



## Using Android Location Extras with Eos Tools Pro

Eos Tools Pro (starting with version 1.34) uses the Location Extras feature of the Android Location service to pass GNSS metadata to other apps in the form of Key / Value mapping:

[http://developer.android.com/reference/android/location/Location.html#getExtras\(\)](http://developer.android.com/reference/android/location/Location.html#getExtras())

This allows apps that do not feature a built-in Ntrip client, or NMEA parser to have access to valuable GNSS information, like DOP's, estimated accuracies, fix type, etc. In the "Map View" menu, an "Extras" button displays a snapshot of the list of Keys as published by Eos Tools Pro. All Values are variable-length strings, therefore some conversion to integer or float will be needed. The type in ( ) below indicates to what the strings should be converted to:

**satellites** (integer)  
**totalSatInView** (integer)  
**pdop** (float)  
**hdop** (float)  
**vdop** (float)  
**diffAge** (float)  
**diffStatus** (integer) (1=GPS, 2=DGPS, 4=Fixed, 5=Float)  
**diffID** (string)  
**3drms** (float)  
**vrms** (float)  
**hrms** (float) (passed on as "Accuracy" in mock provider)  
**mslHeight** (float) (\*Ellipsoidal = mslHeight + ondulation)  
**ondulation** (float)  
**receiverModel** (string) ("model + serial number")  
**mockProvider** (string) (= "EosToolsPro")  
**utcTime** (float)  
**xOffset** (float)  
**yOffset** (float)  
**zOffset** (float)  
**antHeight** (float)

To get the extras, there is an Extras bundle with the Location object. The bundle would be queried with `getString("keyname")` to get a string value returned.

Example pdop:

```
Bundle bundle = location.extras;  
String spdop = "";
```

```
If (bundle.containsKey("pdop"))  
    bundle.getString("pdop");
```

spdop would have string value "1.4"

For support please contact [support@eos-gnss.com](mailto:support@eos-gnss.com) or call +1 (450) 824-3325. Web: [www.eos-gnss.com](http://www.eos-gnss.com)

