12. Appendices

12.1 Appendix 1: BIN file data format

The following file definition was correct at the time this manual was written. It is possible that additional data records will be added in the future, but backwards compatibility will be maintained.

	Description	Name	Type / Length
*	Data format version number	VERSION	Bytes (2)
*	Length of this record (†)	LENGTH	Integer (2)
*	Length of previous record (†)	PREVIOUS	Integer (2)
*	Number of data points	NPOINTS	Integer (2)
*	Luminescence type (‡)	LTYPE	Byte (1)
*	Low (temperature, time, wavelength)	LOW	Single (4)
*	High (temperature, time, wavelength)	HIGH	Single (4)
*	Rate (heating rate, scan rate).	RATE	Single (4)
*	Sample temperature	TEMPERATURE	Integer (2)
	X position of a single grain	XCOORD	Integer (2)
	Y position of a single grain	YCOORD	Integer (2)
*	TOL 'delay' channels	TOLDELAY	Integer (2)
*	TOL 'on' channels	TOLON	Integer (2)
*	TOL 'off' channels	TOLOFF	Integer (2)
*	Carousel position	POSITION	Byte (1)
*	Run number	RUN	Byte (1)
*	Data collection time (hh-mm-ss)	TIME	String (7)ϕ
*	Data collection date (dd-mm-yy)	DATE	String (7) ϕ
*	Sequence name	SEQUENCE	String (9) ϕ
*	User name	USER	String (9) ϕ
	Data type (#)	DTYPE	Byte (1)
	Irradiation time	IRR_TIME	Single (4)
	Irradiation type (alpha, beta or gamma)	IRR_TYPE	Byte (1)
	Irradiation unit (Gy, Rads, secs, mins, hrs)	IRR_UNIT	Byte (1)
	Bleaching time	BL_TIME	Single (4)
	Bleaching unit (mJ, J, secs, mins, hrs)	BL_UNIT	Byte (1)
	Annealing temperature	AN_TEMP	Single (4)
	Annealing time	AN_TIME	Single (4)
	Normalisation factor (1)	NORM1	Single (4)
	Normalisation factor (2)	NORM2	Single (4)
	Normalisation factor (3)	NORM3	Single (4)
	Background level	BG	Single (4)
	Number of channels to shift data	SHIFT	Integer (2)
	Sample name	SAMPLE	String (21) ϕ
	Comment	COMMENT	String (81) ϕ
	Light Source (∇)	LIGHTSOURCE	Byte (1)
*	Set Number	SET	Byte (1)
	Tag	TAG	Byte (1)
§	Grain Number	GRAIN	Integer (2)
§	Optical Stimulation Power	LPOWER	Single (4)
§	System ID	SYSTEMID	Integer (2)
¶	Reserved		Byte (54)
*	Data array of NPOINTS long integers	DPOINTS	Long Integer (4)