

**NAME**

TIFFReadTile - read and decode a tile of data from an open TIFF file

**SYNOPSIS**

```
#include <tiffio.h>
```

```
tsize_t TIFFReadTile(TIFF *tif, tdata_t buf, uint32_t x, uint32_t y, uint32_t z, tsample_t sample)
```

**DESCRIPTION**

Return the data for the tile *containing* the specified coordinates. The data placed in *buf* are returned decompressed and, typically, in the native byte- and bit-ordering, but are otherwise packed (see further below). The buffer must be large enough to hold an entire tile of data. Applications should call the routine *TIFFTileSize* to find out the size (in bytes) of a tile buffer. The *x* and *y* parameters are always used by *TIFFReadTile*. The *z* parameter is used if the image is deeper than 1 slice (*ImageDepth*>1). The *sample* parameter is used only if data are organized in separate planes (*PlanarConfiguration*=2).

**NOTES**

The library attempts to hide bit- and byte-ordering differences between the image and the native machine by converting data to the native machine order. Bit reversal is done if the *FillOrder* tag is opposite to the native machine bit order. 16- and 32-bit samples are automatically byte-swapped if the file was written with a byte order opposite to the native machine byte order,

**RETURN VALUES**

*TIFFReadTile* returns -1 if it detects an error; otherwise the number of bytes in the decoded tile is returned.

**DIAGNOSTICS**

All error messages are directed to the **TIFFError**(3TIFF) routine.

**SEE ALSO**

**TIFFCheckTile**(3TIFF), **TIFFComputeTile**(3TIFF), **TIFFOpen**(3TIFF),  
**TIFFReadEncodedTile**(3TIFF), **TIFFReadRawTile**(3TIFF), **libtiff**(3TIFF)

Libtiff library home page: <http://www.simplesystems.org/libtiff/>