Description	Full Description	Units	File Pattern	Time Steps (Summary)	Time Interpretation
boundary layer depth	"Depth" or "height" of the (atmosphere) planetary boundary layer the part of the atmosphere whose behaviour is directly influenced by its contact with a planetary surface.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-boundary_layer_depth.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
bulk richardson number	Dimensionless ratio related to the consumption of turbulence divided by the shear production (the generation of turbulence kinetic energy caused by wind shear) of turbulence which is used to show dynamic stability and the formation of turbulence.	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-bulk_richardson_number.nc	3-hourly (0-144) 6-hourly (150-168)	Instantaneous
cloud amount below 1000ft ASL	Fraction of horizontal grid square occupied by cloud below 1000 feet above sea level.	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-cloud_amount_below_1000ft_ASL.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
cloud amount of high cloud	Fraction of horizontal grid square occupied by cloud in the high-level cloud height range (from the lowest model layer containing the 5574m height level up to but excluding the lowest model layer containing 13608m height level).	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-cloud_amount_of_high_cloud.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
cloud amount of low cloud	Fraction of horizontal grid square occupied by cloud in the low-level cloud height range (from the lowest model layer containing the 111m height level up to but excluding the lowest model layer containing 1949m height level).	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-cloud_amount_of_low_cloud.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
cloud amount of medium cloud	Fraction of horizontal grid square occupied by cloud in the mid-level cloud height range (from the lowest model layer containing the 1949m height level up to but excluding the lowest model layer containing 5574m height level).	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-cloud_amount_of_medium_cloud.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
cloud amount of total cloud	Fraction of horizontal grid square occupied by cloud as diagnosed by the model cloud scheme. This is for the whole atmosphere column as seen from the surface or the top of the atmosphere.	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-cloud_amount_of_total_cloud.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
cloud amount of total convective cloud	Fraction of horizontal grid square occupied by convective cloud as diagnosed by the model convection scheme. This is for the whole atmosphere column as seen from the surface or the top of the atmosphere.	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-cloud_amount_of_total_convective_cloud.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
cloud amount on height levels	Fraction of horizontal grid square occupied by cloud in layers centred on height levels.	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-cloud_amount_on_height_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
cloud amount on pressure levels	Fraction of horizontal grid square occupied by cloud in layers centred on pressure levels.	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-cloud_amount_on_pressure_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
fog fraction at screen level	Here fog means a visibility of 1000 m or lower. The reduction in visibility is caused water droplets or minute ice crystals forming close to the surface. This quantity represents the fraction of horizontal grid square occupied by fog. An alternative interpretation is that this represents the fractional probability of fog being present at any location in the grid square.	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-fog_fraction_at_screen_level.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
height ASL at cloud base where cloud cover > 2.5 oktas	Height of the base of the lowest cloud above sea level where there is at least 2.5 oktas (eighths) of cloud cover. This is also referred to as the altitude of the cloud base or (geometric) height above the geoid which is the reference geopotential surface. This to corresponds to scattered cloud.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-height_ASL_at_cloud_base_where_cloud_cover_2p5_oktas.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
height ASL at cloud base where cloud cover > 4.5 oktas	Height of the base of the lowest cloud above sea level where there is at least 4.5 oktas (eighths) of cloud cover. This is also referred to as the altitude of the cloud base or (geometric) height above the geoid which is the reference geopotential surface. This to corresponds to broken cloud.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-height_ASL_at_cloud_base_where_cloud_cover_4p5_oktas.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
height ASL at freezing level	Height of the 0degC isotherm (freezing level) above sea level. This is also referred to as the altitude of the freezing level or (geometric) height above the geoid which is the reference geopotential surface.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-height_ASL_at_freezing_level.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
height ASL at wet bulb freezing level	Height of the wet bulb freezing level (i.e. where the wet bulb temperature is 0degC) above sea level. This is also referred to as the altitude of the wet bulb freezing level or (geometric) height above the geoid which is the reference geopotential surface. Wet bulb temperature is defined as the temperature of a parcel of air cooled to saturation (100% relative humidity) by the evaporation of water into it with the latent heat supplied by the parcel.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-height_ASL_at_wet_bulb_freezing_level.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
height ASL on pressure levels	Height above sea level or altitude of the pressure levels. This is considered approximately equivalent to geopotential height. Geopotential is the sum of the specific gravitational potential energy relative to the geoid and the specific centripetal potential energy. Geopotential height is the geopotential divided by the standard acceleration due to gravity.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-height_ASL_on_pressure_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
height of orography	Altitude or (geometric) height above the geoid of the surface (ground).	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-height_of_orography.nc	0h	Instantaneous
landsea mask	Binary indicator of whether at point is considered land (value = 1) or sea (value = 0).	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-landsea_mask.nc	0h	Instantaneous
latent heat flux at surface (mean in 1 hour)	Exchange of heat between the surface and the air on account of evaporation (including sublimation). In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics. Upwards is positive; negative is downward. Mean in previous hour.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-latent_heat_flux_at_surface_mean-PT01H.nc	Hourly (0-48)	Mean in previous hour
latent heat flux at surface (mean in 3 hours)	Exchange of heat between the surface and the air on account of evaporation (including sublimation). In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics. Upwards is positive; negative is downward. Mean in previous 3 hours.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-latent_heat_flux_at_surface_mean-PT03H.nc	3-hourly (51-144)	Mean in previous 3 hours
latent heat flux at surface (mean in 6 hours)	Exchange of heat between the surface and the air on account of evaporation (including sublimation). In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics. Upwards is positive; negative is downward. Mean in previous 6 hours.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-latent_heat_flux_at_surface_mean-PT06H.nc	6-hourly (150-168)	Mean in previous 6 hours
precipitation accumulation (1 hour)	Implied depth of the layer of liquid water which has been deposited on the surface in the previous hour. This includes rain snow and graupel with the ice phase precipitation being considered as a liquid water equivalent (lwe) value. It includes the contribution from the model convection scheme if this is invoked (true for Global models but not the UK models) as well as that from the model precipitation scheme.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-deprecated_precipitation_accumulation-PT01H.nc	Hourly (0-48)	Accumulation in previous hour
precipitation accumulation (3 hour)	Implied depth of the layer of liquid water which has been deposited on the surface in the previous 3 hours. This includes rain snow and graupel with the ice phase precipitation being considered as a liquid water equivalent (lwe) value. It includes the contribution from the model convection scheme if this is invoked (true for Global models but not the UK models) as well as that from the model precipitation scheme.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-deprecated_precipitation_accumulation-PT03H.nc	3-hourly (51-144)	Accumulation in previous 3 hours
precipitation accumulation (6 hour)	Implied depth of the layer of liquid water which has been deposited on the surface in the previous 6 hours. This includes rain snow and graupel with the ice phase precipitation being considered as a liquid water equivalent (lwe) value. It includes the contribution from the model convection scheme if this is invoked (true for Global models but not the UK models) as well as that from the model precipitation scheme.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-deprecated_precipitation_accumulation-PT06H.nc	6-hourly (150-168)	Accumulation in previous 6 hours
precipitation rate	Instantaneous rate at which liquid water (as a depth) is being deposited on the surface.This includes rain snow and graupel with the ice phase precipitation being considered as a liquid water equivalent (lwe) value. It includes the contribution from the model convection scheme if this is invoked (true for Global models but not the UK models) as well as that from the model precipitation scheme.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-deprecated_precipitation_rate.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
pressure at convective cloud base	Air pressure at the base of the lowest convective cloud that diagnosed by the model convection scheme.	Pa	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-pressure_at_convective_cloud_base.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
pressure at convective cloud top	Air pressure at the top of the highest convective cloud that diagnosed by the model convection scheme.	Pa	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-pressure_at_convective_cloud_top.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
pressure at freezing level	Air pressure at the 0degC isotherm (freezing level).	Pa	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-pressure_at_freezing_level.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
pressure at maximum wind speed height	Air pressure at level in the vertical where the maximum wind speed occurs.	Pa	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-pressure_at_maximum_wind_speed_height.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
pressure at mean sea level	Air pressure at mean sea level which is close to the geoid in sea areas. Air pressure at sea level is the quantity often abbreviated as MSLP or PMSL.	Pa	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-pressure_at_mean_sea_level.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
pressure at surface	Air pressure at the surface (lower boundary of the atmosphere).	Pa	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-pressure_at_surface.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
pressure on height levels	Pressure at the height levels. These are height above ground.	Pa	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-pressure_on_height_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
radiation flux in longwave downward at surface	Longwave radiation at the surface from above directed at the ground. In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-radiation_flux_in_longwave_downward_at_surface.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-162)	Instantaneous
radiation flux in longwave outgoing at top of atmosphere	Longwave radiation at the top of the atmosphere (TOA) directed away from the ground. In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-radiation_flux_in_longwave_outgoing_at_top_of_atmosphere.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-162)	Instantaneous
radiation flux in shortwave diffuse downward at surface	Shortwave radiation at the surface from above directed at the ground. "Diffuse" means that the radiation has been scattered by particles in the atmosphere such as cloud droplets and aerosols. In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-radiation_flux_in_shortwave_diffuse_downward_at_surface.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
radiation flux in shortwave direct downward at surface	Shortwave radiation at the surface from above directed at the ground. ""Direct" means that the radiation has followed a direct path from the sun and is alternatively known as "direct insolation". In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-radiation_flux_in_shortwave_direct_downward_at_surface.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous

radiation flux in shortwave net at surface	Shortwave radiation at the surface from above directed at the ground. Net downward radiation is the difference between radiation from above (downwelling) and radiation from below (upwelling). In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]M-radiation_flux_in_shortwave_net_at_surface.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
radiation flux in shortwave total downward at surface	Shortwave radiation at the surface from above directed at the ground. "Total" means the sum of direct and diffuse solar radiation incident on the surface and is sometimes called "global radiation". Shortwave radiation at the surface from above directed at the ground.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-radiation_flux_in_shortwave_total_downward_at_surface.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-162)	Instantaneous
rainfall accumulation (1 hour)	Implied depth of the rain produced by the model precipitation scheme which has been deposited on the surface in the previous hour. For the Global models (which run a convection scheme) the "rainfall accumulation from convection" must be added to this to get the total rainfall accumulation (this is not required for the UK models as they do not run a convection scheme).	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_accumulation-PT01H.nc	Hourly (0-48)	Accumulation in previous hour
rainfall accumulation (3 hour)	Implied depth of the rain produced by the model precipitation scheme which has been deposited on the surface in the previous 3 hours. For the Global models (which run a convection scheme) the "rainfall accumulation from convection" must be added to this to get the total rainfall accumulation (this is not required for the UK models as they do not run a convection scheme).	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_accumulation-PT03H.nc	3-hourly (51-144)	Accumulation in previous 3 hours
rainfall accumulation (6 hour)	Implied depth of the rain produced by the model precipitation scheme which has been deposited on the surface in the previous 6 hours. For the Global models (which run a convection scheme) the "rainfall accumulation from convection" must be added to this to get the total rainfall accumulation (this is not required for the UK models as they do not run a convection scheme).	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_accumulation-PT06H.nc	6-hourly (150-168)	Accumulation in previous 6 hours
rainfall accumulation from convection (1 hour)	Implied depth of the rain produced by the model convection scheme which has been deposited on the surface in the previous hour. The "rainfall accumulation" can be added to this to get the total rainfall accumulation.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_accumulation_from_convection-PT01H.nc	Hourly (0-48)	Accumulation in previous hour
rainfall accumulation from convection (3 hour)	Implied depth of the rain produced by the model convection scheme which has been deposited on the surface in the previous 3 hours. The "rainfall accumulation" can be added to this to get the total rainfall accumulation.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_accumulation_from_convection-PT03H.nc	3-hourly (51-144)	Accumulation in previous 3 hours
rainfall accumulation from convection (6 hour)	Implied depth of the rain produced by the model convection scheme which has been deposited on the surface in the previous 6 hours. The "rainfall accumulation" can be added to this to get the total rainfall accumulation.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_accumulation_from_convection-PT06H.nc	6-hourly (150-168)	Accumulation in previous 6 hours
rainfall rate	Instantaneous rate at which rain (as a depth) which has been produced by the model precipitation scheme is being deposited on the surface. For the Global models (which run a convection scheme) the "rainfall rate from convection" must be added to this to get the total rainfall rate (this is not required for the UK models as they do not run a convection scheme).	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_rate.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
rainfall rate (max in 1 hour)	Maximum instantaneous rate at which rain (as a depth) which has been produced by the model precipitation scheme was being deposited on the surface in previous hour. This excludes the rain produced by the model convection scheme so for Global models (which invoke the convection scheme) this is not a maximum total rainfall rate.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_rate_max-PT01H.nc	Hourly (0-48)	Maximum in previous hour
rainfall rate (max in 3 hours)	Maximum instantaneous rate at which rain (as a depth) which has been produced by the model precipitation scheme was being deposited on the surface in previous 3 hours. This excludes the rain produced by the the model convection scheme so for Global models (which invoke the convection scheme) this is not a maximum total rainfall rate.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_rate_max-PT03H.nc	3-hourly (51-144)	Maximum in previous 3 hours
rainfall rate (max in 6 hours)	Maximum instantaneous rate at which rain (as a depth) which has been produced by the model precipitation scheme was being deposited on the surface in previous 6 hours. This excludes the rain produced by the the model convection scheme so for Global models (which invoke the convection scheme) this is not a maximum total rainfall rate.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_rate_max-PT06H.nc	6-hourly (150-168)	Maximum in previous 6 hours
rainfall rate from convection (max in 1 hour)	Maximum instantaneous rate at which rain (as a depth) which has been produced by the model convection scheme was being deposited on the surface in the previous hour.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_rate_from_convection_max-PT01H.nc	Hourly (0-48)	Maximum in previous hour
rainfall rate from convection (max in 3 hours)	Maximum instantaneous rate at which rain (as a depth) which has been produced by the model convection scheme was being deposited on the surface in the previous 3 hours.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_rate_from_convection_max-PT03H.nc	3-hourly (51-144)	Maximum in previous 3 hours
rainfall rate from convection (max in 6 hours)	Maximum instantaneous rate at which rain (as a depth) which has been produced by the model convection scheme was being deposited on the surface in the previous 6 hours.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_rate_from_convection_max-PT06H.nc	6-hourly (150-168)	Maximum in previous 6 hours
rainfall rate from convection (mean in 1 hour)	Mean rate at which rain (as a depth) which has been produced by the model convection scheme has being deposited on the surface in the previous hour.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_rate_from_convection_mean-PT01H.nc	Hourly (0-48)	Mean in previous hour
rainfall rate from convection (mean in 3 hours)	Mean rate at which rain (as a depth) which has been produced by the model convection scheme has being deposited on the surface in the previous 3 hours.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_rate_from_convection_mean-PT03H.nc	3-hourly (51-144)	Mean in previous 3 hours
rainfall rate from convection (mean in 6 hours)	Mean rate at which rain (as a depth) which has been produced by the model convection scheme has being deposited on the surface in the previous 6 hours.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-rainfall_rate_from_convection_mean-PT06H.nc	6-hourly (150-168)	Mean in previous 6 hours
relative humidity at screen level	Fractional relative humidity (ratio of the partial pressure of water vapour to the equilibrium vapour pressure of water) at screen level (1.5m above the surface).	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-relative_humidity_at_screen_level.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
relative humidity on height levels	Fractional relative humidity (ratio of the partial pressure of water vapour to the equilibrium vapour pressure of water) on height levels.	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-relative_humidity_on_height_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
relative humidity on pressure levels	Fractional relative humidity (ratio of the partial pressure of water vapour to the equilibrium vapour pressure of water) on pressure levels.	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-relative_humidity_on_pressure_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
roughness length	Length-scale representation of the roughness of the surface equivalent to the height at which the wind speed theoretically becomes zero.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-roughness_length.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
sensible heat flux at surface	Exchange of heat between the surface and the air by motion of air; also called "turbulent" heat flux. In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics. Upwards is positive; negative is downward.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-sensible_heat_flux_at_surface.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
sensible heat flux at surface (mean in 1 hour)	Exchange of heat between the surface and the air by motion of air; also called "turbulent" heat flux. In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics. Upwards is positive; negative is downward. Mean in the previous hour.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-sensible_heat_flux_at_surface_mean-PT01H.nc	Hourly (0-48)	Mean in previous hour
sensible heat flux at surface (mean in 3 hours)	Exchange of heat between the surface and the air by motion of air; also called "turbulent" heat flux. In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics. Upwards is positive; negative is downward. Mean in the previous 3 hours.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-sensible_heat_flux_at_surface_mean-PT03H.nc	3-hourly (51-144)	Mean in previous 3 hours
sensible heat flux at surface (mean in 6 hours)	Exchange of heat between the surface and the air by motion of air; also called "turbulent" heat flux. In accordance with common usage in geophysical disciplines "flux" implies per unit area called "flux density" in physics. Upwards is positive; negative is downward. Mean in the previous 6 hours.	W m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-sensible_heat_flux_at_surface_mean-PT06H.nc	6-hourly (150-168)	Mean in previous 6 hours
snow depth water equivalent	Liquid water equivalent (LWE) depth of the snow lying on the surface (ground). Typically water is 10 times as dense as snow so multiplying by 10 gives an approximate depth of the snow although wet snow can be significantly denser and powder snow much less dense. NOTE: At present there is an error is the calculation of this quantity for the Global Model which is resulting it beng generated as a mass per unit area (Kg m-2) rather than a depth (m).	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snow_depth_water_equivalent.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
snowfall accumulation (1 hour)	Implied depth of the layer of liquid water equivalent (LWE) snow produced by the model precipitation scheme which has been deposited on the surface in previous hour. For the Global models (which run a convection scheme) the "snowfall accumulation from convection" must be added to this to get the total snowfall accumulation (this is not required for the UK models as they do not run a convection scheme).	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_accumulation-PT01H.nc	Hourly (0-48)	Accumulation in previous hour
snowfall accumulation (3 hour)	Implied depth of the layer of liquid water equivalent (LWE) snow produced by the model precipitation scheme which has been deposited on the surface in previous 3 hours. For the Global models (which run a convection scheme) the "snowfall accumulation from convection" must be added to this to get the total snowfall accumulation (this is not required for the UK models as they do not run a convection scheme).	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_accumulation-PT03H.nc	3-hourly (51-144)	Accumulation in previous 3 hours
snowfall accumulation (6 hour)	Implied depth of the layer of liquid water equivalent (LWE) snow produced by the model precipitation scheme which has been deposited on the surface in previous 6 hours. For the Global models (which run a convection scheme) the "snowfall accumulation from convection" must be added to this to get the total snowfall accumulation (this is not required for the UK models as they do not run a convection scheme).	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_accumulation-PT06H.nc	6-hourly (150-168)	Accumulation in previous 6 hours
snowfall accumulation from convection (1 hour)	Implied depth depth of the layer of liquid water equivalent (LWE) snow produced by the model convection scheme which has been deposited on the surface in the previous hour. The "snowfall accumulation" can be added to this to get the total snowfall accumulation.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_accumulation_from_convection-PT01H.nc	Hourly (0-48)	Accumulation in previous hour
snowfall accumulation from convection (3 hour)	Implied depth depth of the layer of liquid water equivalent (LWE) snow produced by the model convection scheme which has been deposited on the surface in the previous 3 hours. The "snowfall accumulation" can be added to this to get the total snowfall accumulation.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_accumulation_from_convection-PT03H.nc	3-hourly (51-144)	Accumulation in previous 3 hours
snowfall accumulation from convection (6 hour)	Implied depth depth of the layer of liquid water equivalent (LWE) snow produced by the model convection scheme which has been deposited on the surface in the previous 6 hours. The "snowfall accumulation" can be added to this to get the total snowfall accumulation.	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_accumulation_from_convection-PT06H.nc	6-hourly (150-168)	Accumulation in previous 6 hours
snowfall fraction of precipitation rate	Instantaneous fraction of the precipitation by liquid water volume which is ice phase (i.e. snow or graupel). It includes the contribution from the model convection scheme if this is invoked (true for Global models but not the UK models) as well as that from the model precipitation scheme.	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-deprecated_snowfall_fraction_of_precipitation_rate.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
snowfall rate	Instantaneous rate at which liquid water equivalent (LWE) snow (as a depth) which has been produced by the model precipitation scheme is being deposited on the surface. For the Global models (which run a convection scheme) the "snowfall rate from convection" must be added to this to get the total snowfall rate (this is not required for the UK models as they do not run a convection scheme).	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_rate.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
snowfall rate (max in 1 hour)	Maximum instantaneous rate at which liquid water equivalent (LWE) snow (as a depth) which has been produced by the model precipitation scheme was being deposited on the surface in previous hour. This excludes the snow produced by the the model convection scheme so for Global models (which invoke the convection scheme) this is not a maximum total snowfall rate.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_rate_from_convection_max-PT01H.nc	Hourly (0-48)	Maximum in previous hour

snowfall rate (max in 3 hours)	Maximum instantaneous rate at which liquid water equivalent (LWE) snow (as a depth) which has been produced by the model precipitation scheme was being deposited on the surface in previous 3 hours. This excludes the snow produced by the the model convection scheme so for Global models (which invoke the convection scheme) this is not a maximum total snowfall rate.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]M-snowfall_rate_from_convection_max-PT03H.nc	3-hourly (51-144)	Maximum in previous 3 hours
snowfall rate (max in 6 hours)	Maximum instantaneous rate at which liquid water equivalent (LWE) snow (as a depth) which has been produced by the model precipitation scheme was being deposited on the surface in previous 6 hours. This excludes the snow produced by the the model convection scheme so for Global models (which invoke the convection scheme) this is not a maximum total snowfall rate.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_rate_from_convection_max-PT06H.nc	6-hourly (150-168)	Maximum in previous 6 hours
snowfall rate from convection (max in 1 hour)	Maximum instantaneous rate at which liquid water equivalent (LWE) snow (as a depth) which has been produced by the model convection scheme was being deposited on the surface in previous hour.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_rate_max-PT01H.nc	Hourly (0-48)	Maximum in previous 3 hours
snowfall rate from convection (max in 3 hours)	Maximum instantaneous rate at which liquid water equivalent (LWE) snow (as a depth) which has been produced by the model convection scheme was being deposited on the surface in previous 3 hours.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_rate_max-PT03H.nc	3-hourly (51-144)	Maximum in previous 3 hours
snowfall rate from convection (max in 6 hours)	Maximum instantaneous rate at which liquid water equivalent (LWE) snow (as a depth) which has been produced by the model convection scheme was being deposited on the surface in previous 6 hours.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_rate_max-PT06H.nc	6-hourly (150-168)	Maximum in previous 6 hours
snowfall rate from convection (mean in 1 hour)	Mean rate at which liquid water equivalent (LWE) snow (as a depth) which has been produced by the model convection scheme has being deposited on the surface in previous hour.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_rate_from_convection_mean-PT01H.nc	Hourly (0-48)	Mean in previous hour
snowfall rate from convection (mean in 3 hours)	Mean rate at which liquid water equivalent (LWE) snow (as a depth) which has been produced by the model convection scheme has being deposited on the surface in previous 3 hours.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_rate_from_convection_mean-PT03H.nc	3-hourly (51-144)	Mean in previous 3 hours
snowfall rate from convection (mean in 6 hours)	Mean rate at which liquid water equivalent (LWE) snow (as a depth) which has been produced by the model convection scheme has being deposited on the surface in previous 6 hours.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-snowfall_rate_from_convection_mean-PT06H.nc	6-hourly (150-168)	Mean in previous 6 hours
soil mass concentration of water on soil levels	Mass per unit area of water in all phases contained in the layer surrounding a soil depth level.	kg m-2	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-soil_mass_content_of_water_on_soil_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
soil temperature on soil levels	Temperature of the soil at a soil depth level.	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-soil_temperature_on_soil_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
specific humidity at screen level	Specific humidity (mass fraction of water vapour in (moist) air) at screen level (1.5m).	1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-specific_humidity_at_screen_level.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
temperature at screen level	Air temperature at screen level (1.5m).	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_at_screen_level.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
temperature at screen level (max in 1 hour)	Maximum instantaneous air temperature at screen level (1.5m) in the previous hour.	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_at_screen_level_max-PT01H.nc	Hourly (0-48)	Maximum in previous hour
temperature at screen level (max in 3 hours)	Maximum instantaneous air temperature at screen level (1.5m) in the previous 3 hours.	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_at_screen_level_max-PT03H.nc	3-hourly (51-144)	Maximum in previous 3 hours
temperature at screen level (max in 6 hours)	Maximum instantaneous air temperature at screen level (1.5m) in the previous 6 hours.	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_at_screen_level_max-PT06H.nc	6-hourly (150-168)	Maximum in previous 6 hours
temperature at screen level (min in 1 hour)	Minimum instantaneous air temperature at screen level (1.5m) in previous hour.	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_at_screen_level_min-PT01H.nc	Hourly (0-48)	Minimum in previous hour
temperature at screen level (min in 3 hours)	Minimum instantaneous air temperature at screen level (1.5m) in previous 3 hours.	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_at_screen_level_min-PT03H.nc	3-hourly (51-144)	Minimum in previous 3 hours
temperature at screen level (min in 6 hours)	Minimum instantaneous air temperature at screen level (1.5m) in previous 6 hours.	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_at_screen_level_min-PT06H.nc	6-hourly (150-168)	Minimum in previous 6 hours
temperature at surface	Temperature at the surface interface between the air and the ground.	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_at_surface.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
temperature of dew point at screen level	Dew point temperature (temperature at which a parcel of air reaches saturation upon being cooled at constant pressure and specific humidity) at screen level (1.5m).	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_of_dew_point_at_screen_level.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
temperature on height levels	Air temperature on height levels. These are height above ground	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_on_height_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
temperature on pressure levels	Air temperature on pressure levels.	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-temperature_on_pressure_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
visibility at screen level	Horizontal distance at which something can be seen horizontally from screen level (1.5m).	m	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-visibility_at_screen_level.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wet bulb potential temperature on pressure levels	Wet bulb potential temperature (temperature that a parcel of air at any level would have if starting at the wet bulb temperature it were brought at a saturated adiabatic lapse rate to the standard pressure of 1000hPa) at.	K	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wet_bulb_potential_temperature_on_pressure_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind direction at 10m	Wind at 10m above the surface is defined as a two-dimensional (horizontal) air velocity vector with no vertical component. In meteorological reports the direction of the wind vector is given as the direction from which it is blowing. NOTE: This with "wind speed at 10m" replaces "x wind at 10m" and "y wind at 10m"	degrees	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_direction_at_10m.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind direction at maximum wind speed height	Wind direct at level in the vertical where the maximum wind speed occurs.	degrees	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_direction_at_maximum_wind_speed_height.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind direction on height levels	Wind on a height level is defined as a two-dimensional (horizontal) air velocity vector with no vertical component. In meteorological reports the direction of the wind vector is given as the direction from which it is blowing. NOTE: This with "wind speed on height levels" replaces "x wind on height levels" and "y wind on height levels"	degrees	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_direction_on_height_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind direction on pressure levels	Wind on a pressure level is defined as a two-dimensional (horizontal) air velocity vector with no vertical component. In meteorological reports the direction of the wind vector is given as the direction from which it is blowing. NOTE: This with "wind speed on pressure levels" replaces "x wind on pressure levels" and "y wind on pressure levels"	degrees	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_direction_on_pressure_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind gust at 10m	Diagnosed instantaneous wind gust at 10m. This can be considered as the extreme rather than steady wind speed that might be experienced at this specific time.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_gust_at_10m.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind gust at 10m (max in 1 hour)	Maximum diagnosed instantaneous wind gust at 10m in the previous hour. This can be considered as the extreme wind speed that might be experienced in this period.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_gust_at_10m_max-PT01H.nc	Hourly (0-48)	Maximum in previous hour
wind gust at 10m (max in 3 hours)	Maximum diagnosed instantaneous wind gust at 10m in the previous 3 hours. This can be considered as the extreme wind speed that might be experienced in this period.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_gust_at_10m_max-PT03H.nc	3-hourly (51-144)	Maximum in previous 3 hours
wind gust at 10m (max in 6 hours)	Maximum diagnosed instantaneous wind gust at 10m in the previous 6 hours. This can be considered as the extreme wind speed that might be experienced in this period.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_gust_at_10m_max-PT06H.nc	6-hourly (150-168)	Maximum in previous 6 hours
wind speed at 10m	Wind at 10m above the surface is defined as a two-dimensional (horizontal) air velocity vector with no vertical component. The speed is the magnitude of velocity. NOTE: This with "wind speed at 10m" replaces "x wind at 10m" and "y wind at 10m"	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_speed_at_10m.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind speed at maximum wind speed height	Wind speed at level in the vertical where the maximum wind speed occurs.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_speed_at_maximum_wind_speed_height.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind speed on height levels	Wind on a height level is defined as a two-dimensional (horizontal) air velocity vector with no vertical component. The speed is the magnitude of velocity. NOTE: This with "wind direction on height levels" replaces "x wind on height levels" and "y wind on height levels"	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_speed_on_height_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind speed on pressure levels	Wind on a pressure level is defined as a two-dimensional (horizontal) air velocity vector with no vertical component. The speed is the magnitude of velocity. NOTE: This with "wind direction on pressure levels" replaces "x wind on pressure levels" and "y wind on pressure levels"	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_speed_on_pressure_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind u-component at 10m	Wind at 10m above the surface is defined as a two-dimensional (horizontal) air velocity vector with no vertical component. "X" indicates a vector component of this along the grid x-axis positive with increasing x.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-wind_vertical_velocity_on_pressure_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind u-component on pressure levels	Wind on pressure levels is defined as a two-dimensional (horizontal) air velocity vector with no vertical component. "X" indicates a vector component of this along the grid x-axis positive with increasing x.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-deprecated_x_wind_at_10m.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind v-component at 10m	Wind at 10m above the surface is defined as a two-dimensional (horizontal) air velocity vector with no vertical component. "Y" indicates a vector component of this along the grid y-axis positive with increasing y.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-deprecated_x_wind_on_pressure_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind v-component on pressure levels	Wind on pressure levels is defined as a two-dimensional (horizontal) air velocity vector with no vertical component. "Y" indicates a vector component of this along the grid y-axis positive with increasing y.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-deprecated_y_wind_at_10m.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous
wind vertical velocity on pressure levels	Speed of the vertical component of the air motion at a pressure level. Upwards is positive and downwards is negative.	m s-1	[YYYYMMDD]T[hhmm]Z-PT[nnnn]H[mm]M-deprecated_y_wind_on_pressure_levels.nc	Hourly (0-48) 3-hourly (51-144) 6-hourly (150-168)	Instantaneous