

I. Sample sizes, χ^2 test-statistics, and degrees of freedom (d.f.) for tests of uniformity in the horizontal distribution of *Mastigias* in coves and marine lakes. All test statistics exceed the critical value of χ^2 for $\alpha = 0.005$ (significance level corrected across times within locations using sequential Bonferroni).

| | Location | | | | | | |
|------------|----------|----------|----------|----------|----------|----------|----------|
| | BJCK | RCA | OLO | GLK | CLM | OTM | BJLK |
| time | 0700 hrs | 0600 hrs | 0600 hrs | 0600 hrs | 0700 hrs | 0700 hrs | 0500 hrs |
| n_1, n_2 | 1, 40 | 2, 103 | 4, 1175 | 2, 50 | 2, 129 | 2, 258 | 2, 385 |
| χ^2 | 40.75 | 20.15 | 154.45 | 36.75 | 55.73 | 233.00 | 92.96 |
| d.f. | 3 | 3 | 3 | 2 | 3 | 4 | 3 |
| time | 1100 hrs | 0800 hrs | 0900 hrs | 0800 hrs | 0900 hrs | 1000 hrs | 0900 hrs |
| n_1, n_2 | 1, 53 | 2, 170 | 3, 1048 | 2, 83 | 2, 406 | 2, 410 | 3, 956 |
| χ^2 | 15.66 | 50.29 | 915.17 | 44.89 | 149.86 | 443.36 | 102.10 |
| d.f. | 3 | 3 | 3 | 2 | 3 | 4 | 3 |
| time | 1500 hrs | 1200 hrs | 1200 hrs | 1200 hrs | 1200 hrs | 1300 hrs | 1200 hrs |
| n_1, n_2 | 1, 52 | 1, 71 | 3, 634 | 2, 78 | 2, 251 | 2, 305 | 2, 648 |
| χ^2 | 52.57 | 49.09 | 339.52 | 24.40 | 150.00 | 238.40 | 237.31 |
| d.f. | 3 | 3 | 3 | 2 | 3 | 4 | 3 |
| time | 1700 hrs | 1600 hrs | 1600 hrs | 1600 hrs | 1600 hrs | 1700 hrs | 1600 hrs |
| n_1, n_2 | 1, 45 | 1, 98 | 3, 558 | 2, 207 | 2, 217 | 2, 1084 | 2, 730 |
| χ^2 | 31.19 | 69.43 | 306.70 | 122.35 | 15.18 | 3438.65 | 30.51 |
| d.f. | 3 | 3 | 3 | 2 | 3 | 4 | 3 |
| time | | | | 2300 hrs | | 2300 hrs | 2300 hrs |
| n_1, n_2 | | | | 2, 39 | | 2, 356 | 2, 366 |
| χ^2 | | | | 14.14 | | 1064.55 | 30.36 |
| d.f. | | | | 2 | | 4 | 3 |

n_1 , number of samples. n_2 , total number of medusae measured in all samples.

II. Orientation of swimming by *Mastigias*. Sample sizes, mean instantaneous swimming direction (mISD), sample circular variance (V), χ^2 test-statistics, degrees of freedom (d.f.), and uncorrected p-values for tests of randomly oriented swimming by *Mastigias* in coves and marine lakes. An asterisk indicates significantly non-random orientation at $\alpha = 0.05$ after sequential Bonferroni correction for tests at multiple times within each location.

| | Location | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|
| | BJCK | RCA | OLO | GLK | CLM | OTM | BJLK |
| time | | 0800 hrs | 0730 hrs | 0600 hrs | 0800 hrs | 0800 hrs | 0900 hrs |
| n | No data | 27 | 251 | 90 | 93 | 182 | 324 |
| mISD | | 108° | 099° | 256° | 083° | 089° | 254° |
| V | | 0.833 | 0.624 | 0.770 | 0.475 | 0.521 | 0.869 |
| χ^2 | | 11.89 | 118.13 | 17.00 | 109.64 | 125.47 | 84.44 |
| d.f. | | 5 | 11 | 11 | 11 | 11 | 11 |
| p | | 0.036 | < 0.001* | 0.108 | < 0.001* | < 0.001* | < 0.001* |
| time | | 1200 hrs | 1200 hrs | 1600 hrs | 1600 hrs | 1300 hrs | 1200 hrs |
| n | | 22 | 118 | 87 | 76 | 90 | 273 |
| mISD | | 244° | 323° | 096° | 264° | 262° | 277° |
| V | | 0.835 | 0.789 | 0.676 | 0.799 | 0.601 | 0.965 |
| χ^2 | | 1.18 | 31.08 | 24.38 | 16.48 | 44.73 | 14.78 |
| d.f. | | 5 | 11 | 11 | 11 | 11 | 11 |
| p | | 0.946 | 0.001* | 0.011* | 0.124 | < 0.001* | 0.193 |
| time | | 1600 hrs | 1500 hrs | 2300 hrs | | 2300 hrs | 1600 hrs |
| n | | 20 | 57 | 33 | | 45 | 88 |
| mISD | | 343° | 312° | 175° | | 154° | 205° |
| V | | 0.505 | 0.782 | 0.662 | | 0.826 | 0.926 |
| χ^2 | | 12.33 | 33.74 | 21.18 | | 11.27 | 25.73 |
| d.f. | | 5 | 11 | 11 | | 11 | 11 |
| p | | 0.031 | < 0.001* | 0.032 | | 0.421 | 0.007* |