

# MiscCylindricalCoord

**Inherits From:** MiscMathCoord : MiscCoord : Object  
**Declared In:** misckit/miscgiskit/MiscCylindricalCoord.h

## Class Description

A MiscCylindricalCoord object holds a set of cylindrical coordinate points, ie cylinder radius, theta (angle from zero meridian at x axis towards y axis), and z hieght values. Theta is stored internally as radians at all times, but may be loaded or retrieved in degrees if desired.

## Method Types

Accessing Coord values	- radius
	- thetaRadians
	- thetaDegrees

- zCoord
- coordRadius:thetaDegrees:z:
- coordRadius:thetaRadians:z:
- setCoordRadius:thetaDegrees:z:
- setCoordRadius:thetaRadians:z:

## Instance Methods

### **coordRadius:thetaDegrees:z:**

- **coordRadius:**(double\*)*rValue* **thetaDegrees:**(double\*)*thetaValue* **z:**(double\*)*zValue*

Gets the r,  $\theta$  (in decimal degrees) and z values of the point at the current index. Returns **self**.

**See also:** - **coordRadius:thetaRadians:z:**

### **coordRadius:thetaRadians:z:**

- **coordRadius:**(double\*)*rValue* **thetaRadians:**(double\*)*thetaValue* **z:**(double\*)*zValue*

Gets the r,  $\theta$  (in radians) and z values of the point at the current index. Returns **self**.

**See also:** - **coordRadius:thetaDegrees:z:**

### **radius**

- (double)**radius**

Returns the radius value of the point at the current index.

**See also:** - **thetaRadians**, - **thetaDegrees**, - **zCoord**

**setCoordRadius:thetaDegrees:z:**

- **setCoordRadius:**(double)*rValue* **thetaDegrees:**(double)*thetaValue* **z:**(double)*zValue*

Sets the  $r$ ,  $\theta$  (in decimal degrees) and  $z$  values of the point at the current index.

**See also:** - **setCoordRadius:thetaRadians:z:**

**setCoordRadius:thetaRadians:z:**

- **setCoordRadius:**(double)*rValue* **thetaRadians:**(double)*thetaValue* **z:**(double)*zValue*

Sets the  $r$ ,  $\theta$  (in radians) and  $z$  values of the point at the current index.

**See also:** - **setCoordRadius:thetaDegrees:z:**

**thetaDegrees**

- (double)**thetaDegrees**

Returns the  $\theta$  value (in decimal degrees) of the point at the current index.

**See also:** - **radius**, - **thetaDegrees**, - **zCoord**

**thetaRadians**

- (double)**thetaRadians**

Returns the  $\theta$  value (in radians) of the point at the current index.

**See also:** - **radius**, - **thetaRadians**, - **zCoord**

**zCoord**

- (double)**zCoord**

Returns the z value of the point at the current index.

**See also:**   - radius,   - thetaRadians,   - thetaDegrees