Class VerticalDatumType

Object
    CodeList<VerticalDatumType>
        VerticalDatumType

All Implemented Interfaces:

Serializable, Comparable<VerticalDatumType>

```
@UML(identifier="CD_VerticalDatumType",
     specification=ISO_19111)
public final class VerticalDatumType
extends CodeList<VerticalDatumType>
```

Type of a vertical datum.

Since:

1.0

See Also:

Serialized Form

Nested Class Summary

Nested classes/interfaces inherited from class CodeList
CodeList.Filter

Field Summary

Fields

Modifier and Type	Field	Description
static final VerticalDatum-Type	**BAROMETRIC**	Atmospheric pressure is the basis for the definition of the origin of the associated vertical coordinate system axis.
static final VerticalDatum-Type	**DEPTH**	The zero point of the vertical axis is defined by a surface that has meaning for the purpose which the associated vertical measurements are used for.

static final VerticalDatum-Type	**GEOIDAL**	The zero value of the associated vertical coordinate system axis is defined to approximate a constant potential surface, usually the geoid.
static final VerticalDatum-Type	**OTHER_SURFACE**	In some cases, e.g. oil exploration and production, a geological feature, such as the top or bottom of a geologically identifiable and meaningful subsurface layer, is used as a vertical datum.

Method Summary

All Methods | **Static Methods** | **Instance Methods** | **Concrete Methods**

Modifier and Type	Method	Description
VerticalDatumType[]	**family**()	Returns the list of enumerations of the same kind as this enum.
static VerticalDatumType	**valueOf**(String code)	Returns the vertical datum type that matches the given string, or returns a new one if none match it.
static VerticalDatumType[]	**values**()	Returns the list of VerticalDatumTypes.

Methods inherited from class CodeList

compareTo, identifier, name, names, ordinal, readResolve, toString, valueOf, valueOf

Methods inherited from class Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

Field Details

OTHER_SURFACE

```
@UML(identifier="other surface",
     obligation=CONDITIONAL,
```

```
     specification=ISO_19111)
public static final VerticalDatumType OTHER_SURFACE
```

In some cases, e.g. oil exploration and production, a geological feature, such as the top or bottom of a geologically identifiable and meaningful subsurface layer, is used as a vertical datum. Other variations to the above three vertical datum types may exist and are all included in this type.

GEOIDAL

```
@UML(identifier="geoidal",
     obligation=CONDITIONAL,
     specification=ISO_19111)
public static final VerticalDatumType GEOIDAL
```

The zero value of the associated vertical coordinate system axis is defined to approximate a constant potential surface, usually the geoid. Such a reference surface is usually determined by a national or scientific authority, and is then a well-known, named datum.

DEPTH

```
@UML(identifier="depth",
     obligation=CONDITIONAL,
     specification=ISO_19111)
public static final VerticalDatumType DEPTH
```

The zero point of the vertical axis is defined by a surface that has meaning for the purpose which the associated vertical measurements are used for. For hydrographic charts, this is often a predicted nominal sea surface (i.e., without waves or other wind and current effects) that occurs at low tide. Depths are measured in the direction perpendicular (approximately) to the actual equipotential surfaces of the earth's gravity field, using such procedures as echo-sounding.

BAROMETRIC

```
@UML(identifier="barometric",
     obligation=CONDITIONAL,
     specification=ISO_19111)
public static final VerticalDatumType BAROMETRIC
```

Atmospheric pressure is the basis for the definition of the origin of the associated vertical coordinate system axis. These are approximations of orthometric heights obtained with the help of a barometer or a barometric altimeter. These values are usually expressed in one of the following units: meters, feet, millibars (used to measure pressure levels), or theta value (units used to measure geopotential height).

Method Details

values

`public static VerticalDatumType[] values()`

Returns the list of `VerticalDatumTypes`.

Returns:

The list of codes declared in the current JVM.

family

`public VerticalDatumType[] family()`

Returns the list of enumerations of the same kind as this enum.

Specified by:

`family` in class `CodeList<VerticalDatumType>`

Returns:

The codes of the same kind as this code.

valueOf

`public static VerticalDatumType valueOf(String code)`

Returns the vertical datum type that matches the given string, or returns a new one if none match it.

Parameters:

`code` - The name of the code to fetch or to create.

Returns:

A code matching the given name.