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# **Raw results for the state-of-the-art methods used for comparison in the paper titled “Early classification of time series from a cost minimization point of view”.**

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In this document, we provide the raw results for earliness and accuracy for the methods introduced for comparison purposes in the paper. These methods are two variants of the ECTS method, the strict (ECTS1) and the loose (ECTS2) version, the Early Distinctive Shapelet Classification (EDSC) method and the Reliable Early Classification method with the reliability threshold  $\tau$  set to four different values: 0.001, 0.1, 0.5 and 0.9 (Rel.Class.1,2,3 and 4, respectively from now on).

Table 1: Accuracy values for EDSC, strict and loose versions of the ECTS, Rel.Class. with 4 parameter settings and the full INN method.

Dataset	EDSC	ECTS1	ECTS2	Rel.Class.1	Rel.Class.2	Rel.Class.3	Rel.Class.4	INN
50words	0.42	0.58	0.57	0.65	0.65	0.66	0.66	0.61
Adiac	0.13	0.61	0.40	0.62	0.63	0.63	0.64	0.61
Beef	0.20	0.53	0.50	0.40	0.40	0.57	0.67	0.53
CBF	0.88	0.85	0.85	0.35	0.46	0.64	0.87	0.85
ChlorineConcentration	0.53	0.62	0.62	0.82	0.82	0.82	0.82	0.65
CinC_ECG_torso	0.56	0.87	0.87	0.80	0.84	0.85	0.86	0.90
Coffee	0.39	0.79	0.75	0.71	0.89	0.89	0.89	0.75
Cricket_X	0.46	0.57	0.56	0.60	0.62	0.61	0.61	0.57
Cricket_Y	0.55	0.63	0.63	0.65	0.68	0.68	0.68	0.64
Cricket_Z	0.43	0.59	0.59	0.66	0.66	0.66	0.66	0.62
DiatomSizeReduction	0.85	0.80	0.80	0.94	0.94	0.94	0.94	0.93
ECG200	0.82	0.89	0.89	0.88	0.89	0.89	0.89	0.88
ECGFiveDays	0.76	0.62	0.62	0.57	0.51	0.52	0.77	0.80
FaceAll	0.67	0.74	0.76	0.69	0.69	0.69	0.69	0.71
FaceFour	0.78	0.77	0.82	0.84	0.83	0.83	0.86	0.78
FacesUCR	0.68	0.72	0.71	0.76	0.76	0.77	0.77	0.77
fh	0.62	0.75	0.75	0.80	0.79	0.79	0.79	0.78
Gun_Point	0.95	0.87	0.87	0.91	0.91	0.91	0.91	0.91
Haptics	0.34	0.37	0.37	0.30	0.41	0.41	0.40	0.37
InlineSkate	0.21	0.33	0.33	0.25	0.28	0.27	0.27	0.34
ItalyPowerDemand	0.87	0.94	0.94	0.67	0.79	0.85	0.95	0.96
Lighting2	0.79	0.70	0.70	0.62	0.64	0.62	0.67	0.75
Lighting7	0.62	0.58	0.58	0.70	0.68	0.68	0.67	0.58
MALLAT	0.64	0.85	0.85	0.44	0.70	0.73	0.80	0.91
MedicalImages	0.64	0.68	0.68	0.65	0.67	0.67	0.68	0.68
MoteStrain	0.80	0.88	0.88	0.58	0.58	0.58	0.58	0.88
OliveOil	0.77	0.90	0.90	0.43	0.80	0.77	0.83	0.87
OSULeaf	0.59	0.49	0.49	0.49	0.49	0.48	0.48	0.52
SonyAIBORobotSurface	0.74	0.69	0.69	0.81	0.79	0.79	0.78	0.70
SonyAIBORobotSurfaceII	0.83	0.84	0.85	0.87	0.88	0.88	0.88	0.86
StarLightCurves	-	0.85	0.15	0.94	0.95	0.95	0.95	0.85
SwedhLeaf	0.39	0.79	0.78	0.84	0.83	0.83	0.83	0.79
Symbols	0.44	0.83	0.81	0.47	0.67	0.71	0.79	0.90
synthetic.control	0.88	0.89	0.88	0.84	0.97	0.98	0.98	0.88
Trace	0.84	0.74	0.74	0.76	0.84	0.86	0.86	0.76
TwoLeadECG	0.84	0.73	0.73	0.73	0.72	0.72	0.72	0.75
Two_Patterns	0.81	0.86	0.86	0.93	0.93	0.93	0.93	0.91
uWaveGestureLibrary_X	0.37	0.73	0.73	0.75	0.75	0.75	0.75	0.74
uWaveGestureLibrary_Y	0.31	0.63	0.63	0.60	0.67	0.68	0.68	0.66
uWaveGestureLibrary_Z	0.42	0.65	0.65	0.71	0.71	0.71	0.71	0.65
wafer	0.98	0.99	0.99	0.97	0.99	0.99	1.00	1.00
WordsSynonyms	0.42	0.59	0.59	0.64	0.65	0.65	0.65	0.62
yoga	0.68	0.81	0.81	0.82	0.83	0.83	0.83	0.83
NonInvasiveFatalECG_Thorax1	-	0.82	0.81	0.87	0.87	0.87	0.87	0.83
NonInvasiveFatalECG_Thorax2	-	0.88	0.88	0.88	0.88	0.88	0.88	0.88

Table 2: Earliness values for EDSC, strict and loose versions of the ECTS and the Rel.Class. with 4 parameter settings.

Dataset	EDSC	ECTS1	ECTS2	RelClass.1	Rel.Class.2	Rel.Class.3	Rel.Class.4
50words	70.14	77.10	72.86	84.95	90.79	92.20	95.45
Adiac	87.94	64.05	59.09	91.20	95.41	96.04	98.03
Beef	91.94	77.67	76.50	00.21	07.30	25.70	71.97
CBF	35.03	71.50	71.50	00.80	06.71	23.08	52.02
ChlorineConcentration	42.67	67.01	66.07	96.02	97.29	97.59	98.32
CinC_ECG_torso	51.81	59.91	00.58	45.96	54.12	56.58	64.62
Coffee	58.38	84.93	83.94	05.53	30.96	38.44	63.72
Cricket_X	62.17	73.26	71.80	62.71	76.01	78.68	84.86
Cricket_Y	55.55	67.47	66.49	67.90	79.99	82.36	87.90
Cricket_Z	67.24	69.21	67.86	72.05	78.57	80.36	84.60
DiatomSizeReduction	23.56	14.88	14.88	25.35	31.64	33.49	40.59
ECG200	25.81	77.13	60.11	41.71	63.70	68.81	84.77
ECGFiveDays	50.95	63.82	63.82	00.74	01.63	15.84	73.24
FaceAll	42.44	68.25	63.85	92.33	95.54	96.27	97.92
FaceFour	40.62	89.51	72.26	24.58	31.25	34.22	45.14
FacesUCR	64.33	89.24	87.21	82.89	90.80	92.71	96.65
fh	54.46	65.81	60.94	75.39	83.34	85.42	90.51
Gun_Point	46.20	46.92	46.92	62.14	69.42	71.33	79.67
Haptics	28.07	93.90	93.87	02.12	43.45	57.89	78.91
InlineSkate	50.02	86.42	85.08	72.41	85.10	87.31	92.70
ItalyPowerDemand	75.99	79.33	79.33	05.09	27.10	35.92	64.19
Lighting2	63.97	89.01	89.01	37.91	57.89	61.16	71.89
Lighting7	81.65	86.98	86.97	76.65	83.74	85.23	89.72
MALLAT	58.58	69.32	69.32	13.97	35.92	44.01	67.43
MedicalImages	45.64	54.85	53.87	75.04	86.64	88.96	93.78
MoteStrain	41.42	84.86	79.06	82.72	89.36	90.94	95.49
OliveOil	37.45	87.34	87.34	00.33	12.09	18.76	43.18
OSULeaf	65.33	78.20	76.59	93.58	96.44	97.10	98.48
SonyAIBORobotSurface	37.91	68.49	68.49	36.51	53.54	57.70	76.59
SonyAIBORobotSurfaceII	35.17	55.81	54.54	50.97	66.97	70.86	80.31
StarLightCurves	-	82.83	82.25	85.08	88.86	90.02	93.59
SwedhLeaf	68.92	77.63	76.27	84.96	90.57	91.96	95.44
Symbols	78.17	46.23	51.30	10.08	38.18	45.82	61.85
synthetic_control	55.60	89.97	87.88	37.66	65.83	71.54	85.11
Trace	44.97	51.98	50.72	49.98	71.31	77.82	86.32
TwoLeadECG	48.49	64.43	64.43	73.63	81.40	83.63	89.57
Two_Patterns	64.32	86.79	86.52	86.87	90.72	91.82	94.80
uWaveGestureLibrary_X	79.60	86.90	85.98	78.92	88.04	90.09	94.90
uWaveGestureLibrary_Y	81.32	86.91	86.29	56.14	77.86	81.96	90.58
uWaveGestureLibrary_Z	76.83	85.98	85.03	77.26	89.46	91.80	96.39
wafer	27.59	44.38	44.38	12.65	25.48	30.75	49.60
WordsSynonyms	77.86	83.40	82.51	85.48	90.19	91.40	94.60
yoga	52.15	70.74	69.41	78.67	85.62	87.28	91.65
NonInvasiveFatalECG_Thorax1	-	81.54	78.22	89.39	92.59	93.47	95.95
NonInvasiveFatalECG_Thorax2	-	79.83	76.84	86.97	91.06	92.16	95.33