Variables	Frequency	Aggregation	ISUP_MPS1	ISUP_MPS2	ISUP_MPS3	ISUP_MPS4	where, area	Available in SYSTEM or external database	Available as CFS_id in Archive	Available as SREX	Comments
Air temperature	Daily	mean			GSE, NO, Rig, HUG, UEAC	ARAWATER, ARAWATER, ELAUS, ELAUS, ELAUS, ELAUS, MORGOR, ICS	CARYEG, ENKIS	mean2D2	Derived (mean) - maybe (Sh)	No	
Air temperature	Daily	minimum			T1-2TC, C1	ARAWATER, ELAUS, ELAUS, ELAUS, ELAUS, ELAUS, MORGOR, ICS	LAIBIDS	min2D4	Derived (minimum) - sure (Sh)	sporm	
Air temperature	Daily	maximum			m, PM	ARAWATER, ELAUS, ELAUS, ELAUS, ELAUS, ELAUS, MORGOR, ICS	LAIBIDS, ENKIS	max2D3	Derived (maximum) - sure (Sh)	sporm	
Air temperature	Monthly	mean				ICS		Derived (mean) - maybe (Sh)	Derived (mean) - maybe (Sh)	sm	
Precipitation	Daily	mean			GSP, PM	ARAWATER, ELAUS, ELAUS, ELAUS, ELAUS, ELAUS, ELAUS, MORGOR, ICS	LAIBIDS, ICS	tp	Derived (accumulation) - sure (Sh)	pr	Accumulation or flux, which is produced?
Precipitation	Monthly					ICS		Derived (accumulation) - sure (Sh)	Derived (accumulation) - sure (Sh)	pr	
Surface downwelling shortwave flux in air	Daily	mean				GSAB, LFSeal, ELAUS, ELAUS, MORGOR	LAIBIDS, ENKIS, ICS	rsd	Derived (mean) - maybe (Sh)	rsds	
Surface downwelling longwave flux in air	Daily	mean				GSAB, LFSeal, ELAUS, ELAUS		rld	Derived (mean) - maybe (Sh)	rlds	
2-m temperature trend speed (at Ulsta)	Daily	mean					CARYEG, ENKIS	Derived (mean) - 2-m (Sh)	Derived (mean) - 2-m(m/s)2m (Sh)	sen	
2-m temperature trend speed (at Lerwick)	Daily	mean					CARYEG, ENKIS	Derived (mean) - 2m (Sh)	Derived (mean) - 2-m(m/s)2m (Sh)	sen	
Wind speed (at Ulsta)	Daily	mean			PM	ocean, marine, sequoia-heavy, pocoroy		Derived (medians, mean) - 10-m (Sh)	Derived (median, mean) - 2-m(m/s)10m (Sh)	Derived (median, mean) - sen (Sh) - 10-m (Sh)	
Wind speed (at Ulsta)	Daily	maximum				(CLAUS)		Derived (medians, maximum) - 10s (Sh)	Derived (median, maximum) - 2-m(m/s)10m (Sh)	Derived (median, maximum) - sen (Sh) - 10-m (Sh)	
Wind speed (at Ulsta)	Monthly	mean			CPU			Derived (mean) - m, sec, min	Derived (mean) - 2-m(m/s)10m (Sh)	Derived (mean) - sen (Sh) - 10-m (Sh)	
2-m temperature (Ulsta)	Daily	mean					CARYEG, ENKIS	Derived (mean) - s850 (Lib)	Proxy - s850 (Sh)	Proxy - sp850 (zero)	
2-m temperature (Stoke Ainsi)	Daily	mean					CARYEG	Derived (mean) - s850 (Lib)	Derived (mean) - s850 (Sh)	Proxy - sp850 (zero)	
2-m temperature (Lerwick)	Daily	mean					CARYEG	Derived (mean) - s850 (Lib)	Derived (mean) - s850 (Sh)	Proxy - sp850 (zero)	
2-m temperature (Stornoway)	Daily	mean					CARYEG	Derived (mean) - s850 (Lib)	Derived (mean) - s850 (Sh)	No.	
2-m temperature (Kinloss)	Daily	mean					CARYEG	Derived (mean) - s850 (Lib)	Derived (mean) - s850 (Sh)	No.	
Temperature height at Tolsta	Daily	at 12 UTC	X			MORGOR		Proxy - s700 (Lib)	Derived (mean) - s700 (Sh)	No.	
Temperature height at Lerwick	Daily	at 12 UTC	X			MORGOR		Proxy - s1000 (Lib)	Derived (mean) - s1000 (Sh)	No.	
Surface Rainfall	Daily	mean				pocoroy-heavy		sm	Derived (mean) - rainfall (Sh)	No.	
Sea level pressure	Daily	mean					CARYEG	Derived (mean) - slp (Sh)	Proxy - psmsl (Sh)	Derived (mean) psl (Sh)	
Sea ice concentration	Daily	mean			UEAC	JEANPRE		Derived - sic (Sh)	Proxy - sicmon (Sh)	Derived (mean) - sicn (Sh)	
Snow Rainfall	Monthly					pocoroy-heavy		Derived (mean) - sc (Sh)	No.	snow	Weekly?
Snowfall flux	Daily	mean				JEANPRE		sf	No.	prsn	
Water Evaporation from Soil	Daily					(CLAUS)		e	No.	evbs	What kind of evaporation? Is it appropriate?
Water Evaporation from Soil	Monthly					pocoroy, pocoroy-heavy		Derived (mean) - e (day)	No.	evbs	Time is in hours. Weekly?
Water Content of Soil Layer	Daily	mean				(CLAUS)		Derived (layer) - swvl1, swvl2, swvl3, swvl4 (day)	Proxy - sw0cm, sw10cm, sw40cm, sw100cm (Sh)	No.	Total?
Water Content of Soil Layer	Monthly					pocoroy, pocoroy-heavy		Derived (mean) - swvl1, swvl2, swvl3, swvl4 (day)	Proxy - sw0cm, sw10cm, sw40cm, sw100cm (Sh)	No.	Weekly?
Sea surface temperature	Daily	mean					CARYEG	sst	No.	Proxy - sst (zero)	
Sea surface roughness	Daily	mean				pocoroy-heavy		swrd	No.	No.	Derived in Kinsman's thesis. Formula: z0=0.018u2/g. Pity, as only 10m wind speed data were used, and not a wind vector.
Longwave radiation	Daily	mean					CARYEG, ENKIS	Derived (mean) - s820 (Lib)	No.	No.	
Wind Speed	Daily	maximum				(CLAUS)		s10g	No.	No.	
Precipitation	30-minute	accumulation - no flux data			PM			No.	?Tpeak	?Tpr	
Total Soil Moisture Content	Daily	mean				pocoroy-heavy		Proxy - swvl1, swvl2, swvl3, swvl4 (day)	Derived - swvl1, swvl2, swvl3, swvl4(Sh)	mrso	
Surface air pressure	Daily	mean				GUAR, (ICS, JEANPRE)		Proxy - mn (Sh)	Derived (mean) - psmsl (Sh)	Proxy - psl (day)	
Surface air pressure	Monthly					(ICS)		Proxy - mn (Sh)	Derived (mean) - psmsl (Sh)	Proxy - psl (day)	
Specific humidity	Daily	mean				pocoroy, pocoroy-heavy, pocoroy, pocoroy-heavy, sacrob		No.	Derived (mean) - q2m (Sh)	No.	
Altitude of Upper Frontal of Soil Layer	Monthly					pocoroy-heavy		Proxy - swvl1 (day)	Derived (mean) - sshf (Sh)	No.	What does 'Upper Frontal' mean? Weekly?
Surface downwelling shortwave flux in air	3h 7am, 3pm and 9pm (local time)	point			HIST			Proxy - sfrd (day)	No. ?Tmeasrs(h)	No.	
Surface downwelling longwave flux in air	3h 7am, 3pm and 9pm (local time)	point			HIST			Proxy - rsrd (day)	No. ?Tmeasrs (h)	No.	
Cloud area fraction	Daily	mean					ENKIS	Proxy - mcdfc	No.	Derived (mean) cl (Sh)	
Air temperature	3h 7am, 3pm and 9pm (local time)	point			HIST			Proxy - 2t (Sh)	Proxy - 2t (Sh)	Proxy - tas (Sh)	
Relative humidity	3h 7am, 3pm and 9pm (local time)	point			HIST			Proxy - 2d (Sh)	Proxy - q2m(h), rh2m (Sh), rh2m (Sh), pmsl(h) (Sh)	Proxy - hfds (day)	
Relative humidity	30-min local standard time or daily mean	point			PM			Proxy - 2d (Sh)	Proxy - q2m (Sh), rh2m (Sh), rh2m (Sh), pmsl(h) (Sh)	Proxy - hfds (day)	
Relative humidity	Daily	mean				GSAB, JEANPRE		Proxy - hfdsfc	Proxy - q2m (Sh), rh2m (Sh), rh2m (Sh), pmsl(h) (Sh)	Proxy - hfds (day)	
Wind speed (at 10m)	3h 7am, 3pm and 9pm (local time)	point			HIST			Proxy - 10u (Sh), 10v (Sh)	Proxy - u10m(h)2m (Sh), v10m(h)2m (Sh)	Proxy - sfcwind (day), sen (day)	
Wind speed (at 10m)	30-min local standard time	point			PM			Proxy - 10u (Sh), 10v (Sh)	Proxy - u10m(h)2m (Sh), v10m(h)2m (Sh)	Proxy - sfcwind (day), sen (day)	
Downward Longwave Flux	3h 7am, 3pm and 9pm (local time)	point			HIST			Proxy - rsr (Sh)	No.	Proxy - rlf (day)	
Relative humidity at 300mb	Daily	mean					CARYEG	Proxy - r300mb (Lin)	No.	No.	
Ozone	Daily	mean				(CLAUS)		Proxy - (O3 (ozone) mass mixing ratio (Lin) or Proxy - (total ozone column (day))	No.	No.	2-needs clarification
Skin temperature	Daily	mean				Waterowne		No.	Proxy - skinsfc (Sh)	No.	
Air temperature	30-minute local standard time	point			PM			No.	No.	No.	
2-m Temperature over data	Daily	mean				(CLAUS)		No.	No.	No.	
2-m Temperature over data	Daily	maximum				(CLAUS)		No.	No.	No.	
2-m Temperature over data	Daily	minimum				(CLAUS)		No.	No.	No.	
Precipitation	Hourly rate	maximum				(CLAUS)		No.	No.	No.	
10-metre wind speed in m/s	Daily	mean				ICS, (MORGOR)		No.	No.	No.	
10-metre wind speed in m/s	Monthly					ICS		No.	No.	No.	
10-metre wind speed in m/s	Daily	mean				ICS, (MORGOR)		No.	No.	No.	
10-metre wind speed in m/s	Monthly					ICS		No.	No.	No.	
2-metre wind speed	Daily	mean					CARYEG, ENKIS, ICS	No.	No.	No.	
2-metre wind speed	Daily	mean					CARYEG, ENKIS, ICS	No.	No.	No.	
2-metre wind speed	Daily	mean				(CLAUS)		No.	No.	No.	
Surface rainfall	Daily	mean			UEAC			No.	No.	No.	What does it value is? Weekly? Hourly or sum?
Clear-sky (0) direct surface SW flux	Daily	mean				ICS, (CLAUS)		No.	No.	No.	What does (0) value is?
Clear-sky (0) direct surface SW flux	Monthly					ICS		No.	No.	No.	
Water evaporation flux	Daily	mean				JEANPRE		No.	No.	No.	
Total Cloud Amount Daily mean data	Daily	mean				(CLAUS)		No.	No.	No.	
Surface rainfall	Daily	mean				JMetoffice		No.	No.	No.	Site variable needs clarification
Air pressure at sea level	Daily	mean				JMetoffice		No.	No.	No.	What does it mean?
Air pressure at sea level	Daily	mean				JMetoffice		No.	No.	No.	What does it mean?
Sea level pressure, 1.5 m air temperature, Sea surface temp	Daily	mean				(CLAUS)		No.	No.	No.	
Surface flux	Daily	mean				(CLAUS)		No.	No.	No.	
Energy Storage/heat sink	Daily	mean				pocoroy-heavy		No.	No.	No.	
Evaporation Latent Energy	Daily	mean				pocoroy-heavy		No.	No.	No.	
Sensible heat flux	Daily	mean				pocoroy-heavy		No.	No.	No.	
Evaporation	Monthly					pocoroy-heavy		No.	No.	No.	Weekly?
Soil Column Water Content	Monthly					pocoroy-heavy		No.	No.	No.	Weekly?
Water Evaporation (Under Horizontal Radiation)	Daily	mean					CARYEG, ENKIS, ICS	No.	No.	No.	2-needs clarification. Horizontal?