

YOPPsiteMIP – The YOPP super-site Model Inter-comparison Project

Barrow (Alaska)

<i>Variable name as in CMIP</i>	<i>Longer name</i>	<i>Unit</i>	<i>Notes</i>	<i>Availability</i>
Single Level fixed variables				
sftlf	Land area fraction	%	If applicable, provide information on tiles, and how they are populated for the main model output and the surrounding locations. For each tile provide information on what type of soil and vegetation	
orog	Surface altitude	m	Provide information for the main grid output as well as for the surrounding locations, using the WGS84 CRS	
lat	Latitude	degrees East		
lon	Longitude	degrees North		
Single Level atmospheric variables				
z0m	Surface roughness for momentum	m	No CMIP name	
z0h	Surface roughness for heat	m	No CMIP name If a different value is used for moisture, please provide that as z0q	
psl	Mean sea level pressure	Pa		
ps	Surface pressure	Pa		
uas	10 m eastward wind	m s ⁻¹		
vas	10 m northward wind	m s ⁻¹		
zmla	Height of Boundary Layer	m	Provide description on how it is calculated	
tas	2m temperature	K		
tdps	2m dew point temperature	K		
huss	2m specific humidity	kg kg ⁻¹		
pr	Total precipitation	kg m ⁻² s ⁻¹	At surface, both liquid and rain	
prsn	Snowfall flux	kg m ⁻² s ⁻¹	At surface, all precipitation in solid phase	
clt	Total cloud cover	%		
cod	Cloud optical thickness			
prw	Total column water vapour	kg m ⁻²		
clwvi	Total column liquid water	kg m ⁻²		
clivi	Total column icewater	kg m ⁻²		

vias	Horizontal visibility	m	No CMIP name, CF long name visibility_in_air	
Surface and TOA variables				
snd	Surface snow thickness	m		
snc	Surface snow area fraction	%		
snw	Snow water equivalent	kg m ⁻²		
ts	Skin temperature	K		
tsns	Snow surface skin temperature	K		
tsnl	Snow temperature	K	Provide vertical grid if more than one layer (as snowlevel)	
rhos	Snow density	kg m ⁻³	No CMIP name. Provide vertical grid if more than one layer	
cnc	canopy area fraction	0-1		
tgs	Surface ground skin temperature	K		
tsl	Soil temperature profile	K	Provide vertical grid if more than one layer (as soillevel)	
mrlsl	Soil moisture profile	kg m ⁻²	Provide vertical grid if more than one layer (as soillevel)	
rsus	Upward surface shortwave radiation	W m ⁻²	Follow the CF/CMIP convention that outgoing fluxes are positive upward	
rsds	Downward surface shortwave radiation	W m ⁻²		
rlus	Upward surface long-wave radiation	W m ⁻²	Follow the CF/CMIP convention that outgoing fluxes are positive upward	
rlsds	Downward surface long-wave radiation	W m ⁻²		
hfsl	Surface turbulence latent heat flux	W m ⁻²		
hfss	Surface turbulence sensible heat flux	Wm ⁻²		
hfds	Surface downward heat flux	Wm ⁻²	Ground heat flux	
hfdsn	Surface downward heat flux in snow	Wm ⁻²		

hfdsnb	Downward heat flux at snow botton	Wm^{-2}		
albs	Surface albedo	0-1		
albsn	snow and ice albedo	0-1	Albedo over snow covered portion of gridcell	
tauv	Time-average northward turbulence surface stress	$N m^{-2}$		
tauu	Time-average eastward turbulence surface stress	$N m^{-2}$		