

# XStream-Dynamic Temporary

## 1 Dynamic Evaluation

Window size $\phi$	HST		LODA		XS		XS-1000	
	MAP	OAP	MAP	OAP	MAP	OAP	MAP	OAP
1%	$0.480 \pm 0.178$	0.416	$0.090 \pm 0.028$	0.076	$0.505 \pm 0.138$	0.422	$0.522 \pm 0.153$	0.430
5%	$0.492 \pm 0.179$	0.416	$0.082 \pm 0.014$	0.077	$0.455 \pm 0.135$	0.406	$0.493 \pm 0.134$	0.415
10%	$0.430 \pm 0.024$	0.419	$0.081 \pm 0.010$	0.080	$0.444 \pm 0.037$	0.433	$0.448 \pm 0.037$	0.436
25%	$0.363 \pm 0.024$	0.359	$0.080 \pm 0.001$	0.080	$0.409 \pm 0.009$	0.404	$0.435 \pm 0.013$	0.429

Table 1: Mean average precision (MAP) and overall average precision (OAP) on spam-sms. Window-sizes as a percentage of the entire dataset.

Window size $\phi$	HST		LODA <sup>3</sup>		XS		XS-1000	
	MAP	OAP	MAP	OAP	MAP	OAP	MAP	OAP
1 day	$0.331 \pm 0.055$	0.330	$0.329 \pm 0.059$	0.331	$0.436 \pm 0.083$	0.437	$0.451 \pm 0.106$	0.452
3 days	$0.339 \pm 0.058$	0.329	$0.324 \pm 0.061$	0.345	$0.478 \pm 0.078$	0.479	$0.508 \pm 0.064$	0.509
5 days	$0.336 \pm 0.059$	0.329	$0.325 \pm 0.049$	0.323	$0.472 \pm 0.050$	0.472	$0.493 \pm 0.055$	0.496
7 days <sup>1,2</sup>	–	–	—	—	$0.497 \pm 0.053$	0.502	$0.533 \pm 0.049$	0.530

Table 2: Mean average precision (MAP) and overall average precision (OAP) on ur1. Window sizes as days of incoming URLs, received at 20,000 URLs per-day.

<sup>1</sup> HST exceeds the available memory on a 1 TB machine.

<sup>2</sup> LODA did not complete running after x days.

<sup>3</sup> For 3-day and 5-day, the numbers are incomplete and reported only over 12 and 18 windows.