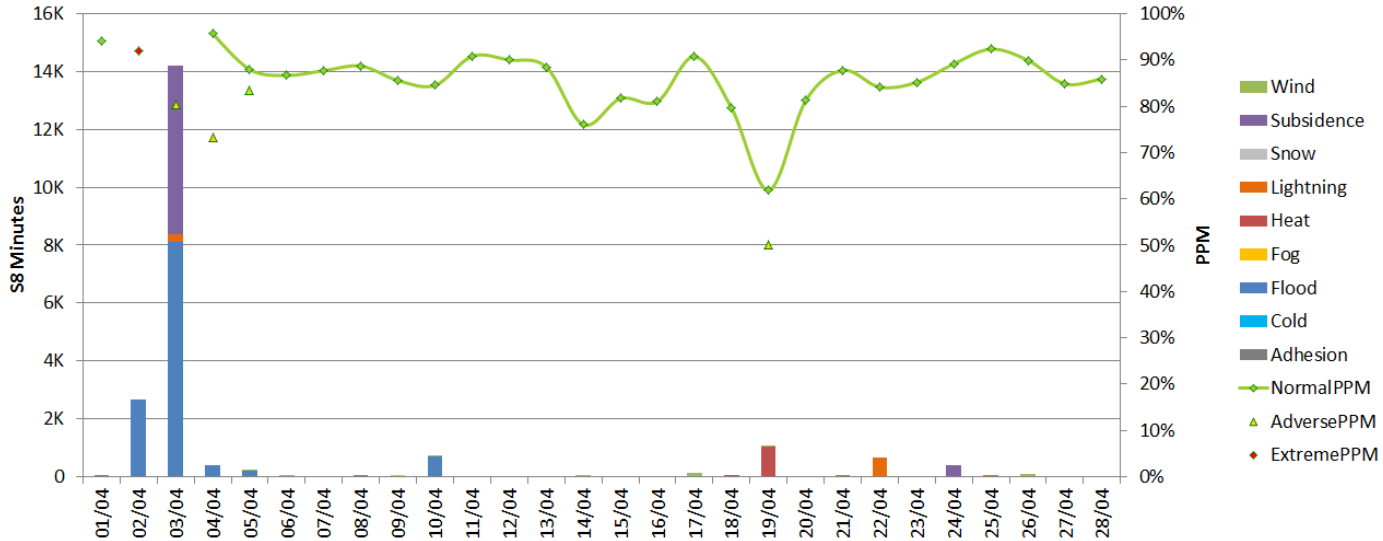


# Weather Resilience and Climate Change Adaptation

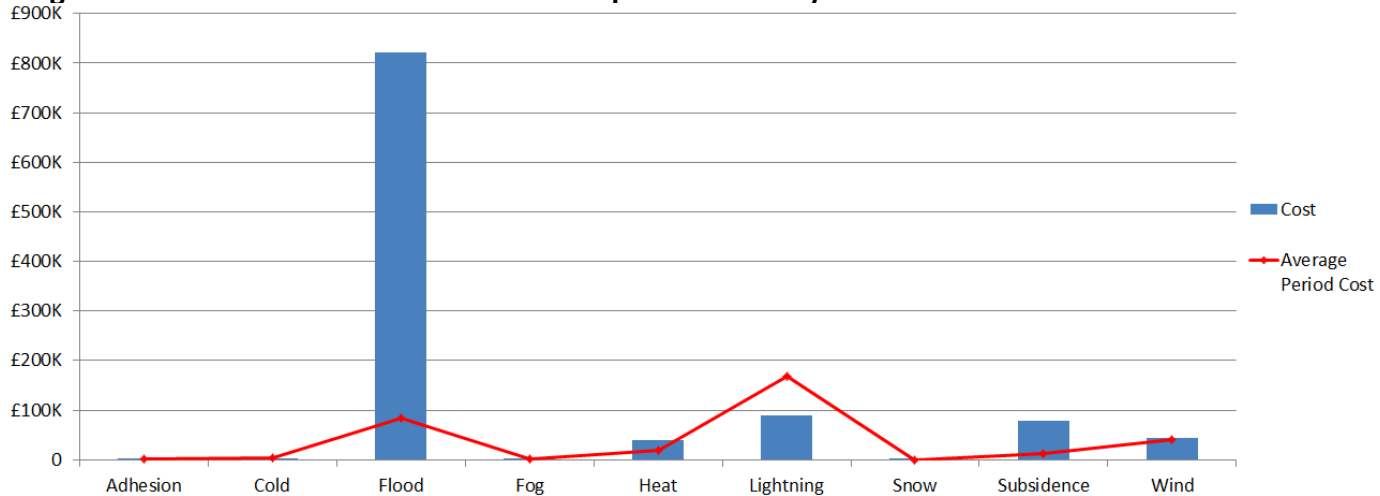
## LNE/EM Route Periodic Performance Report – 2018/2019 P1

Figure 1 provides an overview of the impact of different weather related events by day for period 1 in relation to delay minutes and PPM performance for LNE/EM route. If adverse/extreme conditions were experienced by one or more TOC during a week, a yellow or red dot will indicate the performance of the TOC(s) in question. Weather events don't always cause drops in performance (e.g. extreme rainfall may not flood the railway) and therefore, performance on adverse/extreme days can be higher than expected.

**Figure 1 Weather related PPM and delay minutes for P1 2018**



**Figure 2 Weather related Schedule 8 cost impact for P1 LNE/EM**



Note that this figure relates to Schedule 8 cost and does not include OPEX or other costs.

**Table 1 Top 10 weather related incidents P1**

Date	IncidentDescription	stanoxSection	Route	Weather Category	Delay Minutes	Cost
03/04/2018	SHFTHLJ FLOODING	Temple Hirst Jn. : Shaftholme Jn	LNE	Flood	4416	£527,031.36
22/04/2018	RDT LIGHTNING	St Albans City : West Hampstead Thameslink	EAST MIDLANDS	Lightning	663	£78,072.88
03/04/2018	DON FLOODING	Thorne Jn : 23104	LNE	Flood	2582	£73,137.32
03/04/2018	SHPYSPJ LANDSLIP	Guiseley : Apperley Jn	LNE	Subsidence	5799	£70,822.24
02/04/2018	CEY SEV FLOOD	Skipton : Keighley	LNE	Flood	1027	£52,087.86
03/04/2018	MLY FLOODING	Mirfield : Heaton Lodge Jn	LNE	Flood	947	£46,412.47
02/04/2018	HRS FLOODING	Horsforth	LNE	Flood	557.5	£44,743.21
19/04/2018	FLT BDM 20 ESR CRT	Bedford : Flitwick	EAST MIDLANDS	Heat	331	£25,205.52
17/04/2018	HIT OBJECT ONLINE	Hitchin : Stevenage	LNE	Wind	118	£16,044.83
10/04/2018	SLB FLOODING	Redcar Central	LNE	Flood	385	£10,904.40