|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | G 2 |  |  | G 2 |
| 3-way Model | df | Small | Medium | Large |  | 4-way model | df | Sum |
| 1. TL, F | 9 | 15.05 | 9.23 | 13.77 |  | TLS,FS | 41 | 220.67 |
| 2. TL, FL | 6 | 8.10 | 3.40 | 9.84 |  | TLS,FSL | 38 | 211.12 |
| Effect of location | 3 | 6.95b | 5.83b |  3.93b |  |  | 3 |  9.55a |
|  |  |  |  |  |  |  |  |  |
| 1. TL, F | 9 | 15.05 | 9.23 | 13.77 |  | TLS,FS | 41 | 220.67 |
| 3. TL, FT | 6 | 8.89 | 8.40 | 9.61 |  | TLS,FST | 38 | 217.49 |
| Effect of time | 3 | 6.16b | 0.83b | 4.16b |  |  |  3 | 3.18b |
|  |  |  |  |  |  |  |  |  |
| 3. TL, FT | 6 | 8.89 | 8.40 | 9.61 |  | TLS,FST | 38 | 217.49 |
| 4. TL, FT, FL | 3 | 1.75 | 2.54 | 6.01 |  | TLS,FST,FSL | 35 | 207.38 |
| Effect of location(given the effect of time) | 3 | 7.14b | 5.86b | 3.60b |  |  | 3 | 10.11a |
|  |  |  |  |  |  |  |  |  |
| 2. TL, FL | 6 | 8.10 | 3.40 | 9.84 |  | TLS,FSL | 38 | 211.12 |
| 4. TL, FT, FL | 3 | 1.75 | 2.54 | 6.01 |  | TLS,FST,FSL | 35 | 207.38 |
| Effect of time(given the effect of location) | 3 | 6.35b | 0.86b |  3.83b |  |  | 3 | 3.74b |
|  |  |  |  |  |  |  |  |  |
| 4. TL, FT, FL | 3 | 1.75 | 2.54 | 6.01 |  | TLS,FST,FSL | 35 | 217.01 |
| 5. TLF | 0 | 0 | 0 | 0 |  | TLSF | 0 | 0 |
|  |  3 | 1.75b | 2.54b | 6.01b |  |  | 35 | 217.01a |

**Supplemental file Table 2: Log-linear analysis of the effect of location and time on fate of *Porites astreoides* colonies of the three size classes. F= Fate, S=Stage, T=Time, L=Location, a=p<0.05, bp>0.05, G-squared = goodness of fit, df= degrees of freedom.**