The University of Alabama in Huntsville Space Hardware Club

HELEN Data Report

Icon

Description automatically generated

# Table of Contents

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# General Information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stat | Payload\_1 | Payload\_2 | Payload\_3 | Payload\_4 |
| 'TIME\_GPS\_ON\_SERIAL' | 738354.82799999998 | 738354.83999999997 | 0 | 738354.86300000001 |
| 'TIME\_GPS\_OFF\_SERIAL' | 738355.01899999997 | 738354.97199999995 | 0 | 738355.11300000001 |
| 'TIME\_DURATION\_GPS' | 4.5880000000000001 | 3.157 | 0 | 6.0060000000000002 |
| 'PACKETNUMBER\_FIRST' | 0 | 0 | 0 | 0 |
| 'PACKETNUMBER\_LAST' | 16676 | 12535 | 0 | 24768 |
| 'NUMBEROFPACKETS\_EXPECTED' | 16677 | 12536 | 0 | 24769 |
| 'NUMBEROFPACKETS\_ACTUAL' | 16676 | 12536 | 0 | 24769 |
| 'PACKETNUMBER\_GPSON' | 158 | 1167 | 0 | 3146 |
| 'PACKETNUMBER\_GPSOFF' | 16675 | 12534 | 0 | 24767 |
| 'NUMBEROFPACKETS\_GPS\_DURATION' | 16517 | 11367 | 0 | 21621 |
| 'NUMBEROFPACKETS\_PERSECOND' | 1 | 1 | 0 | 1 |
| 'TIME\_ON\_SERIAL' | 738354.826 | 738354.826 | 0 | 738354.826 |
| 'TIME\_OFF\_SERIAL' | 738355.01899999997 | 738354.97199999995 | 0 | 738355.11300000001 |
| 'TIME\_DURATION' | 4.6319999999999997 | 3.4820000000000002 | 0 | 6.8799999999999999 |
| 'TEMP\_MAX' | 0.41399999999999998 | 0.41299999999999998 | 0 | 0.45600000000000002 |
| 'TEMP\_MIN' | 0.027 | 0.049000000000000002 | 0 | 0.055 |
| 'TEMP\_MEAN' | 0.20300000000000001 | 0.20799999999999999 | 0 | 0.29199999999999998 |
| 'LATITUDE\_START' | 34.725000000000001 | 34.725000000000001 | 0 | 34.725000000000001 |
| 'LONGITUDE\_START' | -86.646000000000001 | -86.646000000000001 | 0 | -86.646000000000001 |
| 'LATITUDE\_END' | 34.634999999999998 | 34.676000000000002 | 0 | 34.606000000000002 |
| 'LONGITUDE\_END' | -87.159999999999997 | -86.796000000000006 | 0 | -87.063999999999993 |
| 'DISTANCE' | 48.014000000000003 | 14.717000000000001 | 0 | 40.395000000000003 |
| 'ACCELERATION\_MAX\_X' | 18.681999999999999 | 15.318 | 0 | 10.199 |
| 'ACCELERATION\_MAX\_Y' | 6.5309999999999997 | 23.997 | 0 | 5.7370000000000001 |
| 'ACCELERATION\_MAX\_Z' | 16.044 | 35.765000000000001 | 0 | 25.321000000000002 |
| 'COUNTS\_TOTAL' | 20504576 | 3813376 | 22253568 | 29016064 |
| 'TIME\_FPGACOUNTER\_RESETS' | 16601 | 12653 | 18830 | 24724 |
| 'TIME\_DURATION\_FPGA' | 4.6109999999999998 | 3.5150000000000001 | 5.2309999999999999 | 6.8680000000000003 |
| 'COUNTS\_PERSECOND\_MEAN' | 1235.1410000000001 | 301.38099999999997 | 1181.8150000000001 | 1173.5989999999999 |
| 'COUNTS\_PERSECOND\_MAX' | 23382 | 2101 | 17698 | 4641 |
| 'COUNTS\_TOTAL\_1500' | 20503923 | 3813243 | 22252865 | 29015157 |
| 'COUNTS\_PERSECOND\_MEAN\_1500' | 4446366.0499999998 | 1084934.3870000001 | 4254397.9819999998 | 4224824.6720000003 |
| 'COUNTS\_PERSECOND\_MAX\_1500' | 14 | 1 | 23 | 14 |
| 'TICKS\_RESET\_MEAN' | 46961.222999999998 | 1037543.048 | 50573.118000000002 | 44326.305999999997 |
| 'TICKS\_COUNTS\_MEAN' | 40481.207999999999 | 165902.864 | 42307.822 | 42603.987000000001 |
| 'DEADTIME\_MEAN\_US' | 129.59999999999999 | 17432.804 | 165.30600000000001 | 34.445999999999998 |
| 'DEADTIME\_MEAN\_PERCENT' | 0 | 0.017000000000000001 | 0 | 0 |