

# TRiDaS v1.2.1 Attribute Tables

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## 1 Introduction

The tables below are intended as a *summary* of the entities and fields used in the Tree Ring Data Standard and are easiest if read in combination with the data model diagram. For a more detail technical view of the standard please see the XML Technical Documentation.

A table is presented for each entity and each primary field is shown as a row. Where a field is a composite (i.e. it is a container for other attributes), the extra attributes are shown in the final column. In the case of the composite field 'woodCompleteness' (used in the radius and measurementSeries entities), it contains a number additional composite fields so for clarity it is presented here as an additional table.

All the tables are autogenerated from the most recent TRiDaS XSD file, but the process of flattening a structured schema into flat tables means that inevitably a number of ambiguities are introduced. In which case please refer to the original XSD file and technical documentation for clarification.

## 2 TRiDaS Entities

### **project**

A project is defined by a laboratory and encompasses dendrochronological research of a particular object or group of objects. Examples include: the dating of a building; the research of forest dynamics in a stand of living trees; the dating of all Rembrandt paintings in a museum. What is considered a 'project' is up to the laboratory performing the research. It could be the dating of a group of objects, but the laboratory can also decide to define a separate project for each object. Therefore, a project can have one or more objects associated with it.

### **object**

An object is the item to be investigated. Examples include: violin; excavation site; painting on a wooden panel; water well; church; carving; ship; forest. An object could also be more specific, for example: mast of a ship; roof of a church. Depending on the object type various descriptions are made possible. An object can have one or more elements and can also refer to another (sub) object. For instance a single file may contain three objects: an archaeological site object, within which there is a building object, within which there is a beam object. The list of possible object types is extensible and is thus flexible enough to incorporate the diversity of data required by the dendro community. Only information that is essential for dendrochronological research is recorded here. Other related data may be provided in the form of a link to an external database such as a museum catalogue.

### **element**

An element is a piece of wood originating from a single tree. Examples include: one plank of a water well; a single wooden panel in a painting; the left-hand back plate of a violin; one beam in a roof; a tree trunk preserved in the soil; a living

tree. The element is a specific part of exactly one object or sub object. An object will often consist of more than one element, e.g., when dealing with the staves (elements) of a barrel (object). One or more samples can be taken from an element and an element may be dated using one or more derivedSeries.

## **sample**

A sample is a physical specimen or non-physical representation of an element. Examples include: core from a living tree; core from a rafter in a church roof; piece of charcoal from an archaeological trench; slice from a pile used in a pile foundation; wax imprint of the outer end of a plank; photo of a back plate of a string instrument. Note that a sample always exists and that it can either be physical (e.g. a core) or representative (e.g. a picture). A sample is taken from exactly one element and can be represented by one or more radii.

## **radius**

A radius is a line from pith to bark along which the measurements are taken. A radius is derived from exactly one sample. It can be measured more than once resulting in multiple measurementSeries.

## **woodCompleteness**

Details of the pith, heartwood, sapwood and last ring under the bark. This is included under the radius or measurementSeries entities. If present in both, the measurementSeries details supercede those of the radius.

## **measurementSeries**

A measurementSeries is a series of direct, raw measurements along a radius. A single measurementSeries can be standardised or a collection of measurementSeries can be combined into a derivedSeries. The measurements themselves are stored separately as values.

## **derivedSeries**

A derivedSeries is a calculated series of values and is a minor modification of the 'v-series' concept proposed by Brewer et al (2009). Examples include: index; average of a collection of measurementSeries such as a chronology. A derivedSeries is derived from one or more measurementSeries and has multiple values associated with it.

## **value**

A value is the result of a single ring measurement. The type of measurement this is along with the units used are recorded in the 'values' container in the associated measurement- or dervedSeries.

# **3 Attribute Tables**

Table 1: Details of the attributes available in TRiDaS project entities.

Name	Description	Data Type	Mandatory	Repeatable	Additional Associated Attributes
title	Title or name of this entity. This should be a 'human readable' name by which the entity is referred.	xs:string	yes	no	
identifier	Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key.	composite field	no	no	<i>domain</i> - The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.
createdTimestamp	Field containing date and time when this record was created.	dateTime	no	no	
lastModifiedTimestamp	Field containing date and time when this records was last updated.	dateTime	no	no	
comments	More information about this entity.	xs:string	no	no	
type	The type of entity this is. Preferrably derived from a controlled vocabulary.	controlledVoc	yes	yes	
description	General description of this entity.	xs:string	no	no	
file	Filename of a file associated with this entity.	composite field	no	yes	
laboratory	The dendrochronological research laboratory where this work was done.	composite field	yes	yes	<i>identifier</i> - Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key. <i>name</i> - Name of the laboratory. <i>address</i> - Address information about this location <i>acronym</i> - Acronym of the laboratory.
category	Category of research this project falls into. Preferably from a controlled vocabulary.	composite field	yes	no	<i>normalTridas</i> - TRiDaS controlled vocabulary of research categories.
investigator	Principal investigator of this project.	xs:string	yes	no	
period	When the dendrochronological project took place. Could consist of a start- and end-date. If unknown it should be estimated.	xs:string	yes	no	
requestDate	Date of the request for dendrochronology. If unknown it should be estimated.	date	no	no	
commissioner	The person/organisation who commissioned the project.	xs:string	no	no	
reference	Citations of publications relating to this project.	xs:string	no	yes	
research	National/International system in which the research project is registered.	composite field	no	yes	<i>identifier</i> - Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key. <i>description</i> - General description of this entity.
genericField	Generic field for storing key/value pairs for data not currently supported in the TRiDaS standard	composite field	no	yes	<i>name</i> - Name of the field. <i>type</i> - The data type that this field contains.

Table 2: Details of the attributes available in TRiDaS object entities.

Name	Description	Data Type	Mandatory	Repeatable	Additional Associated Attributes
title	Title or name of this entity. This should be a 'human readable' name by which the entity is referred.	xs:string	yes	no	
identifier	Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key.	composite field	no	no	<i>domain</i> - The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.
createdTimestamp	Field containing date and time when this record was created.	dateTime	no	no	
lastModifiedTimestamp	Field containing date and time when this records was last updated.	dateTime	no	no	
comments	More information about this entity.	xs:string	no	no	
type	The type of entity this is. Preferrably derived from a controlled vocabulary.	controlledVoc	yes	no	
description	General description of this entity.	xs:string	no	no	
linkSeries		seriesLinksWithPreferred	no	no	
file	Filename of a file associated with this entity.	composite field	no	yes	
creator	Name of creator, place of the workshop/wharf etc.	xs:string	no	no	
owner	Name of the owner of the physical object.	xs:string	no	no	
coverage	Details on the time period this object covers.	composite field	no	no	<i>coverageTemporal</i> - If the date is already known in more or less detail: historical period (broad). Equivalent to Dublin Core term 'temporal'. <i>coverageTemporalFoundation</i> - Method of dating support (e.g. archive sources, inscriptions, stratigraphic context, associated finds, typology, stylistic aspects, carpenter marks, radiocarbon, OSL, other methods).
location	Details about the geographical location of this entity.	composite field	no	no	<i>locationGeometry</i> - GML representation of a location. Can be either a point to represent a particular location or a polygon to represent an area or a geographical extent / bounding box. <i>locationType</i> - The type of location that the geometry field represents taken from the TRiDaS controlled vocabulary. <i>locationPrecision</i> - Stores potential difference; number of meters difference, so 0 is exact. <i>locationComment</i> - Additional information about the location, for example, point taken from center or corner of area, which corner <i>address</i> - Address information about this location
genericField	Generic field for storing key/value pairs for data not currently supported in the TRiDaS standard	composite field	no	yes	<i>name</i> - Name of the field. <i>type</i> - The data type that this field contains.

Table 3: Details of the attributes available in TRiDaS element entities.

Name	Description	Data Type	Mandatory	Repeatable	Additional Associated Attributes
title	Title or name of this entity. This should be a 'human readable' name by which the entity is referred.	xs:string	yes	no	
identifier	Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key.	composite field	no	no	<i>domain</i> - The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.
createdTimestamp	Field containing date and time when this record was created.	dateTime	no	no	
lastModifiedTimestamp	Field containing date and time when this records was last updated.	dateTime	no	no	
comments	More information about this entity.	xs:string	no	no	
type	The type of entity this is. Preferably derived from a controlled vocabulary.	controlledVoc	no	no	
description	General description of this entity.	xs:string	no	no	
linkSeries		seriesLinks	no	no	
file	Filename of a file associated with this entity.	composite field	no	yes	
taxon	The most detailed taxonomic name known for this element (species, genus, family etc). Preferably from the Catalogue of Life (www.catalogueoflife.org) controlled vocabulary.	controlledVoc	yes	no	
shape	The shape of this element, as a free text description, an entry from a specified controlled vocabulary, or preferably from the TRiDaS controlled vocabulary.	composite field	no	no	
dimensions	Physical dimensions of this element, either height and diameter, or height, width and depth. The units of these measurements must also be specified.	composite field	no	no	<i>unit</i> - Measurement units used for these value, preferably taken from the TRiDaS controlled vocabulary <i>height</i> - Height of this element. Should be used in combination with either diameter, or width and depth. <i>diameter</i> - Diameter of this element. Used in combination with height when the element is a tree. <i>width</i> - Width of the element. <i>depth</i> - Depth of the element.
authenticity	Whether this element is original, a repair or later addition etc.	xs:string	no	no	
location	Details about the geographical location of this entity.	composite field	no	no	<i>locationGeometry</i> - GML representation of a location. Can be either a point to represent a particular location or a polygon to represent an area or a geographical extent / bounding box. <i>locationType</i> - The type of location that the geometry field represents taken from the TRiDaS controlled vocabulary. <i>locationPrecision</i> - Stores potential difference; number of meters difference, so 0 is exact. <i>locationComment</i> - Additional information about the location, for example, point taken from center or corner of area, which corner <i>address</i> - Address information about this location
processing	Processing (carved, sawn etc.) rafting marks etc.	xs:string	no	no	

marks	Carpenter marks, inscriptions etc	xs:string	no	no	
altitude	Altitude in metres if this element is a standing tree in situ.	xs:double	no	no	
slope	Only relevant if this element is a standing tree. Contains details about the slope this tree was growing on.	composite field	no	no	<i>angle</i> - Angle of slope from horizontal in degrees <i>azimuth</i> - Angle in degrees from north along which the slope lies
soil	Only relevant if this element is a standing tree. Contains details of the soil the tree was growing in.	composite field	no	no	<i>description</i> - General description of the soil type <i>depth</i> - Depth of soil in centimetres
bedrock	Only relevant if this element is a standing tree. Contains details of the bedrock below where the tree was growing.	composite field	no	no	<i>description</i> - General description of the underlying bedrock
genericField	Generic field for storing key/value pairs for data not currently supported in the TRiDaS standard	composite field	no	yes	<i>name</i> - Name of the field. <i>type</i> - The data type that this field contains.

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Table 4: Details of the attributes available in TRiDaS sample entities.

Name	Description	Data Type	Mandatory	Repeatable	Additional Associated Attributes
title	Title or name of this entity. This should be a 'human readable' name by which the entity is referred.	xs:string	yes	no	
identifier	Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key.	composite field	no	no	<i>domain</i> - The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.
createdTimestamp	Field containing date and time when this record was created.	dateTime	no	no	
lastModifiedTimestamp	Field containing date and time when this records was last updated.	dateTime	no	no	
comments	More information about this entity.	xs:string	no	no	
type	The type of entity this is. Preferrably derived from a controlled vocabulary.	controlledVoc	yes	no	
description	General description of this entity.	xs:string	no	no	
file	Filename of a file associated with this entity.	composite field	no	yes	
samplingDate	Date the sample was taken	date	no	no	
position	Description of the position in the element where this sample was taken from	xs:string	no	no	
state	State of the material (dry/wet/conserved/burned, woodworm, rot, cracks) things that indicate the quality of the measurements.	xs:string	no	no	
knots	Are knots present in the sample?	xs:boolean	no	no	
genericField	Generic field for storing key/value pairs for data not currently supported in the TRiDaS standard	composite field	no	yes	<i>name</i> - Name of the field. <i>type</i> - The data type that this field contains.
radiusPlaceholder	This entity is used instead of a standard 'radius' when radius details are not known.	composite field	no	no	<i>measurementSeriesPlaceholder</i> - If no measurementSeries information is known (e.g. if describing a derivedSeries where no measurementSeries data is available) this placeholder is used instead of a standard measurementSeries entity.

Table 5: Details of the attributes available in TRiDaS radius entities.

Name	Description	Data Type	Mandatory	Repeatable	Additional Associated Attributes
title	Title or name of this entity. This should be a 'human readable' name by which the entity is referred.	xs:string	yes	no	
identifier	Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key.	composite field	no	no	<i>domain</i> - The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.
createdTimestamp	Field containing date and time when this record was created.	dateTime	no	no	
lastModifiedTimestamp	Field containing date and time when this records was last updated.	dateTime	no	no	
comments	More information about this entity.	xs:string	no	no	
woodCompleteness	Details of the pith, heartwood, sapwood and last ring under the bark. This is included under the radius or measurementSeries entities. If present in both, the measurementSeries details supercede those of the radius.	composite field	no	no	<p><i>ringCount</i> - Convenience field for recording the total number of rings measured. If there is a disparity between this field and the actual number of 'values' tags, then the number of 'values' tags should be taken as definitive.</p> <p><i>averageRingWidth</i> - Convenience field for recording the average ring width of rings measured. If there is a disparity between this field and the actual 'values' tags, then the average of the 'values' tags should be taken as definitive.</p> <p><i>nrOfUnmeasuredInnerRings</i> - Field for recording whether there are any rings at the inner (i.e. towards pith) edge of the sample that have not been measured. Typically used to note when rings are too damaged to measure.</p> <p><i>nrOfUnmeasuredOuterRings</i> - Field for recording whether there are any rings at the outer (i.e. towards bark) edge of the sample that have not been measured. Typically used to note when rings are too damaged to measure.</p> <p><i>pith</i> - Whether the pith is present or absent</p> <p><i>heartwood</i> - This field records whether the outer (youngest) heartwood is present and if so whether it is complete. If the sample includes the last heartwood ring before the sapwood then it is 'complete' otherwise it is 'incomplete' or 'absent'.</p> <p><i>sapwood</i> - Details about the sapwood</p> <p><i>bark</i> - Bark is present or absent</p>
azimuth	Angle in degrees from north along which the slope lies	xs:int	no	no	
genericField	Generic field for storing key/value pairs for data not currently supported in the TRiDaS standard	composite field	no	yes	<p><i>name</i> - Name of the field.</p> <p><i>type</i> - The data type that this field contains.</p>

Table 6: Details of the attributes available in TRiDaS woodCompleteness entities.

Name	Description	Data Type	Mandatory	Repeatable	Additional Associated Attributes
ringCount	Convenience field for recording the total number of rings measured. If there is a disparity between this field and the actual number of 'values' tags, then the number of 'values' tags should be taken as definitive.	xs:int	no	no	
averageRingWidth	Convenience field for recording the average ring width of rings measured. If there is a disparity between this field and the actual 'values' tags, then the average of the 'values' tags should be taken as definitive.	xs:double	no	no	
nrOfUnmeasuredInnerRings	Field for recording whether there are any rings at the inner (i.e. towards pith) edge of the sample that have not been measured. Typically used to note when rings are too damaged to measure.	xs:int	no	no	
nrOfUnmeasuredOuterRings	Field for recording whether there are any rings at the outer (i.e. towards bark) edge of the sample that have not been measured. Typically used to note when rings are too damaged to measure.	xs:int	no	no	
pith	Whether the pith is present or absent	composite field	yes	no	
heartwood	This field records whether the outer (youngest) heartwood is present and if so whether it is complete. If the sample includes the last heartwood ring before the sapwood then it is 'complete' otherwise it is 'incomplete' or 'absent'.	composite field	yes	no	<i>missingHeartwoodRingsToPith</i> - Estimated number of missing heartwood rings to the pith <i>missingHeartwoodRingsToPithFoundation</i> - Description of the way the estimation of how many heartwood rings are missing was made and what the certainty is.
sapwood	Details about the sapwood	composite field	yes	no	<i>nrOfSapwoodRings</i> - Number of sapwood rings measured <i>lastRingUnderBark</i> - Information about the last rings under the bark. If the last ring is under the bark is present, include information about the completeness of this ring and/or season of felling. <i>missingSapwoodRingsToBark</i> - Estimated number of missing sapwood rings to the bark <i>missingSapwoodRingsToBarkFoundation</i> - Description of the way the estimation of how many sapwood rings are missing was made and what the certainty is. <i>presence</i> - Whether the sapwood is present or not
bark	Bark is present or absent	composite field	yes	no	

Table 7: Details of the attributes available in TRiDaS measurementSeries entities.

Name	Description	Data Type	Mandatory	Repeatable	Additional Associated Attributes
title	Title or name of this entity. This should be a 'human readable' name by which the entity is referred.	xs:string	yes	no	
identifier	Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key.	composite field	no	no	<i>domain</i> - The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.
createdTimestamp	Field containing date and time when this record was created.	dateTime	no	no	
lastModifiedTimestamp	Field containing date and time when this records was last updated.	dateTime	no	no	
comments	More information about this entity.	xs:string	no	no	
measuringDate	Date that the measurements where made.	date	no	no	
woodCompleteness	Details of the pith, heartwood, sapwood and last ring under the bark. This is included under the radius or measurementSeries entities. If present in both, the measurementSeries details supercede those of the radius.	composite field	no	no	<i>ringCount</i> - Convenience field for recording the total number of rings measured. If there is a disparity between this field and the actual number of 'values' tags, then the number of 'values' tags should be taken as definitive. <i>averageRingWidth</i> - Convenience field for recording the average ring width of rings measured. If there is a disparity between this field and the actual 'values' tags, then the average of the 'values' tags should be taken as definitive. <i>nrOfUnmeasuredInnerRings</i> - Field for recording whether there are any rings at the inner (i.e. towards pith) edge of the sample that have not been measured. Typically used to note when rings are too damaged to measure. <i>nrOfUnmeasuredOuterRings</i> - Field for recording whether there are any rings at the outer (i.e. towards bark) edge of the sample that have not been measured. Typically used to note when rings are too damaged to measure. <i>pith</i> - Whether the pith is present or absent <i>heartwood</i> - This field records whether the outer (youngest) heartwood is present and if so whether it is complete. If the sample includes the last heartwood ring before the sapwood then it is 'complete' otherwise it is 'incomplete' or 'absent'. <i>sapwood</i> - Details about the sapwood <i>bark</i> - Bark is present or absent
analyst	Name of the analyst that made the series	xs:string	no	no	
dendrochronologist	Name of the dendrochronologist that oversaw the analyst	xs:string	no	no	
measuringMethod	Method that was used to measure this measurementSeries, preferably from the TRiDaS controlled vocabulary.	composite field	yes	no	<i>normalTridas</i> - TRiDaS controlled vocabulary for the method of measuring.
genericField	Generic field for storing key/value pairs for data not currently supported in the TRiDaS standard	composite field	no	yes	<i>name</i> - Name of the field. <i>type</i> - The data type that this field contains.

values	This is a container for a group of actual measurement values. When appropriate this container includes details on the variable being represented as well as the units used. If the values are unitless, then the special <unitless> field is used.	composite field	no	yes	<p><i>variable</i> - Measured variable (ring width, earlywood, latewood etc) preferably taken from the TRiDaS controlled vocabulary</p> <p><i>unitless</i> - Presence of this field denotes that the associated values have no units. Not to be used to denote *unknown* units.</p> <p><i>unit</i> - Measurement units used for these values, preferably taken from the TRiDaS controlled vocabulary</p> <p><i>value</i> - A value is the result of a single ring measurement. The type of measurement this is along with the units used are recorded in the 'values' container in the associated measurement- or derivedSeries.</p>
interpretation	Information interpreted from the series	composite field	yes	no	<p><i>dating</i> - Information about dating</p> <p><i>firstYear</i> - Year of the first measured ring. This is derived from the chronology that was used to date this series. It is not to be confused with sproutYear.</p> <p><i>lastYear</i> - Year of the last measured ring. It is not to be confused with deathYear which might also include unmeasured or hypothetical rings</p> <p><i>datingReference</i> - Chronology used to interpret the series</p> <p><i>statFoundation</i> - Container for fields that describe the statistical method used for crossdating</p> <p><i>pithYear</i> - Estimated year that the tree sprouted</p> <p><i>deathYear</i> - Estimated year of death of the tree</p> <p><i>provenance</i> - Estimated provenance derived from the matching chronology</p>
interpretationUnsolved		composite field	yes	no	

Table 8: Details of the attributes available in TRiDaS derivedSeries entities.

Name	Description	Data Type	Mandatory	Repeatable	Additional Associated Attributes
title	Title or name of this entity. This should be a 'human readable' name by which the entity is referred.	xs:string	yes	no	
identifier	Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key.	composite field	no	no	<i>domain</i> - The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.
createdTimestamp	Field containing date and time when this record was created.	dateTime	no	no	
lastModifiedTimestamp	Field containing date and time when this records was last updated.	dateTime	no	no	
comments	More information about this entity.	xs:string	no	no	
derivationDate	The date that this derivedSeries was created.	date	no	no	
type	The type of entity this is. Preferably derived from a controlled vocabulary.	controlledVoc	yes	no	
linkSeries		seriesLinks	yes	no	
objective	The reason/rationale why this series was made	xs:string	no	no	
standardizingMethod	Numerical method used to standardise the series	xs:string	no	no	
author	Name of the person that created this derivedSeries	xs:string	no	no	
version	Version number of this derivedSeries	xs:string	no	no	
location	Details about the geographical location of this entity.	composite field	no	no	<i>locationGeometry</i> - GML representation of a location. Can be either a point to represent a particular location or a polygon to represent an area or a geographical extent / bounding box. <i>locationType</i> - The type of location that the geometry field represents taken from the TRiDaS controlled vocabulary. <i>locationPrecision</i> - Stores potential difference; number of meters difference, so 0 is exact. <i>locationComment</i> - Additional information about the location, for example, point taken from center or corner of area, which corner <i>address</i> - Address information about this location
genericField	Generic field for storing key/value pairs for data not currently supported in the TRiDaS standard	composite field	no	yes	<i>name</i> - Name of the field. <i>type</i> - The data type that this field contains.
values	This is a container for a group of actual measurement values. When appropriate this container includes details on the variable being represented as well as the units used. If the values are unitless, then the special <unitless> field is used.	composite field	no	yes	<i>variable</i> - Measured variable (ring width, earlywood, latewood etc) preferably taken from the TRiDaS controlled vocabulary <i>unitless</i> - Presence of this field denotes that the associated values have no units. Not to be used to denote *unknown* units. <i>unit</i> - Measurement units used for these value, preferably taken from the TRiDaS controlled vocabulary <i>value</i> - A value is the result of a single ring measurement. The type of measurement this is along with the units used are recorded in the 'values' container in the associated measurement- or derivedSeries.

interpretation	Information interpreted from the series	composite field	yes	no	<i>dating</i> - Information about dating <i>firstYear</i> - Year of the first measured ring. This is derived from the chronology that was used to date this series. It is not to be confused with <i>sproutYear</i> . <i>lastYear</i> - Year of the last measured ring. It is not to be confused with <i>deathYear</i> which might also include unmeasured or hypothetical rings <i>datingReference</i> - Chronology used to interpret the series <i>statFoundation</i> - Container for fields that describe the statistical method used for crossdating <i>pithYear</i> - Estimated year that the tree sprouted <i>deathYear</i> - Estimated year of death of the tree <i>provenance</i> - Estimated provenance derived from the matching chronology
interpretationUnsolved		composite field	yes	no	

Table 9: Details of the attributes available in TRiDaS value entities.

Name	Description	Data Type	Mandatory	Repeatable	Additional Associated Attributes
title	Title or name of this entity. This should be a 'human readable' name by which the entity is referred.	xs:string	yes	no	
identifier	Identifier for this entity which in combination with the domain should be unique. This is typically a computer generated code such as a database primary key.	composite field	no	no	<i>domain</i> - The domain which this identifier is applicable to. Could be the URL of the organisation's server or the name of the organisation as long as it is not ambiguous.
createdTimestamp	Field containing date and time when this record was created.	dateTime	no	no	
lastModifiedTimestamp	Field containing date and time when this records was last updated.	dateTime	no	no	
comments	More information about this entity.	xs:string	no	no	
remark	Remark about this value. Remarks can be standardised to consistently record important features like 'frost damage' - preferably using the TRiDaS controlled vocabulary.	composite field	no	yes	<i>normalTridas</i> - TRiDaS controlled vocabulary for specific remarks. <i>inheritedCount</i> - In derivedSeries this shows the number of constituent measurementSeries that this remark is found in.