

Appendice 2.1 - Input al software ProUCL - pH e FoC area E-G

Macroarea	Nome punto	Profondità inizio campionamen to (m)	Profondità fine campionamen to (m)	pH aree E-G	Foc (g-C/g- suolo) aree E- G	Foc LCL aree E-G
E	E006	0	0,1	7,20	0,0121	-0,0121
G	G002	0	0,1	7,80	0,0051	-0,0051
G	G015	0	0,1	7,40	0,0121	-0,0121
G	G019	0	0,1	7,50	0,0138	-0,0138
E	E001	0	1	8,20	0,0010	-0,0010
E	E002	0	1	7,70	0,0058	-0,0058
E	E003	0	1	7,70	0,0046	-0,0046
E	E004	0	1	8,10	0,0035	-0,0035
E	E005	0	1	7,20	0,0064	-0,0064
E	E006	0	1	7,60	0,0044	-0,0044
E	E007	0	1	8,20	0,0039	-0,0039
E	E008	0	1	8,40	0,0051	-0,0051
E	EP001	0	1	8,40	0,0036	-0,0036
E	EP002	0	1	8,10	0,0101	-0,0101
E	EP003	0	1	7,50	0,0062	-0,0062
G	G001	0	1	7,40	0,0027	-0,0027
G	G002	0	1	7,80	0,0091	-0,0091
G	G003	0	1	7,60	0,0052	-0,0052
G	G004	0	1	7,80	0,0051	-0,0051
G	G005	0	1	7,60	0,0011	-0,0011
G	G006	0	1	7,70	0,0083	-0,0083
G	G007	0	1	7,60	0,0058	-0,0058
G	G008	0	1	8,30	0,0010	-0,0010
G	G009	0	1	8,00	0,0047	-0,0047
G	G010	0	1	8,00	0,0054	-0,0054
G	G011	0	1	7,70	0,0060	-0,0060
G	G012	0	1	7,70	0,0128	-0,0128
G	G013	0	1	7,70	0,0080	-0,0080
G	G014	0	1	7,00	0,0058	-0,0058
G	G015	0	1	7,90	0,0055	-0,0055
G	G016	0	1	8,00	0,0026	-0,0026
G	G017	0	1	7,90	0,0044	-0,0044
G	G018	0	1	6,90	0,0079	-0,0079
G	G019	0	1	7,10	0,0075	-0,0075
G	G020	0	1	7,00	0,0077	-0,0077
G	G021	0	1	8,50	0,0020	-0,0020
G	G022	0	1	7,60	0,0119	-0,0119
G	G023	0	1	7,40	0,0090	-0,0090
G	G024	0	1	7,50	0,0038	-0,0038
G	G025	0	1	7,80	0,0058	-0,0058
G	G026	0	1	7,40	0,0058	-0,0058
G	G027	0	1	8,20	0,0148	-0,0148
G	G028	0	1	8,20	0,0039	-0,0039
G	G029	0	1	8,30	0,0014	-0,0014
G	G030	0	1	8,30	0,0043	-0,0043
G	G031	0	1	7,70	0,0084	-0,0084
G	GP001	0	1	7,90	0,0086	-0,0086
G	GP002	0	1	7,90	0,0048	-0,0048
G	GP003	0	1	7,90	0,0133	-0,0133
G	GP004	0	1	7,90	0,0094	-0,0094
G	GP005	0	1	7,90	0,0064	-0,0064
G	GP006	0	1	7,90	0,0064	-0,0064

Appendice 2.2 - Input al software ProUCL - pH e FoC area H

Macroarea	Nome punto	Profondità inizio campionamen to (m)	Profondità fine campionamen to (m)	pH area H	Foc (g-C/g- suolo) area H	Foc LCL area H
H	H002	0	0,1	7,60	0,0118	-0,0118
H	H006	0	0,1	6,20	0,0119	-0,0119
H	H027	0	0,1	7,40	0,0130	-0,0130
H	H001	0	1	7,60	0,0010	-0,0010
H	H002	0	1	7,20	0,0020	-0,0020
H	H003	0	1	8,10	0,0063	-0,0063
H	H004	0	1	7,80	0,0048	-0,0048
H	H005	0	1	6,90	0,0039	-0,0039
H	H006	0	1	7,30	0,0031	-0,0031
H	H007	0	1	7,10	0,0036	-0,0036
H	H008	0	1	7,40	0,0051	-0,0051
H	H009	0	1	7,50	0,0036	-0,0036
H	H010	0	1	7,20	0,0038	-0,0038
H	H011	0	1	7,70	0,0048	-0,0048
H	H012	0	1	7,90	0,0076	-0,0076
H	H013	0	1	7,60	0,0029	-0,0029
H	H014	0	1	8,00	0,0025	-0,0025
H	H015	0	1	7,40	0,0021	-0,0021
H	H016	0	1	8,50	0,0058	-0,0058
H	H017	0	1	8,30	0,0044	-0,0044
H	H018	0	1	6,90	0,0076	-0,0076
H	H019	0	1	8,30	0,0043	-0,0043
H	H020	0	1	7,70	0,0032	-0,0032
H	H021	0	1	7,00	0,0029	-0,0029
H	H022	0	1	8,60	0,0084	-0,0084
H	H023	0	1	7,80	0,0031	-0,0031
H	H024	0	1	8,00	0,0014	-0,0014
H	H025	0	1	7,90	0,0038	-0,0038
H	H026	0	1	8,60	0,0051	-0,0051
H	H027	0	1	8,60	0,0035	-0,0035
H	H028	0	1	8,20	0,0084	-0,0084
H	HP001	0	1	7,50	0,0010	-0,0010
H	HP002	0	1	8,60	0,0021	-0,0021
H	HP003	0	1	8,60	0,0094	-0,0094
H	HP004	0	1	7,90	0,0074	-0,0074
H	HP005	0	1	8,40	0,0013	-0,0013
H	HP006	0	1	8,10	0,0074	-0,0074
H	HP007	0	1	7,60	0,0136	-0,0136
H	HP008	0	1	7,90	0,0060	-0,0060
H	H001	1	2	8,80	0,0010	-0,0010
H	H002	1	2	8,70	0,0010	-0,0010
H	H003	1	2	8,50	0,0010	-0,0010
H	H004	1	2	8,80	0,0013	-0,0013
H	H005	1	2	8,20	0,0011	-0,0011
H	H006	1	2	8,30	0,0010	-0,0010
H	H007	1	2	8,40	0,0010	-0,0010
H	H008	1	2	8,60	0,0010	-0,0010
H	H009	1	2	8,60	0,0010	-0,0010
H	H010	1	2	8,20	0,0010	-0,0010
H	H011	1	2	8,30	0,0010	-0,0010
H	H012	1	2	8,20	0,0082	-0,0082
H	H013	1	2	8,50	0,0012	-0,0012
H	H014	1	2	8,40	0,0010	-0,0010
H	H015	1	2	8,40	0,0010	-0,0010
H	H016	1	2	8,60	0,0085	-0,0085
H	H017	1	2	8,50	0,0010	-0,0010
H	H018	1	2	8,80	0,0012	-0,0012
H	H019	1	2	8,70	0,0010	-0,0010
H	H020	1	2	8,40	0,0010	-0,0010
H	H021	1	2	8,40	0,0010	-0,0010
H	H022	1	2	8,40	0,0053	-0,0053

Macroarea	Nome punto	Profondità inizio campionamen to (m)	Profondità fine campionamen to (m)	pH area H	Foc (g-C/g- suolo) area H	Foc LCL area H
H	H023	1	2	8,70	0,0010	-0,0010
H	H024	1	2	8,50	0,0010	-0,0010
H	H025	1	2	8,20	0,0042	-0,0042
H	H026	1	2	8,40	0,0043	-0,0043
H	H027	1	2	8,00	0,0045	-0,0045
H	H028	1	2	8,30	0,0031	-0,0031
H	HP001	1	2	8,30	0,0010	-0,0010
H	HP002	1	2	8,80	0,0010	-0,0010
H	HP003	1	2	8,70	0,0049	-0,0049
H	HP004	1	2	8,00	0,0051	-0,0051
H	HP005	1	2	8,60	0,0010	-0,0010
H	HP006	1	2	8,10	0,0075	-0,0075
H	HP007	1	2	8,20	0,0047	-0,0047
H	HP008	1	2	8,70	0,0044	-0,0044

Appendice 2.3 - Output del software ProUCL - pH e FoC

General UCL Statistics for Full Data Sets

User Selected Options

From File	M:\AR\46318605 - Syndial - Area Micorosa Brindisi (BR)\input\UCL\input_pH_foC.wst
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

pH aree E-G

General Statistics

Number of Valid Observations	52	Number of Distinct Observations	16
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Raw Statistics

Minimum	6,9
Maximum	8,5
Mean	7,769
Median	7,8
SD	0,381
Coefficient of Variation	0,0491
Skewness	-0,27

Log-transformed Statistics

Minimum of Log Data	1,932
Maximum of Log Data	2,14
Mean of log Data	2,049
SD of log Data	0,0495

Relevant UCL Statistics

Normal Distribution Test

Lilliefors Test Statistic	0,0818
Lilliefors Critical Value	0,123

Data appear Normal at 5% Significance Level

Lognormal Distribution Test

Lilliefors Test Statistic	0,0916
Lilliefors Critical Value	0,123

Data appear Lognormal at 5% Significance Level

Assuming Normal Distribution

95% Student's-t UCL 7,858

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL	7,854
95% Modified-t UCL	7,857

Assuming Lognormal Distribution

95% H-UCL	N/A
95% Chebyshev (MVUE) UCL	8,002
97,5% Chebyshev (MVUE) UCL	8,103
99% Chebyshev (MVUE) UCL	8,3

Gamma Distribution Test

k star (bias corrected)	394,7
Theta Star	0,0197
nu star	41044
Approximate Chi Square Value (.05)	40574
Adjusted Level of Significance	0,0454
Adjusted Chi Square Value	40561

Anderson-Darling Test Statistic	0,411
Anderson-Darling 5% Critical Value	0,748
Kolmogorov-Smirnov Test Statistic	0,0877
Kolmogorov-Smirnov 5% Critical Value	0,123

Data appear Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

95% Approximate Gamma UCL	7,859
95% Adjusted Gamma UCL	7,862

Potential UCL to Use

Data Distribution

Data appear Normal at 5% Significance Level

Nonparametric Statistics

95% CLT UCL	7,856
95% Jackknife UCL	7,858
95% Standard Bootstrap UCL	7,854
95% Bootstrap-t UCL	7,857
95% Hall's Bootstrap UCL	7,852
95% Percentile Bootstrap UCL	7,854
95% BCA Bootstrap UCL	7,848
95% Chebyshev(Mean, Sd) UCL	8
97.5% Chebyshev(Mean, Sd) UCL	8,099
99% Chebyshev(Mean, Sd) UCL	8,295

Use 95% Student's-t UCL 7,858

Foc aree E-G

General Statistics	
Number of Valid Observations	52
Number of Distinct Observations	40
Raw Statistics	Log-transformed Statistics
Minimum	-0,0148
Maximum	-0,001
Mean	-0,00643
Median	-0,0058
SD	0,00341
Coefficient of Variation	-0,53
Skewness	-0,67
	Log Statistics Not Available
Relevant UCL Statistics	
Normal Distribution Test	Lognormal Distribution Test
Lilliefors Test Statistic	0,157
Lilliefors Critical Value	0,123
Data appear Normal at 5% Significance Level	
Assuming Normal Distribution	Assuming Lognormal Distribution
95% Student's-t UCL	-0,00564
95% H-UCL	N/A
Assuming Normal Distribution	95% UCLs (Adjusted for Skewness)
95% Student's-t UCL	-0,00564
	95% Adjusted-CLT UCL -0,0057
	95% Modified-t UCL -0,00564
Gamma Distribution Test	Data Distribution
Gamma Statistics Not Available	Data do not follow a Discernable Distribution (0.05)
Potential UCL to Use	
Use 95% Chebyshev (Mean, Sd) UCL	-0,00437
	95% CLT UCL -0,00565
	95% Jackknife UCL -0,00564
	95% Standard Bootstrap UCL -0,00568
	95% Bootstrap-t UCL -0,00566
	95% Hall's Bootstrap UCL -0,0057
	95% Percentile Bootstrap UCL -0,00568
	95% BCA Bootstrap UCL -0,00571
	95% Chebyshev(Mean, Sd) UCL -0,00437
	97.5% Chebyshev(Mean, Sd) UCL -0,00348
	99% Chebyshev(Mean, Sd) UCL -0,00173

pH area H

General Statistics	
Number of Valid Observations	75
Number of Distinct Observations	21
Raw Statistics	Log-transformed Statistics
Minimum	6,2
Maximum	8,8
Mean	8,095
Median	8,2
SD	0,554
Coefficient of Variation	0,0684
Skewness	-1,004
Minimum of Log Data	1,825
Maximum of Log Data	2,175
Mean of log Data	2,089
SD of log Data	0,0712
Relevant UCL Statistics	
Normal Distribution Test	Lognormal Distribution Test
Lilliefors Test Statistic	0,149
Lilliefors Critical Value	0,102
Data not Normal at 5% Significance Level	
Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution	Assuming Lognormal Distribution
95% Student's-t UCL	8,201
95% UCLs (Adjusted for Skewness)	
95% Adjusted-CLT UCL	8,192
95% Modified-t UCL	8,2
95% H-UCL	N/A
95% Chebyshev (MVUE) UCL	8,386
97,5% Chebyshev (MVUE) UCL	8,511
99% Chebyshev (MVUE) UCL	8,758
Gamma Distribution Test	Data Distribution
k star (bias corrected)	197,5
Theta Star	0,041
nu star	29625
Approximate Chi Square Value (.05)	29226
Adjusted Level of Significance	0,0468
Adjusted Chi Square Value	29219
Anderson-Darling Test Statistic	2,084
Anderson-Darling 5% Critical Value	0,749
Kolmogorov-Smirnov Test Statistic	0,156
Kolmogorov-Smirnov 5% Critical Value	0,103
Data not Gamma Distributed at 5% Significance Level	
Data do not follow a Discernable Distribution (0.05)	
Assuming Gamma Distribution	Nonparametric Statistics
95% Approximate Gamma UCL	8,205
95% Adjusted Gamma UCL	8,207
95% CLT UCL	8,2
95% Jackknife UCL	8,201
95% Standard Bootstrap UCL	8,199
95% Bootstrap-t UCL	8,194
95% Hall's Bootstrap UCL	8,192
95% Percentile Bootstrap UCL	8,199
95% BCA Bootstrap UCL	8,188
95% Chebyshev(Mean, Sd) UCL	8,373
97.5% Chebyshev(Mean, Sd) UCL	8,494
99% Chebyshev(Mean, Sd) UCL	8,731
Potential UCL to Use	
Use 95% Student's-t UCL	8,201
or 95% Modified-t UCL	8,2

Foc area H

General Statistics	
Number of Valid Observations	75
Number of Distinct Observations	38
Raw Statistics	Log-transformed Statistics
Minimum -0,0136	Log Statistics Not Available
Maximum -0,001	
Mean -0,00391	
Median -0,0032	
SD 0,00318	
Coefficient of Variation -0,812	
Skewness -1,199	
Relevant UCL Statistics	
Normal Distribution Test	Lognormal Distribution Test
Lilliefors Test Statistic 0,18	Not Available
Lilliefors Critical Value 0,102	
Data appear Normal at 5% Significance Level	
Assuming Normal Distribution	Assuming Lognormal Distribution
95% Student's-t UCL -0,0033	95% H-UCL N/A
Assuming Normal Distribution	95% UCLs (Adjusted for Skewness)
95% Student's-t UCL -0,0033	95% Adjusted-CLT UCL -0,00336
	95% Modified-t UCL -0,00331
Gamma Distribution Test	Data Distribution
Gamma Statistics Not Available	Data do not follow a Discernable Distribution (0.05)
Potential UCL to Use	
Use 95% Chebyshev (Mean, Sd) UCL -0,00231	95% CLT UCL -0,00331
	95% Jackknife UCL -0,0033
	95% Standard Bootstrap UCL -0,0033
	95% Bootstrap-t UCL -0,00334
	95% Hall's Bootstrap UCL -0,00338
	95% Percentile Bootstrap UCL -0,00331
	95% BCA Bootstrap UCL -0,00338
	95% Chebyshev(Mean, Sd) UCL -0,00231
	97.5% Chebyshev(Mean, Sd) UCL -0,00162
	99% Chebyshev(Mean, Sd) UCL -0,0002613