|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| East subregion | | | | | | | | | | | | |
| Model | Blue shark CPUE | | | Blue shark CPUE | | | Mako CPUE | | | Mako CPUE | | |
| Explanatory variables | (1|Vessel) + Year + Month + Fleet + Observer | | |  | | |  | | |  | | |
| Error | Binomial |  |  | Gamma |  |  | Binomial |  |  | Gamma |  |  |
| Link | Logit |  |  | Log |  |  | Logit |  |  | Log |  |  |
| BIC | 9 944 |  |  | 16 360 |  |  | 11 244 |  |  | 6 755 |  |  |
|  | Estimate | Std. Error | Pr(>|z|) | Estimate | Std. Error | Pr(>|z|) | Estimate | Std. Error | Pr(>|z|) | Estimate | Std. Error | Pr(>|z|) |
| 2000 | 0.1554 | 0.6080 | 0.7982 | -0.2280 | 0.00019 | <2e-16 | -1.0404 | 0.5527 | 0.0598 | 0.0991 | 0.2483 | 0.6898 |
| 2001 | -2.0763 | 0.4199 | 0.0000 | -0.3623 | 0.00020 | <2e-16 | -1.1177 | 0.3355 | 0.0009 | 0.1691 | 0.1363 | 0.2149 |
| 2002 | -1.0531 | 0.3570 | 0.0032 | -0.2521 | 0.00019 | <2e-16 | -1.3521 | 0.2825 | 0.0000 | -0.2047 | 0.0888 | 0.0212 |
| 2003 | -0.2932 | 0.3501 | 0.4025 | 0.0737 | 0.00020 | <2e-16 | -1.2108 | 0.2685 | 0.0000 | 0.0849 | 0.0984 | 0.3880 |
| 2004 | -0.3497 | 0.3402 | 0.3039 | 0.4569 | 0.00020 | <2e-16 | -1.7277 | 0.2753 | 0.0000 | 0.4740 | 0.0952 | 0.0000 |
| 2005 | 0.0152 | 0.3434 | 0.9646 | 0.2481 | 0.00020 | <2e-16 | -0.2753 | 0.2776 | 0.3213 | 0.6062 | 0.0762 | 0.0000 |
| 2006 | -0.4903 | 0.3664 | 0.1809 | 0.5593 | 0.00020 | <2e-16 | 0.1850 | 0.3067 | 0.5464 | 0.1651 | 0.0666 | 0.0132 |
| 2007 | -0.0204 | 0.3420 | 0.9523 | 0.3009 | 0.00019 | <2e-16 | 0.1271 | 0.2724 | 0.6407 | 0.1124 | 0.0531 | 0.0344 |
| 2008 | 0.1503 | 0.3364 | 0.6551 | 0.1393 | 0.00021 | <2e-16 | -0.2771 | 0.2675 | 0.3002 | 0.1219 | 0.0540 | 0.0241 |
| 2009 | 0.0664 | 0.3409 | 0.8456 | 0.0176 | 0.00020 | <2e-16 | -0.2432 | 0.2748 | 0.3761 | 0.0911 | 0.0550 | 0.0973 |
| 2010 | 0.2220 | 0.3490 | 0.5249 | 0.2762 | 0.00019 | <2e-16 | -0.1094 | 0.2780 | 0.6939 | 0.0853 | 0.0558 | 0.1266 |
| 2011 | 0.7442 | 0.3455 | 0.0312 | 0.3627 | 0.00019 | <2e-16 | -0.1856 | 0.2747 | 0.4992 | 0.2043 | 0.0480 | 0.0000 |
| 2012 | -0.1875 | 0.3431 | 0.5848 | 0.2228 | 0.00019 | <2e-16 | 0.1036 | 0.2739 | 0.7053 | 0.1996 | 0.0456 | 0.0000 |
| 2013 | -0.2178 | 0.3429 | 0.5252 | 0.1318 | 0.00020 | <2e-16 | -0.3807 | 0.2746 | 0.1657 | -0.1536 | 0.0012 | < 2e-16 |
| 2014 | 1.5869 | 0.3628 | 0.0000 | 0.1699 | 0.00019 | <2e-16 | 0.0507 | 0.2871 | 0.8599 | -0.0718 | 0.0630 | 0.2549 |
| 2015 | 0.9060 | 0.3503 | 0.0097 | 0.4881 | 0.00020 | <2e-16 | -0.1068 | 0.2694 | 0.6917 | 0.0207 | 0.0011 | < 2e-16 |
| January | - | - | - | - | - | - | - | - | - | - | - | - |
| February | 0.2255 | 0.1684 | 0.1806 | 0.1685 | 0.00019 | <2e-16 | -0.7021 | 0.1711 | 0.0000 | -0.2448 | 0.0651 | 0.0002 |
| March | 0.1977 | 0.1657 | 0.2328 | 0.0810 | 0.00019 | <2e-16 | -0.4466 | 0.1621 | 0.0059 | -0.4731 | 0.0598 | 0.0000 |
| April | 0.9110 | 0.1651 | 0.0000 | 0.4106 | 0.00019 | <2e-16 | 0.0029 | 0.1541 | 0.9849 | -0.2382 | 0.0557 | 0.0000 |
| May | 0.5789 | 0.1586 | 0.0003 | 0.2101 | 0.00019 | <2e-16 | 0.0625 | 0.1516 | 0.6799 | -0.2649 | 0.0529 | 0.0000 |
| June | 0.3606 | 0.1534 | 0.0188 | 0.2862 | 0.00019 | <2e-16 | 0.2911 | 0.1451 | 0.0449 | -0.1396 | 0.0487 | 0.0041 |
| July | 0.3592 | 0.1515 | 0.0178 | 0.0936 | 0.00019 | <2e-16 | 0.3044 | 0.1437 | 0.0341 | -0.2206 | 0.0478 | 0.0000 |
| August | 0.0587 | 0.1575 | 0.7095 | 0.2009 | 0.00020 | <2e-16 | 0.3384 | 0.1493 | 0.0234 | -0.1477 | 0.0506 | 0.0035 |
| September | -0.0260 | 0.1556 | 0.8674 | 0.0071 | 0.00019 | <2e-16 | 0.0247 | 0.1508 | 0.8698 | -0.2876 | 0.0527 | 0.0000 |
| October | 0.1230 | 0.1613 | 0.4458 | -0.0583 | 0.00019 | <2e-16 | -0.1914 | 0.1559 | 0.2195 | -0.3095 | 0.0544 | 0.0000 |
| November | -0.6139 | 0.1622 | 0.0002 | -0.1689 | 0.00019 | <2e-16 | -0.2193 | 0.1553 | 0.1580 | -0.4208 | 0.0531 | 0.0000 |
| December | -0.4461 | 0.1676 | 0.0078 | -0.1330 | 0.00019 | <2e-16 | 0.0132 | 0.1615 | 0.9350 | -0.1960 | 0.0012 | < 2e-16 |
| Fleet - Local | -1.3382 | 0.4447 | 0.0026 | 1.1628 | 0.00019 | <2e-16 | -0.1471 | 0.2714 | 0.5877 | 0.6116 | 0.0012 | < 2e-16 |
| Fleet - Foreign | - | - | - | - | - | - | - | - | - | - | - | - |
| Observer - Unknown | - | - | - | - | - | - | - | - | - | - | - | - |
| Observer - No | 0.6061 | 0.1244 | 0.0000 | 0.0749 | 0.00019 | <2e-16 | 0.0722 | 0.1203 | 0.5485 | 0.0147 | 0.0012 | < 2e-16 |
| Observer - Yes | 0.2435 | 0.1295 | 0.0600 | -0.0802 | 0.00019 | <2e-16 | -0.2663 | 0.1252 | 0.0334 | -0.0352 | 0.0284 | 0.2149 |