

Supplementary Material

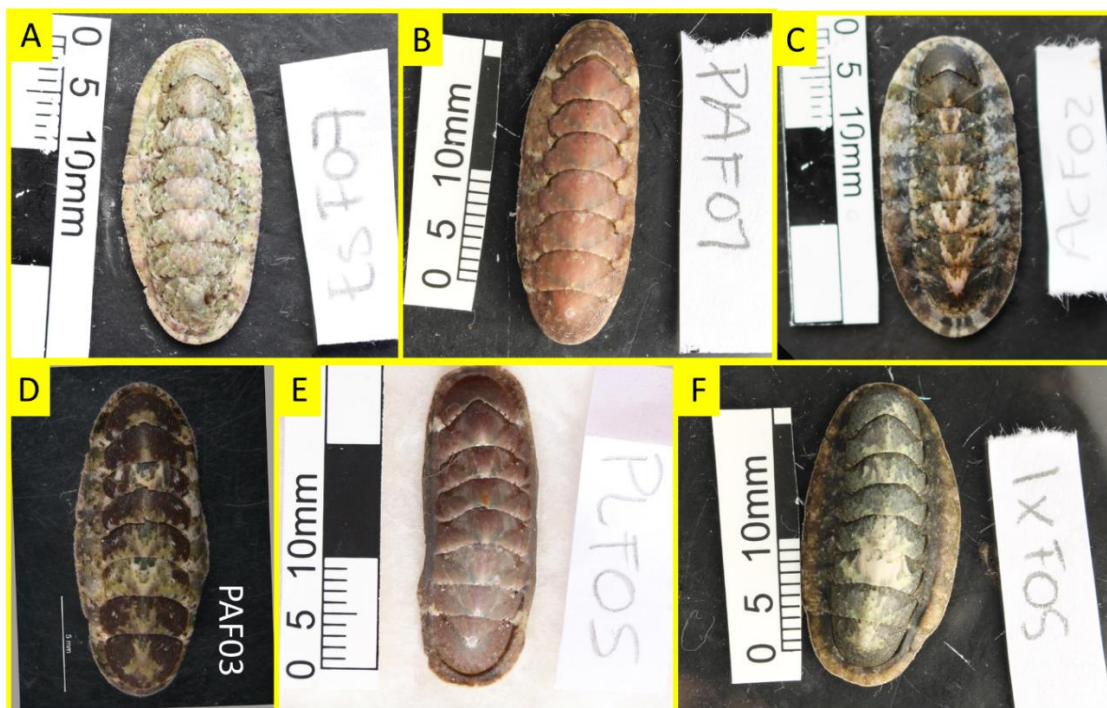


Figure S1. A-C. Selected individuals. D-F. Discarded individuals (D. valves without pustules; E. Crooked individual, and valves without pustules; F. Crooked individual).

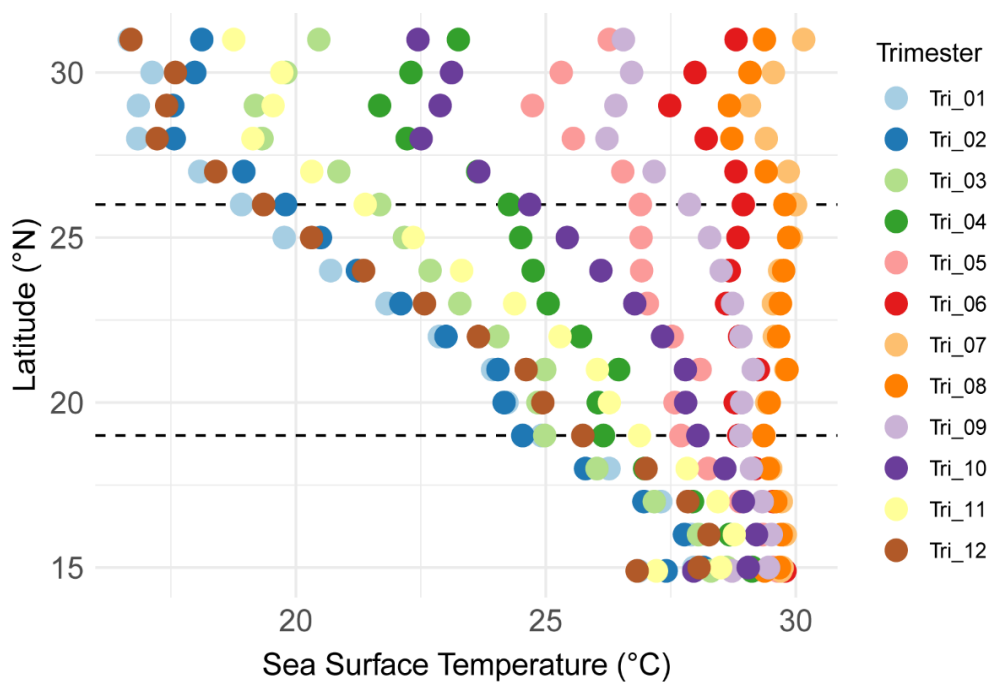


Figure S2. Sea Surface Temperature per trimester along the latitude, dotted lines separate the marine ecoregions.

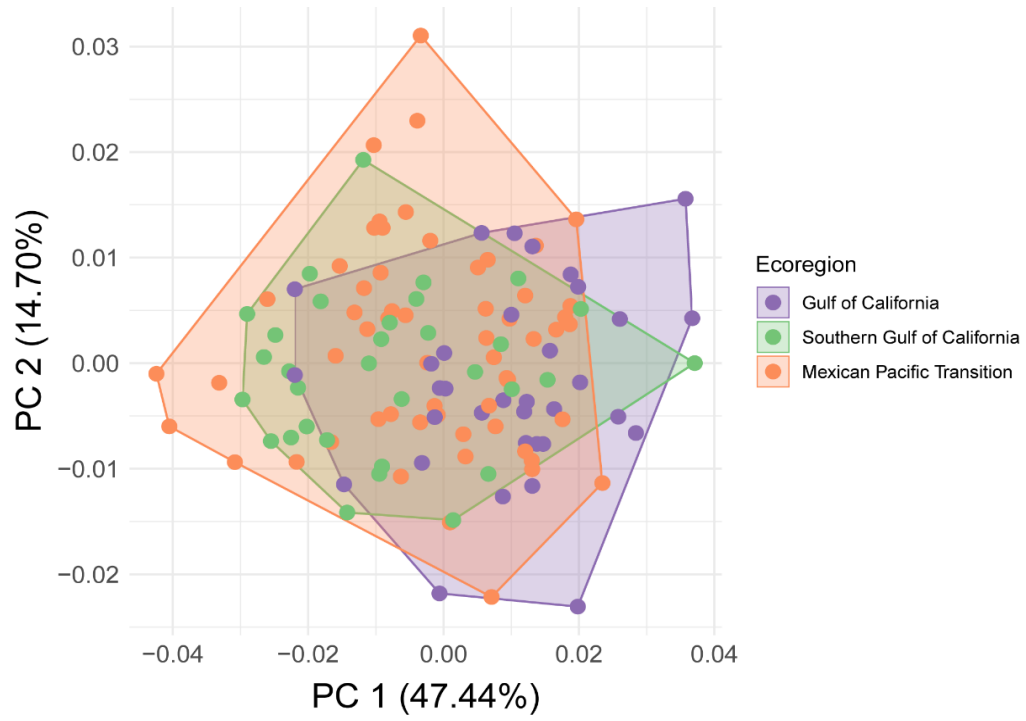


Figure S3. Principal Component Analysis. Polygons represent the different marine ecoregions.

Table S1. Sampling site information. Depth is considered during low tidal. Sites with few individuals were matched with closer sites (latitudes or coast similar) displayed by /.

| Marine ecoregion | ID | Localities | Latitude (° N) | Depth (m) | Number of individuals |
|-----------------------------|-------|--|-------------------------|-----------|-----------------------|
| Gulf of California | Pc | Puertecitos | 30.33979 | 1 | 10 |
| | PL | Sonora Puerto Lobos | 30.264409 | 0 | 4 |
| | BA/KN | Bahía de los Ángeles/ Kino Nuevo | 29.031949/ 28.872907 | 1.5/0.2 | 1/2 |
| | Ch | Punta Chivato | 27.069705 | 1 | 13 |
| | Jn/Sg | Baja Sur (Juncalito/Sargento) | 25.843097/ 24.34138 | 1/0.3 | 2/2 |
| Southern Gulf of California | Gy | Guaymas | 27.935749 | 7 | 9 |
| | IV | Mazatlán | 23.233749 23.21 | 0.20 | 13 |
| | PM | Punta Mita | 20.784561 | 1 | 10 |
| Mexican Pacific Transition | Cc | Isla Cocinas | 19.546819 | 3 | 7 |
| | IZ | Ixtapa/ Zihuatanejo | 17.676791/ 17.621519 | 0.5/1 | 5/7 12 |
| | Ac | Acapulco | 16.844586 | 2.5 | 12 |
| | Es | Puerto Escondido | 15.857662 | 4 | 15 |
| | Hu | Huatulco | 15.760918 | 4 | 13 |

Table S2. Coordinates of satellite data of Surface Sea Temperature per latitude used on [ERDDAP](#)

| Latitude | °N | °W |
|----------|-----------------|-------------------|
| 31 | 30.925 - 32.025 | 245.025 - 247.025 |
| 30 | 29.925 - 31.025 | 245.125 - 247.325 |
| 29 | 28.925 - 30.025 | 245.523 - 248.025 |
| 28 | 27.925 - 29.025 | 246.325 - 249.025 |
| 27 | 26.925 - 28.025 | 247.125 - 250.225 |
| 26 | 25.925 - 27.025 | 247.925 - 250.925 |
| 25 | 24.925 - 26.025 | 248.625 - 252.025 |
| 24 | 23.925 - 25.025 | 249.225 - 253.025 |
| 23 | 22.925 - 24.025 | 250.025 - 254.025 |
| 22 | 21.925 - 23.025 | 252.025 - 254.425 |
| 21 | 20.925 - 22.025 | 252.025 - 254.825 |
| 20 | 19.925 - 21.025 | 252.525 - 254.725 |
| 19 | 18.925 - 20.025 | 253.525 - 256.025 |
| 18 | 17.925 - 19.025 | 255.025 - 257.525 |
| 17 | 16.925 - 18.025 | 257.025 - 260.025 |
| 16 | 15.925 - 17.025 | 259.025 - 262.225 |
| 15 | 15.325 - 15.975 | 261.725 - 263.525 |