Main Data Tabs (e.g. Fauna, Hominin, etc.)

SG	Block	Field	Description	Examples	Data Type	Units	Mandatory	Max Length	Related to AfriArch
	Data Submission (applies to all tabs)	entry_ID	Consecutive ID that list unique entries within the different tabs of the database compilation. Coded by data type, "FAU = fauna, HOM = hominin, PLA = plants, ROC= rock, SED = sediment, SHL = shell)	"FAU00001", "HOM00001"	Text		1		ID
		unique_ID	Random assortment of 12 letters and numbers that will allow specimen tables (e.g., "Fauna", "Hominin", etc.) to be joined to "Dating_Events" table.	"XZP1LR3JPRRL"	Text		1		
		submitter_name	Initials of researcher who contributed data to the given database	"GMB"	Text		1	4	
		submitter_ORCID	ORCID (persistent individual identifier code) of the person who contributed data to the given database	"0022-0001-6147-0000"	Text		1	19	
		enter_date	Date data was entered into database in the following format: 2025-08-01	"15/10/2023"	Date	YYYY/MM/DD	1	10	
	Collection Site (applies to all tabs)	context_ID	Site/field identification code assigned during excavations	"ZIM23"	Text		0	20	Site
		site_name	Name of place where sample was collected	"Zimaura"	Text		0	100	Locality_Notes
		site_locality	Name of town/village/city in the vicinity of the collection site - this can include National Parks or Reserves	"Vilanculos"; "Maputo"; "Sibiloi National Park"	Text		0	70	
		site_region	Region in which sample was collected	"Limpopo Basin"; "East Turkana"	Text		0	40	
		site_country	Country in which sample was collected	"Mozambique"; "Kenya"	Text - Categorical		1	40	"

	site_continent	Continent in which sample was collected	For this database, all entries will be "Africa"	Text		1	6	
	site_age	Name of the estimated age of the site within the Stone Age; if an age is given in the original text, this is what is reported. If not reported in the text, classified by Date_min and Date_max range.	Pre-ESA; ESA; MSA; LSA;Iron Age; Modern	Text - Categorical		1	10	
	latitude	Latitude in decimal degrees (using the reference coordinate system WGS84)	"30.42408"	Numeric	º	1	16	"
	longitude	Longitude in decimal degrees (using the reference coordinate system WGS84)	"130.9675"	Numeric	º	1	16	"
	elevation_m	Elevation of collection site above modern sea level	"112","1150"	Numeric	m	0	5	
	exact_coordinates	Specification of whether exact collection location is known	"true" or "false"	Text - Categorical		1	3	
	site_radius_km	Radius (in km) of circle that encloses the collection site employed when coordinates are not known exactly	"1","1.5","10"	Numeric	km	0	4	Radius
	km_to_coast	Distance (in km) that separates the coast from the place where sample was collected	"10", "100"	Numeric	km	0	4	"
	site_coastal	Specification of whether site is within 15 km of the modern marine coastline	"true" or "false"	Text - Categorical		1	3	
	site_type	Specification of whether site is in the open air (e.g., a midden on the beach), a rockshelter, or a cave	"open", "rockshelter", "cave", "submerged"	Text - Categorical		1	12	
	site_description	Extended description of collection site	"shell midden","urban settlement","cemetery"	Text		0	4000	
General Specimen Attributes	specimen_ID	Identification number associated with analyzed material as reported in original publication	"ZIM003", "GBE-001"	Text		1	50	"

Attributes (applies to all tabs)	sample_ID	When a subset of a given specimen is used for analysis, then the identification number of the sample is given here.	"ZIM003-A12", "GBE-001-Rep"	Text	0	
	collection_date	Time of sample collection	2013", "May"	Text	0	20
	collection_season	Season of sample collection	"autumn", "winter"	Categorical	0	6
	material_type1	Specification of general material type used for stable isotope analysis	"hominin", "fauna", "plant", "sediment", "rock", "shell", "water"	Text - Categorical	1	5
	material_type2	Further specification of material used for stable isotope analysis	"bone", "tooth", "antler", "leaf", "paleosol", "ostrich eggshell", etc.	Text - Categorical	1	15
	material_type3	Further specification of material used for stable isotope analysis	"bone collagen", "bone bioapatite", "tooth enamel", "tooth dentine"	Text - Categorical	1	15
Taxonomic Description (applies to "Fauna", "Hominin", and "Plants" tabs)	taxon_kingdom	Taxonomic unit above Class that includes species of sampled individual; note that this column includes "psuedo-Kingdoms" for materials like sediments, minerals, and bacteria.	"Animalia", "Plantae"	Text - Categorical	1	50 "
	taxon_class	Taxonomic unit above Order that includes species of sampled individual	"Magnoliopsida", "Mammalia", "Aves"	Text - Categorical	1	50 "
	taxon_order	Taxonomic unit above Family that includes species of sampled individual	"Fabales", "Primates"	Text - Categorical	1	50 "
	taxon_family	Taxonomic unit above Tribe/Genus that includes species of sampled individual	"Didieraceae", "Hominidae"	Text - Categorical	1	50 "
	taxon_tribe	Taxonomic unit above Genus that includes species of sampled individual	"Aepycerotini", "Bovini", "Hominini"	Text - Categorical	0	50
	taxon_genus	Taxonomic unit above Species that includes species of sampled individual	"Quercus", "Capra", "Homo"	Text - Categorical	0	50

	taxon_species	Specific identification of sampled individual using bionomenclature system	"Homo sapiens", "Euphorbia stenoclada"	Text	0	50	Taxon
	common_name	Common name of sampled individual, which is not always species-specific (e.g., "cod" in reference to fish belonging to the genus Gadus)	"human","warthog", "dik-dik"	Text	0	50	Taxon_Common_Name
	extinct	Indicate if specimen is from an extinct species	"true" or "false"	Text - Categorical	0	3	
	taxon_notes	Extended description for taxonomy - all specimens originally published with "cf" descriptor sound include the genus or species here	"cf. Damalops", "cf. gautieri"	Text	0	25	
Species & Indiviudal Attributes (applies to "Fauna", "Hominin", and "Plants" tabs)	sex	Biological sex of sampled individual	Indeterminate; leave blank if original paper provides no designation	Text - Categorical	0	1	"
	life_stage	Category based on age of individual at time of death	"adolescent", "adult", "juvenile"	Text - Categorical	0	15	Age
	min_age	Minimum estimated age of individual at time of death	"0.5","36"	Numeric yr	0	3	
	max_age	Maximum estimated age of individual at time of death	"0.7","100"	Numeric yr	0	3	
	skeletal_element	Skeletal element of sampled individual (e.g., bone type)	"femur", "rib"	Text - Categorical	0	20	"
	tooth_element	Tooth position of sampled individual (C=canine, I=inscior, P=premolar, M=molar)	"M1", "I2", "C"	Text - Categorical	0	4	Tooth_Element
	tooth_location	Tooth sample location as positioned in the mouth of the individual; can also be used to delegate skeletal element position, e.g. "left" or "right"	"upper left", "lower right"	Text - Categorical	0	12	

	tooth_seriation	Specification of whether tooth sample is part of a seriation of samples from same individual	"True" or "False"	Text - Categorical		0	3	
	tooth_seriation_distan	Measured distance from enamel-dentine junction that seriated sample was taken	"2", "16"	Numeric	mm	0	2	
	pathology	Notes on pathology or other individual attribute that might affect stable isotope content of tissue.	"enamel hypoplasia present"	Text		0	200	
	environment	Habitat of sampled individual.	"Terrestrial","Marine", "Freshwater", etc.	Text - Categorical		0	20	Category (expanded)
	trophic_level	Individual-level; broad energy position.	"producer", "primary consumer", etc.	Text - Categorical		0	20	Category (expanded)
	feeding_class	Individual level diet strategy as reported/interpreted by the authors of the paper;	"grazer", "browser", "mixed feeder", etc.	Text - Categorical		0	20	
	cerling_d13C_fc	The Cerling et al. classification system for herbivore feeding guilds based on the d13C values of tooth enamel. Please see "Categorical Variables" tab for the correct categorical range of isotope values.	"hyper-brower", "mixed feeder", "grazers", etc.	Text - Categorical		0	20	
	plant_pathway	Photosynthetic pathway of sampled individual (plants only)	"C3","C4", or "CAM"	Text - Categorical		0	3	
	ind_notes	Any further notes on the individual specimen	"fragments of deciduous tooth"; "typically a feeder on C3 plants but data					
Archaeological	arch_context	Description of archaeological context of the sampled specimen	"lower shell layer","stone coffin"	Text		0	100	

	context (applies to all tabs)	material_prov	Notes on particular origin of material used for analysis. This often includes codes that specify burials, levels, sections, trenches, lots, loci, areas, layers, and squares.	"Locus b.116, D-11/II-19","Burial 211"	Text	0	100
		burial_type	Description of burial type associated with specimen	"flexed burial","scattered burial","cremation"	Text	0	100
		depth	Depth at which given material was located	"2.3"	Numeric	0	20
		depth_interval	Depth interval in which given material was located	"5-10"	Text	0	20
		depth_units	Units used to specify depth or depth interval	"cm","m"	Text - Categorical	0	3
	Geological context (applies to all tabs)	ics_period	Period of chrono-stratigraphy as indicated by the International Commission on Stratigraphy (ICS); https://stratigraphy.org./ICSchart/ChronostratChart2024-12.pdf	"Quaternary", "Neogene"	Text - Categorical	1	20
		ics_epoch	Epoch of chrono-stratigraphy as indicated by the International Commission on Stratigraphy (ICS); https://stratigraphy.org./ICSchart/ChronostratChart2024-12.pdf	"Pleistocene", "Pilocene"	Text - Categorical	1	20
		ics_stage	Stage of chrono-stratigraphy as indicated by the International Commission on Stratigraphy (ICS); https://stratigraphy.org./ICSchart/ChronostratChart2024-12.pdf	"Chibanian", "Piacenzian"	Text - Categorical	1	20
		lithology	General characteristic of rock at time of site occupation	"volcanic deposit", "sandstone", "limestone"	Text	0	100
	Chronology	chronology_method	Method used to estimate time of sample death or deposition.	"Archaeological context", "AMS Radiocarbon dating", "OSL", etc.	Text - Categorical	1	30 Date_Type

	(applies to all tabs)							
		date_min_ma	Lower bound of interval in millions of years ago (Ma)	"1.70", ".05"	Numeric	Ma	1	5 "
		date_max_ma	Upper bound of interval in millions of years ago (Ma)	"1.70", ".05"	Numeric	Ma	1	5 "
		date_min_pub	Lower bound of interval specifying the probable time of sample death or deposition; As reported in original publication	"13,000", "-9000"	Numeric		0	
		date_max_pub	Upper bound of interval specifying the probable time of sample death or deposition; As reported in original publication	"13,000", "-9000"	Numeric		0	
		date_ref	The dating reference system used to specify a given date. Given that most databases employ BCE/CE, we recommend use of this system.	"cal BP","BCE/CE", "ka"	Text - Categorical		0	50
		mis_stage	Marine Isotope Stage as defined in Lisiecki & Raymo (2005). Only include if either 1) listed in original publication or 2) dating of specimen fits within one MIS stage or substage.	"5c", "6"	Text - Categorical		0	2
		chrono_notes	Additional comments regarding chronology, including notes on reliability and time period assignments	in view of the associated ceramics in Neolithic Aktopraklık (having parallels in Ilıpınar X–IX), OxA-20596 is probably too old"	Text		0	300
	Isotope Pretreatment & Analysis (applies to all tabs)	pretreatment_lab	Name of laboratory that prepared sample for stable isotope analysis	"Yale Analytical & Stable Isotope Center"	Text - Categorical		1	100
		pretreatment_techniq ue	Method used to prepare the sample for stable isotope analysis	"Longin collegen-extraction method & glass fiber filtration"	Text - Categorical		1	400

analytical_lab	Name of laboratory that analyzed the sample for stable isotopes	"University of Utah, Stable Isotope Lab"	Text - Categorical	1	100	
instrument	Model of instrument used to measure isotope ratios. If no model available, write a description of how samples were analyzed.	"Thermo Finngigan Mat 252"; "Dual inlet and continuous flow mass spectometry "	Text - Categorical	1	200	
analytical_n	The number of distinct samples from a single specimen used for isotope analaysis. (E.g. two teeth and one rib sampled from one individual = 3.) This is for SEPARATE measurments on the same indiviual, not the combined average of multiple elements to get one isotopic measurement.	"2", "5"	Numeric	0	2	
averaged_n	The count of different measured elements or seriations used to produce an average isotopic value for a specimen, (e.g. two bulk tooth enamel measurements averaged together, or multiple seriations on a single tooth averaged togethered to provide one isotopic measurement). Informs on how many independent measurements contributed to the reported mean value.	"2", "10"	Numeric	0	3	"
lab_notes	Comments regarding the pretreatment or analytical process	"sample was analyzed at two labs, for FTIR at the Univerisity of Michigan, and on the MC-ICP-MS at the University of North Carolina, Chapel Hill."	Text	0	400	

Preservation Criteria/Quality Parameters (applies to all tabs)	collagen_yield	Collagen yield from bone sample given as percent weight of bulk bone	"25"	Numeric	%	0	3	C_yield_raw
	collagen_percent_c	Weight percent abundance of carbon in collagen sample (13–47% is typically acceptable)	"30"	Numeric	%	0	3	pct_C
	collagen_percent_n	Weight percent abundance of nitrogen in collagen sample (4.8–17.3% is typically acceptable)	"15"	Numeric	%	0	3	pct_N
	collagen_percent_s	Weight percent abundance of sulfur in collagen sample (~0.15–0.35% typically acceptable)	".2"	Numeric	%	0	3	
	collagen_atomic_c_n	Ratio of carbon atoms to nitrogen atoms in collagen sample (2.9–3.6 is typically acceptable)	"3.2"	Numeric	ratio	0	5	CN_ratio
	collagen_atomic_c_s	Ratio of carbon atoms to sulfur atoms in collagen sample	"266"	Numeric	ratio	0	5	
	collagen_atomic_n_s	Ratio of nitrogen atoms to sulfur atoms in collagen sample (~50–80 is typically acceptable)	"60"	Numeric	ratio	0	5	
	c_index	Crystallinity Index	"2.8"	Numeric		0	3	
	nist_987	Reported measurement for the international standard used during analysis (87Sr/86Sr analysis)	"0.71025"	Numeric	ratio	0	8	
	nist_987_sd	Standard deviation of measured international standard (87Sr/86Sr analysis)	"0.00004"	Numeric	2σ	0	8	
	sr_blank	Measurement of "blank" sample included during analysis	"1"	Numeric	ng	0	3	

		nist_981	Reported measurement for the international standard used during analysis (Pb analysis) - can expand to include all 3 Pb-isotopes	"16.9356"	Numeric	ratio	0	8
		nist_981_sd	Standard deviation of measured international standard (Pb analysis)	"0.0005"	Numeric	2σ	0	8
		pb_blank	Measurement of "blank" sample included during analysis	"1"	Numeric	ng	0	3
		la_jolla	Reported measurement for the international standard used during analysis Nd analysis)	"0.51185"	Numeric	ratio	0	8
		la_jolla_sd	Standard deviation of measured international standard (Nd analysis)	"0.00005"	Numeric	2σ	0	8
		nd_blank	Measurement of "blank" sample included during analysis	"1"	Numeric	ng	0	3
		replicate_n	Number of measurements on a sample assumed to be homogeneous (replicates for reproducibility check)	"1", "2", "5"	Numeric		0	2
		quality_test	Indicates if measurements on specimen indicate good preservation and a lack of diagensis. Mandatory for collagen entries.	"pass", "fail"	Text - Categorical		0	4
	Isotopic Data (applies to all tabs)	d13C_org_VPDB	Organic material stable carbon isotope measurement (relative to VPDB standard)	"-20.5"	Numeric	‰	0	5
		d13C_org_sd	Standard deviation of organic material stable carbon isotope measurement	"0.2"	Numeric	‰	0	3
		d15N_AIR	Organic material stable nitrogen isotope measurement (relative to AIR standard)	"9.8"	Numeric	‰	0	5

d15N_sd	Standard deviation of organic material stable nitrogen isotope measurement	"0.3"	Numeric	‰	0	3
d34S_VCDT	Organic material stable sulfur isotope measurement (relative to Vienna-Canyon Diablo Troilite [V-CDT] standard)	"12.5"	Numeric	‰	0	5
d34S_sd	Standard deviation of organic material stable sulfur isotope measurement	"0.4"	Numeric	‰	0	3
d13C_inorg_VPDB	Mineral (inorganic) fraction stable carbon isotope measurement (relative to VPDB standard)	"-4.2"	Numeric	‰	0	5
d13C_1750_VPDB	Industrialization-corrected carbon isotope value (only reported if original publication provides this correction for modern samples)	"-5.1"	Numeric	‰	0	5
d13C_seriation_VPDB	d13C values from tooth enamel seriation samples	"-1.2"	Numeric	‰	0	5
d13C_inorg_sd	Standard deviation of mineral (inorganic) fraction stable carbon isotope measurement	"0.1"	Numeric	‰	0	5
d18O_carb_VPDB	Carbonate stable oxygen isotope measurement (relative to VPDB standard)	"-6.2"	Numeric	‰	0	5
d18O_carb_SMOW	Carbonate stable oxygen isotope measurement (relative to SMOW standard)	"27.8"	Numeric	‰	0	5
d18O_carb_VSMOW	Carbonate stable oxygen isotope measurement (relative to VSMOW standard)	"28.3"	Numeric	‰	0	5
d18O_phos_VSMOW	Phosphate stable oxygen isotope measurement (relative to VSMOW standard)	"18.5"	Numeric	‰	0	5

d18O_seriation	d18O values from tooth enamel seriation samples	"-4.3"	Numeric	‰	0	5
d18O_sd	Standard deviation of stable oxygen isotope measurement (carbonate or phosphate)	"0.2"	Numeric	‰	0	5
Zn_66_64	66Zn/64Zn isotope ratio	"0.28"	Numeric	ratio		5
Zn_66_64_sd	Standard deviation of 66Zn/64Zn ratio	"0.01"	Numeric	ratio		3
Zn_ppm	Zinc concentration	"0.4"	Numeric	ppm		3
Sr_87_86	87Sr/86Sr isotope ratio from non-seriation samples	"0.70435", "0.72116"	Numeric	ratio	0	8
Sr_87_86_seriation	87Sr/86Sr isotope ratio from tooth enamel seriation samples	"0.70493"	Numeric	ratio	0	8
Sr_87_86_sd	Standard deviation of 87Sr/86Sr ratio measurement	"0.00005"	Numeric	ratio	0	8
Sr_ppm	Strontium concentration in sample	"50", "200"	Numeric	ppm	0	4
Pb_206_204	206Pb/204Pb isotope ratio	"18.52"	Numeric	ratio	0	8
Pb_206_204_sd	Standard deviation of 206Pb/204Pb ratio measurement	"0.02"	Numeric	ratio	0	8
Pb_207_204	207Pb/204Pb isotope ratio	"15.62"	Numeric	ratio	0	8
Pb_207_204_sd	Standard deviation of 207Pb/204Pb ratio measurement	"0.01"	Numeric	ratio	0	8
Pb_208_204	208Pb/204Pb isotope ratio	"38.20"	Numeric	ratio	0	8
Pb_208_204_sd	Standard deviation of 208Pb/204Pb ratio measurement	"0.03"	Numeric	ratio	0	8
Pb_ppm	Lead concentration in sample	"5.2"	Numeric	ppm	0	4
Nd_143_144	143Nd/144Nd isotope ratio	"0.511852"	Numeric	ratio	0	8
Nd_143_144_sd	Standard deviation of 143Nd/144Nd ratio measurement	"0.000010"	Numeric	ratio	0	8

		Nd_ppm	Neodymium concentration in sample	"0.3"	Numeric	ppm	0	4
	References (applies to all tabs)	in_text_citation	Author and year of article that originally published the data	"Copeland et al. (2016)"	Text		1	75
		publication_year	Year of article that originally published the data	"2016"	Numeric		1	4
		complete_reference	Full reference to article that originally published the data	H.C., Fisher, E.C., Lee-Thorp, J.A., Cowling, R.M., le Roux, P.J., Hodgkins, J., Marean, C.W. (2016). Strontium Isotope Investigation of Ungulate Movement Patterns on the Pleistocene Paleo-Agulhas Plain of the Greater Cape Floristic Region, South Africa. Quarterly Science Reviews, 141, 65-84."	Text		1	1000
		doi	Digital object identifier associated with source of dataset	http://dx.doi.org/10.1016/j.quascirev.2016.04.002	Text		1	200
		comments	Specifies additional notes regarding specimen context and publication records associated with a particular specimen	"Originally reported in Cerling et al. (2015)"	Text		0	500

Dating Events Table:

SG	Block	Field	Description	Examples	Data Type	Units	Mandatory	Max Length	Related to AfriArch
	Data Submission (applies to all tabs)	dating_id	Consecutive ID that list unique entries within the Dating_Events table.	"DTE00001"	**TEXT**		1		
		unique_id	The exact same unique_id attributed to the specimen in the specimen tables. This will allow specimen tables (e.g., "Fauna", "Hominin", etc.) to be joined to "Dating_Events" table	"XZP1LR3JPRRL"	**TEXT**		1		
	Absolute Dating	absolute_date_type	Absolute dating method	"AMS radiocarbon dating", "Uranium-Series", "OSL"	Text - Categorical		0	3	Is_Date_AMS
		lab_ID	Laboratory-assigned identification code	"ANU-5155","GaK 633"	Text		0	20	Lab_ID
		batch_num	Laboratory identification number for batch of samples (if relevant)	"AB1502/15","ANU0025"	Text		0	40	
		lab_protocol	Protocol applied to sample, such as notes on pretreatment and instrumentation	"AMS", "Longin", "XAD", ">30kDa"	Text		0	100	
		material_dated	Category that includes material subject to absolute dating	"charcoal","bone collagen"	Text - Categorical		0	100	14C_dated_material

		material_description	A more detailed description of the material used for absolute dating	"charred hazelnut shell","bone","mangrove shell"	Text		0	100	
		date_uncal	Uncalibrated date (conventional age)	"2100"	Numeric	yr BP	0	5	RC_age_est
		date_uncal_sd	Standard deviation associated with uncalibrated date	"20"	Numeric	yr	0	4	RC_age_sd
		multiple_dates	If multiple dates are available, then a text string is used to describe results and associated lab codes.	"GaK 633; 200; 20"	Text		0	3000	
		association_dates	"True" entered when radiocarbon dated material is strongly associated with past human presence, "False" if not, and "unknown" otherwise. This field is relevant for studies of past human activities.	"true","false","unknown"	Text - Categorical		0	10	
		comment_dates	Other comments regarding absolute dating.	"marine","unusable"	Text		0	300	
	Absolute Dating Corrections								
		calibration_curve	If "dating_type" is "radiocarbon dating" this identifies the employed terrestrial 14C curve	"IntCal20", "ShCal20", "Mixed"	Text - Categorical		0	10	"
		d13C_correction	Stable carbon isotope value (relative to VPDB standard) used to correct for radiocarbon fractionation	"-25.90"	Numeric	‰	0	4	
		d13C_correction_sd	Standard deviation of stable carbon isotope value (relative to VPDB standard) used to correct for radiocarbon fractionation	"0.2"	Numeric	‰	0	4	
		delta_R	Aquatic reservoir correction to apply as necessary when calibrating radiocarbon data	"300"	Numeric	yr	0	4	

	Applies to radiocarbon dating	delta_R_sd	Standard deviation of aquatic reservoir correction to apply as necessary when calibrating radiocarbon data	"20"	Numeric	yr	0	4
		diet_estimate	If a marine dietary correction was applied this identifies the type of estimate for the dietary contribution from marine carbon	"No", "Interval", "Mean_SD"	Text - Categorical		0	10 "
		marine_min_or_mean	If a dietary correction was applied to 14C measurement this lists either the lower bound of the diet estimate (if of Interval type) or the mean (if of Mean_SD type)	"0", "23.6"	Numeric		0	10 "
		marine_max_or_sd	to 14C measurement this lists either the upper bound of the diet estimate (if of Interval type) or the standard deviation (if of Mean_SD type)	"5.9", "75"	Numeric		0	10 "
		mre_mean	If a dietary correction was applied this lists the estimated mean for a local marine radiocarbon reservoir effect	"45.4", "-22.3"	Numeric		0	10 "
		mre_sem	this lists the estimated standard error of the mean for a local marine radiocarbon reservoir effect	"53.2", "2"	Numeric		0	10 "
	Applies to U-Serie	detrital_th_correction	Specifies if detrital thorium correction was applied	"true", "false", "unknown"	Text - Categorical		0	10
		detrital_th_method	Method of detrital Th correction	"Assumed", "Isochron", "Measured"	Text - Categorical		0	20
		u_th_model	Model used for age calculation	"Early Uptake", "Linear Uptake", "Open System"	Text - Categorical		0	20
		u_th_closed_system	Indicates whether U/Th system behavior was assessed or assumed to be closed. This impacts confidence in resulting U/Th dates.	"confirmed", "assumed", "rejected", "not reported"	Text - Categorical		0	20

	Applies to U-Series & ESR	U_content_ppm	Measured uranium content in sample	"1.2", "0.05"	Numeric	ppm	0	5
		U_content_SD	SD of uranium content	"0.01", "0.08"	Numeric	ppm	0	5
	Applies to ESR, OSL, & TL	annual_dose_rate	Total annual dose rate used in calculation	"1.4", "2.7"	Numeric	Gy/ka	0	5
		dose_rate_uncertainty	Uncertainty in annual dose rate	"0.1", "0.25"	Numeric	Gy/ka	0	5
	Applies to OSL, TL, & IRSL	bleaching_assumption	Assumption regarding bleaching of grains	"complete", "partial", "unknown"	Text - Categorical		0	10
		alpha_efficiency_value	Alpha efficiency correction factor used	"0.04", "0.035"	Numeric	dimensionless	0	5
	Relative Dating	relative_date_type	Specifies relative dating method	"Stratigraphy", "Faunal Association"	Text - Categorical		0	100
		relative_order	Stratigraphic order relative to reference level	"above Burial 3", "beneath volcanic ash", "within level IV"	Text		0	100
		associated_fauna	Key species used in biostratigraphic/relative dating	"Equus capensis", "Theropithecus oswaldi"	Text		0	100
		reference_layer	Named reference level/marker bed/tephra layer	"Olorgesaile Tuff 3", "KBS Tuff", "Pumice D2"	Text		0	100
		realtive_association	Is the dated material in secure context with the sample	"true", "false", "unknown"	Text - Categorical		0	10
		relative_notes	Notes on stratigraphic correlation or assumptions	"based on presence of Iron Age pottery"; "Level IV correlated to MSA"	Text		0	100