

# TikaGDAL

With [TIKA-605](#), you can now use Tika to parse geospatial file formats! To figure out how, read on.

## Install GDAL

If you're lucky this will work:

```
$ brew install gdal --complete
```

## Errors encountered with brew and Mavericks

Note if you encounter errors while upgrading to Mavericks here, the answer is to first:

```
$ brew rm $(join <(brew leaves) <(brew deps gdal --complete ))
```

Note the above instructions are definitely Mac centric. We recommend checking out [GDAL's Website](#) for specific instructions on installing GDAL on your operating system.

Once GDAL is installed, the following command should be available on your path.

```
gdalinfo
```

Running `gdalinfo` should produce something like:

```
Usage: gdalinfo [--help-general] [-mm] [-stats] [-hist] [-nogcp] [-nomd]
        [-norat] [-noct] [-nofl] [-checksum] [-proj4]
        [-listmdd] [-mdd domain|`all`]*
        [-sd subdataset] datasetname

FAILURE: No datasource specified.
```

If that works you are in business!

## Using Tika and GDAL

To use Tika and GDAL grab the 1.7-SNAPSHOT latest of Tika and then grab a geospatial file, e.g., this example will use a Flexible Image Transport System (FITS) file as an example. Then run:

```
java -jar tika-app-1.7-SNAPSHOT.jar -m WFPC2u5780205r_c0fx.fits
```

This should produce, e.g.,

```
ALLG-MAX: 3.777701E3
ALLG-MIN: -7.319537E1
ATODCORR: COMPLETE
...
X-Parsed-By: org.apache.tika.parser.DefaultParser
X-Parsed-By: org.apache.tika.parser.gdal.GDALParser
```

If you see X-Parsed-By: `..GDALParser` and a bunch of geospatial metadata, you are in business!

## Using Tika Server and GDAL

Once you have GDAL and a fresh build of Tika 1.7-SNAPSHOT (including Tika server), you can easily use Tika-Server with GDAL. For example, to post a FITS file to the server and get back its metadata, run the following commands:

in another window, start Tika server

```
java -jar /path/to/tika-server-1.7-SNAPSHOT.jar
```

in another window, issue a cURL request

```
curl -T /path/to/fits/image.fits http://localhost:9998/tika --header "Content-type: application/fits"
```

## Note on FITS dependencies

On TIKA-2684, Susan Borda, reports on some important steps to get a full FITS parse with GDAL. See Susan's [comment](#), and her pointer to properly loading [fitsio](#).