

Table 1: Hyper-parameter settings used in the experiments.

Model	Grace period	Ensemble size	Subspaces of features	Drift detector	Background learner
ARF	50	100	$0.6n$	ADWIN	Yes
ARTE	100	100	$\sim \text{Unif}\{2, n\}^1$	ADWIN	No
LB	200	100	$n$	ADWIN	No
SRP	50	100	$0.6n$	ADWIN	Yes

Table 2: Properties of the datasets and respective drifts: Abrupt Drift - A, Gradual Drift - G, Incremental Drift (moderate) -  $I_m$ , Incremental Drift (fast) -  $I_f$ , No Drift - N and Unknown - U.

Dataset	# Instances	# Features	# Classes	Majority Class (%)	Type	Drift
Adult	45,222	14	2	72,21	Real	U
Airlines	539,383	7	2	55,47	Real	U
BankFraud	1,000,000	32	2	98,89	Real	U
Census	299,284	41	2	93,79	Real	U
Coil2000	9,822	86	2	94,03	Real	U
Connect-4	67,557	42	3	65,83	Real	U
CovType	581,012	54	7	48,75	Real	U
Electricity	45,312	8	2	57,41	Real	U
Gassensor	13,910	128	6	21,63	Real	U
GMSC	150,000	10	2	93,31	Real	U
Kddcup99	494,021	41	23	56,83	Real	U
Keystroke	1,600	10	4	25,00	Real	U
Letter	20,000	16	26	4,06	Real	U
NOAA	18,159	8	2	69,74	Real	U
Nomao	34,465	118	2	71,44	Real	U
Outdoor	4,000	21	40	2,50	Real	U
Ozone	2,534	72	2	93,68	Real	U
Poker	829,201	10	10	47,78	Real	U
Rialto	82,250	27	10	10,00	Real	U
Zoo	1,000,000	18	7	39,65	Real	U
AGR	1,000,000	9	2	52,83	Synthetic	N
AGR_a	1,000,000	9	2	52,83	Synthetic	A
AGR_g	1,000,000	9	2	52,83	Synthetic	G
HYPER	1,000,000	10	2	50,00	Synthetic	N
LED	1,000,000	24	10	10,28	Synthetic	N
LED_a	1,000,000	24	10	10,28	Synthetic	A
LED_g	1,000,000	24	10	10,28	Synthetic	G
RBF_f	1,000,000	10	5	30,01	Synthetic	$I_f$
RBF_m	1,000,000	10	5	30,01	Synthetic	$I_m$
RTG	1,000,000	10	2	57,84	Synthetic	N
SEA	1,000,000	3	2	59,91	Synthetic	N
SEA_a	1,000,000	3	2	59,91	Synthetic	A
SEA_g	1,000,000	3	2	59,91	Synthetic	G
SINE	1,000,000	4	3	54,01	Synthetic	N
WAVEFORM	1,000,000	21	3	33,39	Synthetic	N
WAVEFORM_g	1,000,000	40	3	33,39	Synthetic	G