Table 4. Two-way and one-way repeated measures ANOVA procedures testing the variations of reef substrate cover by *Orbicella annularis* (complex) between depths and year at the different natural reserve sites surveyed in Puerto Rico.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Site** | **Factor** | **Type III SS** | **df** | **MS** | **F** | **p value** |
| **Vieques** | Depth | 0.46 | 1 | 0.46 | 3.42 | 0.14 |
|   | Year | 1.63 | 2 | 0.82 | 8.68 | 0.01 |
|   | Depth\*Year | 0.11 | 2 | 0.05 | 2.13 | 0.18 |
| **Derrumbadero** | Year | 2.50 | 9 | 0.28 | 13.93 | <0.0001 |
| **Guánica** | Year | 0.40 | 8 | 0.05 | 1.64 | 0.15 |
| **Cabo Rojo** | Depth | 0.13 | 1 | 0.13 | 1.94 | 0.24 |
|  | Year | 0.25 | 2 | 0.12 | 2.85 | 0.12 |
|  | Depth\*Year | 0.32 | 2 | 0.16 | 2.48 | 0.15 |
| **Mayagüez** | Depth | 5.55 | 2 | 2.78 | 16.97 | 0.00 |
|  | Year | 0.60 | 9 | 0.07 | 5.44 | <0.0001 |
|  | Depth\*Year | 0.61 | 18 | 0.03 | 2.27 | 0.01 |
| **Rincón** | Depth | 10.30 | 1 | 10.30 | 6.42 | 0.06 |
|  | Year | 0.21 | 9 | 0.02 | 1.01 | 0.45 |
|  | Depth\*Year | 0.30 | 9 | 0.03 | 0.89 | 0.54 |
| **Desecheo** | Depth | 13.09 | 2 | 6.54 | 31.26 | <0.0001 |
|  | Year | 9.10 | 9 | 1.01 | 20.04 | <0.0001 |
|  | Depth\*Year | 1.41 | 18 | 0.08 | 1.99 | 0.02 |
| **Mona** | Depth | 0.15 | 1 | 0.15 | 0.55 | 0.50 |
|   | Year | 4.00 | 3 | 1.33 | 8.96 | 0.00 |
|   | Depth\*Year | 0.81 | 3 | 0.27 | 3.31 | 0.06 |