PlioMIP3 OUTPUT REQUIRED					
FIELD	UNITS	FREQUENCY	TIMESERIES/ CLIMATOLOGICAL AVG *** Sugest using final 100 years for calculating climatology or averages	DIFFERENCE FROM PlioMIP2 (if Applicable)	OTHER NOTES
ATMOSPHERE					
totalprecip	mm/day	monthly	Timeseries		Time series = last 100 years (monthly averages)
NearSurfaceAirTemp	deg C	monthly	Timeseries		12 values (monthly means)
SurfaceTemperature (radiative temp)	deg C	monthly	Timeseries		Follow CMIP6 variable naming convention
totalevap	mm/day	monthly	Timeseries		
total cloud cover	%	monthly	Timeseries		
absolute minimum and maximum Near Surface Air Temperature	deg C	monthly	Timeseries		Minimum/maximum temperatures within the month from the daily output (consistent with what CMIP/PMIP require)
snowfall	mm/day	monthly	Timeseries		
u(m/s), v (m/s), w (Pa/s), q (kg/kg) t (K) and z (m)	*see left	monthly	Timeseries (vertical levels)		Following CMIP guidelines on the number of levels for each variable and for units

wind stress (taux and tauy)	N/m2	monthly	Timeseries		From ocean component in some models (needed for iceberg modelling)
mslp.	hPa	monthly	Timeseries		
ps (surface pressure)	hPa	monthly	Timeseries		
Surface snow amount	Kg/m-2	monthly	climatology		
Total Runoff	Kg/m-2/s	monthly	climatology		
Surface Runoff	Kg/m-2/s	monthly	climatology		
Total soil moisture content	kg/m2	monthly	climatology		
RADIATION FIELDS FOR ENERGY BALANCE					
downsolar_toa. (rsdt)	W/m2	monthly	average	Previously timeseries	
upsolar_toa. (rsut)	W/m2	monthly	average	Previously timeseries	
outgoing LR_toa (rlut)	W/m2	monthly	average	Previously timeseries	
outgoing LR_toa - clear sky (rlutcs)	W/m2	monthly	average	Previously timeseries	
surface SW&LW up and down (lwdown=rlds Swdown= rsds Lw_Netdown=flns Sw_netdown =fsns)	W/m2	monthly	average	Previously timeseries	
clear sky (surface SW up and down, and LW down)	W/m2	monthly	average	Previously timeseries	

Rsutcs=upward sw					
latent heat flux (hfls, lhfl)	W/m2	monthly	average	Previously timeseries	
sensible heat flux	W/m2	monthly	average	Previously timeseries	
OCEANS					
Sea Surface Temperature	deg C	monthly	Timeseries		
Ocean temperature all layers (all levels)	deg C	annual	Average	Previously monthly timeseries Previously top 1000m	In situ
Mixed layer depth	m	monthly	Timeseries		
4 stream functions (zonal average per basin)	Sv	annual only	Timeseries		Global, atlantic, pacific, indian
Ocean velocity u and v (top 1000)	m/s	annual only	Timeseries	remove	
Ocean velocity u and v (all levels mean monthly of last 100 years)	m/s	monthly	Average		If people need a timeseries, then they should contact individual groups
Sea surface salinity	psu	Monthly	timeseries	New field	
Salinity (all levels)	psu	annual only	Average	Previously timeseries Previously top 1000m	

icedepth. (sea ice thickness)	m	monthly	Timeseries		
iceconc. (sea ice fraction)	%	monthly	Timeseries		
BOUNDARY CONDITIONS					
landsea mask	zero-one - fractional				
orography	m				
vegetation					Optional additional boundary condition
Trends (one number for last 100 yrs of…)					
global mean temp	one number per year				
ocean integratedtemp	one number per year				
Isotope fields (for isotope enabled experiments)				ALL NEW FIELDS	
D18o in precipitation	permille	monthly	timeseries	New field	To match precipitation field
D18o_sw (top level)	permille	monthly	timeseries	New field	To match salinity field
D18o_sw (all levels)	permille	annual	Average	New field	To match salinity field

Vegetation fields (for dynamic vegetation experiments)					
Plant functional types	Percentage coverage	annual	average		Or whatever is appropriate for the model
Daily variables (from core experiments only)**					100 years of daily data
Daily maximum NearSurfaceAirTemperature	degC	Daily	timeseries		
Daily minimum NearSurfaceAirTemperature	degC	Daily	timeseries		
Daily mean NearSurfaceAirTemperature	degC	Daily	timeseries		
Mean Sea Level Pressure	Pa	Daily	timeseries		
Eastward Near Surface Wind	m/s	Daily	timeseries		
Northward Near Surface Wind	m/s	Daily	timeseries		
Geopotential height at 500hPa	M	Daily	timeseries		
Precipitation	Mm/day	Daily	timeseries		
Total Evaporation	mm/day	daily	timeseries		
Daily mean AirTemperature 850hPa, 500hPa, 200hPa	degC	Daily	timeseries		
Daily mean Eastward Wind 850hPa, 500hPa, 200hPa	degC	Daily	timeseries		
Daily mean Northward Wind	degC	Daily	timeseries		

850hPa, 500hPa, 200hPa					