | 37.0 |
| -3.17 | 2 | 3.7 | 3.7 | 40.7 |
| -2.38 | 1 | 1.9 | 1.9 | 42.6 |
| -1.59 | 1 | 1.9 | 1.9 | 44.4 |
| -.79 | 2 | 3.7 | 3.7 | 48.1 |
| 0.0 | 1 | 1.9 | 1.9 | 50.0 |
| .79 | 4 | 7.4 | 7.4 | 57.4 |
| 2.38 | 4 | 7.4 | 7.4 | 64.8 |
| 3.17 | 4 | 7.4 | 7.4 | 72.2 |
| 3.97 | 1 | 1.9 | 1.9 | 74.1 |
| 4.76 | 1 | 1.9 | 1.9 | 75.9 |
| 5.56 | 3 | 5.6 | 5.6 | 81.5 |
| 6.35 | 1 | 1.9 | 1.9 | 83.3 |
| 7.14 | 2 | 3.7 | 3.7 | 87.0 |
| 7.94 | 3 | 5.6 | 5.6 | 92.6 |
| 8.73 | 2 | 3.7 | 3.7 | 96.3 |
| 12.70 | 2 | 3.7 | 3.7 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P17DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.279 | Std Err | .886 | Median | .397 |
| Mode | -3.969 | Std Dev | 6.513 | Variance | 42.418 |
| Range | 26.194 | Minimum | -13.494 | Maximum | 12.700 |

Valid Cases 54

P18DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -22.64 | 1 | 1.9 | 1.9 | 1.9 |
| -17.88 | 1 | 1.9 | 1.9 | 3.7 |
| -17.09 | 1 | 1.9 | 1.9 | 5.6 |
| -15.50 | 1 | 1.9 | 1.9 | 7.4 |
| -13.12 | 1 | 1.9 | 1.9 | 9.3 |
| -12.33 | 1 | 1.9 | 1.9 | 11.1 |
| -11.53 | 1 | 1.9 | 1.9 | 13.0 |
| -9.94 | 1 | 1.9 | 1.9 | 14.8 |
| -8.36 | 3 | 5.6 | 5.6 | 20.4 |
| -7.56 | 1 | 1.9 | 1.9 | 22.2 |
| -6.77 | 2 | 3.7 | 3.7 | 25.9 |
| -5.98 | 1 | 1.9 | 1.9 | 27.8 |
| -5.18 | 2 | 3.7 | 3.7 | 31.5 |
| -4.39 | 2 | 3.7 | 3.7 | 35.2 |
| -3.59 | 2 | 3.7 | 3.7 | 38.9 |
| -2.80 | 2 | 3.7 | 3.7 | 42.6 |
| -2.01 | 5 | 9.3 | 9.3 | 51.9 |
| -.42 | 2 | 3.7 | 3.7 | 55.6 |
| .38 | 1 | 1.9 | 1.9 | 57.4 |
| 1.17 | 1 | 1.9 | 1.9 | 59.3 |
| 2.76 | 2 | 3.7 | 3.7 | 63.0 |
| 3.55 | 2 | 3.7 | 3.7 | 66.7 |
| 4.34 | 2 | 3.7 | 3.7 | 70.4 |
| 5.14 | 2 | 3.7 | 3.7 | 74.1 |
| 5.93 | 1 | 1.9 | 1.9 | 75.9 |
| 6.72 | 1 | 1.9 | 1.9 | 77.8 |
| 7.52 | 3 | 5.6 | 5.6 | 83.3 |
| 10.69 | 1 | 1.9 | 1.9 | 85.2 |
| 11.49 | 1 | 1.9 | 1.9 | 87.0 |
| 12.28 | 1 | 1.9 | 1.9 | 88.9 |
| 16.25 | 1 | 1.9 | 1.9 | 90.7 |
| 18.63 | 3 | 5.6 | 5.6 | 96.3 |
| 20.22 | 1 | 1.9 | 1.9 | 98.1 |
| 21.81 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P18DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .037 | Std Err | 1.378 | Median | -2.006 |
| Mode | -2.006 | Std Dev | 10.129 | Variance | 102.604 |
| Range | 44.450 | Minimum | -22.644 | Maximum | 21.806 |

Valid Cases 54

P19DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -27.91 | 1 | 1.9 | 1.9 | 1.9 |
| -22.35 | 1 | 1.9 | 1.9 | 3.7 |
| -19.97 | 1 | 1.9 | 1.9 | 5.6 |
| -17.59 | 1 | 1.9 | 1.9 | 7.4 |
| -16.79 | 1 | 1.9 | 1.9 | 9.3 |
| -12.03 | 2 | 3.7 | 3.7 | 13.0 |
| -11.24 | 1 | 1.9 | 1.9 | 14.8 |
| -8.86 | 1 | 1.9 | 1.9 | 16.7 |
| -6.48 | 1 | 1.9 | 1.9 | 18.5 |
| -5.68 | 1 | 1.9 | 1.9 | 20.4 |
| -4.89 | 3 | 5.6 | 5.6 | 25.9 |
| -4.09 | 2 | 3.7 | 3.7 | 29.6 |
| -3.30 | 2 | 3.7 | 3.7 | 33.3 |
| -2.51 | 2 | 3.7 | 3.7 | 37.0 |
| -1.71 | 2 | 3.7 | 3.7 | 40.7 |
| -.92 | 3 | 5.6 | 5.6 | 46.3 |
| -.13 | 4 | 7.4 | 7.4 | 53.7 |
| .67 | 2 | 3.7 | 3.7 | 57.4 |
| 2.26 | 3 | 5.6 | 5.6 | 63.0 |
| 3.05 | 2 | 3.7 | 3.7 | 66.7 |
| 3.84 | 1 | 1.9 | 1.9 | 68.5 |
| 5.43 | 2 | 3.7 | 3.7 | 72.2 |
| 6.22 | 1 | 1.9 | 1.9 | 74.1 |
| 7.02 | 3 | 5.6 | 5.6 | 79.6 |
| 7.81 | 2 | 3.7 | 3.7 | 83.3 |
| 8.61 | 2 | 3.7 | 3.7 | 87.0 |
| 10.19 | 1 | 1.9 | 1.9 | 88.9 |
| 11.78 | 3 | 5.6 | 5.6 | 94.4 |
| 12.57 | 1 | 1.9 | 1.9 | 96.3 |
| 13.37 | 1 | 1.9 | 1.9 | 98.1 |
| 14.96 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P19DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.492 | Std Err | 1.270 | Median | -.125 |
| Mode | -.125 | Std Dev | 9.334 | Variance | 87.129 |
| Range | 42.863 | Minimum | -27.906 | Maximum | 14.956 |

Valid Cases 54

P20DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -15.04 | 1 | 1.9 | 1.9 | 1.9 |
| -11.08 | 1 | 1.9 | 1.9 | 3.7 |
| -10.28 | 1 | 1.9 | 1.9 | 5.6 |
| -8.69 | 3 | 5.6 | 5.6 | 11.1 |
| -7.90 | 1 | 1.9 | 1.9 | 13.0 |
| -7.11 | 4 | 7.4 | 7.4 | 20.4 |
| -6.31 | 1 | 1.9 | 1.9 | 22.2 |
| -5.52 | 2 | 3.7 | 3.7 | 25.9 |
| -4.72 | 1 | 1.9 | 1.9 | 27.8 |
| -3.93 | 2 | 3.7 | 3.7 | 31.5 |
| -3.14 | 1 | 1.9 | 1.9 | 33.3 |
| -2.34 | 3 | 5.6 | 5.6 | 38.9 |
| -1.55 | 2 | 3.7 | 3.7 | 42.6 |
| -.76 | 2 | 3.7 | 3.7 | 46.3 |
| .04 | 5 | 9.3 | 9.3 | 55.6 |
| .83 | 3 | 5.6 | 5.6 | 61.1 |
| 1.63 | 1 | 1.9 | 1.9 | 63.0 |
| 2.42 | 5 | 9.3 | 9.3 | 72.2 |
| 3.21 | 2 | 3.7 | 3.7 | 75.9 |
| 4.01 | 2 | 3.7 | 3.7 | 79.6 |
| 4.80 | 1 | 1.9 | 1.9 | 81.5 |
| 5.59 | 1 | 1.9 | 1.9 | 83.3 |
| 6.39 | 2 | 3.7 | 3.7 | 87.0 |
| 7.97 | 2 | 3.7 | 3.7 | 90.7 |
| 8.77 | 1 | 1.9 | 1.9 | 92.6 |
| 11.15 | 1 | 1.9 | 1.9 | 94.4 |
| 15.12 | 1 | 1.9 | 1.9 | 96.3 |
| 15.91 | 1 | 1.9 | 1.9 | 98.1 |
| 17.50 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P20DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.095 | Std Err | .929 | Median | .037 |
| Mode | .037 | Std Dev | 6.828 | Variance | 46.617 |
| Range | 32.544 | Minimum | -15.044 | Maximum | 17.500 |

Valid Cases 54

P21DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -23.74 | 1 | 1.9 | 1.9 | 1.9 |
| -15.80 | 1 | 1.9 | 1.9 | 3.7 |
| -11.83 | 1 | 1.9 | 1.9 | 5.6 |
| -11.04 | 1 | 1.9 | 1.9 | 7.4 |
| -10.24 | 1 | 1.9 | 1.9 | 9.3 |
| -9.45 | 3 | 5.6 | 5.6 | 14.8 |
| -7.86 | 2 | 3.7 | 3.7 | 18.5 |
| -7.07 | 2 | 3.7 | 3.7 | 22.2 |
| -6.28 | 1 | 1.9 | 1.9 | 24.1 |
| -5.48 | 1 | 1.9 | 1.9 | 25.9 |
| -4.69 | 2 | 3.7 | 3.7 | 29.6 |
| -3.89 | 2 | 3.7 | 3.7 | 33.3 |
| -3.10 | 3 | 5.6 | 5.6 | 38.9 |
| -1.51 | 2 | 3.7 | 3.7 | 42.6 |
| -.72 | 3 | 5.6 | 5.6 | 48.1 |
| .07 | 2 | 3.7 | 3.7 | 51.9 |
| .87 | 5 | 9.3 | 9.3 | 61.1 |
| 2.46 | 2 | 3.7 | 3.7 | 64.8 |
| 4.04 | 1 | 1.9 | 1.9 | 66.7 |
| 4.84 | 3 | 5.6 | 5.6 | 72.2 |
| 5.63 | 1 | 1.9 | 1.9 | 74.1 |
| 6.42 | 1 | 1.9 | 1.9 | 75.9 |
| 7.22 | 4 | 7.4 | 7.4 | 83.3 |
| 8.01 | 2 | 3.7 | 3.7 | 87.0 |
| 8.81 | 2 | 3.7 | 3.7 | 90.7 |
| 9.60 | 1 | 1.9 | 1.9 | 92.6 |
| 10.39 | 1 | 1.9 | 1.9 | 94.4 |
| 11.98 | 1 | 1.9 | 1.9 | 96.3 |
| 16.74 | 1 | 1.9 | 1.9 | 98.1 |
| 18.33 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P21DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.087 | Std Err | 1.102 | Median | .075 |
| Mode | .869 | Std Dev | 8.100 | Variance | 65.604 |
| Range | 42.069 | Minimum | -23.737 | Maximum | 18.331 |

Valid Cases 54

P22DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -22.64 | 1 | 1.9 | 1.9 | 1.9 |
| -19.47 | 1 | 1.9 | 1.9 | 3.7 |
| -13.91 | 1 | 1.9 | 1.9 | 5.6 |
| -9.15 | 4 | 7.4 | 7.4 | 13.0 |
| -8.36 | 1 | 1.9 | 1.9 | 14.8 |
| -7.56 | 2 | 3.7 | 3.7 | 18.5 |
| -6.77 | 2 | 3.7 | 3.7 | 22.2 |
| -5.98 | 1 | 1.9 | 1.9 | 24.1 |
| -5.18 | 1 | 1.9 | 1.9 | 25.9 |
| -4.39 | 3 | 5.6 | 5.6 | 31.5 |
| -3.59 | 3 | 5.6 | 5.6 | 37.0 |
| -2.80 | 1 | 1.9 | 1.9 | 38.9 |
| -2.01 | 2 | 3.7 | 3.7 | 42.6 |
| -1.21 | 1 | 1.9 | 1.9 | 44.4 |
| -.42 | 1 | 1.9 | 1.9 | 46.3 |
| .37 | 3 | 5.6 | 5.6 | 51.9 |
| 1.17 | 4 | 7.4 | 7.4 | 59.3 |
| 1.96 | 3 | 5.6 | 5.6 | 64.8 |
| 2.76 | 2 | 3.7 | 3.7 | 68.5 |
| 3.55 | 1 | 1.9 | 1.9 | 70.4 |
| 4.34 | 2 | 3.7 | 3.7 | 74.1 |
| 5.14 | 1 | 1.9 | 1.9 | 75.9 |
| 5.93 | 3 | 5.6 | 5.6 | 81.5 |
| 6.72 | 2 | 3.7 | 3.7 | 85.2 |
| 7.52 | 1 | 1.9 | 1.9 | 87.0 |
| 9.11 | 2 | 3.7 | 3.7 | 90.7 |
| 9.90 | 1 | 1.9 | 1.9 | 92.6 |
| 13.87 | 1 | 1.9 | 1.9 | 94.4 |
| 14.66 | 1 | 1.9 | 1.9 | 96.3 |
| 15.46 | 1 | 1.9 | 1.9 | 98.1 |
| 19.42 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P22DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.154 | Std Err | 1.109 | Median | .375 |
| Mode | -9.150 | Std Dev | 8.150 | Variance | 66.428 |
| Range | 42.069 | Minimum | -22.644 | Maximum | 19.425 |

Valid Cases 54

P23DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -18.93 | 1 | 1.9 | 1.9 | 1.9 |
| -16.54 | 1 | 1.9 | 1.9 | 3.7 |
| -15.75 | 1 | 1.9 | 1.9 | 5.6 |
| -13.37 | 1 | 1.9 | 1.9 | 7.4 |
| -12.58 | 1 | 1.9 | 1.9 | 9.3 |
| -10.19 | 1 | 1.9 | 1.9 | 11.1 |
| -9.40 | 3 | 5.6 | 5.6 | 16.7 |
| -8.61 | 1 | 1.9 | 1.9 | 18.5 |
| -7.81 | 1 | 1.9 | 1.9 | 20.4 |
| -7.02 | 1 | 1.9 | 1.9 | 22.2 |
| -6.23 | 2 | 3.7 | 3.7 | 25.9 |
| -5.43 | 1 | 1.9 | 1.9 | 27.8 |
| -4.64 | 1 | 1.9 | 1.9 | 29.6 |
| -3.84 | 2 | 3.7 | 3.7 | 33.3 |
| -3.05 | 1 | 1.9 | 1.9 | 35.2 |
| -2.26 | 2 | 3.7 | 3.7 | 38.9 |
| -1.46 | 1 | 1.9 | 1.9 | 40.7 |
| -.67 | 3 | 5.6 | 5.6 | 46.3 |
| .12 | 2 | 3.7 | 3.7 | 50.0 |
| .92 | 2 | 3.7 | 3.7 | 53.7 |
| 1.71 | 3 | 5.6 | 5.6 | 59.3 |
| 2.51 | 1 | 1.9 | 1.9 | 61.1 |
| 3.30 | 2 | 3.7 | 3.7 | 64.8 |
| 4.09 | 1 | 1.9 | 1.9 | 66.7 |
| 4.89 | 3 | 5.6 | 5.6 | 72.2 |
| 5.68 | 3 | 5.6 | 5.6 | 77.8 |
| 6.47 | 1 | 1.9 | 1.9 | 79.6 |
| 7.27 | 2 | 3.7 | 3.7 | 83.3 |
| 9.65 | 2 | 3.7 | 3.7 | 87.0 |
| 10.44 | 1 | 1.9 | 1.9 | 88.9 |
| 12.03 | 1 | 1.9 | 1.9 | 90.7 |
| 13.62 | 1 | 1.9 | 1.9 | 92.6 |
| 15.21 | 1 | 1.9 | 1.9 | 94.4 |
| 16.00 | 1 | 1.9 | 1.9 | 96.3 |
| 16.79 | 1 | 1.9 | 1.9 | 98.1 |
| 22.35 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P23DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .345 | Std Err | 1.213 | Median | .522 |
| Mode | -9.400 | Std Dev | 8.913 | Variance | 79.442 |
| Range | 41.275 | Minimum | -18.925 | Maximum | 22.350 |

Valid Cases 54

P24DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -17.84 | 1 | 1.9 | 1.9 | 1.9 |
| -13.87 | 1 | 1.9 | 1.9 | 3.7 |
| -12.28 | 1 | 1.9 | 1.9 | 5.6 |
| -11.49 | 2 | 3.7 | 3.7 | 9.3 |
| -10.69 | 1 | 1.9 | 1.9 | 11.1 |
| -9.11 | 1 | 1.9 | 1.9 | 13.0 |
| -8.31 | 4 | 7.4 | 7.4 | 20.4 |
| -7.52 | 2 | 3.7 | 3.7 | 24.1 |
| -6.73 | 1 | 1.9 | 1.9 | 25.9 |
| -5.93 | 1 | 1.9 | 1.9 | 27.8 |
| -3.55 | 2 | 3.7 | 3.7 | 31.5 |
| -1.96 | 1 | 1.9 | 1.9 | 33.3 |
| -1.17 | 4 | 7.4 | 7.4 | 40.7 |
| -.38 | 5 | 9.3 | 9.3 | 50.0 |
| .42 | 2 | 3.7 | 3.7 | 53.7 |
| 2.01 | 2 | 3.7 | 3.7 | 57.4 |
| 2.80 | 2 | 3.7 | 3.7 | 61.1 |
| 3.59 | 4 | 7.4 | 7.4 | 68.5 |
| 4.39 | 3 | 5.6 | 5.6 | 74.1 |
| 5.18 | 2 | 3.7 | 3.7 | 77.8 |
| 5.97 | 3 | 5.6 | 5.6 | 83.3 |
| 6.77 | 1 | 1.9 | 1.9 | 85.2 |
| 7.56 | 1 | 1.9 | 1.9 | 87.0 |
| 8.36 | 1 | 1.9 | 1.9 | 88.9 |
| 9.15 | 1 | 1.9 | 1.9 | 90.7 |
| 9.94 | 1 | 1.9 | 1.9 | 92.6 |
| 10.74 | 1 | 1.9 | 1.9 | 94.4 |
| 13.12 | 1 | 1.9 | 1.9 | 96.3 |
| 13.91 | 1 | 1.9 | 1.9 | 98.1 |
| 21.85 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P24DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .081 | Std Err | 1.063 | Median | .022 |
| Mode | -.375 | Std Dev | 7.813 | Variance | 61.045 |
| Range | 39.688 | Minimum | -17.838 | Maximum | 21.850 |

Valid Cases 54

P25DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -16.96 | 1 | 1.9 | 1.9 | 1.9 |
| -11.40 | 4 | 7.4 | 7.4 | 9.3 |
| -9.02 | 1 | 1.9 | 1.9 | 11.1 |
| -8.23 | 1 | 1.9 | 1.9 | 13.0 |
| -7.43 | 3 | 5.6 | 5.6 | 18.5 |
| -6.64 | 3 | 5.6 | 5.6 | 24.1 |
| -5.84 | 1 | 1.9 | 1.9 | 25.9 |
| -4.26 | 2 | 3.7 | 3.7 | 29.6 |
| -3.46 | 2 | 3.7 | 3.7 | 33.3 |
| -2.67 | 2 | 3.7 | 3.7 | 37.0 |
| -1.88 | 3 | 5.6 | 5.6 | 42.6 |
| -1.08 | 1 | 1.9 | 1.9 | 44.4 |
| -.29 | 2 | 3.7 | 3.7 | 48.1 |
| .51 | 4 | 7.4 | 7.4 | 55.6 |
| 2.09 | 3 | 5.6 | 5.6 | 61.1 |
| 2.89 | 1 | 1.9 | 1.9 | 63.0 |
| 3.68 | 4 | 7.4 | 7.4 | 70.4 |
| 4.47 | 1 | 1.9 | 1.9 | 72.2 |
| 5.27 | 3 | 5.6 | 5.6 | 77.8 |
| 6.06 | 1 | 1.9 | 1.9 | 79.6 |
| 7.65 | 1 | 1.9 | 1.9 | 81.5 |
| 8.44 | 2 | 3.7 | 3.7 | 85.2 |
| 9.24 | 1 | 1.9 | 1.9 | 87.0 |
| 10.82 | 2 | 3.7 | 3.7 | 90.7 |
| 11.62 | 2 | 3.7 | 3.7 | 94.4 |
| 13.21 | 1 | 1.9 | 1.9 | 96.3 |
| 14.00 | 1 | 1.9 | 1.9 | 98.1 |
| 20.35 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P25DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .418 | Std Err | 1.050 | Median | .506 |
| Mode | -11.400 | Std Dev | 7.718 | Variance | 59.572 |
| Range | 37.306 | Minimum | -16.956 | Maximum | 20.350 |

Valid Cases 54

P26DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -14.50 | 1 | 1.9 | 1.9 | 1.9 |
| -13.71 | 1 | 1.9 | 1.9 | 3.7 |
| -11.33 | 1 | 1.9 | 1.9 | 5.6 |
| -10.53 | 3 | 5.6 | 5.6 | 11.1 |
| -8.94 | 2 | 3.7 | 3.7 | 14.8 |
| -8.15 | 2 | 3.7 | 3.7 | 18.5 |
| -6.56 | 1 | 1.9 | 1.9 | 20.4 |
| -5.77 | 5 | 9.3 | 9.3 | 29.6 |
| -4.98 | 1 | 1.9 | 1.9 | 31.5 |
| -4.18 | 1 | 1.9 | 1.9 | 33.3 |
| -3.39 | 1 | 1.9 | 1.9 | 35.2 |
| -2.59 | 1 | 1.9 | 1.9 | 37.0 |
| -1.80 | 2 | 3.7 | 3.7 | 40.7 |
| -1.01 | 4 | 7.4 | 7.4 | 48.1 |
| -.21 | 5 | 9.3 | 9.3 | 57.4 |
| .58 | 1 | 1.9 | 1.9 | 59.3 |
| 1.37 | 3 | 5.6 | 5.6 | 64.8 |
| 2.17 | 2 | 3.7 | 3.7 | 68.5 |
| 2.96 | 2 | 3.7 | 3.7 | 72.2 |
| 3.76 | 2 | 3.7 | 3.7 | 75.9 |
| 5.34 | 2 | 3.7 | 3.7 | 79.6 |
| 6.14 | 1 | 1.9 | 1.9 | 81.5 |
| 6.93 | 3 | 5.6 | 5.6 | 87.0 |
| 7.72 | 2 | 3.7 | 3.7 | 90.7 |
| 8.52 | 1 | 1.9 | 1.9 | 92.6 |
| 9.31 | 1 | 1.9 | 1.9 | 94.4 |
| 11.69 | 1 | 1.9 | 1.9 | 96.3 |
| 12.49 | 1 | 1.9 | 1.9 | 98.1 |
| 14.07 | 1 | 1.9 | 1.9 | 100.0 |
| TOTAL | 54 | 100.0 | 100.0 | |

P26DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -.609 | Std Err | .931 | Median | -.213 |
| Mode | -5.769 | Std Dev | 6.843 | Variance | 46.831 |
| Range | 28.575 | Minimum | -14.500 | Maximum | 14.075 |

Valid Cases 54

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# APPENDIX E

PROBE DELTAS (PROBE VALUE - LARGE HEADFORM VALUE)
FOR SUBJECTS IN THE SIZE LARGE PASGT HELMET

## APPENDIX E

### PROBE DELTAS (PROBE VALUE - LARGE HEADFORM VALUE) FOR SUBJECTS IN THE SIZE LARGE PASGT HELMET

Line 1: ID P1DELTA P2DELTA P3DELTA P4DELTA P5DELTA P6DELTA P7DELTA

Line 2: P8DELTA P9DELTA P10DELTA P11DELTA P12DELTA P13DELTA P14DELTA

Line 3: P15DELTA P16DELTA P17DELTA P18DELTA P19DELTA P20DELTA P21DELTA

Line 4: P22DELTA P23DELTA P24DELTA P25DELTA P26DELTA

Note: Delta Values Greater Than 2.5 mm Indicate Loss of Recommended Standoff at a Given Probe Location.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=4 | -1.04 | -5.23 | -8.06 | -11.49 | -3.22 | -7.43 | -12.91 |
| | 3.67 | 8.82 | 5.51 | 7.89 | 3.55 | .98 | 3.97 |
| | -23.32 | -8.19 | .33 | -13.49 | -13.79 | -11.53 | -13.88 |
| | -5.94 | -6.89 | 2.04 | -.96 | -2.55 | | |
| ID=13 | -1.04 | .33 | 4.64 | 8.36 | 12.66 | -6.64 | 6.14 |
| | -5.06 | -6.26 | -7.19 | -10.37 | -9.15 | 1.37 | .01 |
| | -1.89 | -4.22 | -7.61 | -13.49 | -12.20 | 5.94 | 7.56 |
| | 4.38 | 6.61 | 1.25 | -.16 | -4.14 | | |
| ID=14 | 6.90 | 1.12 | -8.06 | -5.93 | 1.54 | -9.02 | -10.53 |
| | 2.88 | -8.64 | -7.19 | -5.61 | -8.36 | -4.18 | -7.93 |
| | -6.65 | -5.81 | -8.40 | -10.32 | -11.41 | -3.59 | -9.91 |
| | -6.73 | -6.09 | -6.69 | -4.13 | -4.93 | | |
| ID=17 | 11.66 | -2.84 | -4.09 | -16.25 | -9.57 | -9.02 | -9.73 |
| | -5.86 | -7.85 | -7.99 | -6.40 | -7.56 | -3.39 | -3.17 |
| | -.30 | 1.33 | 1.13 | 3.97 | -3.47 | -9.14 | -10.70 |
| | -11.49 | -14.83 | -9.86 | -12.07 | -12.87 | | |
| ID=21 | 19.60 | -5.23 | 17.59 | -15.46 | -6.39 | 2.89 | -23.22 |
| | -15.38 | -15.79 | 19.79 | -7.19 | -4.39 | -16.88 | -15.87 |
| | -4.27 | 21.97 | -1.26 | 7.14 | 4.47 | -25.02 | -24.19 |
| | -20.22 | -14.03 | -17.80 | -11.28 | -4.93 | | |
| ID=22 | -1.83 | -2.84 | 2.26 | 4.39 | 5.51 | -12.99 | 2.97 |
| | -3.47 | -7.06 | -6.40 | -4.02 | -5.18 | 1.37 | -.79 |
| | -5.86 | -10.58 | -12.37 | -20.64 | -18.55 | 7.52 | -20.22 |
| | 2.79 | 1.05 | -1.93 | -.96 | -6.32 | | |
| ID=30 | 2.93 | -2.84 | -1.71 | 1.21 | 11.07 | -9.81 | -4.17 |
| | -5.06 | -5.47 | -5.61 | -4.02 | -5.97 | -1.80 | -2.38 |
| | -2.68 | -5.02 | -6.81 | -6.35 | -14.58 | -.41 | 1.21 |
| | 2.00 | 1.84 | -1.13 | .63 | -5.73 | | |
| ID=31 | 7.69 | .33 | -7.27 | -11.49 | -.84 | -3.46 | -4.97 |
| | -5.06 | -3.88 | -.84 | 2.33 | 1.17 | -4.98 | -2.38 |
| | 1.29 | -2.64 | 2.71 | -3.97 | -5.85 | -10.73 | -9.91 |
| | -9.11 | -10.06 | -4.31 | -5.72 | -1.76 | | |
| ID=32 | 6.11 | -10.78 | -12.03 | -13.08 | -2.43 | 11.62 | -15.29 |
| | -10.62 | -7.06 | -4.02 | 2.33 | 5.93 | -7.36 | -14.28 |
| | -7.44 | -4.22 | -2.84 | 3.17 | 12.41 | -10.73 | -13.88 |
| | -11.49 | -14.03 | -13.04 | -12.86 | 3.80 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=35 | -12.15 | -17.93 | -8.86 | 2.01 | 22.18 | -8.23 | -12.11 |
| | -10.62 | -11.03 | -15.93 | -12.78 | -9.15 | -11.33 | -14.28 |
| | -18.54 | -22.48 | -21.89 | -24.61 | -23.31 | -2.79 | -2.76 |
| | 1.21 | 7.40 | .46 | 18.09 | 3.01 | | |
| ID=41 | .55 | -3.64 | -9.65 | -13.87 | -9.57 | 5.27 | -8.94 |
| | 3.67 | 7.23 | 7.09 | 10.27 | 9.90 | -6.56 | -.79 |
| | 8.43 | -.26 | 11.44 | -1.89 | 4.47 | -14.70 | -11.49 |
| | -1.97 | -13.24 | -1.93 | -13.66 | -1.76 | | |
| ID=44 | .55 | -9.99 | -12.03 | -15.46 | -6.39 | -4.26 | -8.94 |
| | -4.27 | -2.29 | -4.02 | 2.33 | 1.17 | -10.53 | -4.76 |
| | -.30 | -2.64 | 1.92 | -.00 | -1.88 | -13.11 | -13.08 |
| | -13.08 | -18.79 | -11.45 | -20.01 | -10.49 | | |
| ID=46 | -5.01 | -7.61 | -.13 | 1.21 | 9.48 | -16.16 | 5.35 |
| | 2.88 | 5.64 | 3.92 | .74 | -4.39 | -1.80 | .01 |
| | -2.68 | -10.58 | -2.05 | -17.46 | -20.14 | 1.97 | 4.38 |
| | 10.73 | -1.33 | 6.01 | .63 | -7.31 | | |
| ID=47 | -1.83 | -7.61 | -3.30 | -9.11 | 1.54 | 7.65 | -9.73 |
| | -3.47 | -5.47 | -7.19 | -2.43 | 1.17 | -9.74 | -3.17 |
| | -7.44 | -14.54 | -10.78 | -15.08 | -1.09 | -7.56 | -6.73 |
| | -9.11 | -10.86 | -9.07 | -5.72 | 7.77 | | |
| ID=48 | 11.66 | -1.26 | -10.44 | -10.69 | 1.54 | 3.68 | -11.32 |
| | -4.27 | -.71 | -.84 | 3.12 | 4.34 | -8.15 | -7.14 |
| | -.30 | -4.22 | 1.13 | 5.56 | 5.26 | -13.11 | -11.49 |
| | -10.70 | -12.44 | -9.07 | -10.48 | -.17 | | |
| ID=61 | 6.11 | -6.02 | -14.41 | -11.49 | -2.43 | -5.84 | -14.49 |
| | -10.62 | -6.26 | -4.81 | -1.64 | -2.01 | -11.33 | -12.69 |
| | -1.89 | -3.43 | -1.26 | -.00 | -5.85 | -13.91 | -19.43 |
| | -9.11 | -13.24 | -9.07 | -7.31 | -4.93 | | |
| ID=62 | -8.98 | -10.78 | -9.65 | -3.55 | 6.31 | 1.30 | -10.53 |
| | -4.27 | -3.88 | -2.43 | -.05 | .38 | -4.98 | -8.73 |
| | -6.65 | -18.51 | -8.40 | -16.67 | -9.03 | -8.35 | -9.91 |
| | -6.73 | -10.86 | -3.51 | -4.13 | 5.39 | | |
| ID=70 | 14.84 | 3.51 | -6.48 | -15.46 | -13.54 | -1.08 | -8.94 |
| | -7.44 | -3.88 | -4.81 | -.84 | 1.17 | .58 | -2.38 |
| | 3.67 | 3.71 | 4.30 | 3.17 | 3.67 | -9.94 | -13.88 |
| | -14.67 | -24.35 | -18.59 | -22.39 | -10.49 | | |
| ID=73 | 8.49 | 1.12 | .67 | -2.76 | 1.54 | -6.64 | -4.17 |
| | -6.65 | -7.06 | -8.78 | -5.61 | -5.97 | .58 | -3.17 |
| | -2.68 | -2.64 | -8.40 | -6.35 | -3.47 | -2.00 | -5.14 |
| | -8.32 | -10.86 | -11.45 | -12.07 | -8.11 | | |
| ID=75 | -5.01 | -7.61 | 5.43 | -.38 | 3.92 | -12.99 | 3.76 |
| | -2.68 | -3.88 | -5.61 | -4.02 | 7.52 | -.21 | -.79 |
| | -5.06 | -11.37 | -12.37 | -16.67 | -15.38 | 2.76 | 2.00 |
| | -.38 | -4.51 | -1.93 | -4.13 | -4.14 | | |
| ID=76 | 1.34 | -4.43 | 3.05 | -4.34 | 3.92 | -4.26 | 3.76 |
| | -1.89 | -4.67 | -4.81 | -5.61 | -4.39 | .58 | -2.38 |
| | -5.06 | -13.75 | -6.81 | -15.88 | -9.03 | 3.56 | .41 |
| | .41 | -2.92 | -.34 | -.96 | -.96 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=77 | -4.21 | -8.40 | -1.71 | -9.90 | -3.22 | 3.68 | 1.38 |
| | -1.09 | -.71 | .74 | 1.54 | 1.96 | -4.18 | -3.17 |
| | -4.27 | -16.13 | -.46 | -14.29 | 1.29 | -3.59 | -5.94 |
| | -9.11 | -14.83 | -4.31 | -11.28 | 1.42 | | |
| ID=80 | 2.93 | -2.05 | -2.51 | -5.93 | -.04 | .51 | -6.56 |
| | -.30 | 1.67 | .74 | 3.12 | 3.85 | -1.01 | -7.14 |
| | -6.65 | -10.58 | -7.61 | -8.73 | -1.88 | -3.59 | -1.97 |
| | -1.17 | -9.27 | -4.31 | -8.10 | -.96 | | |
| ID=81 | 2.93 | 1.12 | 4.64 | 3.59 | 3.13 | -10.61 | 1.38 |
| | 5.26 | 5.64 | 4.71 | 3.92 | -.42 | 2.17 | .01 |
| | 4.46 | -4.22 | 3.51 | -7.14 | -6.64 | 3.56 | 2.00 |
| | 3.59 | 12.16 | .46 | -7.31 | -11.28 | | |
| ID=93 | 12.46 | -1.26 | -4.89 | -13.08 | -5.60 | -6.64 | -10.53 |
| | -1.89 | -1.50 | -4.81 | -4.02 | -6.77 | -4.18 | -3.17 |
| | 2.08 | .54 | 2.71 | 7.94 | -1.88 | -7.56 | -11.49 |
| | -7.53 | -6.09 | -6.69 | -11.28 | -8.11 | | |
| ID=94 | 2.93 | -2.05 | -4.09 | -2.76 | 6.31 | -2.67 | -8.94 |
| | -16.97 | -18.96 | -19.10 | -16.72 | -14.71 | -3.39 | -7.14 |
| | -10.62 | -10.58 | -13.16 | -14.29 | -9.82 | -5.18 | -8.32 |
| | -10.70 | -7.68 | -13.83 | -4.13 | 1.42 | | |
| ID=101 | 2.93 | -1.26 | -7.27 | -4.34 | -1.63 | 5.27 | -7.35 |
| | -11 41 | -10.33 | -9.58 | -7.19 | -5.18 | -2.59 | -3.96 |
| | -9.83 | -11.37 | -13.16 | -15.08 | -5.85 | -7.56 | -7.53 |
| | -6.73 | -13.24 | -11.45 | -7.31 | 5.39 | | |
| ID=105 | 7.69 | -2.05 | -2.51 | -9.11 | -4.01 | -6.64 | -11.32 |
| | -9.83 | -12.61 | -15.93 | -11.16 | -7.56 | -4.98 | -9.52 |
| | -9.03 | -10.58 | -11.58 | -6.35 | -5.85 | -8.35 | -12.29 |
| | -11.49 | -9.27 | -12.24 | -7.31 | -3.34 | | |
| ID=106 | 2.93 | -.46 | 1.46 | 2.01 | 7.89 | -3.46 | 2.97 |
| | .49 | -1.50 | -2.43 | -2.43 | -5.97 | 2.96 | 1.59 |
| | 1.29 | -7.40 | -6.02 | -14.29 | -9.03 | 1.17 | 2.79 |
| | 1.21 | -5.30 | -.34 | -5.72 | -.17 | | |
| ID=108 | .55 | -6.02 | -4.89 | -6.73 | -4.81 | -3.46 | 3.76 |
| | .49 | -.71 | -2.43 | -.84 | -3.59 | -1.80 | .01 |
| | -2.68 | 12.44 | -4.43 | -10.32 | -6.64 | -1.21 | 1.21 |
| | -1.97 | -12.44 | -3.51 | -8.10 | -3.34 | | |

Number of cases read = 30

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# APPENDIX F

## PROBE DELTA FREQUENCIES AND DESCRIPTIVE STATISTICS FOR SUBJECTS IN THE SIZE LARGE PASGT HELMET

## APPENDIX F

### PROBE DELTA FREQUENCIES AND DESCRIPTIVE STATISTICS FOR SUBJECTS IN THE SIZE LARGE PASGT HELMET

**P1DELTA**

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -12.15 | 1 | 3.3 | 3.3 | 3.3 |
| -8.98 | 1 | 3.3 | 3.3 | 6.7 |
| -5.01 | 2 | 6.7 | 6.7 | 13.3 |
| -4.21 | 1 | 3.3 | 3.3 | 16.7 |
| -1.83 | 2 | 6.7 | 6.7 | 23.3 |
| -1.04 | 2 | 6.7 | 6.7 | 30.0 |
| .55 | 3 | 10.0 | 10.0 | 40.0 |
| 1.34 | 1 | 3.3 | 3.3 | 43.3 |
| 2.93 | 6 | 20.0 | 20.0 | 63.3 |
| 6.11 | 2 | 6.7 | 6.7 | 70.0 |
| 6.90 | 1 | 3.3 | 3.3 | 73.3 |
| 7.69 | 2 | 6.7 | 6.7 | 80.0 |
| 8.49 | 1 | 3.3 | 3.3 | 83.3 |
| 11.66 | 2 | 6.7 | 6.7 | 90.0 |
| 12.46 | 1 | 3.3 | 3.3 | 93.3 |
| 14.84 | 1 | 3.3 | 3.3 | 96.7 |
| 19.60 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P1DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | 3.090 | Std Err | 1.276 | Median | 2.931 |
| Mode | 2.931 | Std Dev | 6.990 | Variance | 48.856 |
| Range | 31.750 | Minimum | -12.150 | Maximum | 19.600 |

Valid Cases 30

**P2DELTA**

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -17.93 | 1 | 3.3 | 3.3 | 3.3 |
| -10.78 | 2 | 6.7 | 6.7 | 10.0 |
| -9.99 | 1 | 3.3 | 3.3 | 13.3 |
| -8.40 | 1 | 3.3 | 3.3 | 16.7 |
| -7.61 | 3 | 10.0 | 10.0 | 26.7 |
| -6.02 | 2 | 6.7 | 6.7 | 33.3 |
| -5.23 | 2 | 6.7 | 6.7 | 40.0 |
| -4.43 | 1 | 3.3 | 3.3 | 43.3 |
| -3.64 | 1 | 3.3 | 3.3 | 46.7 |
| -2.84 | 3 | 10.0 | 10.0 | 56.7 |
| -2.05 | 3 | 10.0 | 10.0 | 66.7 |
| -1.26 | 3 | 10.0 | 10.0 | 76.7 |
| -.46 | 1 | 3.3 | 3.3 | 80.0 |
| .33 | 2 | 6.7 | 6.7 | 86.7 |
| 1.12 | 3 | 10.0 | 10.0 | 96.7 |
| 3.51 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P2DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -4.087 | Std Err | .840 | Median | -2.844 |
| Mode | -7.606 | Std Dev | 4.603 | Variance | 21.190 |
| Range | 21.431 | Minimum | -17.925 | Maximum | 3.506 |

Valid Cases 30

P3DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -17.59 | 1 | 3.3 | 3.3 | 3.3 |
| -14.41 | 1 | 3.3 | 3.3 | 6.7 |
| -12.03 | 2 | 6.7 | 6.7 | 13.3 |
| -10.44 | 1 | 3.3 | 3.3 | 16.7 |
| -9.65 | 2 | 6.7 | 6.7 | 23.3 |
| -8.86 | 1 | 3.3 | 3.3 | 26.7 |
| -8.06 | 2 | 6.7 | 6.7 | 33.3 |
| -7.27 | 2 | 6.7 | 6.7 | 40.0 |
| -6.48 | 1 | 3.3 | 3.3 | 43.3 |
| -4.89 | 2 | 6.7 | 6.7 | 50.0 |
| -4.09 | 2 | 6.7 | 6.7 | 56.7 |
| -3.30 | 1 | 3.3 | 3.3 | 60.0 |
| -2.51 | 2 | 6.7 | 6.7 | 66.7 |
| -1.71 | 2 | 6.7 | 6.7 | 73.3 |
| -.13 | 1 | 3.3 | 3.3 | 76.7 |
| .67 | 1 | 3.3 | 3.3 | 80.0 |
| 1.46 | 1 | 3.3 | 3.3 | 83.3 |
| 2.26 | 1 | 3.3 | 3.3 | 86.7 |
| 3.05 | 1 | 3.3 | 3.3 | 90.0 |
| 4.64 | 2 | 6.7 | 6.7 | 96.7 |
| 5.43 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P3DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -4.649 | Std Err | 1.077 | Median | -4.491 |
| Mode | -12.031 | Std Dev | 5.900 | Variance | 34.811 |
| Range | 23.019 | Minimum | -17.588 | Maximum | 5.431 |

Valid Cases 30

P4DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -16.25 | 1 | 3.3 | 3.3 | 3.3 |
| -15.46 | 3 | 10.0 | 10.0 | 13.3 |
| -13.87 | 1 | 3.3 | 3.3 | 16.7 |
| -13.08 | 2 | 6.7 | 6.7 | 23.3 |
| -11.49 | 3 | 10.0 | 10.0 | 33.3 |
| -10.69 | 1 | 3.3 | 3.3 | 36.7 |
| -9.90 | 1 | 3.3 | 3.3 | 40.0 |
| -9.11 | 2 | 6.7 | 6.7 | 46.7 |
| -6.73 | 1 | 3.3 | 3.3 | 50.0 |
| -5.93 | 2 | 6.7 | 6.7 | 56.7 |
| -4.34 | 2 | 6.7 | 6.7 | 63.3 |
| -3.55 | 1 | 3.3 | 3.3 | 66.7 |
| -2.76 | 2 | 6.7 | 6.7 | 73.3 |
| -.38 | 1 | 3.3 | 3.3 | 76.7 |
| 1.21 | 2 | 6.7 | 6.7 | 83.3 |
| 2.01 | 2 | 6.7 | 6.7 | 90.0 |
| 3.59 | 1 | 3.3 | 3.3 | 93.3 |
| 4.39 | 1 | 3.3 | 3.3 | 96.7 |
| 8.36 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P4DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -6.328 | Std Err | 1.260 | Median | -6.328 |
| Mode | -15.456 | Std Dev | 6.903 | Variance | 47.655 |
| Range | 24.606 | Minimum | -16.250 | Maximum | 8.356 |

Valid Cases 30

P5DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -13.54 | 1 | 3.3 | 3.3 | 3.3 |
| -9.57 | 2 | 6.7 | 6.7 | 10.0 |
| -6.39 | 2 | 6.7 | 6.7 | 16.7 |
| -5.60 | 1 | 3.3 | 3.3 | 20.0 |
| -4.81 | 1 | 3.3 | 3.3 | 23.3 |
| -4.01 | 1 | 3.3 | 3.3 | 26.7 |
| -3.22 | 2 | 6.7 | 6.7 | 33.3 |
| -2.43 | 2 | 6.7 | 6.7 | 40.0 |
| -1.63 | 1 | 3.3 | 3.3 | 43.3 |
| -.84 | 1 | 3.3 | 3.3 | 46.7 |
| -.04 | 1 | 3.3 | 3.3 | 50.0 |
| 1.54 | 4 | 13.3 | 13.3 | 63.3 |
| 3.13 | 1 | 3.3 | 3.3 | 66.7 |
| 3.92 | 2 | 6.7 | 6.7 | 73.3 |
| 5.51 | 1 | 3.3 | 3.3 | 76.7 |
| 6.31 | 2 | 6.7 | 6.7 | 83.3 |
| 7.89 | 1 | 3.3 | 3.3 | 86.7 |
| 9.48 | 1 | 3.3 | 3.3 | 90.0 |
| 11.07 | 1 | 3.3 | 3.3 | 93.3 |
| 12.66 | 1 | 3.3 | 3.3 | 96.7 |
| 22.18 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P5DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | .829 | Std Err | 1.365 | Median | .750 |
| Mode | 1.544 | Std Dev | 7.476 | Variance | 55.893 |
| Range | 35.719 | Minimum | -13.538 | Maximum | 22.181 |

Valid Cases 30

P6DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -16.16 | 1 | 3.3 | 3.3 | 3.3 |
| -12.99 | 2 | 6.7 | 6.7 | 10.0 |
| -10.61 | 1 | 3.3 | 3.3 | 13.3 |
| -9.81 | 1 | 3.3 | 3.3 | 16.7 |
| -9.02 | 2 | 6.7 | 6.7 | 23.3 |
| -8.23 | 1 | 3.3 | 3.3 | 26.7 |
| -7.43 | 1 | 3.3 | 3.3 | 30.0 |
| -6.64 | 4 | 13.3 | 13.3 | 43.3 |
| -5.84 | 1 | 3.3 | 3.3 | 46.7 |
| -4.26 | 2 | 6.7 | 6.7 | 53.3 |
| -3.46 | 3 | 10.0 | 10.0 | 63.3 |
| -2.67 | 1 | 3.3 | 3.3 | 66.7 |
| -1.08 | 1 | 3.3 | 3.3 | 70.0 |
| .51 | 1 | 3.3 | 3.3 | 73.3 |
| 1.30 | 1 | 3.3 | 3.3 | 76.7 |
| 2.89 | 1 | 3.3 | 3.3 | 80.0 |
| 3.68 | 2 | 6.7 | 6.7 | 86.7 |
| 5.27 | 2 | 6.7 | 6.7 | 93.3 |
| 7.65 | 1 | 3.3 | 3.3 | 96.7 |
| 11.62 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P6DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -3.648 | Std Err | 1.209 | Median | -4.256 |
| Mode | -6.638 | Std Dev | 6.620 | Variance | 43.828 |
| Range | 27.781 | Minimum | -16.163 | Maximum | 11.619 |

Valid Cases 30

P7DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -23.22 | 1 | 3.3 | 3.3 | 3.3 |
| -15.29 | 1 | 3.3 | 3.3 | 6.7 |
| -14.49 | 1 | 3.3 | 3.3 | 10.0 |
| -12.91 | 1 | 3.3 | 3.3 | 13.3 |
| -12.11 | 1 | 3.3 | 3.3 | 16.7 |
| -11.32 | 2 | 6.7 | 6.7 | 23.3 |
| -10.53 | 3 | 10.0 | 10.0 | 33.3 |
| -9.73 | 2 | 6.7 | 6.7 | 40.0 |
| -8.94 | 4 | 13.3 | 13.3 | 53.3 |
| -7.35 | 1 | 3.3 | 3.3 | 56.7 |
| -6.56 | 1 | 3.3 | 3.3 | 60.0 |
| -4.97 | 1 | 3.3 | 3.3 | 63.3 |
| -4.17 | 2 | 6.7 | 6.7 | 70.0 |
| 1.38 | 2 | 6.7 | 6.7 | 76.7 |
| 2.97 | 2 | 6.7 | 6.7 | 83.3 |
| 3.76 | 3 | 10.0 | 10.0 | 93.3 |
| 5.35 | 1 | 3.3 | 3.3 | 96.7 |
| 6.14 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P7DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -6.106 | Std Err | 1.340 | Median | -8.938 |
| Mode | -8.938 | Std Dev | 7.339 | Variance | 53.865 |
| Range | 29.369 | Minimum | -23.225 | Maximum | 6.144 |

Valid Cases 30

P8DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -16.97 | 1 | 3.3 | 3.3 | 3.3 |
| -15.38 | 1 | 3.3 | 3.3 | 6.7 |
| -11.41 | 1 | 3.3 | 3.3 | 10.0 |
| -10.62 | 3 | 10.0 | 10.0 | 20.0 |
| -9.83 | 1 | 3.3 | 3.3 | 23.3 |
| -7.44 | 1 | 3.3 | 3.3 | 26.7 |
| -6.65 | 1 | 3.3 | 3.3 | 30.0 |
| -5.86 | 1 | 3.3 | 3.3 | 33.3 |
| -5.06 | 3 | 10.0 | 10.0 | 43.3 |
| -4.27 | 3 | 10.0 | 10.0 | 53.3 |
| -3.47 | 2 | 6.7 | 6.7 | 60.0 |
| -2.68 | 1 | 3.3 | 3.3 | 63.3 |
| -1.89 | 2 | 6.7 | 6.7 | 70.0 |
| -1.09 | 1 | 3.3 | 3.3 | 73.3 |
| -.30 | 1 | 3.3 | 3.3 | 76.7 |
| .49 | 2 | 6.7 | 6.7 | 83.3 |
| 2.88 | 2 | 6.7 | 6.7 | 90.0 |
| 3.67 | 2 | 6.7 | 6.7 | 96.7 |
| 5.26 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P8DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -4.295 | Std Err | 1.024 | Median | -4.269 |
| Mode | -10.619 | Std Dev | 5.611 | Variance | 31.480 |
| Range | 22.225 | Minimum | -16.969 | Maximum | 5.256 |

Valid Cases 30

P9DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -18.96 | 1 | 3.3 | 3.3 | 3.3 |
| -18.79 | 1 | 3.3 | 3.3 | 6.7 |
| -12.61 | 1 | 3.3 | 3.3 | 10.0 |
| -11.03 | 1 | 3.3 | 3.3 | 13.3 |
| -10.23 | 1 | 3.3 | 3.3 | 16.7 |
| -8.64 | 1 | 3.3 | 3.3 | 20.0 |
| -7.85 | 1 | 3.3 | 3.3 | 23.3 |
| -7.06 | 3 | 10.0 | 10.0 | 33.3 |
| -6.26 | 2 | 6.7 | 6.7 | 40.0 |
| -5.47 | 2 | 6.7 | 6.7 | 46.7 |
| -4.67 | 1 | 3.3 | 3.3 | 50.0 |
| -3.88 | 4 | 13.3 | 13.3 | 63.3 |
| -2.29 | 1 | 3.3 | 3.3 | 66.7 |
| -1.50 | 2 | 6.7 | 6.7 | 73.3 |
| -.71 | 3 | 10.0 | 10.0 | 83.3 |
| 1.67 | 1 | 3.3 | 3.3 | 86.7 |
| 5.64 | 2 | 6.7 | 6.7 | 93.3 |
| 7.23 | 1 | 3.3 | 3.3 | 96.7 |
| 8.82 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P9DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -4.278 | Std Err | 1.154 | Median | -4.278 |
| Mode | -3.881 | Std Dev | 6.322 | Variance | 39.964 |
| Range | 27.781 | Minimum | -18.963 | Maximum | 8.819 |

Valid Cases 30

P10DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -19.10 | 1 | 3.3 | 3.3 | 3.3 |
| -15.93 | 2 | 6.7 | 6.7 | 10.0 |
| -9.58 | 1 | 3.3 | 3.3 | 13.3 |
| -8.78 | 1 | 3.3 | 3.3 | 16.7 |
| -7.99 | 1 | 3.3 | 3.3 | 20.0 |
| -7.19 | 3 | 10.0 | 10.0 | 30.0 |
| -6.40 | 1 | 3.3 | 3.3 | 33.3 |
| -5.61 | 2 | 6.7 | 6.7 | 40.0 |
| -4.81 | 4 | 13.3 | 13.3 | 53.3 |
| -4.02 | 2 | 6.7 | 6.7 | 60.0 |
| -2.43 | 3 | 10.0 | 10.0 | 70.0 |
| -.84 | 2 | 6.7 | 6.7 | 76.7 |
| .74 | 2 | 6.7 | 6.7 | 83.3 |
| 3.92 | 1 | 3.3 | 3.3 | 86.7 |
| 4.71 | 1 | 3.3 | 3.3 | 90.0 |
| 5.51 | 1 | 3.3 | 3.3 | 93.3 |
| 7.09 | 1 | 3.3 | 3.3 | 96.7 |
| 19.79 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P10DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -3.675 | Std Err | 1.362 | Median | -4.813 |
| Mode | -4.813 | Std Dev | 7.460 | Variance | 55.647 |
| Range | 38.894 | Minimum | -19.100 | Maximum | 19.794 |

Valid Cases 30

P11DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -16.72 | 1 | 3.3 | 3.3 | 3.3 |
| -12.78 | 1 | 3.3 | 3.3 | 6.7 |
| -11.16 | 1 | 3.3 | 3.3 | 10.0 |
| -10.37 | 1 | 3.3 | 3.3 | 13.3 |
| -7.19 | 2 | 6.7 | 6.7 | 20.0 |
| -6.40 | 1 | 3.3 | 3.3 | 23.3 |
| -5.61 | 3 | 10.0 | 10.0 | 33.3 |
| -4.02 | 4 | 13.3 | 13.3 | 46.7 |
| -2.43 | 2 | 6.7 | 6.7 | 53.3 |
| -1.64 | 1 | 3.3 | 3.3 | 56.7 |
| -.84 | 2 | 6.7 | 6.7 | 63.3 |
| -.05 | 1 | 3.3 | 3.3 | 66.7 |
| .74 | 1 | 3.3 | 3.3 | 70.0 |
| 1.54 | 1 | 3.3 | 3.3 | 73.3 |
| 2.33 | 3 | 10.0 | 10.0 | 83.3 |
| 3.12 | 2 | 6.7 | 6.7 | 90.0 |
| 3.92 | 1 | 3.3 | 3.3 | 93.3 |
| 7.85 | 1 | 3.3 | 3.3 | 96.7 |
| 10.27 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P11DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -2.511 | Std Err | 1.086 | Median | -2.431 |
| Mode | -4.019 | Std Dev | 5.948 | Variance | 35.384 |
| Range | 26.988 | Minimum | -16.719 | Maximum | 10.269 |

Valid Cases 30

P12DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -14.71 | 1 | 3.3 | 3.3 | 3.3 |
| -9.15 | 2 | 6.7 | 6.7 | 10.0 |
| -8.36 | 1 | 3.3 | 3.3 | 13.3 |
| -7.56 | 2 | 6.7 | 6.7 | 20.0 |
| -6.77 | 1 | 3.3 | 3.3 | 23.3 |
| -5.97 | 3 | 10.0 | 10.0 | 33.3 |
| -5.18 | 2 | 6.7 | 6.7 | 40.0 |
| -4.39 | 3 | 10.0 | 10.0 | 50.0 |
| -3.59 | 1 | 3.3 | 3.3 | 53.3 |
| -2.01 | 1 | 3.3 | 3.3 | 56.7 |
| -.42 | 1 | 3.3 | 3.3 | 60.0 |
| .38 | 1 | 3.3 | 3.3 | 63.3 |
| 1.17 | 4 | 13.3 | 13.3 | 76.7 |
| 1.96 | 1 | 3.3 | 3.3 | 80.0 |
| 3.55 | 2 | 6.7 | 6.7 | 86.7 |
| 4.34 | 1 | 3.3 | 3.3 | 90.0 |
| 5.93 | 1 | 3.3 | 3.3 | 93.3 |
| 7.52 | 1 | 3.3 | 3.3 | 96.7 |
| 9.90 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P12DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -2.297 | Std Err | 1.036 | Median | -3.991 |
| Mode | 1.169 | Std Dev | 5.676 | Variance | 32.218 |
| Range | 24.606 | Minimum | -14.706 | Maximum | 9.900 |

Valid Cases 30

P13DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -16.88 | 1 | 3.3 | 3.3 | 3.3 |
| -11.33 | 2 | 6.7 | 6.7 | 10.0 |
| -10.53 | 1 | 3.3 | 3.3 | 13.3 |
| -9.74 | 1 | 3.3 | 3.3 | 16.7 |
| -8.15 | 1 | 3.3 | 3.3 | 20.0 |
| -7.36 | 1 | 3.3 | 3.3 | 23.3 |
| -6.56 | 1 | 3.3 | 3.3 | 26.7 |
| -4.98 | 3 | 10.0 | 10.0 | 36.7 |
| -4.18 | 3 | 10.0 | 10.0 | 46.7 |
| -3.39 | 2 | 6.7 | 6.7 | 53.3 |
| -2.59 | 1 | 3.3 | 3.3 | 56.7 |
| -1.80 | 3 | 10.0 | 10.0 | 66.7 |
| -1.01 | 1 | 3.3 | 3.3 | 70.0 |
| -.21 | 1 | 3.3 | 3.3 | 73.3 |
| .58 | 4 | 13.3 | 13.3 | 86.7 |
| 1.37 | 2 | 6.7 | 6.7 | 93.3 |
| 2.17 | 1 | 3.3 | 3.3 | 96.7 |
| 2.96 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P13DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -3.837 | Std Err | .868 | Median | -3.388 |
| Mode | .581 | Std Dev | 4.752 | Variance | 22.581 |
| Range | 19.844 | Minimum | -16.881 | Maximum | 2.962 |

Valid Cases 30

P14DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -15.87 | 1 | 3.3 | 3.3 | 3.3 |
| -14.28 | 2 | 6.7 | 6.7 | 10.0 |
| -12.69 | 1 | 3.3 | 3.3 | 13.3 |
| -9.52 | 1 | 3.3 | 3.3 | 16.7 |
| -8.73 | 1 | 3.3 | 3.3 | 20.0 |
| -7.93 | 1 | 3.3 | 3.3 | 23.3 |
| -7.14 | 3 | 10.0 | 10.0 | 33.3 |
| -4.76 | 1 | 3.3 | 3.3 | 36.7 |
| -3.96 | 1 | 3.3 | 3.3 | 40.0 |
| -3.17 | 5 | 16.7 | 16.7 | 56.7 |
| -2.38 | 4 | 13.3 | 13.3 | 70.0 |
| -.79 | 3 | 10.0 | 10.0 | 80.0 |
| .01 | 4 | 13.3 | 13.3 | 93.3 |
| 1.59 | 1 | 3.3 | 3.3 | 96.7 |
| 3.97 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P14DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -4.518 | Std Err | .911 | Median | -3.169 |
| Mode | -3.169 | Std Dev | 4.990 | Variance | 24.904 |
| Range | 19.844 | Minimum | -15.869 | Maximum | 3.975 |

Valid Cases 30

P15DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -23.32 | 1 | 3.3 | 3.3 | 3.3 |
| -18.86 | 1 | 3.3 | 3.3 | 6.7 |
| -10.62 | 1 | 3.3 | 3.3 | 10.0 |
| -9.83 | 1 | 3.3 | 3.3 | 13.3 |
| -9.03 | 1 | 3.3 | 3.3 | 16.7 |
| -7.44 | 2 | 6.7 | 6.7 | 23.3 |
| -6.68 | 3 | 10.0 | 10.0 | 33.3 |
| -5.86 | 1 | 3.3 | 3.3 | 36.7 |
| -5.06 | 2 | 6.7 | 6.7 | 43.3 |
| -4.27 | 2 | 6.7 | 6.7 | 50.0 |
| -2.68 | 4 | 13.3 | 13.3 | 63.3 |
| -1.89 | 2 | 6.7 | 6.7 | 70.0 |
| -.30 | 3 | 10.0 | 10.0 | 80.0 |
| 1.29 | 2 | 6.7 | 6.7 | 86.7 |
| 2.08 | 1 | 3.3 | 3.3 | 90.0 |
| 3.67 | 1 | 3.3 | 3.3 | 93.3 |
| 4.46 | 1 | 3.3 | 3.3 | 96.7 |
| 8.43 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P15DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -4.163 | Std Err | 1.161 | Median | -3.475 |
| Mode | -2.681 | Std Dev | 6.359 | Variance | 40.441 |
| Range | 31.750 | Minimum | -23.319 | Maximum | 8.431 |

Valid Cases 30

P16DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -22.48 | 1 | 3.3 | 3.3 | 3.3 |
| -18.51 | 1 | 3.3 | 3.3 | 6.7 |
| -16.13 | 1 | 3.3 | 3.3 | 10.0 |
| -14.54 | 1 | 3.3 | 3.3 | 13.3 |
| -13.75 | 1 | 3.3 | 3.3 | 16.7 |
| -11.37 | 2 | 6.7 | 6.7 | 23.3 |
| -10.58 | 5 | 16.7 | 16.7 | 40.0 |
| -8.19 | 1 | 3.3 | 3.3 | 43.3 |
| -7.40 | 1 | 3.3 | 3.3 | 46.7 |
| -5.81 | 1 | 3.3 | 3.3 | 50.0 |
| -5.02 | 1 | 3.3 | 3.3 | 53.3 |
| -4.22 | 4 | 13.3 | 13.3 | 66.7 |
| -3.43 | 1 | 3.3 | 3.3 | 70.0 |
| -2.64 | 3 | 10.0 | 10.0 | 80.0 |
| -.26 | 1 | 3.3 | 3.3 | 83.3 |
| .54 | 1 | 3.3 | 3.3 | 86.7 |
| 1.33 | 1 | 3.3 | 3.3 | 90.0 |
| 3.71 | 1 | 3.3 | 3.3 | 93.3 |
| 12.44 | 1 | 3.3 | 3.3 | 96.7 |
| 21.97 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P16DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -5.865 | Std Err | 1.602 | Median | -5.416 |
| Mode | -10.575 | Std Dev | 8.775 | Variance | 76.992 |
| Range | 44.450 | Minimum | -22.481 | Maximum | 21.969 |

Valid Cases 30

P17DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -21.89 | 1 | 3.3 | 3.3 | 3.3 |
| -13.16 | 2 | 6.7 | 6.7 | 10.0 |
| -12.37 | 2 | 6.7 | 6.7 | 16.7 |
| -11.58 | 1 | 3.3 | 3.3 | 20.0 |
| -10.78 | 1 | 3.3 | 3.3 | 23.3 |
| -8.40 | 3 | 10.0 | 10.0 | 33.3 |
| -7.61 | 2 | 6.7 | 6.7 | 40.0 |
| -6.81 | 2 | 6.7 | 6.7 | 46.7 |
| -6.02 | 1 | 3.3 | 3.3 | 50.0 |
| -4.43 | 1 | 3.3 | 3.3 | 53.3 |
| -2.84 | 1 | 3.3 | 3.3 | 56.7 |
| -2.05 | 1 | 3.3 | 3.3 | 60.0 |
| -1.26 | 2 | 6.7 | 6.7 | 66.7 |
| -.46 | 1 | 3.3 | 3.3 | 70.0 |
| .33 | 1 | 3.3 | 3.3 | 73.3 |
| 1.13 | 2 | 6.7 | 6.7 | 80.0 |
| 1.92 | 1 | 3.3 | 3.3 | 83.3 |
| 2.71 | 2 | 6.7 | 6.7 | 90.0 |
| 3.51 | 1 | 3.3 | 3.3 | 93.3 |
| 4.30 | 1 | 3.3 | 3.3 | 96.7 |
| 11.44 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P17DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -4.616 | Std Err | 1.276 | Median | -5.225 |
| Mode | -8.400 | Std Dev | 6.991 | Variance | 48.869 |
| Range | 33.338 | Minimum | -21.894 | Maximum | 11.444 |

Valid Cases 30

P18DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -24.61 | 1 | 3.3 | 3.3 | 3.3 |
| -20.64 | 1 | 3.3 | 3.3 | 6.7 |
| -17.46 | 1 | 3.3 | 3.3 | 10.0 |
| -16.67 | 2 | 6.7 | 6.7 | 16.7 |
| -15.88 | 1 | 3.3 | 3.3 | 20.0 |
| -15.08 | 2 | 6.7 | 6.7 | 26.7 |
| -14.29 | 3 | 10.0 | 10.0 | 36.7 |
| -13.49 | 2 | 6.7 | 6.7 | 43.3 |
| -10.32 | 2 | 6.7 | 6.7 | 50.0 |
| -8.73 | 1 | 3.3 | 3.3 | 53.3 |
| -7.14 | 1 | 3.3 | 3.3 | 56.7 |
| -6.35 | 3 | 10.0 | 10.0 | 66.7 |
| -3.97 | 1 | 3.3 | 3.3 | 70.0 |
| -1.59 | 1 | 3.3 | 3.3 | 73.3 |
| -.00 | 2 | 6.7 | 6.7 | 80.0 |
| 3.17 | 2 | 6.7 | 6.7 | 86.7 |
| 3.97 | 1 | 3.3 | 3.3 | 90.0 |
| 5.56 | 1 | 3.3 | 3.3 | 93.3 |
| 7.14 | 1 | 3.3 | 3.3 | 96.7 |
| 7.94 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P18DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -8.070 | Std Err | 1.620 | Median | -9.525 |
| Mode | -14.288 | Std Dev | 8.871 | Variance | 78.693 |
| Range | 32.544 | Minimum | -24.606 | Maximum | 7.937 |

Valid Cases 30

P19DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -23.31 | 1 | 3.3 | 3.3 | 3.3 |
| -20.14 | 1 | 3.3 | 3.3 | 6.7 |
| -18.55 | 1 | 3.3 | 3.3 | 10.0 |
| -15.38 | 1 | 3.3 | 3.3 | 13.3 |
| -14.08 | 1 | 3.3 | 3.3 | 16.7 |
| -13.79 | 1 | 3.3 | 3.3 | 20.0 |
| -12.20 | 1 | 3.3 | 3.3 | 23.3 |
| -11.41 | 1 | 3.3 | 3.3 | 26.7 |
| -9.82 | 1 | 3.3 | 3.3 | 30.0 |
| -9.03 | 3 | 10.0 | 10.0 | 40.0 |
| -6.64 | 2 | 6.7 | 6.7 | 46.7 |
| -5.85 | 4 | 13.3 | 13.3 | 60.0 |
| -3.47 | 2 | 6.7 | 6.7 | 66.7 |
| -1.88 | 3 | 10.0 | 10.0 | 76.7 |
| -1.09 | 1 | 3.3 | 3.3 | 80.0 |
| 1.29 | 1 | 3.3 | 3.3 | 83.3 |
| 3.67 | 1 | 3.3 | 3.3 | 86.7 |
| 4.47 | 2 | 6.7 | 6.7 | 93.3 |
| 5.26 | 1 | 3.3 | 3.3 | 96.7 |
| 12.41 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P19DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -6.167 | Std Err | 1.481 | Median | -5.850 |
| Mode | -5.850 | Std Dev | 8.112 | Variance | 65.811 |
| Range | 35.719 | Minimum | -23.313 | Maximum | 12.406 |

Valid Cases 30

P20DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -25.02 | 1 | 3.3 | 3.3 | 3.3 |
| -14.70 | 1 | 3.3 | 3.3 | 6.7 |
| -12.91 | 1 | 3.3 | 3.3 | 10.0 |
| -13.11 | 2 | 6.7 | 6.7 | 16.7 |
| -11.52 | 1 | 3.3 | 3.3 | 20.0 |
| -10.73 | 2 | 6.7 | 6.7 | 26.7 |
| -9.94 | 1 | 3.3 | 3.3 | 30.0 |
| -9.14 | 1 | 3.3 | 3.3 | 33.3 |
| -8.35 | 2 | 6.7 | 6.7 | 40.0 |
| -7.56 | 3 | 10.0 | 10.0 | 50.0 |
| -5.18 | 1 | 3.3 | 3.3 | 53.3 |
| -3.59 | 3 | 10.0 | 10.0 | 63.3 |
| -2.79 | 1 | 3.3 | 3.3 | 66.7 |
| -2.00 | 1 | 3.3 | 3.3 | 70.0 |
| -1.21 | 1 | 3.3 | 3.3 | 73.3 |
| -.41 | 1 | 3.3 | 3.3 | 76.7 |
| 1.17 | 1 | 3.3 | 3.3 | 80.0 |
| 1.97 | 1 | 3.3 | 3.3 | 83.3 |
| 2.76 | 1 | 3.3 | 3.3 | 86.7 |
| 3.56 | 2 | 6.7 | 6.7 | 93.3 |
| 5.94 | 1 | 3.3 | 3.3 | 96.7 |
| 7.52 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P20DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -5.572 | Std Err | 1.319 | Median | -6.366 |
| Mode | -7.556 | Std Dev | 7.223 | Variance | 52.174 |
| Range | 32.544 | Minimum | -25.019 | Maximum | 7.525 |

Valid Cases 30

P21DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -24.19 | 1 | 3.3 | 3.3 | 3.3 |
| -20.22 | 1 | 3.3 | 3.3 | 6.7 |
| -19.43 | 1 | 3.3 | 3.3 | 10.0 |
| -13.08 | 3 | 10.0 | 10.0 | 20.0 |
| -13.08 | 1 | 3.3 | 3.3 | 23.3 |
| -12.29 | 1 | 3.3 | 3.3 | 26.7 |
| -11.49 | 3 | 10.0 | 10.0 | 36.7 |
| -10.70 | 1 | 3.3 | 3.3 | 40.0 |
| -9.91 | 3 | 10.0 | 10.0 | 50.0 |
| -8.32 | 1 | 3.3 | 3.3 | 53.3 |
| -7.53 | 1 | 3.3 | 3.3 | 56.7 |
| -6.73 | 1 | 3.3 | 3.3 | 60.0 |
| -5.94 | 1 | 3.3 | 3.3 | 63.3 |
| -5.14 | 1 | 3.3 | 3.3 | 66.7 |
| -2.76 | 1 | 3.3 | 3.3 | 70.0 |
| -1.97 | 1 | 3.3 | 3.3 | 73.3 |
| .41 | 1 | 3.3 | 3.3 | 76.7 |
| 1.21 | 2 | 6.7 | 6.7 | 83.3 |
| 2.00 | 2 | 6.7 | 6.7 | 90.0 |
| 2.79 | 1 | 3.3 | 3.3 | 93.3 |
| 4.38 | 1 | 3.3 | 3.3 | 96.7 |
| 7.56 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P21DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -7.419 | Std Err | 1.424 | Median | -9.112 |
| Mode | -13.875 | Std Dev | 7.801 | Variance | 60.863 |
| Range | 31.750 | Minimum | -24.194 | Maximum | 7.556 |

Valid Cases 30

P22DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -20.22 | 1 | 3.3 | 3.3 | 3.3 |
| -14.67 | 1 | 3.3 | 3.3 | 6.7 |
| -13.08 | 1 | 3.3 | 3.3 | 10.0 |
| -11.49 | 3 | 10.0 | 10.0 | 20.0 |
| -10.70 | 2 | 6.7 | 6.7 | 26.7 |
| -9.11 | 4 | 13.3 | 13.3 | 40.0 |
| -8.32 | 1 | 3.3 | 3.3 | 43.3 |
| -7.53 | 1 | 3.3 | 3.3 | 46.7 |
| -6.73 | 3 | 10.0 | 10.0 | 56.7 |
| -5.94 | 1 | 3.3 | 3.3 | 60.0 |
| -1.97 | 2 | 6.7 | 6.7 | 66.7 |
| -1.17 | 1 | 3.3 | 3.3 | 70.0 |
| -.38 | 1 | 3.3 | 3.3 | 73.3 |
| .41 | 1 | 3.3 | 3.3 | 76.7 |
| 1.21 | 2 | 6.7 | 6.7 | 83.3 |
| 2.00 | 1 | 3.3 | 3.3 | 86.7 |
| 2.79 | 1 | 3.3 | 3.3 | 90.0 |
| 3.59 | 1 | 3.3 | 3.3 | 93.3 |
| 4.38 | 1 | 3.3 | 3.3 | 96.7 |
| 10.73 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P22DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -5.382 | Std Err | 1.247 | Median | -6.731 |
| Mode | -9.112 | Std Dev | 6.829 | Variance | 46.629 |
| Range | 30.956 | Minimum | -20.225 | Maximum | 10.731 |

Valid Cases 30

P23DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -24.35 | 1 | 3.3 | 3.3 | 3.3 |
| -18.79 | 1 | 3.3 | 3.3 | 6.7 |
| -14.83 | 2 | 6.7 | 6.7 | 13.3 |
| -14.03 | 2 | 6.7 | 6.7 | 20.0 |
| -13.24 | 3 | 10.0 | 10.0 | 30.0 |
| -12.44 | 2 | 6.7 | 6.7 | 36.7 |
| -10.86 | 3 | 10.0 | 10.0 | 46.7 |
| -10.06 | 1 | 3.3 | 3.3 | 50.0 |
| -9.27 | 2 | 6.7 | 6.7 | 56.7 |
| -7.68 | 1 | 3.3 | 3.3 | 60.0 |
| -6.89 | 1 | 3.3 | 3.3 | 63.3 |
| -6.09 | 2 | 6.7 | 6.7 | 70.0 |
| -5.30 | 1 | 3.3 | 3.3 | 73.3 |
| -4.51 | 1 | 3.3 | 3.3 | 76.7 |
| -2.92 | 1 | 3.3 | 3.3 | 80.0 |
| -1.33 | 1 | 3.3 | 3.3 | 83.3 |
| 1.05 | 1 | 3.3 | 3.3 | 86.7 |
| 1.84 | 1 | 3.3 | 3.3 | 90.0 |
| 6.61 | 1 | 3.3 | 3.3 | 93.3 |
| 7.40 | 1 | 3.3 | 3.3 | 96.7 |
| 12.16 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P23DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -7.946 | Std Err | 1.452 | Median | -9.666 |
| Mode | -13.237 | Std Dev | 7.960 | Variance | 63.366 |
| Range | 36.512 | Minimum | -24.350 | Maximum | 12.162 |

Valid Cases 30

P24DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -18.59 | 1 | 3.3 | 3.3 | 3.3 |
| -17.80 | 1 | 3.3 | 3.3 | 6.7 |
| -13.83 | 1 | 3.3 | 3.3 | 10.0 |
| -13.04 | 1 | 3.3 | 3.3 | 13.3 |
| -12.24 | 1 | 3.3 | 3.3 | 16.7 |
| -11.45 | 3 | 10.0 | 10.0 | 26.7 |
| -9.86 | 1 | 3.3 | 3.3 | 30.0 |
| -9.07 | 3 | 10.0 | 10.0 | 40.0 |
| -6.69 | 2 | 6.7 | 6.7 | 46.7 |
| -4.31 | 3 | 10.0 | 10.0 | 56.7 |
| -3.51 | 2 | 6.7 | 6.7 | 63.3 |
| -1.93 | 3 | 10.0 | 10.0 | 73.3 |
| -1.13 | 1 | 3.3 | 3.3 | 76.7 |
| -.34 | 2 | 6.7 | 6.7 | 83.3 |
| .46 | 2 | 6.7 | 6.7 | 90.0 |
| 1.25 | 1 | 3.3 | 3.3 | 93.3 |
| 2.04 | 1 | 3.3 | 3.3 | 96.7 |
| 6.01 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P24DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -5.920 | Std Err | 1.116 | Median | -4.306 |
| Mode | -11.450 | Std Dev | 6.115 | Variance | 37.389 |
| Range | 24.606 | Minimum | -18.594 | Maximum | 6.012 |

Valid Cases 30

P25DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -22.39 | 1 | 3.3 | 3.3 | 3.3 |
| -20.01 | 1 | 3.3 | 3.3 | 6.7 |
| -13.66 | 1 | 3.3 | 3.3 | 10.0 |
| -12.86 | 1 | 3.3 | 3.3 | 13.3 |
| -12.07 | 2 | 6.7 | 6.7 | 20.0 |
| -11.28 | 3 | 10.0 | 10.0 | 30.0 |
| -10.48 | 1 | 3.3 | 3.3 | 33.3 |
| -8.10 | 2 | 6.7 | 6.7 | 40.0 |
| -7.31 | 4 | 13.3 | 13.3 | 53.3 |
| -5.72 | 3 | 10.0 | 10.0 | 63.3 |
| -4.13 | 4 | 13.3 | 13.3 | 76.7 |
| -.96 | 3 | 10.0 | 10.0 | 86.7 |
| -.16 | 1 | 3.3 | 3.3 | 90.0 |
| .63 | 2 | 6.7 | 6.7 | 96.7 |
| 18.09 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P25DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -6.671 | Std Err | 1.332 | Median | -7.306 |
| Mode | -7.306 | Std Dev | 7.294 | Variance | 53.201 |
| Range | 40.481 | Minimum | -22.388 | Maximum | 18.094 |

Valid Cases 30

P26DELTA

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| -12.87 | 1 | 3.3 | 3.3 | 3.3 |
| -11.28 | 1 | 3.3 | 3.3 | 6.7 |
| -10.49 | 2 | 6.7 | 6.7 | 13.3 |
| -8.11 | 2 | 6.7 | 6.7 | 20.0 |
| -7.31 | 1 | 3.3 | 3.3 | 23.3 |
| -6.52 | 1 | 3.3 | 3.3 | 26.7 |
| -5.73 | 1 | 3.3 | 3.3 | 30.0 |
| -4.93 | 3 | 10.0 | 10.0 | 40.0 |
| -4.14 | 2 | 6.7 | 6.7 | 46.7 |
| -3.34 | 2 | 6.7 | 6.7 | 53.3 |
| -2.55 | 1 | 3.3 | 3.3 | 56.7 |
| -1.76 | 2 | 6.7 | 6.7 | 63.3 |
| -.96 | 2 | 6.7 | 6.7 | 70.0 |
| -.17 | 2 | 6.7 | 6.7 | 76.7 |
| 1.42 | 2 | 6.7 | 6.7 | 83.3 |
| 3.01 | 1 | 3.3 | 3.3 | 86.7 |
| 3.80 | 1 | 3.3 | 3.3 | 90.0 |
| 5.39 | 2 | 6.7 | 6.7 | 96.7 |
| 7.77 | 1 | 3.3 | 3.3 | 100.0 |
| TOTAL | 30 | 100.0 | 100.0 | |

P26DELTA

| | | | | | |
|---|---|---|---|---|---|
| Mean | -3.026 | Std Err | .952 | Median | -3.344 |
| Mode | -4.931 | Std Dev | 5.214 | Variance | 27.183 |
| Range | 20.638 | Minimum | -12.869 | Maximum | 7.769 |

Valid Cases 30

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permit fully legible reproduction

APPENDIX G

PROBE DELTAS (PROBE VALUE - LARGE HEADFORM VALUE + 6.3 mm)
FOR THE SUBJECT IN THE PROPOSED SIZE EXTRA-LARGE HELMET

## APPENDIX G

### PROBE DELTAS (PROBE VALUE - LARGE HEADFORM VALUE + 6.3 mm) FOR THE SUBJECT IN THE PROPOSED SIZE EXTRA-LARGE HELMET

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Line 1: P1DELTA P2DELTA P3DELTA P4DELTA P5DELTA P6DELTA P7DELTA

Line 2: P8DELTA P9DELTA P10DELTA P11DELTA P12DELTA P13DELTA P14DELTA

Line 3: P15DELTA P16DELTA P17DELTA P18DELTA P19DELTA P20DELTA P21DELTA

Line 4: P22DELTA P23DELTA P24DELTA P25DELTA P26DELTA

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Note: Delta Values Greater Than 2.5 mm Indicate Loss of Recommended Standoff at a Given Probe Location.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ID=43 | .60 | -4.38 | -4.84 | -12.23 | -7.14 | -2.62 | -8.89 |
| | -10.57 | -11.77 | -13.49 | -11.11 | -9.89 | -3.34 | -9.47 |
| | -11.36 | -10.52 | -13.91 | -14.24 | -4.21 | -8.30 | -9.86 |
| | -15.41 | -14.78 | -16.96 | -17.58 | -6.47 | | |

Number of cases read = 1

---