Supporting Information Datasets for "European Neolithic Societies Showed Early Warning Signals of Population Collapse"

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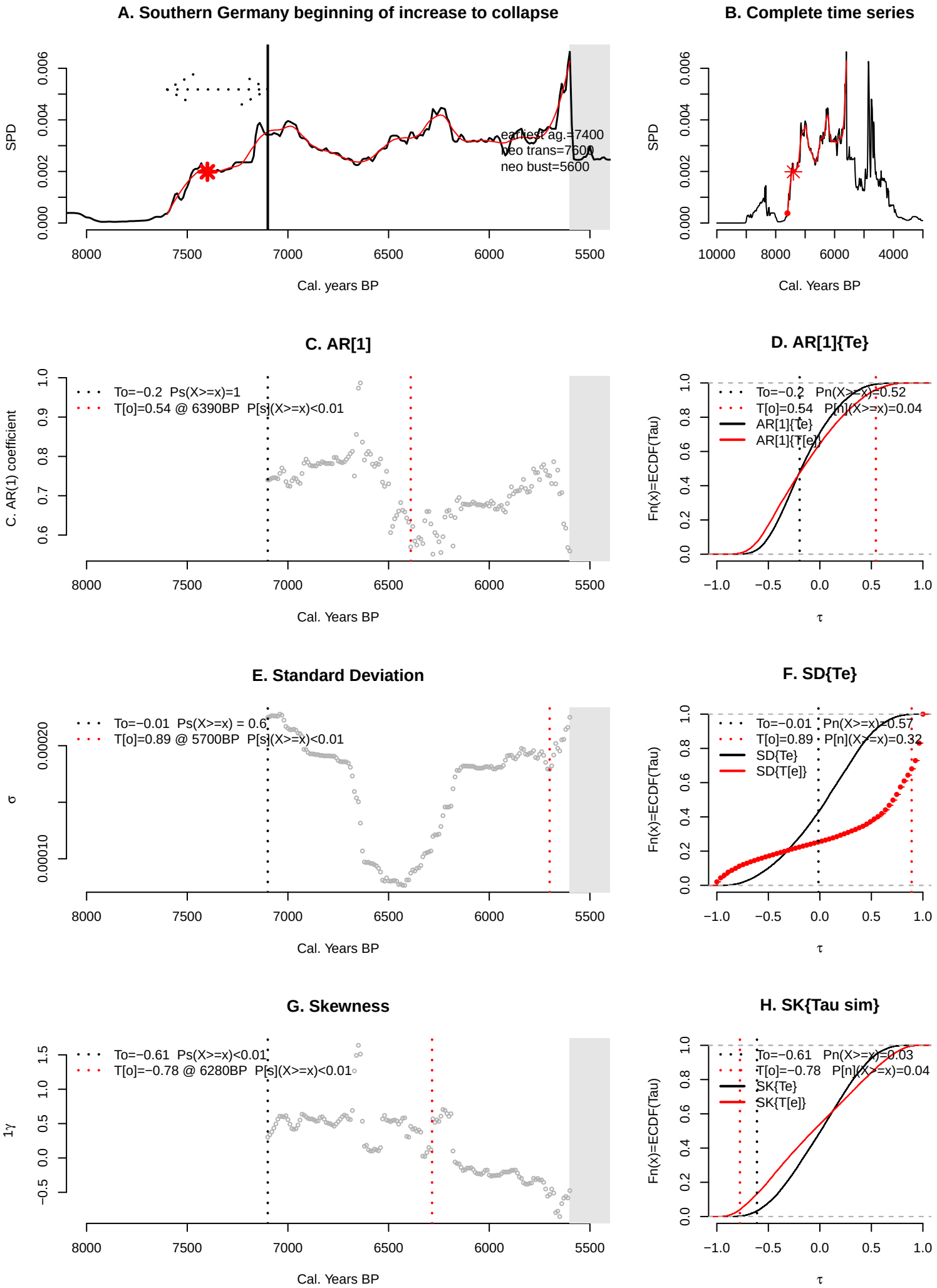
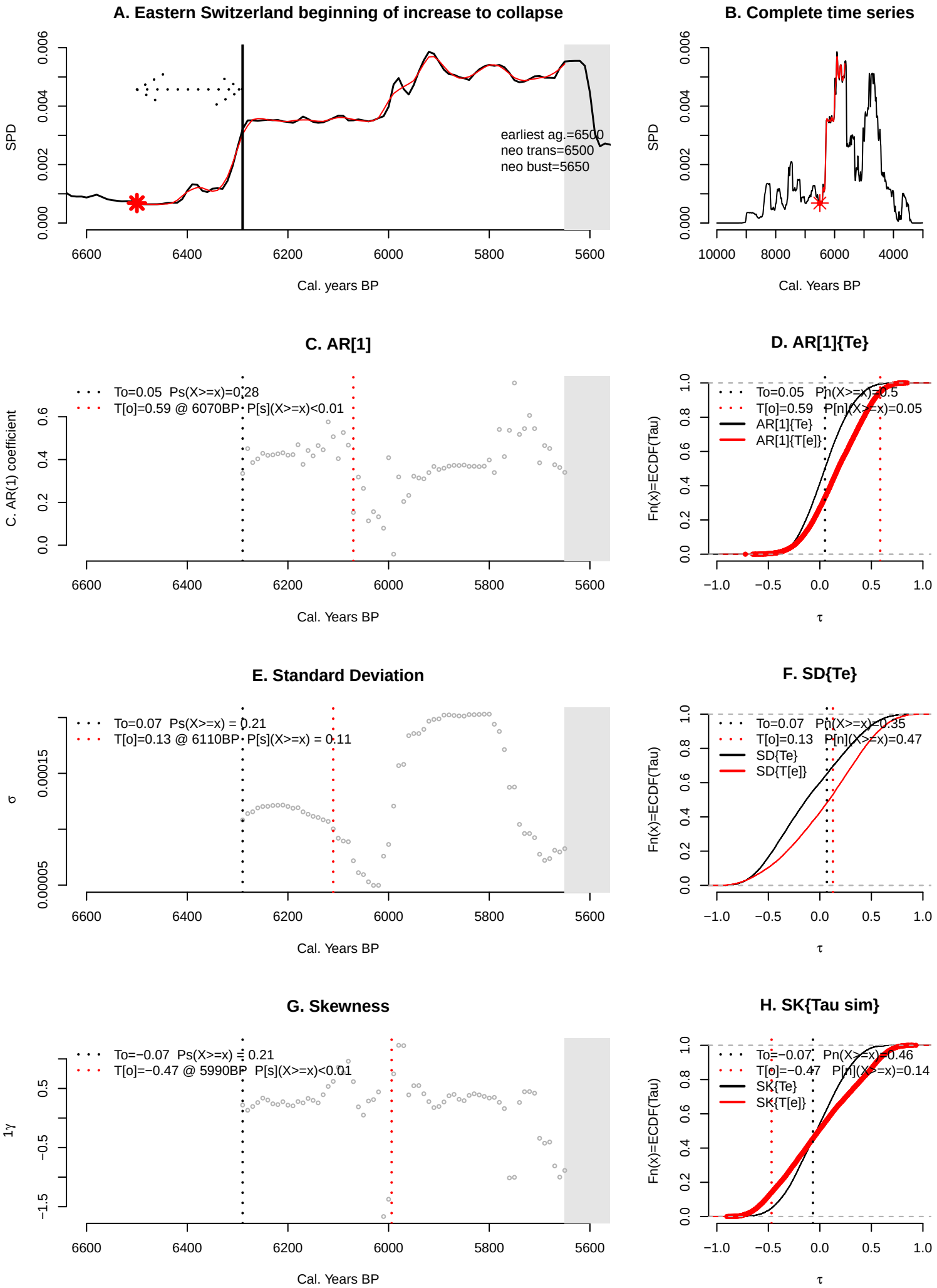
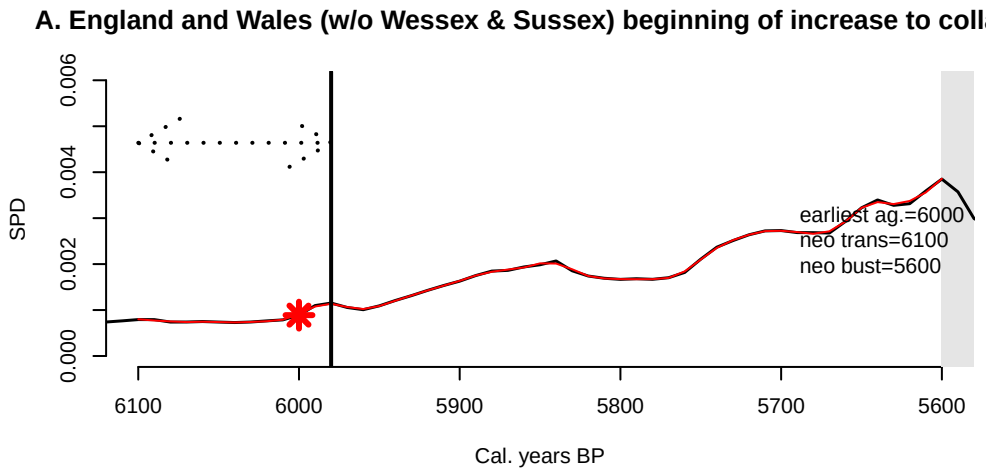
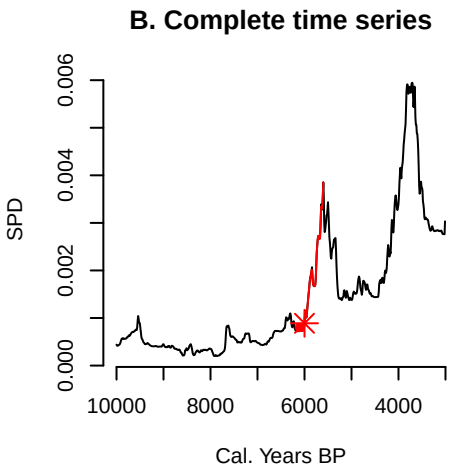
8 June, 2016

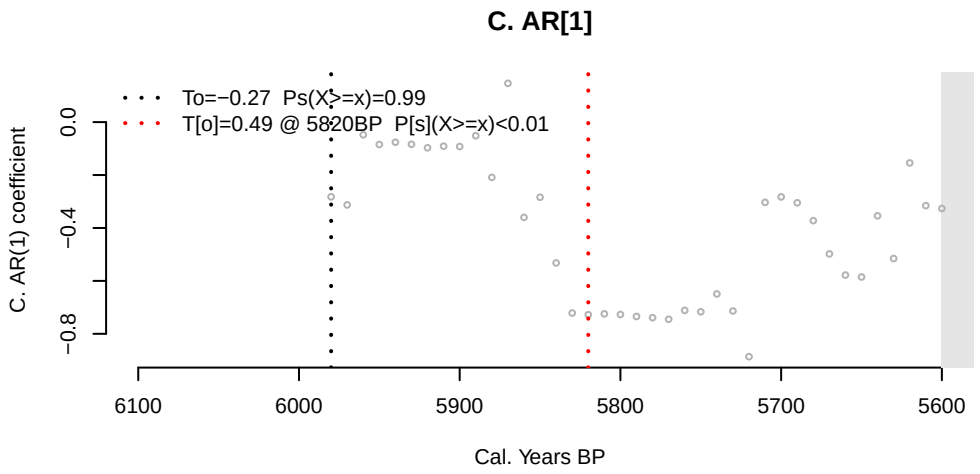
EWS analysis for all regions.

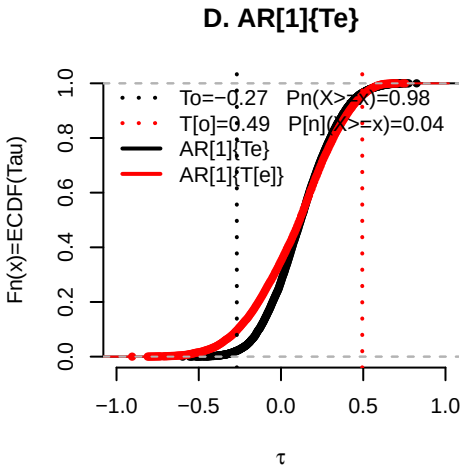

A. Southern Germany beginning of increase to collapse
SPD
Cal. years BP
earliest ag.=7400
neo trans=7500
neo bust=5600
B. Complete time series
SPD
Cal. Years BP
C. AR[1]
C. AR(1) coefficient
To=−0.2 Ps(X>=x)=1
T[o]=0.54 @ 6390BP P[s](X>=x)<0.01
Cal. Years BP
D. AR[1]{Te}
Fn(x)=ECDF(Tau)
To=−0.2 Pn(X>=x)=0.52
T[o]=0.54 P[n](X>=x)=0.04
AR[1]{Te}
AR[1]{T[e]}
τ
E. Standard Deviation
σ
To=−0.01 Ps(X>=x) = 0.6
T[o]=0.89 @ 5700BP P[s](X>=x)<0.01
Cal. Years BP
F. SD{Te}
Fn(x)=ECDF(Tau)
To=−0.01 Pn(X>=x)=0.57
T[o]=0.89 P[n](X>=x)=0.32
SD{Te}
SD{T[e]}
τ
G. Skewness
1γ
To=−0.61 Ps(X>=x)<0.01
T[o]=−0.78 @ 6280BP P[s](X>=x)<0.01
Cal. Years BP
H. SK{Tau sim}
Fn(x)=ECDF(Tau)
To=−0.61 Pn(X>=x)=0.03
T[o]=−0.78 P[n](X>=x)=0.04
SK{Te}
SK{T[e]}
τ

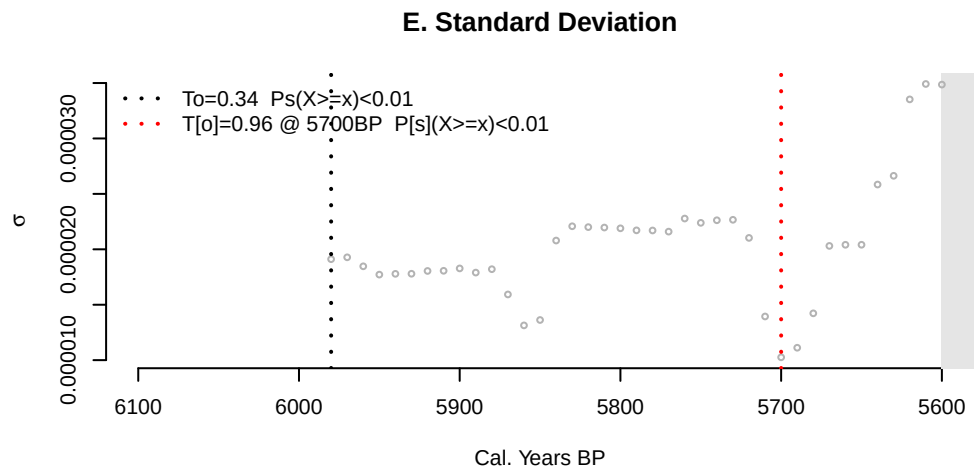

A. Eastern Switzerland beginning of increase to collapse
SPD
0.000
0.002
0.004
0.006
earliest ag.=6500
neo trans=6500
neo bust=5650
6600
6400
6200
6000
5800
5600
Cal. years BP
B. Complete time series
SPD
0.000
0.002
0.004
0.006
10000
8000
6000
4000
Cal. Years BP
C. AR[1]
C. AR(1) coefficient
0.0
0.2
0.4
0.6
To=0.05 Ps(X>=x)=0.28
T[o]=0.59 @ 6070BP P[s](X>=x)<0.01
6600
6400
6200
6000
5800
5600
Cal. Years BP
D. AR[1]{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.05 Pn(X>=x)=0.5
T[o]=0.59 P[n](X>=x)=0.05
AR[1]{Te}
AR[1]{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ
E. Standard Deviation
σ
0.00005
0.00015
To=0.07 Ps(X>=x) = 0.21
T[o]=0.13 @ 6110BP P[s](X>=x) = 0.11
6600
6400
6200
6000
5800
5600
Cal. Years BP
F. SD{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.07 Pn(X>=x)=0.35
T[o]=0.13 P[n](X>=x)=0.47
SD{Te}
SD{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ
G. Skewness
1γ
−1.5
−0.5
0.5
To=−0.07 Ps(X>=x) = 0.21
T[o]=−0.47 @ 5990BP P[s](X>=x)<0.01
6600
6400
6200
6000
5800
5600
Cal. Years BP
H. SK{Tau sim}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=−0.07 Pn(X>=x)=0.46
T[o]=−0.47 P[n](X>=x)=0.14
SK{Te}
SK{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ

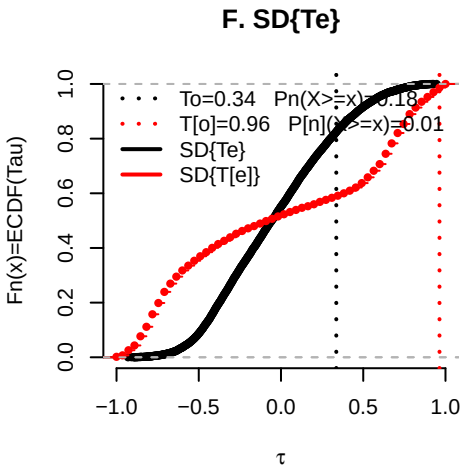

A. England and Wales (w/o Wessex & Sussex) beginning of increase to collaps
SPD
0.000
0.002
0.004
0.006
earliest ag.=6000
neo trans=6100
neo bust=5600
6100
6000
5900
5800
5700
5600
Cal. years BP

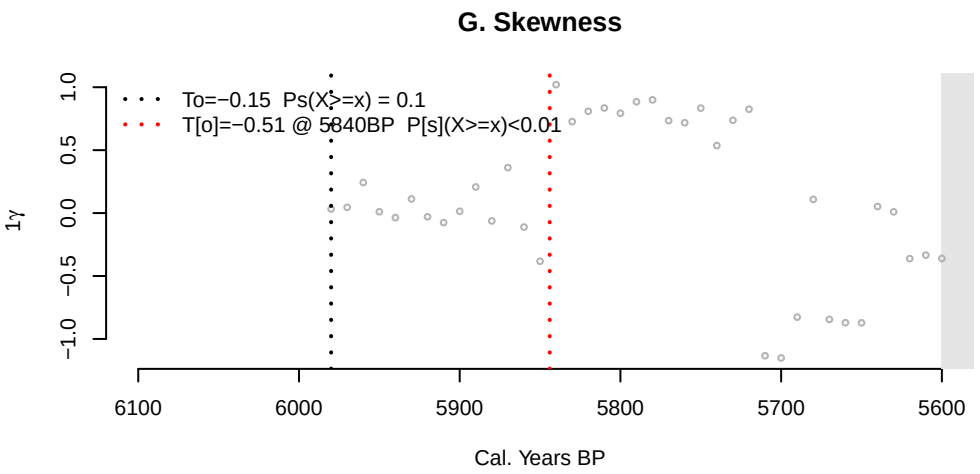

B. Complete time series
SPD
0.000
0.002
0.004
0.006
10000
8000
6000
4000
Cal. Years BP

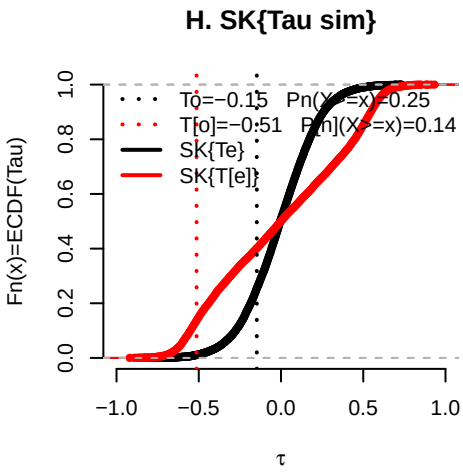

C. AR[1]
C. AR(1) coefficient
To=−0.27 Ps(X>=x)=0.99
T[o]=0.49 @ 5820BP P[s](X>=x)<0.01
0.0
−0.4
−0.8
6100
6000
5900
5800
5700
5600
Cal. Years BP

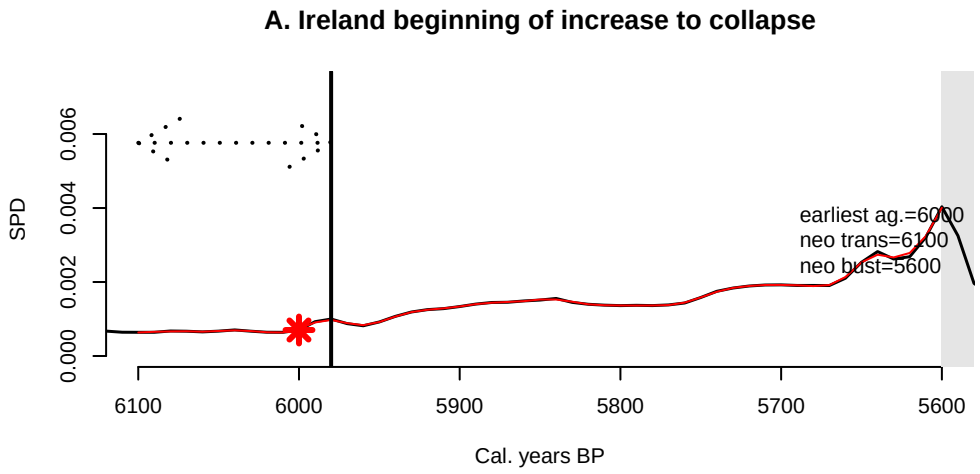

D. AR[1]{Te}
Fn(x)=ECDF(Tau)
To=−0.27 Pn(X>=x)=0.98
T[o]=0.49 P[n](X>=x)=0.04
AR[1]{Te}
AR[1]{T[e]}
0.0
0.2
0.4
0.6
0.8
1.0
−1.0
−0.5
0.0
0.5
1.0
τ

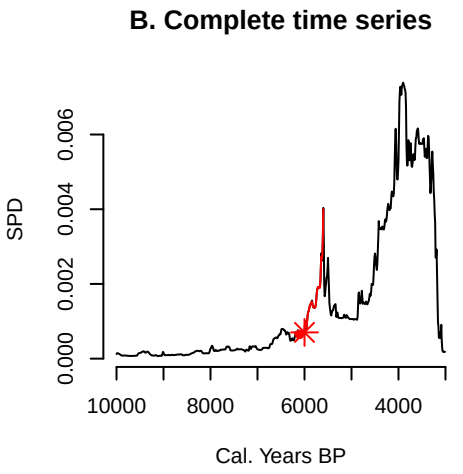

E. Standard Deviation
σ
To=0.34 Ps(X>=x)<0.01
T[o]=0.96 @ 5700BP P[s](X>=x)<0.01
0.000010
0.000020
0.000030
6100
6000
5900
5800
5700
5600
Cal. Years BP

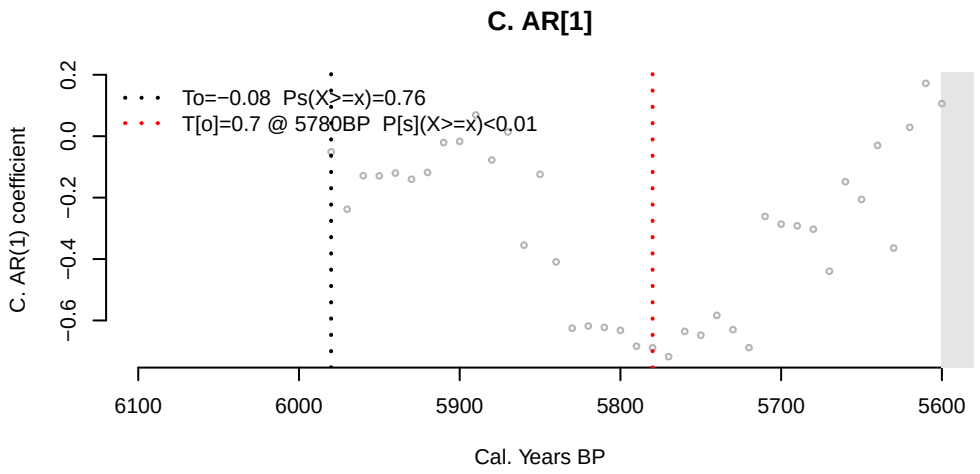

F. SD{Te}
Fn(x)=ECDF(Tau)
To=0.34 Pn(X>=x)=0.18
T[o]=0.96 P[n](X>=x)=0.01
SD{Te}
SD{T[e]}
0.0
0.2
0.4
0.6
0.8
1.0
−1.0
−0.5
0.0
0.5
1.0
τ

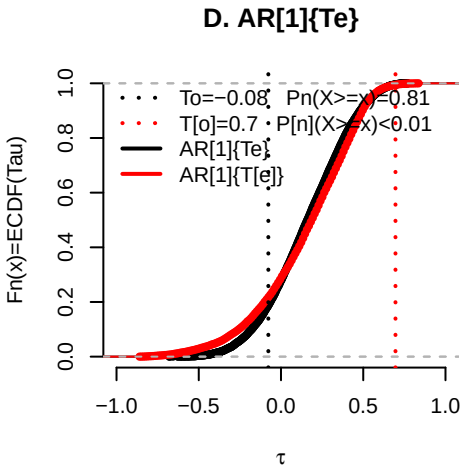

G. Skewness
1γ
To=−0.15 Ps(X>=x) = 0.1
T[o]=−0.51 @ 5840BP P[s](X>=x)<0.01
−1.0
−0.5
0.0
0.5
1.0
6100
6000
5900
5800
5700
5600
Cal. Years BP

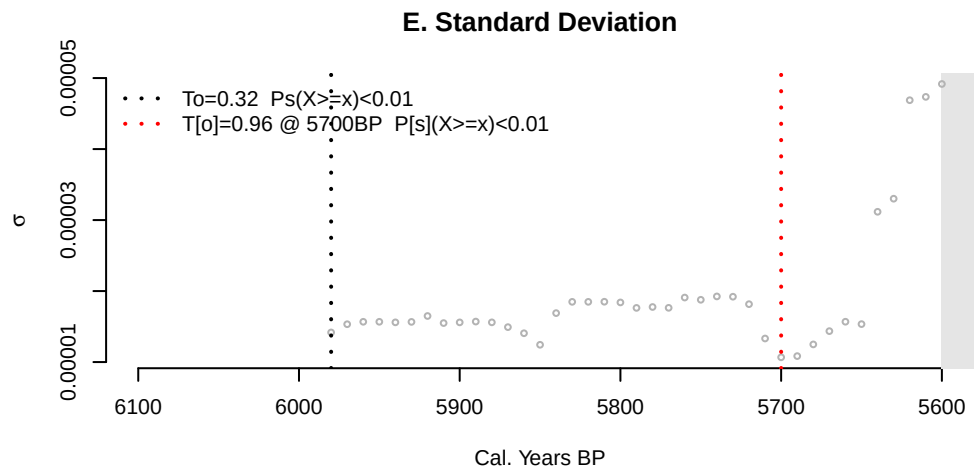

H. SK{Tau sim}
Fn(x)=ECDF(Tau)
To=−0.15 Pn(X>=x)=0.25
T[o]=−0.51 P[n](X>=x)=0.14
SK{Te}
SK{T[e]}
0.0
0.2
0.4
0.6
0.8
1.0
−1.0
−0.5
0.0
0.5
1.0
τ

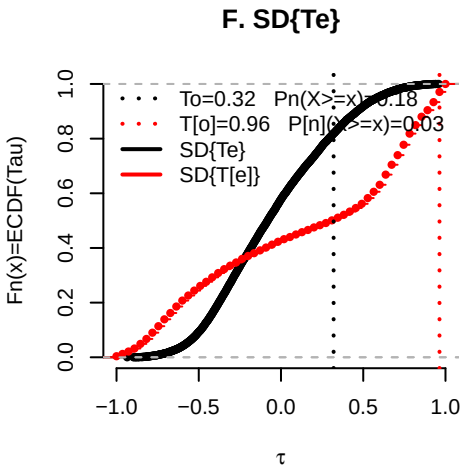

A. Ireland beginning of increase to collapse
SPD
0.000
0.002
0.004
0.006
earliest ag.=6000
neo trans=6100
neo bust=5600
6100
6000
5900
5800
5700
5600
Cal. years BP

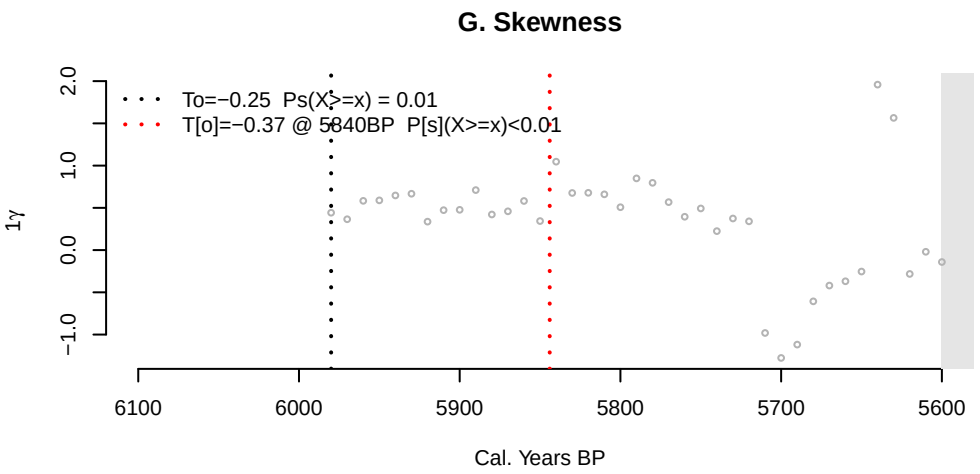

B. Complete time series
SPD
0.000
0.002
0.004
0.006
10000
8000
6000
4000
Cal. Years BP

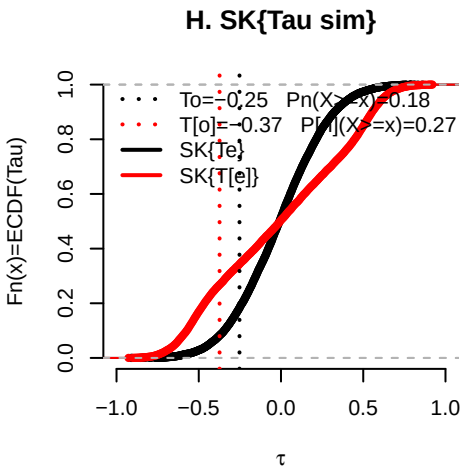

C. AR[1]
C. AR(1) coefficient
−0.6
−0.4
−0.2
0.0
0.2
To=−0.08 Ps(X>=x)=0.76
T[o]=0.7 @ 5780BP P[s](X>=x)<0.01
6100
6000
5900
5800
5700
5600
Cal. Years BP

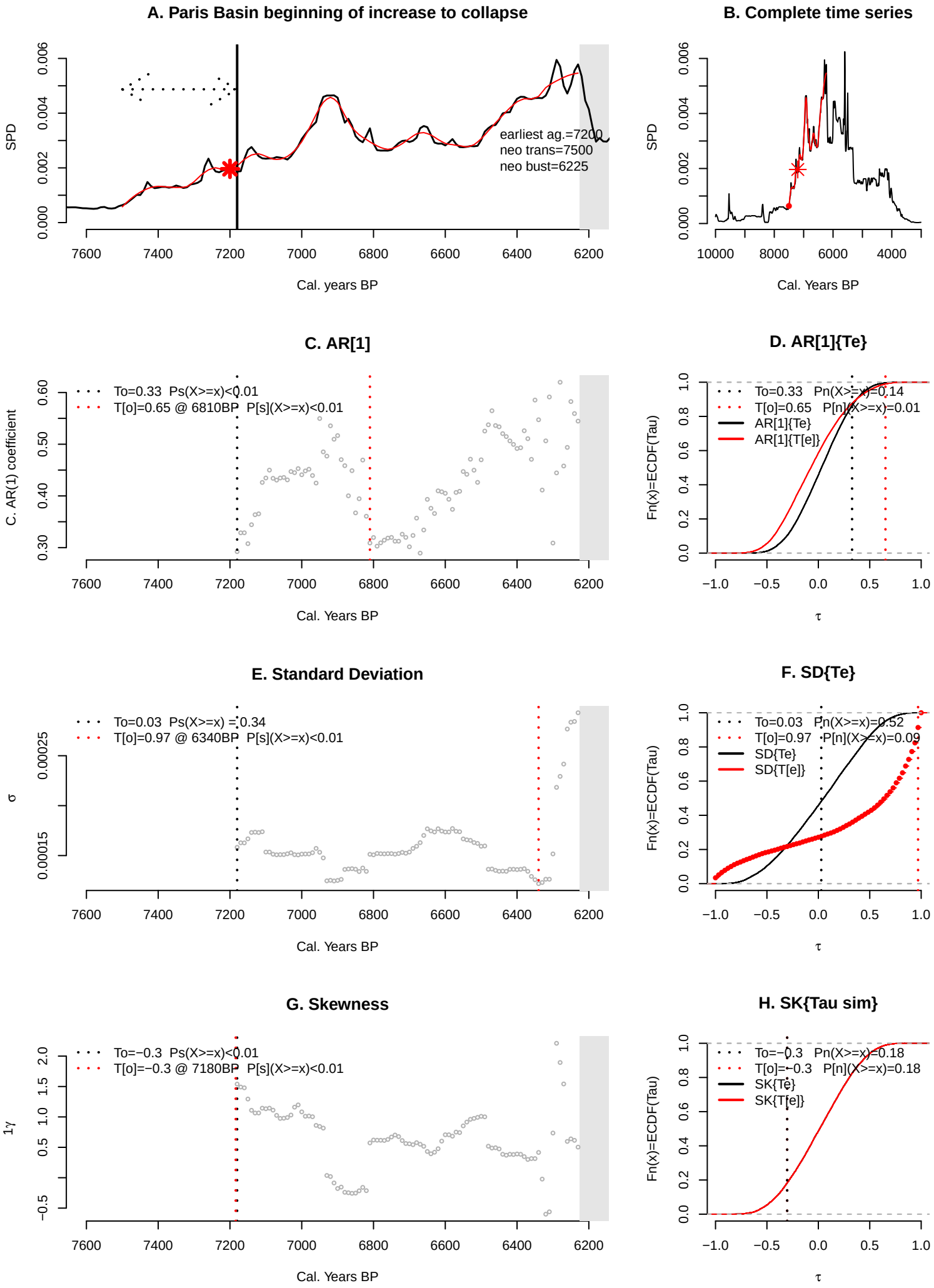

D. AR[1]{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=−0.08 Pn(X>=x)=0.81
T[o]=0.7 P[n](X>=x)<0.01
AR[1]{Te}
AR[1]{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ

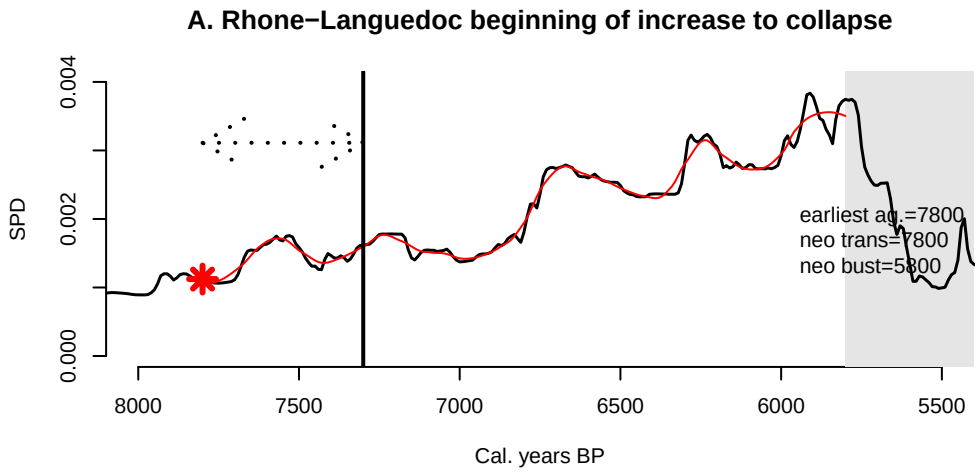

E. Standard Deviation
σ
0.00001
0.00003
0.00005
To=0.32 Ps(X>=x)<0.01
T[o]=0.96 @ 5700BP P[s](X>=x)<0.01
6100
6000
5900
5800
5700
5600
Cal. Years BP

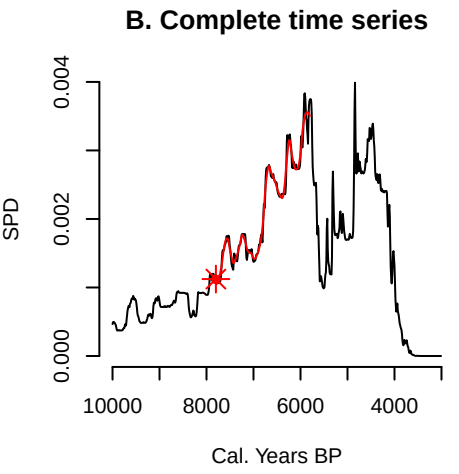

F. SD{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.32 Pn(X>=x)=0.18
T[o]=0.96 P[n](X>=x)=0.03
SD{Te}
SD{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ

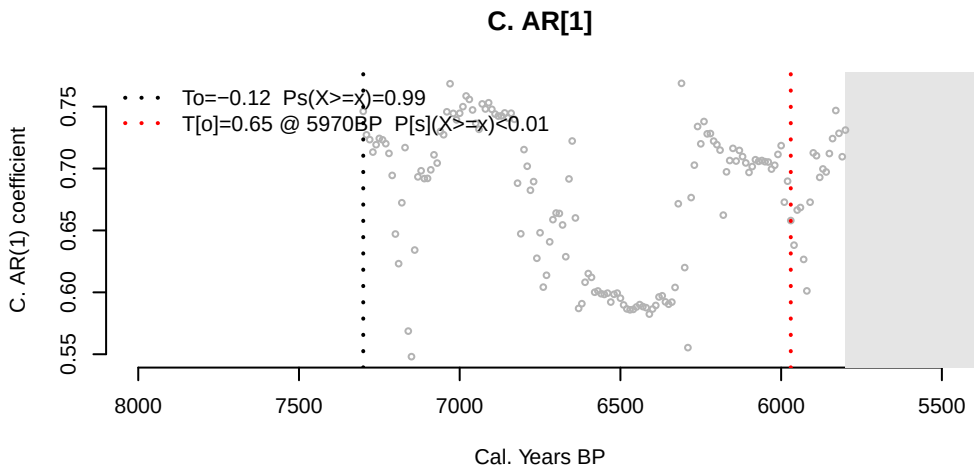

G. Skewness
1γ
−1.0
0.0
1.0
2.0
To=−0.25 Ps(X>=x) = 0.01
T[o]=−0.37 @ 5840BP P[s](X>=x)<0.01
6100
6000
5900
5800
5700
5600
Cal. Years BP

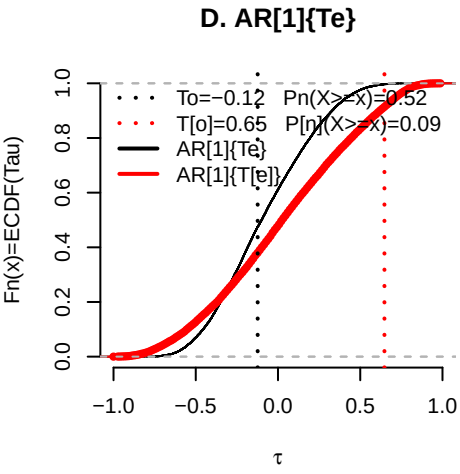

H. SK{Tau sim}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=−0.25 Pn(X>=x)=0.18
T[o]=−0.37 P[n](X>=x)=0.27
SK{Te}
SK{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ

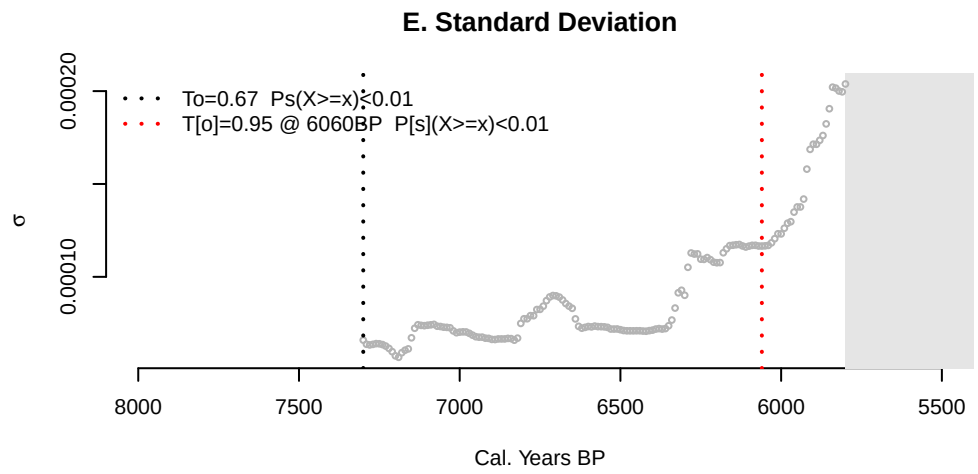

A. Paris Basin beginning of increase to collapse
SPD
0.000
0.002
0.004
0.006
earliest ag.=7200
neo trans=7500
neo bust=6225
7600
7400
7200
7000
6800
6600
6400
6200
Cal. years BP
B. Complete time series
SPD
0.000
0.002
0.004
0.006
10000
8000
6000
4000
Cal. Years BP
C. AR[1]
C. AR(1) coefficient
0.30
0.40
0.50
0.60
To=0.33 Ps(X>=x)<0.01
T[o]=0.65 @ 6810BP P[s](X>=x)<0.01
7600
7400
7200
7000
6800
6600
6400
6200
Cal. Years BP
D. AR[1]{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.33 Pn(X>=x)=0.14
T[o]=0.65 P[n](X>=x)=0.01
AR[1]{Te}
AR[1]{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ
E. Standard Deviation
σ
0.00015
0.00025
To=0.03 Ps(X>=x) = 0.34
T[o]=0.97 @ 6340BP P[s](X>=x)<0.01
7600
7400
7200
7000
6800
6600
6400
6200
Cal. Years BP
F. SD{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.03 Pn(X>=x)=0.52
T[o]=0.97 P[n](X>=x)=0.09
SD{Te}
SD{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ
G. Skewness
1γ
−0.5
0.5
1.0
1.5
2.0
To=−0.3 Ps(X>=x)<0.01
T[o]=−0.3 @ 7180BP P[s](X>=x)<0.01
7600
7400
7200
7000
6800
6600
6400
6200
Cal. Years BP
H. SK{Tau sim}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=−0.3 Pn(X>=x)=0.18
T[o]=−0.3 P[n](X>=x)=0.18
SK{Te}
SK{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ

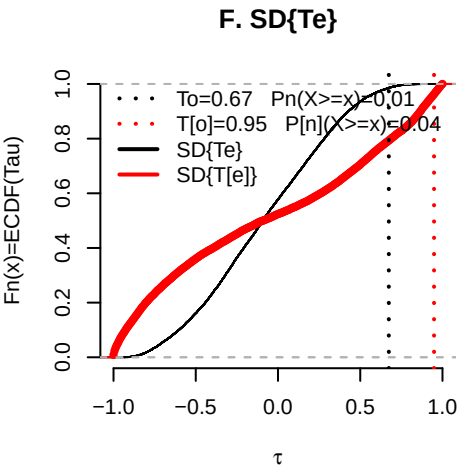

A. Rhone−Languedoc beginning of increase to collapse
SPD
0.000
0.002
0.004
earliest ag.=7800
neo trans=7800
neo bust=5800
8000
7500
7000
6500
6000
5500
Cal. years BP

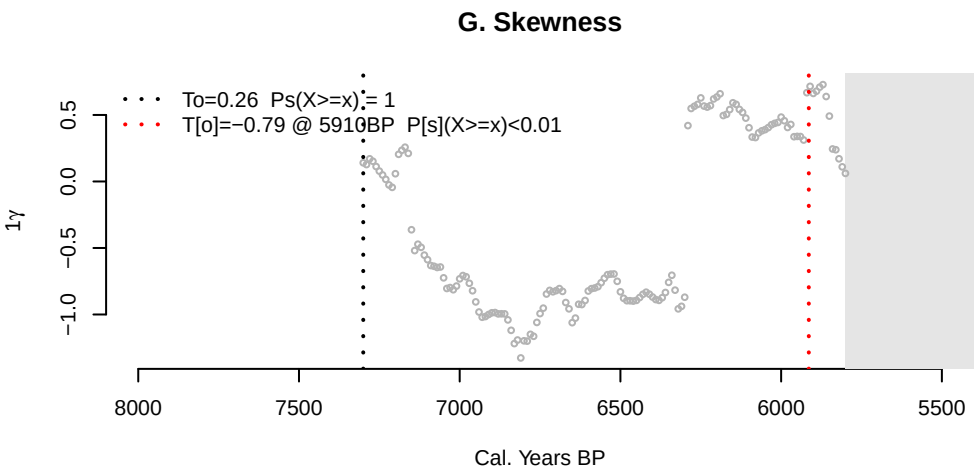

B. Complete time series
SPD
0.000
0.002
0.004
10000
8000
6000
4000
Cal. Years BP

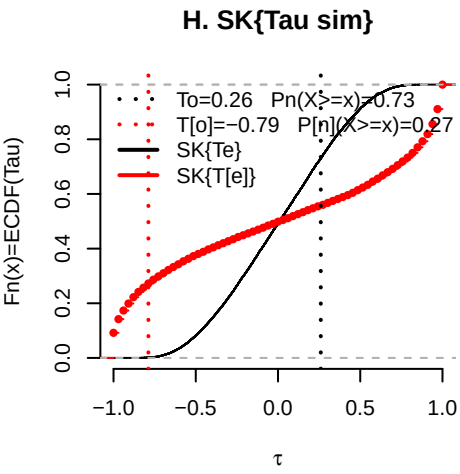

C. AR[1]
C. AR(1) coefficient
0.55
0.60
0.65
0.70
0.75
To=−0.12 Ps(X>=x)=0.99
T[o]=0.65 @ 5970BP P[s](X>=x)<0.01
8000
7500
7000
6500
6000
5500
Cal. Years BP

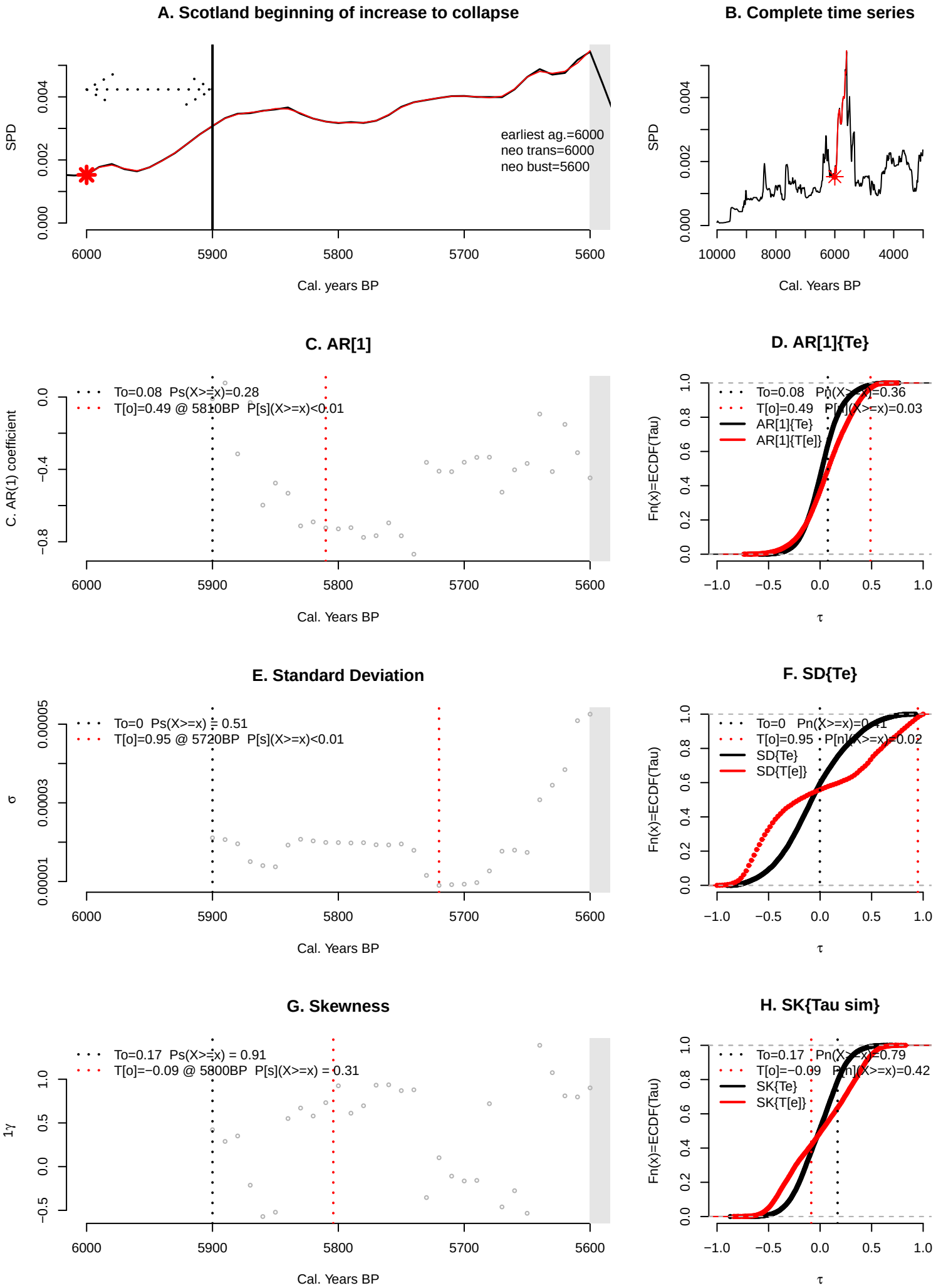

D. AR[1]{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=−0.12 Pn(X>=x)=0.52
T[o]=0.65 P[n](X>=x)=0.09
AR[1]{Te}
AR[1]{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ

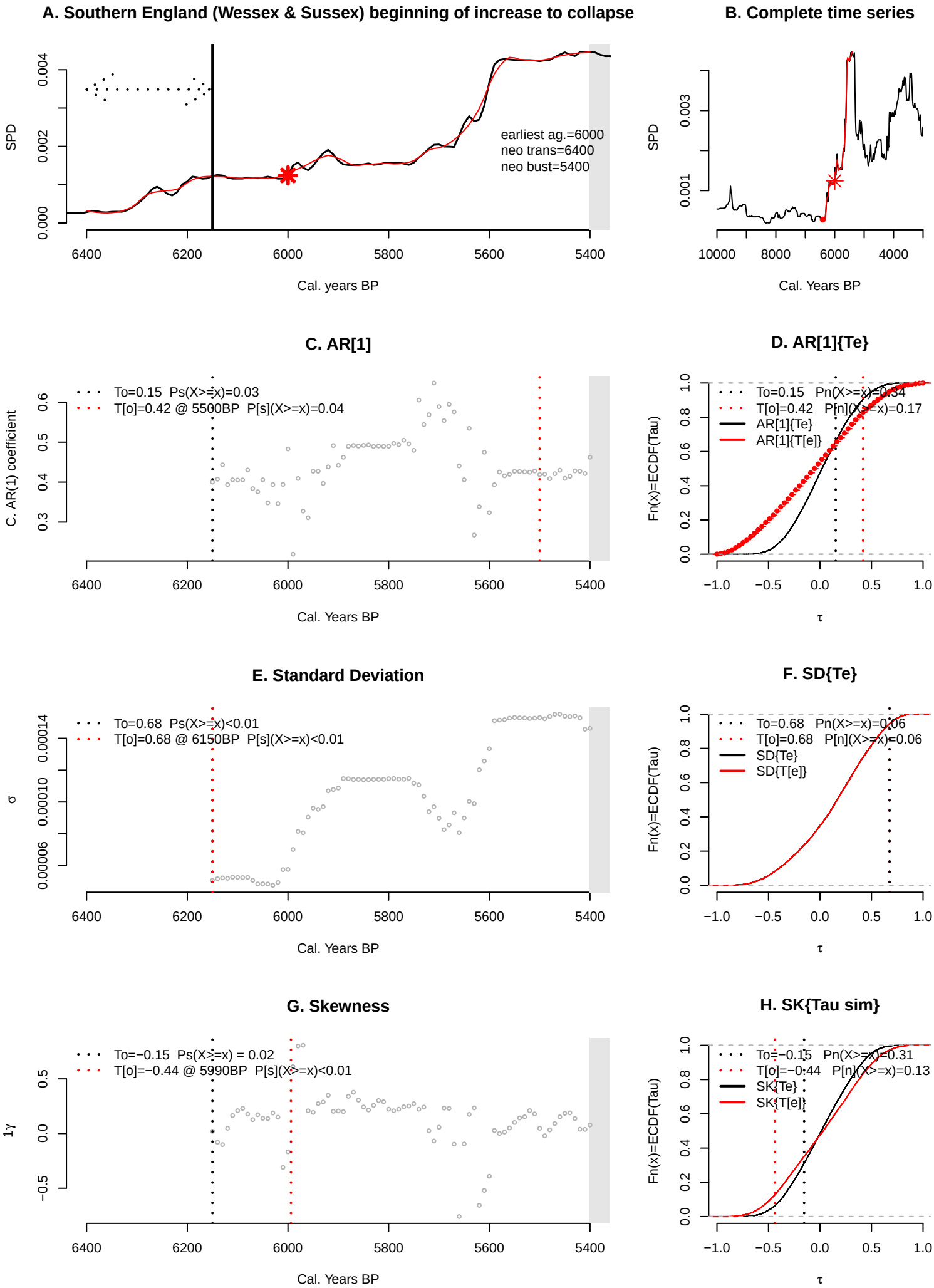

E. Standard Deviation
σ
0.00010
0.00020
To=0.67 Ps(X>=x)<0.01
T[o]=0.95 @ 6060BP P[s](X>=x)<0.01
8000
7500
7000
6500
6000
5500
Cal. Years BP

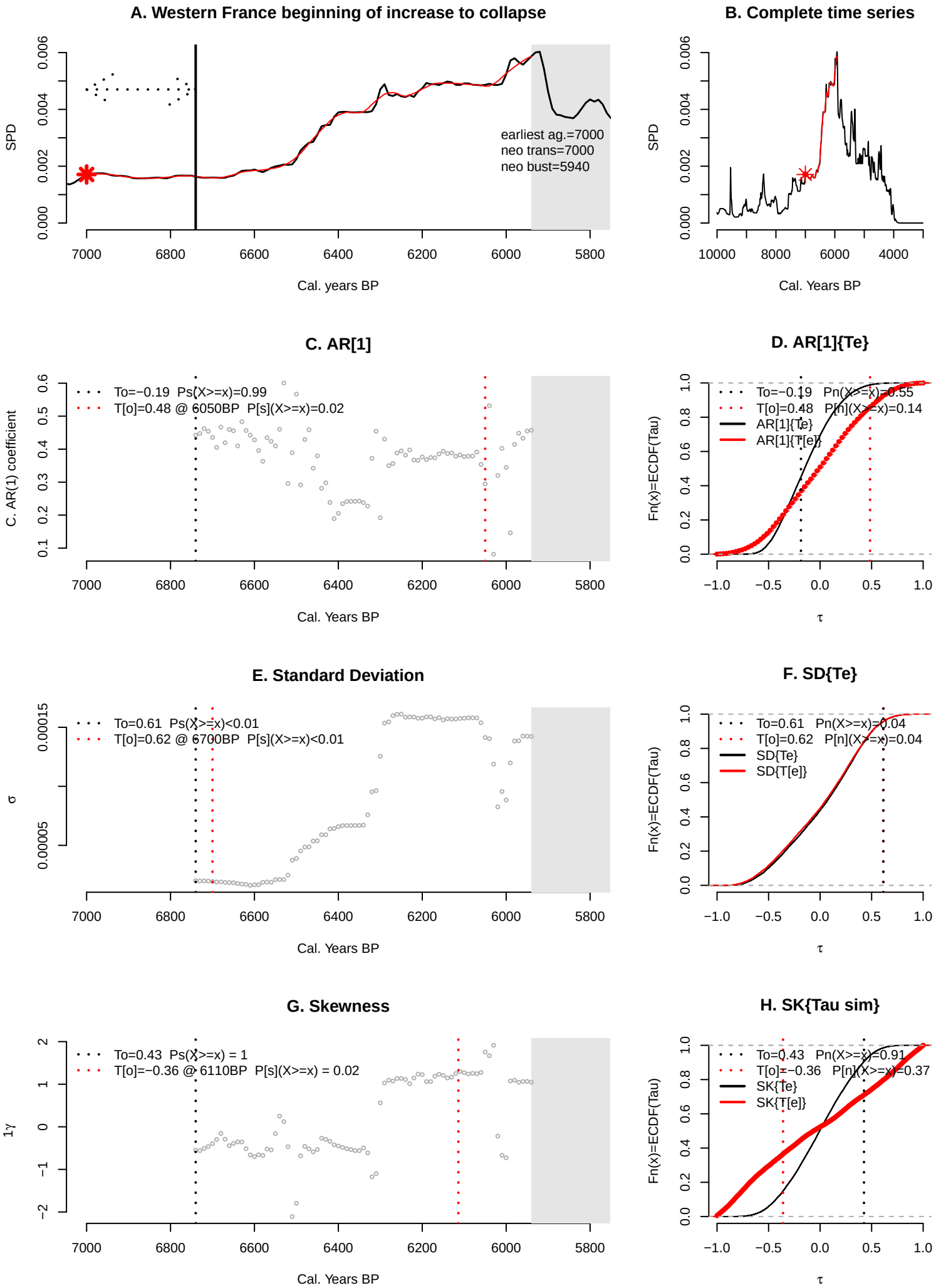

F. SD{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.67 Pn(X>=x)<0.01
T[o]=0.95 P[n](X>=x)=0.04
SD{Te}
SD{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ


G. Skewness
1γ
−1.0
−0.5
0.0
0.5
To=0.26 Ps(X>=x)= 1
T[o]=−0.79 @ 5910BP P[s](X>=x)<0.01
8000
7500
7000
6500
6000
5500
Cal. Years BP

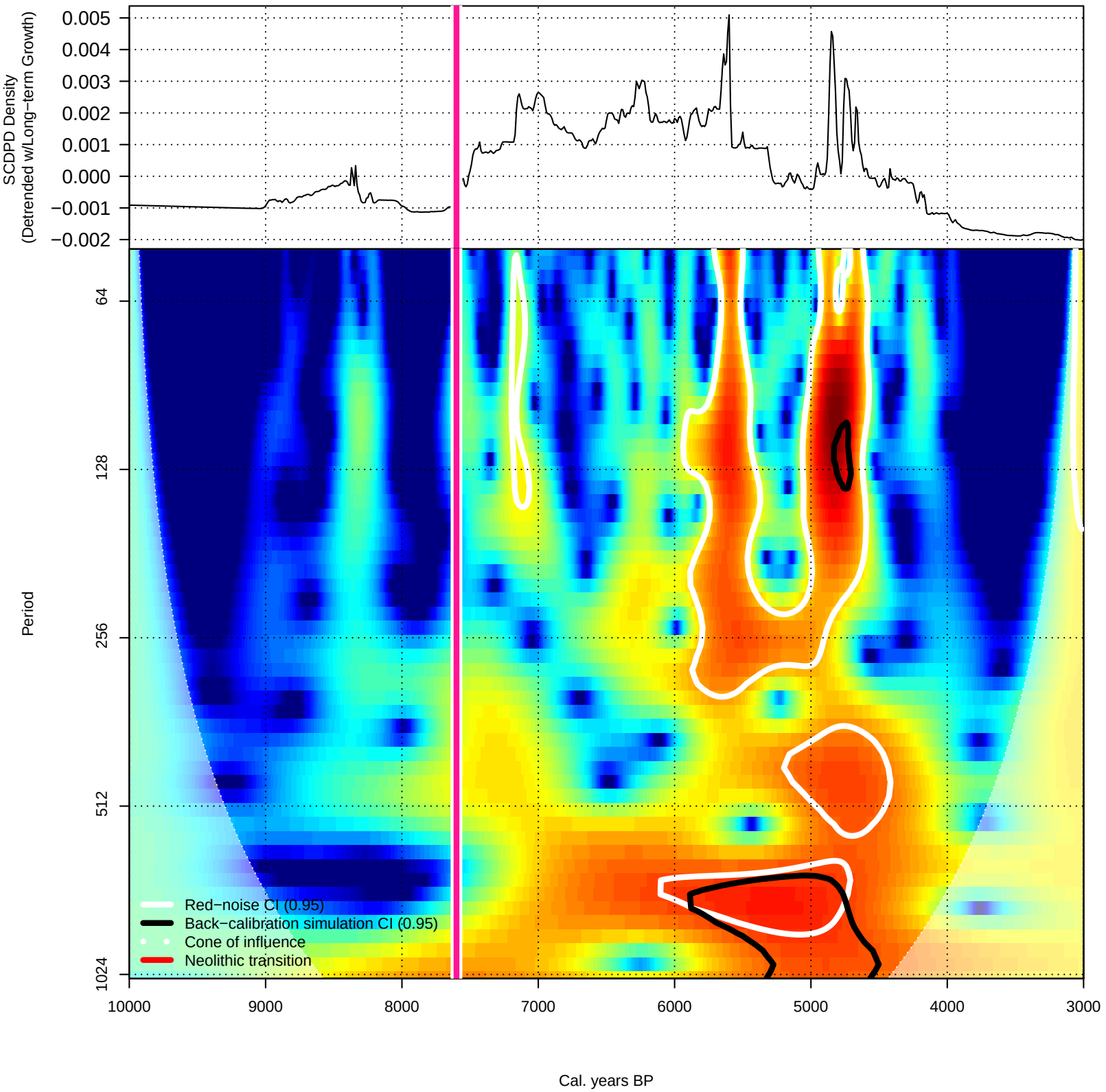

H. SK{Tau sim}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.26 Pn(X>=x)=0.73
T[o]=−0.79 P[n](X>=x)=0.27
SK{Te}
SK{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ

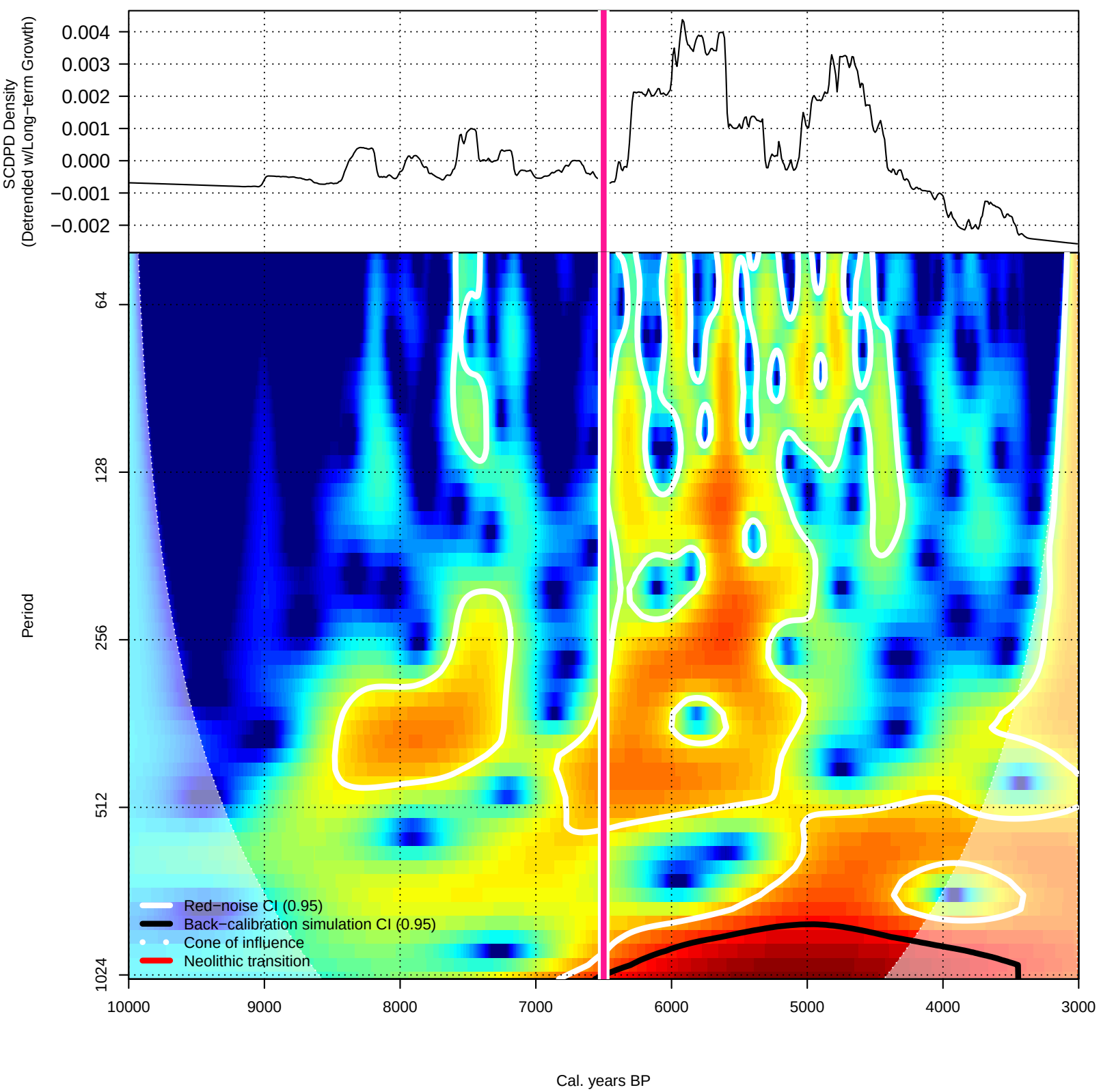

A. Scotland beginning of increase to collapse
SPD
0.000
0.002
0.004
earliest ag.=6000
neo trans=6000
neo bust=5600
6000
5900
5800
5700
5600
Cal. years BP
B. Complete time series
SPD
0.000
0.002
0.004
10000
8000
6000
4000
Cal. Years BP
C. AR[1]
C. AR(1) coefficient
−0.8
−0.4
0.0
To=0.08 Ps(X>=x)=0.28
T[o]=0.49 @ 5810BP P[s](X>=x)<0.01
6000
5900
5800
5700
5600
Cal. Years BP
D. AR[1]{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.08 Pn(X>=x)=0.36
T[o]=0.49 P[n](X>=x)=0.03
AR[1]{Te}
AR[1]{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ
E. Standard Deviation
σ
0.00001
0.00003
0.00005
To=0 Ps(X>=x) = 0.51
T[o]=0.95 @ 5720BP P[s](X>=x)<0.01
6000
5900
5800
5700
5600
Cal. Years BP
F. SD{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0 Pn(X>=x)=0.41
T[o]=0.95 P[n](X>=x)=0.02
SD{Te}
SD{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ
G. Skewness
1γ
−0.5
0.0
0.5
1.0
To=0.17 Ps(X>=x) = 0.91
T[o]=−0.09 @ 5800BP P[s](X>=x) = 0.31
6000
5900
5800
5700
5600
Cal. Years BP
H. SK{Tau sim}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.17 Pn(X>=x)=0.79
T[o]=−0.09 P[n](X>=x)=0.42
SK{Te}
SK{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ

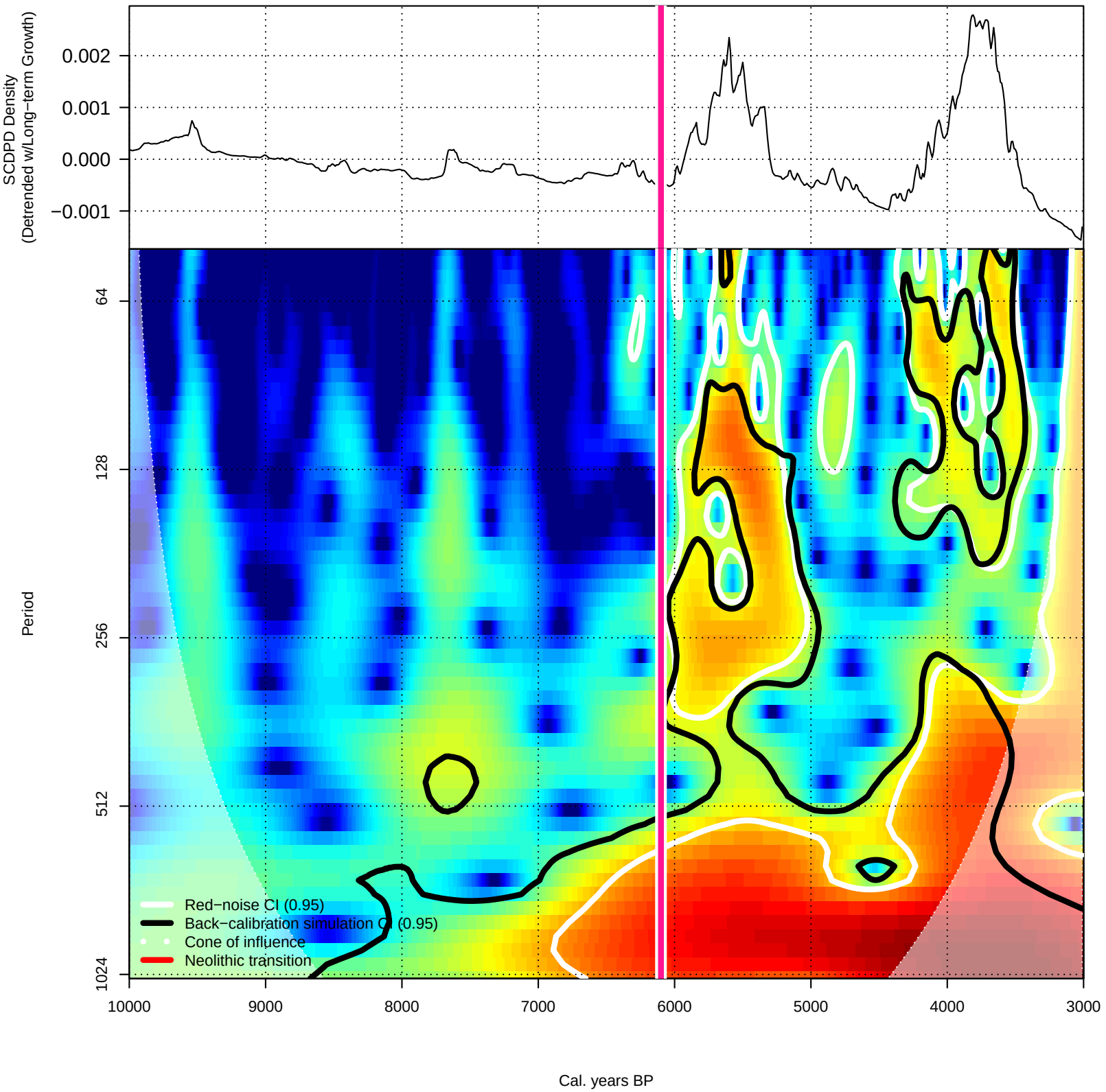

A. Southern England (Wessex & Sussex) beginning of increase to collapse
SPD
0.000
0.002
0.004
earliest ag.=6000
neo trans=6400
neo bust=5400
6400
6200
6000
5800
5600
5400
Cal. years BP
B. Complete time series
SPD
0.001
0.003
10000
8000
6000
4000
Cal. Years BP
C. AR[1]
C. AR(1) coefficient
0.3
0.4
0.5
0.6
To=0.15 Ps(X>=x)=0.03
T[o]=0.42 @ 5500BP P[s](X>=x)=0.04
Cal. Years BP
D. AR[1]{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.15 Pn(X>=x)=0.34
T[o]=0.42 P[n](X>=x)=0.17
AR[1]{Te}
AR[1]{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ
E. Standard Deviation
σ
0.00006
0.00010
0.00014
To=0.68 Ps(X>=x)<0.01
T[o]=0.68 @ 6150BP P[s](X>=x)<0.01
Cal. Years BP
F. SD{Te}
Fn(x)=ECDF(Tau)
To=0.68 Pn(X>=x)=0.06
T[o]=0.68 P[n](X>=x)=0.06
SD{Te}
SD{T[e]}
τ
G. Skewness
1γ
−0.5
0.0
0.5
To=−0.15 Ps(X>=x) = 0.02
T[o]=−0.44 @ 5990BP P[s](X>=x)<0.01
Cal. Years BP
H. SK{Tau sim}
Fn(x)=ECDF(Tau)
To=−0.15 Pn(X>=x)=0.31
T[o]=−0.44 P[n](X>=x)=0.13
SK{Te}
SK{T[e]}
τ

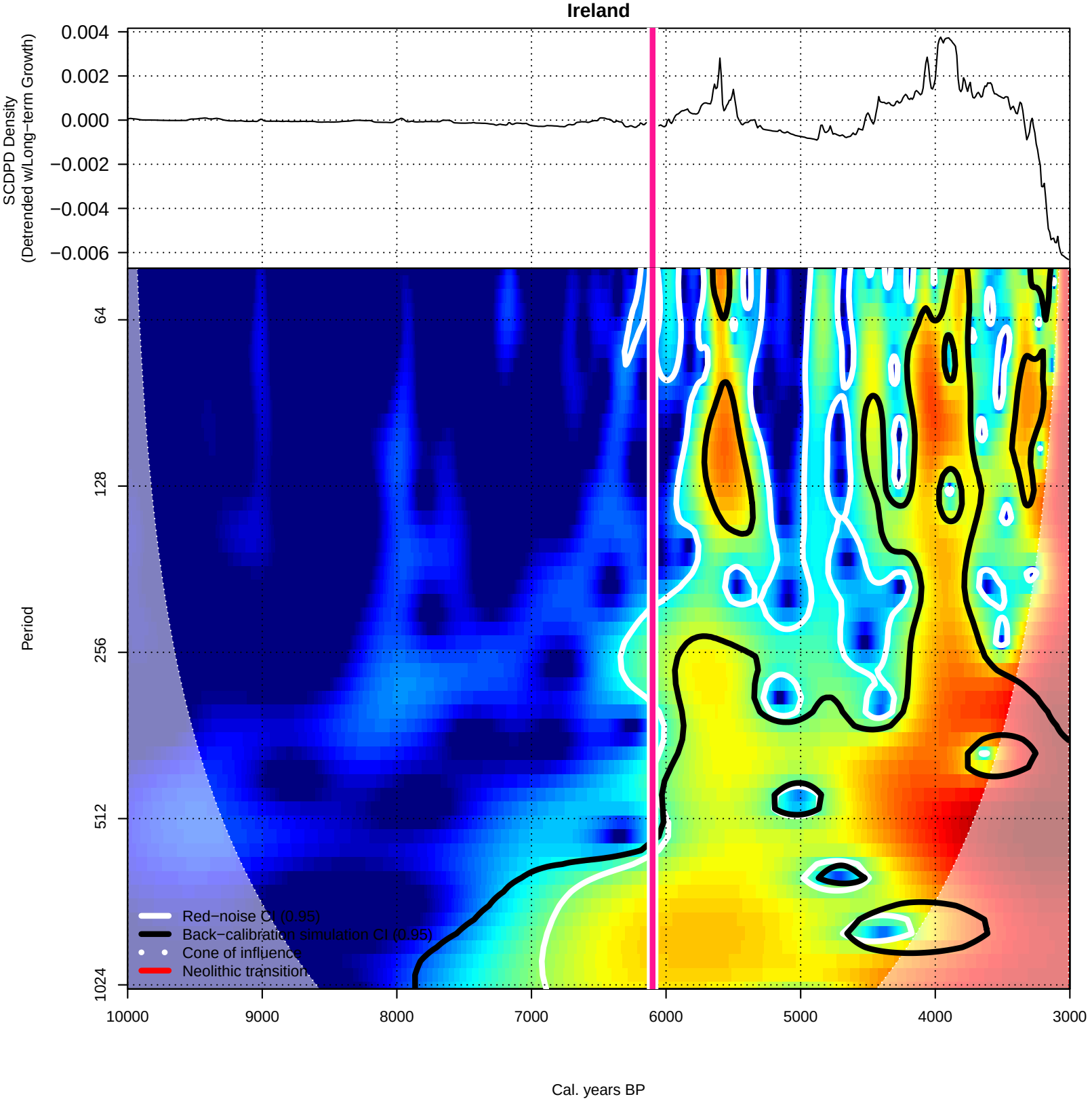

A. Western France beginning of increase to collapse
SPD
0.000
0.002
0.004
0.006
earliest ag.=7000
neo trans=7000
neo bust=5940
7000
6800
6600
6400
6200
6000
5800
Cal. years BP
B. Complete time series
SPD
0.000
0.002
0.004
0.006
10000
8000
6000
4000
Cal. Years BP
C. AR[1]
C. AR(1) coefficient
0.1
0.2
0.3
0.4
0.5
0.6
To=−0.19 Ps(X>=x)=0.99
T[o]=0.48 @ 6050BP P[s](X>=x)=0.02
7000
6800
6600
6400
6200
6000
5800
Cal. Years BP
D. AR[1]{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=−0.19 Pn(X>=x)=0.55
T[o]=0.48 P[n](X>=x)=0.14
AR[1]{Te}
AR[1]{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ
E. Standard Deviation
σ
0.00005
0.00015
To=0.61 Ps(X>=x)<0.01
T[o]=0.62 @ 6700BP P[s](X>=x)<0.01
7000
6800
6600
6400
6200
6000
5800
Cal. Years BP
F. SD{Te}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.61 Pn(X>=x)=0.04
T[o]=0.62 P[n](X>=x)=0.04
SD{Te}
SD{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ
G. Skewness
1γ
−2
−1
0
1
2
To=0.43 Ps(X>=x) = 1
T[o]=−0.36 @ 6110BP P[s](X>=x) = 0.02
7000
6800
6600
6400
6200
6000
5800
Cal. Years BP
H. SK{Tau sim}
Fn(x)=ECDF(Tau)
0.0
0.2
0.4
0.6
0.8
1.0
To=0.43 Pn(X>=x)=0.91
T[o]=−0.36 P[n](X>=x)=0.37
SK{Te}
SK{T[e]}
−1.0
−0.5
0.0
0.5
1.0
τ

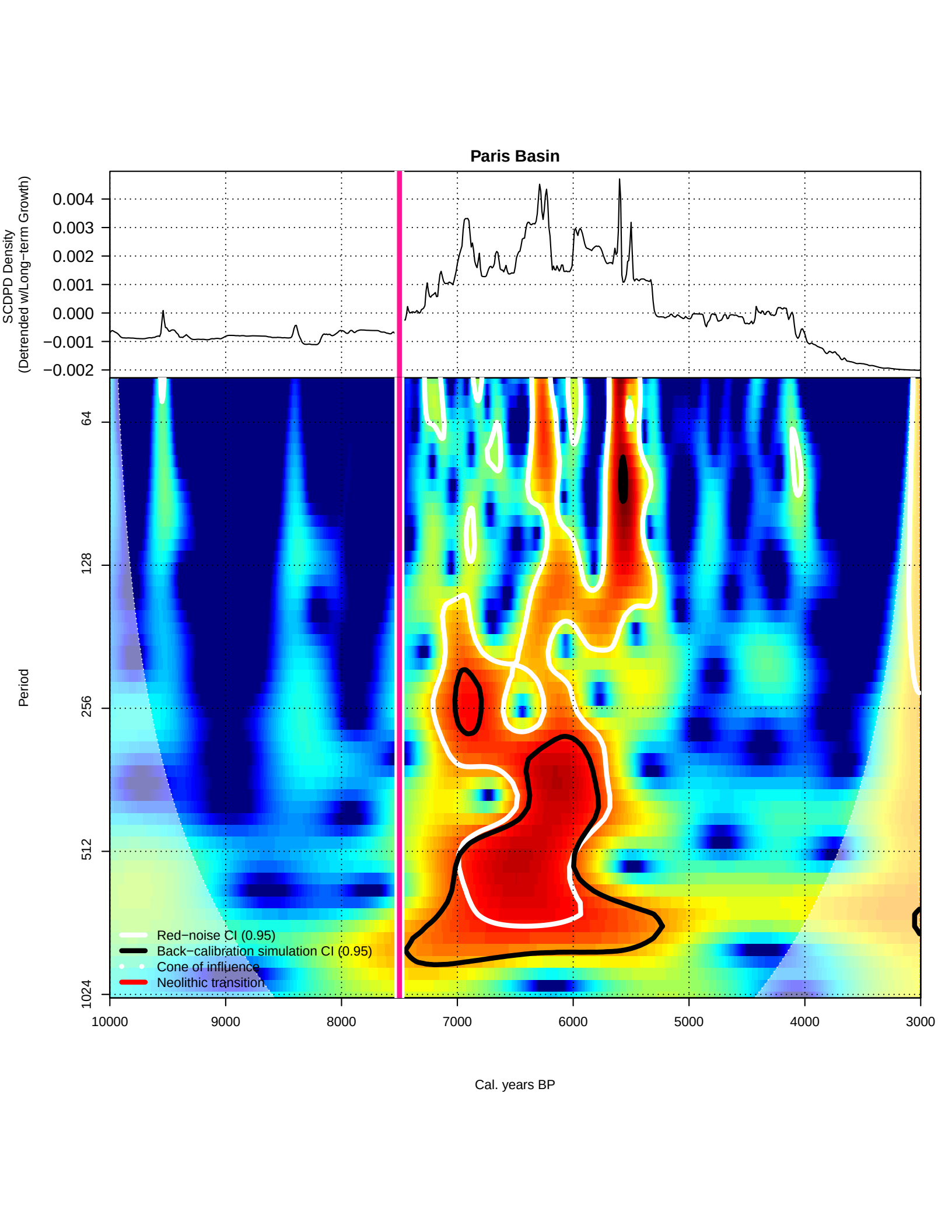
Wavelet analysis for all regions.

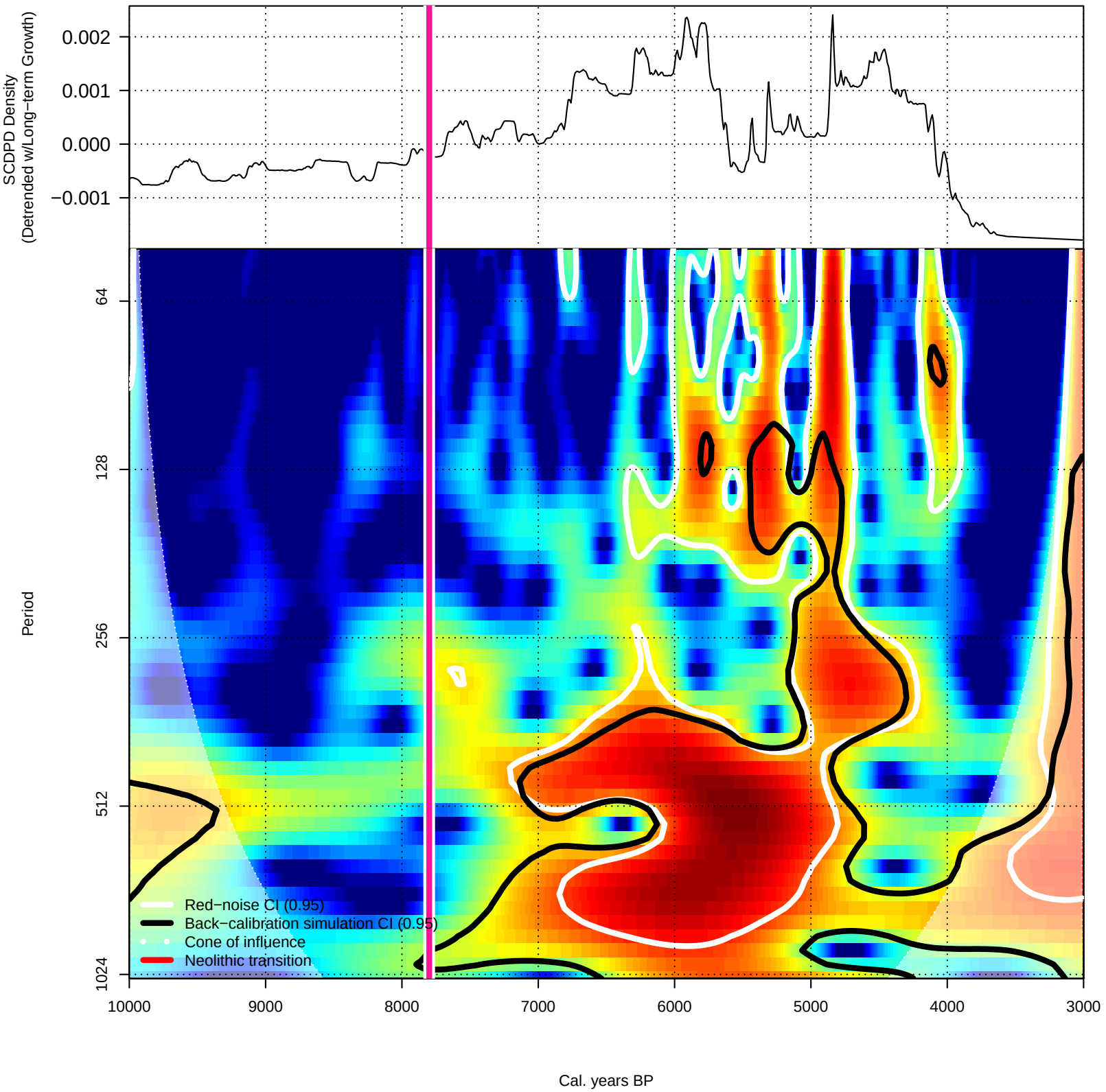

Southern Germany
SCDPD Density
(Detrended w/Long−term Growth)
0.005
0.004
0.003
0.002
0.001
0.000
−0.001
−0.002
Period
64
128
256
512
1024
10000
9000
8000
7000
6000
5000
4000
3000
Cal. years BP
Red−noise CI (0.95)
Back−calibration simulation CI (0.95)
Cone of influence
Neolithic transition

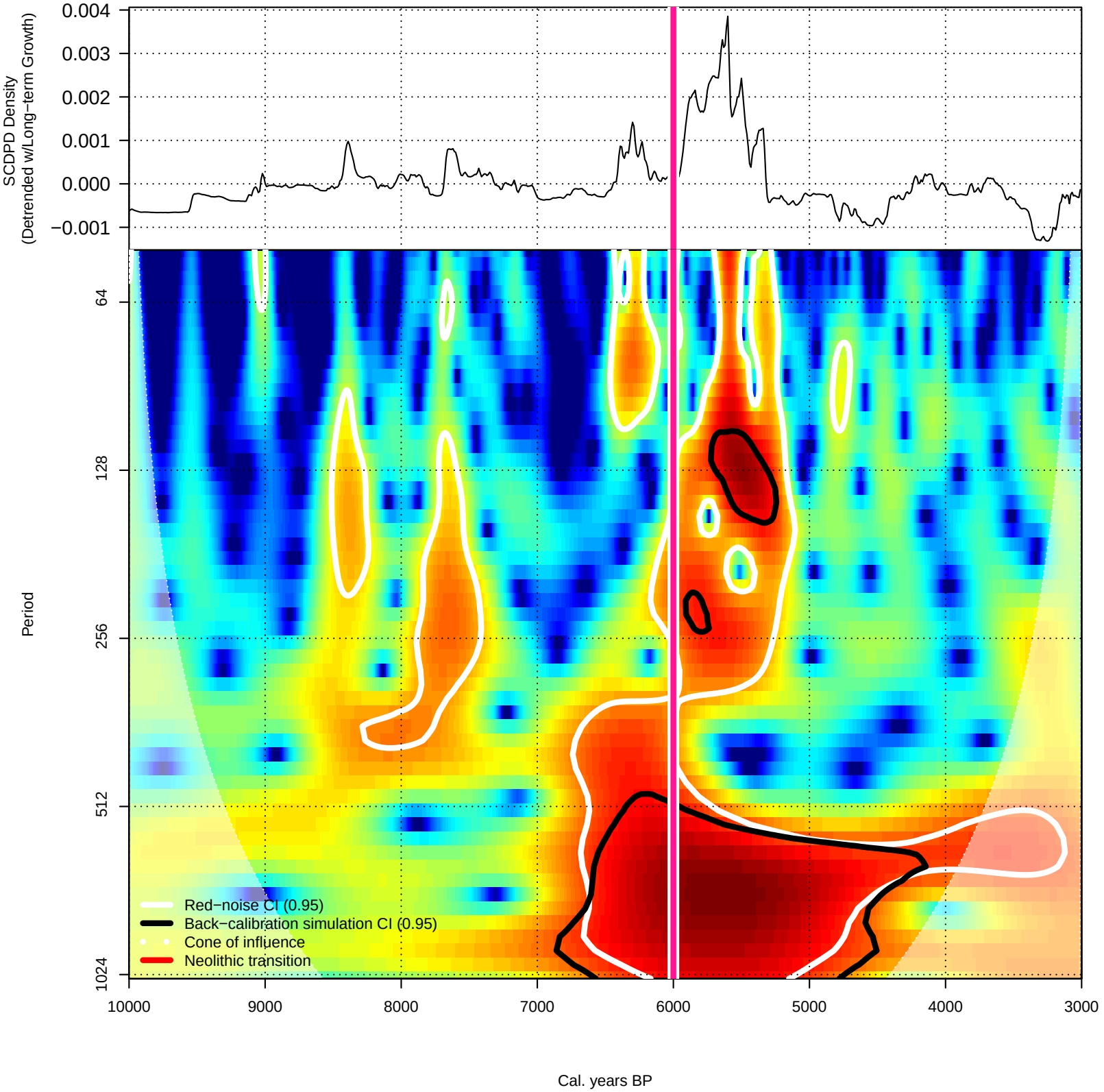

Eastern Switzerland
SCDPD Density
(Detrended w/Long−term Growth)
0.004
0.003
0.002
0.001
0.000
−0.001
−0.002
Period
64
128
256
512
1024
Red−noise CI (0.95)
Back−calibration simulation CI (0.95)
Cone of influence
Neolithic transition
10000
9000
8000
7000
6000
5000
4000
3000
Cal. years BP

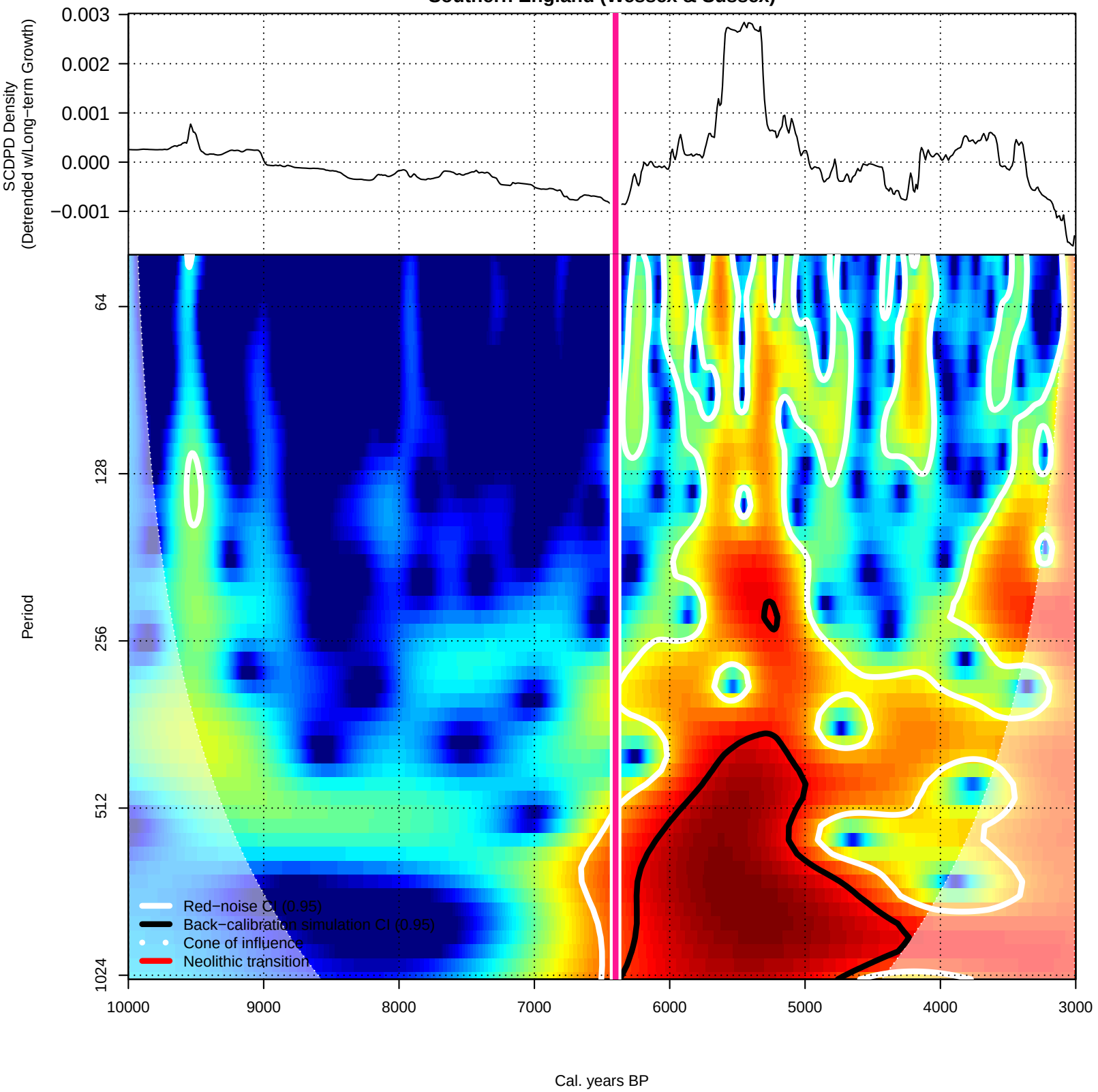

England and Wales (w/o Wessex & Sussex)
SCDPD Density
(Detrended w/Long−term Growth)
0.002
0.001
0.000
−0.001
Period
64
128
256
512
1024
10000
9000
8000
7000
6000
5000
4000
3000
Cal. years BP
Red−noise CI (0.95)
Back−calibration simulation CI (0.95)
Cone of influence
Neolithic transition

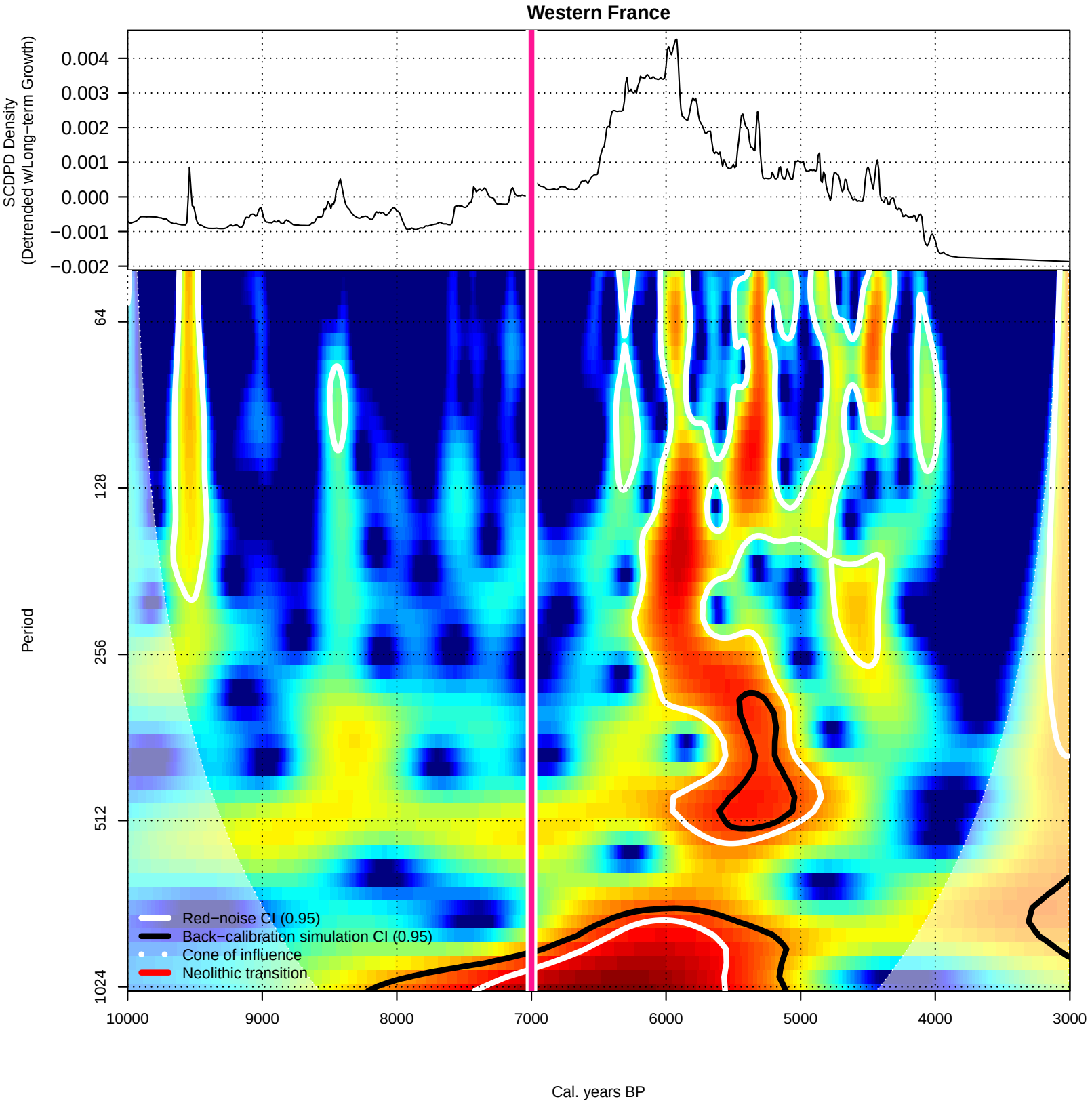

Ireland
SCDPD Density
(Detrended w/Long−term Growth)
0.004
0.002
0.000
−0.002
−0.004
−0.006
Period
64
128
256
512
1024
10000
9000
8000
7000
6000
5000
4000
3000
Cal. years BP
Red−noise CI (0.95)
Back−calibration simulation CI (0.95)
Cone of influence
Neolithic transition


Paris Basin
SCDPD Density
(Detrended w/Long−term Growth)
0.004
0.003
0.002
0.001
0.000
−0.001
−0.002
Period
64
128
256
512
1024
10000
9000
8000
7000
6000
5000
4000
3000
Cal. years BP
Red−noise CI (0.95)
Back−calibration simulation CI (0.95)
Cone of influence
Neolithic transition


Rhone−Languedoc
SCDPD Density
(Detrended w/Long−term Growth)
0.002
0.001
0.000
−0.001
Period
64
128
256
512
1024
10000
9000
8000
7000
6000
5000
4000
3000
Cal. years BP
Red−noise CI (0.95)
Back−calibration simulation CI (0.95)
Cone of influence
Neolithic transition

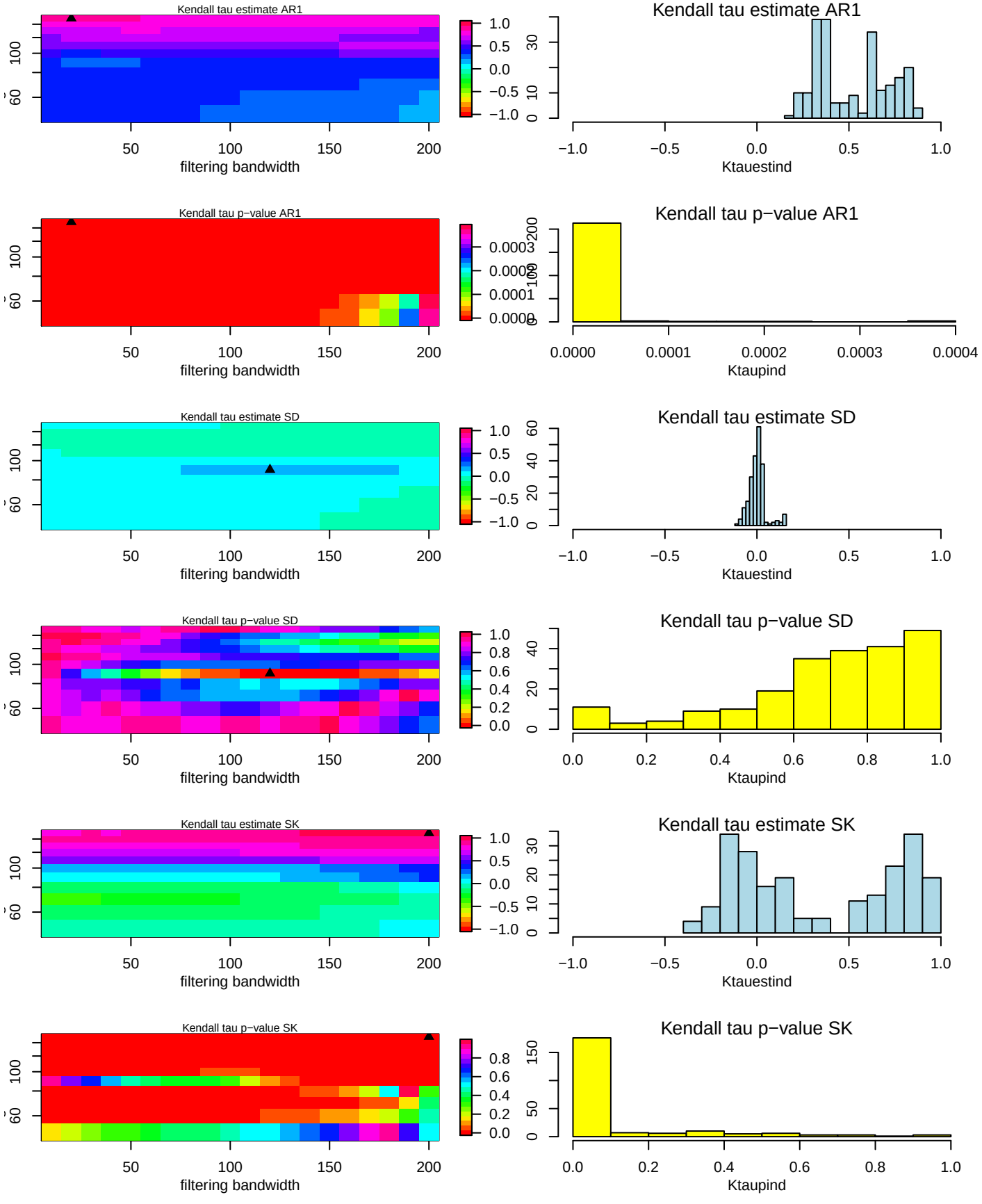

Scotland
SCDPD Density
(Detrended w/Long−term Growth)
0.004
0.003
0.002
0.001
0.000
−0.001
Period
64
128
256
512
1024
10000
9000
8000
7000
6000
5000
4000
3000
Cal. years BP
Red−noise CI (0.95)
Back−calibration simulation CI (0.95)
Cone of influence
Neolithic transition


Southern England (Wessex & Sussex)
SCDPD Density
(Detrended w/Long−term Growth)
0.003
0.002
0.001
0.000
−0.001
Period
64
128
256
512
1024
10000
9000
8000
7000
6000
5000
4000
3000
Cal. years BP
Red−noise CI (0.95)
Back−calibration simulation CI (0.95)
Cone of influence
Neolithic transition

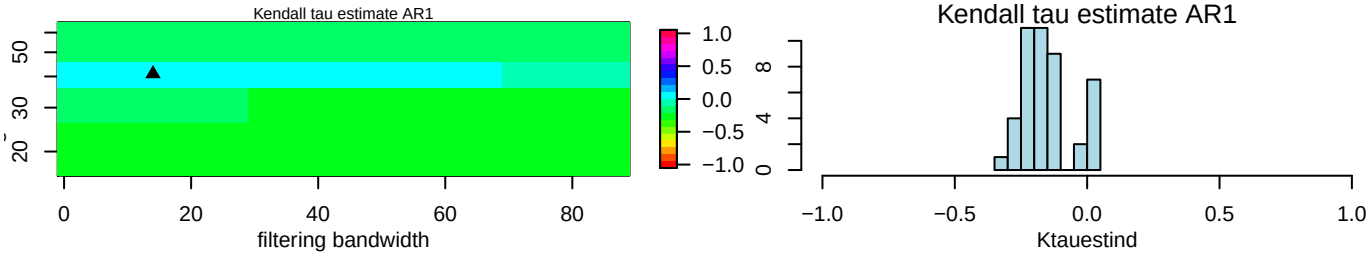

Western France
SCDPD Density
(Detrended w/Long−term Growth)
0.004
0.003
0.002
0.001
0.000
−0.001
−0.002
Period
64
128
256
512
1024
10000
9000
8000
7000
6000
5000
4000
3000
Cal. years BP
Red−noise CI (0.95)
Back−calibration simulation CI (0.95)
Cone of influence
Neolithic transition

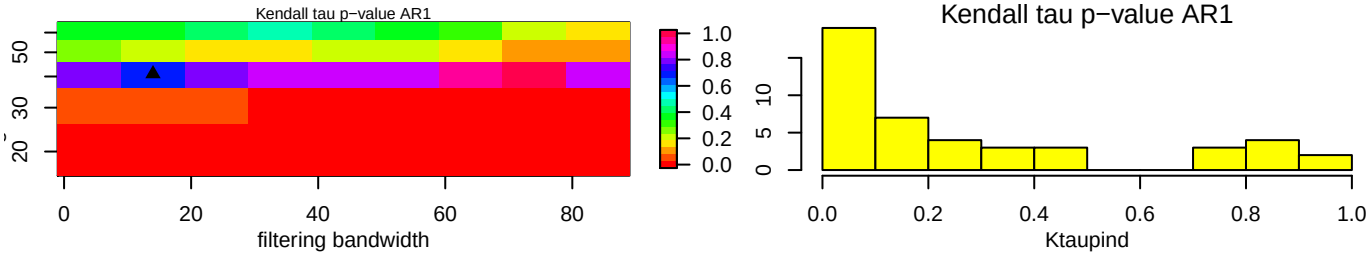
EWS sensitivity analysis for all regions.

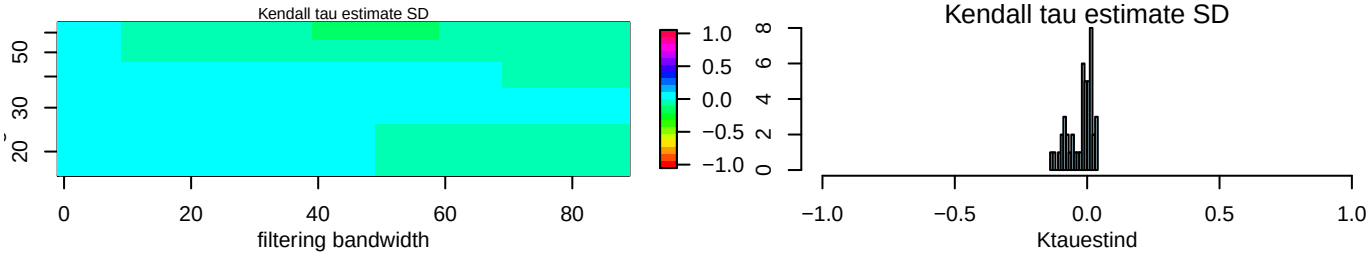
Southern Germany

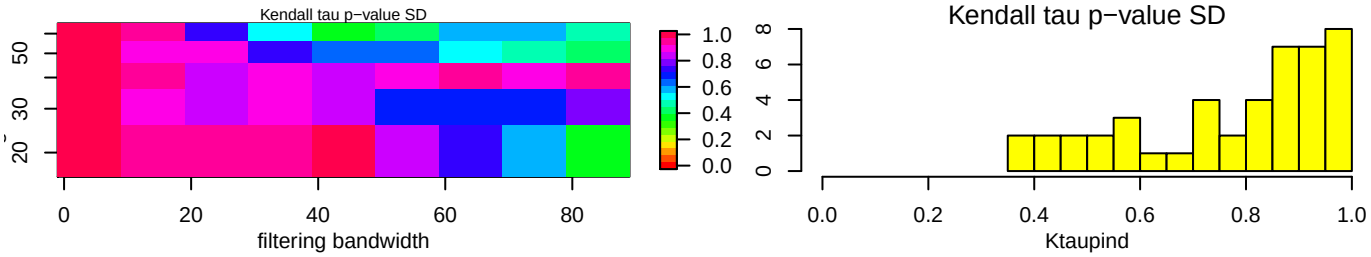


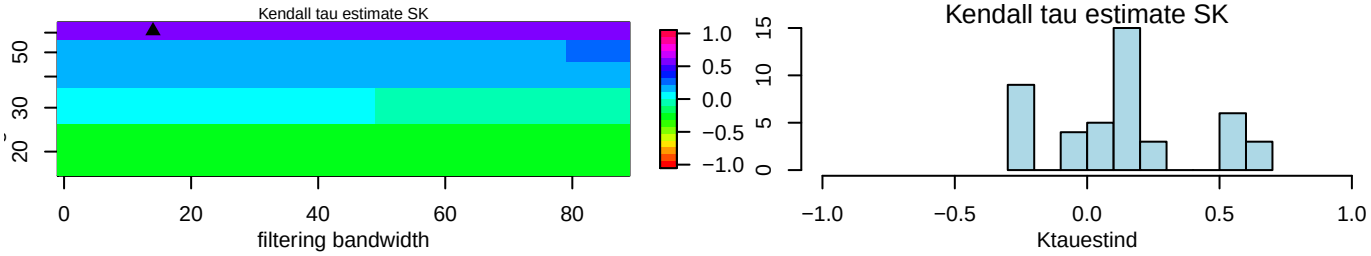
Eastern Switzerland

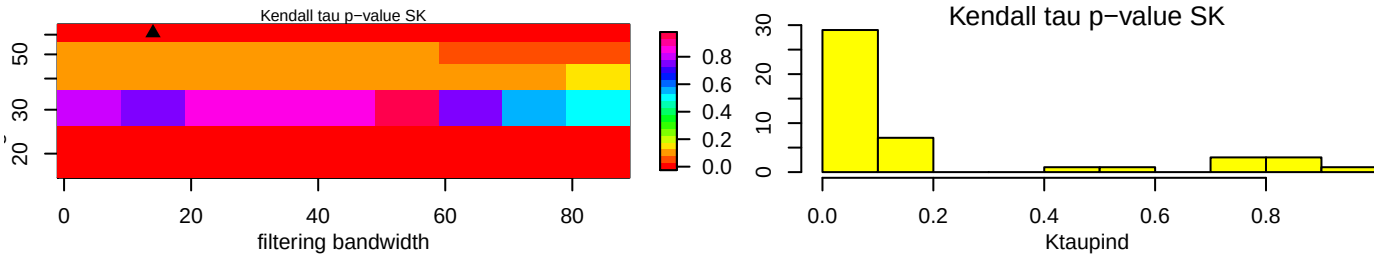




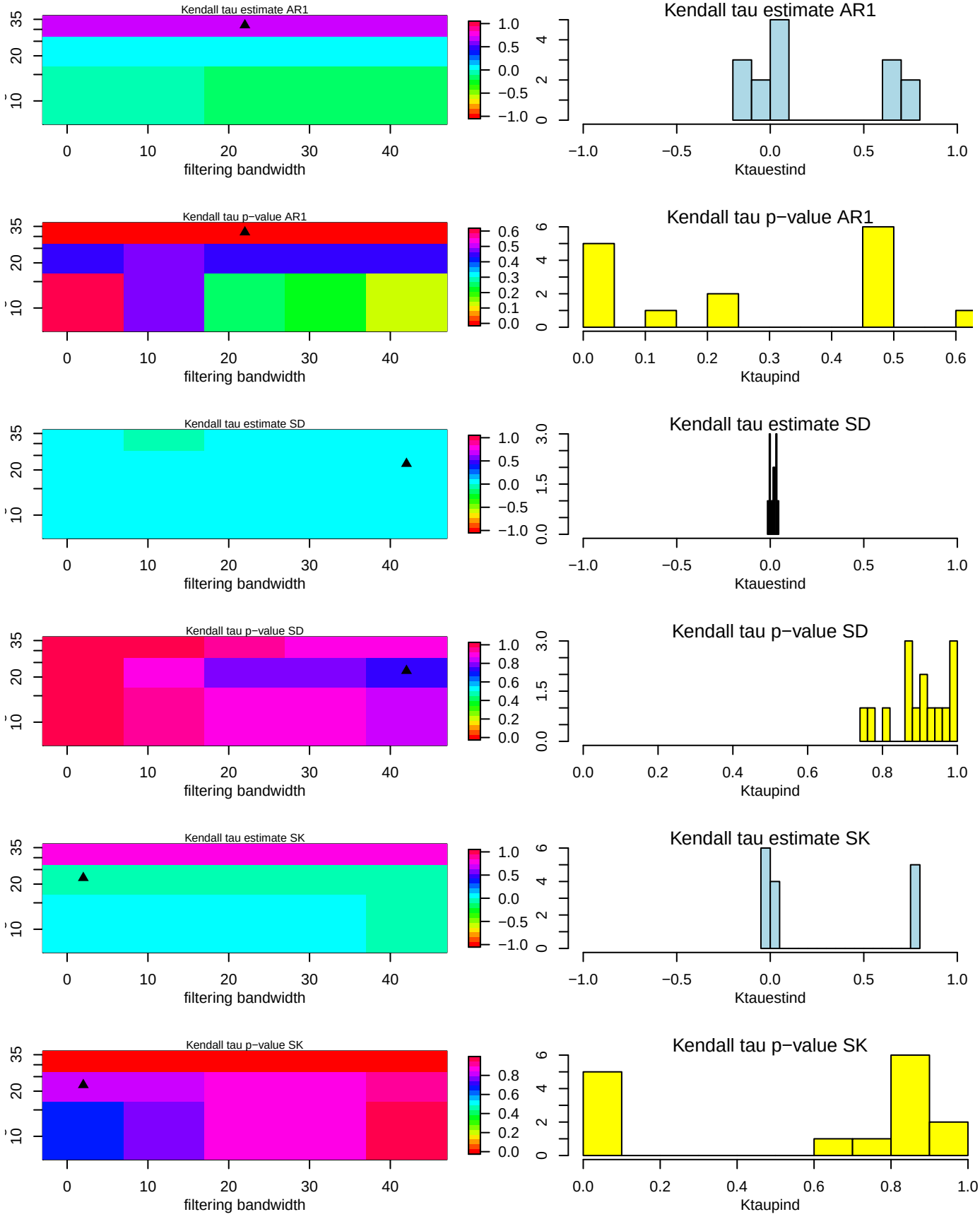




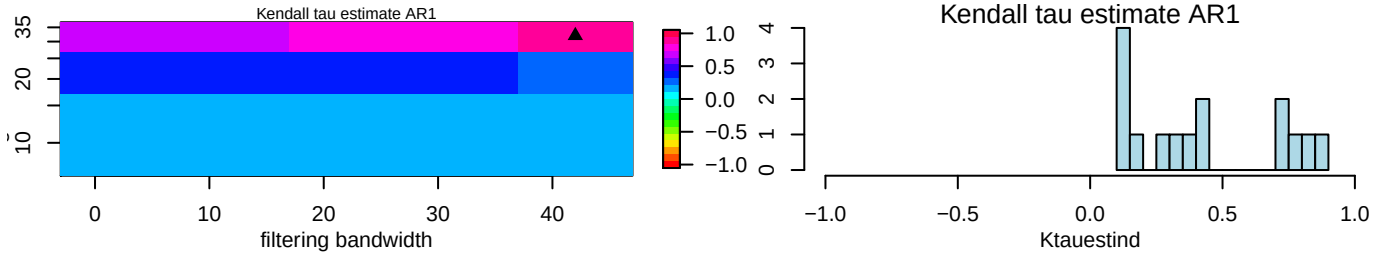


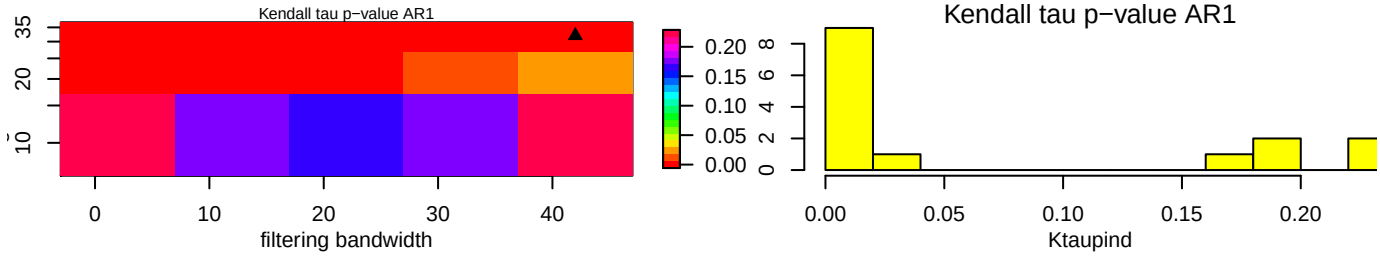


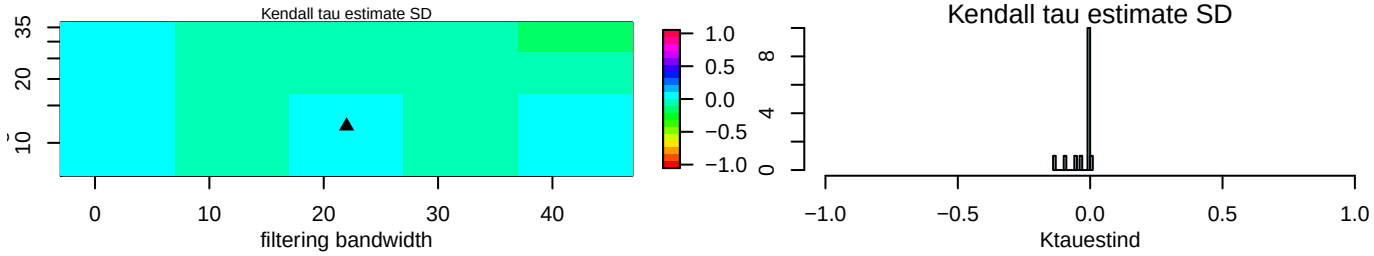
England and Wales (w/o Wessex & Sussex)

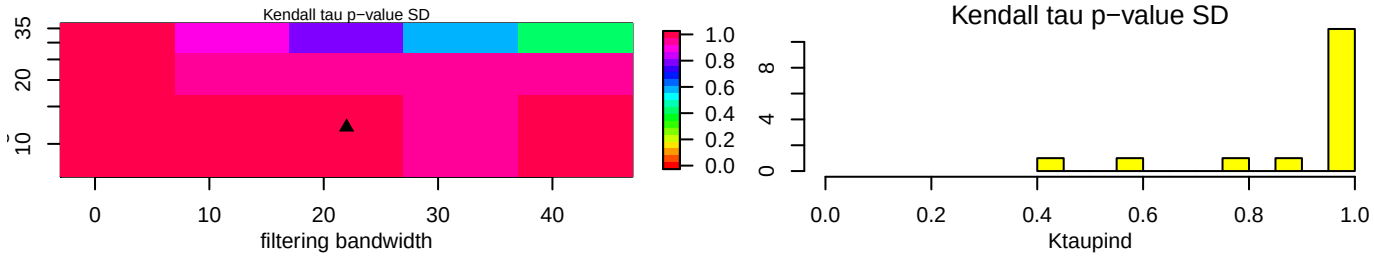


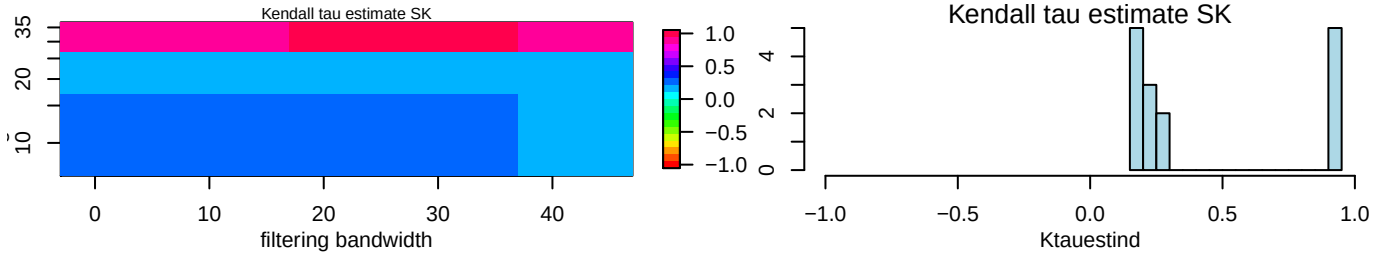
Ireland

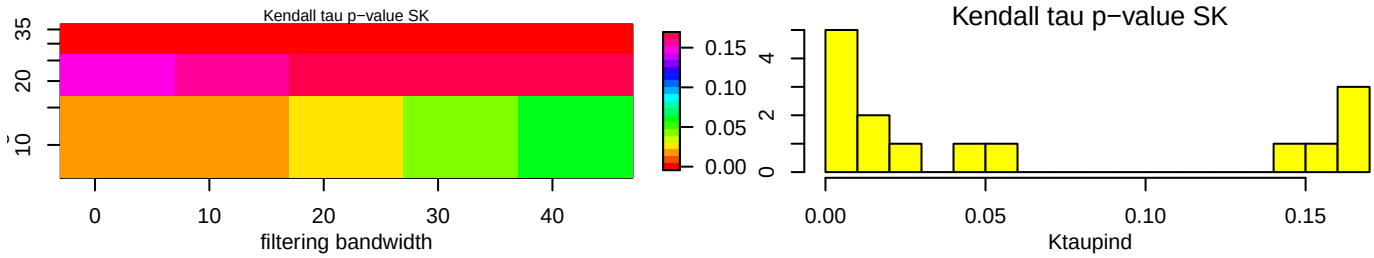

Kendall tau estimate AR1
filtering bandwidth
Kendall tau estimate AR1
Ktauestind


Kendall tau p−value AR1
filtering bandwidth
Kendall tau p−value AR1
Ktaupind

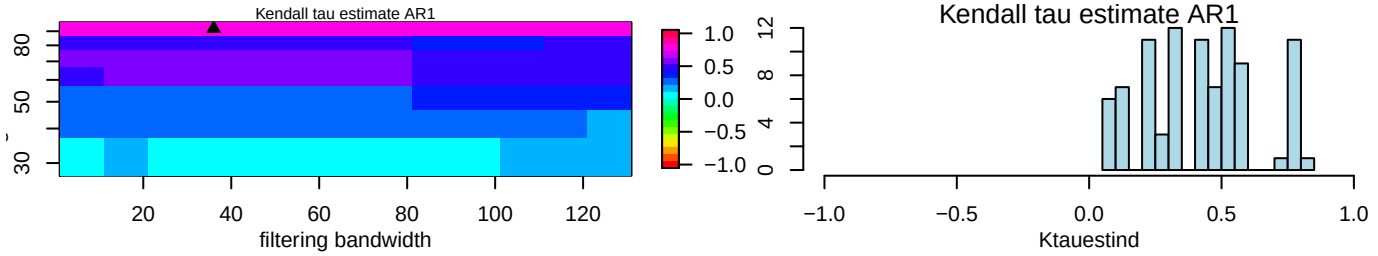

Kendall tau estimate SD
filtering bandwidth
Kendall tau estimate SD
Ktauestind

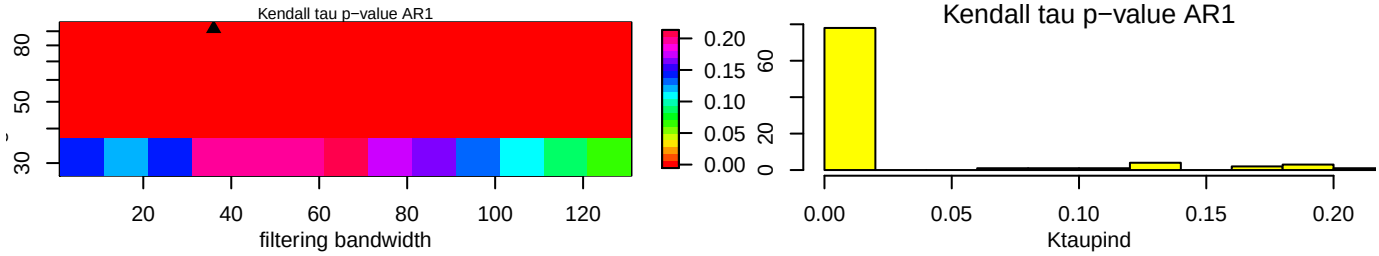

Kendall tau p−value SD
filtering bandwidth
Kendall tau p−value SD
Ktaupind

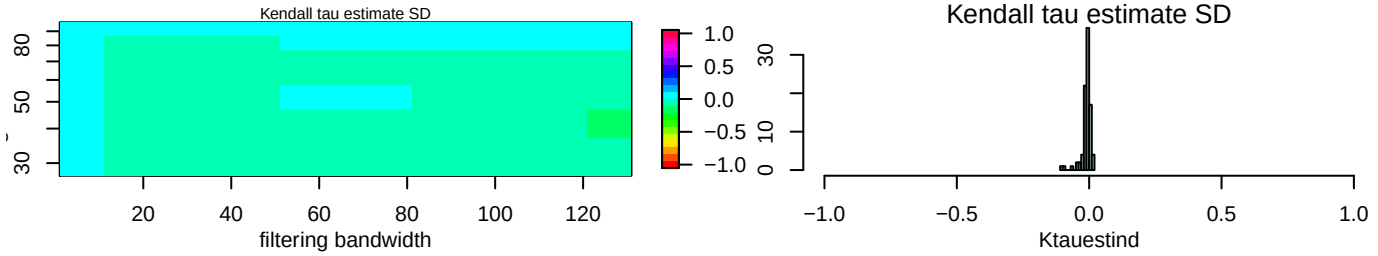

Kendall tau estimate SK
filtering bandwidth
Kendall tau estimate SK
Ktauestind

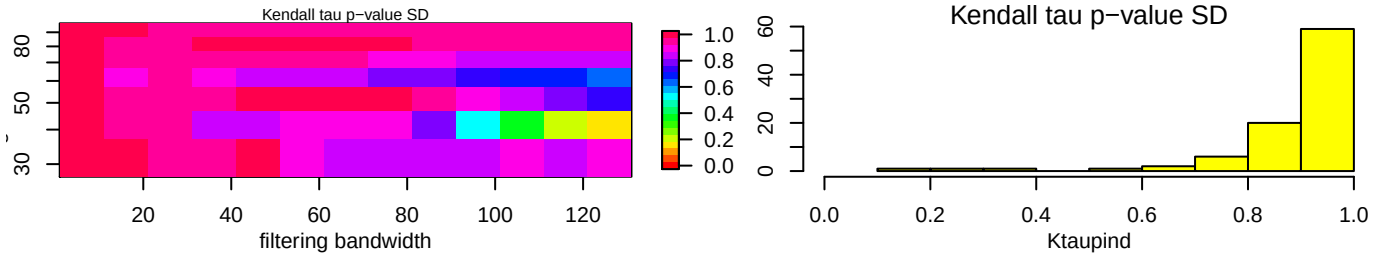

Kendall tau p−value SK
filtering bandwidth
Kendall tau p−value SK
Ktaupind

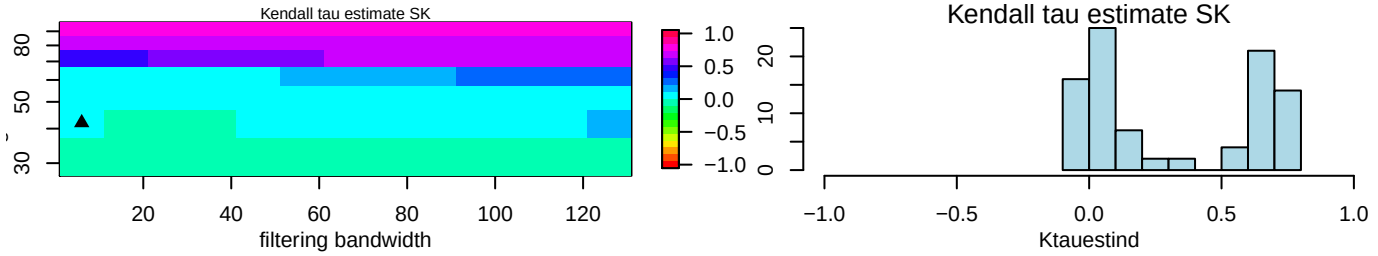
Paris Basin

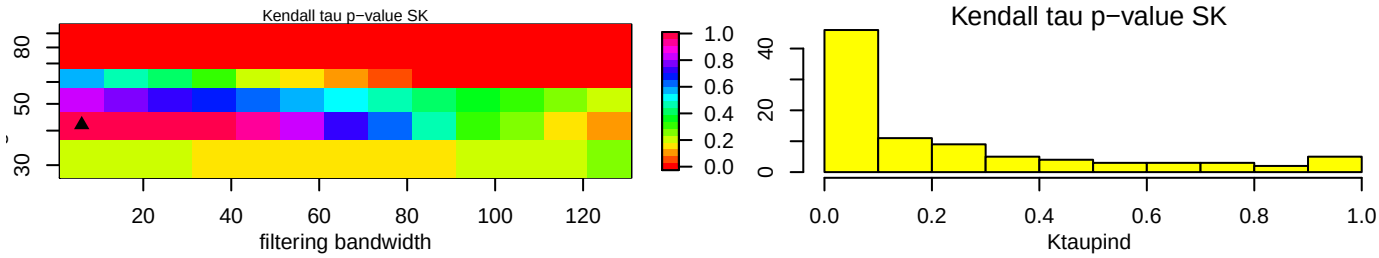

Kendall tau estimate AR1
filtering bandwidth
Kendall tau estimate AR1
Ktauestind


Kendall tau p−value AR1
filtering bandwidth
Kendall tau p−value AR1
Ktaupind

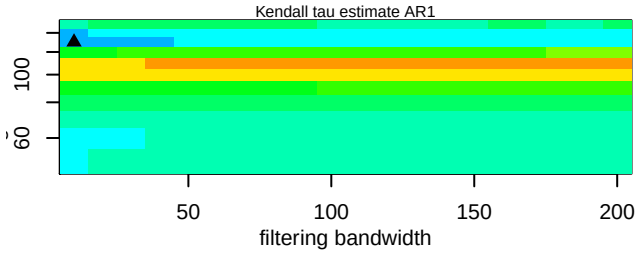

Kendall tau estimate SD
filtering bandwidth
Kendall tau estimate SD
Ktauestind

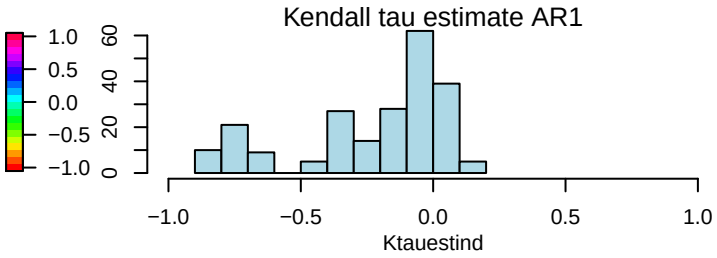

Kendall tau p−value SD
filtering bandwidth
Kendall tau p−value SD
Ktaupind

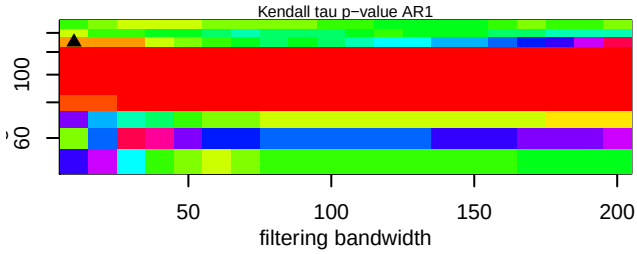

Kendall tau estimate SK
filtering bandwidth
Kendall tau estimate SK
Ktauestind

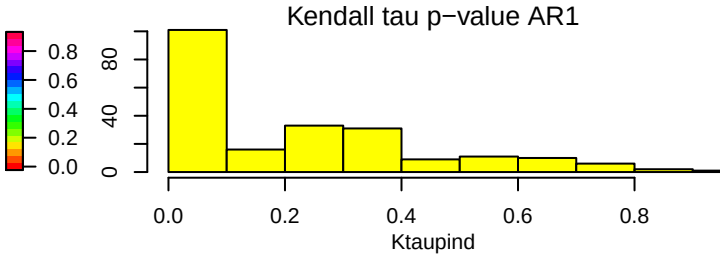

Kendall tau p−value SK
filtering bandwidth
Kendall tau p−value SK
Ktaupind

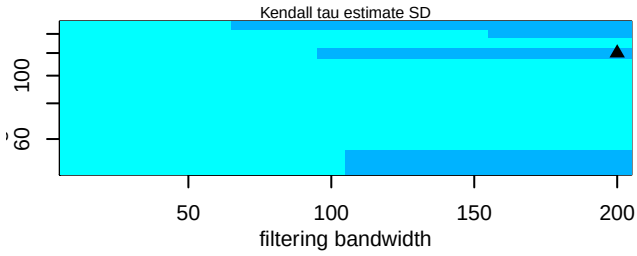
Rhone−Languedoc

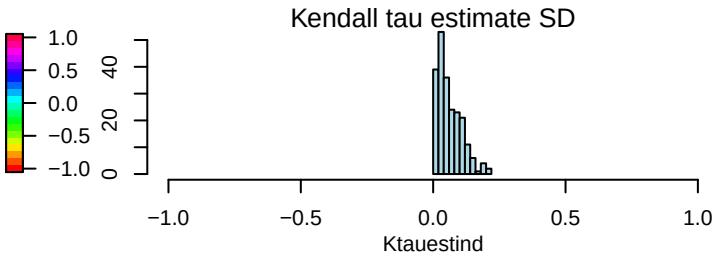


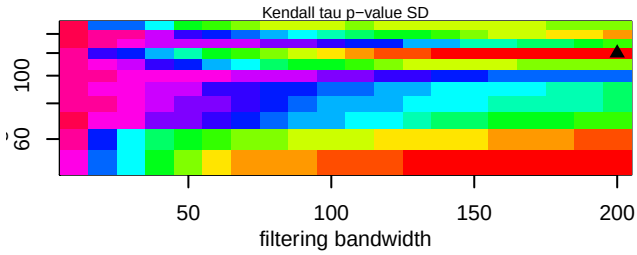


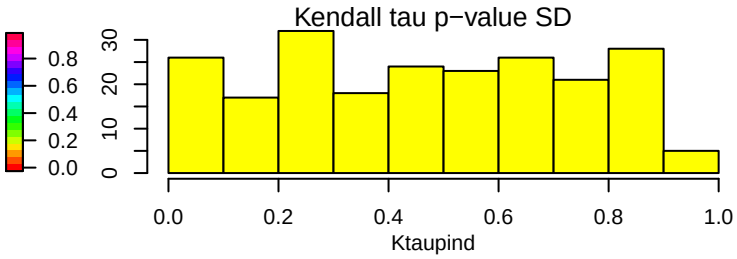


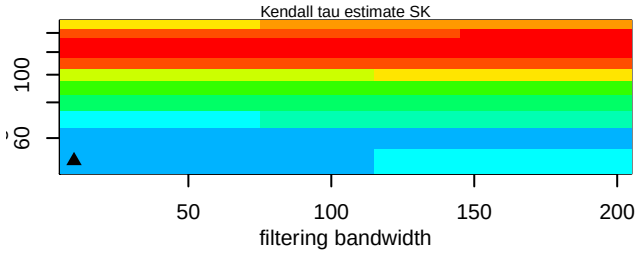


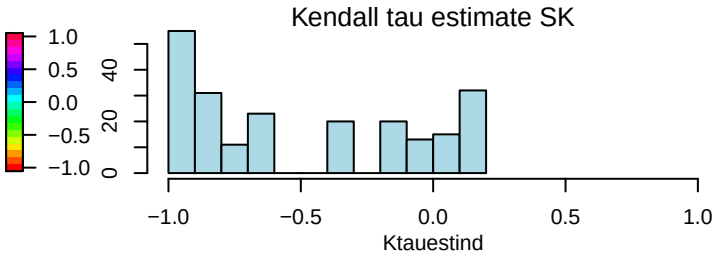


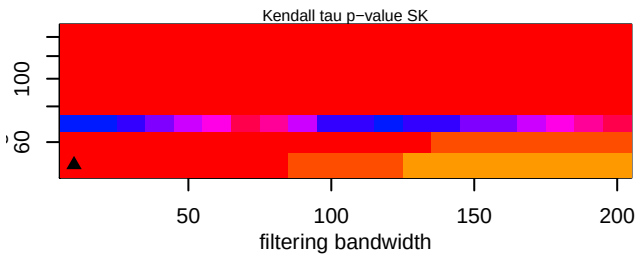


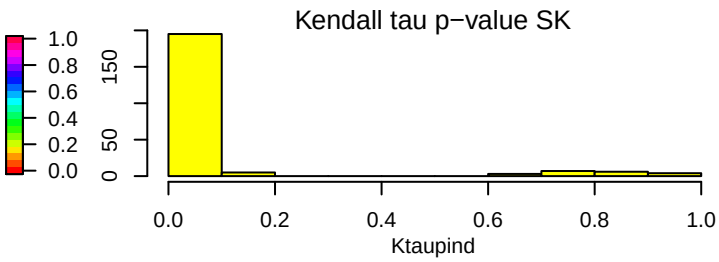




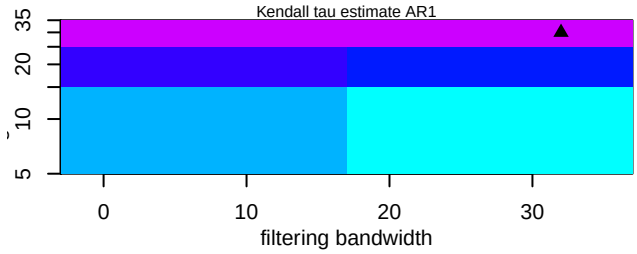


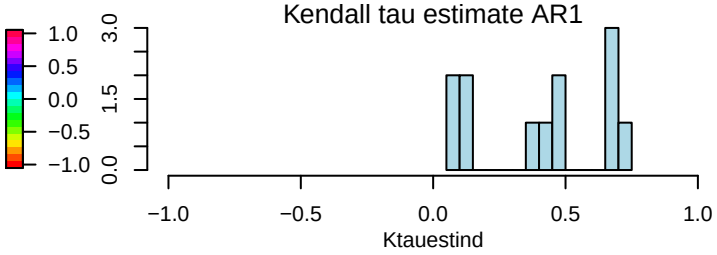


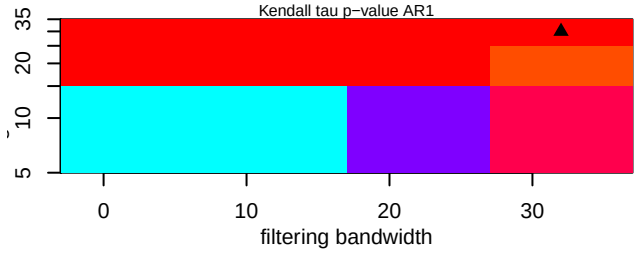


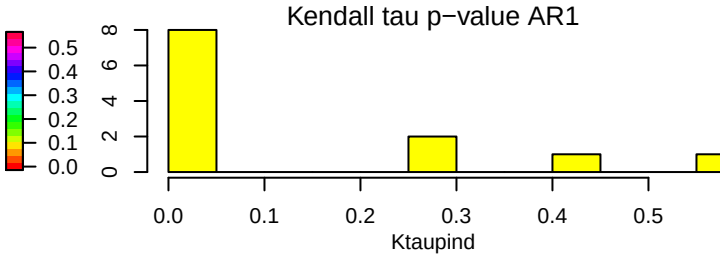


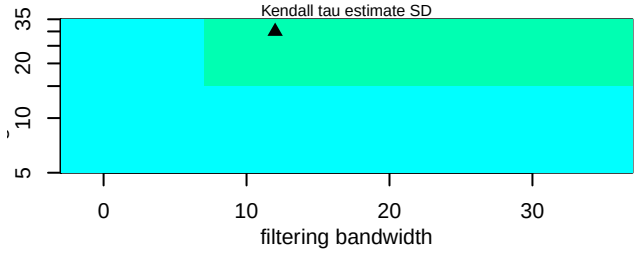
Scotland

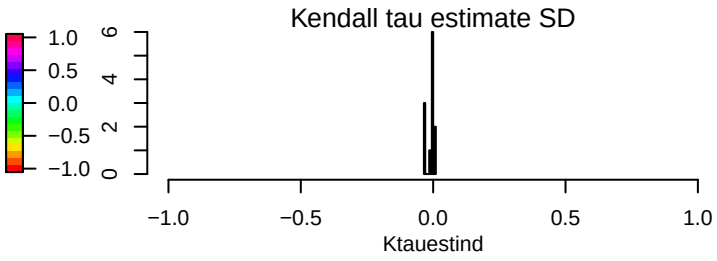

Kendall tau estimate AR1
filtering bandwidth

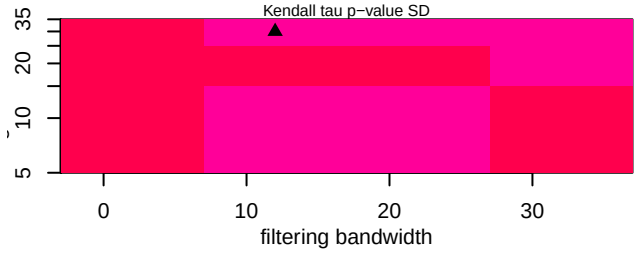

Kendall tau estimate AR1
Ktauestind

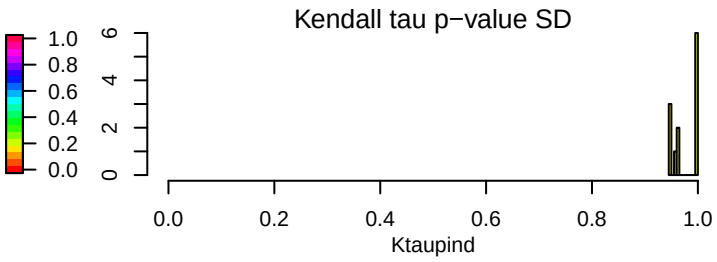

Kendall tau p−value AR1
filtering bandwidth

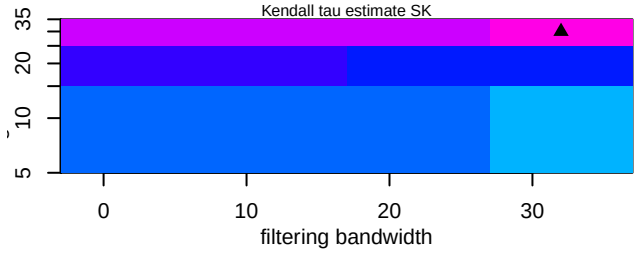

Kendall tau p−value AR1
Ktaupind

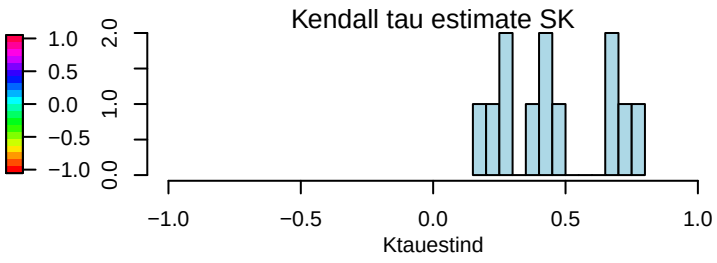

Kendall tau estimate SD
filtering bandwidth

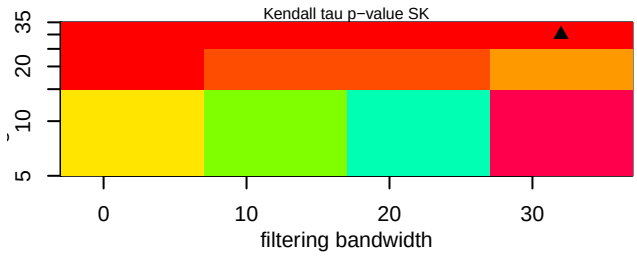

Kendall tau estimate SD
Ktauestind

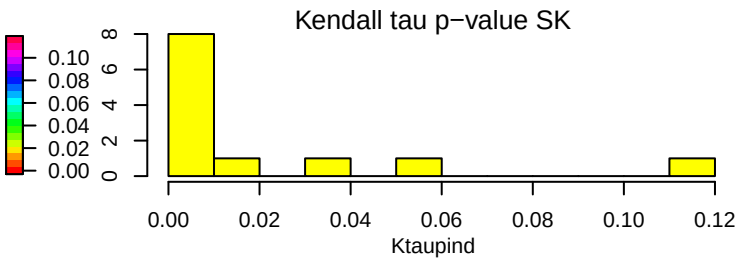

Kendall tau p−value SD
filtering bandwidth


Kendall tau p−value SD
Ktaupind

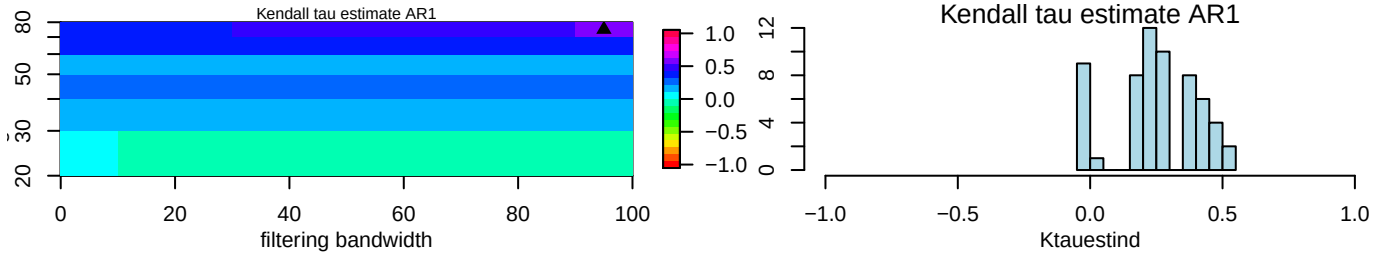

Kendall tau estimate SK
filtering bandwidth

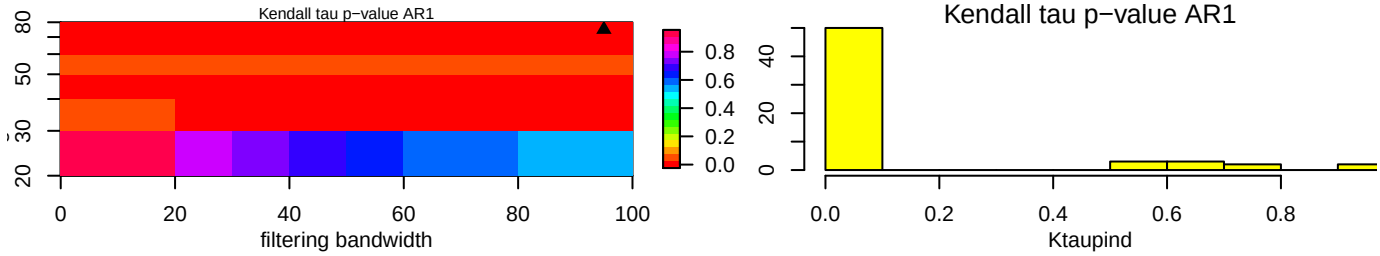

Kendall tau estimate SK
Ktauestind

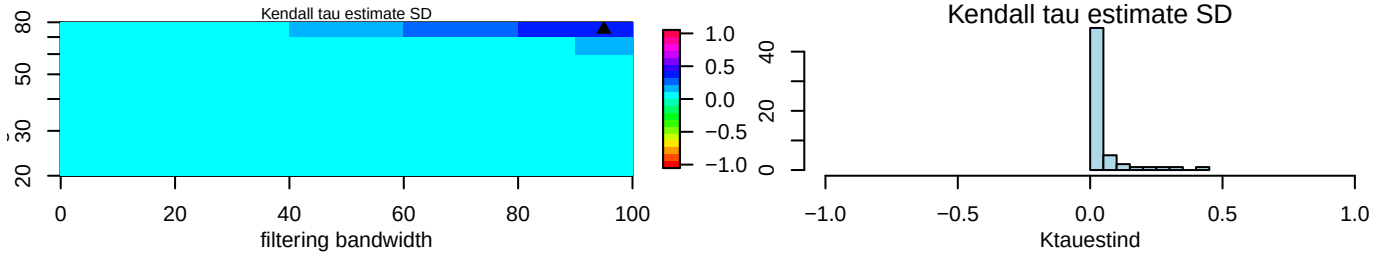

Kendall tau p−value SK
filtering bandwidth

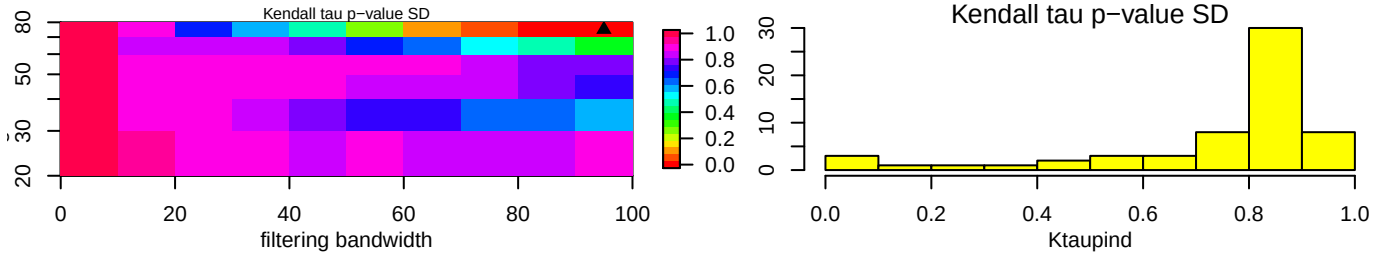

Kendall tau p−value SK
Ktaupind

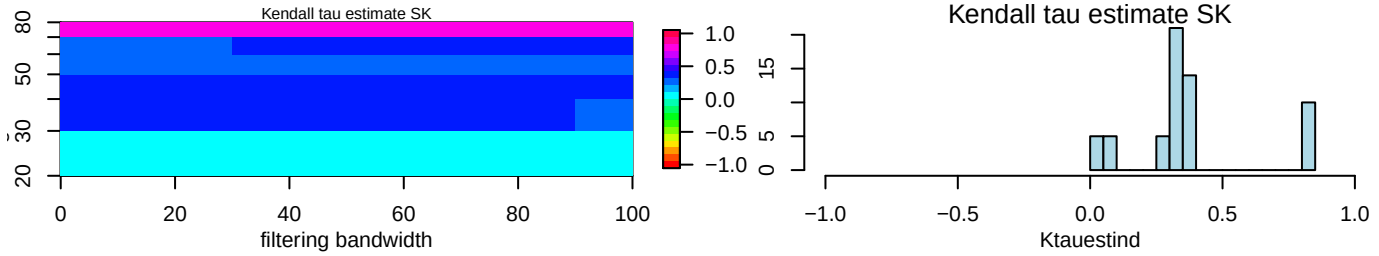
Southern England (Wessex & Sussex)

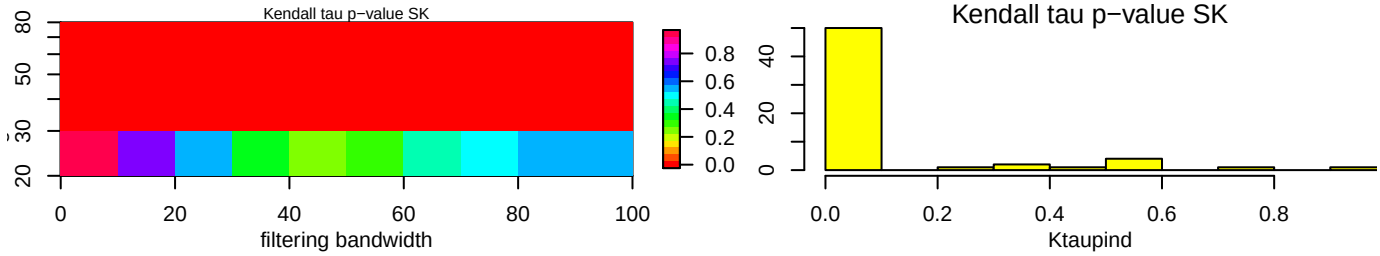












Western France