Variables	Frequency	Aggregation	EUP_MPEG	EUP_MPDD	EUP_MPDD	EUP_MPEG	ceres_area	Available SYNTEMA Database Windows	Available ACCP_v2 archives	Available as SPECS	Comments
Air temperature	Daily	mean			CEG, H1, Hyl, HOE, UDC	AQUATOXA, EUX-VPE, COAS, LP2ms, ZULES, GLAES, MORGOR, ICS	VORTEX, ENBEX	mean2d1a	Derived (mean) map2m (5h)	ces	
Air temperature	Daily	minimum			Tc 17°C, C	COAS, LP2ms, Force (AQUATOXA), ZULES, GLAES, MORGOR	LUSEIDS	min2d1a	Derived (mean) snow (5h)	tscens	
Air temperature	Daily	maximum			H, FMI	COAS, LP2ms, GLAES, Force (AQUATOXA), EUX-VPE, (EUX-VPE), (MORGOR)	LUSEIDS, ENBEX	max2d1a	Derived (mean) snow (5h)	tscenas	
Air temperature	Monthly	mean				(ICS)		Derived (mean) mean2d1a (day)	Derived (mean) map2m (5h)	ces	
Precipitation	Daily	mean			CEP, Hyl	AQUATOXA, EUX-VPE, COAS, LP2ms, ZULES, GLAES, (MORGOR), (ICS)	LUSEIDS, ICS	tp	non-set (precipitation) p-snow (h)	pr	documentation on flux, which is preferred?
Precipitation	Monthly					(ICS)		non-set (precipitation) p-map	non-set (precipitation) p-map (5h)	pr	
Surface downward Shortwave flux-to-air	Daily	mean				COAS, LP2ms, ZULES, GLAES, (MORGOR)	LUSEIDS, ENBEX, ICS	rsnd	Derived (mean) dsw4h (5h)	rnds	
Surface downward Longwave flux-to-air	Daily	mean				COAS, LP2ms, ZULES		rlnd	dlw4h	rlds	
2-component Wind speed at 10m	Daily	mean					VORTEX, ENBEX	10v (9h)	u-wind10m (6h)	uas	
2-component Wind speed at 10m	Daily	mean					VORTEX, ENBEX	10v (9h)	v-wind10m (6h)	vas	
Wind speed at 10m	Daily	mean			FMI	COAS, LP2ms, (AQUATOXA), (EUX-VPE)		Derived, 10m (9h), 10m (9h)	Derived (mean) wind, u-component, v-component (2h)	Derived (mean) (2h), rate (2h)	
Wind speed at 10m	Daily	maximum				(ZULES)		Derived 10m (9h), 10m (9h)	Derived (mean) wind, u-component, v-component (2h)	Derived (mean) (2h), rate (2h)	
Wind speed at 10m	Monthly	mean			CPU			Derived, 10m (9h), 10m (9h)	Derived (mean) wind, u-component, v-component (2h)	Derived (mean) (2h), rate (2h)	
2-component 850mb	Daily	mean					VORTEX, ENBEX	u850	u-wind850 (7h)	Proxy: u850 (mean)	
2-component 850mb Wind speed	Daily	mean					VORTEX	u850	wind850	Proxy: u850 (mean)	
2-component 850mb Wind speed	Daily	mean					VORTEX	u850	wind850	Proxy: u850 (mean)	
2-component 850mb wind speed	Daily	mean					VORTEX	u825	wind825	No.	
2-component 850mb wind speed	Daily	mean					VORTEX	v825	wind825	No.	
Temperature height at 1000mb	Daily	At 12 UTC	X			MORGOR		Derived t1000 (12h)	gpm1000	No.	
Temperature height at 1000mb	Daily	At 12 UTC	X			MORGOR		Derived t1000 (12h)	gpm1000	No.	
Surface Pressure	Daily	mean				(AQUATOXA)		sfc	sfc	No.	
Sea level pressure	Daily	mean					VORTEX	msl	Proxy pmsl (7h)	psl	
Dew point temperature	Daily	mean			UDC	(EUX-VPE)		Td	Proxy d2m (6h), map2m (5h), pmsl (6h)	tdps	
Total Rainfall	Monthly					(AQUATOXA)		mtl	No.	mrro	Monthly?
Snowfall flux	Daily	mean				(GLAES), (EUX-VPE)		sf	No.	prsn	
Water Evaporation from Soil	Daily					(ZULES)		e	No.	Evbs	Third and 4 they include transpiration
Water Evaporation from Soil	Monthly					GLAES, (AQUATOXA)		e	No.	Evbs	Total Evap. Transpiration Soil
Water Content of Soil Layer	Daily	mean				(ZULES)		Derived swvl1, swvl2, swvl3, swvl4 (24h)	Proxy: wsdw1, wsdw2, wsdw3, wsdw4 (6h)	No.	Total?
Water Content of Soil Layer	Monthly					GLAES, (AQUATOXA)		Derived swvl1, swvl2, swvl3, swvl4 (24h)	Proxy: wsdw1, wsdw2, wsdw3, wsdw4 (6h)	No.	Monthly?
Sea surface temperature	Daily	mean					VORTEX	sst	No.	Proxy: tos (mean)	
Sub-surface runoff rate	Daily	mean				(AQUATOXA)		ssrd	No.	No.	According to hydrologist Hydrologists may use this variable that is not included in the Syntema data, to account
2-component 10mb	Daily	mean					VORTEX, ENBEX	u925	No.	No.	
Wind Gust	Daily	maximum	X			(ZULES)		10fg	No.	No.	
Precipitation	3h mean	Accumulated in the last 3h			FMI			No.	p-rate	pr	
Total Soil Moisture Content	Daily	mean				(AQUATOXA)		Proxy swvl1, swvl2, swvl3, swvl4 (24h)	Derived (sum) wsdw1, wsdw2, wsdw3, wsdw4(24h)	mrso	
Surface air pressure	Daily	mean				(GLAES), (ICS), (EUX-VPE)		Proxy msl (6h)	pmsl4h	Proxy psl (24h)	
Surface air pressure	Monthly					(ICS)		Proxy msl (6h)	pmsl4h	Proxy psl (24h)	
Specific humidity	Daily	mean				(ZULES), (AQUATOXA), (GLAES), (Hu-ME)		No.	q2m	No.	
Moisture in Upper Portion of Soil Column	Monthly					(AQUATOXA)		Proxy swvl3 (24h)	w2mv1	No.	What does Upper Portion means? Monthly?
Surface downward Eastward Wind Stress flux-to-air	3h Tave, 3pm and 9pm (local time)	point		FET				Proxy: stmx (24h)	no through-stress	No.	
Surface downward Northward Wind Stress flux-to-air	3h Tave, 3pm and 9pm (local time)	point		FET				Proxy: stmy (24h)	no through-stress	No.	
Specific humidity	Daily	mean					ENBEX	Proxy:hus3h	No.	sh	
Air temperature	3h Tave, 3pm and 9pm (local time)	point		FET				Proxy: 2t (9h)	Proxy: map2m (5h)	Proxy: tas (5h)	
Relative humidity	3h Tave, 3pm and 9pm (local time)	point		FET				Proxy:2d (9h)	Proxy:rpm2m (6h), rpm2m (6h)	Proxy:hdps (24h)	
Relative humidity	3h mean, linear interpolated to daily mean	point		FMI				Proxy:2d (9h)	Proxy:d2m (6h), map2m (5h), pmsl4h (6h)	Proxy:hdps (24h)	
Relative humidity	Daily	mean				COAS, (EUX-VPE)		Proxy:2d(6h)	Proxy:d2m (6h), map2m (5h), pmsl4h (6h)	Proxy:hdps (24h)	
Wind speed at 10m	3h Tave, 3pm and 9pm (local time)	point		FET				Proxy:10v (9h), 10v (9h)	Proxy:u-wind10m (6h), v-wind10m (6h)	Proxy:rate (24h), rate (24h)	
Wind speed at 10m	3h mean linear interpolated to daily mean	point		FMI				Proxy:10v (9h), 10v (9h)	Proxy:u-wind10m (6h), v-wind10m (6h)	Proxy:rate (24h), rate (24h)	
Cloudiness (0-octets)	3h Tave, 3pm and 9pm (local time)	point		FET				Proxy:tcc (9h)	No.	Proxy: cl (24h)	
Relative humidity at 300mb	Daily	mean					VORTEX	Proxy:t (12h),q (12h)	No.	No.	
Ozone	Daily	mean				(ZULES)		Proxy:O3: Ozone mass mixing ratio (12h) or Proxy: tcc: Total column ozone (24h)	No.	No.	3 meets clarification
Skin temperature	Daily	mean				Metmanes		No.	Proxy: mtsk (5h)	No.	
Air temperature	3h mean linear interpolated to daily mean	point		FMI				No.	No.	No.	
10-Min Temperature over tiles	Daily	mean				(ZULES)		No.	No.	No.	
1-Min Temperature over tiles	Daily	maximum				(ZULES)		No.	No.	No.	
1-Min Temperature over tiles	Daily	minimum				(ZULES)		No.	No.	No.	
Precipitation	hourly rate	maximum				(GLAES)		No.	No.	No.	
10-meter wind component U grid	Daily	mean				ICS, (MORGOR)		No.	No.	No.	
10-meter wind component V grid	Monthly					ICS		No.	No.	No.	
10-meter wind component U grid	Daily	mean				ICS, (MORGOR)		No.	No.	No.	
10-meter wind component V grid	Monthly					ICS		No.	No.	No.	
2-component 10-meter wind speed	Daily	mean					VORTEX, ENBEX, ICS	No.	No.	No.	
2-component 10-meter wind speed	Daily	mean					VORTEX, ENBEX, ICS	No.	No.	No.	
Surface snow amount	Daily	mean				GLAES		No.	No.	No.	
Surface moisture	Daily	mean			UDC			No.	No.	No.	What does it refer to? Surface moisture? Water in soil?
Effective (6) down surface SW flux	Daily	mean				ICS, (ZULES)		No.	No.	No.	What does (6) refer to?
Effective (6) down surface SW flux	Monthly					ICS		No.	No.	No.	
Water sublimation flux	Daily	mean				(EUX-VPE)		No.	No.	No.	
1-Min Relative humidity over tiles	Daily	mean				(ZULES)		No.	No.	No.	
Outdoor roughness	Daily	mean				(Metafloe)		No.	No.	No.	Daily variable needs clarification
Instrumental productivity	Daily	mean				(Metafloe)		No.	No.	No.	What does it mean?
Instrumental productivity (no PFT's)	Daily	mean				(Metafloe)		No.	No.	No.	What does it mean?
Soil depth surface CAR net. flux (surface carbon uptake)	Daily	mean				(ZULES)		No.	No.	No.	
Efflux flux	Daily	mean				(ZULES)		No.	No.	No.	
Canopy rainfall drip rate	Daily	mean				(AQUATOXA)		No.	No.	No.	
Transpiration from canopy	Daily	mean				(AQUATOXA)		No.	No.	No.	
Soil moisture	Daily	mean				(AQUATOXA)		No.	No.	No.	
Transpiration	Monthly					(AQUATOXA)		No.	No.	No.	Monthly?
Soil Frozen Water Content	Monthly					(AQUATOXA)		No.	No.	No.	Monthly?
Solar Radiation (Global Horizontal Radiation)	Daily	mean					LUSEIDS, ENBEX, ICS	No.	No.	No.	3 meets clarification. Horizontal?