Table 10: Table of variables included in the file hist LMDZ files. output # stands for (histmth, histday, histhf, histins). ti86400=t_inst_00086400. Getting the values from 'phylmd/phys_output_ctrlout_mod.F90'. Some variables are only available in NPv3.1 version

ariable name	**Standard name**	**units**	**coordinates**	**output #**
ages_lic	Snow age	day	time lat lon	3,10,10,10,10,10
ages_oce	Snow age	day	time lat lon	10,10,10,10,10,10
ages_sic	Snow age	day	time lat lon	3,10,10,10,10,10
ages_ter	Snow age	day	time lat lon	10,10,10,10,10,10
Ahyb	model_level_number	Pa		1,1,1,1,1,1
aire	Grid area	–	lat lon	1,1,10,10,1,1
aireTER	Grid area CONT	–	time lat lon	10,10,1,10,10,10
alb1	Surface VIS albedo	–	time lat lon	3,10,10,10,10,10
alb2	Surface Near IR albedo	–	time lat lon	3,10,10,10,10,10
albe_lic	Albedo VIS surf. lic	$m2/s2$	time lat lon	3,7,10,7,10,10
albe_oce	Albedo VIS surf. oce	$m2/s2$	time lat lon	3,7,10,7,10,10
albe_sic	Albedo VIS surf. sic	$m2/s2$	time lat lon	3,7,10,7,10,10
albe_ter	Albedo VIS surf. ter	$m2/s2$	time lat lon	3,7,10,7,10,10
ale	ALE	$m2/s2$	time lat lon	1,1,1,10,10,10
ale_bl	ALE BL	$m2/s2$	time lat lon	1,1,1,10,10,10
ale_wk	ALE WK	$m2/s2$	time lat lon	1,1,1,10,10,10
alp	ALP	$W/m2$	time lat lon	1,1,1,10,10,10
alp_bl	ALP BL	$m2/s2$	time lat lon	1,1,1,10,10,10
alp_wk	ALP WK	$m2/s2$	time lat lon	1,1,1,10,10,10
Alt	model_level_number	Km		1,1,1,1,1,1
a_th	Thermal plume fraction	–	time presnivs lat lon	4,10,10,10,10,10
beta_prec	LS Conversion rate to prec	$(kg/kg)/s$	time presnivs lat lon	4,10,10,10,10,10
Bhyb	model_level_number			1,1,1,1,1,1
bils	Surf. total heat flux	$W/m2$	time lat lon	1,2,10,5,10,10
bils_diss	Surf. total heat flux	$W/m2$	time lat lon	1,2,10,5,10,10
bils_ec	Surf. total heat flux	$W/m2$	time lat lon	1,2,10,5,10,10
bils_enthalp	Surf. total heat flux	$W/m2$	time lat lon	1,2,10,5,10,10
bils_kinetic	Surf. total heat flux	$W/m2$	time lat lon	1,2,10,5,10,10
bils_latent	Surf. total heat flux	$W/m2$	time lat lon	1,2,10,5,10,10
bils_tke	Surf. total heat flux	$W/m2$	time lat lon	1,2,10,5,10,10
cape	Conv avlbl pot ener	J/kg	time lat lon	1,10,10,10,10,10
cape_max	CAPE max.	J/kg	time lat lon	10,1,10,10,10,10
cdrh	Heat drag coef.	–	time lat lon	1,10,10,7,10,10
cdrm	Momentum drag coef.	–	time lat lon	1,10,10,10,10,10
cldemi	Cloud optical emissivity	1	time presnivs lat lon	10,5,10,10,10,10
cldh	High-level cloudiness	–	time lat lon	1,1,10,10,10,10
cldl	Low-level cloudiness	–	time lat lon	1,1,10,10,10,10
cldm	Mid-level cloudiness	–	time lat lon	1,1,10,10,10,10
cldq	Cloud liquid water path	$kg/m2$	time lat lon	1,1,10,10,10,10
cldt	Total cloudiness	–	time lat lon	1,1,2,10,5,10
cldtau	Cloud optical thickness	1	time presnivs lat lon	10,5,10,10,10,10
clwcon	Convective Cloud Liquid water content	kg/kg	time presnivs lat lon	4,10,10,10,10,10
contfracATM	% sfce ter+lic	–	lat lon	10,1,1,10,10,10
contfracOR	% sfce terre OR	–	time lat lon	10,1,1,10,10,10
cumPB	Cumulated tracer PBVL1	–	time lat lon	
cumRN	Cumulated tracer RNVL1	–	time lat lon	

Table 11: Table of variables included in the file hist LMDZ files (cont' 1)

dmc	Deep COnvective Mass Flux	$kg/(m2*s)$	time presnivs lat lon	4,10,10,10,10,10
dnwd	saturated downdraft	$kg/m2/s$	time presnivs lat lon	4,10,10,10,10,10
dnwd0	unsat. downdraft	$kg/m2/s$	time presnivs lat lon	4,10,10,10,10,10
dqajs	Dry adjust. dQ	$(kg/kg)/s$	time presnivs lat lon	4,10,10,10,10,10
dqcon	Convection dQ	$(kg/kg)/s$	time presnivs lat lon	4,10,10,10,10,10
dqdyn	Dynamics dQ	$(kg/kg)/s$	time presnivs lat lon	4,10,10,10,10,10
dqeva	Reevaporation dQ	$(kg/kg)/s$	time presnivs lat lon	4,10,10,10,10,10
dqlsc	Condensation dQ	$(kg/kg)/s$	time presnivs lat lon	4,10,10,10,10,10
dqlscst	dQ strat.	$(kg/kg)/s$	time presnivs lat lon	10,10,10,10,10,10
dqlscth	dQ therm.	$(kg/kg)/s$	time presnivs lat lon	10,10,10,10,10,10
dqphy	Physics dQ	$(kg/kg)/s$	time presnivs lat lon	2,10,10,10,10,10
dqthe	Thermal dQ	$(kg/kg)/s$	time presnivs lat lon	4,10,10,10,10,10
dqvdf	Boundary-layer dQ	$(kg/kg)/s$	time presnivs lat lon	4,10,10,10,10,10
dqwak	Wake dQ	$(kg/kg)/s$	time presnivs lat lon	4,5,10,10,10,10
dtajs	Dry adjust. dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtcon	Convection dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtdis	TKE dissipation dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtdyn	Dynamics dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtec	Cinetic dissip dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dteva	Reevaporation dT	K/s	time presnivs lat lon	4,10,10,10,10,10
d_th	Thermal plume detrainment	K/s	time presnivs lat lon	4,10,10,10,10,10
dthmin	dTheta mini	K/m	time lat lon	10,1,10,10,10,10
dtlif	Orography dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtlsc	Condensation dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtlschr	Large-scale condensational heating rate	K/s	time presnivs lat lon	4,10,10,10,10,10
dtlscst	dQ strat.	K/s	time presnivs lat lon	10,10,10,10,10,10
dtlscth	dQ therm.	K/s	time presnivs lat lon	10,10,10,10,10,10
dtlw0	CS LW radiation dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtlwr	LW radiation dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtoro	Orography dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtphy	Physics dT	K/s	time presnivs lat lon	2,10,10,10,10,10
dtsvdfg	Boundary-layer dTs(g)	K/s	time lat lon	10,10,10,10,10,10
dtsvdfi	Boundary-layer dTs(g)	K/s	time lat lon	10,10,10,10,10,10
dtsvdfo	Boundary-layer dTs(o)	K/s	time lat lon	10,10,10,10,10,10
dtsvdft	Boundary-layer dTs(t)	K/s	time lat lon	10,10,10,10,10,10
dtsw0	CS SW radiation dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtswr	SW radiation dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtthe	Thermal dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtvdf	Boundary-layer dT	K/s	time presnivs lat lon	4,10,10,10,10,10
dtwak	Wake dT	K/s	time presnivs lat lon	4,5,10,10,10,10
ducon	Convection du	$m/s2$	time presnivs lat lon	4,10,10,10,10,10
dudyn	Dynamics dU	$m/s2$	time presnivs lat lon	4,10,10,10,10,10
dulif	Orography dU	$m/s2$	time presnivs lat lon	4,10,10,10,10,10
duoro	Orography dU	$m/s2$	time presnivs lat lon	4,10,10,10,10,10
duvdf	Boundary-layer dU	$m/s2$	time presnivs lat lon	4,10,10,10,10,10
dvcon	Convection dv	$m/s2$	time presnivs lat lon	4,10,10,10,10,10
dvdyn	Dynamics dV	$m/s2$	time presnivs lat lon	4,10,10,10,10,10
dvlif	Orography dV	$m/s2$	time presnivs lat lon	4,10,10,10,10,10
dvoro	Orography dV	$m/s2$	time presnivs lat lon	4,10,10,10,10,10
dvvdf	Boundary-layer dV	$m/s2$	time presnivs lat lon	4,10,10,10,10,10

Table 12: Table of variables included in the file hist LMDZ files (cont' 2)

ec550aer	Extinction at 550nm	m^-1	time presnivs lat lon	2,6,10,10,10,10
e_th	Thermal plume entrainment	K/s	time presnivs lat lon	4,10,10,10,10,10
evap	Evaporat	$kg/(s*m2)$	time lat lon	1,1,10,10,10,10
evap_lic	evaporation at surface lic	$kg/(s*m2)$	time lat lon	1,6,10,10,10,10
evap_oce	evaporation at surface oce	$kg/(s*m2)$	time lat lon	1,6,10,10,10,10
evappot_lic	Temperaturelic	K	time lat lon	4,6,10,10,10,10
evappot_oce	Temperatureoce	K	time lat lon	4,6,10,10,10,10
evappot_sic	Temperaturesic	K	time lat lon	4,6,10,10,10,10
evappot_ter	Temperatureter	K	time lat lon	1,6,10,10,10,10
evap_sic	evaporation at surface sic	$kg/(s*m2)$	time lat lon	1,6,10,10,10,10
evap_ter	evaporation at surface ter	$kg/(s*m2)$	time lat lon	1,6,10,10,10,10
evu	Eddy viscosity coefficient for Momentum Variables	$m2s-1$	time presnivs lat lon	4,10,10,10,10,10
fbase	Cld base mass flux	$kg/m2/s$	time lat lon	1,10,10,10,10,10
fder	Heat flux derivation	$W/m2$	time lat lon	1,2,10,10,10,10
ffonte	Thermal flux for snow melting	$W/m2$	time lat lon	1,10,10,10,10,10
fl	Denominator of Cloud droplet effective radius		time presnivs lat lon	5,1,10,10,5,10
flat	Latent heat flux	$W/m2$	time lat lon	5,1,10,10,5,10
flw_lic	LW lic	$W/m2$	time lat lon	1,10,10,10,10,10
flw_oce	LW oce	$W/m2$	time lat lon	1,10,10,10,10,10
flw_sic	LW sic	$W/m2$	time lat lon	1,10,10,10,10,10
flw_ter	LW ter	$W/m2$	time lat lon	1,10,10,10,10,10
fqcalving	Ice Calving	$kg/m2/s$	time lat lon	1,10,10,10,10,10
fqfonte	Land ice melt	$kg/m2/s$	time lat lon	1,10,10,10,10,10
fract_lic	Fraction lic	1	time lat lon	1,6,10,10,10,10
fract_oce	Fraction oce	1	time lat lon	1,6,10,10,10,10
fract_sic	Fraction sic	1	time lat lon	1,6,10,10,10,10
fract_ter	Fraction ter	1	time lat lon	1,6,10,10,10,10
fsnow	Surface snow area fraction	–	time lat lon	1,10,10,10,10,10
fsw_lic	SW lic	$W/m2$	time lat lon	1,10,10,10,10,10
fsw_oce	SW oce	$W/m2$	time lat lon	1,10,10,10,10,10
fsw_sic	SW sic	$W/m2$	time lat lon	1,10,10,10,10,10
fsw_ter	SW ter	$W/m2$	time lat lon	1,10,10,10,10,10
ftime_con	Fraction of time convection Occurs		ti86400 lat lon	4,10,10,10,10,10
ftime_th	Fraction of time Shallow convection occurs		time lat lon	4,10,10,10,10,10!
geop	Geopotential height	$m2/s2$	time presnivs lat lon	2,3,10,10,10,10
h2o	Mass Fraction of Water	1	time presnivs lat lon	4,10,10,10,10,10
iwcon	Cloud ice water content	kg/kg	time presnivs lat lon	2,5,10,10,10,10
iwp	Cloud ice water path	$kg/m2$	time lat lon	1,5,10,10,10,10
kz	Kz melange	$m2/s$	time presnivs lat lon	4,10,10,10,10,10
kz_max	Kz melange max	$m2/s$	time presnivs lat lon	4,10,10,10,10,10
lambda_th	Thermal plume vertical velocity	m/s	time presnivs lat lon	10,10,10,10,10,10
lat	latitude	$degrees\_north$	lat	
lat_lic	Latent heat flux lic	$W/m2$	time lat lon	1,6,10,7,10,10
lat_oce	Latent heat flux oce	$W/m2$	time lat lon	1,6,10,7,10,10
lat_sic	Latent heat flux sic	$W/m2$	time lat lon	1,6,10,7,10,10
lat_ter	Latent heat flux ter	$W/m2$	time lat lon	1,6,10,7,10,10
lmaxth	Upper level thermals		time lat lon	10,10,10,10,10,10
lon	longitude	$degrees\_east$	lon	
lwcon	Cloud liquid water content	kg/kg	time presnivs lat lon	2,5,10,10,10,10

Table 13: Table of variables included in the file hist LMDZ files (cont' 3)

LWdn200	LWdn at 200mb	$W/m2$	time lat lon	1,10,10,10,10,10
LWdn200clr	LWdn clear sky at 200mb	$W/m2$	time lat lon	1,10,10,10,10,10
LWdnSFC	Down. IR rad. at surface	$W/m2$	time lat lon	1,4,10,10,5,10
LWdnSFCclr	Down. CS IR rad. at surface	$W/m2$	time lat lon	1,4,10,10,5,10
LWdownOR	Sfce incident LW radiation OR	$W/m2$	time lat lon	10,10,2,10,10,10
lwp	Cloud water path	$kg/m2$	time lat lon	1,5,10,10,10,10
LWup200	LWup at 200mb	$W/m2$	time lat lon	1,10,10,10,10,10
LWup200clr	LWup clear sky at 200mb	$W/m2$	time lat lon	1,10,10,10,10,10
LWupSFC	Upwd. IR rad. at surface	$W/m2$	time lat lon	1,4,10,10,5,10
LWupSFCclr	CS Upwd. IR rad. at surface	$W/m2$	time lat lon	1,4,10,10,5,10
Ma	undilute adiab updraft	$kg/m2/s$	time presnivs lat lon	4,10,10,10,10,10
mass	Masse Couches	$kg/m2$	time presnivs lat lon	2,3,10,10,10,10
mc	Convective mass flux	$kg/m2/s$	time presnivs lat lon	4,5,10,10,10,10
mcd	Downdraft COnvective Mass Flux	$kg/(m2*s)$	time presnivs lat lon	4,10,10,10,10,10
msnow	Surface snow amount	$kg/m2$	time lat lon	1,10,10,10,10,10
ndayrain	Number of dayrain(liq+sol)	$-$	ti86400 lat lon	1,10,10,10,10,10
nettop	Net dn radiatif flux at TOA	$W/m2$	time lat lon	1,4,10,10,10,10
oliq	Condensed water	kg/kg	time presnivs lat lon	2,3,4,10,10,10
ovap	Specific humidity	kg/kg	time presnivs lat lon	2,3,4,10,10,10
ovapinit	Specific humidity (begin of timestep)	kg/kg	time presnivs lat lon	2,10,10,10,10,10
ozone	Ozone mole fraction	$-$	time presnivs lat lon	2,10,10,10,10,10
paprs	Air pressure Inter-Couches	Pa	time presnivs lat lon	2,3,10,10,10,10
PB	Tracer PBVL1	$-$	time presnivs lat lon	
pbase	Cld base pressure	Pa	time lat lon	1,5,10,10,10,10
phis	Surface geop.height	$m2/s2$	time lat lon	1,1,10,5,1,1
plcl	Lifting Condensation Level	hPa	time lat lon	1,10,10,10,10,10
plfc	Level of Free Convection	hPa	time lat lon	1,10,10,10,10,10
pluc	Convective Precip.	$kg/(s*m2)$	time lat lon	1,1,1,10,5,10
plul	Large-scale Precip.	$kg/(s*m2)$	time lat lon	1,1,1,10,10,10
plulst	Rainfall strat.	K/s	time lat lon	10,10,10,10,10,10
plulth	Rainfall therm.	K/s	time lat lon	10,10,10,10,10,10
pourc_lic	% lic	%	time lat lon	1,7,10,10,10,10
pourc_oce	% oce	%	time lat lon	1,7,10,10,10,10
pourc_sic	% sic	%	time lat lon	1,7,10,10,10,10
pourc_ter	% ter	%	time lat lon	1,7,10,10,10,10
pr_con_i	Convective precipitation ice		time presnivs lat lon	2,10,10,10,10,10
pr_con_l	Convective precipitation lic		time presnivs lat lon	2,10,10,10,10,10
precip	Precip Totale liq+sol	$kg/(s*m2)$	time lat lon	1,1,1,10,5,10
pres	Air pressure	Pa	time presnivs lat lon	2,3,10,10,10,10
presnivs	model_level_number	Pa	presnivs	
pr_lsc_i	Large scale precipitation ice		time presnivs lat lon	2,10,10,10,10,10
pr_lsc_l	Large scale precipitation lic		time presnivs lat lon	2,10,10,10,10,10
prw	Precipitable water	$kg/m2$	time lat lon	1,1,10,10,10,10
psol	Surface Pressure	Pa	time lat lon	1,1,1,5,10,10
ptconv	POINTS CONVECTIFS		time presnivs lat lon	4,10,10,10,10,10
ptop	Cld top pressure	Pa	time lat lon	1,5,10,10,10,10

Table 14: Table of variables included in the file hist LMDZ files (cont' 4)

q10	Specific humidity 7hPa	kg/kg	ti86400 lat lon	1,7,7,10,10,10
q100	Specific humidity 5hPa	kg/kg	ti86400 lat lon	1,7,7,10,10,10
q200	Specific humidity 4hPa	kg/kg	ti86400 lat lon	1,7,7,10,10,10
q2m	Specific humidity 2m	kg/kg	time lat lon	1,1,1,5,10,10
q50	Specific humidity 6hPa	kg/kg	ti86400 lat lon	1,7,7,10,10,10
q500	Specific humidity 3hPa	kg/kg	ti86400 lat lon	1,7,7,10,10,10
q700	Specific humidity 2hPa	kg/kg	ti86400 lat lon	1,7,7,10,10,10
q850	Specific humidity 1hPa	kg/kg	ti86400 lat lon	1,7,7,10,10,10
qsat2m	Saturant humidity at 2m	%	time lat lon	10,5,10,10,10,10
qsol	Soil watter content	mm	time lat lon	1,10,10,10,10,10
qsurf	Surface Air humidity	kg/kg	time lat lon	1,10,10,10,10,10
q_th	Thermal plume total humidity	kg/kg	time presnivs lat lon	4,10,10,10,10,10
radsol	Rayonnement au sol	$W/m2$	time lat lon	1,7,10,10,10,10
ratqs	RATQS		time presnivs lat lon	4,10,10,10,10,10
re	Cloud droplet effective radius	um	time presnivs lat lon	5,10,10,10,10,10
ref_ice	Effective radius of startiform cloud ice particle	m	time presnivs lat lon	4,10,10,10,10,10
ref_liq	Effective radius of convective cloud liquid water particle	m	time presnivs lat lon	4,10,10,10,10,10
rh2m	Relative humidity at 2m	%	time lat lon	5,5,10,10,10,10
rh2m_max	Max Relative humidity at 2m	%	time lat lon	10,5,10,10,10,10
rh2m_min	Min Relative humidity at 2m	%	time lat lon	10,5,10,10,10,10
rhum	Relative humidity	–	time presnivs lat lon	2,5,10,10,10,10
rld	LW downward radiation	$Wm-2$	time presnivs lat lon	4,10,10,10,10,10
rldcs	LW CS downward radiation	$Wm-2$	time presnivs lat lon	4,10,10,10,10,10
rlu	LW upward radiation	$Wm-2$	time presnivs lat lon	4,10,10,10,10,10
rlucs	LW CS upward radiation	$Wm-2$	time presnivs lat lon	4,10,10,10,10,10
RN	Tracer RNVL1	–	time presnivs lat lon	
rneb	Cloud fraction	–	time presnivs lat lon	2,5,10,10,10,10
rnebcon	Convective Cloud Fraction	–	time presnivs lat lon	2,5,10,10,10,10
rnebls	LS Cloud fraction	–	time presnivs lat lon	2,5,10,10,10,10
rsd	SW downward radiation	$Wm-2$	time presnivs lat lon	4,10,10,10,10,10
rsdcs	SW CS downward radiation	$Wm-2$	time presnivs lat lon	4,10,10,10,10,10
rsu	SW upward radiation	$Wm-2$	time presnivs lat lon	4,10,10,10,10,10
rsucs	SW CS upward radiation	$Wm-2$	time presnivs lat lon	4,10,10,10,10,10
rugs	rugosity	–	time lat lon	10,10,10,10,10,10
rugs_lic	Surface roughness lic	m	time lat lon	3,6,10,10,10,10
rugs_oce	Surface roughness oce	m	time lat lon	3,6,10,10,10,10
rugs_sic	Surface roughness sic	m	time lat lon	3,6,10,10,10,10
rugs_ter	Surface roughness ter	m	time lat lon	3,6,10,10,10,10
sens	Sensible heat flux	$W/m2$	time lat lon	1,1,10,10,5,10
sens_lic	Sensible heat flux lic	$W/m2$	time lat lon	1,6,10,7,10,10
sens_oce	Sensible heat flux oce	$W/m2$	time lat lon	1,6,10,7,10,10
sens_sic	Sensible heat flux sic	$W/m2$	time lat lon	1,6,10,7,10,10
sens_ter	Sensible heat flux ter	$W/m2$	time lat lon	1,6,10,7,10,10
sicf	Sea-ice fraction	–	time lat lon	1,1,10,10,10,10
s_lcl	Condensation level	m	time lat lon	1,10,10,10,10,10
slp	Sea Level Pressure	Pa	time lat lon	1,1,1,10,10,10

Table 15: Table of variables included in the file hist LMDZ files (cont' 4)

snow	Snow fall	$kg/(s*m2)$	time lat lon	1,1,10,10,5,10
snowl	Solid Large-scale Precip.	$kg/(m2*s)$	time lat lon	10,1,10,10,10,10
soll	IR rad. at surface	$W/m2$	time lat lon	1,1,10,10,10,10
soll0	IR rad. at surface	$W/m2$	time lat lon	1,5,10,10,10,10
solldown	Down. IR rad. at surface	$W/m2$	time lat lon	10,1,10,10,10,10
sols	Solar rad. at surf.	$W/m2$	time lat lon	1,1,10,10,10,10
sols0	Solar rad. at surf.	$W/m2$	time lat lon	1,5,10,10,10,10
s_pblh	Boundary Layer Height	m	time lat lon	1,10,10,10,10,10
s_pblt	t at Boundary Layer Height	K	time lat lon	1,10,10,10,10,10
s_therm	Exces du thermique	K	time lat lon	1,10,10,10,10,10
SWdn200	SWdn at 200mb	$W/m2$	time lat lon	1,10,10,10,10,10
SWdn200clr	SWdn clear sky at 200mb	$W/m2$	time lat lon	10,1,10,10,10,10
SWdnSFC	SWdn at surface	$W/m2$	time lat lon	1,1,10,10,5,10
SWdnSFCclr	SWdn clear sky at surface	$W/m2$	time lat lon	1,4,10,10,5,10
SWdnTOA	SWdn at TOA	$W/m2$	time lat lon	1,4,10,10,10,10
SWdnTOAclr	SWdn clear sky at TOA	$W/m2$	time lat lon	1,4,10,10,10,10
SWdownOR	Sfce incident SW radiation OR	$W/m2$	time lat lon	10,10,2,10,10,10
SWnetOR	Sfce net SW radiation OR	$W/m2$	time lat lon	10,10,2,10,10,10
SWup200	SWup at 200mb	$W/m2$	time lat lon	1,10,10,10,10,10
SWup200clr	SWup clear sky at 200mb	$W/m2$	time lat lon	10,1,10,10,10,10
SWupSFC	SWup at surface	$W/m2$	time lat lon	1,4,10,10,5,10
SWupSFCclr	SWup clear sky at surface	$W/m2$	time lat lon	1,4,10,10,5,10
SWupTOA	SWup at TOA	$W/m2$	time lat lon	1,4,10,10,10,10
SWupTOAclr	SWup clear sky at TOA	$W/m2$	time lat lon	1,4,10,10,10,10
t10	Temperature 7hPa	K	ti86400 lat lon	1,7,7,10,10,10
t100	Temperature 5hPa	K	ti86400 lat lon	1,7,7,10,10,10
t200	Temperature 4hPa	K	ti86400 lat lon	1,7,7,10,10,10
t2m	Temperature 2m	K	time lat lon	1,1,1,5,10,10
t2m_lic	Temp 2m lic	K	time lat lon	10,6,10,10,10,10
t2m_max	Temp 2m max	K	time lat lon	1,1,10,10,10,10
t2m_min	Temp 2m min	K	time lat lon	1,1,10,10,10,10
t2m_oce	Temp 2m oce	K	time lat lon	10,6,10,10,10,10
t2m_sic	Temp 2m sic	K	time lat lon	10,6,10,10,10,10
t2m_ter	Temp 2m ter	K	time lat lon	10,6,10,10,10,10
t50	Temperature 6hPa	K	ti86400 lat lon	1,7,7,10,10,10
t500	Temperature 3hPa	K	ti86400 lat lon	1,7,7,10,10,10
t700	Temperature 2hPa	K	ti86400 lat lon	1,7,7,10,10,10
t850	Temperature 1hPa	K	ti86400 lat lon	1,7,7,10,10,10
taux	Zonal wind stress	Pa	time lat lon	1,10,10,10,10,10
taux_lic	Zonal wind stresslic	Pa	time lat lon	1,6,10,10,10,10
taux_oce	Zonal wind stressoce	Pa	time lat lon	1,6,10,10,10,10
taux_sic	Zonal wind stresssic	Pa	time lat lon	1,6,10,10,10,10
taux_ter	Zonal wind stresster	Pa	time lat lon	1,6,10,10,10,10
tauy	Meridional wind stress	Pa	time lat lon	1,10,10,10,10,10
tauy_lic	Meridional wind stress lic	Pa	time lat lon	1,6,10,10,10,10
tauy_oce	Meridional wind stress oce	Pa	time lat lon	1,6,10,10,10,10
tauy_sic	Meridional wind stress sic	Pa	time lat lon	1,6,10,10,10,10
tauy_ter	Meridional wind stress ter	Pa	time lat lon	1,6,10,10,10,10

Table 16: Table of variables included in the file hist LMDZ files (cont' 5)

temp	Air temperature	K	time presnivs lat lon	2,3,4,10,10,10
theta	Potential air temperature	K	time presnivs lat lon	2,3,4,10,10,10
time	time	*seconds since* $1999-12-31$ $00:00:00$		4,10,10,10,10,10
time_bnds			time bnds	
ti86400	time	*seconds since* $1999-12-31$ $00:00:00$		
tke	TKE	$m2/s2$	time presnivs lat lon	4,10,10,10,10,10
tke_lic	Max Turb. Kinetic Energy lic	–	time lat lon	10,4,10,10,10,10
tke_max	TKE max	$m2/s2$	t_op_00001800 presnivs lat lon	4,10,10,10,10,10
tke_max_lic	Max Turb. Kinetic Energy lic	–	t_op_00001800 lat lon	10,4,10,10,10,10
tke_max_oce	Max Turb. Kinetic Energy oce	–	t_op_00001800 lat lon	10,4,10,10,10,10
tke_max_sic	Max Turb. Kinetic Energy sic	–	t_op_00001800 lat lon	10,4,10,10,10,10
tke_max_ter	Max Turb. Kinetic Energy ter	–	t_op_00001800 lat lon	10,4,10,10,10,10
tke_oce	Max Turb. Kinetic Energy oce	–	time lat lon	10,4,10,10,10,10
tke_sic	Max Turb. Kinetic Energy sic	–	time lat lon	10,4,10,10,10,10
tke_ter	Max Turb. Kinetic Energy ter	–	time lat lon	10,4,10,10,10,10
tnhus	Tendency of specific humidity	$s-1$	time presnivs lat lon	4,10,10,10,10,10
tnhusc	Tendency of specific humidity due to convection	$s-1$	time presnivs lat lon	4,10,10,10,10,10
tnhusscpbl	Tendency of Specific humidity due to ST cl, precip and BL mixing	$s-1$	time presnivs lat lon	4,10,10,10,10,10
tnt	Tendency of air temperature	$Ks-1$	time presnivs lat lon	4,10,10,10,10,10
tntc	Tendency of air temperature due to Moist Convection	$Ks-1$	time presnivs lat lon	4,10,10,10,10,10
tntr	Air temperature tendency due to Radiative heating	$Ks-1$	time presnivs lat lon	4,10,10,10,10,10
tntscpbl	Air temperature tendency due to St cloud and precipitation and BL mixing	$Ks-1$	time presnivs lat lon	4,10,10,10,10,10
t_oce_sic	Temp mixte oce-sic	K	time lat lon	1,10,10,10,10,10
t_op_00001800	time	*seconds since* $1979-01-01$ $00:00:00$		
t_op_00001800_bnds				
topl	IR rad. at TOA	$W/m2$	time lat lon	1,1,10,5,10,10
topl0	IR rad. at TOA	$W/m2$	time lat lon	1,5,10,10,10,10
tops	Solar rad. at TOA	$W/m2$	time lat lon	1,1,10,10,10,10
tops0	CS Solar rad. at TOA	$W/m2$	time lat lon	1,5,10,10,10,10
tpot	Surface air potential temperature	K	time lat lon	10,5,10,10,10,10
tpote	Surface air equivalent potential temperature	K	time lat lon	10,5,10,10,10,10
tsol	Surface Temperature	K	time lat lon	1,1,1,5,10,10
tsol_lic	Temperature lic	K	time lat lon	1,6,10,10,10,10
tsol_oce	Temperature oce	K	time lat lon	1,6,10,10,10,10
tsol_sic	Temperature sic	K	time lat lon	1,6,10,10,10,10
tsol_ter	Temperature ter	K	time lat lon	1,6,10,10,10,10

Table 17: Table of variables included in the file hist LMDZ files (cont' 6)

u10	Zonal wind 7hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
u100	Zonal wind 5hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
u10m	Vent zonal 10m	m/s	time lat lon	1,1,1,5,10,10
u10m_lic	Vent Zonal 10m lic	m/s	time lat lon	10,6,10,10,10,10
u10m_oce	Vent Zonal 10m oce	m/s	time lat lon	10,6,10,10,10,10
u10m_sic	Vent Zonal 10m sic	m/s	time lat lon	10,6,10,10,10,10
u10m_ter	Vent Zonal 10m ter	m/s	time lat lon	10,6,10,10,10,10
u200	Zonal wind 4hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
u50	Zonal wind 6hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
u500	Zonal wind 3hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
u700	Zonal wind 2hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
u850	Zonal wind 1hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
ue	Zonal energy transport	–	time lat lon	1,10,10,10,10,10
upwd	saturated updraft	$kg/m2/s$	time presnivs lat lon	2,10,10,10,10,10
uq	Zonal humidity transport	–	time lat lon	1,10,10,10,10,10
ustar	Friction velocity	m/s	time lat lon	1,1,1,5,10,10
ustar_lic	Friction velocity lic	m/s	time lat lon	10,6,10,10,10,10
ustar_oce	Friction velocity oce	m/s	time lat lon	10,6,10,10,10,10
ustar_sic	Friction velocity sic	m/s	time lat lon	10,6,10,10,10,10
ustar_ter	Friction velocity ter	m/s	time lat lon	10,6,10,10,10,10
v10	Meridional wind 7hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
v100	Meridional wind 5hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
v10m	Vent meridien 10m	m/s	time lat lon	1,1,1,5,10,10
v10m_lic	Vent meredien 10m lic	m/s	time lat lon	10,6,10,10,10,10
v10m_oce	Vent meredien 10m oce	m/s	time lat lon	10,6,10,10,10,10
v10m_sic	Vent meredien 10m sic	m/s	time lat lon	10,6,10,10,10,10
v10m_ter	Vent meredien 10m ter	m/s	time lat lon	10,6,10,10,10,10
v200	Meridional wind 4hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
v50	Meridional wind 6hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
v500	Meridional wind 3hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
v700	Meridional wind 2hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
v850	Meridional wind 1hPa	m/s	ti86400 lat lon	1,7,7,10,10,10
ve	Merid energy transport	–	time lat lon	1,10,10,10,10,10
vitu	Zonal wind	m/s	time presnivs lat lon	2,3,4,6,10,10
vitv	Meridional wind	m/s	time presnivs lat lon	2,3,4,6,10,10
vitw	Vertical wind	Pa/s	time presnivs lat lon	2,3,10,6,10,10
Vprecip	precipitation vertical profile	–	time presnivs lat lon	10,10,10,10,10,10
vq	Merid humidity transport	–	time lat lon	1,10,10,10,10,10

Table 18: Table of variables included in the file hist LMDZ files (cont' 7)

w10	Vertical wind 7hPa	Pa/s	ti86400 lat lon	1,7,7,10,10,10
w100	Vertical wind 5hPa	Pa/s	ti86400 lat lon	1,7,7,10,10,10
w200	Vertical wind 4hPa	Pa/s	ti86400 lat lon	1,7,7,10,10,10
w50	Vertical wind 6hPa	Pa/s	ti86400 lat lon	1,7,7,10,10,10
w500	Vertical wind 3hPa	Pa/s	ti86400 lat lon	1,7,7,10,10,10
w700	Vertical wind 2hPa	Pa/s	ti86400 lat lon	1,7,7,10,10,10
w850	Vertical wind 1hPa	Pa/s	ti86400 lat lon	1,7,7,10,10,10
wake_deltaq	wake_deltaq		time presnivs lat lon	4,5,10,10,10,10
wake_deltat	wake_deltat		time presnivs lat lon	4,5,10,10,10,10
wake_h	wake_h	–	time lat lon	4,5,10,10,10,10
wake_omg	wake_omg		time presnivs lat lon	4,5,10,10,10,10
wake_s	wake_s	–	time lat lon	4,5,10,10,10,10
wape			time lat lon	1,1,1,10,10,10
wbeff	Conv. updraft velocity at LFC (¡100)	m/s	time lat lon	1,10,10,10,10,10
wbilo_lic	Bilan eau lic	$kg/(m2*s)$	time lat lon	1,10,10,10,10,10
wbilo_oce	Bilan eau oce	$kg/(m2*s)$	time lat lon	1,10,10,10,10,10
wbilo_sic	Bilan eau sic	$kg/(m2*s)$	time lat lon	1,10,10,10,10,10
wbilo_ter	Bilan eau ter	$kg/(m2*s)$	time lat lon	1,10,10,10,10,10
wbils_lic	Bilan sol lic	$W/m2$	time lat lon	1,10,10,10,10,10
wbils_oce	Bilan sol oce	$W/m2$	time lat lon	1,10,10,10,10,10
wbils_sic	Bilan sol sic	$W/m2$	time lat lon	1,10,10,10,10,10
wbils_ter	Bilan sol ter	$W/m2$	time lat lon	1,10,10,10,10,10
wdtrainA	precipitation from AA	–	time presnivs lat lon	4,1,10,4,1,10
wdtrainM	precipitation from mixture	–	time presnivs lat lon	4,1,10,4,1,10
weakinv	Weak inversion	–	time lat lon	10,1,10,10,10,10
wind10m	10-m wind speed	m/s	time lat lon	1,1,1,10,10,10
wind10max	10m wind speed max	m/s	time lat lon	10,1,10,10,10,10
z10	Geopotential height 7hPa	m	ti86400 lat lon	1,7,7,10,10,10
z100	Geopotential height 5hPa	m	ti86400 lat lon	1,7,7,10,10,10
z200	Geopotential height 4hPa	m	ti86400 lat lon	1,7,7,10,10,10
z50	Geopotential height 6hPa	m	ti86400 lat lon	1,7,7,10,10,10
z500	Geopotential height 3hPa	m	ti86400 lat lon	1,7,7,10,10,10
z700	Geopotential height 2hPa	m	ti86400 lat lon	1,7,7,10,10,10
z850	Geopotential height 1hPa	m	ti86400 lat lon	1,7,7,10,10,10
zfull	Altitude of full pressure levels	m	time presnivs lat lon	2,3,10,10,10,10
zhalf	Altitude of half pressure levels	m	time presnivs lat lon	2,3,10,10,10,10
zmax_th	Thermal plume height	K/s	time lat lon	4,4,4,5,10,10