#111

U.S. Department
of Transportation

**Federal Railroad
Administration**

IMPROVED ROLLER BEARING WAYSIDE DETECTION RESEARCH PHASE I LABORATORY TEST

**Office of Research and
Development
Washington, D.C. 20590**

DOT/FRA/ORD-

May 1998

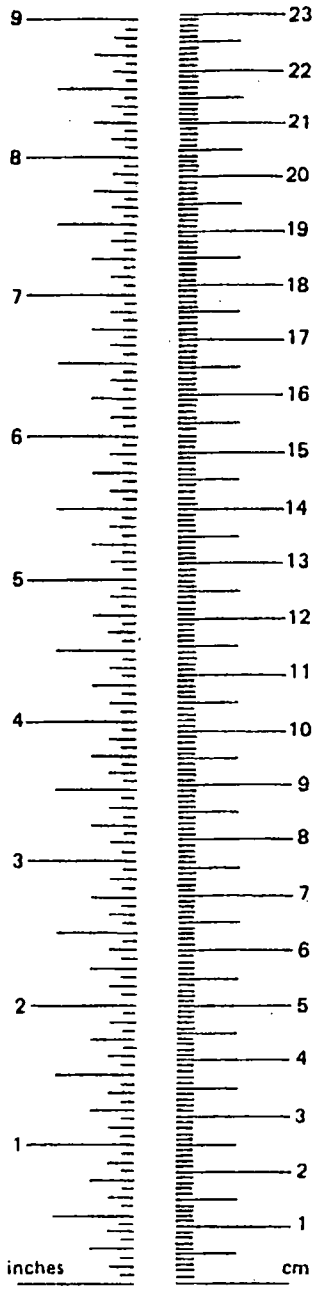
Final Report

METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

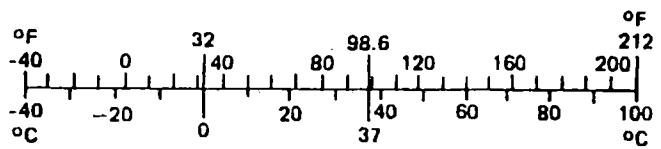
Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
in	inches	*2.50	centimeters	cm
ft	feet	30.00	centimeters	cm
yd	yards	0.90	meters	m
mi	miles	1.60	kilometers	km
		AREA		
in^2	square inches	6.50	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.80	square meters	m^2
mi^2	square miles	2.60	square kilometers	km^2
	acres	0.40	hectares	ha
		MASS (weight)		
oz	ounces	28.00	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.90	tonnes	t
		VOLUME		
tsp	teaspoons	5.00	milliliters	ml
Tbsp	tablespoons	15.00	milliliters	ml
fl oz	fluid ounces	30.00	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.80	liters	l
ft^3	cubic feet	0.03	cubic meters	m^3
yd^3	cubic yards	0.76	cubic meters	m^3
		TEMPERATURE (exact)		
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

* 1 in. = 2.54 cm (exactly)



Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
mm	millimeters	0.04	inches	in
cm	centimeters	0.40	inches	in
m	meters	3.30	feet	ft
m	meters	1.10	yards	yd
km	kilometers	0.60	miles	mi
		AREA		
cm^2	square centim.	0.16	square inches	in^2
m^2	square meters	1.20	square yards	yd^2
km^2	square kilom.	0.40	square miles	mi^2
ha	hectares (10,000 m^2)	2.50	acres	
		MASS (weight)		
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
		VOLUME		
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.10	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m^3	cubic meters	36.00	cubic feet	ft^3
m^3	cubic meters	1.30	cubic yards	yd^3
		TEMPERATURE (exact)		
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



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16. Abstract

A series of tests were performed at the Bearing Test Facility at the Transportation Technology Center in Pueblo, Colorado, to gather acoustic and acceleration emissions for a number of roller bearing defect types designated by the rail industry as a priority. This database will be used to develop data processing techniques for the recognition of these defect types via wayside sensor systems.

The laboratory test series (Phase I of this program) consisted of operating each defective bearing over a number of axle speeds and bearing radial load for each of two bearing size classes (AAR Class E and F). The bearing defect types included raceway spalls (inner and outer ring, single or in multiples), roller defects, water etching, and loose inner rings (spun cones).

After the tests were successfully conducted, it was determined that the database contained unique signatures of each defect type. The data was transmitted to a list of program participants on three compact discs.

In Phase II of this program, a field test was conducted using the same defective bearings to gather wayside acoustic data needed for final development of wayside defective bearing detection systems. The Phase II tests were completed in November 1996. A second report will be issued for the Phase II field test.

17. Key Words	18. Distribution Statement		
acoustics, roller bearing defects, raceway spalls, water etching, loose bearing components, spun cones	This document is available through National Technical Information Service Springfield, VA 22161		
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EXECUTIVE SUMMARY

A series of laboratory tests, sponsored by the Federal Railroad Administration (FRA), were conducted by the Association of American Railroads (AAR) to determine if acoustic techniques could be used to identify specific bearing defects. A second objective was to provide a data base that could be used by program participants to identify and develop improvements in acoustic signal processing currently in use, as well as to improve the techniques in general. Acoustic emissions and accelerations for a number of roller bearing defect types were gathered in this first phase (laboratory testing) of the AAR's Improved Freight Car Roller Bearing Inspection Program, conducted at the Transportation Technology Center, Pueblo, Colorado. The program is funded by the FRA under Task Order No. 111, with support from the AAR.

The objective of this program is to solicit participation by industry and academia to stimulate the development of improved wayside defective bearing detection techniques. As a means of providing the necessary database to enable this development, a series of laboratory and field tests were conducted using defective bearings to generate bearing emission data. This database is available for the development of analytical techniques to "recognize" bearing defects from a wayside sensor system.

Laboratory test data of defective bearing acoustic emissions and accelerations have been distributed to program participants, who will work with this data to develop improved signal processing techniques. A list of program participants is given in Appendix A; these include the Railway Technology Department (formerly Research and Test) of the AAR.

This report will provide a brief synopsis of the data collected. The data was carefully checked prior to conclusion of testing to ensure that all defective bearing conditions were represented in the database without error. The database was distributed to the participants in either ASCII or binary format on three compact disks (CD).

The program objectives for the laboratory test were met, in that data was collected for each of the bearing defect types identified, and it was recognized in the data review that each type had a distinctive characteristic.

The culmination of the wayside roller bearing inspection program occurred during Phase II when a field test simulating revenue freight service conditions was performed in late 1996. During this field test phase, further data was generated to aid in the final development of the improved processing techniques to detect defective bearings located in a train from a wayside sensor system.

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1.0 INTRODUCTION

A Town Hall Meeting was held June 15, 1994 at the Association of American Railroads (AAR) Chicago Technical Center to initiate and review objectives of the Improved Wayside Freight Car Roller Bearing Inspection Program sponsored by the AAR and the Federal Railroad Administration (FRA). The objective of the meeting was to solicit participation by industry, academia, and national laboratories to stimulate the development of improved wayside defective roller bearing detection techniques. Over 45 participants from these various sources attended the meeting.

The AAR, in cooperation with the FRA, conducted a series of controlled laboratory and on-track tests to aid in the development of improved wayside defective bearing detection. The laboratory tests were conducted on the AAR's bearing test machines at the FRA's Transportation Technology Center (TTC), Pueblo, Colorado. A set of data from each of the good and defective bearings tested was made available to the program participants for their bearing detection process development.

The AAR will conduct additional on-track tests using many of the same defective bearings to provide an opportunity to evaluate the detection techniques under controlled simulated revenue service conditions. The AAR and FRA trust that this research program will provide an indispensable test bed for the development and refining of signal processing techniques used in bearing defect identification.

Based on the understanding of the capabilities of existing wayside acoustic roller bearing inspection technology, the following research objectives were determined for the laboratory testing phase of the FRA/AAR research program:

- Determine if acoustic techniques can be reliably used to identify specific defects present in the laboratory test bearing specimens. Specifically, those defects, as defined by Section H II of the *Roller Bearing Manual*, Rule 1.15, were:
    - Spun cone or loose components, in the absence of spalling of the raceway surfaces, for a bearing operating in the fully loaded or light car condition.

- Broken roller element condition for a bearing operating in the fully loaded or light car condition.
- AAR-condemnable cone spall defect for a bearing operating in the fully loaded or light car condition.
- AAR-condemnable multiple connecting cone spall defect for a bearing operating in the fully loaded or light car condition.
- AAR-condemnable cup spall defect for a bearing operating in the fully loaded or light car condition.
- AAR-condemnable multiple connecting cup spall defect for a bearing operating in the fully loaded or light car condition.
- AAR-condemnable water etching defects for a bearing operating in the fully loaded or light car condition.

- Identify improvements in acoustic signal processing currently in use and signal processing techniques.

2.0 TEST SPECIMENS

The test freight car roller bearings used in the laboratory testing included both AP Class E (6″x11″) 70-ton capacity and Class F (6 1/2″x12″) 100-ton capacity bearings. A total of 18 test bearings, donated by the railroads and bearing remanufacturers, were evaluated in the test program. Information on the bearing specimens is given in Table 1.

Table 1. Test Bearing Information

Test	Bearing	Defect Condition	AP Class	Serial Number	Photo No.
8	1	None	F	Timken 61405	
1	2	Single Condemnable Cup Spall	F	Brenco 87958	B1, B2
2	3	Condemnable Multiple Connecting Cone Spalls	F	Timken 10915	B3
3	4	Condemnable Water Etch	F	Timken 85882	B4, B5
5	5	Condemnable Multiple Connecting Cup Spalls	F	79414	
6	6	Broken Roller	F	1055	B6
7	7	Blind Sample	F	1041	B7
4	8	Repaired Small Cup Spall	F	N/A	
9	9	Condemnable Multiple Connecting Cup Spalls		N/A	B8, B9
10	10	Condemnable Multiple Connecting Cone Spalls	E	Brenco 54871	B10, B11
11	11	Condemnable Water Etch	E	16BX167	B12
12	12	None	E	Timken 53689	
13	13	Single Condemnable Cup Spall	E	Timken (no #)	B13
14	14	Single Condemnable Cone Spall	E	Timken 11444C	
15	15	Broken Roller	E	Timken 11444R	
16	16	Blind Sample	E	Timken 16X	B14, B16
17	17	Spun Cone	E	N/A	B15, B17
18	18	Spun Cone	E	Hyatt 54900	B18

The defect condition labeled "none" in the table indicates a good reconditioned bearing as a control sample that the defective bearings were measured against. The "blind sample" was unknown to the program participants to aid in judging the ability of the processing techniques to determine bearing defect type. The Class F blind sample (Test 07) had multiple cup spalls and spalled rollers. The Class E blind sample bearing (Test 16) had a brinnelled cup and a broken roller. The photo number in the last column of Table 1 refers to photographs of the bearings shown in Appendix B.

3.0 INSTRUMENTATION AND DATA COLLECTION

3.1 INSTRUMENTATION

Table 2 lists the instrumentation used to collect data in the laboratory test.

Table 2. Laboratory Test Instrumentation

Measurement Method	Measured Parameter	Type	Quantity
Microphone	Bearing Acoustic Emission	Analog	1
Accelerometer	Bearing Vertical Acceleration	Analog	1
Type K Thermocouple	Bearing Operating Temperature	Analog	4
Cone Motion Sensor	Cone Slippage	Digital	2
Tachometer	Axle Speed	Digital	1
Torquemeter	Axle Torque	Analog	1
Load Cell	Bearing Vertical Load	Analog	2

In order to better understand the test setup and the instrumentation used, the bearing test machine is shown in Figure 1. The bearing test machine consists of a simple load frame into which is placed a full-scale freight car axle with bearings. This machine allows researchers to vary and control the test parameters to determine their influence on bearing operation. Ambient temperature, static or quasi-static bearing vertical load, and axle speed are among the parameters that can be controlled. The machine was designed to simulate the bearing operating environment as closely as possible.

As stated, the bearing test rig uses a standard railroad axle with two standard journal roller bearings. Oil-cooled pillow block bearings are used at the axle wheel seat locations to react the radial loads applied to the test bearings. The radial loads are applied to each test bearing by hydraulic actuators through a pseudo-side frame pedestal block containing a standard bearing adaptor. The axle is driven on one end by a variable speed AC motor through a combination torquemeter and tachometer. In addition to the acoustic and vibration emission data, total axle torque, speed, and bearing loads and temperatures are collected.

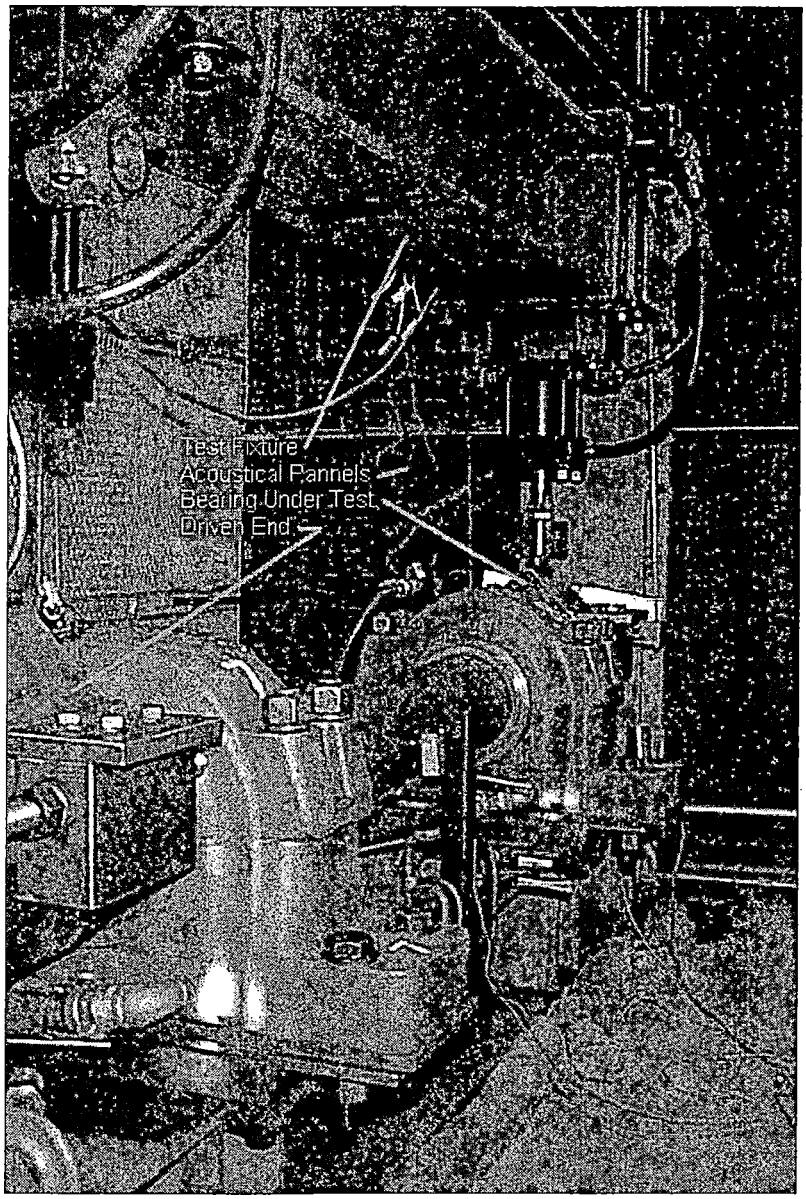

Figure 1. Bearing Test Machine

For this test, only one test bearing was used on the axle and was located on the non-drive end. The drive end bearing was a good bearing and was not monitored. Figure 2 is a photo of the instrumentation clustered around the test bearing.

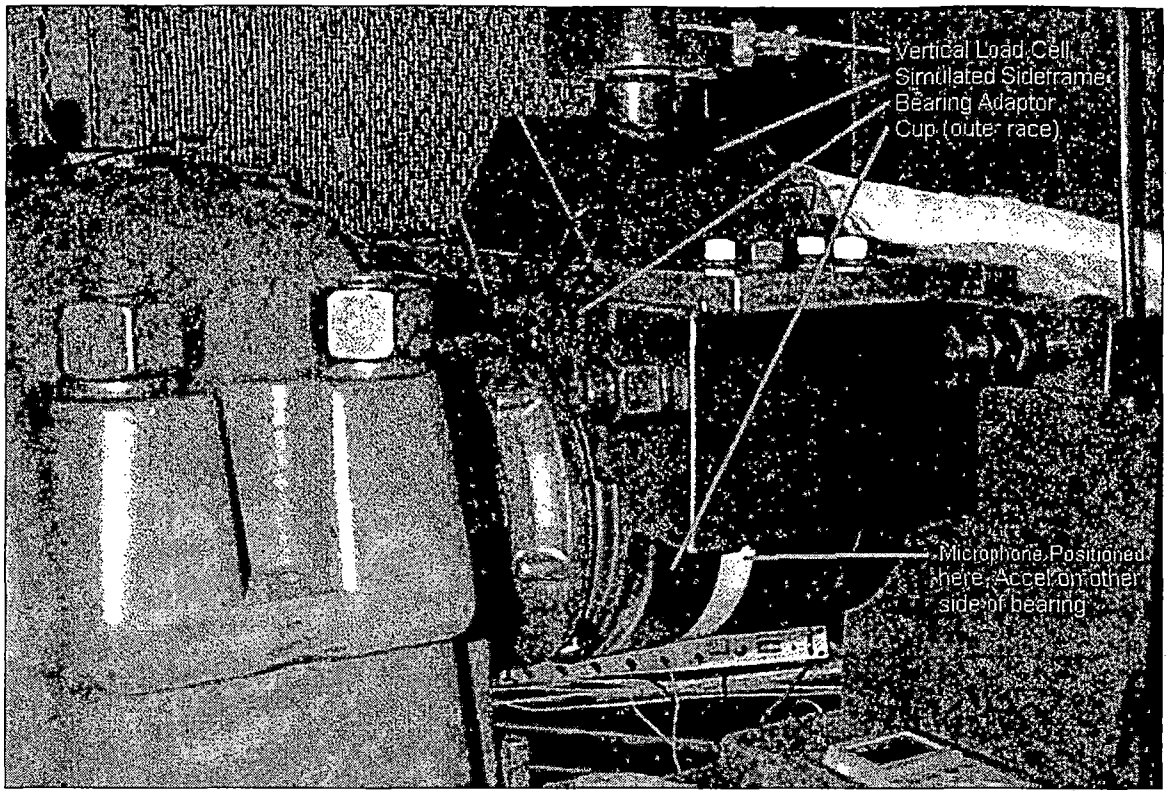

Figure 2. Instrumentation Clustered Around the Bearing

Acoustic measurements were made with a Bruel & Kjaer (B&K) 1/4-inch microphone mounted on a tripod 2 inches from the test bearing at the bearing outer race center line. The microphone output was amplified by a B&K type 5935 microphone power supply to assure proper signal levels at the Kyowa 650A tape recorder. After test parameters were stable, 20-30 seconds of the microphone data was recorded on two channels of the recorder. One microphone channel used direct recording with 200 hertz (Hz) to 150 kilohertz (kHz) response, and the other channel IRIG Wide Band Group 2 with direct current (DC) to 40 kHz response.

Acceleration measurements were made with a PCB high frequency accelerometer powered by a PCB type 483 power supply located near the test machine. The output was connected to the Kyowa tape recorder where the input range of the FM record channels was adjusted according to the amount of radial acceleration.

The bearing surface temperature was recorded using Omega brand self-adhesive, type K, fast response thermocouples. Measurements were taken at locations adjacent to the inboard and outboard seal cases, and on the outer race over each bearing cone. All thermocouples were connected to a CR21XL data logger for real time display and amplification before recording.

The bearing rig drive motor speed and axle torque were measured with a Himmelstein torquemeter and tachometer. The tachometer output was 60 pulses per revolution. The torquemeter was connected to a Lebow 3-kilohertz carrier torque display unit. The 60 cycles per revolution signal, along with a torque signal scaled for 660 lbs-in. per volt, were recorded on the Kyowa tape unit. The axle speed was displayed on a Daytronic model 3240 signal conditioner and a display unit for control purposes.

A Daytronic 3270 signal conditioner and display unit monitored the bearing test radial load. The load was applied by controlling the hydraulic pressure to the 50,000-pound capacity hydraulic actuator, and Interface load cell output was displayed on the Daytronic conditioner. The actual test bearing load was recorded on the Kyowa tape recorder.

The spun cone test bearing (with axle grooved on inboard only) inboard and outboard cone movement in relation to the axle was determined by measuring the time interval change between a reference point (magnet) on the axle and signals from hall effect sensors triggered by magnets fixed to the cones. These microswitch (Honeywell) sensor time intervals were measured by a CR21Xl data logger equipped with a SDM-INT8 interval timer. The interval between cone signals was divided by the interval of one axle revolution and this ratio recorded with a ratio of one equal to Kyowa recorder full scale.

The sensor time intervals were referenced to a 1000-pulse per revolution tachometer driven by the axle.

3.2 DATA COLLECTION

The test data was recorded on a Kyowa 650A Instrumentation Video Cassette Data Recorder on Beta format tapes. This dual-capstan, phase-lock servo machine was operated at 76.2 cm/sec (30 ips) and conforms to IRIG (ISO) Standards. This machine can record for 3.3 minutes per tape as configured; 139 Beta tapes were filled during the Phase I testing.

Due to the high frequency response and number of channels needed in this data collection effort, the data was collected on analog tape. Selected portions of each data run were converted to binary by playing the tape back into a UEI Win30D Analog to Digital (A/D) board mounted in a Pentium PC desktop computer using HEM Snapmaster software. To assure an adequate sample rate on all channels, the tape was played back at one-quarter speed (7.5 ips) and data

recorded for 8 seconds (2 seconds of test time). Data was monitored during collection and post-test A/D conversion to assure quality of data for further analysis.

4.0 TEST PROCEDURE

4.1 GENERAL PROCEDURES

The bearing test fixture required that each axle used in the test be machined to allow the mounting of the large pillow block bearings. These bearings essentially took the place of the railroad wheel. Once the pillow blocks were mounted on the axle, the test bearing was mounted on the axle's free end and another non-test railroad bearing was mounted on the driven end of the axle.

Data from the bearings was collected in the order and under the conditions shown in Table 3. Because the test fixture required some effort to reconfigure, all specimens from one class or size of bearing were run before those from any other class.

Each test bearing was recorded at low load (8,000 pounds) while rotating at the equivalent of 25 mph, then at intervals of 5 mph up to 80 mph. The axle speed was held at 80 mph until the cup temperature stabilized. Recordings were then made at 80 mph and at intervals of 5 mph down to 25 mph. While under high load (33,000 and 27,500 pounds for bearing Class F and E; respectively), the speed sequence was repeated; again allowing for temperature stabilization at 80 mph. The recording made at each speed was approximately 15 seconds in duration to allow thorough examination of signal stability.

Due to the high sample rate, no more than two seconds of data from each recording was included in the data sent to the program participants. Bearing temperatures, speed in revolutions per minute (rpm), applied loads, and gain settings were monitored to ensure safety.

Table 3. Test Order

Date of Test	Bearing ID No.	Bearing Defect Description (* = Condemnable)	AP Class	Vertical Load (kips)	Cap Screw Torque	Nominal Operating Speed (mph)
13DEC95	8	Small Repaired Single Cup Spall	F	8 and 33	380 lb*ft	25 - 80 - 25
08DEC95	2	*Single Cup Spall - New Cones	F	8 and 33	380 lb*ft	25 - 80 – 25
11DEC95	3	*Multiple Connecting Cone Spalls	F	8 and 33	380 lb*ft	25 - 80 – 25
12DEC95	4	*Water Etching	F	8 and 33	380 lb*ft	25 - 80 - 25
15DEC95	5	*Multiple Connecting Cup Spalls	F	8 and 33	380 lb*ft	25 - 80 - 25
20DEC95	6	*Broken Roller (Simulated)	F	8 and 33	380 lb*ft	25 - 80 - 25
21DEC95	7	*Blind Sample (Multi-Cup Spall & Roller)	F	8 and 33	380 lb*ft	25 - 80 - 25
23JAN96	1	Remanufactured "Good Bearing"	F	8 and 33	380 lb*ft	25 - 80 - 25
25JAN96	9	*Multiple Connecting Cup Spalls	E	8 and 27.5	260 lb*ft	25 - 80 - 25
30JAN96	10	*Multiple Connecting Cone Spalls	E	8 and 27.5	260 lb*ft	25 - 80 - 25
31JAN96	11	*Water Etching	E	8 and 27.5	260 lb*ft	25 - 80 - 25
02FEB96	12	Remanufactured "Good Bearing"	E	8 and 27.5	260 lb*ft	25 - 80 - 25
20FEB96	13	Small Repaired Single Cup Spall	E	8 and 27.5	260 lb*ft	25 - 80 - 25
22FEB96	14	*Single Cone Spall - New Cup	E	8 and 27.5	260 lb*ft	25 - 80 - 25
07MAR96	15	*Broken Roller	E	8 and 27.5	260 lb*ft	25 - 80 - 25
19APR96	16	*Blind Sample (Brinell & Roller)	E	8 and 27.5	260 lb*ft	25 - 80 - 25
12JUL96	17	*Spun Cone & Non-condemnable Re-manufactured Cup Spall	E	8 and 27.5	0, 20, 40, 80, and 160 lb*ft	25 - 80 - 25
31JUL96	18	*Spun Cone	F	8 and 33	0, 20, 40, 80, and 160 lb*ft	25 - 80 - 25

4.2 SPUN CONE TEST PROCEDURES

Data was collected for the conditions ***not*** shaded in Table 4. Cone rate of progression or slip was monitored for each run and observed to be constant with respect to RPM.

Table 4. Spun Cone Test Order

Cap Screw	LOOSE		20 lb*ft		40 lb*ft		80 lb*ft		160 lb*ft	
SPEED	HIGH LOAD	LOW LOAD	HIGH LOAD	LOW LOAD	HIGH LOAD	LOW LOAD	HIGH LOAD	LOW LOAD	HIGH LOAD	LOW LOAD
35										
30										
35										
40										
45										
50										
55										
60										
65										
70										
75										
80										
80										
75										
70										
65										
60										
55										
50										
45										
40										
35										
30										
25										

NOTE: Data was collected for conditions not shaded

5.0 TEST RESULTS

In characterization tests such as this, it is common to take recordings both with and without the subject of study as a means of analytically removing the background effects. The background noise level (both acoustic and vibrational) was so low in this case that no static recordings were made. The nature of this test and the test stand made it impossible to remove the test subject (railroad bearings) and record the other vibrations induced from the running test stand. The primary source of undesirable signals was the loaded pillow block bearings that held the axle in place and served as a reaction force for the vertical load applied to the rail bearings. These pillow block bearings were greatly oversized to minimize their noise, and there was no way to load them without loading the test bearing.

As a result of these circumstances, the "good" bearings tested (bearings Number 1 and Number 12) serve as the normalized or background data. While no "perfect" new bearings were tested, any bearing (even if new) will induce some vibration into the overall signal. A re-manufactured good bearing can typically have a variety of imperfections — primarily small repaired race spalls.

Efforts were made to ensure that the usefulness of this test data was not compromised by having remanufactured bearings with non-condemnable defects causing signals that were too severe. Subsequently, the first bearing tested (good re-manufactured) had a repaired cup spall that happened to be in the cup load zone of the bearing. The small, properly repaired defect produced an audible sound and a vibration that was manually detected during pre-test safety inspections. It was determined that the data would be valuable and a full test sequence was recorded. This became bearing Number 8 to avoid confusion with the pre-established test sequence. Similar circumstances produced bearing Number 13. The small properly repaired cup defect from bearing Number 13 was used on the spun cone test bearing Number 17 producing a detectable outer race ball pass frequency signal.

The first tape contained data from the class F bearings numbered 1 through 7. The tape recordings were examined with an enveloping spectral analyzer. If and when this examination revealed serious problems with the instrumentation, the bearing was re-tested.

The PC-based, analog-to-digital conversion process could not handle the sample rate and number of simultaneous channels required for this test. To solve this difficulty, the tape was played back at one-quarter speed and the sample rate was set at one-quarter. The digitized files were saved on 3.5-inch, 230-megabyte rewritable optical disks.

The optical disk files were then read into a PC and transferred to a UNIX environment. In the UNIX machine the files were opened, the sample rate changed, scale factors applied, and the individual channels of data (microphone, accelerometer) were examined. Statistics and graphs (shown in Appendix C) were reviewed to establish that the recordings had been properly digitized and contained signals that might characterize the defect. The statistical data given in Appendix C are themselves a significant data base performed on the contents of the Compact Disks. The meaning and use of the statistical variables in Appendix C are given on page C-1.

A data plot selected for its ease of interpretation is shown in Figure 3. This is data from bearing Number 5, a multiple cup spall defect, at 50 mph under full load. The relevant frequencies caused by the bearing class and speed are: 7.8 Hz axle rotation, 3.4 Hz cage, 36.6 Hz roller, 73.2 Hz two times roller, 80.4 Hz cup, and 99.7 Hz cone. The greatest peak, as shown by power spectral density (PSD) of the demodulated data, was at a frequency of 79.5 Hz. This correlates with the 80.4 Hz cup defect roller pass frequency; thus, validating the data by showing that the defect caused an identifiable and predictable feature in the signal.

Given the location of a bearing defect, it is possible to predict the frequency at which that defect will be impacted by another bearing component. The examination focused on determining the frequency of impact sounds.

Each channel of the data was then saved in DOS binary and ASCII format. Both file formats contained a header with information about the file. The ASCII files were compressed and converted to a self-extracting file using PKZip software. All of the files were then written to a compact disk read-only memory (CD) along with some explanatory text files and photographs. The disks were sent out to approximately 40 program participants.

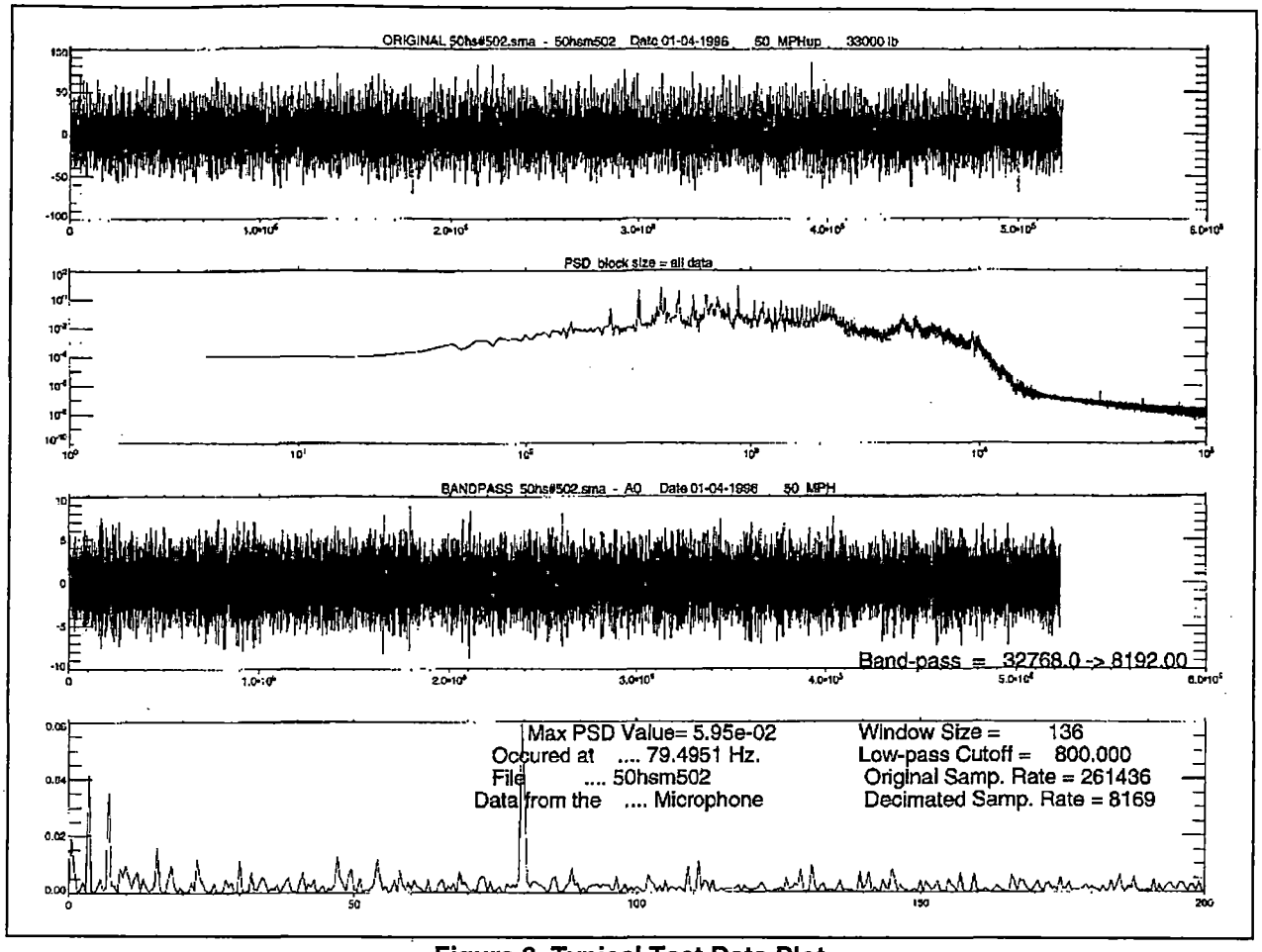

Figure 3. Typical Test Data Plot

The second series of bearings to be tested (numbered 9 through 16) were Class E. They were processed in the same manner as those on the first CD. Additional files included photographs in five different formats and a self-extracting slide presentation that provided an overview of the program, background bearing dynamics information, and photographs of the test stand. The third set of files was the Class E and F spun cone data (bearings Number 17 and Number 18) and the Class F non-condemnable repaired cup spall (bearing Number 8). This CD included more photographs and sound files of most of the defects to enhance program participant comprehension of the defects under study.

6.0 DISCUSSION

The plots in Figure 4 are an example of the examination of data from bearing Number 4, Class F Condemnable Water Etching. The first graph is a time history. It is approximately 530,000 samples, or 2 seconds long. This shows the general character and magnitude of the signal. The vertical scale is in engineering units (g in this case).

The second graph is a PSD the raw time domain signal. It shows the strengths of the different frequencies contained in the signal. Both the horizontal (frequency) axis and the vertical (magnitude) axis use a logarithmic scale. In this example, the energy added to the data by 5-kHz vibrations is approximately 1,000 times that contributed by 8-kHz vibrations.

The third graph shows the time history after it has been band pass filtered from 8 kHz to 32 kHz. In this example, the most dramatic effect is magnitude (from 40 g down to 1.5 g) and the occurrence of an odd burst of data at the very end. Although it might be, this burst is probably not real in the sense of having come from something in the bearing. It only is a small percentage of the data file, so the file is not rejected.

The last graph in Figure 4 is a PSD of the envelope from the previous graph. It shows the relative strengths of the frequencies in the enveloped signal, or how often the spikes caused by impacts are occurring. In this example, the frequency 59 Hz occurs most frequently. At 30 mph, a class F bearing has rollers passing each spot on the outer race at the rate of 59.44 Hz. Because the defect is a water etch, known to produce pitting of the outer race, and the frequencies match so well, it is obvious that this data is representative of the defect and has not been adversely affected by the extensive processing.

Not all defects are as easily verified, nor are all recordings of this defect as clear-cut. The most difficult cases were the spun cones because so little is known about the vibrations they would be most likely to produce. However, when the spun cone test data was reviewed, certain characteristics in the data were seen that will aid in the detection of this most significant defect type.

Since the purpose of the "Improved Wayside Roller Bearing Inspection Program" was to produce a defective bearing database for participants to use to develop an improved detector, the AAR did not analyze data further under the auspices of this program. The purpose of the limited data reduction and analysis presented here was to show that the data was good, that it did indeed contain distinctive signatures of defective bearings, and that it would perform its intended function of being used to develop improved detection techniques. The analysis presented here is given to illustrate the process used to support the conclusion that the data had integrity. Certain techniques used by the AAR to verify defective bearing signatures are proprietary to the AAR, and are not, therefore, shown here.

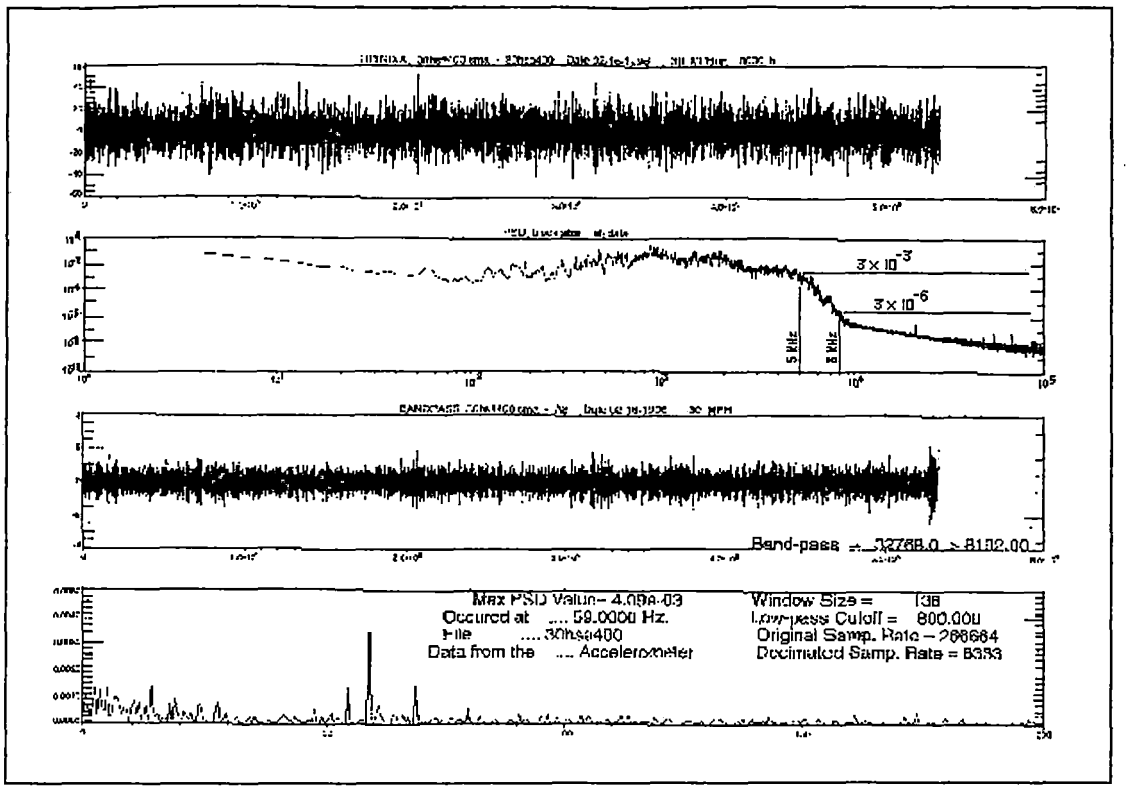

Figure 4. Example of Data Checking

7.0 CONCLUSIONS

The following can be concluded:

- The objectives for the Phase I laboratory test, as outlined in the test plan, were met. All the bearing defect types, including the good remanufactured bearing, were tested and the data has been distributed to the program participants. All of the test parameters (speed, load, bearing class) were utilized as outlined in the laboratory test plan.

- The AAR review and checking of the data verified the integrity of the data base as it was produced on the compact disks.

- The bearing defect characteristic data base is large (over 5 gigabytes) and was only produced through a large-scale effort and careful attention to detail.

- The defect types chosen represented the outcome of a railroad survey conducted during the initial stages of this program. However, the defect test specimens represent only one level of defect severity, AAR-condemnable (by current AAR bearing reconditioning standards). Further data would be required for sophisticated data processing systems to recognize varying levels of defect severity.

- A review of the spun cone sensor data showed that the cone slip rate, as related to axle speed, was constant throughout the testing.

8.0 RECOMMENDATIONS

The following are recommendations:

- When the Phase II bearing defect field test is completed, data between the two test series should be correlated or reviewed by defect type. If further defect characteristic definition is needed in regard to severity, the laboratory would be the most efficient place to run those tests.

- Based on the time and labor force needed to perform the post-test data digitization, it is recommended that future test data be taken by high-speed digital computer. Enough information about the defect characteristics is now known to make that feasible. This would reduce test costs and the time needed to complete data review.

Acknowledgements

The authors wish to acknowledge the significant contributions made by several persons and organizations in the successful conclusion of the Phase I laboratory tests. We want to recognize the substantial effort by Joseph Chamberlain of the AAR who mounted and dismounted all the test bearings, and Robert Florom, who began this effort and directed it during past years. We wish to extend our gratitude to the BNSF Railroad for donating many of the defective bearings for test. We would also like to extend our gratitude to Gerard Deily, Federal Railroads Administration, Contract Officer Technical Representative and Monique Stewart and Donald Gray. Task Order Technical Monitors.

APPENDIX A
List of Program Participants

No.	Organization	Name	Address
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2.	AWI/AHI	Robert Allen	10628 Dutchtown Rd., Knoxville, TN
3.	AMP, Inc.	Frank Mastrog	100 Amp Dr., Harrisburg, PA
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5.	Battelle	Michael Kurre	505 King Ave., Columbus, OH
6.	Battelle	Foster Stullen	505 King Ave., Columbus, OH
7.	BNSF	Geoff Dahlman	1001 NE Atchison, Topeka, KS
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9.	Brenco, Inc.	Christopher Freer	PO Box 389, Petersburg, VA
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19.	Conrail	Mike Lovette	2001 Market St., Philadelphia, PA
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23.	Harmon Industries	William Schrack	415 Oser Ave., Hauppauge, NY
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26.	Kaman Sciences	Jeff Brandt	1500 Garden of the Gods Rd., Colo Springs, CO
27.	Kaman Sciences	Peter Snow	1500 Garden of the Gods Rd., Colo Springs ,CO
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36.	Rail Bearing Svcs.	Rick Hickman	12224 Oakmont Circle, Knoxville, TN
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39.	SAIC	Paul Peterson	1616 Broadway St., Kansas City, MO
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42.	Salient Systems, Inc.	Tom McCanney	4330 Tuller Rd., Dublin, OH
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46.	Sandia Nat'l Labs	Patrick Barney	Structure Dynamics Albuquerque, NM
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49.	Texas A&M Univ.	Howard Choe	Dept. of Elec. Eng., College Station, TX
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APPENDIX B
BEARING PHOTOGRAPHS

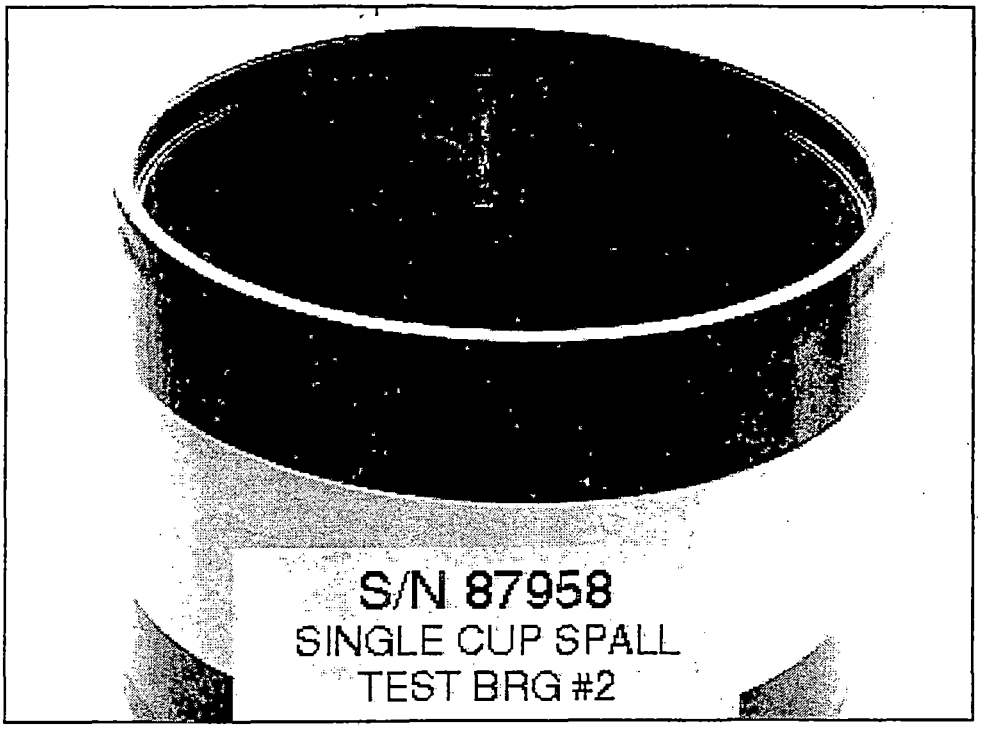
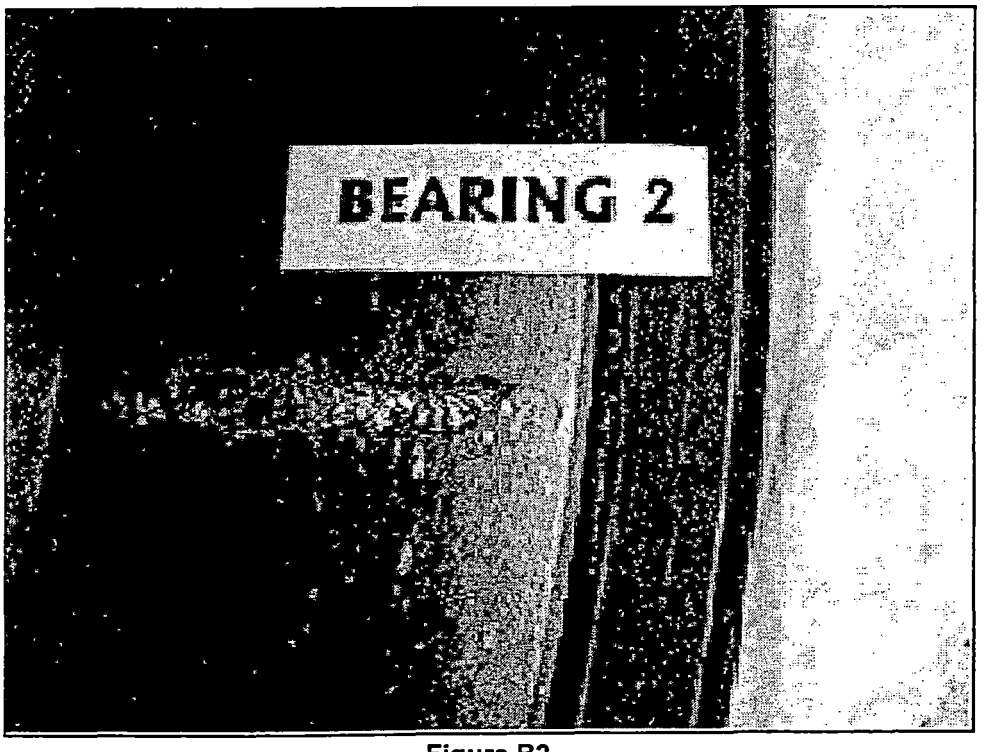


Figure B1



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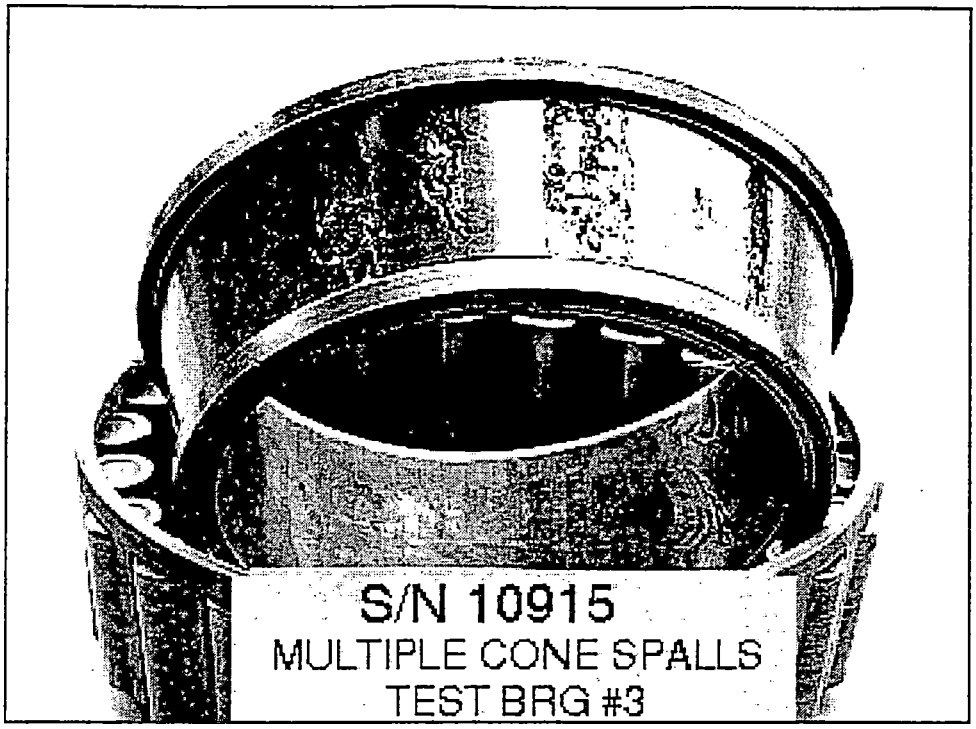


Figure B3

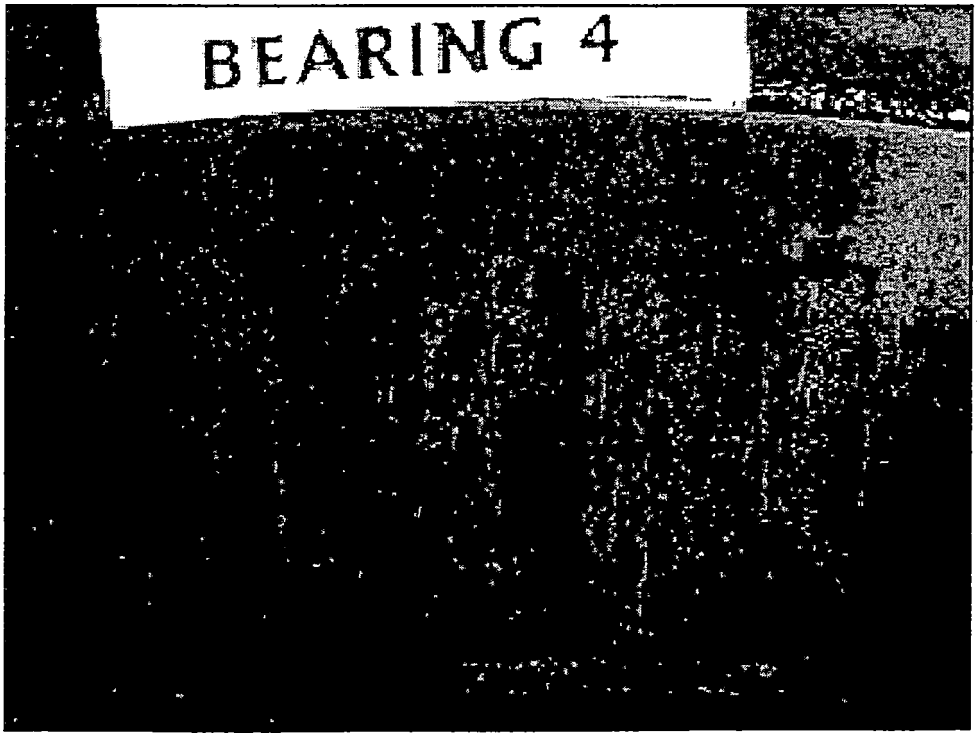
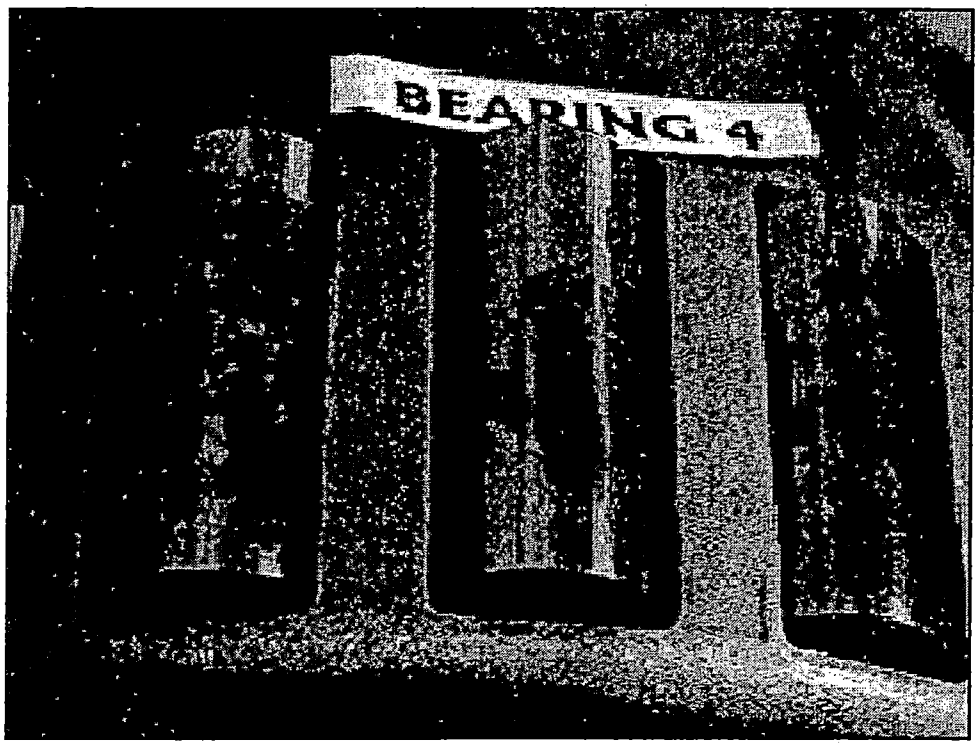


Figure B4



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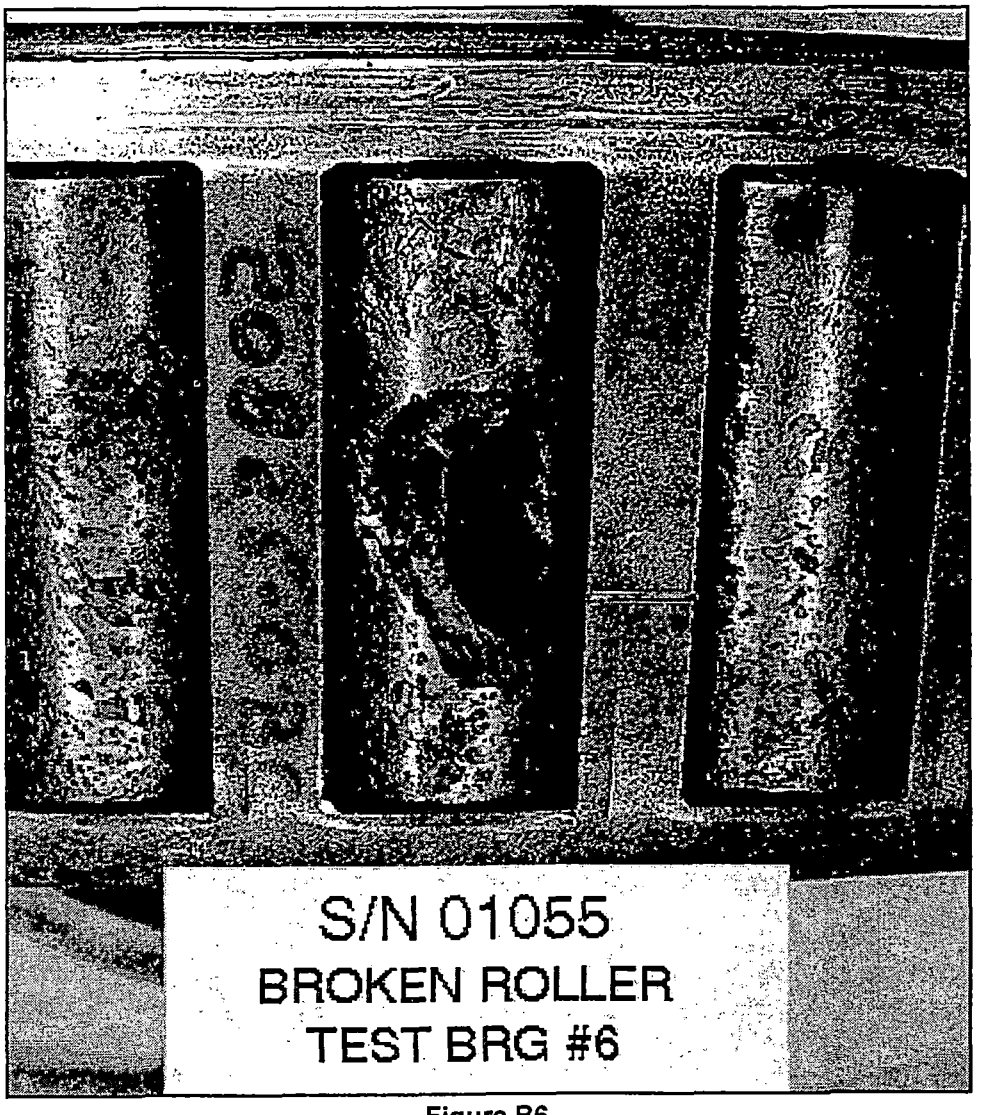

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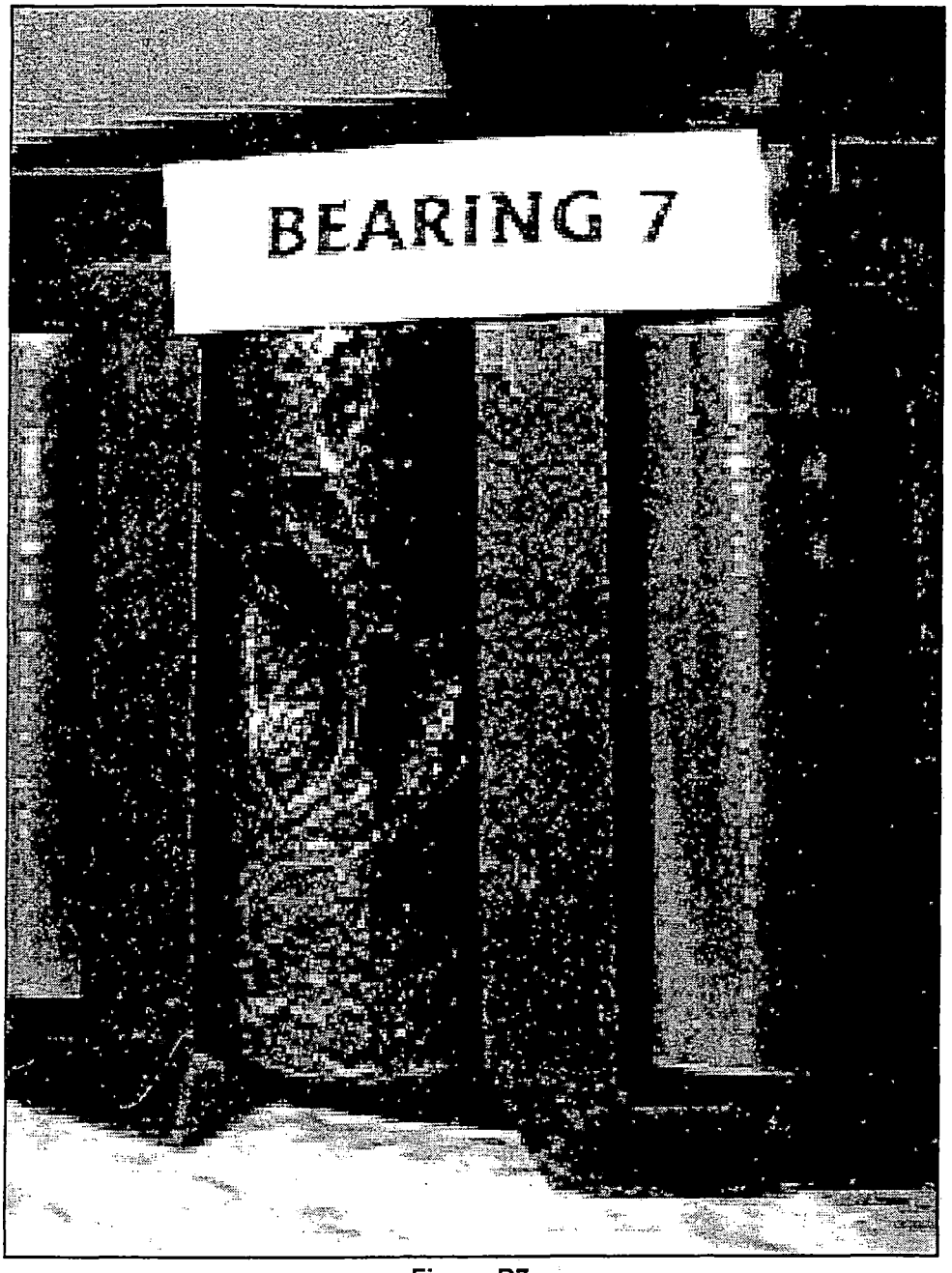
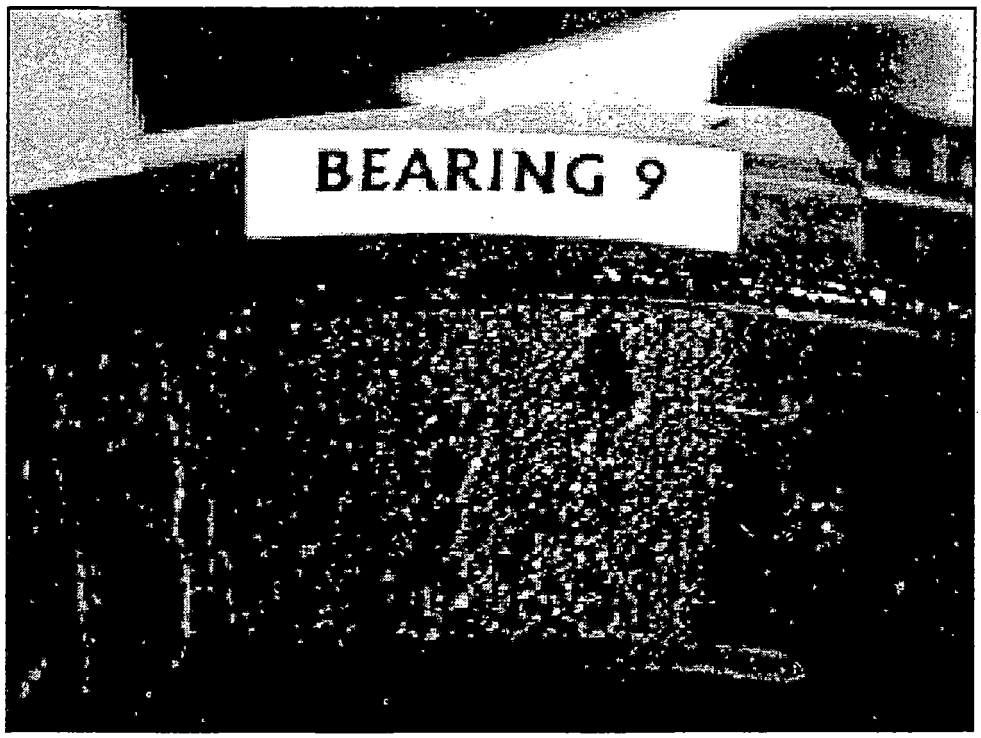


Figure B7

Figure B8



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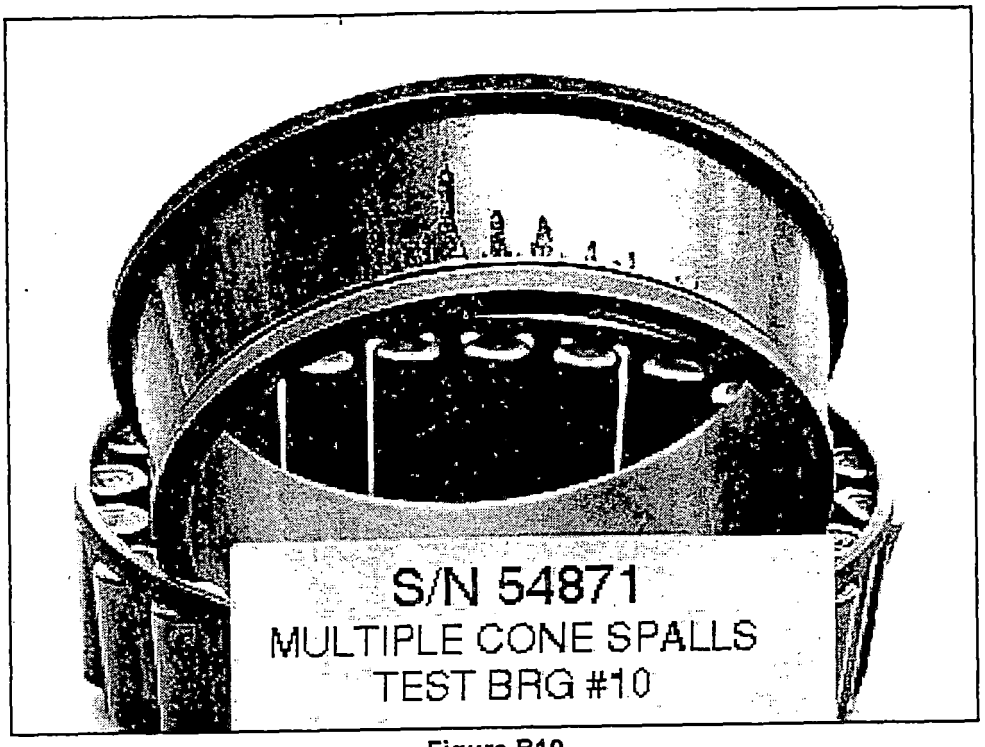

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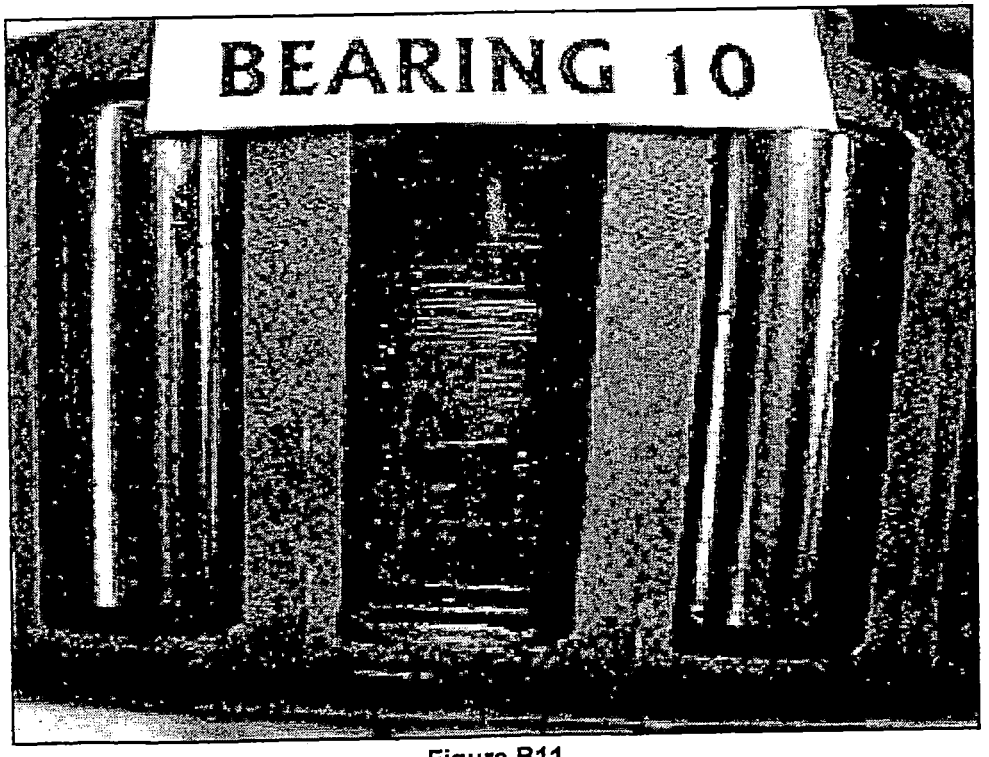

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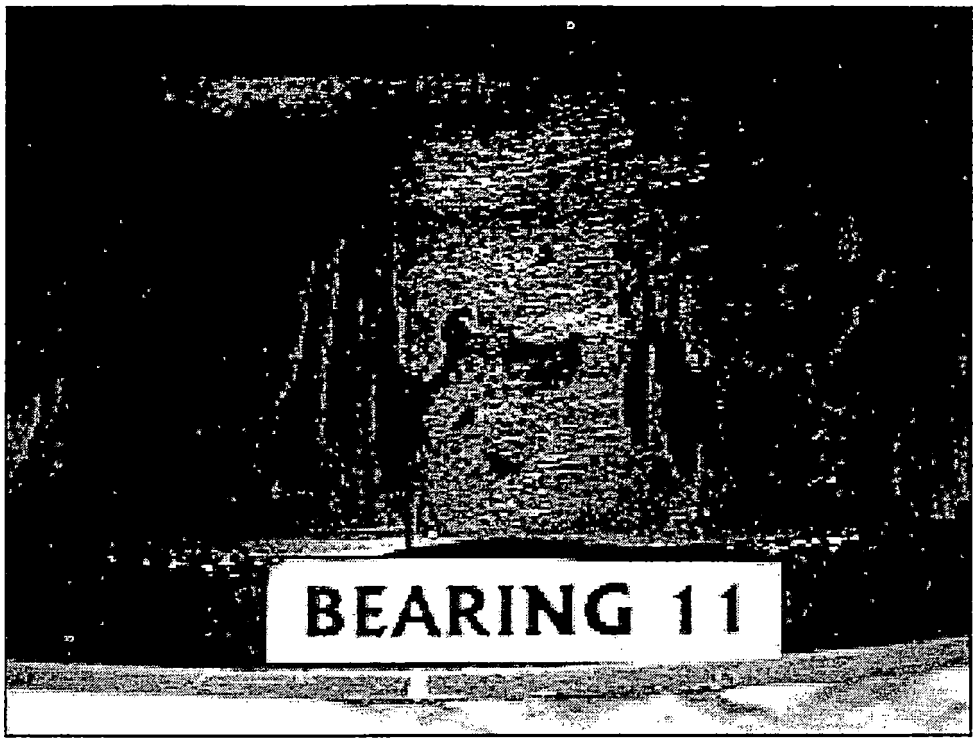

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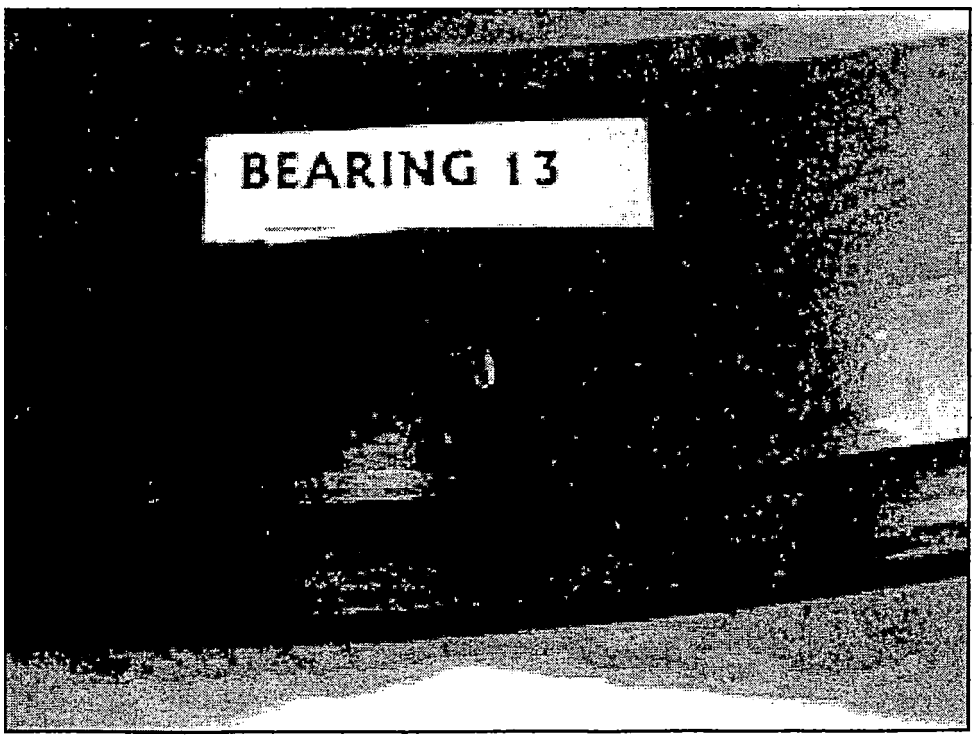

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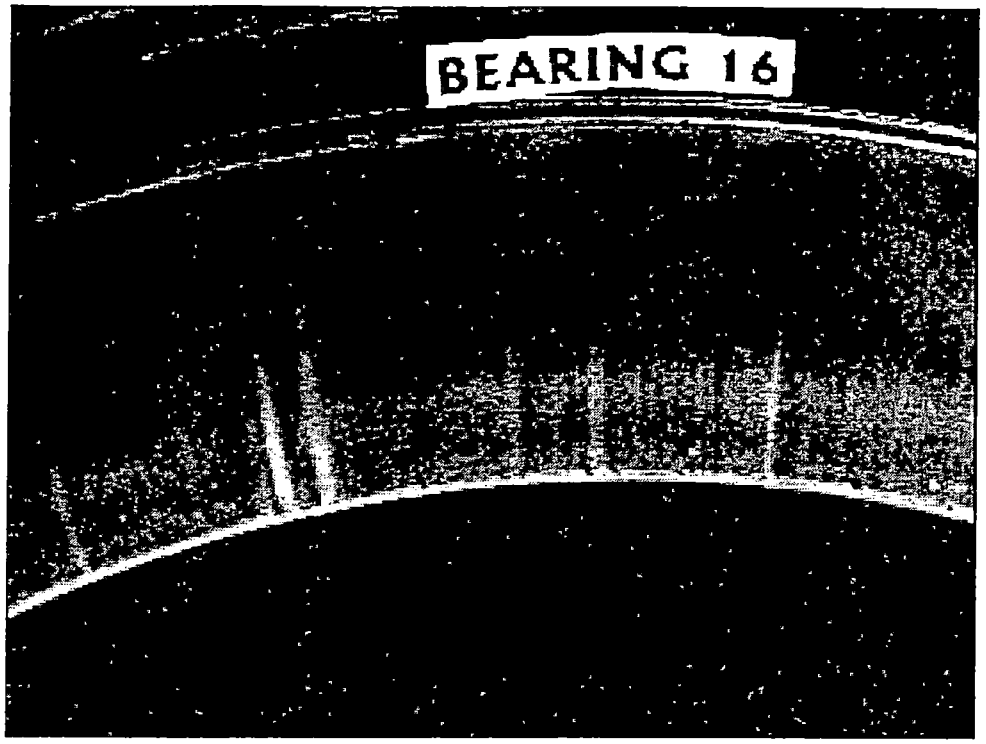

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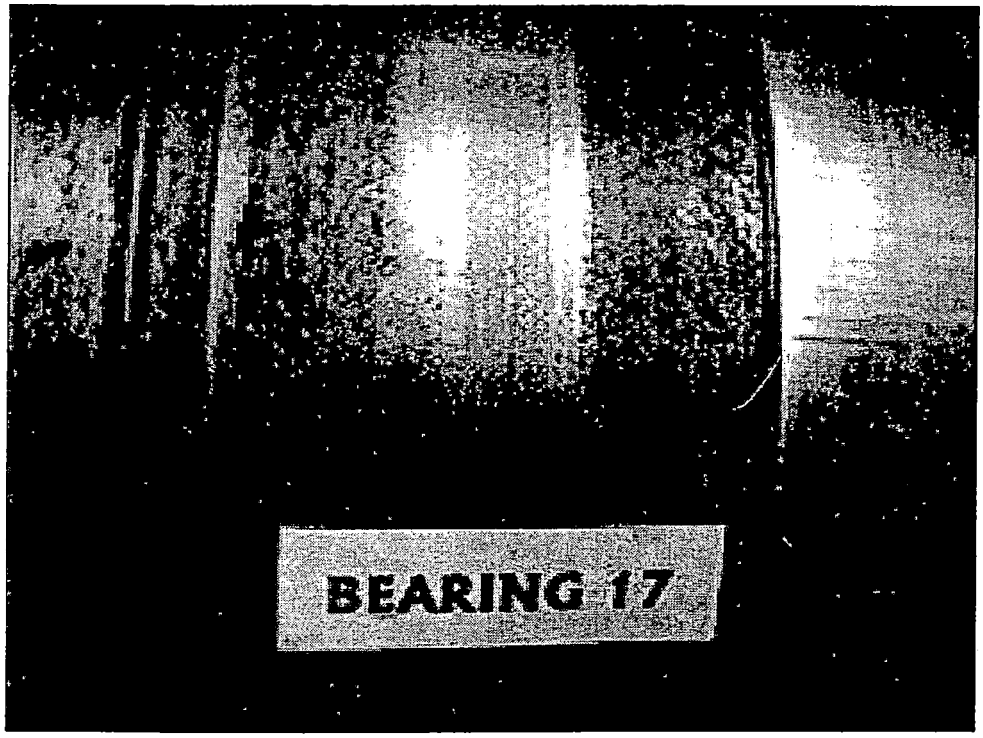

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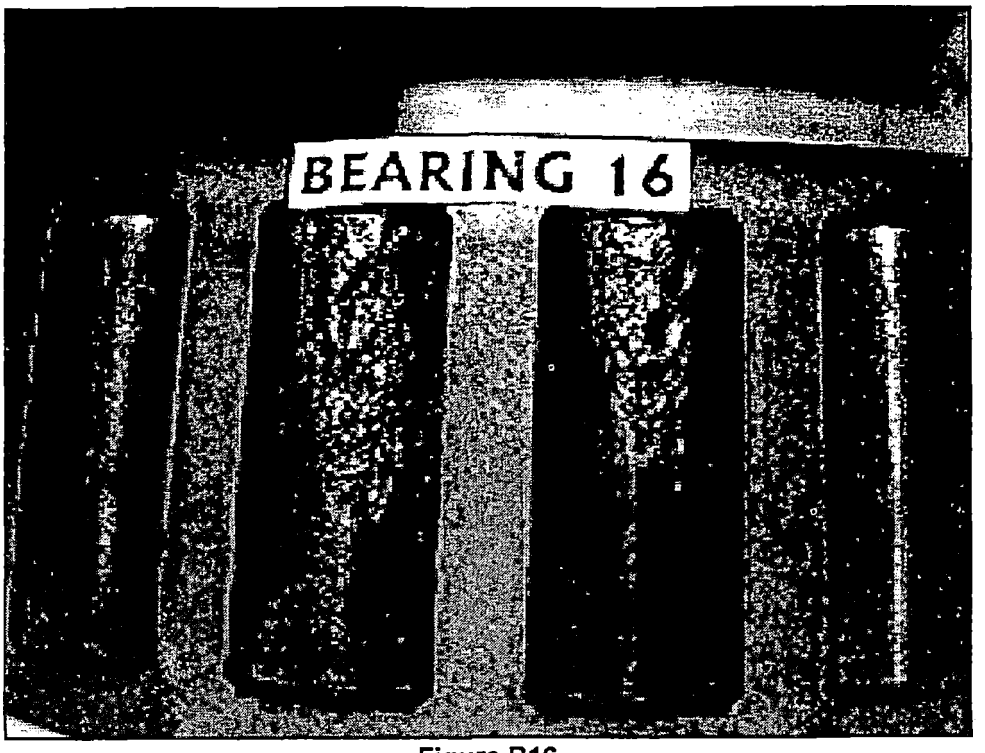
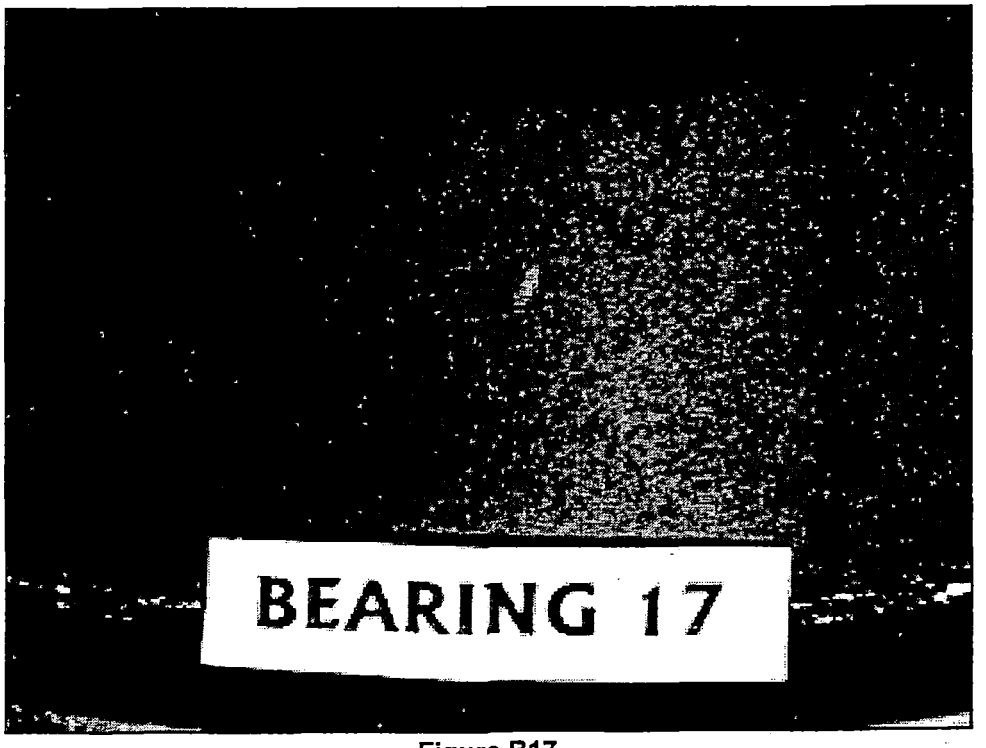


Figure B16



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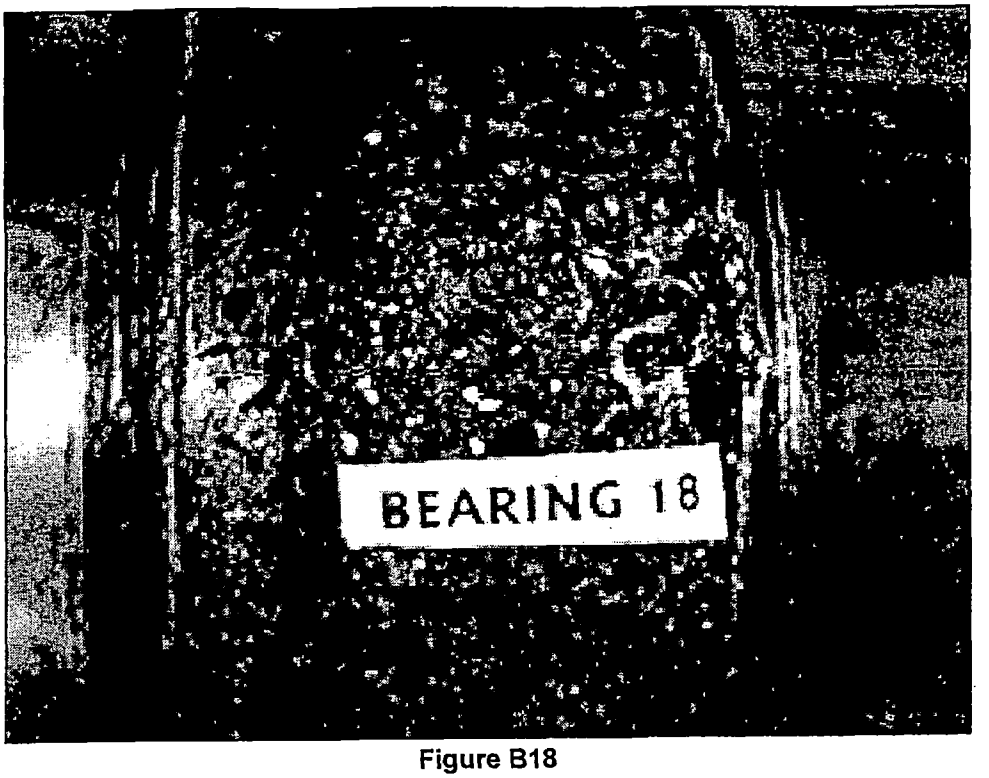

Figure B18

APPENDIX C
GRAPHS AND STATISTICS

Appendix C contains statistical data compiled as the files for bearings 8 through 18 were processed. These statistics were compiled and presented in this report as a starting point to investigate the nature and character of this data. Some of the 14 different statistical measures were included without a demonstrated need or purpose, while others have straightforward applications.

The **From File** column provides the name of the data file and **Counts** shows how many data points were used to calculate the statistics. **Mean** is the sum of the values divided by **Counts**. The mean will be non-zero if, for example, there is a Direct Current (DC) offset to the data or if one polarity was clipped.

Var, like **StD**, is a measure of the degree to which data is scattered about the mean.

Skew and **Kurtosis** are used to compare the distribution of the test data to 'normal' or Gaussian data which fits a bell shaped distribution curve.

Min and **Max** give the greatest negative and positive values found and **Range** is their absolute difference (if Min = -2 and Max =+3 then Range = 5).

LMean and **LVar** are statistical measures of the set of points that have values less than the mean, and likewise **UMean** and **UVar** reference the set of points with values greater than the mean.

From File	Mean	Var	StD	Skew	Kurtosis	Min
30hsa82	0	0.275	0.524	0	0.983	-2.869
40hsa82	0.01	0.655	0.809	0.029	0.572	-3.581
50hsa82	0	1.337	1.156	-0.03	0.194	-4.935
60hsa80	0	2.109	1.452	-0.05	1.083	-6.439
60hsa82	0.01	1.889	1.375	-0.04	0.259	-5.131
70hsa80	0	2.74	1.655	-0.02	0.376	-7.148
70hsa82	0	2.972	1.724	0	0.348	-6.844
80hsa80	0	2.754	1.66	-0.1	0.919	-7.163
80hsa82	0.01	4.412	2.1	0	0.28	-7.991
30hsc82	0.08	8.819	2.97	0.16	0.539	-12.08
40hsc82	1.38	16.149	4.019	0.05	0.292	-15.57
50hsc80	0.646	51.642	7.186	-0.1	0.612	-30.78
50hsc82	-1.65	30.957	5.564	-0.1	0.661	-31.39
60hsc80	1.075	76.43	8.742	0.07	0.317	-34.93
60hsc82	0.671	41.818	6.467	0.04	0.241	-26.75
70hsc80	0.717	84.718	9.204	0.09	0.14	-34.06
70hsc82	0.552	56.502	7.517	0	0.077	-27.27
80hsc80	1.333	91.744	9.578	0.02	0.049	-36.19
80hsc82	0.476	83.147	9.118	0.02	0.179	-35.62
30hsh82	0	9.396	3.065	-0.1	2.123	-21.25
40hsh82	0	20.54	4.532	-0.1	0.799	-26.28
50hsh80	0	38.733	6.224	0.05	1.244	-34.28
50hsh82	0	40.767	6.385	-0.1	1.132	-44.93
60hsh80	0	67.595	8.222	0	1.029	-41.07
60hsh82	0	65.366	8.085	-0.1	0.53	-38.41
70hsh80	0	72.646	8.523	-0.1	0.722	-45.98
70hsh82	0	95.03	9.748	0	0.677	-45.44
80hsh80	0	94.604	9.726	0	0.592	-46
80hsh82	0	147.91	12.162	0	0.505	-63.7
30hsm80	0	18.232	4.27	0.07	1.352	-19.18
30hsm82	0	8.54	2.922	0.04	0.046	-11.9
40hsm82	0	11.962	3.459	0	0.269	-16.2

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
2.372	5.241	132.468	65536	0	0.01	0.272	0.278
3.292	6.873	134.673	65536	0	0.012	0.648	0.662
5.295	10.23	-151.45	65536	-0.02	0	1.323	1.352
6.255	12.693	-1505.73	65536	-0.01	0.01	2.086	2.132
6.678	11.809	279.55	65536	0	0.015	1.869	1.91
7.04	14.188	-510.918	65536	-0.02	0.01	2.711	2.77
7.319	14.163	696.64	65536	0	0.02	2.94	3.005
7.159	14.322	-689	65536	0	0.01	2.725	2.784
8.804	16.795	201.52	65536	0	0.03	4.364	4.46
13.11	25.189	35.652	65536	0.06	0.106	8.724	8.915
19.12	34.689	2.913	65536	1.349	1.41	15.976	16.326
33.87	64.654	11.121	65536	0.591	0.701	51.087	52.206
25.12	56.511	-3.378	65536	-1.69	-1.6	30.625	31.295
37.7	72.634	8.134	65536	1.008	1.142	75.609	77.264
29.71	56.457	9.636	65536	0.622	0.721	41.369	42.274
38.41	72.471	12.834	65536	0.647	0.788	83.808	85.643
29.62	56.891	13.612	65536	0.495	0.61	55.895	57.119
36.93	73.123	7.187	65536	1.259	1.406	90.759	92.746
39.89	75.511	19.17	65536	0.406	0.545	82.254	84.055
19.11	40.358	593.17	65536	0	0.03	9.295	9.499
20.82	47.093	-915.5	65536	0	0.03	20.32	20.764
40.8	75.078	-846.6	65536	-0.1	0.04	38.317	39.156
33.23	78.158	116016	65536	0	0.05	40.329	41.212
40.75	81.813	1344	65536	-0.1	0.07	66.869	68.333
36.09	74.504	-2366	65536	-0.1	0.06	64.664	66.079
45.76	91.733	3114.1	65536	-0.1	0.07	71.866	73.439
46.76	92.203	8045.8	65536	-0.1	0.08	94.01	96.068
46.51	92.516	2086.6	65536	-0.1	0.08	93.588	95.637
48.55	112.25	9476.2	65536	-0.1	0.09	146.32	149.52
20.08	39.26	-4258	65536	0	0.03	18.037	18.431
11.37	23.269	-439.6	65536	0	0.02	8.448	8.633
14.35	30.548	-322.2	65536	0	0.02	11.834	12.093

From File	Mean	Var	StD	Skew	Kurtosis	Min
50hsm82	0	19.528	4.419	0.02	0.455	-20.66
60hsm80	0	48.13	6.938	0	0.3	-33.02
60hsm82	0	25.024	5.002	0.05	0.25	-20.33
70hsm80	0.02	51.721	7.192	-0.12	0.122	-32.69
70hsm82	0	30.822	5.552	0.08	0.045	-18.67
80hsm80	0	57.696	7.596	0	-0.01	-27.28
80hsm82	0	43.832	6.621	0	0.082	-26.17
30hst82	0	1.786	1.336	0.133	-1.413	-1.949
40hst82	0	2.905	1.704	0.144	-1.414	-2.465
50hst82	0	4.151	2.037	0.148	-1.415	-2.91
60hst80	0	5.493	2.344	0.154	-1.413	-3.347
60hst82	0	5.509	2.347	0.155	-1.413	-3.353
70hst80	0	6.998	2.645	0.158	-1.413	-3.764
70hst82	0	6.987	2.643	0.159	-1.412	-3.765
80hst80	0	8.649	2.941	0.164	-1.411	-4.181
80hst82	0	8.593	2.931	0.164	-1.412	-4.163
30hsa90	0	3.703	1.924	0.02	1.183	-11.25
30hsa92	0	6.07	2.464	0.08	0.643	-9.805
40hsa90	0.01	10.659	3.265	0.08	0.403	-12.77
40hsa92	0	14.126	3.759	0.08	0.622	-13.76
50hsa90	0.02	19.873	4.458	0.14	0.556	-21.12
50hsa92	0	25.185	5.018	0	0.221	-20.47
60hsa90	0	24.957	4.996	0.105	0.517	-24.41
60hsa92	0	38.469	6.202	0.06	0.205	-24.3
70hsa90	-0.6	46.954	6.852	0.05	0.512	-30.63
70hsa92	0	53.395	7.307	0.09	0.178	-29.41
80hsa90	-0.27	43.504	6.596	0.1	0.249	-24.19
80hsa92	0.02	59.396	7.707	0.1	0.109	-30.83
30hsc90	0.216	125.59	11.207	0	1.302	-57.98
30hsc92	1.636	165.97	12.883	0.05	0.407	-48.21
40hsc90	1.404	306.13	17.497	0.03	0.429	-82.5
40hsc92	-1.39	476.63	21.832	0.03	0.194	-110.1

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
19.27	39.922	720.87	65536	0	0.04	19.318	19.741
25.27	58.283	-12629	65536	-0.1	0.05	47.613	48.655
20.48	40.804	3758.2	65536	0	0.04	24.756	25.298
24.94	57.622	485.49	65536	0	0.07	51.166	52.286
25.94	44.609	-598.3	65536	-0.1	0.03	30.491	31.158
28.58	55.857	-2867	65536	-0.1	0.06	57.077	58.326
26.65	52.825	788.27	65536	0	0.06	43.362	44.311
2.134	4.083	-390.2	65536	0	0	1.766	1.805
2.707	5.172	-372.4	65536	0	0	2.874	2.937
3.238	6.149	1642.4	65536	0	0.02	4.107	4.196
3.74	7.087	755.12	65536	0	0.02	5.434	5.553
3.729	7.082	1722.5	65536	0	0.02	5.449	5.569
4.207	7.971	931.86	65536	0	0.02	6.923	7.075
4.218	7.983	8364.4	65536	0	0.02	6.912	7.063
4.693	8.874	2995.1	65536	0	0.02	8.556	8.744
4.687	8.85	37374	65536	0	0.02	8.501	8.687
9.491	20.745	234.98	65536	0	0.02	3.663	3.744
11.47	21.27	-11129	65536	0	0.02	6.004	6.136
14.65	27.416	327.83	65536	0	0.04	10.545	10.776
17.3	31.063	1352.8	65536	0	0.03	13.975	14.281
22.47	43.594	259.55	65536	0	0.05	19.66	20.09
21.01	41.483	-123.4	65536	-0.1	0	24.914	25.46
24.87	49.28	-230.9	65536	-0.1	0.02	24.689	25.229
23.29	47.59	-979.2	65536	-0.1	0.04	38.056	38.889
29.7	60.336	-11.49	65536	-0.65	-0.54	46.45	47.467
30.39	59.803	-2757	65536	-0.1	0.05	52.822	53.978
31.93	56.124	-24.37	65536	-0.32	-0.22	43.037	43.979
32.13	62.962	435.1	65536	0	0.08	58.758	60.045
70.9	128.87	51.926	65536	0.13	0.302	124.24	126.96
63.56	111.77	7.873	65536	1.538	1.735	164.19	167.78
77.16	159.65	12.466	65536	1.27	1.537	302.85	309.48
96.4	206.45	-15.71	65536	-1.56	-1.22	471.52	481.84

From File	Mean	Var	StD	Skew	Kurtosis	Min
50hsc90	0.817	70.598	8.402	0.02	0.23	-39.26
50hsc92	0.04	89.626	9.467	0.05	0.099	-33.23
60hsc90	-0.31	74.456	8.629	0.01	0.349	-40.01
60hsc92	1.032	142.46	11.936	0.02	0.013	-47.75
70hsc90	0.216	151.89	12.324	0	0.311	-63.9
70hsc92	0.697	192.2	13.864	0	0.144	-48.38
80hsc90	0.171	139.72	11.82	0.03	0.27	-46.06
80hsc92	-0.8	211.98	14.56	0.05	0	-49.34
30hsh90	0	185.23	13.61	-0.1	3.816	-104.3
30hsh92	0	264.55	16.265	0	1.246	-91.47
40hsh90	0	540.93	23.258	0	0.734	-105.2
40hsh92	0	694.8	26.359	0.05	0.73	-104.4
50hsh90	0	141.29	11.887	0	0.593	-50.83
50hsh92	0	148.57	12.189	0	0.582	-53.67
60hsh90	0	148.37	12.181	0	0.463	-57.03
60hsh92	0	202.13	14.217	0.02	0.291	-56.09
70hsh90	0	316.48	17.79	0	0.431	-75.56
70hsh92	0	328.04	18.112	0.02	0.371	-80.4
80hsh90	0	286.38	16.923	0.05	0.515	-75.07
80hsh92	0	336	18.33	0	0.113	-76.93
30hsm90	0	65.158	8.072	0	1.268	-38.09
30hsm92	0.01	84.94	9.216	0	0.266	-41.79
40hsm90	0	152.08	12.332	0	0.339	-61.95
40hsm92	0	218.16	14.77	0.06	0.268	-62.62
50hsm90	0	36.681	6.056	0.02	0.256	-23.21
50hsm92	0	51.674	7.188	0	0.141	-28.19
60hsm90	0	33.751	5.81	0	0.257	-23.09
60hsm92	0	92.157	9.6	0.01	0	-35.88
70hsm90	0	78.653	8.869	0	0.211	-40.31
70hsm92	0.02	121.5	11.023	0.03	0.077	-44.7
80hsm90	0	73.79	8.59	0	0.19	-35.45
80hsm92	0	133.44	11.551	0	0.129	-45.24

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
33.87	73.134	10.286	65536	0.753	0.881	69.839	71.368
35.77	68.992	270.32	65536	0	0.108	88.663	90.604
42.35	82.364	-28.18	65536	-0.37	-0.24	73.657	75.269
46.74	94.494	11.561	65536	0.941	1.124	140.93	144.01
60.95	124.85	56.926	65536	0.122	0.311	150.26	153.55
56.88	105.26	19.878	65536	0.591	0.804	190.14	194.3
52.46	98.518	69.1	65536	0.08	0.262	138.22	141.25
56.69	106.03	-18.12	65536	-0.92	-0.69	209.71	214.3
106	210.3	-2953	65536	-0.11	0.1	183.25	187.26
86.73	178.19	-1483	65536	-0.14	0.114	261.71	267.44
108.6	213.8	0	65536	-0.18	0.178	535.12	546.84
109.4	213.8	-2478	65536	-0.21	0.191	687.33	702.38
64.73	115.56	2884.4	65536	-0.1	0.1	139.77	142.83
65.6	119.27	6836.6	65536	-0.1	0.1	146.97	150.19
65.1	122.12	-1824	65536	-0.1	0.09	146.77	149.99
67.35	123.44	2193.1	65536	-0.1	0.115	199.96	204.34
79.62	155.18	-5853	65536	-0.14	0.133	313.08	319.93
76.56	156.95	5480.4	65536	-0.14	0.142	324.52	331.62
96.27	171.34	-5866	65536	-0.13	0.127	283.3	289.5
67.52	144.45	-40341	65536	-0.14	0.14	332.4	339.67
48.32	86.405	-3593	65536	-0.1	0.06	64.458	65.87
41.7	83.483	836.7	65536	-0.1	0.08	84.028	85.867
48.99	110.94	-2746	65536	-0.1	0.09	150.45	153.74
66.18	128.81	10621	65536	-0.11	0.114	215.82	220.54
28.05	51.261	1197.9	65536	0	0.05	36.287	37.081
25.65	53.842	-2820	65536	-0.1	0.05	51.119	52.238
25.47	48.56	-1371	65536	0	0.04	33.388	34.119
33.09	68.968	1147.3	65536	-0.1	0.08	91.167	93.163
40.54	80.853	1044.2	65536	-0.1	0.08	77.809	79.512
40.96	85.655	660.92	65536	-0.1	0.101	120.2	122.83
38.5	73.95	-1433	65536	-0.1	0.06	72.997	74.595
53.98	99.22	41960	65536	-0.1	0.09	132	134.89

From File	Mean	Var	StD	Skew	Kurtosis	Min
30hst90	0	1.809	1.345	0.134	-1.411	-1.968
30hst92	0	1.806	1.344	0.129	-1.412	-1.971
40hst90	0	2.876	1.696	0.146	-1.414	-2.453
40hst92	0	2.889	1.7	0.132	-1.416	-2.445
50hst90	0	4.147	2.037	0.146	-1.414	-2.929
50hst92	0	4.108	2.027	0.149	-1.415	-2.92
60hst90	0	5.49	2.343	0.153	-1.414	-3.35
60hst92	0	5.479	2.341	0.157	-1.412	-3.357
70hst90	0	6.987	2.643	0.158	-1.413	-3.767
70hst92	0	6.979	2.642	0.161	-1.412	-3.782
80hst90	0	8.649	2.941	0.163	-1.413	-4.174
80hst92	0	8.609	2.934	0.161	-1.414	-4.17
30hsa100	0.01	0.269	0.519	0.07	1.262	-2.581
30hsa102	0	0.319	0.565	0.125	0.888	-3.241
40hsa100	0	0.706	0.84	0.123	0.683	-4.23
40hsa102	0	0.796	0.892	0.145	1.515	-3.738
50hsa100	0	1.295	1.138	0	0.294	-4.559
50hsa102	0	1.6	1.265	0.05	0.667	-5.534
60hsa100	0	2.42	1.556	0.04	0.801	-6.337
60hsa102	0.01	2.472	1.572	-0.11	0.632	-6.926
70hsa100	0.04	3.443	1.855	0.177	0.815	-7.373
70hsa102	0.01	4.868	2.206	0.08	1.996	-10.65
80hsa100	0	4.343	2.084	-0.1	0.577	-10.05
80hsa102	0.01	9.831	3.135	0.145	1.925	-13.77
30hsc100	5.311	99.998	10	0.06	0.368	-32.99
30hsc102	0.789	167.09	12.926	-0.29	1.34	-64.54
40hsc100	-1.54	202.83	14.242	0.139	0.458	-55.79
40hsc102	1.833	341.55	18.481	0.136	0.598	-68.87
50hsc100	0.795	42.675	6.533	-0.17	0.458	-35.3
50hsc102	0.55	79.591	8.921	-0.15	0.883	-34.11
60hsc100	1.14	83.244	9.124	0.06	0.701	-39.9
60hsc102	1.245	115.28	10.737	0	1.307	-53.24

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
2.151	4.12	-558.1	65536	0	0	1.789	1.829
2.158	4.129	958.04	65536	0	0.01	1.786	1.826
2.697	5.15	-238.6	65536	0	0	2.845	2.908
2.695	5.14	230.74	65536	0	0.02	2.858	2.92
3.257	6.186	860.1	65536	0	0.02	4.103	4.193
3.229	6.149	-1335	65536	0	0.01	4.064	4.153
3.736	7.087	984.42	65536	0	0.02	5.431	5.55
3.724	7.082	-943.3	65536	0	0.02	5.42	5.539
4.199	7.966	5758.2	65536	0	0.02	6.912	7.063
4.213	7.995	-1014	65536	0	0.02	6.904	7.056
4.688	8.862	3105.6	65536	0	0.02	8.556	8.743
4.677	8.847	542.66	65536	0	0.03	8.517	8.703
3.281	5.862	44.63	65536	0	0.02	0.266	0.272
3.116	6.357	1533.9	65536	0	0	0.316	0.322
4.347	8.578	-682.1	65536	0	0	0.698	0.714
5.545	9.283	179.58	65536	0	0.01	0.787	0.804
4.566	9.125	1066.1	65536	0	0.01	1.282	1.31
5.644	11.178	-686.2	65536	0	0	1.583	1.618
7.061	13.398	-92.66	65536	0	0	2.394	2.446
7.157	14.082	134.04	65536	0	0.02	2.445	2.499
11.32	18.692	51.98	65536	0.02	0.05	3.406	3.48
14.95	25.597	229.77	65536	0	0.03	4.815	4.921
9.065	19.113	-736.3	65536	0	0.01	4.296	4.39
18.32	32.091	265.6	65536	0	0.04	9.726	9.938
49.02	82.007	1.883	65536	5.234	5.387	98.924	101.09
51.06	115.6	16.385	65536	0.69	0.888	165.3	168.92
63.18	118.96	-9.242	65536	-1.65	-1.43	200.65	205.04
75.03	143.91	10.085	65536	1.691	1.974	337.88	345.27
25.94	61.234	8.216	65536	0.745	0.845	42.217	43.141
37.22	71.331	16.222	65536	0.482	0.618	78.736	80.459
49.68	89.571	8.002	65536	1.07	1.21	82.35	84.152
54.25	107.49	8.626	65536	1.163	1.327	114.04	116.54

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70hsc100	0.17	114.94	10.721	0	0.378	-42.78	40.61	83.383	63.233	65536	0.09	0.252	113.71	116.2
70hsc102	1.365	161.08	12.692	0.1	0.55	-46.1	53.89	99.994	9.299	65536	1.268	1.462	159.35	162.84
80hsc100	1.317	121.28	11.013	0.08	0.645	-38.48	50.39	88.866	8.363	65536	1.233	1.401	119.98	122.6
80hsc102	-0.76	279.81	16.727	0.08	0.845	-66.53	72.45	138.97	-22.11	65536	-0.89	-0.63	276.8	282.86
30hsh100	0	22.118	4.703	0	0.854	-27.56	21.7	49.266	-2831	65536	0	0.03	21.88	22.359
30hsh102	0	21.697	4.658	0.03	0.898	-26.21	26.37	52.579	1070.1	65536	0	0.04	21.464	21.934
40hsh100	0	99.422	9.971	0	0.391	-42.46	45.94	88.405	4312.2	65536	-0.1	0.08	98.354	100.51
40hsh102	0.01	95.936	9.795	0.06	0.357	-45.05	44.3	89.352	813.76	65536	-0.1	0.09	94.906	96.983
50hsh100	0	30.411	5.515	0	0.484	-28.48	23.37	51.845	-1018	65536	0	0.04	30.084	30.743
50hsh102	0	32.825	5.729	0	0.443	-25.17	25.48	50.644	82188	65536	0	0.04	32.473	33.184
60hsh100	0	58.813	7.669	0.01	0.295	-31.86	34.13	65.993	-46199	65536	-0.1	0.06	58.181	59.455
60hsh102	0	59.07	7.686	0.01	0.08	-28.24	32.27	60.511	-413.8	65536	-0.1	0.04	58.435	59.714
70hsh100	0	78.125	8.839	0	0.084	-37.45	32.51	69.961	-35062	65536	-0.1	0.07	77.286	78.978
70hsh102	0	94.64	9.728	0	0.377	-52.01	45.41	97.424	5622	65536	-0.1	0.08	93.623	95.673
80hsh100	0	92.373	9.611	0	0.121	-37.19	37.37	74.556	2477.6	65536	-0.1	0.08	91.381	93.381
80hsh102	0	158.36	12.584	0	0.235	-52.59	51.88	104.47	19392	65536	-0.1	0.1	156.66	160.09
30hsm100	0	53.329	7.303	0	0.662	-34.16	32.18	66.338	-534	65536	-0.1	0.04	52.756	53.911
30hsm102	0	90.326	9.504	0	1.158	-41.29	43.64	84.933	1064.5	65536	-0.1	0.08	89.356	91.312
40hsm100	0	108.51	10.417	0.05	0.296	-38.98	43.9	82.873	-1309	65536	-0.1	0.07	107.34	109.69
40hsm102	0.02	209.23	14.465	0.04	0.659	-54.91	57.87	112.78	732.91	65536	-0.1	0.13	206.98	211.51
50hsm100	0	26.8	5.177	0	0.588	-30.92	20.97	51.887	656.35	65536	0	0.05	26.512	27.092
50hsm102	0.01	49.991	7.07	0	0.838	-34.38	29.69	64.073	509.39	65536	0	0.07	49.454	50.536
60hsm100	0	46.619	6.828	0.06	0.77	-31.75	27.59	59.331	2105.2	65536	0	0.06	46.118	47.128
60hsm102	0.01	65.969	8.122	0.1	1.434	-38.08	46.06	84.144	718.96	65536	-0.1	0.07	65.261	66.689
70hsm100	0	82.714	9.095	0.04	0.756	-36.65	41.76	78.41	-860.3	65536	-0.1	0.06	81.825	83.617
70hsm102	0	101.11	10.055	-0.1	0.551	-39.62	42.92	82.545	-2274	65536	-0.1	0.07	100.02	102.21
80hsm100	0	88.391	9.402	0	0.667	-42.66	44.46	87.122	3078.9	65536	-0.1	0.08	87.441	89.356
80hsm102	0.02	182.12	13.495	0	0.599	-50.6	50.53	101.13	637.91	65536	-0.1	0.124	180.16	184.1
30hst100	0	1.838	1.356	0.128	-1.414	-1.975	2.15	4.125	-3390	65536	0	0.01	1.818	1.858
30hst102	0	1.815	1.347	0.134	-1.409	-1.966	2.158	4.125	-423.1	65536	0	0	1.795	1.835
40hst100	0	2.873	1.695	0.14	-1.414	-2.443	2.699	5.143	-5121	65536	0	0.01	2.842	2.905
40hst102	0	2.92	1.709	0.133	-1.418	-2.456	2.699	5.155	240.74	65536	0	0.02	2.889	2.952

From File	Mean	Var	StD	Skew	Kurtosis	Min
50hst100	0	4.128	2.032	0.147	-1.415	-2.912
50hst102	0	4.139	2.035	0.146	-1.415	-2.911
60hst100	0	5.501	2.345	0.159	-1.412	-3.351
60hst102	0	5.5	2.345	0.155	-1.412	-3.354
70hst100	0	7.031	2.652	0.16	-1.413	-3.777
70hst102	0	7.053	2.656	0.158	-1.412	-3.792
80hst100	0	8.671	2.945	0.167	-1.41	-4.165
80hst102	0	8.695	2.949	0.166	-1.411	-4.204
30hsa110	-0.22	14.276	3.778	0.771	-0.155	-7.235
30hsa112	0.01	0.882	0.939	0	1.214	-4.917
40hsa110	0	2.05	1.432	0.176	1.309	-7.213
40hsa112	0	1.794	1.339	0.155	0.761	-6.052
50hsa110	0	4.058	2.014	0.102	1.228	-10.18
50hsa112	0	3.723	1.929	0.185	1.497	-9.514
60hsa110	0	7.095	2.664	0.06	0.666	-14.18
60hsa112	0.01	5.938	2.437	-0.1	1.019	-13.29
70hsa110	0.01	4.218	2.054	0.117	0.997	-8.72
70hsa112	0	8.022	2.832	0.02	0.529	-12.74
80hsa110	0	14.95	3.866	0.04	1.387	-23.15
80hsa112	0	11.557	3.4	-0.19	1.437	-20.78
30hsc110	-0.73	452.79	21.279	0.08	0.322	-96.16
30hsc112	-2.39	64.573	8.036	0	0.477	-34.73
40hsc110	-0.38	130.37	11.418	0.02	0.707	-47.9
40hsc112	-0.32	115.86	10.764	0.09	0.311	-44.17
50hsc110	-0.64	220.48	14.848	0	0.377	-68.08
50hsc112	-0.1	220.99	14.866	0	0.519	-64.34
60hsc110	0.609	408	20.199	0.02	0.295	-79.12
60hsc112	0.492	359.13	18.951	-0.15	0.557	-84.62
70hsc110	0.594	507.6	22.53	0.06	0.091	-86.64
70hsc112	-1.02	487.84	22.087	0	0.142	-81.82
80hsc110	-0.94	791.72	28.138	0	0.225	-110.3
80hsc112	-0.66	730.93	27.036	0	0.298	-97.84

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
3.235	6.147	7711.6	65536	0	0.02	4.083	4.173
3.228	6.139	1768.5	65536	0	0.02	4.095	4.185
3.743	7.094	-420.7	65536	0	0.01	5.442	5.561
3.735	7.089	-2068	65536	0	0.02	5.441	5.56
4.226	8.002	-2729	65536	0	0.02	6.955	7.108
4.211	8.002	-2598	65536	0	0.02	6.978	7.13
4.694	8.86	-493.7	65536	0	0.02	8.578	8.765
4.714	8.918	-566.9	65536	0	0.02	8.601	8.79
15.11	22.345	-17.39	65536	-0.25	-0.19	14.123	14.432
4.166	9.083	80.774	65536	0	0.02	0.872	0.891
8.396	15.609	-328.3	65536	0	0	2.028	2.073
6.2	12.251	-242	65536	0	0	1.775	1.813
12.75	22.924	-1489	65536	0	0.01	4.014	4.102
11.03	20.545	-785.9	65536	0	0.01	3.683	3.763
11.74	25.913	-508.7	65536	0	0.02	7.019	7.172
11.22	24.502	221.44	65536	0	0.03	5.874	6.002
9.404	18.124	153.58	65536	0	0.03	4.173	4.264
12.45	25.19	486.75	65536	0	0.03	7.936	8.11
20.68	43.826	-840.1	65536	0	0.03	14.789	15.113
14.23	35.005	-3025	65536	0	0.03	11.433	11.683
87.46	183.63	-29.23	65536	-0.89	-0.57	447.93	457.73
30.09	64.817	-3.362	65536	-2.45	-2.33	63.88	65.278
50.19	98.094	-30.23	65536	-0.47	-0.29	128.97	131.79
45.07	89.246	-33.39	65536	-0.41	-0.24	114.62	117.13
62.65	130.72	-23.21	65536	-0.75	-0.53	218.11	222.88
68.66	133	-145.5	65536	-0.22	0.01	218.62	223.4
95.52	174.64	33.185	65536	0.454	0.763	403.61	412.45
78.89	163.51	38.545	65536	0.347	0.637	355.27	363.05
93.42	180.07	37.905	65536	0.422	0.767	502.15	513.14
95.2	177.03	-21.65	65536	-1.19	-0.85	482.6	493.16
110.6	220.89	-30.04	65536	-1.15	-0.72	783.22	800.37
110.8	208.62	-40.84	65536	-0.87	-0.46	723.08	738.91

From File	Mean	Var	StD	Skew	Kurtosis	Min
30hsh110	0	197.36	14.049	0	0.39	-53.73
30hsh112	0.01	26.211	5.12	-0.1	0.83	-27.67
40hsh110	0	89.214	9.445	0	0.569	-41.3
40hsh112	0	67.204	8.198	0	0.394	-40.35
50hsh110	0	218.95	14.797	0.03	0.445	-63.84
50hsh112	0	159.29	12.621	0.01	0.509	-56.94
60hsh110	0	406.85	20.171	0	0.313	-83.81
60hsh112	0	259.8	16.118	0	0.433	-69.61
70hsh110	0	523.04	22.87	-0.1	0.287	-96.14
70hsh112	0	384.5	19.609	0.05	0.143	-69.13
80hsh110	0	580	24.083	0.04	0.284	-101.1
80hsh112	0	544.69	23.339	0.05	0.432	-101.4
30hsm110	0	280.77	16.756	0.06	0.431	-64.82
30hsm112	0	40.073	6.33	0.01	0.544	-25.62
40hsm110	0	81.815	9.045	0	0.575	-42.01
40hsm112	0	68.051	8.249	0	0.282	-34.39
50hsm110	0	110.69	10.521	0	0.279	-40.25
50hsm112	0	126.27	11.237	0.01	0.451	-45.31
60hsm110	0	206.09	14.356	0	0.318	-58.15
60hsm112	0	223.34	14.944	0	0.394	-65.81
70hsm110	0	256.11	16.004	0.05	0.063	-51.97
70hsm112	0.02	276.87	16.639	0	0.119	-61.63
80hsm110	0	439.89	20.974	0	0.324	-85.83
80hsm112	0	413.25	20.329	0.02	0.335	-81.09
30hst110	0	1.837	1.355	0.129	-1.413	-1.981
30hst112	0	1.829	1.353	0.126	-1.415	-1.969
40hst110	0	2.906	1.705	0.136	-1.414	-2.456
40hst112	0	2.902	1.704	0.143	-1.414	-2.458
50hst110	0	4.171	2.042	0.152	-1.413	-2.929
50hst112	0	4.151	2.037	0.146	-1.415	-2.916
60hst110	0	5.539	2.353	0.152	-1.414	-3.353
60hst112	0	5.501	2.345	0.154	-1.413	-3.351

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70.31	124.04	5595	65536	-0.11	0.11	195.24	199.52
24.23	51.897	436.45	65536	0	0.05	25.929	26.497
39.52	80.821	-948.8	65536	-0.1	0.06	88.256	90.188
32.18	72.52	-1377	65536	-0.1	0.06	66.482	67.937
63.34	127.18	-8118	65536	-0.12	0.111	216.59	221.34
74.95	131.88	-886	65536	-0.11	0.08	157.57	161.02
84.46	168.27	-4713	65536	-0.16	0.15	402.49	411.3
79.03	148.64	-8412	65536	-0.13	0.121	257.01	262.64
90.46	186.6	3069.4	65536	-0.17	0.183	517.42	528.75
72.67	141.8	-3170	65536	-0.16	0.144	380.37	388.7
97.66	198.76	4235.5	65536	-0.18	0.19	573.77	586.33
110	211.35	7413.3	65536	-0.18	0.182	538.84	550.64
81.02	145.84	-1021	65536	-0.15	0.112	277.76	283.84
27.75	53.376	8363.9	65536	0	0.05	39.642	40.51
36.68	78.685	-2813	65536	-0.1	0.07	80.937	82.709
33.6	67.988	-1046	65536	-0.1	0.06	67.32	68.793
41.8	82.049	8229.3	65536	-0.1	0.08	109.5	111.9
51.19	96.496	1429.8	65536	-0.1	0.09	124.92	127.65
61.06	119.21	1552.5	65536	-0.1	0.119	203.88	208.34
63.38	129.19	-901.1	65536	-0.13	0.1	220.94	225.78
66.52	118.5	-838	65536	-0.14	0.103	253.36	258.91
71.98	133.61	884.64	65536	-0.11	0.146	273.9	279.89
85.93	171.76	-1174	65536	-0.18	0.143	435.17	444.69
88.91	170	-1546	65536	-0.17	0.142	408.81	417.76
2.143	4.125	-2327	65536	0	0.01	1.817	1.857
2.141	4.11	1396.9	65536	0	0.01	1.81	1.849
2.723	5.179	337.17	65536	0	0.02	2.875	2.938
2.702	5.16	-401.9	65536	0	0	2.871	2.934
3.256	6.186	-326.9	65536	0	0	4.126	4.217
3.232	6.149	718.94	65536	0	0.02	4.106	4.196
3.746	7.099	614.4	65536	0	0.02	5.479	5.599
3.739	7.089	1211.2	65536	0	0.02	5.442	5.561

From File	Mean	Var	StD	Skew	Kurtosis	Min
70hst110	0	7.072	2.659	0.162	-1.413	-3.776
70hst112	0	7.008	2.647	0.157	-1.413	-3.764
80hst110	0	8.662	2.943	0.164	-1.412	-4.181
80hst112	0	8.656	2.942	0.162	-1.412	-4.178
30hsa120	0	0.045	0.213	0	-0.07	-0.733
30hsa122	0	0.065	0.254	0	-0.114	-0.891
40hsa120	0	0.067	0.259	0.05	0.184	-0.898
40hsa122	0.01	0.323	0.568	0	-0.134	-2.164
50hsa120	0	0.266	0.515	0	0.193	-2.165
50hsa122	0	1.019	1.009	0.03	-0.02	-3.898
60hsa120	0	0.788	0.888	0	0.152	-3.286
60hsa122	0	1.303	1.142	0	0.022	-4.302
70hsa120	0.01	1.142	1.069	0	0	-3.798
70hsa122	0	1.731	1.316	0.05	-0.08	-4.464
80hsa120	0	1.514	1.231	0	0.097	-5.547
80hsa122	0	2.438	1.562	0	0.028	-6.133
30hsc120	-2.19	162.66	12.754	-0.1	-0.134	-45.27
30hsc122	12.55	188.57	13.732	0.08	-0.03	-30.93
40hsc120	-8.04	255.19	15.975	0.09	0.041	-63.22
40hsc122	-7.92	521.89	22.845	0	0.077	-86.56
50hsc120	8.123	513.59	22.663	0.03	0.175	-73.95
50hsc122	2.577	244.13	15.625	-0.1	-0.02	-56.6
60hsc120	0.04	255.07	15.971	0.03	0.042	-54.65
60hsc122	-1.77	355.22	18.847	0.06	-0.08	-72.2
70hsc120	-0.77	365.27	19.112	0.05	0.076	-68.21
70hsc122	2.547	562.38	23.715	0	0.013	-88.48
80hsc120	-1.22	426.84	20.66	0	-0.06	-83.41
80hsc122	4.139	619.12	24.882	0	0	-85.71
30hsh120	0	4.024	2.006	0	0.408	-8.198
30hsh122	0	9.426	3.07	0	0.045	-12.48
40hsh120	0	11.152	3.339	0.05	0.068	-11.51
40hsh122	0	70.734	8.41	0.02	0	-30.01

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
4.234	8.01	-606.8	65536	0	0.02	6.996	7.149
4.222	7.985	764.8	65536	0	0.02	6.933	7.084
4.696	8.877	4775.8	65536	0	0.02	8.569	8.757
4.714	8.891	1010	65536	0	0.03	8.563	8.751
0.751	1.484	29.788	65536	0	0	0.045	0.046
0.993	1.884	51.27	65536	0	0	0.064	0.065
1.028	1.926	-65.79	65536	0	0	0.066	0.068
1.973	4.136	57.634	65536	0	0.01	0.319	0.326
2.151	4.315	1214.4	65536	0	0	0.263	0.268
3.523	7.42	-207.9	65536	0	0	1.008	1.03
3.45	6.736	-86.08	65536	0	0	0.779	0.796
4.329	8.631	201.53	65536	0	0.01	1.289	1.318
3.569	7.368	77.988	65536	0	0.02	1.13	1.155
4.977	9.441	-778.3	65536	0	0	1.712	1.75
4.567	10.115	-207.8	65536	0	0	1.498	1.531
6.223	12.356	262.94	65536	0	0.02	2.412	2.465
38.43	83.695	-5.82	65536	-2.29	-2.09	160.91	164.43
60.85	91.781	1.094	65536	12.45	12.66	186.55	190.63
57.09	120.31	-1.987	65536	-8.16	-7.92	252.45	257.98
77.58	164.14	-2.884	65536	-8.1	-7.75	516.28	527.58
96.88	170.83	2.79	65536	7.95	8.297	508.08	519.2
67	123.6	6.064	65536	2.457	2.696	241.51	246.8
58.13	112.78	370.95	65536	-0.1	0.165	252.33	257.85
72.5	144.7	-10.65	65536	-1.91	-1.63	351.41	359.1
82.22	150.43	-24.75	65536	-0.92	-0.63	361.34	369.25
91.49	179.97	9.31	65536	2.366	2.729	556.34	568.52
76.26	159.67	-16.92	65536	-1.38	-1.06	422.25	431.49
103.6	189.31	6.012	65536	3.948	4.329	612.47	625.88
8.367	16.564	902.46	65536	0	0.02	3.98	4.067
12.94	25.414	-801.4	65536	0	0.02	9.325	9.529
13.14	24.657	1654.7	65536	0	0.03	11.032	11.274
32.84	62.849	1628.9	65536	-0.1	0.07	69.974	71.506

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
50hsh120	0	67.782	8.233	0	0.043	-27.85	31.4	59.252	-1075	65536	-0.1	0.06	67.054	68.522
50hsh122	0	238.8	15.453	0	0	-66.75	59.99	126.74	3844.5	65536	-0.11	0.122	236.23	241.4
60hsh120	0	170.31	13.05	0.02	0.023	-45.41	48.44	93.847	0	65536	-0.1	0.1	168.48	172.17
60hsh122	0.01	405.35	20.133	0.02	-0.09	-77.34	78.65	155.99	1703	65536	-0.14	0.166	401	409.77
70hsh120	0	321.05	17.918	0	0.107	-73.73	71.56	145.29	2926	65536	-0.13	0.143	317.6	324.56
70hsh122	0	607.12	24.64	-0.1	-0.123	-87.66	92.88	180.55	8340	65536	-0.19	0.192	600.59	613.74
80hsh120	0	443.33	21.055	0	-0.07	-78.59	72.33	150.92	3511.5	65536	-0.16	0.167	438.57	448.17
80hsh122	0	812.59	28.506	0	-0.09	-94.26	99.54	193.8	3300	65536	-0.21	0.227	803.86	821.46
30hsm120	0	79.083	8.893	0.1	-0.09	-28.27	32.02	60.293	-503.9	65536	-0.1	0.05	78.234	79.947
30hsm122	0	72.105	8.491	0.02	0.042	-30.17	30.32	60.483	-498.5	65536	-0.1	0.05	71.331	72.892
40hsm120	0.01	121.67	11.03	0.04	0.13	-41.95	47.78	89.73	905.41	65536	-0.1	0.1	120.36	123
40hsm122	0	233.83	15.291	0.07	0.186	-58.66	59.18	117.84	-4642	65536	-0.12	0.114	231.32	236.38
50hsm120	0.02	241.73	15.548	-0.1	0.064	-61.64	52.09	113.72	698.28	65536	-0.1	0.141	239.14	244.37
50hsm122	0	121.54	11.024	0	-0.08	-37.21	48.42	85.637	-2055	65536	-0.1	0.08	120.23	122.87
60hsm120	0	123.77	11.125	0.08	0.077	-42.59	42.29	84.883	-1396	65536	-0.1	0.08	122.45	125.13
60hsm122	0.01	180.14	13.422	0.03	-0.06	-48.97	46.71	95.688	1102.9	65536	-0.1	0.115	178.21	182.11
70hsm120	0.02	227.81	15.093	-0.1	0.055	-51.14	53.95	105.09	1033.8	65536	-0.1	0.13	225.36	230.29
70hsm122	0	268.73	16.393	0.02	-0.04	-68.27	66.01	134.29	-843.9	65536	-0.15	0.106	265.84	271.66
80hsm120	0	250.64	15.832	-0.1	0.017	-60.49	59.12	119.61	-1429	65536	-0.13	0.11	247.95	253.38
80hsm122	0.02	286.62	16.93	0.03	0.056	-62.75	63.95	126.7	944.53	65536	-0.11	0.148	283.54	289.75
30hst120	0	1.833	1.354	0.133	-1.411	-1.971	2.156	4.127	-395.1	65536	0	0	1.813	1.853
30hst122	0	1.339	1.157	0.12	-1.412	-1.706	1.842	3.548	690.48	65536	0	0.01	1.324	1.353
40hst120	0	2.936	1.714	0.137	-1.416	-2.472	2.715	5.187	-16653	65536	0	0.01	2.905	2.969
40hst122	0	2.908	1.705	0.144	-1.412	-2.469	2.713	5.182	-323.2	65536	0	0	2.877	2.94
50hst120	0	4.19	2.047	0.149	-1.415	-2.932	3.252	6.183	-5942	65536	0	0.02	4.145	4.236
50hst122	0	4.191	2.047	0.146	-1.415	-2.934	3.264	6.198	469.24	65536	0	0.02	4.146	4.237
60hst120	0	5.601	2.367	0.156	-1.414	-3.368	3.77	7.138	-956.7	65536	0	0.02	5.541	5.662
60hst122	0	5.546	2.355	0.156	-1.413	-3.361	3.765	7.126	30271	65536	0	0.02	5.486	5.607
70hst120	0	7.148	2.673	0.16	-1.414	-3.814	4.252	8.066	-7830	65536	0	0.02	7.071	7.226
70hst122	0	7.09	2.663	0.163	-1.411	-3.793	4.239	8.032	-470.3	65536	0	0.02	7.014	7.168
80hst120	0	8.807	2.968	0.166	-1.411	-4.22	4.735	8.955	-537.4	65536	0	0.02	8.712	8.903
80hst122	0	8.756	2.959	0.163	-1.413	-4.198	4.711	8.908	12561	65536	0	0.02	8.662	8.852

From File	Mean	Var	StD	Skew	Kurtosis	Min
30hsa130	0	0.483	0.695	0.03	0.251	-3.319
30hsa132	0	0.409	0.64	0.05	0.164	-2.355
40hsa130	0	0.876	0.936	0.05	0.668	-3.739
40hsa132	0	0.897	0.947	0	0.072	-4.161
50hsa130	0	1.836	1.355	0.03	0.467	-5.487
50hsa132	0	1.588	1.26	0	0.044	-5.073
60hsa130	0	2.604	1.614	0	0.424	-6.441
60hsa132	0	2.327	1.525	0.06	0.123	-5.608
70hsa130	0	3.929	1.982	0	0.036	-6.998
70hsa132	0	3.171	1.781	0.02	0.05	-6.033
80hsa130	0.01	3.181	1.783	0	0.041	-7.462
80hsa132	0	4.425	2.104	0	-0.1	-7.859
30hsc130	8.867	274.47	16.567	0.08	0.16	-51.45
30hsc132	4.883	224.06	14.969	-0.1	0.13	-66.75
40hsc130	-0.8	531.89	23.063	0	0.328	-96.57
40hsc132	-6.97	451.49	21.248	0	0.018	-86.26
50hsc130	0.05	1005.1	31.703	-0.1	0.061	-96.9
50hsc132	5.462	833.68	28.874	0.06	-0.07	-85.89
60hsc130	1.177	173.86	13.185	0	0.057	-55.15
60hsc132	-2.81	147.38	12.14	0.06	-0.04	-47.32
70hsc130	0.455	263.41	16.23	0	0.018	-56.44
70hsc132	0.309	197.36	14.048	-0.1	-0.04	-47.82
80hsc130	-1	259.46	16.108	0.01	-0.02	-58.99
80hsc132	2.969	233.74	15.289	0.01	0.01	-52.81
30hsh130	0	78.412	8.855	0	0.304	-51.06
30hsh132	0	74.491	8.631	0	0.21	-38.13
40hsh130	0	201.63	14.2	0.04	0.157	-58.93
40hsh132	0	196.87	14.031	0.02	0.194	-51.78
50hsh130	0	457.4	21.387	0	0.055	-80.41
50hsh132	0	396.63	19.916	0.02	0.108	-87.5
60hsh130	0	91.713	9.577	0.03	0	-36.03
60hsh132	0	82.615	9.089	0	0.032	-35.16

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
3.291	6.61	-134.3	65536	0	0	0.477	0.488
2.981	5.336	389.25	65536	0	0	0.405	0.414
4.302	8.041	101.37	65536	0	0.02	0.867	0.886
3.943	8.104	-333.1	65536	0	0	0.887	0.906
5.565	11.051	-302.7	65536	0	0	1.816	1.856
4.652	9.725	484.21	65536	0	0.01	1.571	1.606
6.589	13.03	584.83	65536	0	0.02	2.576	2.633
7.043	12.651	251.69	65536	0	0.02	2.302	2.352
8.032	15.03	353.96	65536	0	0.02	3.886	3.971
6.597	12.63	-798	65536	0	0.01	3.137	3.206
6.431	13.893	133	65536	0	0.03	3.146	3.215
7.023	14.882	-733.2	65536	0	0.01	4.377	4.473
76.07	127.52	1.868	65536	8.74	8.994	271.52	277.47
58.4	125.15	3.065	65536	4.768	4.998	221.65	226.51
93.73	190.3	-28.67	65536	-0.98	-0.63	526.18	537.7
72.44	158.7	-3.049	65536	-7.13	-6.81	446.64	456.42
93.4	190.3	705.51	65536	-0.2	0.288	994.29	1016.1
104.4	190.3	5.286	65536	5.241	5.683	824.73	842.78
53.21	108.36	11.201	65536	1.076	1.278	171.99	175.76
45.22	92.542	-4.323	65536	-2.9	-2.72	145.79	148.98
62.35	118.79	35.692	65536	0.33	0.579	260.58	266.28
50.68	98.499	45.407	65536	0.202	0.417	195.24	199.51
69.09	128.08	-16.18	65536	-1.12	-0.87	256.67	262.29
56.58	109.39	5.15	65536	2.852	3.086	231.23	236.29
42.5	93.564	-2266	65536	-0.1	0.06	77.57	79.268
36.88	75.012	5587.2	65536	-0.1	0.07	73.691	75.304
58.02	116.94	1937.7	65536	-0.1	0.116	199.46	203.83
57.07	108.85	7834.9	65536	-0.11	0.109	194.76	199.02
74.35	154.76	28056	65536	-0.16	0.165	452.48	462.39
86.19	173.69	-6671	65536	-0.16	0.149	392.37	400.96
38.26	74.295	19249	65536	-0.1	0.07	90.728	92.715
34.8	69.961	1580	65536	-0.1	0.08	81.728	83.517

From File	Mean	Var	StD	Skew	Kurtosis	Min
70hsh130	0	146.13	12.088	0	0.07	-40.24
70hsh132	0	99.611	9.981	0	0.112	-39.8
80hsh130	0	112.01	10.583	0	0.194	-44.1
80hsh132	0	112.24	10.594	0.02	-0.04	-42.08
30hsm130	0	154.12	12.414	0	0.042	-47.3
30hsm132	0.01	105.14	10.254	0	0.141	-49.63
40hsm130	0	230.49	15.182	-0.1	0.282	-68.56
40hsm132	0	241.54	15.541	0.03	0.138	-67.28
50hsm130	0.02	476.53	21.83	-0.1	0.161	-89.48
50hsm132	0	184.31	13.576	0	0.022	-51.29
60hsm130	0	88.815	9.424	0	-0.07	-37
60hsm132	0	79.6	8.922	0	0.07	-32.34
70hsm130	0	130.66	11.431	-0.1	-0.03	-40.02
70hsm132	0	88.831	9.425	0.03	-0.02	-35.89
80hsm130	0	126.33	11.239	0	0.062	-48.79
80hsm132	0	107.63	10.374	0	-0.04	-37.4
30hst130	0	1.821	1.349	0.131	-1.414	-1.955
30hst132	0	1.821	1.349	0.128	-1.413	-1.967
40hst130	0	2.902	1.703	0.135	-1.416	-2.463
40hst132	0	2.93	1.712	0.136	-1.417	-2.462
50hst130	0	4.153	2.038	0.148	-1.415	-2.918
50hst132	0	4.143	2.035	0.149	-1.414	-2.925
60hst130	0	5.523	2.35	0.155	-1.413	-3.355
60hst132	0	5.534	2.352	0.152	-1.414	-3.363
70hst130	0	7.043	2.654	0.157	-1.413	-3.783
70hst132	0	7.069	2.659	0.16	-1.414	-3.775
80hst130	0	8.736	2.956	0.165	-1.412	-4.21
80hst132	0	8.719	2.953	0.164	-1.412	-4.191
30hsa140	0	0.111	0.334	0.02	0.097	-1.408
30hsa142	0	0.175	0.418	-0.1	0.013	-1.658
40hsa140	0	0.278	0.528	0.02	-0.03	-2.053
40hsa142	0	0.36	0.6	0	0.015	-2.091

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
46.74	86.982	-8865	65536	-0.1	0.09	144.56	147.72
42.54	82.335	-10316	65536	-0.1	0.08	98.541	100.7
42.72	86.825	1228.9	65536	-0.1	0.09	110.8	113.23
39	81.082	3284.9	65536	-0.1	0.08	111.03	113.46
41.53	88.831	17667	65536	-0.1	0.1	152.46	155.8
39.25	88.878	889.67	65536	-0.1	0.09	104.01	106.29
65.61	134.17	-2076	65536	-0.12	0.109	228.01	233
59.41	126.69	12521	65536	-0.12	0.12	238.94	244.17
89.84	179.32	1045.8	65536	-0.15	0.188	471.41	481.73
59.03	110.32	-1080	65536	-0.12	0.09	182.33	186.32
31.35	68.343	-4481	65536	-0.1	0.07	87.861	89.784
38.04	70.379	-683.6	65536	-0.1	0.06	78.746	80.469
37.51	77.532	-742.9	65536	-0.1	0.07	129.26	132.09
36.31	72.206	-2513	65536	-0.1	0.07	87.877	89.801
42.57	91.368	3051	65536	-0.1	0.09	124.97	127.71
36.11	73.512	-1238	65536	-0.1	0.07	106.47	108.8
2.138	4.093	2245	65536	0	0.01	1.801	1.841
2.145	4.112	-17517	65536	0	0.01	1.801	1.84
2.718	5.182	373.84	65536	0	0.02	2.87	2.933
2.72	5.182	672.27	65536	0	0.02	2.898	2.962
3.229	6.147	-9361	65536	0	0.02	4.109	4.199
3.238	6.164	-2641	65536	0	0.02	4.098	4.188
3.732	7.087	-30992	65536	0	0.02	5.464	5.583
3.745	7.109	500.4	65536	0	0.02	5.475	5.595
4.219	8.002	660.8	65536	0	0.02	6.967	7.12
4.237	8.012	3134	65536	0	0.02	6.993	7.146
4.703	8.913	-785	65536	0	0.02	8.642	8.831
4.7	8.891	-3453	65536	0	0.02	8.626	8.814
1.213	2.621	-44.64	65536	0	0	0.11	0.112
1.374	3.031	-49.47	65536	0	0	0.173	0.176
2.115	4.168	290.02	65536	0	0	0.275	0.281
2.024	4.115	-111.3	65536	0	0	0.356	0.364

From File	Mean	Var	StD	Skew	Kurtosis	Min
50hsa140	0	0.447	0.669	0	-0.02	-2.749
50hsa142	0	0.695	0.834	0	0.121	-3.266
60hsa140	0	0.473	0.688	0.04	0.056	-2.441
60hsa142	0	1.109	1.053	0	-0.03	-4.123
70hsa140	0	0.867	0.931	0	0.146	-3.405
70hsa142	0	1.75	1.323	0	0.191	-5.149
80hsa140	0	1.7	1.304	0.01	0.071	-4.729
80hsa142	0	2.49	1.578	-0.1	0.093	-6.181
30hsc140	1.038	121.67	11.03	0.154	0.099	-39.29
30hsc142	2.306	542.81	23.298	0.164	-0.612	-60.27
40hsc140	1.598	235.37	15.342	-0.1	-0.01	-53.82
40hsc142	-5.89	274.15	16.558	0	-0.02	-63.18
50hsc140	-13.2	333.34	18.258	-0.11	-0.08	-74.76
50hsc142	37.67	403.05	20.076	0	0.055	-45.45
60hsc140	1.306	423.1	20.569	0.04	0.03	-69.23
60hsc142	-3.46	624.52	24.99	-0.1	0.213	-97.88
70hsc140	-12.8	617.8	24.856	0	-0.07	-92.28
70hsc142	-5.48	107.66	10.376	0	0.109	-49.93
80hsc140	-3.32	101.09	10.054	0	0.057	-42.06
80hsc142	11.36	110.96	10.534	0.02	-0.134	-29.65
30hsh140	0	11.049	3.324	0	-0.04	-12.83
30hsh142	0	17.13	4.139	0	0.025	-16.3
40hsh140	0	41.146	6.415	0	0.032	-31.17
40hsh142	0	39.155	6.257	0	0.011	-24.65
50hsh140	0	44.969	6.706	0	0.121	-33.79
50hsh142	0	81.319	9.018	0	0.072	-38.35
60hsh140	0	46.603	6.827	0.04	-0.03	-26.29
60hsh142	0	134.74	11.608	0.03	0.13	-45.89
70hsh140	0	89.974	9.485	0	-0.02	-42.97
70hsh142	0	24.774	4.977	0.04	0.039	-17.59
80hsh140	0	17.761	4.214	0.06	0.189	-17.1
80hsh142	0	29.076	5.392	0.03	-0.08	-18.3

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
2.524	5.273	215.74	65536	0	0	0.443	0.452
3.07	6.336	472.25	65536	0	0	0.688	0.703
2.569	5.01	194.2	65536	0	0	0.468	0.478
3.971	8.094	-98	65536	0	0	1.097	1.122
3.826	7.231	-742	65536	0	0	0.857	0.876
5.987	11.135	503.18	65536	0	0.01	1.731	1.769
5.144	9.872	144.45	65536	0	0.02	1.682	1.719
5.796	11.977	1675.1	65536	0	0.01	2.463	2.517
42.5	81.79	10.627	65536	0.954	1.122	120.36	123
69.06	129.33	10.103	65536	2.128	2.484	536.98	548.73
60.08	113.9	9.603	65536	1.48	1.715	232.84	237.93
56.53	119.71	-2.811	65536	-6.02	-5.76	271.21	277.14
43.47	118.22	-1.381	65536	-13.4	-13.1	329.76	336.98
97.36	142.81	0.533	65536	37.51	37.82	398.72	407.45
80.88	150.1	15.75	65536	1.149	1.464	418.56	427.72
81.5	179.38	-7.219	65536	-3.65	-3.27	617.81	631.34
75.76	168.04	-1.936	65536	-13	-12.6	611.17	624.54
35.16	85.096	-1.895	65536	-5.55	-5.4	106.51	108.84
33.8	75.852	-3.03	65536	-3.4	-3.24	100.01	102.2
45.63	75.287	0.927	65536	11.28	11.44	109.77	112.17
12.87	25.698	-1077	65536	0	0.02	10.93	11.169
15.74	32.04	-869.9	65536	0	0.03	16.946	17.317
23.73	54.898	-9028	65536	-0.1	0.05	40.704	41.595
25.04	49.692	-9976	65536	0	0.05	38.734	39.582
29.11	62.896	-973.3	65536	-0.1	0.04	44.486	45.46
33.63	71.983	-1922	65536	-0.1	0.06	80.446	82.207
26.81	53.1	1489.9	65536	0	0.06	46.102	47.112
60.5	106.39	2537.6	65536	-0.1	0.09	133.3	136.22
34.41	77.378	-4624	65536	-0.1	0.07	89.007	90.956
21.04	38.635	1921.3	65536	0	0.04	24.508	25.044
18.98	36.077	2229.5	65536	0	0.03	17.571	17.955
21.38	39.68	-3124	65536	0	0.04	28.763	29.393

From File	Mean	Var	StD	Skew	Kurtosis	Min
30hsm140	0	41.6	6.45	0.02	-0.07	-21.65
30hsm142	0	78.572	8.864	0.03	0.108	-32.12
40hsm140	0	96.503	9.824	0.08	-0.07	-34
40hsm142	0	111.5	10.559	0.07	0.079	-34.72
50hsm140	0	144.14	12.006	-0.1	-0.03	-44.84
50hsm142	0.02	205.59	14.339	0	0.16	-60.33
60hsm140	0	197	14.036	0.01	0.196	-54.78
60hsm142	0	320.97	17.916	-0.1	0.253	-76.23
70hsm140	0.02	284.09	16.855	-0.1	-0.03	-61.22
70hsm142	0.01	68.162	8.256	0.03	0.037	-30.37
80hsm140	0	52.031	7.213	-0.1	0.055	-27.75
80hsm142	0	60.351	7.769	-0.1	-0.103	-27.76
30hst140	0	1.83	1.353	0.136	-1.411	-1.971
30hst142	0	1.825	1.351	0.131	-1.413	-1.965
40hst140	0	2.923	1.71	0.136	-1.417	-2.466
40hst142	0	2.91	1.706	0.137	-1.417	-2.481
50hst140	0	4.152	2.038	0.146	-1.416	-2.924
50hst142	0	4.152	2.038	0.148	-1.413	-2.916
60hst140	0	5.53	2.352	0.153	-1.415	-3.363
60hst142	0	5.521	2.35	0.156	-1.413	-3.359
70hst140	0	7.06	2.657	0.157	-1.414	-3.794
70hst142	0	7.048	2.655	0.158	-1.414	-3.775
80hst140	0	8.722	2.953	0.164	-1.412	-4.209
80hst142	0	8.679	2.946	0.163	-1.412	-4.187
30hsa150	0	0.029	0.169	0	0.107	-0.584
30hsa152	0	0.157	0.396	0	0.043	-1.358
40hsa150	0	0.103	0.322	0.02	0.174	-1.322
40hsa152	0	0.33	0.575	0.08	0.486	-2.311
50hsa150	0	0.321	0.567	0	0.16	-2.168
50hsa152	0	0.482	0.694	0	0.044	-2.641
60hsa150	0	0.625	0.791	0	0.031	-3.144
60hsa152	0	0.772	0.879	0.106	0.108	-3.179

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
23.93	45.575	1346	65536	0	0.05	41.153	42.054
33.52	65.641	-502.1	65536	-0.1	0.05	77.728	79.429
32.73	66.73	-663.9	65536	-0.1	0.06	95.467	97.557
38.26	72.977	-911.3	65536	-0.1	0.07	110.31	112.72
46.03	90.866	18308	65536	-0.1	0.09	142.59	145.71
53.4	113.72	913.84	65536	-0.1	0.125	203.39	207.84
66.47	121.25	-1456	65536	-0.12	0.1	194.88	199.15
67.41	143.63	-2851	65536	-0.14	0.131	317.52	324.47
65.71	126.93	1134.9	65536	-0.11	0.144	281.04	287.19
27.22	57.588	841.15	65536	-0.1	0.07	67.43	68.906
27.85	55.604	-2228	65536	-0.1	0.05	51.472	52.599
23.35	51.114	-2636	65536	-0.1	0.06	59.703	61.01
2.161	4.132	-248.3	65536	0	0	1.81	1.85
2.154	4.12	-675.1	65536	0	0	1.805	1.845
2.714	5.179	1572.6	65536	0	0.01	2.892	2.955
2.711	5.192	17320	65536	0	0.01	2.879	2.942
3.239	6.164	3791.9	65536	0	0.02	4.107	4.197
3.252	6.168	1836.8	65536	0	0.02	4.107	4.197
3.77	7.133	1230	65536	0	0.02	5.471	5.59
3.733	7.092	-974.5	65536	0	0.02	5.462	5.581
4.24	8.034	703.35	65536	0	0.02	6.985	7.137
4.215	7.99	1207.9	65536	0	0.02	6.972	7.125
4.729	8.938	-10482	65536	0	0.02	8.628	8.817
4.7	8.886	5068.6	65536	0	0.02	8.585	8.773
0.784	1.368	-41.78	65536	0	0	0.028	0.029
1.81	3.168	0	65536	0	0	0.155	0.158
1.394	2.715	-48.76	65536	0	0	0.102	0.105
3.309	5.62	139.06	65536	0	0	0.327	0.334
1.916	4.084	477.87	65536	0	0	0.318	0.325
2.842	5.484	4566	65536	0	0	0.477	0.487
2.624	5.768	-80.47	65536	0	0	0.618	0.632
3.515	6.694	-53.61	65536	0	0	0.764	0.78

From File	Mean	Var	StD	Skew	Kurtosis	Min
70hsa150	0	1.067	1.033	0.01	0.288	-4.248
70hsa152	0	1.198	1.095	0	0.273	-5.19
80hsa150	0	1.489	1.22	0.02	-0.04	-4.703
80hsa152	0	1.596	1.263	-0.1	-0.04	-4.836
30hsc150	1.138	126.86	11.263	0.04	-0.05	-32.53
30hsc152	-8.93	284.06	16.854	0	0.118	-65.6
40hsc150	-6.31	296.23	17.211	0.1	0.062	-64.2
40hsc152	-6.31	513.87	22.669	-0.1	-0.114	-93.79
50hsc150	12.64	598.63	24.467	0.119	0.091	-72.71
50hsc152	4.354	754.08	27.46	0	-0.127	-94.11
60hsc150	2.094	889.72	29.828	0.04	-0.05	-92.37
60hsc152	28.43	1023.7	31.995	-0.25	-0.228	-107.6
70hsc150	14.5	1389.8	37.28	0	-0.266	-88.3
70hsc152	3.5	231.24	15.206	0	0.012	-56.54
80hsc150	-6.4	1622.8	40.284	0.07	-0.257	-94.08
80hsc152	7.524	194.32	13.94	0	0.191	-42.98
30hsh150	0	2.101	1.449	0	0.101	-6.591
30hsh152	0	7.541	2.746	0.04	-0.07	-11.22
40hsh150	0	10.756	3.28	0	0.093	-13.08
40hsh152	0	22.523	4.746	0	0.039	-20.65
50hsh150	0	49.038	7.003	0	-0.02	-35.31
50hsh152	0	61.521	7.844	0	0.118	-29.5
60hsh150	0	101.23	10.061	0.03	0.018	-35.04
60hsh152	0	111.5	10.559	0	0.109	-44.85
70hsh150	0	174.7	13.218	0.01	-0.115	-44.55
70hsh152	0	24.294	4.929	0	0.086	-21.13
80hsh150	0	264.48	16.263	0.01	0.049	-61.67
80hsh152	0	35.465	5.955	0	0.055	-21.97
30hsm150	0	70.663	8.406	0	-0.196	-28.25
30hsm152	0	135.19	11.627	0.09	-0.01	-42.17
40hsm150	0	163.83	12.799	0.04	0	-47.75
40hsm152	0	268.66	16.391	0.04	-0.07	-64.6

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
3.898	8.146	-66.65	65536	0	0	1.055	1.078
3.904	9.094	-3714	65536	0	0	1.185	1.211
4.57	9.273	207.75	65536	0	0.02	1.473	1.505
4.605	9.441	-260.7	65536	0	0	1.579	1.613
48.84	81.371	9.898	65536	1.052	1.224	125.5	128.24
54.07	119.66	-1.887	65536	-9.06	-8.81	281.01	287.16
54.72	118.92	-2.728	65536	-6.44	-6.18	293.04	299.46
64.02	157.82	-3.591	65536	-6.49	-6.14	508.35	519.47
99.23	171.94	1.935	65536	12.45	12.83	592.2	605.17
96.19	190.3	6.308	65536	4.143	4.564	745.98	762.31
97.93	190.3	14.242	65536	1.866	2.323	880.16	899.43
82.74	190.3	1.125	65536	28.19	28.68	1012.7	1034.9
102	190.3	2.571	65536	14.22	14.79	1374.9	1405
61.01	117.55	4.345	65536	3.384	3.616	228.75	233.76
96.22	190.3	-6.299	65536	-6.7	-6.09	1605.4	1640.5
59.93	102.92	1.853	65536	7.417	7.631	192.23	196.44
6.282	12.873	986.34	65536	0	0.01	2.078	2.124
10.36	21.581	519.21	65536	0	0.03	7.46	7.623
12.58	25.651	945.88	65536	0	0.03	10.64	10.873
17.93	38.571	-29516	65536	0	0.04	22.281	22.769
26.54	61.855	-9250	65536	-0.1	0.05	48.511	49.573
31.22	60.719	-2322	65536	-0.1	0.06	60.86	62.192
39.64	74.68	-90944	65536	-0.1	0.08	100.14	102.33
41.85	86.701	-1238	65536	-0.1	0.07	110.3	112.72
56.59	101.14	7357.3	65536	-0.1	0.103	172.83	176.61
21.89	43.021	-824.3	65536	0	0.03	24.033	24.559
60.1	121.77	7701.4	65536	-0.12	0.127	261.64	267.37
24.34	46.31	-3726	65536	0	0.04	35.084	35.852
27.08	55.324	1379.2	65536	-0.1	0.07	69.904	71.434
43.26	85.423	-1200	65536	-0.1	0.08	133.74	136.67
43.12	90.866	-2012	65536	-0.1	0.09	162.07	165.61
53.05	117.65	-1480	65536	-0.14	0.114	265.78	271.6

From File	Mean	Var	StD	Skew	Kurtosis	Min
50hsm150	0.02	372.06	19.289	0.02	0.01	-69.85
50hsm152	0	417.8	20.44	0	0.079	-94.69
60hsm150	0	556.93	23.599	-0.1	-0.02	-88.64
60hsm152	0.01	649.15	25.478	0	-0.04	-96.87
70hsm150	0	857.69	29.286	0	-0.06	-96.88
70hsm152	0	134.5	11.597	0.01	-0.02	-37.85
80hsm150	0	312.28	17.672	-0.1	0.29	-77.34
80hsm152	0	120.18	10.962	0.02	0.152	-44.95
30hst150	0	1.829	1.352	0.134	-1.411	-1.966
30hst152	0	1.817	1.348	0.13	-1.412	-1.957
40hst150	0	2.918	1.708	0.137	-1.416	-2.467
40hst152	0	2.917	1.708	0.138	-1.414	-2.475
50hst150	0	4.174	2.043	0.149	-1.415	-2.933
50hst152	0	4.151	2.038	0.151	-1.414	-2.935
60hst150	0	5.554	2.357	0.158	-1.412	-3.361
60hst152	0	5.541	2.354	0.158	-1.413	-3.358
70hst150	0	7.111	2.667	0.157	-1.414	-3.794
70hst152	0	7.042	2.654	0.16	-1.413	-3.783
80hst150	0	8.729	2.954	0.165	-1.411	-4.198
80hst152	0	8.692	2.948	0.165	-1.411	-4.19
30hsa160	0.01	0.158	0.398	0	0.025	-1.39
30hsa162	0	0.193	0.439	0.03	0.071	-1.622
40hsa160	0	0.418	0.646	0.103	0.131	-2.368
40hsa162	0.01	0.454	0.674	0.02	0.087	-2.56
50hsa160	0	7.138	2.672	0.07	-0.03	-9.71
50hsa162	0	0.95	0.975	0.01	-0.04	-3.469
60hsa160	0	1.146	1.071	0.06	0.115	-3.834
60hsa162	0	1.599	1.265	0.06	0.227	-4.83
70hsa160	0	1.647	1.283	0.07	0.354	-5.115
70hsa162	0.01	2.245	1.498	0.06	0.083	-6.728
80hsa160	0	2.113	1.453	0.04	0.139	-5.777
80hsa162	0	3.101	1.761	0.04	0.221	-7.362

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
71.23	141.08	986.54	65536	-0.13	0.167	368.06	376.12
94.33	189.02	-758.5	65536	-0.18	0.13	413.31	422.36
75.86	164.51	18969	65536	-0.18	0.182	550.95	563.01
89.08	185.94	1799.2	65536	-0.18	0.209	642.18	656.23
96.92	193.8	-920.3	65536	-0.26	0.192	848.48	867.05
46.21	84.058	-595.6	65536	-0.11	0.07	133.05	135.97
67.1	144.44	-1580	65536	-0.15	0.124	308.93	315.69
41.61	86.564	-1886	65536	-0.1	0.08	118.88	121.49
2.149	4.115	-257.9	65536	0	0	1.809	1.849
2.189	4.147	-731.6	65536	0	0	1.797	1.837
2.71	5.177	915.66	65536	0	0.02	2.887	2.95
2.719	5.194	-3513	65536	0	0.01	2.886	2.949
3.248	6.181	-1836	65536	0	0.02	4.129	4.219
3.236	6.171	-697.3	65536	0	0.01	4.107	4.197
3.758	7.118	-471.8	65536	0	0.01	5.494	5.614
3.746	7.104	-799.8	65536	0	0.02	5.482	5.602
4.235	8.029	874.99	65536	0	0.02	7.035	7.189
4.234	8.017	7255.6	65536	0	0.02	6.966	7.119
4.708	8.906	-810.4	65536	0	0.02	8.635	8.824
4.702	8.891	-642.1	65536	0	0.02	8.599	8.787
1.673	3.063	40.209	65536	0	0.01	0.157	0.16
1.536	3.158	796.37	65536	0	0	0.19	0.195
2.884	5.252	433.33	65536	0	0	0.413	0.422
3.155	5.715	50.708	65536	0	0.02	0.449	0.459
11.63	21.345	-127.3	65536	0	0	7.061	7.216
3.309	6.778	-376.5	65536	0	0	0.94	0.96
4.128	7.962	-470.6	65536	0	0	1.134	1.159
5.421	10.251	320.76	65536	0	0.01	1.582	1.617
6.975	12.09	-323.9	65536	0	0	1.629	1.665
5.734	12.462	116.01	65536	0	0.02	2.221	2.269
5.512	11.289	311.73	65536	0	0.02	2.09	2.136
7.583	14.946	4204.5	65536	0	0.01	3.068	3.135

From File	Mean	Var	StD	Skew	Kurtosis	Min
30hsc160	2.453	169.79	13.03	0	0.078	-47.69
30hsc162	6.593	182.12	13.495	0.08	-0.214	-41.7
40hsc160	-9.94	312.85	17.687	0.03	-0.02	-69.63
40hsc162	3.071	356.49	18.881	-0.18	0.7	-98.28
50hsc160	12.88	640.84	25.315	0.03	-0.06	-88.04
50hsc162	7.325	151.24	12.298	0	0.071	-41.03
60hsc160	11.5	681.9	26.113	0	-0.112	-89.01
60hsc162	5.653	241.57	15.542	0	0.021	-53.68
70hsc160	-7.69	1094	33.076	0.04	-0.127	-95.99
70hsc162	6.537	364.93	19.103	0.04	0.141	-66.49
80hsc160	8.379	1441.7	37.97	0	-0.321	-92.05
80hsc162	-8.22	560.69	23.679	-0.1	0.269	-105.3
30hsh160	0	19.829	4.453	0	-0.06	-17.63
30hsh162	0	22.154	4.707	-0.1	0	-18.7
40hsh160	0	60.568	7.783	0	0	-30.62
40hsh162	0	61.055	7.814	0	-0.08	-28.67
50hsh160	0	172.79	13.145	0	0.047	-51.9
50hsh162	0	152.44	12.347	0	0.039	-49.52
60hsh160	0	249.94	15.81	0	0.1	-66.5
60hsh162	0	254.52	15.954	0	0.038	-58.69
70hsh160	0	452.13	21.263	0	-0.04	-86.92
70hsh162	0	458.35	21.409	0.02	-0.04	-76.52
80hsh160	0	656.92	25.63	0	-0.147	-95.9
80hsh162	0	667.54	25.837	0.01	0.055	-94.73
30hsl160	-0.17	8.061	2.839	-0.66	-0.599	-7.77
30hsl162	-0.35	4.887	2.211	-0.29	-0.45	-6.725
40hsl160	-0.11	6.006	2.451	0.502	0.88	-7.577
40hsl162	0.09	8.709	2.951	0.273	0.024	-8.752
50hsl160	0.222	17.03	4.127	0.208	-0.682	-11.06
50hsl162	0.364	17.65	4.201	-0.34	-0.282	-11.27
60hsl160	-0.1	16.358	4.044	-1.02	0.234	-13.1
60hsl162	-0.32	37.5	6.124	0.417	-0.944	-12.43

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
47.9	95.591	5.312	65536	2.353	2.553	167.96	171.64
50.6	92.292	2.047	65536	6.489	6.696	180.17	184.11
56.82	126.45	-1.78	65536	-10.1	-9.8	309.49	316.26
79.8	178.08	6.147	65536	2.927	3.216	352.66	360.38
96.69	184.73	1.965	65536	12.69	13.08	633.96	647.84
62.92	103.94	1.679	65536	7.23	7.419	149.61	152.89
92.09	181.1	2.271	65536	11.3	11.7	674.57	689.34
60.88	114.56	2.75	65536	5.534	5.772	238.97	244.2
94.31	190.3	-4.304	65536	-7.94	-7.43	1082.3	1105.9
83.1	149.59	2.922	65536	6.391	6.684	361.01	368.91
98.25	190.3	4.532	65536	8.088	8.669	1426.2	1457.4
83	188.27	-2.881	65536	-8.4	-8.04	554.67	566.81
16.82	34.453	-18904	65536	0	0.03	19.616	20.045
18.59	37.293	5013.7	65536	0	0.04	21.916	22.396
31.7	62.328	-1561	65536	-0.1	0.06	59.918	61.23
26.08	54.756	-4634	65536	-0.1	0.06	60.4	61.722
53.04	104.94	-1547	65536	-0.11	0.09	170.94	174.68
49.49	99.006	-2068	65536	-0.1	0.09	150.8	154.1
68.71	135.21	-11978	65536	-0.12	0.12	247.26	252.67
62.37	121.06	2655.7	65536	-0.12	0.128	251.79	257.3
80.14	167.06	-2470	65536	-0.17	0.154	447.27	457.06
99.06	175.58	-11916	65536	-0.17	0.162	453.43	463.35
90.71	186.61	-77173	65536	-0.2	0.196	649.87	664.09
99.07	193.8	-3685	65536	-0.21	0.191	660.37	674.82
5.241	13.011	-16.52	65536	-0.19	-0.15	7.975	8.149
5.319	12.044	-6.284	65536	-0.37	-0.34	4.834	4.94
11.87	19.448	-22.87	65536	-0.13	-0.1	5.941	6.071
8.919	17.67	32.833	65536	0.07	0.112	8.615	8.804
10.33	21.392	18.628	65536	0.19	0.253	16.847	17.216
10.6	21.875	11.534	65536	0.332	0.396	17.461	17.843
7.925	21.026	-48.25	65536	-0.12	-0.1	16.182	16.537
14.28	26.711	-19.1	65536	-0.37	-0.27	37.097	37.909

From File	Mean	Var	StD	Skew	Kurtosis	Min
70hsl160	0.293	37.451	6.12	-0.58	-0.17	-17.24
70hsl162	0.259	31.915	5.649	-0.28	-0.771	-16.18
80hsl160	-0.2	68.972	8.305	-0.83	-0.312	-22.81
80hsl162	0.217	110.67	10.52	-0.61	-0.68	-26.73
30hsm160	0	73.541	8.576	0	0.044	-34.85
30hsm162	0.01	26.677	5.165	0	-0.02	-22.73
40hsm160	0	178.34	13.354	0.05	0	-52.02
40hsm162	0	51.201	7.155	0.05	0.34	-31.72
50hsm160	0	323.11	17.975	0	-0.04	-66.9
50hsm162	0	96.699	9.834	0	-0.06	-37.15
60hsm160	0	90.314	9.503	0.09	-0.03	-35.13
60hsm162	0.02	155.62	12.475	0	0.023	-50.06
70hsm160	0.01	133.47	11.553	0.01	0	-41.27
70hsm162	0	193.58	13.913	0.04	0.157	-53.43
80hsm160	0.02	207.94	14.42	0	-0.04	-61.43
80hsm162	0	279.41	16.715	0	0.119	-64.54
30hst160	0	1.817	1.348	0.128	-1.414	-1.966
30hst162	0	1.797	1.341	0.127	-1.412	-1.957
40hst160	0	2.915	1.707	0.142	-1.414	-2.454
40hst162	0	2.861	1.692	0.138	-1.416	-2.432
50hst160	0	4.15	2.037	0.149	-1.415	-2.931
50hst162	0	4.138	2.034	0.149	-1.415	-2.911
60hst160	0	5.544	2.355	0.15	-1.415	-3.365
60hst162	0	5.521	2.35	0.152	-1.414	-3.362
70hst160	0	7.055	2.656	0.158	-1.414	-3.781
70hst162	0	7.022	2.65	0.16	-1.413	-3.791
80hst160	0	8.715	2.952	0.164	-1.412	-4.194
80hst162	0	8.664	2.943	0.161	-1.413	-4.19
30ha1712	0	0.146	0.382	0	0.178	-1.834
30ha1714	0.02	0.191	0.437	0.03	0.397	-1.892
30ha1716	0	0.159	0.399	0.05	0.055	-1.335
30ha1718	0	0.01	0.099	0.02	0.091	-0.346

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
14.05	31.297	20.922	65536	0.246	0.339	37.049	37.86
15.53	31.707	21.825	65536	0.216	0.302	31.572	32.263
15.77	38.579	-42.07	65536	-0.26	-0.13	68.231	69.725
18.27	44.996	48.468	65536	0.137	0.298	109.48	111.88
31.41	66.256	-1134	65536	-0.1	0.06	72.751	74.343
19.02	41.742	427.98	65536	0	0.05	26.39	26.968
49.92	101.94	7711.5	65536	-0.1	0.104	176.42	180.28
28.99	60.71	1542.6	65536	-0.1	0.06	50.651	51.76
61.69	128.59	-935.1	65536	-0.16	0.118	319.64	326.64
34.47	71.615	-4048	65536	-0.1	0.07	95.661	97.755
35.29	70.421	2115.3	65536	-0.1	0.08	89.344	91.3
42.81	92.874	753.7	65536	-0.1	0.112	153.95	157.32
44.73	85.991	1137.9	65536	-0.1	0.1	132.04	134.93
59.6	113.03	-637.6	65536	-0.13	0.09	191.51	195.7
53.06	114.48	902.69	65536	-0.1	0.126	205.7	210.21
68.54	133.08	2843.9	65536	-0.12	0.134	276.41	282.46
2.154	4.12	3458.4	65536	0	0.01	1.798	1.837
2.144	4.1	754.08	65536	0	0.01	1.778	1.817
2.758	5.211	-625.5	65536	0	0.01	2.883	2.947
2.684	5.116	1347.9	65536	0	0.01	2.831	2.892
3.238	6.168	-865.5	65536	0	0.01	4.105	4.195
3.236	6.147	-1629	65536	0	0.01	4.093	4.183
3.746	7.111	543.62	65536	0	0.02	5.484	5.604
3.737	7.099	867.36	65536	0	0.02	5.461	5.581
4.234	8.015	1406.3	65536	0	0.02	6.979	7.132
4.236	8.027	45721	65536	0	0.02	6.947	7.099
4.7	8.894	-3148	65536	0	0.02	8.621	8.81
4.706	8.896	705.13	65536	0	0.03	8.571	8.759
1.649	3.484	71.293	65536	0	0	0.145	0.148
1.876	3.768	26.985	65536	0.01	0.02	0.189	0.193
1.664	3	-96.57	65536	0	0	0.157	0.161
0.37	0.716	-437.3	65536	0	0	0.01	0.01

From File	Mean	Var	StD	Skew	Kurtosis	Min
30hra170	0.01	0.181	0.425	0	0.105	-1.737
30hra172	0	0.189	0.434	0.03	0.173	-1.486
30hsa170	0	0.133	0.365	0.07	0.129	-1.401
30hsa172	0	0.197	0.444	0.08	0.164	-1.69
30hsa173	0	2.613	1.616	0.04	0.061	-5.866
30hsa176	0	0.159	0.399	0.05	0.055	-1.335
40ha1712	0	0.342	0.585	0.06	0	-2.05
40ha1714	0	0.378	0.615	0	0.308	-2.925
40ha1716	0.01	0.363	0.603	0.06	0.252	-2.203
40ha1718	0	0.018	0.134	0.05	0.126	-0.523
40hra170	0	0.379	0.616	0	0.04	-2.201
40hra172	0	0.536	0.732	0.02	0.02	-2.611
40hsa170	0	0.293	0.541	0.03	0.443	-2.319
40hsa172	0	0.511	0.715	0	0.085	-3.076
50ha1712	0	1.104	1.051	0.04	0.16	-4.452
50ha1714	0.01	0.802	0.895	0.05	0.095	-3.569
50ha1716	0	0.01	0.092	0.06	0.156	-0.388
50ha1718	0	0.03	0.173	0.01	0.212	-0.903
50hra170	0	0.613	0.783	0	0	-2.909
50hra172	0.01	0.972	0.986	0	0.148	-3.768
50hsa170	0	0.26	0.51	0	0.493	-2.772
50hsa172	0	0.826	0.909	0.03	0.072	-3.339
60ha1712	0	2.213	1.488	0.1	0.157	-5.598
60ha1714	0.01	1.329	1.153	0	0.384	-5.716
60ha1716	0	0.015	0.122	0.03	0.075	-0.41
60hra170	0	0.966	0.983	-0.1	0.117	-4.701
60hra172	0	1.408	1.187	0	0.045	-4.879
60hsa170	0	0.417	0.646	0.03	0.235	-2.702
60hsa172	0	1.189	1.09	0.1	0.01	-3.867
70ha1712	0	3.285	1.812	0.103	0.38	-7.066
70ha1714	0	2.108	1.452	0.07	0.221	-5.607
70ha1716	0	0.02	0.141	0.09	0.084	-0.499

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
1.653	3.389	43.038	65536	0	0.01	0.179	0.183
2.103	3.589	-252.9	65536	0	0	0.186	0.191
1.388	2.789	49.837	65536	0	0.01	0.132	0.135
1.91	3.6	-33.84	65536	0	0	0.195	0.199
6.101	11.967	-67.51	65536	0	0	2.585	2.642
1.664	3	-96.57	65536	0	0	0.157	0.161
2.308	4.357	-102.6	65536	0	0	0.339	0.346
3.032	5.957	-53.84	65536	0	0	0.374	0.382
2.733	4.936	47.262	65536	0	0.02	0.359	0.367
0.508	1.031	51.664	65536	0	0	0.018	0.018
2.24	4.442	-95.58	65536	0	0	0.375	0.383
3.189	5.799	858.74	65536	0	0	0.531	0.542
2.344	4.663	208.63	65536	0	0	0.289	0.296
2.671	5.747	413.27	65536	0	0	0.506	0.517
5.158	9.609	-76	65536	0	0	1.092	1.116
3.223	6.792	90.382	65536	0	0.02	0.793	0.81
0.392	0.781	236.33	65536	0	0	0.01	0.01
0.739	1.642	-253.2	65536	0	0	0.03	0.03
3.122	6.031	164.05	65536	0	0.01	0.606	0.619
4.147	7.915	91.29	65536	0	0.02	0.961	0.982
2.228	4.999	-70.4	65536	0	0	0.258	0.263
3.713	7.052	1085.5	65536	0	0	0.817	0.835
6.248	11.846	282.51	65536	0	0.02	2.19	2.237
6.025	11.741	118.65	65536	0	0.02	1.314	1.343
0.524	0.934	-112.3	65536	0	0	0.015	0.015
3.519	8.22	111.27	65536	0	0.02	0.956	0.977
4.236	9.115	286.12	65536	0	0.01	1.393	1.424
2.476	5.178	-1082	65536	0	0	0.412	0.421
4.658	8.525	-813.1	65536	0	0	1.176	1.202
9.308	16.374	-1728	65536	0	0.01	3.249	3.321
6.766	12.373	-302.6	65536	0	0	2.085	2.131
0.582	1.081	-196.9	65536	0	0	0.02	0.02

From File	Mean	Var	StD	Skew	Kurtosis	Min
70hra170	0	1.547	1.244	0.05	0.037	-4.468
70hra172	0.01	1.829	1.352	0	0.05	-5.059
70hsa170	0	0.905	0.951	0	-0.04	-3.769
70hsa172	0	1.553	1.246	0.01	0.08	-5.814
80ha1712	0	4.545	2.132	0.121	0.607	-8.695
80ha1714	0	3.075	1.754	0.09	0.408	-7.891
80ha1716	0	0.025	0.159	0	0.173	-0.712
80hra170	0	2.037	1.427	0	-0.06	-4.94
80hra172	0	2.405	1.551	0	-0.01	-6.321
80hsa170	0	1.062	1.03	0.06	0.287	-4.313
80hsa172	0	1.726	1.314	0.03	0.175	-5.518
30hc1712	-3.44	423.72	20.584	0.05	0.03	-76.04
30hc1714	21.36	520.92	22.824	0	-0.103	-60.11
30hc1716	-10.7	542.56	23.293	0.08	-0.08	-91.95
30hc1718	-14.8	743.89	27.274	0	-0.04	-100.1
30hc1774	4.879	529.26	23.006	0.16	-0.107	-74.83
30hrc170	-1.6	14.321	3.784	0.03	0.018	-15.43
30hrc172	2.889	136.3	11.675	0.114	0.053	-40.94
30hsc170	0	46.97	6.853	0	0.599	-40.94
30hsc172	0	58.177	7.627	0	0.167	-32.24
30hsc173	0	101.88	10.093	0.03	0.044	-40.42
30hsc174	4.879	529.26	23.006	0.16	-0.107	-74.83
30hsc176	0.259	624.41	24.988	0	0.105	-95.88
40hc1712	-1.58	881.35	29.688	0	-0.212	-94.07
40hc1714	2.785	922.99	30.381	-0.1	-0.08	-92.01
40hc1716	-3.84	990.7	31.475	0.06	-0.05	-91.93
40hc1718	28.94	1284.6	35.842	-0.11	-0.331	-90.13
40hc1774	-8.17	1033.5	32.148	0.07	-0.08	-107.3
40hrc170	0.137	34.066	5.837	0	0.012	-21.27
40hrc172	-1.58	30.82	5.552	0.08	0.094	-22.33
40hsc170	0	181.63	13.477	0	0.29	-70.81
40hsc172	0	24	4.899	0.05	0.224	-21.03

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
5.73	10.199	-186.4	65536	0	0	1.53	1.564
4.698	9.757	93.273	65536	0	0.03	1.809	1.849
3.451	7.22	-80.61	65536	0	0	0.895	0.915
4.637	10.451	-179.7	65536	0	0	1.536	1.57
11.05	19.744	-198.9	65536	0	0	4.496	4.595
7.903	15.795	1862.7	65536	0	0.01	3.042	3.109
0.675	1.387	-118.2	65536	0	0	0.025	0.026
5.248	10.188	-177	65536	0	0	2.015	2.059
6.088	12.409	316.41	65536	0	0.02	2.379	2.431
4.371	8.683	-115.6	65536	0	0	1.05	1.073
5.912	11.43	232.81	65536	0	0.02	1.707	1.745
69.88	145.92	-5.992	65536	-3.59	-3.28	419.17	428.34
100.2	160.28	1.069	65536	21.18	21.53	515.32	526.61
73.72	165.67	-2.167	65536	-10.9	-10.6	536.74	548.49
78.82	178.92	-1.846	65536	-15	-14.6	735.9	752.01
93.91	168.74	4.715	65536	4.703	5.055	523.58	535.04
13.83	29.26	-2.371	65536	-1.63	-1.57	14.167	14.477
54.45	95.395	4.042	65536	2.799	2.978	134.84	137.79
33.27	74.215	11092	65536	-0.1	0.05	46.465	47.482
28.87	61.11	6753	65536	-0.1	0.06	57.552	58.812
42.27	82.686	6088.4	65536	-0.1	0.08	100.78	102.99
93.91	168.74	4.715	65536	4.703	5.055	523.58	535.04
90.05	185.93	96.402	65536	0.07	0.451	617.71	631.23
96.23	190.3	-18.77	65536	-1.81	-1.35	871.89	890.97
98.29	190.3	10.907	65536	2.553	3.018	913.08	933.07
98.37	190.3	-8.192	65536	-4.08	-3.6	980.06	1001.5
100.2	190.3	1.239	65536	28.66	29.21	1270.8	1298.6
103	210.3	-3.934	65536	-8.42	-7.93	1022.4	1044.8
22.43	43.7	42.544	65536	0.09	0.182	33.7	34.438
21.05	43.374	-3.507	65536	-1.63	-1.54	30.489	31.156
58.62	129.42	-7053	65536	-0.11	0.101	179.68	183.61
25.14	46.168	1265.4	65536	0	0.04	23.742	24.262

From File	Mean	Var	StD	Skew	Kurtosis	Min
40hsc174	-8.17	1033.5	32.148	0.07	-0.08	-107.3
40hsc176	-2.88	152.06	12.331	0.02	0.022	-50.2
50hc1712	-5.89	1938.8	44.031	0.07	-0.484	-96.29
50hc1714	3.093	224.37	14.979	0	0	-50.3
50hc1716	-3.81	261.15	16.16	0.03	0.019	-70.22
50hc1718	-0.94	224.13	14.971	0.09	0.073	-57.29
50hrc170	2.231	67.703	8.228	-0.11	0.082	-32.88
50hrc172	-0.57	59.019	7.682	0	0.074	-38.68
50hsc170	0	12.107	3.479	0	0.017	-13.97
50hsc172	0	50.866	7.132	0	-0.02	-26.29
50hsc174	1.697	227.27	15.076	0	-0.08	-56.64
50hsc176	1.107	286.72	16.933	0	0.154	-74.8
60hc1712	0.898	417.88	20.442	0.02	0.116	-74.27
60hc1714	-2.09	367.53	19.171	0	0.027	-76.43
60hc1716	0.813	450.4	21.223	0	-0.03	-87.93
60hrc170	-1.71	102.22	10.11	0.137	0.106	-40.89
60hrc172	0.05	112.19	10.592	0.155	0.205	-34.76
60hsc170	0	19.478	4.413	0.02	0.058	-16.39
60hsc172	0	86.809	9.317	0	0.096	-43.47
60hsc174	-0.59	349.76	18.702	0	-0.07	-69.08
60hsc176	2.694	467.99	21.633	0.04	0.02	-82.65
70hc1712	0.241	625.19	25.004	0.03	0.023	-91.09
70hc1714	0.283	547	23.388	0.05	0.027	-85.17
70hc1716	-2.42	608.11	24.66	0.05	0.087	-96.26
70hrc170	-0.1	145.97	12.082	0.05	0.055	-45.58
70hrc172	-1.58	188.55	13.731	0.433	0.365	-44.49
70hsc170	0	59.414	7.708	0	-0.04	-28.92
70hsc172	0	129	11.358	0	0.086	-47.62
70hsc174	12.35	511.74	22.622	0.01	-0.07	-76.47
70hsc176	-0.2	651.44	25.523	0.03	0.027	-104.8
80hc1712	0.841	902.06	30.034	0.08	0.044	-104.4
80hc1714	0.238	782.8	27.979	0	-0.03	-107.8

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
103	210.3	-3.934	65536	-8.42	-7.93	1022.4	1044.8
46.3	96.497	-4.282	65536	-2.97	-2.79	150.43	153.72
94.01	190.3	-7.47	65536	-6.23	-5.56	1917.9	1959.9
66.69	116.99	4.842	65536	2.979	3.208	221.96	226.82
57.24	127.46	-4.247	65536	-3.93	-3.68	258.35	264
61.39	118.68	-15.89	65536	-1.06	-0.83	221.73	226.58
35.3	68.183	3.689	65536	2.168	2.294	66.976	68.442
28.15	66.826	-13.45	65536	-0.63	-0.51	58.385	59.663
14.14	28.115	-414.7	65536	0	0.02	11.977	12.239
27.33	53.615	-1319	65536	-0.1	0.05	50.32	51.422
66.46	123.1	8.883	65536	1.582	1.813	224.83	229.75
72.74	147.54	15.29	65536	0.978	1.237	283.64	289.84
89.6	163.88	22.765	65536	0.741	1.054	413.39	422.44
73.07	149.5	-9.194	65536	-2.23	-1.94	363.58	371.54
80.51	168.45	26.099	65536	0.651	0.976	445.57	455.32
40.32	81.211	-5.911	65536	-1.79	-1.63	101.12	103.34
48.63	83.383	197.45	65536	0	0.135	110.98	113.41
17.82	34.203	-1998	65536	0	0.03	19.269	19.69
36.44	79.909	-5769	65536	-0.1	0.07	85.877	87.757
65.42	134.5	-31.51	65536	-0.74	-0.45	346.01	353.58
91.5	174.15	8.031	65536	2.528	2.859	462.96	473.1
102.9	193.97	103.76	65536	0.05	0.432	618.47	632.01
91.75	176.92	82.695	65536	0.104	0.462	541.13	552.97
93.76	190.02	-10.19	65536	-2.61	-2.23	601.57	614.74
48.18	93.751	-177.3	65536	-0.16	0.02	144.41	147.57
54.91	99.397	-8.666	65536	-1.69	-1.48	186.53	190.61
31.22	60.134	-4103	65536	-0.1	0.06	58.776	60.063
60.33	107.95	-1846	65536	-0.1	0.08	127.61	130.41
95.88	172.35	1.832	65536	12.17	12.52	506.25	517.33
105.5	210.3	-130.9	65536	-0.39	0	644.44	658.55
105.9	210.3	35.704	65536	0.611	1.071	892.37	911.91
102.3	210.04	117.31	65536	0.02	0.453	774.39	791.34

From File	Mean	Var	StD	Skew	Kurtosis	Min
80hc1716	6.782	899.47	29.991	0.212	0.178	-97.11
80hrc170	0.134	231.25	15.207	0.07	0.264	-69.94
80hrc172	0.863	212.34	14.572	0.12	0.098	-54.67
80hsc170	0	59.622	7.722	0	0.058	-32.78
80hsc172	0	123.27	11.103	0.04	0.236	-45.55
80hsc174	-5.86	843.19	29.038	0.05	-0.02	-105.2
80hsc176	-3.03	860.86	29.34	0.04	0.07	-105.7
30hsh170	0.02	0.159	0.398	0.102	-0.1	-1.439
30hi1712	7.076	0.952	0.976	0	0.01	2.338
30hi1714	5.51	3.33	1.825	0.745	-0.577	-1.39
30hi1716	5.594	1.897	1.377	0.666	0.62	1.017
30hi1718	5.979	1.214	1.102	-1.09	2.801	-2.268
30hi1774	6.346	1.986	1.409	-0.76	1.641	-4.526
30hri170	5.109	3.743	1.935	0.47	-0.575	-1.64
30hri172	4.735	3.696	1.922	1.127	0.268	-0.856
30hsi170	5.643	0.86	0.927	0.04	-0.03	1.585
30hsi172	6.41	2.173	1.474	-0.82	1.562	-2.574
30hsi173	1.722	0.189	0.435	-0.56	-0.324	-0.55
30hsi174	6.346	1.986	1.409	-0.76	1.641	-4.526
30hsi176	6.286	1.534	1.239	-0.55	1.592	-3.635
40hi1712	8.42	3.817	1.954	-0.78	0.076	-0.895
40hi1714	7.89	2.103	1.45	-0.47	1.242	-2.941
40hi1716	7.764	0.686	0.828	0.04	0.028	4.076
40hi1718	7.054	5.994	2.448	-0.26	-1.453	-0.517
40hi1774	7.398	5.561	2.358	0.586	-1.086	-0.02
40hri170	7.551	0.964	0.982	0.06	0.01	3.789
40hri172	7.321	2.221	1.49	-0.18	-0.07	-1.844
40hsi170	5.622	2.084	1.444	0.561	1.373	-0.09
40hsi172	8.827	1.368	1.17	-1.76	6.926	-1.219
40hsi174	7.398	5.561	2.358	0.586	-1.086	-0.02
40hsi176	8.435	1.235	1.111	0	0.01	3.845
50hi1712	9.897	7.433	2.726	0.959	-0.116	3.349

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
106.5	203.62	4.422	65536	6.552	7.012	889.81	909.28
60.79	130.72	113.16	65536	0.02	0.251	228.76	233.77
66.88	121.55	16.887	65536	0.751	0.974	210.06	214.65
30.42	63.201	-1891	65536	-0.1	0.06	58.982	60.273
51.62	97.164	98134	65536	-0.1	0.09	121.95	124.62
104.6	209.79	-4.959	65536	-6.08	-5.63	834.13	852.39
104.6	210.3	-9.676	65536	-3.26	-2.81	851.62	870.26
1.687	3.126	16.529	65536	0.02	0.03	0.157	0.16
11.13	8.791	0.138	65536	7.069	7.084	0.942	0.962
11.45	12.835	0.331	65536	5.496	5.524	3.294	3.366
11.74	10.725	0.246	65536	5.583	5.604	1.877	1.918
10.22	12.484	0.184	65536	5.971	5.988	1.201	1.227
11.47	16	0.222	65536	6.335	6.357	1.965	2.008
11.9	13.538	0.379	65536	5.094	5.124	3.703	3.784
11.28	12.132	0.406	65536	4.72	4.75	3.656	3.736
9.321	7.736	0.164	65536	5.636	5.651	0.85	0.869
11.67	14.242	0.23	65536	6.399	6.422	2.15	2.197
2.966	3.516	0.253	65536	1.719	1.725	0.187	0.192
11.47	16	0.222	65536	6.335	6.357	1.965	2.008
10.78	14.418	0.197	65536	6.276	6.295	1.518	1.551
13.87	14.769	0.232	65536	8.405	8.435	3.776	3.858
13.06	16	0.184	65536	7.879	7.901	2.08	2.125
11.29	7.209	0.107	65536	7.757	7.77	0.679	0.693
12.49	13.011	0.347	65536	7.035	7.073	5.929	6.059
14.22	14.242	0.319	65536	7.38	7.416	5.501	5.622
11.88	8.088	0.13	65536	7.544	7.559	0.954	0.975
12.57	14.418	0.204	65536	7.31	7.332	2.197	2.246
13.8	13.89	0.257	65536	5.61	5.633	2.062	2.107
13.02	14.242	0.133	65536	8.818	8.836	1.353	1.383
14.22	14.242	0.319	65536	7.38	7.416	5.501	5.622
12.81	8.967	0.132	65536	8.426	8.443	1.222	1.249
19.35	16	0.275	65536	9.876	9.918	7.353	7.514

From File	Mean	Var	StD	Skew	Kurtosis	Min
50hi1714	9.766	10.183	3.191	-0.39	-1.356	0.377
50hi1716	9.56	1.167	1.081	0	0.019	5.032
50hi1718	0	0.678	0.824	0.05	-0.01	-3.512
50hri170	9.38	10.163	3.188	-0.14	-1.45	1.632
50hri172	8.011	2.49	1.578	1.902	5.127	3.689
50hsi170	8.086	1.43	1.196	0	-0.08	2.861
50hsi172	10.51	1.958	1.399	0	-0.389	5.074
50hsi174	8.496	1.394	1.181	0	-0.01	3.393
50hsi176	9.44	2.464	1.57	1.109	3.672	3.055
60hi1712	10.82	1.533	1.238	0	-0.168	5.33
60hi1714	11.27	10.328	3.214	0.961	-0.677	3.545
60hi1716	12.44	0.776	0.881	0	0.012	9.026
60hri170	10.58	10.551	3.248	0.08	-1.358	0.715
60hri172	11.5	8.105	2.847	-1.21	0.191	0.646
60hsi170	9.087	1.439	1.199	0.01	0	4.319
60hsi172	11.56	1.451	1.204	0	-0.01	6.396
60hsi174	10.56	1.426	1.194	0	-0.02	5.826
60hsi176	11.32	11.122	3.335	0.943	-0.792	3.558
70hi1712	12.86	1.265	1.125	0.02	-0.02	7.997
70hi1714	13.98	9.811	3.132	-1.36	0.383	1.792
70hi1716	13.07	9.692	3.113	1.769	1.684	6.577
70hri170	12.77	0.978	0.989	0	0	8.455
70hri172	11.89	11.282	3.359	0.662	-1.096	3.661
70hsi170	11.86	11.464	3.386	1.055	-0.53	4.131
70hsi172	12.3	1.219	1.104	0.04	-0.01	7.227
70hsi174	14.04	16.552	4.068	-0.79	-0.854	1.704
70hsi176	15.42	0.994	0.997	0	-0.01	10.705
80hi1712	14.06	4.607	2.147	3.393	14.012	6.956
80hi1714	14.94	23.221	4.819	0.746	-1.186	5.605
80hi1716	16.26	26.795	5.176	-0.26	-1.794	4.304
80hri170	15.73	9.723	3.118	-1.98	3.194	1.555
80hri172	13.47	14.037	3.747	1.036	-0.488	4.317

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
17.43	17.055	0.327	65536	9.742	9.791	10.074	10.295
13.82	8.791	0.113	65536	9.552	9.568	1.155	1.18
3.52	7.033	2900.7	65536	0	0	0.671	0.686
16.93	15.297	0.34	65536	9.356	9.404	10.053	10.274
16.52	12.835	0.197	65536	7.999	8.023	2.464	2.518
12.88	10.022	0.148	65536	8.077	8.095	1.414	1.445
15.27	10.198	0.133	65536	10.5	10.52	1.937	1.979
13.42	10.022	0.139	65536	8.487	8.505	1.379	1.409
18.7	15.648	0.166	65536	9.428	9.452	2.437	2.491
15.88	10.549	0.114	65536	10.81	10.83	1.517	1.55
20.25	16.703	0.285	65536	11.25	11.3	10.217	10.44
16.24	7.209	0.071	65536	12.43	12.44	0.768	0.785
19	18.286	0.307	65536	10.55	10.6	10.438	10.666
17.35	16.703	0.248	65536	11.48	11.52	8.018	8.194
14.34	10.022	0.132	65536	9.078	9.096	1.423	1.454
16.77	10.374	0.104	65536	11.55	11.57	1.435	1.467
15.67	9.846	0.113	65536	10.55	10.56	1.411	1.442
20.61	17.055	0.295	65536	11.3	11.35	11.002	11.243
17.49	9.495	0.087	65536	12.85	12.87	1.252	1.279
19.55	17.758	0.224	65536	13.96	14	9.706	9.919
23.46	16.879	0.238	65536	13.04	13.09	9.588	9.798
16.89	8.44	0.077	65536	12.77	12.78	0.968	0.989
21.42	17.758	0.282	65536	11.87	11.92	11.16	11.405
21.19	17.055	0.286	65536	11.83	11.88	11.341	11.589
16.9	9.67	0.09	65536	12.29	12.31	1.205	1.232
21.22	19.516	0.29	65536	14	14.07	16.374	16.733
19.85	9.143	0.065	65536	15.41	15.43	0.983	1.005
28.23	21.275	0.153	65536	14.05	14.08	4.558	4.658
26.18	20.571	0.323	65536	14.9	14.97	22.971	23.474
24.7	20.396	0.318	65536	16.22	16.3	26.507	27.087
21.78	20.22	0.198	65536	15.71	15.75	9.619	9.829
24.01	19.692	0.278	65536	13.44	13.49	13.886	14.19

From File	Mean	Var	StD	Skew	Kurtosis	Min
80hsi170	14.46	20.44	4.521	0.318	-1.734	5.245
80hsi172	14.88	1.358	1.165	0.01	-0.01	10.441
80hsi174	15.39	21.556	4.643	0.149	-1.698	6.295
80hsi176	14.74	1.337	1.156	0	-0.03	9.902
30hl1712	0	0.41	0.641	-2.57	23.111	-9.208
30hl1714	0.05	0.649	0.805	0.159	-0.842	-1.843
30hl1716	0.01	0.554	0.744	-2.3	22.866	-12.6
30hl1718	-0.1	0.454	0.674	-0.1	-0.803	-1.891
30hl1774	-0.1	0.622	0.789	0.216	0.168	-3.578
30hrl170	0.07	0.229	0.478	-2.72	40.512	-9.038
30hrl172	-0.1	0.179	0.423	0	-0.259	-1.609
30hsl170	-0.4	24.261	4.926	0.319	-0.851	-12.42
30hsl174	-0.1	0.622	0.789	0.216	0.168	-3.578
30hsl176	0.04	4.212	2.052	-3.29	24.8	-19.66
40hl1712	0.03	0.337	0.58	-0.19	0.802	-3.874
40hl1714	0.04	0.331	0.575	-0.22	-0.175	-2.22
40hl1716	0.04	0.231	0.481	-0.32	-0.296	-1.531
40hl1718	0	0.359	0.599	-11.9	343.5	-19.7
40hl1774	0	0.433	0.658	-0.3	-0.336	-2.435
40hrl170	0	0.941	0.97	-0.29	2.446	-10.49
40hrl172	0	1.175	1.084	-5.56	73.287	-19.5
40hsl174	0	0.433	0.658	-0.3	-0.336	-2.435
40hsl176	0.02	0.285	0.534	-0.14	0.07	-2.511
50hl1712	-0.41	8.155	2.856	-4.23	20.856	-19.52
50hl1714	0	1.435	1.198	-0.12	-0.703	-3.302
50hl1716	0.05	1.051	1.025	-0.1	-0.752	-2.786
50hl1718	0.04	0.67	0.819	-0.24	-0.739	-2.282
50hrl170	0.104	1.049	1.024	-0.1	1.677	-10.22
50hrl172	0.01	1.63	1.277	-0.17	-1.052	-3.363
50hsl174	0.07	1.206	1.098	-0.12	0.038	-5.758
50hsl176	0	0.858	0.926	-0.12	-0.199	-2.898
60hl1712	0	1.085	1.042	0.281	0.087	-4.41

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
24.06	18.813	0.313	65536	14.42	14.49	20.221	20.663
19.76	9.319	0.078	65536	14.88	14.89	1.343	1.373
25.28	18.989	0.302	65536	15.35	15.43	21.325	21.792
19.75	9.846	0.078	65536	14.73	14.75	1.323	1.352
3.686	12.894	-16.69	65536	0	0	0.406	0.415
2.074	3.917	15.235	65536	0.05	0.06	0.642	0.656
3.238	15.834	73.257	65536	0	0.02	0.548	0.56
1.645	3.536	-8.291	65536	-0.1	-0.1	0.449	0.459
3.728	7.306	-14	65536	-0.1	-0.1	0.615	0.629
3.651	12.689	7.4	65536	0.06	0.07	0.226	0.231
3.011	4.62	-6.599	65536	-0.1	-0.1	0.177	0.181
13.91	26.33	-12.25	65536	-0.44	-0.36	24	24.526
3.728	7.306	-14	65536	-0.1	-0.1	0.615	0.629
19.69	39.355	59.015	65536	0.02	0.05	4.166	4.258
2.094	5.968	21.935	65536	0.02	0.03	0.333	0.34
2.107	4.327	16.421	65536	0.03	0.04	0.328	0.335
1.321	2.852	13.485	65536	0.03	0.04	0.229	0.234
5.302	25.006	-33.09	65536	0	0	0.355	0.362
1.804	4.239	113.48	65536	0	0.01	0.428	0.437
3.995	14.486	-31.72	65536	0	0	0.931	0.951
8.133	27.634	-412.2	65536	0	0	1.162	1.187
1.804	4.239	113.48	65536	0	0.01	0.428	0.437
1.758	4.269	23.565	65536	0.02	0.03	0.282	0.288
10.6	30.115	-6.933	65536	-0.43	-0.39	8.067	8.244
3.8	7.101	-92.55	65536	0	0	1.42	1.451
2.616	5.402	19.985	65536	0.04	0.06	1.04	1.063
2.26	4.542	22.197	65536	0.03	0.04	0.663	0.678
4.494	14.711	9.859	65536	0.1	0.112	1.038	1.06
2.585	5.949	104.32	65536	0	0.02	1.612	1.647
3.98	9.739	16.601	65536	0.06	0.08	1.193	1.219
2.611	5.509	-34.98	65536	0	0	0.848	0.867
3.629	8.039	-21.99	65536	-0.1	0	1.073	1.097

From File	Mean	Var	StD	Skew	Kurtosis	Min
60hl1714	0.02	0.685	0.828	0.329	-0.368	-2.21
60hl1716	0	1.313	1.146	0.235	-0.701	-2.906
60hrl170	0.06	1.672	1.293	-1.57	16.892	-19.89
60hrl172	0.06	1.805	1.343	0.383	-0.787	-5.812
60hsl174	0	0.84	0.916	0.03	-0.599	-3.604
60hsl176	0	0.945	0.972	0.236	0.072	-4.323
70hl1712	0	2.113	1.454	0	-0.251	-6.669
70hl1714	0	2.435	1.56	-0.13	-0.752	-4.258
70hl1716	0	1.951	1.397	-0.15	-0.698	-6.932
70hrl170	0.05	3.122	1.767	-0.56	3.014	-18.74
70hrl172	0	5.05	2.247	0	0.634	-19.65
70hsl174	0	2.421	1.556	-0.21	-0.367	-5.416
70hsl176	0	1.788	1.337	0.21	-0.399	-4.067
80hl1712	0	2.19	1.48	-0.3	0.8	-13.26
80hl1714	-0.1	3.617	1.902	-2.55	19.064	-19.73
80hl1716	0.01	1.773	1.332	-0.11	-0.838	-3.319
80hrl170	0	0.975	0.987	-1.61	19.183	-17.38
80hrl172	0.04	3.109	1.763	-0.47	0.844	-16.08
80hsl174	0	2.626	1.621	0	-0.636	-4.563
80hsl176	0	2.1	1.449	-0.13	-0.414	-5.481
30hm1712	0.02	291.24	17.066	0	0.164	-65.49
30hm1714	0	229.08	15.135	0	-0.03	-54.39
30hm1716	0.02	319.11	17.864	-0.1	0.018	-70.81
30hm1718	0	358.06	18.922	0.06	0.08	-69.82
30hm1774	0	284.36	16.863	0.04	0	-60.4
30hrm170	0	36.387	6.032	0	0.113	-22.68
30hrm172	0	279.97	16.732	0	0.098	-61.64
30hsm170	0	263.64	16.237	0	-0.05	-61.08
30hsm172	0	279.97	16.732	0	0.098	-61.64
30hsm173	0	485.1	22.025	0	-0.176	-77.11
30hsm174	0	284.36	16.863	0.04	0	-60.4
30hsm176	0.02	395.5	19.887	0	-0.03	-73.65

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
2.606	4.816	52.687	65536	0	0.02	0.678	0.693
2.857	5.763	-39.34	65536	0	0	1.299	1.327
6.927	26.813	22.995	65536	0.05	0.07	1.655	1.691
3.839	9.651	22.909	65536	0.05	0.07	1.785	1.825
2.94	6.545	-31.01	65536	0	0	0.831	0.849
3.364	7.687	-25.64	65536	0	0	0.935	0.955
4.555	11.223	-33958	65536	0	0.01	2.09	2.136
3.947	8.205	-60.97	65536	0	0	2.409	2.461
5.776	12.708	-36.26	65536	0	0	1.93	1.972
4.945	23.687	34.456	65536	0.04	0.07	3.088	3.156
6.964	26.608	-122.9	65536	0	0	4.996	5.106
4.166	9.582	-343.4	65536	0	0	2.395	2.447
4.783	8.85	-57.17	65536	0	0	1.769	1.808
5.628	18.891	-53.8	65536	0	0	2.167	2.214
8.201	27.927	-19.14	65536	-0.11	-0.1	3.578	3.656
3.411	6.73	115.02	65536	0	0.02	1.754	1.793
6.16	23.541	365.08	65536	0	0.01	0.965	0.986
4.98	21.06	40.319	65536	0.03	0.06	3.076	3.143
4.629	9.192	-106.3	65536	0	0	2.598	2.655
3.828	9.309	-42.66	65536	0	0	2.078	2.123
65.7	131.19	861.05	65536	-0.11	0.15	288.11	294.42
54.89	109.28	6331	65536	-0.11	0.118	226.62	231.58
74.34	145.15	982.59	65536	-0.12	0.155	315.68	322.59
70.08	139.9	3568.1	65536	-0.14	0.15	354.21	361.97
64.83	125.23	-1158	65536	-0.14	0.115	281.3	287.46
23.06	45.736	-1854	65536	0	0.04	35.996	36.784
62.17	123.81	2921.7	65536	-0.12	0.134	276.97	283.03
74.65	135.73	-1377	65536	-0.14	0.113	260.81	266.52
62.17	123.81	2921.7	65536	-0.12	0.134	276.97	283.03
87.1	164.21	-3129	65536	-0.18	0.162	479.89	490.4
64.83	125.23	-1158	65536	-0.14	0.115	281.3	287.46
93.41	167.06	1038.9	65536	-0.13	0.171	391.25	399.82

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
40hm1712	0	573.56	23.949	0	0.06	-90.66	97.93	188.59	4115.6	65536	-0.18	0.189	567.4	579.82
40hm1714	0	472.77	21.743	0.01	0.019	-81.65	77.79	159.44	-2120	65536	-0.18	0.156	467.7	477.93
40hm1716	0	650.25	25.5	-0.1	-0.09	-95.85	87.92	183.77	5291.2	65536	-0.19	0.2	643.26	657.34
40hm1718	0	636	25.219	-0.1	0	-94.33	93.46	187.79	-2067	65536	-0.21	0.181	629.17	642.95
40hm1774	0	745.03	27.295	-0.1	0.01	-105.7	90.99	196.73	-2849	65536	-0.22	0.199	737.03	753.16
40hrm170	0	81.697	9.039	0.03	-0.05	-31.87	31.93	63.801	1419.6	65536	-0.1	0.08	80.819	82.589
40hrm172	0	76.823	8.765	0.05	0.047	-35.53	38.51	74.034	6011.8	65536	-0.1	0.07	75.997	77.661
40hsm170	0	639.69	25.292	0	0	-95.86	95.1	190.96	-3512	65536	-0.2	0.186	632.82	646.67
40hsm172	0	94.651	9.729	0.03	0.135	-39.02	44.67	83.693	-4789	65536	-0.1	0.07	93.634	95.684
40hsm174	0	745.03	27.295	-0.1	0.01	-105.7	90.99	196.73	-2849	65536	-0.22	0.199	737.03	753.16
40hsm176	0	82.375	9.076	0	-0.105	-32.81	31.41	64.218	-16790	65536	-0.1	0.07	81.49	83.274
50hm1712	0	1473.7	38.389	0	-0.193	-95.89	97.92	193.8	-977.3	65536	-0.33	0.255	1457.9	1489.8
50hm1714	0	95.65	9.78	0.02	0.11	-42.51	36.8	79.307	2339.6	65536	-0.1	0.08	94.622	96.694
50hm1716	0	130.7	11.433	0	-0.03	-47.1	44.53	91.629	-774.3	65536	-0.1	0.07	129.3	132.13
50hm1718	0	92.139	9.599	0.02	0.024	-38.34	38.05	76.383	-893.4	65536	-0.1	0.06	91.149	93.144
50hm174	0	95.65	9.78	0.02	0.11	-42.51	36.8	79.307	2339.6	65536	-0.1	0.08	94.622	96.694
50hrm170	0	124.87	11.175	0.02	0.109	-46.33	43.73	90.062	-2441	65536	-0.1	0.08	123.53	126.23
50hrm172	0	137.96	11.746	0	0	-50.88	41.64	92.516	-1243	65536	-0.1	0.08	136.48	139.47
50hsm170	0	63.176	7.948	0.08	0.016	-33.3	31.82	65.121	1793.4	65536	-0.1	0.07	62.497	63.866
50hsm172	0.01	140.05	11.834	0.04	0.141	-54.12	58.08	112.2	928.48	65536	-0.1	0.103	138.54	141.58
50hsm174	0	120.76	10.989	0	-0.03	-41.73	43.37	85.102	5630.4	65536	-0.1	0.09	119.46	122.08
50hsm176	0.01	141.94	11.914	0	0.106	-58.39	48.07	106.46	930.31	65536	-0.1	0.104	140.42	143.49
60hm1712	0	285.31	16.891	0.03	0.102	-68.12	59.43	127.55	9083.1	65536	-0.13	0.131	282.25	288.43
60hm1714	0	150.36	12.262	-0.1	-0.03	-46.27	43.22	89.488	-1291	65536	-0.1	0.08	148.75	152
60hm1716	0	198.22	14.079	0	0.152	-59.85	62.9	122.75	-1273	65536	-0.12	0.1	196.09	200.38
60hrm170	0	180.69	13.442	0.02	-0.05	-46.49	57.05	103.53	8501.6	65536	-0.1	0.104	178.75	182.66
60hrm172	0	193.84	13.923	0	0.016	-65.08	53.7	118.78	-807.7	65536	-0.12	0.09	191.76	195.96
60hsm170	0	93.554	9.672	0.03	0.259	-43.05	39.87	82.915	-1165	65536	-0.1	0.07	92.549	94.575
60hsm172	0	220.92	14.863	0	-0.07	-51.24	51.82	103.06	-1033	65536	-0.13	0.1	218.55	223.33
60hsm174	0.02	181.85	13.485	0.02	0.025	-55.62	48.64	104.26	855.42	65536	-0.1	0.119	179.89	183.83
60hsm176	0	216.1	14.7	0	0.078	-56.98	58.98	115.96	-1981	65536	-0.12	0.105	213.78	218.46
70hm1712	0	337.95	18.383	0.05	0.037	-65.12	71.41	136.53	-98660	65536	-0.14	0.141	334.32	341.64

From File	Mean	Var	StD	Skew	Kurtosis	Min
70hm1714	0	188.62	13.734	0	0	-52.85
70hm1716	0	243.66	15.609	-0.1	0.017	-60.99
70hrm170	0	265.95	16.308	0	0	-73.94
70hrm172	0	262.69	16.208	0.03	0.101	-71.55
70hsm170	0	175.29	13.24	0	-0.1	-45.8
70hsm172	0	310.28	17.615	0	0.038	-69.57
70hsm174	0	268.06	16.373	0	-0.05	-55.62
70hsm176	0	270.52	16.448	0.04	0	-67.63
80hm1712	0	510.14	22.586	0	0.043	-86.06
80hm1714	0	268.33	16.381	-0.1	0.114	-61.57
80hm1716	0	316.86	17.801	0	0.078	-74.46
80hrm170	0	372.83	19.309	0.02	-0.04	-66.9
80hrm172	0	350.44	18.72	0.01	-0.03	-68.84
80hsm170	0	205.04	14.319	0	-0.09	-49.53
80hsm172	0	337.61	18.374	0	0.093	-70.1
80hsm174	0	419.96	20.493	0	-0.09	-76.14
80hsm176	0	369.4	19.22	0	-0.05	-82.09
30ho1712	0	1.478	1.216	-0.1	0.052	-5.563
30ho1714	0	1.427	1.195	0	0.099	-5.821
30ho1716	0	1.531	1.237	0	0.097	-5.007
30ho1718	0	1.518	1.232	-0.1	0.141	-6.29
30ho1774	0	1.539	1.24	0	0.075	-5.032
30hro170	0	1.436	1.198	0	0.051	-5.176
30hro172	0	1.591	1.262	0	0.043	-5.281
30hso170	0	1.514	1.231	-0.1	0.016	-5.058
30hso172	0	1.415	1.19	0	0.048	-5.727
30hso173	0	0.148	0.384	0	0.083	-2.168
30hso174	0	1.539	1.24	0	0.075	-5.032
30hso176	-0.1	1.553	1.246	-0.1	0.066	-6.958
40ho1712	0	1.45	1.204	0	0.064	-4.897
40ho1714	0	1.466	1.211	-0.1	0.091	-6.362
40ho1716	0.01	1.508	1.228	-0.1	0.044	-5.843

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
52.09	104.94	4353.7	65536	-0.1	0.108	186.59	190.68
52.72	113.71	-956.5	65536	-0.14	0.103	241.04	246.32
66.19	140.13	-19151	65536	-0.13	0.124	263.09	268.85
68.84	140.39	8282	65536	-0.12	0.126	259.87	265.55
55.24	101.04	-1022	65536	-0.11	0.09	173.41	177.2
74.22	143.79	-1277	65536	-0.15	0.121	306.95	313.67
64.88	120.5	35143	65536	-0.13	0.126	265.18	270.99
68.43	136.06	-1164	65536	-0.14	0.112	267.62	273.48
107.6	193.7	-83940	65536	-0.17	0.173	504.66	515.71
65.77	127.34	-1287	65536	-0.14	0.113	265.45	271.26
65.83	140.29	2088.7	65536	-0.13	0.145	313.46	320.32
88.17	155.06	-4560	65536	-0.15	0.144	368.82	376.9
71.87	140.71	-8053	65536	-0.15	0.141	346.68	354.27
54.39	103.93	-7591	65536	-0.11	0.108	202.84	207.28
76.88	146.97	2279.2	65536	-0.13	0.149	333.98	341.29
77.83	153.97	-4978	65536	-0.16	0.153	415.45	424.55
71.78	153.86	-1045	65536	-0.17	0.129	365.43	373.43
5.514	11.077	145.86	65536	0	0.02	1.462	1.494
6.838	12.659	-100.6	65536	0	0	1.412	1.443
6.949	11.956	180.74	65536	0	0.02	1.515	1.548
6.018	12.308	562.65	65536	0	0.01	1.502	1.534
6.045	11.077	961.03	65536	0	0.01	1.522	1.555
5.022	10.198	133.46	65536	0	0.02	1.421	1.452
5.796	11.077	151.13	65536	0	0.02	1.574	1.609
4.964	10.022	-489.7	65536	0	0	1.498	1.531
5.702	11.429	-755.6	65536	0	0	1.4	1.431
1.524	3.691	243.57	65536	0	0	0.146	0.149
6.045	11.077	961.03	65536	0	0.01	1.522	1.555
4.822	11.78	-24.16	65536	-0.1	0	1.536	1.57
6.005	10.901	-48.94	65536	0	0	1.434	1.466
6.298	12.659	152.45	65536	0	0.02	1.451	1.482
5.234	11.077	110.87	65536	0	0.02	1.492	1.524

From File	Mean	Var	StD	Skew	Kurtosis	Min
40ho1718	0	1.504	1.227	0	0.087	-5.771
40ho1774	0	1.533	1.238	0	0.114	-6.057
40hro170	0	1.549	1.245	0.06	0	-4.681
40hro172	0	1.607	1.268	0	0.03	-5.386
40hso170	0	1.486	1.219	-0.1	0.016	-5.76
40hso172	0	1.482	1.217	0	0.053	-5.712
40hso174	0	1.533	1.238	0	0.114	-6.057
40hso176	0	1.472	1.213	0	0	-5.115
50ho1712	0	1.524	1.235	0.01	0.068	-5.21
50ho1714	0.01	1.587	1.26	0	0.063	-5.581
50ho1716	0	1.473	1.214	0.04	0.063	-4.983
50ho1718	0	1.382	1.176	0	0.073	-5.04
50hro170	-0.12	1.634	1.278	0	0.021	-5.292
50hro172	0	1.77	1.33	0.04	0.086	-6.16
50hso170	0.128	1.628	1.276	-0.1	-0.02	-5.567
50hso172	0	1.606	1.267	0	0	-5.986
50hso174	0	1.586	1.259	0	-0.02	-5.322
50hso176	0	1.449	1.204	0.03	0.019	-5.995
60ho1712	0	1.55	1.245	0	0.026	-5.69
60ho1714	0	1.527	1.236	0.02	0	-5.157
60ho1716	0	1.466	1.211	0	0.037	-5.385
60hro170	0.01	1.539	1.24	0	0.054	-6.082
60hro172	0	1.642	1.282	-0.1	0.114	-6.968
60hso170	-0.1	1.578	1.256	0	-0.06	-5.25
60hso172	0	1.531	1.237	0	0.037	-5.334
60hso174	0	1.576	1.255	0	0.01	-5.194
60hso176	0.06	1.527	1.236	0	0.023	-5.145
70ho1712	0	1.637	1.279	0	0.07	-5.514
70ho1714	0	1.473	1.214	-0.1	0.033	-5.93
70ho1716	0	1.409	1.187	0	0.061	-6.101
70hro170	-0.11	1.576	1.255	0	-0.03	-5.035
70hro172	0	1.562	1.25	0	0.128	-7.701

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
6.537	12.308	-356.2	65536	0	0	1.488	1.521
5.723	11.78	210.54	65536	0	0.02	1.517	1.55
5.165	9.846	-142.3	65536	0	0	1.533	1.566
5.867	11.253	268.08	65536	0	0.01	1.59	1.624
6.548	12.308	-616.4	65536	0	0	1.47	1.502
5.54	11.253	288.86	65536	0	0.01	1.466	1.498
5.723	11.78	210.54	65536	0	0.02	1.517	1.55
5.082	10.198	268.15	65536	0	0.01	1.456	1.488
6.043	11.253	-84.93	65536	0	0	1.508	1.541
5.847	11.429	108.21	65536	0	0.02	1.57	1.604
5.215	10.198	197.02	65536	0	0.02	1.458	1.49
5.158	10.198	1438.4	65536	0	0.01	1.367	1.397
6.312	11.604	-10.76	65536	-0.13	-0.11	1.616	1.652
5.62	11.78	-635.9	65536	0	0	1.751	1.789
6.389	11.956	9.984	65536	0.118	0.138	1.61	1.646
4.915	10.901	-1517	65536	0	0	1.589	1.624
5.227	10.549	-112	65536	0	0	1.569	1.603
6.137	12.132	159.01	65536	0	0.02	1.433	1.465
4.86	10.549	2414.6	65536	0	0.01	1.533	1.567
5.041	10.198	615.6	65536	0	0.01	1.51	1.543
5.165	10.549	3999.8	65536	0	0.01	1.45	1.482
5.523	11.604	96.13	65536	0	0.02	1.522	1.555
5.164	12.132	-1129	65536	0	0	1.625	1.66
5.3	10.549	-19.34	65536	-0.1	-0.1	1.561	1.595
5.743	11.077	-113.2	65536	0	0	1.514	1.547
5.004	10.198	246.78	65536	0	0.02	1.559	1.593
6.635	11.78	20.443	65536	0.05	0.07	1.511	1.544
6.794	12.308	249.69	65536	0	0.02	1.619	1.655
5.499	11.429	196.53	65536	0	0.02	1.457	1.489
5.679	11.78	332.62	65536	0	0.01	1.394	1.425
5.339	10.374	-11.3	65536	-0.12	-0.1	1.559	1.593
6.013	13.714	318.49	65536	0	0.01	1.545	1.579

From File	Mean	Var	StD	Skew	Kurtosis	Min
70hso170	0.02	1.459	1.208	0	0.083	-5.234
70hso172	0.124	1.457	1.207	0	-0.02	-4.599
70hso174	0	1.569	1.253	0	0.071	-5.704
70hso176	0	1.599	1.265	-0.1	0.067	-5.303
80ho1712	0	1.553	1.246	0	0.054	-5.171
80ho1714	0	1.434	1.198	0	0.093	-5.625
80ho1716	0.01	1.436	1.198	0	0.087	-5.754
80hro170	0	1.661	1.289	0.01	0.044	-5.79
80hro172	0	1.653	1.286	-0.1	0.123	-7.276
80hso170	0	1.554	1.247	0.02	0.097	-5.858
80hso172	0	1.592	1.262	0.05	0.034	-5.339
80hso174	0	1.482	1.218	0	0.124	-6.718
80hso176	0	1.464	1.21	0	0.013	-6.172
30hrt170	0	1.55	1.245	0.121	-1.415	-1.819
30hrt172	0	1.538	1.24	0.131	-1.41	-1.814
30hst170	0	1.77	1.33	0.133	-1.413	-1.932
30hst172	0	1.789	1.338	0.126	-1.415	-1.942
30hst173	0	1.75	1.323	0.127	-1.413	-1.923
30hst174	0	1.768	1.33	0.129	-1.411	-1.932
30hst176	0	1.783	1.335	0.124	-1.416	-1.933
30ht1712	0	1.773	1.331	0.13	-1.413	-1.936
30ht1714	0	1.793	1.339	0.133	-1.412	-1.952
30ht1716	0	1.734	1.317	0.13	-1.415	-1.904
30ht1718	0	1.763	1.328	0.134	-1.41	-1.935
30ht1774	0	1.768	1.33	0.129	-1.411	-1.932
40hrt170	0	2.478	1.574	0.133	-1.416	-2.266
40hrt172	0	2.466	1.57	0.136	-1.413	-2.27
40hst170	0	2.838	1.685	0.138	-1.415	-2.42
40hst172	0	2.825	1.681	0.141	-1.414	-2.414
40hst174	0	2.823	1.68	0.141	-1.413	-2.409
40hst176	0	2.822	1.68	0.14	-1.414	-2.409
40ht1712	0	2.833	1.683	0.138	-1.414	-2.417

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
5.667	10.901	55.957	65536	0.01	0.03	1.443	1.475
5.072	9.67	9.732	65536	0.115	0.133	1.442	1.473
5.724	11.429	-139.1	65536	0	0	1.553	1.587
4.895	10.198	-18672	65536	0	0.01	1.582	1.617
6.257	11.429	-228	65536	0	0	1.537	1.57
6.332	11.956	-1196	65536	0	0	1.419	1.45
5.675	11.429	125.73	65536	0	0.02	1.421	1.452
6.694	12.484	523.76	65536	0	0.01	1.643	1.679
5.559	12.835	-436	65536	0	0	1.635	1.671
5.394	11.253	-100.4	65536	0	0	1.538	1.571
5.386	10.725	268.78	65536	0	0.01	1.575	1.609
5.414	12.132	244.72	65536	0	0.01	1.466	1.499
5.784	11.956	438.4	65536	0	0.01	1.448	1.48
1.989	3.807	287.85	65536	0	0.01	1.533	1.567
1.976	3.79	-400	65536	0	0	1.521	1.555
2.121	4.054	-730.5	65536	0	0	1.751	1.789
2.132	4.073	485.7	65536	0	0.01	1.77	1.809
2.104	4.027	824.38	65536	0	0.01	1.731	1.769
2.129	4.061	1020.3	65536	0	0.01	1.749	1.787
2.128	4.061	270	65536	0	0.02	1.764	1.803
2.123	4.059	12108	65536	0	0.01	1.753	1.792
2.148	4.1	-569.9	65536	0	0	1.774	1.813
2.094	3.998	893.58	65536	0	0.01	1.716	1.753
2.126	4.061	-480.7	65536	0	0	1.744	1.782
2.129	4.061	1020.3	65536	0	0.01	1.749	1.787
2.518	4.784	613.76	65536	0	0.02	2.451	2.505
2.517	4.786	1127.3	65536	0	0.01	2.44	2.493
2.684	5.104	2043.2	65536	0	0.01	2.808	2.869
2.683	5.096	-835.6	65536	0	0.01	2.794	2.855
2.68	5.089	-5863	65536	0	0.01	2.793	2.854
2.676	5.084	3132.3	65536	0	0.01	2.792	2.853
2.67	5.087	458.9	65536	0	0.02	2.802	2.864

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max
40ht1714	0	2.83	1.682	0.137	-1.415	-2.414	2.683
40ht1716	0	2.811	1.677	0.139	-1.415	-2.413	2.656
40ht1718	0	2.799	1.673	0.139	-1.415	-2.408	2.662
40ht1774	0	2.823	1.68	0.141	-1.413	-2.409	2.68
50hrt170	0	3.568	1.889	0.144	-1.417	-2.702	2.995
50hrt172	0	3.501	1.871	0.147	-1.415	-2.686	2.999
50hst170	0	4.05	2.013	0.15	-1.414	-2.885	3.201
50hst172	0	4.024	2.006	0.149	-1.414	-2.864	3.197
50hst174	0	4.015	2.004	0.152	-1.414	-2.872	3.203
50hst176	0	4.017	2.004	0.151	-1.414	-2.861	3.2
50ht1712	0	4.014	2.004	0.15	-1.413	-2.865	3.204
50ht1714	0	4.029	2.007	0.146	-1.416	-2.864	3.192
50ht1716	0	4.025	2.006	0.152	-1.413	-2.869	3.19
50ht1718	0	4.009	2.002	0.151	-1.413	-2.871	3.197
60hrt170	0	4.757	2.181	0.153	-1.415	-3.117	3.461
60hrt172	0	4.696	2.167	0.15	-1.416	-3.088	3.457
60hst170	0	5.395	2.323	0.156	-1.413	-3.311	3.7
60hst172	0	5.412	2.326	0.156	-1.413	-3.32	3.706
60hst174	0	5.343	2.312	0.157	-1.413	-3.301	3.693
60hst176	0	5.341	2.311	0.157	-1.413	-3.303	3.684
60ht1712	0	5.367	2.317	0.157	-1.413	-3.296	3.686
60ht1714	0	5.359	2.315	0.154	-1.415	-3.287	3.685
60ht1716	0	5.361	2.315	0.155	-1.414	-3.299	3.683
70hrt170	0	6.069	2.464	0.156	-1.416	-3.499	3.927
70hrt172	0	5.985	2.446	0.158	-1.413	-3.481	3.901
70hst170	0	6.884	2.624	0.162	-1.412	-3.735	4.192
70hst172	0	6.889	2.625	0.161	-1.412	-3.718	4.194
70hst174	0	6.862	2.62	0.162	-1.412	-3.718	4.175
70hst176	0	6.855	2.618	0.163	-1.411	-3.708	4.182
70ht1712	0	6.87	2.621	0.162	-1.413	-3.719	4.181
70ht1714	0	6.837	2.615	0.164	-1.412	-3.711	4.181
70ht1716	0	6.826	2.613	0.16	-1.412	-3.708	4.174

Range	C.V.	Counts	LMean	UMean	LVar	UVar
5.096	398.62	65536	0	0.02	2.8	2.861
5.07	1091.9	65536	0	0.01	2.781	2.842
5.07	1437.8	65536	0	0.01	2.769	2.83
5.089	-5863	65536	0	0.01	2.793	2.854
5.697	3691.4	65536	0	0.02	3.53	3.607
5.685	-5297	65536	0	0.01	3.464	3.539
6.085	-2572	65536	0	0.02	4.007	4.094
6.061	-3439	65536	0	0.02	3.981	4.068
6.076	-866.6	65536	0	0.01	3.971	4.058
6.061	-805.4	65536	0	0.01	3.974	4.061
6.068	1829.9	65536	0	0.02	3.971	4.058
6.056	380.49	65536	0	0.02	3.986	4.073
6.059	-599.6	65536	0	0.01	3.982	4.069
6.068	-1408	65536	0	0.01	3.966	4.053
6.579	-783.7	65536	0	0.01	4.706	4.809
6.545	479.21	65536	0	0.02	4.646	4.748
7.011	-1890	65536	0	0.02	5.337	5.454
7.026	17223	65536	0	0.02	5.354	5.471
6.994	-2587	65536	0	0.02	5.286	5.402
6.987	-5664	65536	0	0.02	5.284	5.4
6.982	-2797	65536	0	0.02	5.309	5.425
6.972	558.55	65536	0	0.02	5.301	5.417
6.982	689.12	65536	0	0.02	5.303	5.419
7.426	2656	65536	0	0.02	6.004	6.135
7.382	1341.4	65536	0	0.02	5.92	6.05
7.927	-824.9	65536	0	0.02	6.81	6.959
7.912	2120.6	65536	0	0.02	6.815	6.965
7.893	-1505	65536	0	0.02	6.789	6.937
7.89	-979.3	65536	0	0.02	6.781	6.93
7.9	-8240	65536	0	0.02	6.797	6.945
7.893	-800.3	65536	0	0.02	6.763	6.912
7.883	1930.2	65536	0	0.02	6.752	6.9

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max
80hrt170	0	7.489	2.737	0.16	-1.415	-3.87	4.357
80hrt172	0	7.387	2.718	0.163	-1.412	-3.849	4.339
80hst170	0	8.514	2.918	0.164	-1.413	-4.131	4.66
80hst172	0	8.496	2.915	0.166	-1.411	-4.131	4.658
80hst174	0	8.466	2.91	0.164	-1.412	-4.121	4.646
80hst176	0	8.456	2.908	0.167	-1.41	-4.114	4.65
80ht1712	0	8.473	2.911	0.164	-1.411	-4.126	4.641
80ht1714	0	8.4	2.898	0.166	-1.411	-4.1	4.632
80ht1716	0	8.457	2.908	0.165	-1.411	-4.126	4.648
30ha1810	0.04	0.683	0.826	0.116	-0.06	-2.573	2.974
30ha1812	-0.55	24.617	4.962	-0.11	0.386	-22.18	19.28
30ha1814	0.01	0.25	0.5	1.595	16.185	-3.474	6.114
30ha1816	0	0.118	0.344	0	0.152	-1.374	1.278
30ha1818	-0.1	2.646	1.627	-0.81	11.509	-11.73	10.76
30hsa180	0	0.188	0.433	0.05	0.44	-1.569	2.052
30hsa182	0.01	0.284	0.532	0.119	0.657	-2.061	2.497
30hsa184	0	0.219	0.468	0	0.307	-1.949	1.818
30hsa186	0	0.261	0.511	0.06	0.271	-1.999	2.106
30hsa188	0	0.392	0.626	-3.3	25.285	-6.889	3.12
40ha1810	-0.81	1.994	1.412	0.696	0.68	-4.909	4.711
40ha1812	0.04	0	0.027	-0.11	-0.118	-0.07	0.121
40ha1814	0	0.421	0.649	0.03	0.166	-2.34	2.828
40ha1816	0	0.338	0.582	0.04	0.424	-2.315	2.485
40ha1818	0	0.666	0.816	0.04	0.116	-3.155	3.245
40hsa180	0	0.474	0.688	-0.1	0.535	-3.531	2.594
40hsa182	0	0.598	0.773	-0.11	0.428	-3.241	3.148
40hsa184	0	0.596	0.772	0.03	0.48	-4.574	3.414
40hsa186	0	0.543	0.737	0.06	0.442	-3.508	3.175
40hsa188	0.02	0.478	0.692	0	0.334	-2.937	2.967
50ha1810	2.304	1.878	1.37	1.155	2.632	-2.757	10.94
50ha1812	0	0.913	0.956	-0.11	0.131	-4.412	3.387
50ha1814	0	0.947	0.973	0	0.207	-3.66	3.897

Range	C.V.	Counts	LMean	UMean	LVar	UVar
8.227	1509.1	65536	0	0.02	7.409	7.571
8.188	-2000	65536	0	0.02	7.308	7.468
8.791	2488.5	65536	0	0.02	8.422	8.607
8.789	-848.4	65536	0	0.02	8.405	8.589
8.767	1397.1	65536	0	0.02	8.375	8.558
8.764	-846	65536	0	0.02	8.365	8.549
8.767	1738	65536	0	0.02	8.382	8.566
8.733	-2375	65536	0	0.02	8.31	8.492
8.774	-13068	65536	0	0.02	8.366	8.549
5.547	23.791	65536	0.03	0.04	0.675	0.69
41.458	-8.952	65536	-0.59	-0.52	24.353	24.886
9.588	45.813	65536	0	0.02	0.248	0.253
2.652	82.891	65536	0	0	0.117	0.119
22.492	-26.4	65536	-0.1	0	2.618	2.675
3.621	-101	65536	0	0	0.186	0.19
4.557	47.357	65536	0	0.02	0.281	0.287
3.768	-83.44	65536	0	0	0.216	0.221
4.105	118.35	65536	0	0	0.258	0.264
10.009	-15.04	65536	0	0	0.388	0.397
9.62	-1.739	65536	-0.82	-0.8	1.973	2.016
0.189	0.753	65536	0.04	0.04	0	0
5.168	-77.81	65536	0	0	0.416	0.425
4.799	-221.9	65536	0	0	0.335	0.342
6.399	-150.3	65536	0	0	0.659	0.673
6.126	2343.5	65536	0	0	0.469	0.479
6.389	589.6	65536	0	0	0.591	0.604
7.988	-119.3	65536	0	0	0.589	0.602
6.683	150.54	65536	0	0.01	0.537	0.549
5.905	44.168	65536	0.01	0.02	0.473	0.483
13.693	0.595	65536	2.294	2.315	1.858	1.898
7.799	-123.2	65536	0	0	0.903	0.923
7.557	-190.7	65536	0	0	0.936	0.957

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max
50ha1816	0	0.625	0.791	0	0.478	-3.872	3.17
50hsa180	0	0.861	0.928	0.02	0.126	-3.657	3.447
50hsa182	0	0.964	0.982	0.105	0.282	-3.447	4.667
50hsa184	0	1.066	1.033	0	0.017	-3.762	4.09
50hsa186	0	1.027	1.014	0.05	0.159	-3.715	4.621
50hsa188	-0.16	0.967	0.983	0	0.178	-4.355	3.57
60ha1810	4.118	11.577	3.402	-0.29	-0.108	-5.047	19.12
60ha1812	0	1.221	1.105	0.03	0.165	-3.832	4.188
60ha1814	0	1.637	1.28	0.06	0.226	-4.611	5.083
60ha1816	0	1.356	1.164	0.03	0	-4.806	3.793
60ha1818	0	1.622	1.273	0.05	0.047	-4.866	5.122
60hsa180	0.01	1.566	1.251	0	0.18	-4.985	5.014
60hsa182	0	1.669	1.292	0.08	0.801	-6.236	8.173
60hsa184	0	1.756	1.325	-0.1	0.146	-5.836	4.899
60hsa186	0	1.452	1.205	0.07	0.068	-4.52	5.1
60hsa188	-0.1	1.712	1.308	0.09	0.258	-5.158	6.03
70ha1810	0.04	2.439	1.562	0.02	0.342	-6.58	7.323
70ha1812	0	1.831	1.353	-0.1	0.405	-7.163	5.394
70ha1814	0	2.778	1.667	0.06	0.087	-6.863	6.788
70ha1816	0	2.399	1.549	0.04	0.156	-5.823	6.355
70ha1818	0	2.63	1.622	0.03	0.24	-6.903	6.811
70hsa180	0	2.677	1.636	0	-0.1	-5.489	6.647
70hsa182	0	2.671	1.634	0.03	0.319	-6.502	6.539
70hsa184	0	2.625	1.62	0	0.131	-6.238	5.866
70hsa186	0	2.155	1.468	0.08	0.352	-6.065	6.808
70hsa188	0.06	2.342	1.53	0	0.351	-6.788	6.758
80ha1810	0	3.106	1.762	0.115	0.376	-7.681	7.949
80ha1814	0	3.909	1.977	0.143	0.269	-9.387	9.053
80ha1816	0.01	3.531	1.879	0.01	0.118	-8.261	7.527
80ha1818	0	3.77	1.942	0	0.228	-9.019	8.064
80hsa180	0	3.667	1.915	0	-0.03	-6.655	6.87
80hsa182	0	3.528	1.878	0.181	0.602	-6.625	10.34

Range	C.V.	Counts	LMean	UMean	LVar	UVar
7.041	-97.11	65536	0	0	0.619	0.632
7.104	-238.9	65536	0	0	0.852	0.871
8.115	1970	65536	0	0	0.953	0.974
7.852	-89.47	65536	0	0	1.055	1.078
8.336	241.41	65536	0	0.01	1.016	1.039
7.925	-6.148	65536	-0.17	-0.15	0.957	0.978
24.165	0.826	65536	4.092	4.144	11.452	11.703
8.02	338.6	65536	0	0.01	1.208	1.234
9.694	-19679	65536	0	0.01	1.62	1.655
8.599	449.55	65536	0	0.01	1.341	1.37
9.988	-840.3	65536	0	0	1.604	1.639
9.999	120.47	65536	0	0.02	1.549	1.583
14.409	509.97	65536	0	0.01	1.651	1.687
10.736	-190.6	65536	0	0	1.737	1.775
9.62	-517.9	65536	0	0	1.437	1.468
11.188	-13.7	65536	-0.11	-0.1	1.694	1.731
13.904	44.591	65536	0.02	0.05	2.412	2.465
12.556	-70.34	65536	0	0	1.811	1.851
13.651	-100.9	65536	0	0	2.748	2.808
12.177	-112.8	65536	0	0	2.373	2.425
13.714	619.04	65536	0	0.02	2.602	2.659
12.135	-86.51	65536	0	0	2.648	2.706
13.041	338.91	65536	0	0.02	2.642	2.7
12.104	-425.1	65536	0	0	2.597	2.654
12.872	446.09	65536	0	0.02	2.132	2.179
13.546	25.911	65536	0.05	0.07	2.317	2.368
15.63	-38.77	65536	-0.1	0	3.072	3.14
18.44	-86.98	65536	0	0	3.867	3.952
15.788	180.96	65536	0	0.03	3.493	3.569
17.082	-546.4	65536	0	0.01	3.729	3.811
13.525	471.82	65536	0	0.02	3.628	3.707
16.966	-64.86	65536	0	0	3.49	3.567

From File	Mean	Var	StD	Skew	Kurtosis	Min
80hsa184	0	3.393	1.842	0	0.246	-7.179
80hsa186	0	3.076	1.754	0.146	0.304	-6.999
80hsa188	0.868	15.116	3.888	0.83	1.379	-8.611
30hc1810	2.837	242.14	15.561	0.07	0.07	-56.24
30hc1812	11.95	146.12	12.088	-3.33	10.722	-51.65
30hc1814	0.03	201.2	14.184	0.01	0.011	-53.24
30hc1816	2.482	122.16	11.053	-0.18	0.194	-41.25
30hc1818	-0.44	342	18.493	0.105	-0.314	-60.63
30hsc180	-0.17	915.59	30.259	0	-0.05	-94.75
30hsc182	5.095	374.42	19.35	0	0.04	-71.47
30hsc184	-2.96	208.75	14.448	0.08	-0.109	-53.39
30hsc186	2.34	228.39	15.113	-0.1	0.096	-60.44
30hsc188	9.222	189.21	13.755	-0.12	0.024	-35.22
40hc1810	-0.21	65.695	8.105	0.1	-0.06	-31.39
40hc1812	-0.18	0.019	0.14	-0.1	-0.09	-0.815
40hc1814	5.702	533.55	23.099	0.02	0.216	-96.89
40hc1816	-0.1	36.588	6.049	0.09	0.119	-20.15
40hc1818	-1.42	65.884	8.117	0.07	0.01	-33.78
40hsc180	1.346	247.06	15.718	0.01	0.049	-57.34
40hsc182	-0.75	98.309	9.915	0	0.219	-44.64
40hsc184	-0.57	62.348	7.896	0.02	0.026	-29.86
40hsc186	0.552	55.635	7.459	0.146	0.16	-28.69
40hsc188	0.306	55.609	7.457	0	0.064	-31.63
50hc1810	-1.28	97.949	9.897	0.09	0.157	-36.39
50hc1812	1.863	101.61	10.08	0.03	0.034	-38.54
50hc1814	1.896	110.57	10.515	0.154	0.153	-35.22
50hc1816	-1.71	72.362	8.507	0.05	0.063	-33.38
50hsc180	-2.31	530.41	23.031	-0.1	-0.06	-84.72
50hsc182	2.461	167.03	12.924	-0.1	0.021	-60.87
50hsc184	-1.85	120.31	10.968	0.05	-0.109	-44.48
50hsc186	-1.53	108.34	10.409	0	0.227	-41.52
50hsc188	-0.5	121.72	11.033	0	0.071	-43.74

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
8.03	15.209	691.52	65536	0	0.02	3.356	3.43
8.473	15.472	-173.4	65536	0	0	3.043	3.109
21.71	30.323	4.478	65536	0.838	0.898	14.954	15.281
62.96	119.21	5.484	65536	2.718	2.956	239.54	244.79
23.29	74.942	1.012	65536	11.86	12.04	144.55	147.71
50.5	103.74	496	65536	-0.1	0.137	199.04	203.39
35.37	76.622	4.454	65536	2.397	2.566	120.85	123.5
56.95	117.58	-42.01	65536	-0.58	-0.3	338.33	345.73
95.55	190.3	-174.7	65536	-0.41	0.06	905.75	925.58
83.75	155.22	3.798	65536	4.946	5.243	370.4	378.51
51	104.39	-4.879	65536	-3.07	-2.85	206.51	211.03
59.16	119.6	6.458	65536	2.224	2.456	225.94	230.89
62.3	97.519	1.492	65536	9.117	9.328	187.18	191.28
33.48	64.871	-38.41	65536	-0.27	-0.15	64.99	66.412
0.321	1.136	-0.797	65536	-0.18	-0.17	0.019	0.02
99.84	196.73	4.051	65536	5.525	5.879	527.82	539.37
25.13	45.274	-86.72	65536	-0.12	0	36.195	36.987
27.67	61.451	-5.713	65536	-1.48	-1.36	65.177	66.604
65.5	122.84	11.682	65536	1.225	1.466	244.41	249.76
36.69	81.32	-13.15	65536	-0.83	-0.68	97.254	99.383
30.35	60.203	-13.94	65536	-0.63	-0.51	61.678	63.028
37.32	66.011	13.507	65536	0.495	0.609	55.038	56.243
27.76	59.389	24.397	65536	0.249	0.363	55.012	56.216
39.07	75.457	-7.74	65536	-1.35	-1.2	96.897	99.018
41.42	79.963	5.412	65536	1.786	1.94	100.52	102.72
56.14	91.363	5.545	65536	1.816	1.977	109.38	111.78
31.16	64.546	-4.983	65536	-1.77	-1.64	71.585	73.152
83.11	167.83	-9.957	65536	-2.49	-2.14	524.72	536.2
48.03	108.9	5.252	65536	2.362	2.56	165.24	168.85
38.79	83.274	-5.923	65536	-1.94	-1.77	119.01	121.62
43.27	84.794	-6.817	65536	-1.61	-1.45	107.18	109.53
38.07	81.809	-22.1	65536	-0.58	-0.42	120.41	123.05

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max
60hc1810	1.494	158.65	12.596	0.02	-0.04	-49.95	46.09
60hc1812	1.688	154.08	12.413	0.05	0.01	-43.78	51
60hc1814	-0.8	169.2	13.008	0.08	0.098	-50.75	58.64
60hc1816	0.74	158.98	12.609	0	0.216	-51.46	61.08
60hc1818	-0.25	170.81	13.069	0.07	0.081	-57.14	49.92
60hsc180	1.411	911	30.183	0	-0.05	-104.8	104.3
60hsc182	-0.47	281.52	16.778	0	0	-63.37	60.89
60hsc184	1.593	193.21	13.9	0	-0.04	-56.71	52.62
60hsc186	2.903	169.56	13.022	0.09	0.119	-50.71	57.54
60hsc188	-0.94	195.72	13.99	0	0.129	-56.2	56.71
70hc1810	-1.58	261.22	16.162	-0.1	0.258	-68.51	62.64
70hc1812	1.447	248.81	15.774	0	0.114	-65.95	56.58
70hc1814	-0.17	277.93	16.671	0.125	0.106	-64.74	75.15
70hc1816	-1.18	282.26	16.801	0	0.097	-66.15	61.21
70hc1818	0.564	280.27	16.741	0.04	0	-66.92	69.83
70hsc180	1.158	1567.6	39.593	0	-0.182	-103.4	106.9
70hsc182	-0.5	398.01	19.95	0.1	0.197	-75.89	96.91
70hsc184	0.562	263.72	16.239	0.08	0.099	-70.84	62.6
70hsc186	0.261	229.5	15.149	0.02	0.091	-53.95	61.19
70hsc188	0.28	275.3	16.592	-0.1	-0.04	-63.81	60.12
80hc1810	-0.99	341.13	18.47	0.09	0.178	-77.85	76.38
80hc1814	-0.47	363.95	19.077	0.07	0.185	-74.74	87.41
80hc1816	1.779	428.21	20.693	-0.1	0.097	-83.85	81.39
80hc1818	0.99	384.6	19.611	0	0.064	-69.15	87.63
80hsc180	0.595	280.72	16.755	-0.1	0.025	-69.73	59
80hsc182	-1.05	560.01	23.665	0.01	0.041	-87.14	102.2
80hsc184	-0.76	419.67	20.486	0	-0.02	-84.32	73
80hsc186	2.405	344.6	18.563	0.137	0.138	-72	70.61
80hsc188	-1.53	399.38	19.984	0.03	0.096	-70.76	88.03
30hi1810	10.19	0.753	0.868	-0.1	0.13	4.583	13.9
30hi1812	-12.3	7111.7	84.331	0.122	-1.2	-143.7	131.4
30hi1814	8.739	14.821	3.85	-3.55	24.75	-33.01	16.4

Range	C.V.	Counts	LMean	UMean	LVar	UVar
96.031	8.433	65536	1.397	1.59	156.95	160.38
94.783	7.354	65536	1.593	1.783	152.42	155.76
109.39	-16.29	65536	-0.9	-0.7	167.38	171.04
112.53	17.029	65536	0.644	0.837	157.27	160.71
107.05	-51.53	65536	-0.35	-0.15	168.98	172.67
209.07	21.391	65536	1.18	1.642	901.22	920.95
124.26	-35.76	65536	-0.6	-0.34	278.49	284.59
109.33	8.726	65536	1.487	1.699	191.14	195.32
108.25	4.485	65536	2.804	3.003	167.74	171.41
112.91	-14.93	65536	-1.04	-0.83	193.61	197.85
131.15	-10.23	65536	-1.7	-1.46	258.41	264.07
122.52	10.899	65536	1.326	1.568	246.14	251.52
139.89	-98.89	65536	-0.3	0	274.94	280.96
127.35	-14.29	65536	-1.31	-1.05	279.23	285.34
136.75	29.675	65536	0.436	0.692	277.26	283.33
210.3	34.201	65536	0.855	1.461	1550.8	1584.7
172.79	-40.21	65536	-0.65	-0.34	393.73	402.35
133.43	28.892	65536	0.438	0.686	260.88	266.6
115.14	58.142	65536	0.145	0.377	227.04	232.01
123.93	59.192	65536	0.153	0.407	272.35	278.31
154.23	-18.76	65536	-1.13	-0.84	337.46	344.85
162.15	-40.87	65536	-0.61	-0.32	360.04	367.92
165.25	11.631	65536	1.621	1.938	423.61	432.88
156.78	19.814	65536	0.84	1.14	380.47	388.8
128.73	28.14	65536	0.467	0.724	277.7	283.78
189.29	-22.47	65536	-1.23	-0.87	554	566.13
157.32	-26.97	65536	-0.92	-0.6	415.16	424.25
142.61	7.719	65536	2.263	2.547	340.9	348.36
158.79	-13.09	65536	-1.68	-1.37	395.09	403.74
9.319	0.085	65536	10.19	10.2	0.745	0.761
275.17	-6.864	65536	-12.9	-11.6	7035.3	7189.3
49.407	0.441	65536	8.71	8.769	14.661	14.982

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max
30hi1816	9.078	5.876	2.424	-0.48	-0.907	1.599	16.54
30hi1818	-16.5	4750.5	68.924	-1.85	1.463	-212.2	20.8
30hsi180	8.663	3.873	1.968	-1.44	2.043	-3.301	13.93
30hsi182	8.315	4.557	2.135	-1.28	0.535	-0.691	13.2
30hsi184	8.89	14.002	3.742	0.06	-1.781	1.635	18.34
30hsi186	7.496	1.343	1.159	0	-0.01	2.317	12.51
30hsi188	4.545	1072.4	32.748	-6.39	38.911	-232.2	13.98
40hi1810	12.66	0.746	0.864	0	-0.113	9.248	15.93
40hi1812	-1.47	0.676	0.822	0.05	-0.04	-4.774	1.907
40hi1814	11.65	12.133	3.483	0.56	-1.168	4.063	22.17
40hi1816	12.9	13.628	3.692	-1.07	-0.385	-0.233	21.04
40hi1818	10.76	6.746	2.597	1.462	1.431	4.611	22.55
40hsi180	10.84	10.734	3.276	-0.34	-1.307	-0.531	18.46
40hsi182	9.22	5.97	2.443	1.29	0.407	1.906	17.03
40hsi184	11.42	2.628	1.621	0	-0.515	5.523	18.01
40hsi186	10.37	1.253	1.119	0.01	0.01	5.859	15.35
40hsi188	12.74	10.093	3.177	-1.14	-0.317	3.679	19.15
50hi1810	15.82	1.135	1.065	0.02	0.015	11.23	20.2
50hi1812	16.1	11.501	3.391	-1.41	0.521	5.476	22.53
50hi1814	14.77	23.663	4.864	0.255	-1.615	5.516	25.74
50hi1816	14.83	22.724	4.767	-0.51	-1.494	4.241	23.23
50hsi180	12.18	3.951	1.988	3.163	11.341	5.49	23.78
50hsi182	13.99	1.292	1.137	0	-0.202	9.147	18.64
50hsi184	14.72	3.234	1.798	0	-0.596	8.021	20.5
50hsi186	13.62	18.149	4.26	-0.26	-1.652	4.975	23.09
50hsi188	15.45	24.301	4.93	0.05	-1.874	6.924	24.51
60hi1810	17.02	0.889	0.943	0.03	-0.02	13.319	21.06
60hi1812	18.28	28.592	5.347	0.589	-1.477	10.427	30.82
60hi1814	17.65	2.671	1.634	0	-0.567	12.033	23.11
60hi1816	8.15	171.44	13.093	-0.85	-1.263	-16.13	22.55
60hi1818	16.29	30.971	5.565	0.638	-1.376	6.56	29.24
60hsi180	16.33	1.313	1.146	0	0.01	11.504	22.23

Range	C.V.	Counts	LMean	UMean	LVar	UVar
14.945	0.267	65536	9.059	9.096	5.813	5.94
232.97	-4.184	65536	-17	-15.9	4699.5	4802.3
17.231	0.227	65536	8.648	8.678	3.832	3.916
13.89	0.257	65536	8.299	8.331	4.508	4.607
16.703	0.421	65536	8.861	8.918	13.851	14.155
10.198	0.155	65536	7.487	7.504	1.328	1.357
246.15	7.205	65536	4.294	4.796	1060.9	1084.1
6.681	0.068	65536	12.66	12.67	0.738	0.754
6.681	-0.559	65536	-1.48	-1.46	0.669	0.683
18.11	0.299	65536	11.62	11.67	12.002	12.265
21.275	0.286	65536	12.87	12.93	13.482	13.777
17.934	0.241	65536	10.74	10.78	6.674	6.82
18.989	0.302	65536	10.82	10.87	10.618	10.851
15.121	0.265	65536	9.202	9.239	5.906	6.035
12.484	0.142	65536	11.41	11.44	2.6	2.657
9.495	0.108	65536	10.36	10.37	1.24	1.267
15.473	0.249	65536	12.72	12.77	9.985	10.203
8.967	0.067	65536	15.81	15.83	1.123	1.147
17.055	0.211	65536	16.08	16.13	11.377	11.626
20.22	0.329	65536	14.73	14.8	23.409	23.921
18.989	0.321	65536	14.8	14.87	22.48	22.972
18.286	0.163	65536	12.16	12.19	3.908	3.994
9.495	0.081	65536	13.98	14	1.278	1.306
12.484	0.122	65536	14.71	14.73	3.199	3.269
18.11	0.313	65536	13.59	13.66	17.954	18.347
17.582	0.319	65536	15.41	15.49	24.04	24.566
7.736	0.055	65536	17.02	17.03	0.879	0.898
20.396	0.293	65536	18.24	18.32	28.285	28.904
11.077	0.093	65536	17.64	17.67	2.642	2.7
38.681	1.607	65536	8.049	8.25	169.6	173.31
22.681	0.342	65536	16.25	16.34	30.638	31.309
10.725	0.07	65536	16.33	16.34	1.299	1.327

From File	Mean	Var	StD	Skew	Kurtosis	Min
60hsi182	15.89	1.873	1.369	0	-0.343	10.539
60hsi184	18.92	29.715	5.451	-0.4	-1.726	8.345
60hsi186	16.5	30.147	5.491	0.467	-1.674	8.687
60hsi188	20.07	2.535	1.592	0	-0.51	14.848
70hi1810	21.17	48.257	6.947	0.129	-1.873	10.1
70hi1812	20.17	3.672	1.916	3.759	21.809	14.881
70hi1814	20.55	34.717	5.892	0.08	-1.863	10.403
70hi1816	15.87	19.523	4.419	0.763	-1.123	7.559
70hi1818	18.63	28.087	5.3	1.225	-0.251	10.568
70hsi180	18.32	1.261	1.123	0	-0.05	13.448
70hsi182	20.08	1.415	1.189	-0.1	-0.1	14.574
70hsi184	21.5	43.449	6.592	0	-1.862	9.97
70hsi186	19.34	34.607	5.883	0.728	-1.357	11.643
70hsi188	20.61	41.173	6.417	1.151	-0.374	11.19
80hi1810	23.62	0.778	0.882	0.04	-0.04	20.047
80hi1814	23.73	45.029	6.71	-0.67	-1.427	9.425
80hi1816	-22.4	5088.5	71.333	-1.47	0.176	-166.8
80hi1818	23.15	1.438	1.199	0	-0.02	18.408
80hsi180	22.65	33.923	5.824	-0.93	-1.011	8.815
80hsi182	21.8	0.9	0.949	0	0.01	17.487
80hsi184	23.1	1.014	1.007	0.02	0.068	18.762
80hsi186	22.82	45.737	6.763	0.534	-1.605	12.901
80hsi188	25.54	1.581	1.257	0.03	-0.04	20.847
30hl1810	0	2.08	1.442	-1.99	18.579	-19.73
30hl1812	0.464	7.747	2.783	0.09	0	-10.23
30hl1814	0.12	1.86	1.364	-5.07	61.402	-19.61
30hl1816	-0.1	0.994	0.997	-5.85	100.61	-19.65
30hl1818	1.433	17.961	4.238	1.672	1.176	-15
30hsl180	0.06	2.447	1.564	-2.2	18.518	-18.43
30hsl182	-0.15	1.321	1.149	-0.46	11.494	-19.63
30hsl184	0	2.325	1.525	-3.32	28.632	-19.54
30hsl186	-0.11	1.353	1.163	-0.55	6.212	-14.36

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
20.91	10.374	0.086	65536	15.88	15.9	1.853	1.894
28.39	20.044	0.288	65536	18.88	18.96	29.396	30.039
29.08	20.396	0.333	65536	16.45	16.54	29.823	30.476
25.93	11.077	0.079	65536	20.06	20.08	2.508	2.562
35.59	25.494	0.328	65536	21.12	21.22	47.738	48.783
37.04	22.154	0.095	65536	20.16	20.19	3.633	3.712
32.03	21.626	0.287	65536	20.51	20.6	34.344	35.096
27.6	20.044	0.278	65536	15.84	15.91	19.314	19.737
34.3	23.736	0.285	65536	18.59	18.67	27.785	28.394
22.77	9.319	0.061	65536	18.31	18.33	1.247	1.274
24.42	9.846	0.059	65536	20.07	20.09	1.399	1.43
33.71	23.736	0.307	65536	21.45	21.55	42.983	43.924
34.68	23.033	0.304	65536	19.29	19.38	34.235	34.985
37.04	25.846	0.311	65536	20.56	20.66	40.731	41.623
28.49	8.44	0.037	65536	23.61	23.63	0.769	0.786
34.39	24.967	0.283	65536	23.68	23.78	44.546	45.521
33.32	200.09	-3.18	65536	-23	-21.9	5033.8	5144
28.43	10.022	0.052	65536	23.14	23.16	1.423	1.454
30.27	21.451	0.257	65536	22.61	22.7	33.558	34.293
25.93	8.44	0.044	65536	21.8	21.81	0.89	0.909
27.38	8.615	0.044	65536	23.09	23.11	1.003	1.025
37.87	24.967	0.296	65536	22.77	22.87	45.245	46.236
30.52	9.67	0.049	65536	25.54	25.55	1.564	1.598
6.121	25.846	-39.59	65536	0	0	2.057	2.102
10.36	20.591	5.994	65536	0.443	0.486	7.664	7.832
7.054	26.667	11.36	65536	0.11	0.131	1.841	1.881
13.19	32.84	-12.45	65536	-0.1	-0.1	0.984	1.005
11.17	26.168	2.957	65536	1.401	1.466	17.768	18.157
12.03	30.457	24.507	65536	0.05	0.08	2.421	2.474
8.421	28.054	-7.47	65536	-0.16	-0.15	1.307	1.336
9.707	29.245	-68.96	65536	0	0	2.3	2.351
6.451	20.806	-10.62	65536	-0.12	-0.1	1.339	1.368

From File	Mean	Var	StD	Skew	Kurtosis	Min
30hsl188	0.08	5.069	2.251	4.552	25.032	-12.93
40hl1810	0	2.446	1.564	-1.18	12.938	-19.67
40hl1812	-0.1	0	0.024	0.111	-0.16	-0.149
40hl1814	-0.1	3.185	1.785	-3.22	24.238	-19.58
40hl1816	0	1.209	1.1	-1.16	9.184	-12.75
40hl1818	0	1.14	1.068	-1.2	8.932	-11.98
40hsl180	0	1.996	1.413	0.169	-0.556	-5.049
40hsl182	0.04	2.327	1.525	-0.67	2.361	-16.44
40hsl184	0	2.754	1.659	-1.07	6.854	-19.56
40hsl186	0	1.867	1.367	-1.66	16.039	-19.09
40hsl188	0.04	1.853	1.361	-0.72	1.851	-13.55
50hl1810	0.03	3.976	1.994	-2.18	13.582	-19.61
50hl1812	-0.23	5.944	2.438	-2.87	16.241	-19.57
50hl1814	0.02	4.174	2.043	-1.23	5.546	-19.67
50hl1816	0.117	3.288	1.813	-1.33	9.864	-19.68
50hsl180	0.204	3.762	1.94	-0.24	0.104	-12.98
50hsl182	0.216	3.346	1.829	-0.37	0.389	-13.22
50hsl184	0.155	3.359	1.833	-1.51	9.795	-19.56
50hsl186	0.09	4.258	2.064	-0.18	1.323	-19.62
50hsl188	-0.23	3.892	1.973	-1.72	9.884	-19.7
60hl1810	0.06	5.636	2.374	0.176	0.516	-19.66
60hl1812	0.01	5.117	2.262	-1.23	5.997	-19.59
60hl1814	0.06	7.232	2.689	0.08	-0.601	-9.311
60hl1816	0.08	5.548	2.355	-0.68	0.794	-16.08
60hl1818	0	2.58	1.606	-0.49	-0.315	-8.505
60hsl180	0.01	4.78	2.186	-0.83	0.528	-9.951
60hsl182	-0.1	8.232	2.869	0.09	-0.422	-16.66
60hsl184	0.03	5.126	2.264	-0.42	-0.259	-16.92
60hsl186	0	4.957	2.226	0.09	-0.242	-11.96
60hsl188	0	7.223	2.688	-1.66	7.859	-19.68
70hl1810	0.189	8.865	2.977	-1.42	3.896	-19.68
70hl1812	0	9.992	3.161	-0.41	2.484	-19.78

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
13.53	26.462	28.168	65536	0.06	0.1	5.014	5.124
9.49	29.158	-62.04	65536	0	0	2.419	2.472
0.03	0.176	-0.351	65536	-0.1	-0.1	0	0
7.708	27.292	-19.28	65536	-0.11	-0.1	3.151	3.22
7.816	20.562	-45.4	65536	0	0	1.196	1.222
6.698	18.676	-134.3	65536	0	0	1.128	1.153
8.802	13.851	-52.35	65536	0	0	1.974	2.017
10.12	26.559	38.256	65536	0.03	0.05	2.302	2.352
11.66	31.219	458.31	65536	0	0.02	2.724	2.784
10.93	30.017	145.99	65536	0	0.02	1.847	1.888
5.267	18.813	33.542	65536	0.03	0.05	1.833	1.873
5.181	24.791	60.483	65536	0.02	0.05	3.933	4.019
11.03	30.593	-10.71	65536	-0.25	-0.21	5.88	6.009
7.212	26.882	91.138	65536	0	0.04	4.129	4.219
13.28	32.957	15.445	65536	0.104	0.131	3.253	3.324
6.253	19.233	9.487	65536	0.19	0.219	3.722	3.803
7.839	21.06	8.452	65536	0.202	0.23	3.31	3.383
10.19	29.744	11.849	65536	0.141	0.169	3.323	3.396
9.814	29.431	24.22	65536	0.07	0.101	4.213	4.305
9.57	29.265	-8.685	65536	-0.24	-0.21	3.85	3.934
6.188	25.846	38.183	65536	0.04	0.08	5.576	5.698
7.951	27.536	213.07	65536	0	0.03	5.062	5.173
7.276	16.586	45.768	65536	0.04	0.08	7.154	7.31
11.27	27.35	28.076	65536	0.07	0.102	5.488	5.608
3.812	12.317	239.23	65536	0	0.02	2.552	2.608
14.03	23.98	162.88	65536	0	0.03	4.728	4.832
7.384	24.039	-33.36	65536	-0.11	-0.1	8.143	8.322
6.196	23.111	80.582	65536	0.01	0.05	5.071	5.182
10.4	22.359	-74.97	65536	0	0	4.904	5.011
10.32	29.998	-56.49	65536	-0.1	0	7.146	7.302
6.396	26.071	15.728	65536	0.167	0.212	8.77	8.962
11.48	31.267	1104.3	65536	0	0.03	9.885	10.101

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max
70hl1814	-0.14	18.641	4.317	-0.25	-0.873	-19.65	9.071
70hl1816	0.106	7.449	2.729	-0.28	-0.761	-19.5	12.43
70hl1818	0.103	3	1.732	0.292	0.155	-4.803	5.883
70hsl180	-0.1	9.394	3.065	-0.43	-0.735	-11.63	6.616
70hsl182	-0.1	19.678	4.436	-0.16	-1.076	-11.28	8.492
70hsl184	-0.15	7.685	2.772	0	1.137	-19.51	12.3
70hsl186	0	9.14	3.023	-0.55	-0.383	-18.58	9.805
70hsl188	0	7.64	2.764	-0.56	2.659	-19.67	8.766
80hl1810	-0.1	14.182	3.766	-0.14	0.118	-19.68	11.89
80hl1814	-0.21	68.235	8.26	0	-1.251	-19.64	14.21
80hl1816	0.08	5.695	2.386	-0.11	-1.258	-13.22	4.798
80hl1818	0.04	3.187	1.785	0.137	1.254	-16.35	6.021
80hsl180	0.01	7.832	2.799	-0.17	-0.473	-6.988	7.224
80hsl182	0.121	48.178	6.941	0.119	-1.397	-19.76	13.75
80hsl184	0.05	7.423	2.725	-0.6	-0.134	-12.78	14.01
80hsl186	0.02	22.017	4.692	-0.1	-0.647	-10.07	12.16
80hsl188	-0.1	6.611	2.571	-0.62	0.723	-19.69	5.735
30hm1810	0	630.42	25.108	-0.1	0.268	-95.85	97.95
30hm1812	2.953	67.718	8.229	0.436	7.825	-39.37	32.43
30hm1814	0.225	476.17	21.821	0	-0.101	-92.02	75.56
30hm1816	0	589.3	24.276	0.01	-0.09	-88.05	91.36
30hm1818	6.714	930.37	30.502	-0.1	-0.772	-89.8	96.57
30hsm180	0	701.87	26.493	0.01	-0.09	-95.85	85.83
30hsm182	0	534.34	23.116	0.02	0.412	-95.29	97.95
30hsm184	0	598.16	24.457	0	0.076	-95.85	92.04
30hsm186	0.02	534.53	23.12	0.04	0.076	-86.29	82.85
30hsm188	0.63	647.18	25.44	0	-0.112	-76.86	97.82
40hm1810	0	144.93	12.039	0	0.249	-52.02	48.69
40hm1812	0	2.377	1.542	0	0.049	-5.655	5.467
40hm1814	0.02	1065.6	32.643	0.03	0.083	-105.8	108.1
40hm1816	0	229.68	15.155	0	0.173	-57.97	57.05
40hm1818	0	179.09	13.382	0	0.183	-58.65	61.12

Range	C.V.	Counts	LMean	UMean	LVar	UVar
28.718	-30.89	65536	-0.17	-0.11	18.44	18.844
31.932	25.782	65536	0.09	0.127	7.369	7.53
10.686	16.85	65536	0.09	0.116	2.968	3.033
18.247	-59.02	65536	-0.1	0	9.293	9.497
19.77	-68.9	65536	-0.1	0	19.467	19.893
31.814	-18.72	65536	-0.17	-0.13	7.603	7.769
28.386	-180	65536	0	0	9.041	9.239
28.435	-191.4	65536	0	0	7.558	7.724
31.56	-36.22	65536	-0.13	-0.1	14.03	14.337
33.856	-39.62	65536	-0.27	-0.15	67.503	68.98
18.022	30.585	65536	0.06	0.1	5.634	5.757
22.369	45.176	65536	0.03	0.05	3.153	3.222
14.212	198.87	65536	0	0.04	7.748	7.918
33.504	57.492	65536	0.07	0.174	47.66	48.704
26.794	61.012	65536	0.02	0.07	7.344	7.504
22.222	214	65536	0	0.06	21.78	22.257
25.426	-45.11	65536	-0.1	0	6.54	6.683
193.8	6543.5	65536	-0.19	0.196	623.65	637.3
71.794	2.787	65536	2.89	3.016	66.991	68.458
167.58	96.861	65536	0.06	0.392	471.05	481.37
179.41	2665.5	65536	-0.18	0.195	582.98	595.74
186.37	4.543	65536	6.48	6.947	920.38	940.52
181.69	-750.4	65536	-0.24	0.168	694.33	709.53
193.23	-3096	65536	-0.18	0.17	528.6	540.17
187.88	4626	65536	-0.18	0.193	591.74	604.69
169.14	1285.8	65536	-0.16	0.195	528.79	540.37
174.68	40.408	65536	0.435	0.824	640.23	654.25
100.71	10655	65536	-0.1	0.09	143.37	146.51
11.122	-264.2	65536	0	0	2.352	2.403
213.8	2043.5	65536	-0.23	0.266	1054.1	1077.2
115.02	-1450	65536	-0.13	0.106	227.21	232.18
119.77	5248.8	65536	-0.1	0.105	177.17	181.04

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
40hsm180	0	204.06	14.285	0	-0.229	-48.26	47.39	95.649	2502.1	65536	-0.1	0.115	201.87	206.28
40hsm182	0	120.89	10.995	0.02	0.224	-42	41.38	83.379	-7678	65536	-0.1	0.08	119.59	122.21
40hsm184	0	181.02	13.454	0	0	-46.12	48.65	94.761	-828.2	65536	-0.12	0.09	179.08	183
40hsm186	0.01	107.81	10.383	0	0.351	-42.41	39.61	82.022	745.66	65536	-0.1	0.09	106.65	108.99
40hsm188	0.01	222.26	14.908	0	0.064	-50.46	52.03	102.49	1454	65536	-0.1	0.124	219.87	224.68
50hm1810	0.01	216.11	14.701	0.05	0.441	-51.71	66.7	118.41	1032.9	65536	-0.1	0.127	213.79	218.47
50hm1812	0.02	250.99	15.843	0	0.09	-59.07	58.5	117.58	683.56	65536	-0.1	0.144	248.29	253.73
50hm1814	0	252.2	15.881	0.02	0.069	-63.3	57.2	120.5	-1831	65536	-0.13	0.113	249.49	254.95
50hm1816	0.02	411.28	20.28	0	0.133	-76.46	77.35	153.81	1067.7	65536	-0.14	0.174	406.87	415.77
50hsm180	0	349.99	18.708	0.06	0.328	-64.03	89.83	153.86	-1326	65536	-0.16	0.129	346.23	353.81
50hsm182	0	195.81	13.993	0	0.463	-63.82	69.73	133.55	-2038	65536	-0.11	0.1	193.71	197.95
50hsm184	0	333.76	18.269	0.04	0	-62.72	77	139.71	8609	65536	-0.14	0.142	330.17	337.4
50hsm186	0	182.33	13.503	-0.1	0.291	-53.43	51.46	104.89	86891	65536	-0.1	0.104	180.37	184.32
50hsm188	0	461.1	21.473	0.04	0.223	-87.06	85.44	172.5	-14720	65536	-0.17	0.163	456.14	466.13
60hm1810	0	351.46	18.747	0.06	0.161	-74.52	79.55	154.07	-630.8	65536	-0.17	0.114	347.68	355.3
60hm1812	0.02	383.68	19.588	0.05	0.123	-76.31	81.74	158.04	1073.9	65536	-0.13	0.168	379.56	387.87
60hm1814	0	384.45	19.607	0	0.305	-82.77	86.39	169.16	11330	65536	-0.15	0.152	380.32	388.64
60hm1816	0	604.78	24.592	0.03	0.18	-99.69	103.9	203.62	-2636	65536	-0.2	0.179	598.28	611.38
60hm1818	0	407.58	20.189	0	0.125	-79.01	78.56	157.57	2182	65536	-0.15	0.164	403.2	412.03
60hsm180	0.03	554.72	23.552	0.06	0.115	-88.36	93.12	181.48	878.45	65536	-0.15	0.207	548.76	560.77
60hsm182	0	286.96	16.94	0.07	0.023	-64.08	62.68	126.77	-3218	65536	-0.14	0.124	283.88	290.09
60hsm184	0.02	509.67	22.576	0.04	0.178	-84.75	103.6	188.37	1198.9	65536	-0.15	0.192	504.19	515.23
60hsm186	0	258.07	16.064	0.06	-0.01	-56.25	55.95	112.2	-3689	65536	-0.13	0.119	255.29	260.88
60hsm188	0.01	723.11	26.891	0.02	-0.02	-99.01	105.9	204.92	1948.5	65536	-0.19	0.22	715.34	731
70hm1810	0.02	468.27	21.64	0.06	0.284	-87.9	89.04	176.94	884.87	65536	-0.14	0.19	463.25	473.39
70hm1812	0	537.23	23.178	0.04	0.179	-88.42	84.14	172.55	-1811	65536	-0.19	0.165	531.46	543.09
70hm1814	0.02	579.02	24.063	0.07	0.176	-96.19	97.35	193.54	1441.3	65536	-0.17	0.201	572.8	585.34
70hm1816	0	1003.7	31.681	0	-0.03	-105.7	108.1	213.8	-4447	65536	-0.25	0.235	992.89	1014.6
70hm1818	0	594.39	24.38	0	0.15	-94.89	88.32	183.21	2577.9	65536	-0.18	0.196	588.01	600.88
70hsm180	0	808.92	28.442	0.03	-0.145	-101.4	108	209.41	4879.4	65536	-0.21	0.224	800.24	817.76
70hsm182	0	419.01	20.47	-0.1	0.141	-81.99	93.23	175.22	-7742	65536	-0.16	0.154	414.51	423.59
70hsm184	0	678.55	26.049	0	0.172	-105.5	101.3	206.75	0	65536	-0.2	0.199	671.26	685.96

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max
70hsm186	0	376.84	19.412	0	0.301	-89.66	89.94
70hsm188	0.04	809.44	28.451	0.04	0.284	-105.7	108.1
80hm1810	0	609.5	24.688	0	0.052	-95.41	108.1
80hm1814	0	627.28	25.045	0	0.13	-90.77	104
80hm1816	0	1486.4	38.553	0.02	-0.146	-105.7	108.1
80hm1818	0.03	813.06	28.514	0	0.128	-105.7	105
80hsm180	0	116.75	10.805	0	-0.06	-35.94	36.23
80hsm182	0	487.25	22.074	-0.1	0.284	-99.89	92.71
80hsm184	0	895.5	29.925	0	0.281	-105.7	108.1
80hsm186	0	424.07	20.593	0.03	0.154	-81.62	81.53
80hsm188	0	1008.2	31.752	0	0.14	-105.7	108.1
30ho1810	-0.1	1.838	1.356	0	-0.342	-6.387	5.745
30ho1812	-65.1	379.76	19.487	0.503	40.525	-278.3	193
30ho1814	14.17	129.53	11.381	-10.3	105.62	-114.9	23.47
30ho1816	0	1.876	1.37	0	-0.188	-5.842	5.059
30ho1818	-26.6	5448	73.81	-1.96	2.283	-512.3	10.62
30hso180	0	1.793	1.339	0	-0.153	-6.892	6.119
30hso182	0	2.062	1.436	0	-0.331	-6.241	5.715
30hso184	0	1.392	1.18	0	-0.14	-5.786	4.587
30hso186	0.195	1.885	1.373	0	-0.342	-4.804	5.042
30hso188	-2.26	325.93	18.054	-6.35	38.59	-128.6	5.354
40ho1810	0	1.808	1.345	0	-0.37	-5.117	4.729
40ho1812	-5.93	0.711	0.843	0	0.021	-9.728	-1.99
40ho1814	-10.7	1025.9	32.029	0.836	-1.294	-38.01	42.52
40ho1816	0	1.808	1.345	-0.1	-0.13	-5.482	5.067
40ho1818	0	1.837	1.355	0	-0.175	-5.459	5.267
40hso180	0	1.792	1.339	0.02	-0.186	-6.018	5.762
40hso182	0	2.053	1.433	0	-0.328	-6.387	5.745
40hso184	0	1.546	1.243	0	-0.208	-4.591	5.08
40hso186	0.01	2.107	1.452	0	-0.247	-5.616	5.636
40hso188	0.05	1.816	1.348	0	-0.239	-7.018	5.289
50ho1810	0.376	1.801	1.342	0	-0.372	-5.416	5.309

Range	C.V.	Counts	LMean	UMean	LVar	UVar
179.6	-1172	65536	-0.17	0.132	372.79	380.95
213.8	674.48	65536	-0.18	0.26	800.74	818.27
203.46	4789	65536	-0.18	0.194	602.96	616.16
194.8	-1821	65536	-0.21	0.178	620.54	634.12
213.8	-1176	65536	-0.33	0.262	1470.4	1502.6
210.77	971.13	65536	-0.19	0.248	804.32	821.93
72.167	-1146	65536	-0.1	0.07	115.5	118.02
192.6	-661.7	65536	-0.2	0.136	482.01	492.56
213.8	-1759	65536	-0.25	0.212	885.88	905.28
163.16	-5002	65536	-0.16	0.154	419.52	428.7
213.8	-1274	65536	-0.27	0.218	997.38	1019.2
12.132	-23.23	65536	-0.1	0	1.818	1.858
471.39	-0.299	65536	-65.3	-65	375.68	383.91
138.37	0.803	65536	14.09	14.26	128.14	130.95
10.901	150.56	65536	0	0.02	1.856	1.897
522.9	-2.78	65536	-27.1	-26	5389.5	5507.5
13.011	-377.4	65536	0	0	1.774	1.812
11.956	344.55	65536	0	0.02	2.04	2.085
10.374	274.63	65536	0	0.01	1.377	1.408
9.846	7.038	65536	0.185	0.206	1.864	1.905
133.98	-8.003	65536	-2.39	-2.12	322.43	329.49
9.846	148.68	65536	0	0.02	1.788	1.827
7.736	-0.142	65536	-5.93	-5.92	0.703	0.719
80.527	-2.986	65536	-11	-10.5	1014.9	1037.1
10.549	148.96	65536	0	0.02	1.788	1.827
10.725	-351.2	65536	0	0	1.818	1.857
11.78	324.79	65536	0	0.01	1.773	1.812
12.132	1568.8	65536	0	0.01	2.031	2.075
9.67	-144.1	65536	0	0	1.529	1.563
11.253	144.89	65536	0	0.02	2.084	2.13
12.308	29.641	65536	0.04	0.06	1.796	1.836
10.725	3.572	65536	0.365	0.386	1.782	1.821

From File	Mean	Var	StD	Skew	Kurtosis	Min
50ho1812	0.157	1.927	1.388	0	-0.323	-7.474
50ho1814	0	1.805	1.343	0	-0.161	-5.333
50ho1816	0	1.703	1.305	0	-0.139	-5.295
50hso180	0	1.83	1.353	0	-0.224	-5.661
50hso182	0	1.838	1.356	0	-0.332	-4.816
50hso184	0	1.483	1.218	0	-0.18	-4.404
50hso186	0.09	2.079	1.442	-0.1	-0.286	-5.984
50hso188	0	1.907	1.381	0	-0.312	-5.408
60ho1810	-0.24	1.855	1.362	0	-0.383	-6.043
60ho1812	0	1.901	1.379	0	-0.329	-6.107
60ho1814	0	1.73	1.315	0	-0.177	-5.688
60ho1816	0	1.787	1.337	0	-0.117	-5.758
60ho1818	0	1.746	1.321	0	-0.105	-5.303
60hso180	0	1.977	1.406	0	-0.329	-5.869
60hso182	0.02	2.062	1.436	0	-0.296	-5.402
60hso184	0	1.418	1.191	0	-0.168	-5.972
60hso186	0	1.856	1.362	0	-0.314	-6.343
60hso188	0	2.074	1.44	0	-0.347	-4.98
70ho1810	0	1.897	1.377	0	-0.344	-5.78
70ho1812	0	1.844	1.358	0	-0.221	-5.094
70ho1814	0	1.711	1.308	0	-0.209	-5.152
70ho1816	0.02	1.755	1.325	0	-0.143	-6.271
70ho1818	0	1.766	1.329	0	-0.114	-6.907
70hso180	0	1.982	1.408	0	-0.325	-5.175
70hso182	-0.2	2.149	1.466	0	-0.386	-5.85
70hso184	-0.28	1.519	1.233	0	-0.17	-5.463
70hso186	0	1.897	1.377	0	-0.336	-5.999
70hso188	0	2.041	1.429	0	-0.339	-7.74
80ho1810	0.01	1.845	1.358	0.01	-0.354	-5.061
80ho1814	0	1.757	1.325	0	-0.19	-5.323
80ho1816	3.195	3873.6	62.238	-1.25	-0.434	-113
80ho1818	0.02	1.799	1.341	0	-0.112	-5.306

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
5.185	12.659	8.84	65536	0.146	0.168	1.906	1.948
5.92	11.253	246.42	65536	0	0.02	1.785	1.825
5.079	10.374	-161.8	65536	0	0	1.685	1.722
5.944	11.604	203.11	65536	0	0.02	1.811	1.85
4.855	9.67	-111.5	65536	0	0	1.818	1.858
4.563	8.967	-239.7	65536	0	0	1.468	1.5
5.268	11.253	17.033	65536	0.07	0.1	2.057	2.102
4.79	10.198	386.34	65536	0	0.01	1.887	1.928
4.506	10.549	-5.695	65536	-0.25	-0.23	1.836	1.876
5.322	11.429	597.99	65536	0	0.01	1.88	1.921
5.565	11.253	152.57	65536	0	0.02	1.712	1.749
5.495	11.253	371.81	65536	0	0.01	1.768	1.807
5.774	11.077	-1184	65536	0	0	1.727	1.765
4.681	10.549	-212.1	65536	0	0	1.956	1.999
4.971	10.374	68.19	65536	0.01	0.03	2.04	2.084
4.929	10.901	-69.82	65536	0	0	1.402	1.433
6.14	12.484	3917.9	65536	0	0.01	1.836	1.877
5.569	10.549	224.09	65536	0	0.02	2.052	2.097
5.473	11.253	-167.2	65536	0	0	1.877	1.918
5.455	10.549	-210.2	65536	0	0	1.825	1.865
5.046	10.198	464.08	65536	0	0.01	1.693	1.73
5.333	11.604	79.125	65536	0	0.03	1.736	1.774
4.874	11.78	671.84	65536	0	0.01	1.747	1.785
5.199	10.374	338.21	65536	0	0.02	1.961	2.004
5.754	11.604	-7.492	65536	-0.21	-0.18	2.126	2.173
4.383	9.846	-4.383	65536	-0.29	-0.27	1.503	1.536
5.254	11.253	318.98	65536	0	0.02	1.876	1.917
5.447	13.187	238.55	65536	0	0.02	2.019	2.063
4.961	10.022	138.81	65536	0	0.02	1.825	1.865
5.754	11.077	-254.2	65536	0	0	1.738	1.776
43.3	156.31	19.483	65536	2.718	3.671	3832	3915.9
5.419	10.725	76.396	65536	0	0.03	1.78	1.819

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
30hsm716	0.02	433.19	20.813	-0.1	0.018	-82.5	86.61	169.12	982.59	65536	-0.14	0.181	428.54	437.92

From File	Mean	Var	StD	Skew	Kurtosis	Min
80hso180	0.01	1.954	1.398	0	-0.279	-5.466
80hso182	0	2.124	1.457	0	-0.391	-5.156
80hso184	0	1.441	1.201	0	-0.145	-4.882
80hso186	0	1.935	1.391	0	-0.316	-5.848
80hso188	0	2.107	1.452	0	-0.323	-5.234
30hst180	0	1.561	1.249	0.123	-1.412	-1.833
30hst182	0	1.555	1.247	0.131	-1.411	-1.83
30hst184	0	1.55	1.245	0.122	-1.414	-1.827
30hst186	0	1.556	1.248	0.124	-1.411	-1.829
30hst188	0	1.559	1.249	0.124	-1.388	-2.944
30ht1810	0	1.577	1.256	0.125	-1.413	-1.85
30ht1812	-0.45	0.175	0.418	0.822	10.697	-3.393
30ht1814	0	1.542	1.242	0.133	-1.404	-1.91
30ht1816	0	1.515	1.231	0.129	-1.411	-1.799
30ht1818	0	1.645	1.282	0.07	-1.036	-4.623
40hst180	0	2.48	1.575	0.142	-1.412	-2.289
40hst182	0	2.484	1.576	0.139	-1.412	-2.281
40hst184	0	2.496	1.58	0.136	-1.413	-2.29
40hst186	0	2.481	1.575	0.137	-1.413	-2.284
40hst188	0	2.5	1.581	0.139	-1.414	-2.305
40ht1810	0	2.487	1.577	0.141	-1.412	-2.279
40ht1812	0	0	0.011	0	0.05	-0.04
40ht1814	0	2.482	1.575	0.139	-1.413	-2.284
40ht1816	0	2.5	1.581	0.137	-1.415	-2.286
40ht1818	0	2.492	1.579	0.138	-1.413	-2.29
50hst180	0	3.545	1.883	0.147	-1.413	-2.707
50hst182	0	3.54	1.881	0.147	-1.413	-2.709
50hst184	0	3.572	1.89	0.144	-1.413	-2.737
50hst186	0	3.558	1.886	0.148	-1.413	-2.726
50hst188	0	3.568	1.889	0.144	-1.414	-2.732
50ht1810	0	3.562	1.887	0.146	-1.414	-2.715
50ht1812	0	3.544	1.883	0.147	-1.412	-2.732

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
6.666	12.132	135.64	65536	0	0.02	1.933	1.976
5.745	10.901	-1881	65536	0	0.01	2.101	2.147
4.612	9.495	-255.4	65536	0	0	1.426	1.457
5.405	11.253	249.13	65536	0	0.02	1.914	1.956
5.491	10.725	425.37	65536	0	0.02	2.084	2.13
1.994	3.827	463.63	65536	0	0.01	1.544	1.578
1.99	3.819	-1732	65536	0	0	1.538	1.572
1.985	3.812	321.01	65536	0	0.01	1.533	1.567
1.988	3.817	333.6	65536	0	0.01	1.54	1.573
2.899	5.844	1146.6	65536	0	0.01	1.542	1.576
1.999	3.849	1253.2	65536	0	0.01	1.56	1.594
3.154	6.547	-0.926	65536	-0.46	-0.45	0.173	0.177
2.175	4.085	-348.1	65536	0	0	1.525	1.558
1.964	3.763	-379	65536	0	0	1.499	1.532
4.783	9.407	-251.1	65536	0	0	1.627	1.663
2.527	4.816	-359.2	65536	0	0	2.453	2.507
2.517	4.799	-17280	65536	0	0.01	2.457	2.511
2.528	4.818	1004.7	65536	0	0.01	2.47	2.524
2.51	4.794	-8491	65536	0	0.01	2.455	2.509
2.513	4.818	-2992	65536	0	0.01	2.474	2.528
2.537	4.816	-457	65536	0	0	2.46	2.514
0.06	0.098	1.435	65536	0	0	0	0
2.519	4.803	4363.6	65536	0	0.01	2.455	2.509
2.524	4.811	1067.4	65536	0	0.01	2.473	2.527
2.513	4.803	-1838	65536	0	0.01	2.466	2.52
3.012	5.719	-780.4	65536	0	0.01	3.506	3.583
2.986	5.695	-675.1	65536	0	0.01	3.502	3.579
3.011	5.748	746.64	65536	0	0.02	3.533	3.611
3.001	5.726	-525.1	65536	0	0.01	3.519	3.596
3.014	5.746	1124.4	65536	0	0.02	3.53	3.607
3.023	5.739	-12025	65536	0	0.01	3.524	3.601
3	5.731	-1833	65536	0	0.01	3.506	3.583

From File	Mean	Var	StD	Skew	Kurtosis	Min
50ht1814	0	3.563	1.888	0.143	-1.414	-2.718
50ht1816	0	3.579	1.892	0.142	-1.415	-2.729
60hst180	0	4.749	2.179	0.156	-1.413	-3.128
60hst182	0	4.744	2.178	0.156	-1.413	-3.114
60hst184	0	4.75	2.18	0.156	-1.413	-3.123
60hst186	0	4.742	2.178	0.15	-1.415	-3.112
60hst188	0	4.787	2.188	0.153	-1.413	-3.14
60ht1810	0	4.758	2.181	0.152	-1.413	-3.115
60ht1812	0	4.753	2.18	0.151	-1.414	-3.145
60ht1814	0	4.747	2.179	0.155	-1.413	-3.114
60ht1816	0	4.8	2.191	0.152	-1.415	-3.146
60ht1818	0	4.753	2.18	0.153	-1.412	-3.128
70hst180	0	6.092	2.468	0.159	-1.412	-3.528
70hst182	0	6.034	2.456	0.156	-1.412	-3.501
70hst184	0	6.061	2.462	0.162	-1.41	-3.519
70hst186	0	6.069	2.464	0.159	-1.413	-3.51
70hst188	0	6.118	2.474	0.156	-1.413	-3.524
70ht1810	0	6.088	2.467	0.16	-1.412	-3.52
70ht1812	0	6.056	2.461	0.156	-1.413	-3.535
70ht1814	0	6.057	2.461	0.157	-1.413	-3.537
70ht1816	0	6.088	2.467	0.159	-1.412	-3.534
70ht1818	0	6.088	2.467	0.155	-1.413	-3.524
80hst180	0	7.476	2.734	0.159	-1.413	-3.909
80hst182	0	7.46	2.731	0.162	-1.411	-3.899
80hst184	0	7.503	2.739	0.163	-1.411	-3.9
80hst186	0	7.475	2.734	0.161	-1.412	-3.903
80hst188	0	7.53	2.744	0.16	-1.412	-3.91
80ht1810	0	7.52	2.742	0.16	-1.413	-3.902
80ht1814	0	7.49	2.737	0.162	-1.412	-3.894
80ht1816	0	7.526	2.743	0.163	-1.411	-3.919
80ht1818	0	7.517	2.742	0.162	-1.412	-3.905
30hsl716	0.02	1.247	1.117	-2.29	22.867	-18.89

Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
3.018	5.736	720.7	65536	0	0.02	3.525	3.602
3.005	5.734	627.21	65536	0	0.02	3.541	3.618
3.463	6.591	-485.4	65536	0	0.01	4.698	4.801
3.472	6.586	-573.1	65536	0	0.01	4.693	4.796
3.471	6.593	-477	65536	0	0.01	4.699	4.802
3.457	6.569	554.72	65536	0	0.02	4.691	4.794
3.487	6.628	-1340	65536	0	0.02	4.736	4.839
3.469	6.584	1752.3	65536	0	0.02	4.707	4.81
3.485	6.63	719.72	65536	0	0.02	4.702	4.805
3.494	6.608	-526.6	65536	0	0.01	4.696	4.799
3.506	6.652	2051.8	65536	0	0.02	4.748	4.852
3.475	6.603	-36728	65536	0	0.02	4.702	4.805
3.952	7.48	-2908	65536	0	0.02	6.026	6.158
3.926	7.426	762.62	65536	0	0.02	5.969	6.1
3.929	7.448	-573	65536	0	0.02	5.996	6.128
3.917	7.426	-2995	65536	0	0.02	6.004	6.135
3.939	7.463	685.4	65536	0	0.02	6.053	6.185
3.943	7.463	-543.7	65536	0	0.01	6.023	6.155
3.95	7.485	1094.7	65536	0	0.02	5.991	6.123
3.953	7.49	1219	65536	0	0.02	5.992	6.123
3.933	7.468	-1562	65536	0	0.02	6.022	6.154
3.932	7.455	942.52	65536	0	0.02	6.023	6.155
4.381	8.291	659.83	65536	0	0.03	7.395	7.557
4.372	8.271	1939.6	65536	0	0.02	7.38	7.541
4.369	8.269	-2138	65536	0	0.02	7.423	7.585
4.373	8.276	1907	65536	0	0.02	7.395	7.557
4.378	8.288	673.1	65536	0	0.03	7.449	7.612
4.374	8.276	783.99	65536	0	0.02	7.439	7.602
4.384	8.278	5937.6	65536	0	0.02	7.41	7.572
4.389	8.308	-1116	65536	0	0.02	7.445	7.608
4.375	8.281	2410	65536	0	0.02	7.436	7.599
4.857	23.751	73.259	65536	0	0.02	1.233	1.26