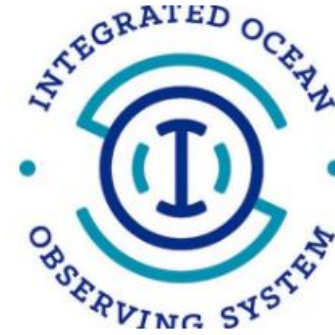


ioos/erddapy

Python interface for ERDDAP



 18
Contributors

 70
Used by

 70
Stars

 29
Forks



docs: <https://ioos.github.io/erddapy>

source: <https://github.com/ioos/erddapy>

Scope

- What is erddapy:
 - o ERDDAP URL builder
 - o Tool for other tools
 - o Use python to programmatically return anything that ERDDAP RESTful API can do
 - o Some basic data export: netCDF, CSV, xarray, etc.
- What it isn't:
 - o A particular server/service/region data browser
 - o A (user friendly) data exploration tool
 - o A (complete) multiple ERDDAP server search

Dependency graph













Dependencies

Dependents

Dependabot

Export SBOM

Repositories that depend on **erddapy**

70 Repositories 12 Packages ⓘ		Owner ▾
	pyo-oracle	
	ceotr-erddap-proxy	
	euroargodev / VirtualFleet virtualfleet	☆ 6 🍷 2
	axiom-data-science / intake-erddap	☆ 0 🍷 1
	app-common	
	oceanmodeling / searvey ←	☆ 16 🍷 6
	modaat-console	
	lifewatch / bpnsdata	☆ 2 🍷 0
	ioos / gliderpy ←	☆ 5 🍷 10
	rbardaji / mooda	☆ 16 🍷 3
	axiom-data-science / ocean_data_gateway ocean-data-gateway	☆ 5 🍷 3
	euroargodev / argopy ←	☆ 159 🍷 37

```
from erddapy import ERDDAP
```

```
server = "https://gliders.ioos.us/erddap"
```

```
e = ERDDAP(server=server)
```

```
e.dataset_id = "whoi_406-20160902T1700"
```

```
e.protocol = "tabledap"
```

```
e.variables = [
```

```
    "depth",
```

```
    "latitude",
```

```
    "longitude",
```

```
    "salinity",
```

```
    "temperature",
```

```
    "time",
```

```
]
```

```
e.constraints = {
```

```
    "time>=": "2016-09-03T00:00:00Z",
```

```
    "time<=": "2017-02-10T00:00:00Z",
```

```
    "latitude>=": 38.0,
```

```
    "latitude<=": 41.0,
```

```
    "longitude>=": -72.0,
```

```
    "longitude<=": -69.0,
```

```
}
```

```
df = e.to_pandas(
```

```
    index_col="time (UTC)",
```

```
    parse_dates=True,
```

```
    .dropna()
```

```
import matplotlib.dates as mdates
```

```
fig, ax = plt.subplots(figsize=(17, 2))
```

```
cs = ax.scatter(
```

```
    df.index,
```

```
    df["depth (m)",
```

```
    s=15,
```

```
    c=df["temperature (Celsius)",
```

```
    marker="o",
```

```
    edgecolor="none",
```

```
)
```

```
ax.invert_yaxis()
```

```
ax.set_xlim(df.index[0], df.index[-1])
```

```
xfmt = mdates.DateFormatter("%H:%Mh\n%d-%b")
```

```
ax.xaxis.set_major_formatter(xfmt)
```

```
cbar = fig.colorbar(cs, orientation="vertical",  
                    extend="both")
```

```
cbar.ax.set_ylabel("Temperature ( $^{\circ}$ C)")
```

```
ax.set_ylabel("Depth (m)")
```

