Patterns of occurrence of the sub-Antarctic fur seal *Arctocephalus tropicalis* (Gray, 1872) in Southern Brazil: climatic and environmental associations

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Online resource 2. Results of Akaike Information Criterion (AIC) values for lags of 2 to 7 months for the seasonality (sine and cosine) and climate modes model in the period from 1991 to 2013, and for the model of climate variables chlorophyll anomalies (aChlor) and sea surface temperature anomalies (aSST) in the period from 1998 to 2013. Bold indicates the results with the lowest AIC values, which are the models discussed in the paper

Lags (months)	AIC	
	1991 - 2013	1998 - 2013
2	354.00	301.64
3	341.99	303.50
4	**340.86**	283.37
5	352.89	**257.75**
6	347.77	258.28
7	358.41	274.64

Online resource 3. Results of the Akaike Information Criterion (AIC) values for the models tested during the Backward Stepwise Regression process. The full model corresponds to model 1 with all seasonality (sine and cosine) and climate modes variables with a 4-month lag in the period from 1991 to 2013. Bold indicates the time when the Backward Stepwise Regression reaches the lowest AIC value. The variables that remained in the model were those discussed in the paper. For model 4, it was not necessary to carry out the Backward Stepwise Regression process, because the model only presented the environmental variables of chlorophyte anomalies (aChlor) and sea surface temperature anomalies (aSST) interacting. (*) interaction of variables

Variables eliminated	AIC
Full Model (M1: 4 months interaction)	340.86
SIOD*ENSO	338.95
SAM*SIOD	337.07
SAOD*IOD	335.53
SAM*IOD	334.09
SAM*ENSO	333.37
SAOD*SIOD	332.69
SAOD*ENSO	332.17
IOD*SIOD	**331.43**
ENSO*IOD	339.05