Supplementary Material

Fish Species in a Changing World: The Route and Timing of Species Migration between Tropical and Temperate Ecosystems in Eastern Atlantic

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### Supplementary Table 6. Mean SST per ecosystem in the third period (2003-2012)

| Year | Month | North Sea | Celtic Sea | South Europ. | Mediterranean | Canary | Guinea |
|------|-------|-----------|------------|--------------|---------------|--------|--------|
| 2003 | 1     | 6.5       | 10.2       | 13.4         | 14.6          | 19.6   | 27.6   |
| 2003 | 2     | 5.9       | 9.7        | 12.6         | 13.7          | 18.1   | 27.3   |
| 2003 | 3     | 6.1       | 9.6        | 12.9         | 14.1          | 18.7   | 27.4   |
| 2003 | 4     | 7.1       | 10.4       | 13.6         | 15.0          | 19.2   | 27.9   |
| 2003 | 5     | 9.5       | 10.7       | 15.0         | 18.3          | 19.8   | 27.8   |
| 2003 | 6     | 13.5      | 12.9       | 18.0         | 23.4          | 21.1   | 26.4   |
| 2003 | 7     | 16.3      | 15.0       | 19.5         | 25.7          | 21.9   | 25.8   |
| 2003 | 8     | 17.6      | 15.9       | 21.2         | 27.7          | 24.2   | 25.2   |
| 2003 | 9     | 15.5      | 15.2       | 20.0         | 24.2          | 24.0   | 25.9   |
| 2003 | 10    | 12.7      | 13.6       | 18.2         | 21.3          | 24.1   | 26.8   |
| 2003 | 11    | 10.4      | 12.2       | 15.7         | 18.2          | 22.7   | 27.6   |
| 2003 | 12    | 8.9       | 11.1       | 14.2         | 16.0          | 21.0   | 27.8   |
| 2004 | 1     | 7.3       | 10.2       | 13.4         | 14.3          | 19.7   | 27.4   |
| 2004 | 2     | 6.3       | 10.0       | 13.0         | 13.8          | 19.2   | 27.1   |
| 2004 | 3     | 6.2       | 9.7        | 12.7         | 13.7          | 18.7   | 27.2   |
| 2004 | 4     | 7.4       | 10.1       | 13.2         | 14.7          | 19.3   | 27.1   |
| 2004 | 5     | 9.8       | 11.5       | 14.6         | 16.5          | 19.7   | 26.9   |
| 2004 | 6     | 12.5      | 13.9       | 17.8         | 20.5          | 20.9   | 25.9   |
| 2004 | 7     | 14.4      | 14.5       | 19.0         | 23.8          | 22.3   | 25.0   |
| 2004 | 8     | 17.0      | 15.4       | 20.3         | 25.3          | 23.9   | 24.8   |
| 2004 | 9     | 15.1      | 14.9       | 19.7         | 24.1          | 24.0   | 25.7   |
| 2004 | 10    | 12.4      | 12.8       | 17.6         | 22.2          | 24.1   | 26.6   |
| 2004 | 11    | 10.3      | 11.6       | 15.8         | 18.3          | 22.9   | 27.5   |
| 2004 | 12    | 8.7       | 10.9       | 14.4         | 16.0          | 20.9   | 27.6   |
| 2005 | 1     | 7.5       | 10.1       | 13.3         | 14.4          | 19.0   | 27.1   |
| 2005 | 2     | 6.3       | 9.5        | 12.7         | 13.4          | 18.1   | 27.3   |
| 2005 | 3     | 5.5       | 9.6        | 12.3         | 13.3          | 19.0   | 27.7   |
| 2005 | 4     | 7.1       | 10.2       | 13.3         | 14.8          | 19.5   | 27.7   |
| 2005 | 5     | 8.9       | 10.9       | 15.0         | 17.6          | 20.0   | 27.5   |
| 2005 | 6     | 12.0      | 12.8       | 17.4         | 22.2          | 21.8   | 25.5   |
| 2005 | 7     | 14.9      | 14.6       | 19.4         | 24.2          | 22.4   | 24.6   |
| 2005 | 8     | 14.7      | 15.4       | 19.9         | 24.4          | 23.1   | 24.4   |
| 2005 | 9     | 14.5      | 14.8       | 19.4         | 23.8          | 24.0   | 25.3   |
| 2005 | 10    | 13.1      | 13.3       | 18.1         | 21.4          | 24.0   | 26.7   |
| 2005 | 11    | 11.5      | 12.3       | 16.4         | 19.7          | 23.1   | 27.5   |
| 2005 | 12    | 8.6       | 11.1       | 14.2         | 15.6          | 21.9   | 27.8   |
| 2006 | 1     | 6.8       | 10.2       | 13.0         | 13.9          | 19.6   | 27.4   |
| 2006 | 2     | 6.1       | 9.8        | 12.5         | 13.5          | 18.4   | 27.1   |
| 2006 | 3     | 5.0       | 9.4        | 12.2         | 13.5          | 18.2   | 27.1   |
| 2006 | 4     | 6.3       | 9.8        | 13.4         | 15.4          | 19.2   | 27.6   |
| 2006 | 5     | 8.7       | 10.5       | 15.0         | 17.9          | 19.8   | 26.8   |
| Year | Month | North Sea | Celtic Sea | South Europ. | Mediterranean | Canary | Guinea |
|------|-------|-----------|-----------|--------------|--------------|--------|-------|
| 2006| 6     | 11.9      | 12.7      | 17.1         | 20.4         | 21.0   | 26.6  |
| 2006| 7     | 15.6      | 14.4      | 20.1         | 25.7         | 21.8   | 25.5  |
| 2006| 8     | 16.8      | 15.5      | 20.3         | 25.1         | 23.6   | 24.7  |
| 2006| 9     | 15.5      | 14.8      | 19.9         | 23.7         | 24.4   | 25.2  |
| 2006| 10    | 14.1      | 13.9      | 18.8         | 22.1         | 24.2   | 26.4  |
| 2006| 11    | 10.8      | 12.5      | 17.3         | 19.5         | 23.8   | 27.7  |
| 2006| 12    | 9.2       | 10.8      | 14.9         | 16.9         | 20.9   | 27.9  |
| 2007| 1     | 8.1       | 10.3      | 14.0         | 15.4         | 19.4   | 26.6  |
| 2007| 2     | 7.2       | 9.9       | 13.3         | 14.6         | 19.0   | 27.4  |
| 2007| 3     | 7.1       | 9.8       | 13.2         | 14.5         | 18.5   | 27.0  |
| 2007| 4     | 8.3       | 10.5      | 13.8         | 15.9         | 18.7   | 27.4  |
| 2007| 5     | 10.0      | 11.4      | 14.9         | 18.4         | 19.7   | 27.6  |
| 2007| 6     | 13.1      | 12.6      | 16.7         | 21.3         | 20.6   | 26.4  |
| 2007| 7     | 14.4      | 14.5      | 18.2         | 23.5         | 21.0   | 25.7  |
| 2007| 8     | 15.1      | 14.7      | 19.0         | 24.6         | 22.4   | 25.1  |
| 2007| 9     | 13.6      | 15.0      | 18.7         | 23.3         | 23.4   | 25.4  |
| 2007| 10    | 12.4      | 13.8      | 17.9         | 21.7         | 23.5   | 26.7  |
| 2007| 11    | 10.5      | 12.8      | 16.2         | 18.2         | 22.7   | 27.6  |
| 2007| 12    | 8.5       | 11.2      | 14.3         | 16.0         | 20.9   | 27.6  |
| 2008| 1     | 7.2       | 10.4      | 13.6         | 14.6         | 19.5   | 27.4  |
| 2008| 2     | 6.8       | 10.2      | 13.4         | 14.2         | 19.5   | 27.2  |
| 2008| 3     | 6.6       | 9.7       | 13.4         | 14.4         | 19.4   | 27.6  |
| 2008| 4     | 7.1       | 9.9       | 13.5         | 14.9         | 19.2   | 27.4  |
| 2008| 5     | 10.6      | 11.7      | 15.4         | 17.5         | 20.3   | 27.4  |
| 2008| 6     | 13.3      | 13.1      | 17.7         | 21.5         | 21.0   | 26.2  |
| 2008| 7     | 14.7      | 13.7      | 18.8         | 24.0         | 21.9   | 25.7  |
| 2008| 8     | 15.8      | 14.6      | 19.2         | 25.6         | 22.7   | 25.4  |
| 2008| 9     | 14.4      | 14.1      | 18.6         | 24.3         | 23.8   | 25.6  |
| 2008| 10    | 12.2      | 13.0      | 17.4         | 21.3         | 23.2   | 26.7  |
| 2008| 11    | 9.9       | 11.5      | 15.4         | 18.7         | 21.7   | 27.5  |
| 2008| 12    | 7.8       | 10.5      | 13.3         | 15.3         | 19.9   | 27.6  |
| 2009| 1     | 6.6       | 9.8       | 12.6         | 14.1         | 18.4   | 27.2  |
| 2009| 2     | 5.3       | 9.4       | 12.1         | 13.5         | 17.7   | 26.8  |
| 2009| 3     | 6.0       | 9.7       | 12.6         | 13.8         | 18.0   | 26.7  |
| 2009| 4     | 7.6       | 9.9       | 13.0         | 14.9         | 18.4   | 27.0  |
| 2009| 5     | 9.4       | 10.6      | 14.0         | 17.6         | 19.2   | 27.5  |
| 2009| 6     | 12.9      | 13.0      | 17.6         | 21.9         | 21.4   | 26.7  |
| 2009| 7     | 15.9      | 14.5      | 19.2         | 24.6         | 22.5   | 25.3  |
| 2009| 8     | 15.8      | 14.5      | 19.7         | 26.3         | 23.6   | 24.2  |
| 2009| 9     | 14.6      | 14.2      | 19.0         | 25.1         | 23.9   | 25.1  |
| 2009| 10    | 12.3      | 13.3      | 18.4         | 22.1         | 24.6   | 26.3  |
| 2009| 11    | 10.5      | 11.9      | 16.0         | 18.5         | 23.2   | 27.3  |
| 2009| 12    | 8.7       | 10.8      | 14.6         | 16.3         | 21.8   | 27.9  |
| 2010| 1     | 6.3       | 9.8       | 13.2         | 14.4         | 20.7   | 27.6  |
| 2010| 2     | 5.3       | 9.5       | 12.8         | 13.8         | 20.3   | 27.9  |
| Year | Month | North Sea | Celtic Sea | South Europ. | Mediterranean | Canary | Guinea |
|------|-------|-----------|------------|--------------|---------------|--------|--------|
| 2010 | 3     | 4.7       | 9.3        | 12.5         | 13.9          | 20.1   | 28.1   |
| 2010 | 4     | 6.7       | 9.6        | 13.3         | 15.3          | 20.2   | 28.0   |
| 2010 | 5     | 8.8       | 10.9       | 15.1         | 17.5          | 20.2   | 27.5   |
| 2010 | 6     | 12.0      | 13.3       | 17.4         | 20.8          | 21.4   | 26.3   |
| 2010 | 7     | 14.7      | 14.3       | 19.1         | 24.9          | 22.2   | 25.5   |
| 2010 | 8     | 15.8      | 15.0       | 19.8         | 25.1          | 23.7   | 25.2   |
| 2010 | 9     | 14.5      | 15.0       | 19.6         | 23.9          | 24.4   | 25.5   |
| 2010 | 10    | 12.6      | 13.9       | 18.0         | 21.4          | 24.3   | 27.0   |
| 2010 | 11    | 10.0      | 11.7       | 16.2         | 18.3          | 23.4   | 27.9   |
| 2010 | 12    | 6.7       | 10.3       | 14.2         | 15.6          | 22.5   | 28.1   |
| 2011 | 1     | 5.3       | 9.6        | 13.2         | 14.3          | 20.9   | 27.3   |
| 2011 | 2     | 5.3       | 9.5        | 12.8         | 13.7          | 19.2   | 27.5   |
| 2011 | 3     | 5.1       | 9.5        | 12.7         | 13.7          | 18.7   | 27.6   |
| 2011 | 4     | 7.1       | 10.0       | 14.1         | 15.6          | 19.0   | 27.9   |
| 2011 | 5     | 9.7       | 11.2       | 16.3         | 18.4          | 20.3   | 27.0   |
| 2011 | 6     | 12.1      | 11.8       | 17.5         | 22.0          | 21.5   | 26.2   |
| 2011 | 7     | 14.4      | 13.6       | 17.9         | 23.7          | 21.9   | 24.6   |
| 2011 | 8     | 15.0      | 14.2       | 18.8         | 25.1          | 22.5   | 24.6   |
| 2011 | 9     | 13.9      | 13.6       | 18.9         | 24.6          | 23.5   | 25.4   |
| 2011 | 10    | 12.5      | 12.9       | 18.8         | 22.5          | 23.9   | 26.5   |
| 2011 | 11    | 10.8      | 12.0       | 16.3         | 18.9          | 22.3   | 27.3   |
| 2011 | 12    | 8.5       | 10.5       | 14.7         | 16.7          | 20.8   | 27.3   |
| 2012 | 1     | 7.2       | 10.1       | 14.0         | 14.9          | 18.9   | 27.1   |
| 2012 | 2     | 5.6       | 9.3        | 12.5         | 13.5          | 17.4   | 26.1   |
| 2012 | 3     | 6.4       | 9.8        | 12.9         | 14.1          | 17.6   | 26.6   |
| 2012 | 4     | 6.9       | 9.9        | 13.2         | 15.1          | 18.2   | 26.9   |
| 2012 | 5     | 9.1       | 10.4       | 14.4         | 17.2          | 19.3   | 27.0   |
| 2012 | 6     | 11.7      | 12.3       | 16.8         | 21.3          | 20.5   | 26.4   |
| 2012 | 7     | 14.1      | 13.6       | 18.5         | 24.4          | 21.2   | 25.3   |
| 2012 | 8     | 15.7      | 14.5       | 19.8         | 26.2          | 23.2   | 24.6   |
| 2012 | 9     | 13.9      | 14.2       | 19.4         | 23.7          | 24.4   | 25.5   |
| 2012 | 10    | 11.8      | 12.6       | 17.9         | 22.2          | 24.6   | 26.5   |
| 2012 | 11    | 9.8       | 11.3       | 16.2         | 18.6          | 23.3   | 27.4   |
| 2012 | 12    | 8.0       | 10.4       | 14.4         | 15.8          | 20.8   | 27.8   |