Onshore Grab Sample

Sample: IR-19-BB
Sample Taken By: D. Phelps
Sample Collected On: 10/30/08
Splits? N/A

County: Indian River
Latitude: 27° 37' 45.8"
Longitude: 80° 21' 00.3"
Datum: WGS 84
Surf. Elev: 0
Datum: N/A

Fine Data Summary

Total Sample Weight	56.124	grams
Total Fines in Sample	0.080	grams
Total Percent Fines	0.14	%

Dry Sieving Summary

Total Sample Weight	56.032	grams
Total Digested Weight	41.286	grams
Total Carbonate Weight	14.746	grams
Total Silica %	73.68	%
Total Carbonate %	26.32	%
Carbonate/Silica Ratio	0.357	

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-19-BB

Total Sample Mass: 56.032 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.010	0.018	0.018
-1.25	-1.375	0.023	0.041	0.059
-1.00	-1.125	0.056	0.100	0.159
-0.75	-0.875	0.011	0.020	0.178
-0.50	-0.625	0.040	0.071	0.250
-0.25	-0.375	0.115	0.205	0.455
0.00	-0.125	0.192	0.343	0.798
0.25	0.125	0.282	0.503	1.301
0.50	0.375	0.694	1.239	2.540
0.75	0.625	1.699	3.032	5.572
1.00	0.875	3.854	6.878	12.450
1.25	1.125	5.743	10.250	22.700
1.50	1.375	11.583	20.672	43.372
1.75	1.625	13.377	23.874	67.246
2.00	1.875	10.573	18.870	86.115
2.25	2.125	5.178	9.241	95.356
2.50	2.375	1.517	2.707	98.064
2.75	2.625	0.650	1.160	99.224
3.00	2.875	0.241	0.430	99.654
3.25	3.125	0.113	0.202	99.855
3.50	3.375	0.048	0.086	99.941
3.75	3.625	0.024	0.043	99.984
4.00	3.875	0.009	0.016	100.000
5.00	4.50	0.000	0.000	100.000

Statistical Results			
Mean:	1.5368	phi	(0.3447 mm)
Standard Dev:	0.4997	phi-units	(0.7072 mm)
Skewness:	-0.5904	dimensionless	
Kurtosis:	5.6430	dimensionless	
5th Moment:	-12.5337	dimensionless	
6th Moment:	88.0319	dimensionless	
RARD *	0.3252	dimensionless	
Median	1.4444	phi	(0.3674 mm)

* RARD = reciprocal absolute relative dispersion (see below)

Statistical Explanation

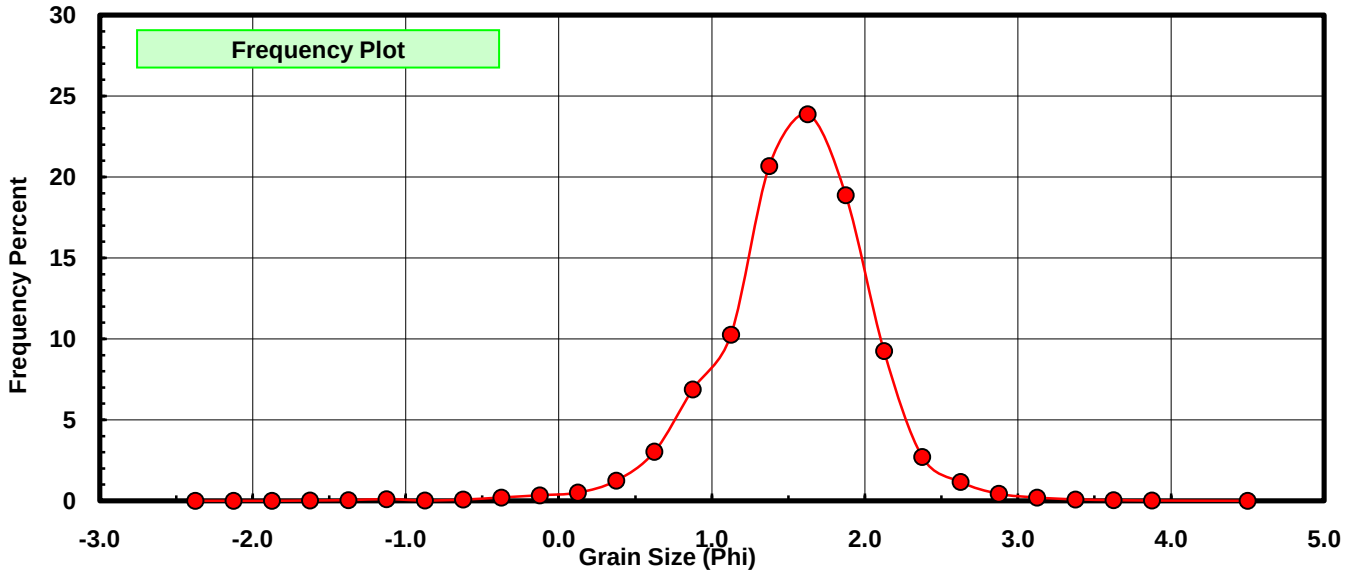
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

For Further Explanation, See Basillle et al. 2002

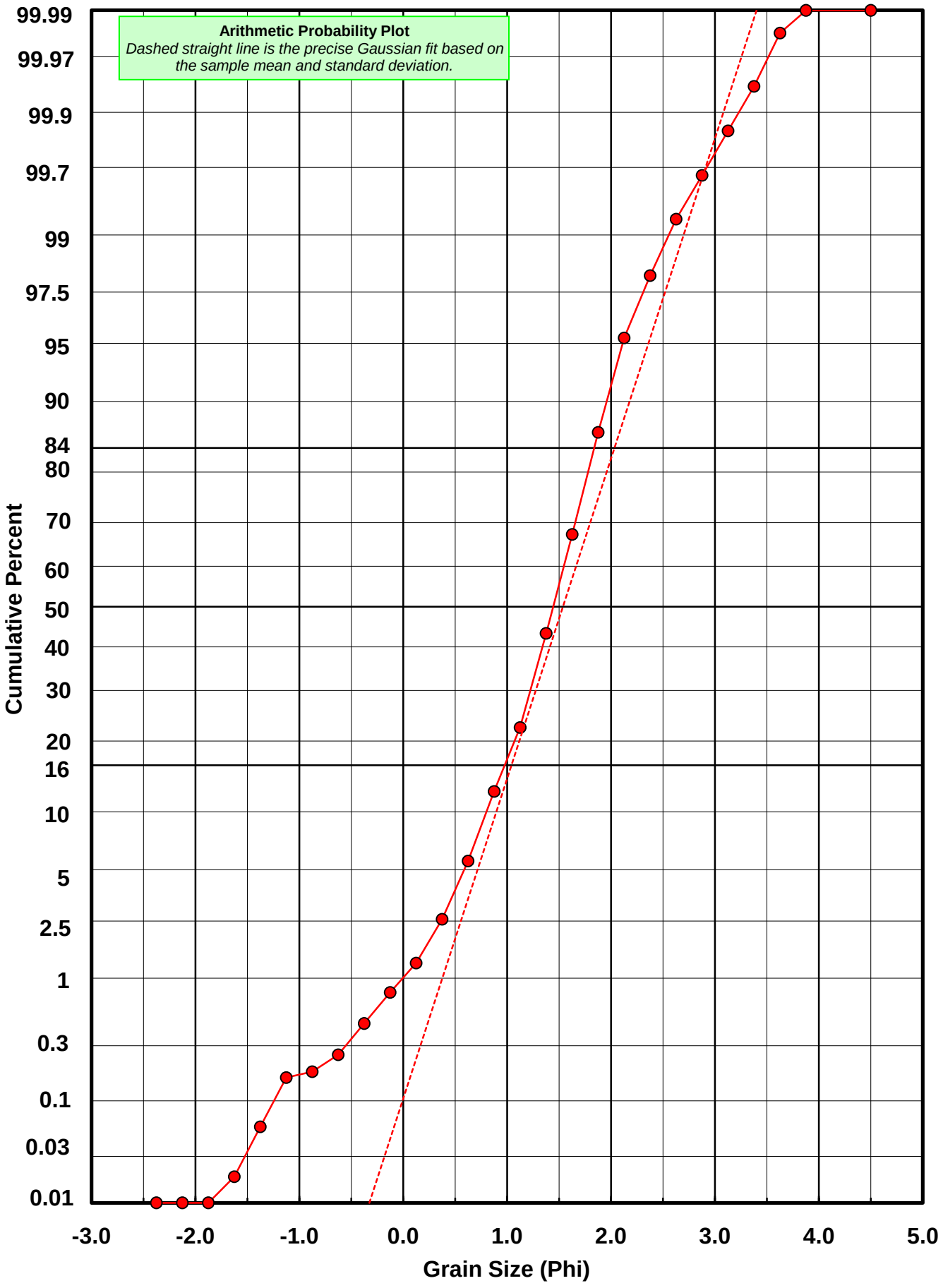
Millimeter data calculated by mm = 2^(-phi)

Reciprocal Absolute Relative Dispersion (RARD) Scale

< 0.5	Excellent homogeneity (e.g., beaches)
0.5 to 1.0	Good homogeneity
1.0 to 1.33	Fair homogeneity
> 1.33	Poor homogeneity (e.g., glacial)



IR-19-BB


Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)

Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: IR-19-BB

Total Carbonate Mass: 14.829 grams

% Carbonate: 26.3 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.010	0.067	0.067
-1.25	-1.375	0.023	0.155	0.223
-1.00	-1.125	0.056	0.378	0.600
-0.75	-0.875	0.011	0.074	0.674
-0.50	-0.625	0.034	0.229	0.904
-0.25	-0.375	0.107	0.722	1.625
0.00	-0.125	0.176	1.187	2.812
0.25	0.125	0.238	1.605	4.417
0.50	0.375	0.490	3.304	7.721
0.75	0.625	0.894	6.029	13.750
1.00	0.875	1.197	8.072	21.822
1.25	1.125	1.422	9.589	31.411
1.50	1.375	3.044	20.527	51.939
1.75	1.625	2.902	19.570	71.509
2.00	1.875	2.596	17.506	89.015
2.25	2.125	1.041	7.020	96.035
2.50	2.375	0.416	2.805	98.840
2.75	2.625	0.147	0.991	99.831
3.00	2.875	0.025	0.169	100.000
3.25	3.125	0.000	0.000	100.000
3.50	3.375	0.000	0.000	100.000
3.75	3.625	0.000	0.000	100.000
4.00	3.875	0.000	0.000	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.3920	phi	(0.381 mm)
Standard Dev:	0.6246	phi-units	(0.6486 mm)
Skewness:	-1.0001	dimensionless	
Kurtosis:	4.7936	dimensionless	
5th Moment:	-13.1262	dimensionless	
6th Moment:	54.0186	dimensionless	
RARD *	0.4487	dimensionless	
Median	1.3514	phi	(0.3919 mm)

* RARD = reciprocal absolute relative dispersion (see below)

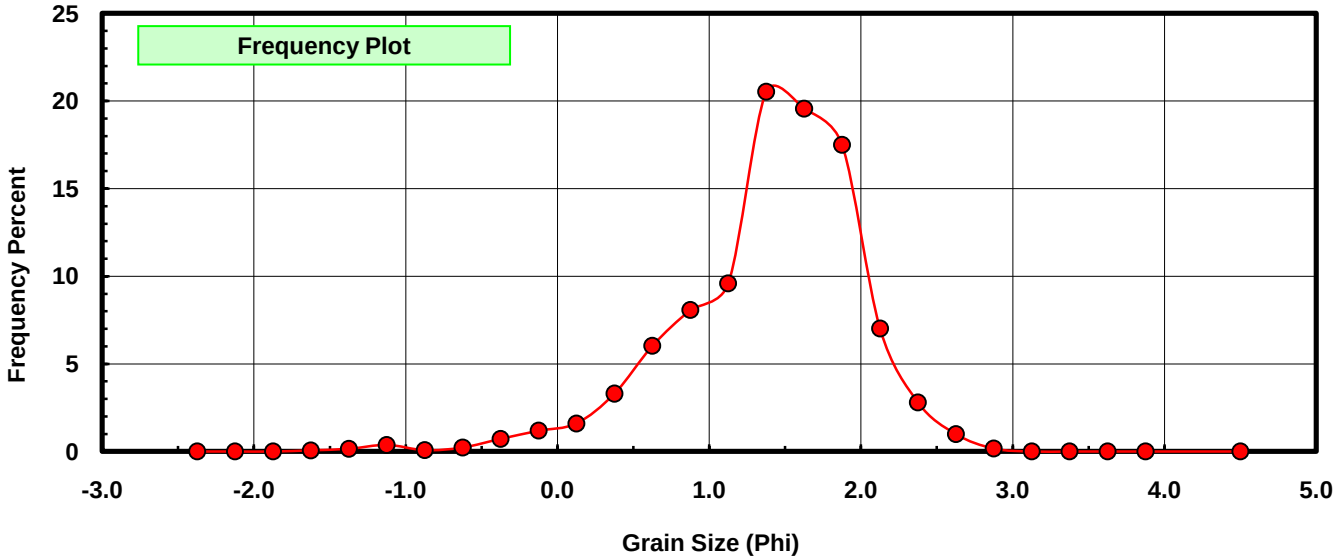
Statistical Explanation

Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

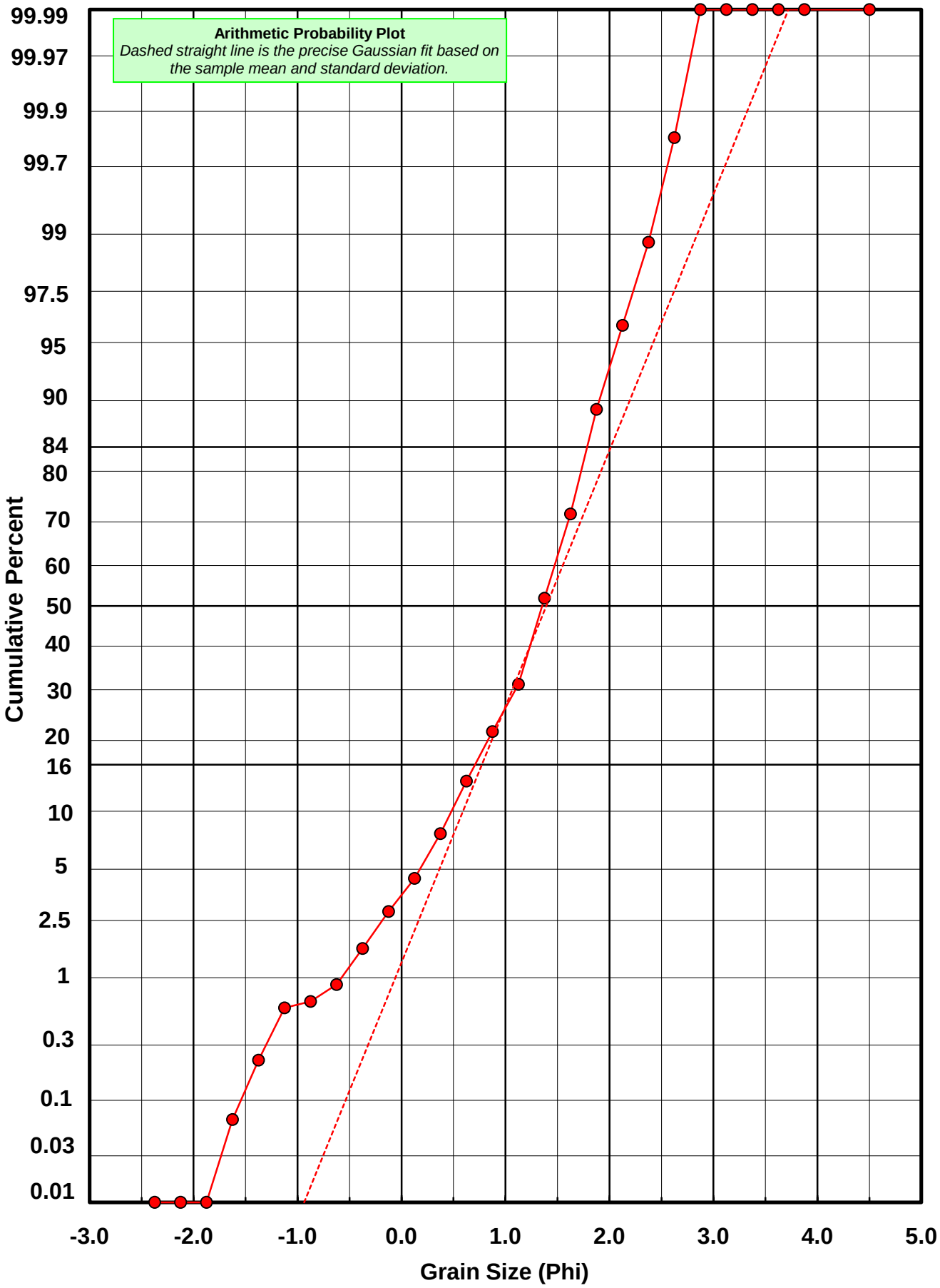
For Further Explanation, See Basillle et al. 2002

Millimeter data calculated by mm = 2^(-phi)

Reciprocal Absolute Relative Dispersion (RARD) Scale	
< 0.5	Excellent homogeneity (e.g., beaches)
0.5 to 1.0	Good homogeneity
1.0 to 1.33	Fair homogeneity
> 1.33	Poor homogeneity (e.g., glacial)



IR-19-BB


Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)

Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-19-BB

Total Digested Mass: 41.286 grams

% Silica: 73.7 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.006	0.015	0.015
-0.25	-0.375	0.008	0.019	0.034
0.00	-0.125	0.016	0.039	0.073
0.25	0.125	0.044	0.107	0.179
0.50	0.375	0.204	0.494	0.673
0.75	0.625	0.805	1.950	2.623
1.00	0.875	2.657	6.436	9.059
1.25	1.125	4.321	10.466	19.525
1.50	1.375	8.539	20.683	40.207
1.75	1.625	10.475	25.372	65.579
2.00	1.875	7.977	19.321	84.900
2.25	2.125	4.137	10.020	94.921
2.50	2.375	1.101	2.667	97.588
2.75	2.625	0.503	1.218	98.806
3.00	2.875	0.216	0.523	99.329
3.25	3.125	0.134	0.325	99.654
3.50	3.375	0.067	0.162	99.816
3.75	3.625	0.059	0.143	99.959
4.00	3.875	0.017	0.041	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.5927	phi	(0.3316 mm)
Standard Dev:	0.4517	phi-units	(0.7312 mm)
Skewness:	0.2539	dimensionless	
Kurtosis:	4.4869	dimensionless	
5th Moment:	5.7485	dimensionless	
6th Moment:	47.1100	dimensionless	
RARD *	0.2836	dimensionless	
Median	1.4715	phi	(0.3606 mm)

* RARD = reciprocal absolute relative dispersion (see below)

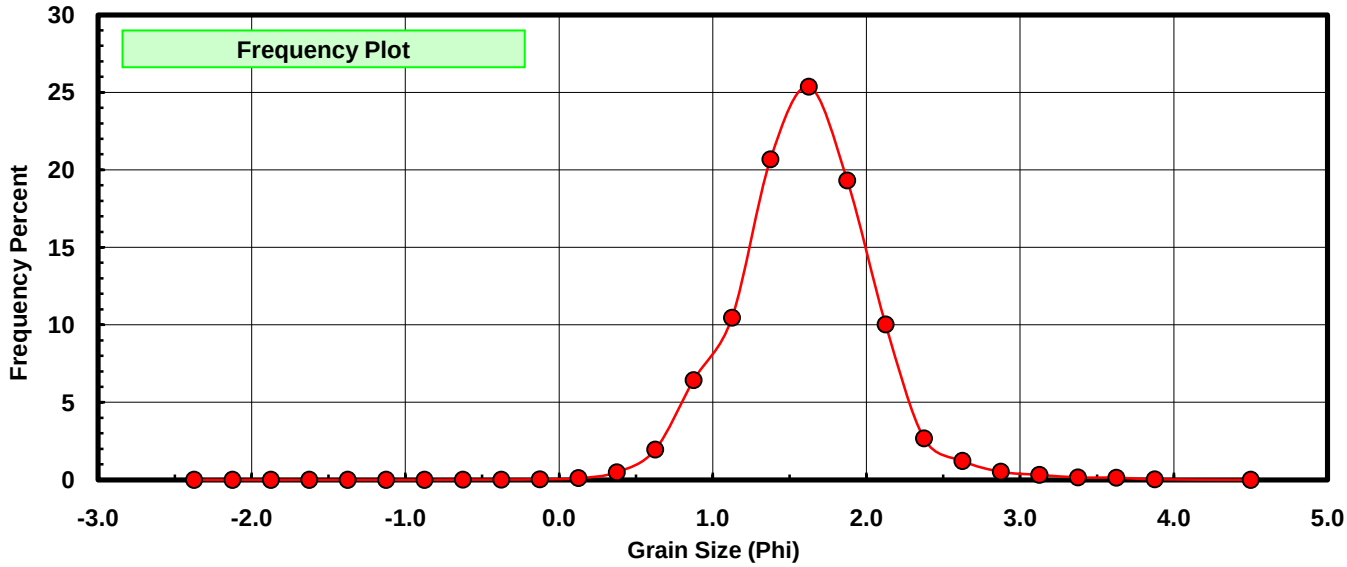
Statistical Explanation

Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

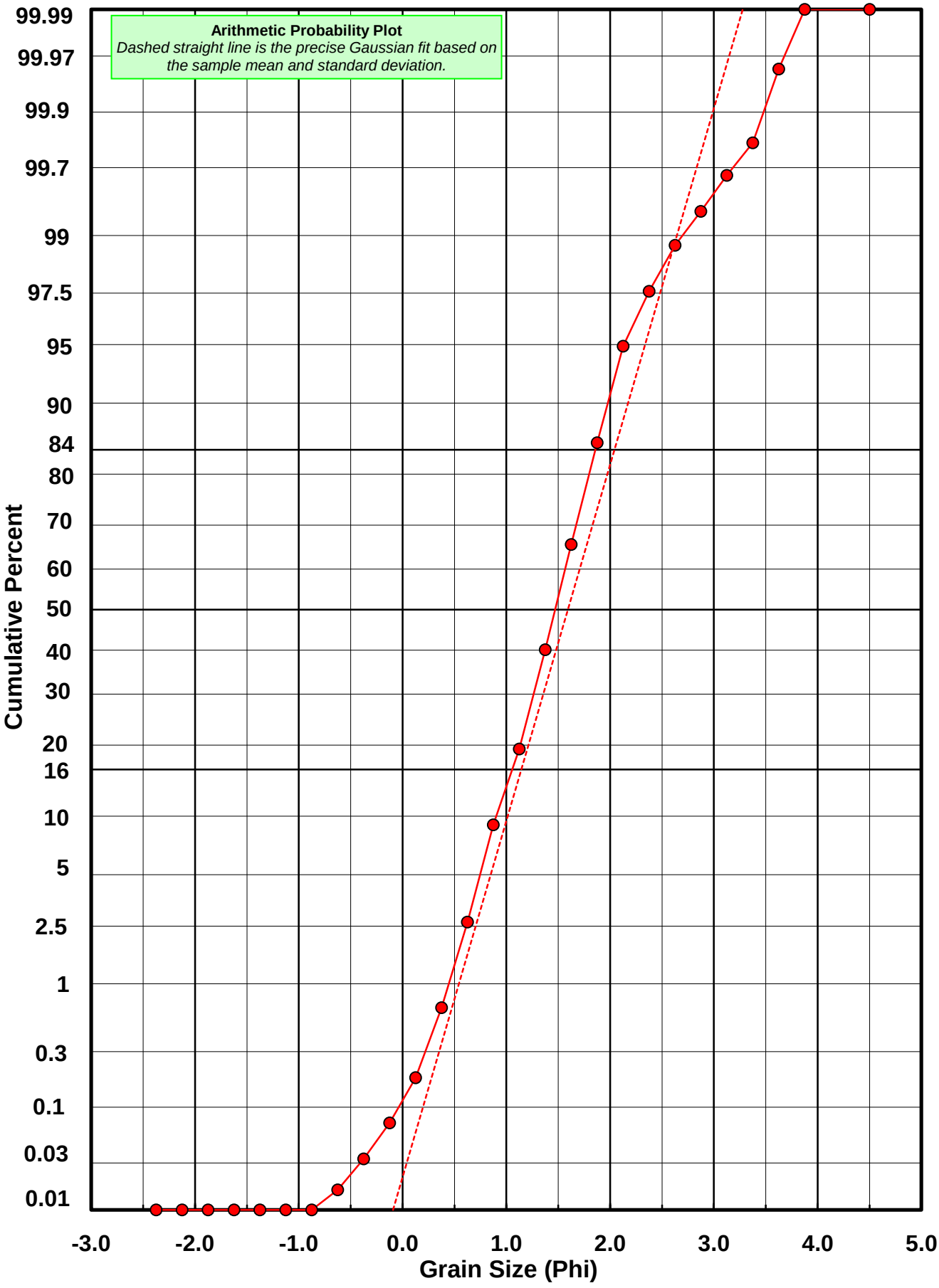
For Further Explanation, See Basillle et al. 2002

Millimeter data calculated by mm = 2^(-phi)

Reciprocal Absolute Relative Dispersion (RARD) Scale	
< 0.5	Excellent homogeneity (e.g., beaches)
0.5 to 1.0	Good homogeneity
1.0 to 1.33	Fair homogeneity
> 1.33	Poor homogeneity (e.g., glacial)



IR-19-BB


Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)