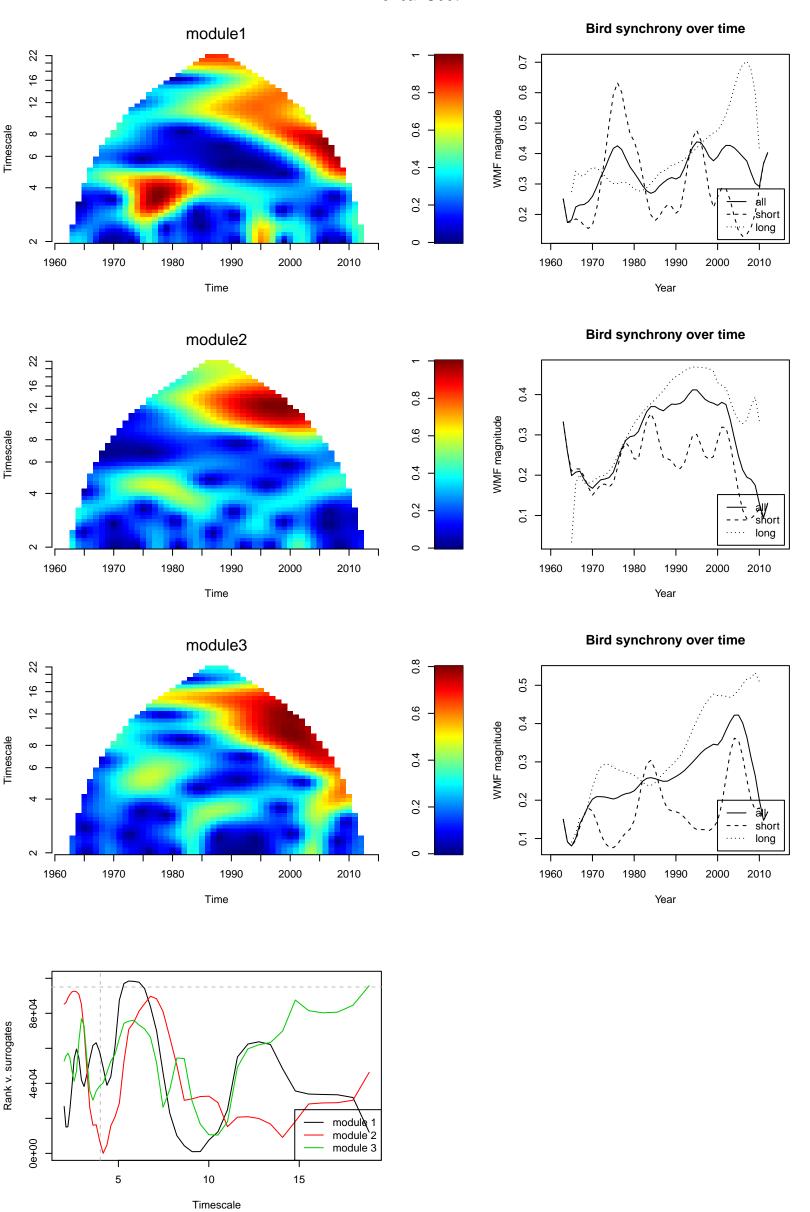
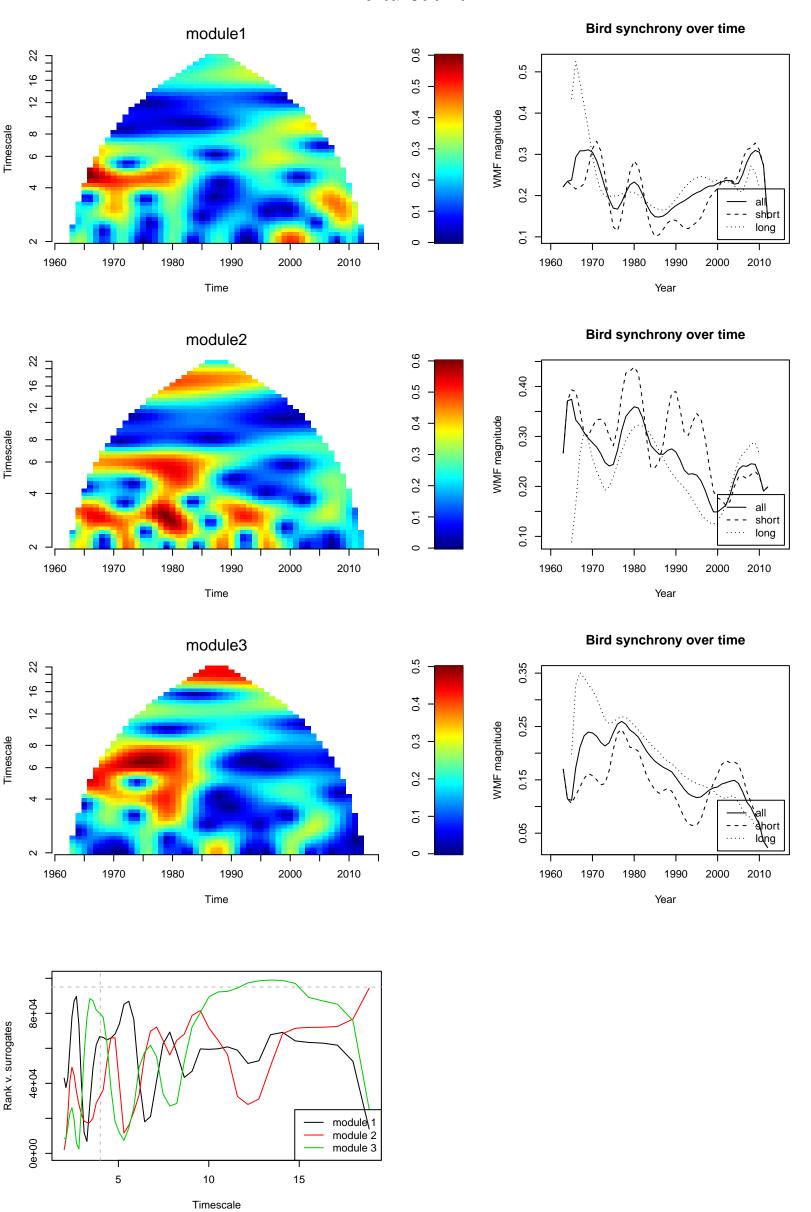
AmericanCoot



AmericanGoldfinch



AmericanKestrel Bird synchrony over time module1 0.7 22 0.4 9.0 16 12 0.5 0.3 WMF magnitude 0.4 Timescale ∞ 0.2 9 0.3 0.2 0.1 0.1 hort 0 1960 1980 2000 1980 2010 1970 1990 2010 1960 1970 1990 2000 Time Year Bird synchrony over time module2 0.35 9.0 22 0.30 16 0.5 12 0.25 WMF magnitude 0.4 Timescale ω 0.10 0.15 0.20 0.3 9 0.2 all short 0.1 long 0.05 0 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 0.5 22 0.30 16 0.4 0.25 12 WMF magnitude 0.3 0.20 Timescale ∞ 0.15 0.2 0.10 all 0.1 short long 0.05 0 1960 1970 1980 2000 1960 1970 1980 2010 1990 2010 1990 2000 Time Year Rank v. surrogates 4e+04

module 1 module 2 module 3

15

0e+00

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Timescale

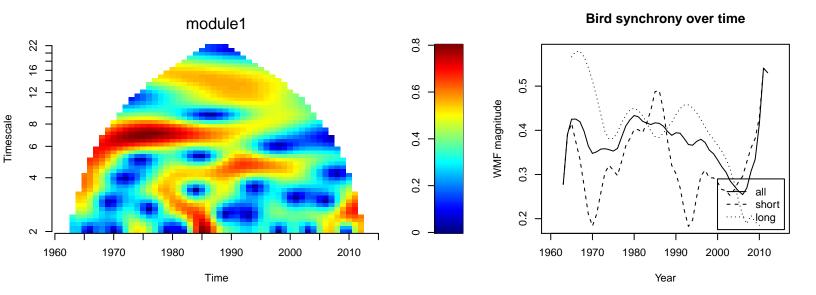
AmericanRobin Bird synchrony over time module1 0.7 22 9.0 9.0 16 12 0.5 WMF magnitude 0.3 0.4 Timescale ∞ 9 0.3 0.2 0.2 all 0.1 short 0.1 long 0 1960 1970 1980 2010 1970 1980 1990 2000 1960 1990 2000 2010 Time Year Bird synchrony over time module2 0.7 22 0.40 9.0 16 12 0.5 WMF magnitude 0.30 0.4 Timescale ω 9 0.3 0.20 0.2 0.1 0.10 0 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 0.7 22 9.0 9.0 16 12 0.5 0.5 WMF magnitude Timescale 0.4 ∞ 0.4 0.3 0.3 0.2 0.2 0.1 0 1980 1960 1970 2000 2010 1960 1970 1980 2010 1990 1990 2000 Time Year Rank v. surrogates 4e+04 module 1 module 2 module 3 0e+00

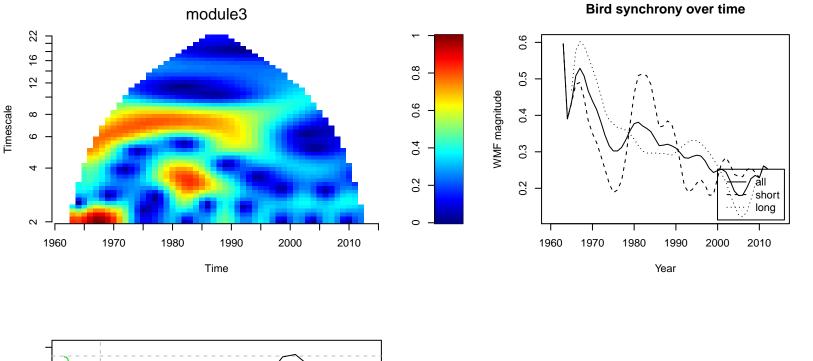
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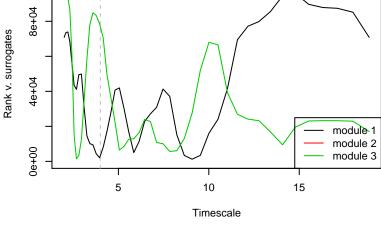
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Timescale

AmericanTreeSparrow







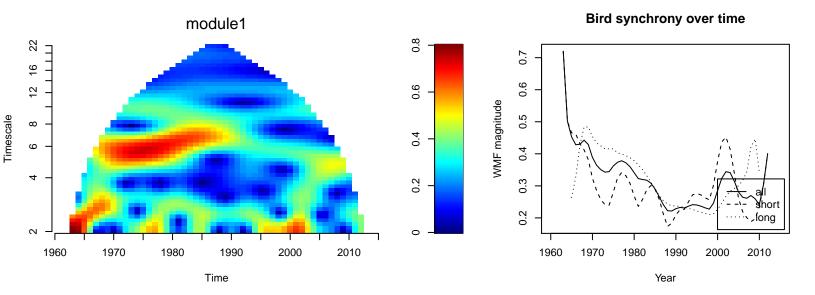
BeltedKingfisher Bird synchrony over time module1 0.8 0.5 22 16 9.0 0.4 12 WMF magnitude Timescale ∞ 0.3 0.4 9 0.2 0.2 short long 0.1 1960 1970 1980 1990 2000 2010 1970 1980 2010 1960 1990 2000 Time Year Bird synchrony over time module2 0.5 22 0.35 16 9.7 12 WMF magnitude 0.25 0.3 Timescale ω 9 0.2 0.15 0.1 sport long 0.05 0 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 0.40 9.0 22 16 0.5 12 0.30 0.4 WMF magnitude Timescale ∞ 0.3 0.20 0.2 0.1 0.10 shor long 0 1970 2010 1960 1980 2000 1960 1970 1980 2000 1990 2010 1990 Time Year Rank v. surrogates 4e+04 module 1 module 2 module 3 0e+00

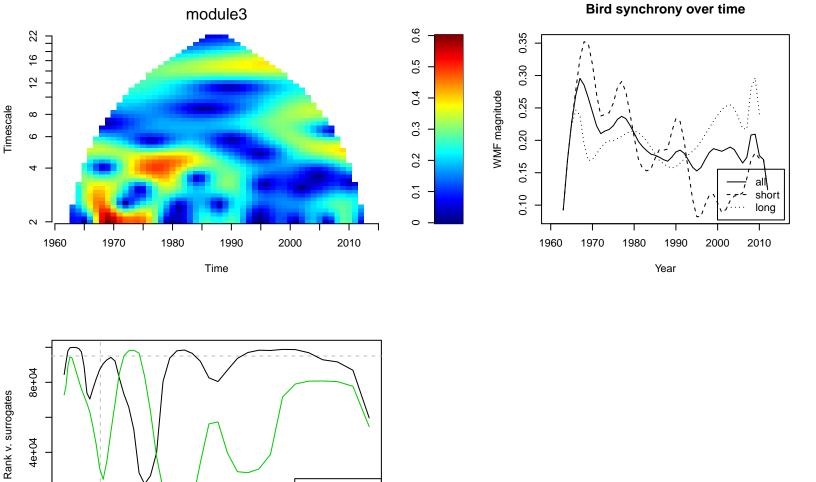
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Timescale

${\bf Black Capped Chickadee}$





module 1 module 2 module 3

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4e+04

0e+00

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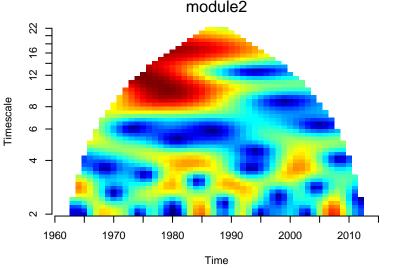
Timescale

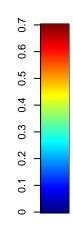
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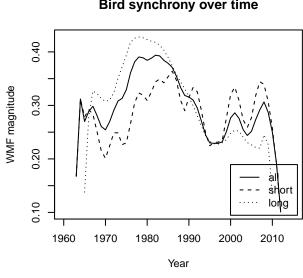
Timescale

BrownCreeper Bird synchrony over time module1 9.0 22 0.35 16 0.5 12 0.4 WMF magnitude 0.25 Timescale ∞ 0.3 9 0.15 0.2 0.1 short 0.05 long 0 1960 1970 1980 2000 1970 1980 1990 2010 1960 1990 2000 2010 Time Year Bird synchrony over time module2 0.45 0.7 22 9.0 16 12 0.5 0.35 WMF magnitude 0.4 Timescale ω 9 0.3 0.25 0.2 0.1 0.15 short long 0 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 0.5 0.35 22 16 0.4 12 0.25 WMF magnitude 0.3 Timescale ∞ 0.2 0.15 0.1 short long 0 1960 2010 1960 1970 1980 2000 2010 1970 1980 2000 1990 1990 Time Year 8e+04 Rank v. surrogates 4e+04 module 1 module 2 module 3 0e+00 10 15 Timescale

CarolinaWren Bird synchrony over time module1 22 0.7 16 0.8 9.0 12 WMF magnitude 0.5 9.0 Timescale ∞ 9.0 9 9.0 0.3 0.2 0.2 0.1 2010 1970 1980 1960 1970 1980 1990 2000 1960 1990 2000 Time Year Bird synchrony over time module2

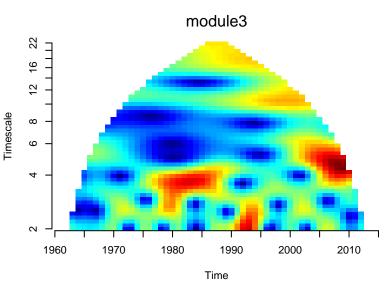


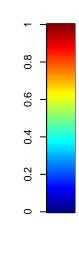


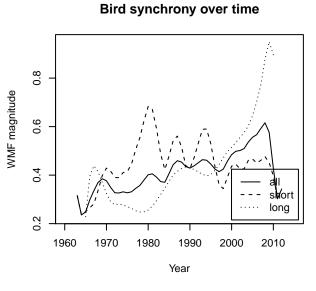


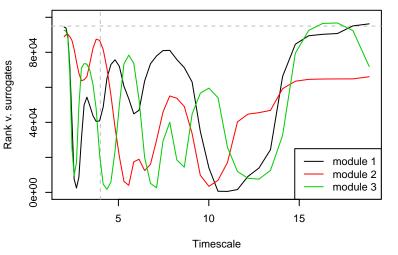
short

long









CedarWaxwing Bird synchrony over time module1 0.8 22 16 0.4 9.0 12 WMF magnitude Timescale ∞ 0.3 0.4 9 0.2 0.2 short long 0.1 1960 1980 1970 1980 2010 1970 1990 2000 2010 1960 1990 2000 Time Year Bird synchrony over time module2 0.5 22 0.25 16 9.0 12 0.20 WMF magnitude 0.3 Timescale ω 0.15 9 0.2 0.10 all 0.1 short 0.05 long 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 0.8 22 0.35 16 9.0 12 WMF magnitude 0.25 Timescale ∞ 0.4 0.15 0.2 0.05 llong 0 1980 1960 1970 1990 2000 2010 1960 1970 1980 2000 2010 1990 Time Year Rank v. surrogates 4e+04 module 1 module 2 module 3 0e+00 5 10 15 Timescale

DarkEyedJunco Bird synchrony over time module1 0.7 22 9.0 0.5 16 12 0.5 WMF magnitude 9.0 0.4 Timescale ∞ 0.3 9 0.3 0.2 0.2 0.1 short 0.1 0 1970 2000 1960 1970 1980 1960 1980 1990 2010 1990 2000 2010 Time Year Bird synchrony over time module2 0.8 0.5 22 16 9.0 12 9.0 WMF magnitude Timescale ω 0.3 0.4 9 0.2 0.2 short long 0.1 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 22 0.35 16 0.7 12 WMF magnitude 0.5 0.25 Timescale ∞ 0.3 0.15 short 0.1 long 0.05 1960 1960 1970 1980 1990 2000 2010 1970 1980 2010 1990 2000 Time Year Rank v. surrogates 4e+04 module 1 module 2 module 3

0e+00

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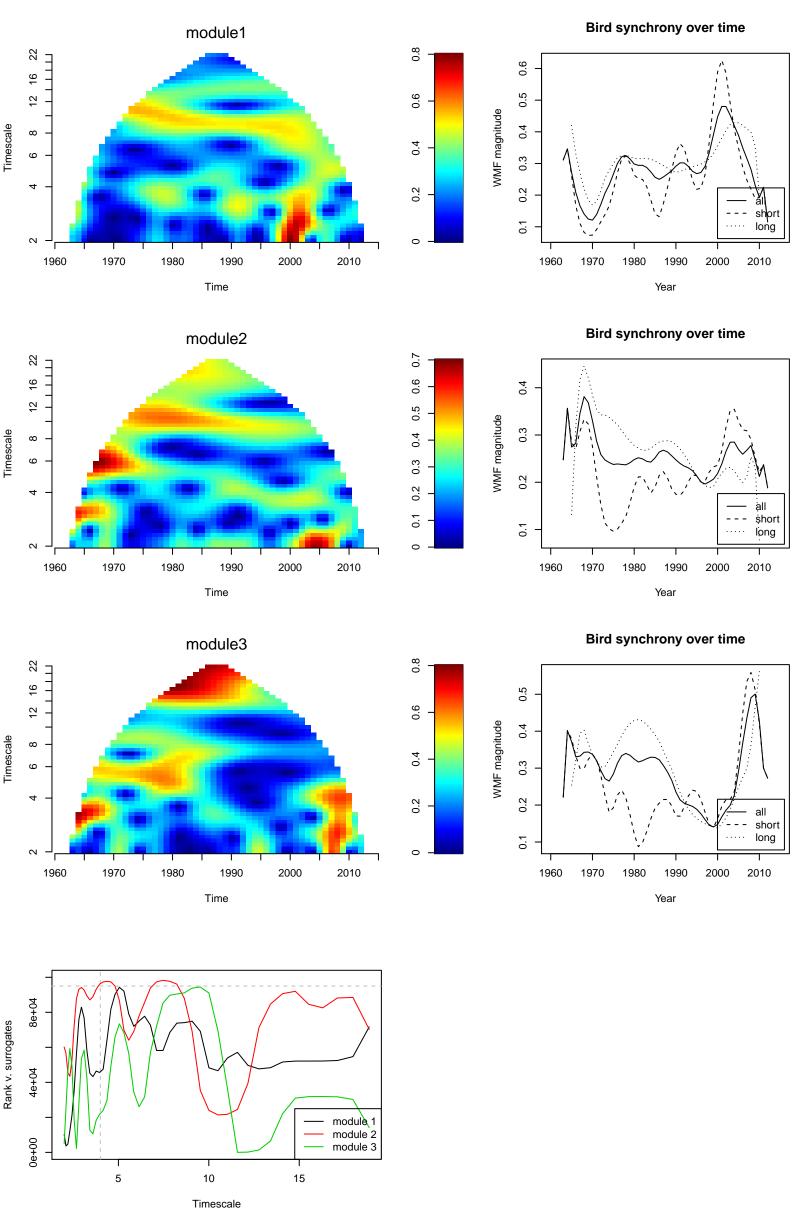
Timescale

DownyWoodpecker Bird synchrony over time module1 0.8 22 16 9.0 9.0 12 WMF magnitude Timescale 0.3 ∞ 0.4 9 0.2 0.2 0.1 1960 1970 1980 1960 1970 1980 2010 1990 2000 2010 1990 2000 Time Year Bird synchrony over time module2 9.0 22 0.4 16 0.5 12 WMF magnitude 0.4 Timescale ω 0.3 9 0.2 0.2 0.1 0.1 short long 0 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 0.35 22 0.3 16 0.20 0.25 12 WMF magnitude 0.15 0.2 Timescale ∞ 0.15 0.10 0.1 all 0.05 0.05 short long 1960 1970 1980 2000 2010 1960 1970 1980 2000 2010 1990 1990 Time Year Rank v. surrogates 4e+04 module 1 module 2 module 3 0e+00

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Timescale

EasternBluebird



EuropeanStarling Bird synchrony over time module1 0.7 22 0.35 9.0 16 0.30 12 0.5 WMF magnitude 0.10 0.15 0.20 0.25 0.4 Timescale ∞ 9 0.3 0.2 all 0.1 short 0 1960 2000 1970 1980 1970 1980 1990 2010 1960 1990 2000 2010 Time Year Bird synchrony over time module2 0.35 22 0.3 16 12 0.2 0.25 0.15 WMF magnitude Timescale ω 0.15 9 0.10 0.1 0.05 0.05 short long 0 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 0.3 22 0.20 16 0.25 12 0.15 0.2 WMF magnitude Timescale ∞ 0.15 0.10 0.1 all 0.05 0.05 short long 0 1960 1970 1980 1990 2000 2010 1960 1970 1980 2000 2010 1990 Time Year 8e+04 Rank v. surrogates 4e+04 module 1 module 2 module 3

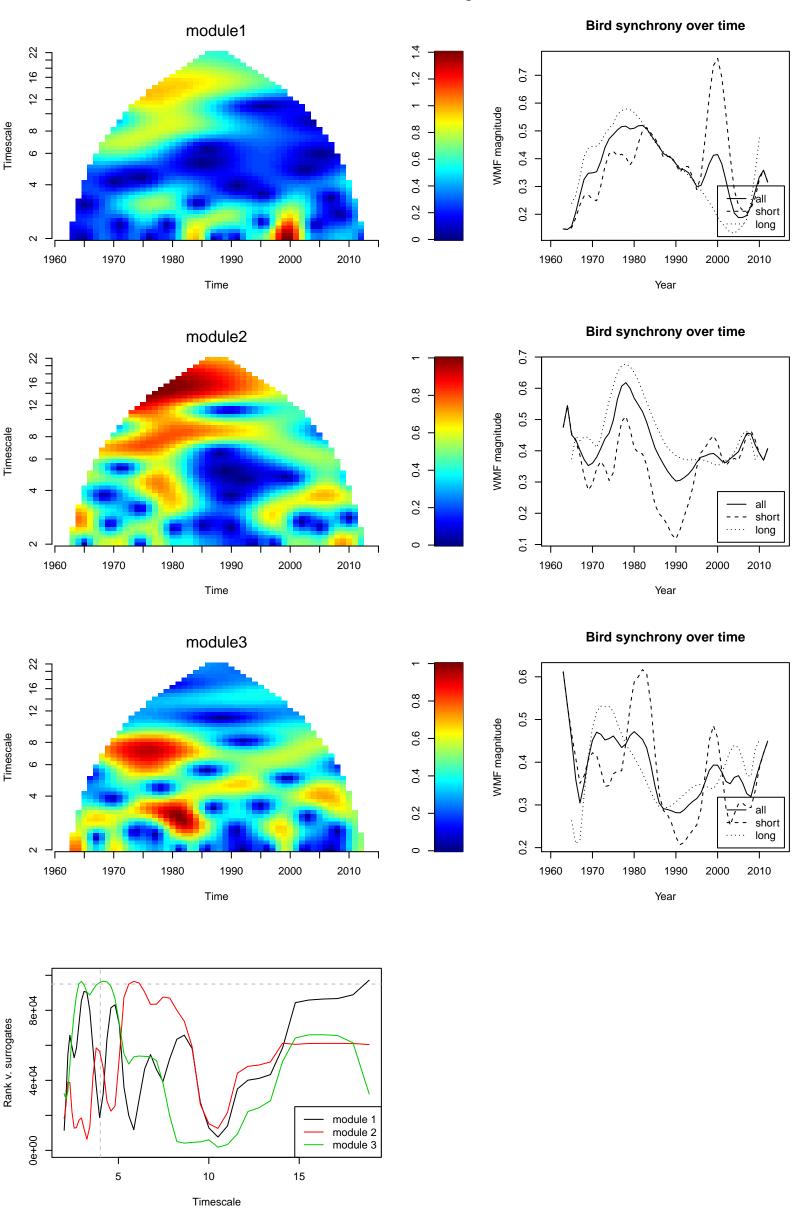
0e+00

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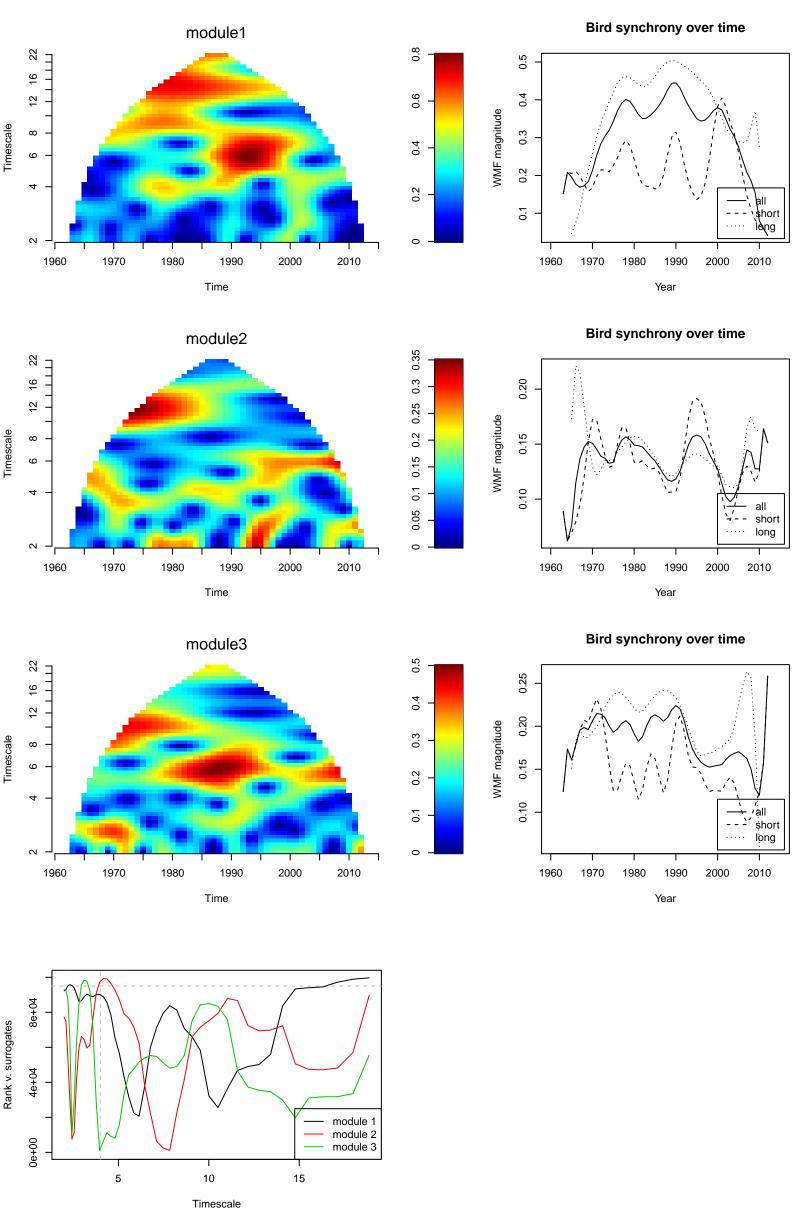
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Timescale

GoldenCrownedKinglet



GreatBlueHeron

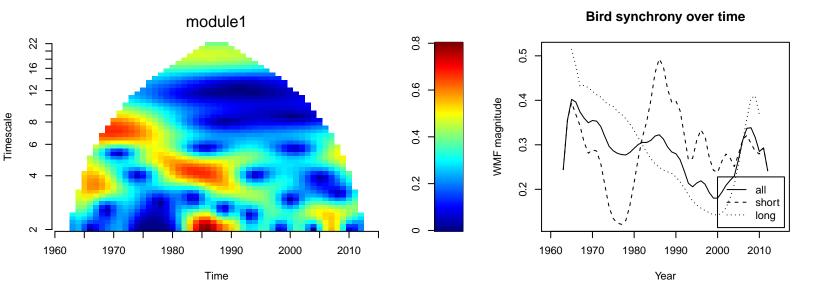


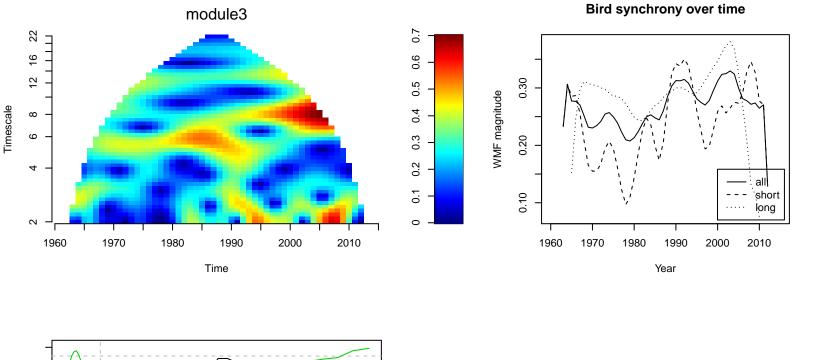
HermitThrush Bird synchrony over time module1 0.8 22 9.0 16 9.0 12 0.5 WMF magnitude Timescale ∞ 0.4 0.4 9 0.3 0.2 0.2 short 1960 1970 2000 2010 1970 1980 2010 1980 1990 1960 1990 2000 Time Year Bird synchrony over time module2 0.8 22 9.0 16 12 9.0 0.5 WMF magnitude Timescale ω 0.4 0.4 9 0.3 0.2 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 22 1.2 16 0.8 12 WMF magnitude 0.8 9.0 Timescale ∞ 9.0 9.0 0.4 0.2 0.2 0 1970 1980 1970 2010 1960 2000 2010 1960 1980 2000 1990 1990 Time Year 8e+04 Rank v. surrogates 4e+04 module 1 module 2 module 3 0e+00

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Timescale

HornedLark





module 1 module 2 module 3

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Rank v. surrogates

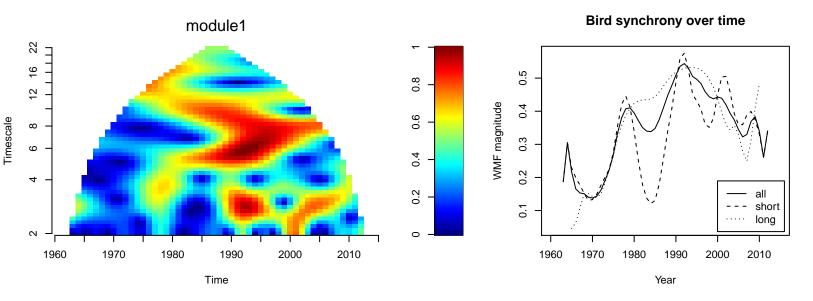
4e+04

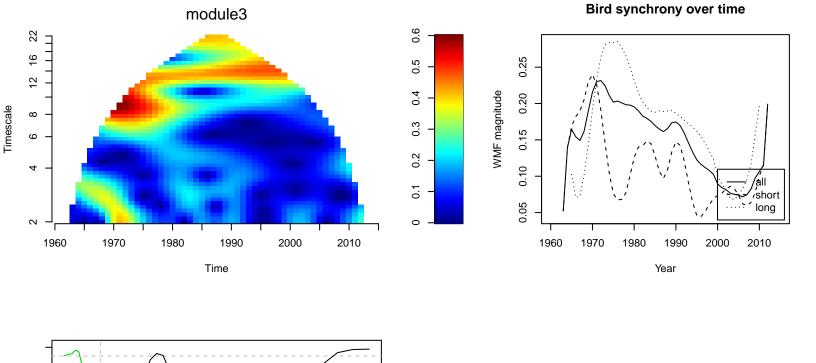
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Timescale

HouseFinch





module 1 module 2 module 3

15

10 Timescale

Rank v. surrogates

4e+04

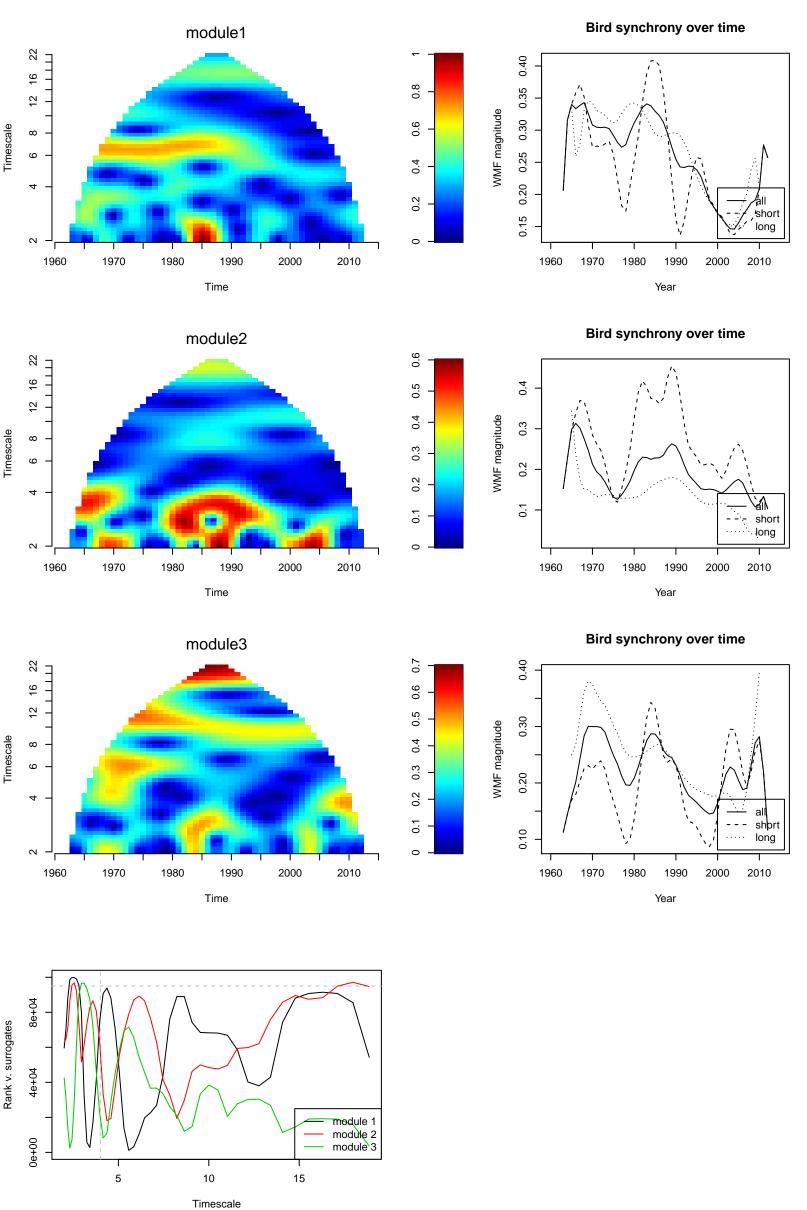
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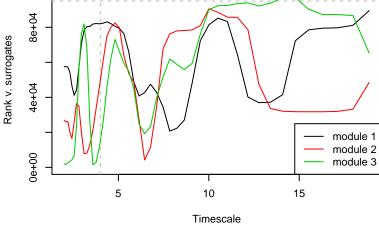
Timescale

MourningDove Bird synchrony over time module1 9.0 22 16 0.5 0.25 12 9.0 WMF magnitude Timescale 0.20 ∞ 0.3 9 0.15 0.2 all 0.10 0.1 short 0 1960 1970 1970 1980 2010 1980 1990 2000 2010 1960 1990 2000 Time Year Bird synchrony over time module2 0.5 22 16 0.20 9.7 12 WMF magnitude 0.3 Timescale ω 0.15 9 0.2 0.10 0.1 short long 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 9.0 22 0.25 16 0.5 12 0.20 0.4 WMF magnitude Timescale ∞ 0.3 0.15 0.2 0.10 0.1 short long 0 2000 1960 1970 1980 1990 2000 2010 1960 1970 1980 2010 1990 Time Year Rank v. surrogates 4e+04 module 1 module 2 module 3 5 10 15 Timescale

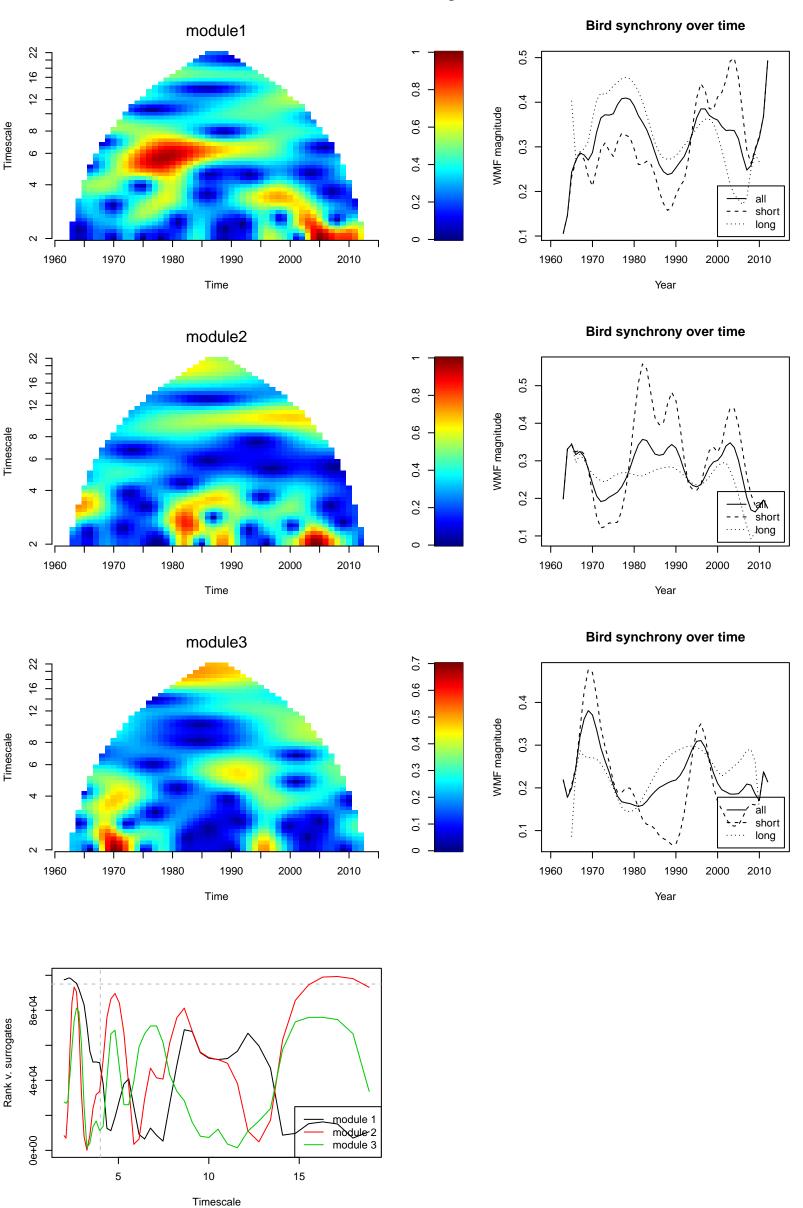
NorthernCardinal

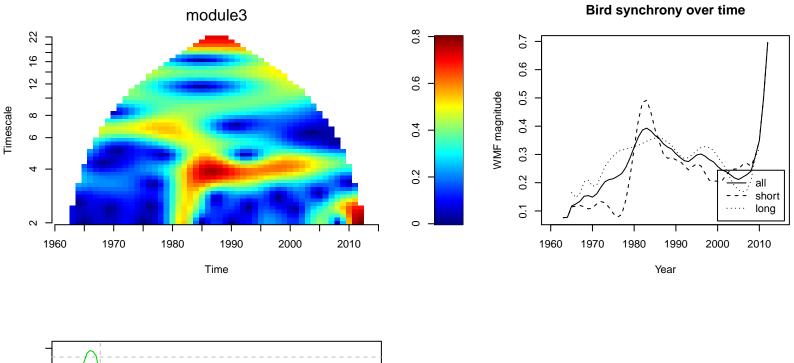


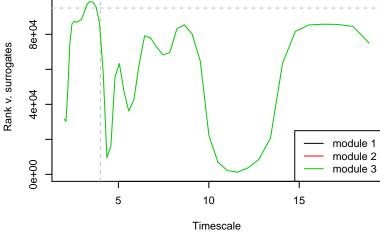
NorthernHarrier Bird synchrony over time module1 0.5 0.7 22 9.0 16 0.4 12 0.5 WMF magnitude 0.4 Timescale ∞ 0.3 9 0.3 0.2 0.2 0.1 shor long 0.1 0 1960 1970 1980 2000 1980 2010 1990 2010 1960 1970 1990 2000 Time Year Bird synchrony over time module2 0.7 22 9.0 16 0.4 12 0.5 WMF magnitude 0.4 Timescale ω 0.3 9 0.3 0.2 0.2 0.1 long 0.1 0 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 0.5 22 16 0.4 0.30 12 WMF magnitude 0.3 Timescale ∞ 0.20 0.2 0.1 0.10 Idng 0 1980 2010 1960 1970 1990 2000 2010 1960 1970 1980 2000 1990 Time Year 8e+04



NorthernMockingbird







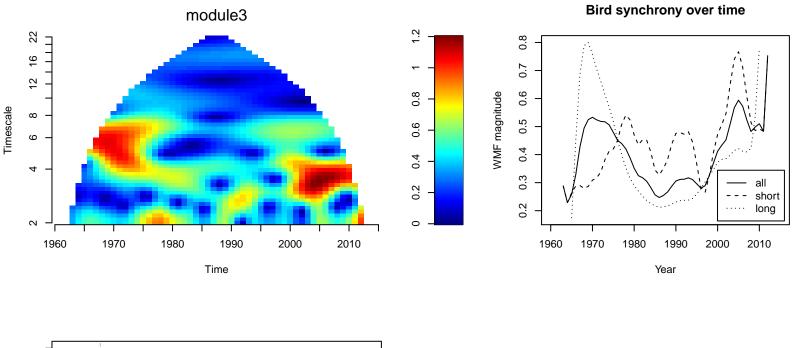
PiedBilledGrebe Bird synchrony over time module1 0.8 1.2 22 0.7 16 12 9.0 0.8 WMF magnitude Timescale 0.5 ∞ 9.0 9 0.4 0.4 0.3 all 0.2 short 0.2 long 1960 1970 1980 1980 2010 1990 2000 2010 1960 1970 1990 2000 Time Year Bird synchrony over time module2 0.8 22 0.40 16 12 9.0 WMF magnitude 0.30 Timescale ω 0.4 9 0.20 0.2 short 0.10 long 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 9.0 22 0.4 16 0.5 12 0.3 0.4 WMF magnitude Timescale ∞ 0.3 0.2 0.2 0.1 all 0.1 short long 0 1970 1980 1960 1990 2000 2010 1970 1980 2010 1960 1990 2000 Time Year 8e+04 Rank v. surrogates 4e+04 module 1 module 2 module 3

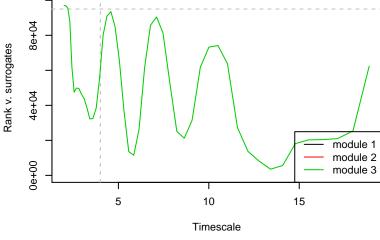
0e+00

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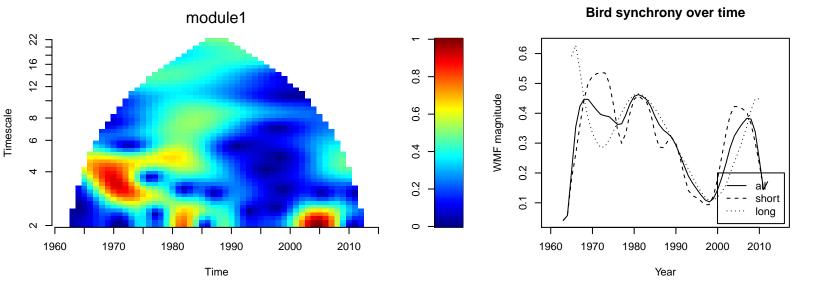
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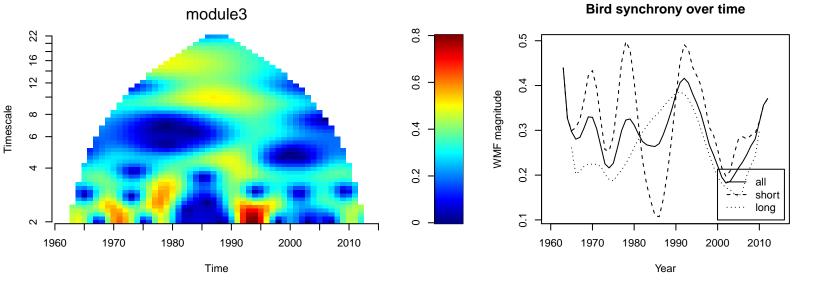
Timescale

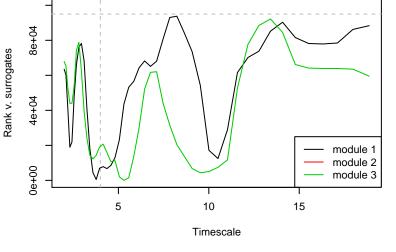




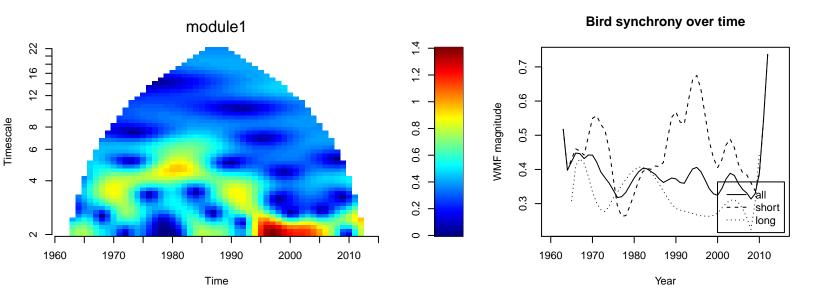
PurpleFinch

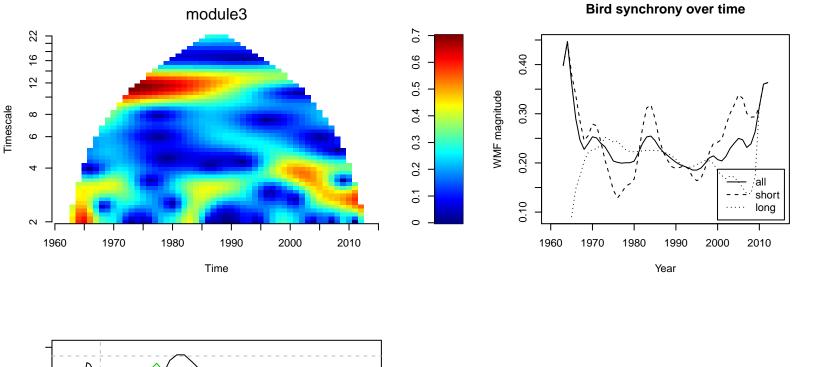






RedBreastedNuthatch





module 1 module 2 module 3

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Timescale

Rank v. surrogates

4e+04

RingBilledGull Bird synchrony over time module1 0.5 22 16 9.0 12 WMF magnitude 0.25 0.3 Timescale ∞ 9 0.2 0.15 0.1 short 0.05 0 1960 1970 1960 1970 1980 2010 1980 1990 2000 2010 1990 2000 Time Year Bird synchrony over time module2 0.5 0.35 22 16 9.0 12 0.25 WMF magnitude 0.3 Timescale ω 9 0.15 0.2 all 0.1 0.05 short long 0 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 0.5 22 0.25 16 0.4 12 0.20 WMF magnitude 0.3 Timescale ∞ 0.15 0.2 0.10 0.1 0.05 0 1980 2010 1960 1970 2000 2010 1960 1970 1980 2000 1990 1990 Time Year 8e+04 Rank v. surrogates 4e+04 module 1 module 2 module 3

0e+00

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Timescale

Ruby Crowned KingletBird synchrony over time module1 22 0.8 1.2 16 12 WMF magnitude 9.0 0.8 Timescale ∞ 9.0 9 9.0 0.4 0.2 0.2 0 1960 1970 1980 1970 1980 2010 1990 2000 2010 1960 1990 2000 Time Year Bird synchrony over time module2 0.8 22 0.5 16 12 9.0 9.0 WMF magnitude Timescale ω 0.3 0.4 9 0.2 0.2 short 0.1 long 1960 1970 1980 1990 2000 2010 1960 1970 1980 1990 2000 2010 Time Year Bird synchrony over time module3 22 0.40 16 0.7 12 WMF magnitude 0.30 0.5 Timescale ∞ 0.3 0.20 0.1 0.10 2010 1960 1970 1980 2000 2010 1960 1970 1980 2000 1990 1990 Time Year Rank v. surrogates 4e+04

module 1 module 2 module 3

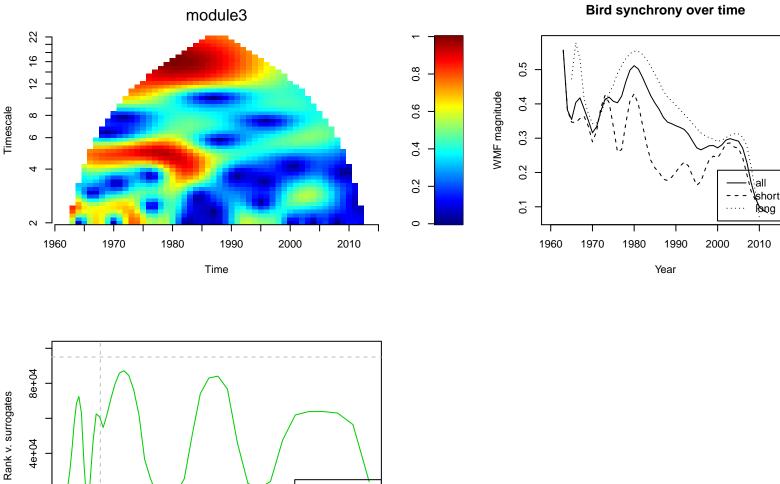
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0e+00

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Timescale



module 1 module 2 module 3

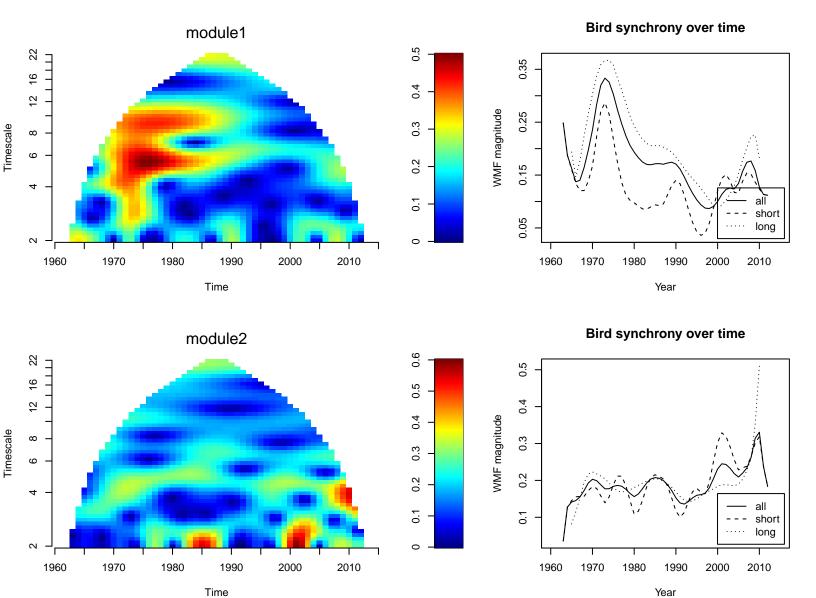
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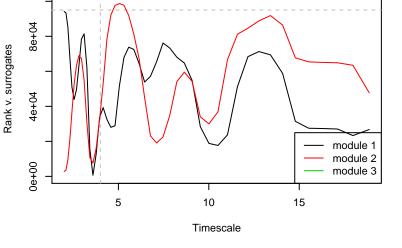
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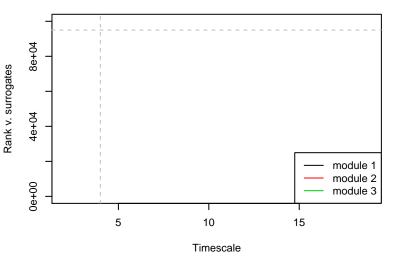
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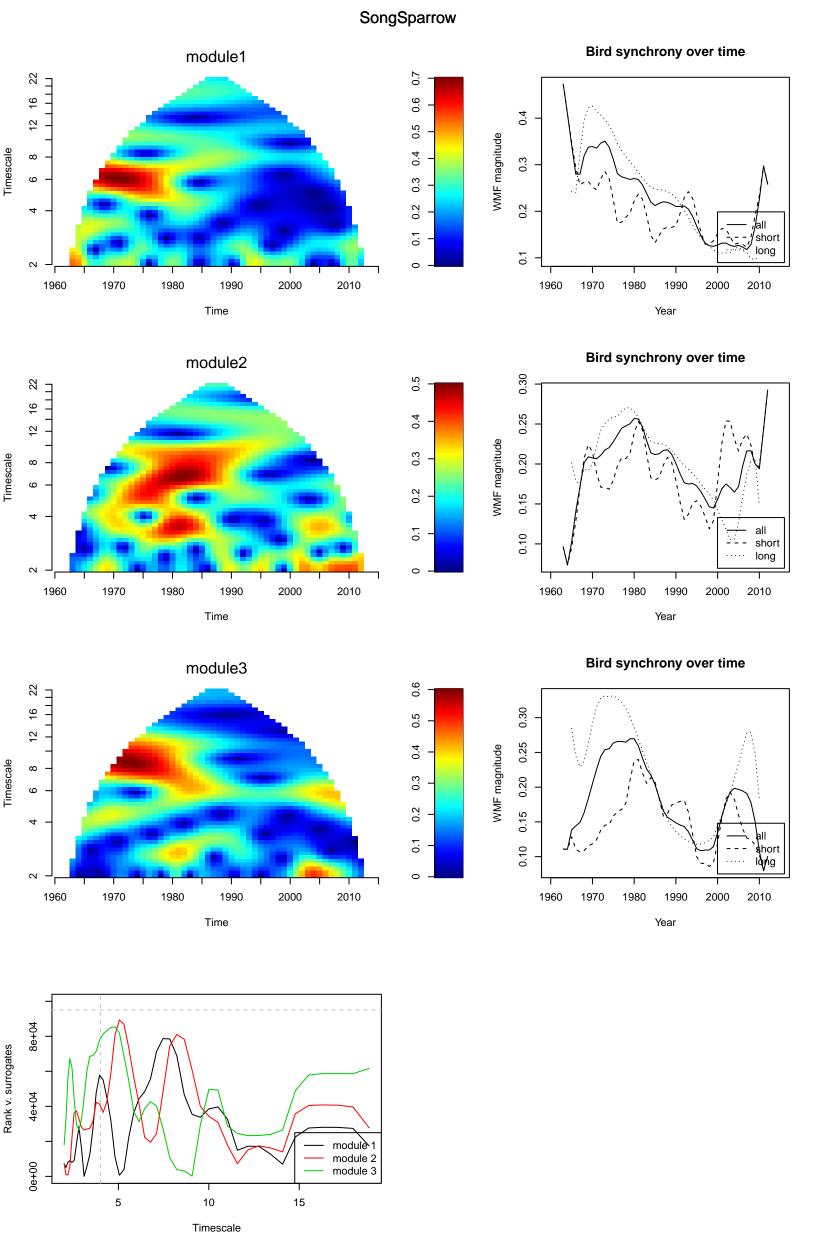
Timescale

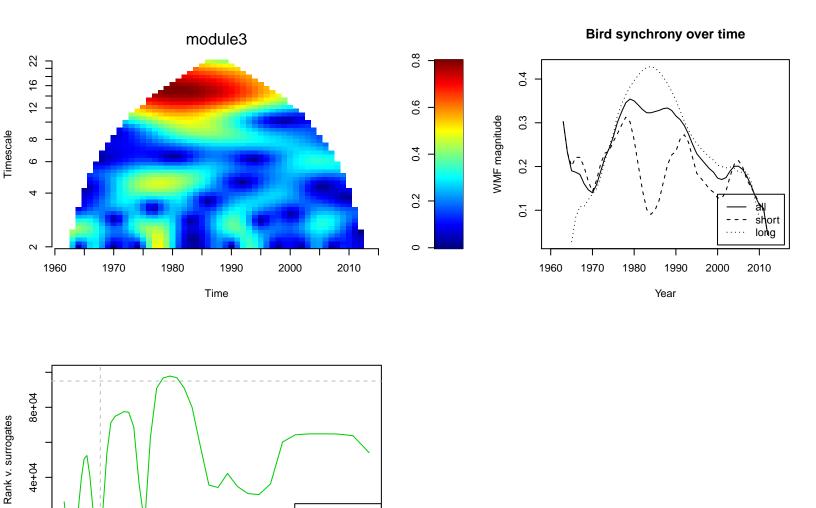
ScreechOwl











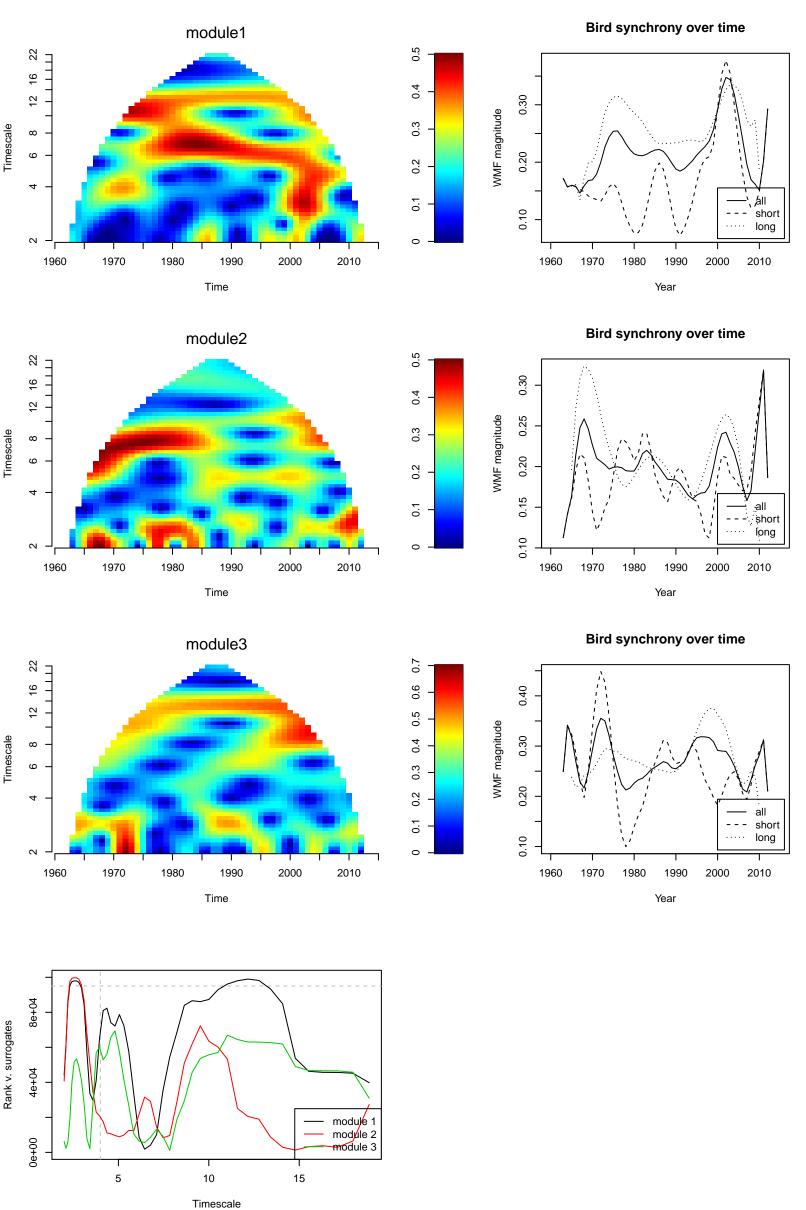
module 1 module 2 module 3

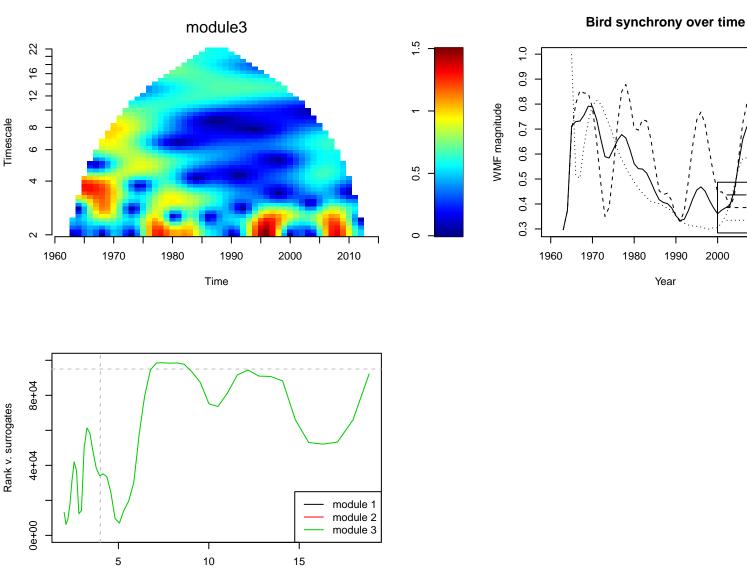
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Timescale

TuftedTitmouse

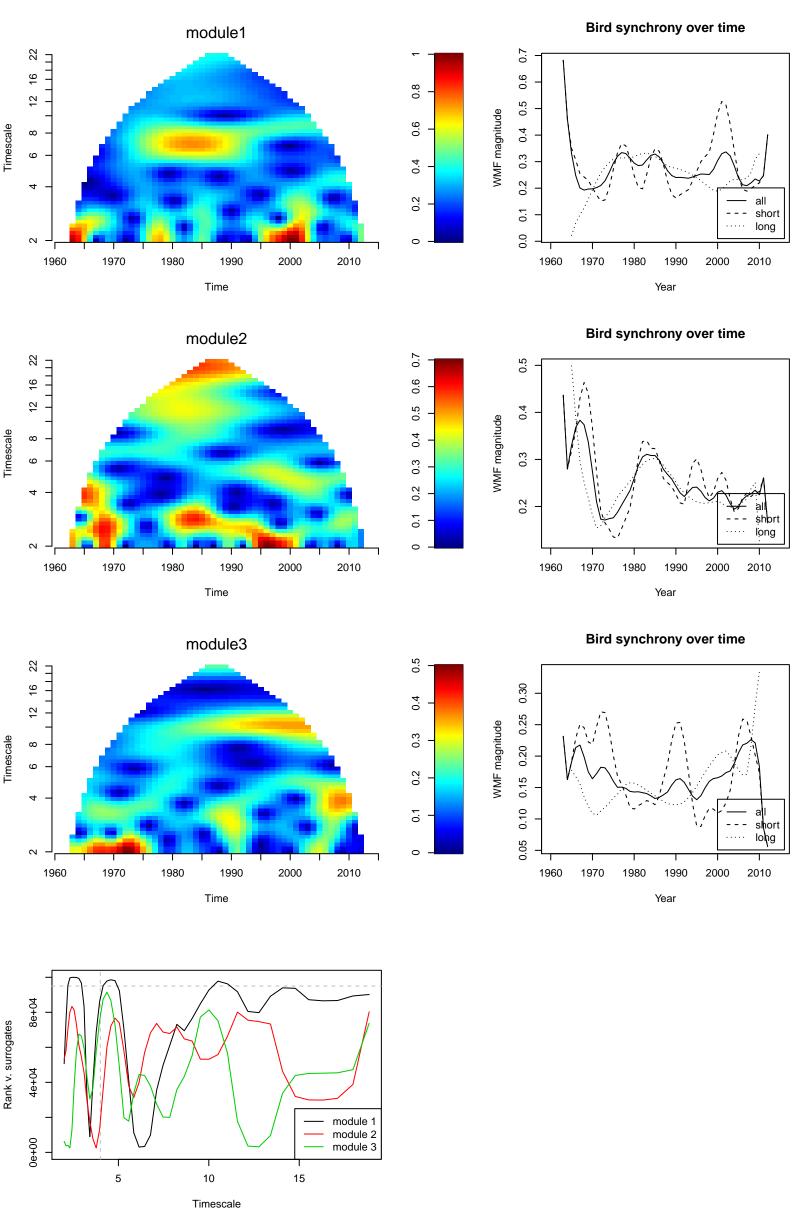




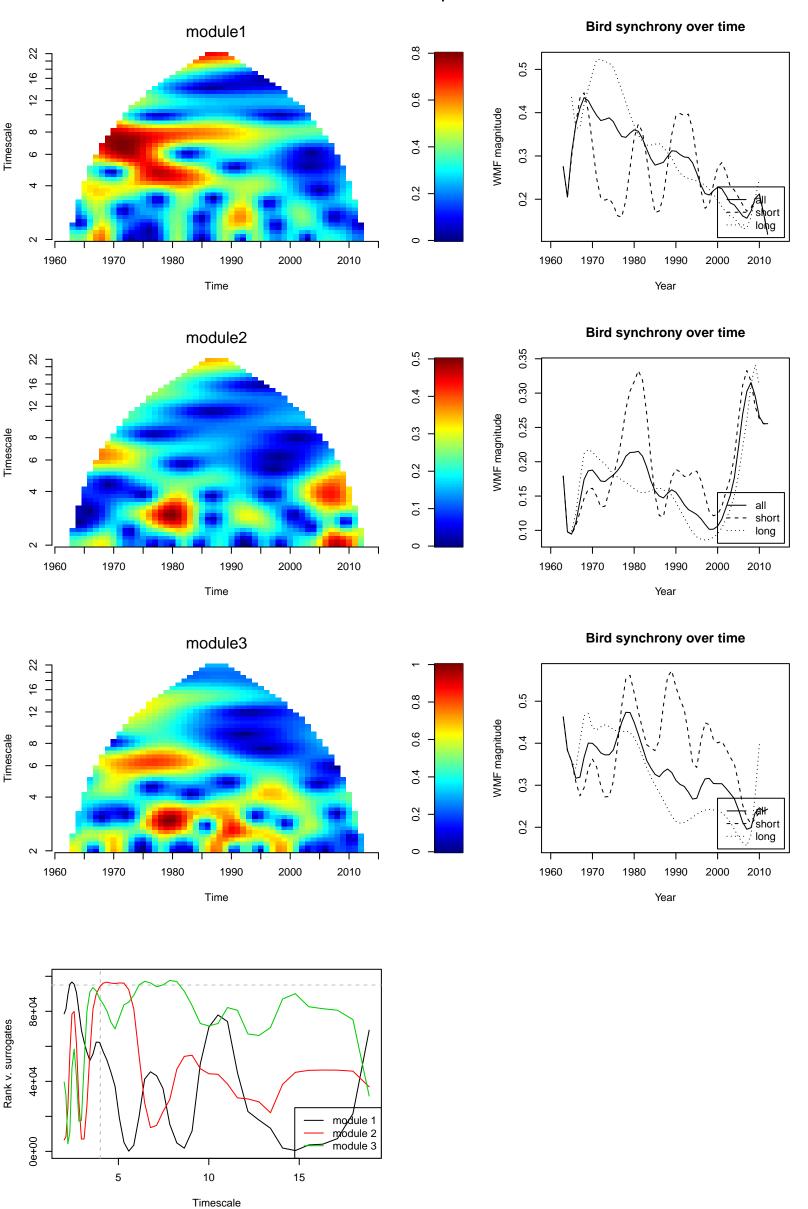
Timescale

al short

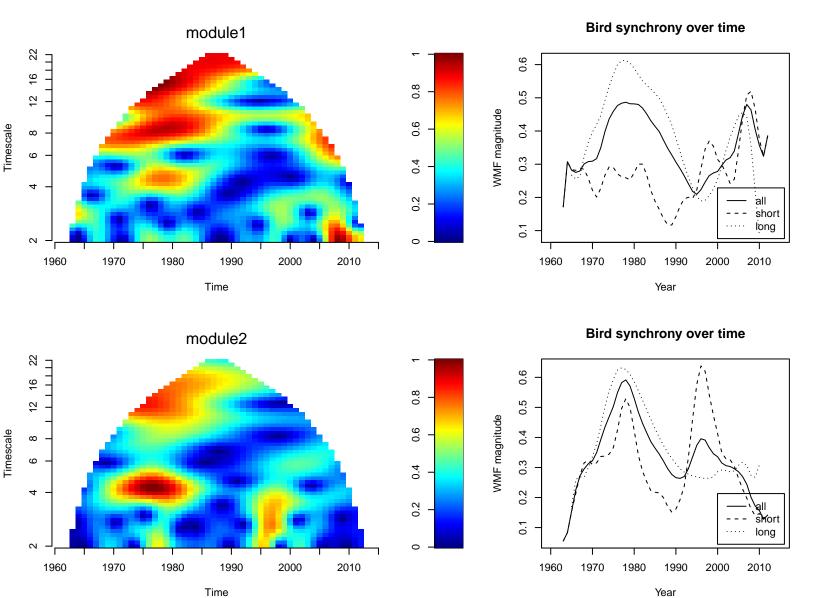
WhiteBreastedNuthatch

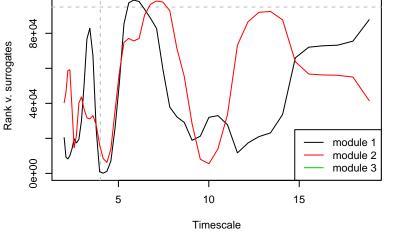


WhiteThroatedSparrow

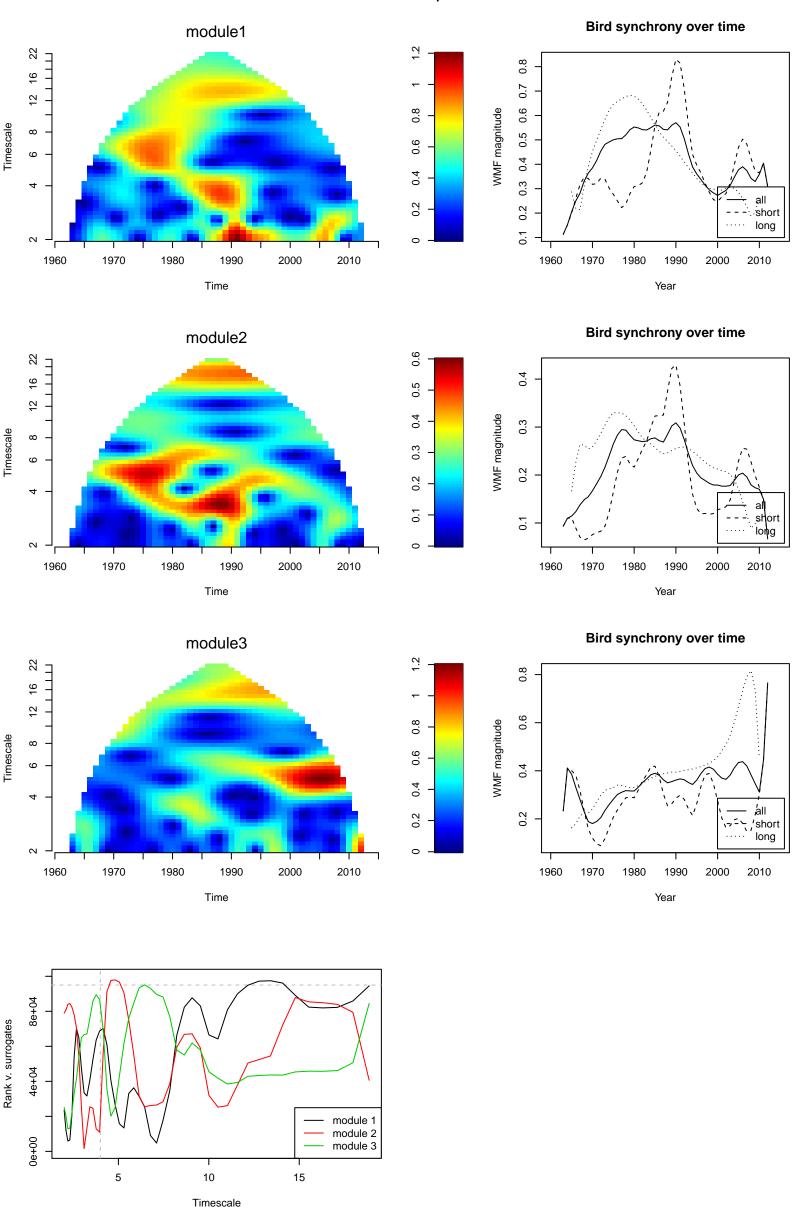


WinterWren





YellowBelliedSapsucker



YellowRumpedWarbler

