INTRODUCTION TO GEOLIME

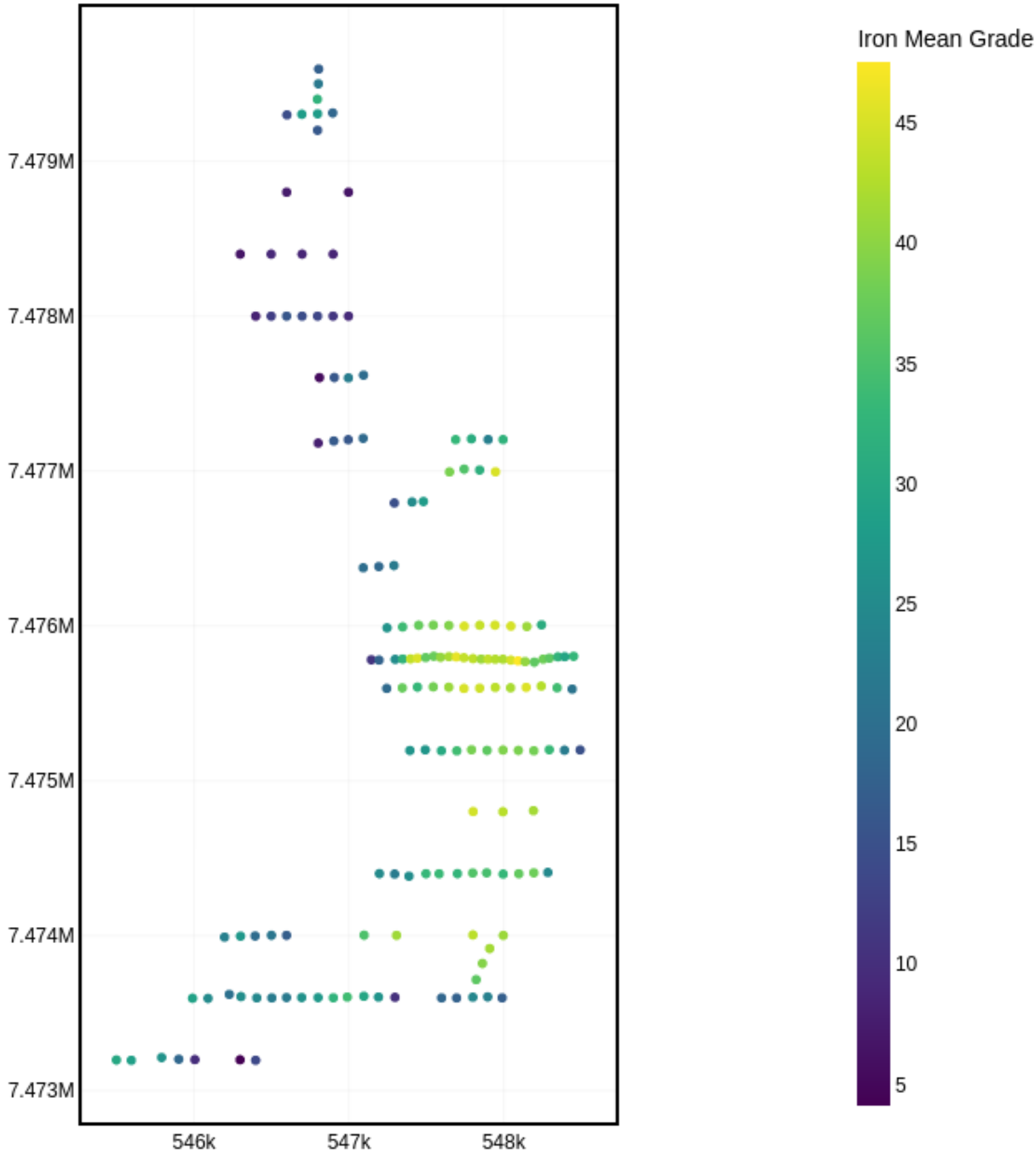
Spatial Data Declustering in Python

DEEPLIME

```python
import geolime as geo

drillholes = geo.read_file(
    "rocklea_dh.geo"
)

drillholes.plot_2d(
    attribute="Fe",
    agg_method="mean"
)
```

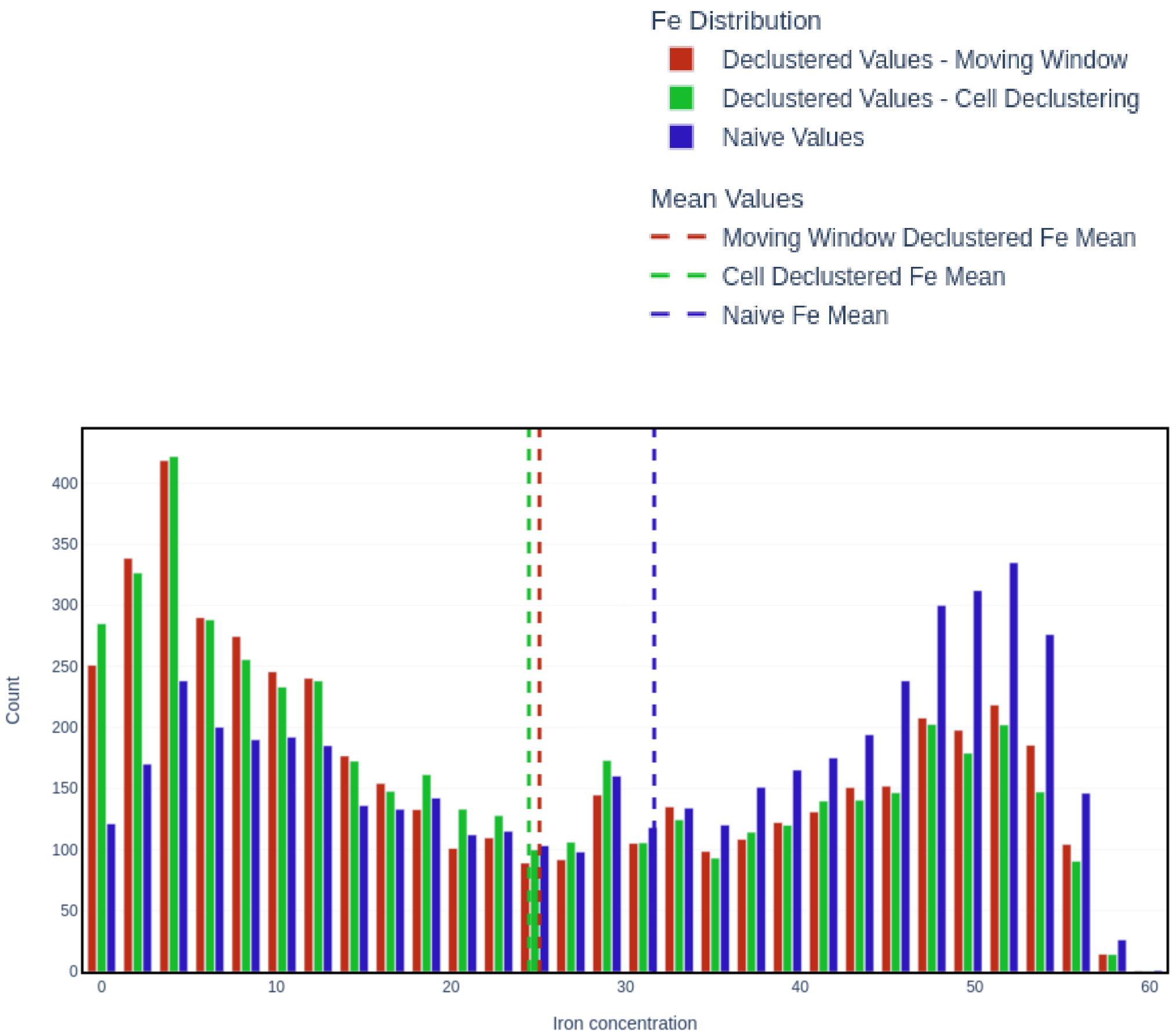

7.479M
7.478M
7.477M
7.476M
7.475M
7.474M
7.473M
546k
547k
548k
Iron Mean Grade
45
40
35
30
25
20
15
10
5

```
geo.moving_window_declus(
    obj=drillholes,
    obj_attribute="Fe",
    declus_attribute="Fe_declus_weight_mw",
    diam_x=500,
    diam_y=500,
    geometry="BALL"
)
```

```
geo.cell_declustering(
    obj=drillholes,
    obj_attribute="Fe",
    declus_attribute="Fe_declus_weight_cd",
    size_x=500,
    size_y=500,
    nb_off=25
)
```

```
geo.bar(
    [
        {"object": dh, "property": "Fe"},
        {
          "object": drillholes,
          "property": "Fe",
          "weights":"Fe_declus_weight_mw"
        },
        {
          "object": drillholes,
          "property": "Fe",
          "weights":"Fe_declus_weight_cd"
        }

    ],
    nbins=30
)
```


Fe Distribution
Declustered Values - Moving Window
Declustered Values - Cell Declustering
Naive Values
Mean Values
Moving Window Declustered Fe Mean
Cell Declustered Fe Mean
Naive Fe Mean
Count
0
50
100
150
200
250
300
350
400
0
10
20
30
40
50
60
Iron concentration

```
geo.plot_2d(
    [
        {
            "object":drillholes,
            "property":"Fe_declus_weight_mw",
            "size":"Fe_declus_weight_mw",
            "title":"Moving Window Declustering"
        },
        {
            "object":drillholes,
            "property":"Fe_declus_weight_cd",
            "size":"Fe_declus_weight_cd",
            "title":"Cell Declustering"
        }
    ],
    yaxis_shared=True,
    colorscale_name="Weight Value"
)
```


Moving Window Declustering
Cell Declustering
Weight Value
4.5
4
3.5
3
2.5
2
1.5
1
0.5
7.48M
7.479M
7.478M
7.477M
7.476M
7.475M
7.474M
7.473M
546k
547k
548k

HOW EASY WAS THAT?

Check our documentation for more examples, and let's rock!

DEEPLIME