

Table 1: 2D parameter

Parameter	Description	Level	Type	Unit
ALWU_S	long wave upward radiation flux at surface	-	average	W/m ²
ASOB_S	net short wave radiation flux at the surface	-	average	W/m ²
ASWDIFD_S	short wave diffuse downward radiation flux at the surface	-	average	W/m ²
ASWDIR_S	short wave direct radiation flux at the surface	-	average	W/m ²
ATHB_S	net long wave radiation flux at the surface	-	average	W/m ²
ATHD_S	long wave downward radiation flux at the surface	-	average	W/m ²
CLCT	total cloud cover	-	instantaneous	%
DURSUN	sunshine duration	-	accumulated	s
H_PBL	height of the planetary boundary layer	-	instantaneous	m
LWU_S	long wave upward radiation flux at the surface	-	instantaneous	W/m ²
PMSL	pressure at mean sea level	-	instantaneous	Pa
PS	not reduced surface pressure	-	instantaneous	Pa
QV_2M	2m specific humidity	2	instantaneous	kg/kg
QV_S	Specific humidity at the surface	-	instantaneous	kg/kg
RAIN_CON	convective rain	-	accumulated	kg/m ²
RAIN_GSP	stratiform rain	-	accumulated	kg/m ²
RUNOFF_G	ground runoff	-	accumulated	kg/m ²
RUNOFF_S	surface runoff	-	accumulated	kg/m ²
RELHUM_2M	2m relative humidity		instantaneous	%
SNOW_CON	convective snow	-	accumulated	kg/m ²
SNOW_GSP	stratiform snow	-	accumulated	kg/m ²
SOBS_RAD	net short wave radiation flux at the surface	-	instantaneous	W/m ²
SWDIFDS_RAD	short wave diffuse downward radiation flux at the surface	-	instantaneous	W/m ²
SWDIRS_RAD	short wave direct radiation flux at the surface	-	instantaneous	W/m ²
THBS_RAD	net long wave radiation flux at the surface	-	instantaneous	W/m ²
THDS_RAD	downward long wave radiation flux at the surface	-	instantaneous	W/m ²
TMAX_2M	2m maximum temperature	2	time interval	K
TMIN_2M	2m minimum temperature	2	time interval	K

TOT_PRECIP	total precipitation		accumulated	kg/m ²
TQV	vertical integrated water vapour	-	instantaneous	kg/m ²
T_2M	2m temperature	2	instantaneous	K
T_SOIL	soil temperature	-	instantaneous	K
U_10M	10m zonal wind speed	10	instantaneous	m/s
VMAX_10M	10m maximum wind speed	10	time interval	m/s
V_10M	10m meridional wind speed	10	instantaneous	m/s
WD_040	40m wind direction	40	instantaneous	m/s
WD_060	60m wind direction	60	instantaneous	m/s
WD_080	80m wind direction	80	instantaneous	m/s
WD_100	100m wind direction	100	instantaneous	m/s
WD_125	125m wind direction	125	instantaneous	m/s
WD_150	150m wind direction	150	instantaneous	m/s
WD_175	175m wind direction	175	instantaneous	m/s
WD_200	200m wind direction	200	instantaneous	m/s
WS_010	10m wind speed	10	instantaneous	m/s
WS_040	40m wind speed	40	instantaneous	m/s
WS_060	60m wind speed	60	instantaneous	m/s
WS_080	80m wind speed	80	instantaneous	m/s
WS_100	100m wind speed	100	instantaneous	m/s
WS_125	125m wind speed	125	instantaneous	m/s
WS_150	150m wind speed	150	instantaneous	m/s
WS_175	175m wind speed	175	instantaneous	m/s
WS_200	200m wind speed	200	instantaneous	m/s

Table 2: 3D parameters

Parameter	Description	Level	Type	Unit
Q	specific humidity	35 to 40	instantaneous	kg/kg
T	temperature	35 to 40	instantaneous	K
TKE	turbulent kinetic energy	35 to 40	instantaneous	m ² /s ²
U	zonal wind speed	35 to 40	instantaneous	m/s
V	meridional wind speed	35 to 40	instantaneous	m/s