# **Tidal Gauge App Documentation**

Release first preview on android – app bond's version

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### App info



This app display a graph obtained from database connected to tidal station.

This is automatically updated every data entered in database.

For now, this app is monitoring S.Sebastiao station (BRAZIL) available for android.

#### The application also shows:

- the average of all records from database
- the minimum and maximum values that occurred these past three days.

This application was developed in the context of RedeLitoral project, consisting of a large network of scientific collaboration. Visit the [Redelitoral website] (http://www.redelitoral.ita.br/index.php/inicial)

# Installation

You can install it via [Google Play Store](https://play.google.com/store/apps/details?id=org.demo.test8)

# Requirements

### Android

You can run Kivy applications on Android, on (more or less) any device with OpenGL ES 2.0 (Android 2.2 minimum).

### More info

Visit the [github tide-app](https://github.com/mabelcalim/tide-app)

#### Note:

### Many thanks:

- to my friends Gaúcho (Luiz Irber) and GG (Gabriel Geraldo Marcondes) who encouraged me in creating this application
- To my colleagues and friends from RedeLitoral

### DIY

Do it Yourself (DIY) your own kivy app!

Note: This guide was developed on OSX 10.9.5, python 2.7, kivy 1.8.1

- 1. brew install dpkg
- 2. vi .bash\_profile and comment this line

#export ARCHFLAGS = "-arch x86"

- 1. create your app main.py
- 2. save your dir in your home
- ' /Users/usuario/dir ' 3. init buildozer
- ' dir usuario\$ buildozer init `4. modified the buildozer spec file
- ' dir usuario\$ vi buildozer.spec '5. create a virtualenv in your dir

```
' dir usuario$ virtualenv venv --distribute '6. activate virtualenv
```

```
' dir usuario$ source /venv/bin/activate '.. note:
```

to deactivate : dir usuario\$ deactivate

7. run buildozer - see more in : https://github.com/kivy/buildozer

```
' dir usuario$ buildozer android release '
```

### 5.1 Signed and Zipalign

More infos to create a signature and to zip in : https://github.com/kivy/kivy/wiki/Creating-a-Release-APK

- 1. change the dir
- ' dir usuario\$ cd ~ '2. Obtain a keystore
- \*\*\* keytool -genkey -v -keystore ./keystores/<my-new-key>.keystore -alias <my-alias> -keyalg RSA -keysize 2048 -validity 10000
- "" 3. then signed as follows
- "" jarsigner -verbose -sigalg SHA1withRSA -digestalg SHA1 -keystore ./keystores/<my-new-key>.keystore ./<my-project>/bin/<MyProject>-<version>-release-unsigned.apk <my-alias>

```
", 4. zip the apk already signed
```

\*\*\* .buildozer/android/platform/android-sdk-21/build-tools/21.1.1/zipalign -v 4 ./<my-project>/bin/<MyProject>-

```
".. warning:
```

The zipalign script may not be in tools, but you can also find it in build-tools.

## 5.2 adb logcat and installation on android

1. change to dir

```
' cd /Users/usuario/.buildozer/android/platform/android-sdk-21/platform-tools
```

2. install device

```
' platform-tools usuario$ ./adb start-serve '
```

```
' platform-tools usuario$ ./adb devices '
```

3. adb install the apk on android for test

```
' platform-tools usuario$ ./adb install /Users/usuario/dir/bin/<app-name>.apk
'4. see error log
```

' platform-tools usuario\$ ./adb logcat '



CHAPTER 6

**Tide Gauge Data** 

station 23.81085 S 45.39841 W city São Sebastião - Brazil type semidiurnal



**Note:** More app info:

tide-app.readthedocs.org/en/latest/index.html
https://github.com/mabelcalim/tide-app

CHAPTER 7

Indices and tables

- genindex
- modindex
- search