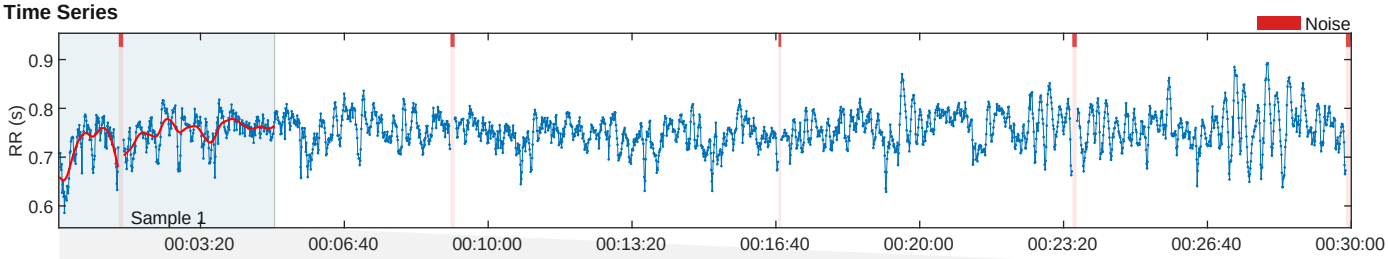
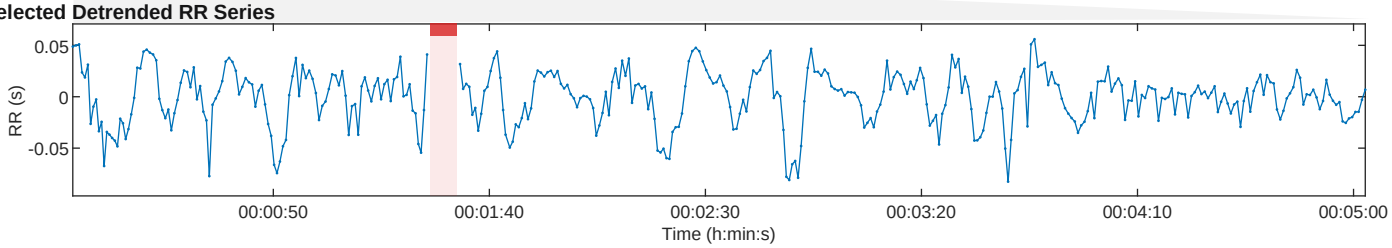
HRV Analysis - Standard Results

Person:				Measurement Info				Results for Sample 1/6	
Gender:	Male	Height:	180 cm	Date:		Trend removal:	Smoothn priors	Sample start:	00:00:04
Age:	49 years	Weight:	78 kg	Start time:	00:00:00	Artefact corr.:	Automatic correction	Sample length:	00:05:00
Max HR:	171 bpm	BMI:	24.1 kg/m2	Duration:	00:30:04	Analysis samples:	6	Beats corrected:	8 (2.03 %)

RR Time Series



Selected Detrended RR Series



Autonomic nervous system indexes

Parasympathetic Nervous System (PNS)

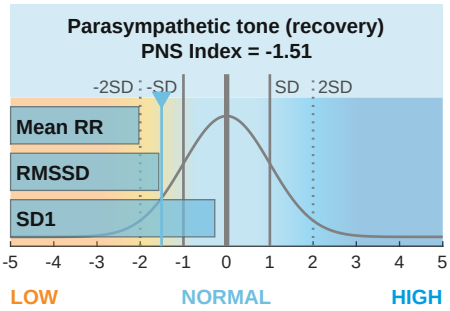
Mean RR	RMSSD	SD1
743 ms	**18.4** ms	**27.6** %

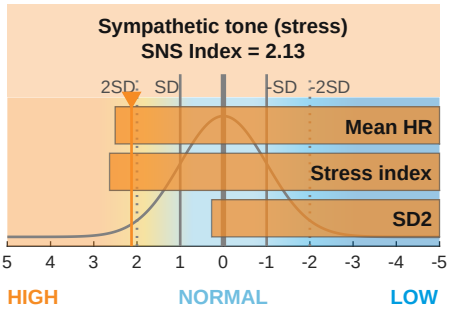
PNS Index = -1.51

Sympathetic Nervous System (SNS)

Mean HR	Stress index	SD2
81 bpm	**16.5**	**72.4** %

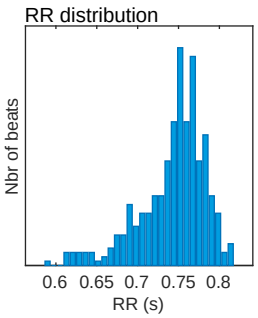
SNS Index = 2.13





Time-Domain Results

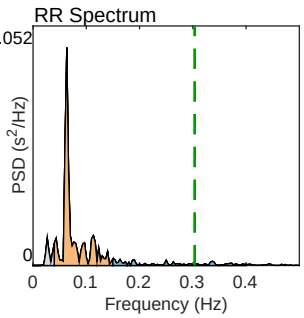
Variable	Units	Value
Mean RR*	(ms)	743
Mean HR*	(bpm)	81
Min HR	(bpm)	74
Max HR	(bpm)	98
SDNN	(ms)	25.9
RMSSD	(ms)	18.4
NN50	(beats)	6
pNN50	(%)	1.53
RR triangular index		6.91
TINN	(ms)	117.0
Stress Index (SI)		16.5
DC	(ms)	9.6
DCmod	(ms)	17.5



Frequency-Domain Results (FFT spectrum)

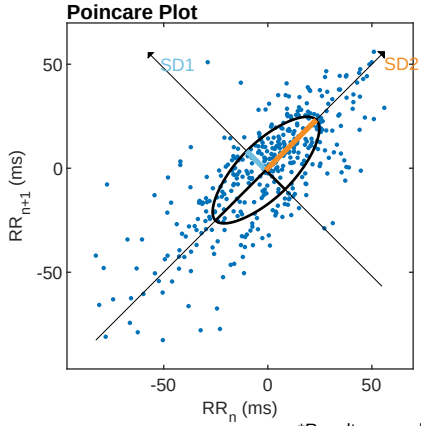
Variable	Units	VLF	LF	HF
Frequency band	(Hz)	0.00-0.04	0.04-0.15	0.15-0.40
Peak frequency	(Hz)	0.027	0.063	0.150
Power	(ms^2)	58	602	86
Power	(log)	4.055	6.401	4.451
Power	(%)	7.73	80.76	11.49
Power	(n.u.)		87.52	12.45

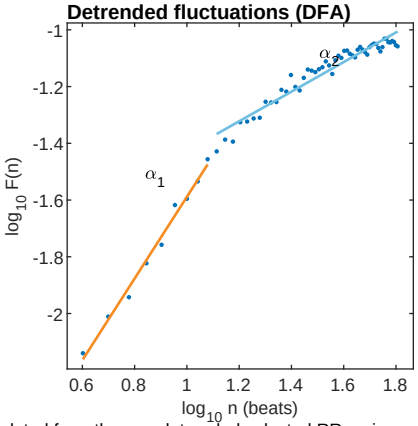
Total power	(ms^2)	746		
Total Power	(log)	6.615		
LF/HF ratio		7.031		
RESP	(Hz)	0.30		



Nonlinear Results

Variable	Units	Value
Poincare Plot		
SD1	(ms)	13.1
SD2	(ms)	34.2
SD2/SD1		2.621
Approximate Entropy (ApEn)		1.195
Sample Entropy (SampEn)		1.571
Detrended Fluctutation Analysis (DFA)		
Short-term fluctuations, $\alpha 1$		1.439
Long-term fluctuations, $\alpha 2$		0.522
Correlation Dimension (D2)		0.485
Recurrence Plot Analysis (RPA)	(beats)	
Mean line length (Lmean)	(beats)	10.42
Max line length (Lmax)	(%)	98
Recurrence rate (REC)	(%)	32.13
Determinism (DET)		98.49
Shannon Entropy (ShanEn)		3.129
Multi-Scale Entropy (MSE)		0.456 - 2.071



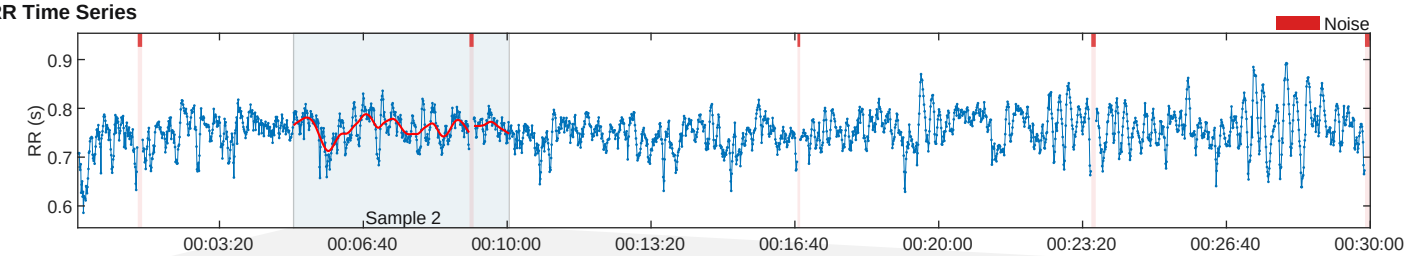


*Results are calculated from the non-detrended selected RR series.

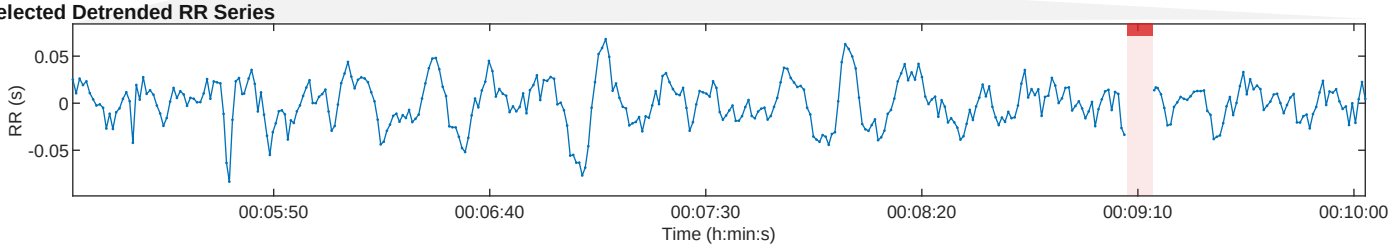
HRV Analysis - Standard Results

Person:				Measurement Info				Results for Sample 2/6	
Gender:	Male	Height:	180 cm	Date:		Trend removal:	Smoothn priors	Sample start:	00:05:04
Age:	49 years	Weight:	78 kg	Start time:	00:00:00	Artefact corr.:	Automatic correction	Sample length:	00:05:00
Max HR:	171 bpm	BMI:	24.1 kg/m2	Duration:	00:30:04	Analysis samples:	6	Beats corrected:	7 (1.80 %)

RR Time Series



Selected Detrended RR Series



Autonomic nervous system indexes

Parasympathetic Nervous System (PNS)

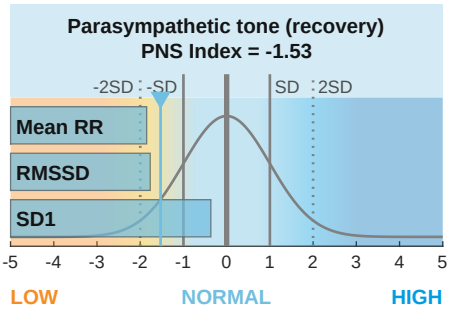
Mean RR	RMSSD	SD1
759 ms	**15.5** ms	**26.2** %

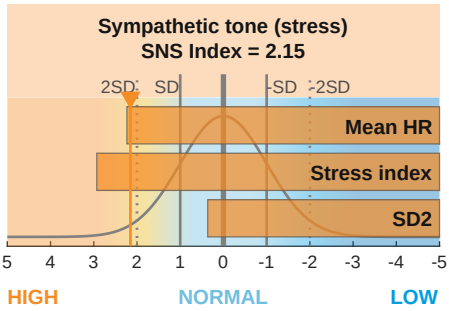
PNS Index = -1.53

Sympathetic Nervous System (SNS)

Mean HR	Stress index	SD2
79 bpm	**17.2**	**73.8** %

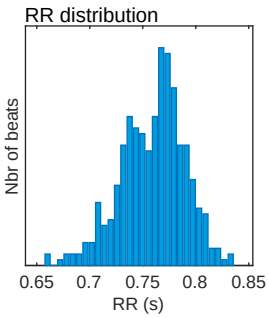
SNS Index = 2.15





Time-Domain Results

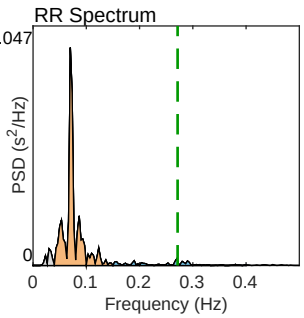
Variable	Units	Value
Mean RR*	(ms)	759
Mean HR*	(bpm)	79
Min HR	(bpm)	73
Max HR	(bpm)	88
SDNN	(ms)	23.2
RMSSD	(ms)	15.5
NN50	(beats)	3
pNN50	(%)	0.78
RR triangular index		6.47
TINN	(ms)	122.0
Stress Index (SI)		17.2
DC	(ms)	10.1
DCmod	(ms)	14.5



Frequency-Domain Results (FFT spectrum)

Variable	Units	VLF	LF	HF
Frequency band	(Hz)	0.00-0.04	0.04-0.15	0.15-0.40
Peak frequency	(Hz)	0.030	0.070	0.270
Power	(ms^2)	35	596	56
Power	(log)	3.550	6.389	4.028
Power	(%)	5.07	86.74	8.18
Power	(n.u.)		91.37	8.62

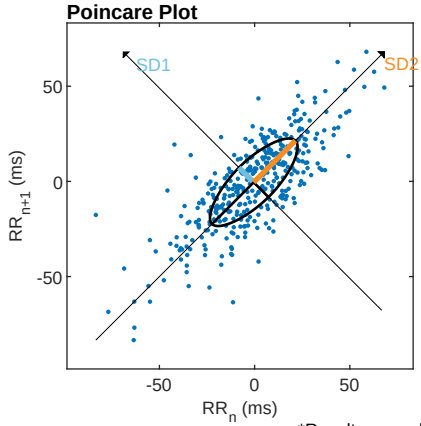
Total power	(ms^2)	687		
Total Power	(log)	6.532		
LF/HF ratio		10.604		
RESP	(Hz)	0.27		



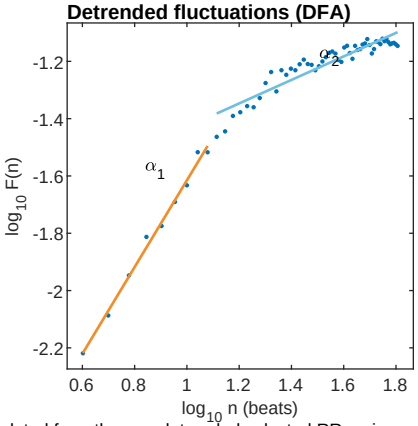
Nonlinear Results

Variable	Units	Value
Poincare Plot		
SD1	(ms)	11.0
SD2	(ms)	31.0
SD2/SD1		2.823
Approximate Entropy (ApEn)		1.186
Sample Entropy (SampEn)		1.577
Detrended Fluctutation Analysis (DFA)		
Short-term fluctuations, $\alpha 1$		1.514
Long-term fluctuations, $\alpha 2$		0.410
Correlation Dimension (D2)		0.322
Recurrence Plot Analysis (RPA)	(beats)	
Mean line length (Lmean)	(beats)	9.78
Max line length (Lmax)	(%)	219
Recurrence rate (REC)	(%)	32.32
Determinism (DET)		98.54
Shannon Entropy (ShanEn)		3.084
Multi-Scale Entropy (MSE)		0.613 - 1.915

Poincare Plot



Detrended fluctuations (DFA)

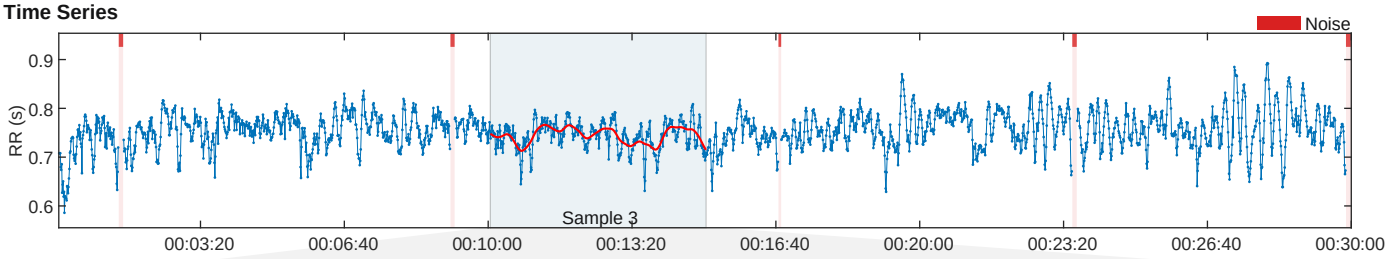


*Results are calculated from the non-detrended selected RR series.

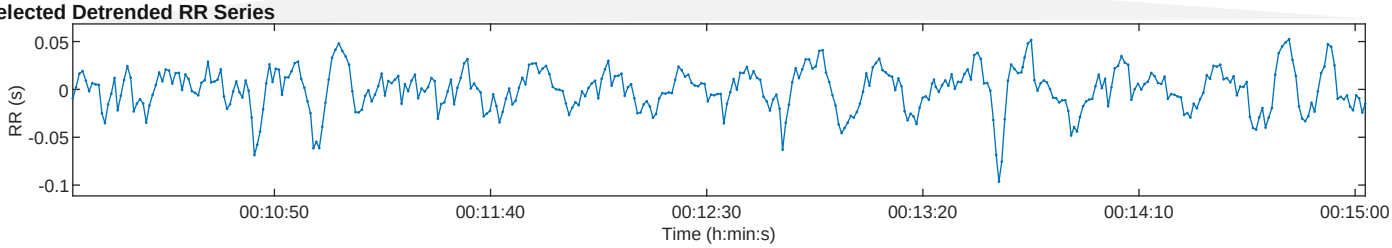
HRV Analysis - Standard Results

Person:				Measurement Info				Results for Sample 3/6	
Gender:	Male	Height:	180 cm	Date:		Trend removal:	Smoothn priors	Sample start:	00:10:03
Age:	49 years	Weight:	78 kg	Start time:	00:00:00	Artefact corr.:	Automatic correction	Sample length:	00:05:00
Max HR:	171 bpm	BMI:	24.1 kg/m2	Duration:	00:30:04	Analysis samples:	6	Beats corrected:	6 (1.48 %)

RR Time Series



Selected Detrended RR Series



Autonomic nervous system indexes

Parasympathetic Nervous System (PNS)

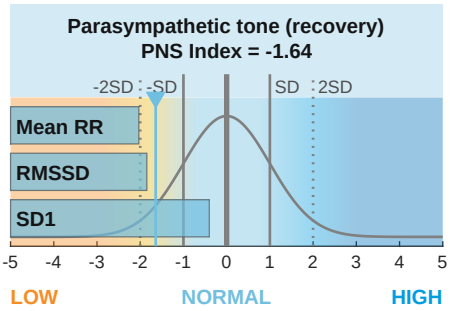
Mean RR	RMSSD	SD1
743 ms	**14.3** ms	**25.6** %

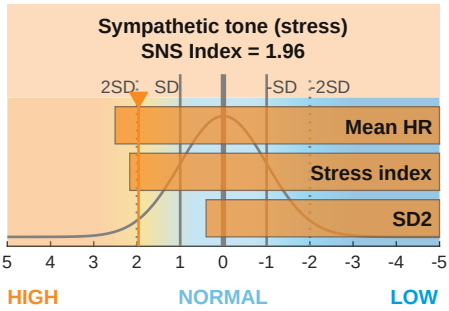
PNS Index = -1.64

Sympathetic Nervous System (SNS)

Mean HR	Stress index	SD2
81 bpm	**15.3**	**74.4** %

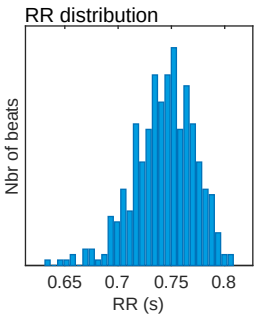
SNS Index = 1.96





Time-Domain Results

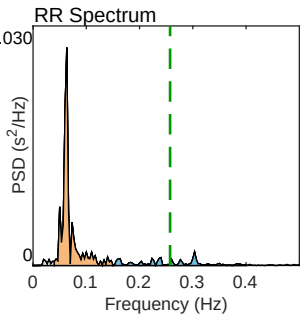
Variable	Units	Value
Mean RR*	(ms)	743
Mean HR*	(bpm)	81
Min HR	(bpm)	75
Max HR	(bpm)	90
SDNN	(ms)	22.0
RMSSD	(ms)	14.3
NN50	(beats)	0
pNN50	(%)	0.00
RR triangular index		5.62
TINN	(ms)	115.0
Stress Index (SI)		15.3
DC	(ms)	8.5
DCmod	(ms)	12.5



Frequency-Domain Results (FFT spectrum)

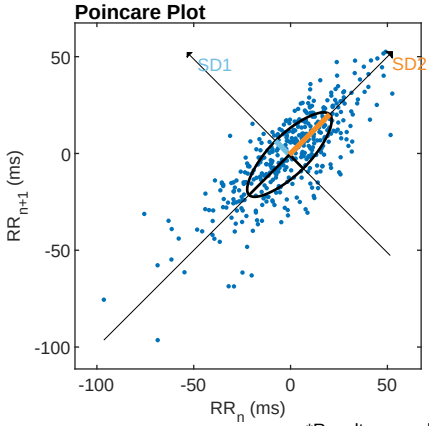
Variable	Units	VLF	LF	HF
Frequency band	(Hz)	0.00-0.04	0.04-0.15	0.15-0.40
Peak frequency	(Hz)	0.020	0.063	0.303
Power	(ms^2)	11	328	64
Power	(log)	2.396	5.793	4.154
Power	(%)	2.73	81.44	15.82
Power	(n.u.)		83.72	16.27

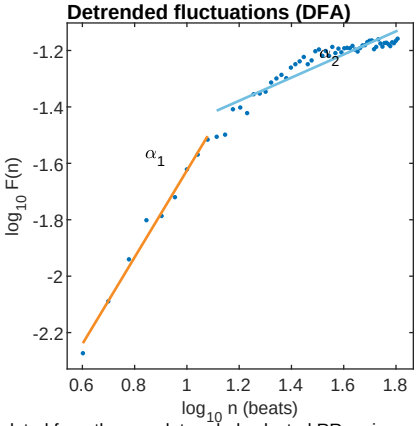
Total power	(ms^2)	403		
Total Power	(log)	5.998		
LF/HF ratio		5.147		
RESP	(Hz)	0.26		



Nonlinear Results

Variable	Units	Value
Poincare Plot		
SD1	(ms)	10.1
SD2	(ms)	29.5
SD2/SD1		2.909
Approximate Entropy (ApEn)		1.232
Sample Entropy (SampEn)		1.610
Detrended Fluctutation Analysis (DFA)		
Short-term fluctuations, $\alpha 1$		1.538
Long-term fluctuations, $\alpha 2$		0.410
Correlation Dimension (D2)		0.277
Recurrence Plot Analysis (RPA)	(beats)	
Mean line length (Lmean)	(beats)	10.27
Max line length (Lmax)	(%)	225
Recurrence rate (REC)	(%)	31.45
Determinism (DET)		98.22
Shannon Entropy (ShanEn)		3.101
Multi-Scale Entropy (MSE)		0.468 - 2.039



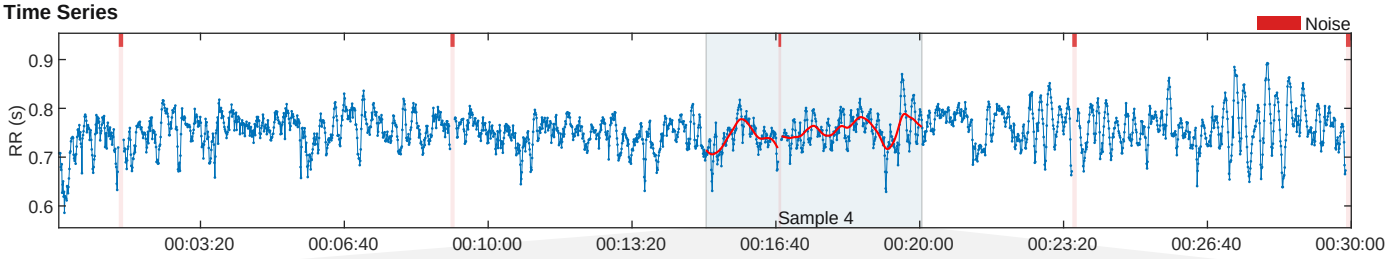


*Results are calculated from the non-detrended selected RR series.

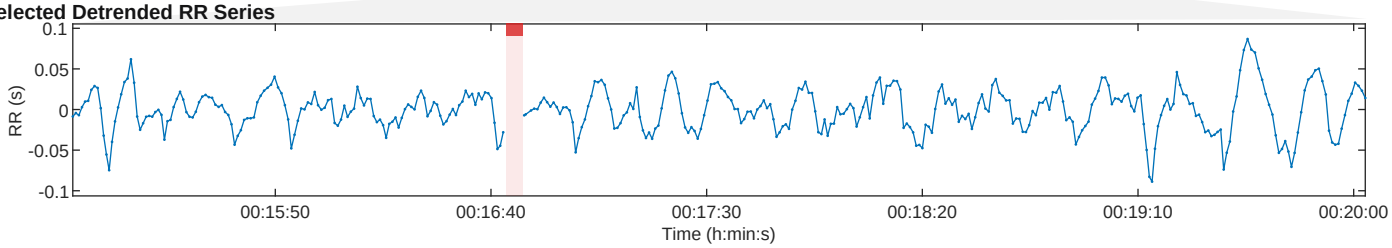
HRV Analysis - Standard Results

Person:				Measurement Info				Results for Sample 4/6	
Gender:	Male	Height:	180 cm	Date:		Trend removal:	Smoothn priors	Sample start:	00:15:03
Age:	49 years	Weight:	78 kg	Start time:	00:00:00	Artefact corr.:	Automatic correction	Sample length:	00:05:00
Max HR:	171 bpm	BMI:	24.1 kg/m2	Duration:	00:30:04	Analysis samples:	6	Beats corrected:	4 (1.01 %)

RR Time Series



Selected Detrended RR Series



Autonomic nervous system indexes

Parasympathetic Nervous System (PNS)

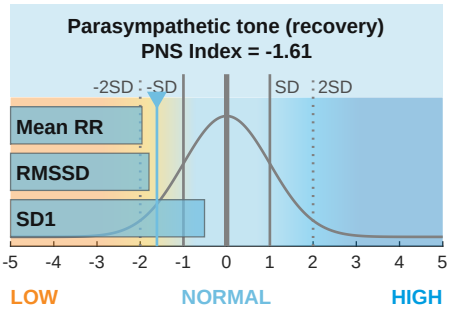
Mean RR	RMSSD	SD1
750 ms	**15.0** ms	**23.8** %

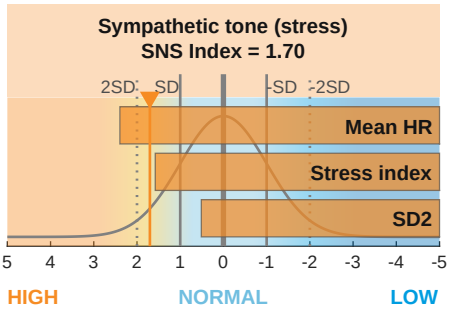
PNS Index = -1.61

Sympathetic Nervous System (SNS)

Mean HR	Stress index	SD2
80 bpm	**13.7**	**76.2** %

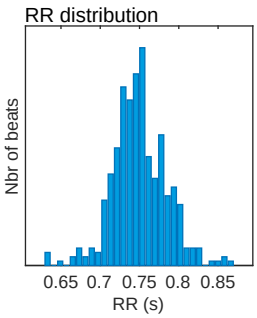
SNS Index = 1.70





Time-Domain Results

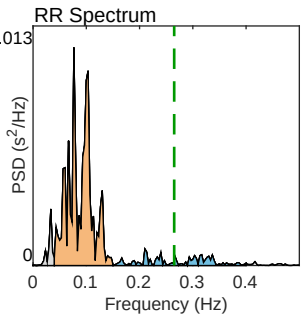
Variable	Units	Value
Mean RR*	(ms)	750
Mean HR*	(bpm)	80
Min HR	(bpm)	70
Max HR	(bpm)	91
SDNN	(ms)	25.2
RMSSD	(ms)	15.0
NN50	(beats)	0
pNN50	(%)	0.00
RR triangular index		6.58
TINN	(ms)	136.0
Stress Index (SI)		13.7
DC	(ms)	10.9
DCmod	(ms)	13.7



Frequency-Domain Results (FFT spectrum)

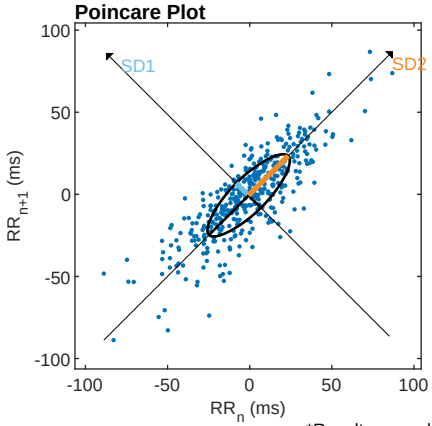
Variable	Units	VLF	LF	HF
Frequency band	(Hz)	0.00-0.04	0.04-0.15	0.15-0.40
Peak frequency	(Hz)	0.033	0.077	0.210
Power	(ms^2)	22	369	50
Power	(log)	3.073	5.912	3.920
Power	(%)	4.90	83.66	11.41
Power	(n.u.)		87.97	12.00

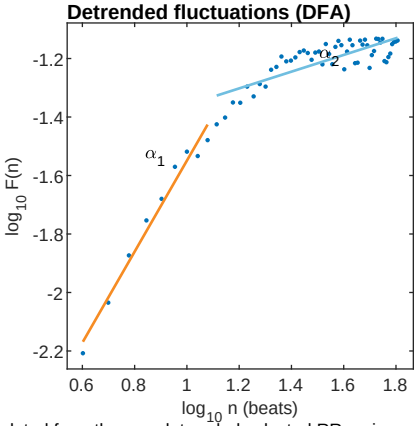
Total power	(ms^2)	441		
Total Power	(log)	6.090		
LF/HF ratio		7.330		
RESP	(Hz)	0.27		



Nonlinear Results

Variable	Units	Value
Poincare Plot		
SD1	(ms)	10.7
SD2	(ms)	34.1
SD2/SD1		3.201
Approximate Entropy (ApEn)		1.183
Sample Entropy (SampEn)		1.528
Detrended Fluctutation Analysis (DFA)		
Short-term fluctuations, $\alpha 1$		1.556
Long-term fluctuations, $\alpha 2$		0.286
Correlation Dimension (D2)		0.437
Recurrence Plot Analysis (RPA)	(beats)	
Mean line length (Lmean)	(beats)	11.63
Max line length (Lmax)	(%)	323
Recurrence rate (REC)	(%)	33.85
Determinism (DET)		98.61
Shannon Entropy (ShanEn)		3.235
Multi-Scale Entropy (MSE)		0.540 - 1.954



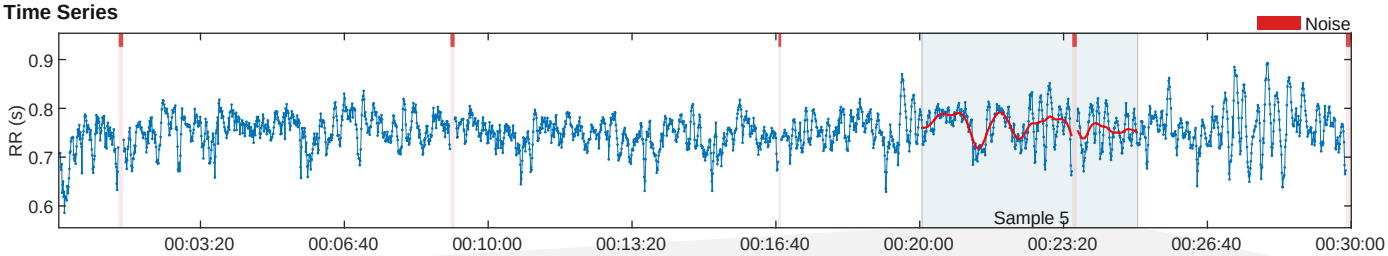


*Results are calculated from the non-detrended selected RR series.

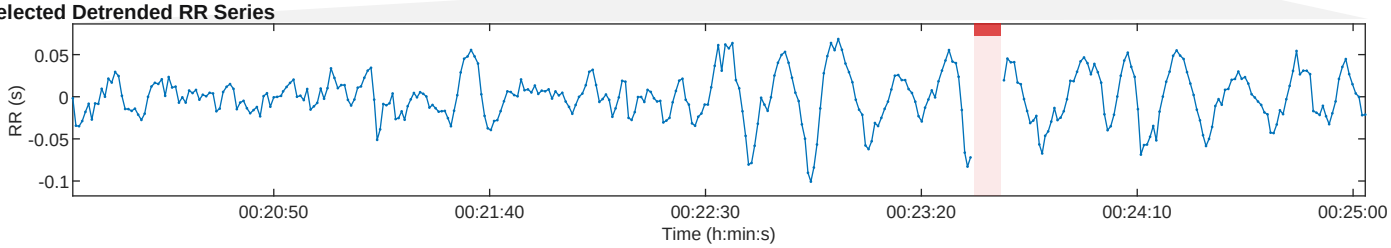
HRV Analysis - Standard Results

Person:				Measurement Info				Results for Sample 5/6	
Gender:	Male	Height:	180 cm	Date:		Trend removal:	Smoothn priors	Sample start:	00:20:03
Age:	49 years	Weight:	78 kg	Start time:	00:00:00	Artefact corr.:	Automatic correction	Sample length:	00:05:00
Max HR:	171 bpm	BMI:	24.1 kg/m2	Duration:	00:30:04	Analysis samples:	6	Beats corrected:	5 (1.30 %)

RR Time Series



Selected Detrended RR Series



Autonomic nervous system indexes

Parasympathetic Nervous System (PNS)

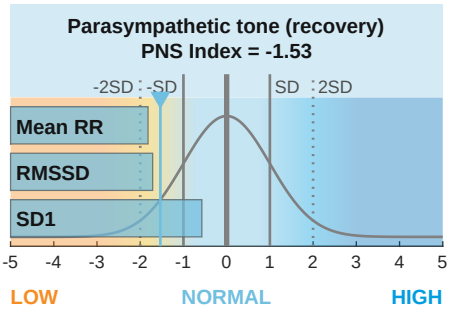
Mean RR	RMSSD	SD1
762 ms	**16.3** ms	**22.8** %

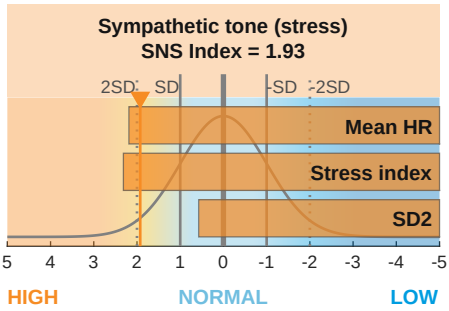
PNS Index = -1.53

Sympathetic Nervous System (SNS)

Mean HR	Stress index	SD2
79 bpm	**15.7**	**77.2** %

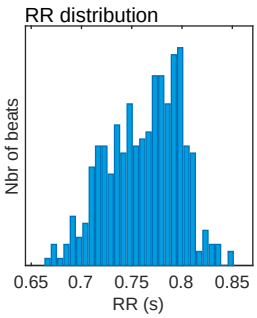
SNS Index = 1.93





Time-Domain Results

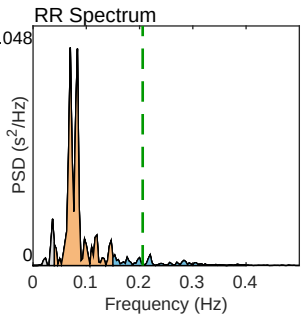
Variable	Units	Value
Mean RR*	(ms)	762
Mean HR*	(bpm)	79
Min HR	(bpm)	71
Max HR	(bpm)	87
SDNN	(ms)	28.8
RMSSD	(ms)	16.3
NN50	(beats)	3
pNN50	(%)	0.78
RR triangular index		7.26
TINN	(ms)	136.0
Stress Index (SI)		15.7
DC	(ms)	13.1
DCmod	(ms)	15.0



Frequency-Domain Results (FFT spectrum)

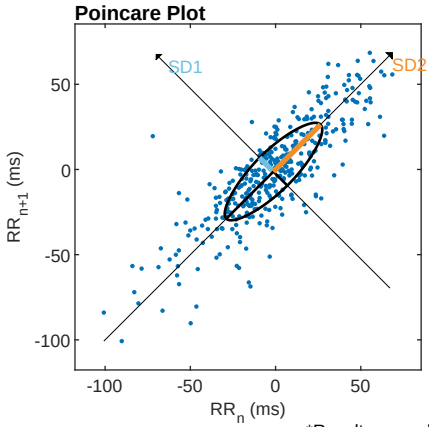
Variable	Units	VLF	LF	HF
Frequency band	(Hz)	0.00-0.04	0.04-0.15	0.15-0.40
Peak frequency	(Hz)	0.037	0.070	0.220
Power	(ms^2)	63	848	106
Power	(log)	4.149	6.742	4.660
Power	(%)	6.24	83.37	10.39
Power	(n.u.)		88.91	11.09

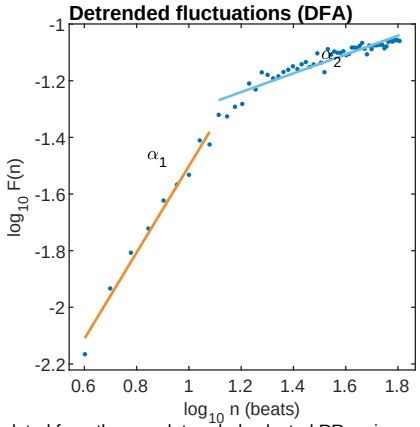
Total power	(ms^2)	1017		
Total Power	(log)	6.924		
LF/HF ratio		8.020		
RESP	(Hz)	0.21		



Nonlinear Results

Variable	Units	Value
Poincare Plot		
SD1	(ms)	11.6
SD2	(ms)	39.1
SD2/SD1		3.381
Approximate Entropy (ApEn)		1.083
Sample Entropy (SampEn)		1.328
Detrended Fluctutation Analysis (DFA)		
Short-term fluctuations, $\alpha 1$		1.525
Long-term fluctuations, $\alpha 2$		0.332
Correlation Dimension (D2)		0.827
Recurrence Plot Analysis (RPA)	(beats)	
Mean line length (Lmean)	(beats)	14.14
Max line length (Lmax)	(%)	263
Recurrence rate (REC)	(%)	35.72
Determinism (DET)		99.20
Shannon Entropy (ShanEn)		3.449
Multi-Scale Entropy (MSE)		0.591 - 1.765



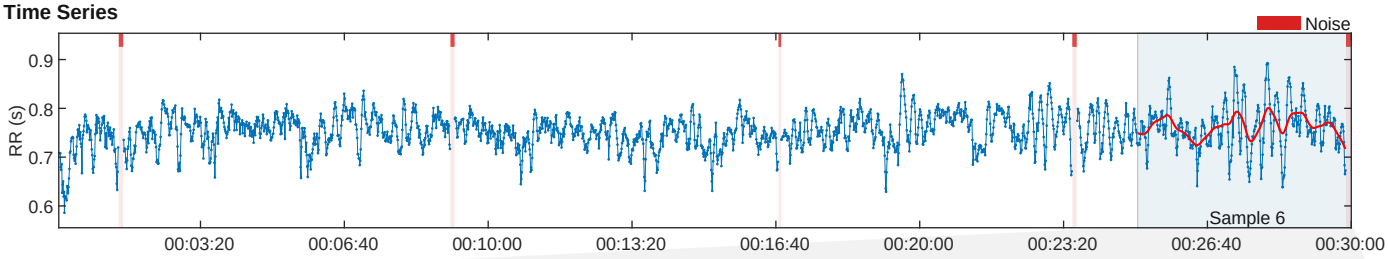


*Results are calculated from the non-detrended selected RR series.

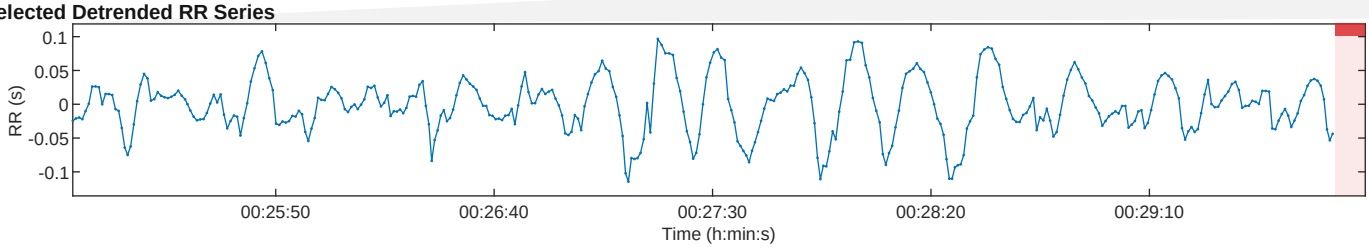
HRV Analysis - Standard Results

Person:				Measurement Info				Results for Sample 6/6	
Gender:	Male	Height:	180 cm	Date:		Trend removal:	Smoothn priors	Sample start:	00:25:04
Age:	49 years	Weight:	78 kg	Start time:	00:00:00	Artefact corr.:	Automatic correction	Sample length:	00:05:00
Max HR:	171 bpm	BMI:	24.1 kg/m2	Duration:	00:30:04	Analysis samples:	6	Beats corrected:	5 (1.31 %)

RR Time Series



Selected Detrended RR Series



Autonomic nervous system indexes

Parasympathetic Nervous System (PNS)

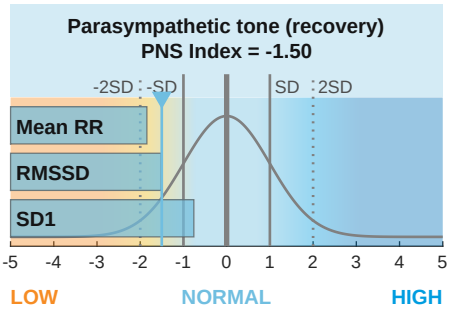
Mean RR	RMSSD	SD1
760 ms	**19.3** ms	**19.9** %

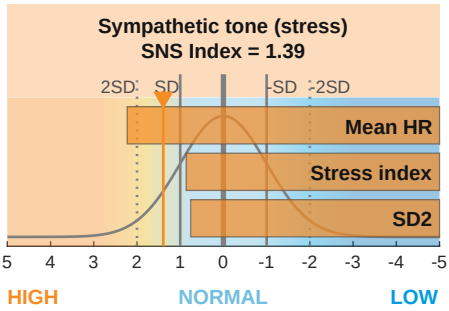
PNS Index = -1.50

Sympathetic Nervous System (SNS)

Mean HR	Stress index	SD2
79 bpm	**11.9**	**80.1** %

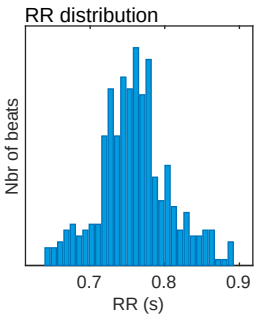
SNS Index = 1.39





Time-Domain Results

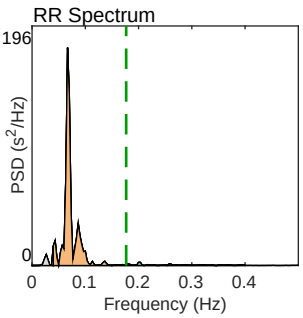
Variable	Units	Value
Mean RR*	(ms)	760
Mean HR*	(bpm)	79
Min HR	(bpm)	68
Max HR	(bpm)	92
SDNN	(ms)	40.1
RMSSD	(ms)	19.3
NN50	(beats)	9
pNN50	(%)	2.37
RR triangular index		10.89
TINN	(ms)	191.0
Stress Index (SI)		11.9
DC	(ms)	21.5
DCmod	(ms)	19.3



Frequency-Domain Results (FFT spectrum)

Variable	Units	VLF	LF	HF
Frequency band	(Hz)	0.00-0.04	0.04-0.15	0.15-0.40
Peak frequency	(Hz)	0.040	0.067	0.200
Power	(ms^2)	100	2225	103
Power	(log)	4.604	7.708	4.633
Power	(%)	4.11	91.65	4.23
Power	(n.u.)		95.58	4.41

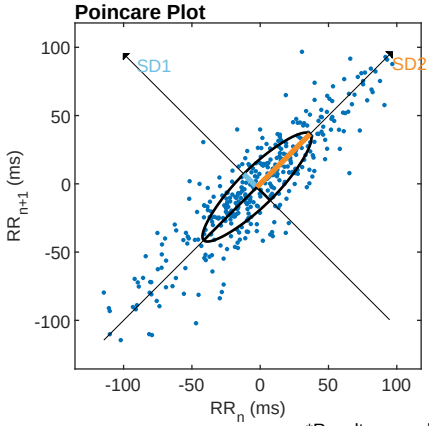
Total power	(ms^2)	2428		
Total Power	(log)	7.795		
LF/HF ratio		21.652		
RESP	(Hz)	0.18		



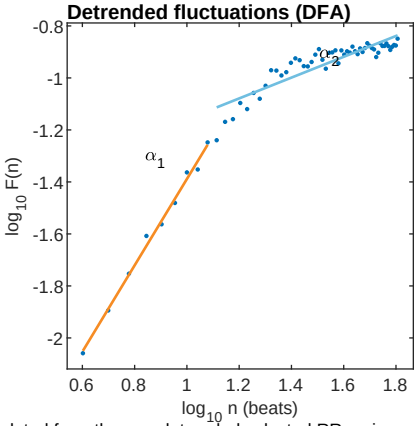
Nonlinear Results

Variable	Units	Value
Poincare Plot		
SD1	(ms)	13.6
SD2	(ms)	55.1
SD2/SD1		4.035
Approximate Entropy (ApEn)		0.966
Sample Entropy (SampEn)		1.074
Detrended Fluctutation Analysis (DFA)		
Short-term fluctuations, $\alpha 1$		1.661
Long-term fluctuations, $\alpha 2$		0.400
Correlation Dimension (D2)		1.567
Recurrence Plot Analysis (RPA)	(beats)	
Mean line length (Lmean)	(beats)	14.30
Max line length (Lmax)	(%)	196
Recurrence rate (REC)	(%)	37.26
Determinism (DET)		99.47
Shannon Entropy (ShanEn)		3.501
Multi-Scale Entropy (MSE)		0.408 - 2.436

Poincare Plot



Detrended fluctuations (DFA)

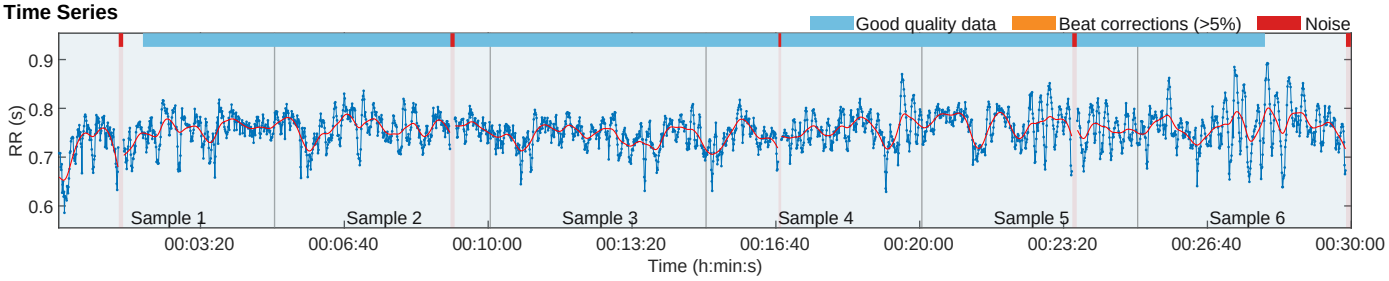


*Results are calculated from the non-detrended selected RR series.

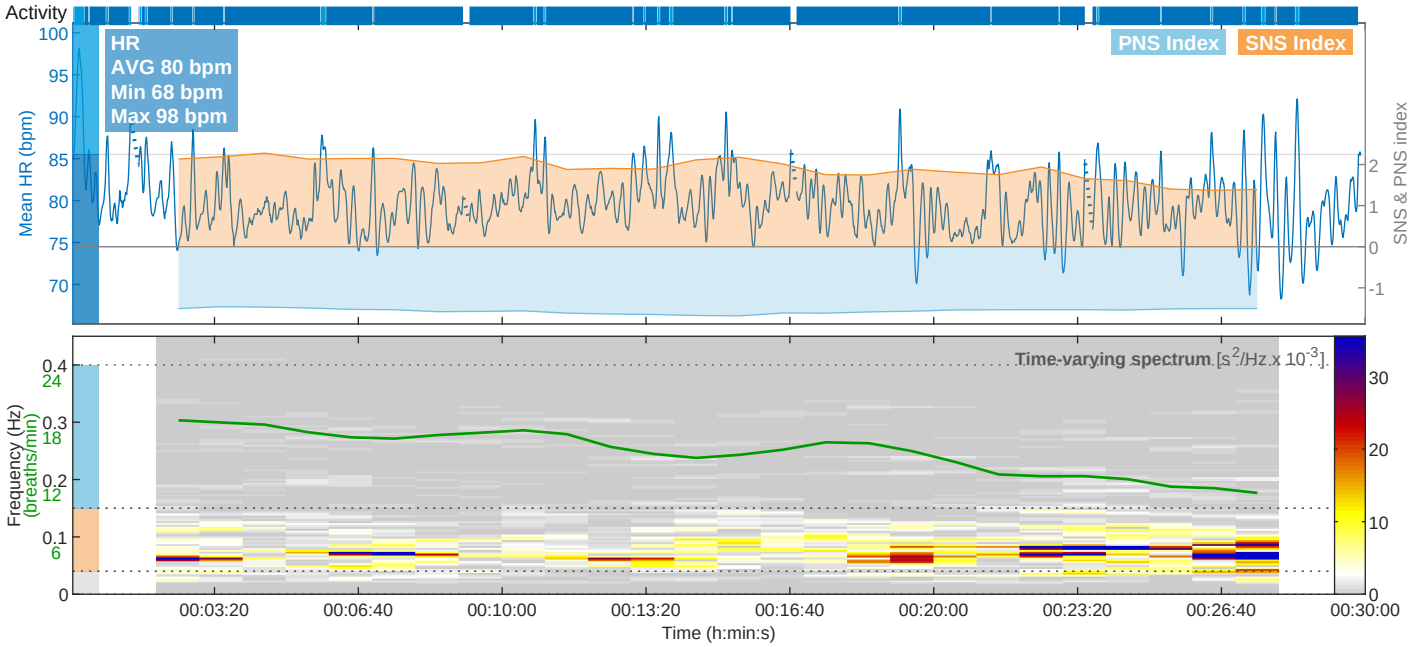
HRV Analysis - Time-Varying Results

Person:				Measurement Info				Results for the whole measurement	
Gender:	Male	Height:	180 cm	Date:		Trend removal:	Smoothn priors	Sample start:	00:02:30
Age:	49 years	Weight:	78 kg	Start time:	00:00:00	Artefact corr.:	Automatic correction	Sample length:	00:25:00
Max HR:	171 bpm	BMI:	24.1 kg/m2	Duration:	00:30:04	Analysis samples:	6	Beats corrected:	35 (1.49 %)

RR Time Series



Kubios HRV - Time-Varying Results

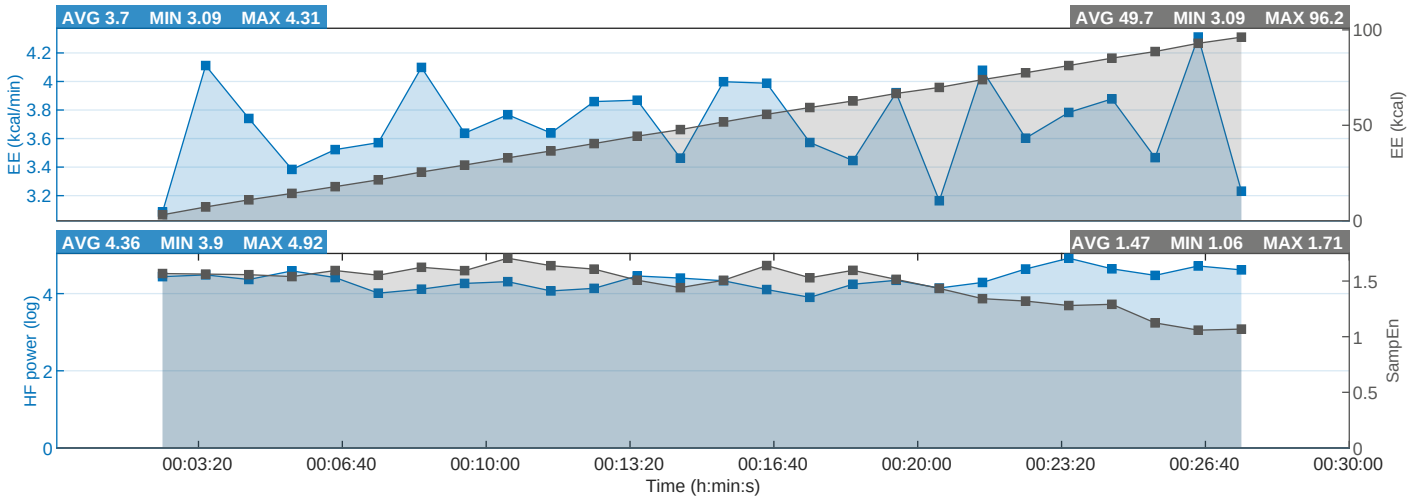


HR	0%	50%	100%	PNS	0%	50%	100%	SNS	0%	50%	100%
MAXIMUM			00:00:00	VERY LOW			00:00:00	VERY HIGH			00:13:36
HARD			00:00:00	LOW			00:29:28	HIGH			00:15:52
MODERATE			00:00:00	NORMAL			00:00:00	NORMAL			00:00:00
LIGHT			00:00:00	HIGH			00:00:00	LOW			00:00:00
VERY LIGH			00:01:42	VERY HIGH			00:00:00	VERY LOW			00:00:00
INACTIVE			00:27:46								

PNS Index	SNS Index
AVG -1.56	AVG 1.91
Min -1.68	Min 1.37
Max -1.46	Max 2.28

Energy Expenditure
96/ 131 kcal
BMR | Activity

Optional Time-Varying Parameters*



*Window width = 300 s and window shift = 60 s