|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| South 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 | 10 378 | | | 32 056 | | | 9 672 | | | 38 603 | | |
|  | Estimate | Std. Error | Pr(>|z|) | Estimate | Std. Error | Pr(>|z|) | Estimate | Std. Error | Pr(>|z|) | Estimate | Std. Error | Pr(>|z|) |
| 2000 | 0.3342 | 0.4556 | 0.4631 | -0.1937 | 0.2821 | 0.4922 | -1.8013 | 0.6492 | 0.0055 | -0.5742 | 0.3457 | 0.0967 |
| 2001 | -1.7415 | 0.5599 | 0.0019 | -0.1997 | 0.5005 | 0.6899 | -0.8546 | 0.6314 | 0.1759 | -0.7940 | 0.2729 | 0.0036 |
| 2002 | 0.2063 | 0.6887 | 0.7645 | 0.3612 | 0.3478 | 0.2990 | -2.6288 | 0.8546 | 0.0021 | -1.9124 | 0.2661 | 0.0000 |
| 2003 | 0.4275 | 0.4472 | 0.3391 | 0.5269 | 0.2542 | 0.0382 | -2.6640 | 0.6560 | 0.0000 | -1.1739 | 0.2676 | 0.0000 |
| 2004 | -1.5365 | 0.4120 | 0.0002 | 0.1799 | 0.2307 | 0.4355 | -2.6554 | 0.5859 | 0.0000 | 1.0092 | 0.2003 | 0.0000 |
| 2005 | 0.5204 | 0.3893 | 0.1814 | 0.6848 | 0.1954 | 0.0005 | 0.7820 | 0.5498 | 0.1550 | 0.7723 | 0.1837 | 0.0000 |
| 2006 | 0.3542 | 0.4214 | 0.4005 | 0.2460 | 0.2090 | 0.2393 | 0.3449 | 0.6982 | 0.6213 | 0.4070 | 0.1882 | 0.0306 |
| 2007 | 0.6622 | 0.3847 | 0.0852 | 0.8157 | 0.1934 | 0.0000 | 1.3276 | 0.5577 | 0.0173 | 0.4505 | 0.1818 | 0.0132 |
| 2008 | 0.8289 | 0.3909 | 0.0340 | 1.1430 | 0.1943 | 0.0000 | 1.9598 | 0.5627 | 0.0005 | 0.6841 | 0.1824 | 0.0002 |
| 2009 | 0.7716 | 0.3819 | 0.0433 | 0.8405 | 0.1918 | 0.0000 | 2.0273 | 0.5614 | 0.0003 | 0.5442 | 0.1803 | 0.0025 |
| 2010 | 0.9781 | 0.3822 | 0.0105 | 0.6014 | 0.1902 | 0.0016 | 1.6763 | 0.5596 | 0.0027 | 0.2581 | 0.1800 | 0.1517 |
| 2011 | 0.8400 | 0.3840 | 0.0287 | 0.6173 | 0.1916 | 0.0013 | 1.6411 | 0.5614 | 0.0035 | 0.4087 | 0.1806 | 0.0236 |
| 2012 | 0.8123 | 0.3890 | 0.0368 | 0.8711 | 0.1964 | 0.0000 | 1.4044 | 0.5643 | 0.0128 | 0.4565 | 0.1833 | 0.0128 |
| 2013 | 1.3147 | 0.3932 | 0.0008 | 1.1039 | 0.1964 | 0.0000 | 2.0664 | 0.5638 | 0.0002 | 0.6130 | 0.1842 | 0.0009 |
| 2014 | 0.9028 | 0.4030 | 0.0251 | 0.9942 | 0.2083 | 0.0000 | 2.2439 | 0.5737 | 0.0001 | 0.3182 | 0.1895 | 0.0931 |
| 2015 | 0.0352 | 0.3880 | 0.9277 | 1.3140 | 0.1988 | 0.0000 | 1.2889 | 0.5593 | 0.0212 | 0.3715 | 0.1823 | 0.0415 |
| January | - | - | - | - | - | - | - | - | - | - | - | - |
| February | 0.2489 | 0.2415 | 0.3028 | 0.1529 | 0.1289 | 0.2356 | 0.2307 | 0.3302 | 0.4847 | -0.1896 | 0.0887 | 0.0325 |
| March | 0.2637 | 0.2174 | 0.2250 | 0.2970 | 0.1202 | 0.0135 | 0.2862 | 0.2669 | 0.2835 | 0.0273 | 0.0806 | 0.7346 |
| April | 1.4157 | 0.2142 | 0.0000 | 0.1778 | 0.1106 | 0.1081 | 1.5788 | 0.2488 | 0.0000 | 0.0850 | 0.0758 | 0.2622 |
| May | 0.3241 | 0.1927 | 0.0926 | -0.2509 | 0.1091 | 0.0215 | 1.0134 | 0.2393 | 0.0000 | 0.1544 | 0.0751 | 0.0396 |
| June | 0.1095 | 0.1877 | 0.5596 | -0.0487 | 0.1073 | 0.6497 | 0.8362 | 0.2364 | 0.0004 | 0.1952 | 0.0738 | 0.0081 |
| July | 0.2104 | 0.1860 | 0.2578 | -0.1069 | 0.1066 | 0.3158 | 1.1526 | 0.2349 | 0.0000 | 0.0770 | 0.0728 | 0.2903 |
| August | 0.3466 | 0.1859 | 0.0622 | -0.0546 | 0.1074 | 0.6114 | 1.2432 | 0.2319 | 0.0000 | 0.1691 | 0.0741 | 0.0225 |
| September | 0.2978 | 0.1869 | 0.1110 | -0.2013 | 0.1090 | 0.0647 | 0.7088 | 0.2320 | 0.0023 | -0.1002 | 0.0756 | 0.1850 |
| October | 0.1847 | 0.1874 | 0.3243 | -0.2307 | 0.1102 | 0.0363 | 0.4480 | 0.2336 | 0.0552 | -0.0826 | 0.0768 | 0.2824 |
| November | 0.2921 | 0.2079 | 0.1600 | -0.3928 | 0.1216 | 0.0012 | 0.6841 | 0.2622 | 0.0091 | 0.0486 | 0.0797 | 0.5419 |
| December | 0.0622 | 0.2186 | 0.7762 | -0.4431 | 0.1248 | 0.0004 | 0.8535 | 0.3023 | 0.0047 | -0.1730 | 0.0810 | 0.0327 |
| Fleet - Local | -1.0020 | 0.4609 | 0.0297 | 1.9439 | 0.2371 | 0.0000 | -1.2413 | 0.7515 | 0.0986 | 2.0378 | 0.2455 | < 2e-16 |
| Fleet - Foreign | - | - | - | - | - | - | - | - | - | - | - | - |
| Observer - Unknown | - | - | - | - | - | - | - | - | - | - | - | - |
| Observer - No | 0.3423 | 0.1220 | 0.0050 | 0.1579 | 0.0827 | 0.0562 | 0.0676 | 0.1291 | 0.6006 | -0.1237 | 0.0616 | 0.0445 |
| Observer - Yes | -0.0600 | 0.1264 | 0.6351 | 0.1195 | 0.0864 | 0.1668 | -0.2792 | 0.1344 | 0.0378 | -0.1279 | 0.0634 | 0.0438 |