

# MiscIrelandUTMCoord

**Inherits From:** MiscUTMCoord : MiscCoord : Object

**Declared In:** misckit/miscgiskit/MiscIrelandUTMCoord.h

## Class Description

A MiscIrelandUTMCoord object contains points in the Irish Universal Transverse Mercator Projection described in the Irish Ordnance Survey document, "Tables for the Transverse Mercator Projection of Ireland", 1953, reprinted 1971. The addendum with values for the currently used modified airy sphere has been applied. All distances are in meters.

MiscIrelandUTMCoords use an MiscIrelandCoordConverter object as the default converter for **convert:to:** operations (See MiscCoord). This related class is invisible to the user and handles conversion between the basic types discussed above. It is used because the Irish Grid uses slightly different equations to convert between UTM and world coordinates than the UK and UTM Zone equations.

The first time a MiscIrelandUTMCoord is created, a single instance of a MiscUTMConstants object is created

with values particular to this grid.

World coordinate of True Origin:	Latitude 53.5 N, Longitude 8.0 W
True origin offset from grid origin:	200000.0 meters East , 250000.0 meters North
Airy sphere:	a=6377563.396 meters, b=6356256.910 meters
Scaling at Central Meridian:	1.000035

This invisible constants object is shared by all future instances of `MiscIrelandUTMCoord` that are created and is protected against deletion.

## Method Types

Initialization	- <code>initDescription</code> :
	- <code>awake</code>

## Instance Methods

**awake**  
- `awake`

Connect to the private local constants object to the unarchived object and free the unarchived constants. You should never invoke this method directly. Returns **self**.

**initDescription:**

- **initWithDescription:**(char\*)*textString*

Designated initializer for the `MiscIrelandUTMCoord` class. *textString* is copied and may be used in describing the set of points. The new object will initially have space for one point. The default conversion contractor for conversion between coordinate systems is set to be the instance of `MiscIrelandCoordConverter`.