**Supplementary Material 3**. Paired Student t-test results (T and P values are given) performed between foraminiferal faunas including and excluding allochtonous shelf species (Ammoniidae, Elphidiidae, Glabratellidae, and Haynesinidae families). To assess the effect of including or not shelf species in the statistical analyses, the datasets are compared independently for each cluster separating at 45% similarity (see section 5.2 of the manuscript for cluster attribution).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *G. praegeri* | | *D. araucana* | | *R. vilardeboana* | | *M. subrotunda* | | *B. variabilis* | | *R. paupereques* | | *M. dilatata* | | *Globocassidulina* spp. | |
| **Cluster** | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B |
| **T value** | -0.71 | -0.3 | -0.35 | -0.62 | -0.36 | -0.62 | -0.27 | -0.6 | -0.54 | -0.86 | -0.15 | -0.33 | -0.16 | -0.42 | -0.41 | -0.55 |
| **P value** | 0.48 | 0.77 | 0.73 | 0.54 | 0.72 | 0.54 | 0.78 | 0.55 | 0.59 | 0.39 | 0.88 | 0.74 | 0.87 | 0.67 | 0.68 | 0.59 |