Onshore Grab Sample

Sample: IR-13-BB
Sample Taken By: D. Phelps
Sample Collected On: 10/30/08
Splits? N/A

County: Indian River
Latitude: 27° 42' 32.2"
Longitude: 80° 22' 23.8"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	60.507	grams
Total Fines in Sample	0.115	grams
Total Percent Fines	0.19	%

Dry Sieving Summary

Total Sample Weight	60.335	grams
Total Digested Weight	47.975	grams
Total Carbonate Weight	12.360	grams
Total Silica %	79.51	%
Total Carbonate %	20.49	%
Carbonate/Silica Ratio	0.258	

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-13-BB

Total Sample Mass: 60.335 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	0.000	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	0.010	0.017	0.017
-0.50	-0.625	0.020	0.033	0.050
-0.25	-0.375	0.017	0.028	0.078
0.00	-0.125	0.022	0.036	0.114
0.25	0.125	0.042	0.070	0.184
0.50	0.375	0.138	0.229	0.413
0.75	0.625	0.502	0.832	1.245
1.00	0.875	1.584	2.625	3.870
1.25	1.125	3.250	5.387	9.257
1.50	1.375	8.407	13.934	23.191
1.75	1.625	13.128	21.759	44.949
2.00	1.875	12.691	21.034	65.983
2.25	2.125	8.102	13.428	79.412
2.50	2.375	4.450	7.375	86.787
2.75	2.625	4.416	7.319	94.106
3.00	2.875	2.453	4.066	98.172
3.25	3.125	0.806	1.336	99.508
3.50	3.375	0.202	0.335	99.843
3.75	3.625	0.073	0.121	99.964
4.00	3.875	0.022	0.036	100.000
5.00	4.50	0.000	0.000	100.000

Statistical Results			
Mean:	1.8571	phi	(0.276 mm)
Standard Dev:	0.5272	phi-units	(0.6939 mm)
Skewness:	0.2223	dimensionless	
Kurtosis:	3.4766	dimensionless	
5th Moment:	-0.0616	dimensionless	
6th Moment:	25.0339	dimensionless	
RARD *	0.2839	dimensionless	
Median	1.6850	phi	(0.311 mm)

* RARD = reciprocal absolute relative dispersion (see below)

Statistical Explanation

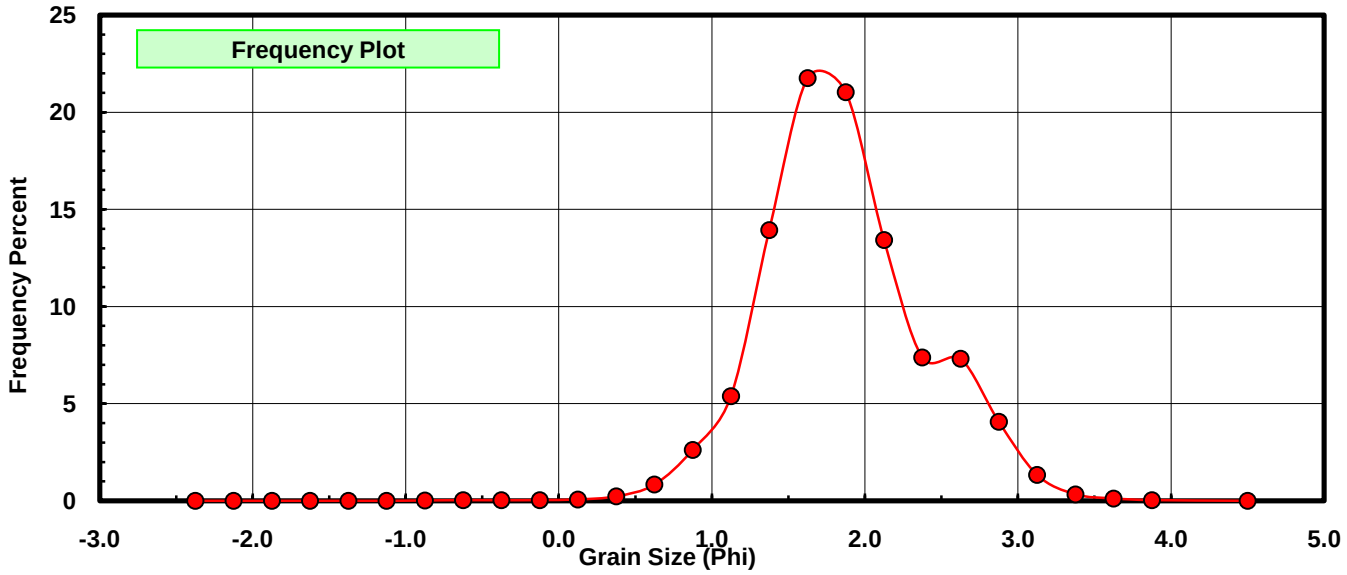
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

For Further Explanation, See Basillle et al. 2002

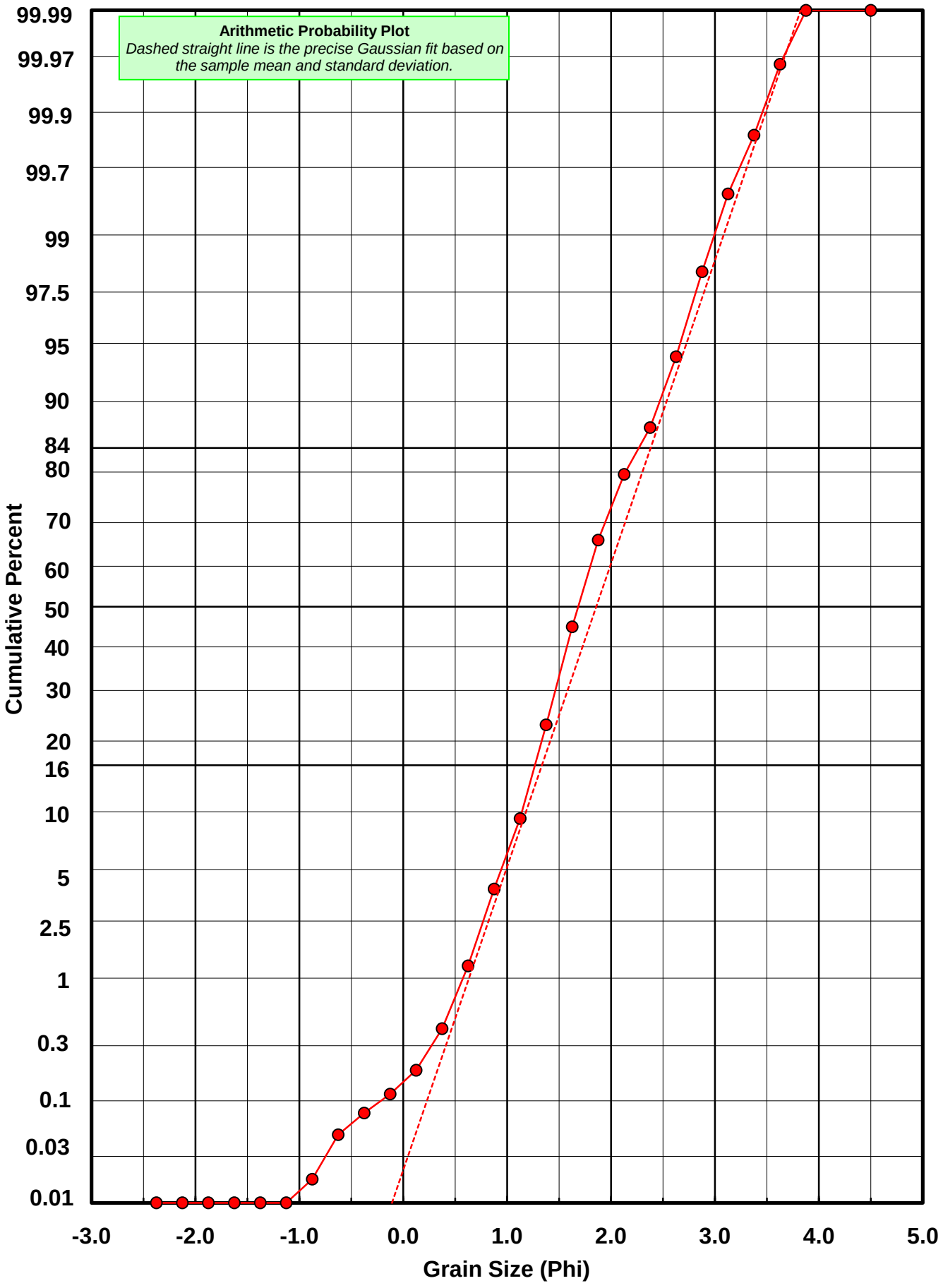
Millimeter data calculated by mm = 2^(-phi)

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-13-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-13-BB

Total Carbonate Mass: 12.379 grams

% Carbonate: 20.5 %

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	0.010	0.081	0.081
-0.50	-0.625	0.020	0.162	0.242
-0.25	-0.375	0.017	0.137	0.380
0.00	-0.125	0.011	0.089	0.469
0.25	0.125	0.036	0.291	0.759
0.50	0.375	0.105	0.848	1.608
0.75	0.625	0.309	2.496	4.104
1.00	0.875	0.642	5.186	9.290
1.25	1.125	1.319	10.655	19.945
1.50	1.375	1.517	12.255	32.200
1.75	1.625	3.218	25.996	58.195
2.00	1.875	2.999	24.227	82.422
2.25	2.125	1.351	10.914	93.335
2.50	2.375	0.546	4.411	97.746
2.75	2.625	0.113	0.913	98.659
3.00	2.875	0.166	1.341	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:	1.6264	phi	(0.3239 mm)
Standard Dev:	0.4969	phi-units	(0.7086 mm)
Skewness:	-0.5748	dimensionless	
Kurtosis:	4.4811	dimensionless	
5th Moment:	-9.2228	dimensionless	
6th Moment:	50.1203	dimensionless	
RARD *	0.3055	dimensionless	
Median	1.5462	phi	(0.3424 mm)

* RARD = reciprocal absolute relative dispersion (see below)

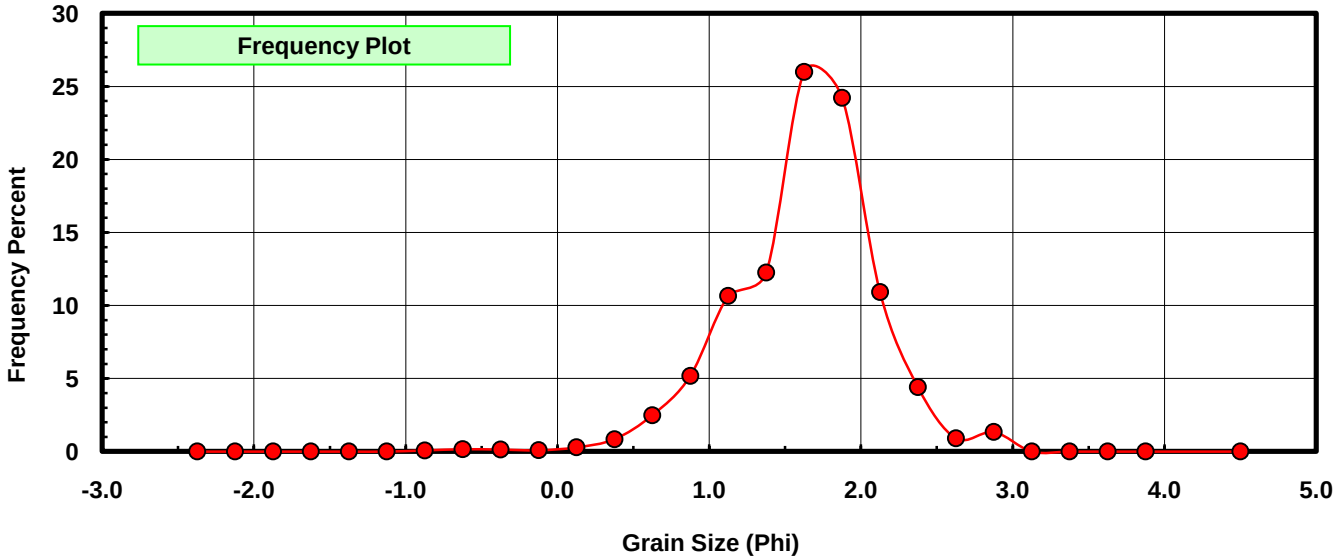
Statistical Explanation

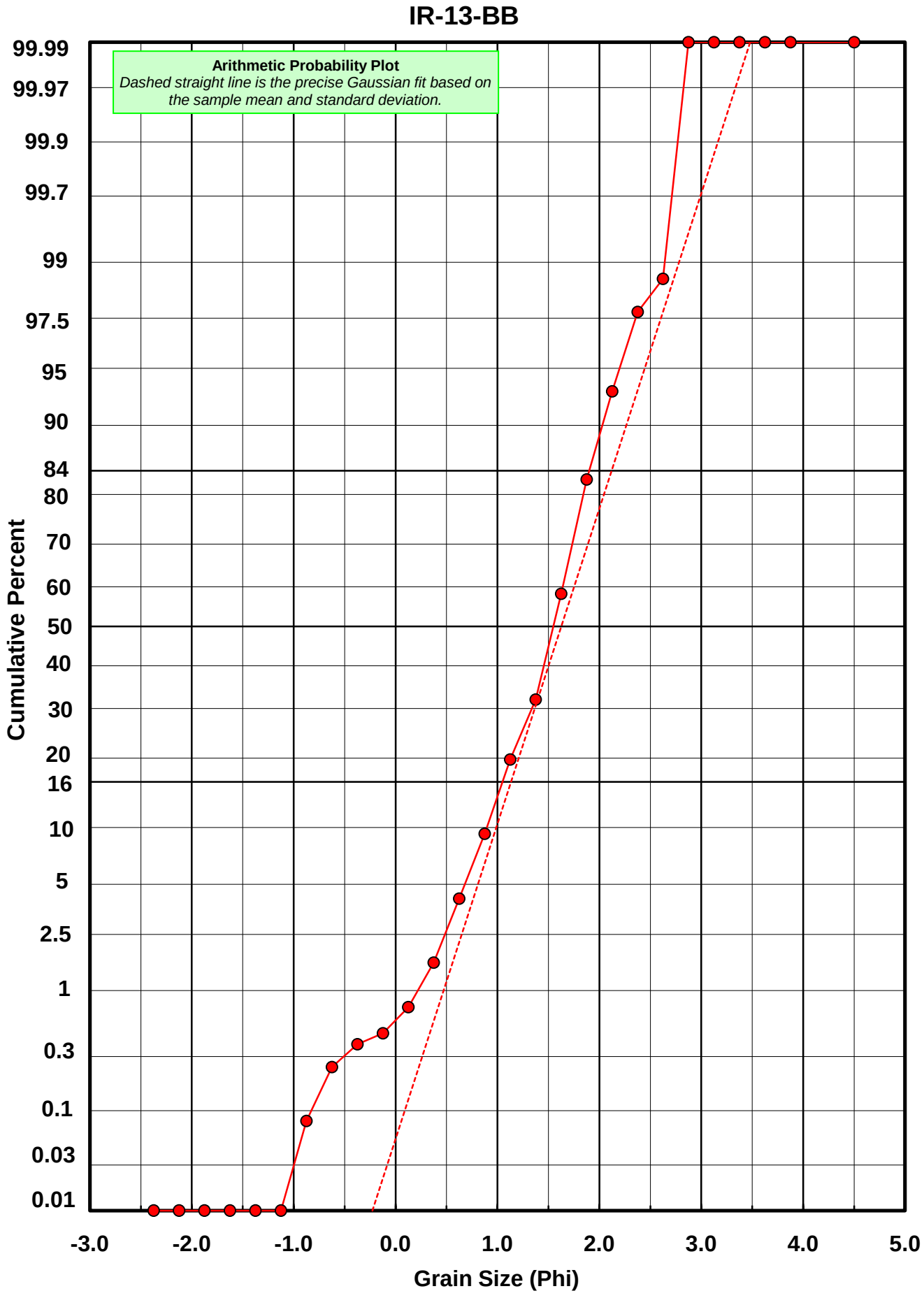
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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-13-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-13-BB

Total Digested Mass: 47.975 grams

% Silica: 79.5 %

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	0.000	0.000	0.000
-0.25	-0.375	0.000	0.000	0.000
0.00	-0.125	0.011	0.023	0.023
0.25	0.125	0.006	0.013	0.035
0.50	0.375	0.033	0.069	0.104
0.75	0.625	0.193	0.402	0.507
1.00	0.875	0.942	1.964	2.470
1.25	1.125	1.931	4.025	6.495
1.50	1.375	6.890	14.362	20.857
1.75	1.625	9.910	20.657	41.513
2.00	1.875	9.692	20.202	61.715
2.25	2.125	6.751	14.072	75.787
2.50	2.375	3.904	8.138	83.925
2.75	2.625	4.303	8.969	92.894
3.00	2.875	2.287	4.767	97.661
3.25	3.125	0.811	1.690	99.352
3.50	3.375	0.205	0.427	99.779
3.75	3.625	0.082	0.171	99.950
4.00	3.875	0.024	0.050	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.9173	phi	(0.2647 mm)
Standard Dev:	0.5241	phi-units	(0.6954 mm)
Skewness:	0.3815	dimensionless	
Kurtosis:	2.9362	dimensionless	
5th Moment:	2.3732	dimensionless	
6th Moment:	14.8075	dimensionless	
RARD *	0.2733	dimensionless	
Median	1.7300	phi	(0.3014 mm)

* RARD = reciprocal absolute relative dispersion (see below)

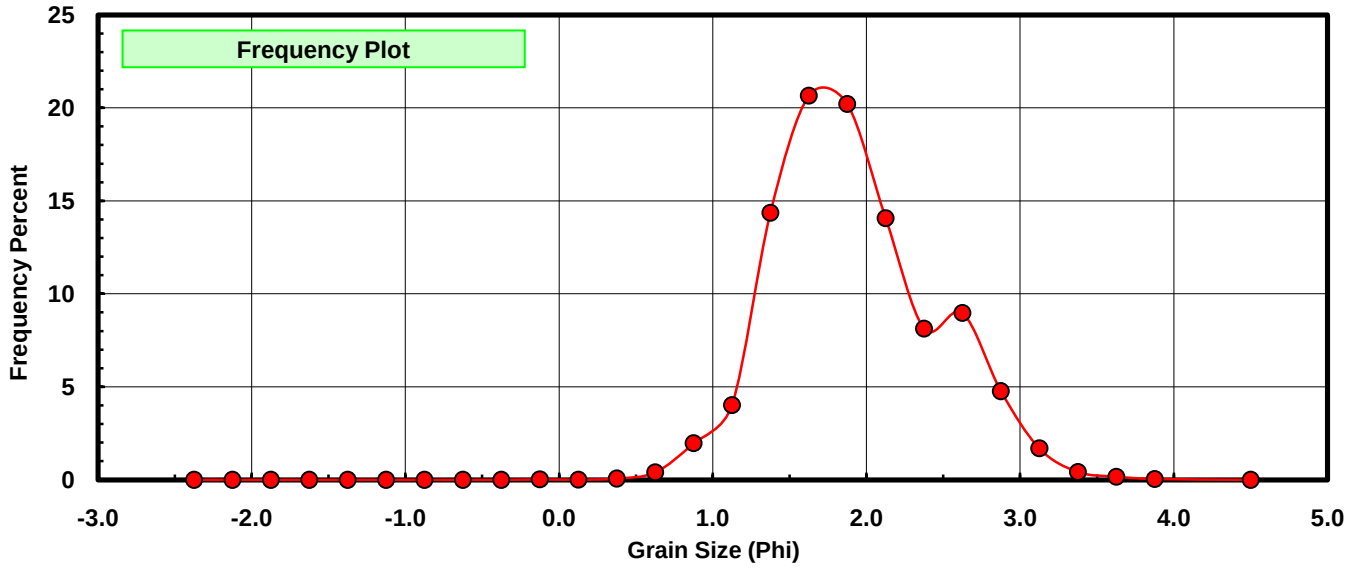
Statistical Explanation

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

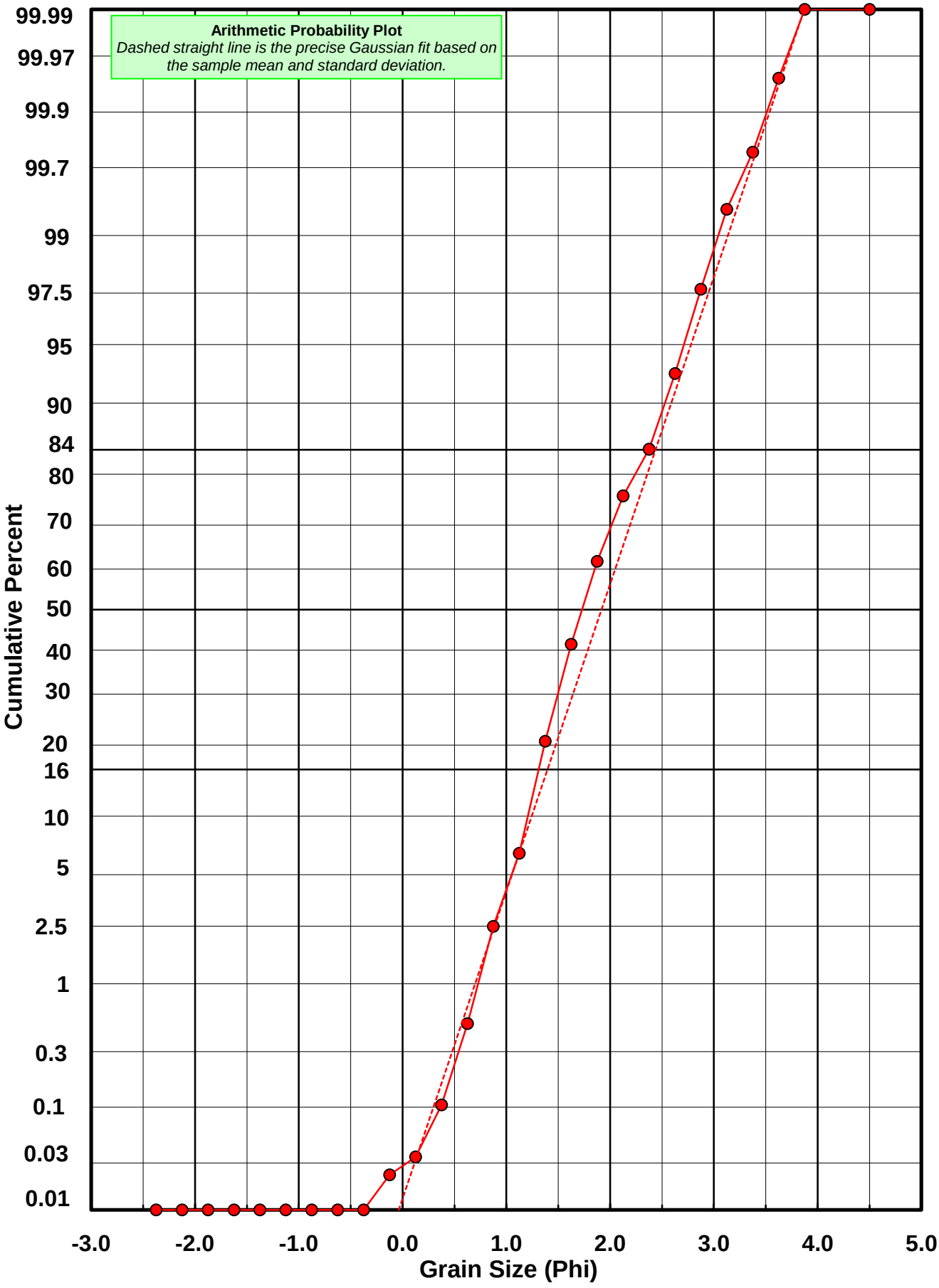
For Further Explanation, See Basillle et al. 2002

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-13-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)