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# Earthshot

## Earthshot Labs Contributors

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# USER GUIDE

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Earthshot is a central python package for projects at Earthshot Labs.



## INSTALLATION

Installation instructions go here...





## EXAMPLES

A bunch of examples can go here!



## EARTHSHOT

### 3.1 earthshot

#### 3.1.1 earthshot.core

##### earthshot.core.mon\_stats

earthshot.core.mon\_stats.**bands\_avgs** (*bands, img\_col*)

earthshot.core.mon\_stats.**months\_dict** ()

earthshot.core.mon\_stats.**months\_list** ()

##### earthshot.core.normalize

earthshot.core.normalize.**distribution\_plot** (*title, hist, edges, x, pdf, cdf*)

earthshot.core.normalize.**img\_col\_range** (*img\_col, area\_of\_interest=None, scale\_m: int = 1*)  
→ list

Get the [min, max] of an image Collection given optional area of interest and scale (meters).

earthshot.core.normalize.**img\_range** (*img, area\_of\_interest=None, scale\_m: int = 1*) → list

Get the [min, max] of an image given optional area of interest and scale (meters).

earthshot.core.normalize.**img\_scale** (*img, min=None, max=None, area\_of\_interest=None,*  
*scale\_m: int = 1*)

earthshot.core.normalize.**normal\_dist\_plot** (*data, n\_bins: int = 50, n\_dist: int = 1000*) →  
None

#### 3.1.2 earthshot.water

##### earthshot.water.water\_common

earthshot.water.water\_common.**bboxes** () → dict

A dictionary of common bounding boxes.

### earthshot.water.water\_viz

`earthshot.water.water_viz.add_ee_layer(self, ee_image_object, vis_params, name)`

A method for displaying or layering Earth Engine image tiles to folium map.

`earthshot.water.water_viz.folium_display(the_map) → None`

Display a folium map with layer control.

`earthshot.water.water_viz.folium_map(**kwargs) → folium.folium.Map`

`earthshot.water.water_viz.legend(palette: tuple, title: str = 'Legend Title (-)', plot_width: int = 500, plot_height: int = 75, minimum: float = 0, maximum: float = 1) → None`

Create a stand-alone legend. :param palette: tuple of colors :param title: str for title :param plot\_width: int :param plot\_height: int :param minimum: float of values to include :param maximum: float of values to include

**Returns** None but displays a legend bar in a Jupyter Notebook.

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