

## EDHM Independent data description document

### MetData

Variable	Units	Description	Notes
TAir	Cel	Average air temperature	
TMax	Cel	Maximal air temperature	
TMin	Cel	Minimal air temperature	
Precipitation	mm	Total precipitation (rain and snow)	
AirDensity	kg/m3	Atmospheric density	
AirPressure	kPa	Atmospheric pressure	
VaporPressure	kPa	Vapor pressure	calc_saturated_vapor_pressure
VaporPressDeficit	kPa	Atmospheric vapor pressure deficit	
RelativeHumidity	%	Relative humidity	
WindSpeed	m/s	Wind speed	
WindH	m	height at which wind is measured	
ShortWave	W/m2	Incoming shortwave radiation	
LongWave	W/m2	Incoming longwave radiation	
SunHour	h	Sun hour in one day	

# VegData

Variable	Description	Units
LAI	current leaf area index	m2/m2
Albedo	current vegetation albedo	100%
Fetch	Average fetch length for each vegetation	no data
VegHeight	vegetation height	m
TrunkRatio	ratio of trunk height to tree height, default = 0.2	100%
Displacement	vegetation displacement	no data
Roughness	vegetation roughness length	m
WindAttenuation	wind attenuation through canopy, default = 0.5	no data
IsOverstory	TRUE = overstory present, important for snow accumulation in canopy	LOGICAL
MaxIntercept		

## GeoData

Variable	Description	Units
Latitude		deg
Longitude		deg
Elevation		m

## LandData

Variable	Description	Units
LagOneSlope	Lag-one autocorrelation of terrain slope within vegetation tile	N/A
SigmaSlope	Standard deviation of terrain slopes within vegetation tile	N/A
MaxSnowDistribSlope	Maximum slope of snow depth distribution [m]. This should equal $2 \times \text{depth\_min}$ , where $\text{depth\_min}$ = minimum snow pack depth below which coverage $< 1$ . Comment, ported from user_def.h, with questionable units: SiB uses 0.076; Rosemount data imply 0.155cm depth $\sim$ 0.028mm swq.	m

# SoilData

Variable	Description	Units
Porosity		100%
FieldCapacity		100%
WiltingPoint		100%
WettingFrontSoilSucti		mm
onHead		
SaturatedSoilSuction		mm
Head		
SaturatedHydraulicCo		mm/d
nductivity		

# TimeData

Variable	Description	Units
NDay	Oder of the day of the year	N/A
NMon	Oder of the month of the year	N/A