Fig. S1 Normalized temperature (°C, shading, contours) anomaly composites with respect to El Niño events at 100 metres depth and 6 months lead/lag time. The contour interval is 0.5 °C, with solid (dashed) lines depicting positive (negative) anomalies. The events used for the calculation of the composites are as in Figures 7 and 8. The green rectangle indicates the Region "cold" ($[140e - 210e]x[5n - 10n]$, Table 2).
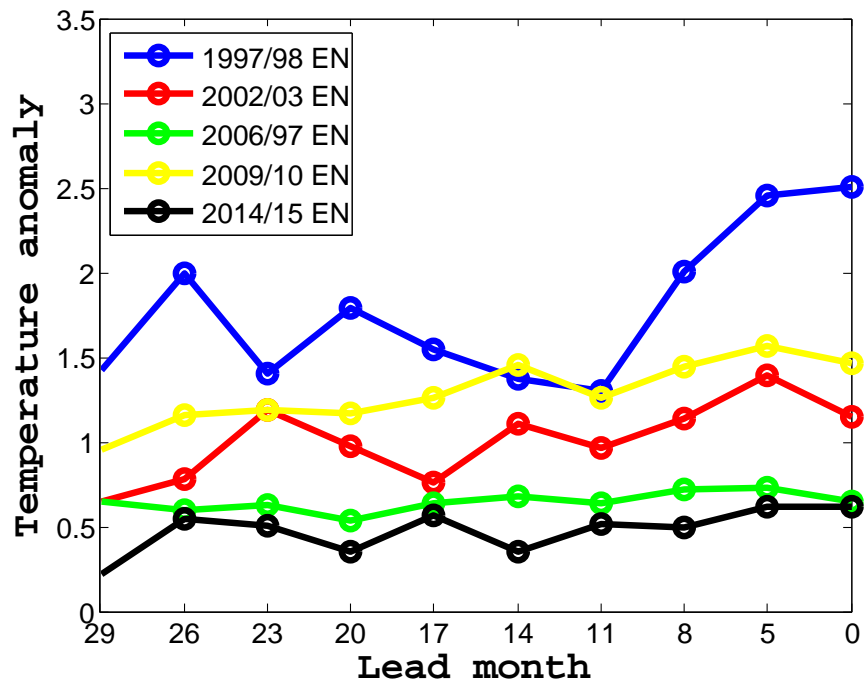
Fig. S2 Predictions of the January target month for all EN events shown in Figure 9: 1997/98 (blue), 2002/03 (red), 2006/07 (green), 2009/10 (yellow), 2014/15 (black). The lead months for the respective events are as in Table 9, and lead month 0 corresponds to the observations.
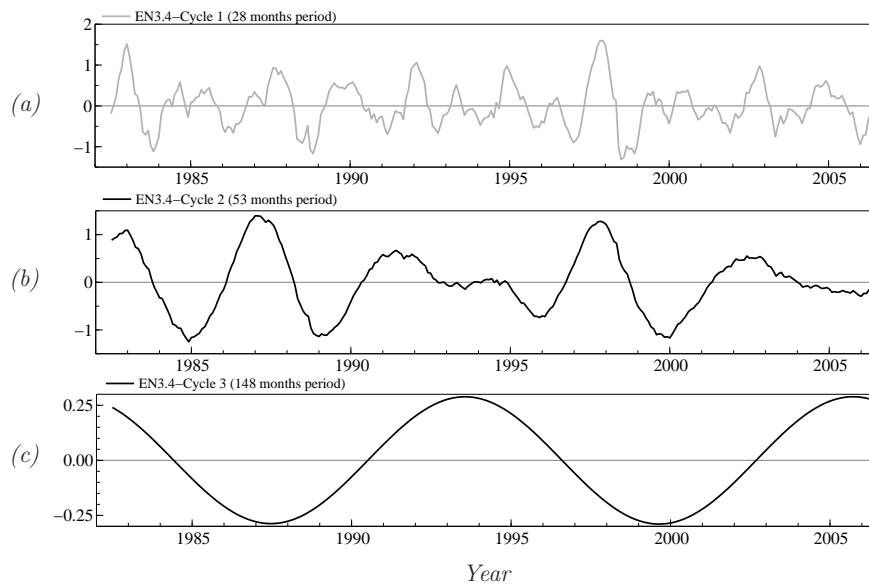
Fig. S3 Cycle components graphics of the model used to predict the 2006/07 EN event. The estimated cycle periods are approximately (a) 2.5, (b) 4.5, (c) 12 years.
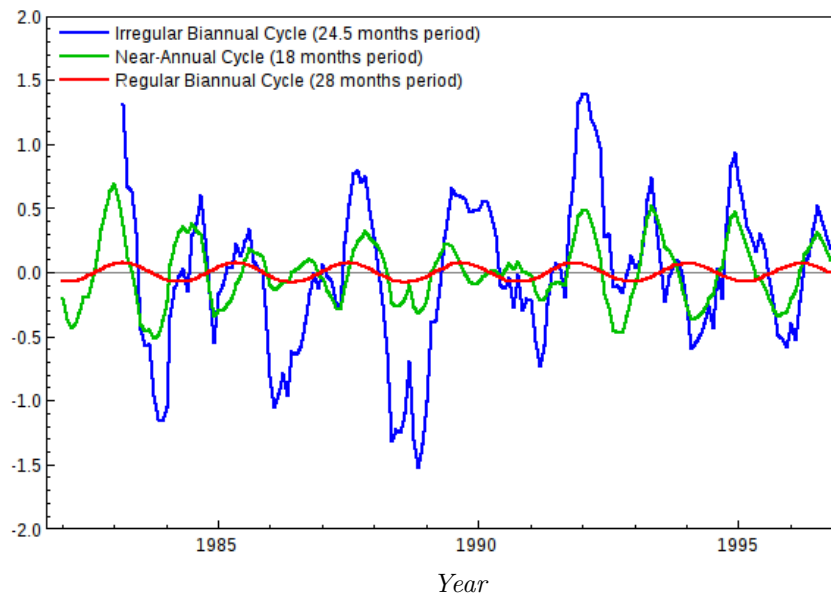

Fig. S4 Superposition of Cycle 1 (1.5 years period) from Figure 1(c) (green), Cycle 2 (2.5 years period) from Figure 1(d) (red), and Cycle 1 (2.5 years period) from Supplementary Figure 3(a) (blue).
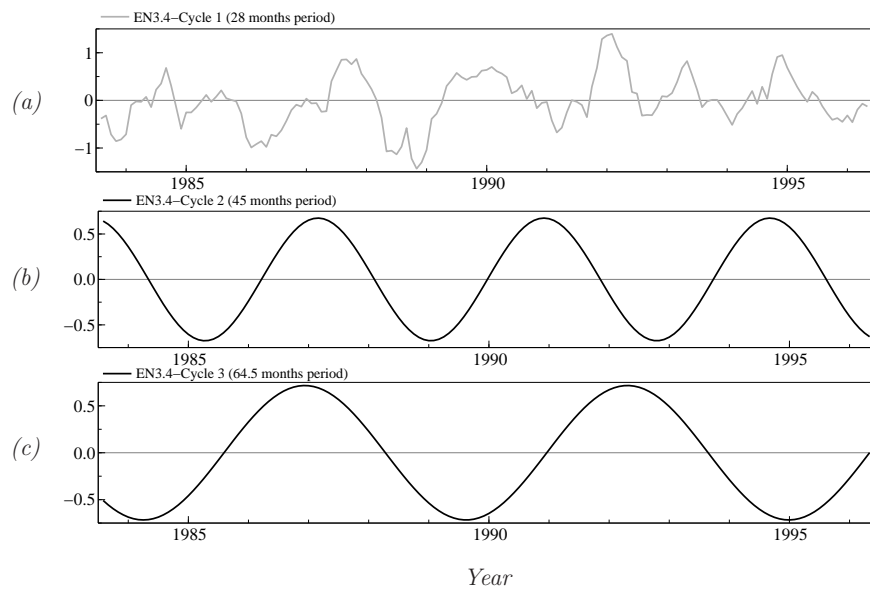
Fig. S5 Same as Supplementary Figure 3, but for the 1997/98 EN event. The estimated cycle periods are approximately (a) 2.5, (b) 3.7, (c) 5.4 years.