

Supplementary materials

Table S1. Model assessment based on degrees of freedom for trend and crossbasis function.

Models	Total df	Trend df=1		Trend df=3		Trend df=5		Trend df=7	
		QAIC	QBIC	QAIC	QBIC	QAIC	QBIC	QAIC	QBIC
Model 1	25	30487.4	30841.5	29745.1	30502.3	35270	36178.1	35167.2	36311
Model 2	25	30487.4	30841.5	29745.1	30502.3	35270	36178.1	35167.2	36311
Model 3	25	30487.4	30841.5	29745.1	30502.3	35270	36178.1	35167.2	36311
Model 4	25	30487.4	30841.5	29745.1	30502.3	35270	36178.1	35167.2	36311
Model 5	20	30502.1	30816.9	29744.9	30455.5	35260.6	36124.7	35160.4	36261.4
Model 6	20	30502.1	30816.9	29744.9	30455.5	35260.6	36124.7	35160.4	36261.4
Model 7	20	30502.1	30816.9	29744.9	30455.5	35260.6	36124.7	35160.4	36261.4
Model 8	20	30502.1	30816.9	29744.9	30455.5	35260.6	36124.7	35160.4	36261.4
Model 9	25	30487.4	30841.5	29745.1	30502.3	35270	36178.1	35167.2	36311
Model 10	25	30487.4	30841.5	29745.1	30502.3	35270	36178.1	35167.2	36311
Model 11	25	30487.4	30841.5	29745.1	30502.3	35270	36178.1	35167.2	36311
Model 12	25	30487.4	30841.5	29745.1	30502.3	35270	36178.1	35167.2	36311
Model 13	20	30502.1	30816.9	29744.9	30455.5	35260.6	36124.7	35160.4	36261.4
Model 14	20	30502.1	30816.9	29744.9	30455.5	35260.6	36124.7	35160.4	36261.4
Model 15	20	30502.1	30816.9	29744.9	30455.5	35260.6	36124.7	35160.4	36261.4
Model 16	20	30502.1	30816.9	29744.9	30455.5	35260.6	36124.7	35160.4	36261.4
Models	Total df	Trend df=2		Trend df=4		Trend df=6		Trend df=8	
		QAIC	QBIC	QAIC	QBIC	QAIC	QBIC	QAIC	QBIC
Model 1	25	35828.2	36393.3	35372.9	36165.6	35234.6	36264.7	35135.6	36398.9
Model 2	25	35828.2	36393.3	35372.9	36165.6	35234.6	36264.7	35135.6	36398.9
Model 3	25	35828.2	36393.3	35372.9	36165.6	35234.6	36264.7	35135.6	36398.9
Model 4	25	35828.2	36393.3	35372.9	36165.6	35234.6	36264.7	35135.6	36398.9
Model 5	20	35846	36365.1	35371.6	36120.4	35227.1	36213.7	35131	36352.2
Model 6	20	35846	36365.1	35371.6	36120.4	35227.1	36213.7	35131	36352.2
Model 7	20	35846	36365.1	35371.6	36120.4	35227.1	36213.7	35131	36352.2

Model 8	20	35846	36365.1	35371.6	36120.4	35227.1	36213.7	35131	36352.2
Model 9	25	35828.2	36393.3	35372.9	36165.6	35234.6	36264.7	35135.6	36398.9
Model 10	25	35828.2	36393.3	35372.9	36165.6	35234.6	36264.7	35135.6	36398.9
Model 11	25	35828.2	36393.3	35372.9	36165.6	35234.6	36264.7	35135.6	36398.9
Model 12	25	35828.2	36393.3	35372.9	36165.6	35234.6	36264.7	35135.6	36398.9
Model 13	20	35846	36365.1	35371.6	36120.4	35227.1	36213.7	35131	36352.2
Model 14	20	35846	36365.1	35371.6	36120.4	35227.1	36213.7	35131	36352.2
Model 15	20	35846	36365.1	35371.6	36120.4	35227.1	36213.7	35131	36352.2
Model 16	20	35846	36365.1	35371.6	36120.4	35227.1	36213.7	35131	36352.2

Table S1 Contd.

Models	Total df	Trend df=9		Trend df=11		Trend df=13		Trend df=15	
		QAIC	QBIC	QAIC	QBIC	QAIC	QBIC	QAIC	QBIC
Model 1	25	35082.5	36455.3	34994.2	36584.9	34970.3	36788.4	34921.3	36958
Model 2	25	35082.5	36455.3	34994.2	36584.9	34970.3	36788.4	34921.3	36958
Model 3	25	35082.5	36455.3	34994.2	36584.9	34970.3	36788.4	34921.3	36958
Model 4	25	35082.5	36455.3	34994.2	36584.9	34970.3	36788.4	34921.3	36958
Model 5	20	35077	36408	34991.2	36541.8	34968.2	36747.2	34920.5	36919.3
Model 6	20	35077	36408	34991.2	36541.8	34968.2	36747.2	34920.5	36919.3
Model 7	20	35077	36408	34991.2	36541.8	34968.2	36747.2	34920.5	36919.3
Model 8	20	35077	36408	34991.2	36541.8	34968.2	36747.2	34920.5	36919.3
Model 9	25	35082.5	36455.3	34994.2	36584.9	34970.3	36788.4	34921.3	36958
Model 10	25	35082.5	36455.3	34994.2	36584.9	34970.3	36788.4	34921.3	36958
Model 11	25	35082.5	36455.3	34994.2	36584.9	34970.3	36788.4	34921.3	36958
Model 12	25	35082.5	36455.3	34994.2	36584.9	34970.3	36788.4	34921.3	36958
Model 13	20	35077	36408	34991.2	36541.8	34968.2	36747.2	34920.5	36919.3
Model 14	20	35077	36408	34991.2	36541.8	34968.2	36747.2	34920.5	36919.3
Model 15	20	35077	36408	34991.2	36541.8	34968.2	36747.2	34920.5	36919.3

Model 16	20	35077	36408	34991.2	36541.8	34968.2	36747.2	34920.5	36919.3
		Trend df=10	Trend df=12			Trend df=14	Trend df=16		
Model 1	25	35026.8	36510	35011.9	36727.7	35016.8	36969.4	29959.1	31583.2
Model 2	25	35026.8	36510	35011.9	36727.7	35016.8	36969.4	29959.1	31583.2
Model 3	25	35026.8	36510	35011.9	36727.7	35016.8	36969.4	29959.1	31583.2
Model 4	25	35026.8	36510	35011.9	36727.7	35016.8	36969.4	29959.1	31583.2
Model 5	20	35023.2	36465.7	35009.1	36685	35014.4	36927.7	29949.4	31550.1
Model 6	20	35023.2	36465.7	35009.1	36685	35014.4	36927.7	29949.4	31550.1
Model 7	20	35023.2	36465.7	35009.1	36685	35014.4	36927.7	29949.4	31550.1
Model 8	20	35023.2	36465.7	35009.1	36685	35014.4	36927.7	29949.4	31550.1
Model 9	25	35026.8	36510	35011.9	36727.7	35016.8	36969.4	29959.1	31583.2
Model 10	25	35026.8	36510	35011.9	36727.7	35016.8	36969.4	29959.1	31583.2
Model 11	25	35026.8	36510	35011.9	36727.7	35016.8	36969.4	29959.1	31583.2
Model 12	25	35026.8	36510	35011.9	36727.7	35016.8	36969.4	29959.1	31583.2
Model 13	20	35023.2	36465.7	35009.1	36685	35014.4	36927.7	29949.4	31550.1
Model 14	20	35023.2	36465.7	35009.1	36685	35014.4	36927.7	29949.4	31550.1
Model 15	20	35023.2	36465.7	35009.1	36685	35014.4	36927.7	29949.4	31550.1
Model 16	20	35023.2	36465.7	35009.1	36685	35014.4	36927.7	29949.4	31550.1

Model 1: Exposure-response was modelled by a natural cubic spline with 4 dfs with 4 internal knots placed at equal intervals in the temperature range and the log scale of lags with intercept.

Model 2: Exposure-response was modelled by a natural cubic spline with 5 dfs with 4 internal knots placed at equal intervals in the temperature range and the log scale of lags with intercept.

Model 3: Exposure-response was modelled by a natural cubic spline with 6 dfs with 4 internal knots placed at equal intervals in the temperature range and the log scale of lags with intercept.

Model 4: Exposure-response was modelled by a natural cubic spline with 7 dfs with 4 internal knots placed at equal intervals in the temperature range and the log scale of lags with intercept.

Model 5: Exposure-response was modelled by a natural cubic spline with 4 dfs with 4 internal knots placed at equal intervals in the temperature range and the log scale of lags without intercept.

Model 6: Exposure-response was modelled by a natural cubic spline with 5 dfs with 4 internal knots placed at equal intervals in the temperature range and the log scale of lags without intercept.

Model 7: Exposure-response was modelled by a natural cubic spline with 6 dfs with 4 internal knots placed at equal intervals in the temperature range and the log scale of lags without intercept.

Model 8: Exposure-response was modelled by a natural cubic spline with 7 dfs with 4 internal knots placed at equal intervals in the temperature range and the log scale of lags without intercept.

Model 9: Exposure-response was modelled by a natural cubic spline with 4 dfs with 4 internal knots placed at equal intervals in the temperature range and 5 dfs with 4 internal knots along the log scale of lags with intercept.

Model 10: Exposure-response was modelled by a natural cubic spline with 5 dfs with 4 internal knots placed at equal intervals in the temperature range and 5 dfs with 4 internal knots along the log scale of lags with intercept.

Model 11: Exposure-response was modelled by a natural cubic spline with 6 dfs with 4 internal knots placed at equal intervals in the temperature range and 5 dfs with 4 internal knots along the log scale of lags with intercept.

Model 12: Exposure-response was modelled by a natural cubic spline with 7 dfs with 4 internal knots placed at equal intervals in the temperature range and 5 dfs with 4 internal knots along the log scale of lags with intercept.

Model 13: Exposure-response was modelled by a natural cubic spline with 4 dfs with 4 internal knots placed at equal intervals in the temperature range and 5 dfs with 4 internal knots along the log scale of lags without intercept.

Model 14: Exposure-response was modelled by a natural cubic spline with 5 dfs with 4 internal knots placed at equal intervals in the temperature range and 5 dfs without 4 internal knots along the log scale of lags with intercept.

Model 15: Exposure-response was modelled by a natural cubic spline with 6 dfs with 4 internal knots placed at equal intervals in the temperature range and 5 dfs with 4 internal knots along the log scale of lags without intercept.

Model 16: Exposure-response was modelled by a natural cubic spline with 7 dfs with 4 internal knots placed at equal intervals in the temperature range and 5 dfs with 4 internal knots along the log scale of lags without intercept.