Supplementary material for the paper titled "Reliable early classification of time series based on discriminating the classes over time"

Raw results for the RelClass method

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Dataset	$tau = 0.001$	$tau = 0.002$	$tau = 0.004$	$tau = 0.006$
50words	0.65	0.65	0.65	0.65
Adiac	0.62	0.62	0.63	0.63
Beef	0.4	0.4	0.4	0.43
CBF	0.35	0.36	0.36	0.36
ChlorineConcentration	0.82	0.82	0.82	0.82
CinC_ECG_torso	0.8	0.8	0.81	0.82
Coffee	0.71	0.79	0.82	0.82
Cricket_X	0.6	0.61	0.62	0.62
Cricket_Y	0.65	0.65	0.65	0.65
Cricket_Z	0.66	0.67	0.66	0.66
DiatomSizeReduction	0.94	0.94	0.94	0.94
ECG200	0.88	0.88	0.89	0.89
ECGFiveDays	0.57	0.57	0.57	0.57
FaceAll	0.69	0.69	0.69	0.69
FaceFour	0.84	0.84	0.84	0.84
FacesUCR	0.76	0.76	0.76	0.76
fh	0.8	0.8	0.79	0.79
Gun_Point	0.91	0.91	0.91	0.91
Haptics	0.3	0.32	0.31	0.33
InlineSkate	0.25	0.25	0.25	0.26
ItalyPowerDemand	0.67	0.68	0.69	0.7
Lighting2	0.62	0.62	0.62	0.64
Lighting7	0.7	0.7	0.7	0.68
MALLAT	0.44	0.51	0.56	0.59
MedicalImages	0.65	0.66	0.66	0.66
MoteStrain	0.58	0.84	0.84	0.84
OliveOil	0.43	0.47	0.6	0.73
OSULeaf	0.49	0.49	0.49	0.49
SonyAIBORobotSurface	0.81	0.81	0.81	0.81
SonyAIBORobotSurfaceII	0.87	0.87	0.87	0.87
StarLightCurves	0.94	0.94	0.94	0.94
SwedhLeaf	0.84	0.83	0.83	0.83
Symbols	0.47	0.49	0.51	0.52
synthetic_control	0.84	0.86	0.88	0.88
Trace	0.76	0.78	0.81	0.81
TwoLeadECG	0.73	0.93	0.93	0.93
Two_Patterns	0.93	0.68	0.68	0.68
uWaveGestureLibrary_X	0.75	0.75	0.75	0.75
uWaveGestureLibrary_Y	0.6	0.63	0.64	0.65
uWaveGestureLibrary_Z	0.71	0.71	0.71	0.71
wafer	0.97	0.97	0.97	0.97
WordsSynonyms	0.64	0.64	0.65	0.65
yoga	0.82	0.82	0.82	0.82
NonInvasiveFatalECG_Thorax1	0.87	0.87	0.87	0.87
NonInvasiveFatalECG_Thorax2	0.88	0.88	0.88	0.88

Table 1: Accuracy values for the Rel.Class method using the Gaussian Naive Bayes box method and various reliability parameter values (tau) set to 0.001, 0.002, 0.004, 0.006.

Dataset	$tau = 0.008$	$tau = 0.02$	$tau = 0.04$	$tau = 0.06$
50words	0.65	0.65	0.65	0.65
Adiac	0.63	0.63	0.63	0.63
Beef	0.4	0.37	0.37	0.40
CBF	0.37	0.37	0.39	0.41
ChlorineConcentration	0.82	0.82	0.82	0.82
CinC_ECG_torso	0.82	0.83	0.83	0.84
Coffee	0.86	0.89	0.89	0.89
Cricket_X	0.62	0.62	0.62	0.62
Cricket_Y	0.66	0.67	0.67	0.68
Cricket_Z	0.66	0.67	0.67	0.67
DiatomSizeReduction	0.94	0.94	0.94	0.94
ECG200	0.88	0.88	0.89	0.89
ECGFiveDays	0.57	0.51	0.5	0.5
FaceAll	0.69	0.69	0.69	0.69
FaceFour	0.85	0.83	0.83	0.82
FacesUCR	0.76	0.77	0.77	0.77
fh	0.79	0.79	0.79	0.79
Gun_Point	0.91	0.91	0.91	0.91
Haptics	0.33	0.38	0.40	0.40
InlineSkate	0.27	0.27	0.27	0.27
ItalyPowerDemand	0.70	0.72	0.75	0.76
Lighting2	0.66	0.67	0.66	0.62
Lighting7	0.68	0.68	0.68	0.68
MALLAT	0.61	0.66	0.68	0.69
MedicalImages	0.66	0.66	0.67	0.67
MoteStrain	0.84	0.84	0.84	0.85
OliveOil	0.80	0.80	0.80	0.80
OSULeaf	0.49	0.49	0.49	0.49
SonyAIBORobotSurface	0.81	0.79	0.79	0.78
SonyAIBORobotSurfaceII	0.87	0.87	0.87	0.87
StarLightCurves	0.94	0.94	0.94	0.94
SwedhLeaf	0.83	0.83	0.83	0.83
Symbols	0.52	0.62	0.66	0.66
synthetic_control	0.89	0.92	0.94	0.96
Trace	0.81	0.82	0.82	0.83
TwoLeadECG	0.93	0.93	0.93	0.93
Two_Patterns	0.68	0.68	0.68	0.68
uWaveGestureLibrary_X	0.75	0.75	0.75	0.75
uWaveGestureLibrary_Y	0.65	0.66	0.67	0.67
uWaveGestureLibrary_Z	0.71	0.71	0.71	0.71
wafer	0.98	0.98	0.98	0.99
WordsSynonyms	0.65	0.65	0.65	0.65
yoga	0.83	0.83	0.83	0.83
NonInvasiveFatalECG_Thorax1	0.87	0.87	0.87	0.87
NonInvasiveFatalECG_Thorax2	0.88	0.88	0.88	0.88

Table 2: Accuracy values for the Rel.Class method using the Gaussian Naive Bayes box method and various reliability parameter values (tau) set to 0.008 0.02, 0.04, 0.06.

Dataset	$tau = 0.08$	$tau = 0.1$	$tau = 0.5$	$tau = 0.9$
50words	0.65	0.65	0.66	0.66
Adiac	0.63	0.63	0.63	0.64
Beef	0.37	0.4	0.57	0.67
CBF	0.44	0.46	0.64	0.87
ChlorineConcentration	0.82	0.82	0.82	0.82
CinC_ECG_torso	0.84	0.84	0.85	0.86
Coffee	0.89	0.89	0.89	0.89
Cricket_X	0.62	0.62	0.61	0.61
Cricket_Y	0.68	0.68	0.68	0.68
Cricket_Z	0.66	0.66	0.66	0.66
DiatomSizeReduction	0.94	0.94	0.94	0.94
ECG200	0.89	0.89	0.89	0.89
ECGFiveDays	0.5	0.51	0.52	0.77
FaceAll	0.69	0.69	0.69	0.69
FaceFour	0.83	0.83	0.83	0.86
FacesUCR	0.77	0.76	0.77	0.77
fh	0.79	0.79	0.79	0.79
Gun_Point	0.91	0.91	0.91	0.91
Haptics	0.4	0.41	0.41	0.4
InlineSkate	0.27	0.28	0.27	0.27
ItalyPowerDemand	0.78	0.79	0.85	0.95
Lighting2	0.61	0.64	0.62	0.67
Lighting7	0.68	0.68	0.68	0.67
MALLAT	0.7	0.7	0.73	0.8
MedicalImages	0.67	0.67	0.67	0.68
MoteStrain	0.85	0.58	0.58	0.58
OliveOil	0.8	0.8	0.77	0.83
OSULeaf	0.49	0.49	0.48	0.48
SonyAIBORobotSurface	0.79	0.79	0.79	0.78
SonyAIBORobotSurfaceII	0.87	0.88	0.88	0.88
StarLightCurves	0.95	0.95	0.95	0.95
SwedhLeaf	0.83	0.83	0.83	0.83
Symbols	0.67	0.67	0.71	0.79
synthetic_control	0.96	0.97	0.98	0.98
Trace	0.84	0.84	0.86	0.86
TwoLeadECG	0.93	0.72	0.72	0.72
Two_Patterns	0.68	0.93	0.93	0.93
uWaveGestureLibrary_X	0.75	0.75	0.75	0.75
uWaveGestureLibrary_Y	0.67	0.67	0.68	0.68
uWaveGestureLibrary_Z	0.71	0.71	0.71	0.71
wafer	0.99	0.99	0.99	1.00
WordsSynonyms	0.65	0.65	0.65	0.65
yoga	0.83	0.83	0.83	0.83
NonInvasiveFatalECG_Thorax1	0.87	0.87	0.87	0.87
NonInvasiveFatalECG_Thorax2	0.88	0.88	0.88	0.88

Table 3: Accuracy values for the Rel.Class method using the Gaussian Naive Bayes box method and various reliability parameter values (tau) set to 0.08, 0.1, 0.5, 0.9.

Dataset	$tau = 0.001$	$tau = 0.002$	$tau = 0.004$	$tau = 0.006$
50words	0.64	0.64	0.65	0.65
Adiac	0.63	0.63	0.63	0.64
Beef	0.4	0.4	0.4	0.43
CBF	0.35	0.36	0.36	0.36
ChlorineConcentration	0.82	0.82	0.82	0.82
CinC_ECG_torso	0.8	0.81	0.81	0.82
Coffee	0.71	0.79	0.82	0.82
Cricket_X	0.6	0.6	0.61	0.61
Cricket_Y	0.64	0.65	0.66	0.65
Cricket_Z	0.66	0.66	0.66	0.66
DiatomSizeReduction	0.94	0.94	0.94	0.94
ECG200	0.84	0.85	0.85	0.85
ECGFiveDays	0.57	0.57	0.57	0.57
FaceAll	0.69	0.69	0.69	0.69
FaceFour	0.86	0.85	0.85	0.85
FacesUCR	0.76	0.76	0.76	0.76
fh	0.79	0.79	0.79	0.80
Gun_Point	0.91	0.91	0.91	0.91
Haptics	0.3	0.31	0.32	0.32
InlineSkate	0.25	0.25	0.25	0.25
ItalyPowerDemand	0.68	0.69	0.69	0.70
Lighting2	0.59	0.59	0.57	0.57
Lighting7	0.66	0.67	0.67	0.67
MALLAT	0.43	0.47	0.53	0.56
MedicalImages	0.64	0.65	0.65	0.65
MoteStrain	0.85	0.85	0.85	0.85
OliveOil	0.43	0.43	0.57	0.57
OSULeaf	0.5	0.5	0.49	0.49
SonyAIBORobotSurface	0.79	0.79	0.79	0.79
SonyAIBORobotSurfaceII	0.87	0.87	0.87	0.87
StarLightCurves	0.95	0.95	0.95	0.95
SwedhLeaf	0.84	0.84	0.83	0.83
Symbols	0.46	0.49	0.49	0.50
synthetic_control	0.76	0.79	0.83	0.85
Trace	0.83	0.84	0.84	0.85
TwoLeadECG	0.93	0.93	0.93	0.93
Two_Patterns	0.68	0.68	0.68	0.68
uWaveGestureLibrary_X	0.75	0.75	0.75	0.75
uWaveGestureLibrary_Y	0.57	0.59	0.61	0.62
uWaveGestureLibrary_Z	0.7	0.7	0.71	0.71
wafer	0.93	0.93	0.94	0.94
WordsSynonyms	0.65	0.65	0.65	0.65
yoga	0.82	0.82	0.82	0.82
NonInvasiveFatalECG_Thorax1	0.87	0.87	0.87	0.87
NonInvasiveFatalECG_Thorax2	0.88	0.88	0.88	0.88

Table 4: Accuracy values for the Rel.Class method using the Naive Gaussian Quadratic set method and various reliability parameter values (tau) set to 0.001, 0.002, 0.004, 0.006.

Dataset	$tau = 0.008$	$tau = 0.02$	$tau = 0.04$	$tau = 0.06$
50words	0.65	0.65	0.65	0.65
Adiac	0.64	0.64	0.64	0.63
Beef	0.43	0.37	0.37	0.33
CBF	0.36	0.37	0.38	0.39
ChlorineConcentration	0.82	0.82	0.82	0.82
CinC_ECG_torso	0.82	0.83	0.84	0.84
Coffee	0.82	0.89	0.89	0.89
Cricket_X	0.61	0.62	0.62	0.62
Cricket_Y	0.66	0.67	0.67	0.68
Cricket_Z	0.66	0.66	0.66	0.66
DiatomSizeReduction	0.94	0.94	0.94	0.94
ECG200	0.85	0.89	0.89	0.89
ECGFiveDays	0.57	0.51	0.50	0.50
FaceAll	0.69	0.69	0.69	0.69
FaceFour	0.84	0.84	0.83	0.82
FacesUCR	0.76	0.77	0.76	0.76
fh	0.80	0.80	0.80	0.80
Gun_Point	0.91	0.91	0.91	0.91
Haptics	0.33	0.37	0.39	0.40
InlineSkate	0.25	0.25	0.26	0.27
ItalyPowerDemand	0.71	0.73	0.75	0.77
Lighting2	0.56	0.64	0.70	0.62
Lighting7	0.67	0.67	0.70	0.70
MALLAT	0.58	0.63	0.66	0.66
MedicalImages	0.65	0.66	0.66	0.66
MoteStrain	0.85	0.85	0.86	0.86
OliveOil	0.73	0.80	0.77	0.80
OSULeaf	0.49	0.49	0.49	0.49
SonyAIBORobotSurface	0.79	0.78	0.77	0.78
SonyAIBORobotSurfaceII	0.87	0.87	0.87	0.87
StarLightCurves	0.95	0.95	0.95	0.95
SwedhLeaf	0.83	0.83	0.83	0.84
Symbols	0.5	0.53	0.61	0.63
synthetic_control	0.87	0.89	0.91	0.93
Trace	0.85	0.85	0.85	0.85
TwoLeadECG	0.93	0.93	0.93	0.93
Two_Patterns	0.68	0.68	0.68	0.68
uWaveGestureLibrary_X	0.75	0.75	0.75	0.75
uWaveGestureLibrary_Y	0.63	0.64	0.65	0.66
uWaveGestureLibrary_Z	0.71	0.71	0.71	0.71
wafer	0.95	0.97	0.98	0.98
WordsSynonyms	0.65	0.65	0.65	0.65
yoga	0.82	0.82	0.83	0.83
NonInvasiveFatalECG_Thorax1	0.87	0.87	0.87	0.87
NonInvasiveFatalECG_Thorax2	0.88	0.88	0.88	0.88

Table 5: Accuracy values for the Rel.Class method using the Naive Gaussian Quadratic set and various reliability parameter values (tau) set to 0.008 0.02, 0.04, 0.06.

Dataset	$tau = 0.08$	$tau = 0.1$	$tau = 0.5$	$tau = 0.9$
50words	0.65	0.65	0.65	0.65
Adiac	0.63	0.63	0.64	0.64
Beef	0.4	0.4	0.6	0.67
CBF	0.41	0.42	0.75	0.86
ChlorineConcentration	0.82	0.82	0.82	0.82
CinC_ECG_torso	0.84	0.84	0.85	0.85
Coffee	0.89	0.89	0.89	0.89
Cricket_X	0.62	0.62	0.61	0.61
Cricket_Y	0.68	0.68	0.68	0.68
Cricket_Z	0.66	0.66	0.66	0.66
DiatomSizeReduction	0.94	0.94	0.94	0.94
ECG200	0.89	0.89	0.89	0.89
ECGFiveDays	0.5	0.51	0.69	0.77
FaceAll	0.69	0.69	0.69	0.69
FaceFour	0.82	0.82	0.82	0.85
FacesUCR	0.77	0.77	0.77	0.77
fh	0.8	0.8	0.79	0.79
Gun_Point	0.91	0.91	0.91	0.91
Haptics	0.39	0.41	0.41	0.40
InlineSkate	0.27	0.27	0.28	0.27
ItalyPowerDemand	0.78	0.79	0.92	0.95
Lighting2	0.62	0.62	0.66	0.70
Lighting7	0.7	0.7	0.7	0.68
MALLAT	0.67	0.67	0.73	0.78
MedicalImages	0.66	0.66	0.67	0.67
MoteStrain	0.86	0.86	0.86	0.86
OliveOil	0.77	0.77	0.77	0.83
OSULeaf	0.49	0.49	0.49	0.48
SonyAIBORobotSurface	0.78	0.77	0.77	0.78
SonyAIBORobotSurfaceII	0.87	0.87	0.88	0.87
StarLightCurves	0.95	0.95	0.95	0.95
SwedhLeaf	0.84	0.84	0.83	0.83
Symbols	0.65	0.66	0.72	0.77
synthetic_control	0.94	0.95	0.98	0.98
Trace	0.85	0.85	0.86	0.86
TwoLeadECG	0.93	0.93	0.93	0.93
Two_Patterns	0.68	0.68	0.68	0.68
uWaveGestureLibrary_X	0.75	0.75	0.75	0.75
uWaveGestureLibrary_Y	0.66	0.67	0.68	0.68
uWaveGestureLibrary_Z	0.71	0.71	0.71	0.71
wafer	0.99	0.99	0.99	0.99
WordsSynonyms	0.65	0.65	0.65	0.65
yoga	0.83	0.83	0.83	0.83
NonInvasiveFatalECG_Thorax1	0.87	0.87	0.87	0.87
NonInvasiveFatalECG_Thorax2	0.88	0.88	0.88	0.88

Table 6: Accuracy values for the Rel.Class method using the Naive Gaussian Quadratic set and various reliability parameter values (tau) set to 0.08, 0.1, 0.5, 0.9.

Dataset	$tau = 0.001$	$tau = 0.002$	$tau = 0.004$	$tau = 0.006$
50words	84.95	85.96	86.84	87.26
Adiac	91.2	91.81	92.63	92.95
Beef	0.21	0.21	0.21	0.35
CBF	0.8	0.81	0.82	0.84
ChlorineConcentration	96.02	96.2	96.39	96.5
CinC_ECG_torso	45.96	46.8	47.94	48.55
Coffee	5.53	6.68	9.4	15.17
Cricket_X	62.71	64.85	67.05	68.28
Cricket_Y	67.9	69.78	71.26	72.43
Cricket_Z	72.05	73.02	74.07	74.59
DiatomSizeReduction	25.35	27.27	28.12	28.64
ECG200	41.71	43.88	48.53	50.57
ECGFiveDays	0.74	0.74	0.74	0.74
FaceAll	92.33	92.84	93.29	93.58
FaceFour	24.58	25.69	26.44	27.06
FacesUCR	82.89	83.98	85.11	85.79
fh	75.39	76.16	77.34	77.96
Gun_Point	62.14	62.77	63.89	64.36
Haptics	2.12	3.7	7.74	11.00
InlineSkate	72.41	74.15	76.13	76.93
ItalyPowerDemand	5.09	5.92	7.72	9.07
Lighting2	37.91	40.38	43.13	45.25
Lighting7	76.65	77.3	78.19	79.22
MALLAT	13.97	16.12	18.48	20.14
MedicalImages	75.04	76.97	78.69	79.73
MoteStrain	82.72	45.91	47.56	48.51
OliveOil	0.33	0.48	1.75	3.97
OSULeaf	93.58	94.08	94.55	94.79
SonyAIBORobotSurface	36.51	35.96	38.43	39.43
SonyAIBORobotSurfaceII	50.97	51.71	53.83	55.04
StarLightCurves	85.08	85.61	86.17	86.49
SwedhLeaf	84.96	85.78	86.53	86.97
Symbols	10.08	16.16	18.99	20.8
synthetic_control	37.66	41.86	45.77	48.11
Trace	49.98	51.83	55.37	57.69
TwoLeadECG	73.63	87.39	87.91	88.23
Two_Patterns	86.87	74.57	75.51	76.18
uWaveGestureLibrary_X	78.92	80.31	81.67	82.47
uWaveGestureLibrary_Y	56.14	59.85	63.31	65.19
uWaveGestureLibrary_Z	77.26	79.34	81.25	82.40
wafer	12.65	14.46	16.56	17.44
WordsSynonyms	85.48	86.17	86.75	87.15
yoga	78.67	79.55	80.51	81.05
NonInvasiveFatalECG_Thorax1	89.39	89.79	90.21	90.47
NonInvasiveFatalECG_Thorax2	86.97	87.5	88.04	88.36

Table 7: Earliness values for the Rel.Class method using the Gaussian Naive Bayes box method and various reliability parameter values (tau) set to 0.001, 0.002, 0.004, 0.006.

Dataset	$tau = 0.008$	$tau = 0.02$	$tau = 0.04$	$tau = 0.06$
50words	87.63	88.75	89.59	90.11
Adiac	93.3	94.17	94.58	95.06
Beef	0.4	0.6	0.64	1.57
CBF	0.87	1.05	1.57	2.47
ChlorineConcentration	96.58	96.83	97.01	97.13
CinC_ECG_torso	48.97	50.6	52.04	52.95
Coffee	18.68	25.01	26.85	28.52
Cricket_X	69.06	71.61	73.4	74.65
Cricket_Y	73.2	75.82	77.53	78.66
Cricket_Z	74.95	76.24	77.18	77.7
DiatomSizeReduction	29.06	30.38	31.37	31.88
ECG200	51.59	55.77	59.21	61.6
ECGFiveDays	0.74	0.81	0.85	0.88
FaceAll	93.76	94.39	94.88	95.16
FaceFour	27.37	28.71	29.77	30.73
FacesUCR	86.29	87.83	89.09	89.86
fh	78.36	80.08	81.36	82.09
Gun_Point	64.9	66.47	67.78	68.67
Haptics	13.15	23.82	32.3	36.99
InlineSkate	77.87	80.22	82.3	83.68
ItalyPowerDemand	10.09	15.57	20.96	23.97
Lighting2	46.62	52.61	54.65	55.63
Lighting7	79.61	80.75	81.72	82.4
MALLAT	21.66	26.14	30.02	32.84
MedicalImages	80.4	82.54	84.35	85.42
MoteStrain	49.33	52.28	54.93	56.6
OliveOil	5.15	7.13	8.86	9.99
OSULeaf	94.93	95.46	95.91	96.14
SonyAIBORobotSurface	40.48	44	46.51	48.31
SonyAIBORobotSurfaceII	55.9	59.1	61.76	63.38
StarLightCurves	86.67	87.42	88.06	88.46
SwedhLeaf	87.33	88.45	89.25	89.79
Symbols	22.37	27.25	31.79	34.44
synthetic_control	49.82	55.64	60.28	63.13
Trace	58	62.69	65.37	67.62
TwoLeadECG	88.46	139.26	140.24	140.84
Two_Patterns	76.59	50.02	50.72	51.22
uWaveGestureLibrary_X	83.05	84.82	86.14	86.97
uWaveGestureLibrary_Y	66.54	70.91	73.88	75.62
uWaveGestureLibrary_Z	83.18	85.39	87.13	88.10
wafer	18.2	20.66	22.66	23.70
WordsSynonyms	87.48	88.42	89.16	89.61
yoga	81.53	83.01	84.15	84.80
NonInvasiveFatalECG_Thorax1	90.65	91.27	91.81	92.11
NonInvasiveFatalECG_Thorax2	88.6	89.42	90.1	90.52

Table 8: Earliness values for the Rel.Class method using the Gaussian Naive Bayes box method and various reliability parameter values (tau) set to 0.008 0.02, 0.04, 0.06.

Dataset	$tau = 0.08$	$tau = 0.1$	$tau = 0.5$	$tau = 0.9$
50words	90.5	90.79	92.2	95.45
Adiac	95.26	95.41	96.04	98.03
Beef	5.91	7.3	25.7	71.97
CBF	3.98	6.71	23.08	52.02
ChlorineConcentration	97.21	97.29	97.59	98.32
CinC_ECG_torso	53.56	54.12	56.58	64.62
Coffee	30.27	30.96	38.44	63.72
Cricket_X	75.41	76.01	78.68	84.86
Cricket_Y	79.4	79.99	82.36	87.90
Cricket_Z	78.31	78.57	80.36	84.60
DiatomSizeReduction	32.33	31.64	33.49	40.59
ECG200	62.61	63.7	68.81	84.77
ECGFiveDays	1.1	1.63	15.84	73.24
FaceAll	95.36	95.54	96.27	97.92
FaceFour	31.42	31.25	34.22	45.14
FacesUCR	90.37	90.8	92.71	96.65
fh	82.74	83.34	85.42	90.51
Gun_Point	69.11	69.42	71.33	79.67
Haptics	40.21	43.45	57.89	78.91
InlineSkate	84.54	85.1	87.31	92.70
ItalyPowerDemand	25.59	27.1	35.92	64.19
Lighting2	56.35	57.89	61.16	71.89
Lighting7	83.35	83.74	85.23	89.72
MALLAT	34.49	35.92	44.01	67.43
MedicalImages	86.11	86.64	88.96	93.78
MoteStrain	57.9	89.36	90.94	95.49
OliveOil	11.22	12.09	18.76	43.18
OSULeaf	96.32	96.44	97.1	98.48
SonyAIBORobotSurface	49.43	53.54	57.7	76.59
SonyAIBORobotSurfaceII	64.64	66.97	70.86	80.31
StarLightCurves	88.73	88.86	90.02	93.59
SwedhLeaf	90.27	90.57	91.96	95.44
Symbols	36.53	38.18	45.82	61.85
synthetic_control	64.44	65.83	71.54	85.11
Trace	70.33	71.31	77.82	86.32
TwoLeadECG	141.28	81.4	83.63	89.57
Two_Patterns	51.61	90.72	91.82	94.80
uWaveGestureLibrary_X	87.55	88.04	90.09	94.90
uWaveGestureLibrary_Y	76.85	77.86	81.96	90.58
uWaveGestureLibrary_Z	88.84	89.46	91.8	96.39
wafer	24.65	25.48	30.75	49.60
WordsSynonyms	89.91	90.19	91.40	94.60
yoga	85.28	85.62	87.28	91.65
NonInvasiveFatalECG_Thorax1	92.41	92.59	93.47	95.95
NonInvasiveFatalECG_Thorax2	90.81	91.06	92.16	95.33

Table 9: Accuracy values for the Rel.Class method using the Gaussian Naive Bayes box method and various reliability parameter values (tau) set to 0.08, 0.1, 0.5, 0.9.

Dataset	$tau = 0.001$	$tau = 0.002$	$tau = 0.004$	$tau = 0.006$
50words	79.86	80.92	82.12	82.69
Adiac	90.69	91.31	91.87	92.19
Beef	0.21	0.21	0.21	0.36
CBF	0.8	0.81	0.82	0.83
ChlorineConcentration	95.32	95.55	95.77	95.89
CinC_ECG_torso	45.83	46.58	47.36	47.93
Coffee	5.11	6.54	7.67	12.04
Cricket_X	59.08	61.56	64.07	65.32
Cricket_Y	64.54	66.69	69.15	70.17
Cricket_Z	71.33	72.68	73.73	74.34
DiatomSizeReduction	32.55	33.34	33.88	34.28
ECG200	32.05	33.43	35.96	37.82
ECGFiveDays	0.74	0.74	0.74	0.74
FaceAll	86.81	87.44	88.09	88.42
FaceFour	24.8	25.08	25.9	26.46
FacesUCR	77.09	78.36	79.62	80.33
fh	70	70.81	71.71	72.21
Gun_Point	65.77	66.46	67.09	67.52
Haptics	1.13	2.37	4.1	6.56
InlineSkate	69.62	71.88	73.73	74.65
ItalyPowerDemand	5.24	6.21	8.32	9.53
Lighting2	21.72	31.27	35.07	36.27
Lighting7	72.92	73.27	74.11	74.66
MALLAT	12.77	14.47	16.35	17.58
MedicalImages	67.68	69.73	71.69	72.78
MoteStrain	46.08	47.62	48.88	49.87
OliveOil	0.32	0.42	1.07	1.11
OSULeaf	90.76	91.35	92.04	92.47
SonyAIBORobotSurface	53.76	55.86	57.76	59.07
SonyAIBORobotSurfaceII	53	54.76	56.5	57.8
StarLightCurves	88.61	89.12	89.58	89.86
SwedhLeaf	80.83	81.8	82.78	83.32
Symbols	10.56	14.21	16.69	18.19
synthetic_control	26.62	31.12	36.02	39.04
Trace	57.23	59.45	64.79	66.83
TwoLeadECG	84.65	85.24	85.87	86.19
Two_Patterns	72.53	73.51	74.5	75.09
uWaveGestureLibrary_X	72.93	74.96	77.06	78.31
uWaveGestureLibrary_Y	48.61	53.37	57.06	59.25
uWaveGestureLibrary_Z	70.19	73.02	75.75	77.47
wafer	11.94	13.91	15.74	16.40
WordsSynonyms	82.15	82.94	83.59	83.95
yoga	78.41	79.24	80.12	80.58
NonInvasiveFatalECG_Thorax1	85.98	86.4	86.84	87.13
NonInvasiveFatalECG_Thorax2	82.59	83.22	83.85	84.23

Table 10: Earliness values for the Rel.Class method using the Naive Gaussian Quadratic set method and various reliability parameter values (tau) set to 0.001, 0.002, 0.004, 0.006.

Dataset	$tau = 0.008$	$tau = 0.02$	$tau = 0.04$	$tau = 0.06$
50words	83.11	84.26	85.19	85.86
Adiac	92.37	93.1	93.55	93.88
Beef	0.4	0.6	0.6	1.67
CBF	0.84	0.91	1.28	1.63
ChlorineConcentration	95.98	96.23	96.44	96.56
CinC_ECG_torso	48.39	49.72	50.9	51.43
Coffee	15.02	22.45	25.5	27.50
Cricket_X	66.13	69.2	71.36	72.38
Cricket_Y	71.14	73.58	75.74	77.16
Cricket_Z	74.78	76.31	77.49	78.00
DiatomSizeReduction	34.59	35.59	36.43	37.09
ECG200	38.89	45.49	47.32	48.46
ECGFiveDays	0.74	0.81	0.85	0.88
FaceAll	88.66	89.52	90.19	90.59
FaceFour	26.65	27.77	29.21	29.88
FacesUCR	80.88	82.63	83.88	84.65
fh	72.47	73.6	74.84	75.59
Gun_Point	67.9	69.63	70.36	70.99
Haptics	8.82	18.35	27.14	32.36
InlineSkate	75.38	77.71	79.56	80.62
ItalyPowerDemand	10.79	16.56	21.85	24.55
Lighting2	39.61	45.16	48.38	50.67
Lighting7	75.01	76.22	77.04	77.86
MALLAT	18.52	22.24	25.28	27.03
MedicalImages	73.78	76.28	78.2	79.38
MoteStrain	50.31	52.67	54.59	55.96
OliveOil	3.4	5.78	7.67	8.51
OSULeaf	92.67	93.36	93.78	94.20
SonyAIBORobotSurface	59.91	63.63	65.8	67.33
SonyAIBORobotSurfaceII	58.69	61.47	63.72	65.13
StarLightCurves	90.04	90.68	91.16	91.49
SwedhLeaf	83.69	84.76	85.67	86.31
Symbols	19.35	23.39	27.18	29.80
synthetic_control	41.3	46.72	52.24	55.20
Trace	68.15	70.96	72.13	73.12
TwoLeadECG	86.47	136.26	137.27	137.88
Two_Patterns	75.48	49.25	49.92	50.34
uWaveGestureLibrary_X	79.02	81.28	82.81	83.66
uWaveGestureLibrary_Y	60.76	65.27	68.79	70.94
uWaveGestureLibrary_Z	78.43	81.52	83.6	84.71
wafer	16.92	19.15	21.1	22.19
WordsSynonyms	84.26	85.24	86.03	86.47
yoga	80.94	82.06	83.03	83.66
NonInvasiveFatalECG_Thorax1	87.35	87.98	88.48	88.83
NonInvasiveFatalECG_Thorax2	84.53	85.39	86.02	86.42

Table 11: Earliness values for the Rel.Class method using the Naive Gaussian Quadratic set method and various reliability parameter values (tau) set to 0.008 0.02, 0.04, 0.06.

Dataset	$tau = 0.08$	$tau = 0.1$	$tau = 0.5$	$tau = 0.9$
50words	86.34	86.65	89.57	91.69
Adiac	94.04	94.19	95.71	96.78
Beef	1.7	1.28	52.6	70.97
CBF	2.4	3.58	31.96	48.62
ChlorineConcentration	96.64	96.71	97.31	97.72
CinC_ECG_torso	51.93	52.34	56.35	59.56
Coffee	28.97	29.65	40.33	56.58
Cricket_X	73.24	74	79.9	83.28
Cricket_Y	77.95	78.5	83.33	86.15
Cricket_Z	78.47	78.81	81.84	84.12
DiatomSizeReduction	37.5	37.83	41.18	44.62
ECG200	50.92	52.97	63.93	70.99
ECGFiveDays	1.1	1.63	51.6	73.24
FaceAll	90.89	91.15	93.39	94.87
FaceFour	30.41	30.84	34.5	38.68
FacesUCR	85.2	85.69	89.7	92.62
fh	76	76.3	80.72	83.84
Gun_Point	71.31	71.61	75.16	78.94
Haptics	35.81	38.26	63.69	75.47
InlineSkate	81.49	81.95	87.52	90.29
ItalyPowerDemand	26.49	28.27	50.1	64.97
Lighting2	51.19	51.78	60.27	65.90
Lighting7	78.44	78.75	82.63	84.75
MALLAT	28.67	29.81	44.22	58.14
MedicalImages	80.18	80.85	86.61	90.07
MoteStrain	57.11	58.12	65.68	72.28
OliveOil	9.1	9.45	20.3	35.96
OSULeaf	94.43	94.64	96.31	97.37
SonyAIBORobotSurface	68.02	68.75	77.19	83.59
SonyAIBORobotSurfaceII	66.02	66.8	73.18	77.43
StarLightCurves	91.69	91.88	93.51	94.55
SwedhLeaf	86.65	87.09	90.08	92.34
Symbols	31.79	33.5	47.67	56.93
synthetic_control	57.09	58.81	69.79	78.01
Trace	74.44	75.53	82.09	85.10
TwoLeadECG	138.3	88.83	90.86	92.34
Two_Patterns	50.71	79.55	83.24	86.16
uWaveGestureLibrary_X	84.25	84.75	89	91.95
uWaveGestureLibrary_Y	72.36	73.48	82.07	87.02
uWaveGestureLibrary_Z	85.55	86.21	91.29	94.18
wafer	22.99	23.67	28.27	33.49
WordsSynonyms	86.86	87.13	89.61	91.39
yoga	84.09	84.42	87.3	89.22
NonInvasiveFatalECG_Thorax1	89.06	89.23	90.88	92.35
NonInvasiveFatalECG_Thorax2	86.75	87.04	89.39	91.35

Table 12: Accuracy values for the Rel.Class method using the Naive Gaussian Quadratic set method and various reliability parameter values (tau) set to 0.08, 0.1, 0.5, 0.9.