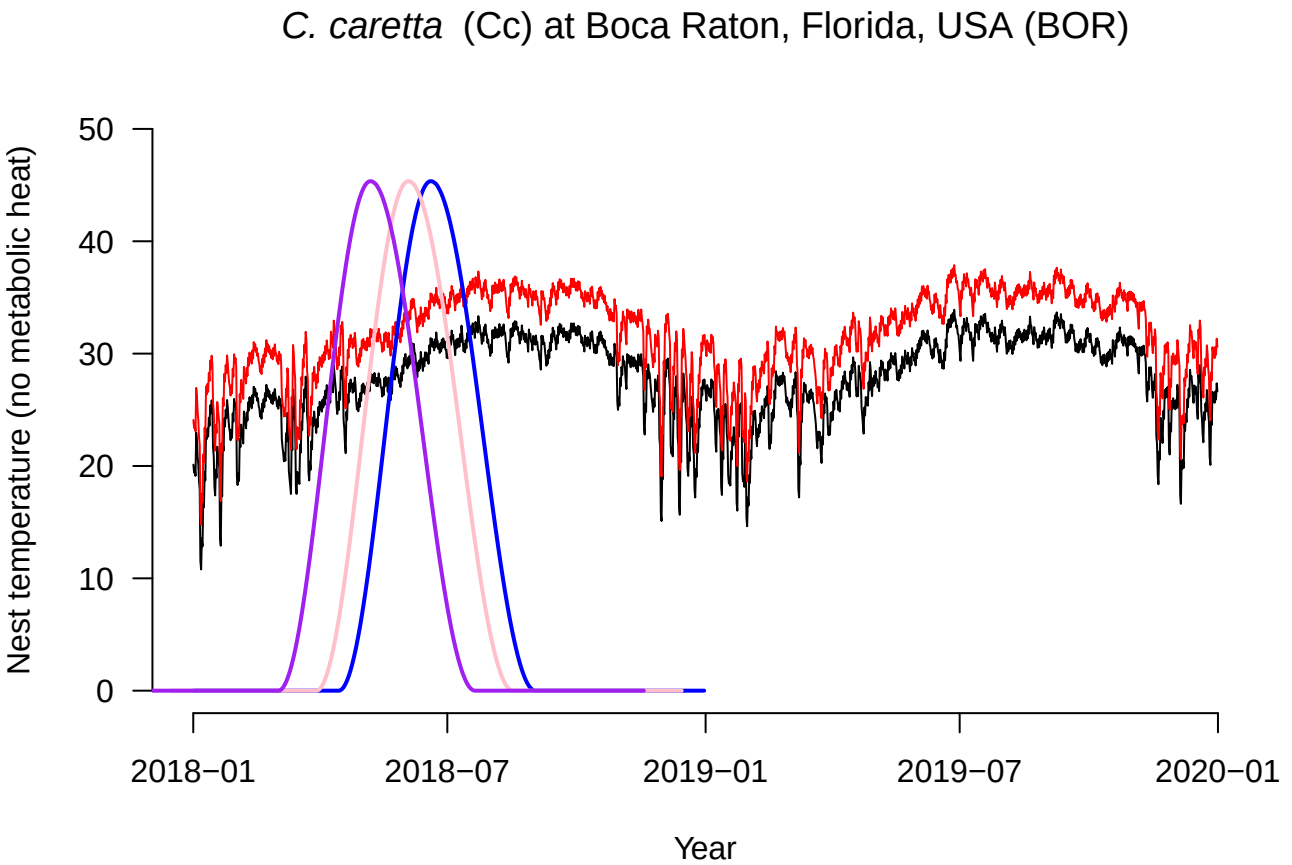
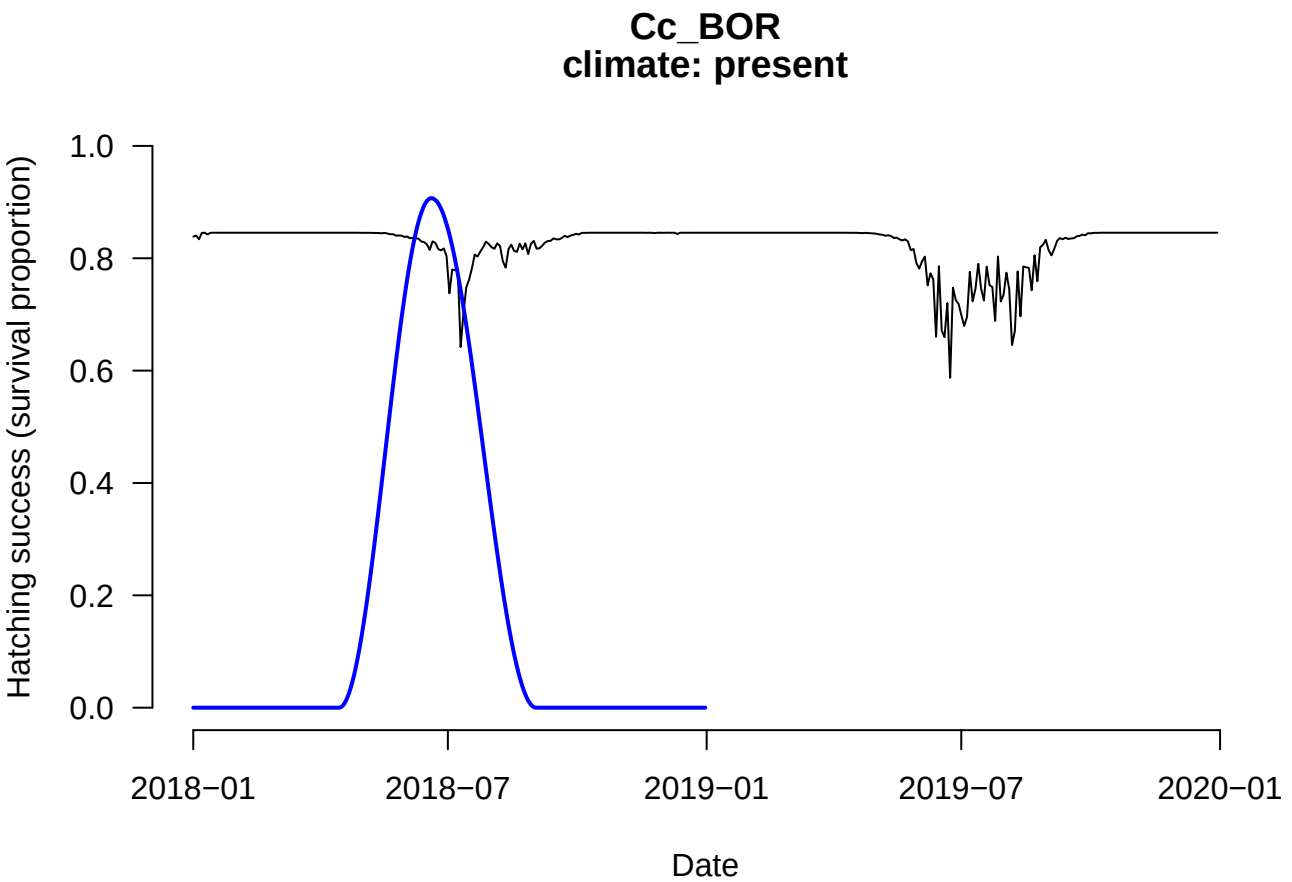
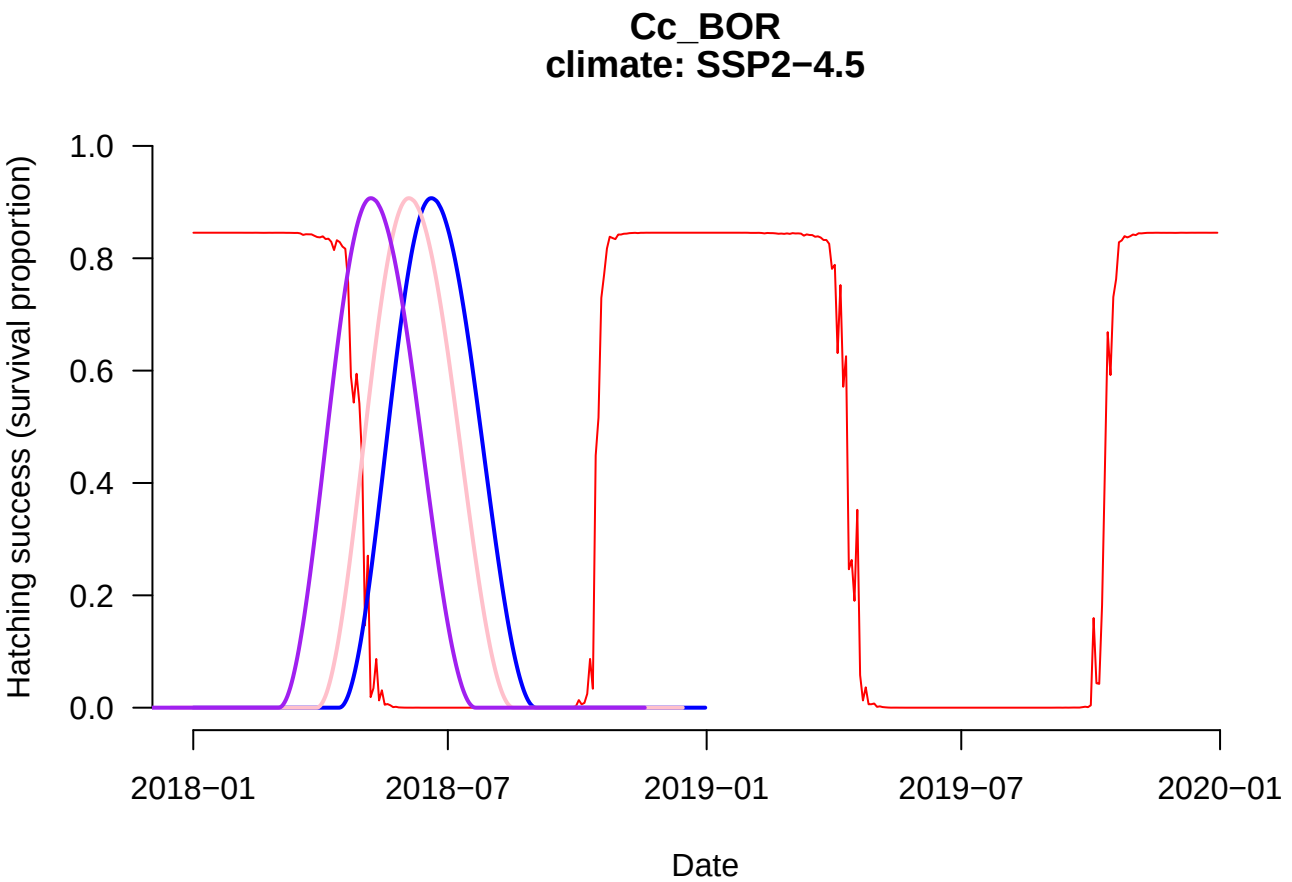
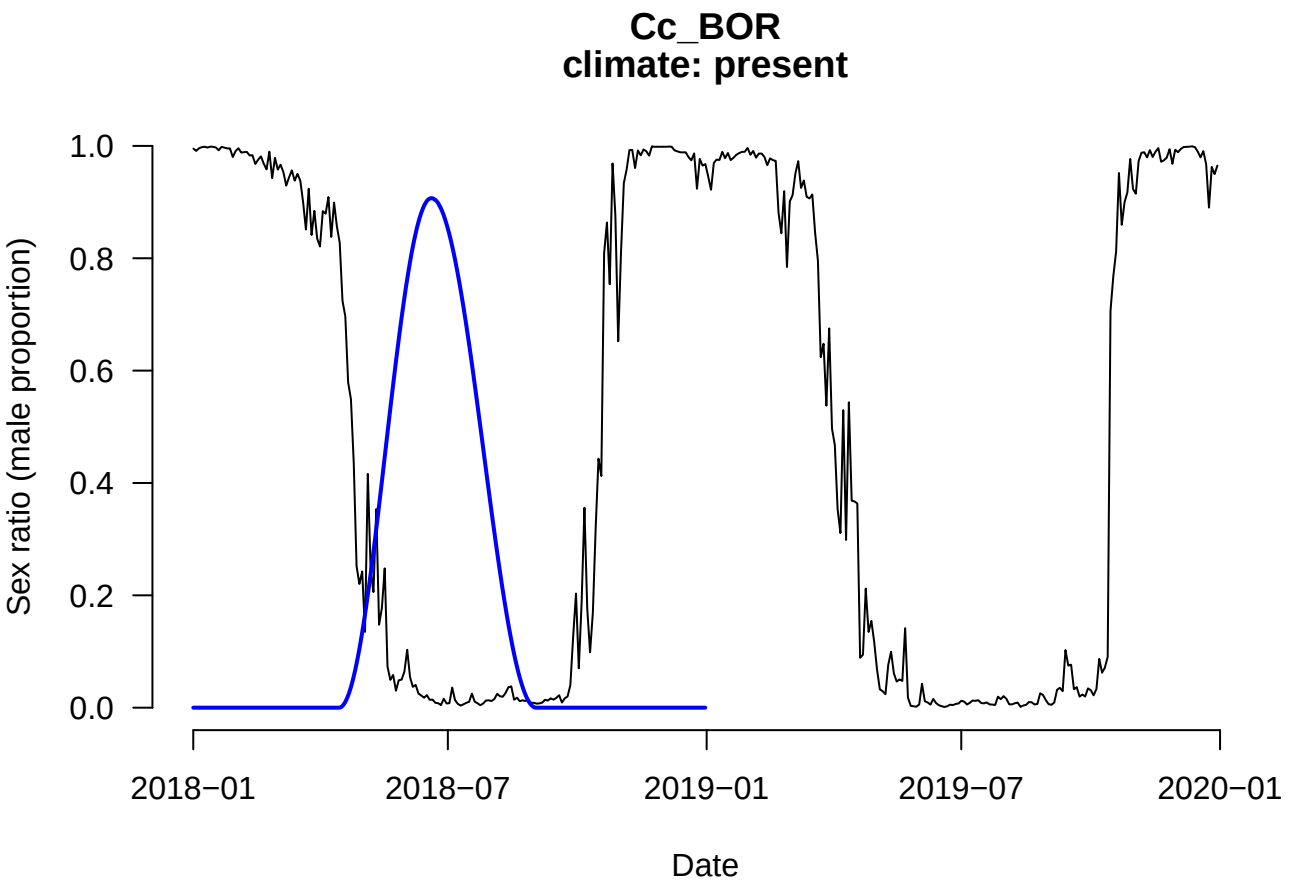
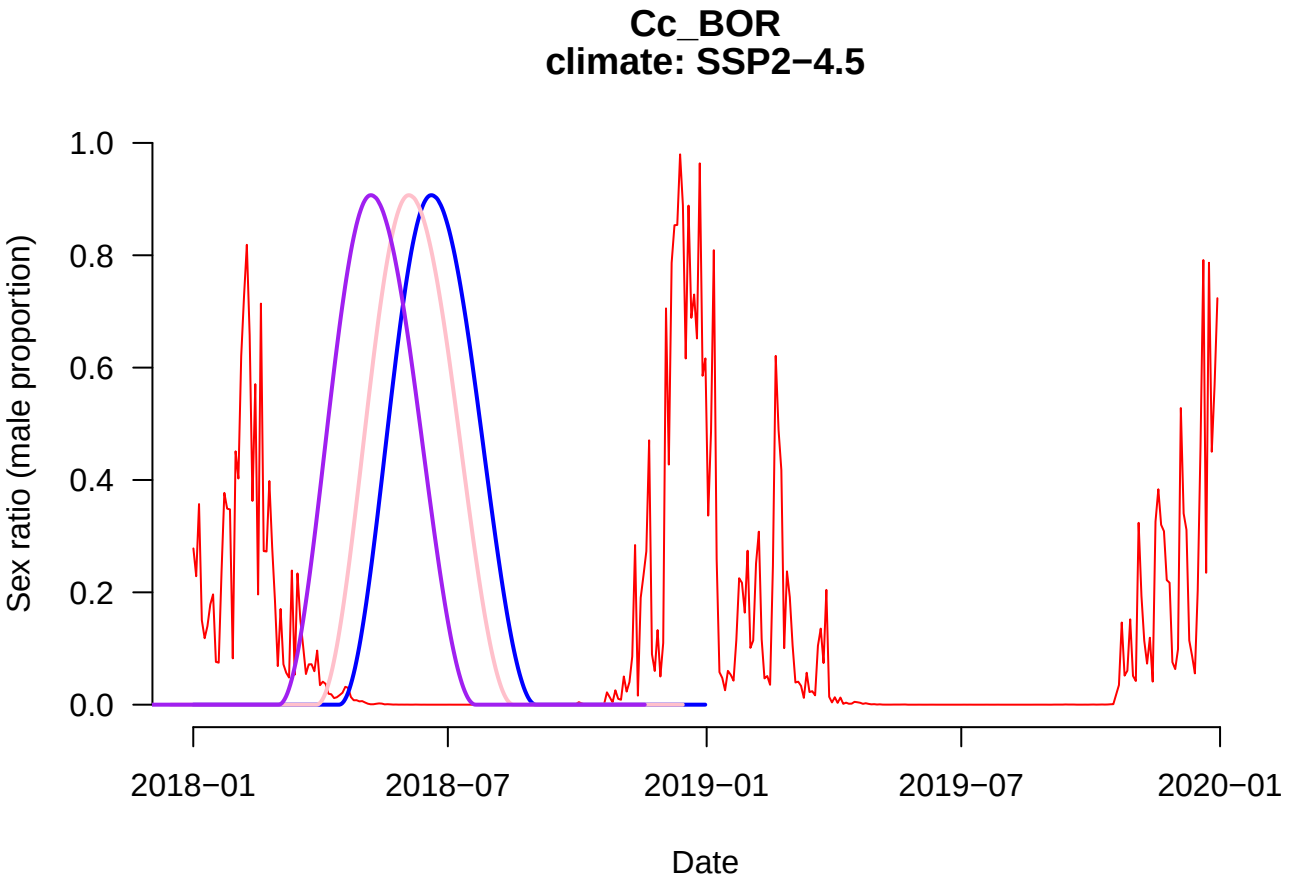
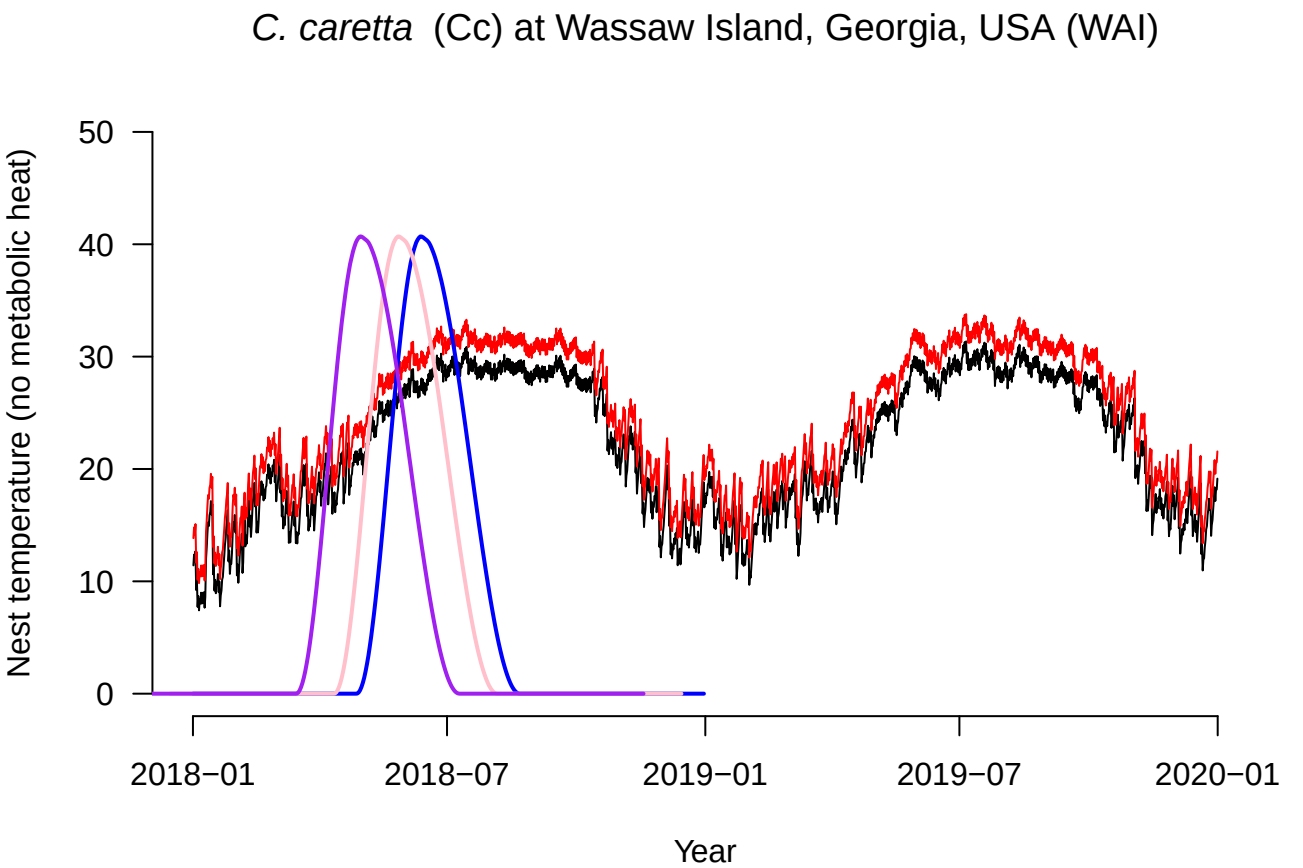

C. caretta (Cc) at Boca Raton, Florida, USA (BOR)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

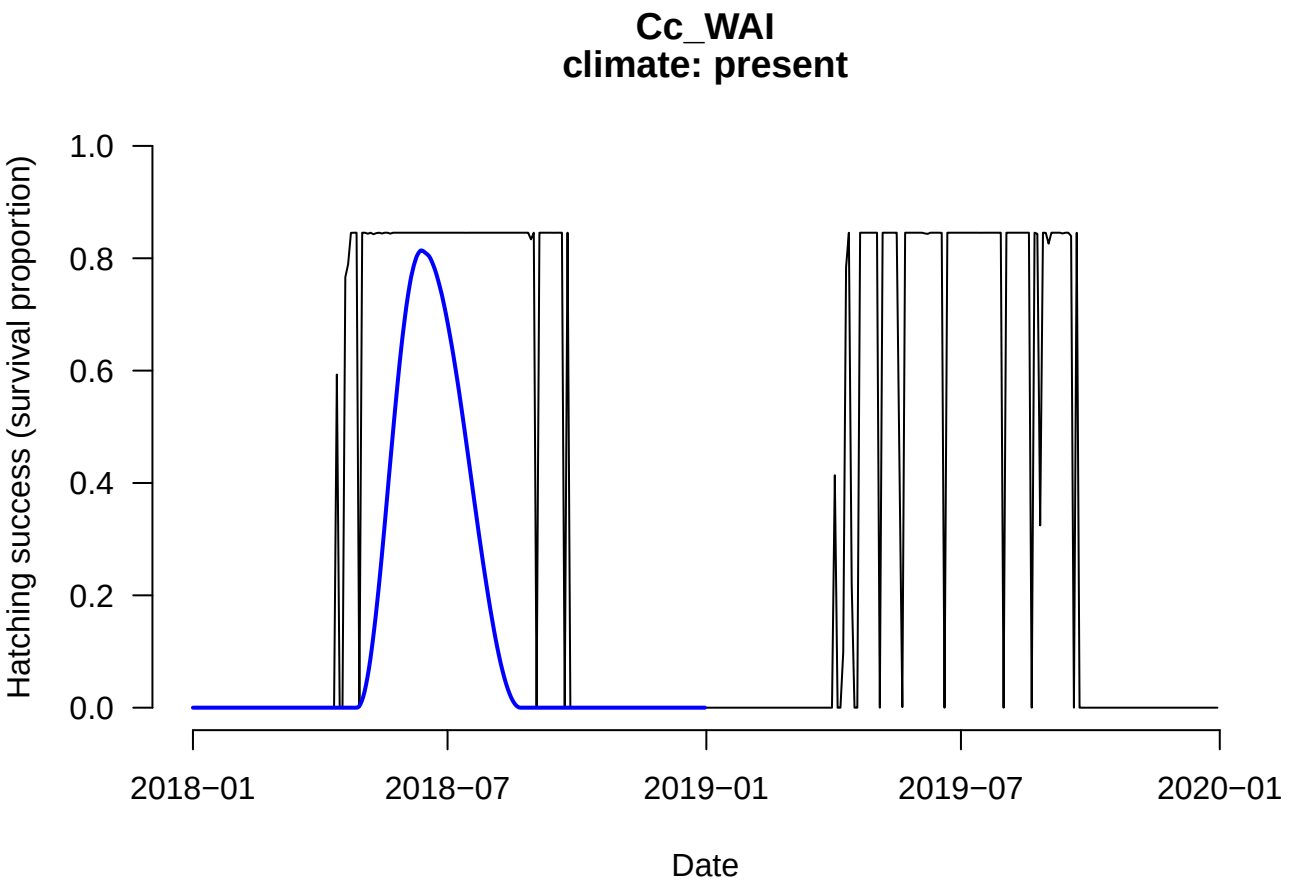

Cc_BOR
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

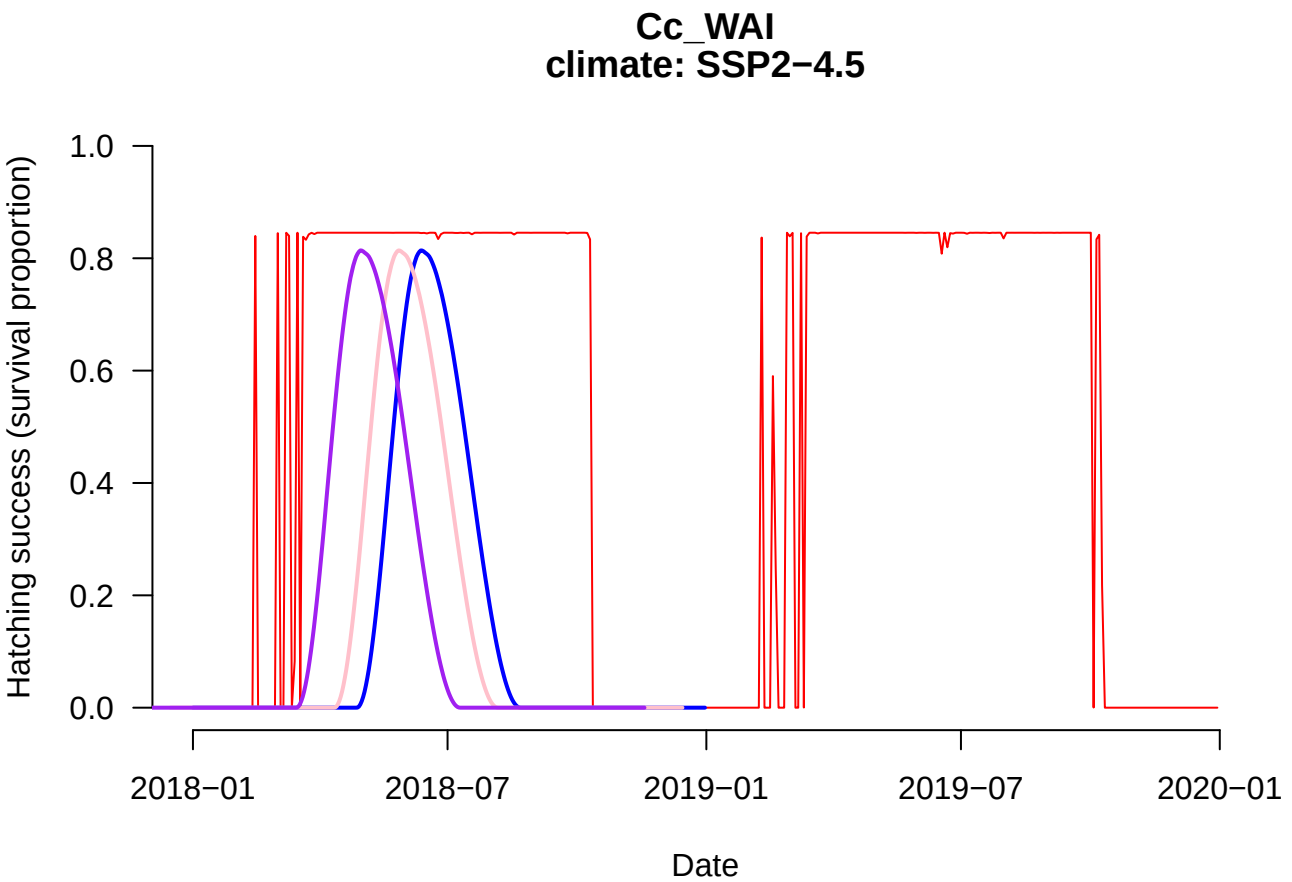

Cc_BOR
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

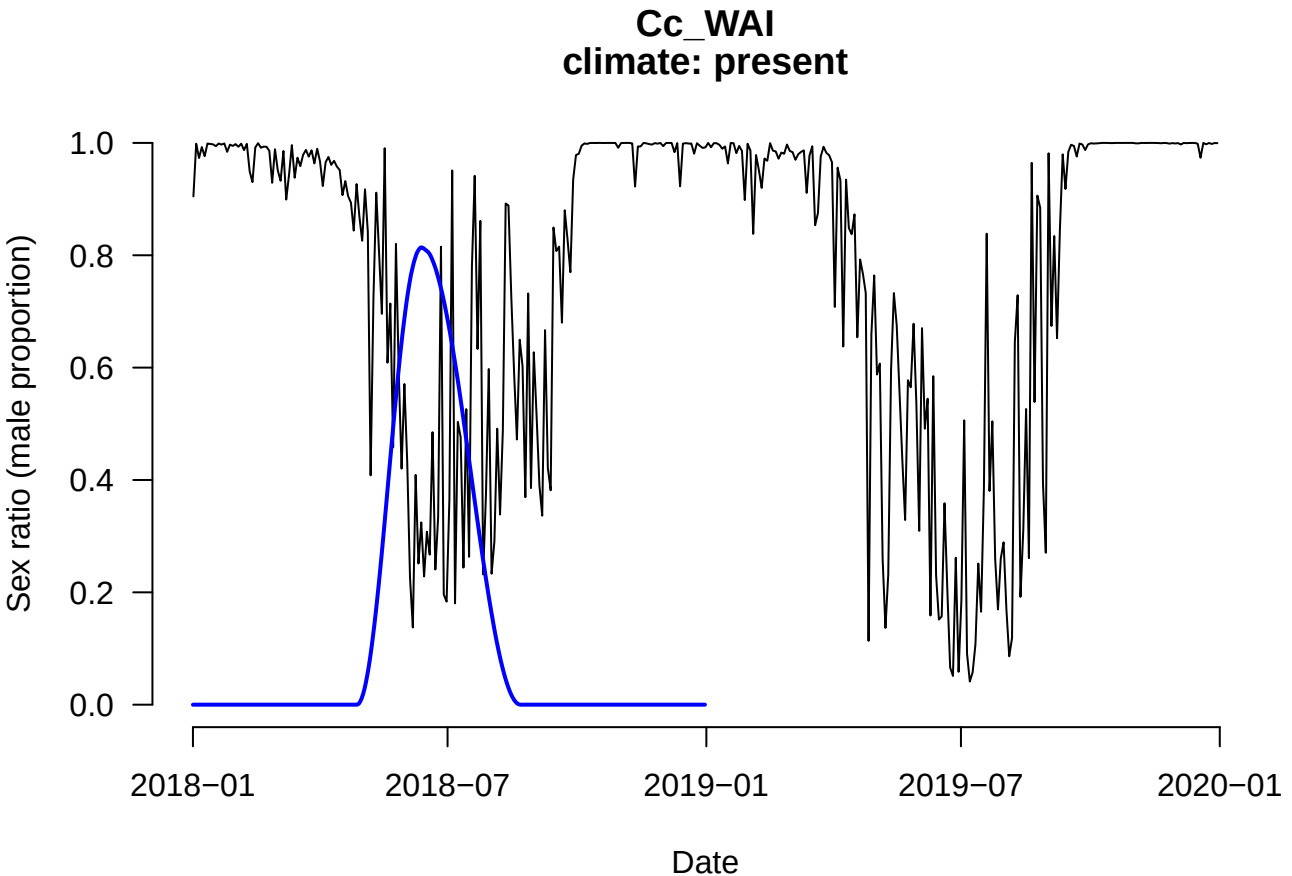

Cc_BOR
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

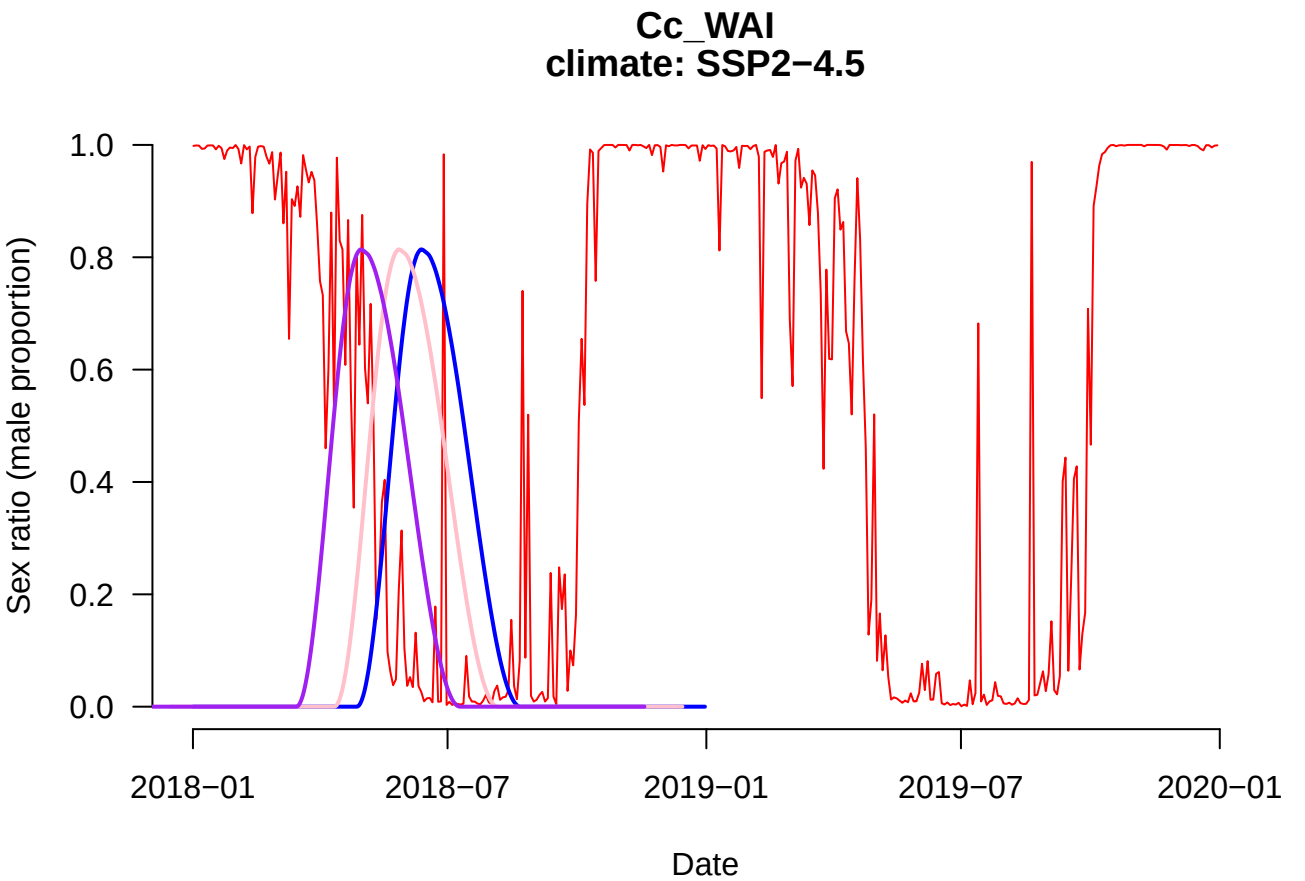

Cc_BOR
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

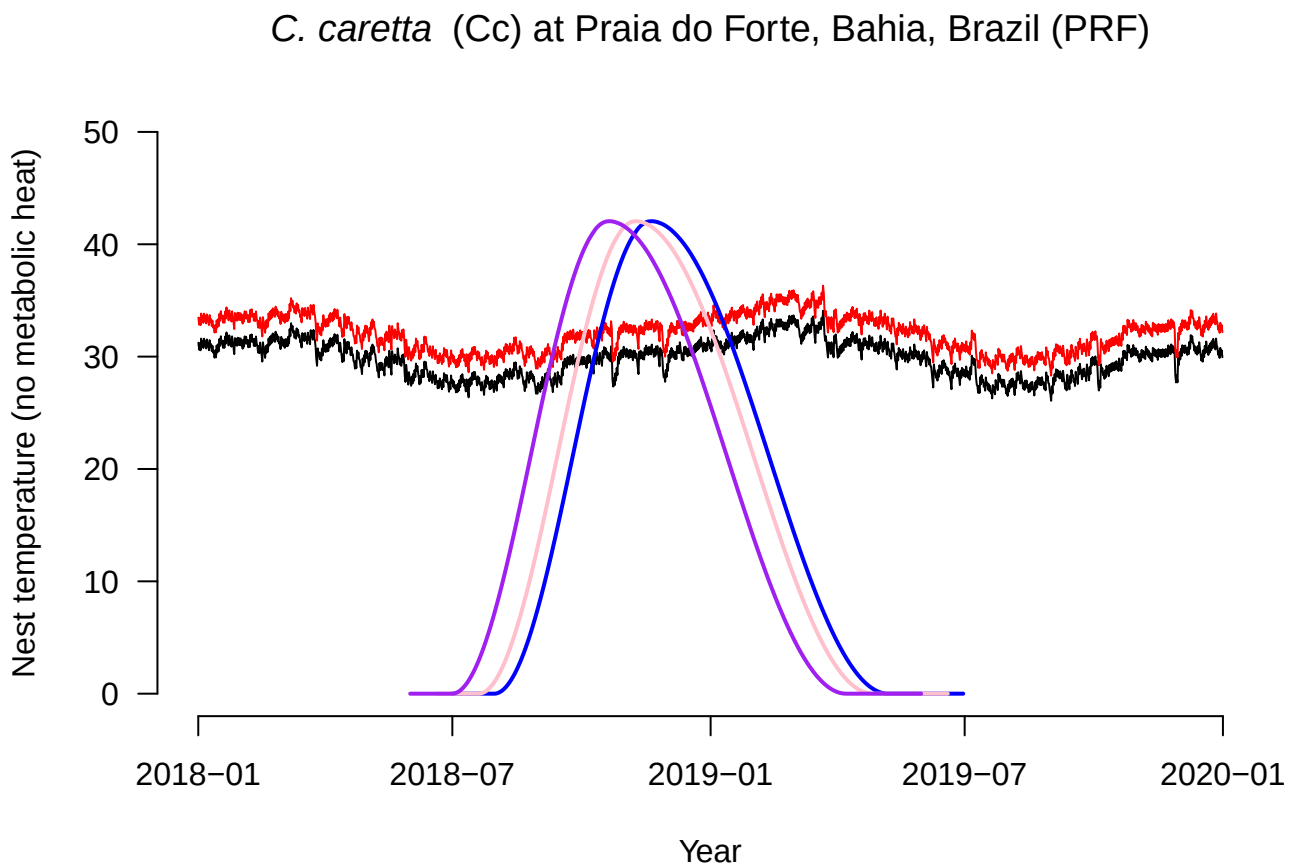

C. caretta (Cc) at Wassaw Island, Georgia, USA (WAI)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

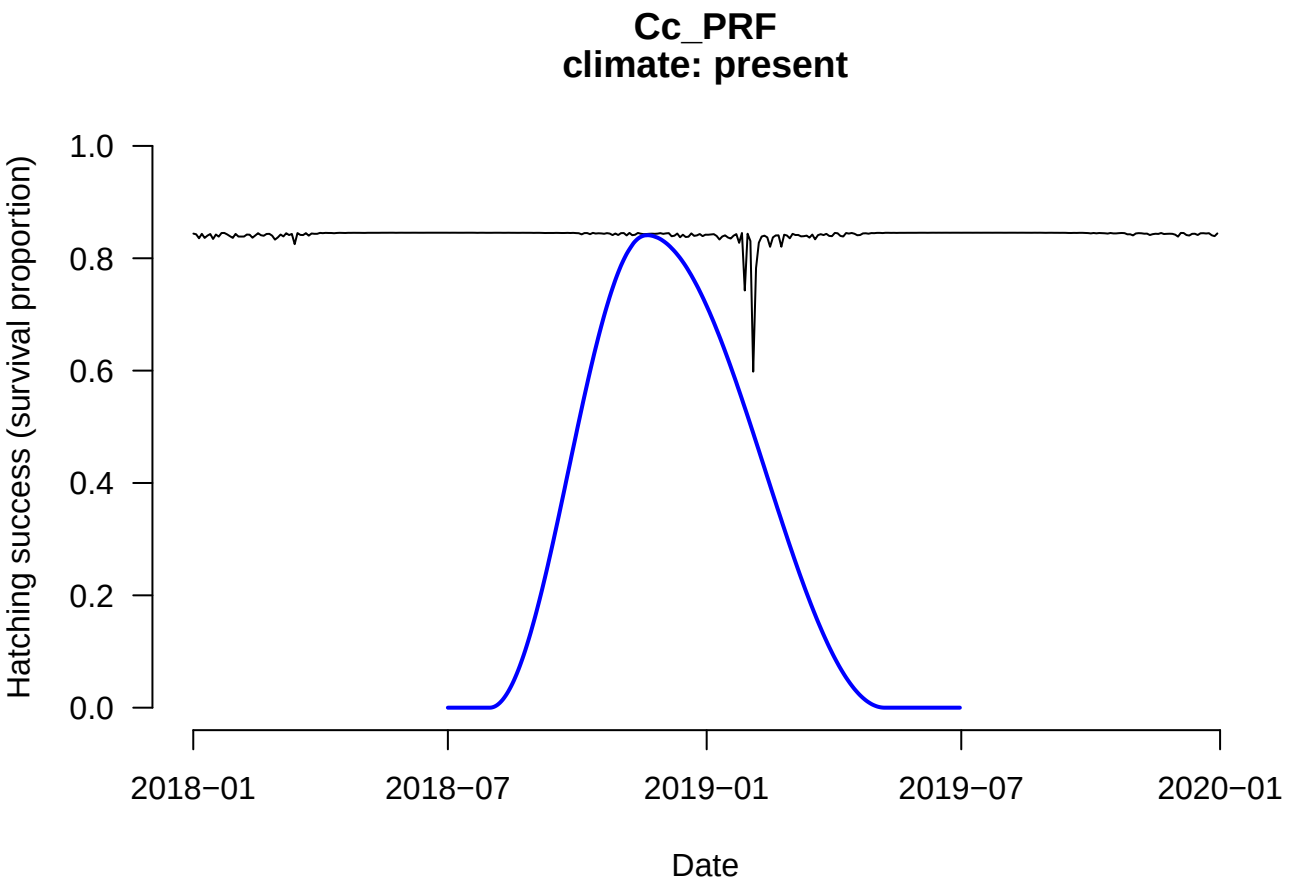

Cc_WAI
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

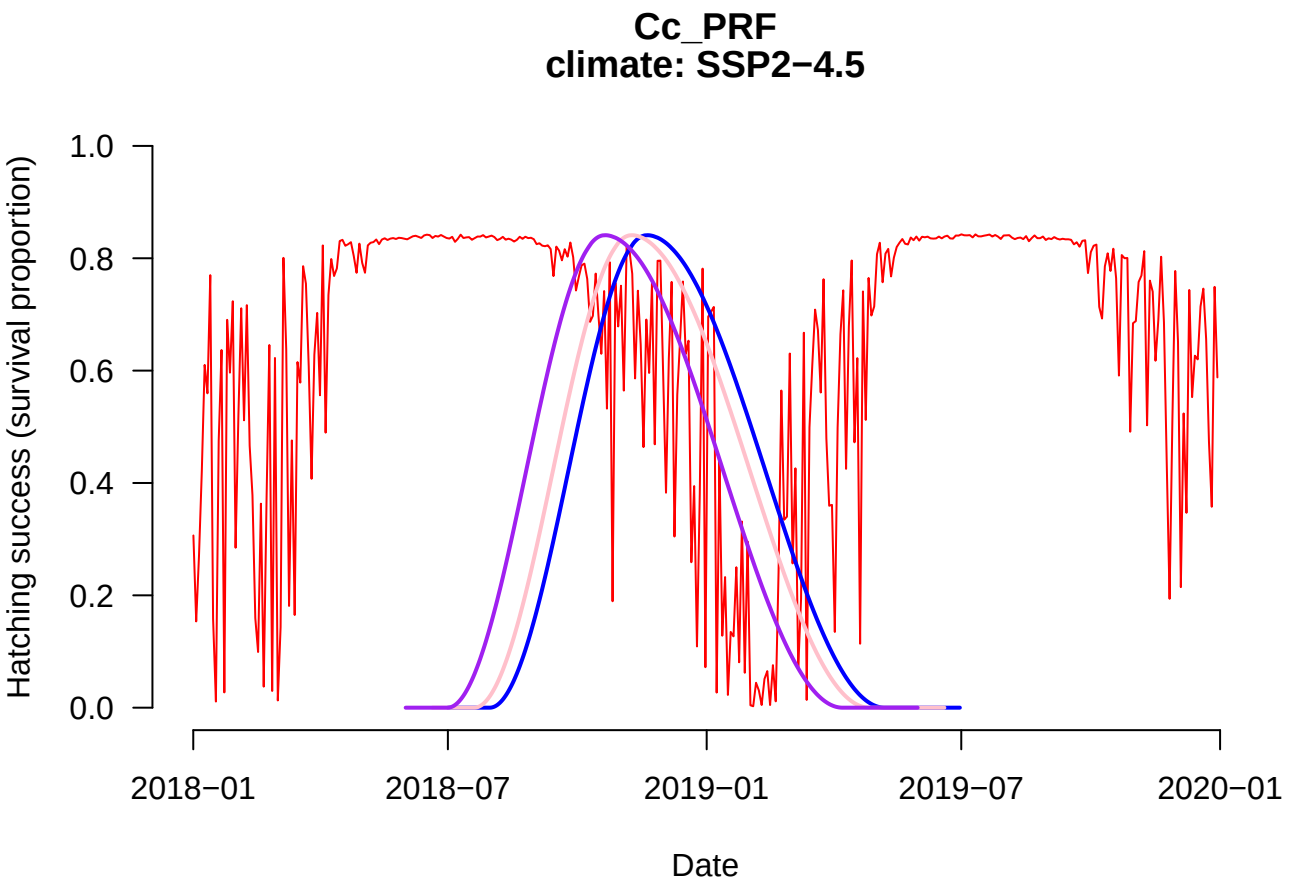

Cc_WAI
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

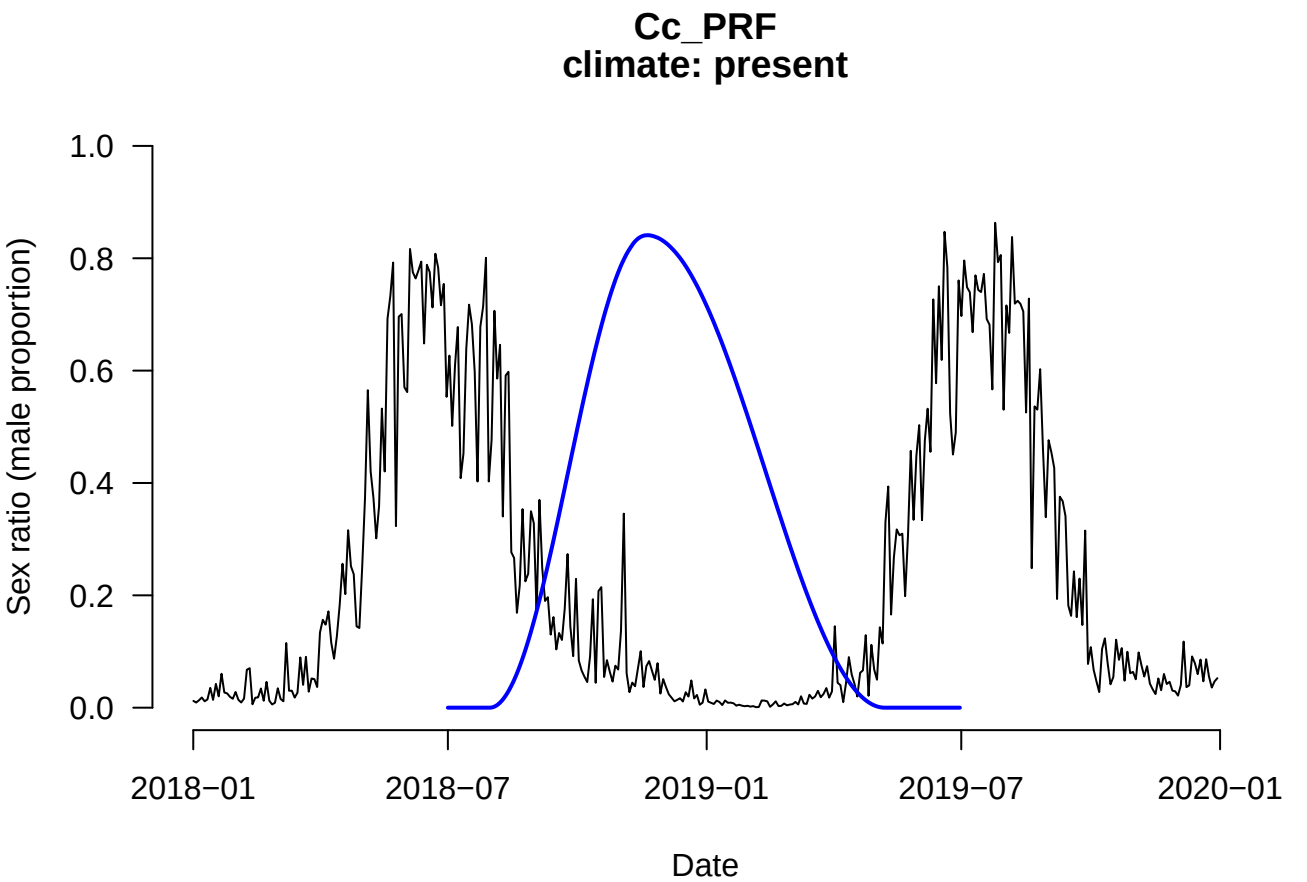

Cc_WAI
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

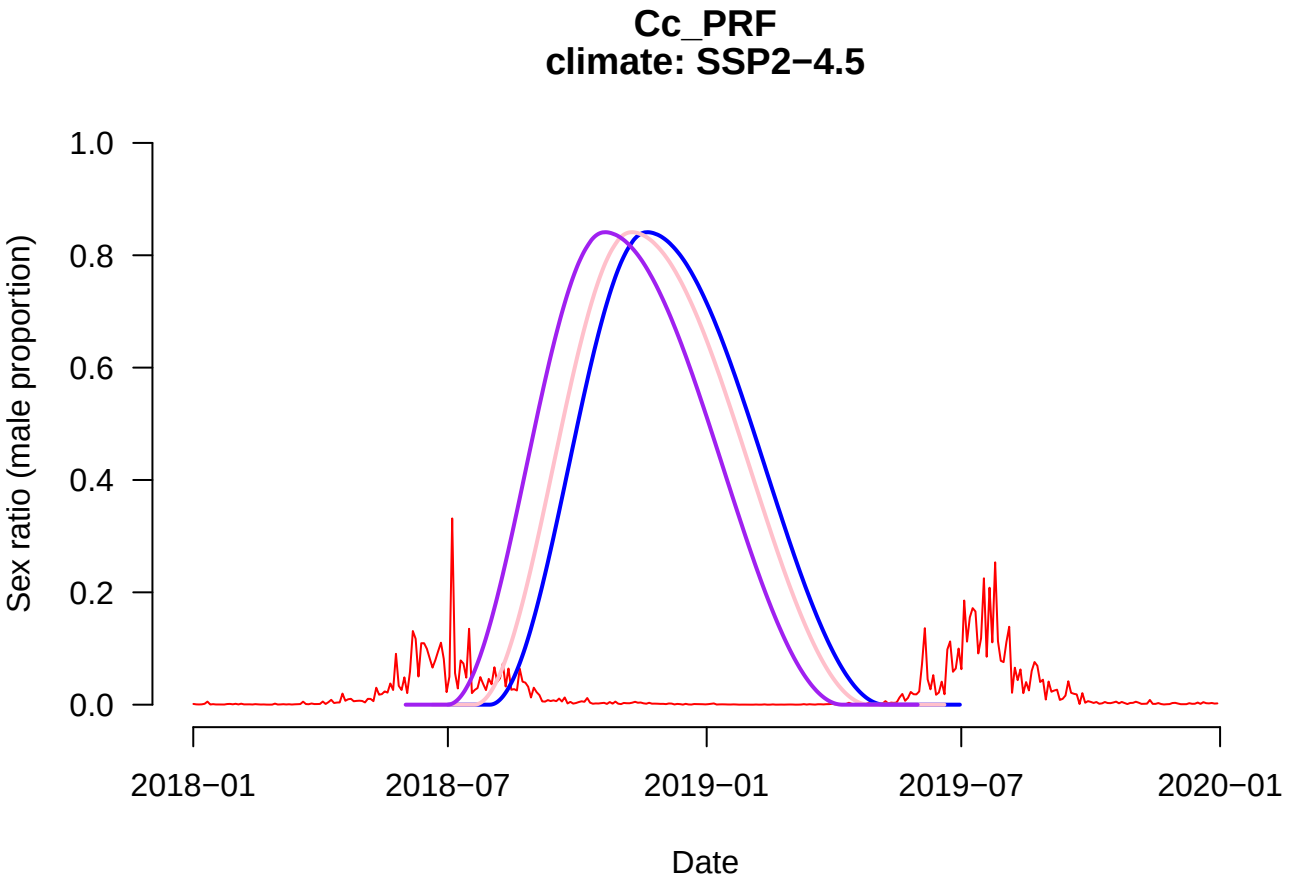

Cc_WAI
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

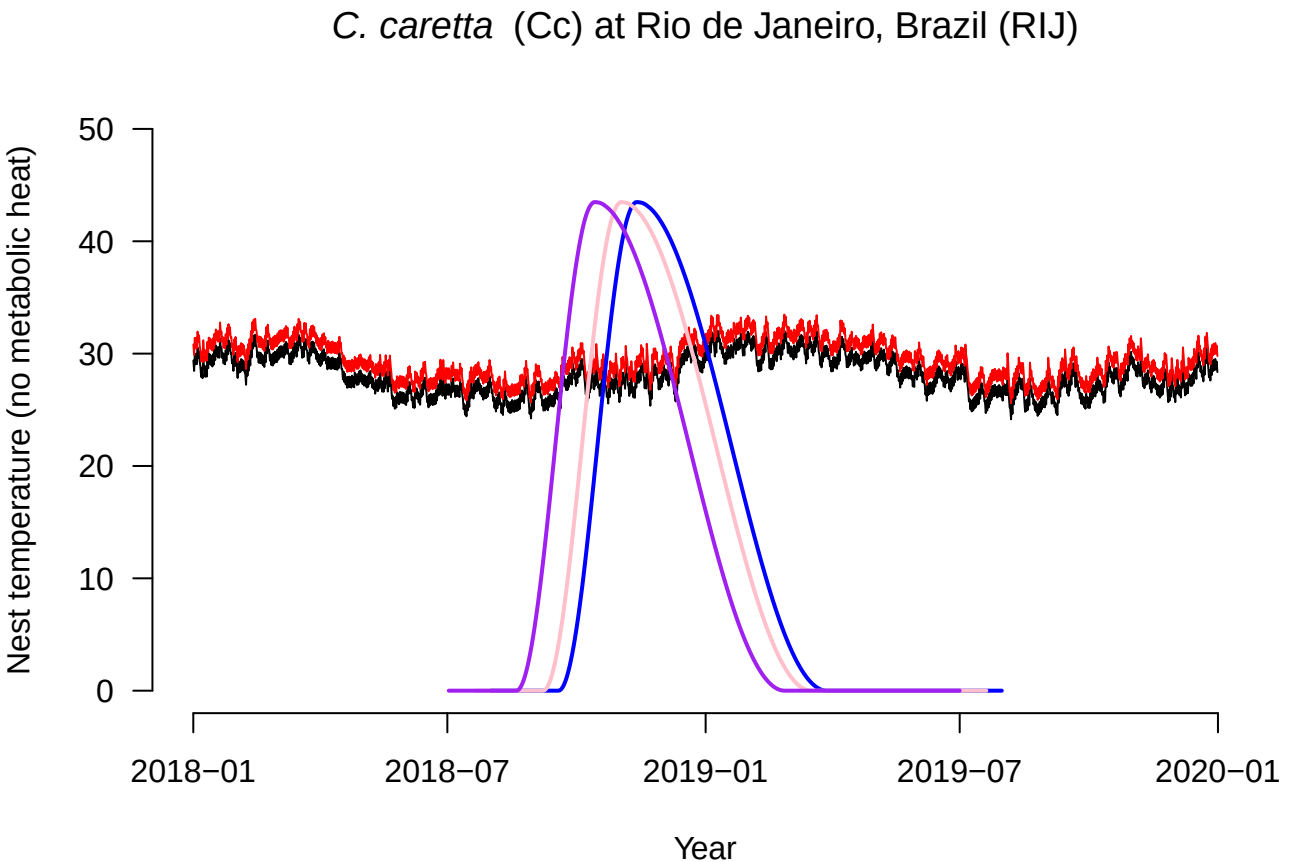

C. caretta (Cc) at Praia do Forte, Bahia, Brazil (PRF)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

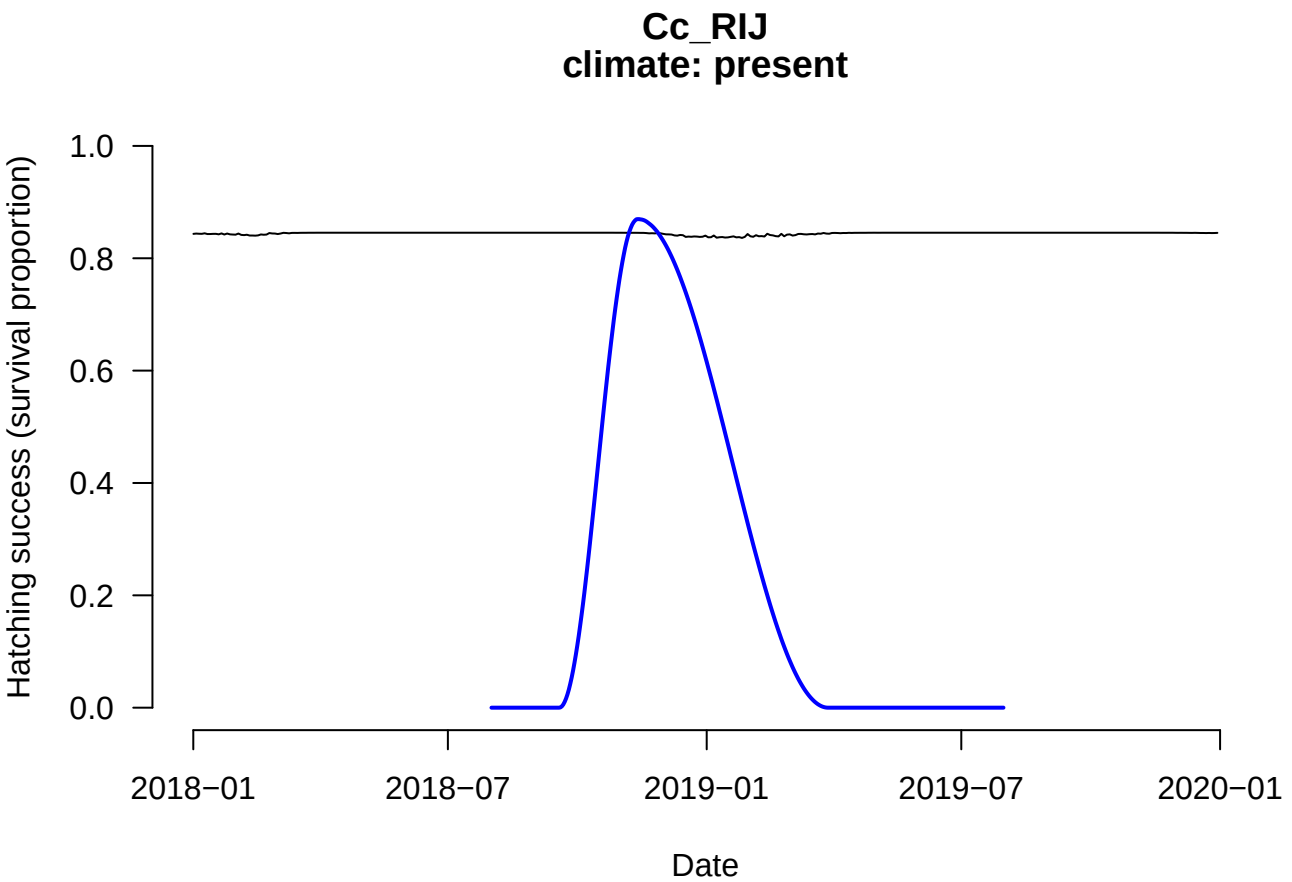

Cc_PRF
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

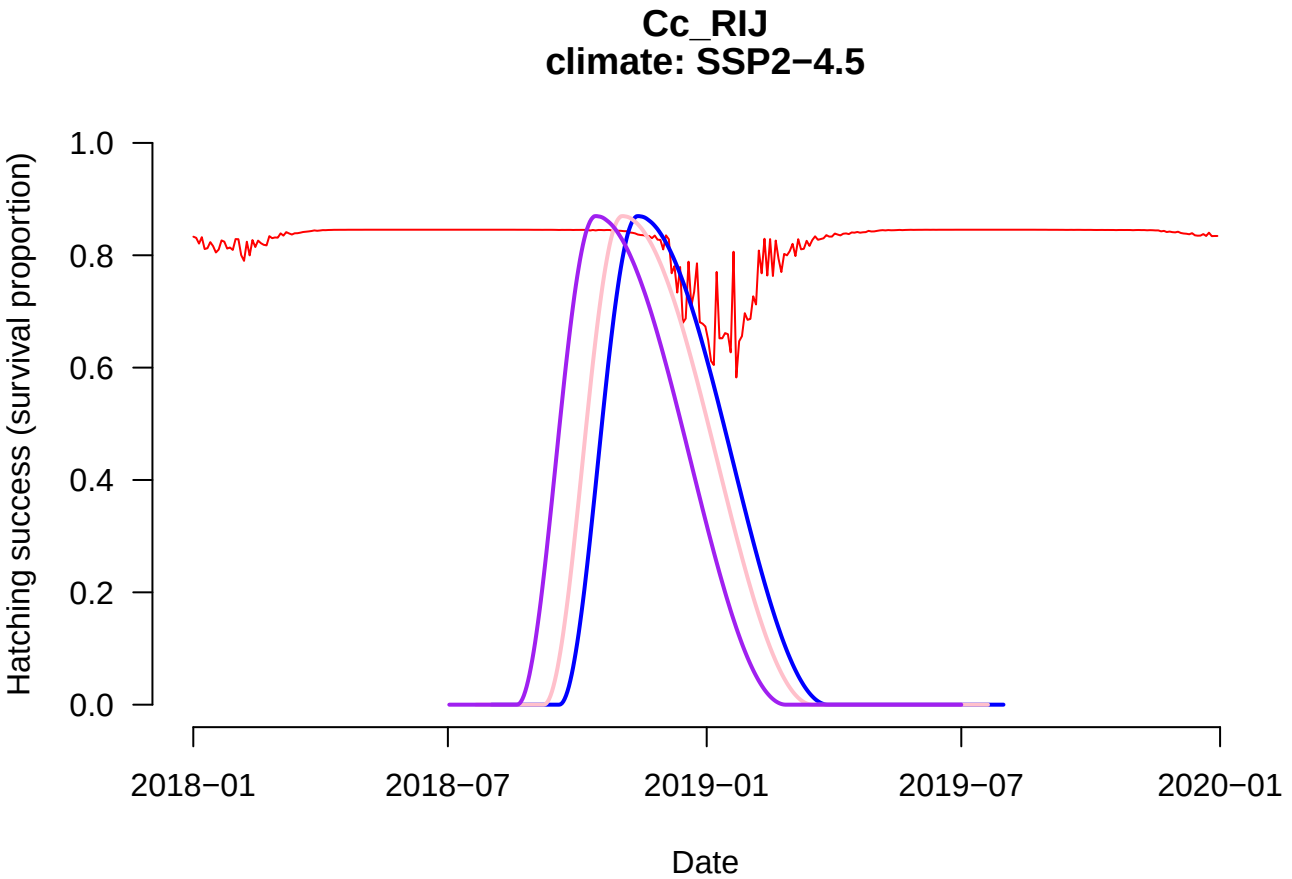

Cc_PRF
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

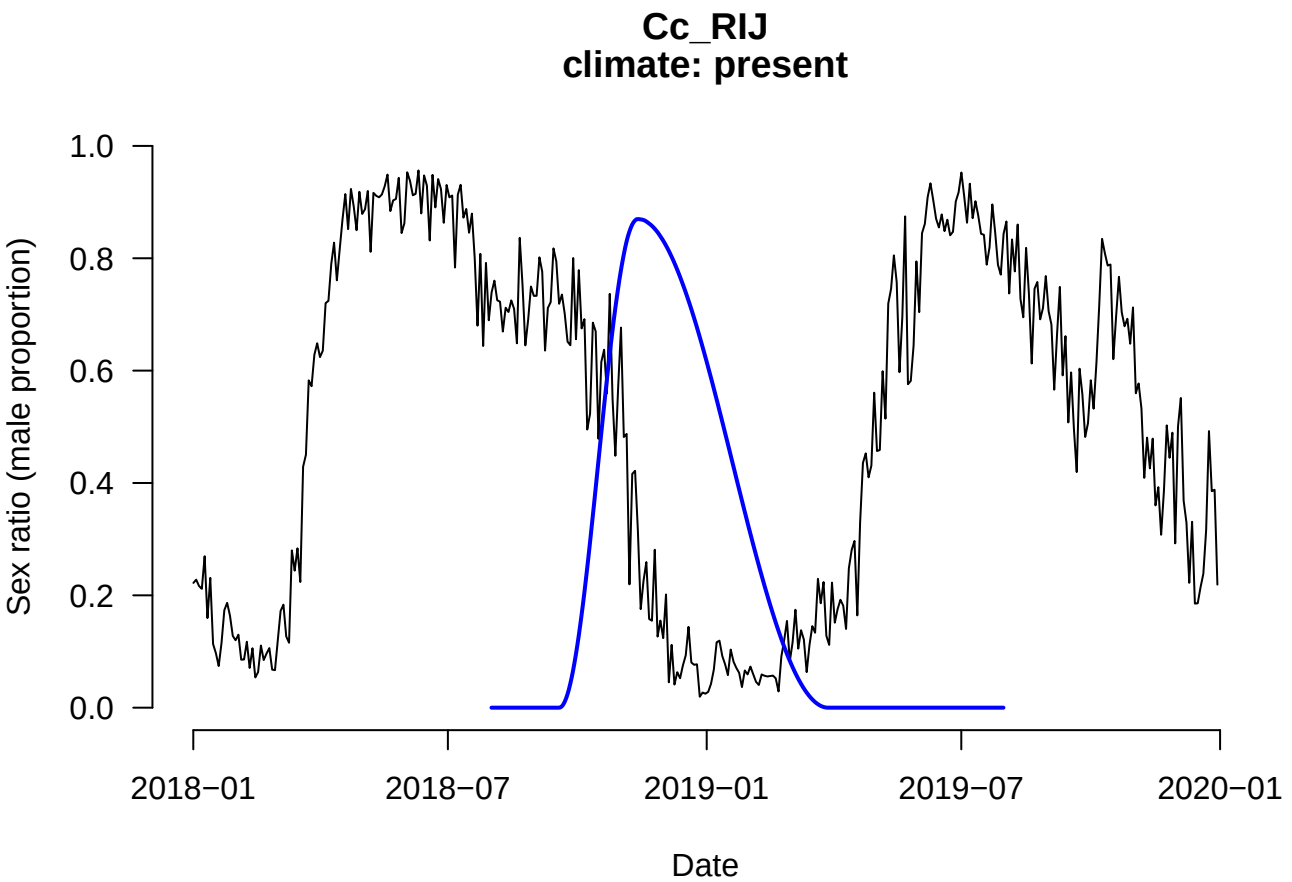

Cc_PRF
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

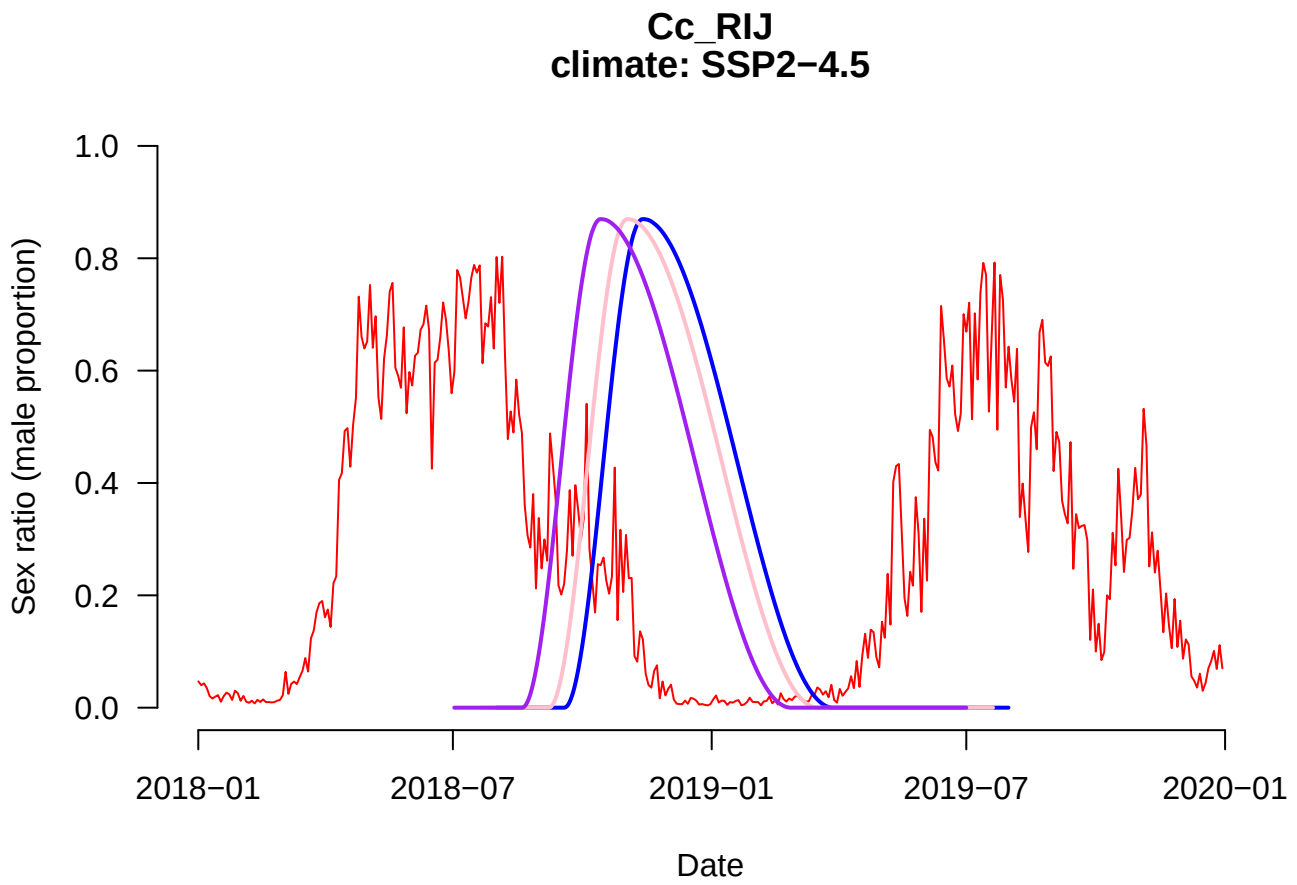

Cc_PRF
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

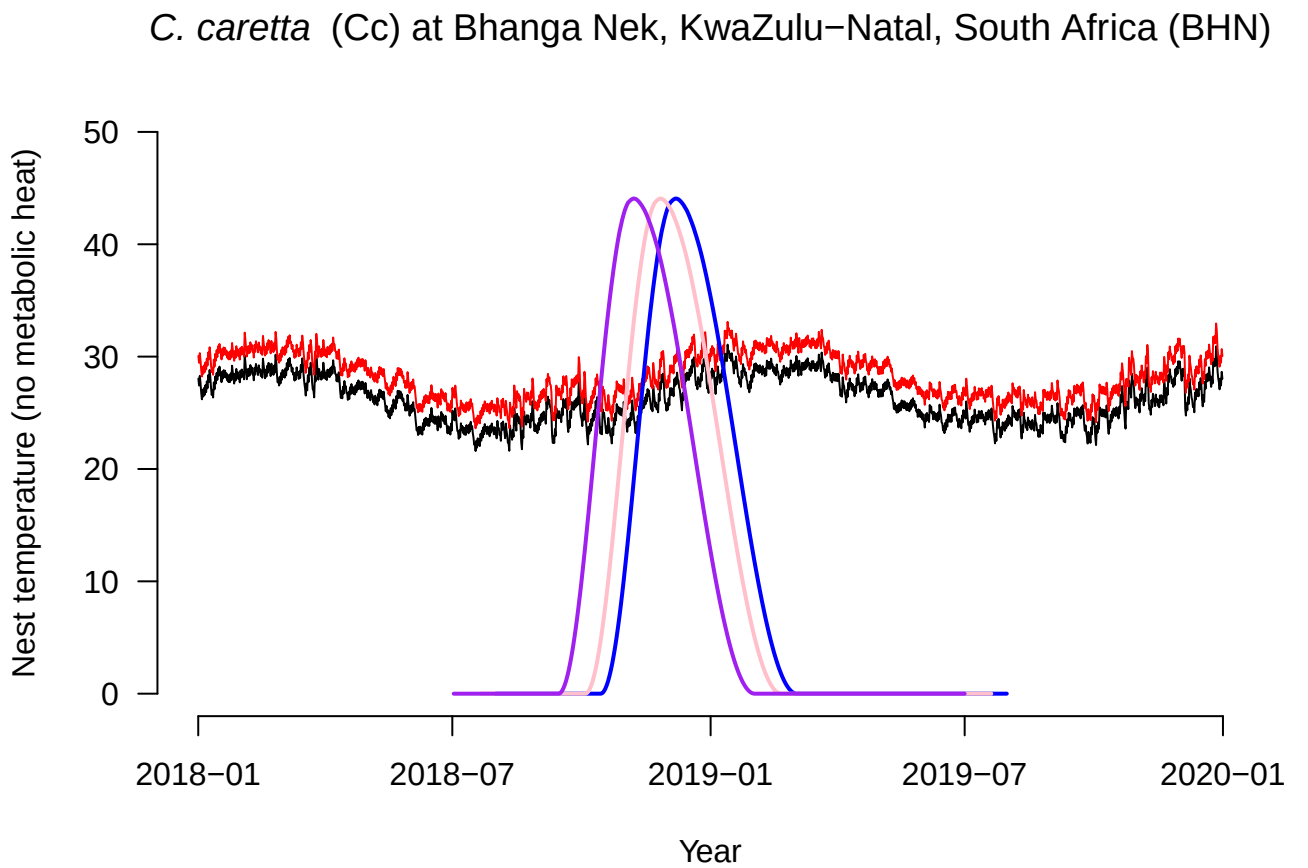

C. caretta (Cc) at Rio de Janeiro, Brazil (RIJ)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

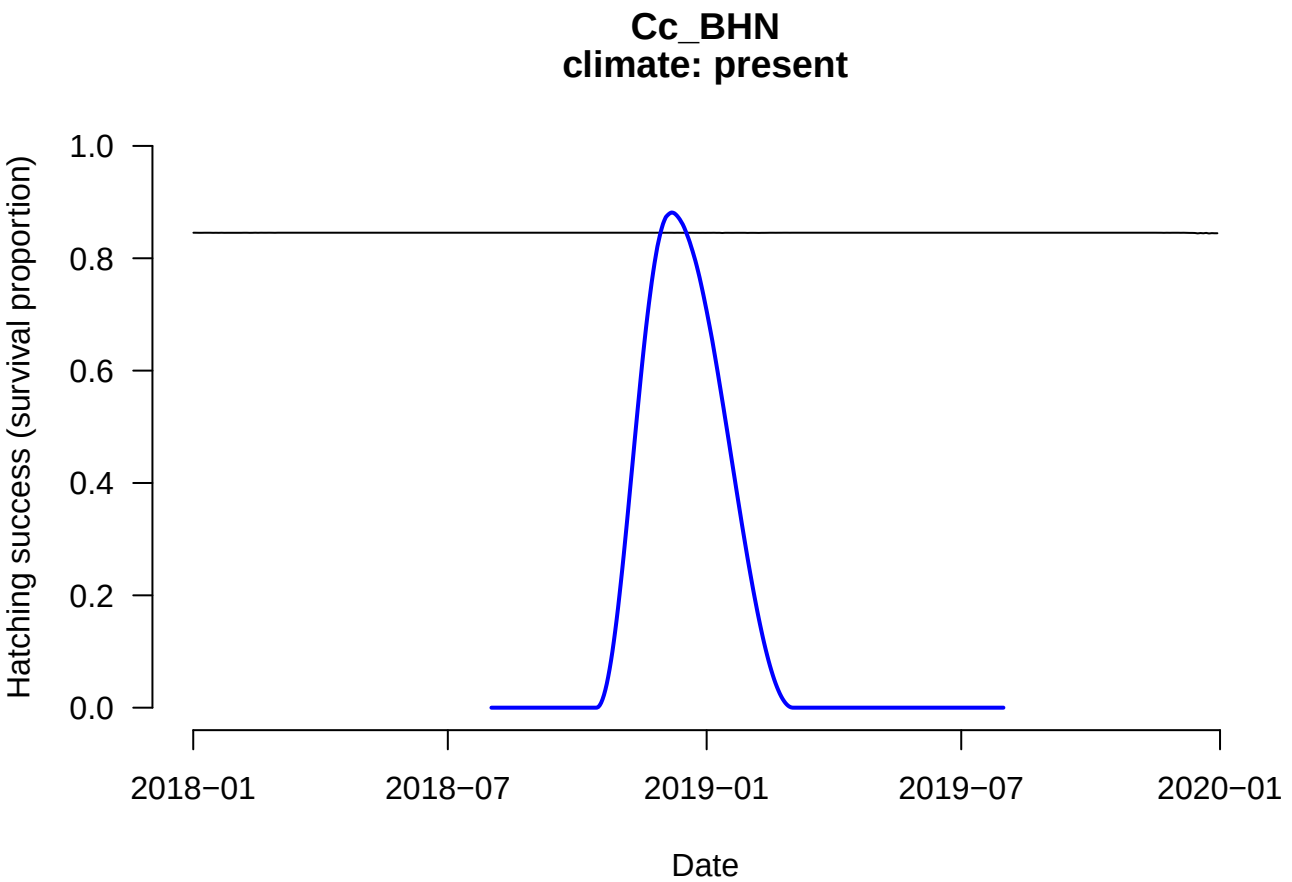

Cc_RIJ
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

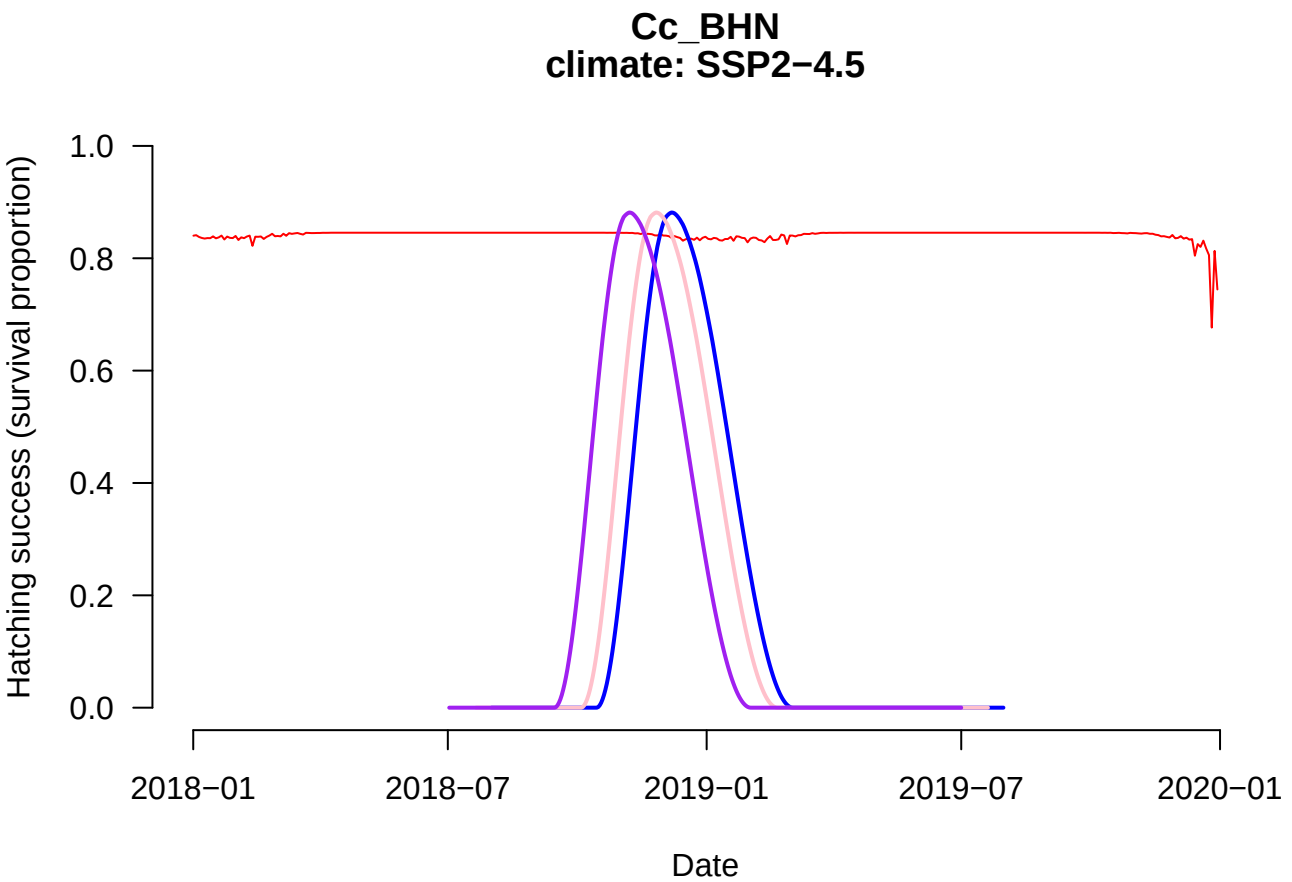

Cc_RIJ
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

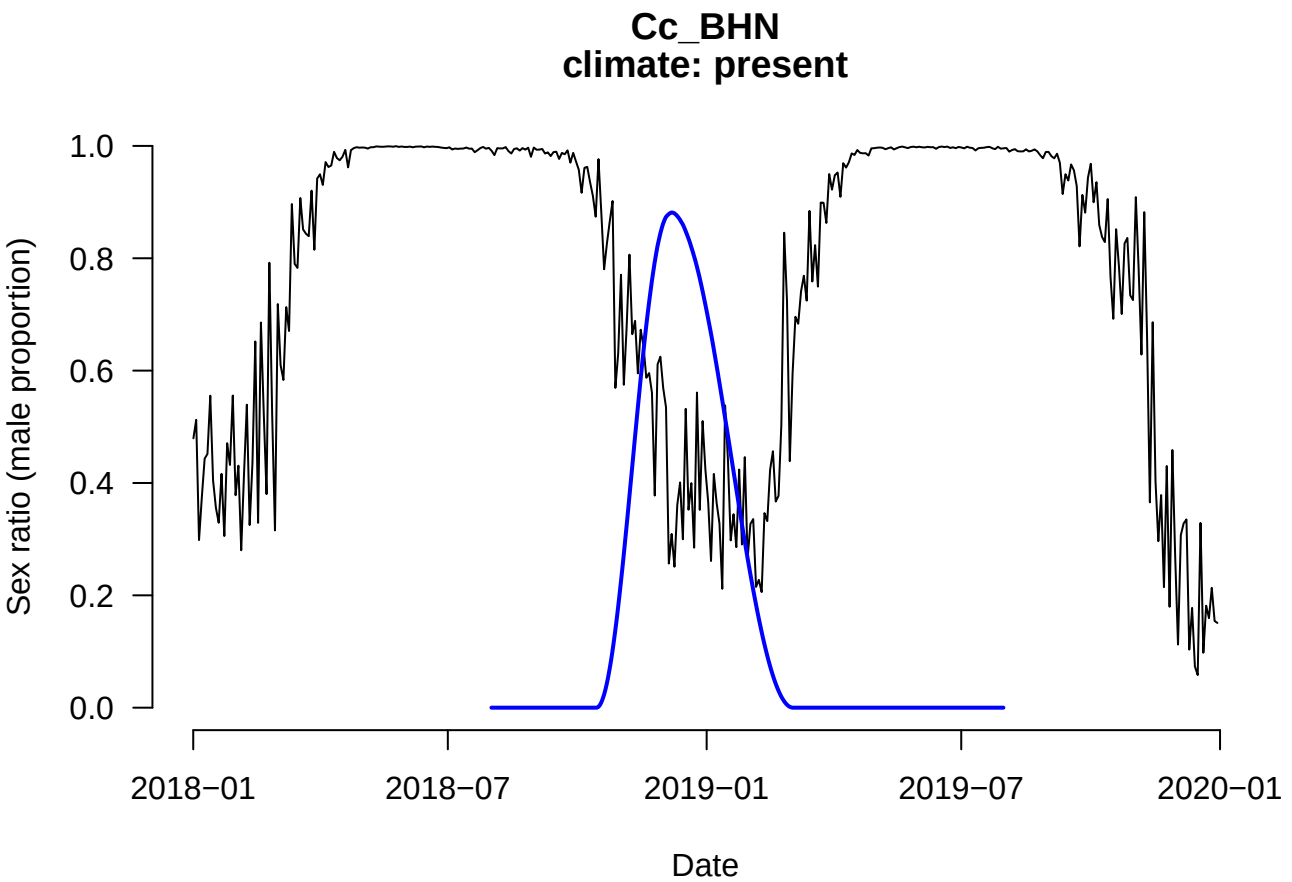

Cc_RIJ
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

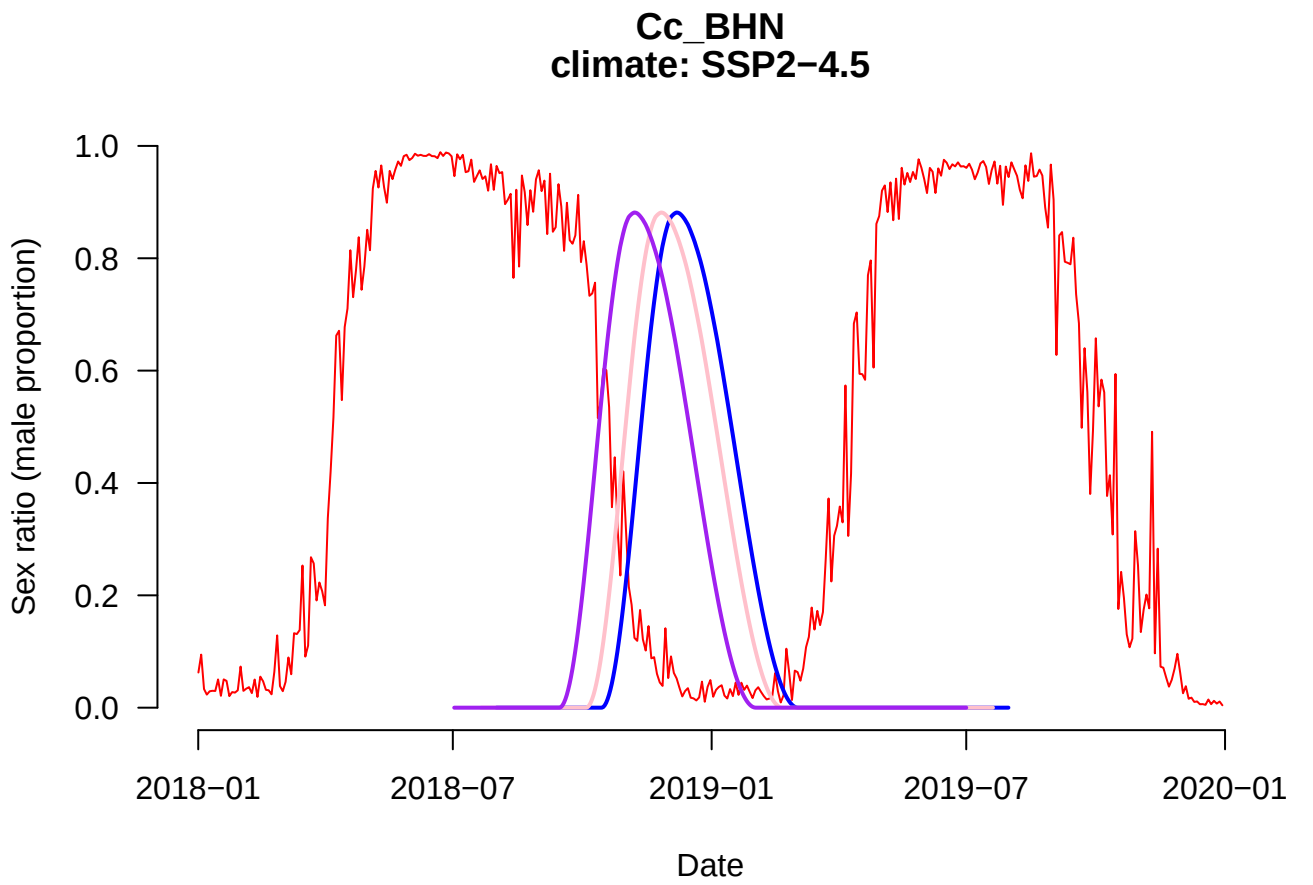

Cc_RIJ
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

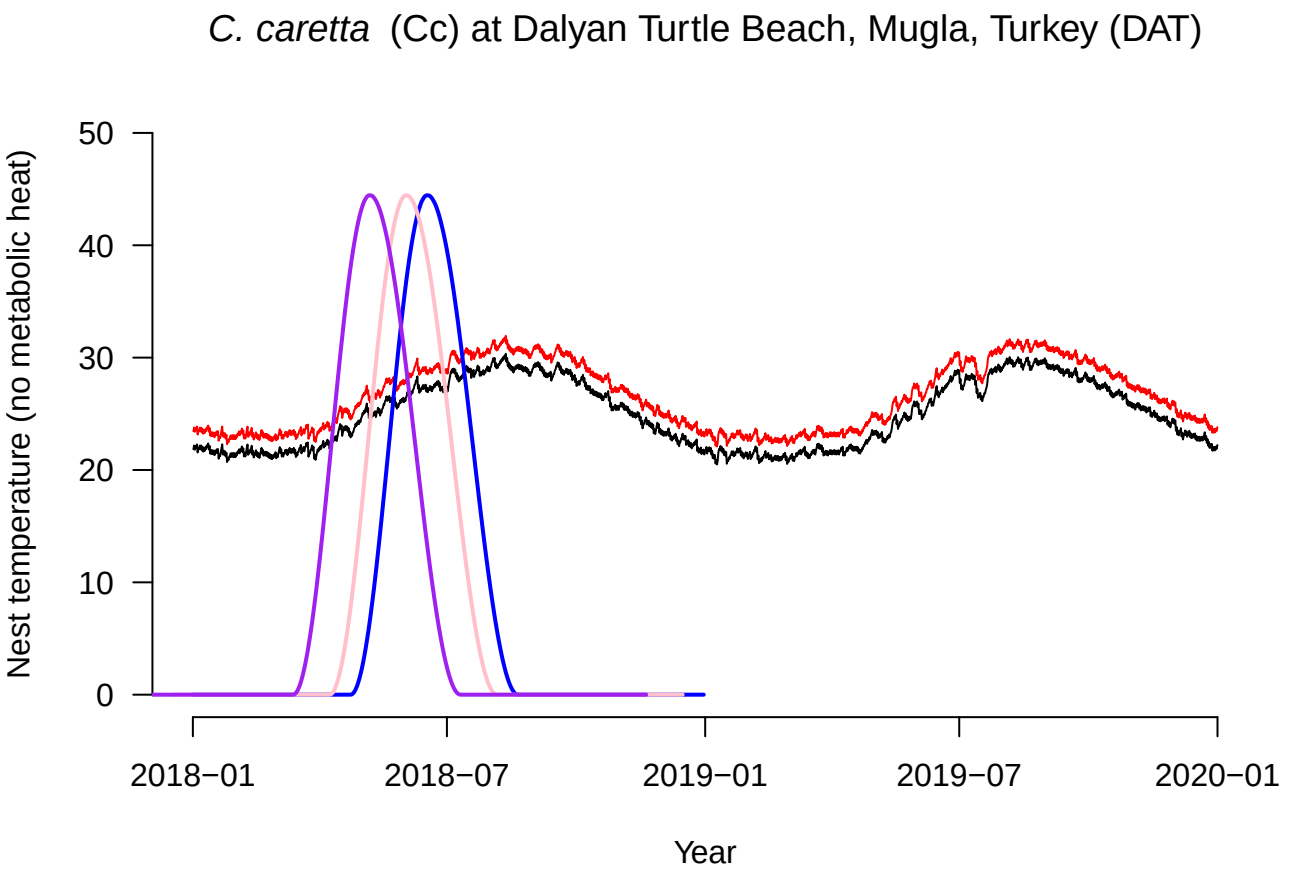

C. caretta (Cc) at Bhanga Nek, KwaZulu−Natal, South Africa (BHN)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

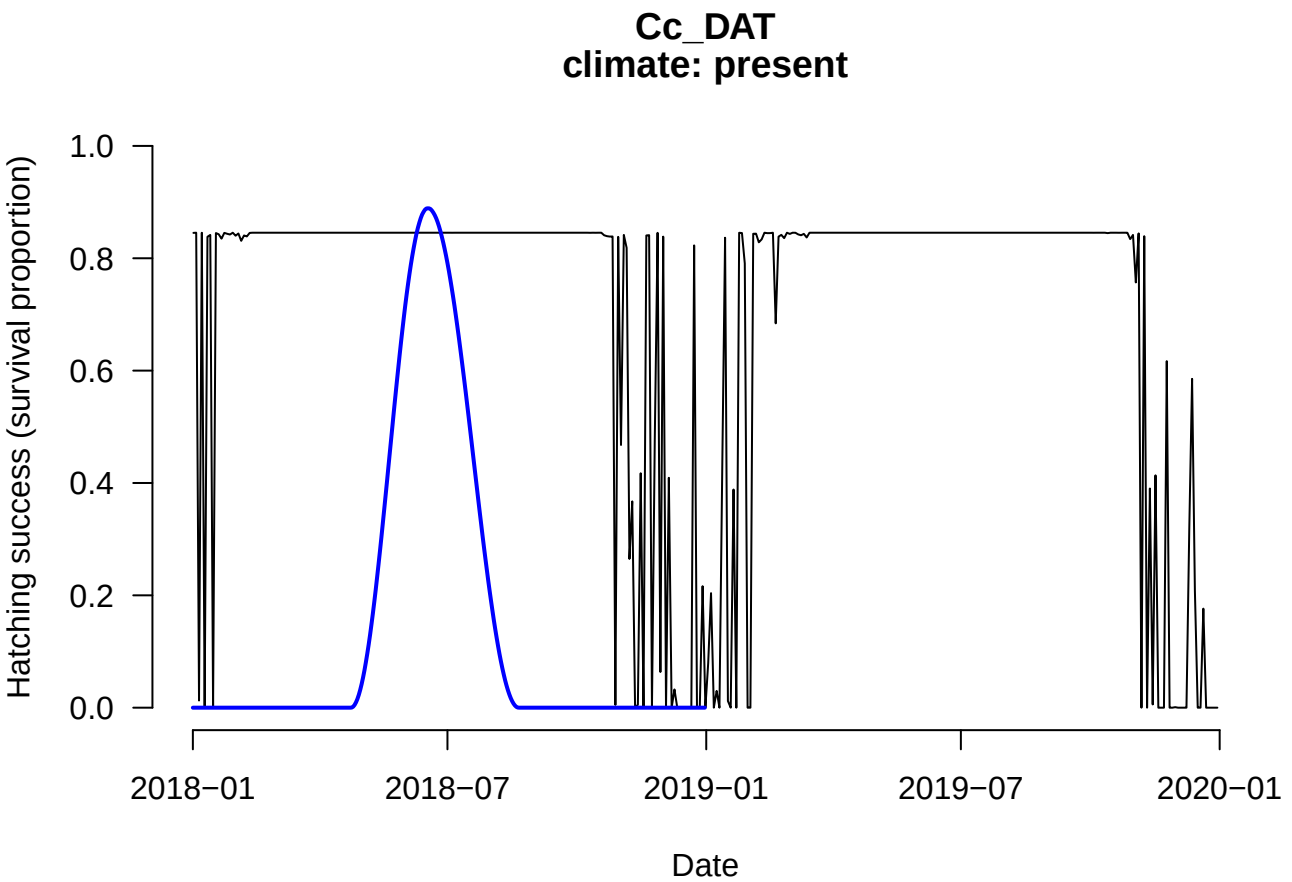

Cc_BHN
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

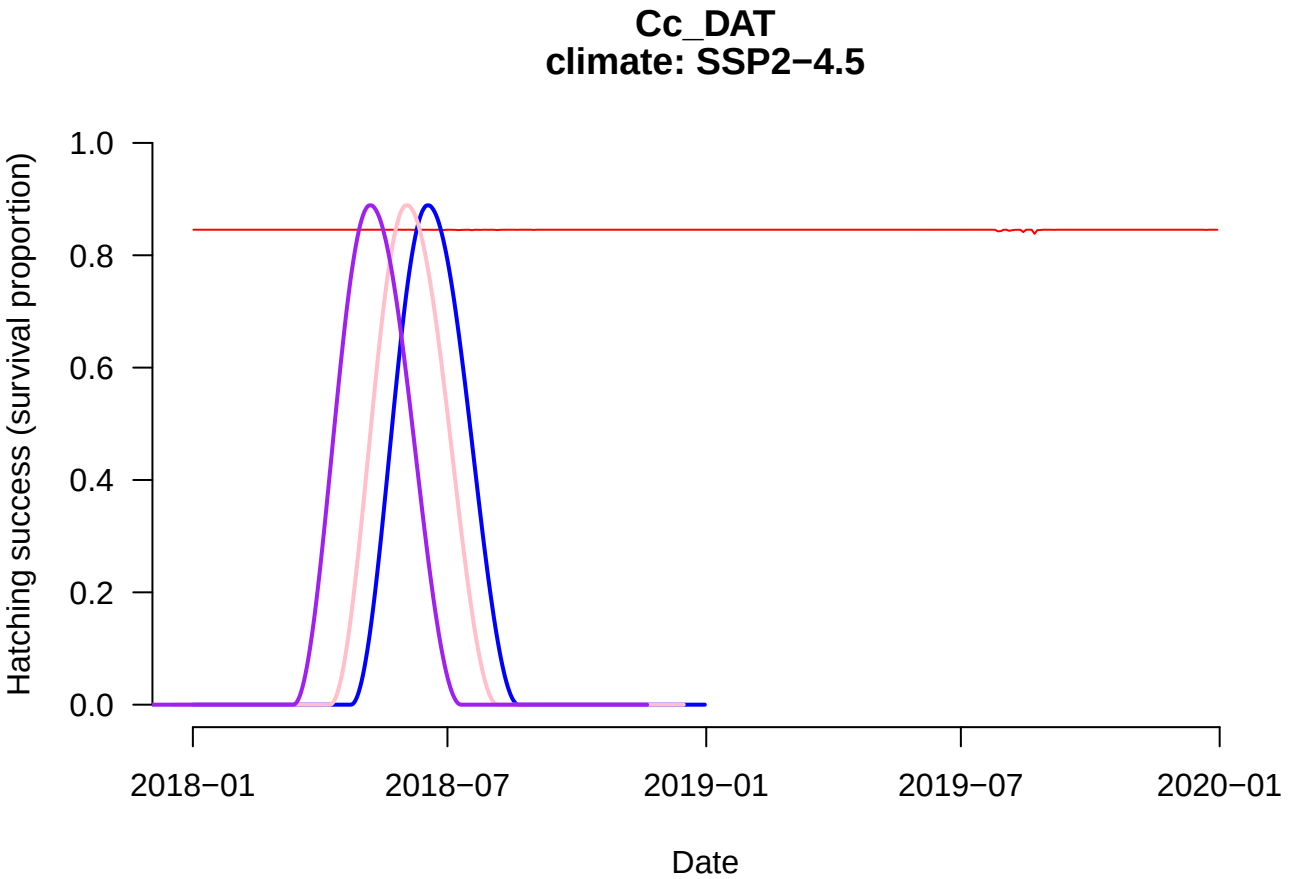

Cc_BHN
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

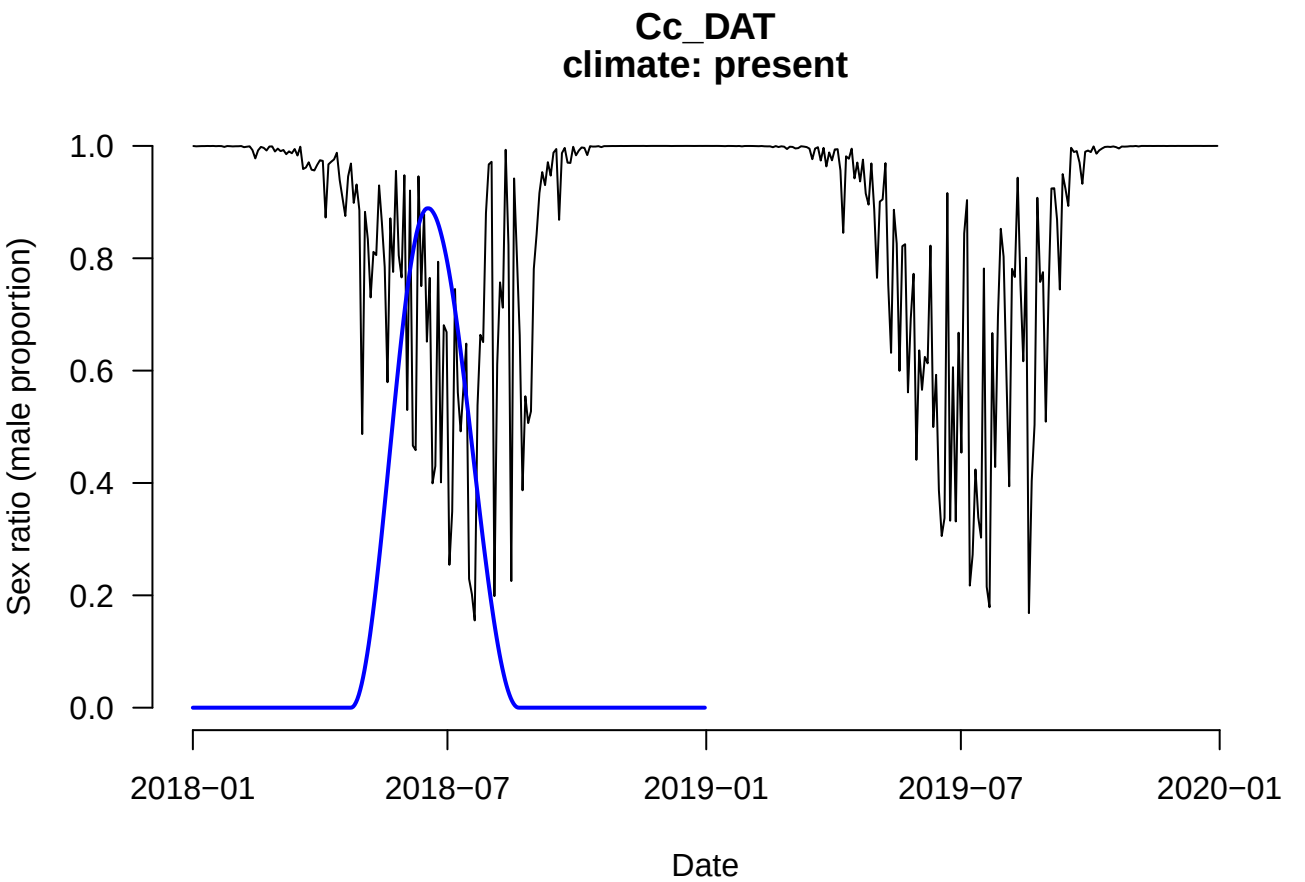

Cc_BHN
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

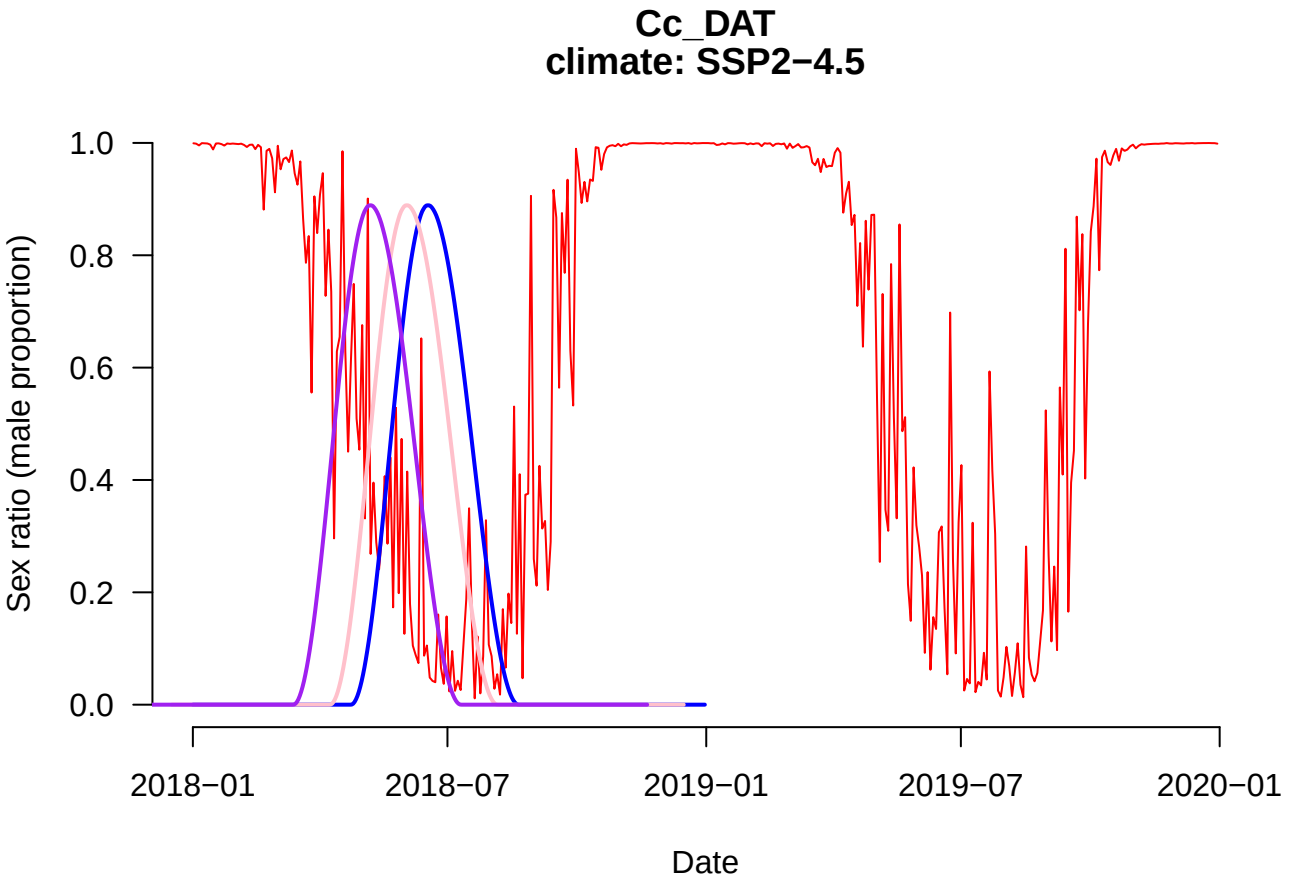

Cc_BHN
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

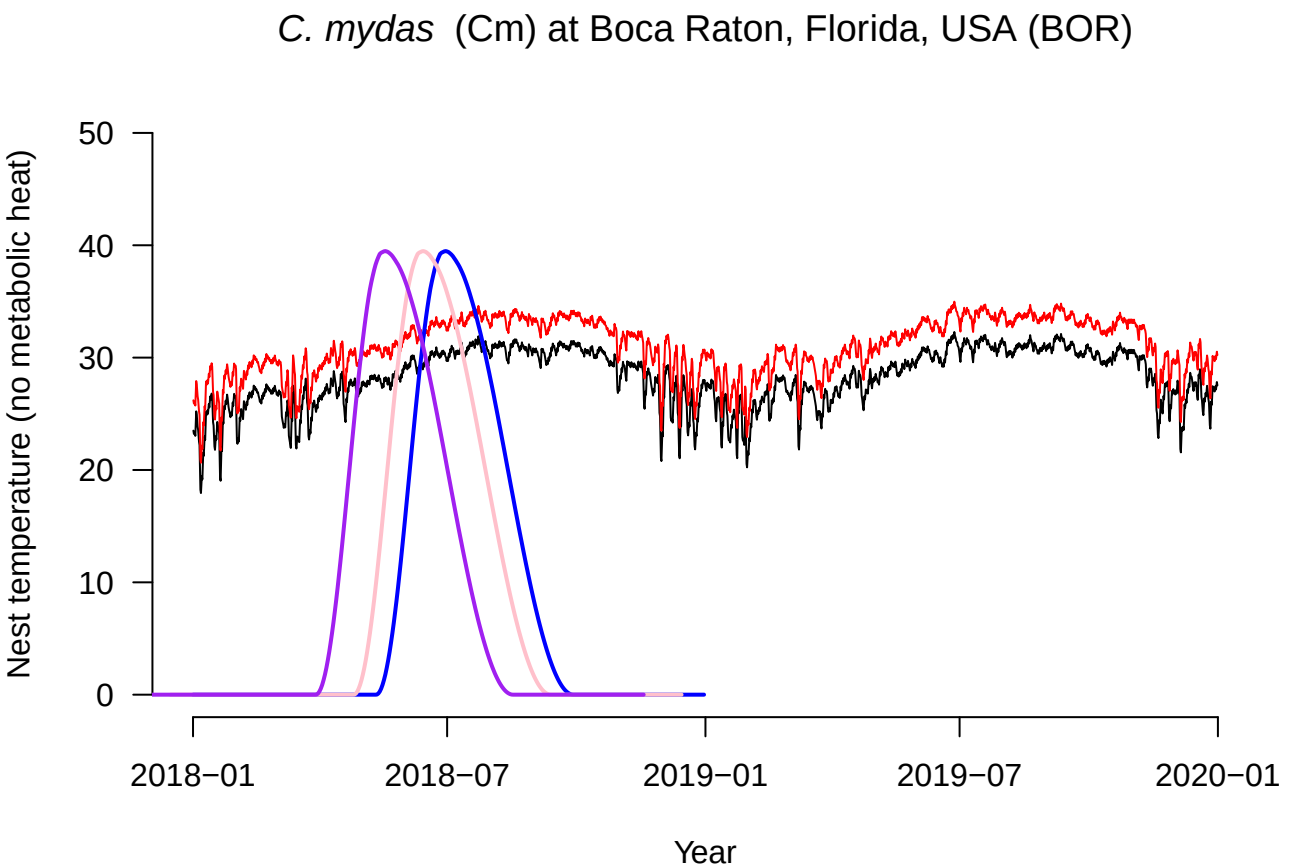

C. caretta (Cc) at Dalyan Turtle Beach, Mugla, Turkey (DAT)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

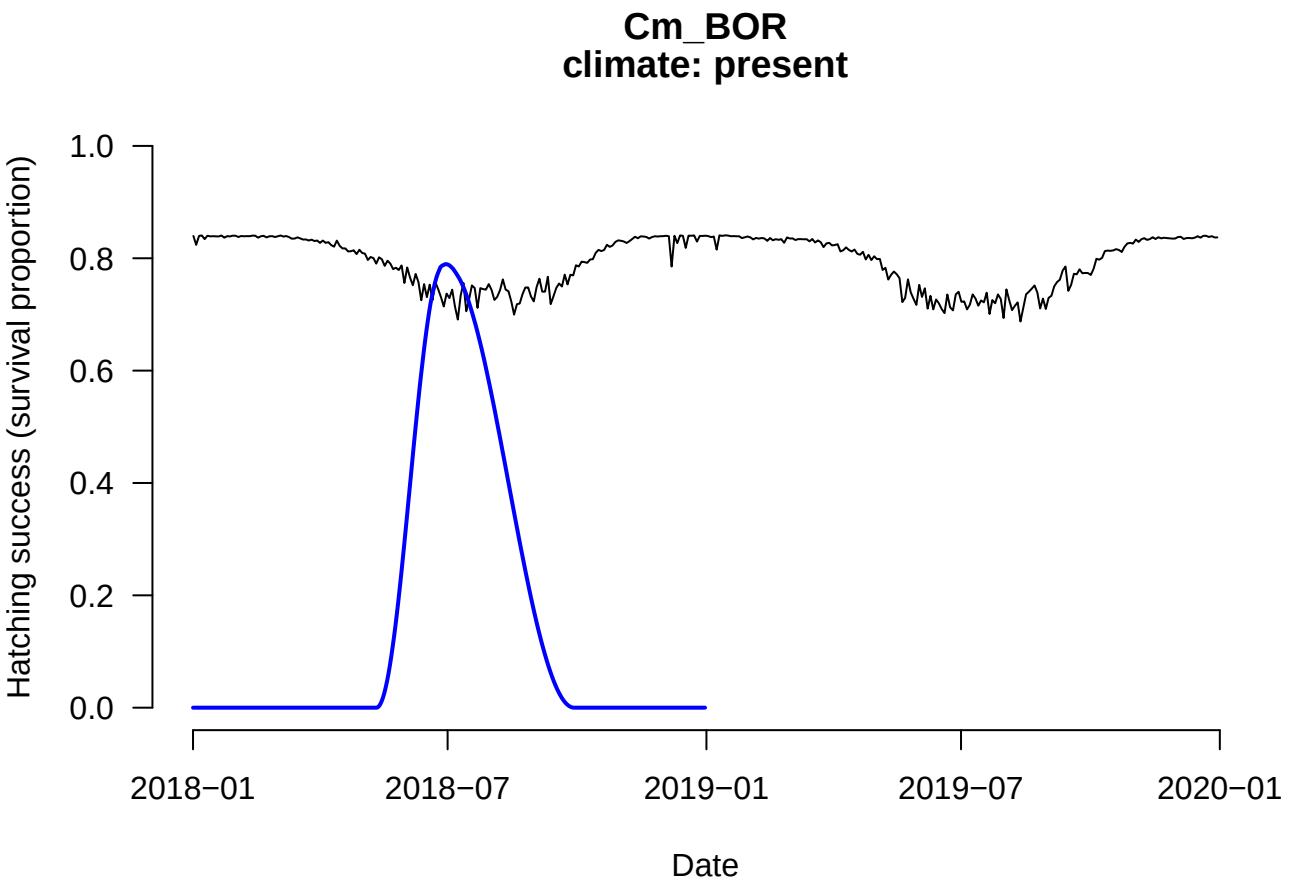

Cc_DAT
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

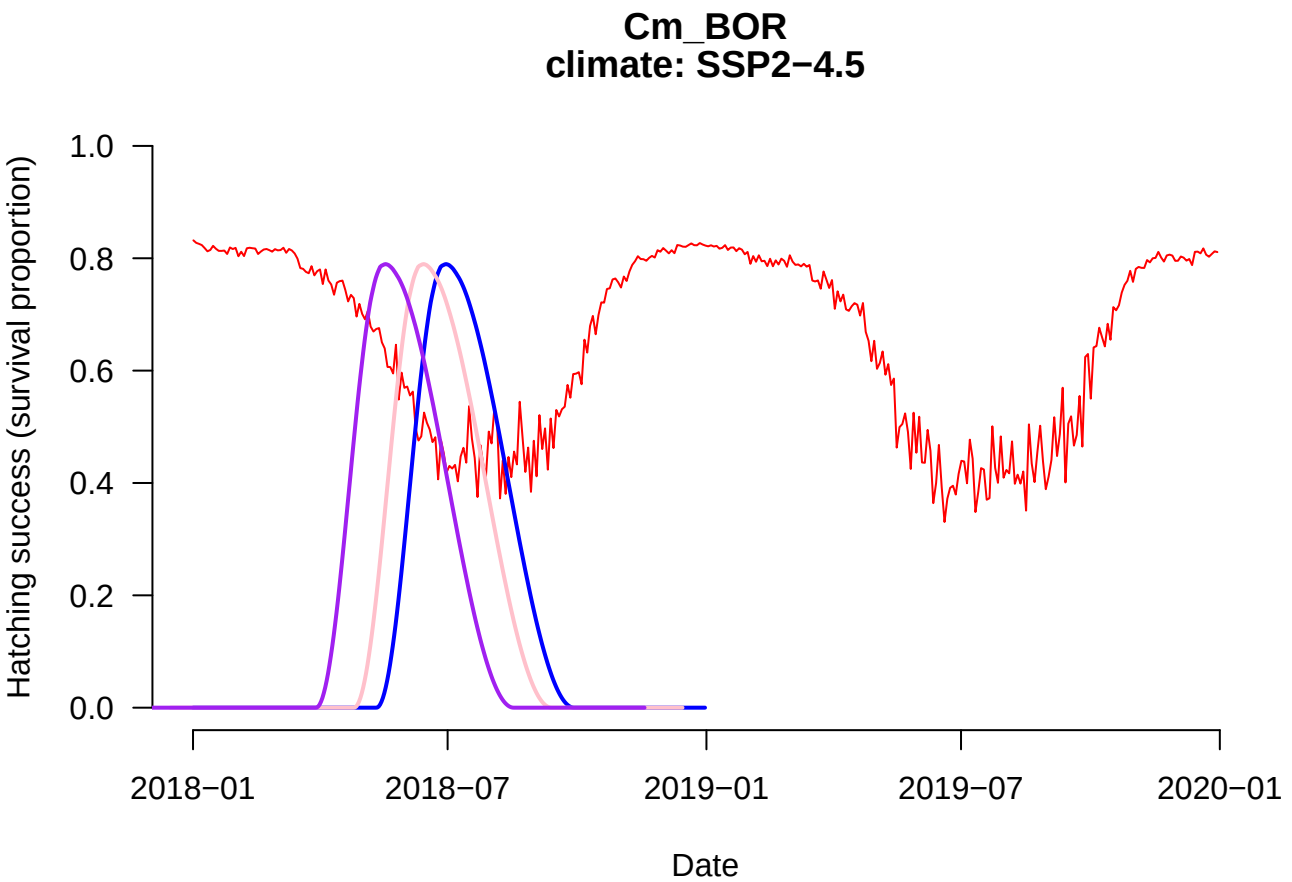

Cc_DAT
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

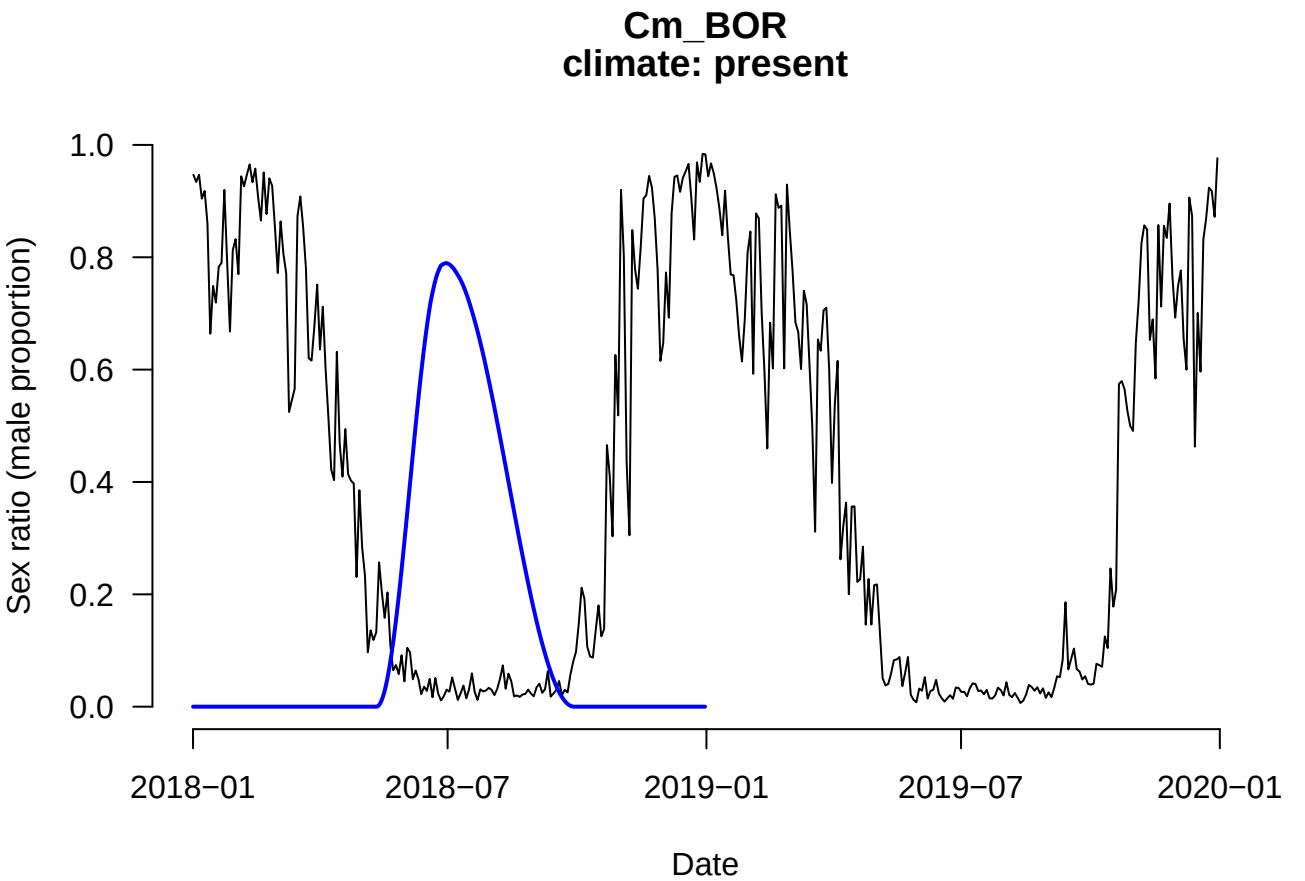

Cc_DAT
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

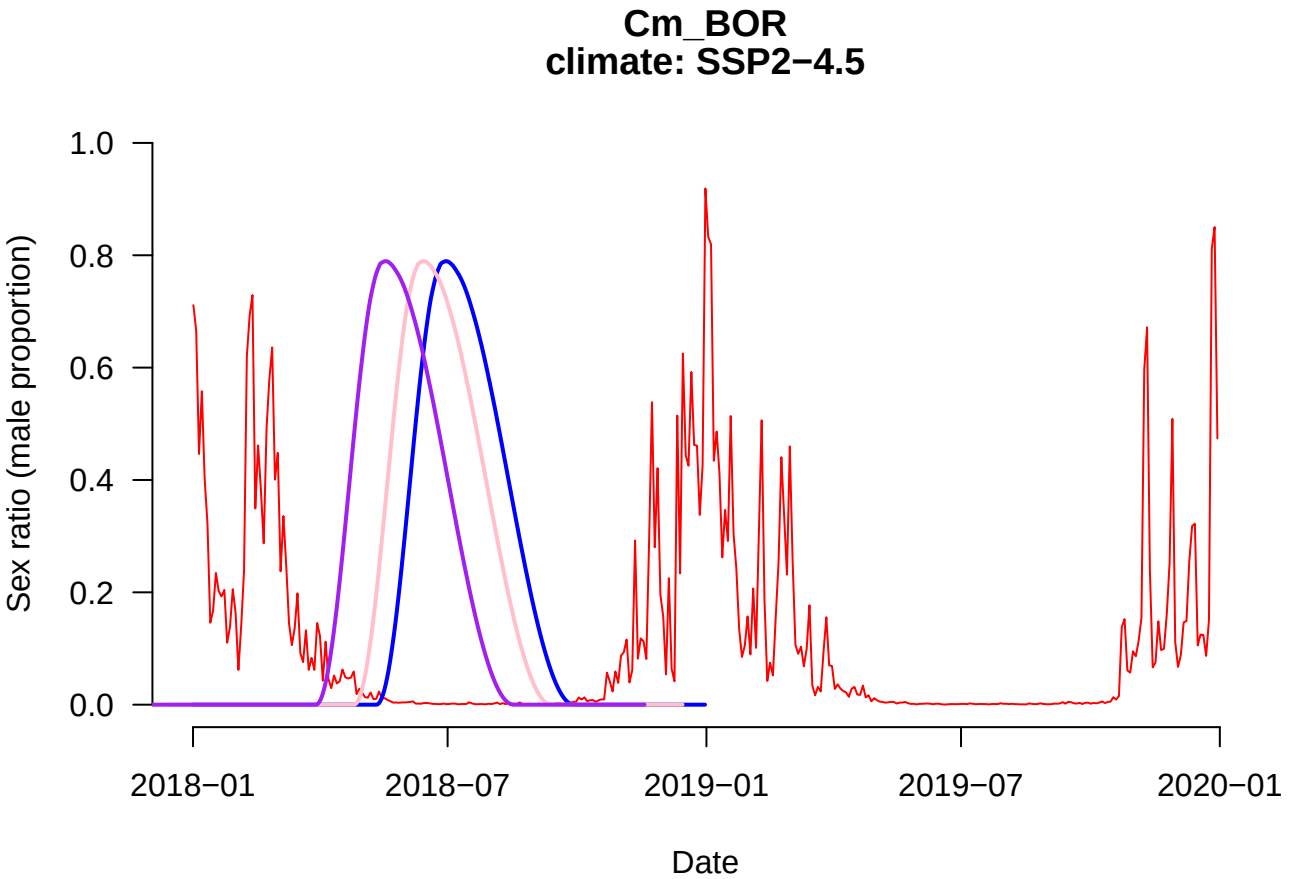

Cc_DAT
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

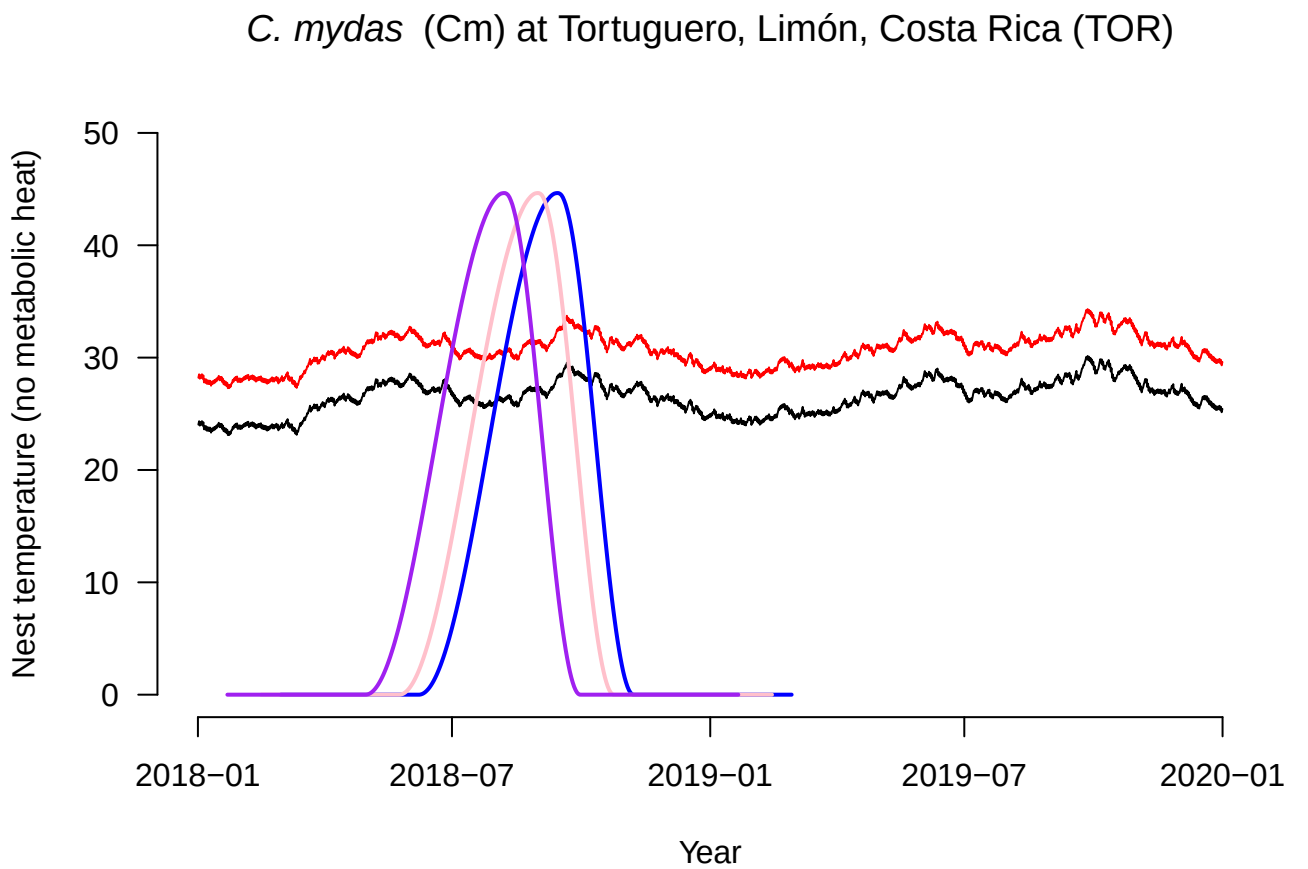

C. mydas (Cm) at Boca Raton, Florida, USA (BOR)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

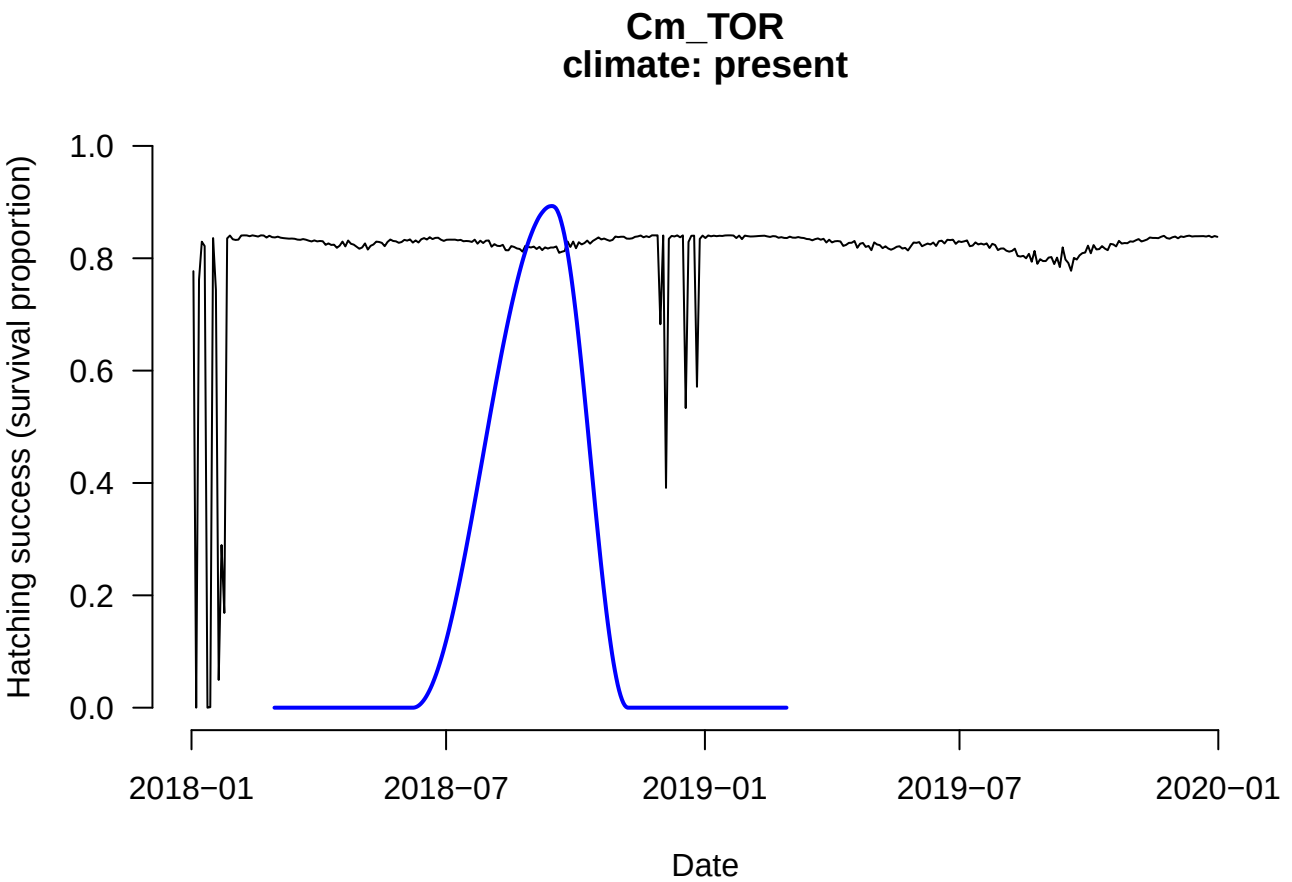

Cm_BOR
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

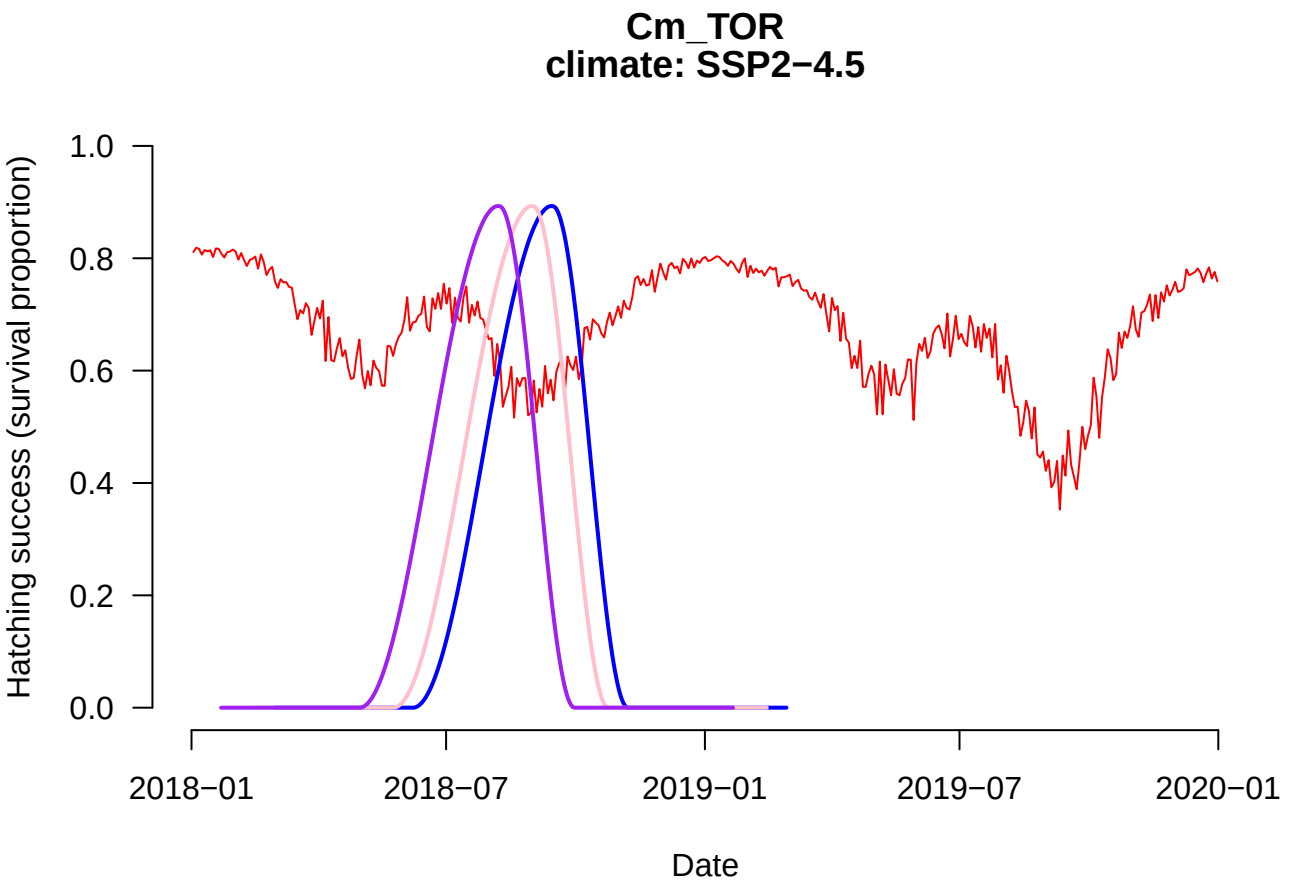

Cm_BOR
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

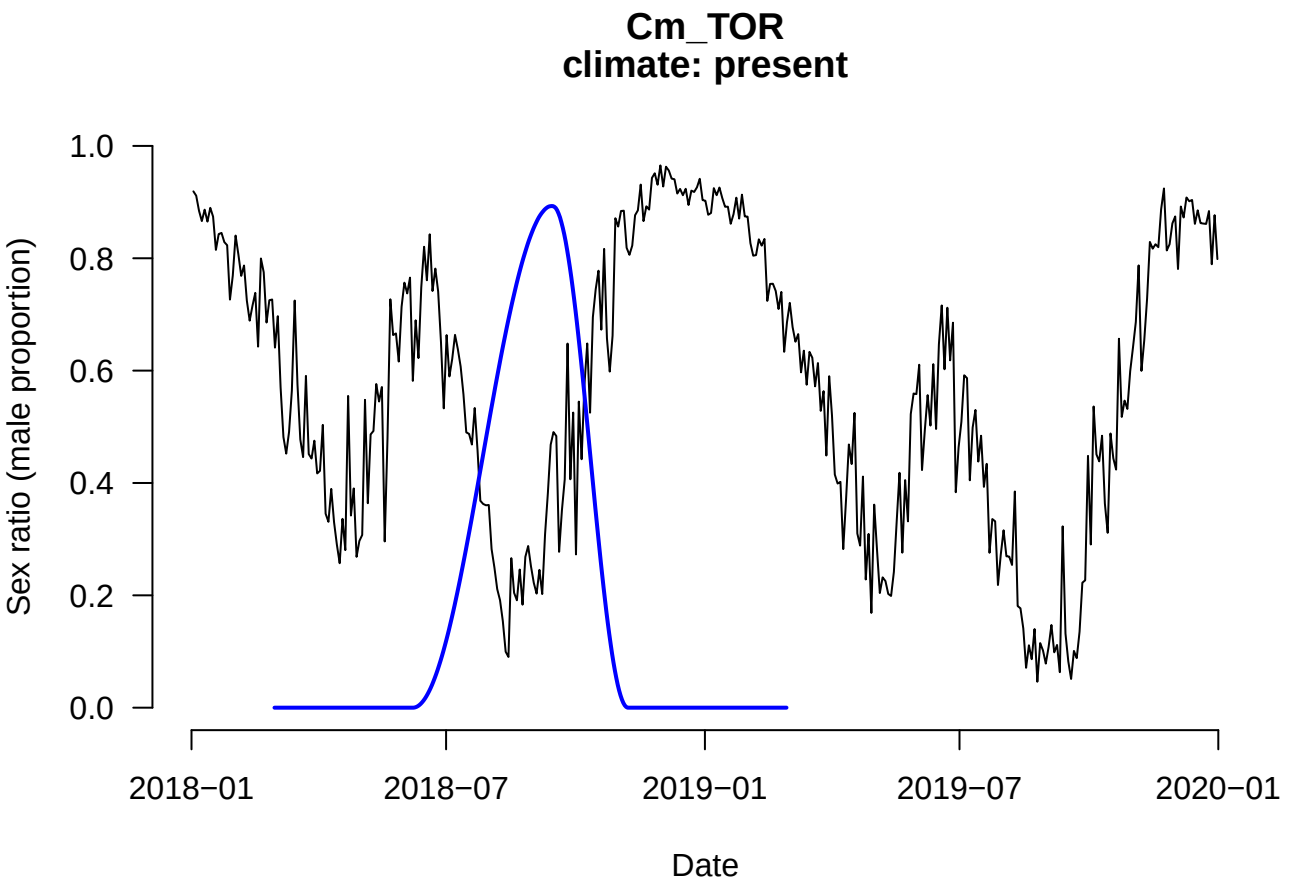

Cm_BOR
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

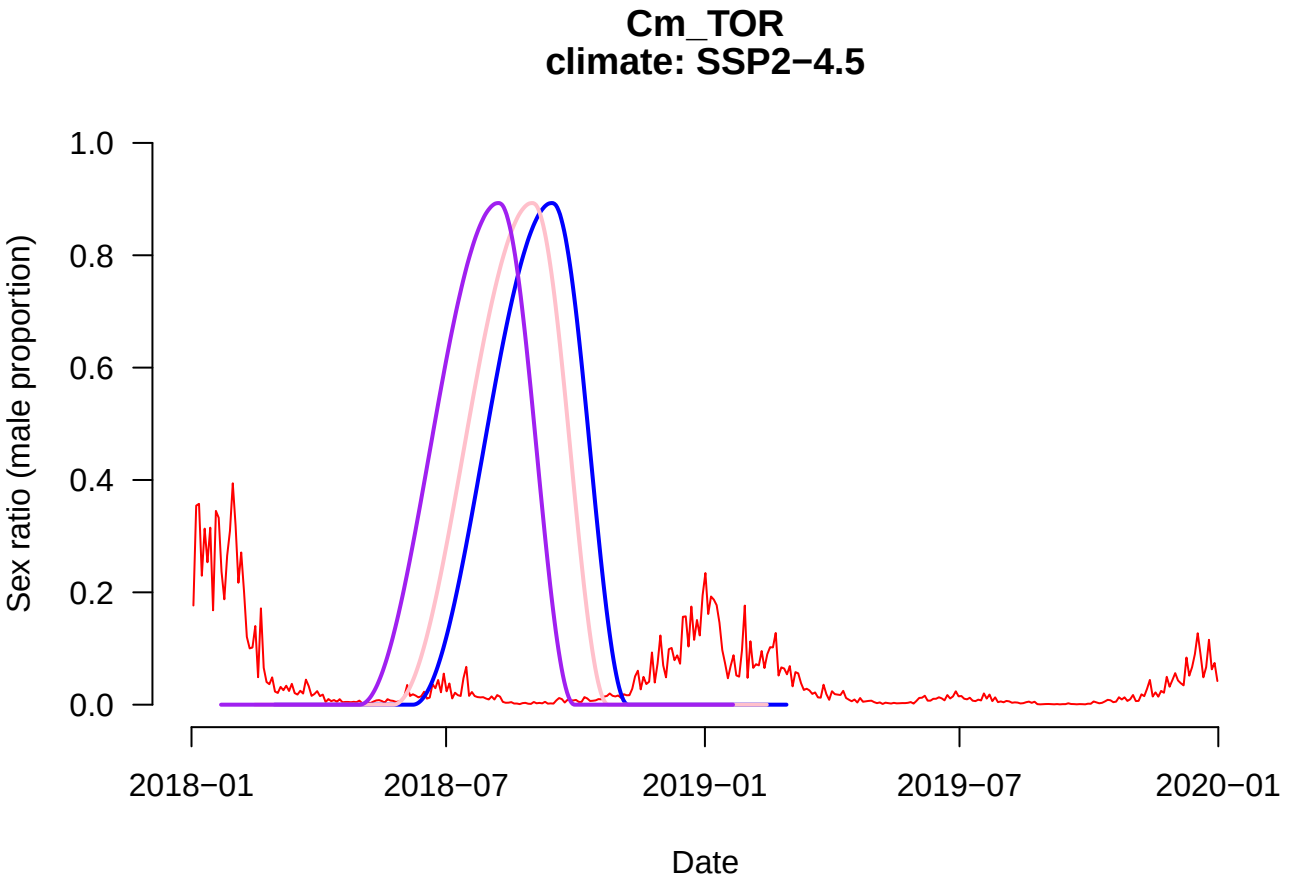

Cm_BOR
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

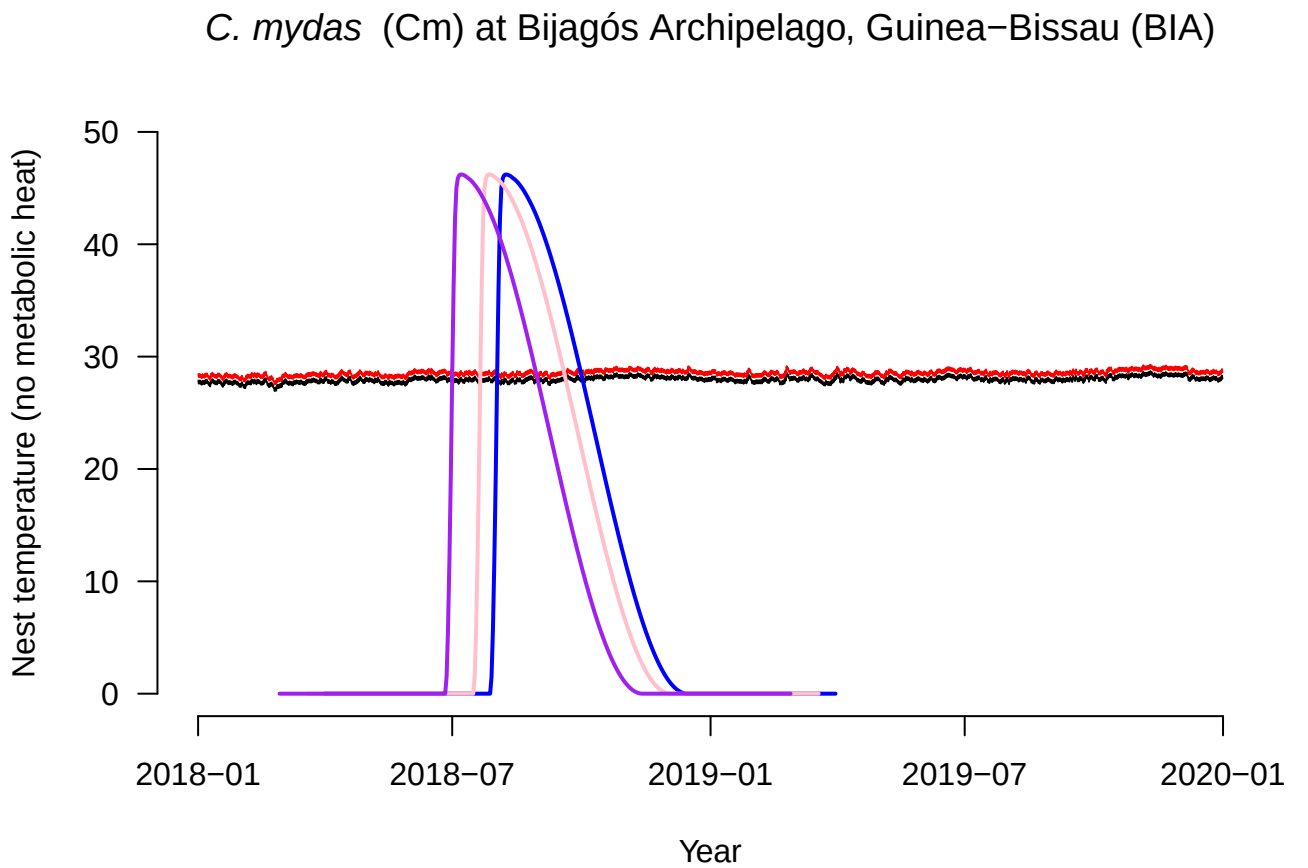

C. mydas (Cm) at Tortuguero, Limón, Costa Rica (TOR)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

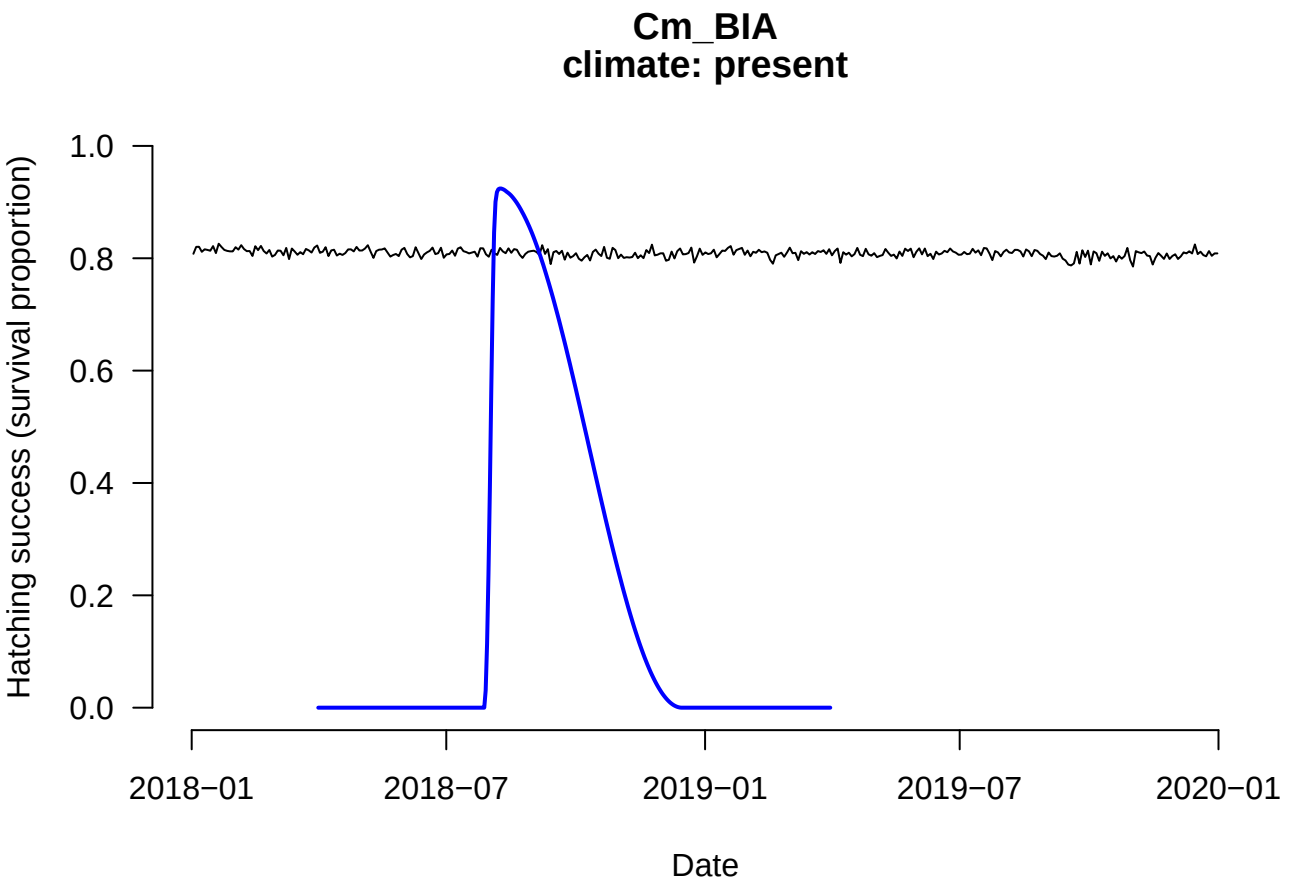

Cm_TOR
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

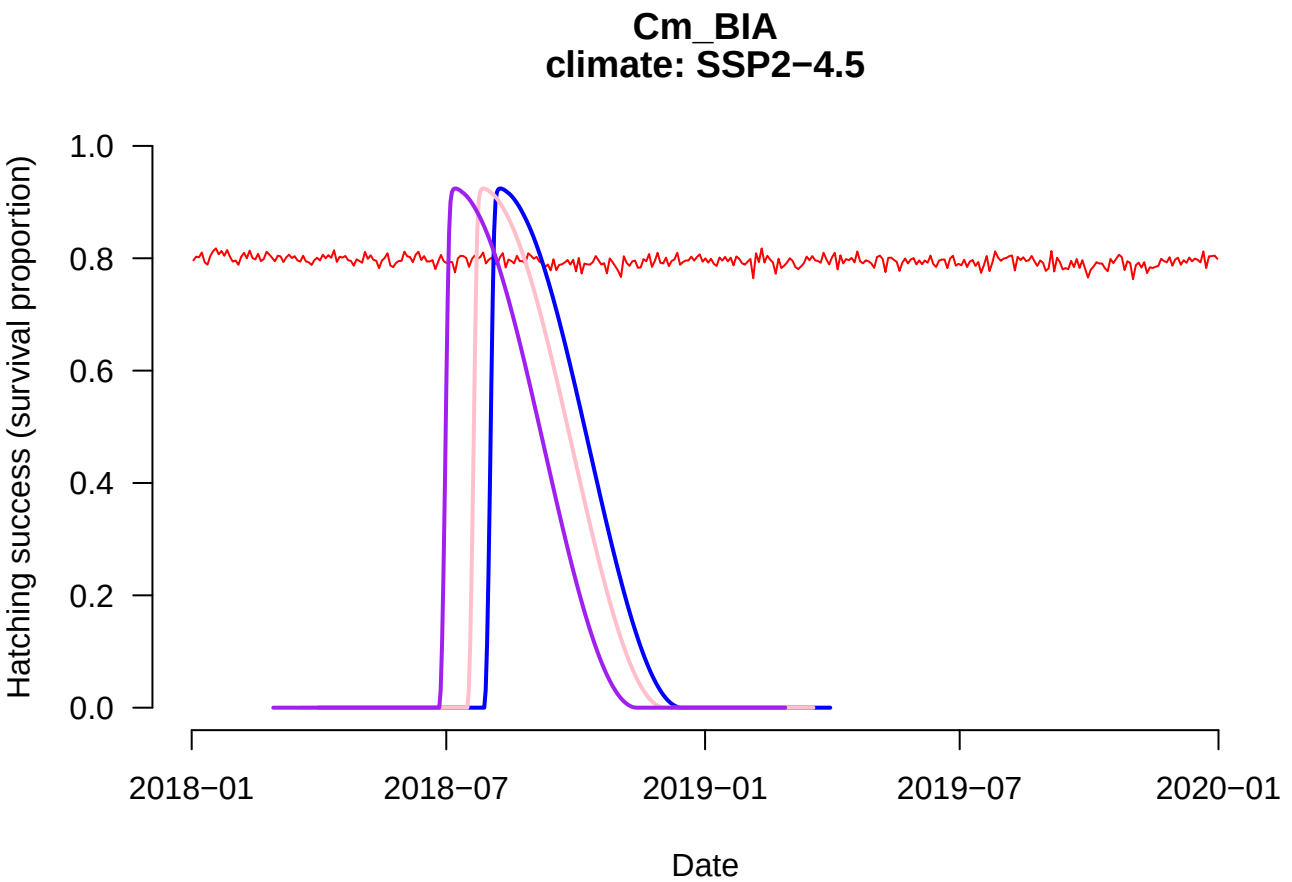

Cm_TOR
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

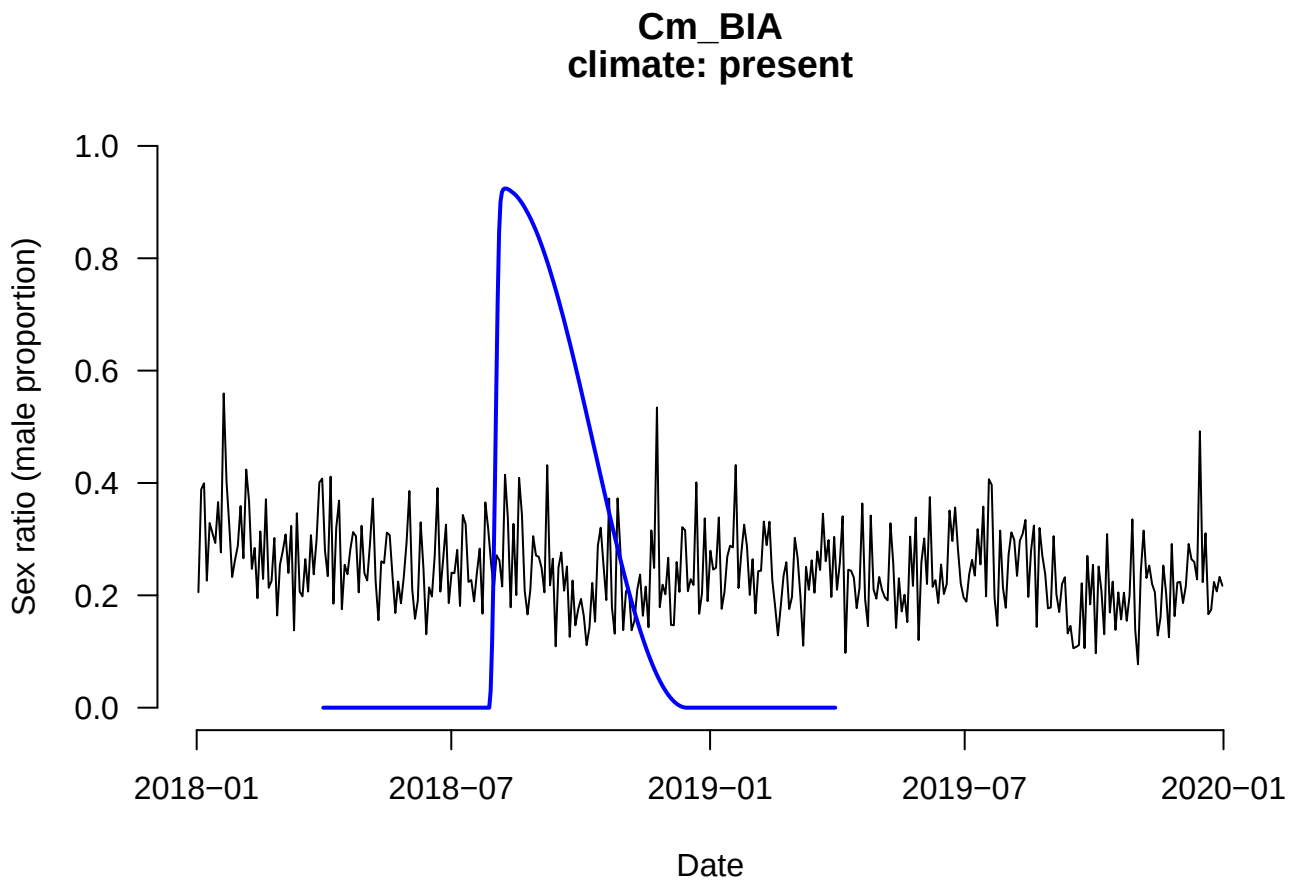

Cm_TOR
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

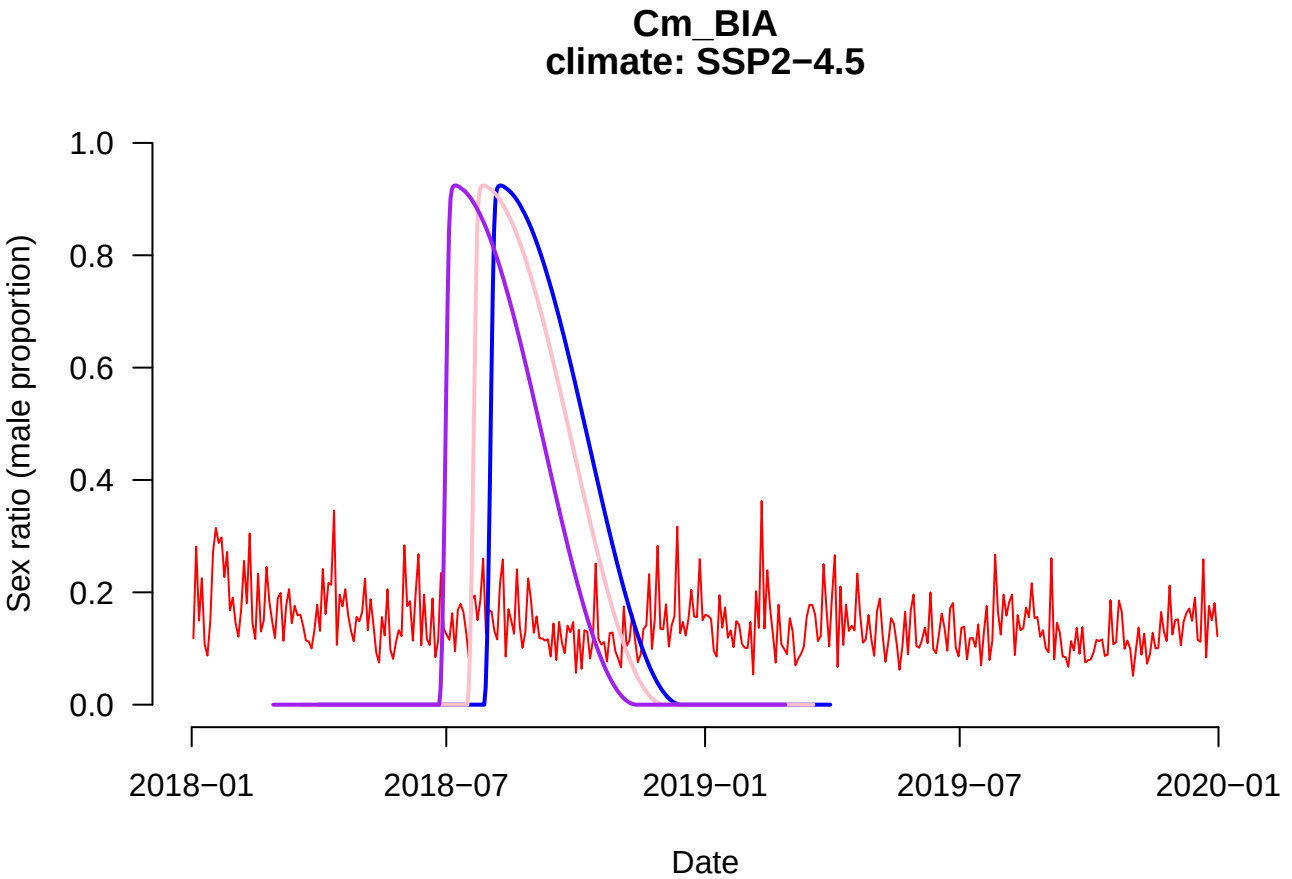

Cm_TOR
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

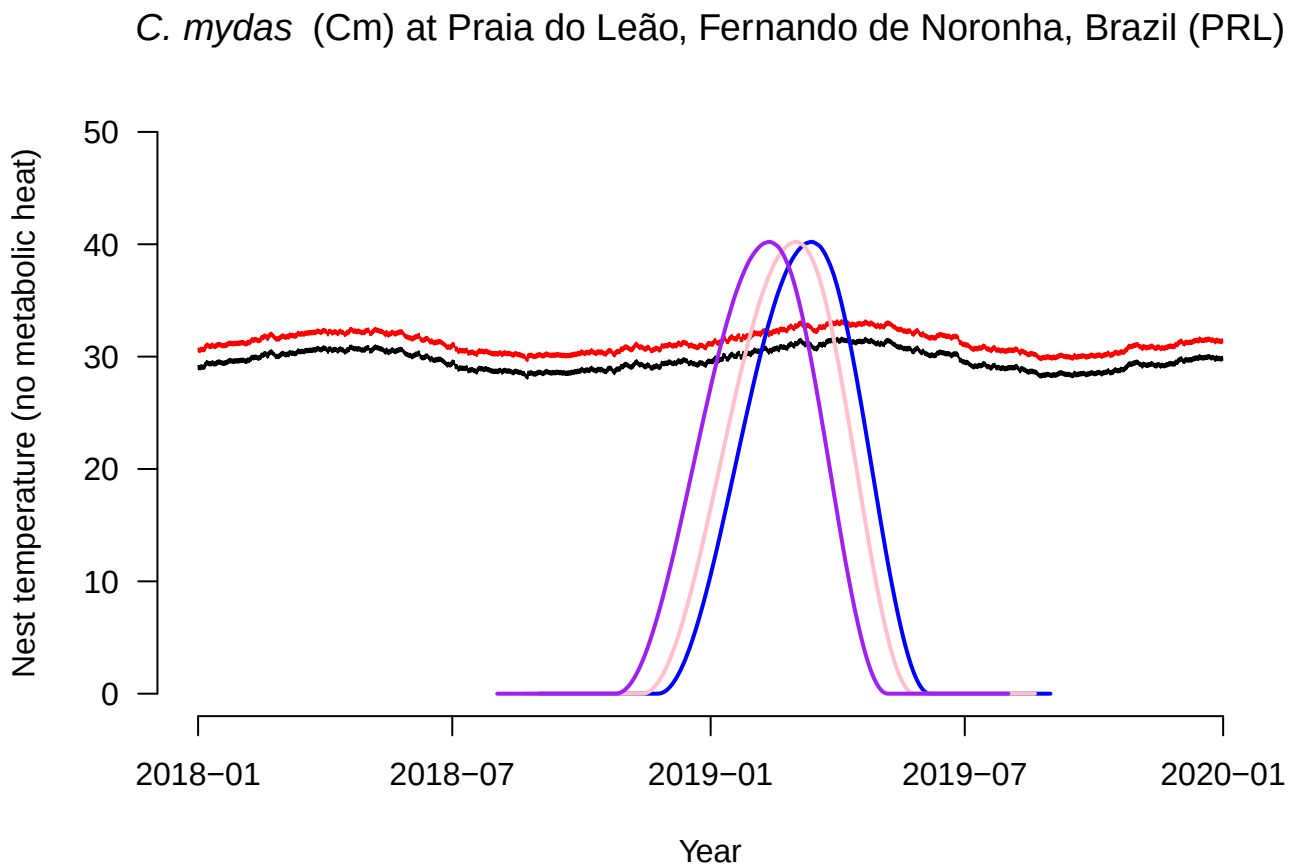

C. mydas (Cm) at Bijagós Archipelago, Guinea−Bissau (BIA)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

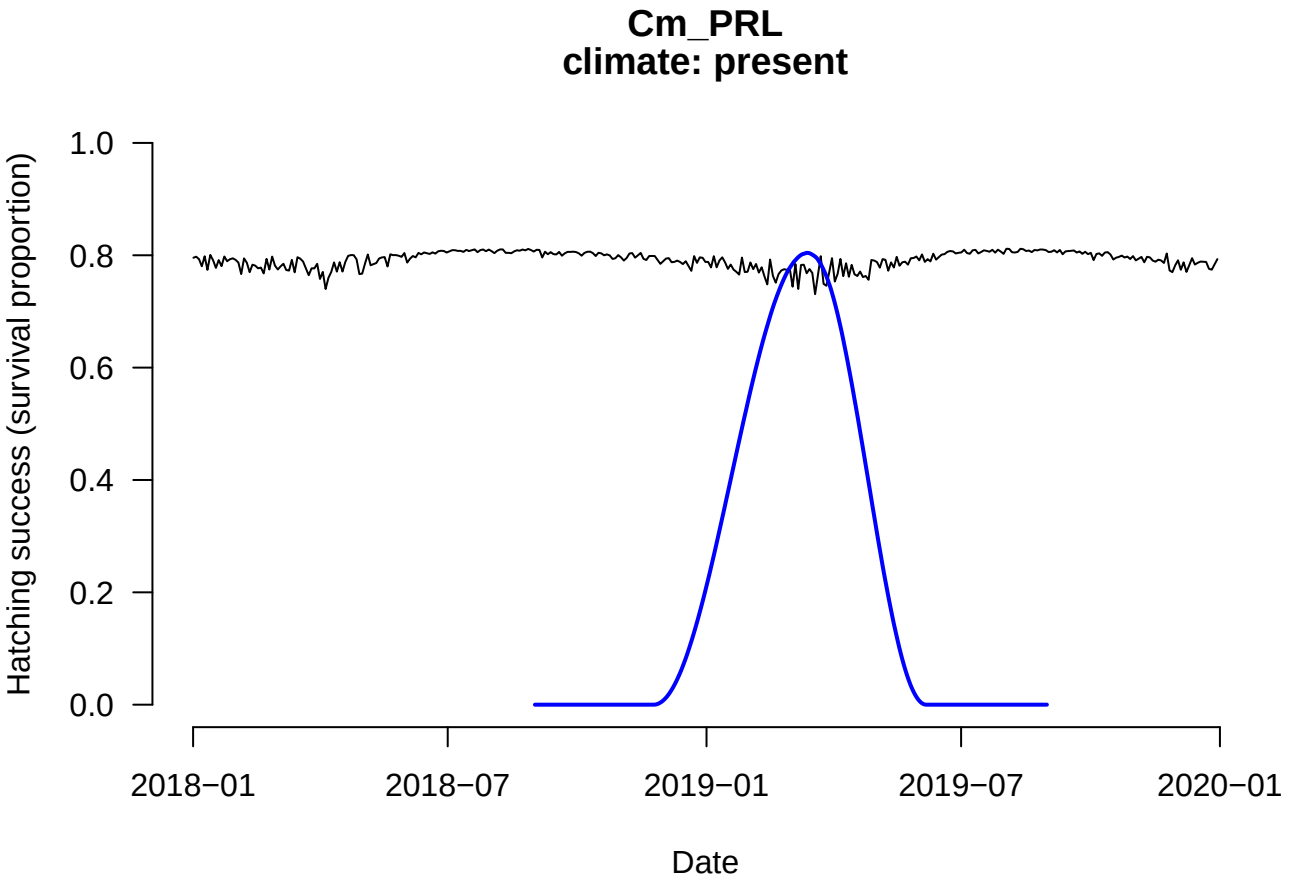

Cm_BIA
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

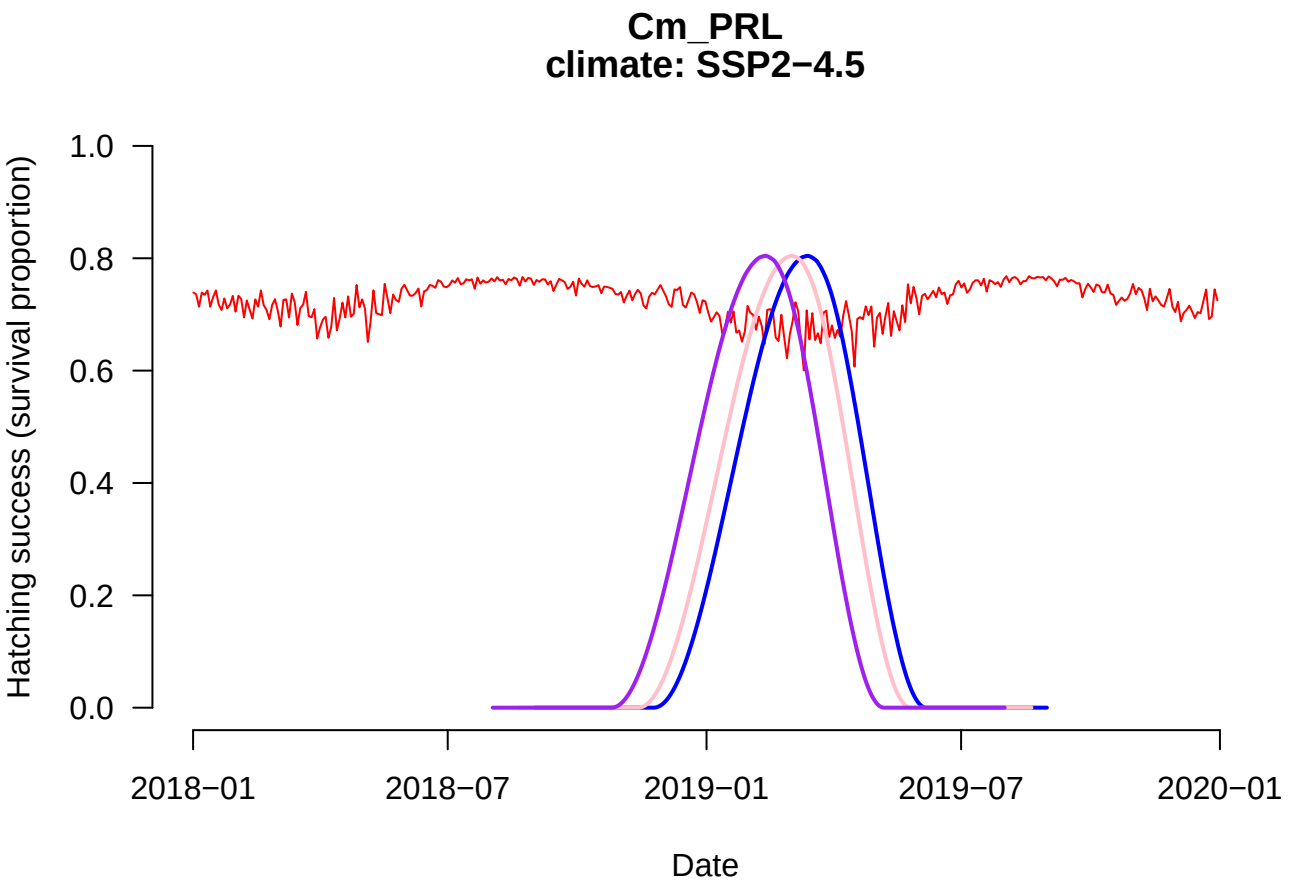

Cm_BIA
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

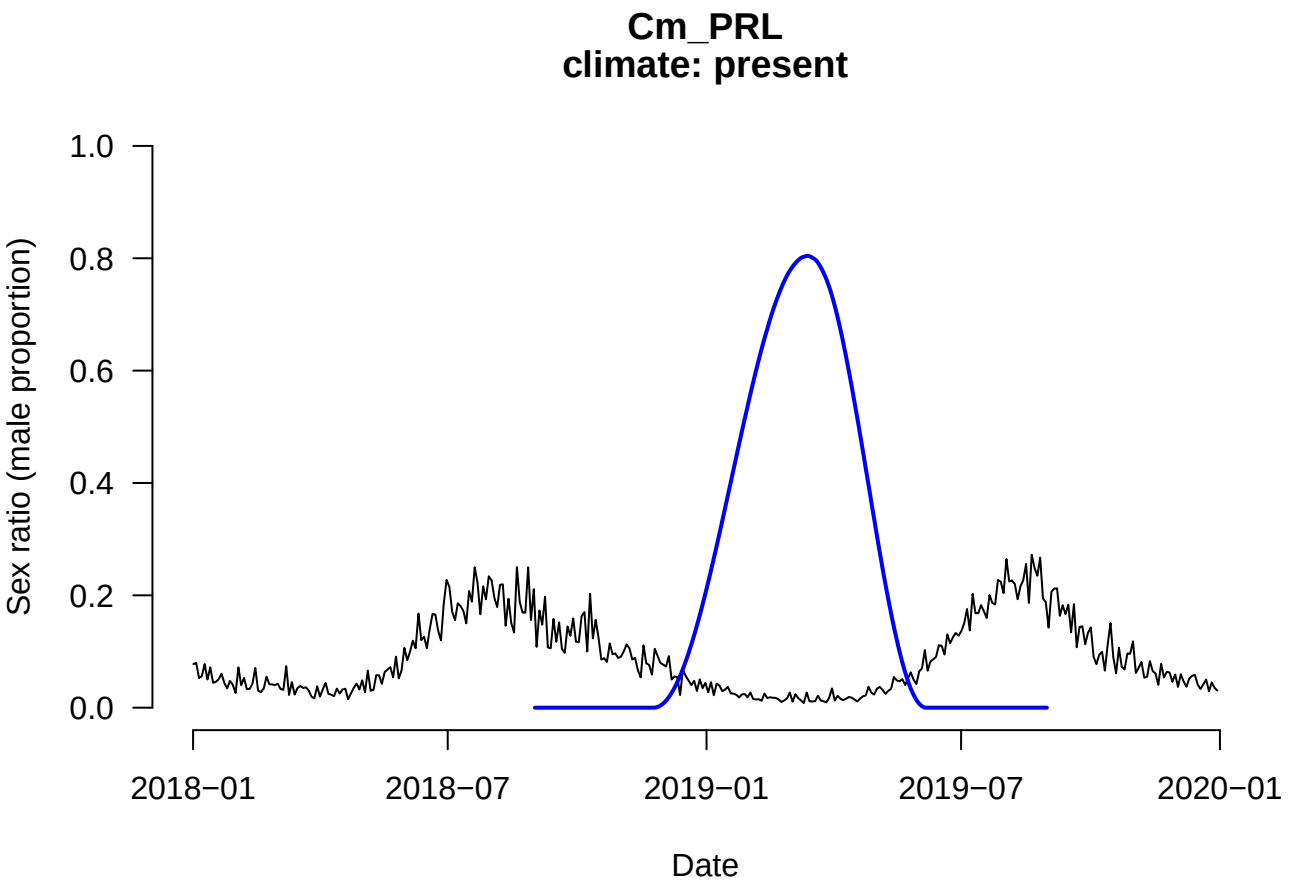

Cm_BIA
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

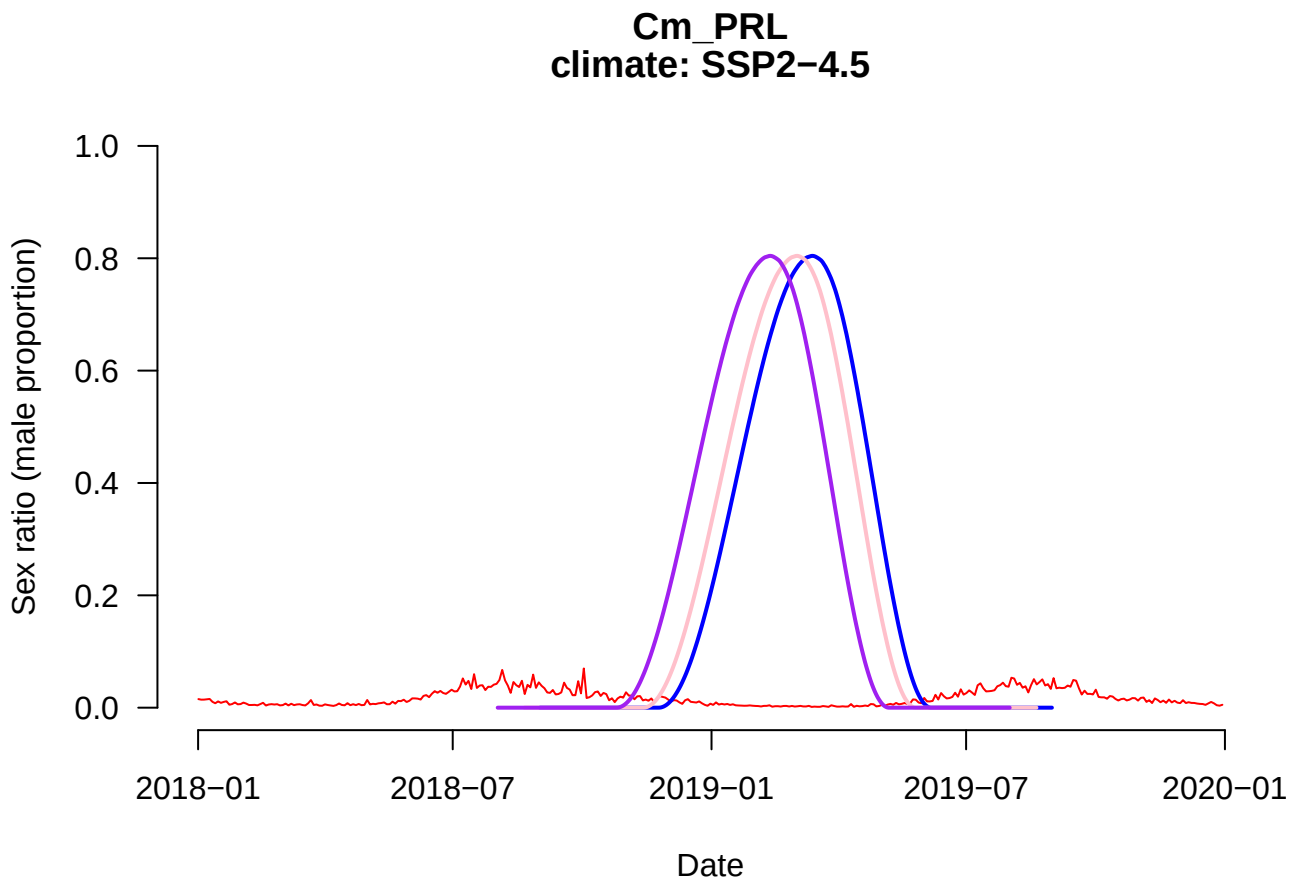

Cm_BIA
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

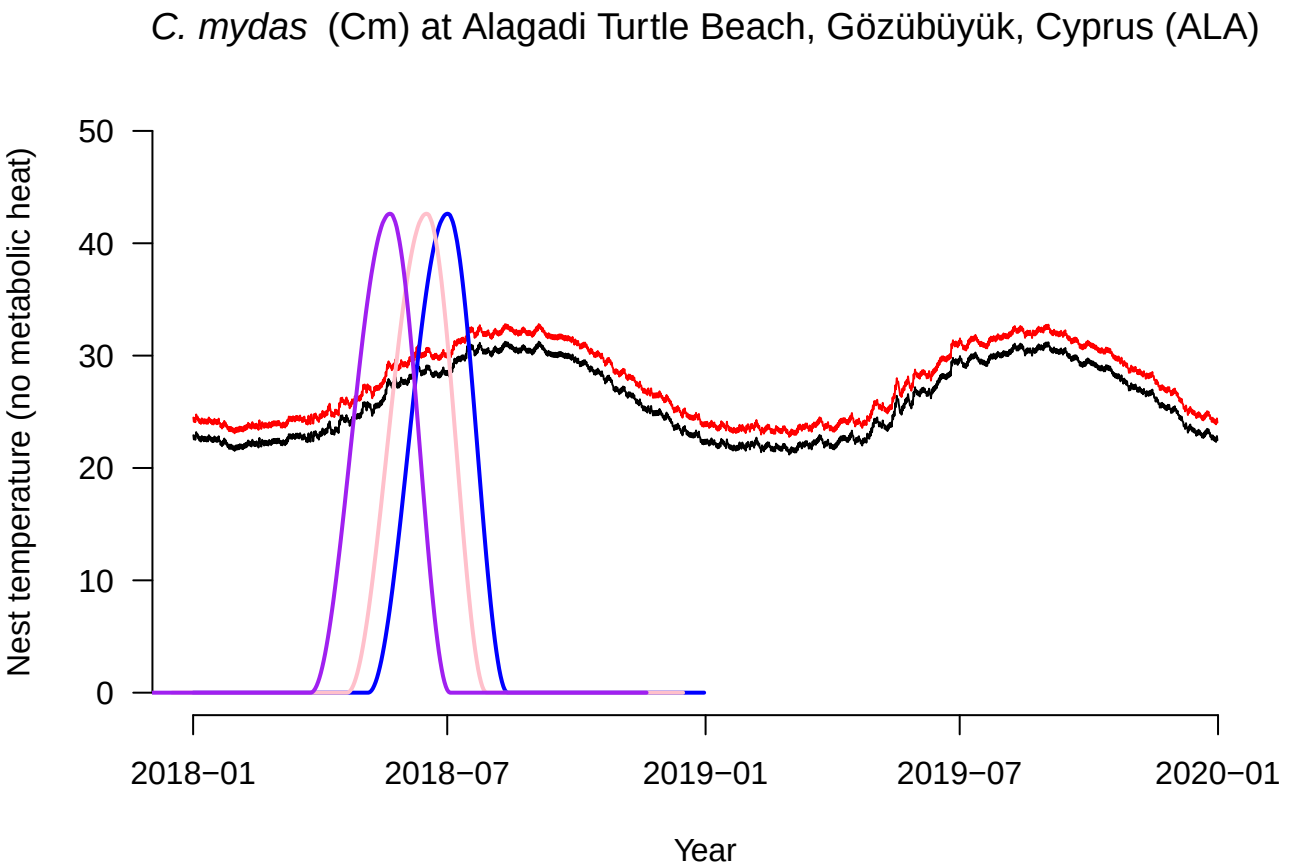

C. mydas (Cm) at Praia do Leão, Fernando de Noronha, Brazil (PRL)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

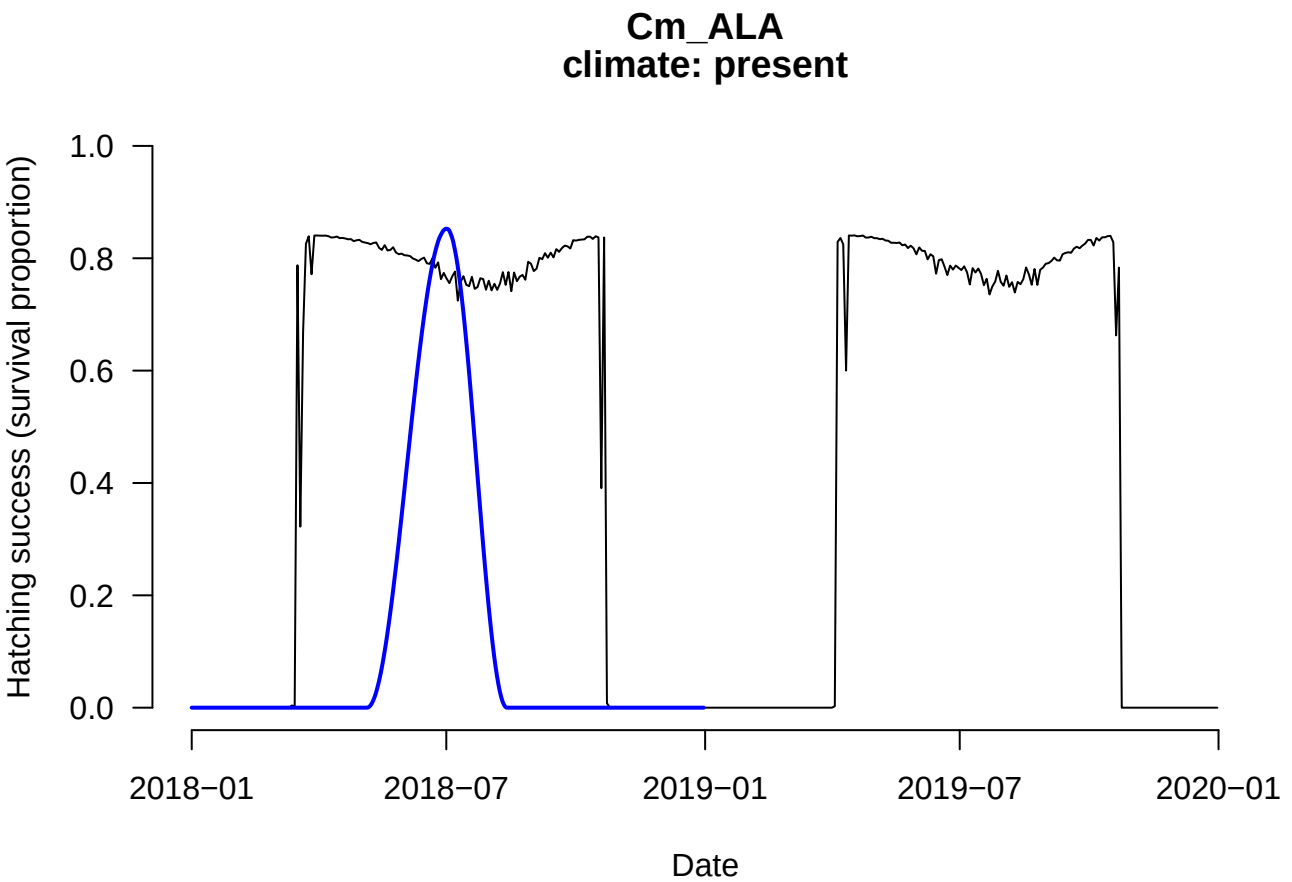

Cm_PRL
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

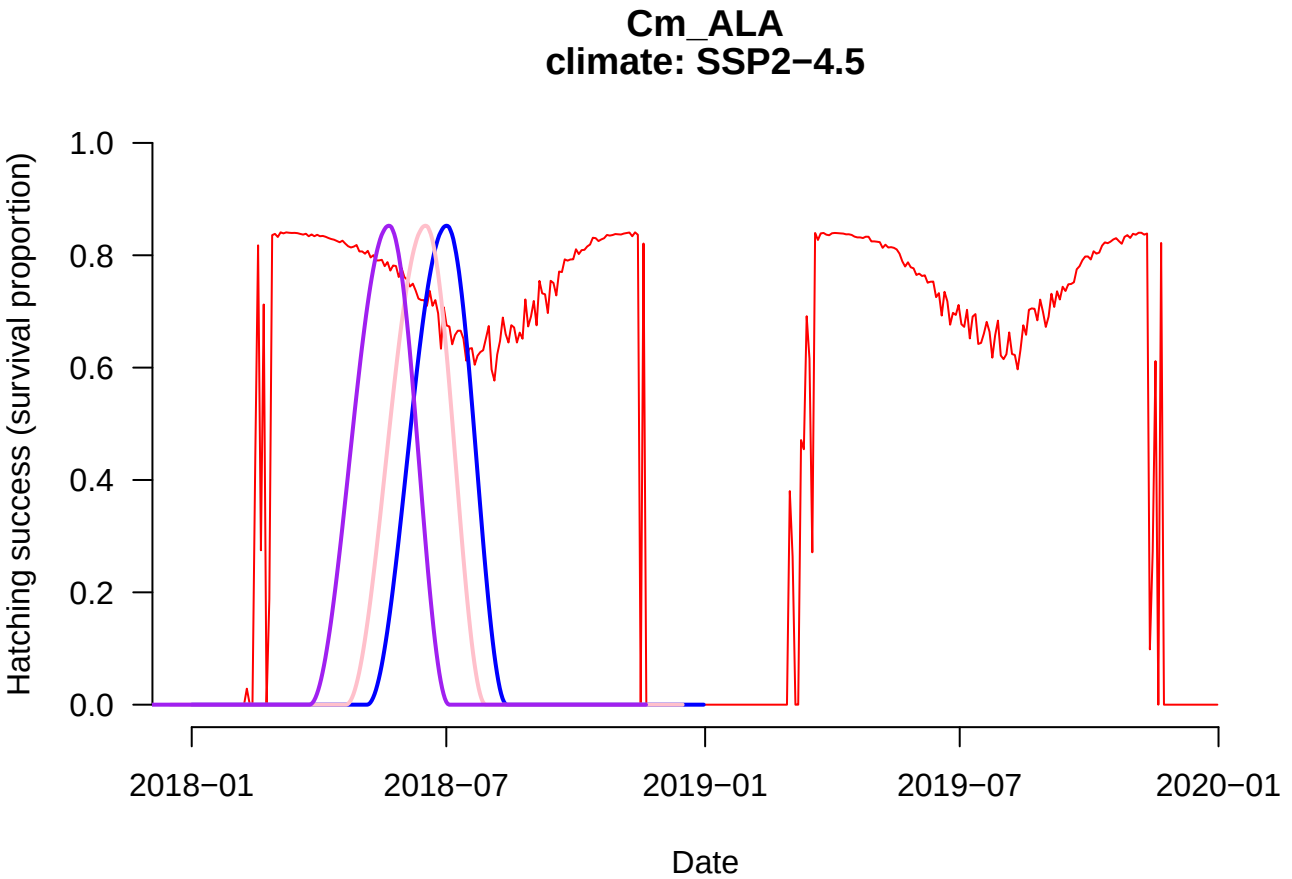

Cm_PRL
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

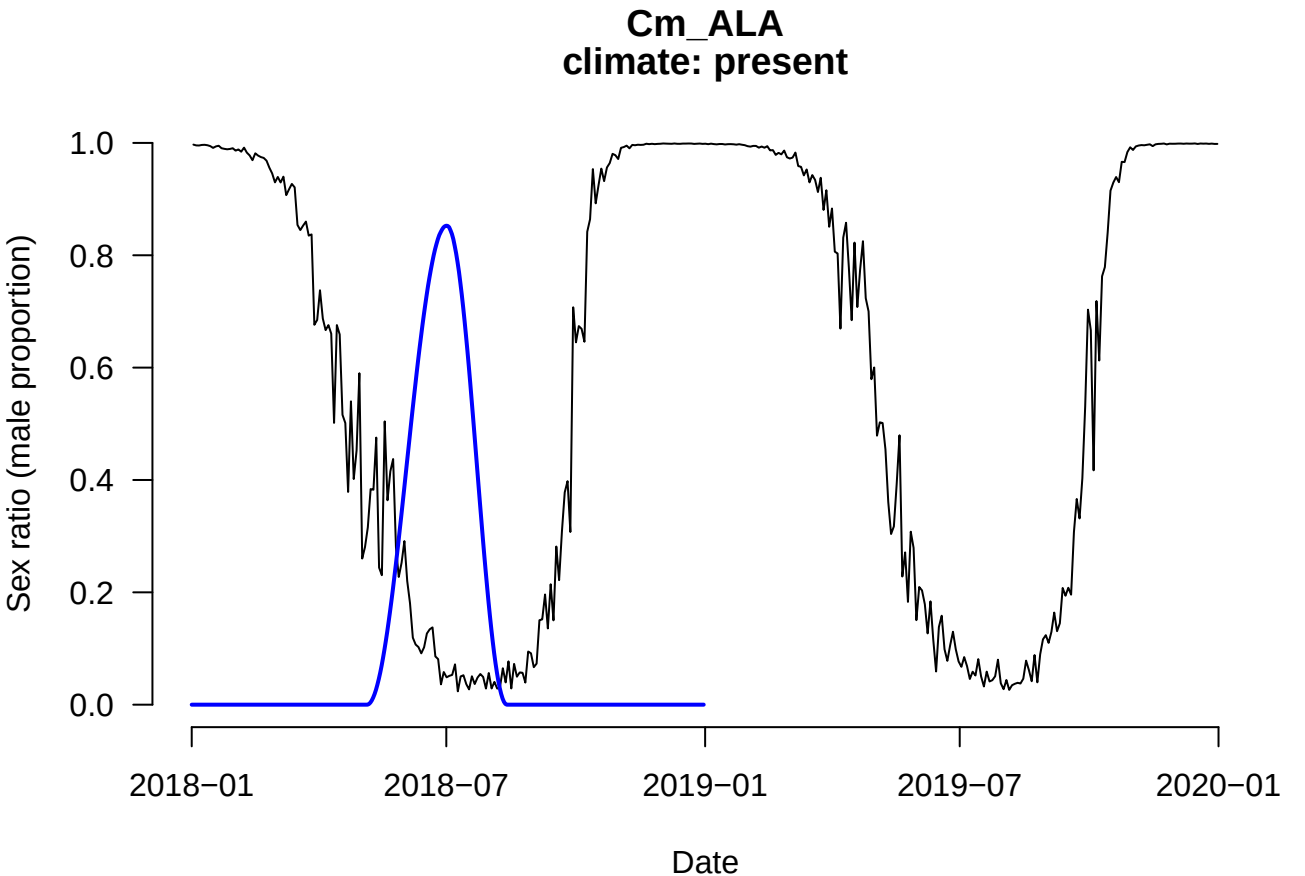

Cm_PRL
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

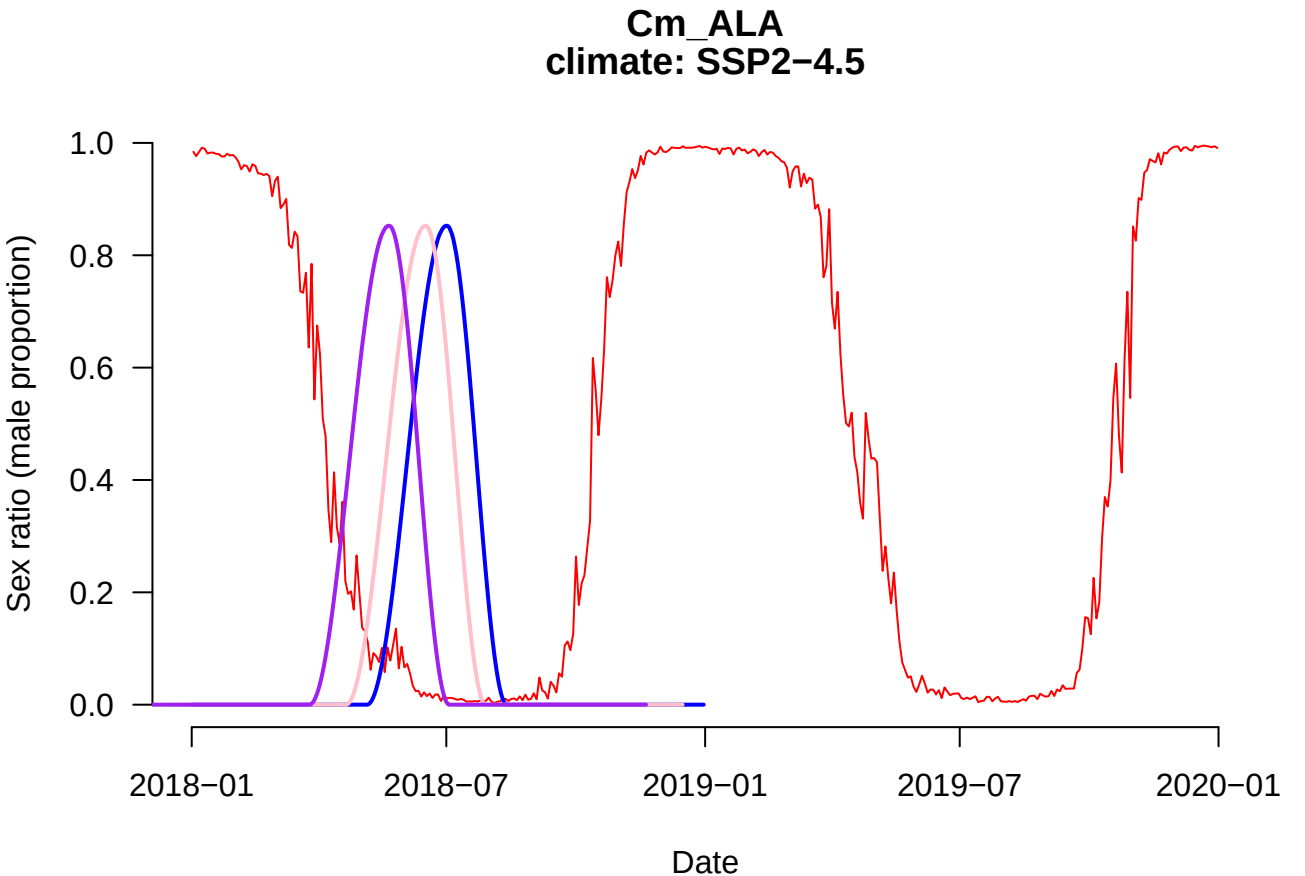

Cm_PRL
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

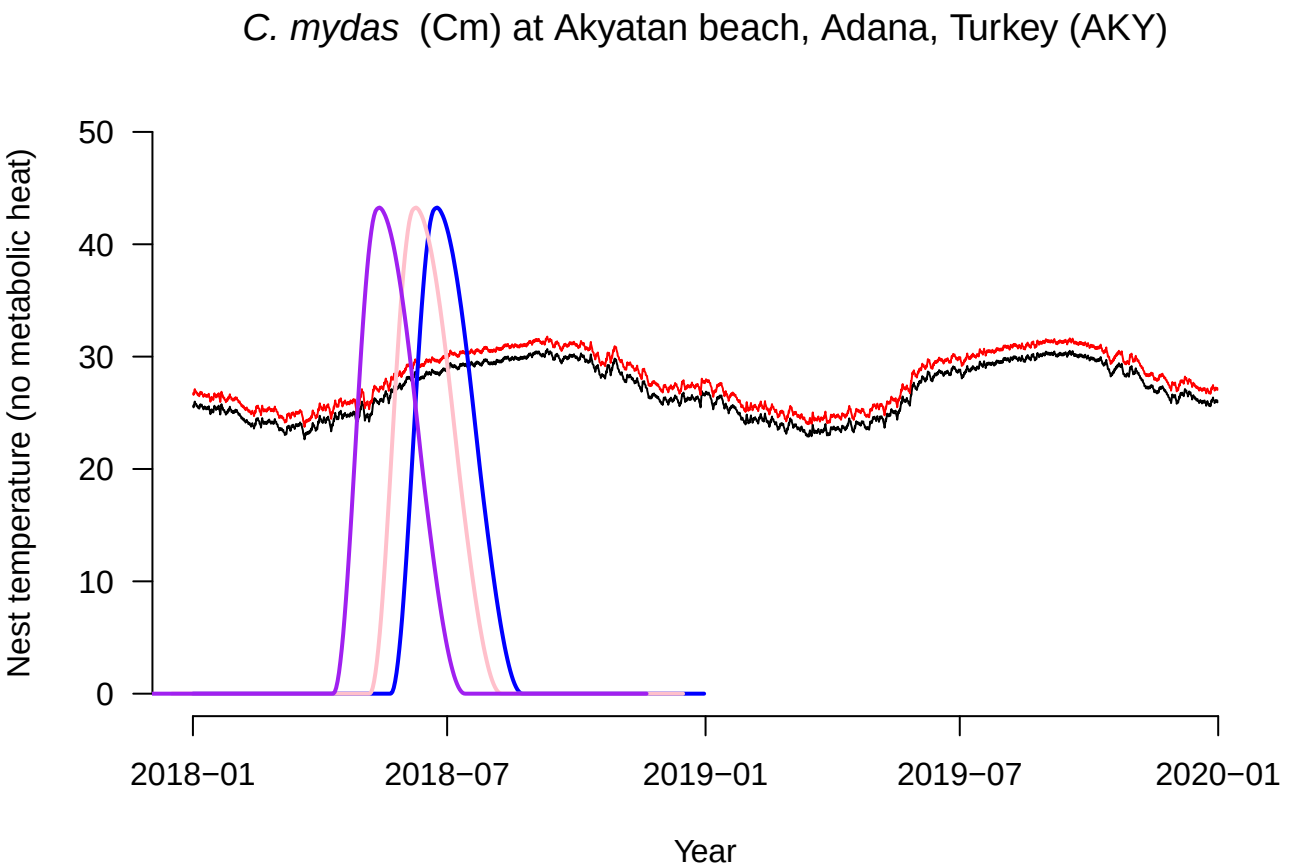

C. mydas (Cm) at Alagadi Turtle Beach, Gözübüyük, Cyprus (ALA)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

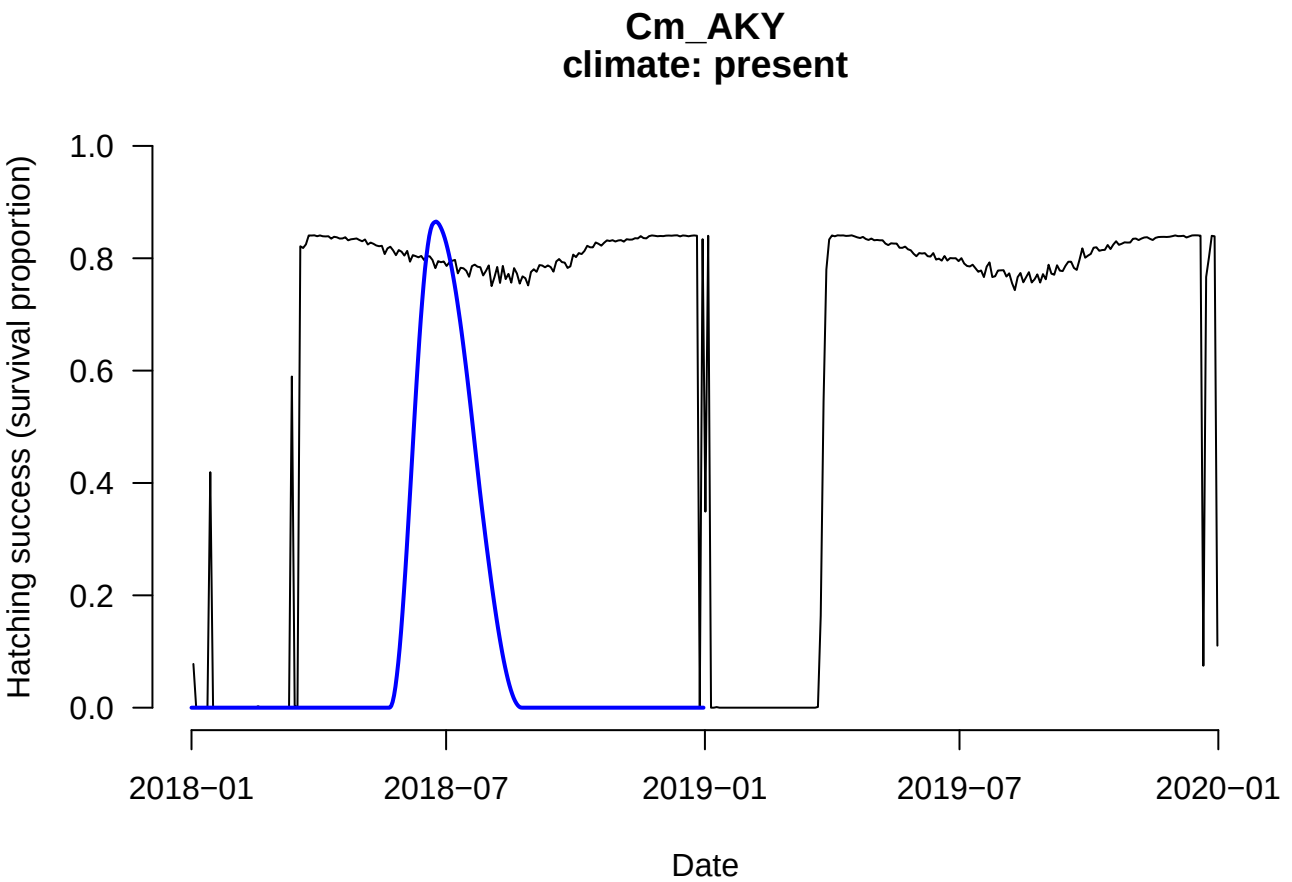

Cm_ALA
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

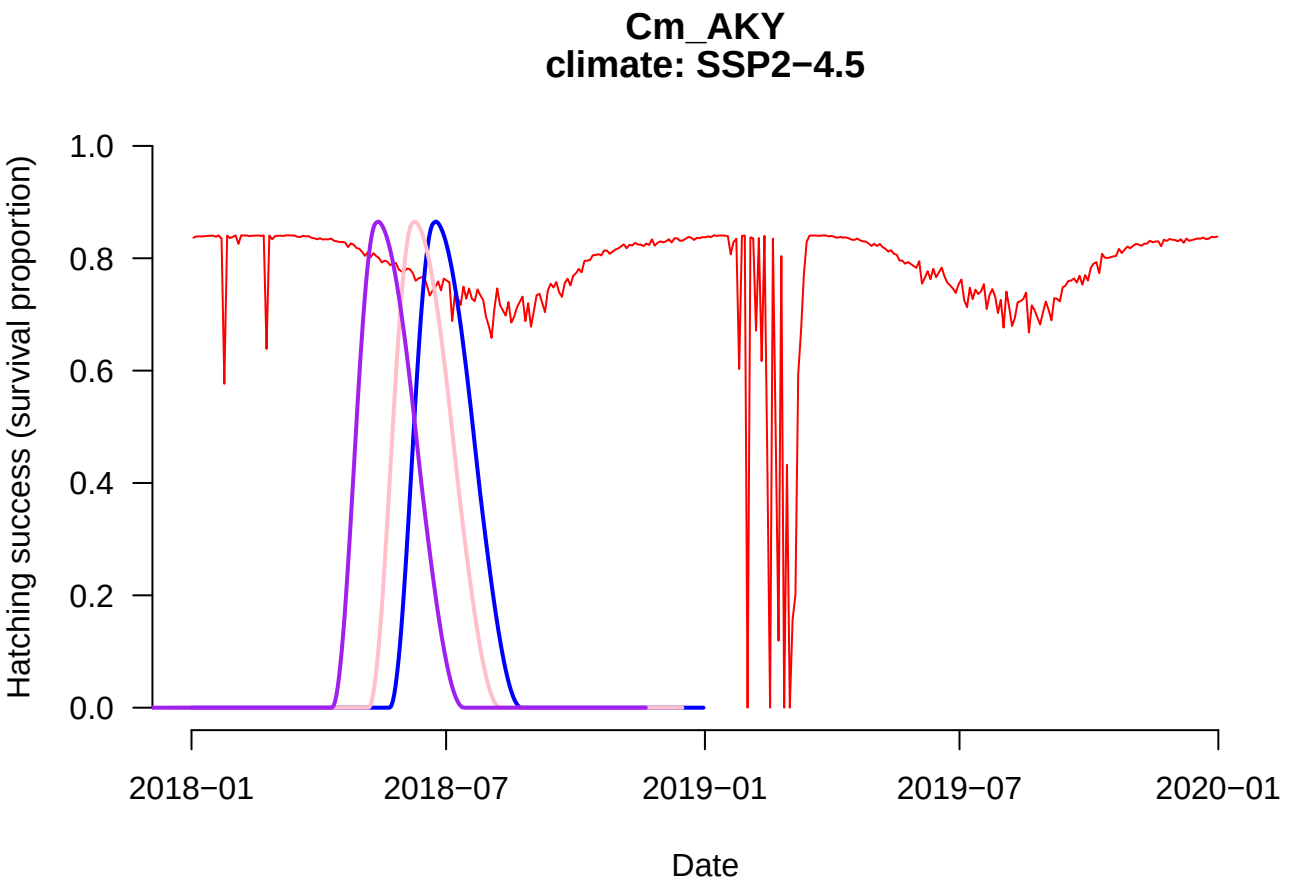

Cm_ALA
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

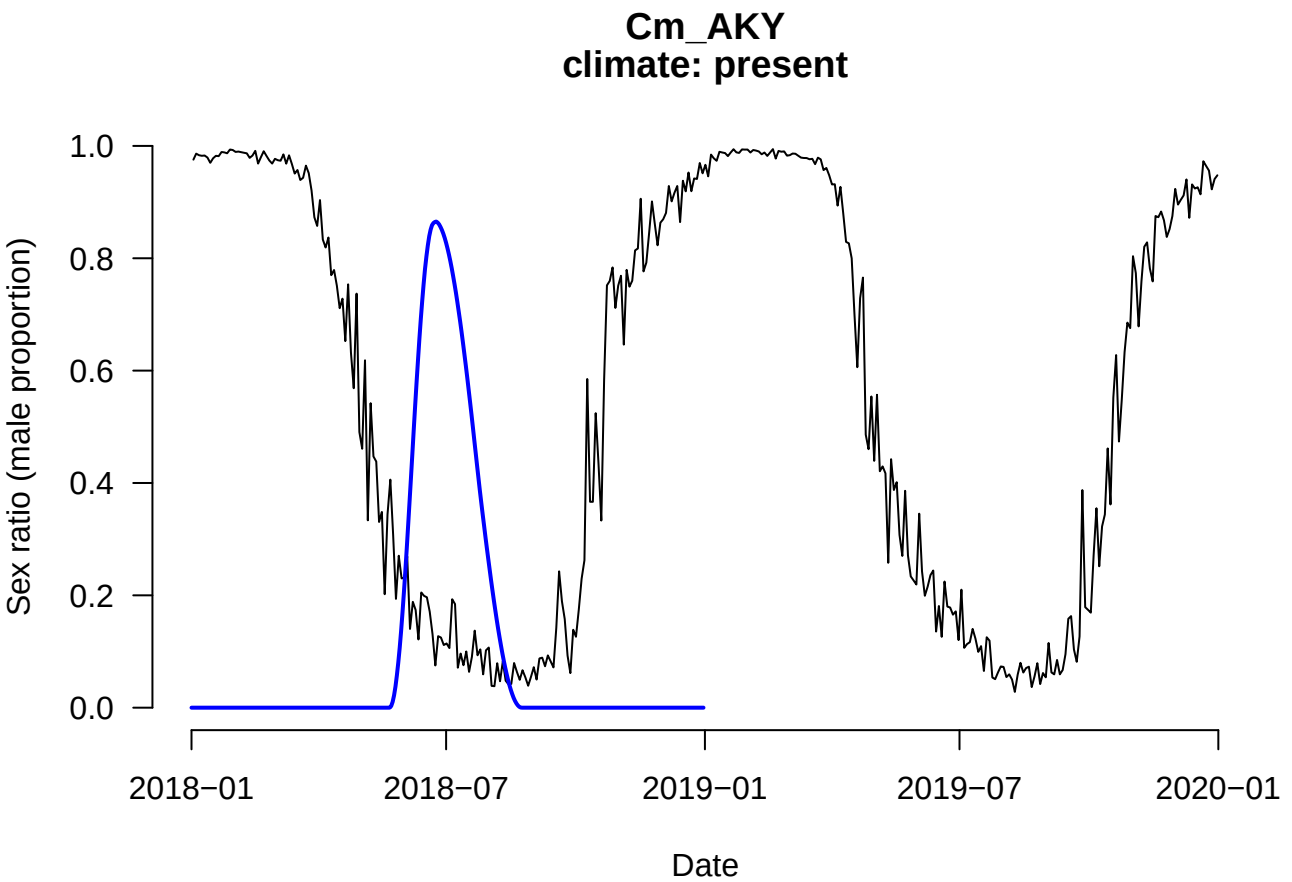

Cm_ALA
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

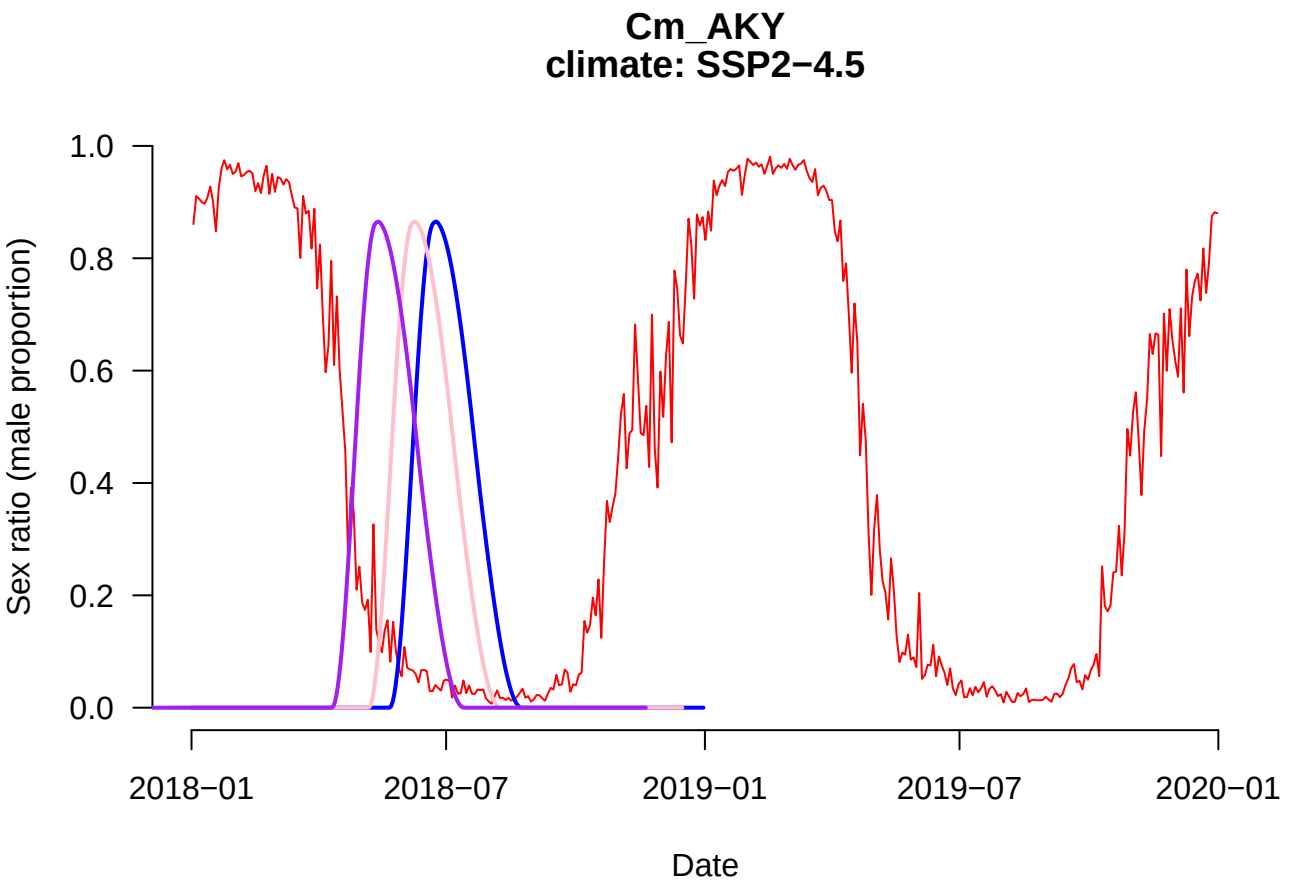

Cm_ALA
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

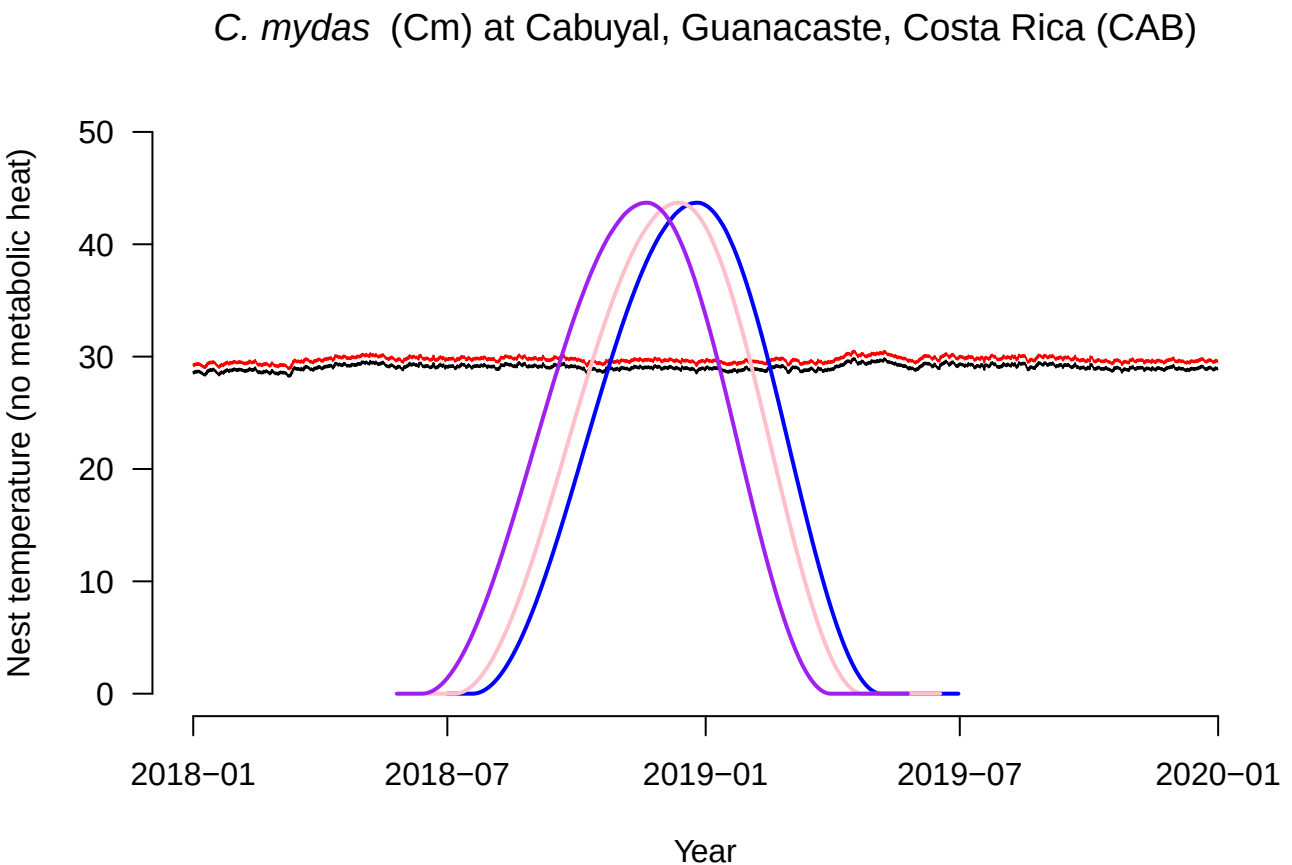

C. mydas (Cm) at Akyatan beach, Adana, Turkey (AKY)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

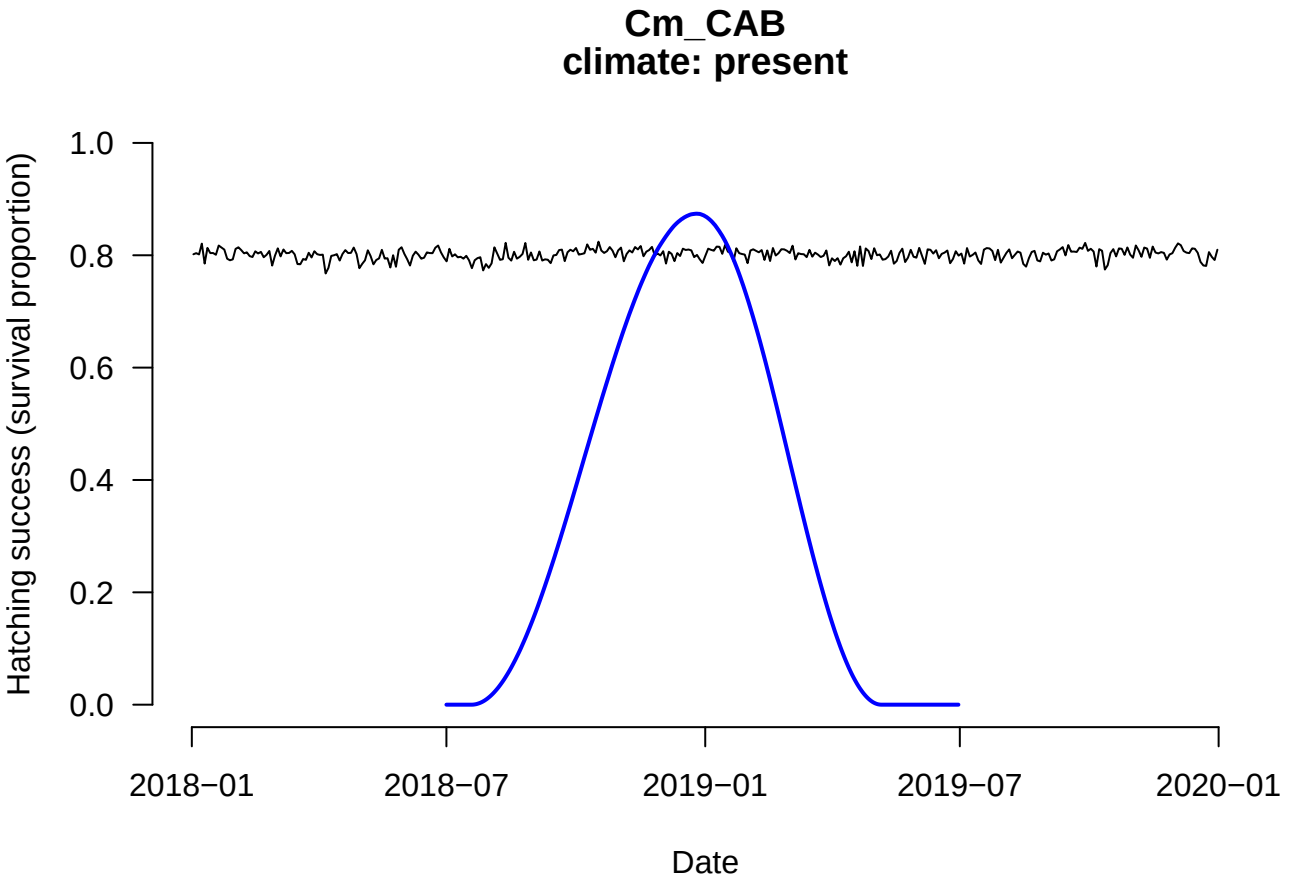

Cm_AKY
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

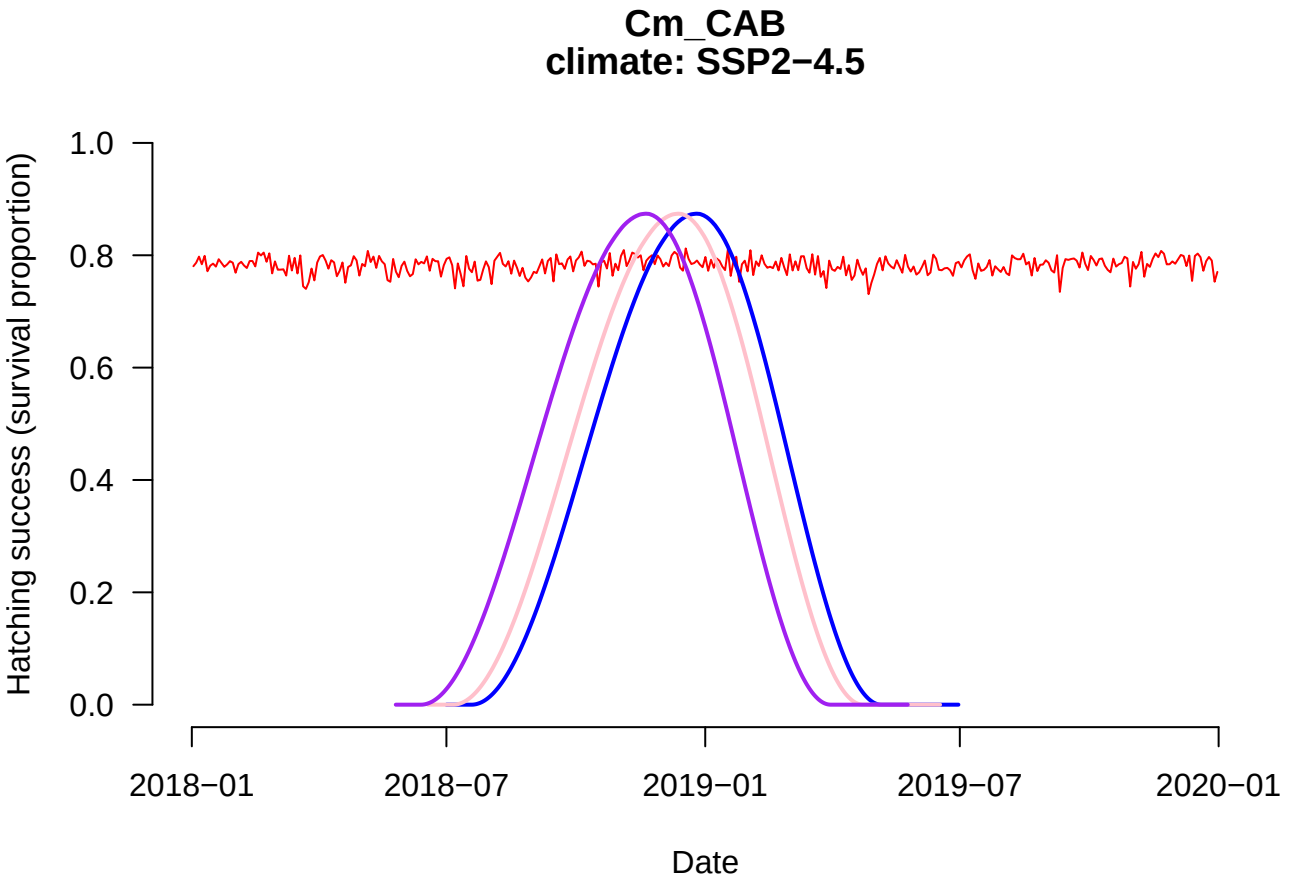

Cm_AKY
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

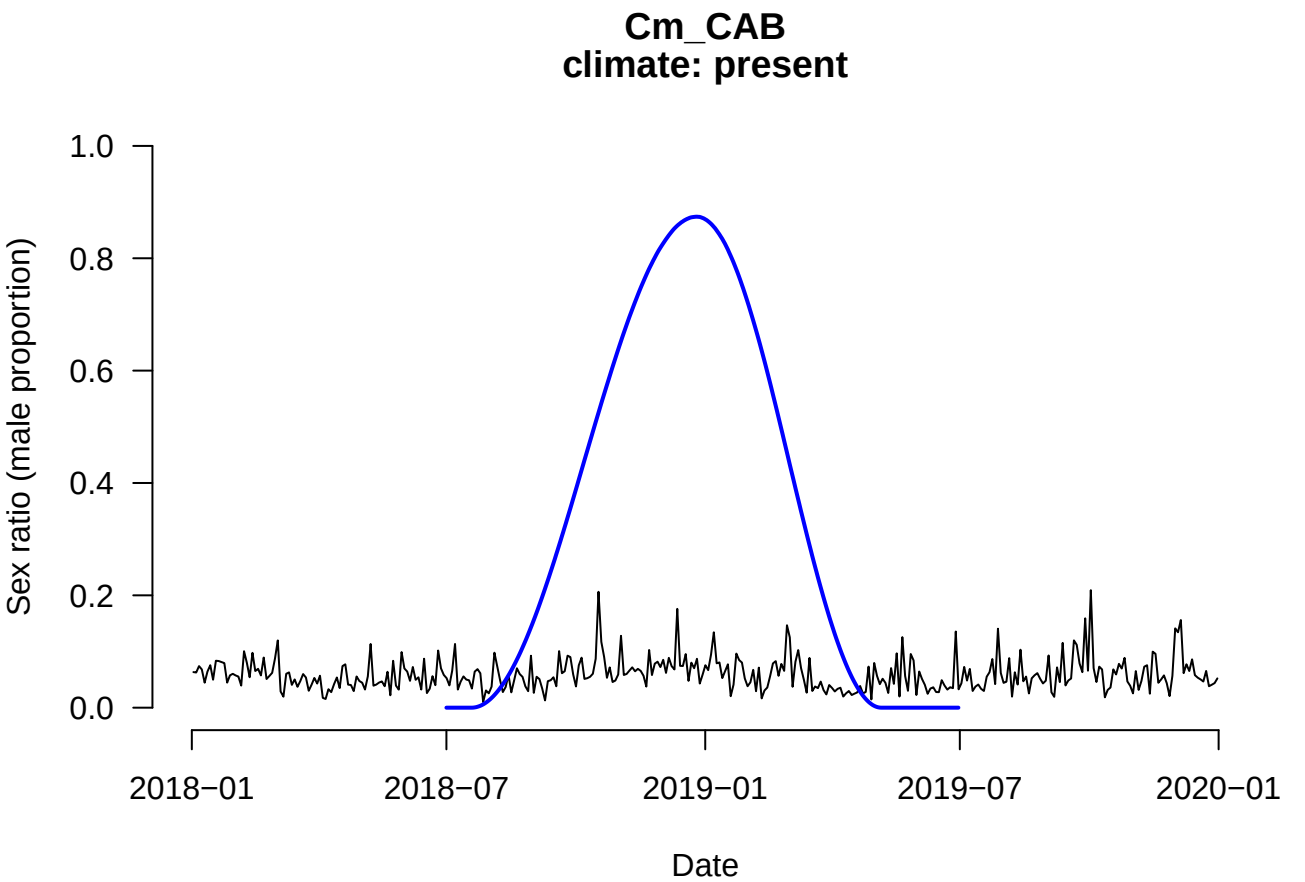

Cm_AKY
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

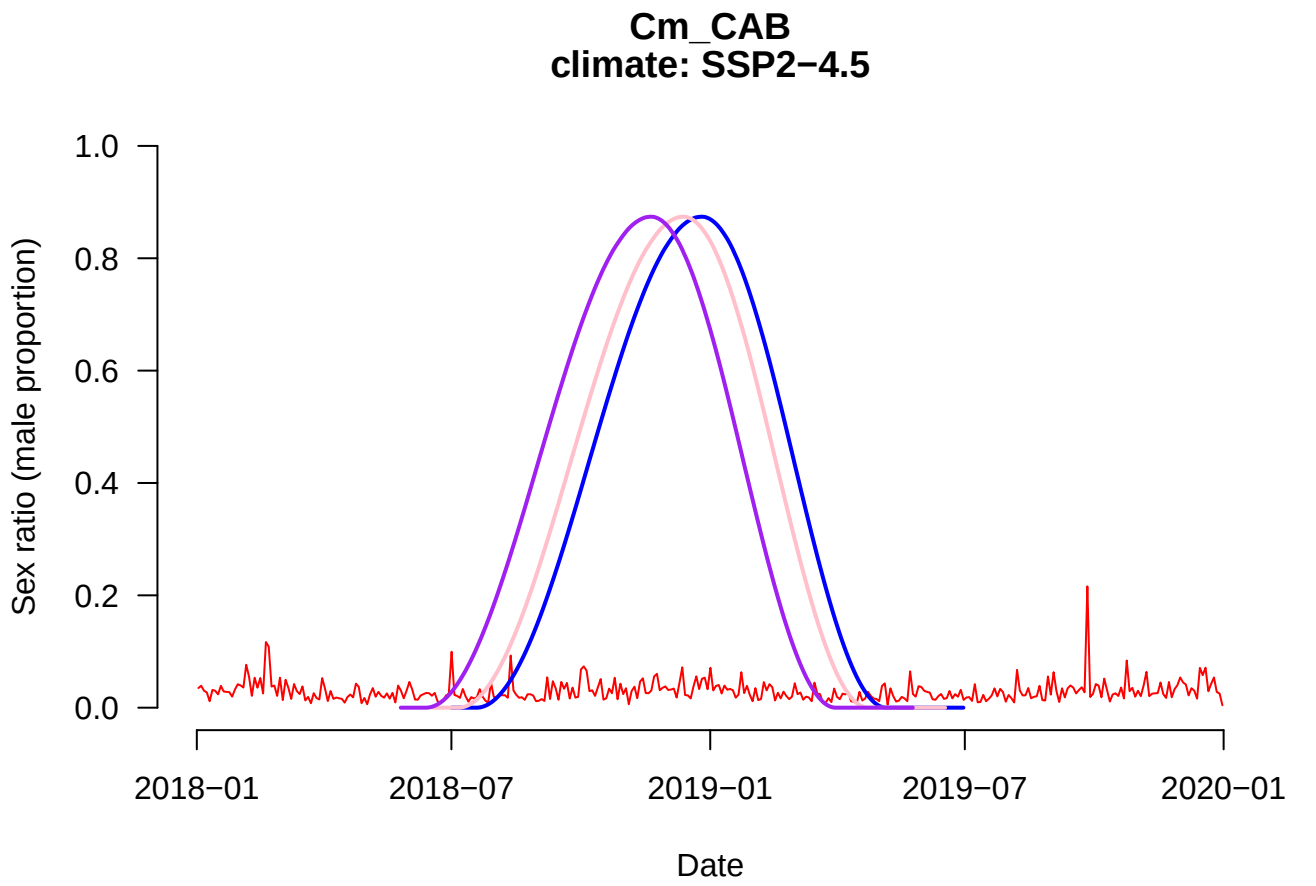

Cm_AKY
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

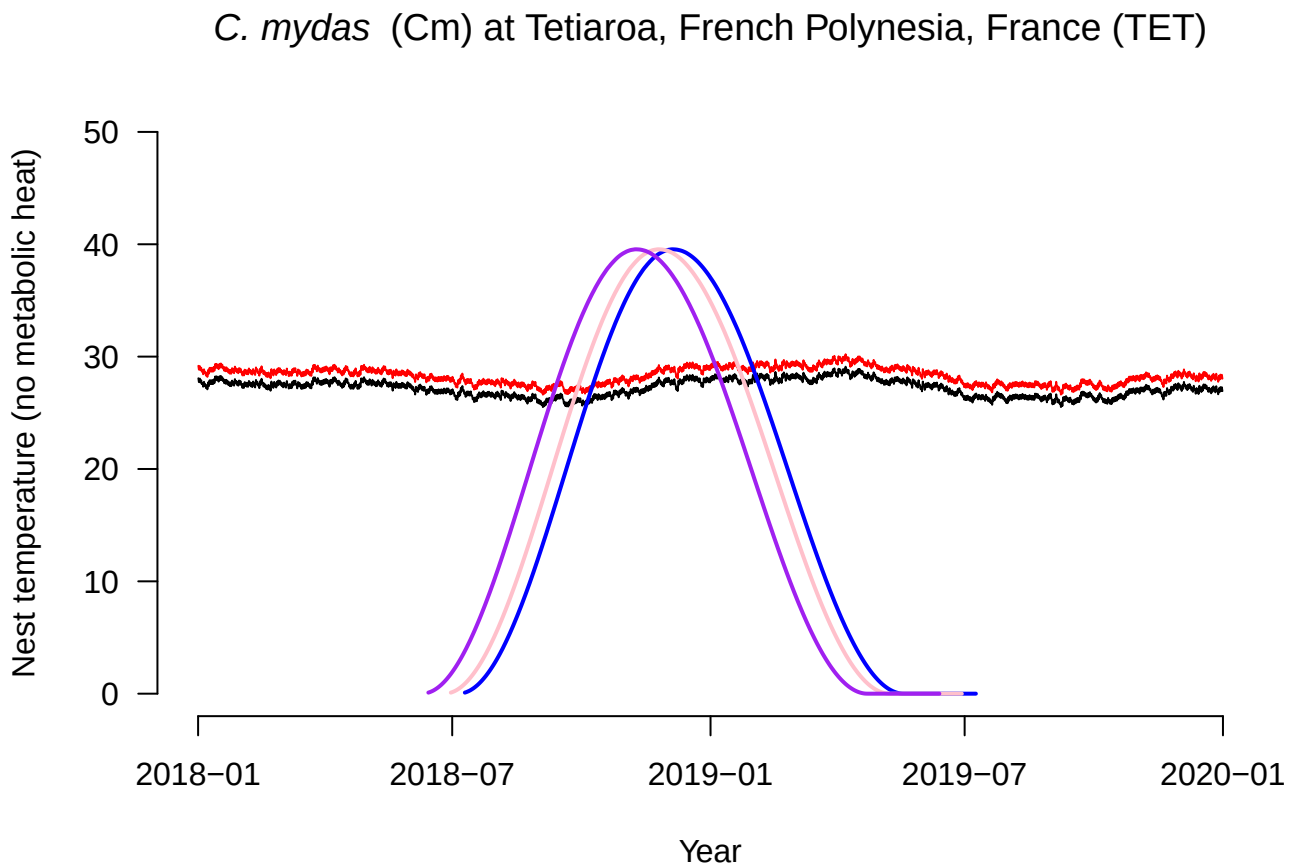

C. mydas (Cm) at Cabuyal, Guanacaste, Costa Rica (CAB)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

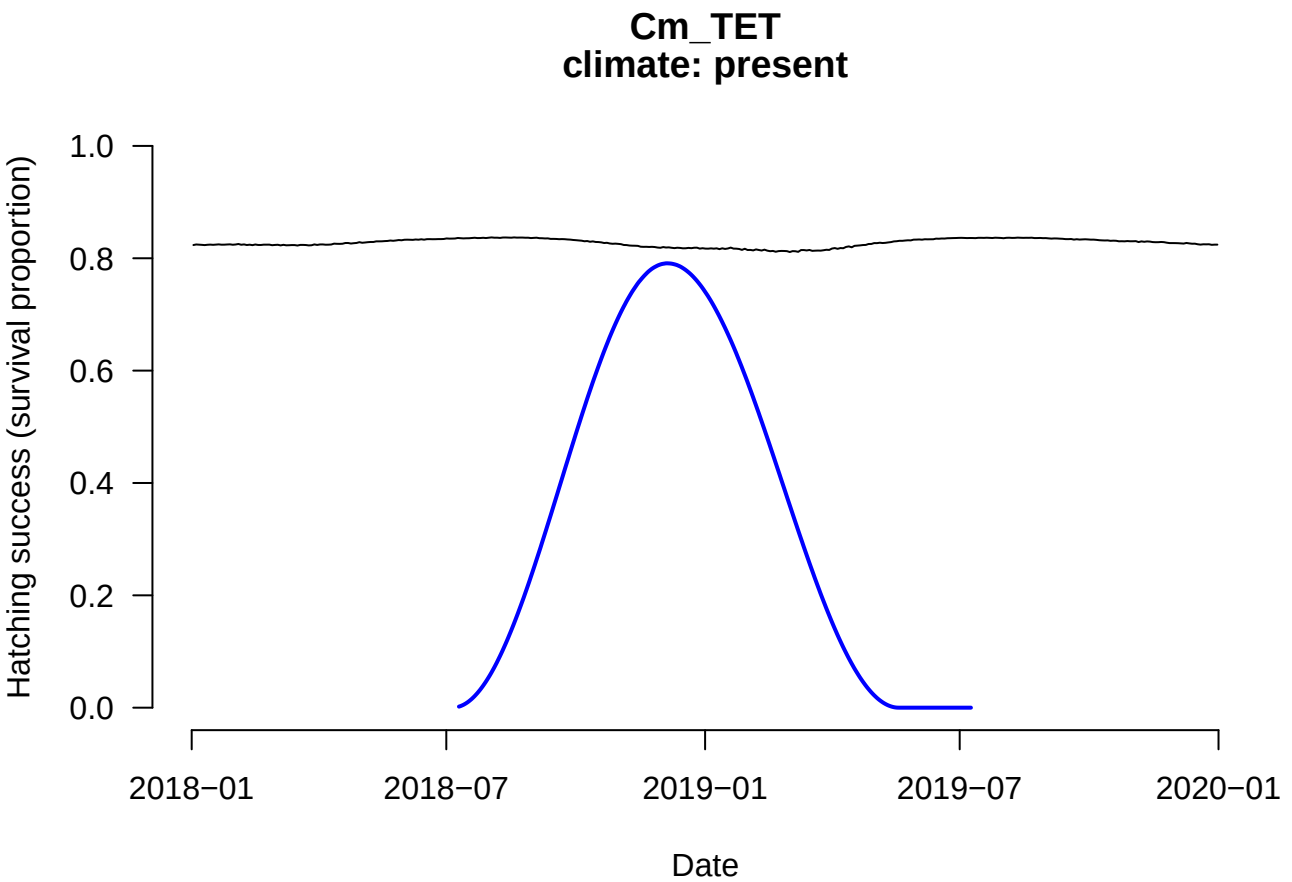

Cm_CAB
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

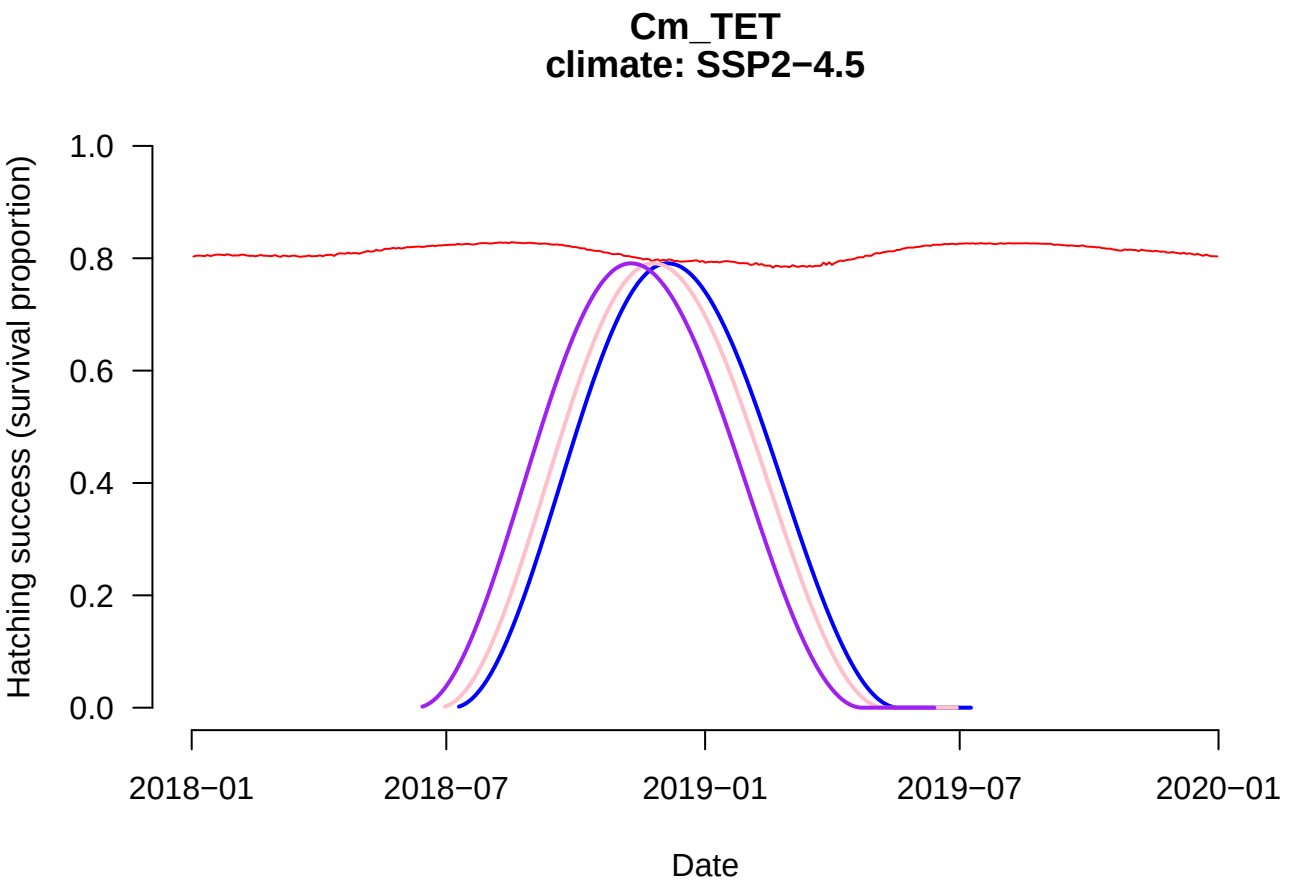

Cm_CAB
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

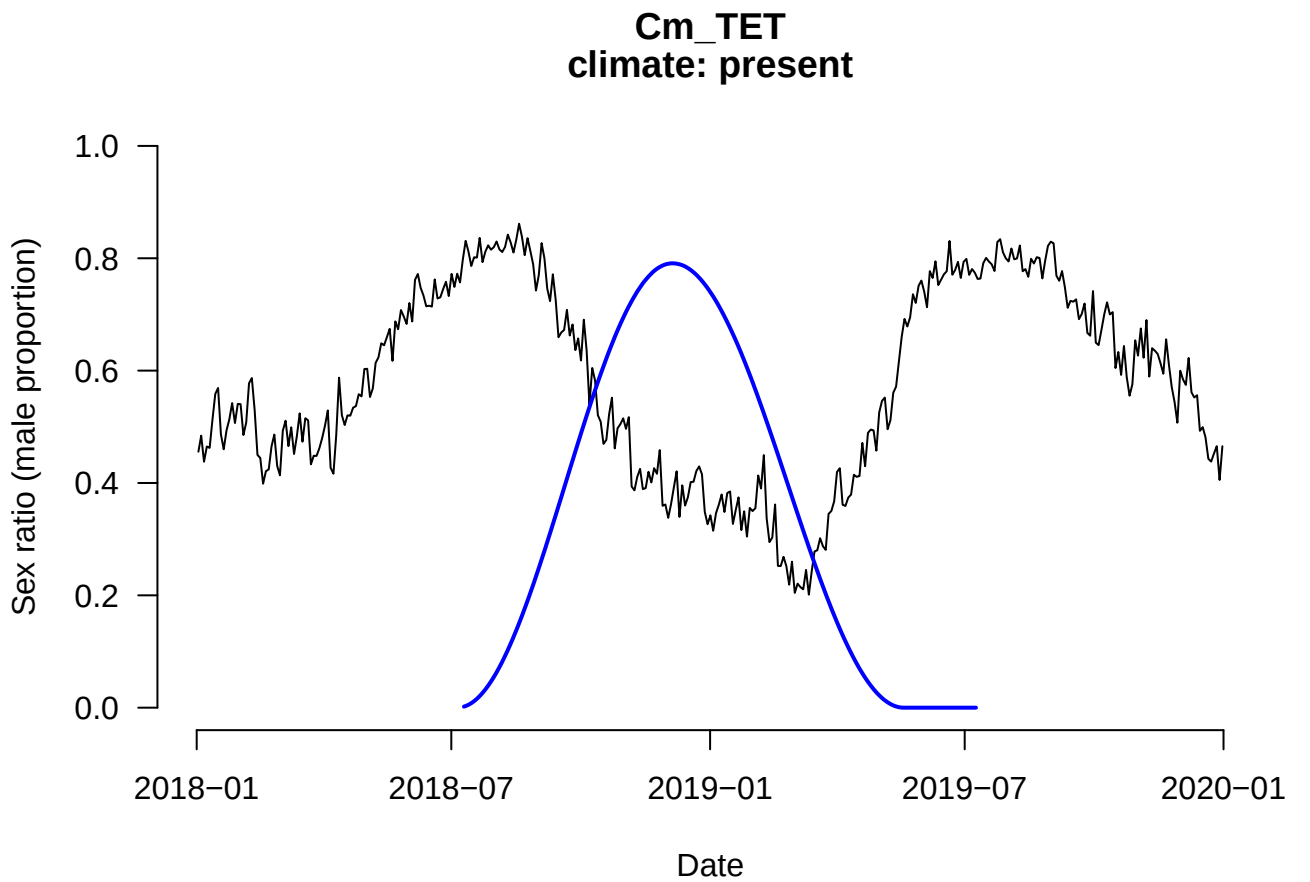

Cm_CAB
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

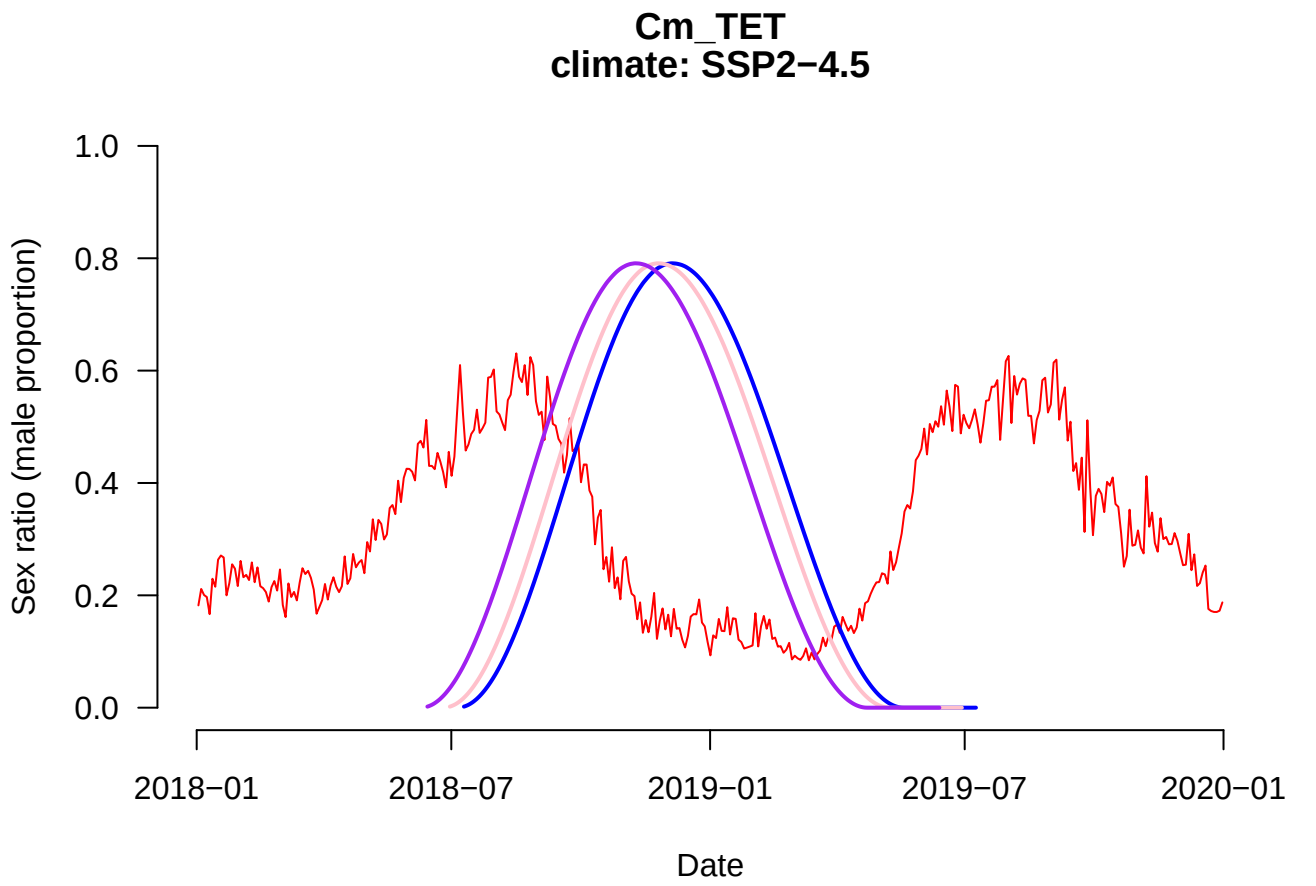

Cm_CAB
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

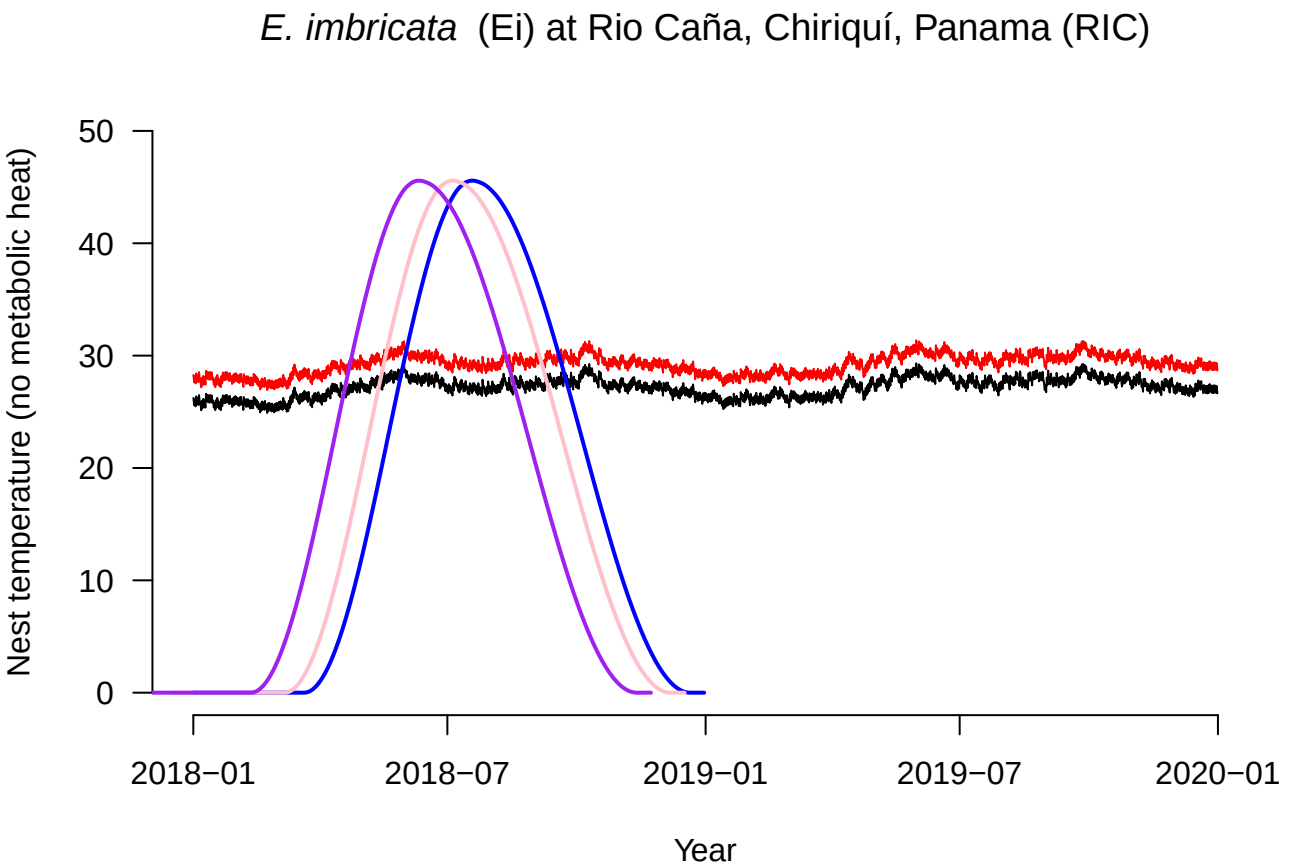

C. mydas (Cm) at Tetiaroa, French Polynesia, France (TET)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

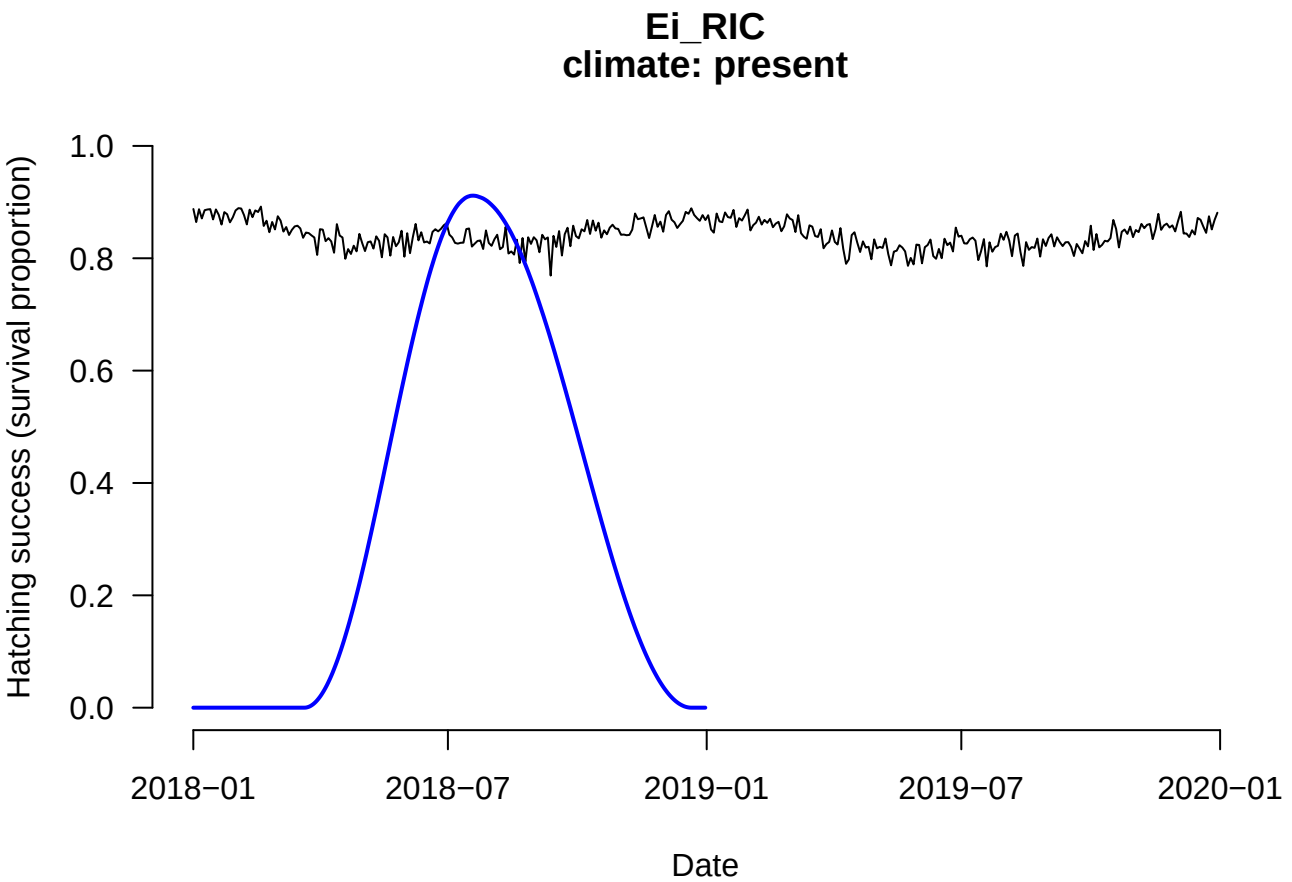

Cm_TET
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

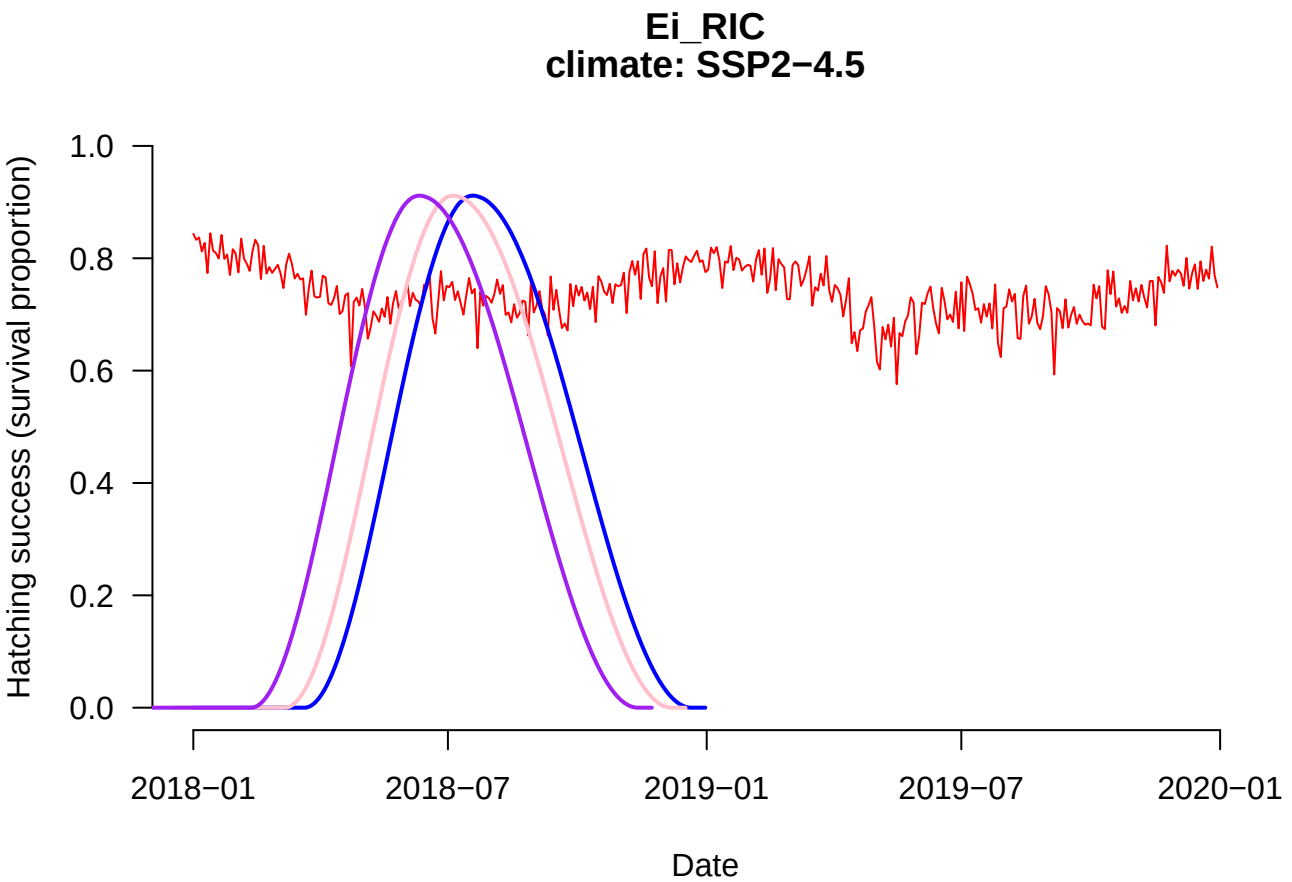

Cm_TET
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

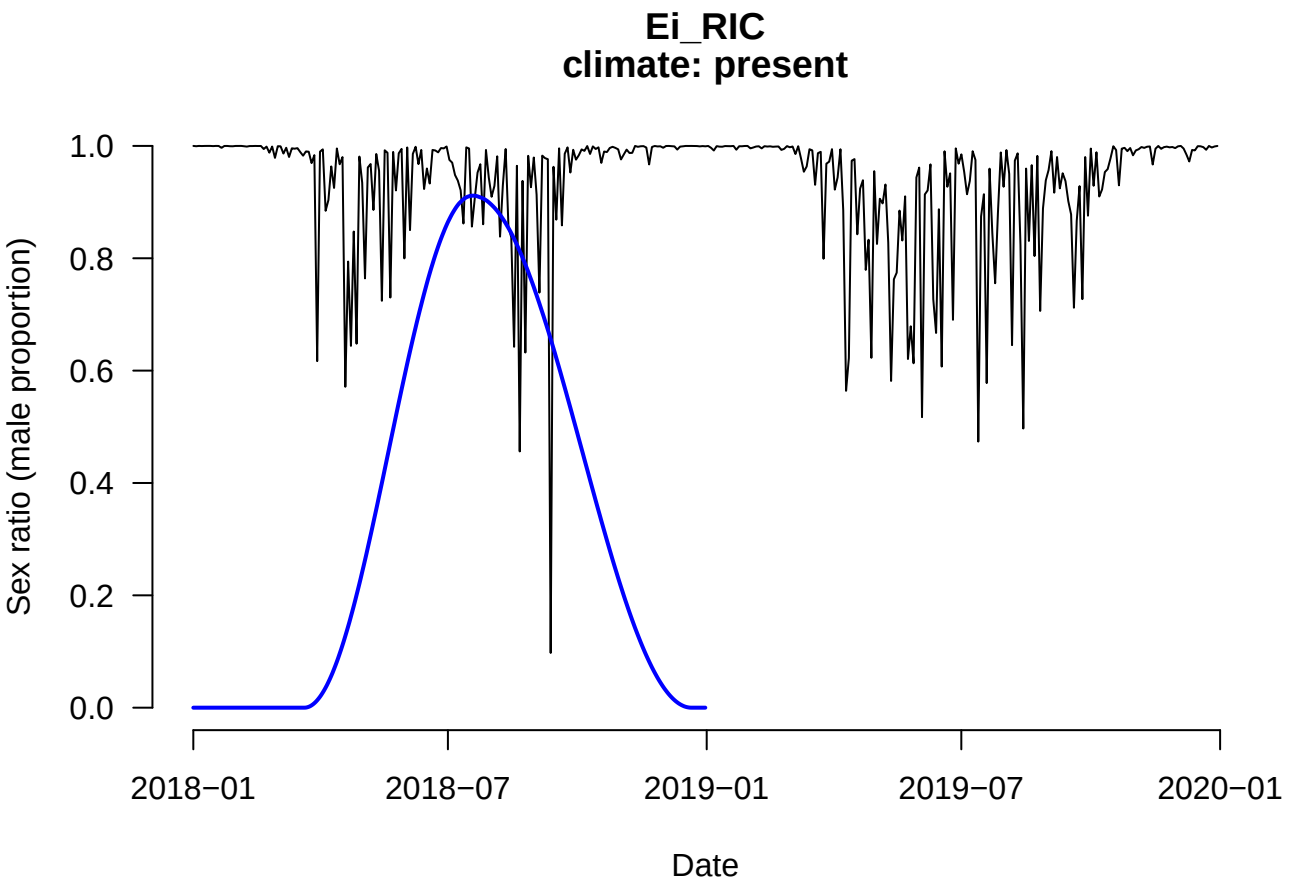

Cm_TET
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

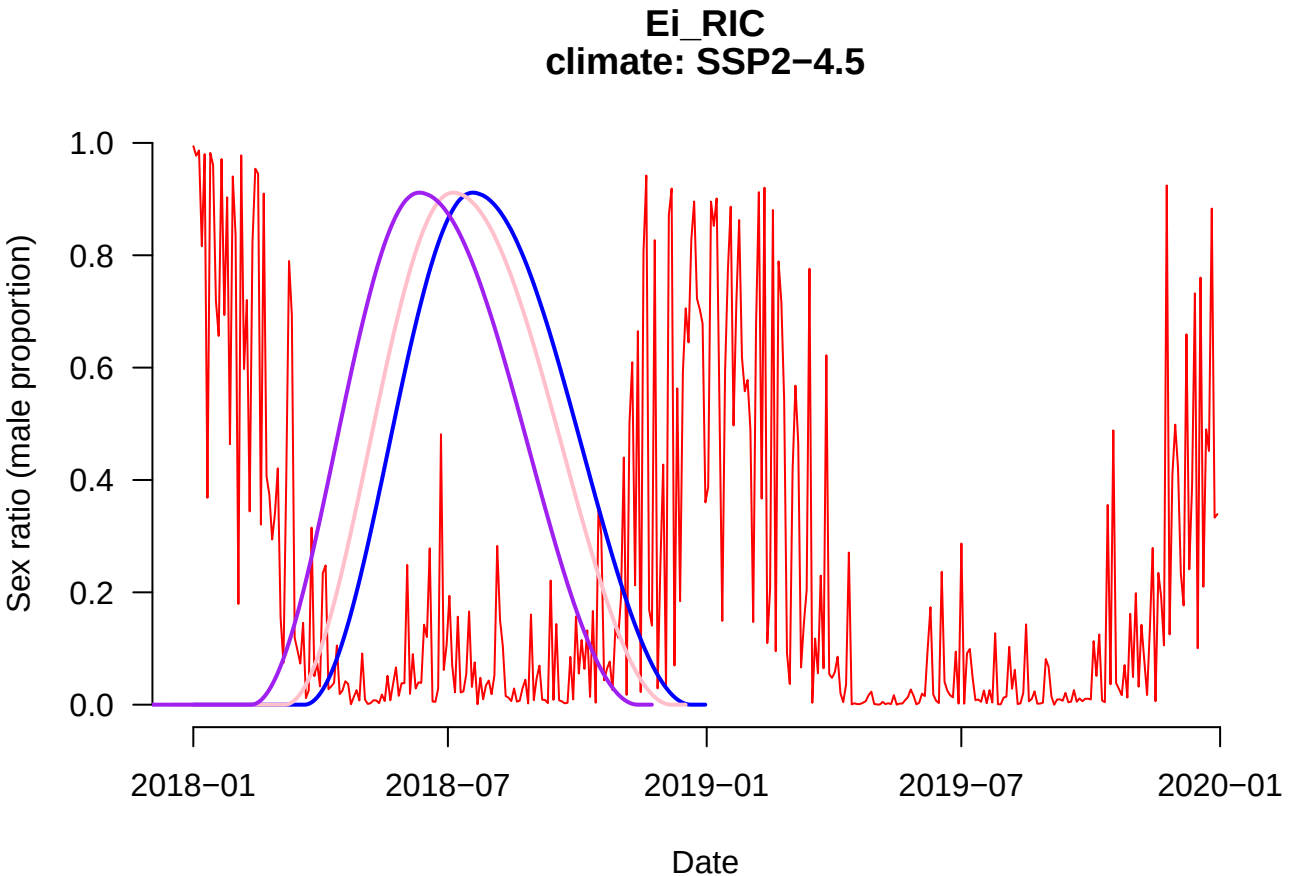

Cm_TET
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

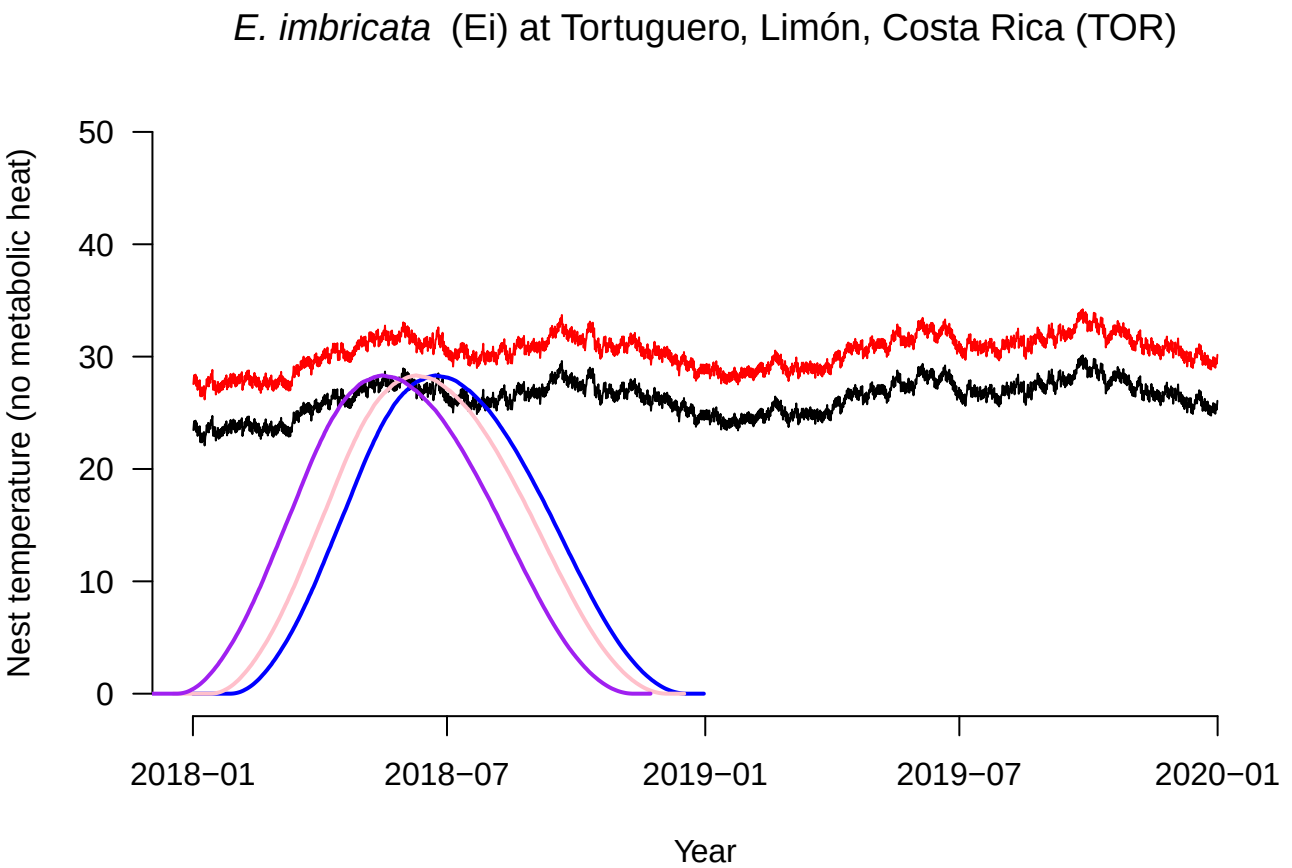

E. imbricata (Ei) at Rio Caña, Chiriquí, Panama (RIC)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

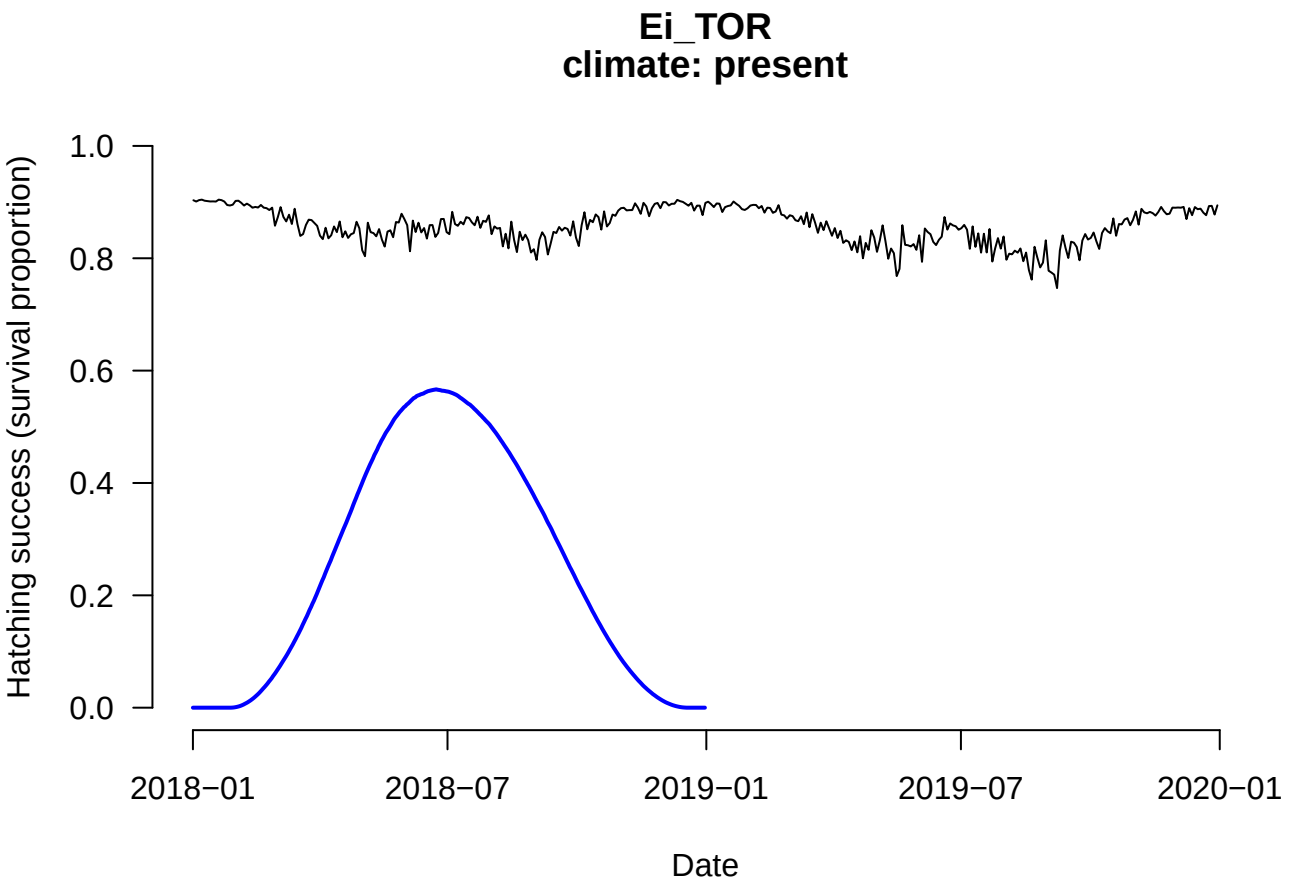

Ei_RIC
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

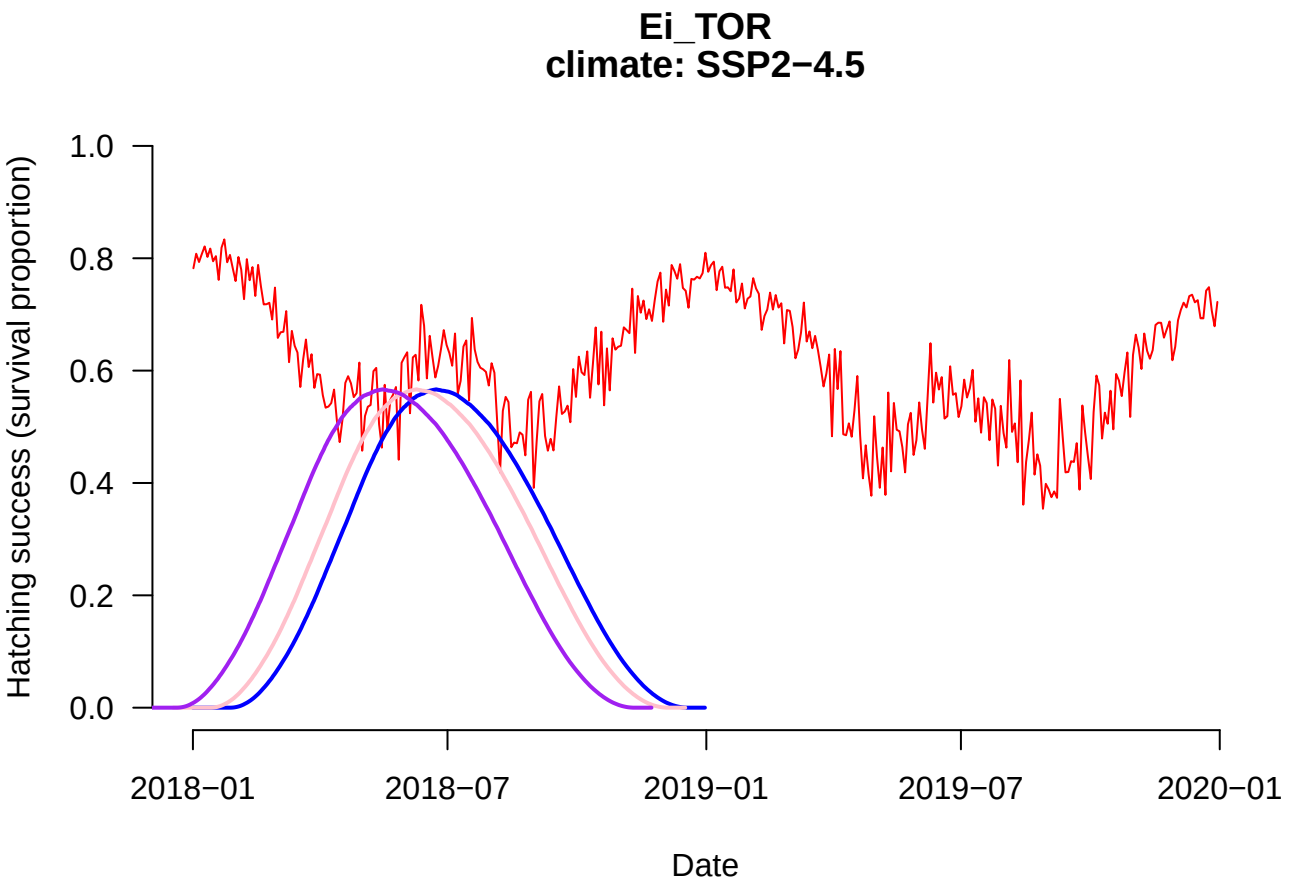

Ei_RIC
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

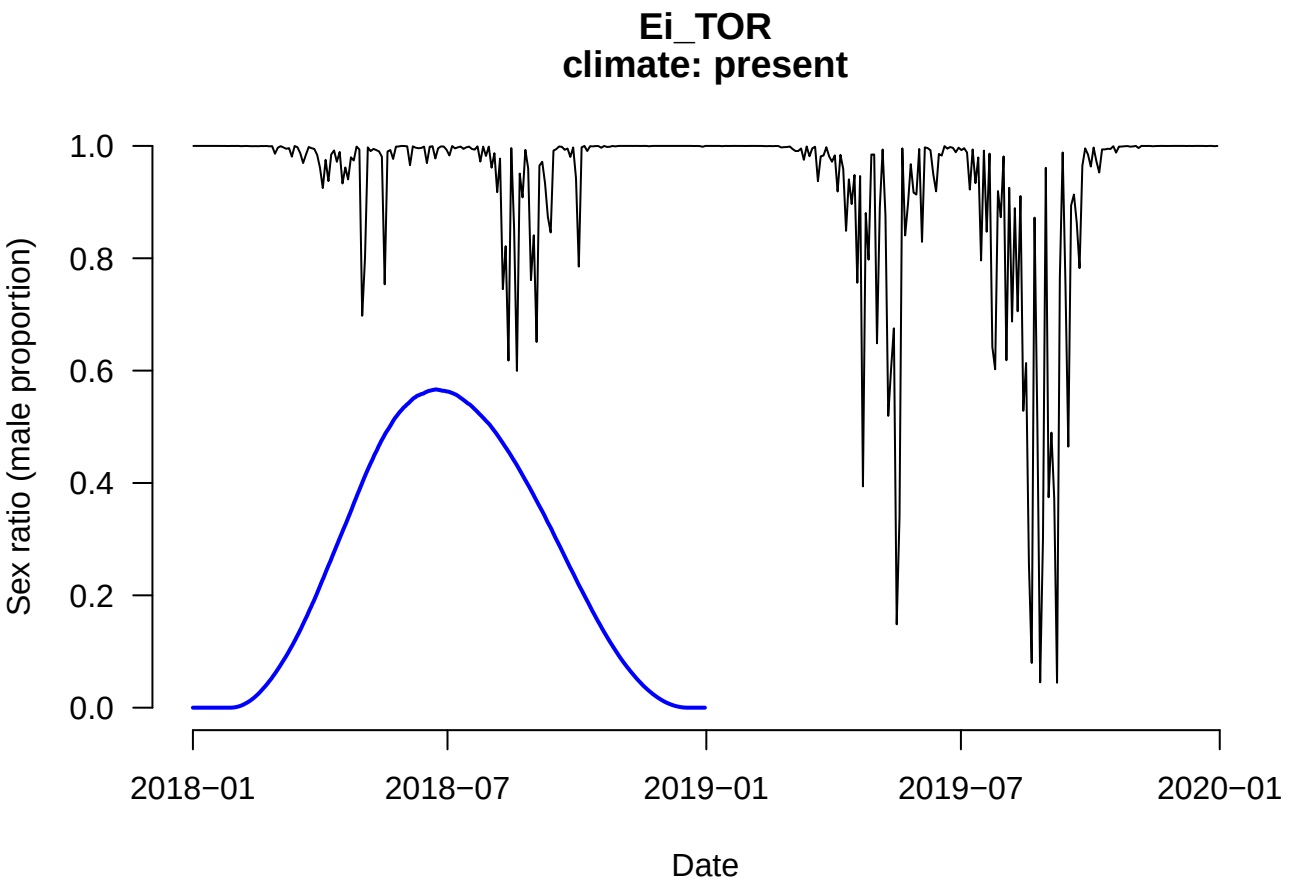

Ei_RIC
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

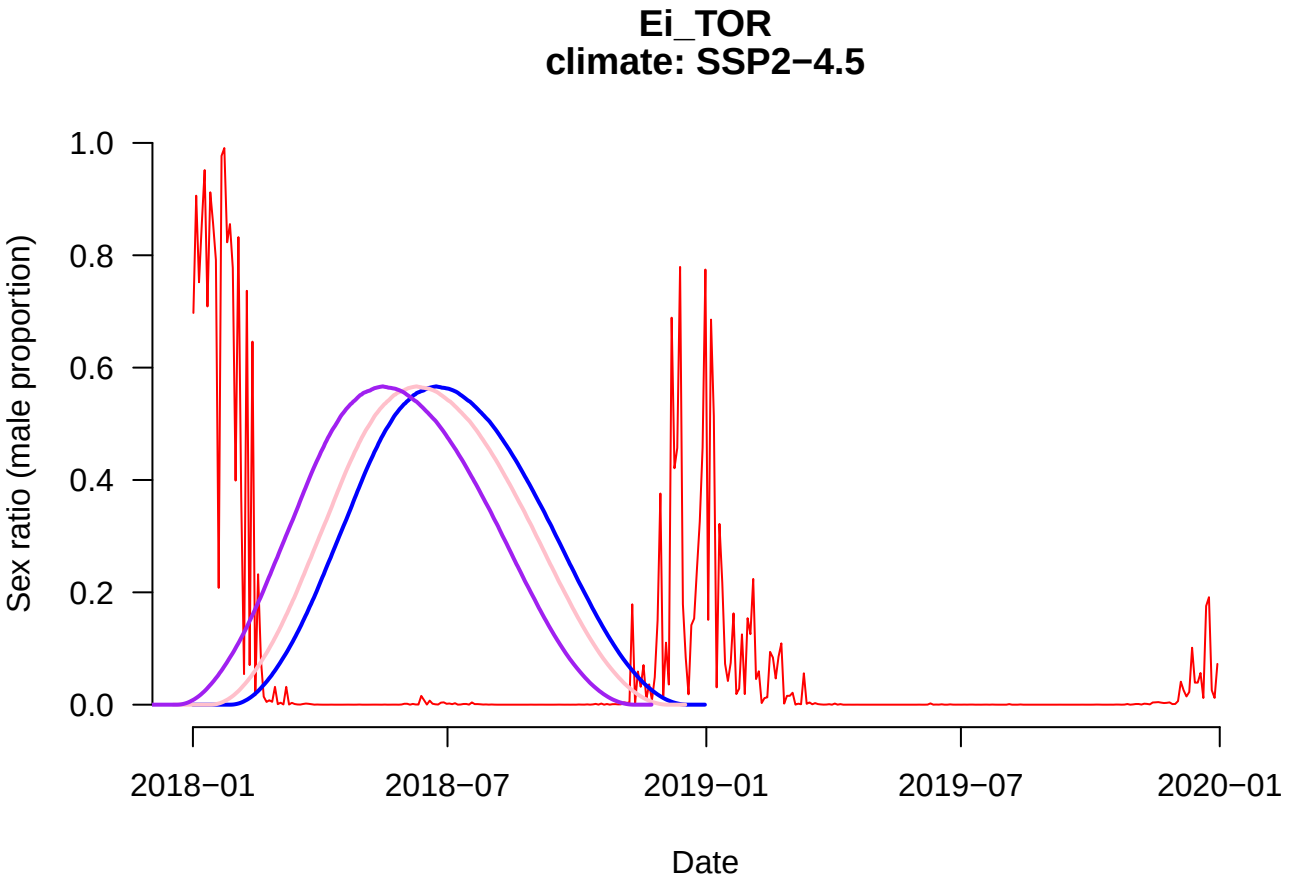

Ei_RIC
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

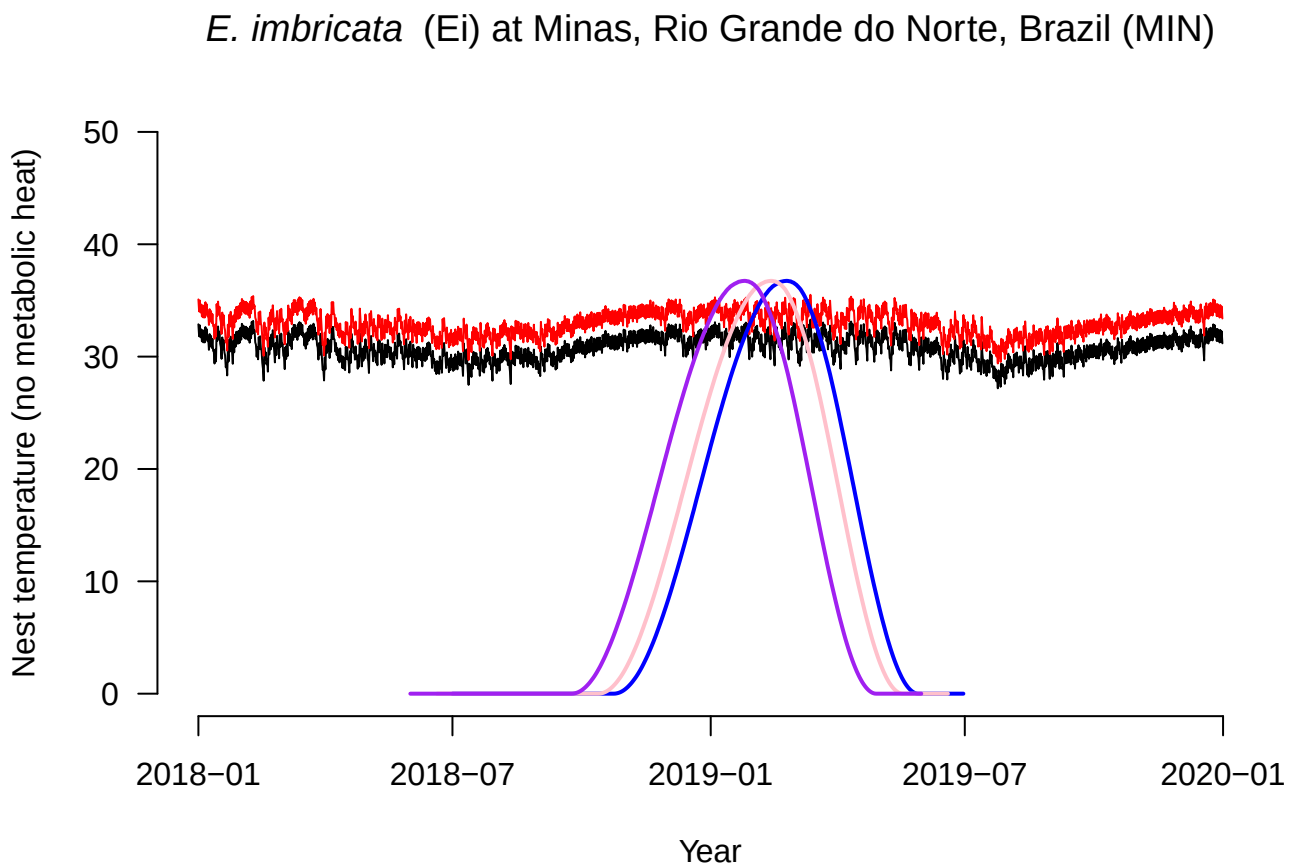

E. imbricata (Ei) at Tortuguero, Limón, Costa Rica (TOR)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

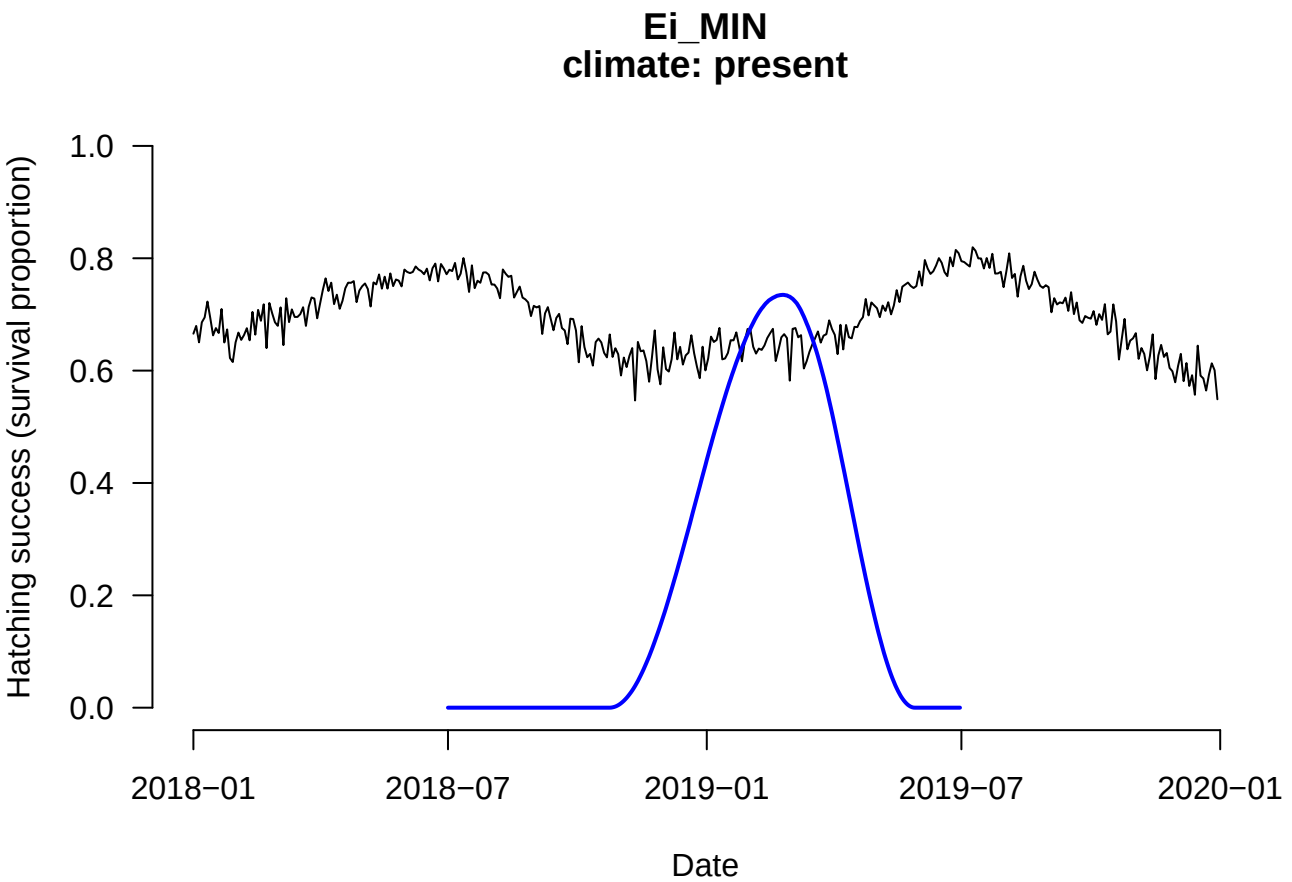

Ei_TOR
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

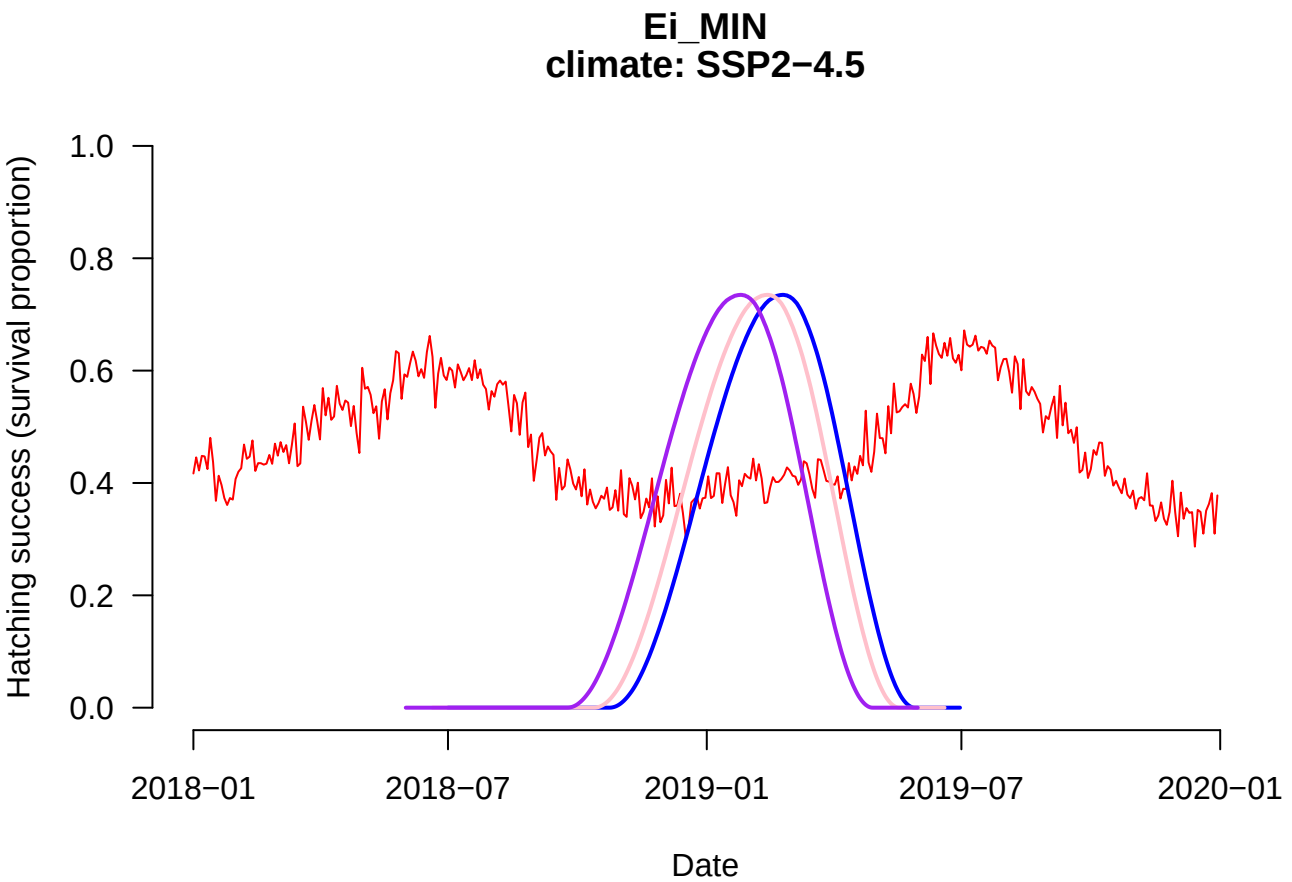

Ei_TOR
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

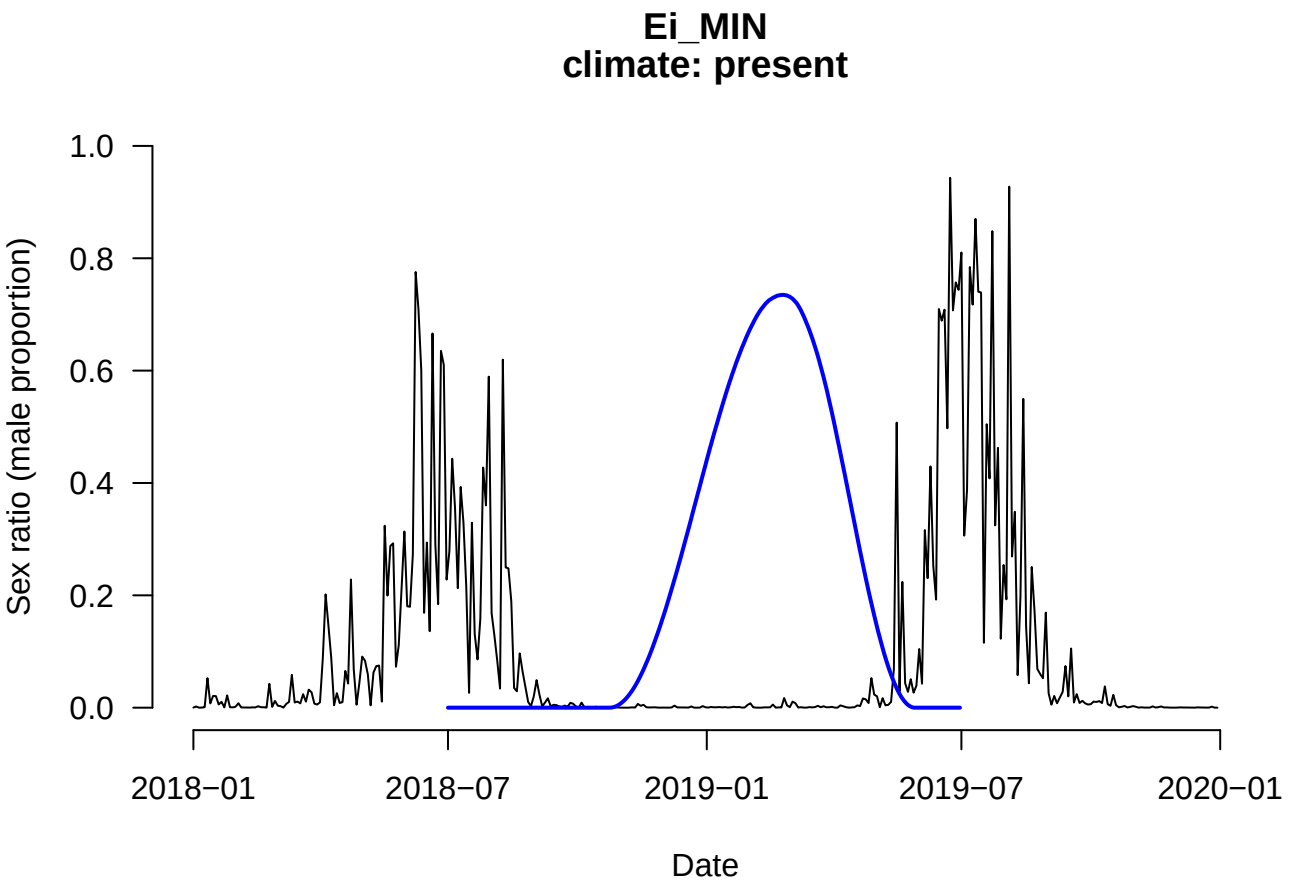

Ei_TOR
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

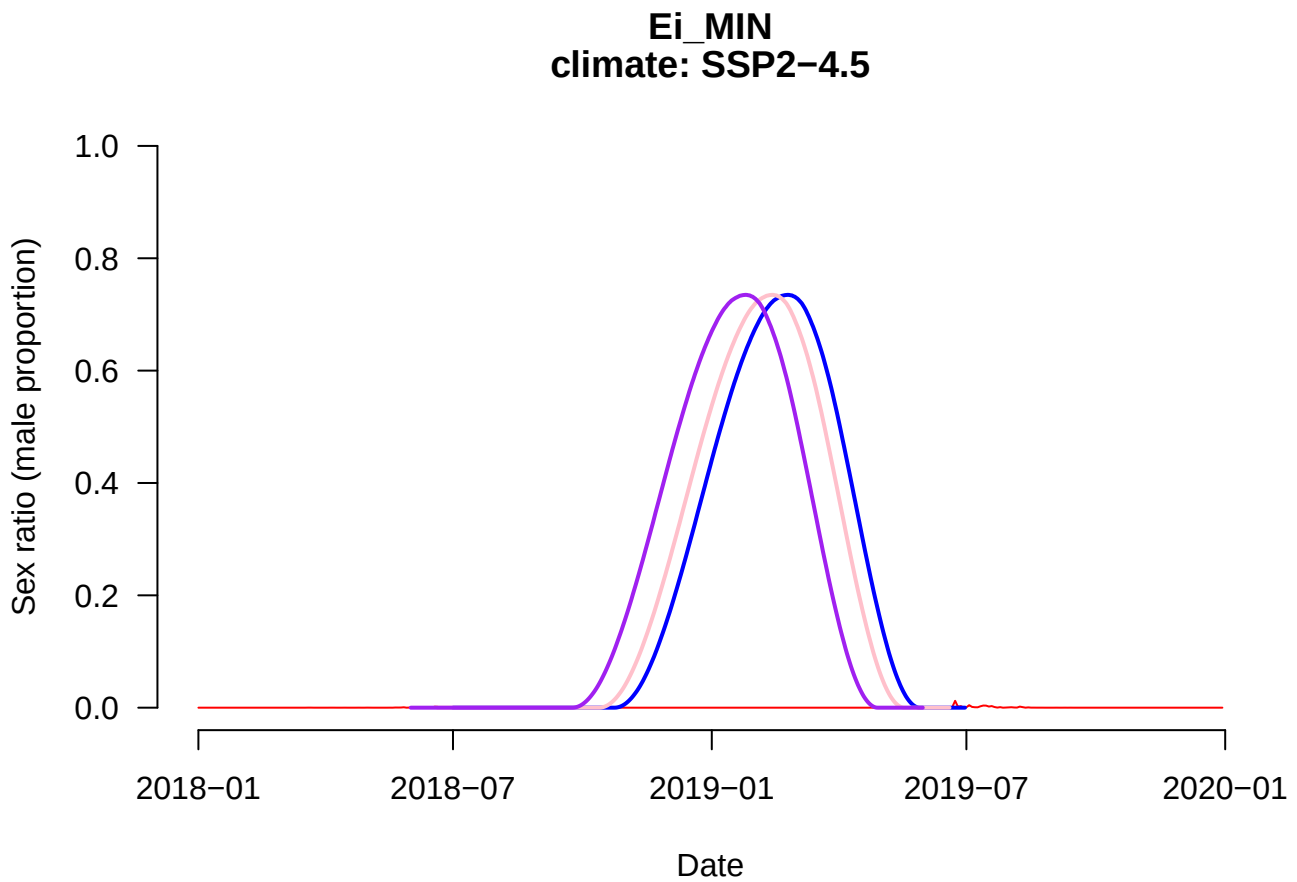

Ei_TOR
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

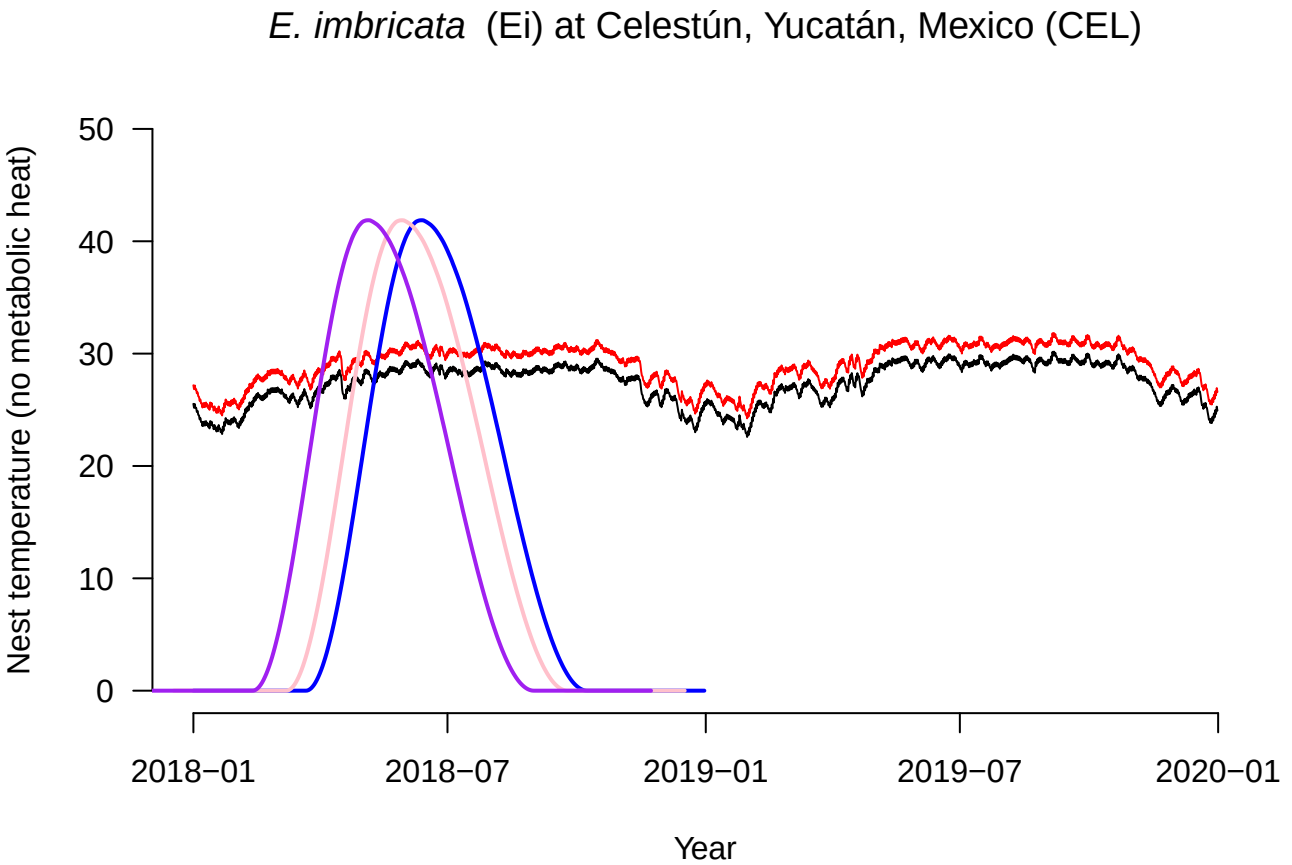

E. imbricata (Ei) at Minas, Rio Grande do Norte, Brazil (MIN)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

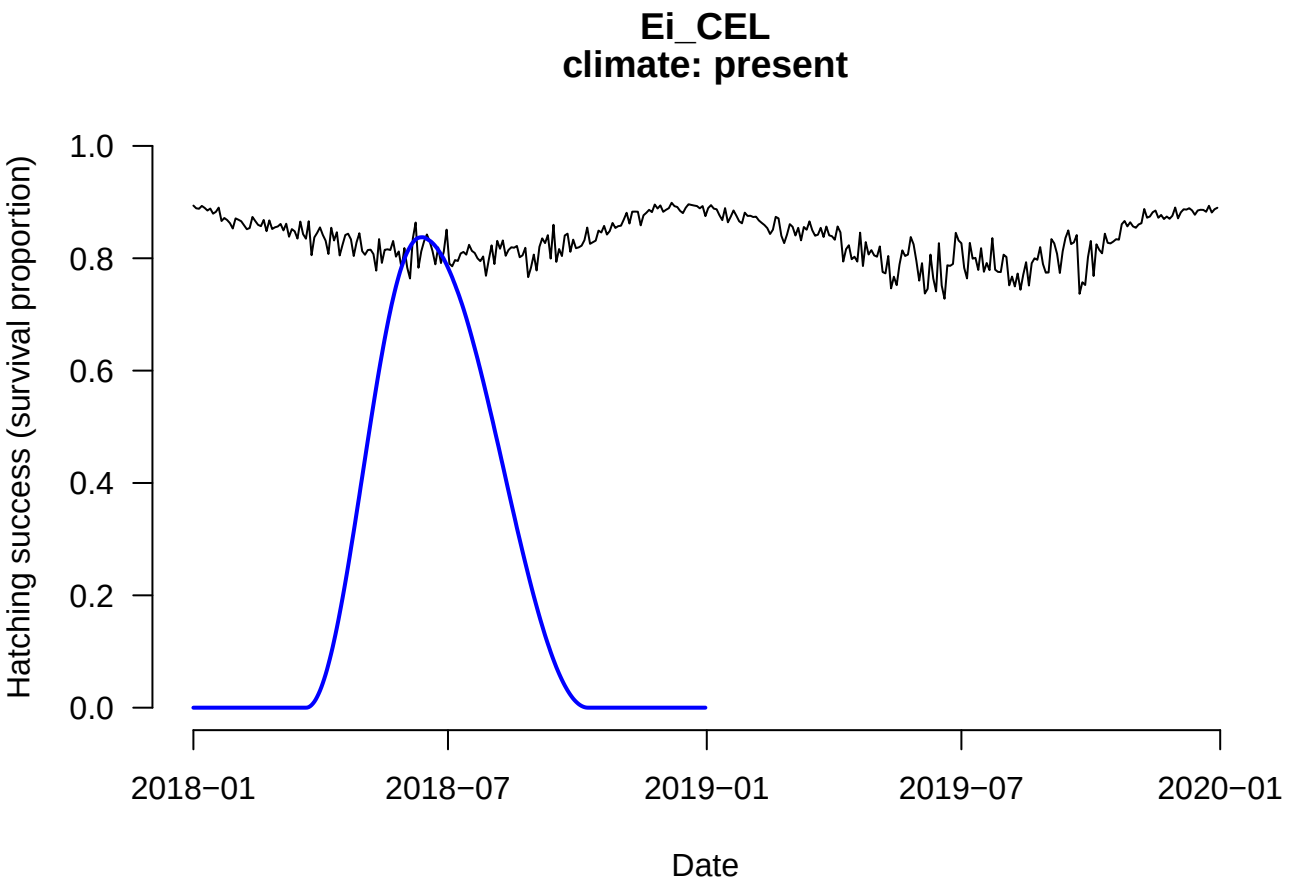

Ei_MIN
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

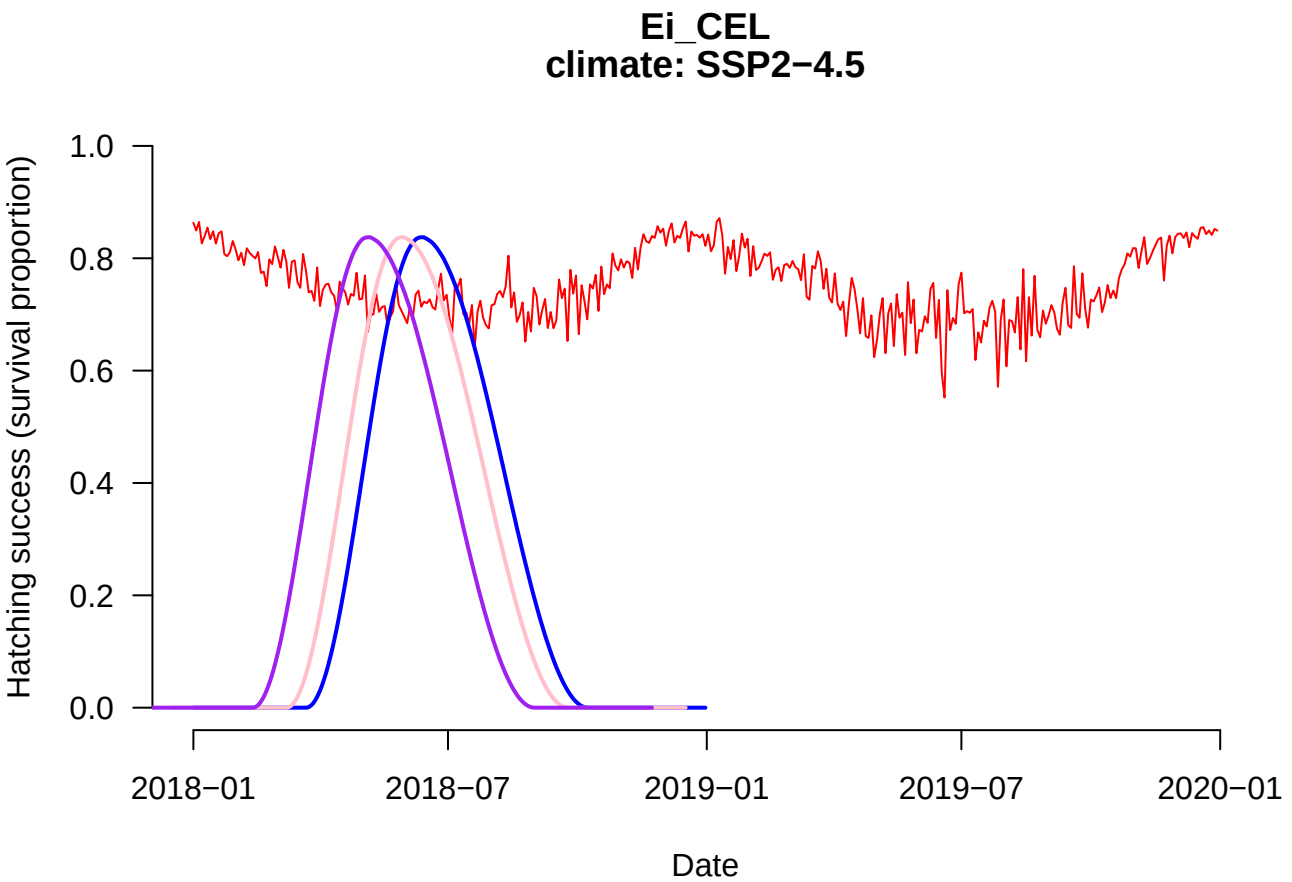

Ei_MIN
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

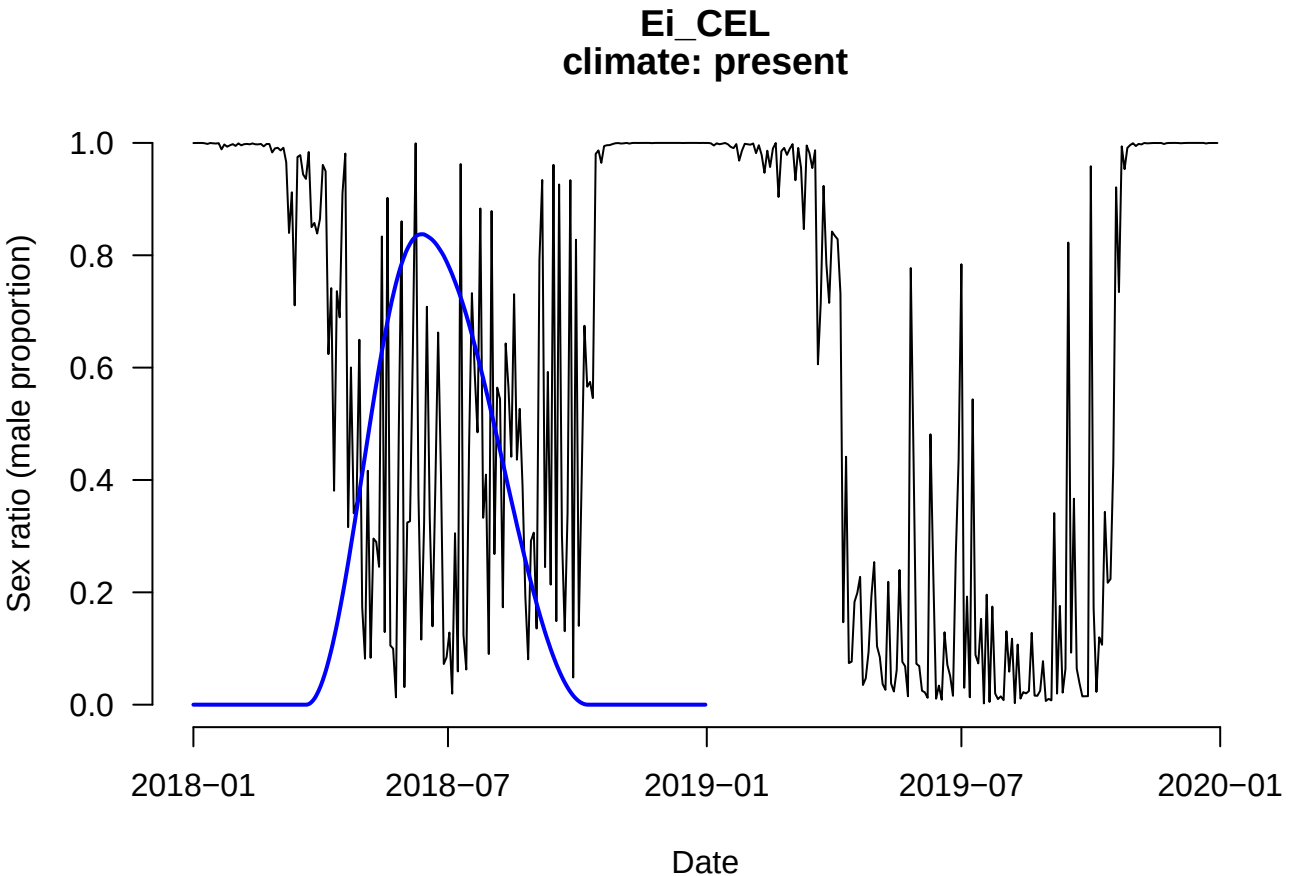

Ei_MIN
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

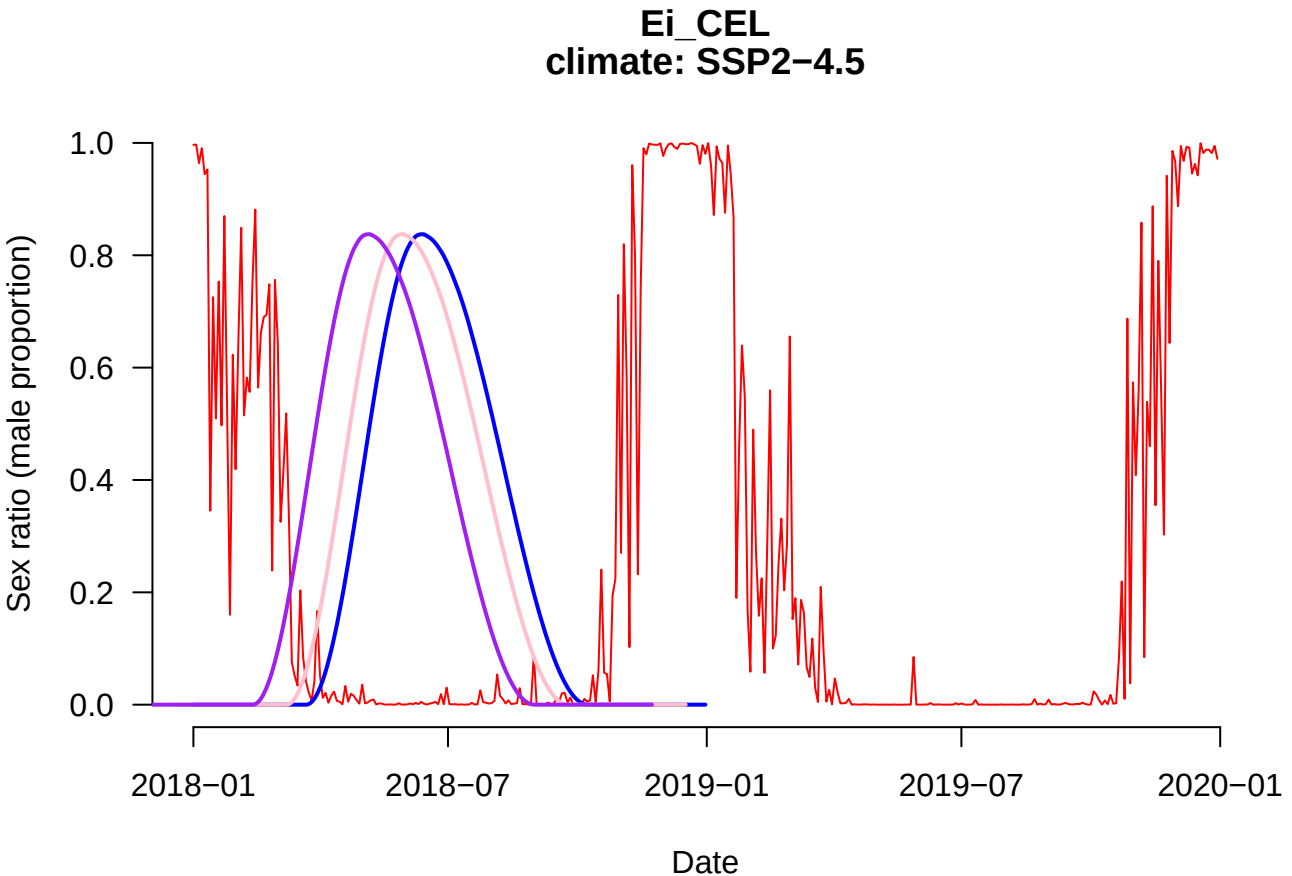

Ei_MIN
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

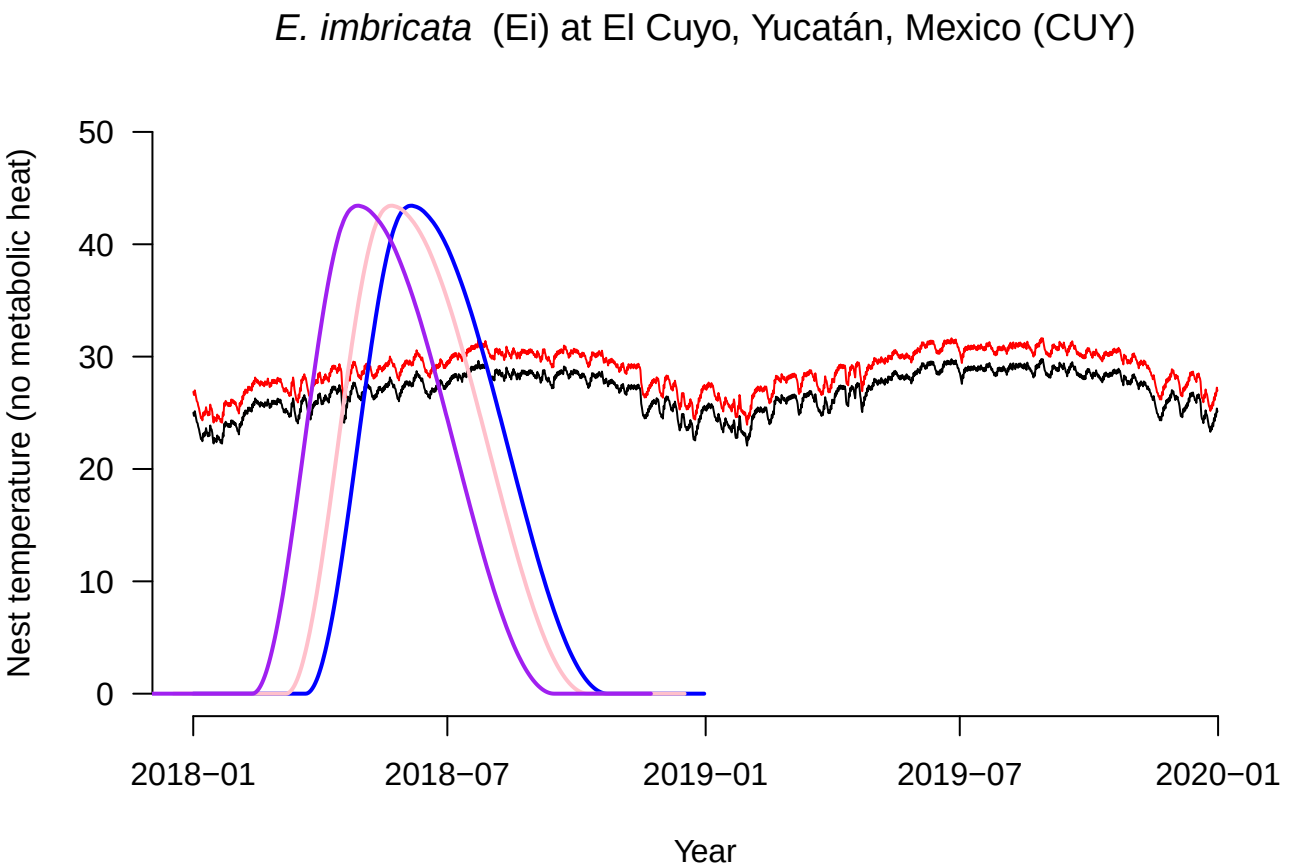

E. imbricata (Ei) at Celestún, Yucatán, Mexico (CEL)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

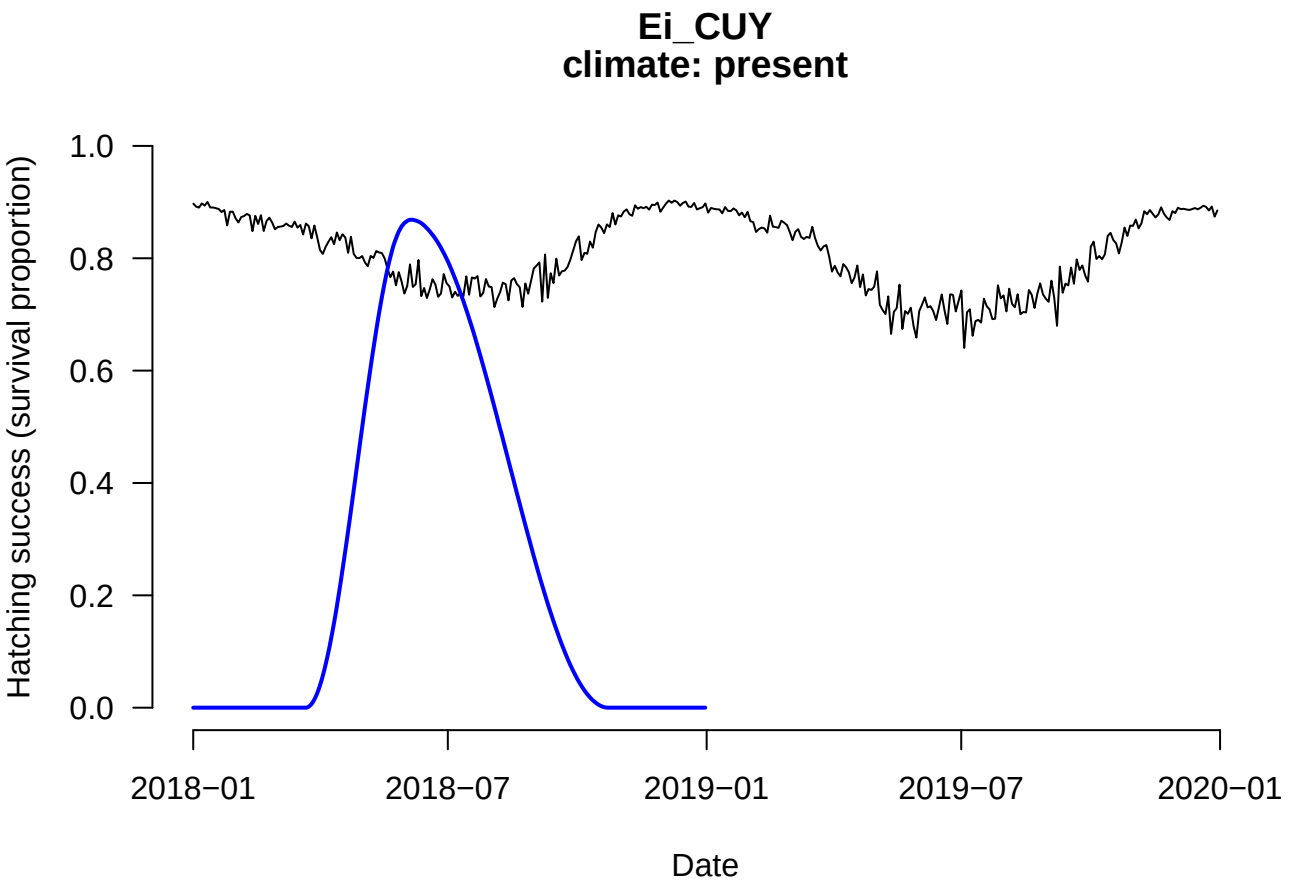

Ei_CEL
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

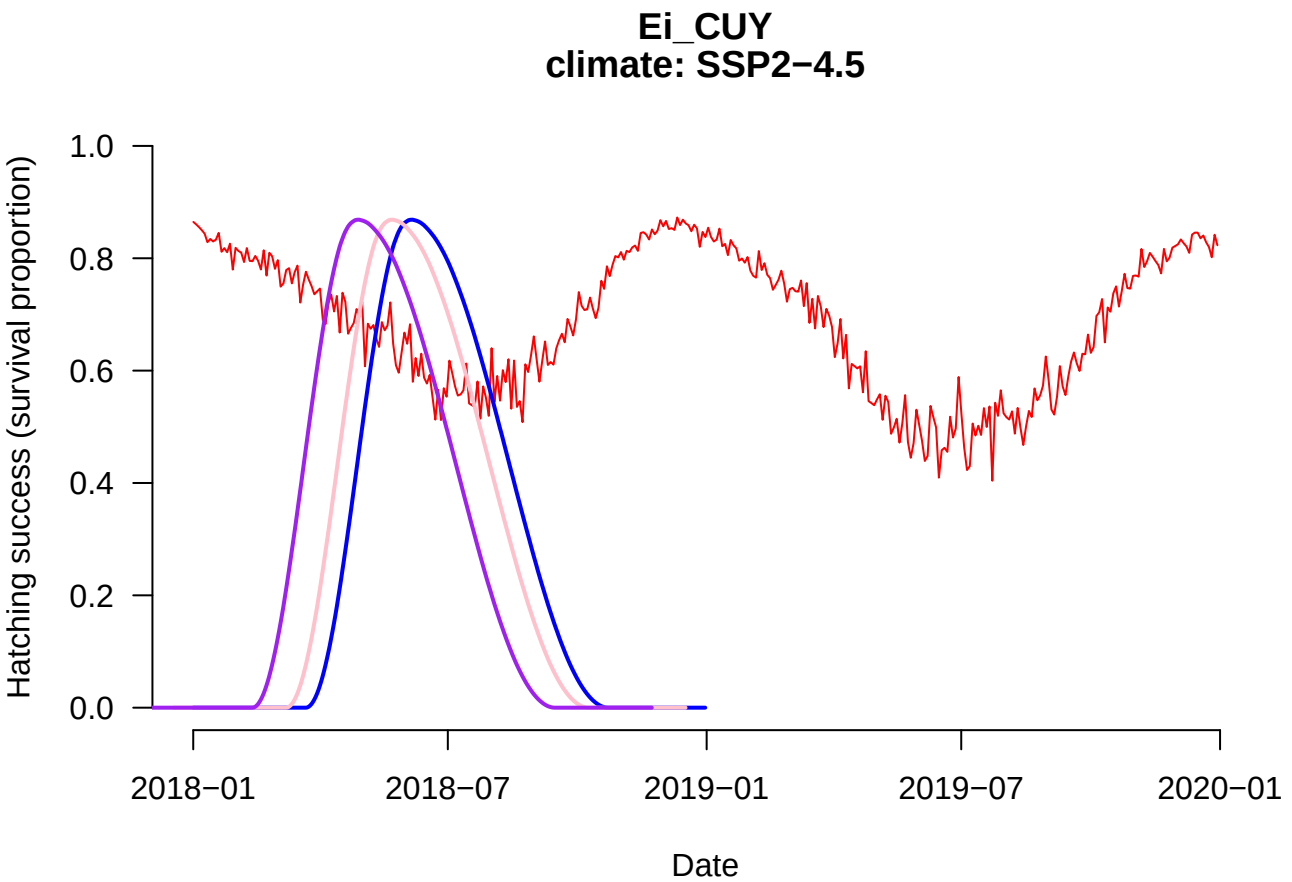

Ei_CEL
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

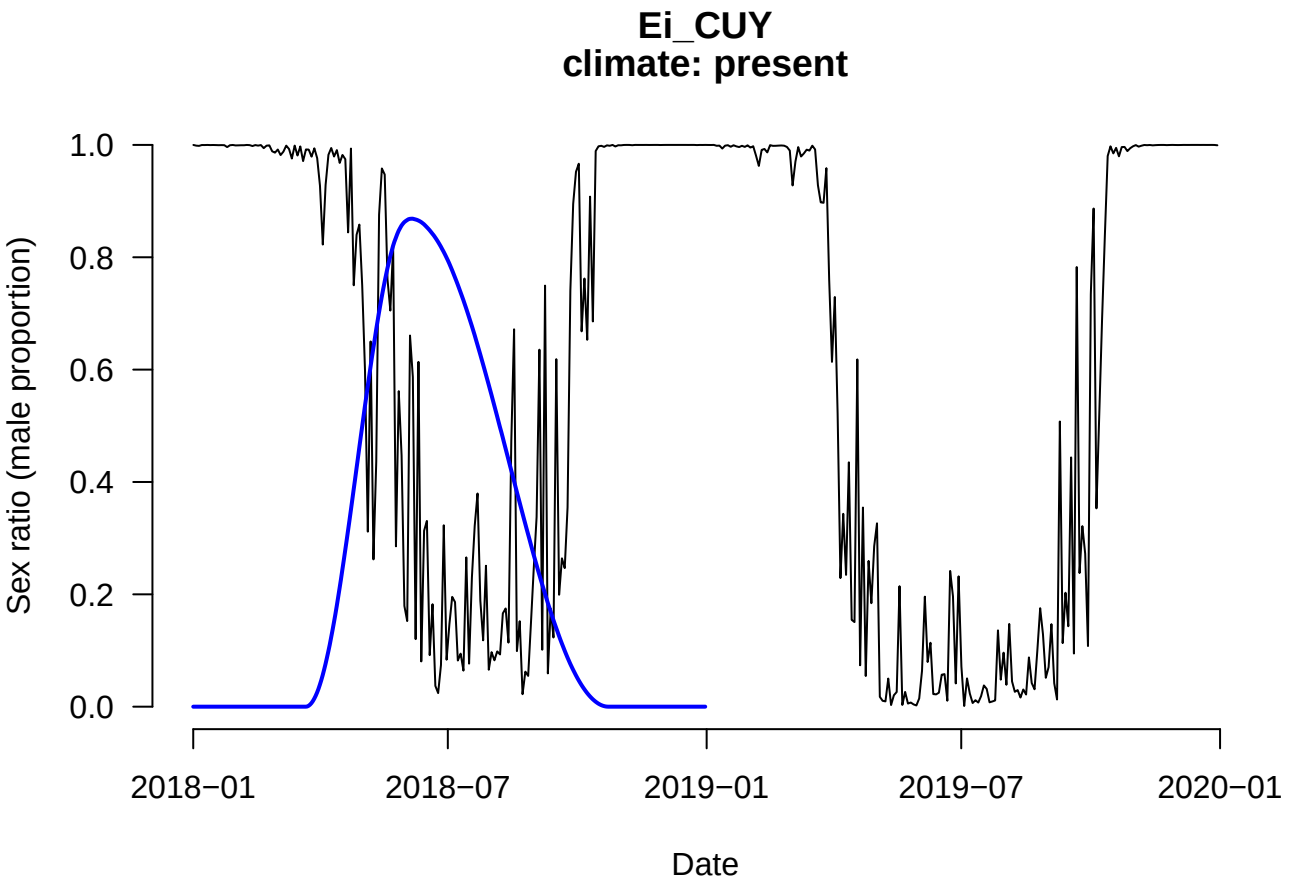

Ei_CEL
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

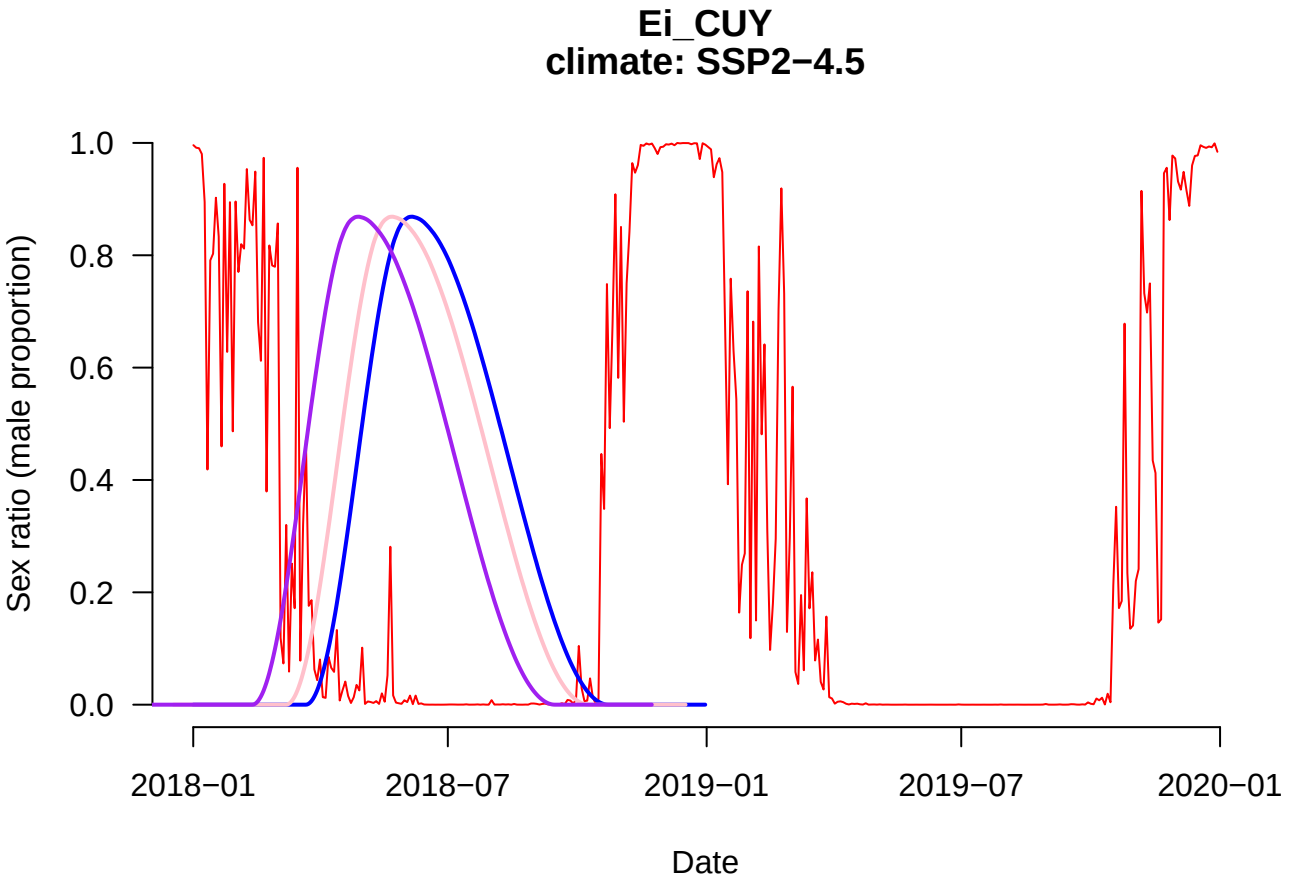

Ei_CEL
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

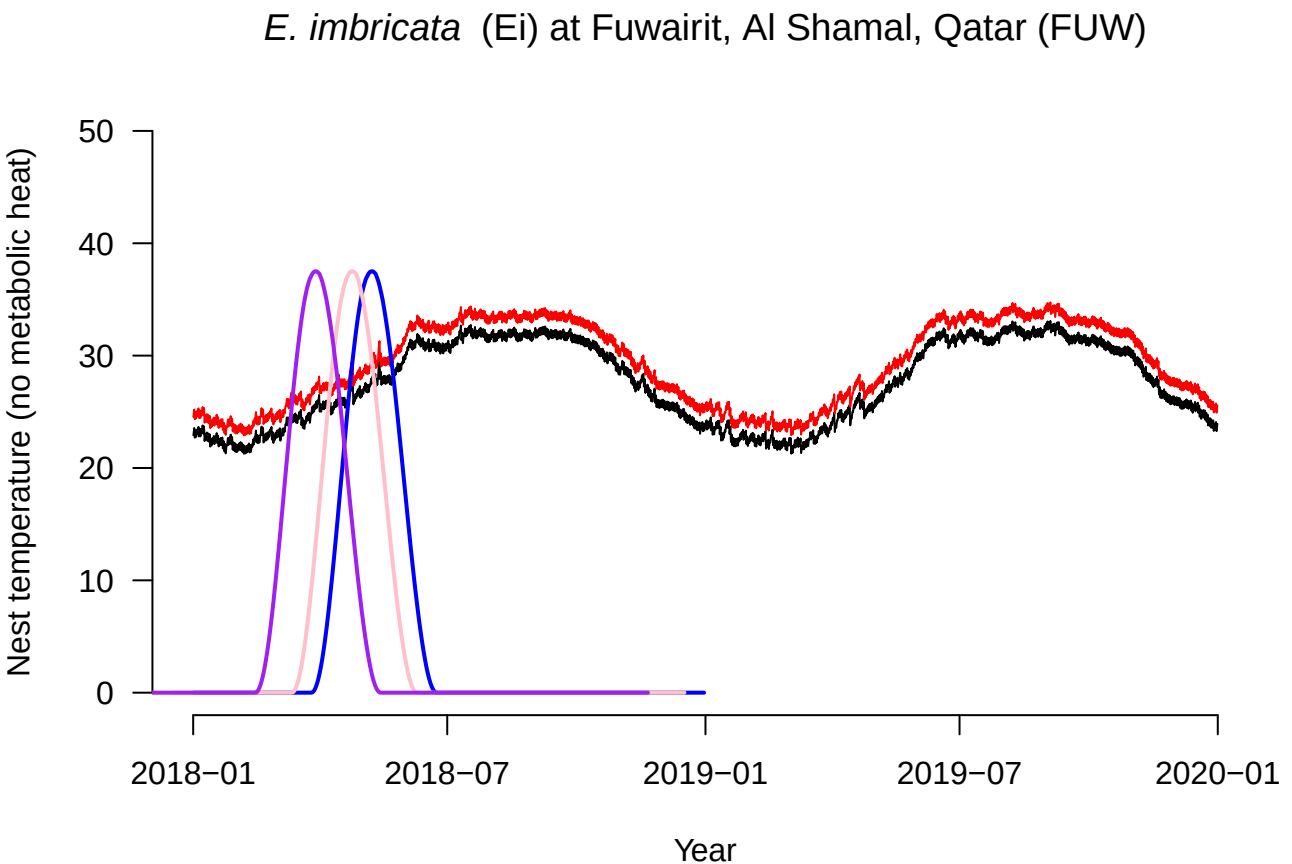

E. imbricata (Ei) at El Cuyo, Yucatán, Mexico (CUY)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

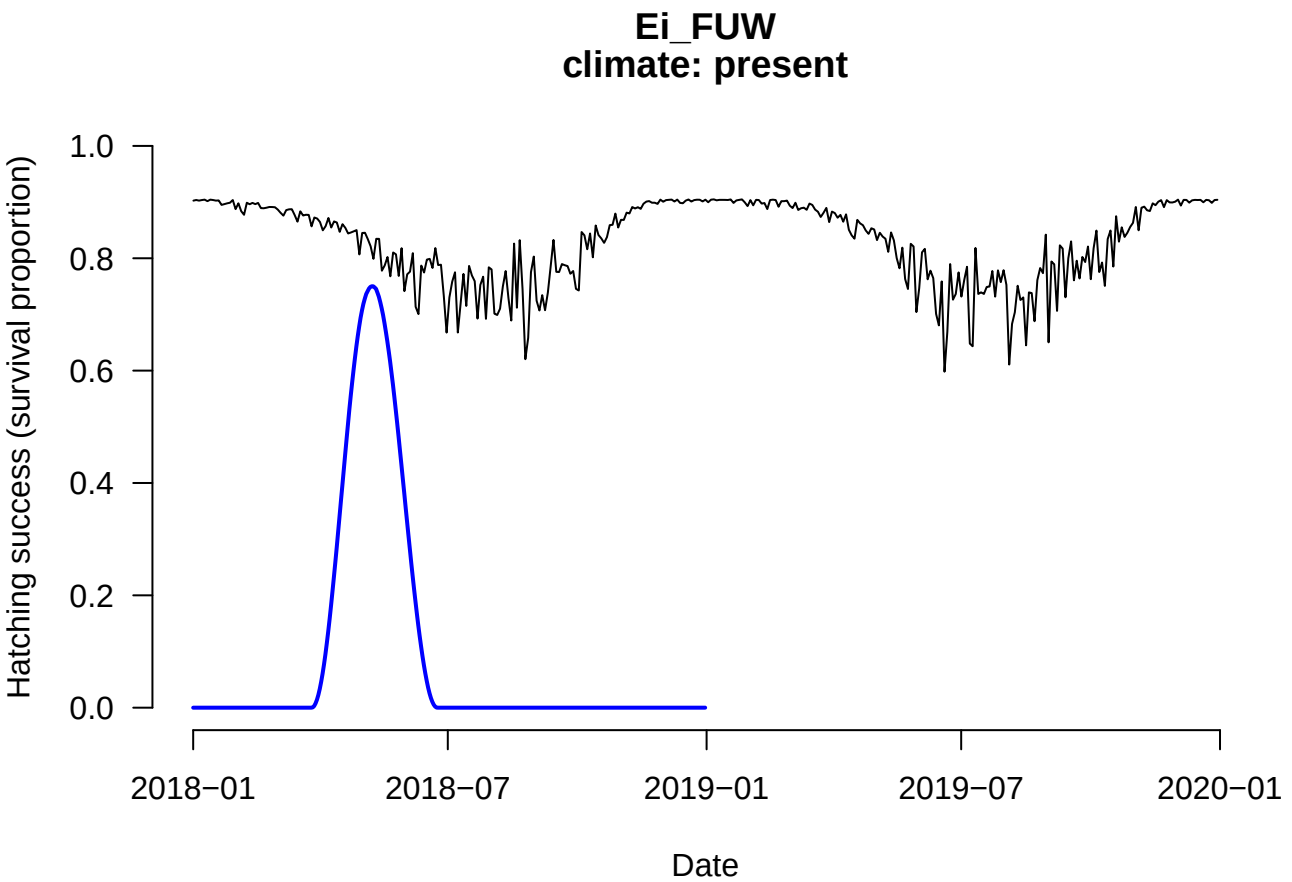

Ei_CUY
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

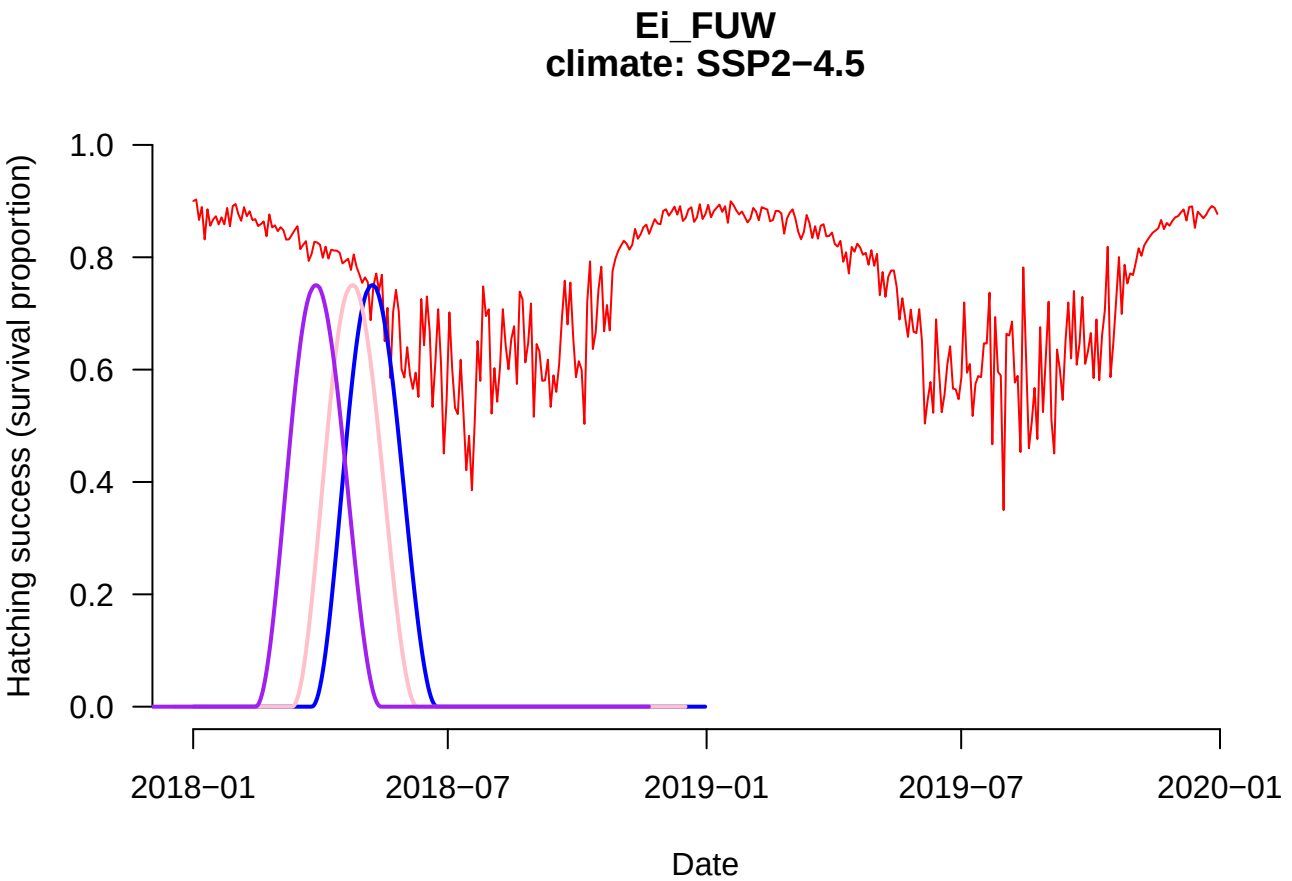

Ei_CUY
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

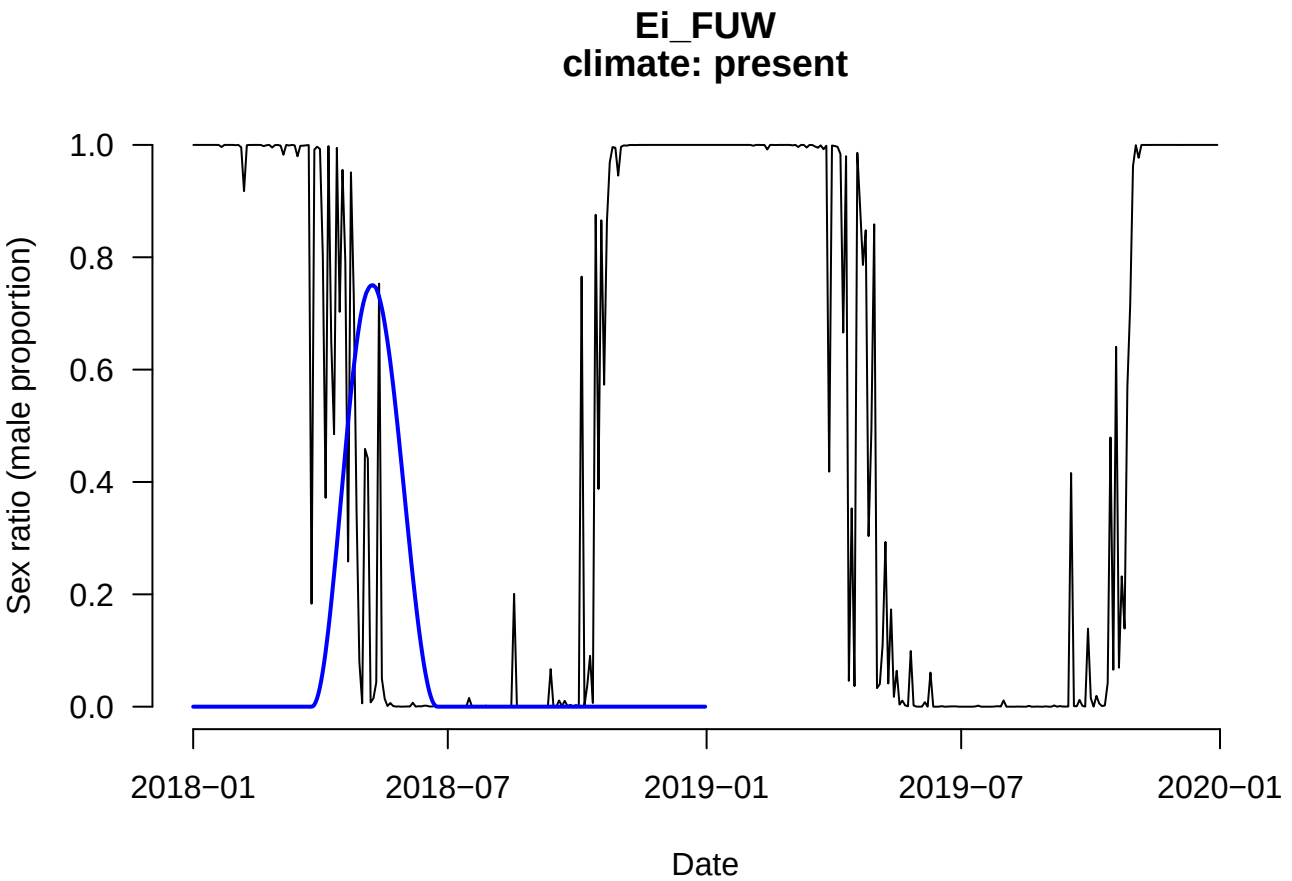

Ei_CUY
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

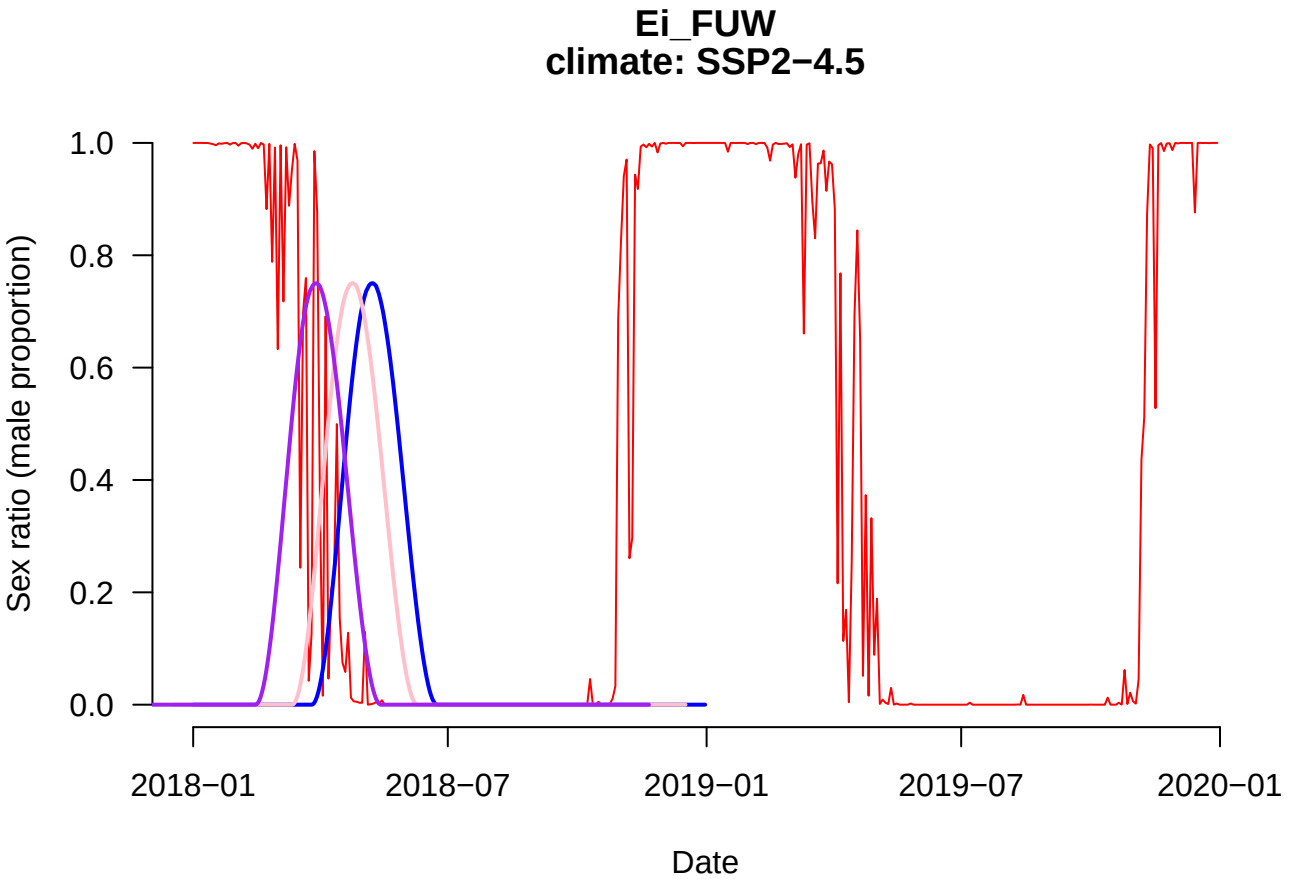

Ei_CUY
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

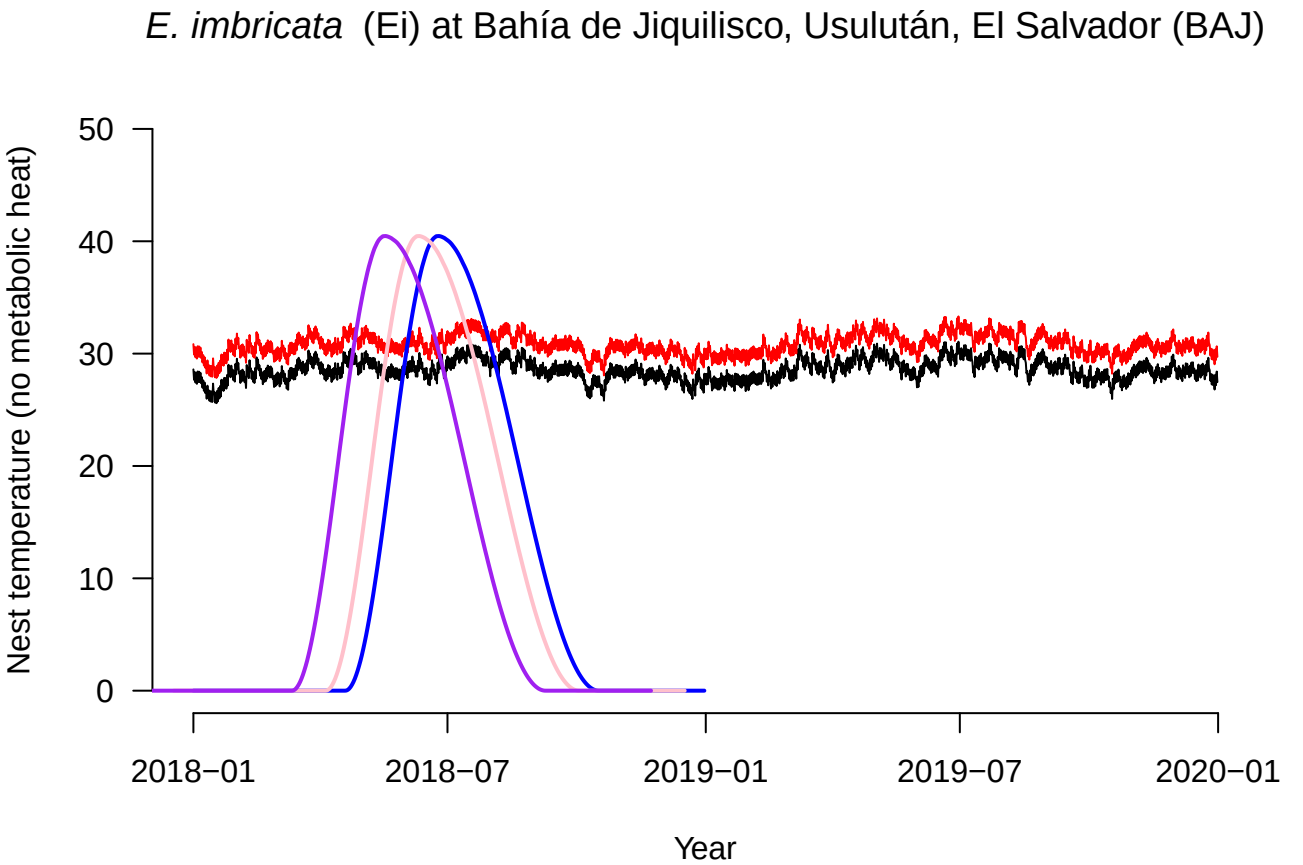

E. imbricata (Ei) at Fuwairit, Al Shamal, Qatar (FUW)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

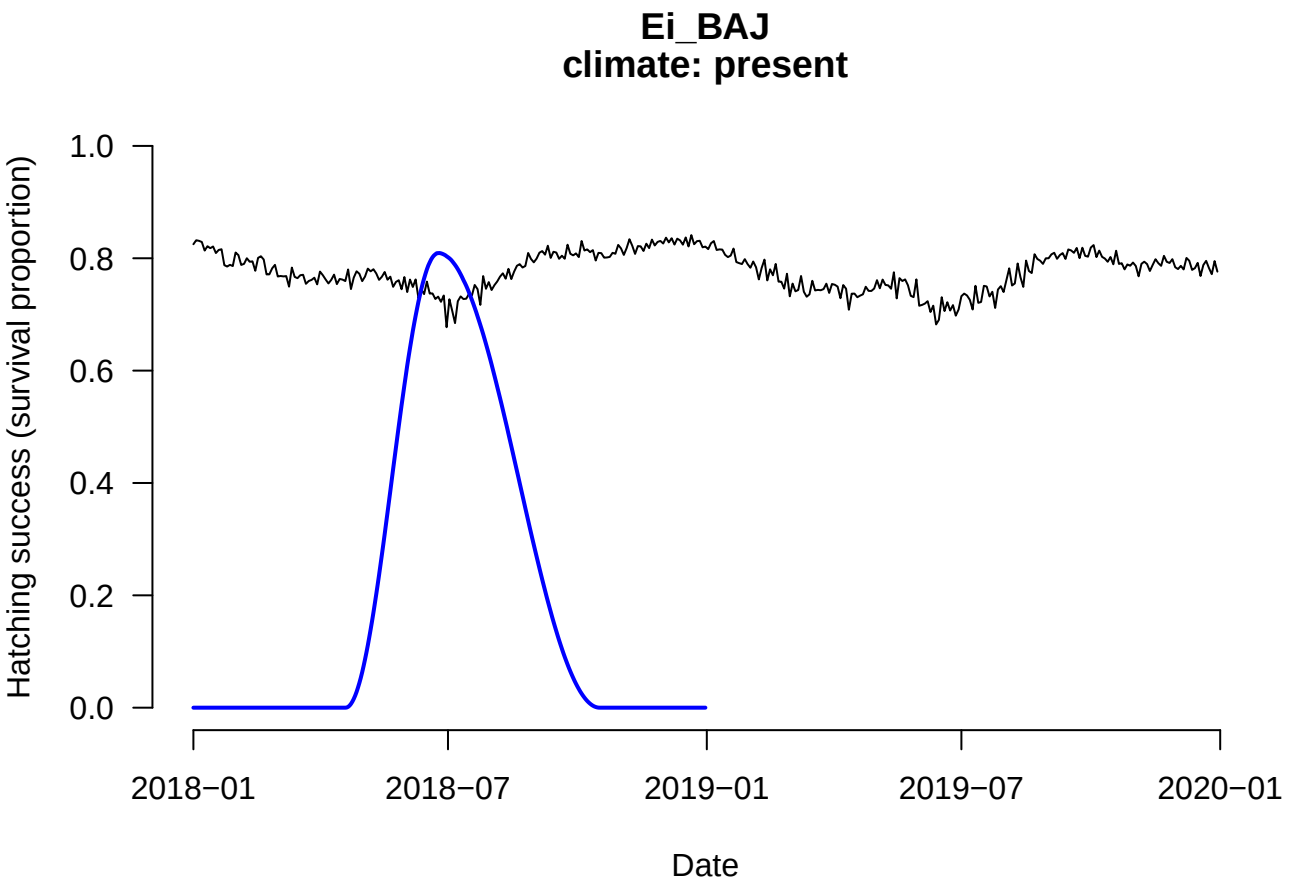

Ei_FUW
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

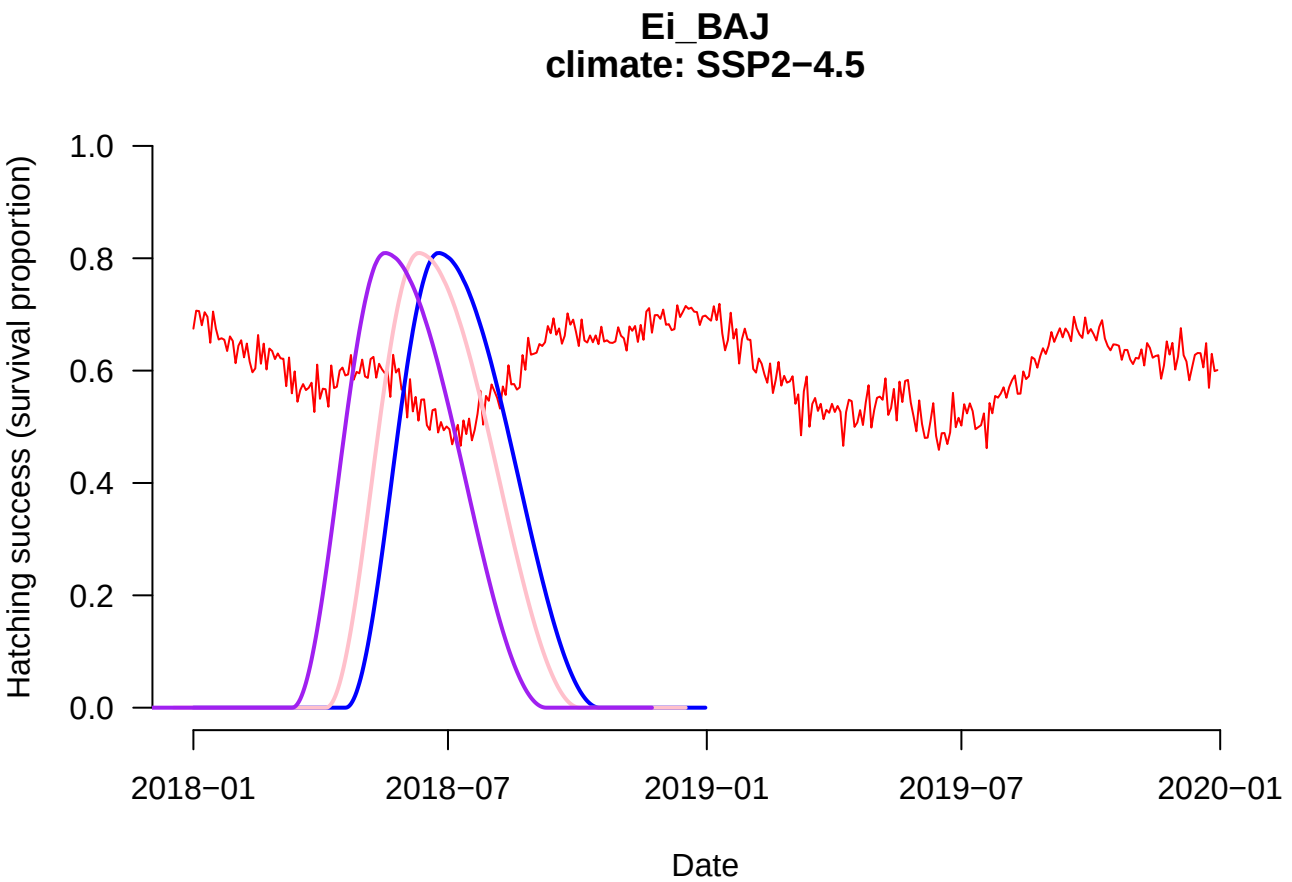

Ei_FUW
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

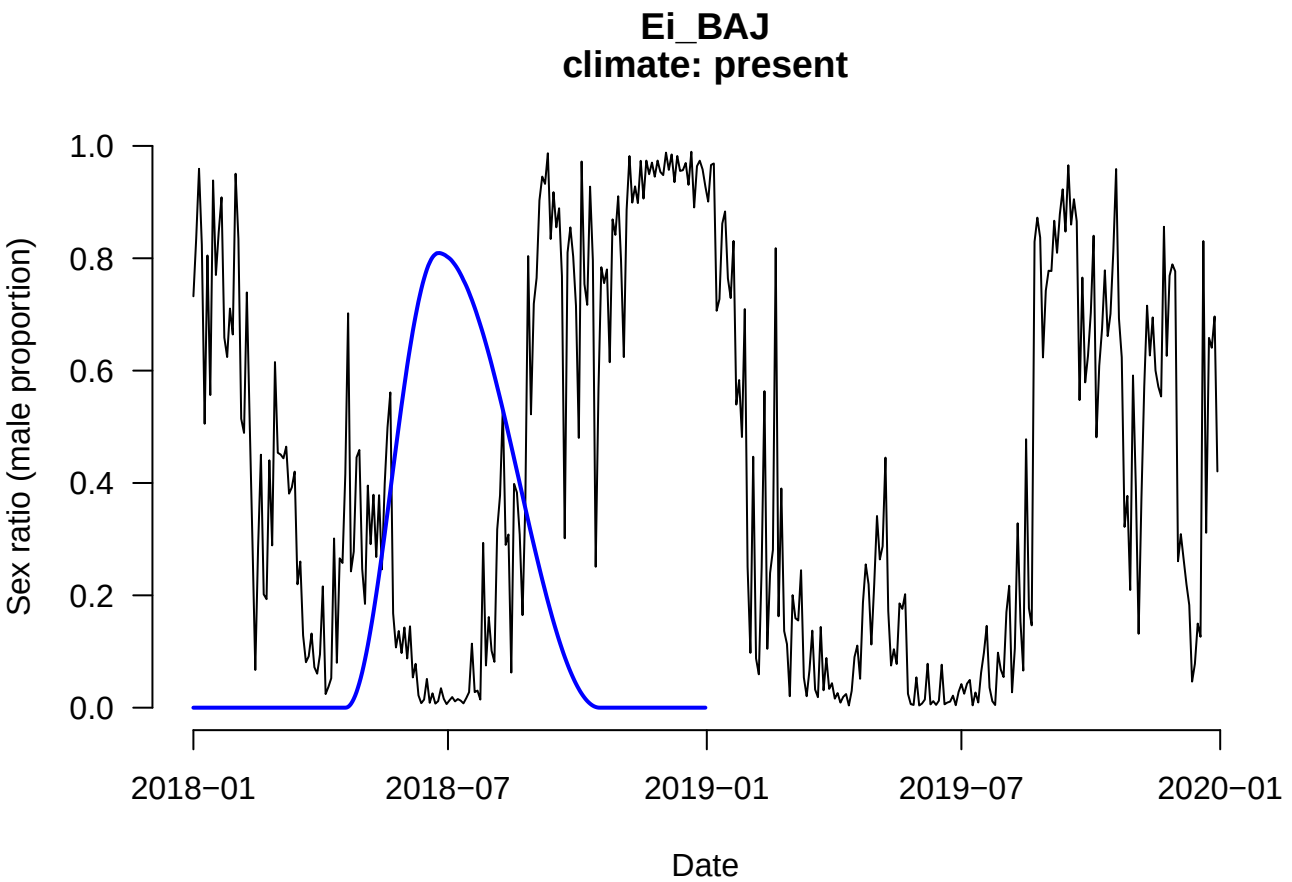

Ei_FUW
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

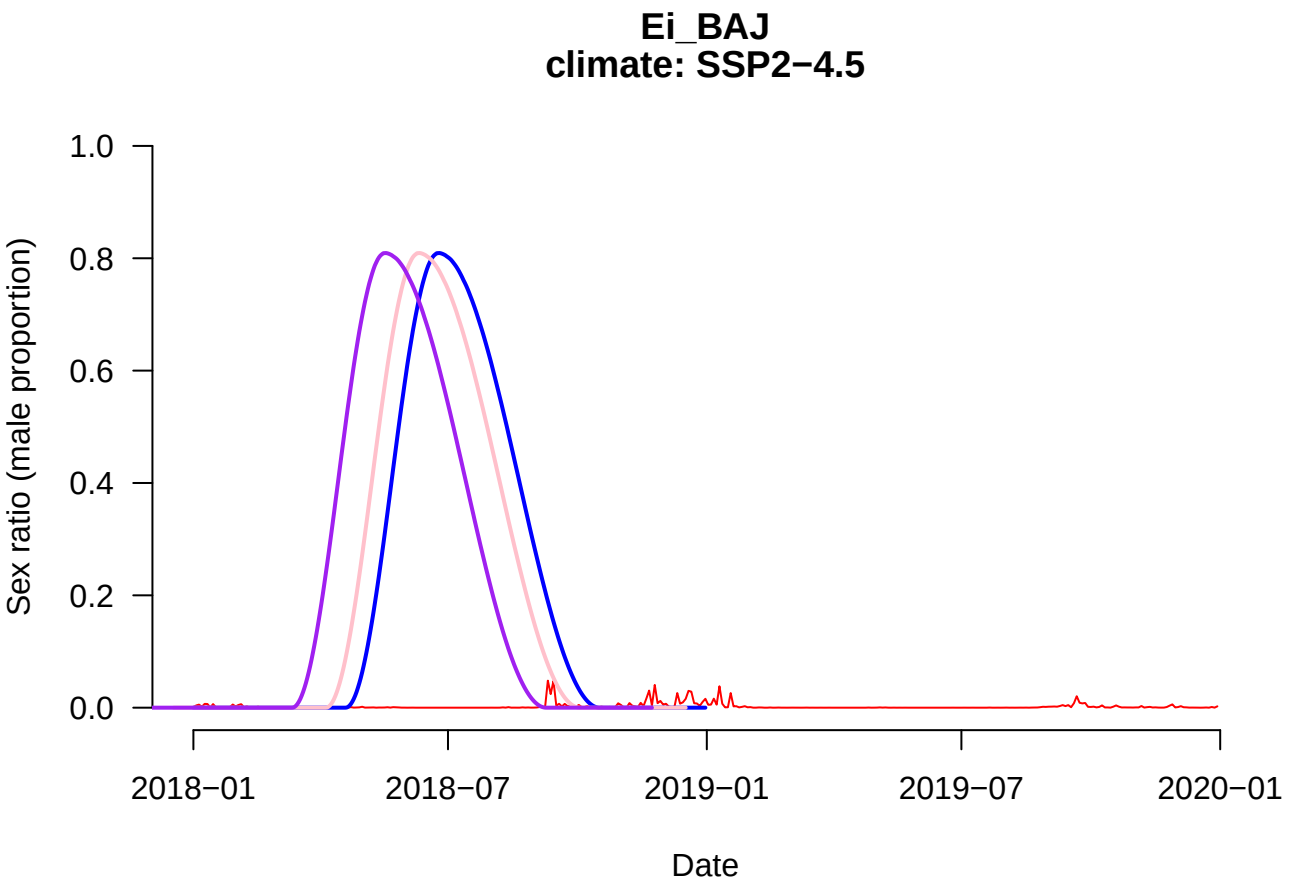

Ei_FUW
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

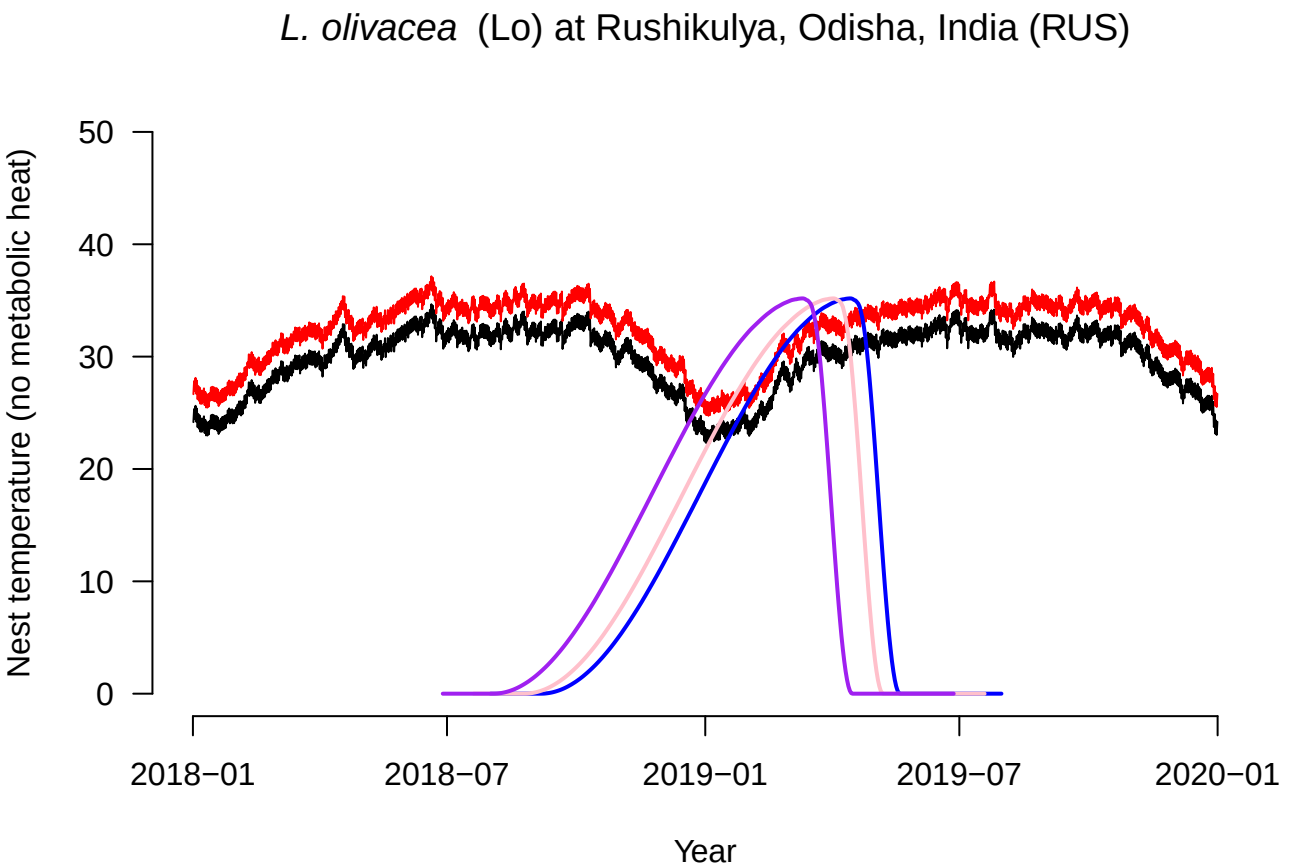

E. imbricata (Ei) at Bahía de Jiquilisco, Usulután, El Salvador (BAJ)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

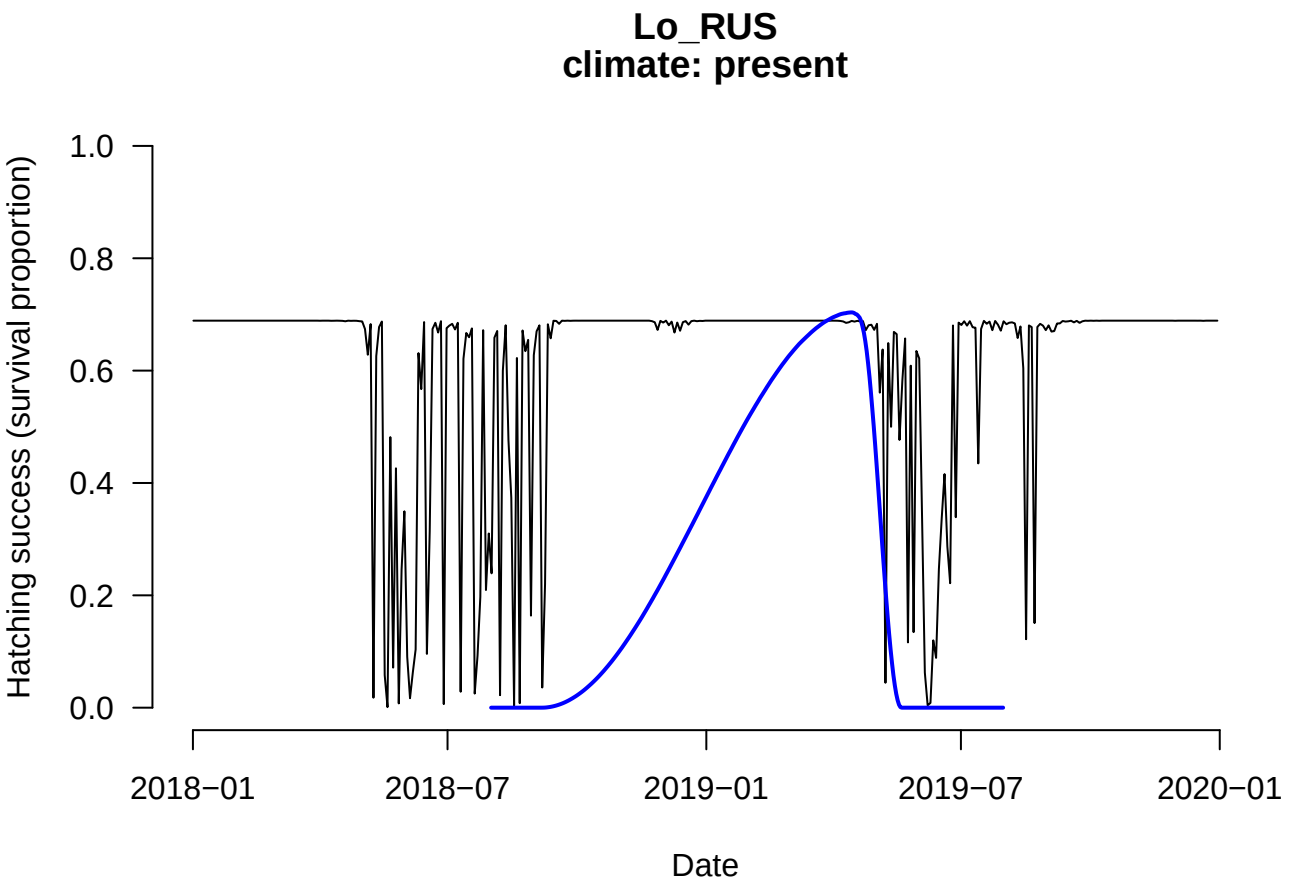

Ei_BAJ
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

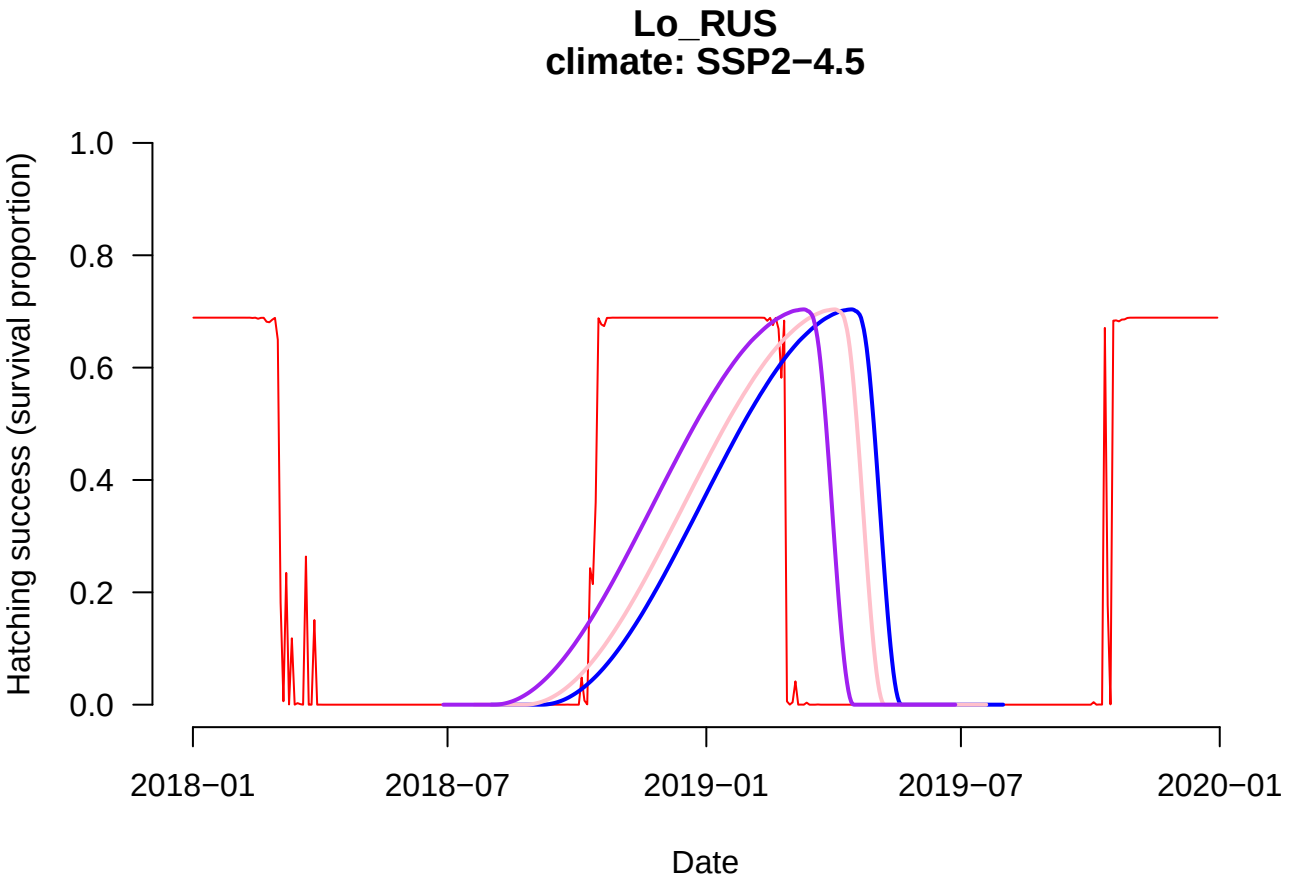

Ei_BAJ
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

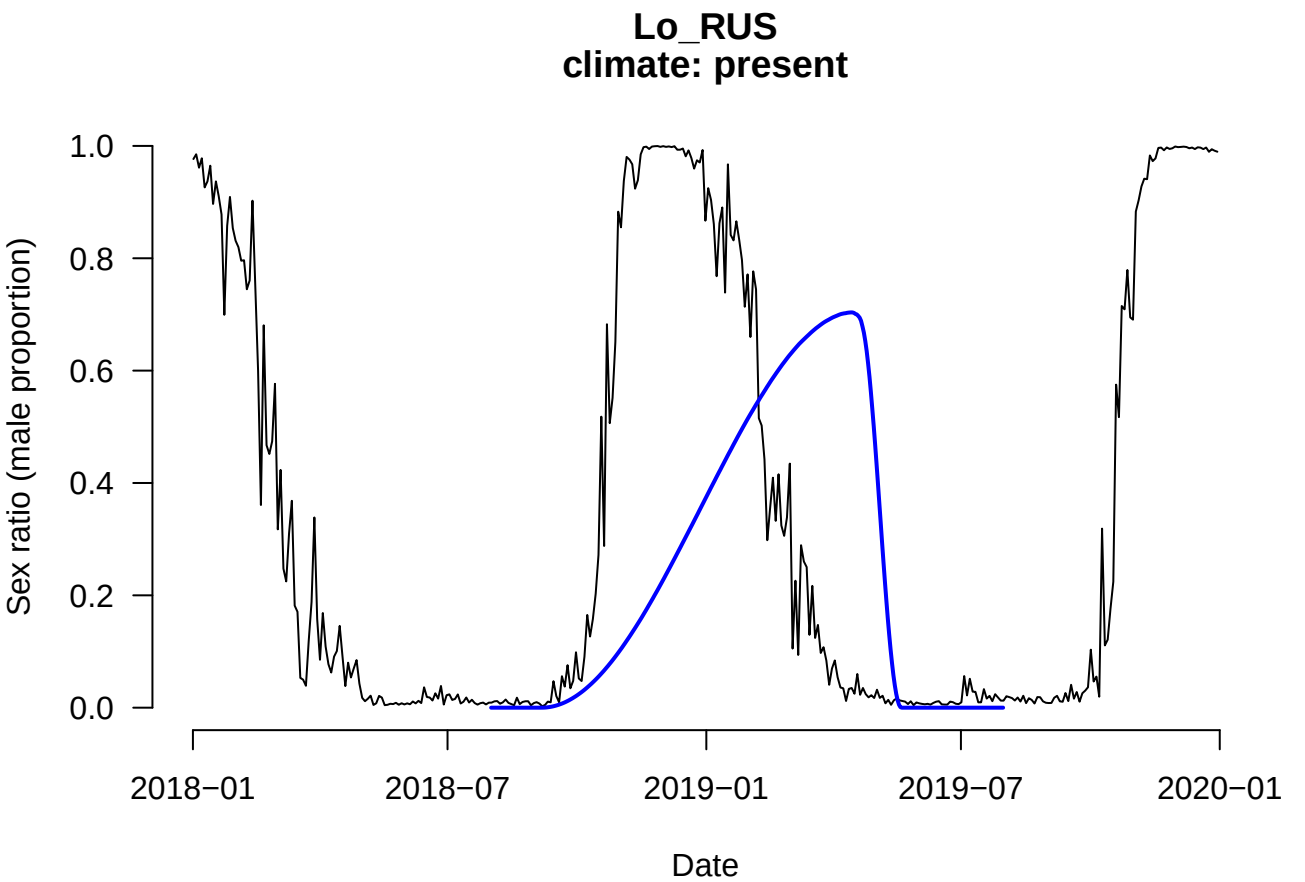

Ei_BAJ
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

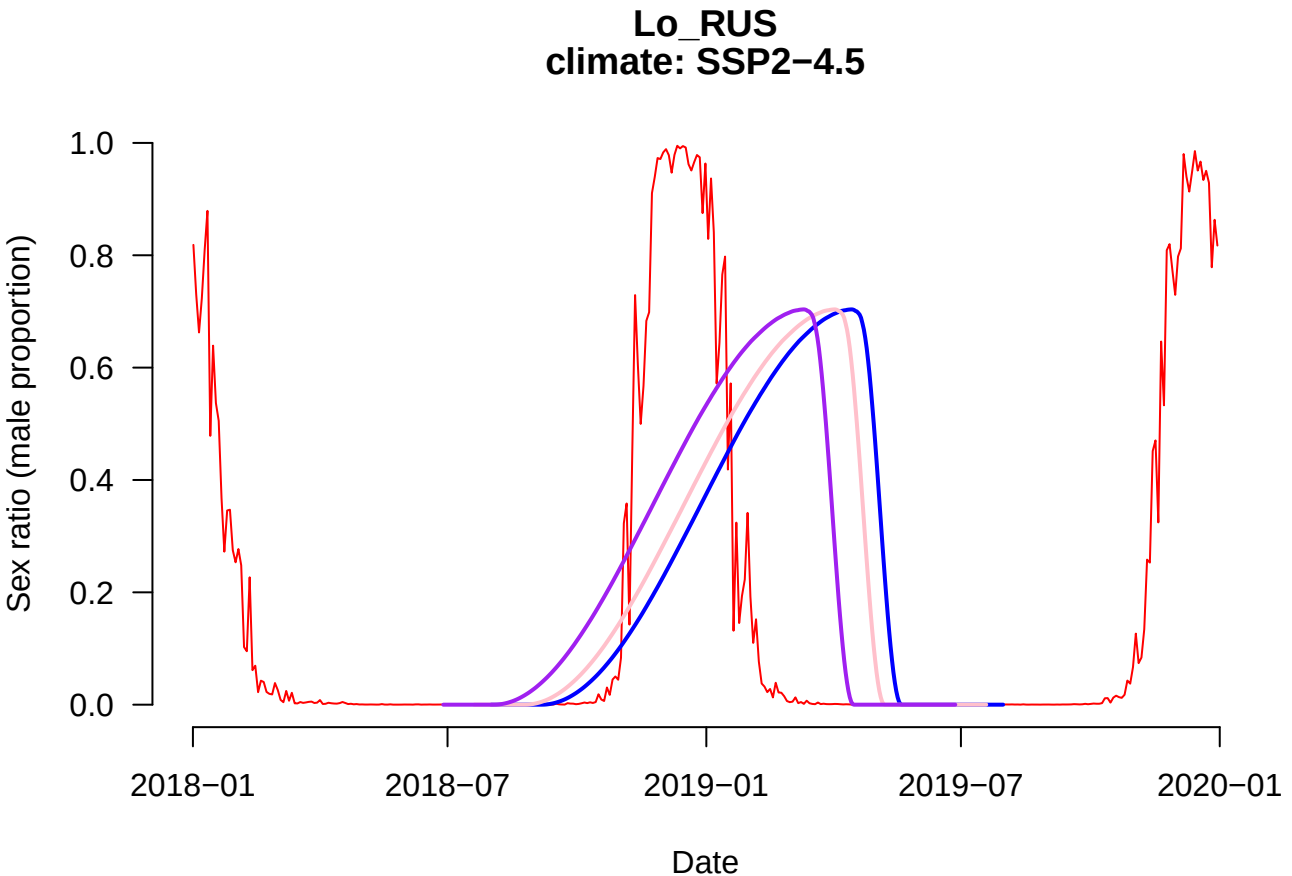

Ei_BAJ
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

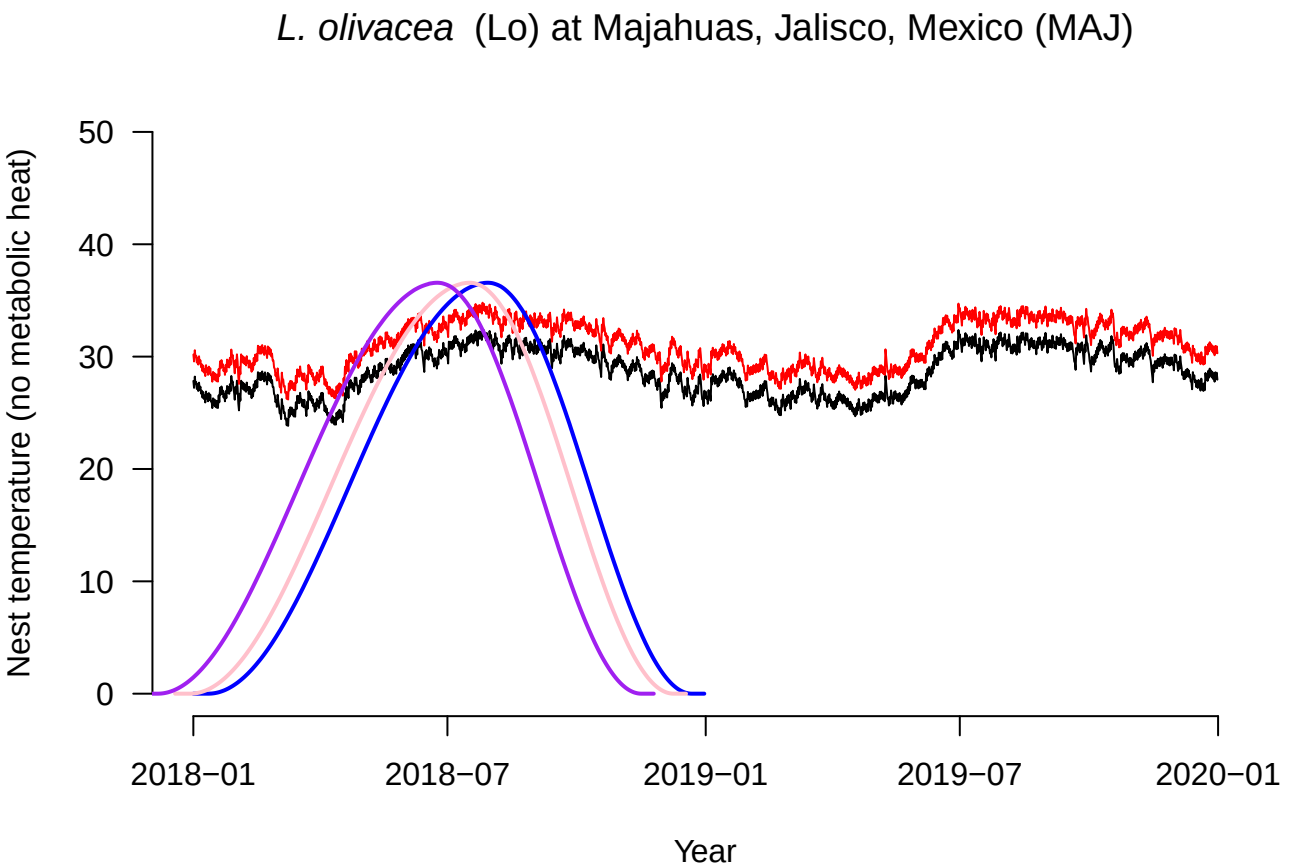

L. olivacea (Lo) at Rushikulya, Odisha, India (RUS)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

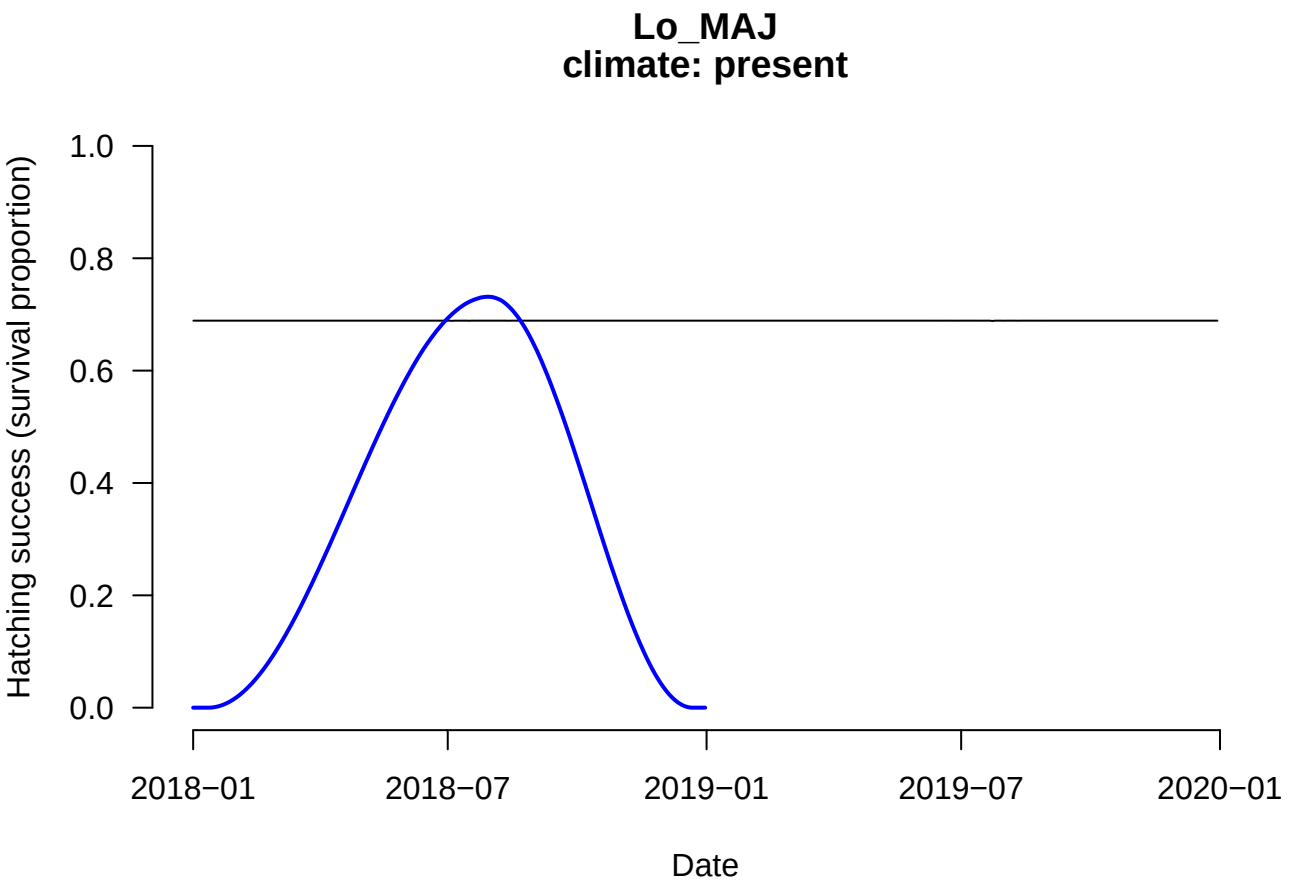

Lo_RUS
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

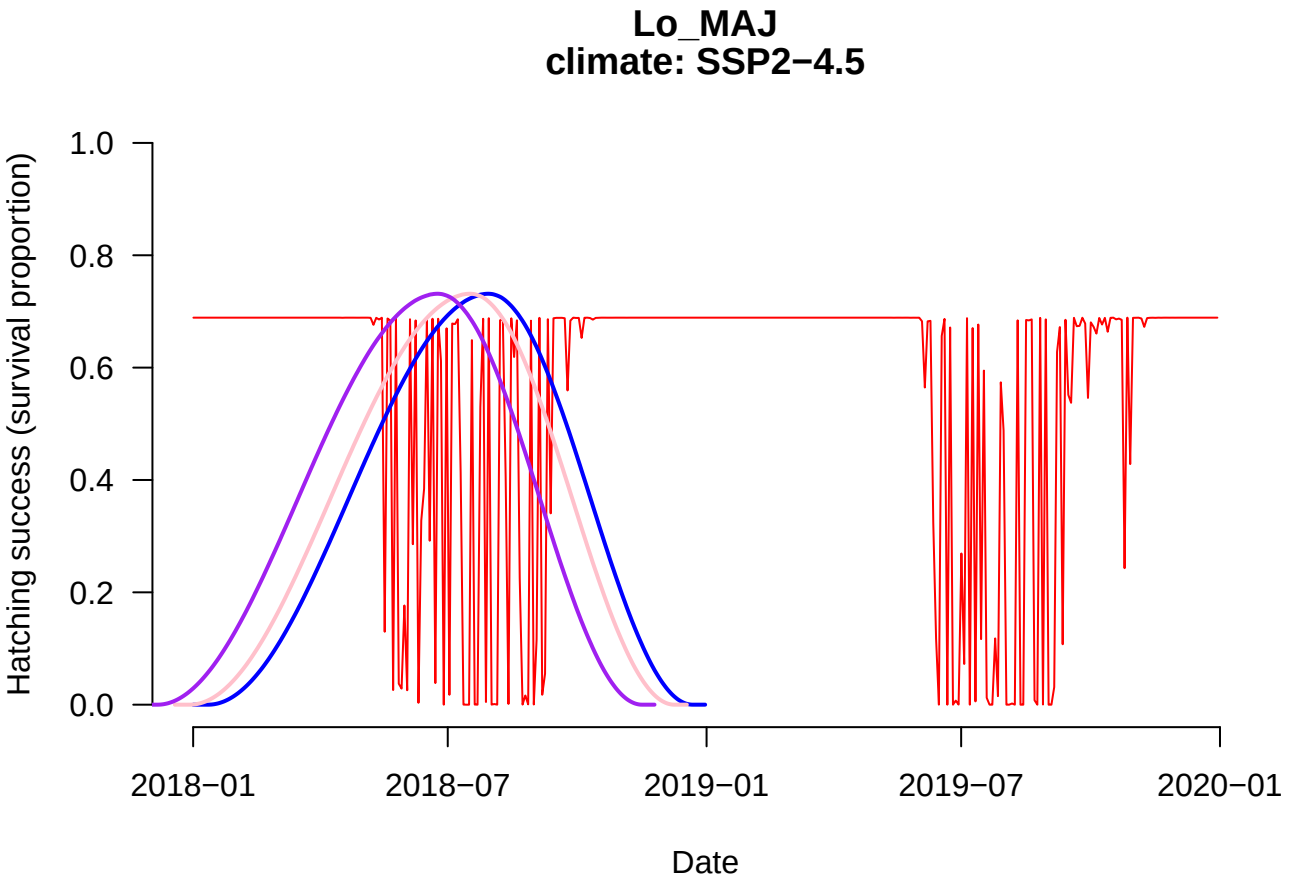

Lo_RUS
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

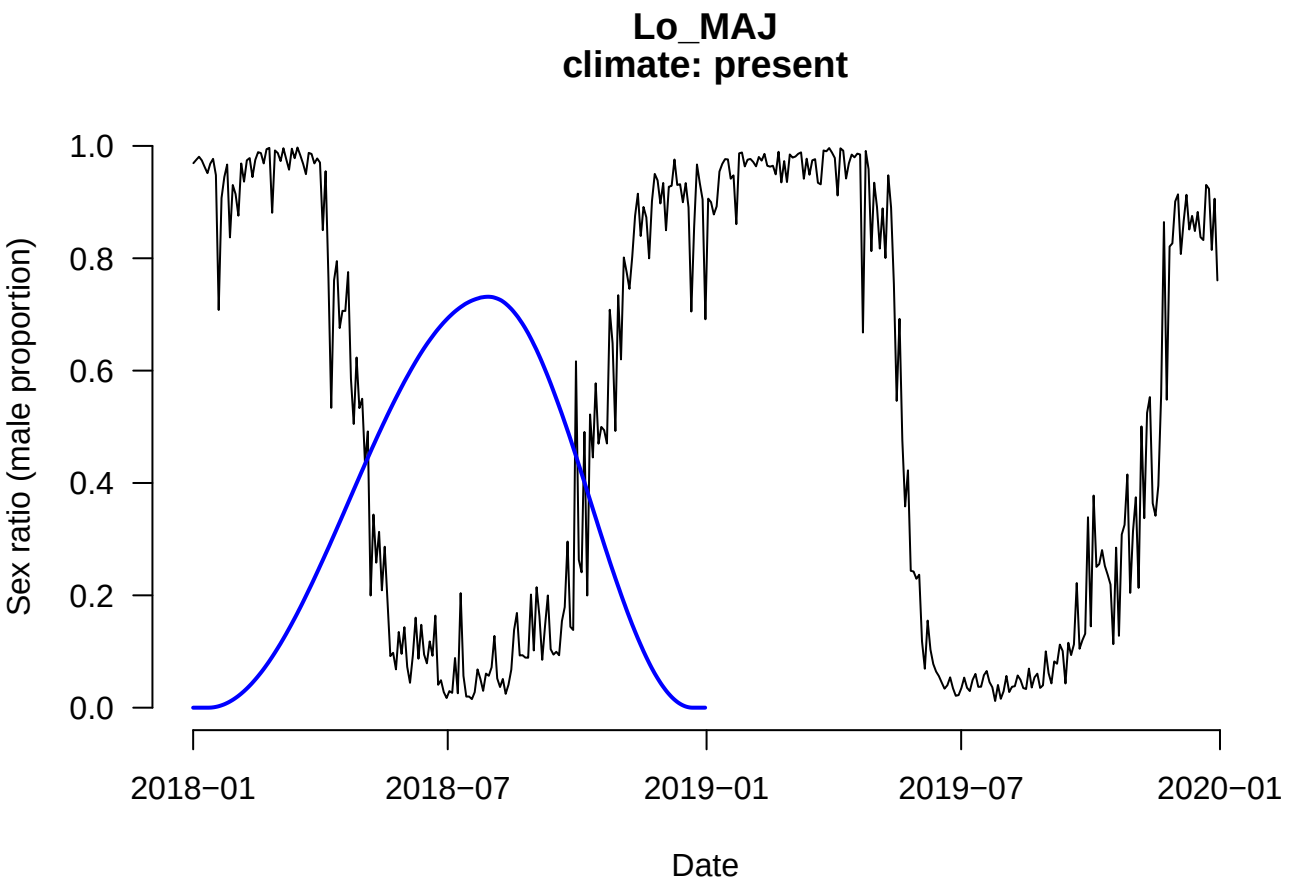

Lo_RUS
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

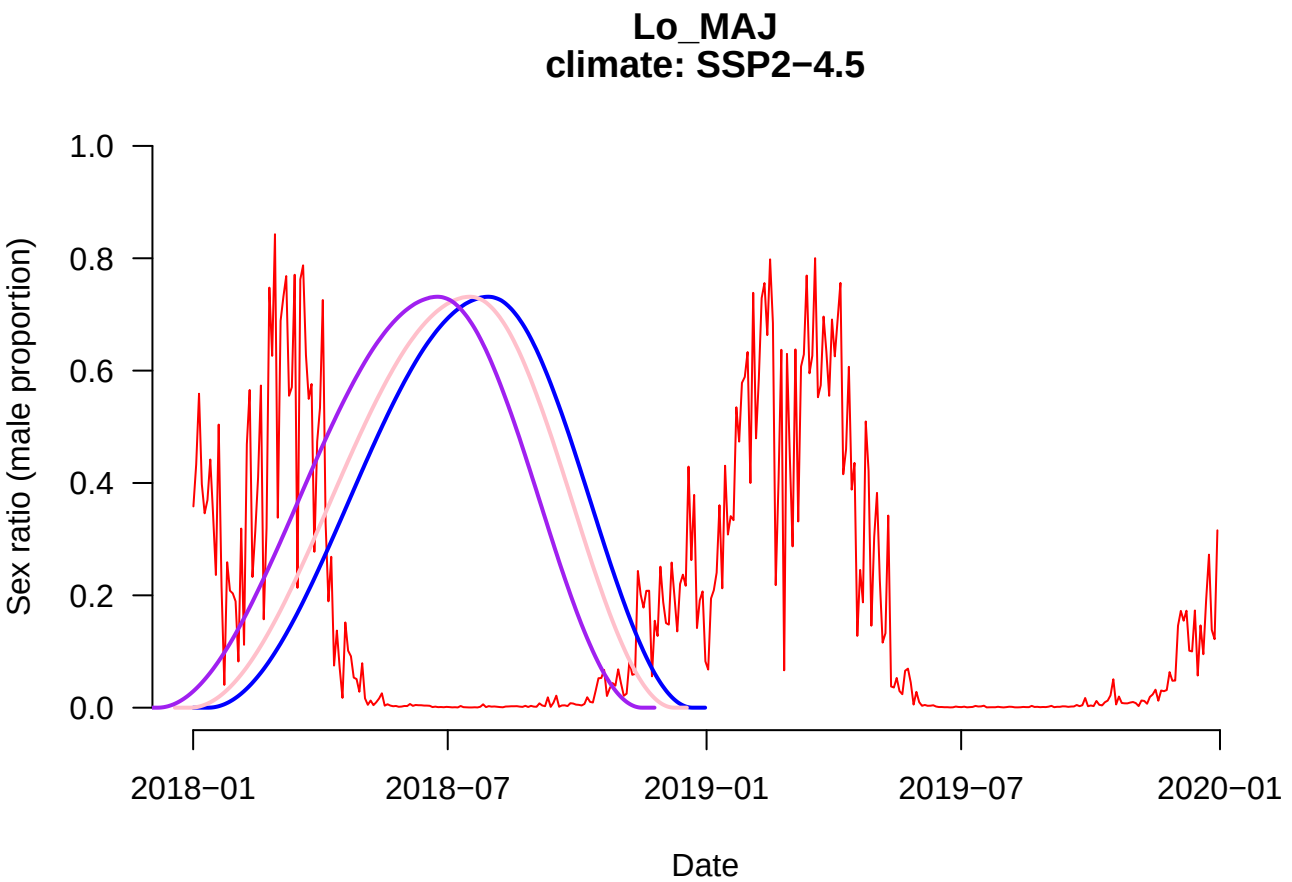

Lo_RUS
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

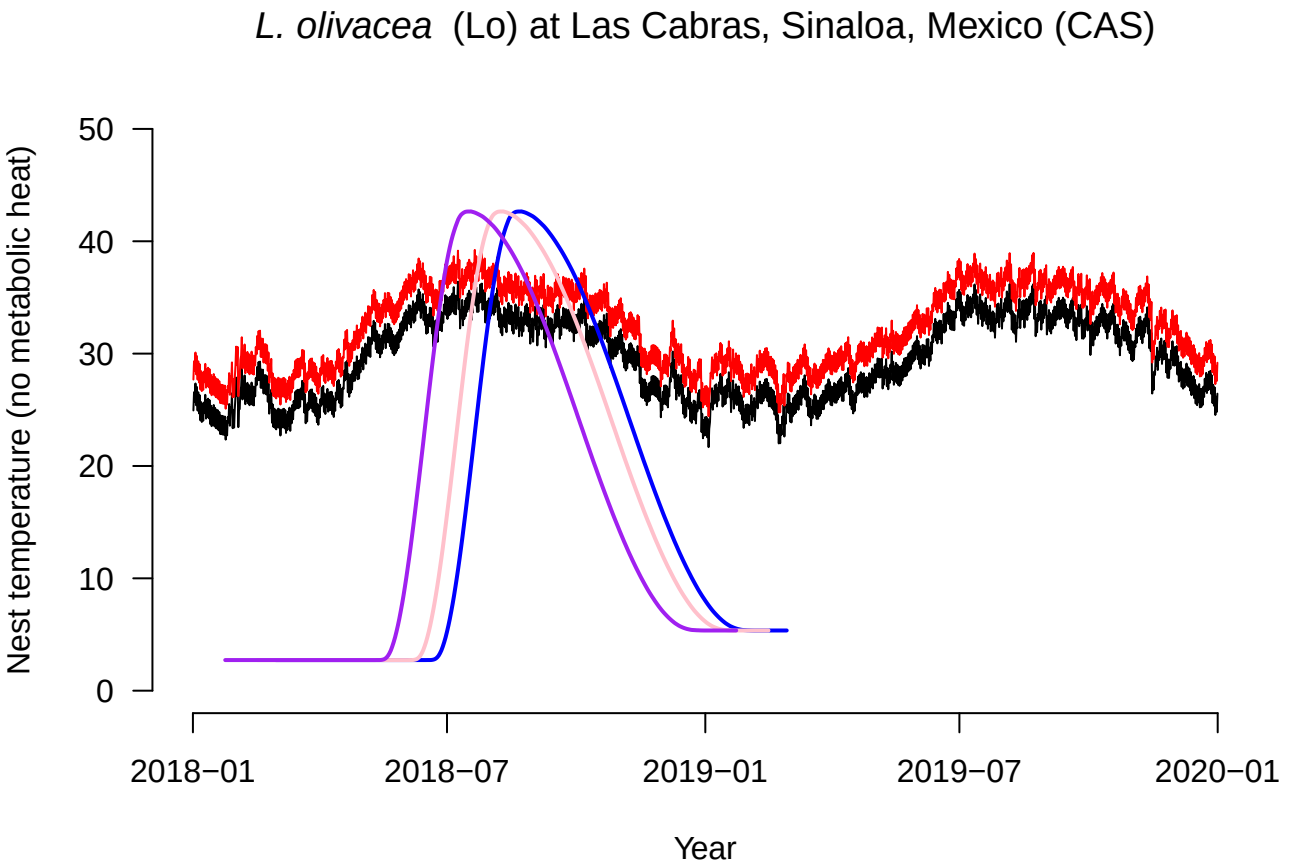

L. olivacea (Lo) at Majahuas, Jalisco, Mexico (MAJ)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year

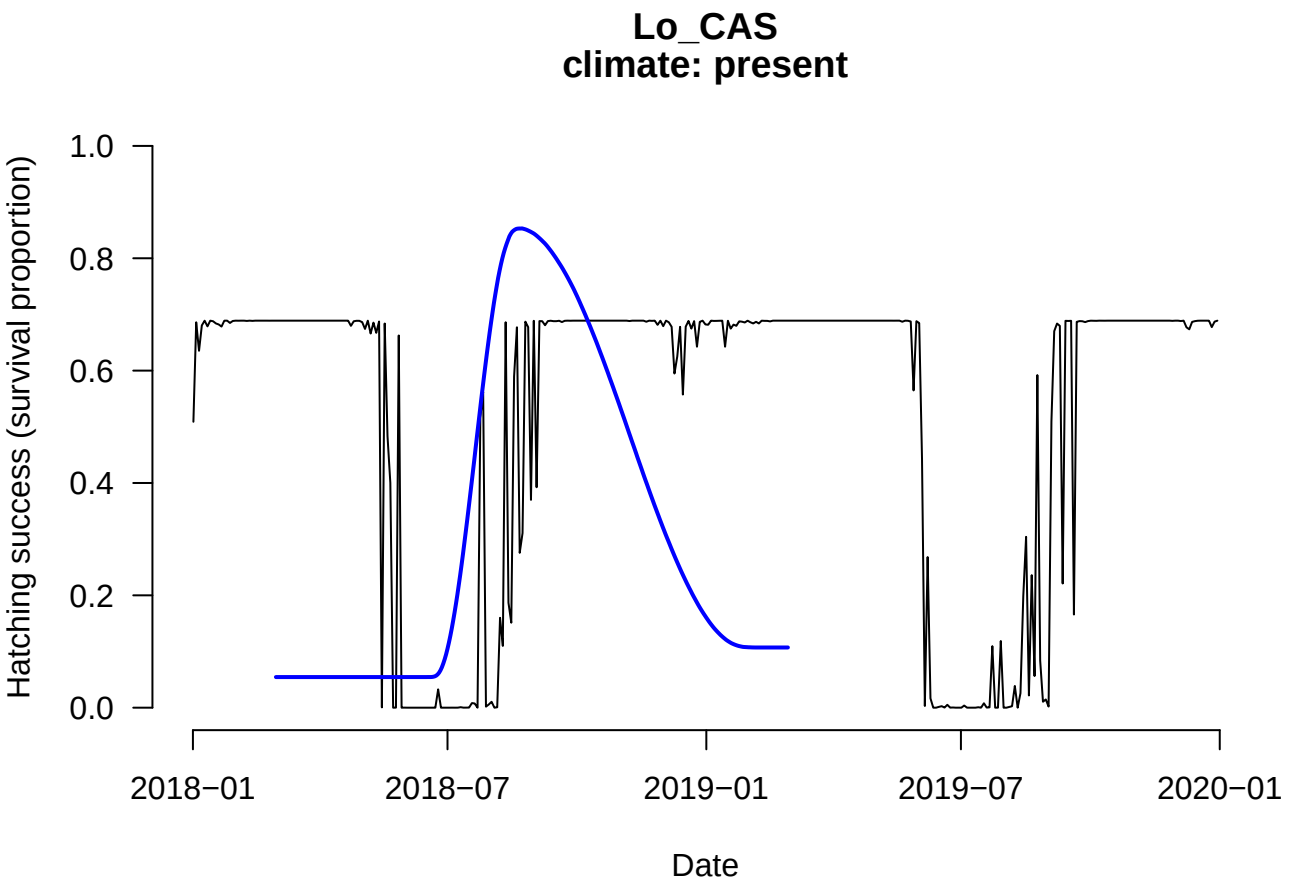

Lo_MAJ
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

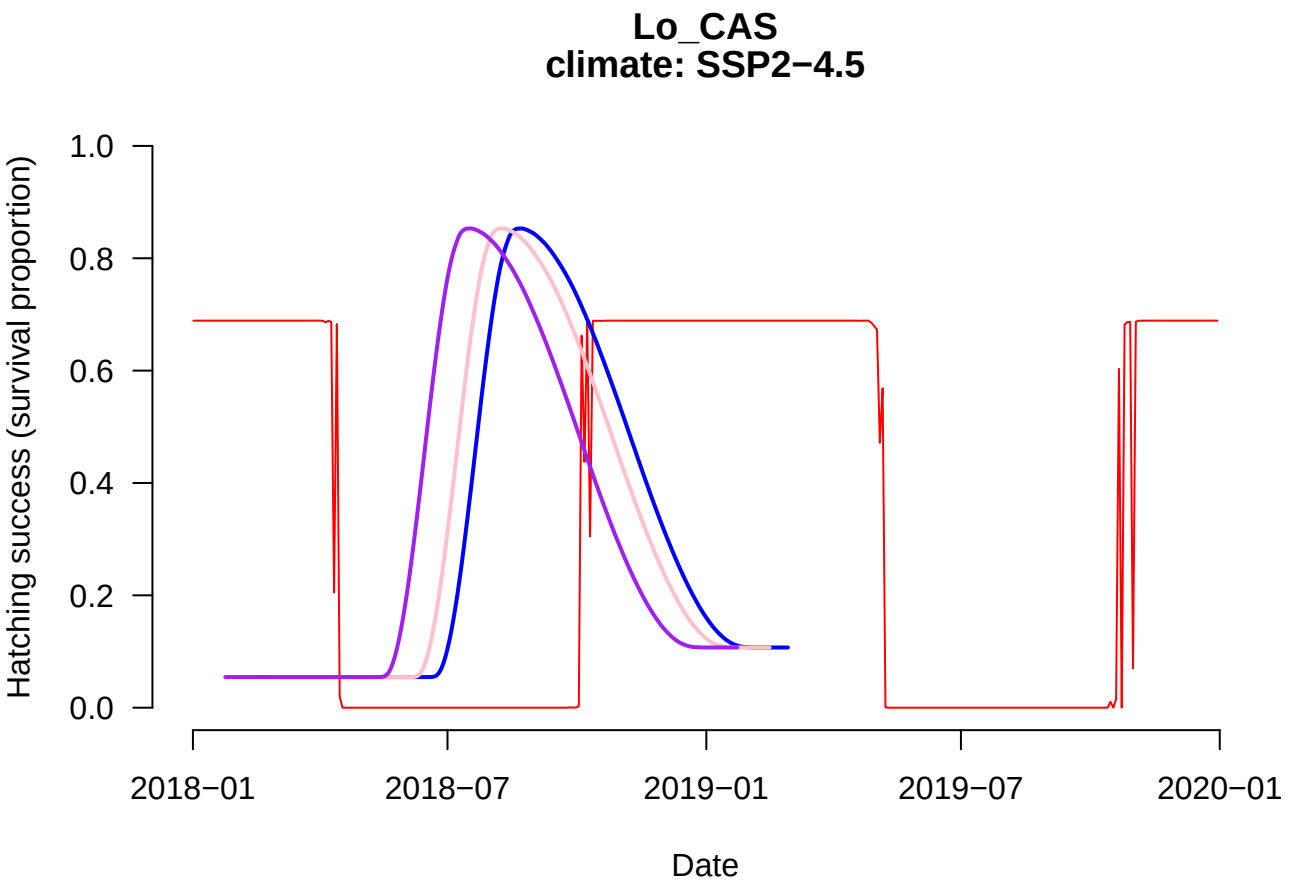

Lo_MAJ
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

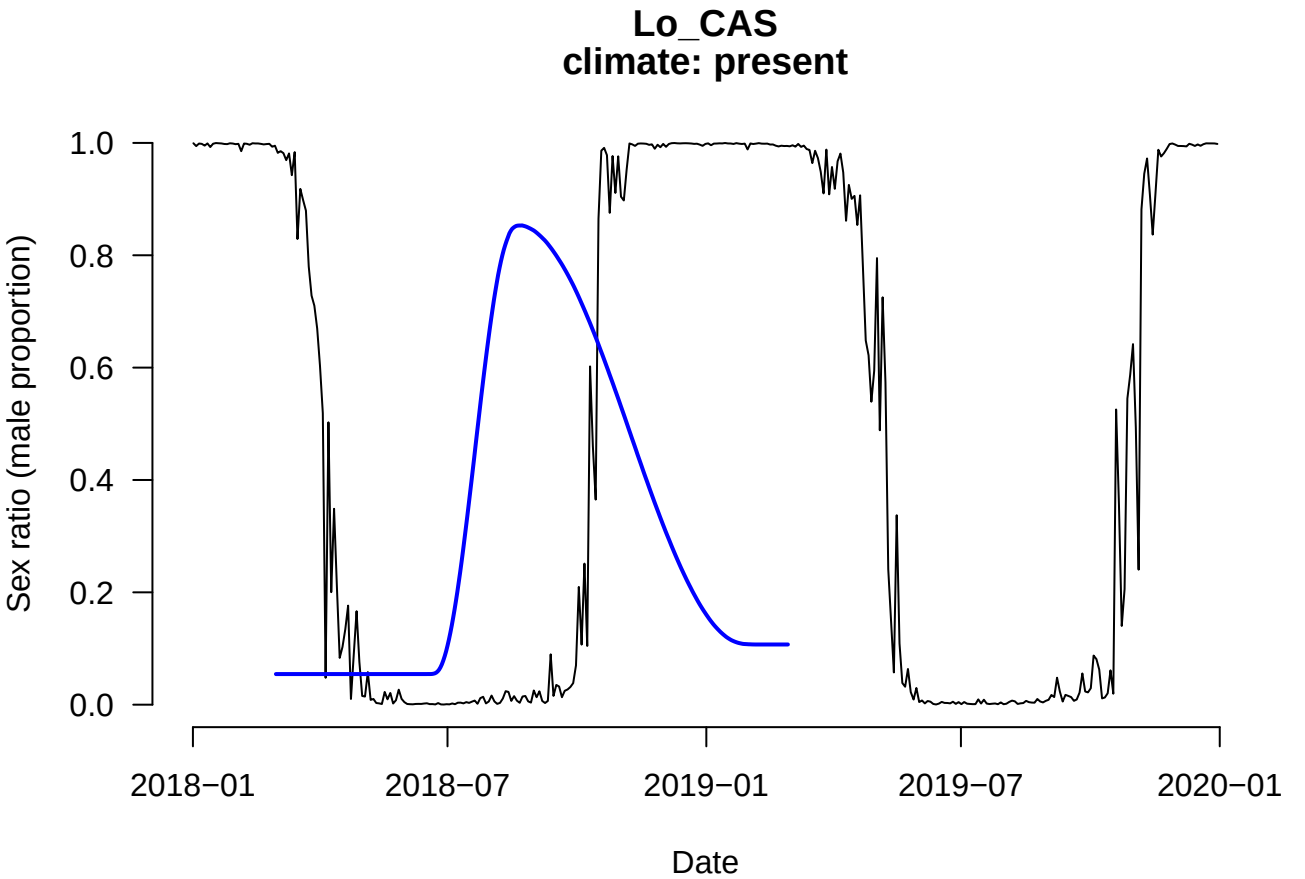

Lo_MAJ
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date

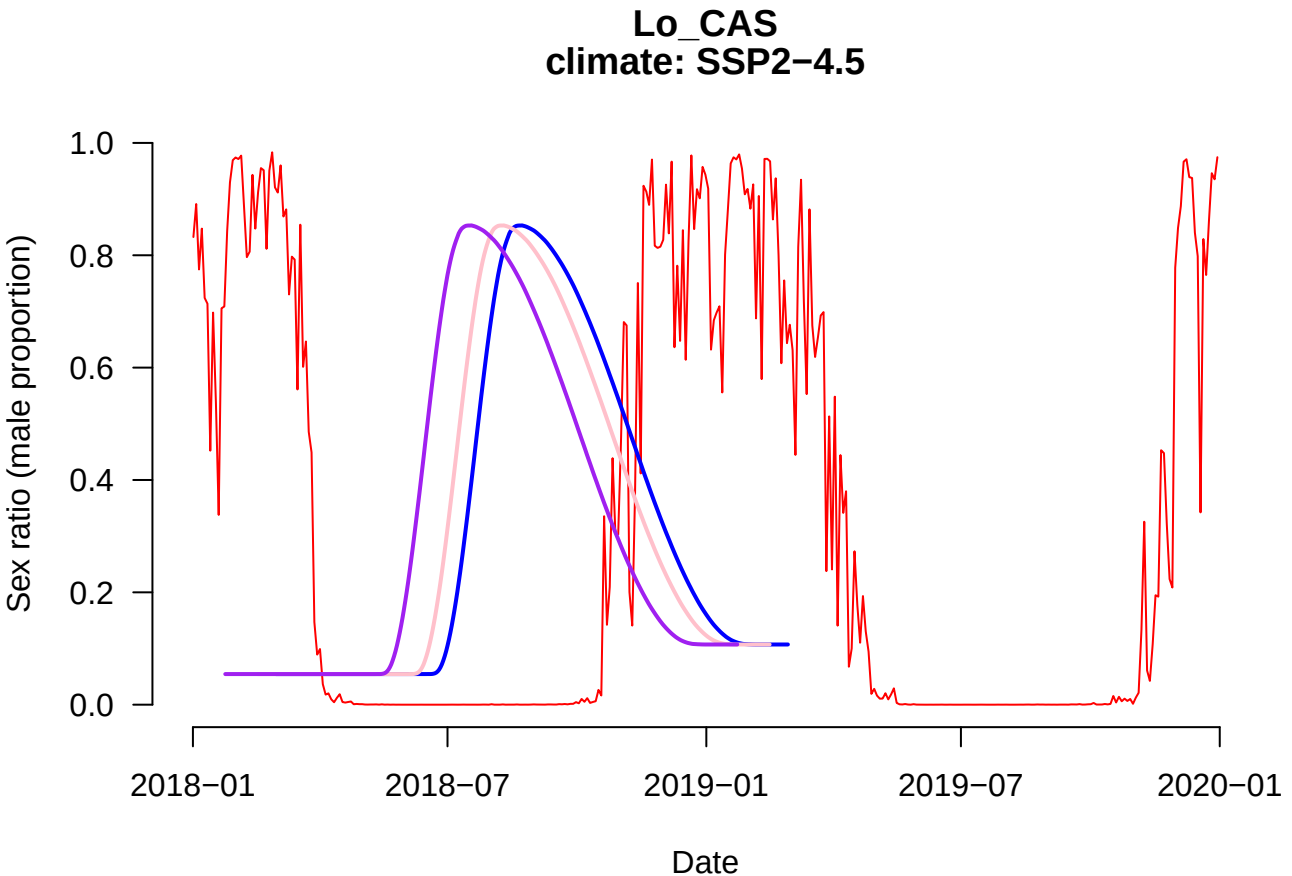

Lo_MAJ
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date


L. olivacea (Lo) at Las Cabras, Sinaloa, Mexico (CAS)
Nest temperature (no metabolic heat)
50
40
30
20
10
0
2018−01
2018−07
2019−01
2019−07
2020−01
Year


Lo_CAS
climate: present
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date


Lo_CAS
climate: SSP2−4.5
Hatching success (survival proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date


Lo_CAS
climate: present
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date


Lo_CAS
climate: SSP2−4.5
Sex ratio (male proportion)
1.0
0.8
0.6
0.4
0.2
0.0
2018−01
2018−07
2019−01
2019−07
2020−01
Date