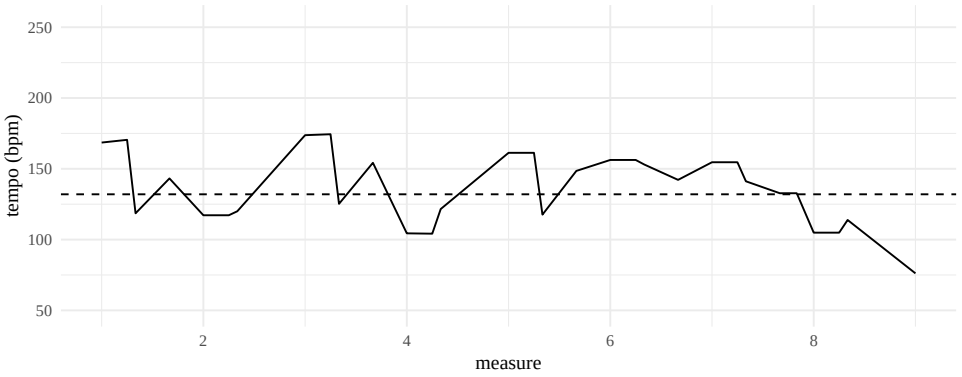
Mazurka paper figures

DJM

2/22/2019

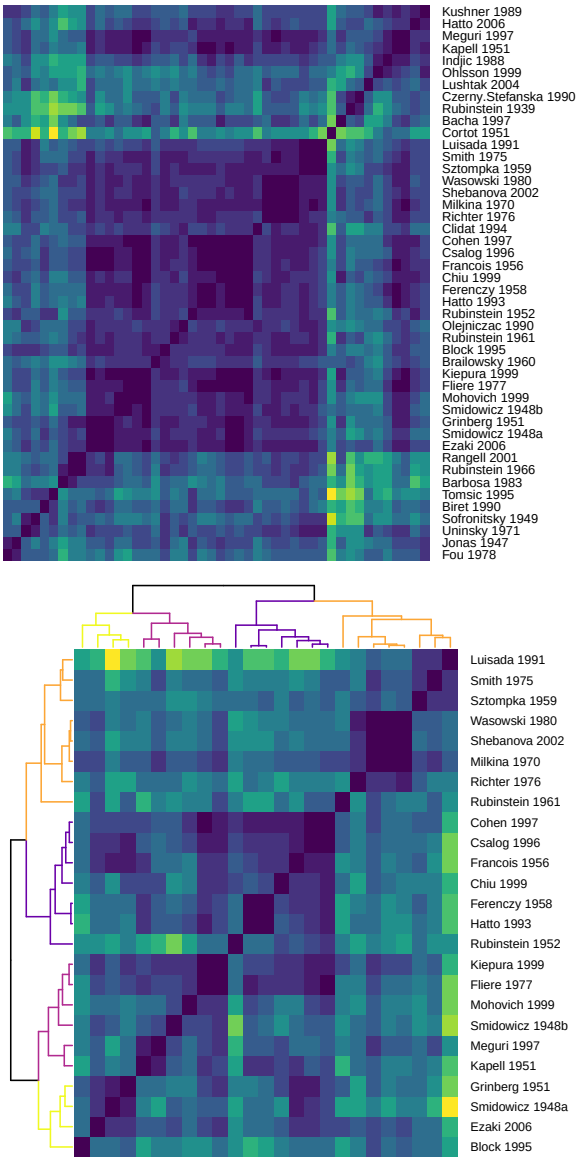
Short tempo figure



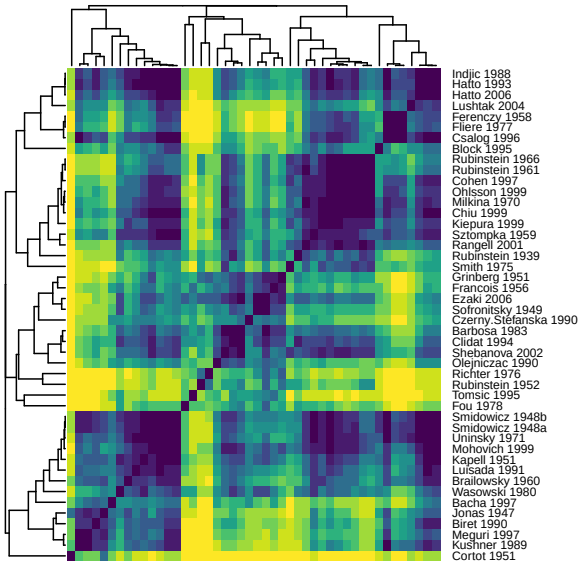
Comparing clusters

```
## [1] FALSE
## [1] FALSE
## [1] FALSE
## [1] FALSE
## [1] FALSE
## [1] TRUE
## [1] TRUE
## [1] TRUE
## [1] 8
```

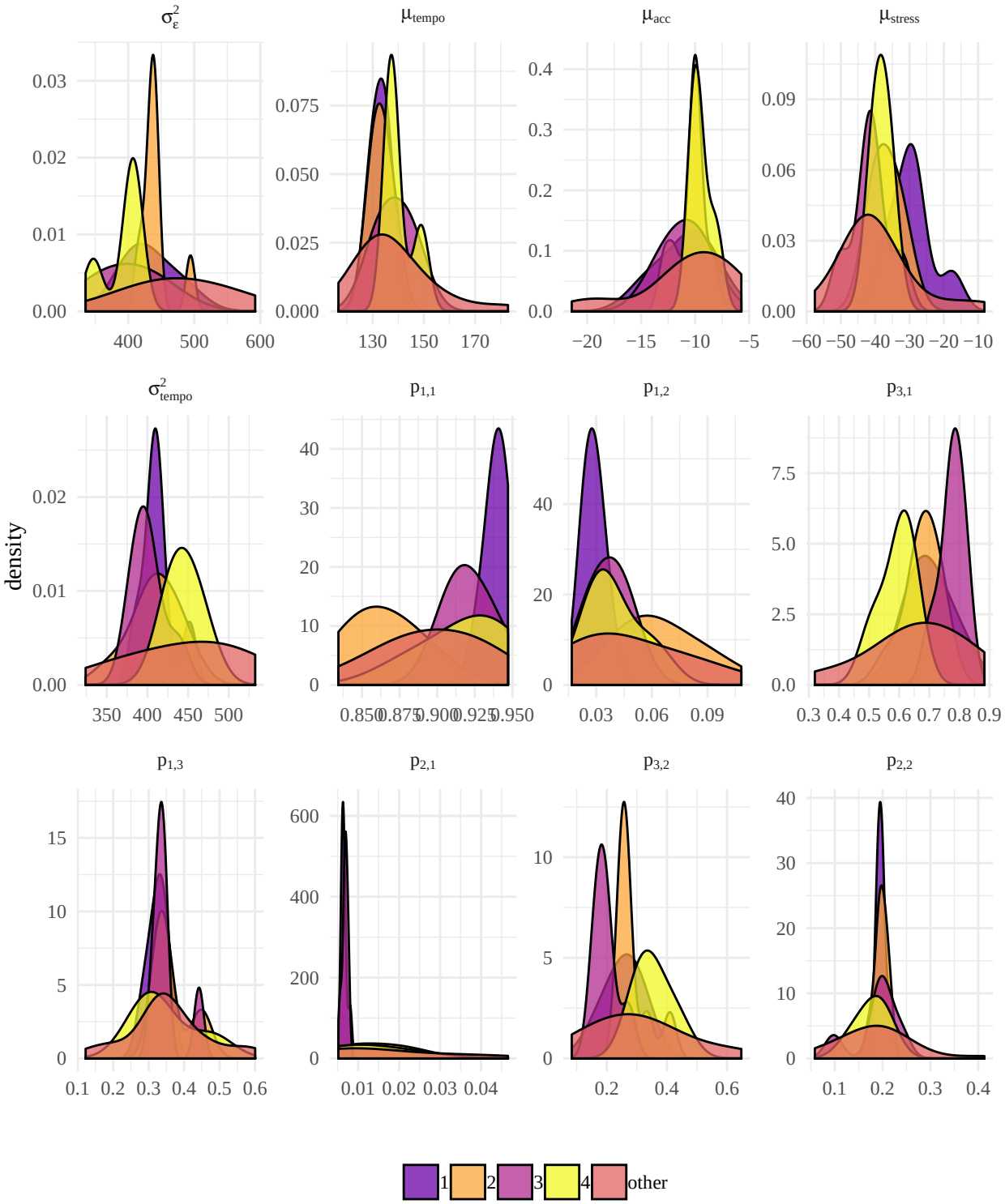
Distance matrix from parameters

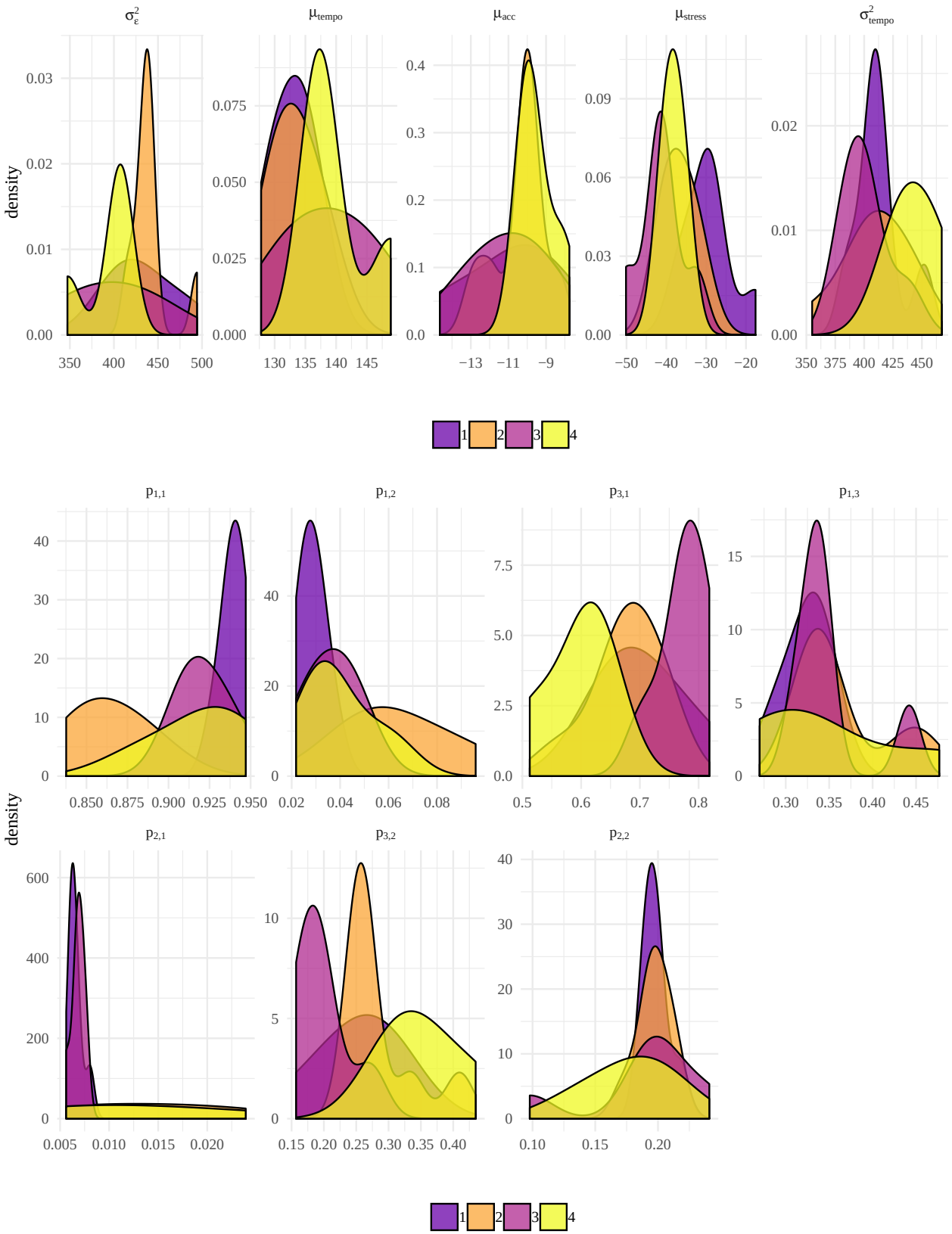


Distance matrix from raw data



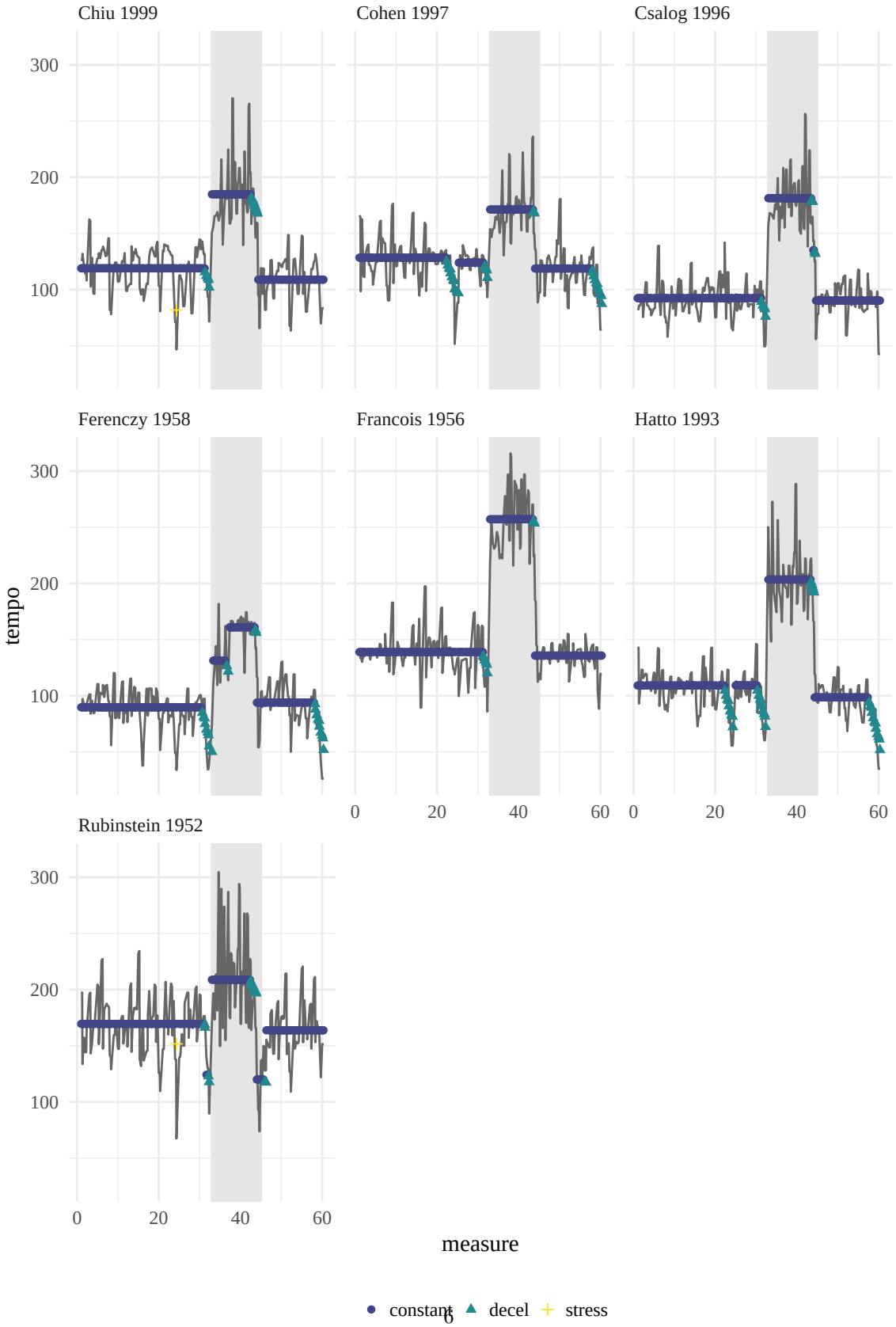
Cluster densities



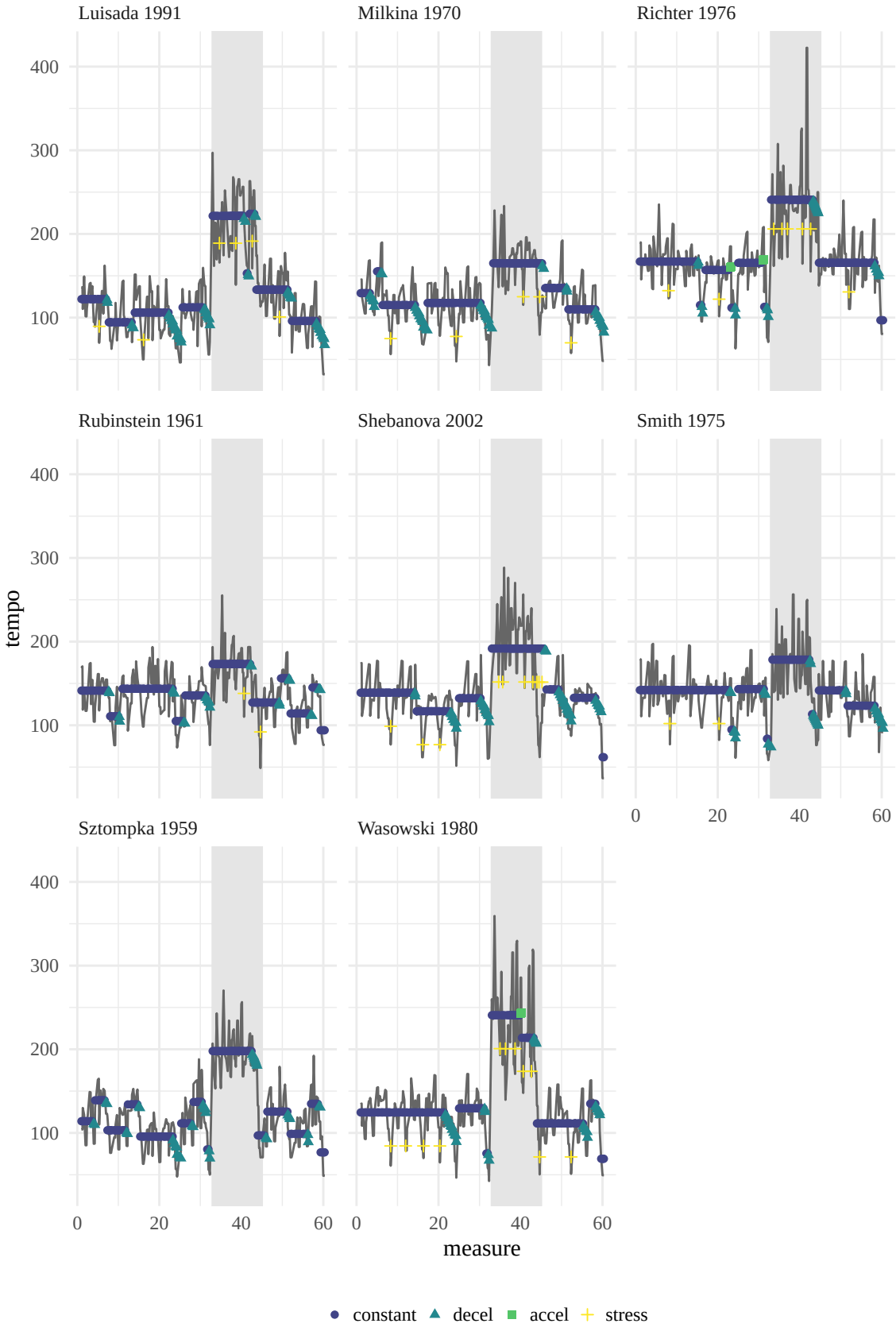

σ²ε
μtempo
μacc
μstress
σ²tempo
density
1
2
3
4
p1,1
p1,2
p3,1
p1,3
p2,1
p3,2
p2,2

Plotting performances

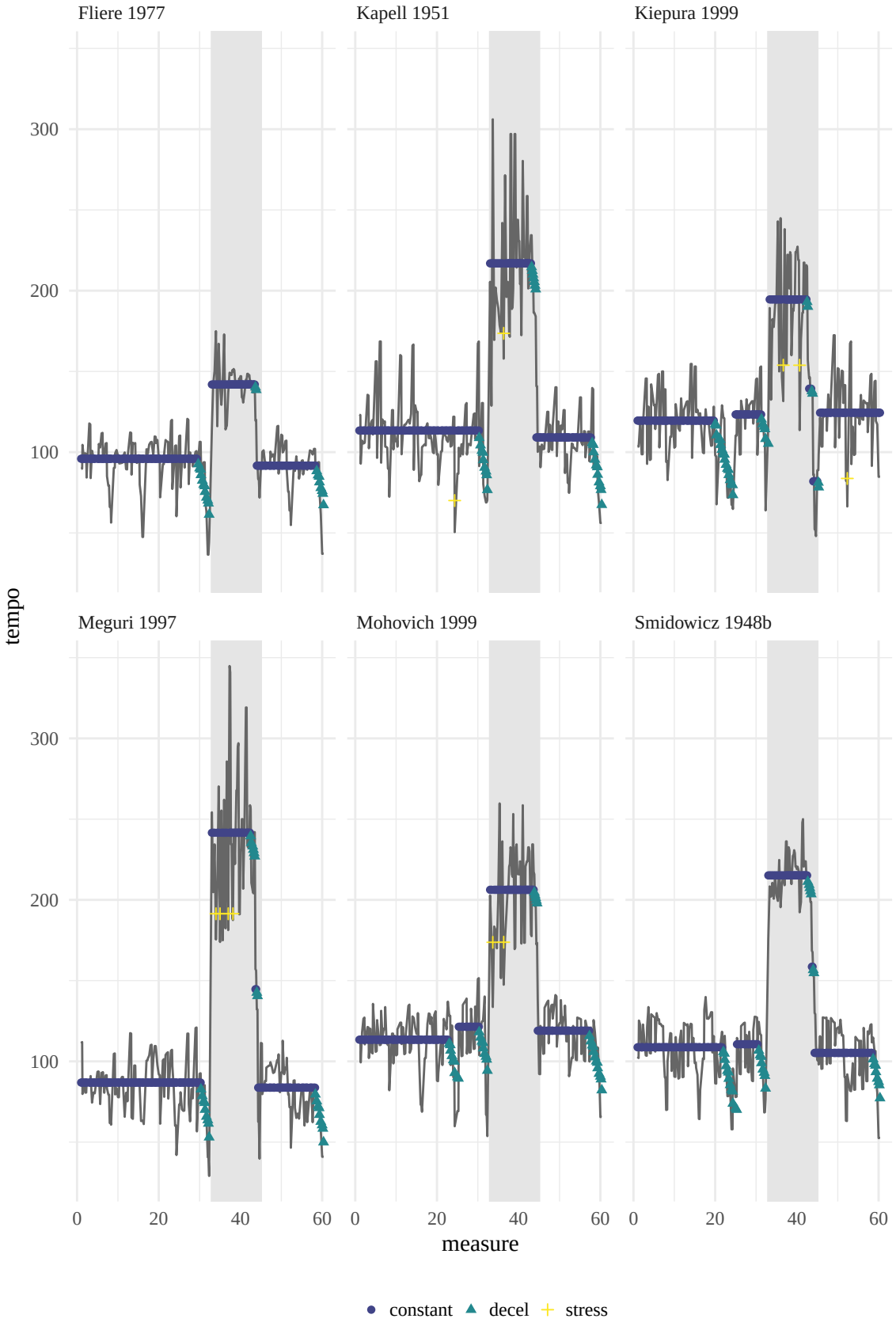
Cluster 1



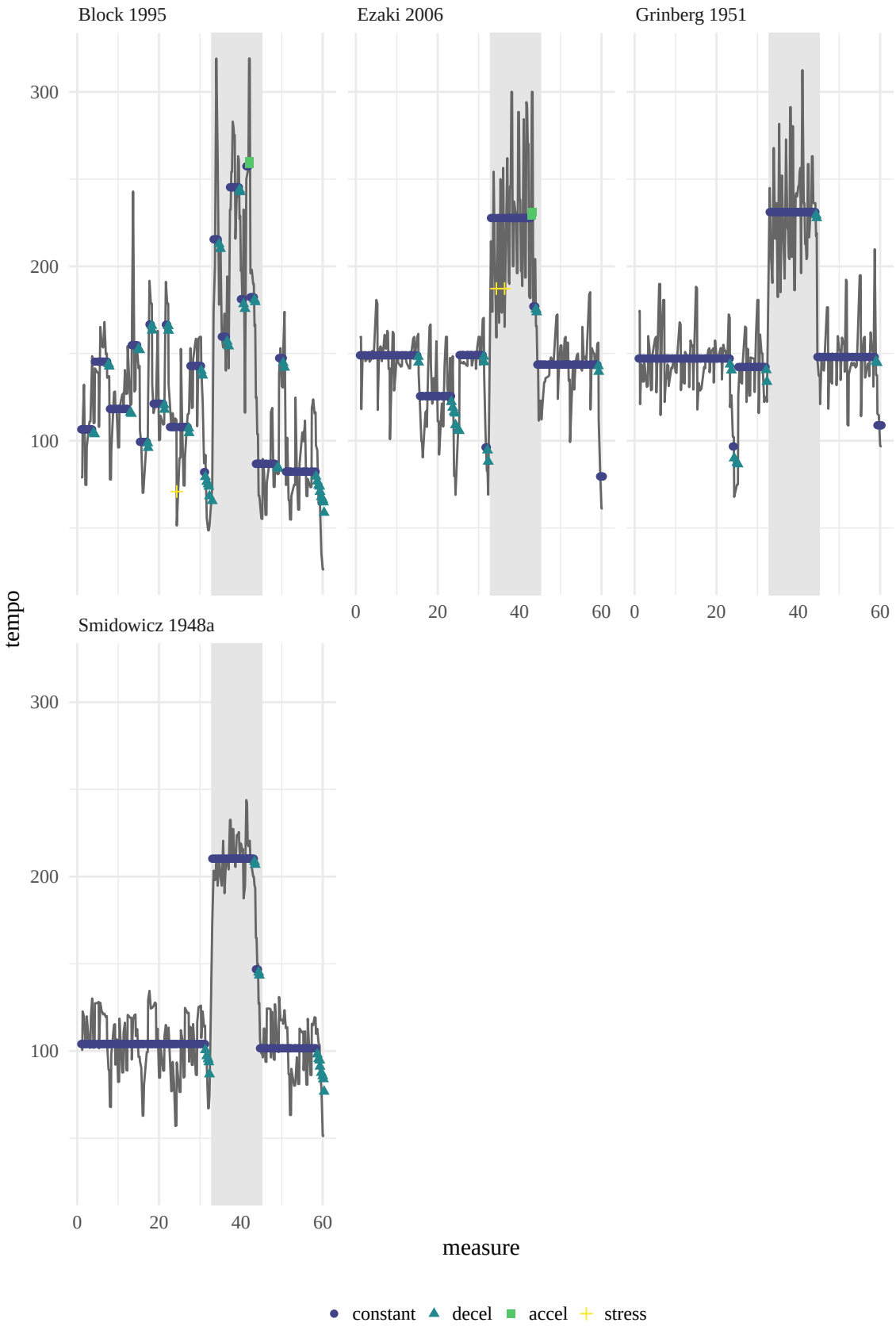
Cluster 2


Luisada 1991
Milkina 1970
Richter 1976
Rubinstein 1961
Shebanova 2002
Smith 1975
Sztompka 1959
Wasowski 1980
tempo
measure
constant
decel
accel
stress

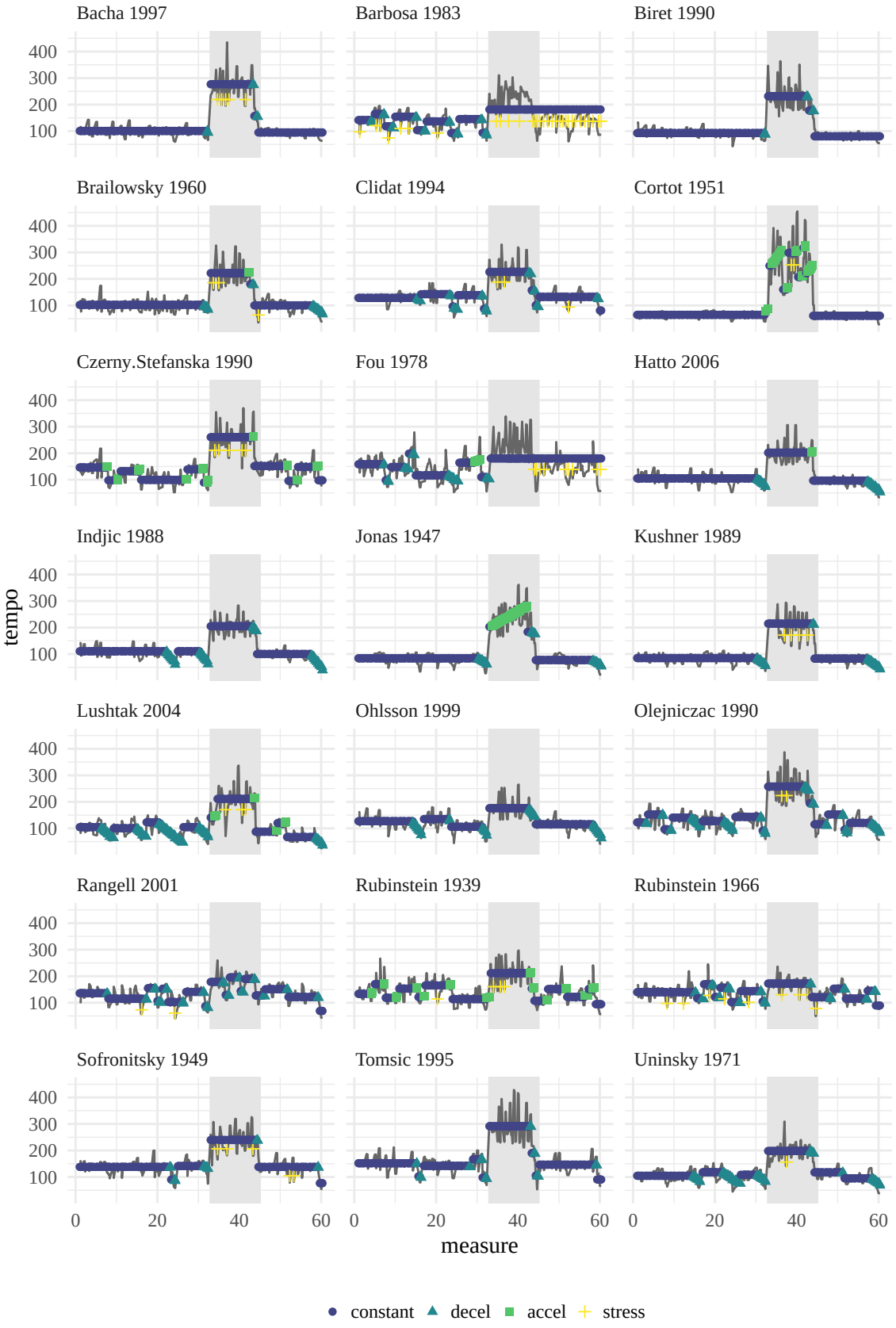
Cluster 3


Fliere 1977
Kapell 1951
Kiepura 1999
Meguri 1997
Mohovich 1999
Smidowicz 1948b
tempo
300
200
100
0
20
40
60
measure
constant
decel
stress

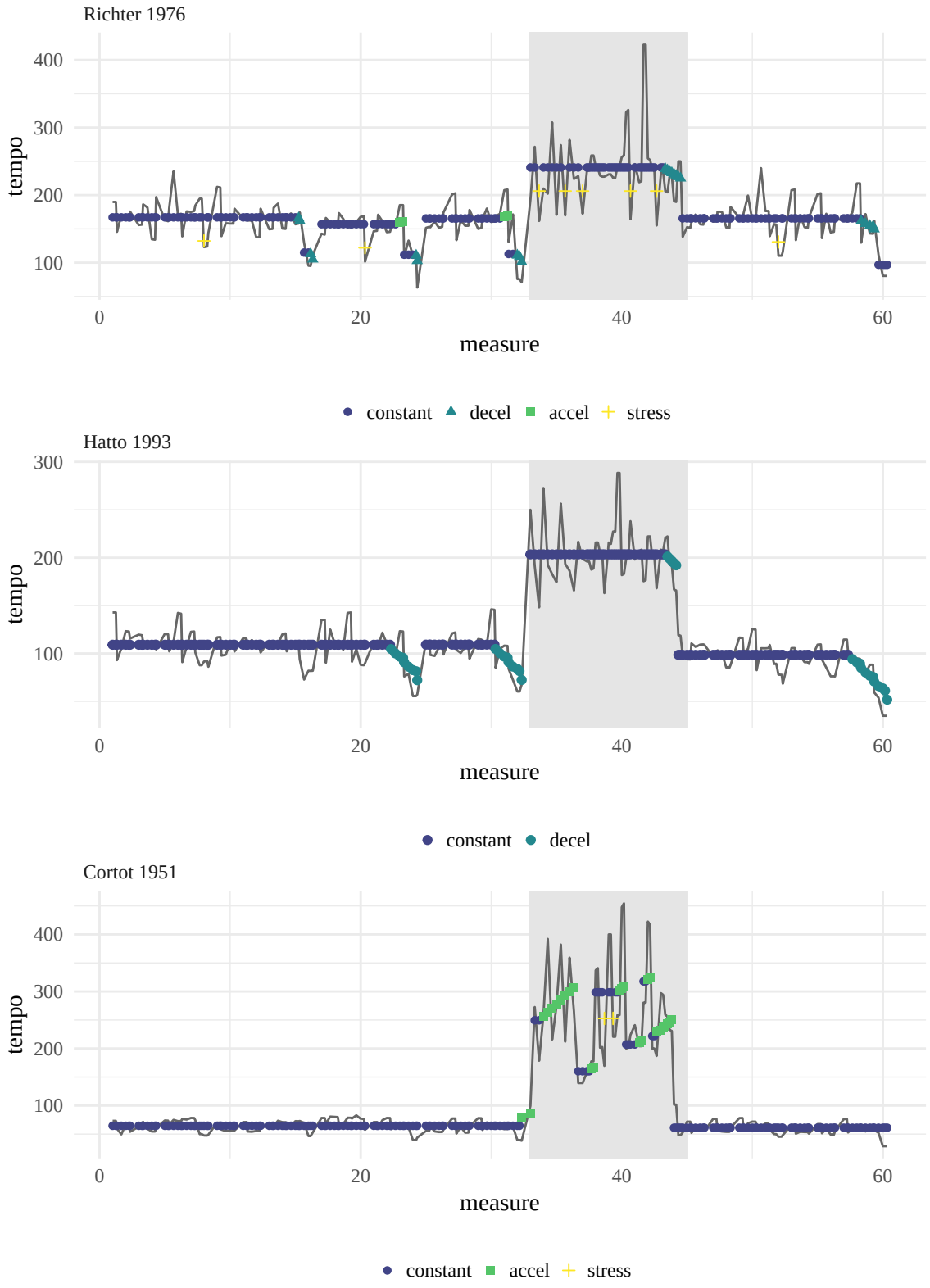
Cluster 4

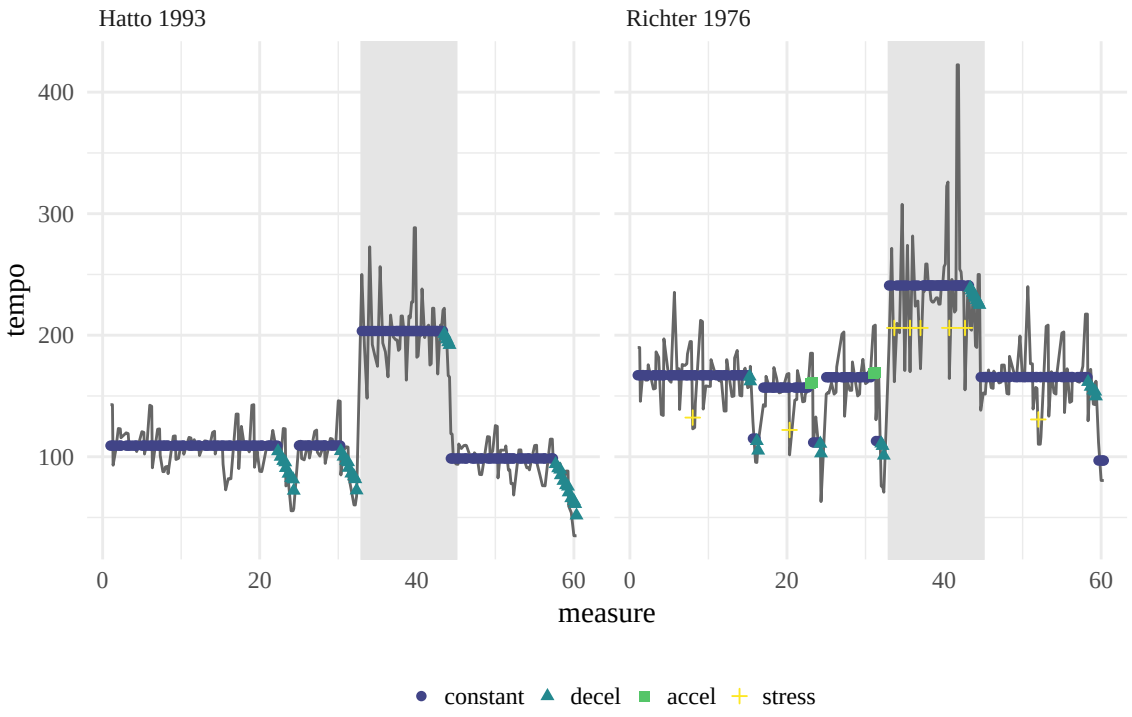

Block 1995
Ezaki 2006
Grinberg 1951
Smidowicz 1948a
tempo
300
200
100
0
20
40
60
measure
constant
decel
accel
stress

Cluster “other”



Individual performances



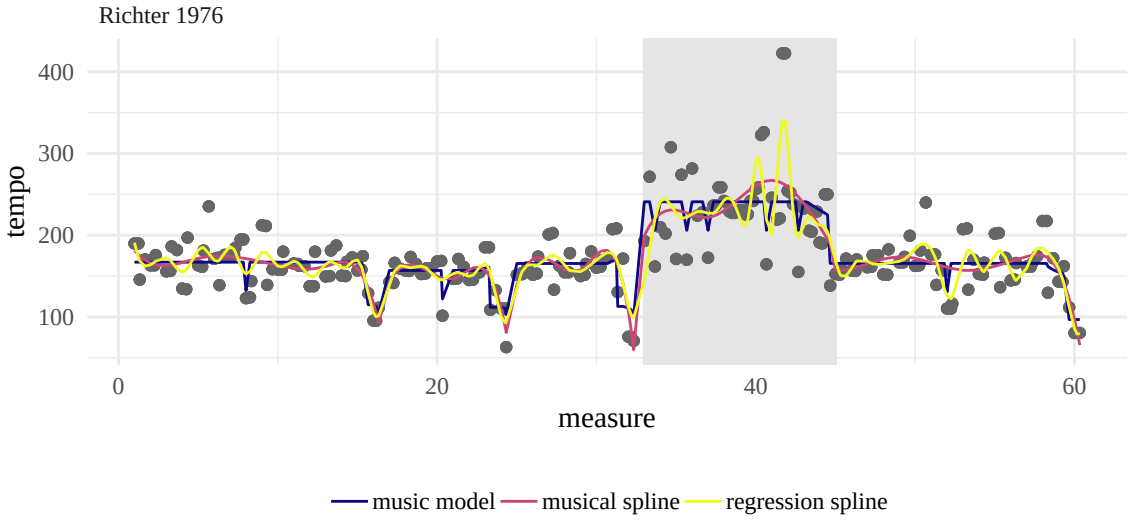


Parameter table

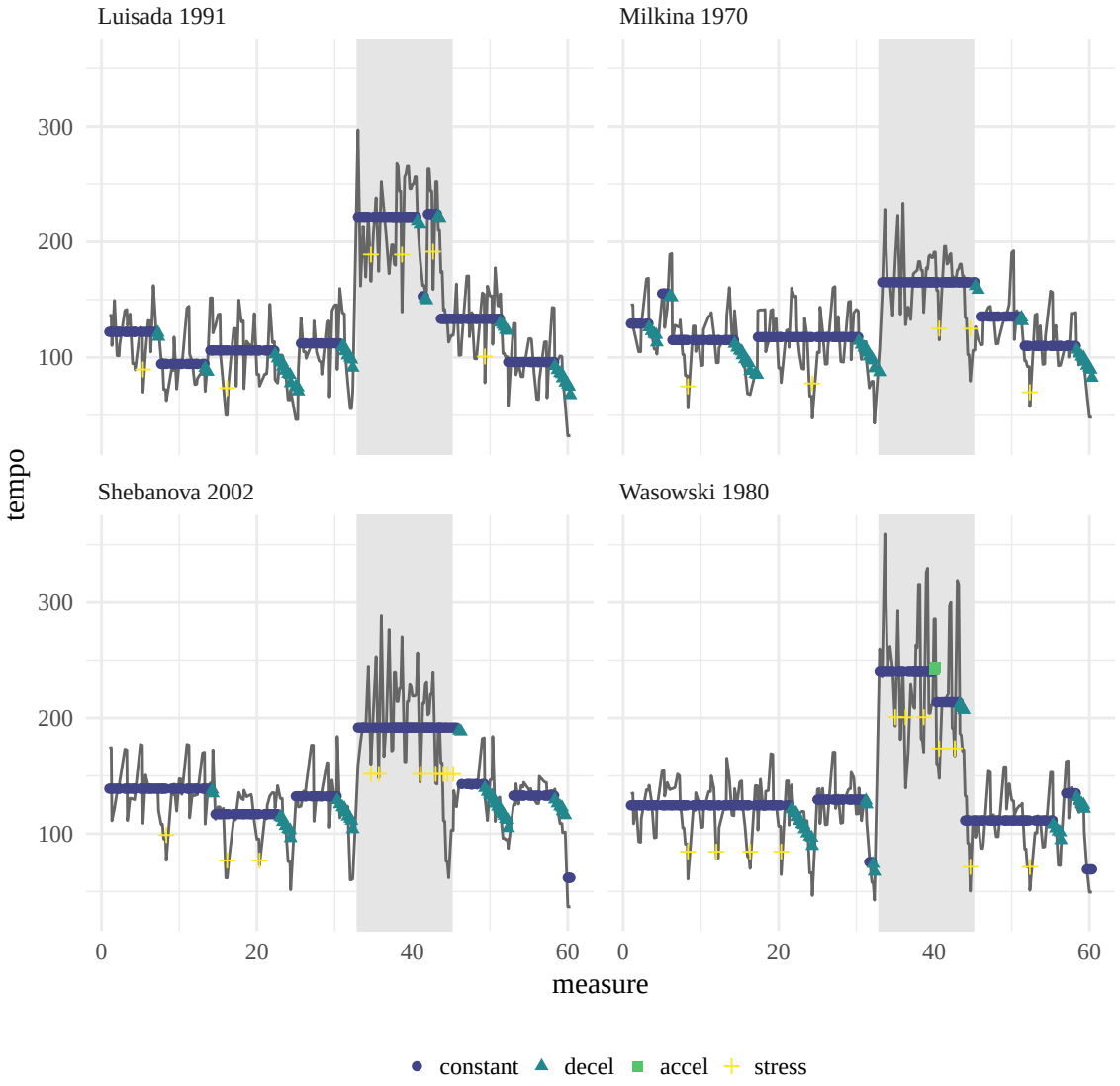
	sig2eps	mu1	mu2	mu3	sig2tempo	p11	p12	p22	p31	p13	p21	p32
Richter 1976	426.70	136.33	-11.84	-34.82	439.38	0.85	0.05	0.74	0.44	0.02	0.25	0.17
Hatto 1993	405.57	130.36	-13.57	-27.93	408.99	0.94	0.03	0.82	0.36	0.01	0.16	0.19
Cortot 1951	403.71	182.84	-21.43	-45.67	460.82	0.92	0.02	0.71	0.34	0.03	0.23	0.09

Different smoothing

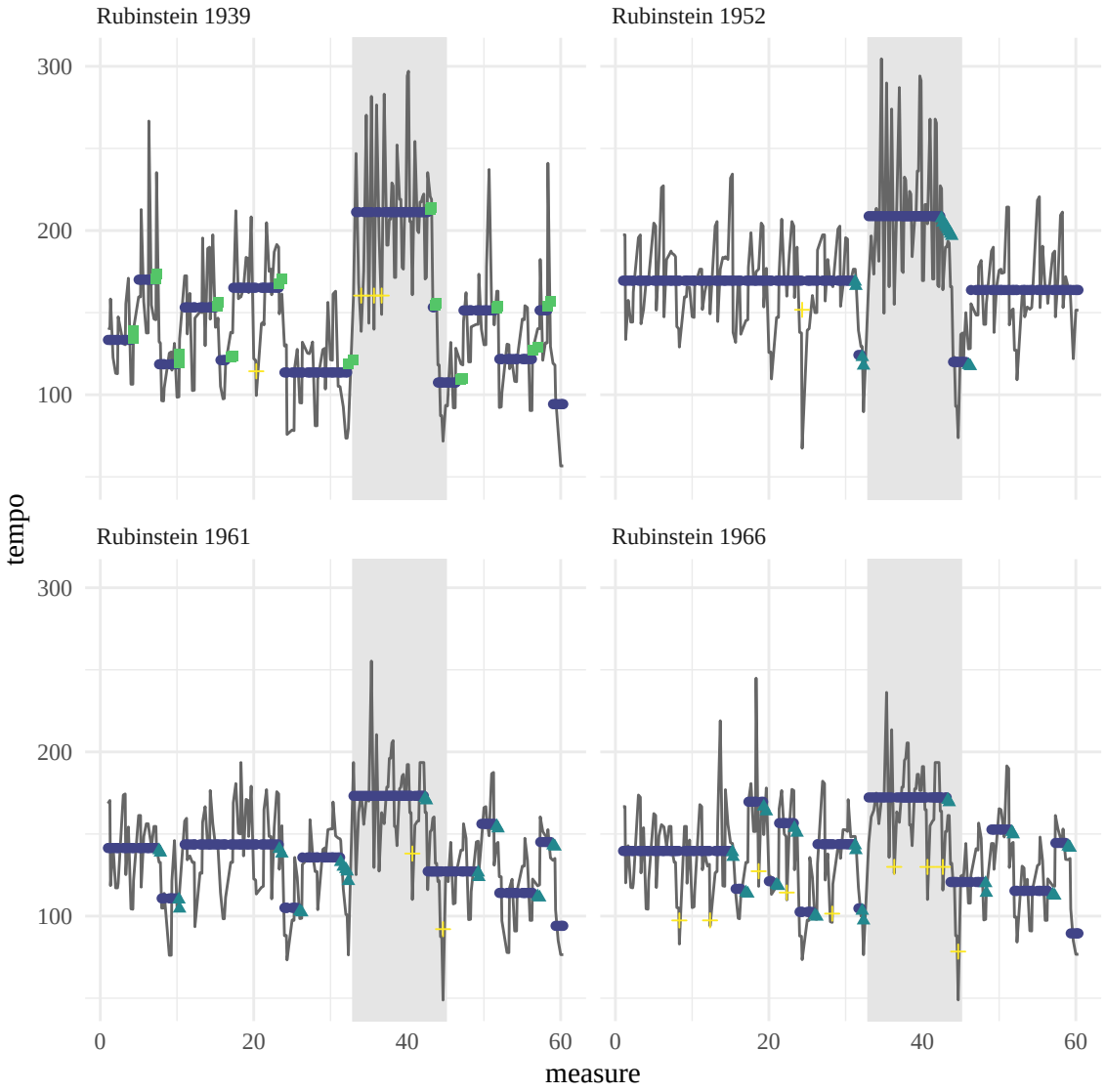
Try splines, replicating knots, l1tf?



Similar performances



Rubinstein contrast



	sig2eps	mu1	mu2	mu3	sig2tempo	p11	p12	p22	p31	p13	p21	p32
Wasowski 1980	414.99	132.00	-10.00	-40.00	425.00	0.85	0.05	0.67	0.34	0.02	0.26	0.20
Shebanova 2002	439.98	132.00	-10.00	-40.00	400.02	0.85	0.05	0.67	0.33	0.02	0.27	0.20
Luisada 1991	494.33	127.80	-10.24	-32.56	411.63	0.84	0.10	0.71	0.35	0.01	0.26	0.19
Milkina 1970	435.25	136.38	-9.68	-40.02	400.01	0.87	0.05	0.68	0.33	0.02	0.26	0.21
Rubinstein 1939	520.32	145.26	-7.89	-50.82	345.64	0.89	0.02	0.83	0.56	0.05	0.13	0.16
Rubinstein 1952	481.13	128.13	-7.76	-17.59	409.30	0.93	0.04	0.68	0.32	0.01	0.28	0.19
Rubinstein 1961	434.23	139.17	-8.34	-35.08	355.00	0.90	0.06	0.56	0.46	0.01	0.41	0.19
Rubinstein 1966	380.95	127.24	-8.80	-42.28	473.69	0.87	0.07	0.36	0.34	0.01	0.61	0.20

Bad estimation