

Statistical Analysis of the Trend of Suspended Solids

For Mid-Flood Tide

Station: TM-FM1

t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	5.9733	1.3518	0.3902
Quarterly Mean	37	0	6.7207	1.0588	0.1741

Result:

Probability that two variances are equal (f-test) = 0.86822

Difference between means = 0.7474 (Std Dev = 1.689 and SE = 0.4273)
(95% CI : -0.0901 < Diff < 1.5849)

t-value of difference = 1.749 (15.1 degrees of freedom)
P = 0.95212 (>0.05)

Conclusion:

There is no statistically significant difference between the groups.

Station: TM-FM2

t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	6.0267	1.1748	0.3391
Quarterly Mean	37	0	6.5545	1.0777	0.1772

Result:

Probability that two variances are equal (f-test) = 0.67076

Difference between means = 0.5278 (Std Dev = 1.5973 and SE = 0.3826)
(95% CI : -0.2221 < Diff < 1.2777)

t-value of difference = 1.379 (16.9 degrees of freedom)
P = 0.91102 (>0.05)

Conclusion:

There is no statistically significant difference between the groups.

Statistical Analysis of the Trend of Suspended Solids

For Mid-Flood Tide

Station: TM-FC1

t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	6.6942	1.8839	0.5438
Quarterly Mean	37	0	6.7743	1.1294	0.1857

Result:

Probability that two variances are equal (f-test) = 0.98993

Difference between means = 0.0801 (Std Dev = 2.1237 and SE = 0.5747)
(95% CI : -1.0462 < Diff < 1.2064)

t-value of difference = 0.139 (13.2 degrees of freedom)
P = 0.55511 (>0.05)

Conclusion:

There is no statistically significant difference between the groups.

Station: TM-FC2

t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	6.3067	1.8674	0.5391
Quarterly Mean	37	0	6.3279	1.0201	0.1677

Result:

Probability that two variances are equal (f-test) = 0.99707

Difference between means = 0.0212 (Std Dev = 2.0507 and SE = 0.5646)
(95% CI : -1.0853 < Diff < 1.1277)

t-value of difference = 0.038 (12.7 degrees of freedom)
P = 0.51458 (>0.05)

Conclusion:

There is no statistically significant difference between the groups.

Statistical Analysis of the Trend of Suspended Solids

For Mid-Ebb Tide

Station: TM-FM1

t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	7.0008	1.6394	0.4733
Quarterly Mean	37	0	6.7217	1.1115	0.1827

Result:

Probability that two variances are equal (f-test) = 0.03915

Difference between means = 0.2791 (Std Dev = 1.9269 and SE = 0.5073)
(95% CI : -0.7152 < Diff < 1.2734)

t-value of difference = 0.55 (13.9 degrees of freedom)
P = 0.70182 (>0.05)

Conclusion:

There is no statistically significant difference between the groups.

Station: TM-FM2

t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	7.2758	1.5293	0.4415
Quarterly Mean	37	0	6.6279	1.0345	0.1701

Result:

Probability that two variances are equal (f-test) = 0.03828

Difference between means = 0.6479 (Std Dev = 1.7959 and SE = 0.4731)
(95% CI : -0.2794 < Diff < 1.5752)

t-value of difference = 1.369 (13.9 degrees of freedom)
P = 0.90076 (>0.05)

Conclusion:

There is no statistically significant difference between the groups.

Statistical Analysis of the Trend of Suspended Solids

For Mid-Ebb Tide

Station: TM-FC1

t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	7.0008	1.6394	0.4733
Quarterly Mean	37	0	6.8573	1.1477	0.1887

Result:

Probability that two variances are equal (f-test) = 0.05303

Difference between means = 0.1435 (Std Dev = 1.9508 and SE = 0.5095)
(95% CI : -0.8551 < Diff < 1.1421)

t-value of difference = 0.282 (14.2 degrees of freedom)
P = 0.7872 (>0.05)

Conclusion:

There is no statistically significant difference between the groups.

Station: TM-FC2

t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	7.2758	1.5293	0.4415
Quarterly Mean	37	0	6.4878	1.0605	0.1743

Result:

Probability that two variances are equal (f-test) = 0.04857

Difference between means = 0.788 (Std Dev = 1.813 and SE = 0.4747)
(95% CI : -0.1423 < Diff < 1.7183)

t-value of difference = 1.66 (14.1 degrees of freedom)
P = 0.93691 (>0.05)

Conclusion:

There is no statistically significant difference between the groups.