

Product Format and Definition Changes with Release-29

NOTE: References to GLAS binary product names GLA01 to GLA15 refer to original GLAS binary data, and are retained here for informational and provenance purposes. Access to GLAS binary data was removed 01 August, 2017. All GLAS data are available in HDF5 format, products GLAH01 to GLAH15.

Significant product changes were made in this release. Products changed include GLA05, GLA06, GLA09, GLA10, GLA11, GLA12, GLA13, GLA14, and GLA15. No changes were made to any product record sizes. A summary of the product changes is listed below. More information about product formats is available on the NASA Wallops Flight Facility's Web site at [Version 5.4 GLAS Files](#).

Table 1. Release-29 Changes

Product	Variable Changes
GLA01	None
GLA02	None
GLA03	None
GLA04	None
GLA05	Replaced integer (kind=i2b) :: i_areaTrWF (40) with integer (kind=i2b) :: i_TxNrg (40)
GLA06	Replaced integer (kind=i2b) :: i_ocElv (2) with integer (kind=i2b) :: i_spare12 (2)
	Replaced integer (kind=i2b) :: i_SigmaElv (40) with integer (kind=i2b) :: i_ocElv (40)
	Replaced integer (kind=i2b) :: i_srf_ruf (40) integer (kind=i2b) :: i_srf_slope (40) with integer (kind=i1b) :: i_spare4 (160)
	Replaced integer (kind=i1b) :: i_SurfRuf_slpQF (40) with integer (kind=i1b) :: i_spare9 (40)

Product	Variable Changes
	<p>Replaced integer (kind=i2b) :: i_satPwdCorr(40) with integer (kind=i2b) :: i_spare13(40)</p> <p>Replaced integer (kind=i1b) :: i_spare7(366) with integer (kind=i2b) :: i_TxNrg (40) integer (kind=i2b) :: i_eqElv(2) integer (kind=i1b) :: i_spare7(282)</p> <p>Replaced integer (kind=i1b) :: i_spare3 (3) with integer (kind=i1b) :: i_bs_conf integer (kind=i2b) :: i_bs_erd</p>
GLA07	None
GLA08	None
GLA09	<p>Replaced integer (kind=i1b) :: i_spare4 (558) with integer (kind=i2b) :: i_blow_snow_ht (20) integer (kind=i2b) :: i_blow_snow_od (20) integer (kind=i2b) :: i_blow_snow_erd (20) integer (kind=i1b) :: i_blow_snow_conf (20) integer (kind=i1b) :: i_spare4 (418)</p>
GLA10	<p>Replaced integer (kind=i1b) :: i_spare5 (292) with integer (kind=i2b) :: i_aod_botht_4s integer (kind=i1b) :: i_spare5 (290)</p>

Product	Variable Changes
GLA11	<p>Replaced integer (kind=i1b) :: i_FRir_qaFlag (160) integer (kind=i2b) :: i_FRir_cldtop (160) integer (kind=i1b) :: i_Aer_b20_prop (20,5) integer (kind=i1b) :: i_PBL_prop (20) integer (kind=i1b) :: i_Aer_ir_layflg (2) integer (kind=i1b) :: i_spare3 (142) with integer (kind=i2b) :: i_reflct_1064od_40hz_cor (40,4) integer (kind=i1b) :: i_reflct_1064msf_40hz (40,4) integer (kind=i2b) :: i_reflct_1064od_1hz_cor (4) integer (kind=i1b) :: i_reflct_1064msf_1hz (4) integer (kind=i2b) :: i_reflct_pristine_1hz (4) integer (kind=i2b) :: i_aod_4s integer (kind=i1b) :: i_aod_flg_4s integer (kind=i1b) :: i_spare3 integer (kind=i2b) :: i_bs_erd (4) integer (kind=i1b) :: i_bs_conf(4) integer (kind=i1b) :: i_spare4 (228)</p>
GLA12	<p>Replaced integer (kind=i2b) :: i_ocElv (2) with integer (kind=i2b) :: i_spare12 (2)</p> <hr/> <p>Replaced integer (kind=i2b) :: i_SigmaElv (40) with integer (kind=i2b) :: i_ocElv (40)</p> <hr/> <p>Replaced integer (kind=i2b) :: i_IceSheetRuf (40) integer (kind=i2b) :: i_IsSlopeEmp (40) with integer (kind=i1b) :: i_spare4 (160)</p> <hr/> <p>Replaced integer (kind=i1b) :: i_SurfRuf_slpQF (40) with integer (kind=i1b) :: i_spare9 (40)</p> <hr/> <p>Replaced integer (kind=i2b) :: i_satPwdCorr(40) with integer (kind=i2b) :: i_spare13(40)</p>

Product	Variable Changes
	<p>Replaced integer (kind=i1b) :: i_spare7 (366) with integer (kind=i2b) :: i_TxNrg (40) integer (kind=i2b) :: i_eqElv (2) integer (kind=i1b) :: i_spare7 (282)</p> <p>Replaced integer (kind=i1b) :: i_spare3 (3) with integer (kind=i1b) :: i_bs_conf integer (kind=i2b) :: i_bs_erd</p>
GLA13	<p>Replaced integer (kind=i2b) :: i_ocElv (2) with integer (kind=i2b) :: i_spare12 (2)</p> <p>Replaced integer (kind=i2b) :: i_SigmaElv (40) with integer (kind=i2b) :: i_ocElv (40)</p> <p>Replaced integer (kind=i2b) :: i_RufSealce (40) with integer (kind=i1b) :: i_spare11 (80)</p> <p>Replaced integer (kind=i2b) :: i_SiRufLstPk (40) integer (kind=i2b) :: i_AvgRuf (40) with integer (kind=i1b) :: i_spare4 (160)</p> <p>Replaced integer (kind=i2b) :: i_spare7 (40) integer (kind=i2b) :: i_SiRufMaxPk (40) with integer (kind=i1b) :: i_spare10 (160)</p> <p>Replaced integer (kind=i1b) :: i_SiRufQF (40) with integer (kind=i1b) :: i_spare9 (40)</p> <p>Replaced integer (kind=i2b) :: i_satPwdCorr(40) with integer (kind=i2b) :: i_spare13(40)</p>

Product	Variable Changes
	<p>Replaced integer (kind=i1b) :: i_spare8 (366) with integer (kind=i2b) :: i_TxNrg (40) integer (kind=i2b) :: i_eqElv (2) integer (kind=i1b) :: i_spare7 (282)</p> <p>Replaced integer (kind=i1b) :: i_spare3 (3) with integer (kind=i1b) :: i_bs_conf integer (kind=i2b) :: i_bs_erd</p>
GLA14	<p>Replaced integer (kind=i2b) :: i_ocElv (2) with integer (kind=i2b) :: i_spare12 (2)</p> <p>Replaced integer (kind=i2b) :: i_SigmaElv (40) with integer (kind=i2b) :: i_ocElv (40)</p> <p>Replaced integer (kind=i2b) :: i_LdRufLstPk (40) integer (kind=i2b) :: i_LandSlopeLast (40) with integer (kind=i1b) :: i_spare4 (160)</p> <p>Replaced integer (kind=i1b) :: i_SurfRuf_slpQF (40) with integer (kind=i1b) :: i_spare9 (40)</p> <p>Replaced integer (kind=i2b) :: i_satPwdCorr(40) with integer (kind=i2b) :: i_spare13(40)</p> <p>Replaced integer (kind=i1b) :: i_spare7 (204) with integer (kind=i2b) :: i_TxNrg (40) integer (kind=i2b) :: i_eqElv (2) integer (kind=i1b) :: i_spare7 (120)</p> <p>Replaced integer (kind=i1b) :: i_spare3 (3) with integer (kind=i1b) :: i_bs_conf integer (kind=i2b) :: i_bs_erd</p>

Product	Variable Changes
GLA15	Replaced integer (kind=i2b) :: i_ocElv (2) with integer (kind=i2b) :: i_spare12 (2)
	Replaced integer (kind=i2b) :: i_SigmaElv (40) with integer (kind=i2b) :: i_ocElv (40)
	Replaced integer (kind=i1b) :: i_OcRMSqf (40) with integer (kind=i1b) :: i_spare9 (40)
	Replaced integer (kind=i2b) :: i_satPwdCorr(40) with integer (kind=i2b) :: i_spare13(40)
	Replaced integer (kind=i2b) :: i_srf_ruf (40) integer (kind=i2b) :: i_srf_slope (40) with integer (kind=i1b) :: i_spare4 (160)
	Replaced integer (kind=i1b) :: i_spare7 (234) with integer (kind=i2b) :: i_TxNrg (40) integer (kind=i2b) :: i_eqElv (2) integer (kind=i1b) :: i_spare7 (150)