Paul Vaillancourt- revisions : 18 avril 2007; 29 aout 2007; 23 juin2008

	Instantaneous			***Accumulator***			***Average***		
Description	***nombus***	***ON***	***serxst***	***nombus***	***ON***	***serxst***			
LW flux at surface-down	fdsi	FI	FI *	fiaf	AD	AD			
LW flux at surface- net	fnsi	SI	SI	siaf	AI	AI			
LW flux at toa – up(OLR)	ei	EI	EI	eiaf	AR	AR			
net clear sky LW flux at top	clt	clt	clt	cltaf	aclt	aclt			
net clear sky LW flux at sfc	clb	clb	clb	clbaf	aclb	aclb			
Solar flux at top of atmosphere (down)	iv	IV	IV	ivaf	AB	AB			
Solar flux at top of atmosphere (up)	ev	EV	EV	evaf	AU	AU			
Solar flux absorbed by surface	fdss	FS	FS	fsaf	AS	AS			
Solar flux incident at surface	flusolis	FB	FU	flusolaf	N4	AF			
net clear sky SW flux at top	cstt	cstt	cst	cstaf	acst	acst			
net clear sky SW flux at sfc	csb	csb	csb	csbaf	acsb	acsb			
Net radiation budget at TOA			NR						
Net radiation budget at sfc(soil)	rnet_s	NR	C9						

Paul Vaillancourt- revisions : 18 avril 2007; 29 aout 2007; 23 juin2008

	Instantaneous			***Accumulator***			***Average***		
Surface albedo	alvis	AL	AL						
Planetary albedo	ap	AP	AP						
Sfc albedo over ocean	salb6z	salb							
Cosine of solar angle - average	cosas	CO	CO						
Cosine of solar angle	cosz	M4							
Normaliza-tion factor for SW	vv1	vv1							
Flux down sw at mid t	fluxds0	f0ds							
Flux up sw at mid t	fluxus0	f0us							
Flux down sw	fluxds	flds							
Flux up sw	fluxus	flus							
Flux down lw	fluxdl	fldl							
Flux up lw	fluxul	flul							
Sw flux abs from toa to model top	fsamoon	fsam							
Sw direct flux at sfc	fsd	fsd	Fsd	fsdaf	afsd				
Sw diffuse flux at sfc	fsf	fsf	fsf	fsfaf	afsf				
Sw down flux abs at sfc at mid t	fsg	fsg	fsg	fsgaf	afsg				
Sw-near IR flux at sfc	fsi	fsi	fsi	fsiaf	afsi				
Sw-vis flux at sfc	fsv	fsv	fsv	fsvaf	afsv				
Average mixing ratio	oztoit	ozto							

Paul Vaillancourt- revisions : 18 avril 2007; 29 aout 2007; 23 juin2008

	Instantaneous			***Accumulator***			***Average***		
of ozone above model top									
ozone	o3s	o3s							
Photosyn. active radiation	parr	parr	parr	parraf	apar				
Surface sensible heat flux	fc	FC	FC	fcaf	AH	AH			
Surface latent heat flux	fv	FV	FV	fvaf	AV	AV			
surf. vapour flux	fvap	HF							
Surf momentum flux	fq	FQ	FQ	fqaf	AW	AW			
Net heat flux in ground (fnsi+fdss-fc-fv)	fl	fl	FL	flaf	AG	AG			

Table 1: Radiative and surface fluxes. Valid for phy4.4-phy4.5

- This is actually FI=fdsi*epstfn/stefan = fdsi as long as emiss of surface is 1.0 (see difver6)

Paul Vaillancourt- revisions : 18 avril 2007; 29 aout 2007; 23 juin2008

	Instantaneous			***Accumulator***			***Average***		
Description	***nombus***	***ON***	***serxst***	***nombus***	***ON***	***serxst***	***nombus***	***ON***	***serxst***
Liquid condensate (for RT)	lwcrad	LWCR	LWCR				lwcradm	LWRM	LWRM
Solid condensate (for RT)	iwcrad	IWCR	IWCR				iwcradm	IWRM	IWRM
Cloud fraction (for RT)	cldrad	CLDR	CLDR				cldradm	CLRM	CLRM
2d total effective cloudiness	nt	NT	NT	ntaf	NF	NF			
Total LWP (for RT)	tlwp	ICR	ICR				tlwpm	ICRM	
Total IWP (for RT)	tiwp	IIR	IIR				tiwpm	IIRM	
Total in-cloud LWP	tlwpin	W1	W1						
Total in-cloud IWP	tiwpin	W2	W2						
Total in-cloud optical thickness of liq for vis	topthw	W3	W3						
Total in-cloud optical thickness of ice for vis	topthi	W4	W4						
Deep convection - implicit liquid condensate	qldi	qldi							
Deep convection - explicit total condensate	qtde	qtde							
Shallow convection –	qssc	qssc							

Paul Vaillancourt- revisions : 18 avril 2007; 29 aout 2007; 23 juin2008

	Instantaneous			***Accumulator***			***Average***		
implicit solid condensate									
Shallow convection - implicit liquid condensate	qlsc	qlsc							
	qtbl	qtbl							
Total cloud fraction	ftot	FN	NU				ccnm	CA	
Boundary layer cloud fraction	fbl	NC	NJ?						
Cloud fraction for deep convection	fdc	CK	NC						
Cloud fraction for explicit scheme	fxp	NS	NS						
Cloud fraction for shallow convection	fsc	FSC							
ISCCP cloud variability (epsilon)	icep	icep							
ISCCP cloud top pressure	ictp	ictp							
ISCCP sunlit mask (mu > 0.2)	isun	isun							
ISCCP cloud optical thickness	itau	itau							
ISCCP total cloud fraction	itcf	itcf							
ISCCP ctp vs tau histo	itp	itp							

Paul Vaillancourt- revisions : 18 avril 2007; 29 aout 2007; 23 juin2008

	Instantaneous			***Accumulator***			***Average***		

Table 2: Available variables for cloud condensate, cloud fraction and water vapor. Valid for phy4.4(4.5?) and assuming istcond le 5.