

Experiment location	Experiment type	$\Delta t$ (s)	No. lev <sub>a</sub>	Forcing	Sensitivity experiments
PAPA	AOSCM	900	60	6 h ERA-Interim	(i) ASCM, (ii) 3 h ERA-Interim, (iii) nudging of $uv$ with $\tau_a = 1$ h nudging above 3 km, (iv) $uvTq$ with $\tau_a = 6$ h
PIRATA	AOSCM	900	60	3 h ERA-Interim	(i)–(ii) initialised 12 and 15 June instead of 1 June, (iii) nudging above 1 km, $uvTq$ with $\tau_a = 6$ h, (iv) OSCM
Arctic	ASCM	450	137	6 h idealised (ERA-Interim and observations)	(i) AOSCM, (ii)–(iii) $\Delta_t \in \{900, 2700\}$ s, (iv)–(v) no $T$ and $q$ advection