



U.S. Department  
of Transportation  
**Federal Railroad  
Administration**

## **ACOUSTIC DETECTION OF RAILCAR ROLLER BEARING DEFECTS: PHASE I, LABORATORY TEST**

---

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

---

DOT/FRA/ORD-00/06.1

June 2003  
Final Report

This document is available to the  
U.S. public through the National  
Technical Information Service  
Springfield, Virginia 22161

**Notice**

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

**Notice**

The United States Government does not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the objective of this report.

<b>1. Report No.</b> DOT/FRA/ORD-00/06.I		<b>2. Government Accession No.</b>		<b>3. Recipient's Catalog No.</b>	
<b>4. Title and Subtitle</b> Acoustic Detection of Railcar Roller Bearing Defects: - Phase I, Laboratory Test				<b>5. Report Date</b> June 2003	
<b>7. Authors</b> Gerald B. Anderson, James E. Cline, Richard A. Graff, *Richard L. Smith (*North-South-East-West)				<b>6. Performing Organization Code</b>	
<b>9. Performing Organization Name and Address</b> Transportation Technology Center, Inc., a subsidiary of Association of American Railroads P.O. Box 11130 Pueblo, CO 81001				<b>8. Performing Organization Report No.</b>	
				<b>10. Work Unit No. (TRAIS)</b>	
				<b>11. Contract or Grant No.</b> DTFR53-93-C-00001, Task Order 111	
<b>12. Sponsoring Agency Name and Address</b> U.S. Department of Transportation Federal Railroad Administration Office of Research and Development, Mail Stop -20 1120 Vermont Ave, NW Washington, DC 20590				<b>13. Type of Report or Period Covered</b> November 1996	
				<b>14. Sponsoring Agency Code</b>	
<b>15. Supplemental Notes</b>					
<b>16. Abstract</b> A series of tests were performed at the Bearing Test Facility at the Transportation Technology Center, Inc. (TTCI) 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 and a second report covers this field test. A third report covers Phase III, the system evaluation test. Phase III tests, also conducted at TTCI, included a series of simulated revenue service tests using a consist of eight railcars that contained wheelsets with both good bearings and specific roller bearing defects. These tests were performed to evaluate improved wayside acoustic bearing detection systems.					
<b>17. Key Words</b> acoustics, roller bearing defects, raceway spalls, water etching, loose bearing components, spun cones				<b>18. Distribution Statement</b> This document is available through National Technical Information Service Springfield, VA 22161	
<b>19. Security Classification (of the report)</b>		<b>20. Security Classification (of this page)</b>		<b>21. No. of pages</b> 85	<b>22. Price</b>

## METRIC CONVERSION FACTORS

### Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
in	inches	*2.50	centimeters	cm
ft	feet	30.00	centimeters	cm
yd	yards	0.90	meters	m
mi	miles	1.60	kilometers	km

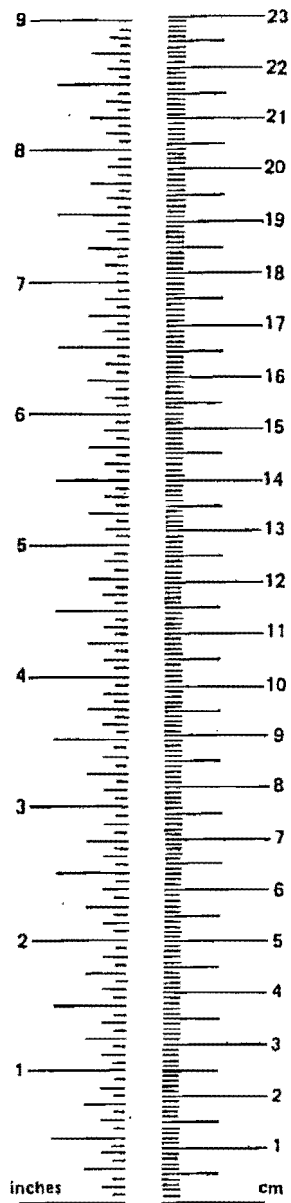
<b>AREA</b>				
in <sup>2</sup>	square inches	6.50	square centimeters	cm <sup>2</sup>
ft <sup>2</sup>	square feet	0.09	square meters	m <sup>2</sup>
yd <sup>2</sup>	square yards	0.80	square meters	m <sup>2</sup>
mi <sup>2</sup>	square miles	2.60	square kilometers	km <sup>2</sup>
	acres	0.40	hectares	ha

<b>MASS (weight)</b>				
oz	ounces	28.00	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.90	tonnes	t

<b>VOLUME</b>				
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 <sup>3</sup>	cubic feet	0.03	cubic meters	m <sup>3</sup>
yd <sup>3</sup>	cubic yards	0.76	cubic meters	m <sup>3</sup>

<b>TEMPERATURE (exact)</b>				
'F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	'C

\* 1 in. = 2.54 cm (exactly)



### Approximate Conversions from Metric Measures

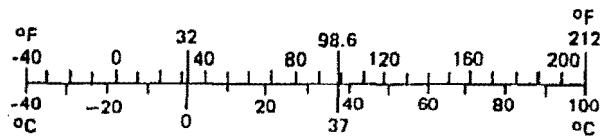
Symbol	When You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
mm	millimeters	0.04	inches	in
cm	centimeters	0.40	inches	in
m	meters	3.30	feet	ft
m	meters	1.10	yards	yd
km	kilometers	0.60	miles	mi

<b>AREA</b>				
cm <sup>2</sup>	square centim.	0.16	square inches	in <sup>2</sup>
m <sup>2</sup>	square meters	1.20	square yards	yd <sup>2</sup>
km <sup>2</sup>	square kilom.	0.40	square miles	mi <sup>2</sup>
ha	hectares (10,000 m <sup>2</sup> )	2.50	acres	

<b>MASS (weight)</b>				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	

<b>VOLUME</b>				
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 <sup>3</sup>	cubic meters	36.00	cubic feet	ft <sup>3</sup>
m <sup>3</sup>	cubic meters	1.30	cubic yards	yd <sup>3</sup>

<b>TEMPERATURE (exact)</b>				
'C	Celsius* temperature	9/5 (then add 32)	Fahrenheit temperature	'F



## **Acknowledgements**

The authors 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 TTCI 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 Railroad Administration, Contract Officer Technical Representative and Monique Stewart and Donald Gray, Task Order Technical Monitors.

(blank page)

## EXECUTIVE SUMMARY

A series of laboratory tests, sponsored by the Federal Railroad Administration (FRA), were conducted by Transportation Technology Center, Inc. (TTCI), a subsidiary of 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 database 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 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.

Phase III tests, also conducted at TTCI, included a series of simulated revenue service tests using a consist of eight railcars that contained wheelsets with both good bearings and specific roller bearing defects. These tests were completed to evaluate improved wayside acoustic bearing detection systems. A separate report will cover these tests.

## Table of Contents

<b>1.0</b>	<b>INTRODUCTION</b> .....	<b>1</b>
<b>2.0</b>	<b>TEST SPECIMENS</b> .....	<b>2</b>
<b>3.0</b>	<b>INSTRUMENTATION and DATA COLLECTION</b> .....	<b>3</b>
	3.1 Instrumentation .....	3
	3.2 Data Collection.....	6
<b>4.0</b>	<b>TEST PROCEDURE</b> .....	<b>6</b>
	4.1 General Procedures .....	6
	4.2 Spun Cone Procedures.....	7
<b>5.0</b>	<b>TEST RESULTS</b> .....	<b>9</b>
<b>6.0</b>	<b>DISCUSSION</b> .....	<b>11</b>
<b>7.0</b>	<b>CONCLUSIONS</b> .....	<b>12</b>
<b>8.0</b>	<b>RECOMMENDATIONS</b> .....	<b>13</b>
	Appendix A: Program Participants .....	A-1
	Appendix B: Bearing Photographs.....	B-1
	Appendix C: Graphs and Statistics .....	C-1



**List of Figures**

Figure 1. Bearing Test Machine ..... 4  
Figure 2. Instrumentation Clustered around the Bearing ..... 5  
Figure 3. Typical Test Data Plot..... 10  
Figure 4. Example of Data Checking ..... 12

**List of Tables**

Table 1. Test Bearing Information..... 2  
Table 2. Laboratory Test Instrumentation ..... 3  
Table 3. Test Order ..... 7  
Table 4. Spun Cone Test Order..... 8

## 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 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. 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

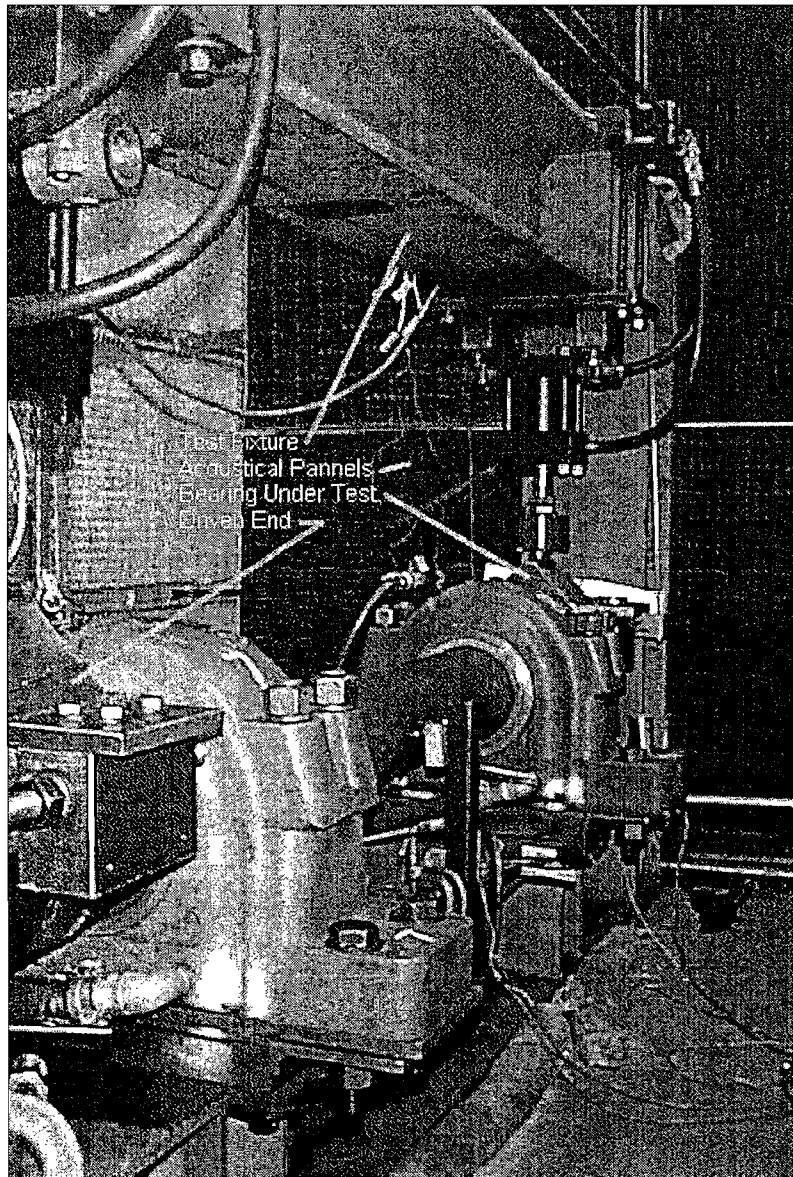
Table 2 lists the instrumentation used to collect data in the laboratory test.

**Table 2. Laboratory Test Instrumentation**

<b>Measurement Method</b>	<b>Measured Parameter</b>	<b>Type</b>	<b>Quantity</b>
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

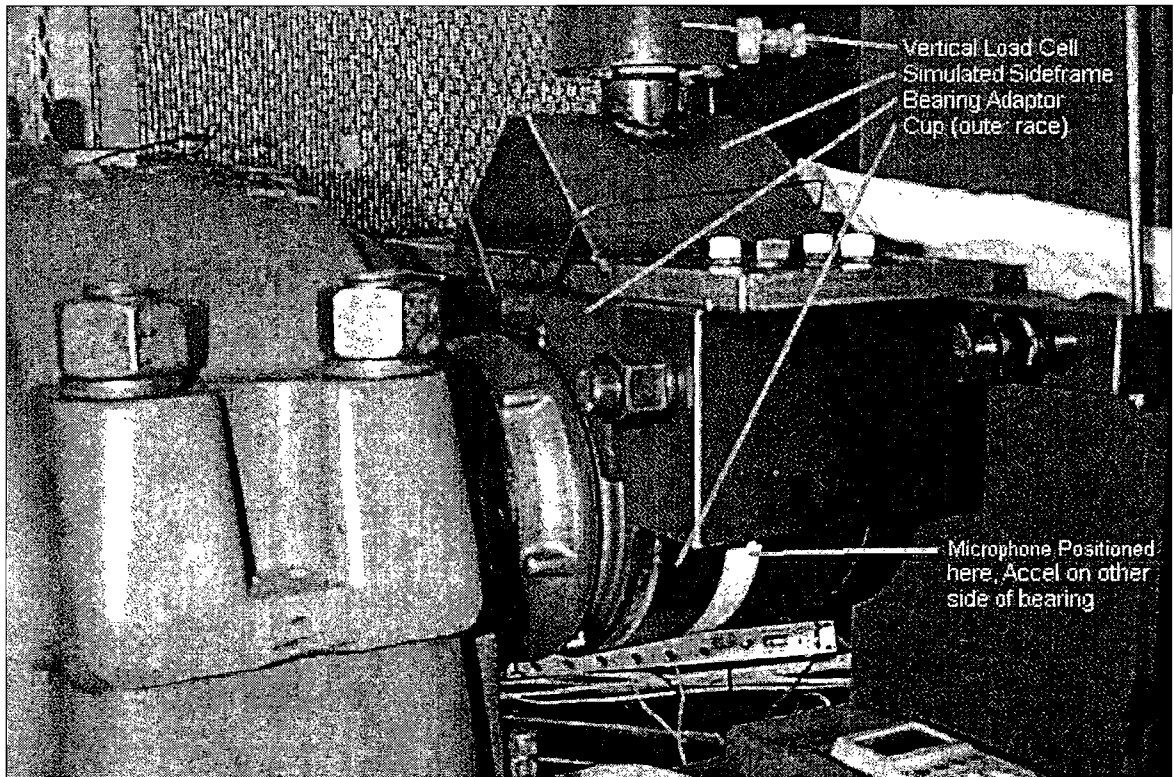
To better understand the test setup and the instrumentation used, the bearing test machine is shown in Figure 1. The bearing test machine consists of a simple load frame into which a full-scale freight car axle with bearings is placed. This machine allows researchers to vary and control the test parameters 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 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 seals, 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 CR21X1 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. Since 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
25										
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 database 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.

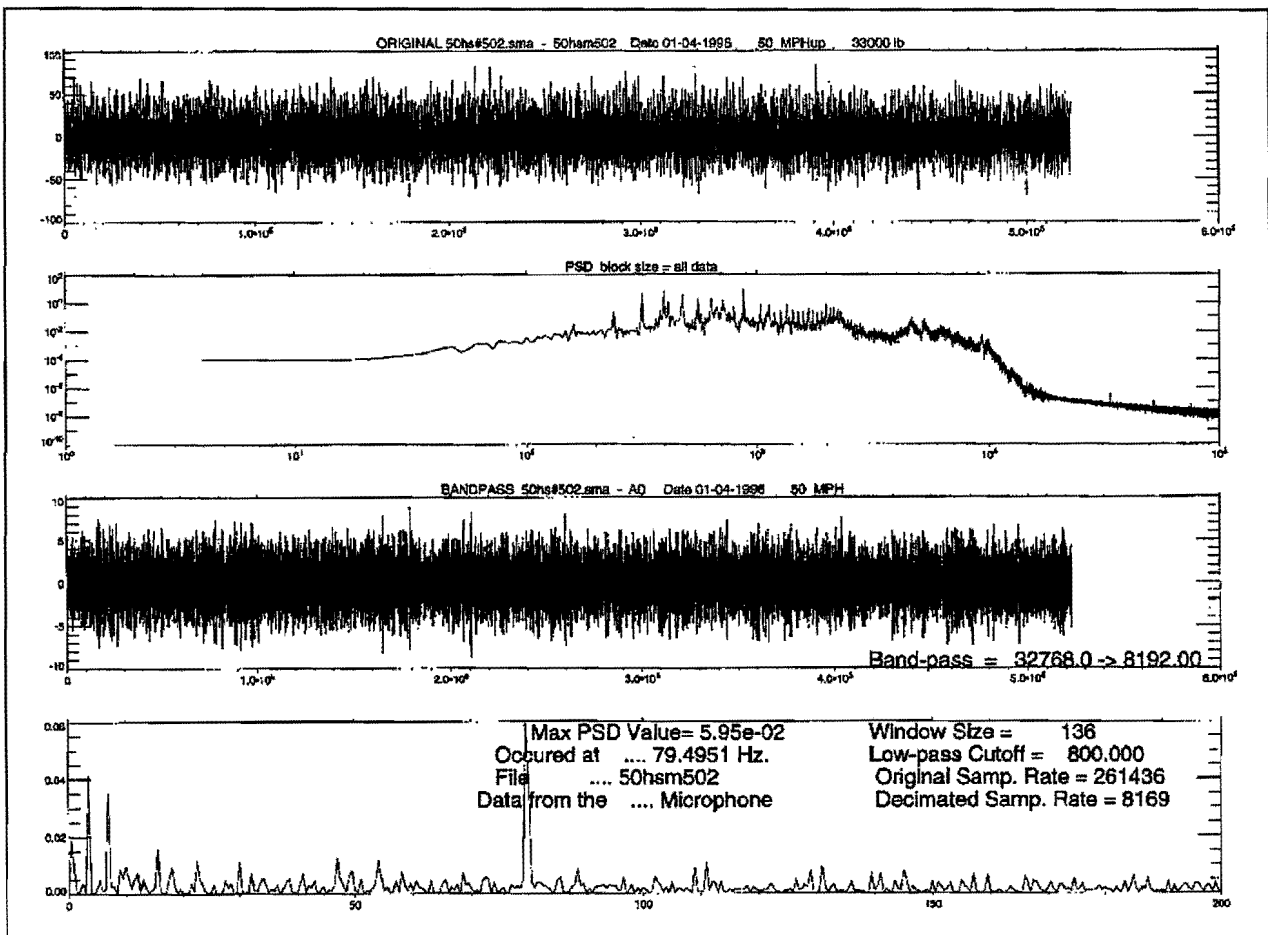


Figure 3. Typical Test Data Plot

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 of 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 is only 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. Since 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 TTCI to verify defective bearing signatures are proprietary to TTCI, and are not, therefore, shown here.

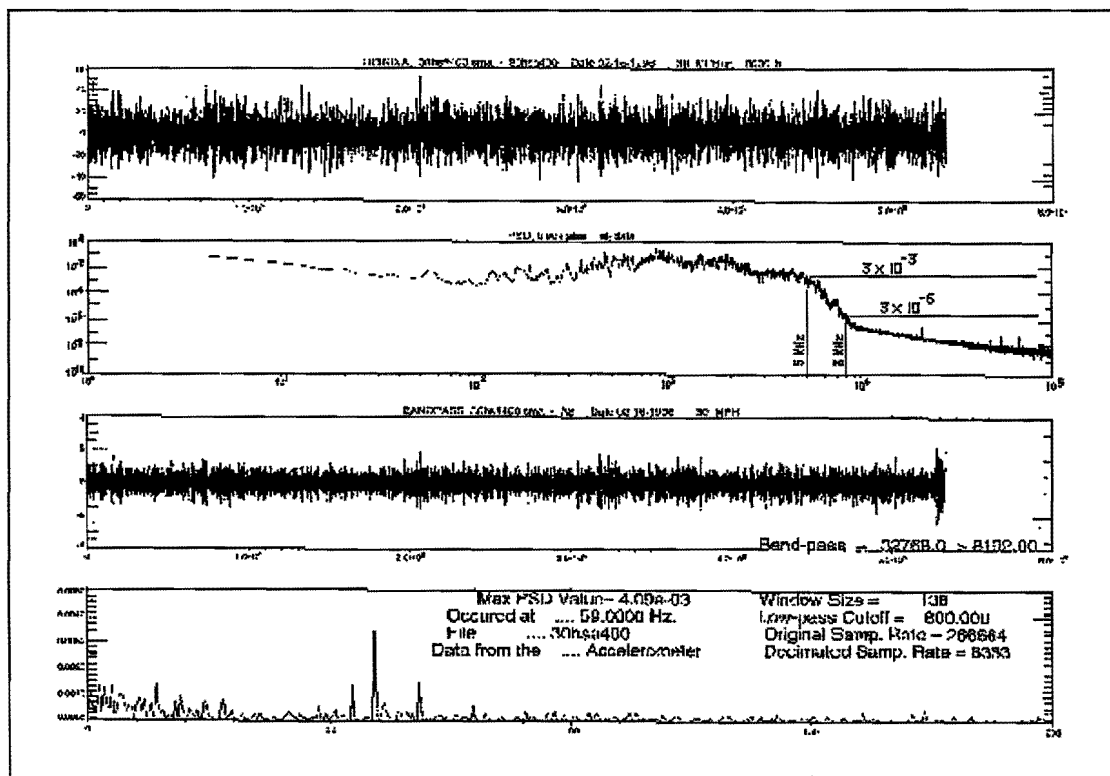


Figure 4. Example of Data Checking

## 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 TTCI review and checking of the data verified the integrity of the database as it was produced on the compact disks.
- The bearing defect characteristic database 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 was completed, data between the two test series were 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.

**APPENDIX A**  
**List of Program Participants**

<b>No.</b>	<b>Organization</b>	<b>Name</b>	<b>Address</b>
1.	Alliant Tech. Systems	Ed Page	1911 Fort Meyer Dr. Ste 601, Arlington, VA
2.	AWI/AHI	Robert Allen	10628 Dutchtown Rd., Knoxville, TN
3.	AMP, Inc.	Frank Mastrog	100 Amp Dr., Harrisburg, PA
4.	Argonne Nat'l. Lab	John Kramer	9700 S. Cass Ave., Argonne, IL
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
8.	Brenco, Inc.	Kurt Fisher	PO Box 389, Petersburg, VA
9.	Brenco, Inc.	Christopher Freer	PO Box 389, Petersburg, VA
10.	Boulder Vibration	Duncan Carter	PO Box 3395, Boulder, CO
11.	CAE Vanguard	Walter Anderson	3500 W 80th St., Minneapolis, MN
12.	CAE Vanguard	Bill Reid	3500 W 80th St., Minneapolis, MN
13.	Carnegie Mellon	Willaim Kaufman	PO Box 2950 700 Tech. Dr., Pittsburgh, PA
14.	CASI	Craig Harston	PO Box 251, Signal Mountain, TN
15.	Colorado State U.	Mick Peterson	Fort Collins, CO
16.	Commonwealth Tech.	Joel Billingsley	5875 Barclay Dr., Alexandria, VA
17.	Concurrent Tech.	Robert Czarnek	1450 Scalp Ave., Johnstown, PA
18.	Conrail	Paul Steets	2001 Market St., Philadelphia, PA
19.	Conrail	Mike Lovette	2001 Market St., Philadelphia, PA
20.	Elexor Associates	Tim Slifkin	PO Box 246, Morris Plains, NJ
21.	Epoch Engineering	Mike Holland	2001 Jefferson Davis Hwy., Arlington, VA
22.	Harmon Industries	Misa Janda	415 Oser Ave., Hauppauge, NY
23.	Harmon Industries	William Schrack	415 Oser Ave., Hauppauge, NY
24.	Harmon Industries	Mark Orlassino	415 Oser Ave., Hauppauge, NY
25.	Int'l Electronic Mach.	Zahid Mian	60 4th Ave., Albany, NY
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
28.	Nat'l. Res. Council	Jeff Xi	3250 East Mall, Vancouver, BC



29.	NY Inst. Of Eng.	Jun Ma	116 Harry Schure Hall, Old Westbury, NY
30.	Norfolk Southern	Lincoln Keegan	407 S. Henry, Alexandria, VA
31.	Northrop/Grumman	Alberd Taylor	1111 Stewart Ave., Bethpage, NY
32.	North South East West	Richard Smith	4 N. Nottingham Way, Clifton Park, NY
33.	NRC	G. K. Krishnappa	3250 East Mall, Vancouver, BC
34.	Penn State ARL	Karl Reichard	North Atherton PO Box 30, State College, PA
35.	Peerless Instrument	Thomas O'Brien	150 Executive Dr., Edgewood, NY
36.	Rail Bearing Svcs.	Rick Hickman	12224 Oakmont Circle, Knoxville, TN
37.	Rensselaer Poly. Inst.	James Li	Dept. Mech. Eng., Aero & Mechs., Troy, NY
38.	SAIC	John Danyluk	1616 Broadway St., Kansas City, MO
39.	SAIC	Paul Peterson	1616 Broadway St., Kansas City, MO
40.	SAIC	John Donelson	1710 Goodridge Dr., McLean, VA
41.	Salient Systems, Inc.	Harold Harrison	4330 Tuller Rd., Dublin, OH
42.	Salient Systems, Inc.	Tom McCanney	4330 Tuller Rd., Dublin, OH
43.	SASIB Railway GRS	Joseph Denny	150 Sawgrass Dr., Rochester, NY
44.	SASIB Railway GRS	Burt Vane	150 Sawgrass Dr., Rochester, NY
45.	Sandia Nat'l Labs	William Sullivan	Dept. 6111 MS 1033, Albuquerque, NM
46.	Sandia Nat'l Labs	Patrick Barney	Structure Dynamics Albuquerque, NM
47.	Signition, Inc.	George Zweig	PO Box 1020, Los Alamos, NM
48.	SKF Cond. Monitoring	Robert Jones	52 Shadow Lake Trail, Newnan, GA
49.	Texas A&M Univ.	Howard Choe	Dept. of Elec. Eng., College Station, TX
50.	The Timken Company	Rosendo Fuquen	1835 Dueber Ave. SW, Canton, OH
51.	The Timken Company	Sam Williams	1025 Cleveland Ave., Columbus, OH
52.	TTC/AAR	Gerald Anderson	PO Box 11130, Pueblo, CO
53.	Univ. Of North Texas	Albert Haddad	1554 N. Valley Pkwy., Lewisville, TX
54.	VAST, Inc.	Anton Azoutseu	22 Rozenshteina St., St. Petersburg, Russia
55.	Wyle Labs	Wade Dorland	PO Box 077777, Huntsville, AL



**APPENDIX B  
BEARING PHOTOGRAPHS**



Figure B1

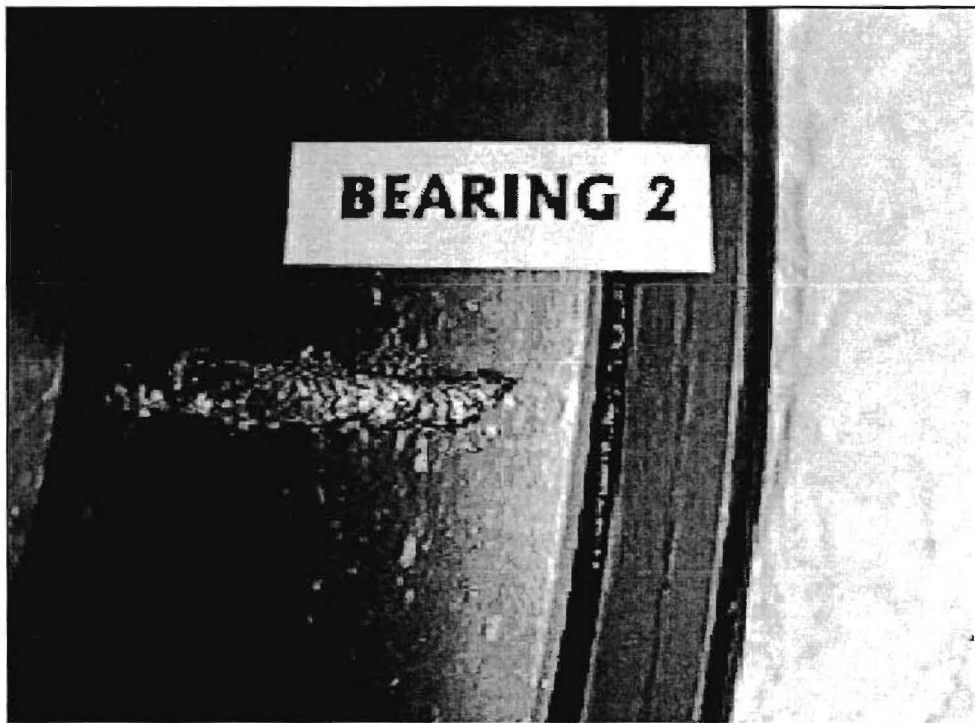


Figure B2



Figure B3

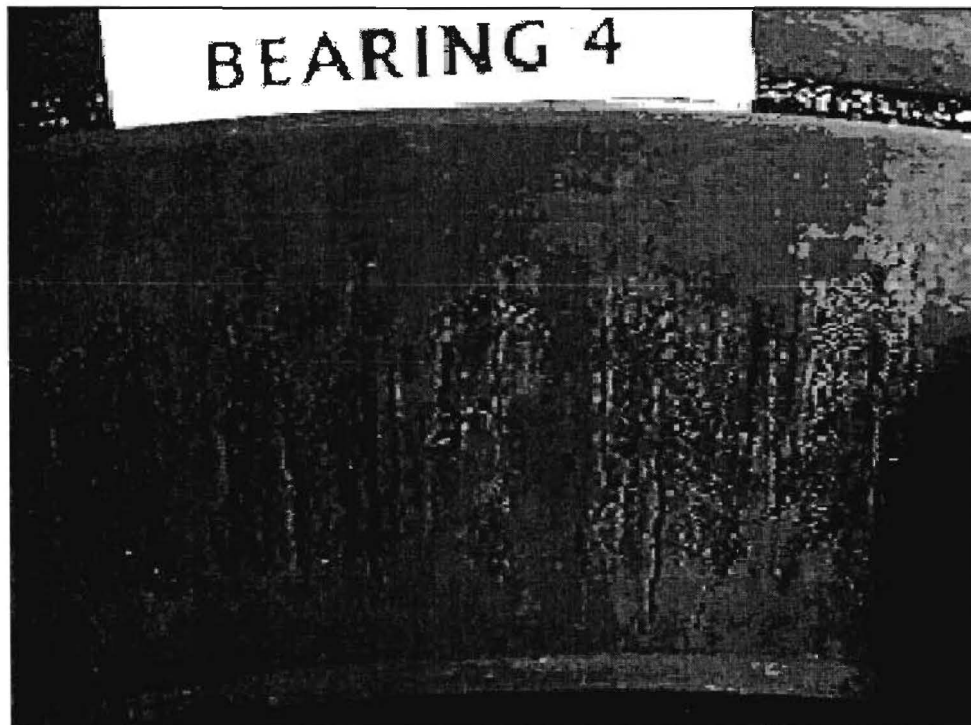


Figure B4

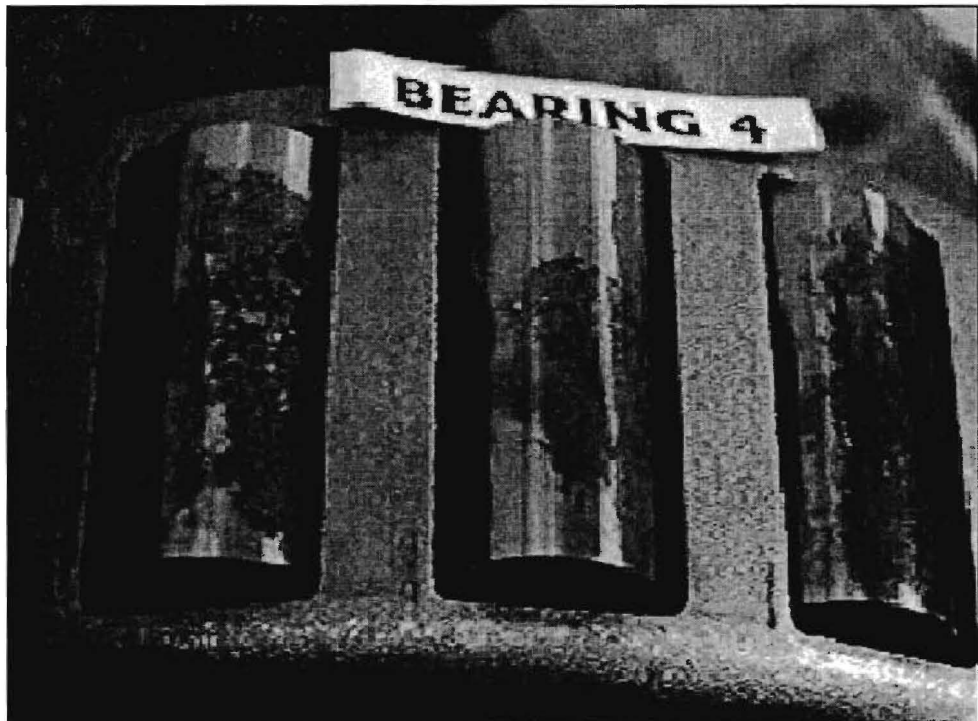


Figure B5

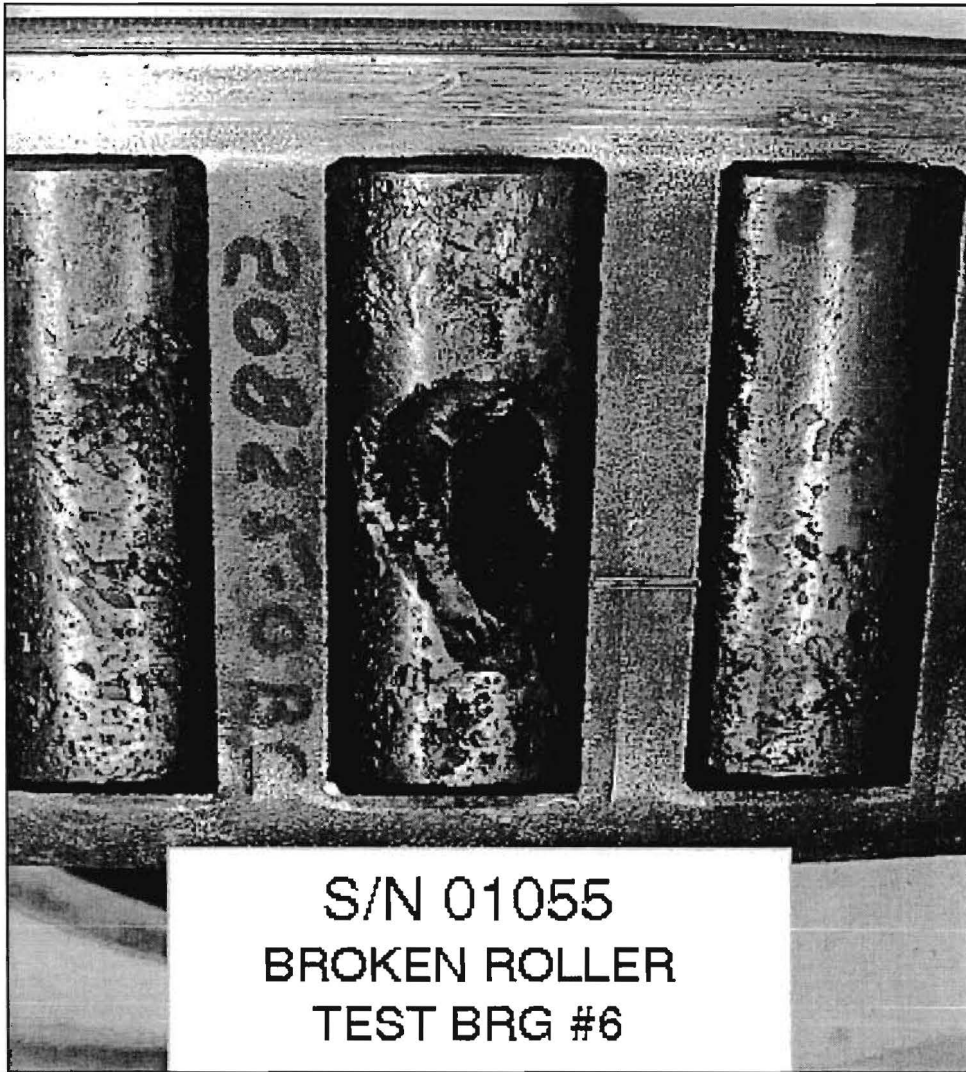


Figure B6

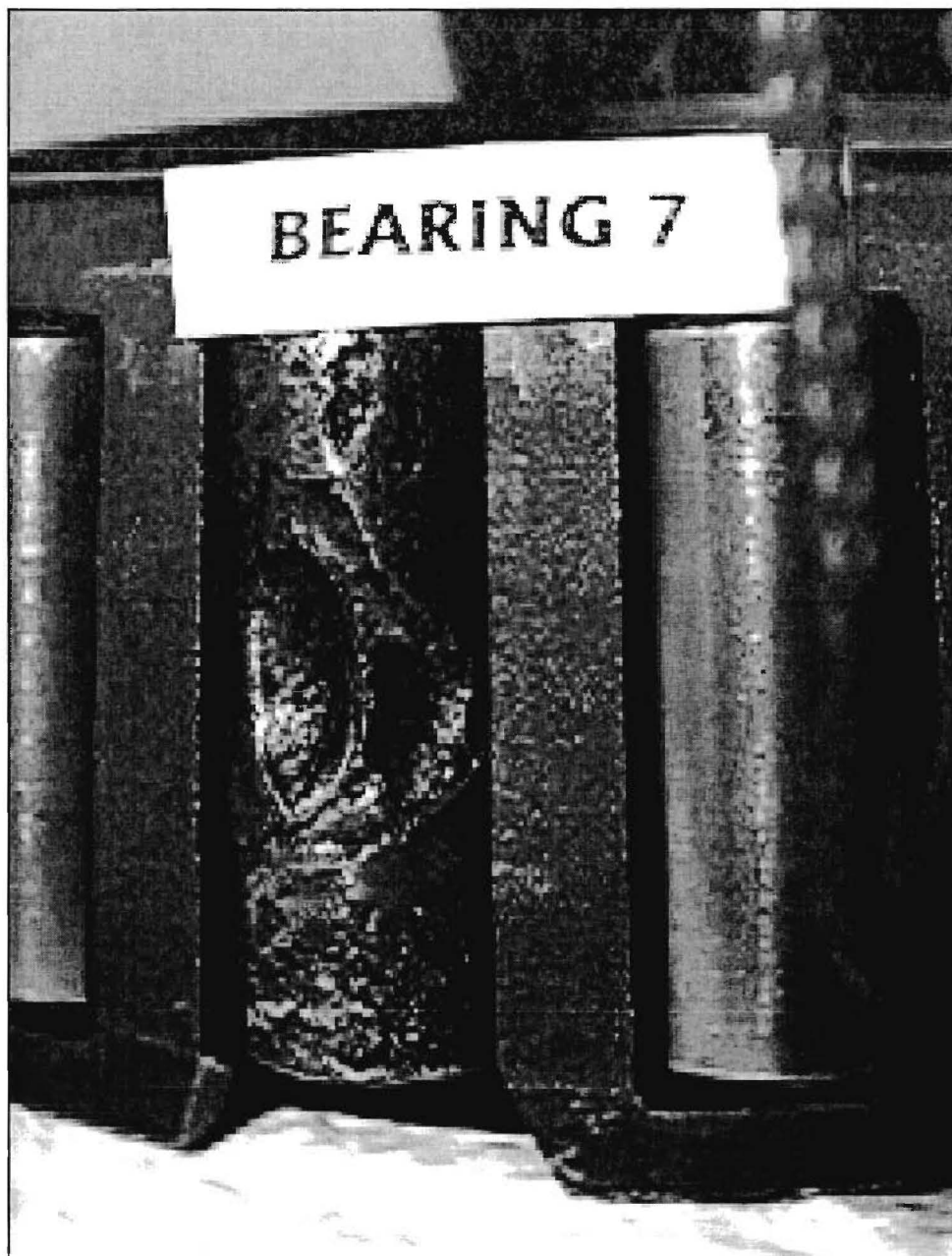


Figure B7





Figure B8



Figure B9



Figure B10



Figure B11

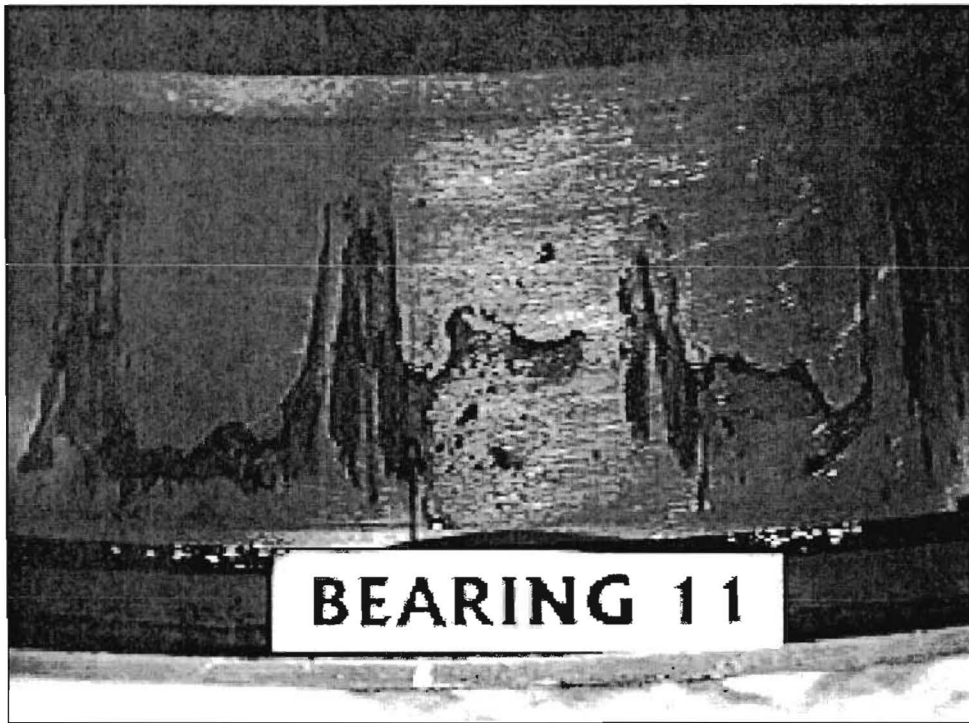


Figure B12

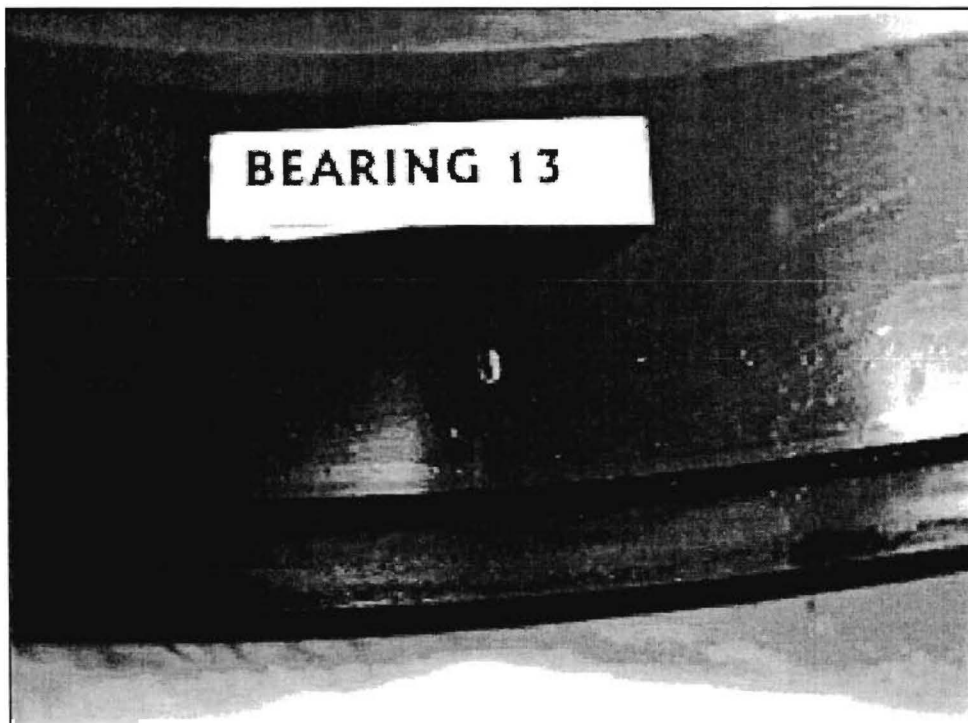


Figure B13

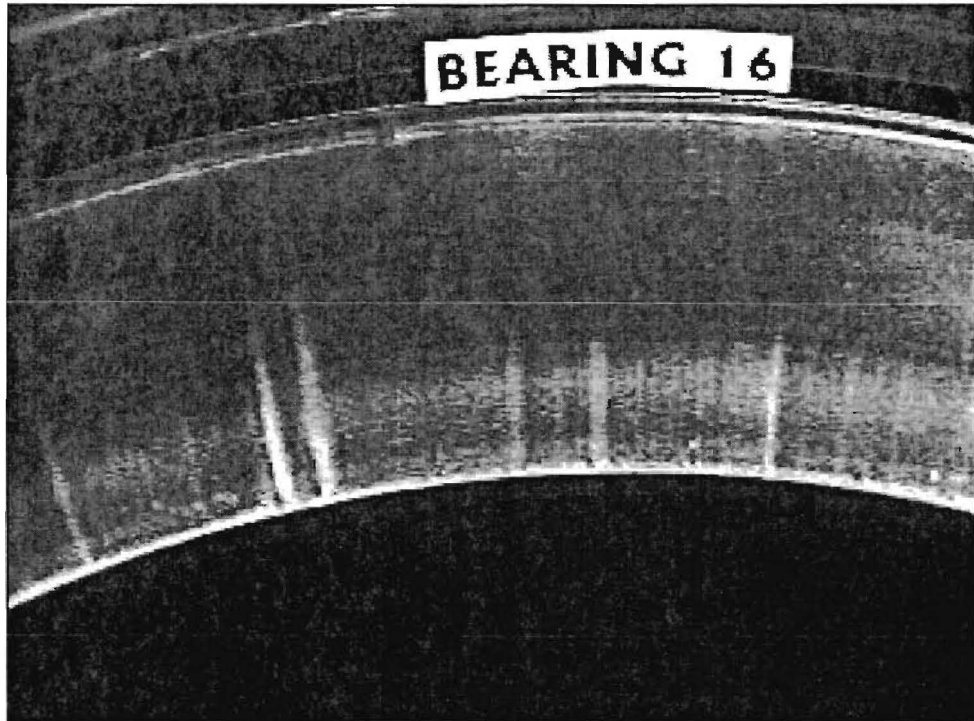


Figure B14

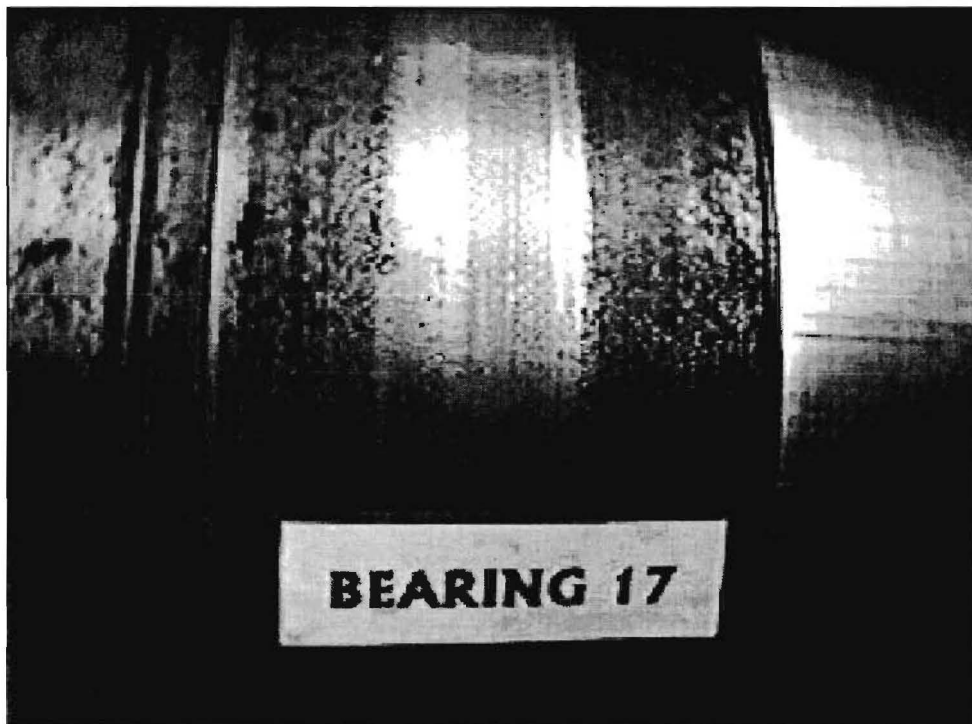


Figure B15



Figure B16

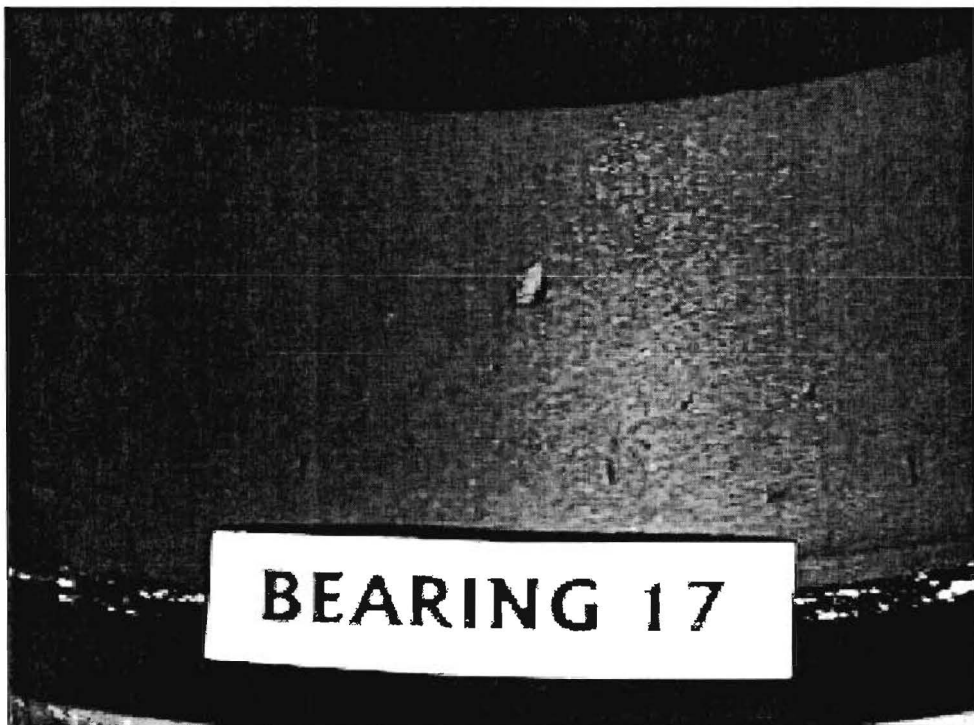


Figure B17

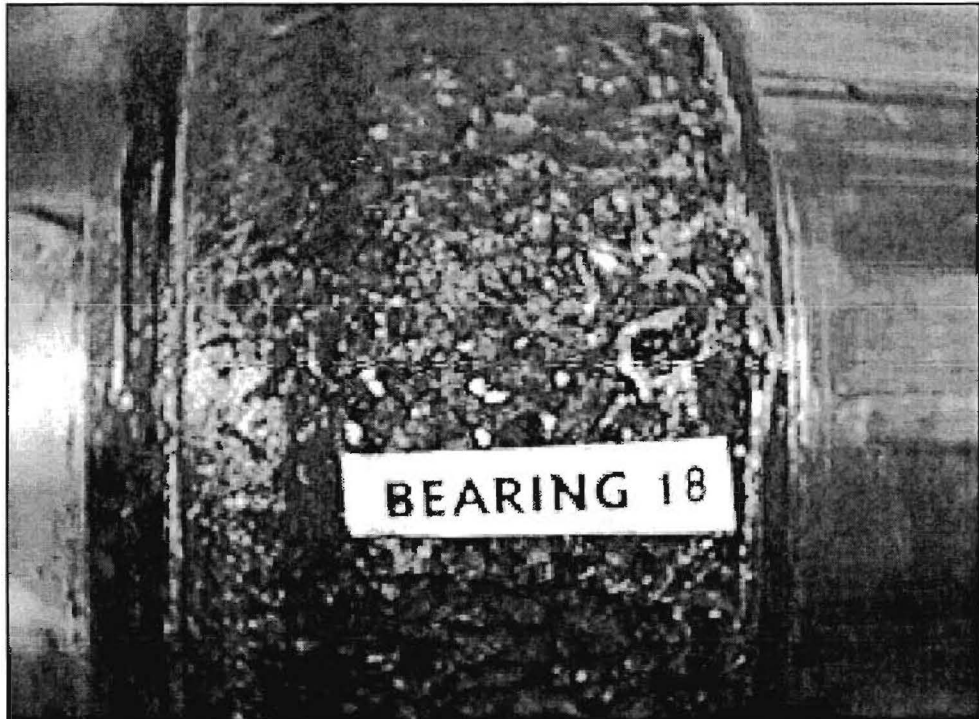


Figure B18

## 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  $\text{Min} = -2$  and  $\text{Max} = +3$  then  $\text{Range} = 5$ ).

**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	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
30hsa82	0	0.275	0.524	0	0.983	-2.869	2.372	5.241	132.468	65536	0	0.01	0.272	0.278
40hsa82	0.01	0.655	0.809	0.029	0.572	-3.581	3.292	6.873	134.673	65536	0	0.012	0.648	0.662
50hsa82	0	1.337	1.156	-0.03	0.194	-4.935	5.295	10.23	-151.45	65536	-0.02	0	1.323	1.352
60hsa80	0	2.109	1.452	-0.05	1.083	-6.439	6.255	12.693	-1505.73	65536	-0.01	0.01	2.086	2.132
60hsa82	0.01	1.889	1.375	-0.04	0.259	-5.131	6.678	11.809	279.55	65536	0	0.015	1.869	1.91
70hsa80	0	2.74	1.655	-0.02	0.376	-7.148	7.04	14.188	-510.918	65536	-0.02	0.01	2.711	2.77
70hsa82	0	2.972	1.724	0	0.348	-6.844	7.319	14.163	696.64	65536	0	0.02	2.94	3.005
80hsa80	0	2.754	1.66	-0.1	0.919	-7.163	7.159	14.322	-689	65536	0	0.01	2.725	2.784
80hsa82	0.01	4.412	2.1	0	0.28	-7.991	8.804	16.795	201.52	65536	0	0.03	4.364	4.46
30hsc82	0.08	8.819	2.97	0.16	0.539	-12.08	13.11	25.189	35.652	65536	0.06	0.106	8.724	8.915
40hsc82	1.38	16.149	4.019	0.05	0.292	-15.57	19.12	34.689	2.913	65536	1.349	1.41	15.976	16.326
50hsc80	0.646	51.642	7.186	-0.1	0.612	-30.78	33.87	64.654	11.121	65536	0.591	0.701	51.087	52.206
50hsc82	-1.65	30.957	5.564	-0.1	0.661	-31.39	25.12	56.511	-3.378	65536	-1.69	-1.6	30.625	31.295
60hsc80	1.075	76.43	8.742	0.07	0.317	-34.93	37.7	72.634	8.134	65536	1.008	1.142	75.609	77.264
60hsc82	0.671	41.818	6.467	0.04	0.241	-26.75	29.71	56.457	9.636	65536	0.622	0.721	41.369	42.274
70hsc80	0.717	84.718	9.204	0.09	0.14	-34.06	38.41	72.471	12.834	65536	0.647	0.788	83.808	85.643
70hsc82	0.552	56.502	7.517	0	0.077	-27.27	29.62	56.891	13.612	65536	0.495	0.61	55.895	57.119
80hsc80	1.333	91.744	9.578	0.02	0.049	-36.19	36.93	73.123	7.187	65536	1.259	1.406	90.759	92.746
80hsc82	0.476	83.147	9.118	0.02	0.179	-35.62	39.89	75.511	19.17	65536	0.406	0.545	82.254	84.055
30hsh82	0	9.396	3.065	-0.1	2.123	-21.25	19.11	40.358	593.17	65536	0	0.03	9.295	9.499
40hsh82	0	20.54	4.532	-0.1	0.799	-26.28	20.82	47.093	-915.5	65536	0	0.03	20.32	20.764
50hsh80	0	38.733	6.224	0.05	1.244	-34.28	40.8	75.078	-846.6	65536	-0.1	0.04	38.317	39.156
50hsh82	0	40.767	6.385	-0.1	1.132	-44.93	33.23	78.158	116016	65536	0	0.05	40.329	41.212
60hsh80	0	67.595	8.222	0	1.029	-41.07	40.75	81.813	1344	65536	-0.1	0.07	66.869	68.333
60hsh82	0	65.366	8.085	-0.1	0.53	-38.41	36.09	74.504	-2366	65536	-0.1	0.06	64.664	66.079
70hsh80	0	72.646	8.523	-0.1	0.722	-45.98	45.76	91.733	3114.1	65536	-0.1	0.07	71.866	73.439
70hsh82	0	95.03	9.748	0	0.677	-45.44	46.76	92.203	8045.8	65536	-0.1	0.08	94.01	96.068
80hsh80	0	94.604	9.726	0	0.592	-46	46.51	92.516	2086.6	65536	-0.1	0.08	93.588	95.637
80hsh82	0	147.91	12.162	0	0.505	-63.7	48.55	112.25	9476.2	65536	-0.1	0.09	146.32	149.52
30hsm80	0	18.232	4.27	0.07	1.352	-19.18	20.08	39.26	-4258	65536	0	0.03	18.037	18.431
30hsm82	0	8.54	2.922	0.04	0.046	-11.9	11.37	23.269	-439.6	65536	0	0.02	8.448	8.633
40hsm82	0	11.962	3.459	0	0.269	-16.2	14.35	30.548	-322.2	65536	0	0.02	11.834	12.093



From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
50hsm82	0	19.528	4.419	0.02	0.455	-20.66	19.27	39.922	720.87	65536	0	0.04	19.318	19.741
60hsm80	0	48.13	6.938	0	0.3	-33.02	25.27	58.283	-12629	65536	-0.1	0.05	47.613	48.655
60hsm82	0	25.024	5.002	0.05	0.25	-20.33	20.48	40.804	3758.2	65536	0	0.04	24.756	25.298
70hsm80	0.02	51.721	7.192	-0.12	0.122	-32.69	24.94	57.622	485.49	65536	0	0.07	51.166	52.286
70hsm82	0	30.822	5.552	0.08	0.045	-18.67	25.94	44.609	-598.3	65536	-0.1	0.03	30.491	31.158
80hsm80	0	57.696	7.596	0	-0.01	-27.28	28.58	55.857	-2867	65536	-0.1	0.06	57.077	58.326
80hsm82	0	43.832	6.621	0	0.082	-26.17	26.65	52.825	788.27	65536	0	0.06	43.362	44.311
30hst82	0	1.786	1.336	0.133	-1.413	-1.949	2.134	4.083	-390.2	65536	0	0	1.766	1.805
40hst82	0	2.905	1.704	0.144	-1.414	-2.465	2.707	5.172	-372.4	65536	0	0	2.874	2.937
50hst82	0	4.151	2.037	0.148	-1.415	-2.91	3.238	6.149	1642.4	65536	0	0.02	4.107	4.196
60hst80	0	5.493	2.344	0.154	-1.413	-3.347	3.74	7.087	755.12	65536	0	0.02	5.434	5.553
60hst82	0	5.509	2.347	0.155	-1.413	-3.353	3.729	7.082	1722.5	65536	0	0.02	5.449	5.569
70hst80	0	6.998	2.645	0.158	-1.413	-3.764	4.207	7.971	931.86	65536	0	0.02	6.923	7.075
70hst82	0	6.987	2.643	0.159	-1.412	-3.765	4.218	7.983	8364.4	65536	0	0.02	6.912	7.063
80hst80	0	8.649	2.941	0.164	-1.411	-4.181	4.693	8.874	2995.1	65536	0	0.02	8.556	8.744
80hst82	0	8.593	2.931	0.164	-1.412	-4.163	4.687	8.85	37374	65536	0	0.02	8.501	8.687
30hsa90	0	3.703	1.924	0.02	1.183	-11.25	9.491	20.745	234.98	65536	0	0.02	3.663	3.744
30hsa92	0	6.07	2.464	0.08	0.643	-9.805	11.47	21.27	-11129	65536	0	0.02	6.004	6.136
40hsa90	0.01	10.659	3.265	0.08	0.403	-12.77	14.65	27.416	327.83	65536	0	0.04	10.545	10.776
40hsa92	0	14.126	3.759	0.08	0.622	-13.76	17.3	31.063	1352.8	65536	0	0.03	13.975	14.281
50hsa90	0.02	19.873	4.458	0.14	0.556	-21.12	22.47	43.594	259.55	65536	0	0.05	19.66	20.09
50hsa92	0	25.185	5.018	0	0.221	-20.47	21.01	41.483	-123.4	65536	-0.1	0	24.914	25.46
60hsa90	0	24.957	4.996	0.105	0.517	-24.41	24.87	49.28	-230.9	65536	-0.1	0.02	24.689	25.229
60hsa92	0	38.469	6.202	0.06	0.205	-24.3	23.29	47.59	-979.2	65536	-0.1	0.04	38.056	38.889
70hsa90	-0.6	46.954	6.852	0.05	0.512	-30.63	29.7	60.336	-11.49	65536	-0.65	-0.54	46.45	47.467
70hsa92	0	53.395	7.307	0.09	0.178	-29.41	30.39	59.803	-2757	65536	-0.1	0.05	52.822	53.978
80hsa90	-0.27	43.504	6.596	0.1	0.249	-24.19	31.93	56.124	-24.37	65536	-0.32	-0.22	43.037	43.979
80hsa92	0.02	59.396	7.707	0.1	0.109	-30.83	32.13	62.962	435.1	65536	0	0.08	58.758	60.045
30hsc90	0.216	125.59	11.207	0	1.302	-57.98	70.9	128.87	51.926	65536	0.13	0.302	124.24	126.96
30hsc92	1.636	165.97	12.883	0.05	0.407	-48.21	63.56	111.77	7.873	65536	1.538	1.735	164.19	167.78
40hsc90	1.404	306.13	17.497	0.03	0.429	-82.5	77.16	159.65	12.466	65536	1.27	1.537	302.85	309.48
40hsc92	-1.39	476.63	21.832	0.03	0.194	-110.1	96.4	206.45	-15.71	65536	-1.56	-1.22	471.52	481.84

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
50hsc90	0.817	70.598	8.402	0.02	0.23	-39.26	33.87	73.134	10.286	65536	0.753	0.881	69.839	71.368
50hsc92	0.04	89.626	9.467	0.05	0.099	-33.23	35.77	68.992	270.32	65536	0	0.108	88.663	90.604
60hsc90	-0.31	74.456	8.629	0.01	0.349	-40.01	42.35	82.364	-28.18	65536	-0.37	-0.24	73.657	75.269
60hsc92	1.032	142.46	11.936	0.02	0.013	-47.75	46.74	94.494	11.561	65536	0.941	1.124	140.93	144.01
70hsc90	0.216	151.89	12.324	0	0.311	-63.9	60.95	124.85	56.926	65536	0.122	0.311	150.26	153.55
70hsc92	0.697	192.2	13.864	0	0.144	-48.38	56.88	105.26	19.878	65536	0.591	0.804	190.14	194.3
80hsc90	0.171	139.72	11.82	0.03	0.27	-46.06	52.46	98.518	69.1	65536	0.08	0.262	138.22	141.25
80hsc92	-0.8	211.98	14.56	0.05	0	-49.34	56.69	106.03	-18.12	65536	-0.92	-0.69	209.71	214.3
30hsh90	0	185.23	13.61	-0.1	3.816	-104.3	106	210.3	-2953	65536	-0.11	0.1	183.25	187.26
30hsh92	0	264.55	16.265	0	1.246	-91.47	86.73	178.19	-1483	65536	-0.14	0.114	261.71	267.44
40hsh90	0	540.93	23.258	0	0.734	-105.2	108.6	213.8	0	65536	-0.18	0.178	535.12	546.84
40hsh92	0	694.8	26.359	0.05	0.73	-104.4	109.4	213.8	-2478	65536	-0.21	0.191	687.33	702.38
50hsh90	0	141.29	11.887	0	0.593	-50.83	64.73	115.56	2884.4	65536	-0.1	0.1	139.77	142.83
50hsh92	0	148.57	12.189	0	0.582	-53.67	65.6	119.27	6836.6	65536	-0.1	0.1	146.97	150.19
60hsh90	0	148.37	12.181	0	0.463	-57.03	65.1	122.12	-1824	65536	-0.1	0.09	146.77	149.99
60hsh92	0	202.13	14.217	0.02	0.291	-56.09	67.35	123.44	2193.1	65536	-0.1	0.115	199.96	204.34
70hsh90	0	316.48	17.79	0	0.431	-75.56	79.62	155.18	-5853	65536	-0.14	0.133	313.08	319.93
70hsh92	0	328.04	18.112	0.02	0.371	-80.4	76.56	156.95	5480.4	65536	-0.14	0.142	324.52	331.62
80hsh90	0	286.38	16.923	0.05	0.515	-75.07	96.27	171.34	-5866	65536	-0.13	0.127	283.3	289.5
80hsh92	0	336	18.33	0	0.113	-76.93	67.52	144.45	-40341	65536	-0.14	0.14	332.4	339.67
30hsm90	0	65.158	8.072	0	1.268	-38.09	48.32	86.405	-3593	65536	-0.1	0.06	64.458	65.87
30hsm92	0.01	84.94	9.216	0	0.266	-41.79	41.7	83.483	836.7	65536	-0.1	0.08	84.028	85.867
40hsm90	0	152.08	12.332	0	0.339	-61.95	48.99	110.94	-2746	65536	-0.1	0.09	150.45	153.74
40hsm92	0	218.16	14.77	0.06	0.268	-62.62	66.18	128.81	10621	65536	-0.11	0.114	215.82	220.54
50hsm90	0	36.681	6.056	0.02	0.256	-23.21	28.05	51.261	1197.9	65536	0	0.05	36.287	37.081
50hsm92	0	51.674	7.188	0	0.141	-28.19	25.65	53.842	-2820	65536	-0.1	0.05	51.119	52.238
60hsm90	0	33.751	5.81	0	0.257	-23.09	25.47	48.56	-1371	65536	0	0.04	33.388	34.119
60hsm92	0	92.157	9.6	0.01	0	-35.88	33.09	68.968	1147.3	65536	-0.1	0.08	91.167	93.163
70hsm90	0	78.653	8.869	0	0.211	-40.31	40.54	80.853	1044.2	65536	-0.1	0.08	77.809	79.512
70hsm92	0.02	121.5	11.023	0.03	0.077	-44.7	40.96	85.655	660.92	65536	-0.1	0.101	120.2	122.83
80hsm90	0	73.79	8.59	0	0.19	-35.45	38.5	73.95	-1433	65536	-0.1	0.06	72.997	74.595
80hsm92	0	133.44	11.551	0	0.129	-45.24	53.98	99.22	41960	65536	-0.1	0.09	132	134.89

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
30hst90	0	1.809	1.345	0.134	-1.411	-1.968	2.151	4.12	-558.1	65536	0	0	1.789	1.829
30hst92	0	1.806	1.344	0.129	-1.412	-1.971	2.158	4.129	958.04	65536	0	0.01	1.786	1.826
40hst90	0	2.876	1.696	0.146	-1.414	-2.453	2.697	5.15	-238.6	65536	0	0	2.845	2.908
40hst92	0	2.889	1.7	0.132	-1.416	-2.445	2.695	5.14	230.74	65536	0	0.02	2.858	2.92
50hst90	0	4.147	2.037	0.146	-1.414	-2.929	3.257	6.186	860.1	65536	0	0.02	4.103	4.193
50hst92	0	4.108	2.027	0.149	-1.415	-2.92	3.229	6.149	-1335	65536	0	0.01	4.064	4.153
60hst90	0	5.49	2.343	0.153	-1.414	-3.35	3.736	7.087	984.42	65536	0	0.02	5.431	5.55
60hst92	0	5.479	2.341	0.157	-1.412	-3.357	3.724	7.082	-943.3	65536	0	0.02	5.42	5.539
70hst90	0	6.987	2.643	0.158	-1.413	-3.767	4.199	7.966	5758.2	65536	0	0.02	6.912	7.063
70hst92	0	6.979	2.642	0.161	-1.412	-3.782	4.213	7.995	-1014	65536	0	0.02	6.904	7.056
80hst90	0	8.649	2.941	0.163	-1.413	-4.174	4.688	8.862	3105.6	65536	0	0.02	8.556	8.743
80hst92	0	8.609	2.934	0.161	-1.414	-4.17	4.677	8.847	542.66	65536	0	0.03	8.517	8.703
30hsa100	0.01	0.269	0.519	0.07	1.262	-2.581	3.281	5.862	44.63	65536	0	0.02	0.266	0.272
30hsa102	0	0.319	0.565	0.125	0.888	-3.241	3.116	6.357	1533.9	65536	0	0	0.316	0.322
40hsa100	0	0.706	0.84	0.123	0.683	-4.23	4.347	8.578	-682.1	65536	0	0	0.698	0.714
40hsa102	0	0.796	0.892	0.145	1.515	-3.738	5.545	9.283	179.58	65536	0	0.01	0.787	0.804
50hsa100	0	1.295	1.138	0	0.294	-4.559	4.566	9.125	1066.1	65536	0	0.01	1.282	1.31
50hsa102	0	1.6	1.265	0.05	0.667	-5.534	5.644	11.178	-686.2	65536	0	0	1.583	1.618
60hsa100	0	2.42	1.556	0.04	0.801	-6.337	7.061	13.398	-92.66	65536	0	0	2.394	2.446
60hsa102	0.01	2.472	1.572	-0.11	0.632	-6.926	7.157	14.082	134.04	65536	0	0.02	2.445	2.499
70hsa100	0.04	3.443	1.855	0.177	0.815	-7.373	11.32	18.692	51.98	65536	0.02	0.05	3.406	3.48
70hsa102	0.01	4.868	2.206	0.08	1.996	-10.65	14.95	25.597	229.77	65536	0	0.03	4.815	4.921
80hsa100	0	4.343	2.084	-0.1	0.577	-10.05	9.065	19.113	-736.3	65536	0	0.01	4.296	4.39
80hsa102	0.01	9.831	3.135	0.145	1.925	-13.77	18.32	32.091	265.6	65536	0	0.04	9.726	9.938
30hsc100	5.311	99.998	10	0.06	0.368	-32.99	49.02	82.007	1.883	65536	5.234	5.387	98.924	101.09
30hsc102	0.789	167.09	12.926	-0.29	1.34	-64.54	51.06	115.6	16.385	65536	0.69	0.888	165.3	168.92
40hsc100	-1.54	202.83	14.242	0.139	0.458	-55.79	63.18	118.96	-9.242	65536	-1.65	-1.43	200.65	205.04
40hsc102	1.833	341.55	18.481	0.136	0.598	-68.87	75.03	143.91	10.085	65536	1.691	1.974	337.88	345.27
50hsc100	0.795	42.675	6.533	-0.17	0.458	-35.3	25.94	61.234	8.216	65536	0.745	0.845	42.217	43.141
50hsc102	0.55	79.591	8.921	-0.15	0.883	-34.11	37.22	71.331	16.222	65536	0.482	0.618	78.736	80.459
60hsc100	1.14	83.244	9.124	0.06	0.701	-39.9	49.68	89.571	8.002	65536	1.07	1.21	82.35	84.152
60hsc102	1.245	115.28	10.737	0	1.307	-53.24	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	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
50hst100	0	4.128	2.032	0.147	-1.415	-2.912	3.235	6.147	7711.6	65536	0	0.02	4.083	4.173
50hst102	0	4.139	2.035	0.146	-1.415	-2.911	3.228	6.139	1768.5	65536	0	0.02	4.095	4.185
60hst100	0	5.501	2.345	0.159	-1.412	-3.351	3.743	7.094	-420.7	65536	0	0.01	5.442	5.561
60hst102	0	5.5	2.345	0.155	-1.412	-3.354	3.735	7.089	-2068	65536	0	0.02	5.441	5.56
70hst100	0	7.031	2.652	0.16	-1.413	-3.777	4.226	8.002	-2729	65536	0	0.02	6.955	7.108
70hst102	0	7.053	2.656	0.158	-1.412	-3.792	4.211	8.002	-2598	65536	0	0.02	6.978	7.13
80hst100	0	8.671	2.945	0.167	-1.41	-4.165	4.694	8.86	-493.7	65536	0	0.02	8.578	8.765
80hst102	0	8.695	2.949	0.166	-1.411	-4.204	4.714	8.918	-566.9	65536	0	0.02	8.601	8.79
30hsa110	-0.22	14.276	3.778	0.771	-0.155	-7.235	15.11	22.345	-17.39	65536	-0.25	-0.19	14.123	14.432
30hsa112	0.01	0.882	0.939	0	1.214	-4.917	4.166	9.083	80.774	65536	0	0.02	0.872	0.891
40hsa110	0	2.05	1.432	0.176	1.309	-7.213	8.396	15.609	-328.3	65536	0	0	2.028	2.073
40hsa112	0	1.794	1.339	0.155	0.761	-6.052	6.2	12.251	-242	65536	0	0	1.775	1.813
50hsa110	0	4.058	2.014	0.102	1.228	-10.18	12.75	22.924	-1489	65536	0	0.01	4.014	4.102
50hsa112	0	3.723	1.929	0.185	1.497	-9.514	11.03	20.545	-785.9	65536	0	0.01	3.683	3.763
60hsa110	0	7.095	2.664	0.06	0.666	-14.18	11.74	25.913	-508.7	65536	0	0.02	7.019	7.172
60hsa112	0.01	5.938	2.437	-0.1	1.019	-13.29	11.22	24.502	221.44	65536	0	0.03	5.874	6.002
70hsa110	0.01	4.218	2.054	0.117	0.997	-8.72	9.404	18.124	153.58	65536	0	0.03	4.173	4.264
70hsa112	0	8.022	2.832	0.02	0.529	-12.74	12.45	25.19	486.75	65536	0	0.03	7.936	8.11
80hsa110	0	14.95	3.866	0.04	1.387	-23.15	20.68	43.826	-840.1	65536	0	0.03	14.789	15.113
80hsa112	0	11.557	3.4	-0.19	1.437	-20.78	14.23	35.005	-3025	65536	0	0.03	11.433	11.683
30hsc110	-0.73	452.79	21.279	0.08	0.322	-96.16	87.46	183.63	-29.23	65536	-0.89	-0.57	447.93	457.73
30hsc112	-2.39	64.573	8.036	0	0.477	-34.73	30.09	64.817	-3.362	65536	-2.45	-2.33	63.88	65.278
40hsc110	-0.38	130.37	11.418	0.02	0.707	-47.9	50.19	98.094	-30.23	65536	-0.47	-0.29	128.97	131.79
40hsc112	-0.32	115.86	10.764	0.09	0.311	-44.17	45.07	89.246	-33.39	65536	-0.41	-0.24	114.62	117.13
50hsc110	-0.64	220.48	14.848	0	0.377	-68.08	62.65	130.72	-23.21	65536	-0.75	-0.53	218.11	222.88
50hsc112	-0.1	220.99	14.866	0	0.519	-64.34	68.66	133	-145.5	65536	-0.22	0.01	218.62	223.4
60hsc110	0.609	408	20.199	0.02	0.295	-79.12	95.52	174.64	33.185	65536	0.454	0.763	403.61	412.45
60hsc112	0.492	359.13	18.951	-0.15	0.557	-84.62	78.89	163.51	38.545	65536	0.347	0.637	355.27	363.05
70hsc110	0.594	507.6	22.53	0.06	0.091	-86.64	93.42	180.07	37.905	65536	0.422	0.767	502.15	513.14
70hsc112	-1.02	487.84	22.087	0	0.142	-81.82	95.2	177.03	-21.65	65536	-1.19	-0.85	482.6	493.16
80hsc110	-0.94	791.72	28.138	0	0.225	-110.3	110.6	220.89	-30.04	65536	-1.15	-0.72	783.22	800.37
80hsc112	-0.66	730.93	27.036	0	0.298	-97.84	110.8	208.62	-40.84	65536	-0.87	-0.46	723.08	738.91

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
30hsh110	0	197.36	14.049	0	0.39	-53.73	70.31	124.04	5595	65536	-0.11	0.11	195.24	199.52
30hsh112	0.01	26.211	5.12	-0.1	0.83	-27.67	24.23	51.897	436.45	65536	0	0.05	25.929	26.497
40hsh110	0	89.214	9.445	0	0.569	-41.3	39.52	80.821	-948.8	65536	-0.1	0.06	88.256	90.188
40hsh112	0	67.204	8.198	0	0.394	-40.35	32.18	72.52	-1377	65536	-0.1	0.06	66.482	67.937
50hsh110	0	218.95	14.797	0.03	0.445	-63.84	63.34	127.18	-8118	65536	-0.12	0.111	216.59	221.34
50hsh112	0	159.29	12.621	0.01	0.509	-56.94	74.95	131.88	-886	65536	-0.11	0.08	157.57	161.02
60hsh110	0	406.85	20.171	0	0.313	-83.81	84.46	168.27	-4713	65536	-0.16	0.15	402.49	411.3
60hsh112	0	259.8	16.118	0	0.433	-69.61	79.03	148.64	-8412	65536	-0.13	0.121	257.01	262.64
70hsh110	0	523.04	22.87	-0.1	0.287	-96.14	90.46	186.6	3069.4	65536	-0.17	0.183	517.42	528.75
70hsh112	0	384.5	19.609	0.05	0.143	-69.13	72.67	141.8	-3170	65536	-0.16	0.144	380.37	388.7
80hsh110	0	580	24.083	0.04	0.284	-101.1	97.66	198.76	4235.5	65536	-0.18	0.19	573.77	586.33
80hsh112	0	544.69	23.339	0.05	0.432	-101.4	110	211.35	7413.3	65536	-0.18	0.182	538.84	550.64
30hsm110	0	280.77	16.756	0.06	0.431	-64.82	81.02	145.84	-1021	65536	-0.15	0.112	277.76	283.84
30hsm112	0	40.073	6.33	0.01	0.544	-25.62	27.75	53.376	8363.9	65536	0	0.05	39.642	40.51
40hsm110	0	81.815	9.045	0	0.575	-42.01	36.68	78.685	-2813	65536	-0.1	0.07	80.937	82.709
40hsm112	0	68.051	8.249	0	0.282	-34.39	33.6	67.988	-1046	65536	-0.1	0.06	67.32	68.793
50hsm110	0	110.69	10.521	0	0.279	-40.25	41.8	82.049	8229.3	65536	-0.1	0.08	109.5	111.9
50hsm112	0	126.27	11.237	0.01	0.451	-45.31	51.19	96.496	1429.8	65536	-0.1	0.09	124.92	127.65
60hsm110	0	206.09	14.356	0	0.318	-58.15	61.06	119.21	1552.5	65536	-0.1	0.119	203.88	208.34
60hsm112	0	223.34	14.944	0	0.394	-65.81	63.38	129.19	-901.1	65536	-0.13	0.1	220.94	225.78
70hsm110	0	256.11	16.004	0.05	0.063	-51.97	66.52	118.5	-838	65536	-0.14	0.103	253.36	258.91
70hsm112	0.02	276.87	16.639	0	0.119	-61.63	71.98	133.61	884.64	65536	-0.11	0.146	273.9	279.89
80hsm110	0	439.89	20.974	0	0.324	-85.83	85.93	171.76	-1174	65536	-0.18	0.143	435.17	444.69
80hsm112	0	413.25	20.329	0.02	0.335	-81.09	88.91	170	-1546	65536	-0.17	0.142	408.81	417.76
30hst110	0	1.837	1.355	0.129	-1.413	-1.981	2.143	4.125	-2327	65536	0	0.01	1.817	1.857
30hst112	0	1.829	1.353	0.126	-1.415	-1.969	2.141	4.11	1396.9	65536	0	0.01	1.81	1.849
40hst110	0	2.906	1.705	0.136	-1.414	-2.456	2.723	5.179	337.17	65536	0	0.02	2.875	2.938
40hst112	0	2.902	1.704	0.143	-1.414	-2.458	2.702	5.16	-401.9	65536	0	0	2.871	2.934
50hst110	0	4.171	2.042	0.152	-1.413	-2.929	3.256	6.186	-326.9	65536	0	0	4.126	4.217
50hst112	0	4.151	2.037	0.146	-1.415	-2.916	3.232	6.149	718.94	65536	0	0.02	4.106	4.196
60hst110	0	5.539	2.353	0.152	-1.414	-3.353	3.746	7.099	614.4	65536	0	0.02	5.479	5.599
60hst112	0	5.501	2.345	0.154	-1.413	-3.351	3.739	7.089	1211.2	65536	0	0.02	5.442	5.561

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70hst110	0	7.072	2.659	0.162	-1.413	-3.776	4.234	8.01	-606.8	65536	0	0.02	6.996	7.149
70hst112	0	7.008	2.647	0.157	-1.413	-3.764	4.222	7.985	764.8	65536	0	0.02	6.933	7.084
80hst110	0	8.662	2.943	0.164	-1.412	-4.181	4.696	8.877	4775.8	65536	0	0.02	8.569	8.757
80hst112	0	8.656	2.942	0.162	-1.412	-4.178	4.714	8.891	1010	65536	0	0.03	8.563	8.751
30hsa120	0	0.045	0.213	0	-0.07	-0.733	0.751	1.484	29.788	65536	0	0	0.045	0.046
30hsa122	0	0.065	0.254	0	-0.114	-0.891	0.993	1.884	51.27	65536	0	0	0.064	0.065
40hsa120	0	0.067	0.259	0.05	0.184	-0.898	1.028	1.926	-65.79	65536	0	0	0.066	0.068
40hsa122	0.01	0.323	0.568	0	-0.134	-2.164	1.973	4.136	57.634	65536	0	0.01	0.319	0.326
50hsa120	0	0.266	0.515	0	0.193	-2.165	2.151	4.315	1214.4	65536	0	0	0.263	0.268
50hsa122	0	1.019	1.009	0.03	-0.02	-3.898	3.523	7.42	-207.9	65536	0	0	1.008	1.03
60hsa120	0	0.788	0.888	0	0.152	-3.286	3.45	6.736	-86.08	65536	0	0	0.779	0.796
60hsa122	0	1.303	1.142	0	0.022	-4.302	4.329	8.631	201.53	65536	0	0.01	1.289	1.318
70hsa120	0.01	1.142	1.069	0	0	-3.798	3.569	7.368	77.988	65536	0	0.02	1.13	1.155
70hsa122	0	1.731	1.316	0.05	-0.08	-4.464	4.977	9.441	-778.3	65536	0	0	1.712	1.75
80hsa120	0	1.514	1.231	0	0.097	-5.547	4.567	10.115	-207.8	65536	0	0	1.498	1.531
80hsa122	0	2.438	1.562	0	0.028	-6.133	6.223	12.356	262.94	65536	0	0.02	2.412	2.465
30hsc120	-2.19	162.66	12.754	-0.1	-0.134	-45.27	38.43	83.695	-5.82	65536	-2.29	-2.09	160.91	164.43
30hsc122	12.55	188.57	13.732	0.08	-0.03	-30.93	60.85	91.781	1.094	65536	12.45	12.66	186.55	190.63
40hsc120	-8.04	255.19	15.975	0.09	0.041	-63.22	57.09	120.31	-1.987	65536	-8.16	-7.92	252.45	257.98
40hsc122	-7.92	521.89	22.845	0	0.077	-86.56	77.58	164.14	-2.884	65536	-8.1	-7.75	516.28	527.58
50hsc120	8.123	513.59	22.663	0.03	0.175	-73.95	96.88	170.83	2.79	65536	7.95	8.297	508.08	519.2
50hsc122	2.577	244.13	15.625	-0.1	-0.02	-56.6	67	123.6	6.064	65536	2.457	2.696	241.51	246.8
60hsc120	0.04	255.07	15.971	0.03	0.042	-54.65	58.13	112.78	370.95	65536	-0.1	0.165	252.33	257.85
60hsc122	-1.77	355.22	18.847	0.06	-0.08	-72.2	72.5	144.7	-10.65	65536	-1.91	-1.63	351.41	359.1
70hsc120	-0.77	365.27	19.112	0.05	0.076	-68.21	82.22	150.43	-24.75	65536	-0.92	-0.63	361.34	369.25
70hsc122	2.547	562.38	23.715	0	0.013	-88.48	91.49	179.97	9.31	65536	2.366	2.729	556.34	568.52
80hsc120	-1.22	426.84	20.66	0	-0.06	-83.41	76.26	159.67	-16.92	65536	-1.38	-1.06	422.25	431.49
80hsc122	4.139	619.12	24.882	0	0	-85.71	103.6	189.31	6.012	65536	3.948	4.329	612.47	625.88
30hsh120	0	4.024	2.006	0	0.408	-8.198	8.367	16.564	902.46	65536	0	0.02	3.98	4.067
30hsh122	0	9.426	3.07	0	0.045	-12.48	12.94	25.414	-801.4	65536	0	0.02	9.325	9.529
40hsh120	0	11.152	3.339	0.05	0.068	-11.51	13.14	24.657	1654.7	65536	0	0.03	11.032	11.274
40hsh122	0	70.734	8.41	0.02	0	-30.01	32.84	62.849	1828.9	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	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
30hsa130	0	0.483	0.695	0.03	0.251	-3.319	3.291	6.61	-134.3	65536	0	0	0.477	0.488
30hsa132	0	0.409	0.64	0.05	0.164	-2.355	2.981	5.336	389.25	65536	0	0	0.405	0.414
40hsa130	0	0.876	0.936	0.05	0.668	-3.739	4.302	8.041	101.37	65536	0	0.02	0.867	0.886
40hsa132	0	0.897	0.947	0	0.072	-4.161	3.943	8.104	-333.1	65536	0	0	0.887	0.906
50hsa130	0	1.836	1.355	0.03	0.467	-5.487	5.565	11.051	-302.7	65536	0	0	1.816	1.856
50hsa132	0	1.588	1.26	0	0.044	-5.073	4.652	9.725	484.21	65536	0	0.01	1.571	1.606
60hsa130	0	2.604	1.614	0	0.424	-6.441	6.589	13.03	584.83	65536	0	0.02	2.576	2.633
60hsa132	0	2.327	1.525	0.06	0.123	-5.608	7.043	12.651	251.69	65536	0	0.02	2.302	2.352
70hsa130	0	3.929	1.982	0	0.036	-6.998	8.032	15.03	353.96	65536	0	0.02	3.886	3.971
70hsa132	0	3.171	1.781	0.02	0.05	-6.033	6.597	12.63	-798	65536	0	0.01	3.137	3.206
80hsa130	0.01	3.181	1.783	0	0.041	-7.462	6.431	13.893	133	65536	0	0.03	3.146	3.215
80hsa132	0	4.425	2.104	0	-0.1	-7.859	7.023	14.882	-733.2	65536	0	0.01	4.377	4.473
30hsc130	8.867	274.47	16.567	0.08	0.16	-51.45	76.07	127.52	1.868	65536	8.74	8.994	271.52	277.47
30hsc132	4.883	224.06	14.969	-0.1	0.13	-66.75	58.4	125.15	3.065	65536	4.768	4.998	221.65	226.51
40hsc130	-0.8	531.89	23.063	0	0.328	-96.57	93.73	190.3	-28.67	65536	-0.98	-0.63	526.18	537.7
40hsc132	-6.97	451.49	21.248	0	0.018	-86.26	72.44	158.7	-3.049	65536	-7.13	-6.81	446.64	456.42
50hsc130	0.05	1005.1	31.703	-0.1	0.061	-96.9	93.4	190.3	705.51	65536	-0.2	0.288	994.29	1016.1
50hsc132	5.462	833.68	28.874	0.06	-0.07	-85.89	104.4	190.3	5.286	65536	5.241	5.683	824.73	842.78
60hsc130	1.177	173.86	13.185	0	0.057	-55.15	53.21	108.36	11.201	65536	1.076	1.278	171.99	175.76
60hsc132	-2.81	147.38	12.14	0.06	-0.04	-47.32	45.22	92.542	-4.323	65536	-2.9	-2.72	145.79	148.98
70hsc130	0.455	263.41	16.23	0	0.018	-56.44	62.35	118.79	35.692	65536	0.33	0.579	260.58	266.28
70hsc132	0.309	197.36	14.048	-0.1	-0.04	-47.82	50.68	98.499	45.407	65536	0.202	0.417	195.24	199.51
80hsc130	-1	259.46	16.108	0.01	-0.02	-58.99	69.09	128.08	-16.18	65536	-1.12	-0.87	256.67	262.29
80hsc132	2.969	233.74	15.289	0.01	0.01	-52.81	56.58	109.39	5.15	65536	2.852	3.086	231.23	236.29
30hsh130	0	78.412	8.855	0	0.304	-51.06	42.5	93.564	-2266	65536	-0.1	0.06	77.57	79.268
30hsh132	0	74.491	8.631	0	0.21	-38.13	36.88	75.012	5587.2	65536	-0.1	0.07	73.691	75.304
40hsh130	0	201.63	14.2	0.04	0.157	-58.93	58.02	116.94	1937.7	65536	-0.1	0.116	199.46	203.83
40hsh132	0	196.87	14.031	0.02	0.194	-51.78	57.07	108.85	7834.9	65536	-0.11	0.109	194.76	199.02
50hsh130	0	457.4	21.387	0	0.055	-80.41	74.35	154.76	28056	65536	-0.16	0.165	452.48	462.39
50hsh132	0	396.63	19.916	0.02	0.108	-87.5	86.19	173.69	-6671	65536	-0.16	0.149	392.37	400.96
60hsh130	0	91.713	9.577	0.03	0	-36.03	38.26	74.295	19249	65536	-0.1	0.07	90.728	92.715
60hsh132	0	82.615	9.089	0	0.032	-35.16	34.8	69.961	1580	65536	-0.1	0.08	81.728	83.517

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70hsh130	0	146.13	12.088	0	0.07	-40.24	46.74	86.982	-8865	65536	-0.1	0.09	144.56	147.72
70hsh132	0	99.611	9.981	0	0.112	-39.8	42.54	82.335	-10316	65536	-0.1	0.08	98.541	100.7
80hsh130	0	112.01	10.583	0	0.194	-44.1	42.72	86.825	1228.9	65536	-0.1	0.09	110.8	113.23
80hsh132	0	112.24	10.594	0.02	-0.04	-42.08	39	81.082	3284.9	65536	-0.1	0.08	111.03	113.46
30hsm130	0	154.12	12.414	0	0.042	-47.3	41.53	88.831	17667	65536	-0.1	0.1	152.46	155.8
30hsm132	0.01	105.14	10.254	0	0.141	-49.63	39.25	88.878	889.67	65536	-0.1	0.09	104.01	106.29
40hsm130	0	230.49	15.182	-0.1	0.282	-68.56	65.61	134.17	-2076	65536	-0.12	0.109	228.01	233
40hsm132	0	241.54	15.541	0.03	0.138	-67.28	59.41	126.69	12521	65536	-0.12	0.12	238.94	244.17
50hsm130	0.02	476.53	21.83	-0.1	0.161	-89.48	89.84	179.32	1045.8	65536	-0.15	0.188	471.41	481.73
50hsm132	0	184.31	13.576	0	0.022	-51.29	59.03	110.32	-1080	65536	-0.12	0.09	182.33	186.32
60hsm130	0	88.815	9.424	0	-0.07	-37	31.35	68.343	-4481	65536	-0.1	0.07	87.861	89.784
60hsm132	0	79.6	8.922	0	0.07	-32.34	38.04	70.379	-683.6	65536	-0.1	0.06	78.746	80.469
70hsm130	0	130.66	11.431	-0.1	-0.03	-40.02	37.51	77.532	-742.9	65536	-0.1	0.07	129.26	132.09
70hsm132	0	88.831	9.425	0.03	-0.02	-35.89	36.31	72.206	-2513	65536	-0.1	0.07	87.877	89.801
80hsm130	0	126.33	11.239	0	0.062	-48.79	42.57	91.368	3051	65536	-0.1	0.09	124.97	127.71
80hsm132	0	107.63	10.374	0	-0.04	-37.4	36.11	73.512	-1238	65536	-0.1	0.07	106.47	108.8
30hst130	0	1.821	1.349	0.131	-1.414	-1.955	2.138	4.093	2245	65536	0	0.01	1.801	1.841
30hst132	0	1.821	1.349	0.128	-1.413	-1.967	2.145	4.112	-17517	65536	0	0.01	1.801	1.84
40hst130	0	2.902	1.703	0.135	-1.416	-2.463	2.718	5.182	373.84	65536	0	0.02	2.87	2.933
40hst132	0	2.93	1.712	0.136	-1.417	-2.462	2.72	5.182	672.27	65536	0	0.02	2.898	2.962
50hst130	0	4.153	2.038	0.148	-1.415	-2.918	3.229	6.147	-9361	65536	0	0.02	4.109	4.199
50hst132	0	4.143	2.035	0.149	-1.414	-2.925	3.238	6.164	-2641	65536	0	0.02	4.098	4.188
60hst130	0	5.523	2.35	0.155	-1.413	-3.355	3.732	7.087	-30992	65536	0	0.02	5.464	5.583
60hst132	0	5.534	2.352	0.152	-1.414	-3.363	3.745	7.109	500.4	65536	0	0.02	5.475	5.595
70hst130	0	7.043	2.654	0.157	-1.413	-3.783	4.219	8.002	660.8	65536	0	0.02	6.967	7.12
70hst132	0	7.069	2.659	0.16	-1.414	-3.775	4.237	8.012	3134	65536	0	0.02	6.993	7.146
80hst130	0	8.736	2.956	0.165	-1.412	-4.21	4.703	8.913	-785	65536	0	0.02	8.642	8.831
80hst132	0	8.719	2.953	0.164	-1.412	-4.191	4.7	8.891	-3453	65536	0	0.02	8.626	8.814
30hsa140	0	0.111	0.334	0.02	0.097	-1.408	1.213	2.621	-44.64	65536	0	0	0.11	0.112
30hsa142	0	0.175	0.418	-0.1	0.013	-1.658	1.374	3.031	-49.47	65536	0	0	0.173	0.176
40hsa140	0	0.278	0.528	0.02	-0.03	-2.053	2.115	4.168	290.02	65536	0	0	0.275	0.281
40hsa142	0	0.36	0.6	0	0.015	-2.091	2.024	4.115	-111.3	65536	0	0	0.356	0.364

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
50hsa140	0	0.447	0.669	0	-0.02	-2.749	2.524	5.273	215.74	65536	0	0	0.443	0.452
50hsa142	0	0.695	0.834	0	0.121	-3.266	3.07	6.336	472.25	65536	0	0	0.688	0.703
60hsa140	0	0.473	0.688	0.04	0.056	-2.441	2.569	5.01	194.2	65536	0	0	0.468	0.478
60hsa142	0	1.109	1.053	0	-0.03	-4.123	3.971	8.094	-98	65536	0	0	1.097	1.122
70hsa140	0	0.867	0.931	0	0.146	-3.405	3.826	7.231	-742	65536	0	0	0.857	0.876
70hsa142	0	1.75	1.323	0	0.191	-5.149	5.987	11.135	503.18	65536	0	0.01	1.731	1.769
80hsa140	0	1.7	1.304	0.01	0.071	-4.729	5.144	9.872	144.45	65536	0	0.02	1.682	1.719
80hsa142	0	2.49	1.578	-0.1	0.093	-6.181	5.796	11.977	1675.1	65536	0	0.01	2.463	2.517
30hsc140	1.038	121.67	11.03	0.154	0.099	-39.29	42.5	81.79	10.627	65536	0.954	1.122	120.36	123
30hsc142	2.306	542.81	23.298	0.164	-0.612	-60.27	69.06	129.33	10.103	65536	2.128	2.484	536.98	548.73
40hsc140	1.598	235.37	15.342	-0.1	-0.01	-53.82	60.08	113.9	9.603	65536	1.48	1.715	232.84	237.93
40hsc142	-5.89	274.15	16.558	0	-0.02	-63.18	56.53	119.71	-2.811	65536	-6.02	-5.76	271.21	277.14
50hsc140	-13.2	333.34	18.258	-0.11	-0.08	-74.76	43.47	118.22	-1.381	65536	-13.4	-13.1	329.76	336.98
50hsc142	37.67	403.05	20.076	0	0.055	-45.45	97.36	142.81	0.533	65536	37.51	37.82	398.72	407.45
60hsc140	1.306	423.1	20.569	0.04	0.03	-69.23	80.88	150.1	15.75	65536	1.149	1.464	418.56	427.72
60hsc142	-3.46	624.52	24.99	-0.1	0.213	-97.88	81.5	179.38	-7.219	65536	-3.65	-3.27	617.81	631.34
70hsc140	-12.8	617.8	24.856	0	-0.07	-92.28	75.76	168.04	-1.936	65536	-13	-12.6	611.17	624.54
70hsc142	-5.48	107.66	10.376	0	0.109	-49.93	35.16	85.096	-1.895	65536	-5.55	-5.4	106.51	108.84
80hsc140	-3.32	101.09	10.054	0	0.057	-42.06	33.8	75.852	-3.03	65536	-3.4	-3.24	100.01	102.2
80hsc142	11.36	110.96	10.534	0.02	-0.134	-29.65	45.63	75.287	0.927	65536	11.28	11.44	109.77	112.17
30hsh140	0	11.049	3.324	0	-0.04	-12.83	12.87	25.698	-1077	65536	0	0.02	10.93	11.169
30hsh142	0	17.13	4.139	0	0.025	-16.3	15.74	32.04	-869.9	65536	0	0.03	16.946	17.317
40hsh140	0	41.146	6.415	0	0.032	-31.17	23.73	54.898	-9028	65536	-0.1	0.05	40.704	41.595
40hsh142	0	39.155	6.257	0	0.011	-24.65	25.04	49.692	-9976	65536	0	0.05	38.734	39.582
50hsh140	0	44.969	6.706	0	0.121	-33.79	29.11	62.896	-973.3	65536	-0.1	0.04	44.486	45.46
50hsh142	0	81.319	9.018	0	0.072	-38.35	33.63	71.983	-1922	65536	-0.1	0.06	80.446	82.207
60hsh140	0	46.603	6.827	0.04	-0.03	-26.29	26.81	53.1	1489.9	65536	0	0.06	46.102	47.112
60hsh142	0	134.74	11.608	0.03	0.13	-45.89	60.5	106.39	2537.6	65536	-0.1	0.09	133.3	136.22
70hsh140	0	89.974	9.485	0	-0.02	-42.97	34.41	77.378	-4624	65536	-0.1	0.07	89.007	90.956
70hsh142	0	24.774	4.977	0.04	0.039	-17.59	21.04	38.635	1921.3	65536	0	0.04	24.508	25.044
80hsh140	0	17.761	4.214	0.06	0.189	-17.1	18.98	36.077	2229.5	65536	0	0.03	17.571	17.955
80hsh142	0	29.076	5.392	0.03	-0.08	-18.3	21.38	39.68	-3124	65536	0	0.04	28.763	29.393

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
30hsm140	0	41.6	6.45	0.02	-0.07	-21.65	23.93	45.575	1346	65536	0	0.05	41.153	42.054
30hsm142	0	78.572	8.864	0.03	0.108	-32.12	33.52	65.641	-502.1	65536	-0.1	0.05	77.728	79.429
40hsm140	0	96.503	9.824	0.08	-0.07	-34	32.73	66.73	-663.9	65536	-0.1	0.06	95.467	97.557
40hsm142	0	111.5	10.559	0.07	0.079	-34.72	38.26	72.977	-911.3	65536	-0.1	0.07	110.31	112.72
50hsm140	0	144.14	12.006	-0.1	-0.03	-44.84	46.03	90.866	18308	65536	-0.1	0.09	142.59	145.71
50hsm142	0.02	205.59	14.339	0	0.16	-60.33	53.4	113.72	913.84	65536	-0.1	0.125	203.39	207.84
60hsm140	0	197	14.036	0.01	0.196	-54.78	66.47	121.25	-1456	65536	-0.12	0.1	194.88	199.15
60hsm142	0	320.97	17.916	-0.1	0.253	-76.23	67.41	143.63	-2851	65536	-0.14	0.131	317.52	324.47
70hsm140	0.02	284.09	16.855	-0.1	-0.03	-61.22	65.71	126.93	1134.9	65536	-0.11	0.144	281.04	287.19
70hsm142	0.01	68.162	8.256	0.03	0.037	-30.37	27.22	57.588	841.15	65536	-0.1	0.07	67.43	68.906
80hsm140	0	52.031	7.213	-0.1	0.055	-27.75	27.85	55.604	-2228	65536	-0.1	0.05	51.472	52.599
80hsm142	0	60.351	7.769	-0.1	-0.103	-27.76	23.35	51.114	-2636	65536	-0.1	0.06	59.703	61.01
30hst140	0	1.83	1.353	0.136	-1.411	-1.971	2.161	4.132	-248.3	65536	0	0	1.81	1.85
30hst142	0	1.825	1.351	0.131	-1.413	-1.965	2.154	4.12	-675.1	65536	0	0	1.805	1.845
40hst140	0	2.923	1.71	0.136	-1.417	-2.466	2.714	5.179	1572.6	65536	0	0.01	2.892	2.955
40hst142	0	2.91	1.706	0.137	-1.417	-2.481	2.711	5.192	17320	65536	0	0.01	2.879	2.942
50hst140	0	4.152	2.038	0.146	-1.416	-2.924	3.239	6.164	3791.9	65536	0	0.02	4.107	4.197
50hst142	0	4.152	2.038	0.148	-1.413	-2.916	3.252	6.168	1836.8	65536	0	0.02	4.107	4.197
60hst140	0	5.53	2.352	0.153	-1.415	-3.363	3.77	7.133	1230	65536	0	0.02	5.471	5.59
60hst142	0	5.521	2.35	0.156	-1.413	-3.359	3.733	7.092	-974.5	65536	0	0.02	5.462	5.581
70hst140	0	7.06	2.657	0.157	-1.414	-3.794	4.24	8.034	703.35	65536	0	0.02	6.985	7.137
70hst142	0	7.048	2.655	0.158	-1.414	-3.775	4.215	7.99	1207.9	65536	0	0.02	6.972	7.125
80hst140	0	8.722	2.953	0.164	-1.412	-4.209	4.729	8.938	-10482	65536	0	0.02	8.628	8.817
80hst142	0	8.679	2.946	0.163	-1.412	-4.187	4.7	8.886	5068.6	65536	0	0.02	8.585	8.773
30hsa150	0	0.029	0.169	0	0.107	-0.584	0.784	1.368	-41.78	65536	0	0	0.028	0.029
30hsa152	0	0.157	0.396	0	0.043	-1.358	1.81	3.168	0	65536	0	0	0.155	0.158
40hsa150	0	0.103	0.322	0.02	0.174	-1.322	1.394	2.715	-48.76	65536	0	0	0.102	0.105
40hsa152	0	0.33	0.575	0.08	0.486	-2.311	3.309	5.62	139.06	65536	0	0	0.327	0.334
50hsa150	0	0.321	0.567	0	0.16	-2.168	1.916	4.084	477.87	65536	0	0	0.318	0.325
50hsa152	0	0.482	0.694	0	0.044	-2.641	2.842	5.484	4566	65536	0	0	0.477	0.487
60hsa150	0	0.625	0.791	0	0.031	-3.144	2.624	5.768	-80.47	65536	0	0	0.618	0.632
60hsa152	0	0.772	0.879	0.106	0.108	-3.179	3.515	6.694	-53.61	65536	0	0	0.764	0.78

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70hsa150	0	1.067	1.033	0.01	0.288	-4.248	3.898	8.146	-66.65	65536	0	0	1.055	1.078
70hsa152	0	1.198	1.095	0	0.273	-5.19	3.904	9.094	-3714	65536	0	0	1.185	1.211
80hsa150	0	1.489	1.22	0.02	-0.04	-4.703	4.57	9.273	207.75	65536	0	0.02	1.473	1.505
80hsa152	0	1.596	1.263	-0.1	-0.04	-4.836	4.605	9.441	-260.7	65536	0	0	1.579	1.613
30hsc150	1.138	126.86	11.263	0.04	-0.05	-32.53	48.84	81.371	9.898	65536	1.052	1.224	125.5	128.24
30hsc152	-8.93	284.06	16.854	0	0.118	-65.6	54.07	119.66	-1.887	65536	-9.06	-8.81	281.01	287.16
40hsc150	-6.31	296.23	17.211	0.1	0.062	-64.2	54.72	118.92	-2.728	65536	-6.44	-6.18	293.04	299.46
40hsc152	-6.31	513.87	22.669	-0.1	-0.114	-93.79	64.02	157.82	-3.591	65536	-6.49	-6.14	508.35	519.47
50hsc150	12.64	598.63	24.467	0.119	0.091	-72.71	99.23	171.94	1.935	65536	12.45	12.83	592.2	605.17
50hsc152	4.354	754.08	27.46	0	-0.127	-94.11	96.19	190.3	6.308	65536	4.143	4.564	745.98	762.31
60hsc150	2.094	889.72	29.828	0.04	-0.05	-92.37	97.93	190.3	14.242	65536	1.866	2.323	880.16	899.43
60hsc152	28.43	1023.7	31.995	-0.25	-0.228	-107.6	82.74	190.3	1.125	65536	28.19	28.68	1012.7	1034.9
70hsc150	14.5	1389.8	37.28	0	-0.266	-88.3	102	190.3	2.571	65536	14.22	14.79	1374.9	1405
70hsc152	3.5	231.24	15.206	0	0.012	-56.54	61.01	117.55	4.345	65536	3.384	3.616	228.75	233.76
80hsc150	-6.4	1622.8	40.284	0.07	-0.257	-94.08	96.22	190.3	-6.299	65536	-6.7	-6.09	1605.4	1640.5
80hsc152	7.524	194.32	13.94	0	0.191	-42.98	59.93	102.92	1.853	65536	7.417	7.631	192.23	196.44
30hsh150	0	2.101	1.449	0	0.101	-6.591	6.282	12.873	986.34	65536	0	0.01	2.078	2.124
30hsh152	0	7.541	2.746	0.04	-0.07	-11.22	10.36	21.581	519.21	65536	0	0.03	7.46	7.623
40hsh150	0	10.756	3.28	0	0.093	-13.08	12.58	25.651	945.88	65536	0	0.03	10.64	10.873
40hsh152	0	22.523	4.746	0	0.039	-20.65	17.93	38.571	-29516	65536	0	0.04	22.281	22.769
50hsh150	0	49.038	7.003	0	-0.02	-35.31	26.54	61.855	-9250	65536	-0.1	0.05	48.511	49.573
50hsh152	0	61.521	7.844	0	0.118	-29.5	31.22	60.719	-2322	65536	-0.1	0.06	60.86	62.192
60hsh150	0	101.23	10.061	0.03	0.018	-35.04	39.64	74.68	-90944	65536	-0.1	0.08	100.14	102.33
60hsh152	0	111.5	10.559	0	0.109	-44.85	41.85	86.701	-1238	65536	-0.1	0.07	110.3	112.72
70hsh150	0	174.7	13.218	0.01	-0.115	-44.55	56.59	101.14	7357.3	65536	-0.1	0.103	172.83	176.61
70hsh152	0	24.294	4.929	0	0.086	-21.13	21.89	43.021	-824.3	65536	0	0.03	24.033	24.559
80hsh150	0	264.48	16.263	0.01	0.049	-61.67	60.1	121.77	7701.4	65536	-0.12	0.127	261.64	267.37
80hsh152	0	35.465	5.955	0	0.055	-21.97	24.34	46.31	-3726	65536	0	0.04	35.084	35.852
30hsm150	0	70.663	8.406	0	-0.196	-28.25	27.08	55.324	1379.2	65536	-0.1	0.07	69.904	71.434
30hsm152	0	135.19	11.627	0.09	-0.01	-42.17	43.26	85.423	-1200	65536	-0.1	0.08	133.74	136.67
40hsm150	0	163.83	12.799	0.04	0	-47.75	43.12	90.866	-2012	65536	-0.1	0.09	162.07	165.61
40hsm152	0	268.66	16.391	0.04	-0.07	-64.6	53.05	117.65	-1480	65536	-0.14	0.114	265.78	271.6

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
50hsm150	0.02	372.06	19.289	0.02	0.01	-69.85	71.23	141.08	986.54	65536	-0.13	0.167	368.06	376.12
50hsm152	0	417.8	20.44	0	0.079	-94.69	94.33	189.02	-758.5	65536	-0.18	0.13	413.31	422.36
60hsm150	0	556.93	23.599	-0.1	-0.02	-88.64	75.86	164.51	18969	65536	-0.18	0.182	550.95	563.01
60hsm152	0.01	649.15	25.478	0	-0.04	-96.87	89.08	185.94	1799.2	65536	-0.18	0.209	642.18	656.23
70hsm150	0	857.69	29.286	0	-0.06	-96.88	96.92	193.8	-920.3	65536	-0.26	0.192	848.48	867.05
70hsm152	0	134.5	11.597	0.01	-0.02	-37.85	46.21	84.058	-595.6	65536	-0.11	0.07	133.05	135.97
80hsm150	0	312.28	17.672	-0.1	0.29	-77.34	67.1	144.44	-1580	65536	-0.15	0.124	308.93	315.69
80hsm152	0	120.18	10.962	0.02	0.152	-44.95	41.61	86.564	-1886	65536	-0.1	0.08	118.88	121.49
30hst150	0	1.829	1.352	0.134	-1.411	-1.966	2.149	4.115	-257.9	65536	0	0	1.809	1.849
30hst152	0	1.817	1.348	0.13	-1.412	-1.957	2.189	4.147	-731.6	65536	0	0	1.797	1.837
40hst150	0	2.918	1.708	0.137	-1.416	-2.467	2.71	5.177	915.66	65536	0	0.02	2.887	2.95
40hst152	0	2.917	1.708	0.138	-1.414	-2.475	2.719	5.194	-3513	65536	0	0.01	2.886	2.949
50hst150	0	4.174	2.043	0.149	-1.415	-2.933	3.248	6.181	-1836	65536	0	0.02	4.129	4.219
50hst152	0	4.151	2.038	0.151	-1.414	-2.935	3.236	6.171	-697.3	65536	0	0.01	4.107	4.197
60hst150	0	5.554	2.357	0.158	-1.412	-3.361	3.758	7.118	-471.8	65536	0	0.01	5.494	5.614
60hst152	0	5.541	2.354	0.158	-1.413	-3.358	3.746	7.104	-799.8	65536	0	0.02	5.482	5.602
70hst150	0	7.111	2.667	0.157	-1.414	-3.794	4.235	8.029	874.99	65536	0	0.02	7.035	7.189
70hst152	0	7.042	2.654	0.16	-1.413	-3.783	4.234	8.017	7255.6	65536	0	0.02	6.966	7.119
80hst150	0	8.729	2.954	0.165	-1.411	-4.198	4.708	8.906	-810.4	65536	0	0.02	8.635	8.824
80hst152	0	8.692	2.948	0.165	-1.411	-4.19	4.702	8.891	-642.1	65536	0	0.02	8.599	8.787
30hsa160	0.01	0.158	0.398	0	0.025	-1.39	1.673	3.063	40.209	65536	0	0.01	0.157	0.16
30hsa162	0	0.193	0.439	0.03	0.071	-1.622	1.536	3.158	796.37	65536	0	0	0.19	0.195
40hsa160	0	0.418	0.646	0.103	0.131	-2.368	2.884	5.252	433.33	65536	0	0	0.413	0.422
40hsa162	0.01	0.454	0.674	0.02	0.087	-2.56	3.155	5.715	50.708	65536	0	0.02	0.449	0.459
50hsa160	0	7.138	2.672	0.07	-0.03	-9.71	11.63	21.345	-127.3	65536	0	0	7.061	7.216
50hsa162	0	0.95	0.975	0.01	-0.04	-3.469	3.309	6.778	-376.5	65536	0	0	0.94	0.96
60hsa160	0	1.146	1.071	0.06	0.115	-3.834	4.128	7.962	-470.6	65536	0	0	1.134	1.159
60hsa162	0	1.599	1.265	0.06	0.227	-4.83	5.421	10.251	320.76	65536	0	0.01	1.582	1.617
70hsa160	0	1.647	1.283	0.07	0.354	-5.115	6.975	12.09	-323.9	65536	0	0	1.629	1.665
70hsa162	0.01	2.245	1.498	0.06	0.083	-6.728	5.734	12.462	116.01	65536	0	0.02	2.221	2.269
80hsa160	0	2.113	1.453	0.04	0.139	-5.777	5.512	11.289	311.73	65536	0	0.02	2.09	2.136
80hsa162	0	3.101	1.761	0.04	0.221	-7.362	7.583	14.946	4204.5	65536	0	0.01	3.068	3.135

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
30hsc160	2.453	169.79	13.03	0	0.078	-47.69	47.9	95.591	5.312	65536	2.353	2.553	167.96	171.64
30hsc162	6.593	182.12	13.495	0.08	-0.214	-41.7	50.6	92.292	2.047	65536	6.489	6.696	180.17	184.11
40hsc160	-9.94	312.85	17.687	0.03	-0.02	-69.63	56.82	126.45	-1.78	65536	-10.1	-9.8	309.49	316.26
40hsc162	3.071	356.49	18.881	-0.18	0.7	-98.28	79.8	178.08	6.147	65536	2.927	3.216	352.66	360.38
50hsc160	12.88	640.84	25.315	0.03	-0.06	-88.04	96.69	184.73	1.965	65536	12.69	13.08	633.96	647.84
50hsc162	7.325	151.24	12.298	0	0.071	-41.03	62.92	103.94	1.679	65536	7.23	7.419	149.61	152.89
60hsc160	11.5	681.9	26.113	0	-0.112	-89.01	92.09	181.1	2.271	65536	11.3	11.7	674.57	689.34
60hsc162	5.653	241.57	15.542	0	0.021	-53.68	60.88	114.56	2.75	65536	5.534	5.772	238.97	244.2
70hsc160	-7.69	1094	33.076	0.04	-0.127	-95.99	94.31	190.3	-4.304	65536	-7.94	-7.43	1082.3	1105.9
70hsc162	6.537	364.93	19.103	0.04	0.141	-66.49	83.1	149.59	2.922	65536	6.391	6.684	361.01	368.91
80hsc160	8.379	1441.7	37.97	0	-0.321	-92.05	98.25	190.3	4.532	65536	8.088	8.669	1426.2	1457.4
80hsc162	-8.22	560.69	23.679	-0.1	0.269	-105.3	83	188.27	-2.881	65536	-8.4	-8.04	554.67	566.81
30hsh160	0	19.829	4.453	0	-0.06	-17.63	16.82	34.453	-18904	65536	0	0.03	19.616	20.045
30hsh162	0	22.154	4.707	-0.1	0	-18.7	18.59	37.293	5013.7	65536	0	0.04	21.916	22.396
40hsh160	0	60.568	7.783	0	0	-30.62	31.7	62.328	-1561	65536	-0.1	0.06	59.918	61.23
40hsh162	0	61.055	7.814	0	-0.08	-28.67	26.08	54.756	-4634	65536	-0.1	0.06	60.4	61.722
50hsh160	0	172.79	13.145	0	0.047	-51.9	53.04	104.94	-1547	65536	-0.11	0.09	170.94	174.68
50hsh162	0	152.44	12.347	0	0.039	-49.52	49.49	99.006	-2068	65536	-0.1	0.09	150.8	154.1
60hsh160	0	249.94	15.81	0	0.1	-66.5	68.71	135.21	-11978	65536	-0.12	0.12	247.26	252.67
60hsh162	0	254.52	15.954	0	0.038	-58.69	62.37	121.06	2655.7	65536	-0.12	0.128	251.79	257.3
70hsh160	0	452.13	21.263	0	-0.04	-86.92	80.14	167.06	-2470	65536	-0.17	0.154	447.27	457.06
70hsh162	0	458.35	21.409	0.02	-0.04	-76.52	99.06	175.58	-11916	65536	-0.17	0.162	453.43	463.35
80hsh160	0	656.92	25.63	0	-0.147	-95.9	90.71	186.61	-77173	65536	-0.2	0.196	649.87	664.09
80hsh162	0	667.54	25.837	0.01	0.055	-94.73	99.07	193.8	-3685	65536	-0.21	0.191	660.37	674.82
30hsl160	-0.17	8.061	2.839	-0.66	-0.599	-7.77	5.241	13.011	-16.52	65536	-0.19	-0.15	7.975	8.149
30hsl162	-0.35	4.887	2.211	-0.29	-0.45	-6.725	5.319	12.044	-6.284	65536	-0.37	-0.34	4.834	4.94
40hsl160	-0.11	6.006	2.451	0.502	0.88	-7.577	11.87	19.448	-22.87	65536	-0.13	-0.1	5.941	6.071
40hsl162	0.09	8.709	2.951	0.273	0.024	-8.752	8.919	17.67	32.833	65536	0.07	0.112	8.615	8.804
50hsl160	0.222	17.03	4.127	0.208	-0.682	-11.06	10.33	21.392	18.628	65536	0.19	0.253	16.847	17.216
50hsl162	0.364	17.65	4.201	-0.34	-0.282	-11.27	10.6	21.875	11.534	65536	0.332	0.396	17.461	17.843
60hsl160	-0.1	16.358	4.044	-1.02	0.234	-13.1	7.925	21.026	-48.25	65536	-0.12	-0.1	16.182	16.537
60hsl162	-0.32	37.5	6.124	0.417	-0.944	-12.43	14.28	26.711	-19.1	65536	-0.37	-0.27	37.097	37.909

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70hsl160	0.293	37.451	6.12	-0.58	-0.17	-17.24	14.05	31.297	20.922	65536	0.246	0.339	37.049	37.86
70hsl162	0.259	31.915	5.649	-0.28	-0.771	-16.18	15.53	31.707	21.825	65536	0.216	0.302	31.572	32.263
80hsl160	-0.2	68.972	8.305	-0.83	-0.312	-22.81	15.77	38.579	-42.07	65536	-0.26	-0.13	68.231	69.725
80hsl162	0.217	110.67	10.52	-0.61	-0.68	-26.73	18.27	44.996	48.468	65536	0.137	0.298	109.48	111.88
30hsm160	0	73.541	8.576	0	0.044	-34.85	31.41	66.256	-1134	65536	-0.1	0.06	72.751	74.343
30hsm162	0.01	26.677	5.165	0	-0.02	-22.73	19.02	41.742	427.98	65536	0	0.05	26.39	26.968
40hsm160	0	178.34	13.354	0.05	0	-52.02	49.92	101.94	7711.5	65536	-0.1	0.104	176.42	180.28
40hsm162	0	51.201	7.155	0.05	0.34	-31.72	28.99	60.71	1542.6	65536	-0.1	0.06	50.651	51.76
50hsm160	0	323.11	17.975	0	-0.04	-66.9	61.69	128.59	-935.1	65536	-0.16	0.118	319.64	326.64
50hsm162	0	96.699	9.834	0	-0.06	-37.15	34.47	71.615	-4048	65536	-0.1	0.07	95.661	97.755
60hsm160	0	90.314	9.503	0.09	-0.03	-35.13	35.29	70.421	2115.3	65536	-0.1	0.08	89.344	91.3
60hsm162	0.02	155.62	12.475	0	0.023	-50.06	42.81	92.874	753.7	65536	-0.1	0.112	153.95	157.32
70hsm160	0.01	133.47	11.553	0.01	0	-41.27	44.73	85.991	1137.9	65536	-0.1	0.1	132.04	134.93
70hsm162	0	193.58	13.913	0.04	0.157	-53.43	59.6	113.03	-637.6	65536	-0.13	0.09	191.51	195.7
80hsm160	0.02	207.94	14.42	0	-0.04	-61.43	53.06	114.48	902.69	65536	-0.1	0.126	205.7	210.21
80hsm162	0	279.41	16.715	0	0.119	-64.54	68.54	133.08	2843.9	65536	-0.12	0.134	276.41	282.46
30hst160	0	1.817	1.348	0.128	-1.414	-1.966	2.154	4.12	3458.4	65536	0	0.01	1.798	1.837
30hst162	0	1.797	1.341	0.127	-1.412	-1.957	2.144	4.1	754.08	65536	0	0.01	1.778	1.817
40hst160	0	2.915	1.707	0.142	-1.414	-2.454	2.758	5.211	-625.5	65536	0	0.01	2.883	2.947
40hst162	0	2.861	1.692	0.138	-1.416	-2.432	2.684	5.116	1347.9	65536	0	0.01	2.831	2.892
50hst160	0	4.15	2.037	0.149	-1.415	-2.931	3.238	6.168	-865.5	65536	0	0.01	4.105	4.195
50hst162	0	4.138	2.034	0.149	-1.415	-2.911	3.236	6.147	-1629	65536	0	0.01	4.093	4.183
60hst160	0	5.544	2.355	0.15	-1.415	-3.365	3.746	7.111	543.62	65536	0	0.02	5.484	5.604
60hst162	0	5.521	2.35	0.152	-1.414	-3.362	3.737	7.099	867.36	65536	0	0.02	5.461	5.581
70hst160	0	7.055	2.656	0.158	-1.414	-3.781	4.234	8.015	1406.3	65536	0	0.02	6.979	7.132
70hst162	0	7.022	2.65	0.16	-1.413	-3.791	4.236	8.027	45721	65536	0	0.02	6.947	7.099
80hst160	0	8.715	2.952	0.164	-1.412	-4.194	4.7	8.894	-3148	65536	0	0.02	8.621	8.81
80hst162	0	8.664	2.943	0.161	-1.413	-4.19	4.706	8.896	705.13	65536	0	0.03	8.571	8.759
30ha1712	0	0.146	0.382	0	0.178	-1.834	1.649	3.484	71.293	65536	0	0	0.145	0.148
30ha1714	0.02	0.191	0.437	0.03	0.397	-1.892	1.876	3.768	26.985	65536	0.01	0.02	0.189	0.193
30ha1716	0	0.159	0.399	0.05	0.055	-1.335	1.664	3	-96.57	65536	0	0	0.157	0.161
30ha1718	0	0.01	0.099	0.02	0.091	-0.346	0.37	0.716	-437.3	65536	0	0	0.01	0.01



From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
30hra170	0.01	0.181	0.425	0	0.105	-1.737	1.653	3.389	43.038	65536	0	0.01	0.179	0.183
30hra172	0	0.189	0.434	0.03	0.173	-1.486	2.103	3.589	-252.9	65536	0	0	0.186	0.191
30hsa170	0	0.133	0.365	0.07	0.129	-1.401	1.388	2.789	49.837	65536	0	0.01	0.132	0.135
30hsa172	0	0.197	0.444	0.08	0.164	-1.69	1.91	3.6	-33.84	65536	0	0	0.195	0.199
30hsa173	0	2.613	1.616	0.04	0.061	-5.866	6.101	11.967	-67.51	65536	0	0	2.585	2.642
30hsa176	0	0.159	0.399	0.05	0.055	-1.335	1.664	3	-96.57	65536	0	0	0.157	0.161
40ha1712	0	0.342	0.585	0.06	0	-2.05	2.308	4.357	-102.6	65536	0	0	0.339	0.346
40ha1714	0	0.378	0.615	0	0.308	-2.925	3.032	5.957	-53.84	65536	0	0	0.374	0.382
40ha1716	0.01	0.363	0.603	0.06	0.252	-2.203	2.733	4.936	47.262	65536	0	0.02	0.359	0.367
40ha1718	0	0.018	0.134	0.05	0.126	-0.523	0.508	1.031	51.664	65536	0	0	0.018	0.018
40hra170	0	0.379	0.616	0	0.04	-2.201	2.24	4.442	-95.58	65536	0	0	0.375	0.383
40hra172	0	0.536	0.732	0.02	0.02	-2.611	3.189	5.799	858.74	65536	0	0	0.531	0.542
40hsa170	0	0.293	0.541	0.03	0.443	-2.319	2.344	4.663	208.63	65536	0	0	0.289	0.296
40hsa172	0	0.511	0.715	0	0.085	-3.076	2.671	5.747	413.27	65536	0	0	0.506	0.517
50ha1712	0	1.104	1.051	0.04	0.16	-4.452	5.158	9.609	-76	65536	0	0	1.092	1.116
50ha1714	0.01	0.802	0.895	0.05	0.095	-3.569	3.223	6.792	90.382	65536	0	0.02	0.793	0.81
50ha1716	0	0.01	0.092	0.06	0.156	-0.388	0.392	0.781	236.33	65536	0	0	0.01	0.01
50ha1718	0	0.03	0.173	0.01	0.212	-0.903	0.739	1.642	-253.2	65536	0	0	0.03	0.03
50hra170	0	0.613	0.783	0	0	-2.909	3.122	6.031	164.05	65536	0	0.01	0.606	0.619
50hra172	0.01	0.972	0.986	0	0.148	-3.768	4.147	7.915	91.29	65536	0	0.02	0.961	0.982
50hsa170	0	0.26	0.51	0	0.493	-2.772	2.228	4.999	-70.4	65536	0	0	0.258	0.263
50hsa172	0	0.826	0.909	0.03	0.072	-3.339	3.713	7.052	1085.5	65536	0	0	0.817	0.835
60ha1712	0	2.213	1.488	0.1	0.157	-5.598	6.248	11.846	282.51	65536	0	0.02	2.19	2.237
60ha1714	0.01	1.329	1.153	0	0.384	-5.716	6.025	11.741	118.65	65536	0	0.02	1.314	1.343
60ha1716	0	0.015	0.122	0.03	0.075	-0.41	0.524	0.934	-112.3	65536	0	0	0.015	0.015
60hra170	0	0.966	0.983	-0.1	0.117	-4.701	3.519	8.22	111.27	65536	0	0.02	0.956	0.977
60hra172	0	1.408	1.187	0	0.045	-4.879	4.236	9.115	286.12	65536	0	0.01	1.393	1.424
60hsa170	0	0.417	0.646	0.03	0.235	-2.702	2.476	5.178	-1082	65536	0	0	0.412	0.421
60hsa172	0	1.189	1.09	0.1	0.01	-3.867	4.658	8.525	-813.1	65536	0	0	1.176	1.202
70ha1712	0	3.285	1.812	0.103	0.38	-7.066	9.308	16.374	-1728	65536	0	0.01	3.249	3.321
70ha1714	0	2.108	1.452	0.07	0.221	-5.607	6.766	12.373	-302.6	65536	0	0	2.085	2.131
70ha1716	0	0.02	0.141	0.09	0.084	-0.499	0.582	1.081	-196.9	65536	0	0	0.02	0.02

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70hra170	0	1.547	1.244	0.05	0.037	-4.468	5.73	10.199	-186.4	65536	0	0	1.53	1.564
70hra172	0.01	1.829	1.352	0	0.05	-5.059	4.698	9.757	93.273	65536	0	0.03	1.809	1.849
70hsa170	0	0.905	0.951	0	-0.04	-3.769	3.451	7.22	-80.61	65536	0	0	0.895	0.915
70hsa172	0	1.553	1.246	0.01	0.08	-5.814	4.637	10.451	-179.7	65536	0	0	1.536	1.57
80ha1712	0	4.545	2.132	0.121	0.607	-8.695	11.05	19.744	-198.9	65536	0	0	4.496	4.595
80ha1714	0	3.075	1.754	0.09	0.408	-7.891	7.903	15.795	1862.7	65536	0	0.01	3.042	3.109
80ha1716	0	0.025	0.159	0	0.173	-0.712	0.675	1.387	-118.2	65536	0	0	0.025	0.026
80hra170	0	2.037	1.427	0	-0.06	-4.94	5.248	10.188	-177	65536	0	0	2.015	2.059
80hra172	0	2.405	1.551	0	-0.01	-6.321	6.088	12.409	316.41	65536	0	0.02	2.379	2.431
80hsa170	0	1.062	1.03	0.06	0.287	-4.313	4.371	8.683	-115.6	65536	0	0	1.05	1.073
80hsa172	0	1.726	1.314	0.03	0.175	-5.518	5.912	11.43	232.81	65536	0	0.02	1.707	1.745
30hc1712	-3.44	423.72	20.584	0.05	0.03	-76.04	69.88	145.92	-5.992	65536	-3.59	-3.28	419.17	428.34
30hc1714	21.36	520.92	22.824	0	-0.103	-60.11	100.2	160.28	1.069	65536	21.18	21.53	515.32	526.61
30hc1716	-10.7	542.56	23.293	0.08	-0.08	-91.95	73.72	165.67	-2.167	65536	-10.9	-10.6	536.74	548.49
30hc1718	-14.8	743.89	27.274	0	-0.04	-100.1	78.82	178.92	-1.846	65536	-15	-14.6	735.9	752.01
30hc1774	4.879	529.26	23.006	0.16	-0.107	-74.83	93.91	168.74	4.715	65536	4.703	5.055	523.58	535.04
30hrc170	-1.6	14.321	3.784	0.03	0.018	-15.43	13.83	29.26	-2.371	65536	-1.63	-1.57	14.167	14.477
30hrc172	2.889	136.3	11.675	0.114	0.053	-40.94	54.45	95.395	4.042	65536	2.799	2.978	134.84	137.79
30hsc170	0	46.97	6.853	0	0.599	-40.94	33.27	74.215	11092	65536	-0.1	0.05	46.465	47.482
30hsc172	0	58.177	7.627	0	0.167	-32.24	28.87	61.11	6753	65536	-0.1	0.06	57.552	58.812
30hsc173	0	101.88	10.093	0.03	0.044	-40.42	42.27	82.686	6088.4	65536	-0.1	0.08	100.78	102.99
30hsc174	4.879	529.26	23.006	0.16	-0.107	-74.83	93.91	168.74	4.715	65536	4.703	5.055	523.58	535.04
30hsc176	0.259	624.41	24.988	0	0.105	-95.88	90.05	185.93	96.402	65536	0.07	0.451	617.71	631.23
40hc1712	-1.58	881.35	29.688	0	-0.212	-94.07	96.23	190.3	-18.77	65536	-1.81	-1.35	871.89	890.97
40hc1714	2.785	922.99	30.381	-0.1	-0.08	-92.01	98.29	190.3	10.907	65536	2.553	3.018	913.08	933.07
40hc1716	-3.84	990.7	31.475	0.06	-0.05	-91.93	98.37	190.3	-8.192	65536	-4.08	-3.6	980.06	1001.5
40hc1718	28.94	1284.6	35.842	-0.11	-0.331	-90.13	100.2	190.3	1.239	65536	28.66	29.21	1270.8	1298.6
40hc1774	-8.17	1033.5	32.148	0.07	-0.08	-107.3	103	210.3	-3.934	65536	-8.42	-7.93	1022.4	1044.8
40hrc170	0.137	34.066	5.837	0	0.012	-21.27	22.43	43.7	42.544	65536	0.09	0.182	33.7	34.438
40hrc172	-1.58	30.82	5.552	0.08	0.094	-22.33	21.05	43.374	-3.507	65536	-1.63	-1.54	30.489	31.156
40hsc170	0	181.63	13.477	0	0.29	-70.81	58.62	129.42	-7053	65536	-0.11	0.101	179.68	183.61
40hsc172	0	24	4.899	0.05	0.224	-21.03	25.14	46.168	1265.4	65536	0	0.04	23.742	24.262

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
40hsc174	-8.17	1033.5	32.148	0.07	-0.08	-107.3	103	210.3	-3.934	65536	-8.42	-7.93	1022.4	1044.8
40hsc176	-2.88	152.06	12.331	0.02	0.022	-50.2	46.3	96.497	-4.282	65536	-2.97	-2.79	150.43	153.72
50hrc1712	-5.89	1938.8	44.031	0.07	-0.484	-96.29	94.01	190.3	-7.47	65536	-6.23	-5.56	1917.9	1959.9
50hc1714	3.093	224.37	14.979	0	0	-50.3	66.69	116.99	4.842	65536	2.979	3.208	221.96	226.82
50hc1716	-3.81	261.15	16.16	0.03	0.019	-70.22	57.24	127.46	-4.247	65536	-3.93	-3.68	258.35	264
50hc1718	-0.94	224.13	14.971	0.09	0.073	-57.29	61.39	118.68	-15.89	65536	-1.06	-0.83	221.73	226.58
50hrc170	2.231	67.703	8.228	-0.11	0.082	-32.88	35.3	68.183	3.689	65536	2.168	2.294	66.976	68.442
50hrc172	-0.57	59.019	7.682	0	0.074	-38.68	28.15	66.826	-13.45	65536	-0.63	-0.51	58.385	59.663
50hsc170	0	12.107	3.479	0	0.017	-13.97	14.14	28.115	-414.7	65536	0	0.02	11.977	12.239
50hsc172	0	50.866	7.132	0	-0.02	-26.29	27.33	53.615	-1319	65536	-0.1	0.05	50.32	51.422
50hsc174	1.697	227.27	15.076	0	-0.08	-56.64	66.46	123.1	8.883	65536	1.582	1.813	224.83	229.75
50hsc176	1.107	286.72	16.933	0	0.154	-74.8	72.74	147.54	15.29	65536	0.978	1.237	283.64	289.84
60hc1712	0.898	417.88	20.442	0.02	0.116	-74.27	89.6	163.88	22.765	65536	0.741	1.054	413.39	422.44
60hc1714	-2.09	367.53	19.171	0	0.027	-76.43	73.07	149.5	-9.194	65536	-2.23	-1.94	363.58	371.54
60hc1716	0.813	450.4	21.223	0	-0.03	-87.93	80.51	168.45	26.099	65536	0.651	0.976	445.57	455.32
60hrc170	-1.71	102.22	10.11	0.137	0.106	-40.89	40.32	81.211	-5.911	65536	-1.79	-1.63	101.12	103.34
60hrc172	0.05	112.19	10.592	0.155	0.205	-34.76	48.63	83.383	197.45	65536	0	0.135	110.98	113.41
60hsc170	0	19.478	4.413	0.02	0.058	-16.39	17.82	34.203	-1998	65536	0	0.03	19.269	19.69
60hsc172	0	86.809	9.317	0	0.096	-43.47	36.44	79.909	-5769	65536	-0.1	0.07	85.877	87.757
60hsc174	-0.59	349.76	18.702	0	-0.07	-69.08	65.42	134.5	-31.51	65536	-0.74	-0.45	346.01	353.58
60hsc176	2.694	467.99	21.633	0.04	0.02	-82.65	91.5	174.15	8.031	65536	2.528	2.859	462.96	473.1
70hc1712	0.241	625.19	25.004	0.03	0.023	-91.09	102.9	193.97	103.76	65536	0.05	0.432	618.47	632.01
70hc1714	0.283	547	23.388	0.05	0.027	-85.17	91.75	176.92	82.695	65536	0.104	0.462	541.13	552.97
70hc1716	-2.42	608.11	24.66	0.05	0.087	-96.26	93.76	190.02	-10.19	65536	-2.61	-2.23	601.57	614.74
70hrc170	-0.1	145.97	12.082	0.05	0.055	-45.58	48.18	93.751	-177.3	65536	-0.16	0.02	144.41	147.57
70hrc172	-1.58	188.55	13.731	0.433	0.365	-44.49	54.91	99.397	-8.666	65536	-1.69	-1.48	186.53	190.61
70hsc170	0	59.414	7.708	0	-0.04	-28.92	31.22	60.134	-4103	65536	-0.1	0.06	58.776	60.063
70hsc172	0	129	11.358	0	0.086	-47.62	60.33	107.95	-1846	65536	-0.1	0.08	127.61	130.41
70hsc174	12.35	511.74	22.622	0.01	-0.07	-76.47	95.88	172.35	1.832	65536	12.17	12.52	506.25	517.33
70hsc176	-0.2	651.44	25.523	0.03	0.027	-104.8	105.5	210.3	-130.9	65536	-0.39	0	644.44	658.55
80hc1712	0.841	902.06	30.034	0.08	0.044	-104.4	105.9	210.3	35.704	65536	0.611	1.071	892.37	911.91
80hc1714	0.238	782.8	27.979	0	-0.03	-107.8	102.3	210.04	117.31	65536	0.02	0.453	774.39	791.34

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
80hc1716	6.782	899.47	29.991	0.212	0.178	-97.11	106.5	203.62	4.422	65536	6.552	7.012	889.81	909.28
80hrc170	0.134	231.25	15.207	0.07	0.264	-69.94	60.79	130.72	113.16	65536	0.02	0.251	228.76	233.77
80hrc172	0.863	212.34	14.572	0.12	0.098	-54.67	66.88	121.55	16.887	65536	0.751	0.974	210.06	214.65
80hsc170	0	59.622	7.722	0	0.058	-32.78	30.42	63.201	-1891	65536	-0.1	0.06	58.982	60.273
80hsc172	0	123.27	11.103	0.04	0.236	-45.55	51.62	97.164	98134	65536	-0.1	0.09	121.95	124.62
80hsc174	-5.86	843.19	29.038	0.05	-0.02	-105.2	104.6	209.79	-4.959	65536	-6.08	-5.63	834.13	852.39
80hsc176	-3.03	860.86	29.34	0.04	0.07	-105.7	104.6	210.3	-9.676	65536	-3.26	-2.81	851.62	870.26
30hsh170	0.02	0.159	0.398	0.102	-0.1	-1.439	1.687	3.126	16.529	65536	0.02	0.03	0.157	0.16
30hi1712	7.076	0.952	0.976	0	0.01	2.338	11.13	8.791	0.138	65536	7.069	7.084	0.942	0.962
30hi1714	5.51	3.33	1.825	0.745	-0.577	-1.39	11.45	12.835	0.331	65536	5.496	5.524	3.294	3.366
30hi1716	5.594	1.897	1.377	0.666	0.62	1.017	11.74	10.725	0.246	65536	5.583	5.604	1.877	1.918
30hi1718	5.979	1.214	1.102	-1.09	2.801	-2.268	10.22	12.484	0.184	65536	5.971	5.988	1.201	1.227
30hi1774	6.346	1.986	1.409	-0.76	1.641	-4.526	11.47	16	0.222	65536	6.335	6.357	1.965	2.008
30hri170	5.109	3.743	1.935	0.47	-0.575	-1.64	11.9	13.538	0.379	65536	5.094	5.124	3.703	3.784
30hri172	4.735	3.696	1.922	1.127	0.268	-0.856	11.28	12.132	0.406	65536	4.72	4.75	3.656	3.736
30hsi170	5.643	0.86	0.927	0.04	-0.03	1.585	9.321	7.736	0.164	65536	5.636	5.651	0.85	0.869
30hsi172	6.41	2.173	1.474	-0.82	1.562	-2.574	11.67	14.242	0.23	65536	6.399	6.422	2.15	2.197
30hsi173	1.722	0.189	0.435	-0.56	-0.324	-0.55	2.966	3.516	0.253	65536	1.719	1.725	0.187	0.192
30hsi174	6.346	1.986	1.409	-0.76	1.641	-4.526	11.47	16	0.222	65536	6.335	6.357	1.965	2.008
30hsi176	6.286	1.534	1.239	-0.55	1.592	-3.635	10.78	14.418	0.197	65536	6.276	6.295	1.518	1.551
40hi1712	8.42	3.817	1.954	-0.78	0.076	-0.895	13.87	14.769	0.232	65536	8.405	8.435	3.776	3.858
40hi1714	7.89	2.103	1.45	-0.47	1.242	-2.941	13.06	16	0.184	65536	7.879	7.901	2.08	2.125
40hi1716	7.764	0.686	0.828	0.04	0.028	4.076	11.29	7.209	0.107	65536	7.757	7.77	0.679	0.693
40hi1718	7.054	5.994	2.448	-0.26	-1.453	-0.517	12.49	13.011	0.347	65536	7.035	7.073	5.929	6.059
40hi1774	7.398	5.561	2.358	0.586	-1.086	-0.02	14.22	14.242	0.319	65536	7.38	7.416	5.501	5.622
40hri170	7.551	0.964	0.982	0.06	0.01	3.789	11.88	8.088	0.13	65536	7.544	7.559	0.954	0.975
40hri172	7.321	2.221	1.49	-0.18	-0.07	-1.844	12.57	14.418	0.204	65536	7.31	7.332	2.197	2.246
40hsi170	5.622	2.084	1.444	0.561	1.373	-0.09	13.8	13.89	0.257	65536	5.61	5.633	2.062	2.107
40hsi172	8.827	1.368	1.17	-1.76	6.926	-1.219	13.02	14.242	0.133	65536	8.818	8.836	1.353	1.383
40hsi174	7.398	5.561	2.358	0.586	-1.086	-0.02	14.22	14.242	0.319	65536	7.38	7.416	5.501	5.622
40hsi176	8.435	1.235	1.111	0	0.01	3.845	12.81	8.967	0.132	65536	8.426	8.443	1.222	1.249
50hi1712	9.897	7.433	2.726	0.959	-0.116	3.349	19.35	16	0.275	65536	9.876	9.918	7.353	7.514

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
50hi1714	9.766	10.183	3.191	-0.39	-1.356	0.377	17.43	17.055	0.327	65536	9.742	9.791	10.074	10.295
50hi1716	9.56	1.167	1.081	0	0.019	5.032	13.82	8.791	0.113	65536	9.552	9.568	1.155	1.18
50hi1718	0	0.678	0.824	0.05	-0.01	-3.512	3.52	7.033	2900.7	65536	0	0	0.671	0.686
50hri170	9.38	10.163	3.188	-0.14	-1.45	1.632	16.93	15.297	0.34	65536	9.356	9.404	10.053	10.274
50hri172	8.011	2.49	1.578	1.902	5.127	3.689	16.52	12.835	0.197	65536	7.999	8.023	2.464	2.518
50hsi170	8.086	1.43	1.196	0	-0.08	2.861	12.88	10.022	0.148	65536	8.077	8.095	1.414	1.445
50hsi172	10.51	1.958	1.399	0	-0.389	5.074	15.27	10.198	0.133	65536	10.5	10.52	1.937	1.979
50hsi174	8.496	1.394	1.181	0	-0.01	3.393	13.42	10.022	0.139	65536	8.487	8.505	1.379	1.409
50hsi176	9.44	2.464	1.57	1.109	3.672	3.055	18.7	15.648	0.166	65536	9.428	9.452	2.437	2.491
60hi1712	10.82	1.533	1.238	0	-0.168	5.33	15.88	10.549	0.114	65536	10.81	10.83	1.517	1.55
60hi1714	11.27	10.328	3.214	0.961	-0.677	3.545	20.25	16.703	0.285	65536	11.25	11.3	10.217	10.44
60hi1716	12.44	0.776	0.881	0	0.012	9.026	16.24	7.209	0.071	65536	12.43	12.44	0.768	0.785
60hri170	10.58	10.551	3.248	0.08	-1.358	0.715	19	18.286	0.307	65536	10.55	10.6	10.438	10.666
60hri172	11.5	8.105	2.847	-1.21	0.191	0.646	17.35	16.703	0.248	65536	11.48	11.52	8.018	8.194
60hsi170	9.087	1.439	1.199	0.01	0	4.319	14.34	10.022	0.132	65536	9.078	9.096	1.423	1.454
60hsi172	11.56	1.451	1.204	0	-0.01	6.396	16.77	10.374	0.104	65536	11.55	11.57	1.435	1.467
60hsi174	10.56	1.426	1.194	0	-0.02	5.826	15.67	9.846	0.113	65536	10.55	10.56	1.411	1.442
60hsi176	11.32	11.122	3.335	0.943	-0.792	3.558	20.61	17.055	0.295	65536	11.3	11.35	11.002	11.243
70hi1712	12.86	1.265	1.125	0.02	-0.02	7.997	17.49	9.495	0.087	65536	12.85	12.87	1.252	1.279
70hi1714	13.98	9.811	3.132	-1.36	0.383	1.792	19.55	17.758	0.224	65536	13.96	14	9.706	9.919
70hi1716	13.07	9.692	3.113	1.769	1.684	6.577	23.46	16.879	0.238	65536	13.04	13.09	9.588	9.798
70hri170	12.77	0.978	0.989	0	0	8.455	16.89	8.44	0.077	65536	12.77	12.78	0.968	0.989
70hri172	11.89	11.282	3.359	0.662	-1.096	3.661	21.42	17.758	0.282	65536	11.87	11.92	11.16	11.405
70hsi170	11.86	11.464	3.386	1.055	-0.53	4.131	21.19	17.055	0.286	65536	11.83	11.88	11.341	11.589
70hsi172	12.3	1.219	1.104	0.04	-0.01	7.227	16.9	9.67	0.09	65536	12.29	12.31	1.205	1.232
70hsi174	14.04	16.552	4.068	-0.79	-0.854	1.704	21.22	19.516	0.29	65536	14	14.07	16.374	16.733
70hsi176	15.42	0.994	0.997	0	-0.01	10.705	19.85	9.143	0.065	65536	15.41	15.43	0.983	1.005
80hi1712	14.06	4.607	2.147	3.393	14.012	6.956	28.23	21.275	0.153	65536	14.05	14.08	4.558	4.658
80hi1714	14.94	23.221	4.819	0.746	-1.186	5.605	26.18	20.571	0.323	65536	14.9	14.97	22.971	23.474
80hi1716	16.26	26.795	5.176	-0.26	-1.794	4.304	24.7	20.396	0.318	65536	16.22	16.3	26.507	27.087
80hri170	15.73	9.723	3.118	-1.98	3.194	1.555	21.78	20.22	0.198	65536	15.71	15.75	9.619	9.829
80hri172	13.47	14.037	3.747	1.036	-0.488	4.317	24.01	19.692	0.278	65536	13.44	13.49	13.886	14.19

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
80hsi170	14.46	20.44	4.521	0.318	-1.734	5.245	24.06	18.813	0.313	65536	14.42	14.49	20.221	20.663
80hsi172	14.88	1.358	1.165	0.01	-0.01	10.441	19.76	9.319	0.078	65536	14.88	14.89	1.343	1.373
80hsi174	15.39	21.556	4.643	0.149	-1.698	6.295	25.28	18.989	0.302	65536	15.35	15.43	21.325	21.792
80hsi176	14.74	1.337	1.156	0	-0.03	9.902	19.75	9.846	0.078	65536	14.73	14.75	1.323	1.352
30hl1712	0	0.41	0.641	-2.57	23.111	-9.208	3.686	12.894	-16.69	65536	0	0	0.406	0.415
30hl1714	0.05	0.649	0.805	0.159	-0.842	-1.843	2.074	3.917	15.235	65536	0.05	0.06	0.642	0.656
30hl1716	0.01	0.554	0.744	-2.3	22.866	-12.6	3.238	15.834	73.257	65536	0	0.02	0.548	0.56
30hl1718	-0.1	0.454	0.674	-0.1	-0.803	-1.891	1.645	3.536	-8.291	65536	-0.1	-0.1	0.449	0.459
30hl1774	-0.1	0.622	0.789	0.216	0.168	-3.578	3.728	7.306	-14	65536	-0.1	-0.1	0.615	0.629
30hr170	0.07	0.229	0.478	-2.72	40.512	-9.038	3.651	12.689	7.4	65536	0.06	0.07	0.226	0.231
30hr172	-0.1	0.179	0.423	0	-0.259	-1.609	3.011	4.62	-6.599	65536	-0.1	-0.1	0.177	0.181
30hsl170	-0.4	24.261	4.926	0.319	-0.851	-12.42	13.91	26.33	-12.25	65536	-0.44	-0.36	24	24.526
30hsl174	-0.1	0.622	0.789	0.216	0.168	-3.578	3.728	7.306	-14	65536	-0.1	-0.1	0.615	0.629
30hsl176	0.04	4.212	2.052	-3.29	24.8	-19.66	19.69	39.355	59.015	65536	0.02	0.05	4.166	4.258
40hl1712	0.03	0.337	0.58	-0.19	0.802	-3.874	2.094	5.968	21.935	65536	0.02	0.03	0.333	0.34
40hl1714	0.04	0.331	0.575	-0.22	-0.175	-2.22	2.107	4.327	16.421	65536	0.03	0.04	0.328	0.335
40hl1716	0.04	0.231	0.481	-0.32	-0.296	-1.531	1.321	2.852	13.485	65536	0.03	0.04	0.229	0.234
40hl1718	0	0.359	0.599	-11.9	343.5	-19.7	5.302	25.006	-33.09	65536	0	0	0.355	0.362
40hl1774	0	0.433	0.658	-0.3	-0.336	-2.435	1.804	4.239	113.48	65536	0	0.01	0.428	0.437
40hr170	0	0.941	0.97	-0.29	2.446	-10.49	3.995	14.486	-31.72	65536	0	0	0.931	0.951
40hr172	0	1.175	1.084	-5.56	73.287	-19.5	8.133	27.634	-412.2	65536	0	0	1.162	1.187
40hsl174	0	0.433	0.658	-0.3	-0.336	-2.435	1.804	4.239	113.48	65536	0	0.01	0.428	0.437
40hsl176	0.02	0.285	0.534	-0.14	0.07	-2.511	1.758	4.269	23.565	65536	0.02	0.03	0.282	0.288
50hl1712	-0.41	8.155	2.856	-4.23	20.856	-19.52	10.6	30.115	-6.933	65536	-0.43	-0.39	8.067	8.244
50hl1714	0	1.435	1.198	-0.12	-0.703	-3.302	3.8	7.101	-92.55	65536	0	0	1.42	1.451
50hl1716	0.05	1.051	1.025	-0.1	-0.752	-2.786	2.616	5.402	19.985	65536	0.04	0.06	1.04	1.063
50hl1718	0.04	0.67	0.819	-0.24	-0.739	-2.282	2.26	4.542	22.197	65536	0.03	0.04	0.663	0.678
50hr170	0.104	1.049	1.024	-0.1	1.677	-10.22	4.494	14.711	9.859	65536	0.1	0.112	1.038	1.06
50hr172	0.01	1.63	1.277	-0.17	-1.052	-3.363	2.585	5.949	104.32	65536	0	0.02	1.612	1.647
50hsl174	0.07	1.206	1.098	-0.12	0.038	-5.758	3.98	9.739	16.601	65536	0.06	0.08	1.193	1.219
50hsl176	0	0.858	0.926	-0.12	-0.199	-2.898	2.611	5.509	-34.98	65536	0	0	0.848	0.867
60hl1712	0	1.085	1.042	0.281	0.087	-4.41	3.629	8.039	-21.99	65536	-0.1	0	1.073	1.097

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
60hl1714	0.02	0.685	0.828	0.329	-0.368	-2.21	2.606	4.816	52.687	65536	0	0.02	0.678	0.693
60hl1716	0	1.313	1.146	0.235	-0.701	-2.906	2.857	5.763	-39.34	65536	0	0	1.299	1.327
60hr170	0.06	1.672	1.293	-1.57	16.892	-19.89	6.927	26.813	22.995	65536	0.05	0.07	1.655	1.691
60hr172	0.06	1.805	1.343	0.383	-0.787	-5.812	3.839	9.651	22.909	65536	0.05	0.07	1.785	1.825
60hsl174	0	0.84	0.916	0.03	-0.599	-3.604	2.94	6.545	-31.01	65536	0	0	0.831	0.849
60hsl176	0	0.945	0.972	0.236	0.072	-4.323	3.364	7.687	-25.64	65536	0	0	0.935	0.955
70hl1712	0	2.113	1.454	0	-0.251	-6.669	4.555	11.223	-33958	65536	0	0.01	2.09	2.136
70hl1714	0	2.435	1.56	-0.13	-0.752	-4.258	3.947	8.205	-60.97	65536	0	0	2.409	2.461
70hl1716	0	1.951	1.397	-0.15	-0.698	-6.932	5.776	12.708	-36.26	65536	0	0	1.93	1.972
70hr170	0.05	3.122	1.767	-0.56	3.014	-18.74	4.945	23.687	34.456	65536	0.04	0.07	3.088	3.156
70hr172	0	5.05	2.247	0	0.634	-19.65	6.964	26.608	-122.9	65536	0	0	4.996	5.106
70hsl174	0	2.421	1.556	-0.21	-0.367	-5.416	4.166	9.582	-343.4	65536	0	0	2.395	2.447
70hsl176	0	1.788	1.337	0.21	-0.399	-4.067	4.783	8.85	-57.17	65536	0	0	1.769	1.808
80hl1712	0	2.19	1.48	-0.3	0.8	-13.26	5.628	18.891	-53.8	65536	0	0	2.167	2.214
80hl1714	-0.1	3.617	1.902	-2.55	19.064	-19.73	8.201	27.927	-19.14	65536	-0.11	-0.1	3.578	3.656
80hl1716	0.01	1.773	1.332	-0.11	-0.838	-3.319	3.411	6.73	115.02	65536	0	0.02	1.754	1.793
80hr170	0	0.975	0.987	-1.61	19.183	-17.38	6.16	23.541	365.08	65536	0	0.01	0.965	0.986
80hr172	0.04	3.109	1.763	-0.47	0.844	-16.08	4.98	21.06	40.319	65536	0.03	0.06	3.076	3.143
80hsl174	0	2.626	1.621	0	-0.636	-4.563	4.629	9.192	-106.3	65536	0	0	2.598	2.655
80hsl176	0	2.1	1.449	-0.13	-0.414	-5.481	3.828	9.309	-42.66	65536	0	0	2.078	2.123
30hm1712	0.02	291.24	17.066	0	0.164	-65.49	65.7	131.19	861.05	65536	-0.11	0.15	288.11	294.42
30hm1714	0	229.08	15.135	0	-0.03	-54.39	54.89	109.28	6331	65536	-0.11	0.118	226.62	231.58
30hm1716	0.02	319.11	17.864	-0.1	0.018	-70.81	74.34	145.15	982.59	65536	-0.12	0.155	315.68	322.59
30hm1718	0	358.06	18.922	0.06	0.08	-69.82	70.08	139.9	3568.1	65536	-0.14	0.15	354.21	361.97
30hm1774	0	284.36	16.863	0.04	0	-60.4	64.83	125.23	-1158	65536	-0.14	0.115	281.3	287.46
30hrm170	0	36.387	6.032	0	0.113	-22.68	23.06	45.736	-1854	65536	0	0.04	35.996	36.784
30hrm172	0	279.97	16.732	0	0.098	-61.64	62.17	123.81	2921.7	65536	-0.12	0.134	276.97	283.03
30hsm170	0	263.64	16.237	0	-0.05	-61.08	74.65	135.73	-1377	65536	-0.14	0.113	260.81	266.52
30hsm172	0	279.97	16.732	0	0.098	-61.64	62.17	123.81	2921.7	65536	-0.12	0.134	276.97	283.03
30hsm173	0	485.1	22.025	0	-0.176	-77.11	87.1	164.21	-3129	65536	-0.18	0.162	479.89	490.4
30hsm174	0	284.36	16.863	0.04	0	-60.4	64.83	125.23	-1158	65536	-0.14	0.115	281.3	287.46
30hsm176	0.02	395.5	19.887	0	-0.03	-73.65	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	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70hm1714	0	188.62	13.734	0	0	-52.85	52.09	104.94	4353.7	65536	-0.1	0.108	186.59	190.68
70hm1716	0	243.66	15.609	-0.1	0.017	-60.99	52.72	113.71	-956.5	65536	-0.14	0.103	241.04	246.32
70hrm170	0	265.95	16.308	0	0	-73.94	66.19	140.13	-19151	65536	-0.13	0.124	263.09	268.85
70hrm172	0	262.69	16.208	0.03	0.101	-71.55	68.84	140.39	8282	65536	-0.12	0.126	259.87	265.55
70hsm170	0	175.29	13.24	0	-0.1	-45.8	55.24	101.04	-1022	65536	-0.11	0.09	173.41	177.2
70hsm172	0	310.28	17.615	0	0.038	-69.57	74.22	143.79	-1277	65536	-0.15	0.121	306.95	313.67
70hsm174	0	268.06	16.373	0	-0.05	-55.62	64.88	120.5	35143	65536	-0.13	0.126	265.18	270.99
70hsm176	0	270.52	16.448	0.04	0	-67.63	68.43	136.06	-1164	65536	-0.14	0.112	267.62	273.48
80hm1712	0	510.14	22.586	0	0.043	-86.06	107.6	193.7	-83940	65536	-0.17	0.173	504.66	515.71
80hm1714	0	268.33	16.381	-0.1	0.114	-61.57	65.77	127.34	-1287	65536	-0.14	0.113	265.45	271.26
80hm1716	0	316.86	17.801	0	0.078	-74.46	65.83	140.29	2088.7	65536	-0.13	0.145	313.46	320.32
80hrm170	0	372.83	19.309	0.02	-0.04	-66.9	88.17	155.06	-4560	65536	-0.15	0.144	368.82	376.9
80hrm172	0	350.44	18.72	0.01	-0.03	-68.84	71.87	140.71	-8053	65536	-0.15	0.141	346.68	354.27
80hsm170	0	205.04	14.319	0	-0.09	-49.53	54.39	103.93	-7591	65536	-0.11	0.108	202.84	207.28
80hsm172	0	337.61	18.374	0	0.093	-70.1	76.88	146.97	2279.2	65536	-0.13	0.149	333.98	341.29
80hsm174	0	419.96	20.493	0	-0.09	-76.14	77.83	153.97	-4978	65536	-0.16	0.153	415.45	424.55
80hsm176	0	369.4	19.22	0	-0.05	-82.09	71.78	153.86	-1045	65536	-0.17	0.129	365.43	373.43
30ho1712	0	1.478	1.216	-0.1	0.052	-5.563	5.514	11.077	145.86	65536	0	0.02	1.462	1.494
30ho1714	0	1.427	1.195	0	0.099	-5.821	6.838	12.659	-100.6	65536	0	0	1.412	1.443
30ho1716	0	1.531	1.237	0	0.097	-5.007	6.949	11.956	180.74	65536	0	0.02	1.515	1.548
30ho1718	0	1.518	1.232	-0.1	0.141	-6.29	6.018	12.308	562.65	65536	0	0.01	1.502	1.534
30ho1774	0	1.539	1.24	0	0.075	-5.032	6.045	11.077	961.03	65536	0	0.01	1.522	1.555
30hro170	0	1.436	1.198	0	0.051	-5.176	5.022	10.198	133.46	65536	0	0.02	1.421	1.452
30hro172	0	1.591	1.262	0	0.043	-5.281	5.796	11.077	151.13	65536	0	0.02	1.574	1.609
30hso170	0	1.514	1.231	-0.1	0.016	-5.058	4.964	10.022	-489.7	65536	0	0	1.498	1.531
30hso172	0	1.415	1.19	0	0.048	-5.727	5.702	11.429	-755.6	65536	0	0	1.4	1.431
30hso173	0	0.148	0.384	0	0.083	-2.168	1.524	3.691	243.57	65536	0	0	0.146	0.149
30hso174	0	1.539	1.24	0	0.075	-5.032	6.045	11.077	961.03	65536	0	0.01	1.522	1.555
30hso176	-0.1	1.553	1.246	-0.1	0.066	-6.958	4.822	11.78	-24.16	65536	-0.1	0	1.536	1.57
40ho1712	0	1.45	1.204	0	0.064	-4.897	6.005	10.901	-48.94	65536	0	0	1.434	1.466
40ho1714	0	1.466	1.211	-0.1	0.091	-6.362	6.298	12.659	152.45	65536	0	0.02	1.451	1.482
40ho1716	0.01	1.508	1.228	-0.1	0.044	-5.843	5.234	11.077	110.87	65536	0	0.02	1.492	1.524

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
40ho1718	0	1.504	1.227	0	0.087	-5.771	6.537	12.308	-356.2	65536	0	0	1.488	1.521
40ho1774	0	1.533	1.238	0	0.114	-6.057	5.723	11.78	210.54	65536	0	0.02	1.517	1.55
40hro170	0	1.549	1.245	0.06	0	-4.681	5.165	9.846	-142.3	65536	0	0	1.533	1.566
40hro172	0	1.607	1.268	0	0.03	-5.386	5.867	11.253	268.08	65536	0	0.01	1.59	1.624
40hso170	0	1.486	1.219	-0.1	0.016	-5.76	6.548	12.308	-616.4	65536	0	0	1.47	1.502
40hso172	0	1.482	1.217	0	0.053	-5.712	5.54	11.253	288.86	65536	0	0.01	1.466	1.498
40hso174	0	1.533	1.238	0	0.114	-6.057	5.723	11.78	210.54	65536	0	0.02	1.517	1.55
40hso176	0	1.472	1.213	0	0	-5.115	5.082	10.198	268.15	65536	0	0.01	1.456	1.488
50ho1712	0	1.524	1.235	0.01	0.068	-5.21	6.043	11.253	-84.93	65536	0	0	1.508	1.541
50ho1714	0.01	1.587	1.26	0	0.063	-5.581	5.847	11.429	108.21	65536	0	0.02	1.57	1.604
50ho1716	0	1.473	1.214	0.04	0.063	-4.983	5.215	10.198	197.02	65536	0	0.02	1.458	1.49
50ho1718	0	1.382	1.176	0	0.073	-5.04	5.158	10.198	1438.4	65536	0	0.01	1.367	1.397
50hro170	-0.12	1.634	1.278	0	0.021	-5.292	6.312	11.604	-10.76	65536	-0.13	-0.11	1.616	1.652
50hro172	0	1.77	1.33	0.04	0.086	-6.16	5.62	11.78	-635.9	65536	0	0	1.751	1.789
50hso170	0.128	1.628	1.276	-0.1	-0.02	-5.567	6.389	11.956	9.984	65536	0.118	0.138	1.61	1.646
50hso172	0	1.606	1.267	0	0	-5.986	4.915	10.901	-1517	65536	0	0	1.589	1.624
50hso174	0	1.586	1.259	0	-0.02	-5.322	5.227	10.549	-112	65536	0	0	1.569	1.603
50hso176	0	1.449	1.204	0.03	0.019	-5.995	6.137	12.132	159.01	65536	0	0.02	1.433	1.465
60ho1712	0	1.55	1.245	0	0.026	-5.69	4.86	10.549	2414.6	65536	0	0.01	1.533	1.567
60ho1714	0	1.527	1.236	0.02	0	-5.157	5.041	10.198	615.6	65536	0	0.01	1.51	1.543
60ho1716	0	1.466	1.211	0	0.037	-5.385	5.165	10.549	3999.8	65536	0	0.01	1.45	1.482
60hro170	0.01	1.539	1.24	0	0.054	-6.082	5.523	11.604	96.13	65536	0	0.02	1.522	1.555
60hro172	0	1.642	1.282	-0.1	0.114	-6.968	5.164	12.132	-1129	65536	0	0	1.625	1.66
60hso170	-0.1	1.578	1.256	0	-0.06	-5.25	5.3	10.549	-19.34	65536	-0.1	-0.1	1.561	1.595
60hso172	0	1.531	1.237	0	0.037	-5.334	5.743	11.077	-113.2	65536	0	0	1.514	1.547
60hso174	0	1.576	1.255	0	0.01	-5.194	5.004	10.198	246.78	65536	0	0.02	1.559	1.593
60hso176	0.06	1.527	1.236	0	0.023	-5.145	6.635	11.78	20.443	65536	0.05	0.07	1.511	1.544
70ho1712	0	1.637	1.279	0	0.07	-5.514	6.794	12.308	249.69	65536	0	0.02	1.619	1.655
70ho1714	0	1.473	1.214	-0.1	0.033	-5.93	5.499	11.429	196.53	65536	0	0.02	1.457	1.489
70ho1716	0	1.409	1.187	0	0.061	-6.101	5.679	11.78	332.62	65536	0	0.01	1.394	1.425
70hro170	-0.11	1.576	1.255	0	-0.03	-5.035	5.339	10.374	-11.3	65536	-0.12	-0.1	1.559	1.593
70hro172	0	1.562	1.25	0	0.128	-7.701	6.013	13.714	318.49	65536	0	0.01	1.545	1.579

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70hso170	0.02	1.459	1.208	0	0.083	-5.234	5.667	10.901	55.957	65536	0.01	0.03	1.443	1.475
70hso172	0.124	1.457	1.207	0	-0.02	-4.599	5.072	9.67	9.732	65536	0.115	0.133	1.442	1.473
70hso174	0	1.569	1.253	0	0.071	-5.704	5.724	11.429	-139.1	65536	0	0	1.553	1.587
70hso176	0	1.599	1.265	-0.1	0.067	-5.303	4.895	10.198	-18672	65536	0	0.01	1.582	1.617
80ho1712	0	1.553	1.246	0	0.054	-5.171	6.257	11.429	-228	65536	0	0	1.537	1.57
80ho1714	0	1.434	1.198	0	0.093	-5.625	6.332	11.956	-1196	65536	0	0	1.419	1.45
80ho1716	0.01	1.436	1.198	0	0.087	-5.754	5.675	11.429	125.73	65536	0	0.02	1.421	1.452
80hro170	0	1.661	1.289	0.01	0.044	-5.79	6.694	12.484	523.76	65536	0	0.01	1.643	1.679
80hro172	0	1.653	1.286	-0.1	0.123	-7.276	5.559	12.835	-436	65536	0	0	1.635	1.671
80hso170	0	1.554	1.247	0.02	0.097	-5.858	5.394	11.253	-100.4	65536	0	0	1.538	1.571
80hso172	0	1.592	1.262	0.05	0.034	-5.339	5.386	10.725	268.78	65536	0	0.01	1.575	1.609
80hso174	0	1.482	1.218	0	0.124	-6.718	5.414	12.132	244.72	65536	0	0.01	1.466	1.499
80hso176	0	1.464	1.21	0	0.013	-6.172	5.784	11.956	438.4	65536	0	0.01	1.448	1.48
30hrt170	0	1.55	1.245	0.121	-1.415	-1.819	1.989	3.807	287.85	65536	0	0.01	1.533	1.567
30hrt172	0	1.538	1.24	0.131	-1.41	-1.814	1.976	3.79	-400	65536	0	0	1.521	1.555
30hst170	0	1.77	1.33	0.133	-1.413	-1.932	2.121	4.054	-730.5	65536	0	0	1.751	1.789
30hst172	0	1.789	1.338	0.126	-1.415	-1.942	2.132	4.073	485.7	65536	0	0.01	1.77	1.809
30hst173	0	1.75	1.323	0.127	-1.413	-1.923	2.104	4.027	824.38	65536	0	0.01	1.731	1.769
30hst174	0	1.768	1.33	0.129	-1.411	-1.932	2.129	4.061	1020.3	65536	0	0.01	1.749	1.787
30hst176	0	1.783	1.335	0.124	-1.416	-1.933	2.128	4.061	270	65536	0	0.02	1.764	1.803
30ht1712	0	1.773	1.331	0.13	-1.413	-1.936	2.123	4.059	12108	65536	0	0.01	1.753	1.792
30ht1714	0	1.793	1.339	0.133	-1.412	-1.952	2.148	4.1	-569.9	65536	0	0	1.774	1.813
30ht1716	0	1.734	1.317	0.13	-1.415	-1.904	2.094	3.998	893.58	65536	0	0.01	1.716	1.753
30ht1718	0	1.763	1.328	0.134	-1.41	-1.935	2.126	4.061	-480.7	65536	0	0	1.744	1.782
30ht1774	0	1.768	1.33	0.129	-1.411	-1.932	2.129	4.061	1020.3	65536	0	0.01	1.749	1.787
40hrt170	0	2.478	1.574	0.133	-1.416	-2.266	2.518	4.784	613.76	65536	0	0.02	2.451	2.505
40hrt172	0	2.466	1.57	0.136	-1.413	-2.27	2.517	4.786	1127.3	65536	0	0.01	2.44	2.493
40hst170	0	2.838	1.685	0.138	-1.415	-2.42	2.684	5.104	2043.2	65536	0	0.01	2.808	2.869
40hst172	0	2.825	1.681	0.141	-1.414	-2.414	2.683	5.096	-835.6	65536	0	0.01	2.794	2.855
40hst174	0	2.823	1.68	0.141	-1.413	-2.409	2.68	5.089	-5863	65536	0	0.01	2.793	2.854
40hst176	0	2.822	1.68	0.14	-1.414	-2.409	2.676	5.084	3132.3	65536	0	0.01	2.792	2.853
40ht1712	0	2.833	1.683	0.138	-1.414	-2.417	2.67	5.087	458.9	65536	0	0.02	2.802	2.864

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
40ht1714	0	2.83	1.682	0.137	-1.415	-2.414	2.683	5.096	398.62	65536	0	0.02	2.8	2.861
40ht1716	0	2.811	1.677	0.139	-1.415	-2.413	2.656	5.07	1091.9	65536	0	0.01	2.781	2.842
40ht1718	0	2.799	1.673	0.139	-1.415	-2.408	2.662	5.07	1437.8	65536	0	0.01	2.769	2.83
40ht1774	0	2.823	1.68	0.141	-1.413	-2.409	2.68	5.089	-5863	65536	0	0.01	2.793	2.854
50hrt170	0	3.568	1.889	0.144	-1.417	-2.702	2.995	5.697	3691.4	65536	0	0.02	3.53	3.607
50hrt172	0	3.501	1.871	0.147	-1.415	-2.686	2.999	5.685	-5297	65536	0	0.01	3.464	3.539
50hst170	0	4.05	2.013	0.15	-1.414	-2.885	3.201	6.085	-2572	65536	0	0.02	4.007	4.094
50hst172	0	4.024	2.006	0.149	-1.414	-2.864	3.197	6.061	-3439	65536	0	0.02	3.981	4.068
50hst174	0	4.015	2.004	0.152	-1.414	-2.872	3.203	6.076	-866.6	65536	0	0.01	3.971	4.058
50hst176	0	4.017	2.004	0.151	-1.414	-2.861	3.2	6.061	-805.4	65536	0	0.01	3.974	4.061
50ht1712	0	4.014	2.004	0.15	-1.413	-2.865	3.204	6.068	1829.9	65536	0	0.02	3.971	4.058
50ht1714	0	4.029	2.007	0.146	-1.416	-2.864	3.192	6.056	380.49	65536	0	0.02	3.986	4.073
50ht1716	0	4.025	2.006	0.152	-1.413	-2.869	3.19	6.059	-599.6	65536	0	0.01	3.982	4.069
50ht1718	0	4.009	2.002	0.151	-1.413	-2.871	3.197	6.068	-1408	65536	0	0.01	3.966	4.053
60hrt170	0	4.757	2.181	0.153	-1.415	-3.117	3.461	6.579	-783.7	65536	0	0.01	4.706	4.809
60hrt172	0	4.696	2.167	0.15	-1.416	-3.088	3.457	6.545	479.21	65536	0	0.02	4.646	4.748
60hst170	0	5.395	2.323	0.156	-1.413	-3.311	3.7	7.011	-1890	65536	0	0.02	5.337	5.454
60hst172	0	5.412	2.326	0.156	-1.413	-3.32	3.706	7.026	17223	65536	0	0.02	5.354	5.471
60hst174	0	5.343	2.312	0.157	-1.413	-3.301	3.693	6.994	-2587	65536	0	0.02	5.286	5.402
60hst176	0	5.341	2.311	0.157	-1.413	-3.303	3.684	6.987	-5664	65536	0	0.02	5.284	5.4
60ht1712	0	5.367	2.317	0.157	-1.413	-3.296	3.686	6.982	-2797	65536	0	0.02	5.309	5.425
60ht1714	0	5.359	2.315	0.154	-1.415	-3.287	3.685	6.972	558.55	65536	0	0.02	5.301	5.417
60ht1716	0	5.361	2.315	0.155	-1.414	-3.299	3.683	6.982	689.12	65536	0	0.02	5.303	5.419
70hrt170	0	6.069	2.464	0.156	-1.416	-3.499	3.927	7.426	2656	65536	0	0.02	6.004	6.135
70hrt172	0	5.985	2.446	0.158	-1.413	-3.481	3.901	7.382	1341.4	65536	0	0.02	5.92	6.05
70hst170	0	6.884	2.624	0.162	-1.412	-3.735	4.192	7.927	-824.9	65536	0	0.02	6.81	6.959
70hst172	0	6.889	2.625	0.161	-1.412	-3.718	4.194	7.912	2120.6	65536	0	0.02	6.815	6.965
70hst174	0	6.862	2.62	0.162	-1.412	-3.718	4.175	7.893	-1505	65536	0	0.02	6.789	6.937
70hst176	0	6.855	2.618	0.163	-1.411	-3.708	4.182	7.89	-979.3	65536	0	0.02	6.781	6.93
70ht1712	0	6.87	2.621	0.162	-1.413	-3.719	4.181	7.9	-8240	65536	0	0.02	6.797	6.945
70ht1714	0	6.837	2.615	0.164	-1.412	-3.711	4.181	7.893	-800.3	65536	0	0.02	6.763	6.912
70ht1716	0	6.826	2.613	0.16	-1.412	-3.708	4.174	7.883	1930.2	65536	0	0.02	6.752	6.9

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
80hrt170	0	7.489	2.737	0.16	-1.415	-3.87	4.357	8.227	1509.1	65536	0	0.02	7.409	7.571
80hrt172	0	7.387	2.718	0.163	-1.412	-3.849	4.339	8.188	-2000	65536	0	0.02	7.308	7.468
80hst170	0	8.514	2.918	0.164	-1.413	-4.131	4.66	8.791	2488.5	65536	0	0.02	8.422	8.607
80hst172	0	8.496	2.915	0.166	-1.411	-4.131	4.658	8.789	-848.4	65536	0	0.02	8.405	8.589
80hst174	0	8.466	2.91	0.164	-1.412	-4.121	4.646	8.767	1397.1	65536	0	0.02	8.375	8.558
80hst176	0	8.456	2.908	0.167	-1.41	-4.114	4.65	8.764	-846	65536	0	0.02	8.365	8.549
80ht1712	0	8.473	2.911	0.164	-1.411	-4.126	4.641	8.767	1738	65536	0	0.02	8.382	8.566
80ht1714	0	8.4	2.898	0.166	-1.411	-4.1	4.632	8.733	-2375	65536	0	0.02	8.31	8.492
80ht1716	0	8.457	2.908	0.165	-1.411	-4.126	4.648	8.774	-13068	65536	0	0.02	8.366	8.549
30ha1810	0.04	0.683	0.826	0.116	-0.06	-2.573	2.974	5.547	23.791	65536	0.03	0.04	0.675	0.69
30ha1812	-0.55	24.617	4.962	-0.11	0.386	-22.18	19.28	41.458	-8.952	65536	-0.59	-0.52	24.353	24.886
30ha1814	0.01	0.25	0.5	1.595	16.185	-3.474	6.114	9.588	45.813	65536	0	0.02	0.248	0.253
30ha1816	0	0.118	0.344	0	0.152	-1.374	1.278	2.652	82.891	65536	0	0	0.117	0.119
30ha1818	-0.1	2.646	1.627	-0.81	11.509	-11.73	10.76	22.492	-26.4	65536	-0.1	0	2.618	2.675
30hsa180	0	0.188	0.433	0.05	0.44	-1.569	2.052	3.621	-101	65536	0	0	0.186	0.19
30hsa182	0.01	0.284	0.532	0.119	0.657	-2.061	2.497	4.557	47.357	65536	0	0.02	0.281	0.287
30hsa184	0	0.219	0.468	0	0.307	-1.949	1.818	3.768	-83.44	65536	0	0	0.216	0.221
30hsa186	0	0.261	0.511	0.06	0.271	-1.999	2.106	4.105	118.35	65536	0	0	0.258	0.264
30hsa188	0	0.392	0.626	-3.3	25.285	-6.889	3.12	10.009	-15.04	65536	0	0	0.388	0.397
40ha1810	-0.81	1.994	1.412	0.696	0.68	-4.909	4.711	9.62	-1.739	65536	-0.82	-0.8	1.973	2.016
40ha1812	0.04	0	0.027	-0.11	-0.118	-0.07	0.121	0.189	0.753	65536	0.04	0.04	0	0
40ha1814	0	0.421	0.649	0.03	0.166	-2.34	2.828	5.168	-77.81	65536	0	0	0.416	0.425
40ha1816	0	0.338	0.582	0.04	0.424	-2.315	2.485	4.799	-221.9	65536	0	0	0.335	0.342
40ha1818	0	0.666	0.816	0.04	0.116	-3.155	3.245	6.399	-150.3	65536	0	0	0.659	0.673
40hsa180	0	0.474	0.688	-0.1	0.535	-3.531	2.594	6.126	2343.5	65536	0	0	0.469	0.479
40hsa182	0	0.598	0.773	-0.11	0.428	-3.241	3.148	6.389	589.6	65536	0	0	0.591	0.604
40hsa184	0	0.596	0.772	0.03	0.48	-4.574	3.414	7.988	-119.3	65536	0	0	0.589	0.602
40hsa186	0	0.543	0.737	0.06	0.442	-3.508	3.175	6.683	150.54	65536	0	0.01	0.537	0.549
40hsa188	0.02	0.478	0.692	0	0.334	-2.937	2.967	5.905	44.168	65536	0.01	0.02	0.473	0.483
50ha1810	2.304	1.878	1.37	1.155	2.632	-2.757	10.94	13.693	0.595	65536	2.294	2.315	1.858	1.898
50ha1812	0	0.913	0.956	-0.11	0.131	-4.412	3.387	7.799	-123.2	65536	0	0	0.903	0.923
50ha1814	0	0.947	0.973	0	0.207	-3.66	3.897	7.557	-190.7	65536	0	0	0.936	0.957

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
50ha1816	0	0.625	0.791	0	0.478	-3.872	3.17	7.041	-97.11	65536	0	0	0.619	0.632
50hsa180	0	0.861	0.928	0.02	0.126	-3.657	3.447	7.104	-238.9	65536	0	0	0.852	0.871
50hsa182	0	0.964	0.982	0.105	0.282	-3.447	4.667	8.115	1970	65536	0	0	0.953	0.974
50hsa184	0	1.066	1.033	0	0.017	-3.762	4.09	7.852	-89.47	65536	0	0	1.055	1.078
50hsa186	0	1.027	1.014	0.05	0.159	-3.715	4.621	8.336	241.41	65536	0	0.01	1.016	1.039
50hsa188	-0.16	0.967	0.983	0	0.178	-4.355	3.57	7.925	-6.148	65536	-0.17	-0.15	0.957	0.978
60ha1810	4.118	11.577	3.402	-0.29	-0.108	-5.047	19.12	24.165	0.826	65536	4.092	4.144	11.452	11.703
60ha1812	0	1.221	1.105	0.03	0.165	-3.832	4.188	8.02	338.6	65536	0	0.01	1.208	1.234
60ha1814	0	1.637	1.28	0.06	0.226	-4.611	5.083	9.694	-19679	65536	0	0.01	1.62	1.655
60ha1816	0	1.356	1.164	0.03	0	-4.806	3.793	8.599	449.55	65536	0	0.01	1.341	1.37
60ha1818	0	1.622	1.273	0.05	0.047	-4.866	5.122	9.988	-840.3	65536	0	0	1.604	1.639
60hsa180	0.01	1.566	1.251	0	0.18	-4.985	5.014	9.999	120.47	65536	0	0.02	1.549	1.583
60hsa182	0	1.669	1.292	0.08	0.801	-6.236	8.173	14.409	509.97	65536	0	0.01	1.651	1.687
60hsa184	0	1.756	1.325	-0.1	0.146	-5.836	4.899	10.736	-190.6	65536	0	0	1.737	1.775
60hsa186	0	1.452	1.205	0.07	0.068	-4.52	5.1	9.62	-517.9	65536	0	0	1.437	1.468
60hsa188	-0.1	1.712	1.308	0.09	0.258	-5.158	6.03	11.188	-13.7	65536	-0.11	-0.1	1.694	1.731
70ha1810	0.04	2.439	1.562	0.02	0.342	-6.58	7.323	13.904	44.591	65536	0.02	0.05	2.412	2.465
70ha1812	0	1.831	1.353	-0.1	0.405	-7.163	5.394	12.556	-70.34	65536	0	0	1.811	1.851
70ha1814	0	2.778	1.667	0.06	0.087	-6.863	6.788	13.651	-100.9	65536	0	0	2.748	2.808
70ha1816	0	2.399	1.549	0.04	0.156	-5.823	6.355	12.177	-112.8	65536	0	0	2.373	2.425
70ha1818	0	2.63	1.622	0.03	0.24	-6.903	6.811	13.714	619.04	65536	0	0.02	2.602	2.659
70hsa180	0	2.677	1.636	0	-0.1	-5.489	6.647	12.135	-86.51	65536	0	0	2.648	2.706
70hsa182	0	2.671	1.634	0.03	0.319	-6.502	6.539	13.041	338.91	65536	0	0.02	2.642	2.7
70hsa184	0	2.625	1.62	0	0.131	-6.238	5.866	12.104	-425.1	65536	0	0	2.597	2.654
70hsa186	0	2.155	1.468	0.08	0.352	-6.065	6.808	12.872	446.09	65536	0	0.02	2.132	2.179
70hsa188	0.06	2.342	1.53	0	0.351	-6.788	6.758	13.546	25.911	65536	0.05	0.07	2.317	2.368
80ha1810	0	3.106	1.762	0.115	0.376	-7.681	7.949	15.63	-38.77	65536	-0.1	0	3.072	3.14
80ha1814	0	3.909	1.977	0.143	0.269	-9.387	9.053	18.44	-86.98	65536	0	0	3.867	3.952
80ha1816	0.01	3.531	1.879	0.01	0.118	-8.261	7.527	15.788	180.96	65536	0	0.03	3.493	3.569
80ha1818	0	3.77	1.942	0	0.228	-9.019	8.064	17.082	-546.4	65536	0	0.01	3.729	3.811
80hsa180	0	3.667	1.915	0	-0.03	-6.655	6.87	13.525	471.82	65536	0	0.02	3.628	3.707
80hsa182	0	3.528	1.878	0.181	0.602	-6.625	10.34	16.966	-64.86	65536	0	0	3.49	3.567

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
80hsa184	0	3.393	1.842	0	0.246	-7.179	8.03	15.209	691.52	65536	0	0.02	3.356	3.43
80hsa186	0	3.076	1.754	0.146	0.304	-6.999	8.473	15.472	-173.4	65536	0	0	3.043	3.109
80hsa188	0.868	15.116	3.888	0.83	1.379	-8.611	21.71	30.323	4.478	65536	0.838	0.898	14.954	15.281
30hc1810	2.837	242.14	15.561	0.07	0.07	-56.24	62.96	119.21	5.484	65536	2.718	2.956	239.54	244.79
30hc1812	11.95	146.12	12.088	-3.33	10.722	-51.65	23.29	74.942	1.012	65536	11.86	12.04	144.55	147.71
30hc1814	0.03	201.2	14.184	0.01	0.011	-53.24	50.5	103.74	496	65536	-0.1	0.137	199.04	203.39
30hc1816	2.482	122.16	11.053	-0.18	0.194	-41.25	35.37	76.622	4.454	65536	2.397	2.566	120.85	123.5
30hc1818	-0.44	342	18.493	0.105	-0.314	-60.63	56.95	117.58	-42.01	65536	-0.58	-0.3	338.33	345.73
30hsc180	-0.17	915.59	30.259	0	-0.05	-94.75	95.55	190.3	-174.7	65536	-0.41	0.06	905.75	925.58
30hsc182	5.095	374.42	19.35	0	0.04	-71.47	83.75	155.22	3.798	65536	4.946	5.243	370.4	378.51
30hsc184	-2.96	208.75	14.448	0.08	-0.109	-53.39	51	104.39	-4.879	65536	-3.07	-2.85	206.51	211.03
30hsc186	2.34	228.39	15.113	-0.1	0.096	-60.44	59.16	119.6	6.458	65536	2.224	2.456	225.94	230.89
30hsc188	9.222	189.21	13.755	-0.12	0.024	-35.22	62.3	97.519	1.492	65536	9.117	9.328	187.18	191.28
40hc1810	-0.21	65.695	8.105	0.1	-0.06	-31.39	33.48	64.871	-38.41	65536	-0.27	-0.15	64.99	66.412
40hc1812	-0.18	0.019	0.14	-0.1	-0.09	-0.815	0.321	1.136	-0.797	65536	-0.18	-0.17	0.019	0.02
40hc1814	5.702	533.55	23.099	0.02	0.216	-96.89	99.84	196.73	4.051	65536	5.525	5.879	527.82	539.37
40hc1816	-0.1	36.588	6.049	0.09	0.119	-20.15	25.13	45.274	-86.72	65536	-0.12	0	36.195	36.987
40hc1818	-1.42	65.884	8.117	0.07	0.01	-33.78	27.67	61.451	-5.713	65536	-1.48	-1.36	65.177	66.604
40hsc180	1.346	247.06	15.718	0.01	0.049	-57.34	65.5	122.84	11.682	65536	1.225	1.466	244.41	249.76
40hsc182	-0.75	98.309	9.915	0	0.219	-44.64	36.69	81.32	-13.15	65536	-0.83	-0.68	97.254	99.383
40hsc184	-0.57	62.348	7.896	0.02	0.026	-29.86	30.35	60.203	-13.94	65536	-0.63	-0.51	61.678	63.028
40hsc186	0.552	55.635	7.459	0.146	0.16	-28.69	37.32	66.011	13.507	65536	0.495	0.609	55.038	56.243
40hsc188	0.306	55.609	7.457	0	0.064	-31.63	27.76	59.389	24.397	65536	0.249	0.363	55.012	56.216
50hc1810	-1.28	97.949	9.897	0.09	0.157	-36.39	39.07	75.457	-7.74	65536	-1.35	-1.2	96.897	99.018
50hc1812	1.863	101.61	10.08	0.03	0.034	-38.54	41.42	79.963	5.412	65536	1.786	1.94	100.52	102.72
50hc1814	1.896	110.57	10.515	0.154	0.153	-35.22	56.14	91.363	5.545	65536	1.816	1.977	109.38	111.78
50hc1816	-1.71	72.362	8.507	0.05	0.063	-33.38	31.16	64.546	-4.983	65536	-1.77	-1.64	71.585	73.152
50hsc180	-2.31	530.41	23.031	-0.1	-0.06	-84.72	83.11	167.83	-9.957	65536	-2.49	-2.14	524.72	536.2
50hsc182	2.461	167.03	12.924	-0.1	0.021	-60.87	48.03	108.9	5.252	65536	2.362	2.56	165.24	168.85
50hsc184	-1.85	120.31	10.968	0.05	-0.109	-44.48	38.79	83.274	-5.923	65536	-1.94	-1.77	119.01	121.62
50hsc186	-1.53	108.34	10.409	0	0.227	-41.52	43.27	84.794	-6.817	65536	-1.61	-1.45	107.18	109.53
50hsc188	-0.5	121.72	11.033	0	0.071	-43.74	38.07	81.809	-22.1	65536	-0.58	-0.42	120.41	123.05

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
60hc1810	1.494	158.65	12.596	0.02	-0.04	-49.95	46.09	96.031	8.433	65536	1.397	1.59	156.95	160.38
60hc1812	1.688	154.08	12.413	0.05	0.01	-43.78	51	94.783	7.354	65536	1.593	1.783	152.42	155.76
60hc1814	-0.8	169.2	13.008	0.08	0.098	-50.75	58.64	109.39	-16.29	65536	-0.9	-0.7	167.38	171.04
60hc1816	0.74	158.98	12.609	0	0.216	-51.46	61.08	112.53	17.029	65536	0.644	0.837	157.27	160.71
60hc1818	-0.25	170.81	13.069	0.07	0.081	-57.14	49.92	107.05	-51.53	65536	-0.35	-0.15	168.98	172.67
60hsc180	1.411	911	30.183	0	-0.05	-104.8	104.3	209.07	21.391	65536	1.18	1.642	901.22	920.95
60hsc182	-0.47	281.52	16.778	0	0	-63.37	60.89	124.26	-35.76	65536	-0.6	-0.34	278.49	284.59
60hsc184	1.593	193.21	13.9	0	-0.04	-56.71	52.62	109.33	8.726	65536	1.487	1.699	191.14	195.32
60hsc186	2.903	169.56	13.022	0.09	0.119	-50.71	57.54	108.25	4.485	65536	2.804	3.003	167.74	171.41
60hsc188	-0.94	195.72	13.99	0	0.129	-56.2	56.71	112.91	-14.93	65536	-1.04	-0.83	193.61	197.85
70hc1810	-1.58	261.22	16.162	-0.1	0.258	-68.51	62.64	131.15	-10.23	65536	-1.7	-1.46	258.41	264.07
70hc1812	1.447	248.81	15.774	0	0.114	-65.95	56.58	122.52	10.899	65536	1.326	1.568	246.14	251.52
70hc1814	-0.17	277.93	16.671	0.125	0.106	-64.74	75.15	139.89	-98.89	65536	-0.3	0	274.94	280.96
70hc1816	-1.18	282.26	16.801	0	0.097	-66.15	61.21	127.35	-14.29	65536	-1.31	-1.05	279.23	285.34
70hc1818	0.564	280.27	16.741	0.04	0	-66.92	69.83	136.75	29.675	65536	0.436	0.692	277.26	283.33
70hsc180	1.158	1567.6	39.593	0	-0.182	-103.4	106.9	210.3	34.201	65536	0.855	1.461	1550.8	1584.7
70hsc182	-0.5	398.01	19.95	0.1	0.197	-75.89	96.91	172.79	-40.21	65536	-0.65	-0.34	393.73	402.35
70hsc184	0.562	263.72	16.239	0.08	0.099	-70.84	62.6	133.43	28.892	65536	0.438	0.686	260.88	266.6
70hsc186	0.261	229.5	15.149	0.02	0.091	-53.95	61.19	115.14	58.142	65536	0.145	0.377	227.04	232.01
70hsc188	0.28	275.3	16.592	-0.1	-0.04	-63.81	60.12	123.93	59.192	65536	0.153	0.407	272.35	278.31
80hc1810	-0.99	341.13	18.47	0.09	0.178	-77.85	76.38	154.23	-18.76	65536	-1.13	-0.84	337.46	344.85
80hc1814	-0.47	363.95	19.077	0.07	0.185	-74.74	87.41	162.15	-40.87	65536	-0.61	-0.32	360.04	367.92
80hc1816	1.779	428.21	20.693	-0.1	0.097	-83.85	81.39	165.25	11.631	65536	1.621	1.938	423.61	432.88
80hc1818	0.99	384.6	19.611	0	0.064	-69.15	87.63	156.78	19.814	65536	0.84	1.14	380.47	388.8
80hsc180	0.595	280.72	16.755	-0.1	0.025	-69.73	59	128.73	28.14	65536	0.467	0.724	277.7	283.78
80hsc182	-1.05	560.01	23.665	0.01	0.041	-87.14	102.2	189.29	-22.47	65536	-1.23	-0.87	554	566.13
80hsc184	-0.76	419.67	20.486	0	-0.02	-84.32	73	157.32	-26.97	65536	-0.92	-0.6	415.16	424.25
80hsc186	2.405	344.6	18.563	0.137	0.138	-72	70.61	142.61	7.719	65536	2.263	2.547	340.9	348.36
80hsc188	-1.53	399.38	19.984	0.03	0.096	-70.76	88.03	158.79	-13.09	65536	-1.68	-1.37	395.09	403.74
30hi1810	10.19	0.753	0.868	-0.1	0.13	4.583	13.9	9.319	0.085	65536	10.19	10.2	0.745	0.761
30hi1812	-12.3	7111.7	84.331	0.122	-1.2	-143.7	131.4	275.17	-6.864	65536	-12.9	-11.6	7035.3	7189.3
30hi1814	8.739	14.821	3.85	-3.55	24.75	-33.01	16.4	49.407	0.441	65536	8.71	8.769	14.661	14.982



From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
30hi1816	9.078	5.876	2.424	-0.48	-0.907	1.599	16.54	14.945	0.267	65536	9.059	9.096	5.813	5.94
30hi1818	-16.5	4750.5	68.924	-1.85	1.463	-212.2	20.8	232.97	-4.184	65536	-17	-15.9	4699.5	4802.3
30hsi180	8.663	3.873	1.968	-1.44	2.043	-3.301	13.93	17.231	0.227	65536	8.648	8.678	3.832	3.916
30hsi182	8.315	4.557	2.135	-1.28	0.535	-0.691	13.2	13.89	0.257	65536	8.299	8.331	4.508	4.607
30hsi184	8.89	14.002	3.742	0.06	-1.781	1.635	18.34	16.703	0.421	65536	8.861	8.918	13.851	14.155
30hsi186	7.496	1.343	1.159	0	-0.01	2.317	12.51	10.198	0.155	65536	7.487	7.504	1.328	1.357
30hsi188	4.545	1072.4	32.748	-6.39	38.911	-232.2	13.98	246.15	7.205	65536	4.294	4.796	1060.9	1084.1
40hi1810	12.66	0.746	0.864	0	-0.113	9.248	15.93	6.681	0.068	65536	12.66	12.67	0.738	0.754
40hi1812	-1.47	0.676	0.822	0.05	-0.04	-4.774	1.907	6.681	-0.559	65536	-1.48	-1.46	0.669	0.683
40hi1814	11.65	12.133	3.483	0.56	-1.168	4.063	22.17	18.11	0.299	65536	11.62	11.67	12.002	12.265
40hi1816	12.9	13.628	3.692	-1.07	-0.385	-0.233	21.04	21.275	0.286	65536	12.87	12.93	13.482	13.777
40hi1818	10.76	6.746	2.597	1.462	1.431	4.611	22.55	17.934	0.241	65536	10.74	10.78	6.674	6.82
40hsi180	10.84	10.734	3.276	-0.34	-1.307	-0.531	18.46	18.989	0.302	65536	10.82	10.87	10.618	10.851
40hsi182	9.22	5.97	2.443	1.29	0.407	1.906	17.03	15.121	0.265	65536	9.202	9.239	5.906	6.035
40hsi184	11.42	2.628	1.621	0	-0.515	5.523	18.01	12.484	0.142	65536	11.41	11.44	2.6	2.657
40hsi186	10.37	1.253	1.119	0.01	0.01	5.859	15.35	9.495	0.108	65536	10.36	10.37	1.24	1.267
40hsi188	12.74	10.093	3.177	-1.14	-0.317	3.679	19.15	15.473	0.249	65536	12.72	12.77	9.985	10.203
50hi1810	15.82	1.135	1.065	0.02	0.015	11.23	20.2	8.967	0.067	65536	15.81	15.83	1.123	1.147
50hi1812	16.1	11.501	3.391	-1.41	0.521	5.476	22.53	17.055	0.211	65536	16.08	16.13	11.377	11.626
50hi1814	14.77	23.663	4.864	0.255	-1.615	5.516	25.74	20.22	0.329	65536	14.73	14.8	23.409	23.921
50hi1816	14.83	22.724	4.767	-0.51	-1.494	4.241	23.23	18.989	0.321	65536	14.8	14.87	22.48	22.972
50hsi180	12.18	3.951	1.988	3.163	11.341	5.49	23.78	18.286	0.163	65536	12.16	12.19	3.908	3.994
50hsi182	13.99	1.292	1.137	0	-0.202	9.147	18.64	9.495	0.081	65536	13.98	14	1.278	1.306
50hsi184	14.72	3.234	1.798	0	-0.596	8.021	20.5	12.484	0.122	65536	14.71	14.73	3.199	3.269
50hsi186	13.62	18.149	4.26	-0.26	-1.652	4.975	23.09	18.11	0.313	65536	13.59	13.66	17.954	18.347
50hsi188	15.45	24.301	4.93	0.05	-1.874	6.924	24.51	17.582	0.319	65536	15.41	15.49	24.04	24.566
60hi1810	17.02	0.889	0.943	0.03	-0.02	13.319	21.06	7.736	0.055	65536	17.02	17.03	0.879	0.898
60hi1812	18.28	28.592	5.347	0.589	-1.477	10.427	30.82	20.396	0.293	65536	18.24	18.32	28.285	28.904
60hi1814	17.65	2.671	1.634	0	-0.567	12.033	23.11	11.077	0.093	65536	17.64	17.67	2.642	2.7
60hi1816	8.15	171.44	13.093	-0.85	-1.263	-16.13	22.55	38.681	1.607	65536	8.049	8.25	169.6	173.31
60hi1818	16.29	30.971	5.565	0.638	-1.376	6.56	29.24	22.681	0.342	65536	16.25	16.34	30.638	31.309
60hsi180	16.33	1.313	1.146	0	0.01	11.504	22.23	10.725	0.07	65536	16.33	16.34	1.299	1.327

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
60hsi182	15.89	1.873	1.369	0	-0.343	10.539	20.91	10.374	0.086	65536	15.88	15.9	1.853	1.894
60hsi184	18.92	29.715	5.451	-0.4	-1.726	8.345	28.39	20.044	0.288	65536	18.88	18.96	29.396	30.039
60hsi186	16.5	30.147	5.491	0.467	-1.674	8.687	29.08	20.396	0.333	65536	16.45	16.54	29.823	30.476
60hsi188	20.07	2.535	1.592	0	-0.51	14.848	25.93	11.077	0.079	65536	20.06	20.08	2.508	2.562
70hi1810	21.17	48.257	6.947	0.129	-1.873	10.1	35.59	25.494	0.328	65536	21.12	21.22	47.738	48.783
70hi1812	20.17	3.672	1.916	3.759	21.809	14.881	37.04	22.154	0.095	65536	20.16	20.19	3.633	3.712
70hi1814	20.55	34.717	5.892	0.08	-1.863	10.403	32.03	21.626	0.287	65536	20.51	20.6	34.344	35.096
70hi1816	15.87	19.523	4.419	0.763	-1.123	7.559	27.6	20.044	0.278	65536	15.84	15.91	19.314	19.737
70hi1818	18.63	28.087	5.3	1.225	-0.251	10.568	34.3	23.736	0.285	65536	18.59	18.67	27.785	28.394
70hsi180	18.32	1.261	1.123	0	-0.05	13.448	22.77	9.319	0.061	65536	18.31	18.33	1.247	1.274
70hsi182	20.08	1.415	1.189	-0.1	-0.1	14.574	24.42	9.846	0.059	65536	20.07	20.09	1.399	1.43
70hsi184	21.5	43.449	6.592	0	-1.862	9.97	33.71	23.736	0.307	65536	21.45	21.55	42.983	43.924
70hsi186	19.34	34.607	5.883	0.728	-1.357	11.643	34.68	23.033	0.304	65536	19.29	19.38	34.235	34.985
70hsi188	20.61	41.173	6.417	1.151	-0.374	11.19	37.04	25.846	0.311	65536	20.56	20.66	40.731	41.623
80hi1810	23.62	0.778	0.882	0.04	-0.04	20.047	28.49	8.44	0.037	65536	23.61	23.63	0.769	0.786
80hi1814	23.73	45.029	6.71	-0.67	-1.427	9.425	34.39	24.967	0.283	65536	23.68	23.78	44.546	45.521
80hi1816	-22.4	5088.5	71.333	-1.47	0.176	-166.8	33.32	200.09	-3.18	65536	-23	-21.9	5033.8	5144
80hi1818	23.15	1.438	1.199	0	-0.02	18.408	28.43	10.022	0.052	65536	23.14	23.16	1.423	1.454
80hsi180	22.65	33.923	5.824	-0.93	-1.011	8.815	30.27	21.451	0.257	65536	22.61	22.7	33.558	34.293
80hsi182	21.8	0.9	0.949	0	0.01	17.487	25.93	8.44	0.044	65536	21.8	21.81	0.89	0.909
80hsi184	23.1	1.014	1.007	0.02	0.068	18.762	27.38	8.615	0.044	65536	23.09	23.11	1.003	1.025
80hsi186	22.82	45.737	6.763	0.534	-1.605	12.901	37.87	24.967	0.296	65536	22.77	22.87	45.245	46.236
80hsi188	25.54	1.581	1.257	0.03	-0.04	20.847	30.52	9.67	0.049	65536	25.54	25.55	1.564	1.598
30hl1810	0	2.08	1.442	-1.99	18.579	-19.73	6.121	25.846	-39.59	65536	0	0	2.057	2.102
30hl1812	0.464	7.747	2.783	0.09	0	-10.23	10.36	20.591	5.994	65536	0.443	0.486	7.664	7.832
30hl1814	0.12	1.86	1.364	-5.07	61.402	-19.61	7.054	26.667	11.36	65536	0.11	0.131	1.841	1.881
30hl1816	-0.1	0.994	0.997	-5.85	100.61	-19.65	13.19	32.84	-12.45	65536	-0.1	-0.1	0.984	1.005
30hl1818	1.433	17.961	4.238	1.672	1.176	-15	11.17	26.168	2.957	65536	1.401	1.466	17.768	18.157
30hsi180	0.06	2.447	1.564	-2.2	18.518	-18.43	12.03	30.457	24.507	65536	0.05	0.08	2.421	2.474
30hsi182	-0.15	1.321	1.149	-0.46	11.494	-19.63	8.421	28.054	-7.47	65536	-0.16	-0.15	1.307	1.336
30hsi184	0	2.325	1.525	-3.32	28.632	-19.54	9.707	29.245	-68.96	65536	0	0	2.3	2.351
30hsi186	-0.11	1.353	1.163	-0.55	6.212	-14.36	6.451	20.806	-10.62	65536	-0.12	-0.1	1.339	1.368

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
30hsl188	0.08	5.069	2.251	4.552	25.032	-12.93	13.53	26.462	28.168	65536	0.06	0.1	5.014	5.124
40hl1810	0	2.446	1.564	-1.18	12.938	-19.67	9.49	29.158	-62.04	65536	0	0	2.419	2.472
40hl1812	-0.1	0	0.024	0.111	-0.16	-0.149	0.03	0.176	-0.351	65536	-0.1	-0.1	0	0
40hl1814	-0.1	3.185	1.785	-3.22	24.238	-19.58	7.708	27.292	-19.28	65536	-0.11	-0.1	3.151	3.22
40hl1816	0	1.209	1.1	-1.16	9.184	-12.75	7.816	20.562	-45.4	65536	0	0	1.196	1.222
40hl1818	0	1.14	1.068	-1.2	8.932	-11.98	6.698	18.676	-134.3	65536	0	0	1.128	1.153
40hsl180	0	1.996	1.413	0.169	-0.556	-5.049	8.802	13.851	-52.35	65536	0	0	1.974	2.017
40hsl182	0.04	2.327	1.525	-0.67	2.381	-16.44	10.12	26.559	38.256	65536	0.03	0.05	2.302	2.352
40hsl184	0	2.754	1.659	-1.07	6.854	-19.56	11.66	31.219	458.31	65536	0	0.02	2.724	2.784
40hsl186	0	1.867	1.367	-1.66	16.039	-19.09	10.93	30.017	145.99	65536	0	0.02	1.847	1.888
40hsl188	0.04	1.853	1.361	-0.72	1.851	-13.55	5.267	18.813	33.542	65536	0.03	0.05	1.833	1.873
50hl1810	0.03	3.976	1.994	-2.18	13.582	-19.61	5.181	24.791	60.483	65536	0.02	0.05	3.933	4.019
50hl1812	-0.23	5.944	2.438	-2.87	16.241	-19.57	11.03	30.593	-10.71	65536	-0.25	-0.21	5.88	6.009
50hl1814	0.02	4.174	2.043	-1.23	5.546	-19.67	7.212	26.882	91.138	65536	0	0.04	4.129	4.219
50hl1816	0.117	3.288	1.813	-1.33	9.864	-19.68	13.28	32.957	15.445	65536	0.104	0.131	3.253	3.324
50hsl180	0.204	3.762	1.94	-0.24	0.104	-12.98	6.253	19.233	9.487	65536	0.19	0.219	3.722	3.803
50hsl182	0.216	3.346	1.829	-0.37	0.389	-13.22	7.839	21.06	8.452	65536	0.202	0.23	3.31	3.383
50hsl184	0.155	3.359	1.833	-1.51	9.795	-19.56	10.19	29.744	11.849	65536	0.141	0.169	3.323	3.396
50hsl186	0.09	4.258	2.064	-0.18	1.323	-19.62	9.814	29.431	24.22	65536	0.07	0.101	4.213	4.305
50hsl188	-0.23	3.892	1.973	-1.72	9.884	-19.7	9.57	29.265	-8.685	65536	-0.24	-0.21	3.85	3.934
60hl1810	0.06	5.636	2.374	0.176	0.516	-19.66	6.188	25.846	38.183	65536	0.04	0.08	5.576	5.698
60hl1812	0.01	5.117	2.262	-1.23	5.997	-19.59	7.951	27.536	213.07	65536	0	0.03	5.062	5.173
60hl1814	0.06	7.232	2.689	0.08	-0.601	-9.311	7.276	16.586	45.768	65536	0.04	0.08	7.154	7.31
60hl1816	0.08	5.548	2.355	-0.68	0.794	-16.08	11.27	27.35	28.076	65536	0.07	0.102	5.488	5.608
60hl1818	0	2.58	1.606	-0.49	-0.315	-8.505	3.812	12.317	239.23	65536	0	0.02	2.552	2.608
60hsl180	0.01	4.78	2.186	-0.83	0.528	-9.951	14.03	23.98	162.88	65536	0	0.03	4.728	4.832
60hsl182	-0.1	8.232	2.869	0.09	-0.422	-16.66	7.384	24.039	-33.36	65536	-0.11	-0.1	8.143	8.322
60hsl184	0.03	5.126	2.264	-0.42	-0.259	-16.92	6.196	23.111	80.582	65536	0.01	0.05	5.071	5.182
60hsl186	0	4.957	2.226	0.09	-0.242	-11.96	10.4	22.359	-74.97	65536	0	0	4.904	5.011
60hsl188	0	7.223	2.688	-1.66	7.859	-19.68	10.32	29.998	-56.49	65536	-0.1	0	7.146	7.302
70hl1810	0.189	8.865	2.977	-1.42	3.896	-19.68	6.396	26.071	15.728	65536	0.167	0.212	8.77	8.962
70hl1812	0	9.992	3.161	-0.41	2.484	-19.78	11.48	31.267	1104.3	65536	0	0.03	9.885	10.101

From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70hl1814	-0.14	18.641	4.317	-0.25	-0.873	-19.65	9.071	28.718	-30.89	65536	-0.17	-0.11	18.44	18.844
70hl1816	0.106	7.449	2.729	-0.28	-0.761	-19.5	12.43	31.932	25.782	65536	0.09	0.127	7.369	7.53
70hl1818	0.103	3	1.732	0.292	0.155	-4.803	5.883	10.686	16.85	65536	0.09	0.116	2.968	3.033
70hsl180	-0.1	9.394	3.065	-0.43	-0.735	-11.63	6.616	18.247	-59.02	65536	-0.1	0	9.293	9.497
70hsl182	-0.1	19.678	4.436	-0.16	-1.076	-11.28	8.492	19.77	-68.9	65536	-0.1	0	19.467	19.893
70hsl184	-0.15	7.685	2.772	0	1.137	-19.51	12.3	31.814	-18.72	65536	-0.17	-0.13	7.603	7.769
70hsl186	0	9.14	3.023	-0.55	-0.383	-18.58	9.805	28.386	-180	65536	0	0	9.041	9.239
70hsl188	0	7.64	2.764	-0.56	2.659	-19.67	8.766	28.435	-191.4	65536	0	0	7.558	7.724
80hl1810	-0.1	14.182	3.766	-0.14	0.118	-19.68	11.89	31.56	-36.22	65536	-0.13	-0.1	14.03	14.337
80hl1814	-0.21	68.235	8.26	0	-1.251	-19.64	14.21	33.856	-39.62	65536	-0.27	-0.15	67.503	68.98
80hl1816	0.08	5.695	2.386	-0.11	-1.258	-13.22	4.798	18.022	30.585	65536	0.06	0.1	5.634	5.757
80hl1818	0.04	3.187	1.785	0.137	1.254	-16.35	6.021	22.369	45.176	65536	0.03	0.05	3.153	3.222
80hsl180	0.01	7.832	2.799	-0.17	-0.473	-6.988	7.224	14.212	198.87	65536	0	0.04	7.748	7.918
80hsl182	0.121	48.178	6.941	0.119	-1.397	-19.76	13.75	33.504	57.492	65536	0.07	0.174	47.66	48.704
80hsl184	0.05	7.423	2.725	-0.6	-0.134	-12.78	14.01	26.794	61.012	65536	0.02	0.07	7.344	7.504
80hsl186	0.02	22.017	4.692	-0.1	-0.647	-10.07	12.16	22.222	214	65536	0	0.06	21.78	22.257
80hsl188	-0.1	6.611	2.571	-0.62	0.723	-19.69	5.735	25.426	-45.11	65536	-0.1	0	6.54	6.683
30hm1810	0	630.42	25.108	-0.1	0.268	-95.85	97.95	193.8	6543.5	65536	-0.19	0.196	623.65	637.3
30hm1812	2.953	67.718	8.229	0.436	7.825	-39.37	32.43	71.794	2.787	65536	2.89	3.016	66.991	68.458
30hm1814	0.225	476.17	21.821	0	-0.101	-92.02	75.56	167.58	96.861	65536	0.06	0.392	471.05	481.37
30hm1816	0	589.3	24.276	0.01	-0.09	-88.05	91.36	179.41	2665.5	65536	-0.18	0.195	582.98	595.74
30hm1818	6.714	930.37	30.502	-0.1	-0.772	-89.8	96.57	186.37	4.543	65536	6.48	6.947	920.38	940.52
30hsm180	0	701.87	26.493	0.01	-0.09	-95.85	85.83	181.69	-750.4	65536	-0.24	0.168	694.33	709.53
30hsm182	0	534.34	23.116	0.02	0.412	-95.29	97.95	193.23	-3096	65536	-0.18	0.17	528.6	540.17
30hsm184	0	598.16	24.457	0	0.076	-95.85	92.04	187.88	4626	65536	-0.18	0.193	591.74	604.69
30hsm186	0.02	534.53	23.12	0.04	0.076	-86.29	82.85	169.14	1285.8	65536	-0.16	0.195	528.79	540.37
30hsm188	0.63	647.18	25.44	0	-0.112	-76.86	97.82	174.68	40.408	65536	0.435	0.824	640.23	654.25
40hm1810	0	144.93	12.039	0	0.249	-52.02	48.69	100.71	10655	65536	-0.1	0.09	143.37	146.51
40hm1812	0	2.377	1.542	0	0.049	-5.655	5.467	11.122	-264.2	65536	0	0	2.352	2.403
40hm1814	0.02	1065.6	32.643	0.03	0.083	-105.8	108.1	213.8	2043.5	65536	-0.23	0.266	1054.1	1077.2
40hm1816	0	229.68	15.155	0	0.173	-57.97	57.05	115.02	-1450	65536	-0.13	0.106	227.21	232.18
40hm1818	0	179.09	13.382	0	0.183	-58.65	61.12	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	Range	C.V.	Counts	LMean	UMean	LVar	UVar
70hsm186	0	376.84	19.412	0	0.301	-89.66	89.94	179.6	-1172	65536	-0.17	0.132	372.79	380.95
70hsm188	0.04	809.44	28.451	0.04	0.284	-105.7	108.1	213.8	674.48	65536	-0.18	0.26	800.74	818.27
80hm1810	0	609.5	24.688	0	0.052	-95.41	108.1	203.46	4789	65536	-0.18	0.194	602.96	616.16
80hm1814	0	627.28	25.045	0	0.13	-90.77	104	194.8	-1821	65536	-0.21	0.178	620.54	634.12
80hm1816	0	1486.4	38.553	0.02	-0.146	-105.7	108.1	213.8	-1176	65536	-0.33	0.262	1470.4	1502.6
80hm1818	0.03	813.06	28.514	0	0.128	-105.7	105	210.77	971.13	65536	-0.19	0.248	804.32	821.93
80hsm180	0	116.75	10.805	0	-0.06	-35.94	36.23	72.167	-1146	65536	-0.1	0.07	115.5	118.02
80hsm182	0	487.25	22.074	-0.1	0.284	-99.89	92.71	192.6	-661.7	65536	-0.2	0.136	482.01	492.56
80hsm184	0	895.5	29.925	0	0.281	-105.7	108.1	213.8	-1759	65536	-0.25	0.212	885.88	905.28
80hsm186	0	424.07	20.593	0.03	0.154	-81.62	81.53	163.16	-5002	65536	-0.16	0.154	419.52	428.7
80hsm188	0	1008.2	31.752	0	0.14	-105.7	108.1	213.8	-1274	65536	-0.27	0.218	997.38	1019.2
30ho1810	-0.1	1.838	1.356	0	-0.342	-6.387	5.745	12.132	-23.23	65536	-0.1	0	1.818	1.858
30ho1812	-65.1	379.76	19.487	0.503	40.525	-278.3	193	471.39	-0.299	65536	-65.3	-65	375.68	383.91
30ho1814	14.17	129.53	11.381	-10.3	105.62	-114.9	23.47	138.37	0.803	65536	14.09	14.26	128.14	130.95
30ho1816	0	1.876	1.37	0	-0.188	-5.842	5.059	10.901	150.56	65536	0	0.02	1.856	1.897
30ho1818	-26.6	5448	73.81	-1.96	2.283	-512.3	10.62	522.9	-2.78	65536	-27.1	-26	5389.5	5507.5
30hso180	0	1.793	1.339	0	-0.153	-6.892	6.119	13.011	-377.4	65536	0	0	1.774	1.812
30hso182	0	2.062	1.436	0	-0.331	-6.241	5.715	11.956	344.55	65536	0	0.02	2.04	2.085
30hso184	0	1.392	1.18	0	-0.14	-5.786	4.587	10.374	274.63	65536	0	0.01	1.377	1.408
30hso186	0.195	1.885	1.373	0	-0.342	-4.804	5.042	9.846	7.038	65536	0.185	0.206	1.864	1.905
30hso188	-2.26	325.93	18.054	-6.35	38.59	-128.6	5.354	133.98	-8.003	65536	-2.39	-2.12	322.43	329.49
40ho1810	0	1.808	1.345	0	-0.37	-5.117	4.729	9.846	148.68	65536	0	0.02	1.788	1.827
40ho1812	-5.93	0.711	0.843	0	0.021	-9.728	-1.99	7.736	-0.142	65536	-5.93	-5.92	0.703	0.719
40ho1814	-10.7	1025.9	32.029	0.836	-1.294	-38.01	42.52	80.527	-2.986	65536	-11	-10.5	1014.9	1037.1
40ho1816	0	1.808	1.345	-0.1	-0.13	-5.482	5.067	10.549	148.96	65536	0	0.02	1.788	1.827
40ho1818	0	1.837	1.355	0	-0.175	-5.459	5.267	10.725	-351.2	65536	0	0	1.818	1.857
40hso180	0	1.792	1.339	0.02	-0.186	-6.018	5.762	11.78	324.79	65536	0	0.01	1.773	1.812
40hso182	0	2.053	1.433	0	-0.328	-6.387	5.745	12.132	1568.8	65536	0	0.01	2.031	2.075
40hso184	0	1.546	1.243	0	-0.208	-4.591	5.08	9.67	-144.1	65536	0	0	1.529	1.563
40hso186	0.01	2.107	1.452	0	-0.247	-5.616	5.636	11.253	144.89	65536	0	0.02	2.084	2.13
40hso188	0.05	1.816	1.348	0	-0.239	-7.018	5.289	12.308	29.641	65536	0.04	0.06	1.796	1.836
50ho1810	0.376	1.801	1.342	0	-0.372	-5.416	5.309	10.725	3.572	65536	0.365	0.386	1.782	1.821

From File	Mean	Var	Std	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
50ho1812	0.157	1.927	1.388	0	-0.323	-7.474	5.185	12.659	8.84	65536	0.146	0.168	1.906	1.948
50ho1814	0	1.805	1.343	0	-0.161	-5.333	5.92	11.253	246.42	65536	0	0.02	1.785	1.825
50ho1816	0	1.703	1.305	0	-0.139	-5.295	5.079	10.374	-161.8	65536	0	0	1.685	1.722
50hso180	0	1.83	1.353	0	-0.224	-5.661	5.944	11.604	203.11	65536	0	0.02	1.811	1.85
50hso182	0	1.838	1.356	0	-0.332	-4.816	4.855	9.67	-111.5	65536	0	0	1.818	1.858
50hso184	0	1.483	1.218	0	-0.18	-4.404	4.563	8.967	-239.7	65536	0	0	1.468	1.5
50hso186	0.09	2.079	1.442	-0.1	-0.286	-5.984	5.268	11.253	17.033	65536	0.07	0.1	2.057	2.102
50hso188	0	1.907	1.381	0	-0.312	-5.408	4.79	10.198	386.34	65536	0	0.01	1.887	1.928
60ho1810	-0.24	1.855	1.362	0	-0.383	-6.043	4.506	10.549	-5.695	65536	-0.25	-0.23	1.836	1.876
60ho1812	0	1.901	1.379	0	-0.329	-6.107	5.322	11.429	597.99	65536	0	0.01	1.88	1.921
60ho1814	0	1.73	1.315	0	-0.177	-5.688	5.565	11.253	152.57	65536	0	0.02	1.712	1.749
60ho1816	0	1.787	1.337	0	-0.117	-5.758	5.495	11.253	371.81	65536	0	0.01	1.768	1.807
60ho1818	0	1.746	1.321	0	-0.105	-5.303	5.774	11.077	-1184	65536	0	0	1.727	1.765
60hso180	0	1.977	1.406	0	-0.329	-5.869	4.681	10.549	-212.1	65536	0	0	1.956	1.999
60hso182	0.02	2.062	1.436	0	-0.296	-5.402	4.971	10.374	68.19	65536	0.01	0.03	2.04	2.084
60hso184	0	1.418	1.191	0	-0.168	-5.972	4.929	10.901	-69.82	65536	0	0	1.402	1.433
60hso186	0	1.856	1.362	0	-0.314	-6.343	6.14	12.484	3917.9	65536	0	0.01	1.836	1.877
60hso188	0	2.074	1.44	0	-0.347	-4.98	5.569	10.549	224.09	65536	0	0.02	2.052	2.097
70ho1810	0	1.897	1.377	0	-0.344	-5.78	5.473	11.253	-167.2	65536	0	0	1.877	1.918
70ho1812	0	1.844	1.358	0	-0.221	-5.094	5.455	10.549	-210.2	65536	0	0	1.825	1.865
70ho1814	0	1.711	1.308	0	-0.209	-5.152	5.046	10.198	464.08	65536	0	0.01	1.693	1.73
70ho1816	0.02	1.755	1.325	0	-0.143	-6.271	5.333	11.604	79.125	65536	0	0.03	1.736	1.774
70ho1818	0	1.766	1.329	0	-0.114	-6.907	4.874	11.78	671.84	65536	0	0.01	1.747	1.785
70hso180	0	1.982	1.408	0	-0.325	-5.175	5.199	10.374	338.21	65536	0	0.02	1.961	2.004
70hso182	-0.2	2.149	1.466	0	-0.386	-5.85	5.754	11.604	-7.492	65536	-0.21	-0.18	2.126	2.173
70hso184	-0.28	1.519	1.233	0	-0.17	-5.463	4.383	9.846	-4.383	65536	-0.29	-0.27	1.503	1.536
70hso186	0	1.897	1.377	0	-0.336	-5.999	5.254	11.253	318.98	65536	0	0.02	1.876	1.917
70hso188	0	2.041	1.429	0	-0.339	-7.74	5.447	13.187	238.55	65536	0	0.02	2.019	2.063
80ho1810	0.01	1.845	1.358	0.01	-0.354	-5.061	4.961	10.022	138.81	65536	0	0.02	1.825	1.865
80ho1814	0	1.757	1.325	0	-0.19	-5.323	5.754	11.077	-254.2	65536	0	0	1.738	1.776
80ho1816	3.195	3873.6	62.238	-1.25	-0.434	-113	43.3	156.31	19.483	65536	2.718	3.671	3832	3915.9
80ho1818	0.02	1.799	1.341	0	-0.112	-5.306	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
80hso180	0.01	1.954	1.398	0	-0.279	-5.466	6.666	12.132	135.64	65536	0	0.02	1.933	1.976
80hso182	0	2.124	1.457	0	-0.391	-5.156	5.745	10.901	-1881	65536	0	0.01	2.101	2.147
80hso184	0	1.441	1.201	0	-0.145	-4.882	4.612	9.495	-255.4	65536	0	0	1.426	1.457
80hso186	0	1.935	1.391	0	-0.316	-5.848	5.405	11.253	249.13	65536	0	0.02	1.914	1.956
80hso188	0	2.107	1.452	0	-0.323	-5.234	5.491	10.725	425.37	65536	0	0.02	2.084	2.13
30hst180	0	1.561	1.249	0.123	-1.412	-1.833	1.994	3.827	463.63	65536	0	0.01	1.544	1.578
30hst182	0	1.555	1.247	0.131	-1.411	-1.83	1.99	3.819	-1732	65536	0	0	1.538	1.572
30hst184	0	1.55	1.245	0.122	-1.414	-1.827	1.985	3.812	321.01	65536	0	0.01	1.533	1.567
30hst186	0	1.556	1.248	0.124	-1.411	-1.829	1.988	3.817	333.6	65536	0	0.01	1.54	1.573
30hst188	0	1.559	1.249	0.124	-1.388	-2.944	2.899	5.844	1146.6	65536	0	0.01	1.542	1.576
30ht1810	0	1.577	1.256	0.125	-1.413	-1.85	1.999	3.849	1253.2	65536	0	0.01	1.56	1.594
30ht1812	-0.45	0.175	0.418	0.822	10.697	-3.393	3.154	6.547	-0.926	65536	-0.46	-0.45	0.173	0.177
30ht1814	0	1.542	1.242	0.133	-1.404	-1.91	2.175	4.085	-348.1	65536	0	0	1.525	1.558
30ht1816	0	1.515	1.231	0.129	-1.411	-1.799	1.964	3.763	-379	65536	0	0	1.499	1.532
30ht1818	0	1.645	1.282	0.07	-1.036	-4.623	4.783	9.407	-251.1	65536	0	0	1.627	1.663
40hst180	0	2.48	1.575	0.142	-1.412	-2.289	2.527	4.816	-359.2	65536	0	0	2.453	2.507
40hst182	0	2.484	1.576	0.139	-1.412	-2.281	2.517	4.799	-17280	65536	0	0.01	2.457	2.511
40hst184	0	2.496	1.58	0.136	-1.413	-2.29	2.528	4.818	1004.7	65536	0	0.01	2.47	2.524
40hst186	0	2.481	1.575	0.137	-1.413	-2.284	2.51	4.794	-8491	65536	0	0.01	2.455	2.509
40hst188	0	2.5	1.581	0.139	-1.414	-2.305	2.513	4.818	-2992	65536	0	0.01	2.474	2.528
40ht1810	0	2.487	1.577	0.141	-1.412	-2.279	2.537	4.816	-457	65536	0	0	2.46	2.514
40ht1812	0	0	0.011	0	0.05	-0.04	0.06	0.098	1.435	65536	0	0	0	0
40ht1814	0	2.482	1.575	0.139	-1.413	-2.284	2.519	4.803	4363.6	65536	0	0.01	2.455	2.509
40ht1816	0	2.5	1.581	0.137	-1.415	-2.286	2.524	4.811	1067.4	65536	0	0.01	2.473	2.527
40ht1818	0	2.492	1.579	0.138	-1.413	-2.29	2.513	4.803	-1838	65536	0	0.01	2.466	2.52
50hst180	0	3.545	1.883	0.147	-1.413	-2.707	3.012	5.719	-780.4	65536	0	0.01	3.506	3.583
50hst182	0	3.54	1.881	0.147	-1.413	-2.709	2.986	5.695	-675.1	65536	0	0.01	3.502	3.579
50hst184	0	3.572	1.89	0.144	-1.413	-2.737	3.011	5.748	746.64	65536	0	0.02	3.533	3.611
50hst186	0	3.558	1.886	0.148	-1.413	-2.726	3.001	5.726	-525.1	65536	0	0.01	3.519	3.596
50hst188	0	3.568	1.889	0.144	-1.414	-2.732	3.014	5.746	1124.4	65536	0	0.02	3.53	3.607
50ht1810	0	3.562	1.887	0.146	-1.414	-2.715	3.023	5.739	-12025	65536	0	0.01	3.524	3.601
50ht1812	0	3.544	1.883	0.147	-1.412	-2.732	3	5.731	-1833	65536	0	0.01	3.506	3.583



From File	Mean	Var	StD	Skew	Kurtosis	Min	Max	Range	C.V.	Counts	LMean	UMean	LVar	UVar
50ht1814	0	3.563	1.888	0.143	-1.414	-2.718	3.018	5.736	720.7	65536	0	0.02	3.525	3.602
50ht1816	0	3.579	1.892	0.142	-1.415	-2.729	3.005	5.734	627.21	65536	0	0.02	3.541	3.618
60hst180	0	4.749	2.179	0.156	-1.413	-3.128	3.463	6.591	-485.4	65536	0	0.01	4.698	4.801
60hst182	0	4.744	2.178	0.156	-1.413	-3.114	3.472	6.586	-573.1	65536	0	0.01	4.693	4.796
60hst184	0	4.75	2.18	0.156	-1.413	-3.123	3.471	6.593	-477	65536	0	0.01	4.699	4.802
60hst186	0	4.742	2.178	0.15	-1.415	-3.112	3.457	6.569	554.72	65536	0	0.02	4.691	4.794
60hst188	0	4.787	2.188	0.153	-1.413	-3.14	3.487	6.628	-1340	65536	0	0.02	4.736	4.839
60ht1810	0	4.758	2.181	0.152	-1.413	-3.115	3.469	6.584	1752.3	65536	0	0.02	4.707	4.81
60ht1812	0	4.753	2.18	0.151	-1.414	-3.145	3.485	6.63	719.72	65536	0	0.02	4.702	4.805
60ht1814	0	4.747	2.179	0.155	-1.413	-3.114	3.494	6.608	-526.6	65536	0	0.01	4.696	4.799
60ht1816	0	4.8	2.191	0.152	-1.415	-3.146	3.506	6.652	2051.8	65536	0	0.02	4.748	4.852
60ht1818	0	4.753	2.18	0.153	-1.412	-3.128	3.475	6.603	-36728	65536	0	0.02	4.702	4.805
70hst180	0	6.092	2.468	0.159	-1.412	-3.528	3.952	7.48	-2908	65536	0	0.02	6.026	6.158
70hst182	0	6.034	2.456	0.156	-1.412	-3.501	3.926	7.426	762.62	65536	0	0.02	5.969	6.1
70hst184	0	6.061	2.462	0.162	-1.41	-3.519	3.929	7.448	-573	65536	0	0.02	5.996	6.128
70hst186	0	6.069	2.464	0.159	-1.413	-3.51	3.917	7.426	-2995	65536	0	0.02	6.004	6.135
70hst188	0	6.118	2.474	0.156	-1.413	-3.524	3.939	7.463	685.4	65536	0	0.02	6.053	6.185
70ht1810	0	6.088	2.467	0.16	-1.412	-3.52	3.943	7.463	-543.7	65536	0	0.01	6.023	6.155
70ht1812	0	6.056	2.461	0.156	-1.413	-3.535	3.95	7.485	1094.7	65536	0	0.02	5.991	6.123
70ht1814	0	6.057	2.461	0.157	-1.413	-3.537	3.953	7.49	1219	65536	0	0.02	5.992	6.123
70ht1816	0	6.088	2.467	0.159	-1.412	-3.534	3.933	7.468	-1562	65536	0	0.02	6.022	6.154
70ht1818	0	6.088	2.467	0.155	-1.413	-3.524	3.932	7.455	942.52	65536	0	0.02	6.023	6.155
80hst180	0	7.476	2.734	0.159	-1.413	-3.909	4.381	8.291	659.83	65536	0	0.03	7.395	7.557
80hst182	0	7.46	2.731	0.162	-1.411	-3.899	4.372	8.271	1939.6	65536	0	0.02	7.38	7.541
80hst184	0	7.503	2.739	0.163	-1.411	-3.9	4.369	8.269	-2138	65536	0	0.02	7.423	7.585
80hst186	0	7.475	2.734	0.161	-1.412	-3.903	4.373	8.276	1907	65536	0	0.02	7.395	7.557
80hst188	0	7.53	2.744	0.16	-1.412	-3.91	4.378	8.288	673.1	65536	0	0.03	7.449	7.612
80ht1810	0	7.52	2.742	0.16	-1.413	-3.902	4.374	8.276	783.99	65536	0	0.02	7.439	7.602
80ht1814	0	7.49	2.737	0.162	-1.412	-3.894	4.384	8.278	5937.6	65536	0	0.02	7.41	7.572
80ht1816	0	7.526	2.743	0.163	-1.411	-3.919	4.389	8.308	-1116	65536	0	0.02	7.445	7.608
80ht1818	0	7.517	2.742	0.162	-1.412	-3.905	4.375	8.281	2410	65536	0	0.02	7.436	7.599
30hsl716	0.02	1.247	1.117	-2.29	22.867	-18.89	4.857	23.751	73.259	65536	0	0.02	1.233	1.26

<b>From File</b>	<b>Mean</b>	<b>Var</b>	<b>StD</b>	<b>Skew</b>	<b>Kurtosis</b>	<b>Min</b>	<b>Max</b>	<b>Range</b>	<b>C.V.</b>	<b>Counts</b>	<b>LMean</b>	<b>UMean</b>	<b>LVar</b>	<b>UVar</b>
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



