Variable name	Abbrev.	Unit	Origin	Description
primary variables				
Cloud mask	cldmask	1	NN	binary cloud occurrence classification
Cloud type	cldtype	1	PV	categorical cloud type classification
Cloud phase	phflag	1	PV	cloud phase classification
Cloud top pressure	ctp	hPa	SV	OE retrieval estimate of cloud top pressure
Cloud top pressure uncertainty	ctp_unc	hPa	SV	OE retrieval uncertainty of cloud top pressure
Cloud effective radius	cer	µm	SV	OE retrieval estimate of cloud effective radius
Cloud effective radius uncertainty	cer_unc	µm	SV	OE retrieval uncertainty of cloud effective radius
Cloud optical thickness	cot	1	SV	OE retrieval estimate of cloud optical thickness
Cloud optical thickness uncertainty	cot_unc	1	SV	OE retrieval uncertainty of cloud optical thickness
Surface temperature	stemp	kelvin	SV	OE retrieval estimate of surface temperature
Surface temperature uncertainty	stemp_unc	kelvin	SV	OE retrieval uncertainty of surface temperature
secondary variables				
Cloud mask uncertainty	cldmask_unc	1	PP	derived from NN output and threshold distance
Cloud top height	cth	km	PP	derived from CTP and atmospheric profile
Cloud top height uncertainty	cth_unc	km	PP	derived from retrieval uncertainty of CTP
Cloud top temperature	ctt	kelvin	PP	derived from CTP and atmospheric profile
Cloud top temperature uncertainty	ctt_unc	kelvin	PP	derived from retrieval uncertainty of CTP
Cloud water path	cwp	$g\,m^{-2}$	PP	derived from CER and COT (Han et al., 1994)
Cloud water path uncertainty	cwp_unc	$g\,m^{-2}$	PP	derived from retrieval uncertainty of CER and COT
Cloud albedo at 0.06 µm	cla	1	PP	derived from CER and COT based on DISORT (Laszlo et al., 2016)
Cloud albedo at 0.06 µm uncertainty	cla_unc	1	PP	derived from retrieval uncertainty of CER and COT
Cloud albedo at 0.08 µm	cla	1	PP	derived from CER and COT based on DISORT (Laszlo et al., 2016)
Cloud albedo at 0.08 µm uncertainty	cla_unc	1	PP	derived from retrieval uncertainty of CER and COT
Cloud effective emissivity	cee	1	PP	derived from 10.8 and 12.0 µm data