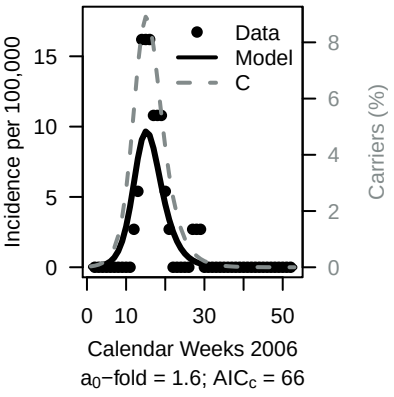
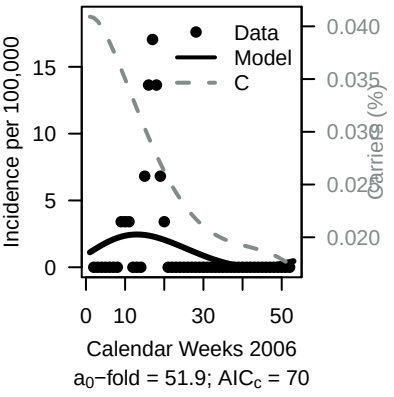
Results of age structured model estimations using a poisson maximum likelihood approach.

Figure 1. Model1−"inv" trajectories matching plots of simulated and observed (weekly) data, for 64 health center−years with complete data, across four health distrits of Burkina faso (2004−2010).


SEGUENEGA|csps bema
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 1.6; AICc = 66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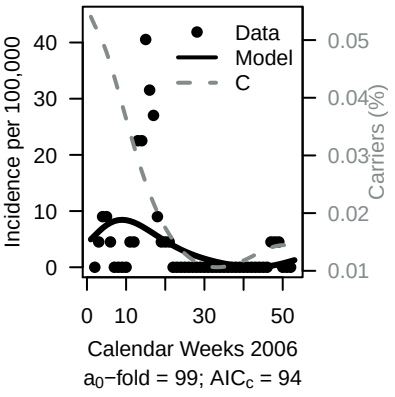
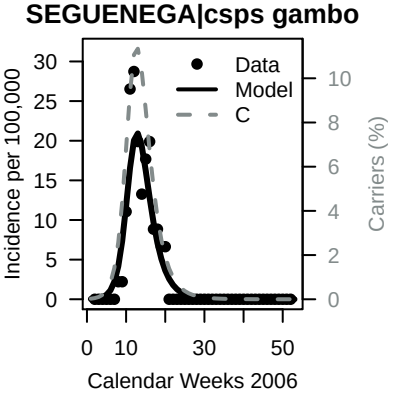
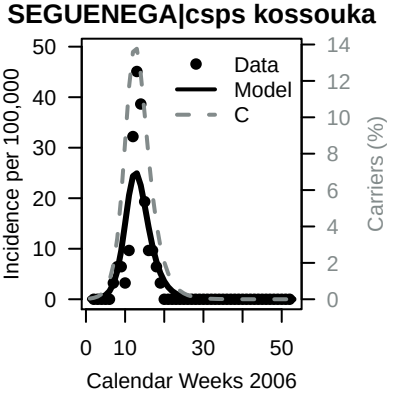
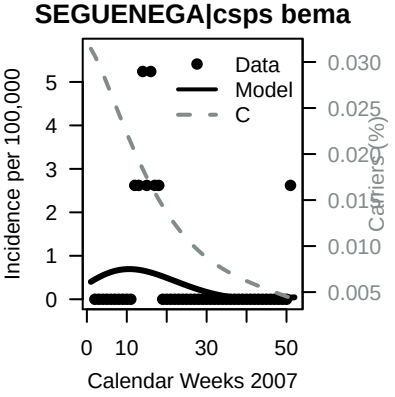
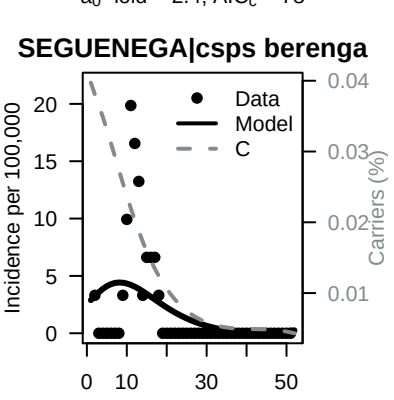
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 51.9; AICc = 70


SEGUENEGA|csps bouga
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 99; AICc = 94


SEGUENEGA|csps gambo
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 2.4; AICc = 78


SEGUENEGA|csps kossouka
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 2.2; AICc = 75


SEGUENEGA|csps bema
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
a0−fold = 36.9; AICc = 53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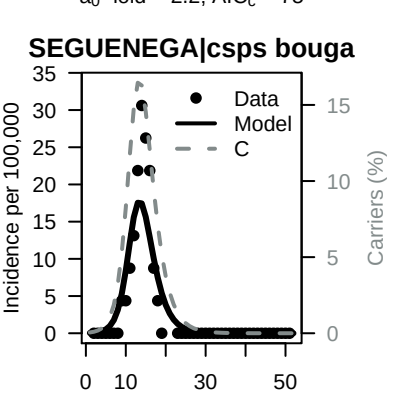
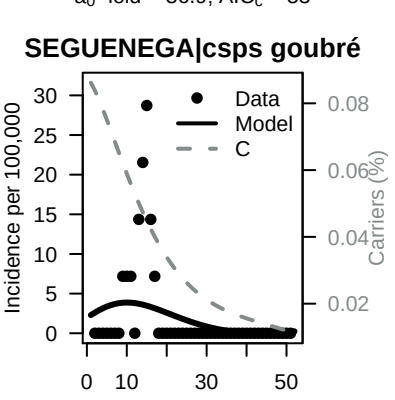
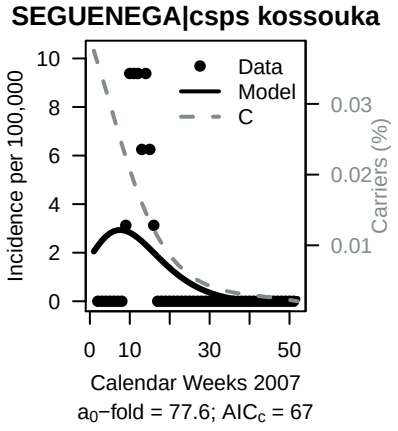
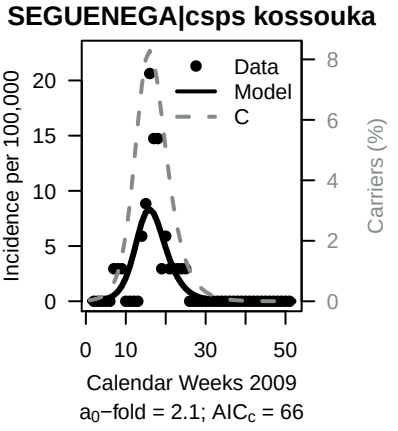
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
a0−fold = 99.8; AICc = 77


SEGUENEGA|csps bouga
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
a0−fold = 2.3; AICc = 65


SEGUENEGA|csps goubré
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
a0−fold = 53.3; AICc = 62


SEGUENEGA|csps kossouka
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
a0−fold = 77.6; AICc = 67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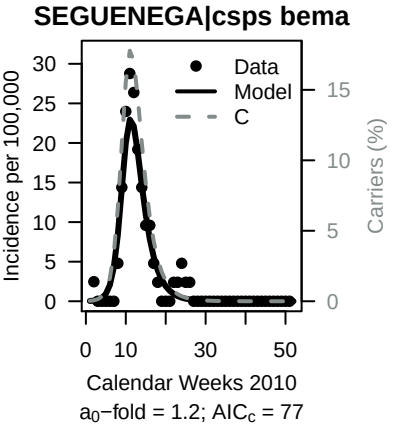
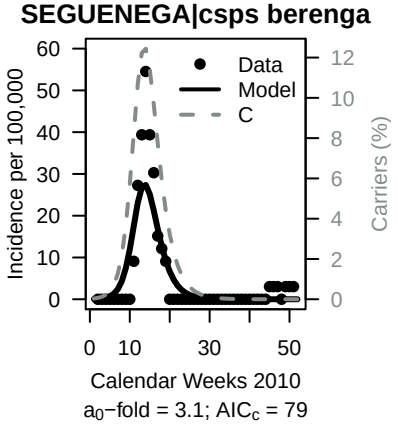
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2009
a0−fold = 2.1; AICc = 66


SEGUENEGA|csps bema
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2010
a0−fold = 1.2; AICc = 77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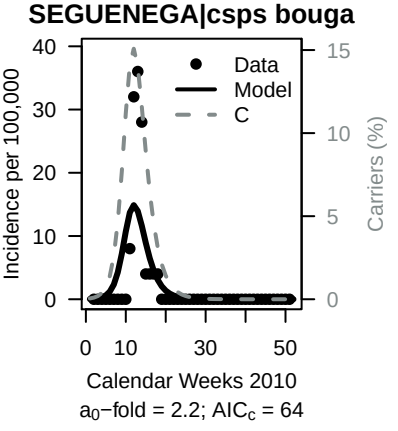
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2010
a0−fold = 3.1; AICc = 79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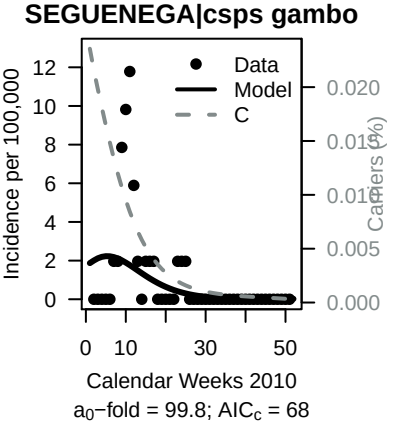
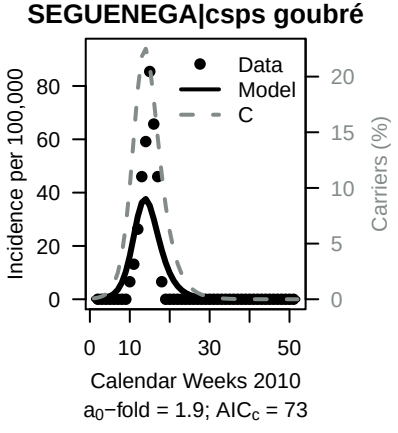
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2010
a0−fold = 2.2; AICc = 64


SEGUENEGA|csps gambo
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2010
a0−fold = 99.8; AICc = 68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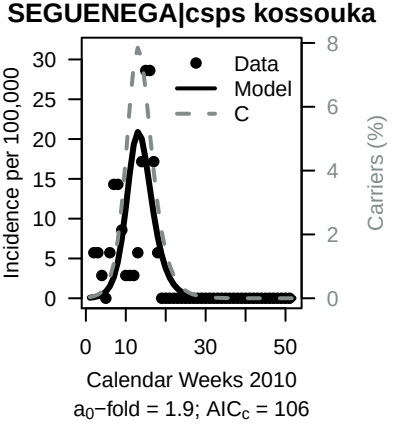
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2010
a0−fold = 1.9; AICc = 73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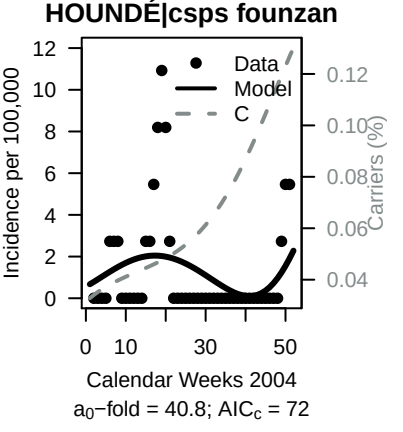
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2010
a0−fold = 1.9; AICc = 106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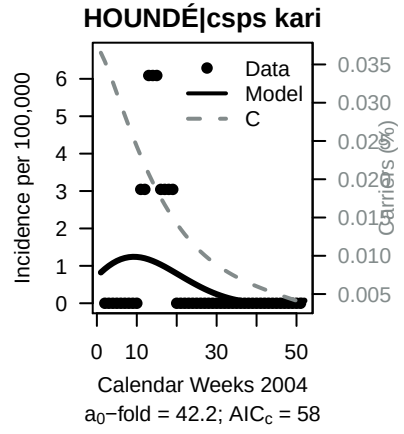
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2004
a0−fold = 40.8; AICc = 72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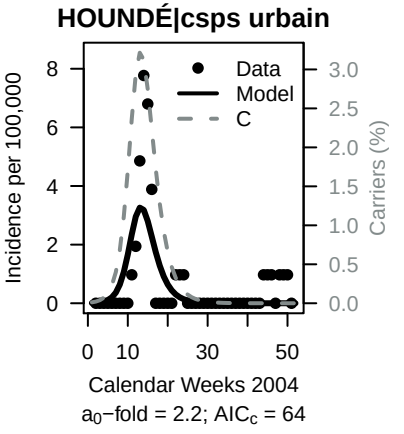
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2004
a0−fold = 42.2; AICc = 58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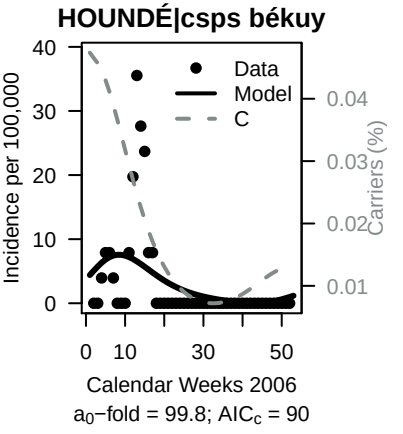
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2004
a0−fold = 2.2; AICc = 64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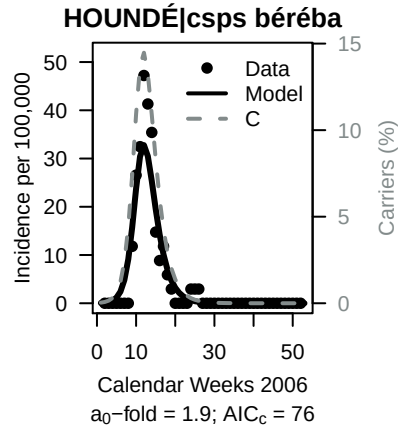
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 99.8; AICc = 90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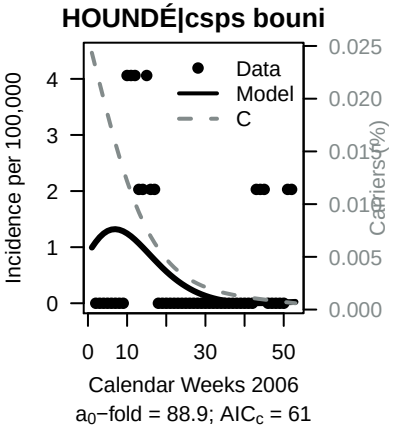
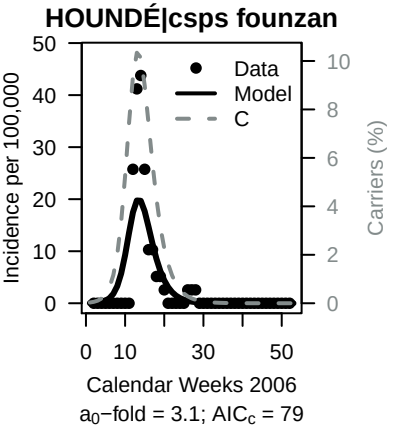
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 1.9; AICc = 76


HOUNDÉ|csps bouni
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 88.9; AICc = 61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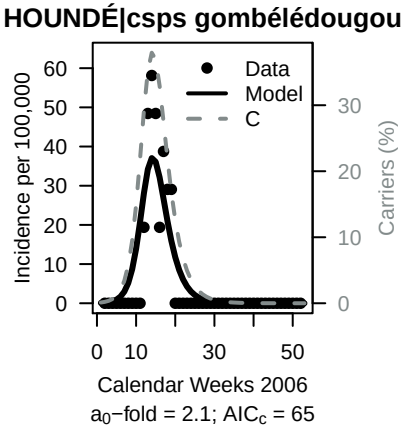
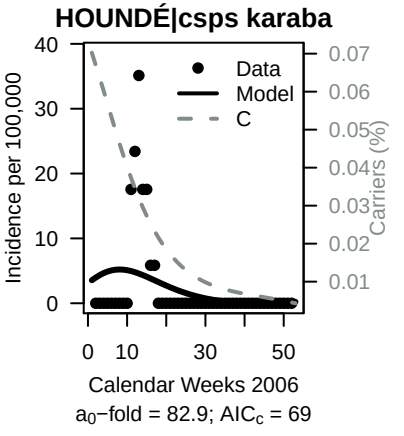
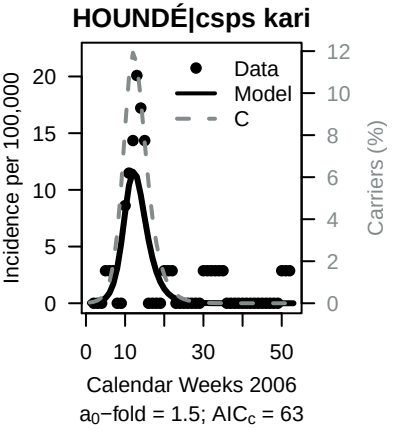
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 3.1; AICc = 79


HOUNDÉ|csps gombélédougou
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 2.1; AICc = 65


HOUNDÉ|csps karaba
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 82.9; AICc = 69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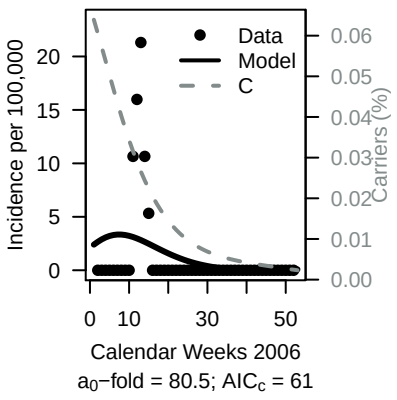
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 1.5; AICc = 63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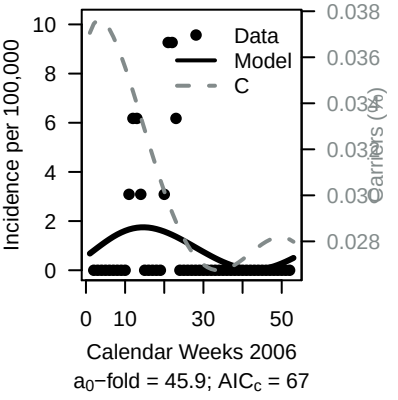
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 80.5; AICc = 61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Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
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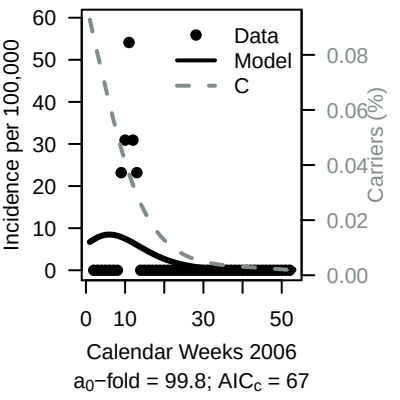
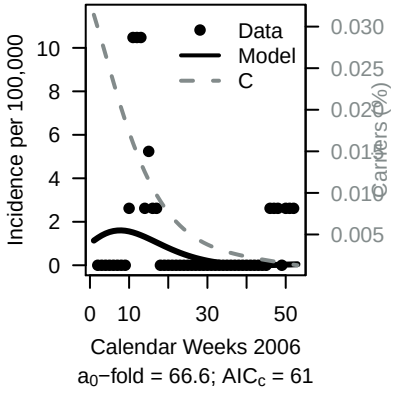
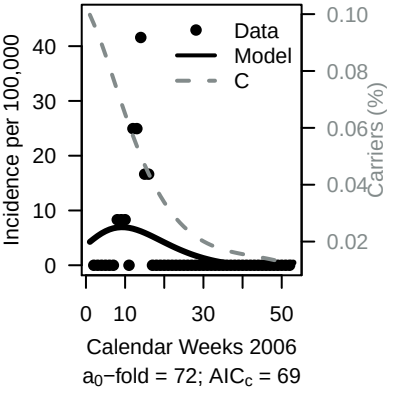

HOUNDÉ|csps maro
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 99.8; AICc = 67


HOUNDÉ|csps pê
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 66.6; AICc = 61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Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
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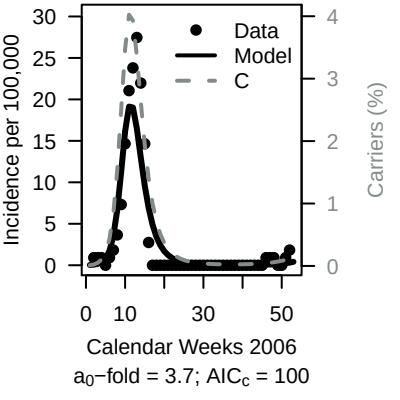
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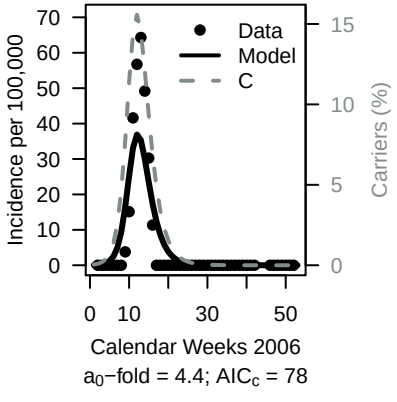
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 3.7; AICc = 100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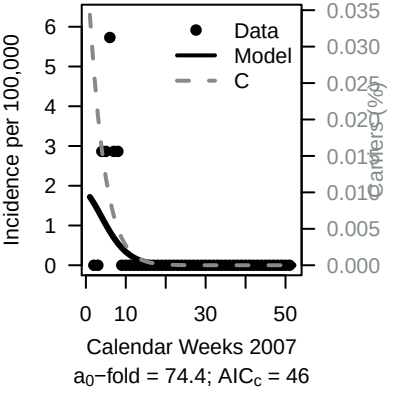
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 4.4; AICc = 78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Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
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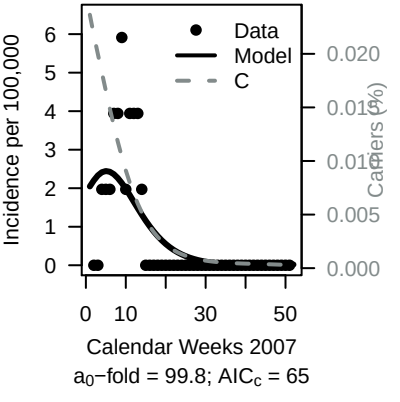
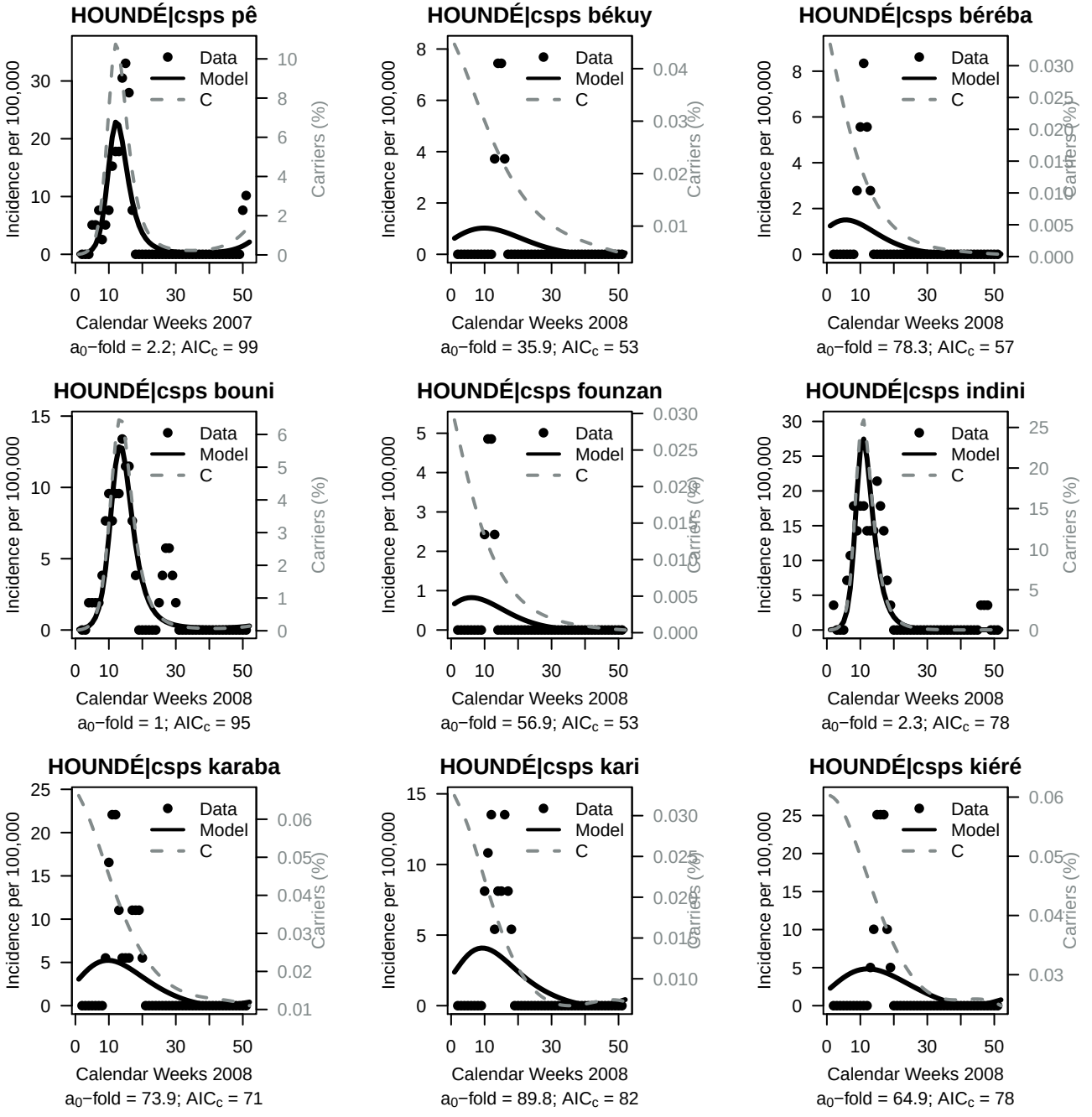
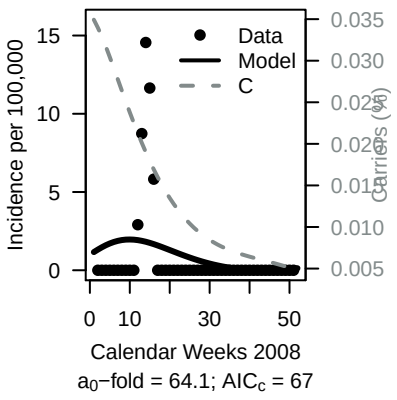

HOUNDÉ|csps bouni
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
a0−fold = 99.8; AICc = 65


HOUNDÉ|csps pê
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
a0−fold = 2.2; AICc = 99
HOUNDÉ|csps békuy
Calendar Weeks 2008
a0−fold = 35.9; AICc = 53
HOUNDÉ|csps béréba
Calendar Weeks 2008
a0−fold = 78.3; AICc = 57
HOUNDÉ|csps bouni
Calendar Weeks 2008
a0−fold = 1; AICc = 95
HOUNDÉ|csps founzan
Calendar Weeks 2008
a0−fold = 56.9; AICc = 53
HOUNDÉ|csps indini
Calendar Weeks 2008
a0−fold = 2.3; AICc = 78
HOUNDÉ|csps karaba
Calendar Weeks 2008
a0−fold = 73.9; AICc = 71
HOUNDÉ|csps kari
Calendar Weeks 2008
a0−fold = 89.8; AICc = 82
HOUNDÉ|csps kiéré
Calendar Weeks 2008
a0−fold = 64.9; AICc = 78


HOUNDÉ|csps koti
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
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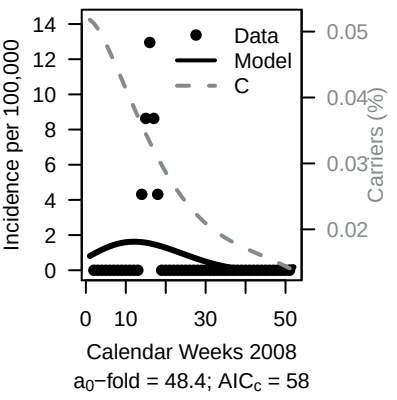
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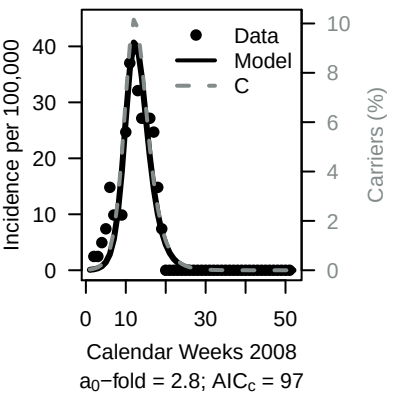
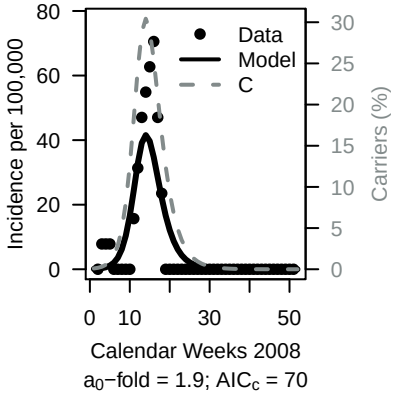
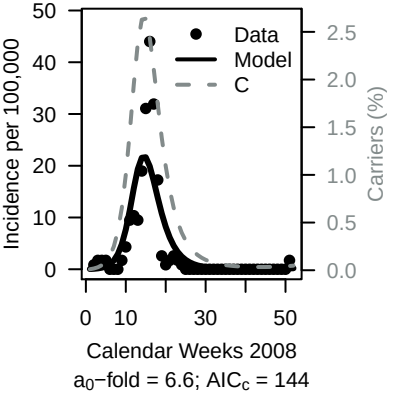
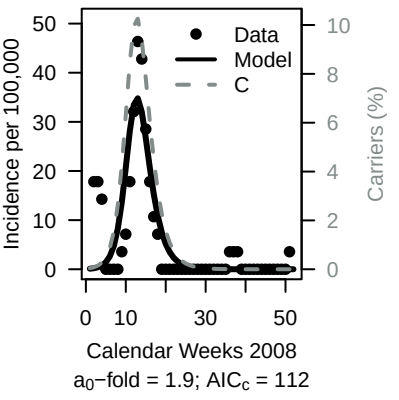
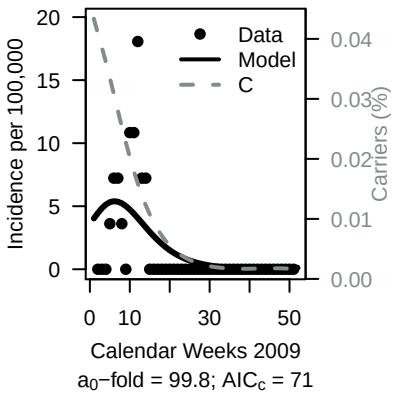
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
a0−fold = 48.4; AICc = 58

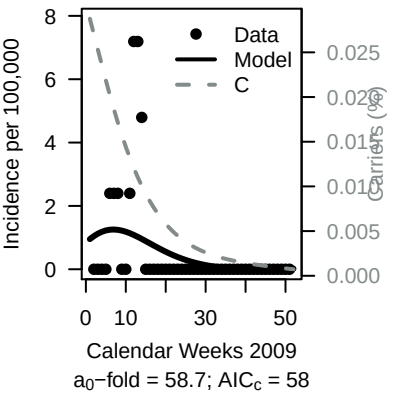

HOUNDÉ|csps pê
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
a0−fold = 2.8; AICc = 97

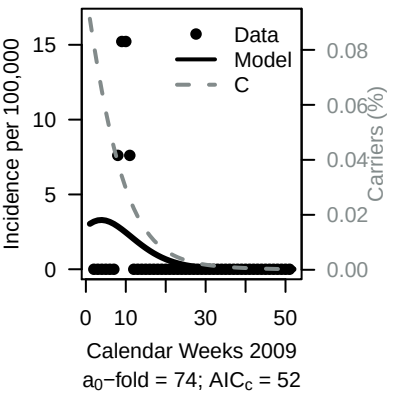

HOUNDÉ|csps sebedougou
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
a0−fold = 1.9; AICc = 70


HOUNDÉ|csps urbain
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
a0−fold = 6.6; AICc = 144


HOUNDÉ|csps wakuy
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
a0−fold = 1.9; AICc = 112


HOUNDÉ|csps békuy
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2009
a0−fold = 99.8; AICc = 71


HOUNDÉ|csps pê
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2009
a0−fold = 58.7; AICc = 58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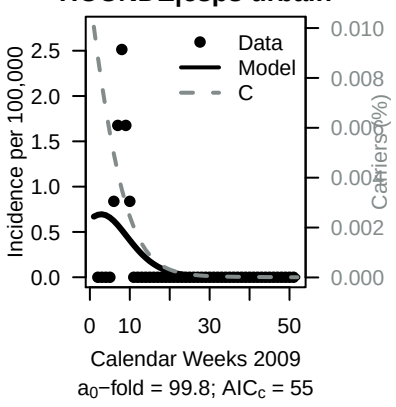
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2009
a0−fold = 74; AICc = 52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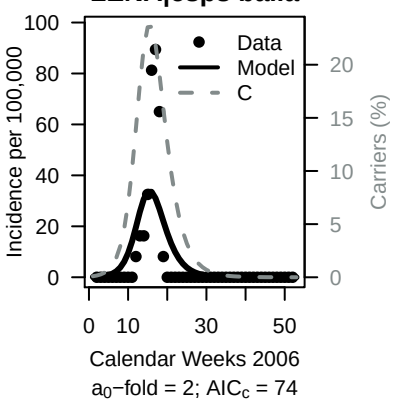
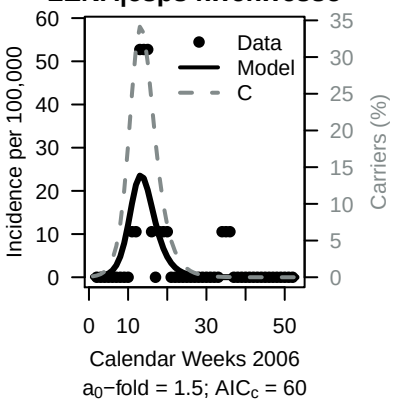
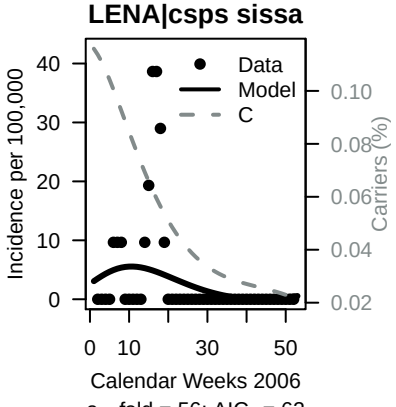
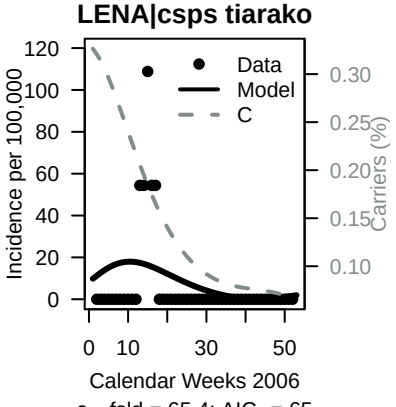
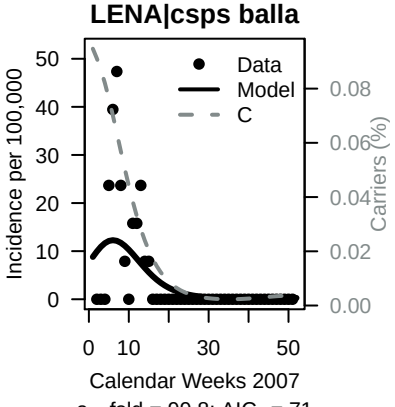
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2009
a0−fold = 99.8; AICc = 55

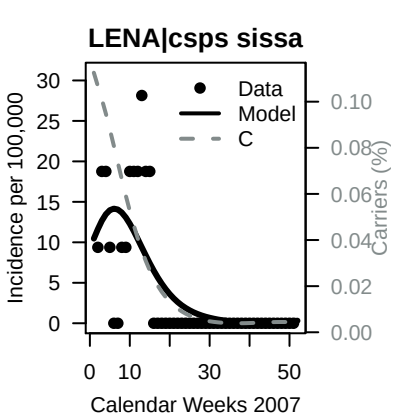

LENA|csps balla
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 2; AICc = 74

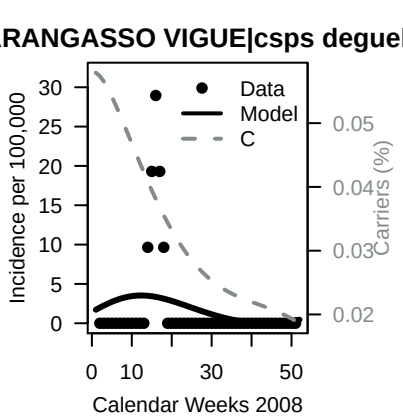

LENA|csps kwekwesso
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 1.5; AICc = 60

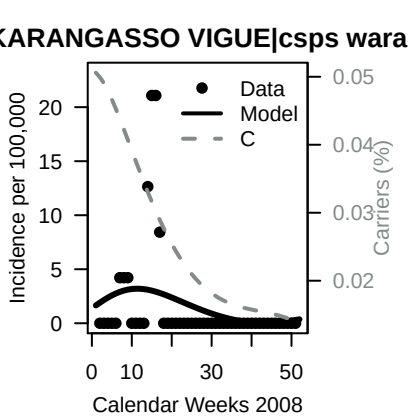

LENA|csps sissa
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 56; AICc = 62


LENA|csps tiarako
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
a0−fold = 65.4; AICc = 65

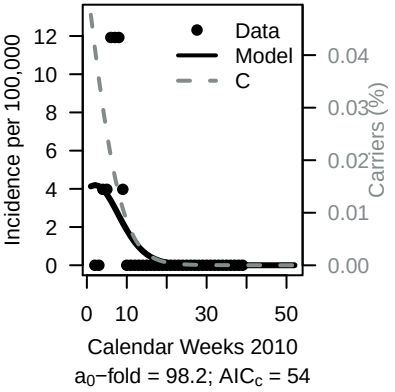

LENA|csps balla
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
a0−fold = 99.8; AICc = 71


LENA|csps sissa
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
a0−fold = 99.8; AICc = 71


KARANGASSO VIGUE|csps deguel
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
a0−fold = 61.1; AICc = 70

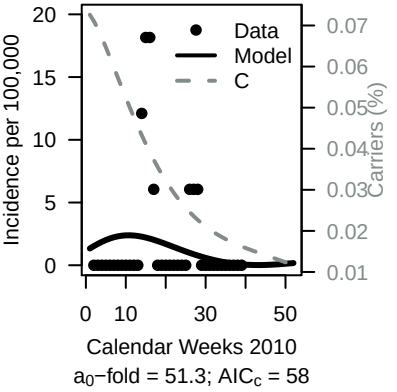

KARANGASSO VIGUE|csps wara
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
a0−fold = 59.7; AICc = 71

KARANGASSO VIGUE|csps wara



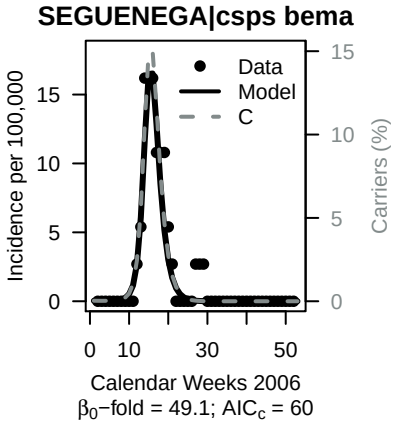
a_0−fold = 98.2; AIC_c = 54

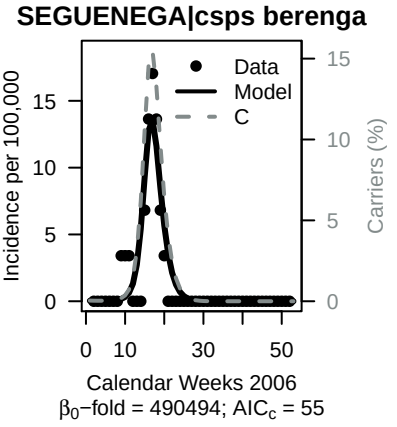
KARANGASSO VIGUE|dispe dioss

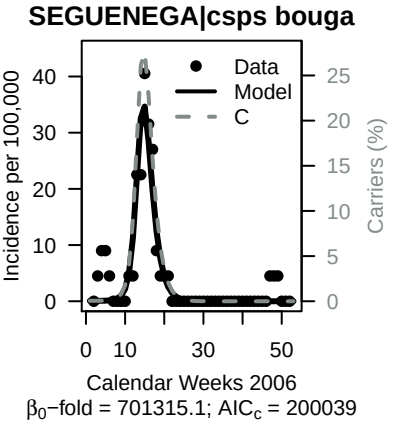


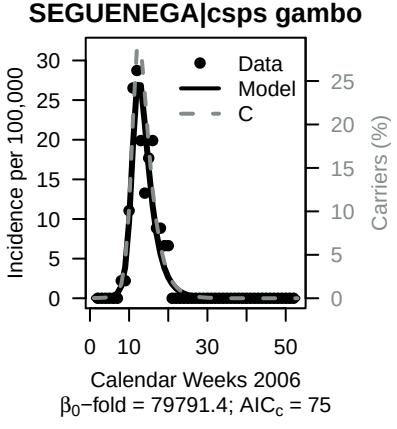
a_0−fold = 51.3; AIC_c = 58

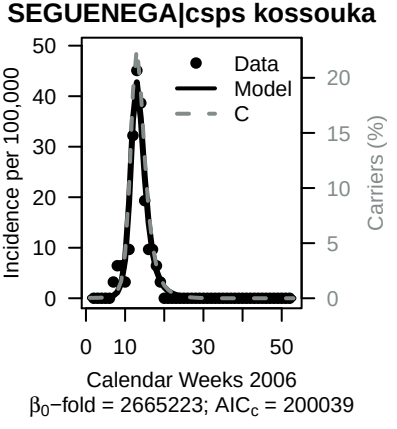
Figure 2. Model2−"transm" trajectories matching plots of simulated and observed (weekly) data, for 64 health center−years with complete data, across four health distrits of Burkina faso (2004−2010).

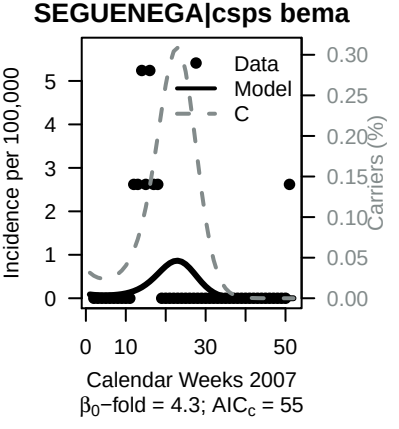

SEGUENEGA|csps bema
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 49.1; AICc = 60

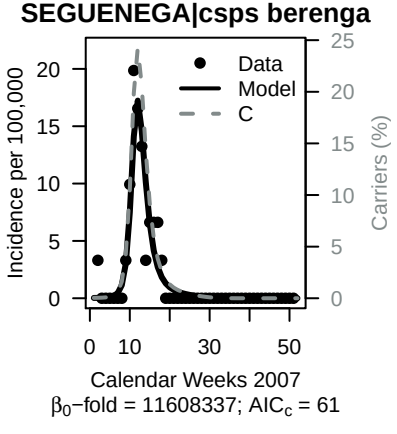

SEGUENEGA|csps berenga
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 490494; AICc = 55

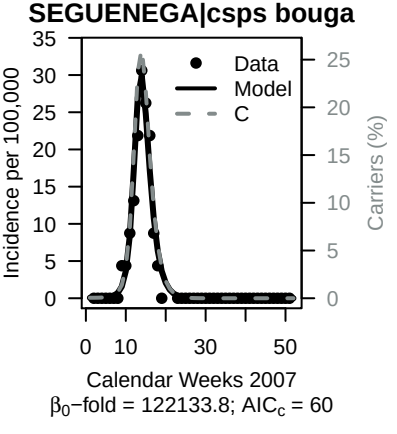

SEGUENEGA|csps bouga
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 701315.1; AICc = 200039

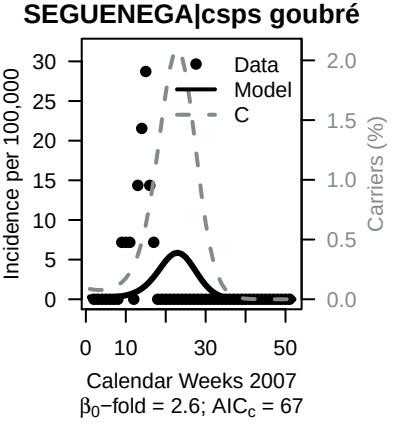

SEGUENEGA|csps gambo
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 79791.4; AICc = 75

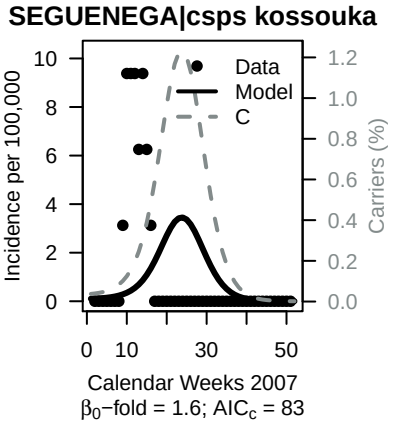

SEGUENEGA|csps kossouka
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 2665223; AICc = 200039

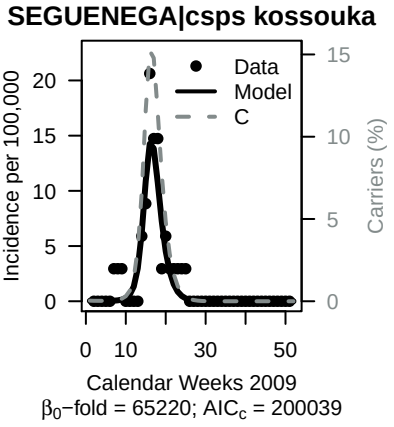

SEGUENEGA|csps bema
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
β0−fold = 4.3; AICc = 55

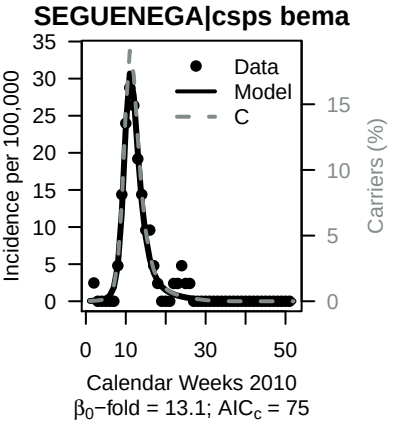

SEGUENEGA|csps berenga
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
β0−fold = 11608337; AICc = 61

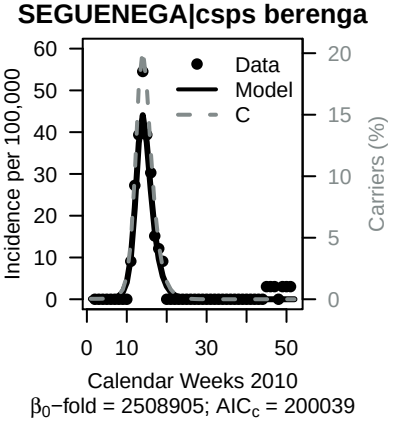

SEGUENEGA|csps bouga
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
β0−fold = 122133.8; AICc = 60

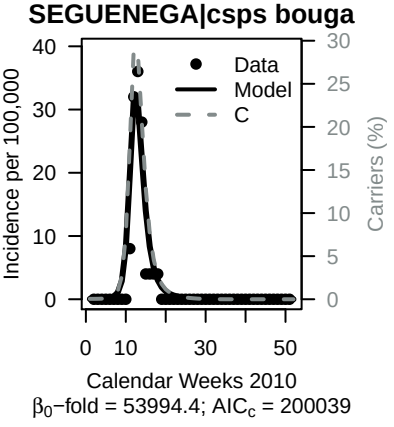

SEGUENEGA|csps goubré
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
β0−fold = 2.6; AICc = 67

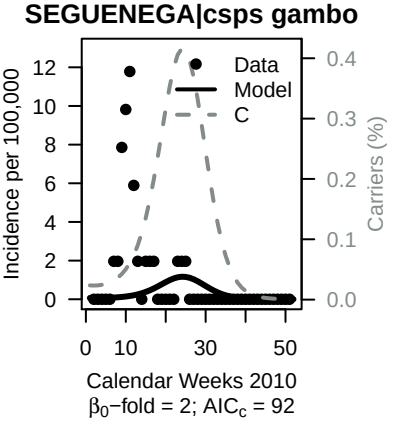

SEGUENEGA|csps kossouka
Incidence per 100,000
Carriers (%)
Data
Model
C
Calendar Weeks 2007
β0−fold = 1.6; AICc = 83

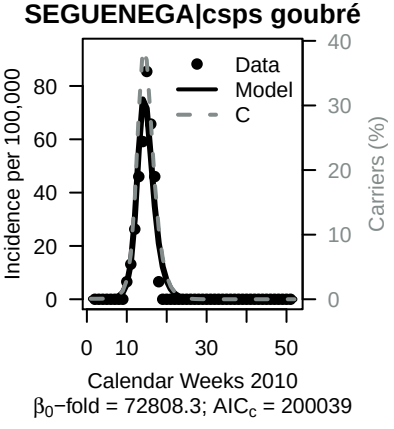

SEGUENEGA|csps kossouka
Incidence per 100,000
Carriers (%)
Data
Model
C
Calendar Weeks 2009
β0−fold = 65220; AICc = 200039

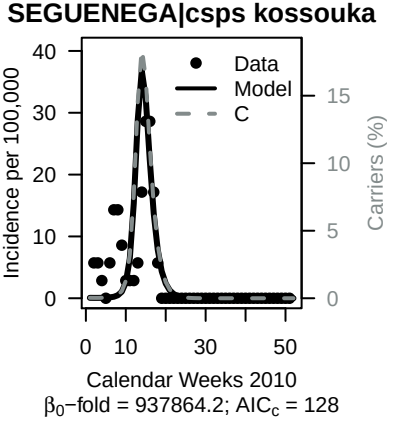

SEGUENEGA|csps bema
Incidence per 100,000
Carriers (%)
Data
Model
C
Calendar Weeks 2010
β0−fold = 13.1; AICc = 75

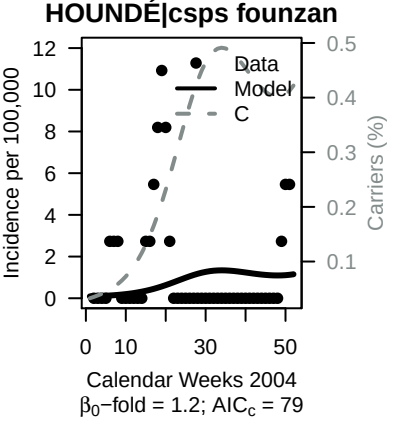

SEGUENEGA|csps berenga
Incidence per 100,000
Carriers (%)
Data
Model
C
Calendar Weeks 2010
β0−fold = 2508905; AICc = 200039

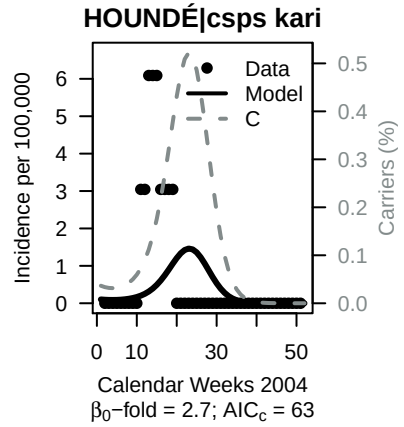

SEGUENEGA|csps bouga
Incidence per 100,000
Carriers (%)
Data
Model
C
Calendar Weeks 2010
β0−fold = 53994.4; AICc = 200039

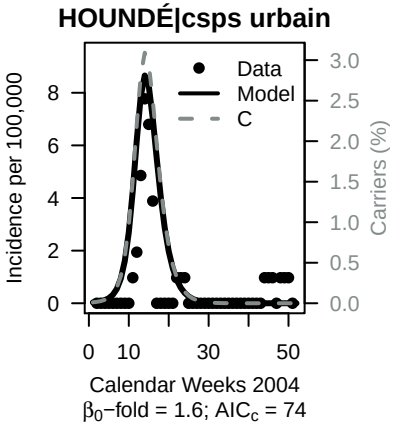

SEGUENEGA|csps gambo
Incidence per 100,000
Carriers (%)
Data
Model
C
Calendar Weeks 2010
β0−fold = 2; AICc = 92

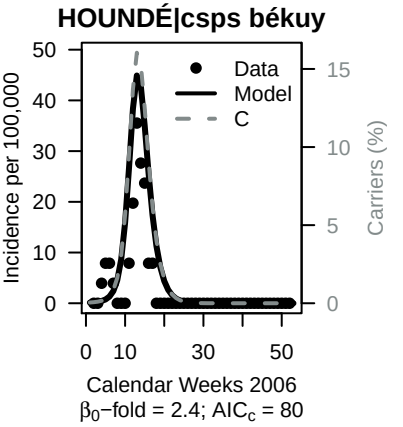

SEGUENEGA|csps goubré
Incidence per 100,000
Carriers (%)
Data
Model
C
Calendar Weeks 2010
β0−fold = 72808.3; AICc = 200039

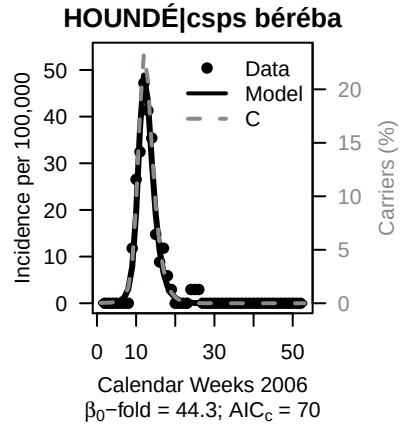

SEGUENEGA|csps kossouka
Incidence per 100,000
Carriers (%)
Data
Model
C
Calendar Weeks 2010
β0−fold = 937864.2; AICc = 128

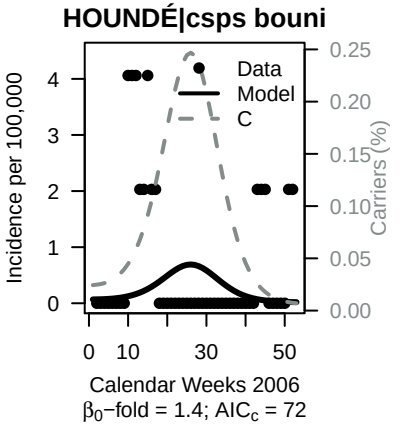

HOUNDÉ|csps founzan
Incidence per 100,000
Carriers (%)
Data
Model
C
Calendar Weeks 2004
β0−fold = 1.2; AICc = 79

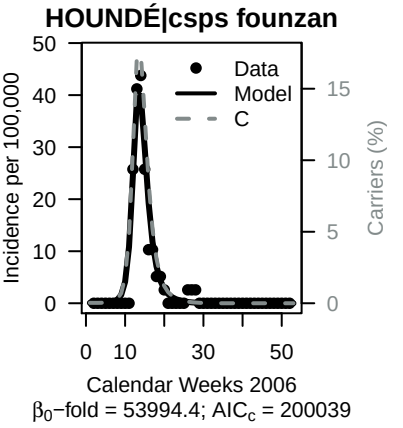

HOUNDÉ|csps kari
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2004
β0−fold = 2.7; AICc = 63

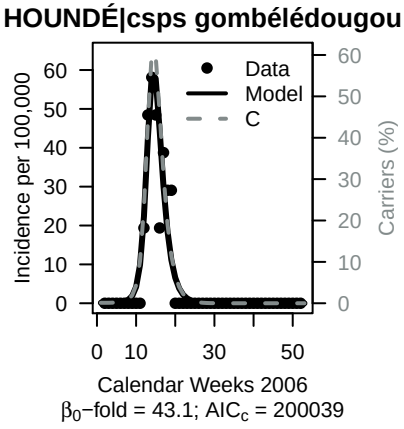

HOUNDÉ|csps urbain
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2004
β0−fold = 1.6; AICc = 74

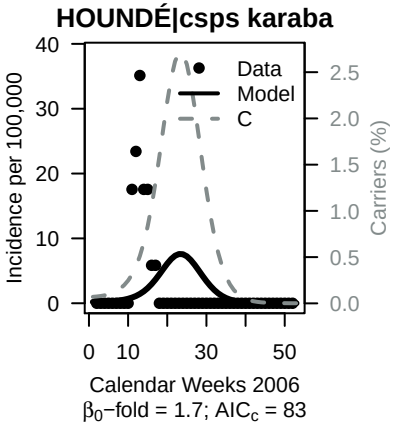

HOUNDÉ|csps békuy
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 2.4; AICc = 80


HOUNDÉ|csps béréba
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 44.3; AICc = 70


HOUNDÉ|csps bouni
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 1.4; AICc = 72


HOUNDÉ|csps founzan
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 53994.4; AICc = 200039


HOUNDÉ|csps gombélédougou
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 43.1; AICc = 200039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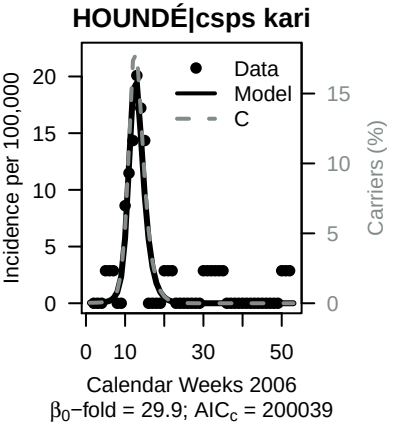
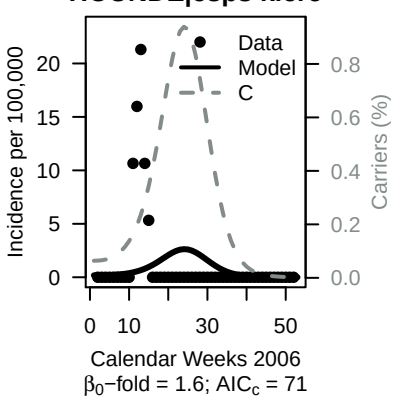
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 1.7; AICc = 83


HOUNDÉ|csps kari
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 29.9; AICc = 200039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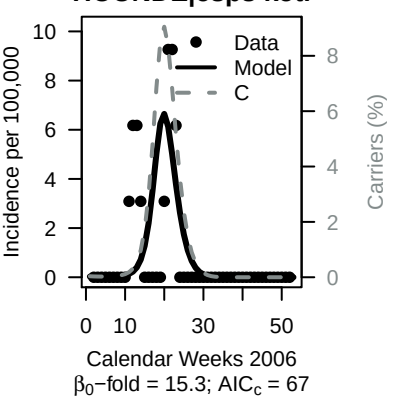
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 1.6; AICc = 71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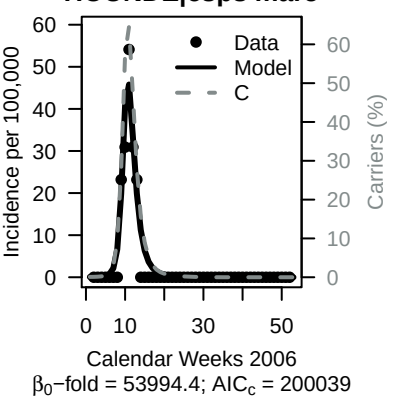
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 15.3; AICc = 67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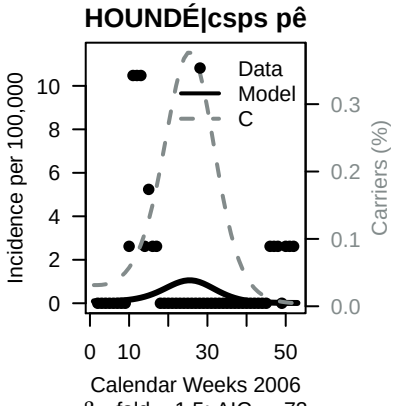
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 53994.4; AICc = 200039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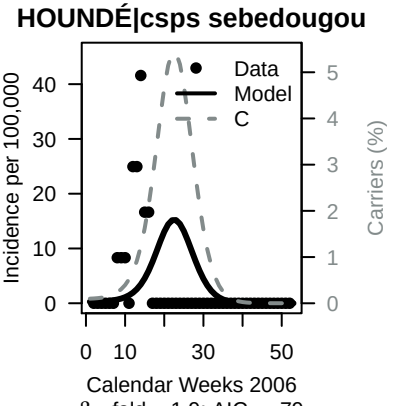
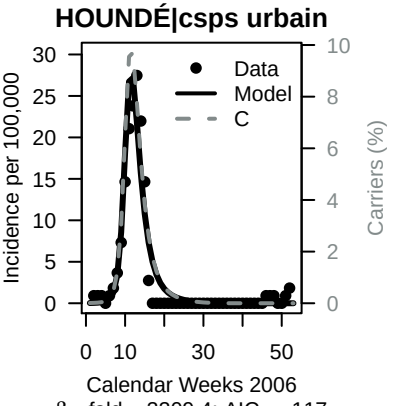
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 1.5; AICc = 72


HOUNDÉ|csps sebedougou
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 1.9; AICc = 79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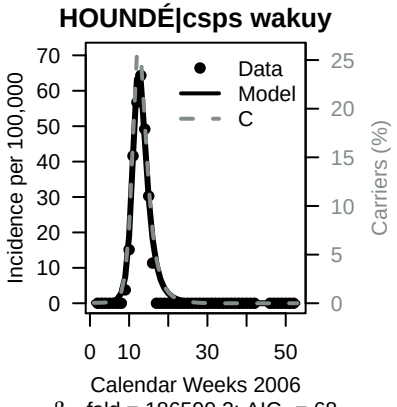
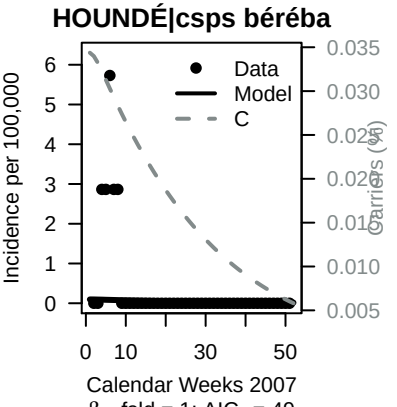
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 3309.4; AICc = 117


HOUNDÉ|csps wakuy
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 186599.2; AICc = 68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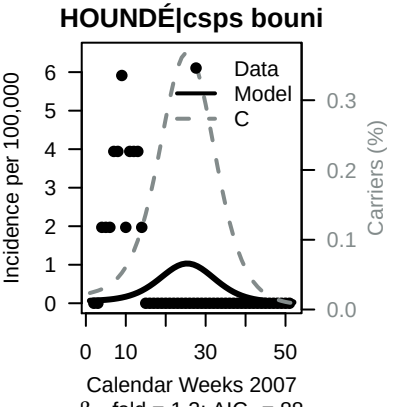
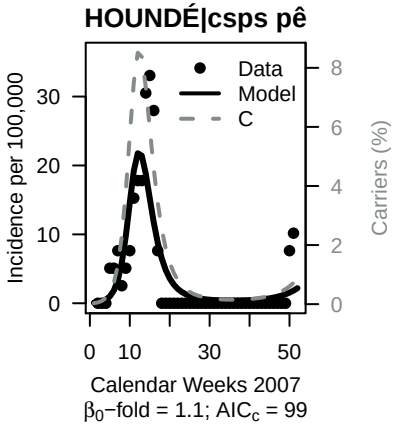
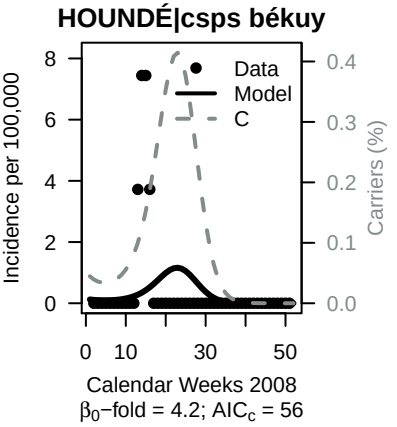
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
β0−fold = 1; AICc = 49


HOUNDÉ|csps bouni
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
β0−fold = 1.3; AICc = 88


HOUNDÉ|csps pê
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
β0−fold = 1.1; AICc = 99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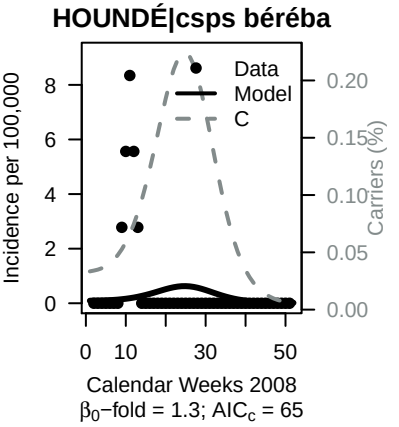
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 4.2; AICc = 56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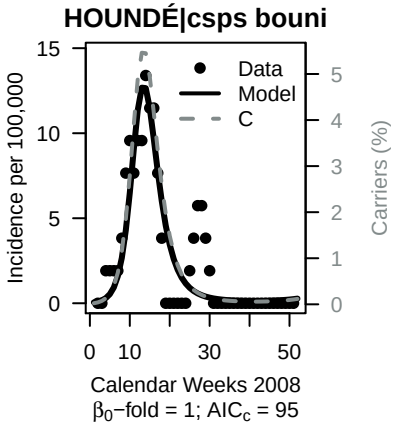
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 1.3; AICc = 65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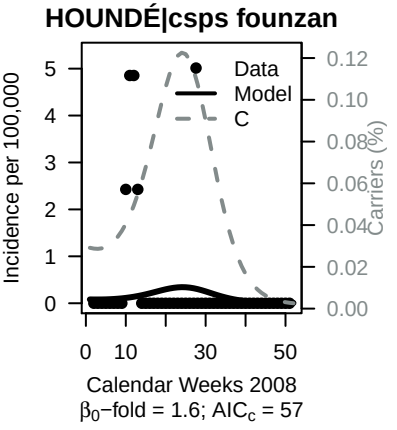
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 1; AICc = 95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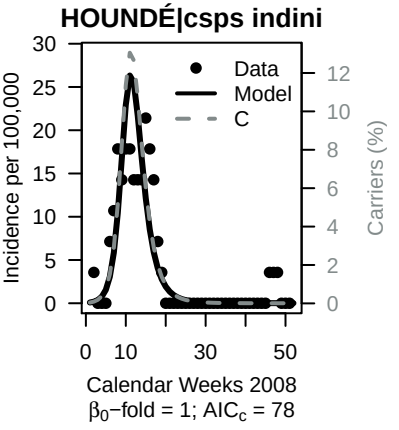
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 1.6; AICc = 57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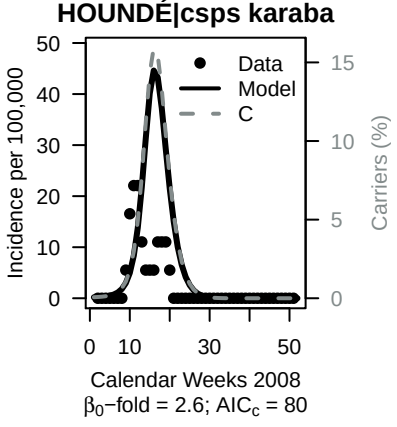
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 1; AICc = 78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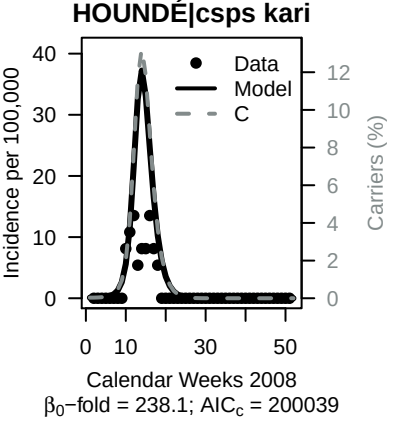
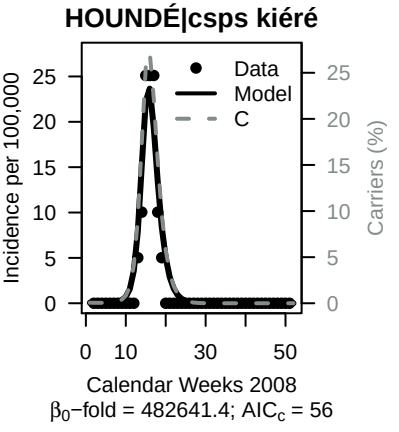
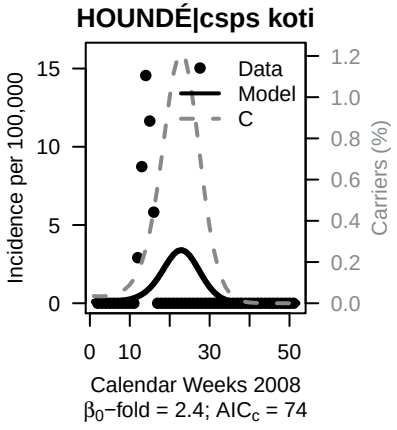
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 2.6; AICc = 80


HOUNDÉ|csps kari
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 238.1; AICc = 200039


HOUNDÉ|csps kiéré
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 482641.4; AICc = 56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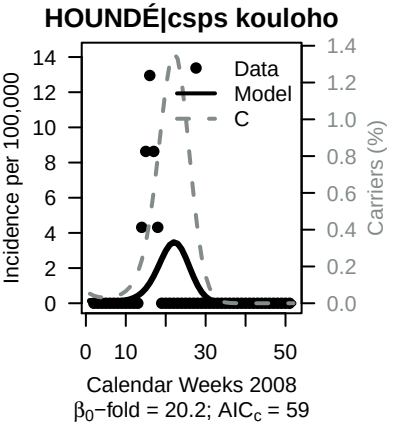
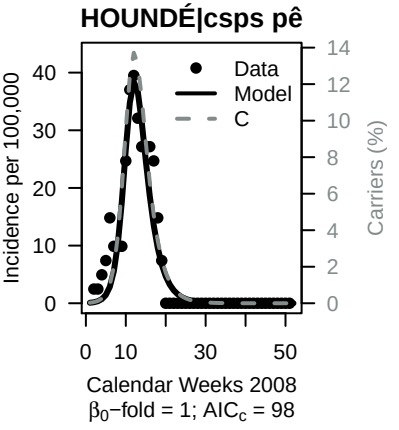
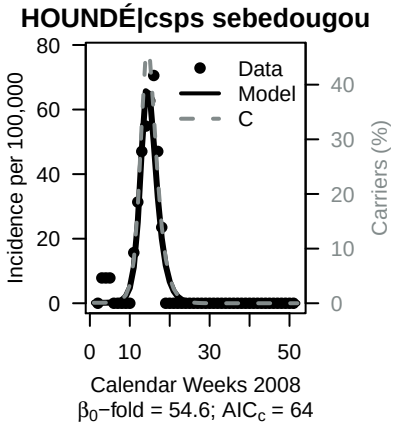
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 2.4; AICc = 74


HOUNDÉ|csps kouloho
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 20.2; AICc = 59


HOUNDÉ|csps pê
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 1; AICc = 98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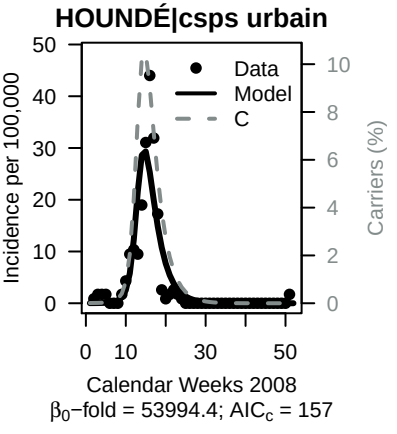
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 54.6; AICc = 64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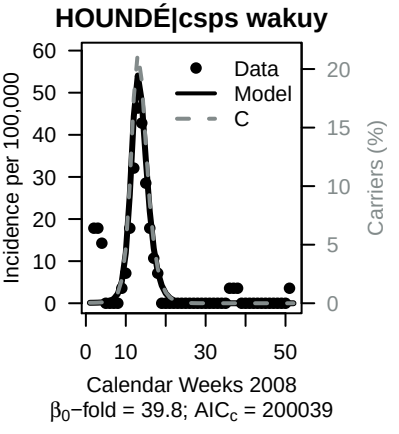
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 53994.4; AICc = 157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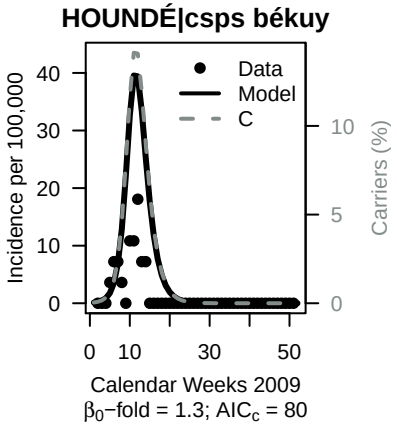
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 39.8; AICc = 200039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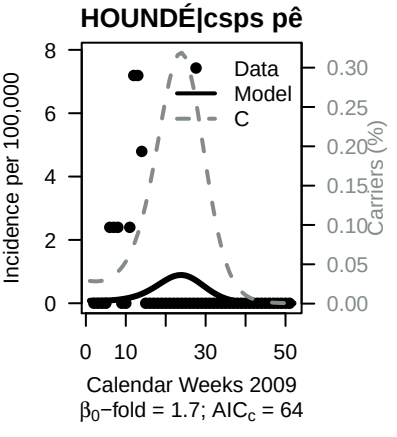
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2009
β0−fold = 1.3; AICc = 80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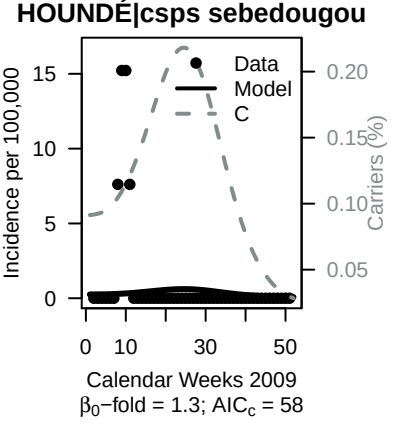
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2009
β0−fold = 1.7; AICc = 64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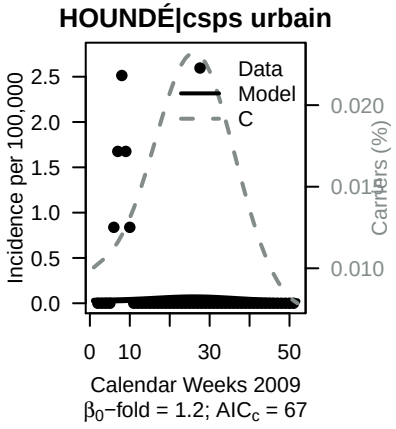
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2009
β0−fold = 1.3; AICc = 58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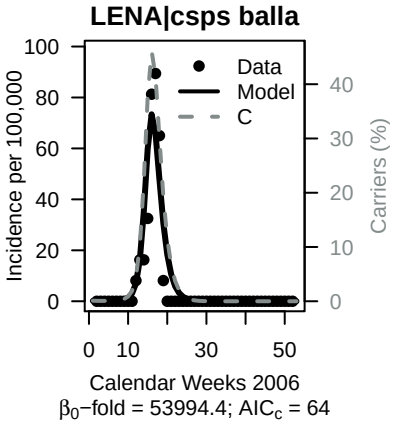
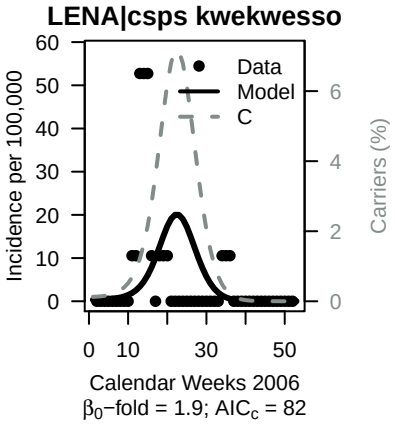
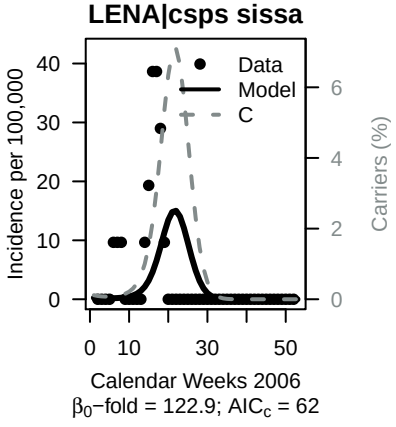
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2009
β0−fold = 1.2; AICc = 67


LENA|csps balla
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 53994.4; AICc = 64


LENA|csps kwekwesso
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 1.9; AICc = 82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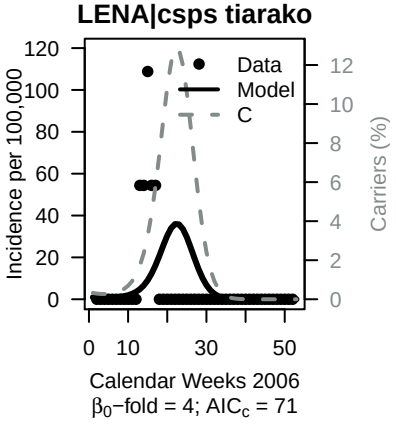
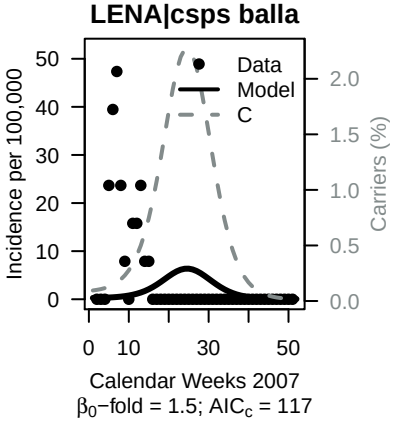
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 122.9; AICc = 62


LENA|csps tiarako
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2006
β0−fold = 4; AICc = 71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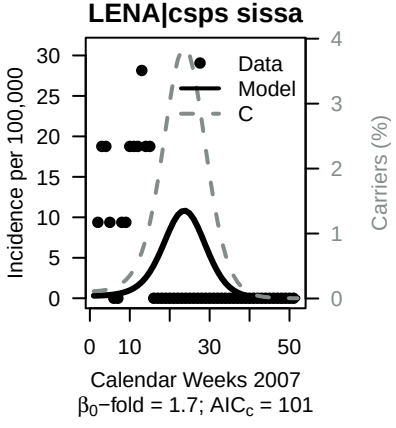
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
β0−fold = 1.5; AICc = 117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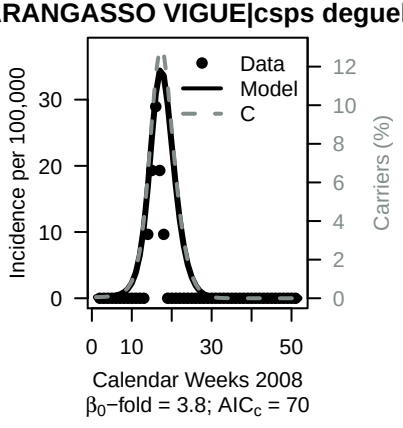
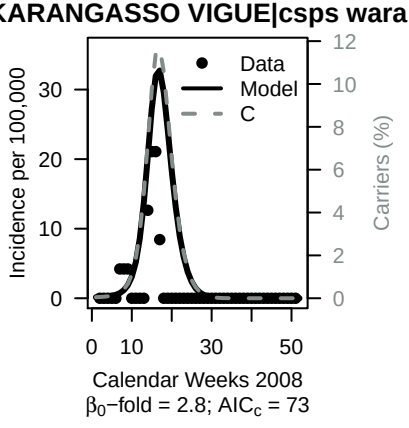
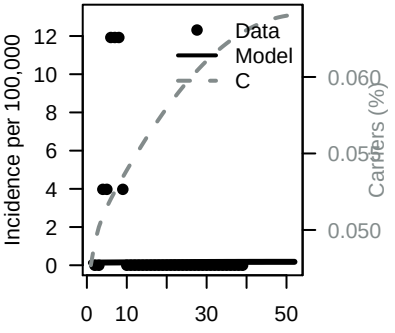
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2007
β0−fold = 1.7; AICc = 101


KARANGASSO VIGUE|csps deguel
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 3.8; AICc = 70

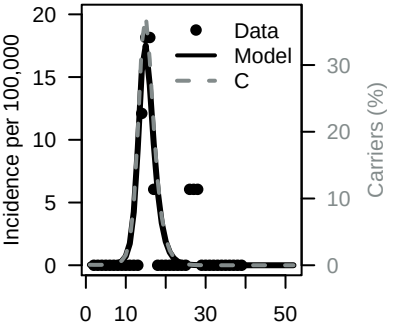

KARANGASSO VIGUE|csps wara
Data
Model
C
Incidence per 100,000
Carriers (%)
Calendar Weeks 2008
β0−fold = 2.8; AICc = 73

KARANGASSO VIGUE|csps wara



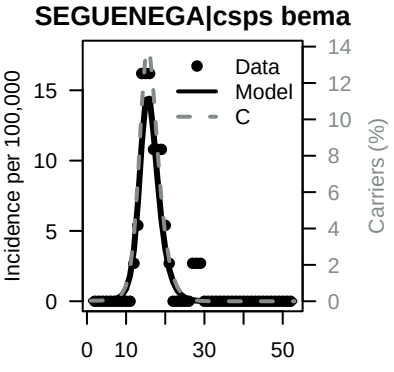
β_0−fold = 1; AIC_c = 67

KARANGASSO VIGUE|dispe dioss

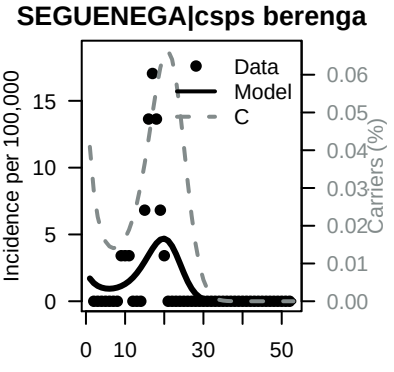


β_0−fold = 254782.9; AIC_c = 50

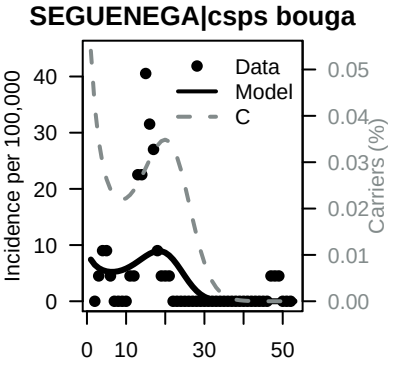
Figure 3. Model3−"inv−transm" trajectories matching plots of simulated and observed (weekly) data, for 64 health center−years with complete data, across four health distrits of Burkina faso (2004−2010).



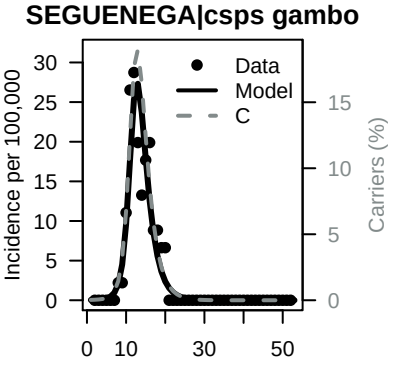
a_0−fold = 1.3; β_0−fold = 12.9; AIC_c = 65



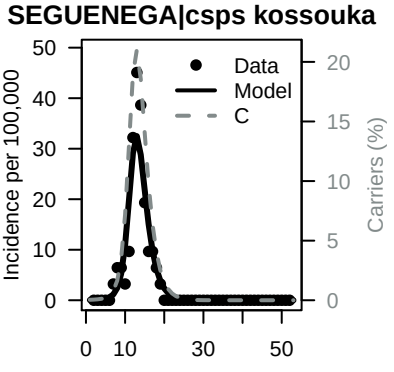
a_0−fold = 51.8; β_0−fold = 23.8; AIC_c = 200043



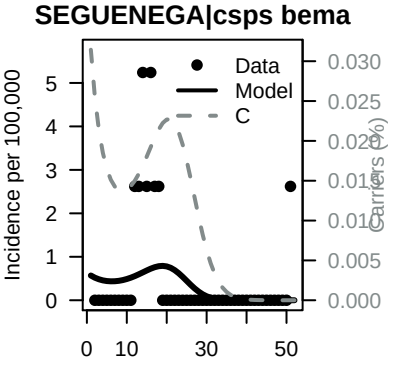
a_0−fold = 99.9; β_0−fold = 4.3; AIC_c = 95



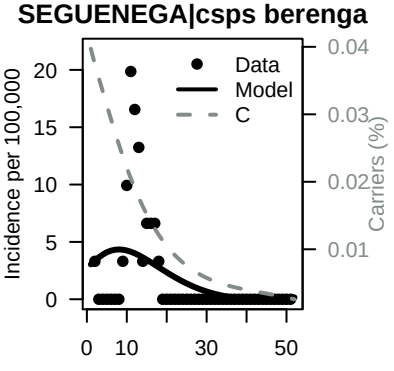
a_0−fold = 1.1; β_0−fold = 3.5; AIC_c = 79



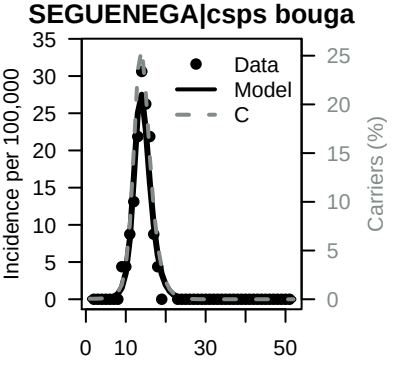
a_0−fold = 1.4; β_0−fold = 4; AIC_c = 76



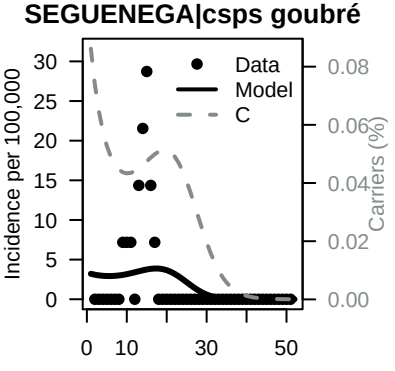
a_0−fold = 35.1; β_0−fold = 3.8; AIC_c = 57



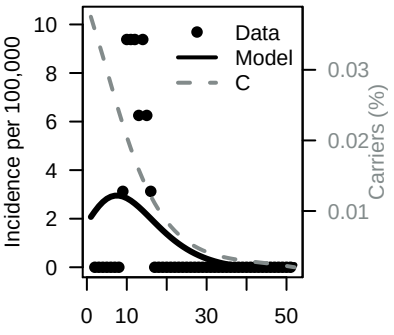
a_0−fold = 99.8; β_0−fold = 1.1; AIC_c = 82



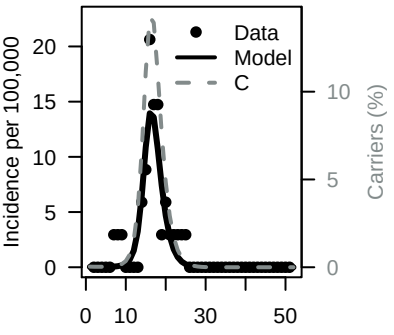
a_0−fold = 1.2; β_0−fold = 14.5; AIC_c = 64



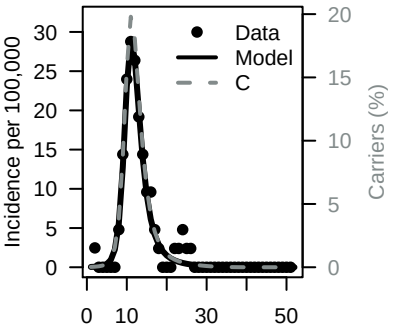
a_0−fold = 48.1; β_0−fold = 1.9; AIC_c = 66



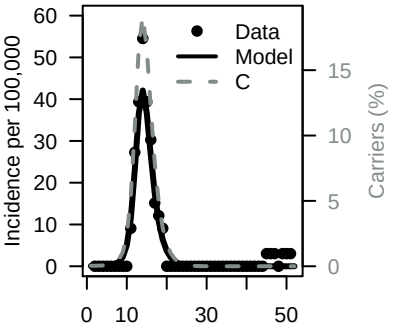
a_0−fold = 91.4; β_0−fold = 1; AIC_c = 71



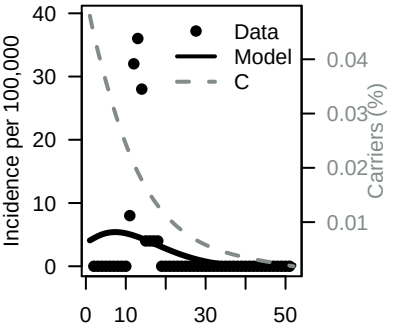
a_0−fold = 1.3; β_0−fold = 237072.8; AIC_c = 63



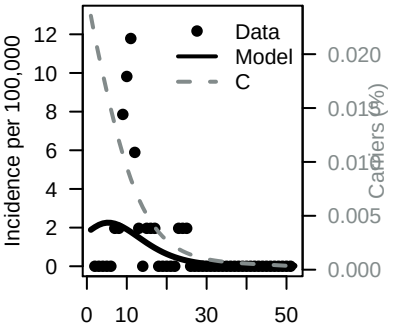
a_0−fold = 1.1; β_0−fold = 4.4; AIC_c = 79



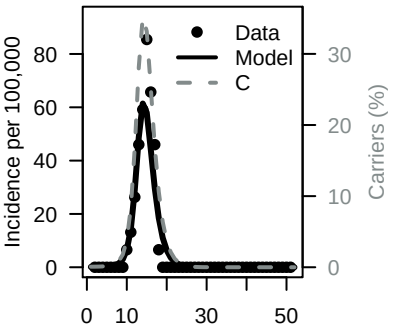
a_0−fold = 1.7; β_0−fold = 18.4; AIC_c = 73



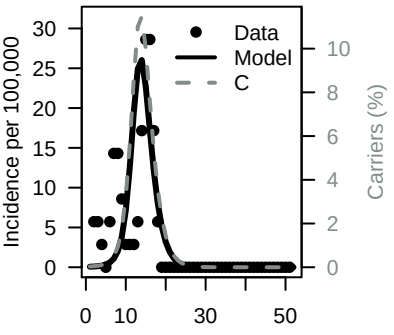
a_0−fold = 99.8; β_0−fold = 1.1; AIC_c = 87



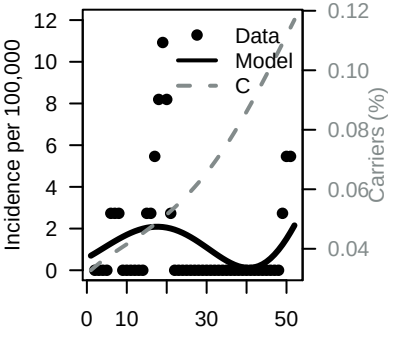
a_0−fold = 96.7; β_0−fold = 1; AIC_c = 72



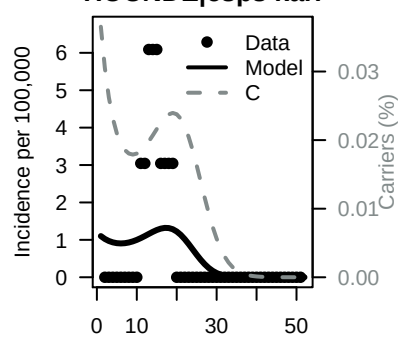
a_0−fold = 1.4; β_0−fold = 10; AIC_c = 69



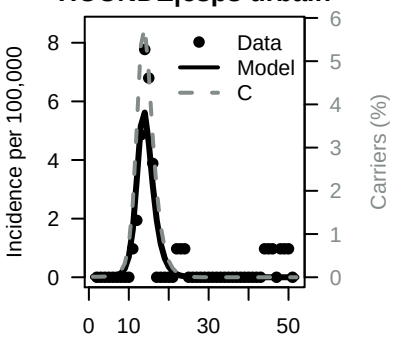
a_0−fold = 1.5; β_0−fold = 2.3; AIC_c = 117



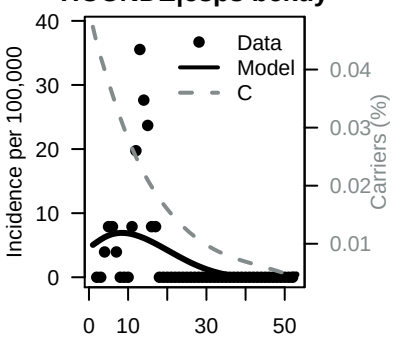
a_0−fold = 34.6; β_0−fold = 1; AIC_c = 76



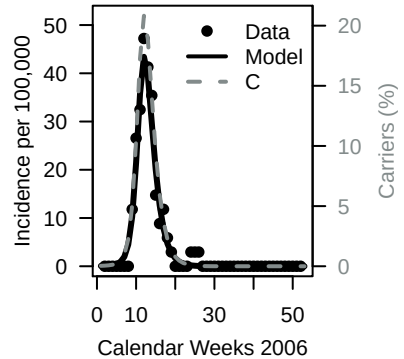
a_0−fold = 43; β_0−fold = 2.5; AIC_c = 62



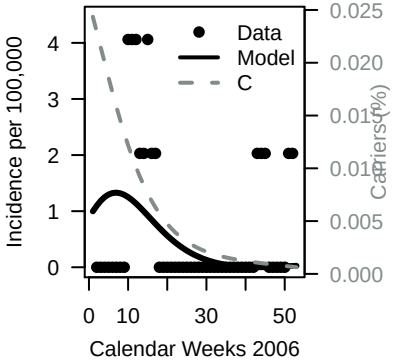
a_0−fold = 1.5; β_0−fold = 125.7; AIC_c = 200043



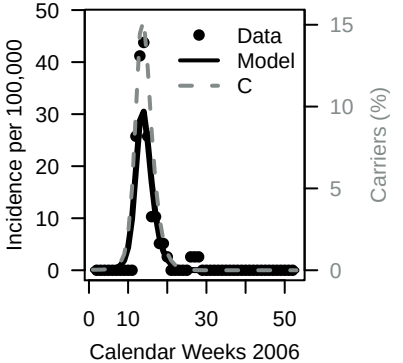
a_0−fold = 99.9; β_0−fold = 1.3; AIC_c = 94



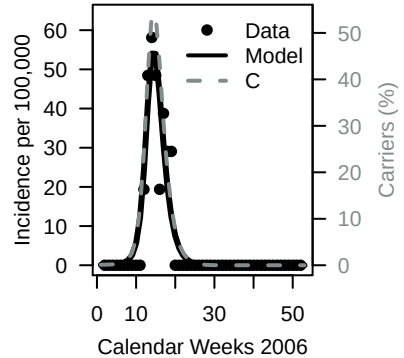
a_0−fold = 1.4; β_0−fold = 4.6; AIC_c = 74



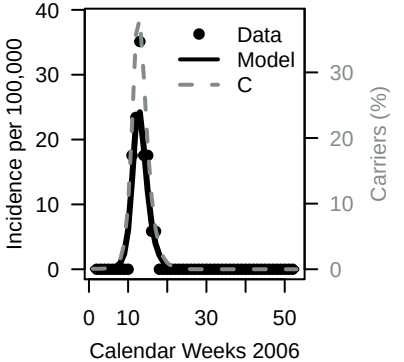
a_0−fold = 89.6; β_0−fold = 1; AIC_c = 65



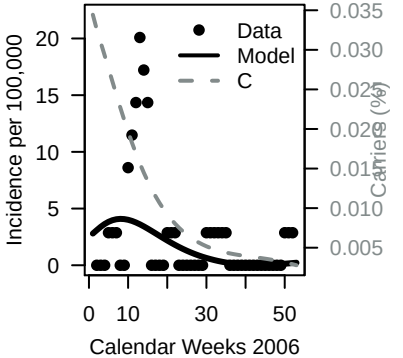
a_0−fold = 1.1; β_0−fold = 21.8; AIC_c = 200043



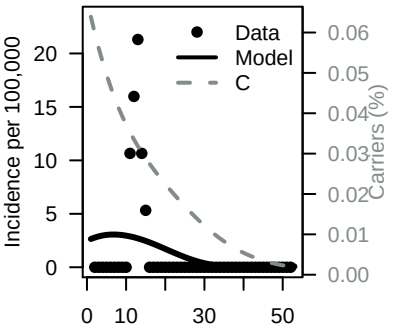
a_0−fold = 1.4; β_0−fold = 9.2; AIC_c = 65



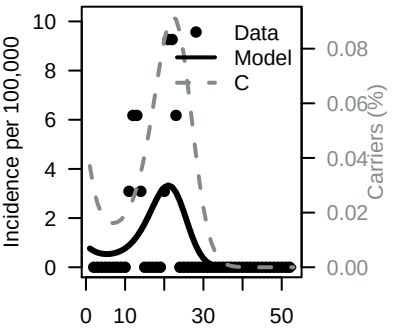
a_0−fold = 1.4; β_0−fold = 184687.1; AIC_c = 57



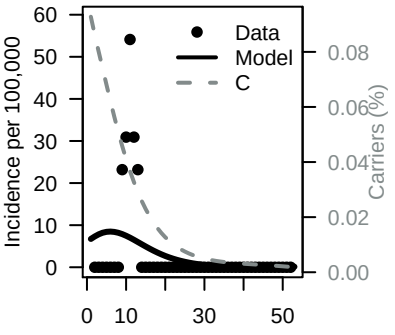
a_0−fold = 94.4; β_0−fold = 1; AIC_c = 85



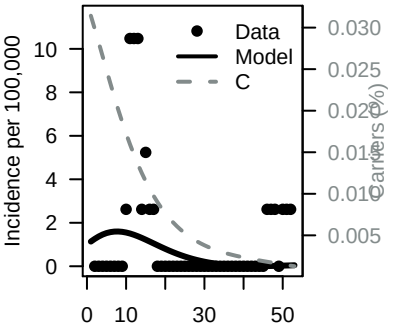
a_0−fold = 56.5; β_0−fold = 1.1; AIC_c = 65



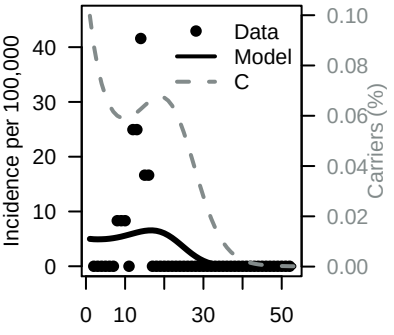
a_0−fold = 36.5; β_0−fold = 8.4; AIC_c = 68



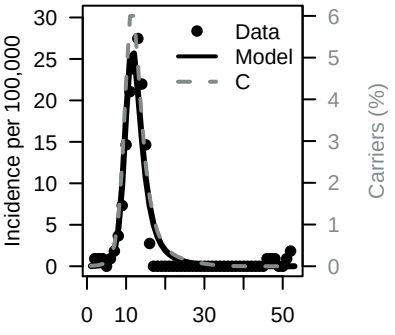
a_0−fold = 99.8; β_0−fold = 1; AIC_c = 71



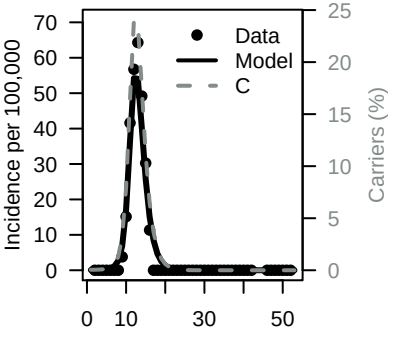
a_0−fold = 66.2; β_0−fold = 1; AIC_c = 65



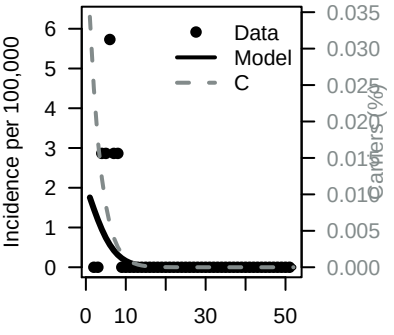
a_0−fold = 57.6; β_0−fold = 1.8; AIC_c = 73



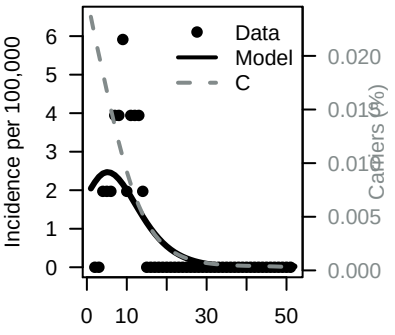
a_0−fold = 3.6; β_0−fold = 3.2; AIC_c = 113



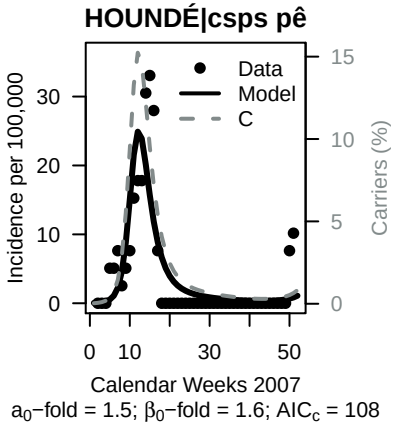
a_0−fold = 2.5; β_0−fold = 70.1; AIC_c = 70



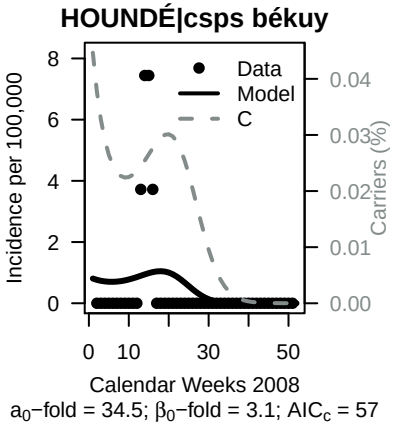
a_0−fold = 74.6; β_0−fold = 1; AIC_c = 51



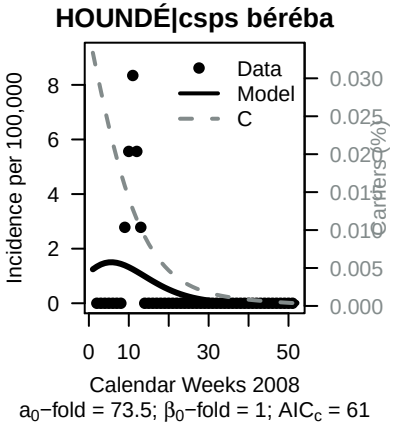
a_0−fold = 99.8; β_0−fold = 1; AIC_c = 69



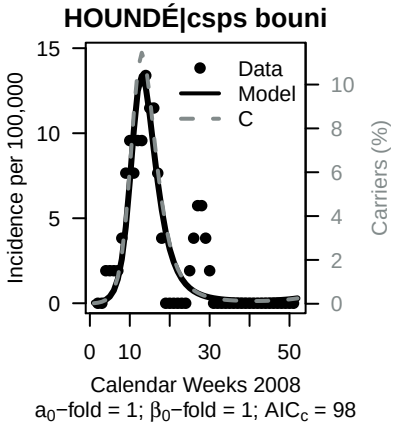
a_0−fold = 1.5; β_0−fold = 1.6; AIC_c = 108



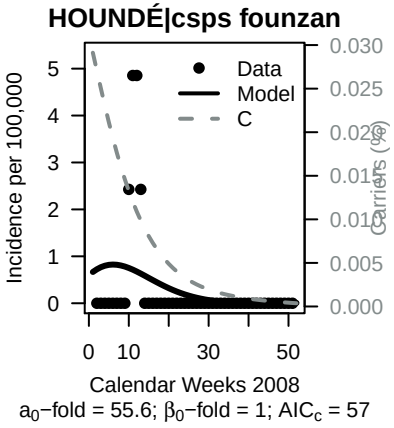
a_0−fold = 34.5; β_0−fold = 3.1; AIC_c = 57



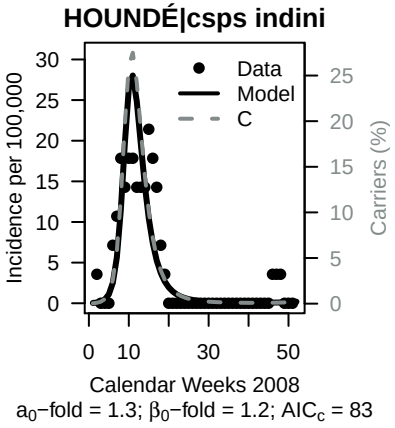
a_0−fold = 73.5; β_0−fold = 1; AIC_c = 61



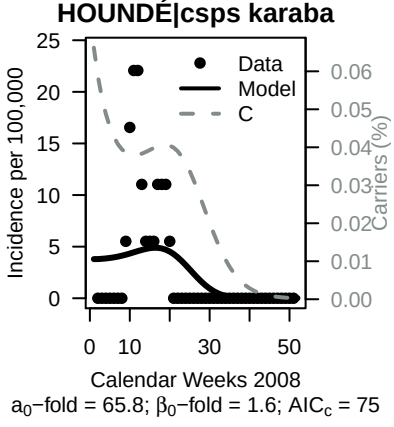
a_0−fold = 1; β_0−fold = 1; AIC_c = 98



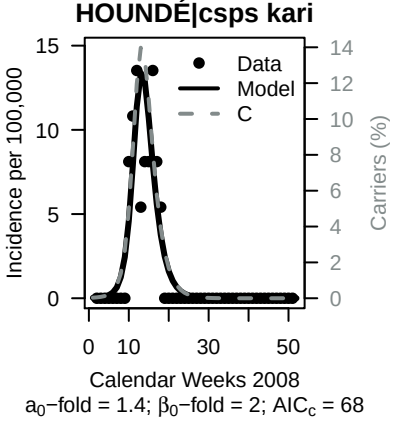
a_0−fold = 55.6; β_0−fold = 1; AIC_c = 57



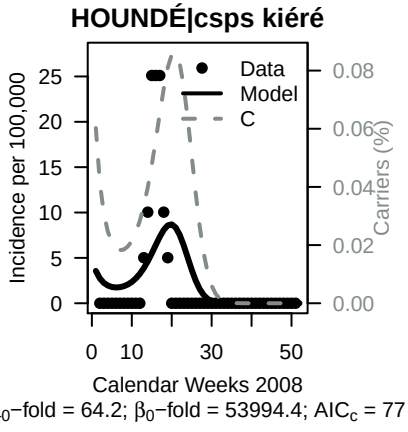
a_0−fold = 1.3; β_0−fold = 1.2; AIC_c = 83



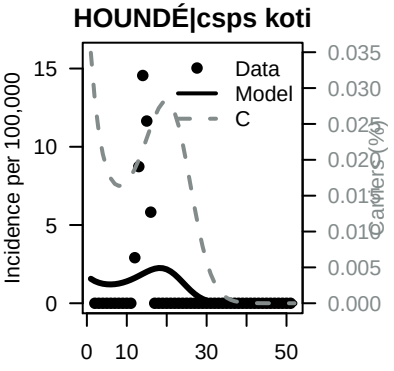
a_0−fold = 65.8; β_0−fold = 1.6; AIC_c = 75



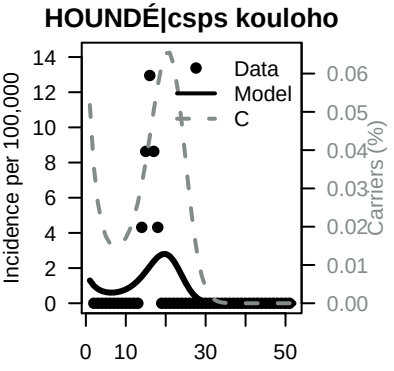
a_0−fold = 1.4; β_0−fold = 2; AIC_c = 68



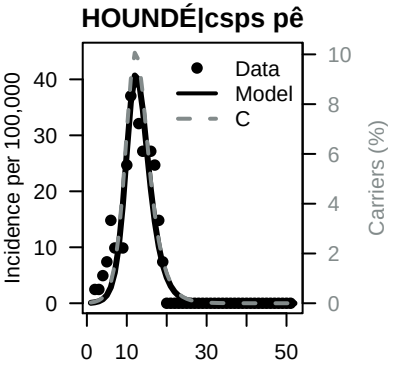
a_0−fold = 64.2; β_0−fold = 53994.4; AIC_c = 77



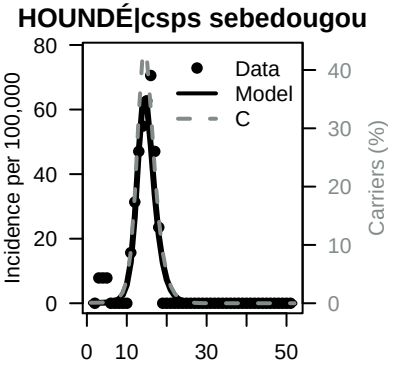
a_0−fold = 56.1; β_0−fold = 3; AIC_c = 70



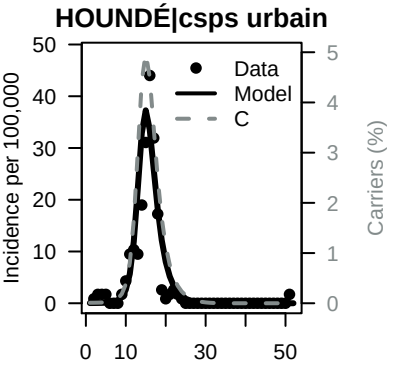
a_0−fold = 38.6; β_0−fold = 303448.9; AIC_c = 60



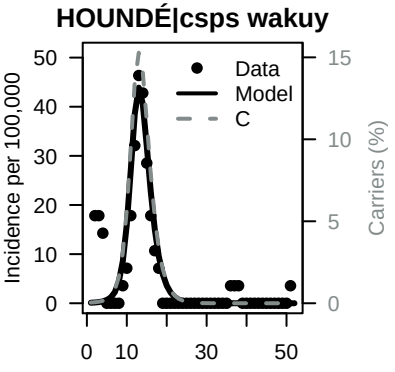
a_0−fold = 2.9; β_0−fold = 1; AIC_c = 101



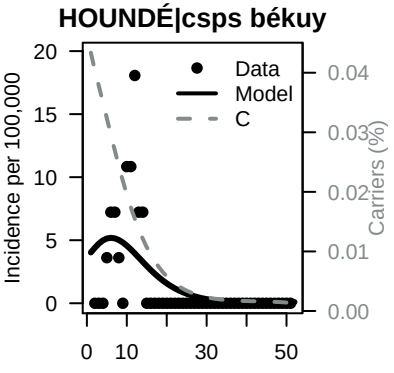
a_0−fold = 1.6; β_0−fold = 24.7; AIC_c = 68



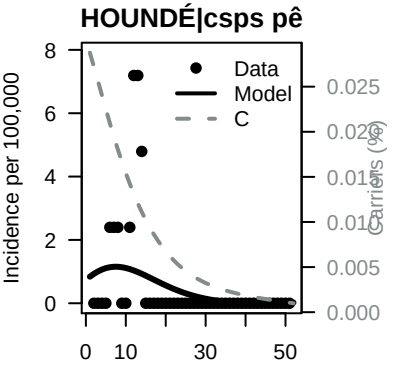
a_0−fold = 6.2; β_0−fold = 16.6; AIC_c = 170



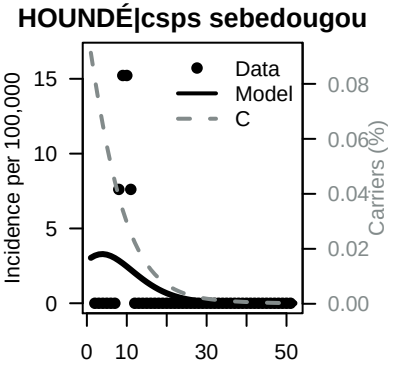
a_0−fold = 1.4; β_0−fold = 2.2; AIC_c = 115



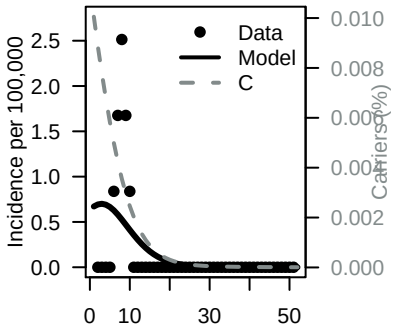
a_0−fold = 99.8; β_0−fold = 1; AIC_c = 76



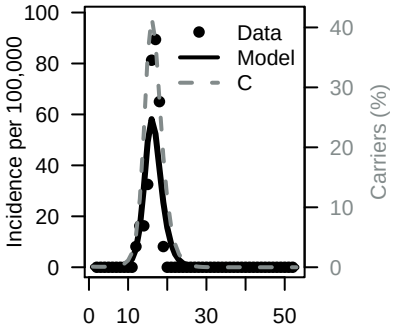
a_0−fold = 54.4; β_0−fold = 1; AIC_c = 62



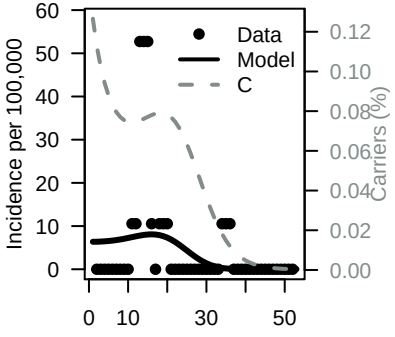
a_0−fold = 74.9; β_0−fold = 1; AIC_c = 56



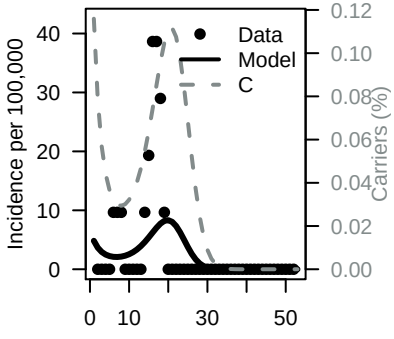
a_0−fold = 99.8; β_0−fold = 1; AIC_c = 59



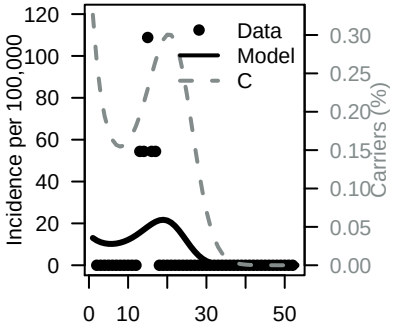
a_0−fold = 1.7; β_0−fold = 67.3; AIC_c = 200043



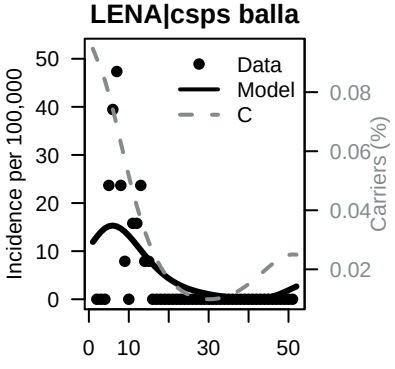
a_0−fold = 61.8; β_0−fold = 1.6; AIC_c = 76



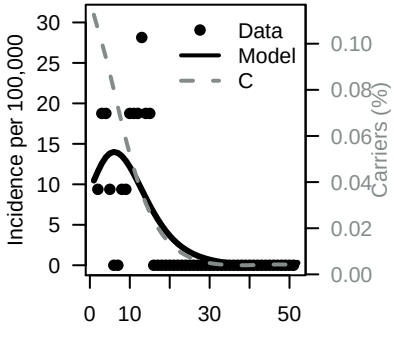
a_0−fold = 52.9; β_0−fold = 312.5; AIC_c = 63



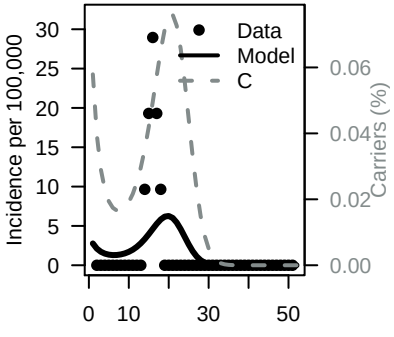
a_0−fold = 53.8; β_0−fold = 5; AIC_c = 68



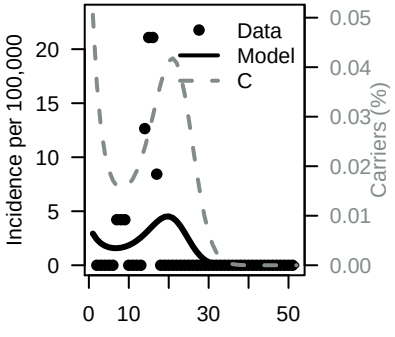
a_0−fold = 99.9; β_0−fold = 1; AIC_c = 78



a_0−fold = 99.8; β_0−fold = 1; AIC_c = 75

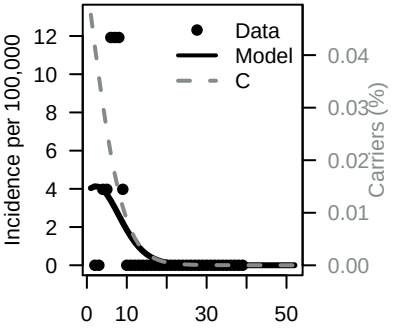


a_0−fold = 57.4; β_0−fold = 3824134; AIC_c = 71



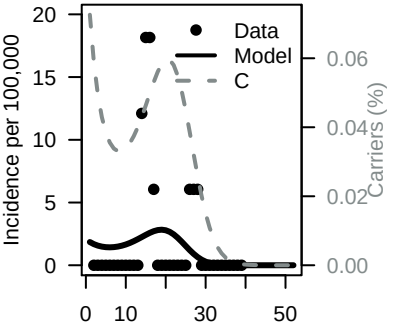
a_0−fold = 74.9; β_0−fold = 6.3; AIC_c = 74

KARANGASSO VIGUE|csps wara



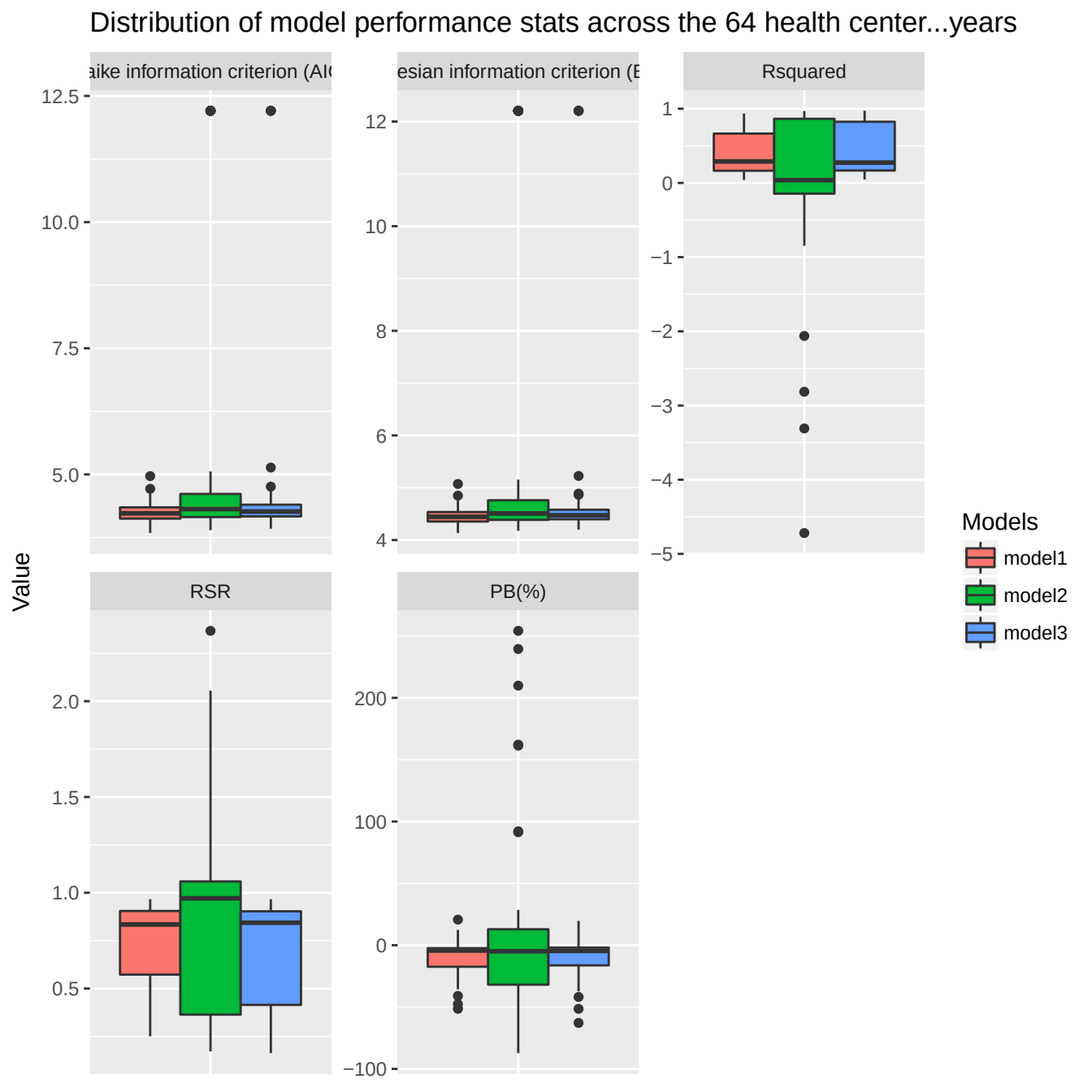
a_0−fold = 99.8; β_0−fold = 1; AIC_c = 58

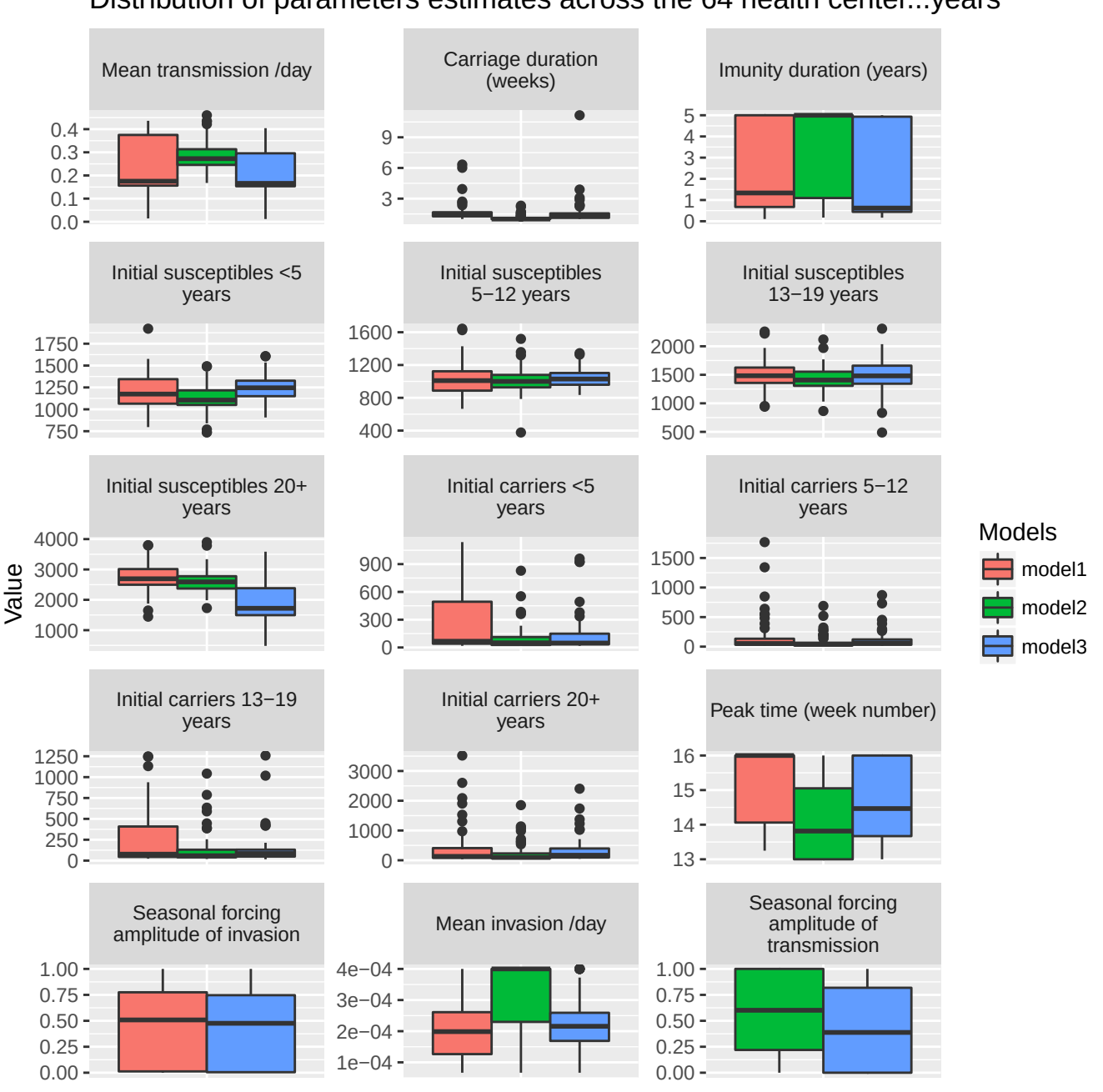
KARANGASSO VIGUE|dispe dioss



a_0−fold = 44.3; β_0−fold = 4.5; AIC_c = 61

Figure 4. Distribution of parameters estimates and models performance stats, for 64 health center−years with complete data, across four health distrits of Burkina faso (2004−2010).


Distribution of model performance stats across the 64 health center...years
aike information criterion (AI
esian information criterion (B
Rsquared
RSR
PB(%)
Value
Models
model1
model2
model3


Distribution of parameters estimates across the 64 health center...years
Mean transmission /day
Carriage duration (weeks)
Imunity duration (years)
Initial susceptibles <5 years
Initial susceptibles 5−12 years
Initial susceptibles 13−19 years
Initial susceptibles 20+ years
Initial carriers <5 years
Initial carriers 5−12 years
Initial carriers 13−19 years
Initial carriers 20+ years
Peak time (week number)
Seasonal forcing amplitude of invasion
Mean invasion /day
Seasonal forcing amplitude of transmission
Value
Models
model1
model2
model3