Plot all the data for each sensor type

```
In [1]: import pandas as pd
        import matplotlib.pyplot as plt
```

```
In [2]: raw_data_suffixes = {"air_co2":        "air_carbon_dioxide_ppm_T6713-Top.csv",
                             "air_RH":         "air_humidity_percent_SHT25-Top.csv",
                             "air_temp_C":     "air_temperature_celcius_SHT25-Top.csv",
                             "water_ec_ms_cm": "water_electrical_conductivity_ms_cm_AtlasEC-Reser
        voir.csv",
                             "water_pH":       "water_potential_hydrogen_AtlasPH-Reservoir.csv",
                             "water_temp_C":   "water_temperature_celcius_AtlasTemp-Reservoir.cs
        v"}
```

```
In [3]: save_path = "../data/csv/raw_from_BQ/split_datas/evap_test/"
        device_ids = ['EDU-30A77B2D-f4-5e-ab-64-50-92',
                      'EDU-30EB6274-f4-5e-ab-66-6f-05',
                      'EDU-32B65C51-50-65-83-d0-fb-bf',
                      'EDU-429A28CD-f4-5e-ab-3c-f3-d2',
                      'EDU-46CF2F54-f4-5e-ab-5d-fd-81',
                      'EDU-4EF485F5-f4-5e-ab-5b-10-cd',
                      'EDU-56F786AB-f4-5e-ab-5c-33-b2',
                      'EDU-90DB5116-50-65-83-e6-7d-b0',
                      'EDU-A3F734CE-f4-5e-ab-59-ac-e3',
                      'EDU-B373ACFF-f4-5e-ab-66-4b-6a',
                      'EDU-B4092A13-f4-5e-ab-5a-4d-f9',
                      'EDU-C9B9F1A0-f4-5e-ab-5b-4f-d2',
                      'EDU-D473FCE2-f4-5e-ab-65-8d-62',
                      'EDU-D834D808-f4-5e-ab-fa-82-e8',
                      'EDU-DC266DD8-f4-5e-ab-60-49-b2',
                      'EDU-E074D2DE-f4-5e-ab-3d-d0-61',
                      'EDU-F86DC2E3-50-65-83-d5-51-e5',
                      'EDU-FACAD357-f4-5e-ab-67-5d-92',
                      'EDU-27B1A1C6-f4-5e-ab-3b-35-dd']
        # List of soil bots, so we can not plot water measurements for them (which messes
        up the scale)
        soil_devices = ['EDU-32B65C51-50-65-83-d0-fb-bf',
                        'EDU-D834D808-f4-5e-ab-fa-82-e8',
                        'EDU-A3F734CE-f4-5e-ab-59-ac-e3',
                        'EDU-84A7BF83-f4-5e-ab-5a-4d-ae']
```

```
In [4]: import os
        def plotData(data_type,removeSoil=False):
            dfs = {}
            for device_id in device_ids:
                if(not removeSoil or device_id not in soil_devices):
                    filename = save_path +device_id + "_" + raw_data_suffixes[data_type]
                    if os.path.exists(filename):
                        df = pd.read_csv(filename)
                        df['timestamp_utc'] = pd.to_datetime(df['timestamp_utc'])
                        dfs[device_id] = df.copy()
            fig,ax = plt.subplots(figsize=(18,8), dpi=80)
            for device_id in dfs.keys():
                df = dfs[device_id]
                ax.plot(df.timestamp_utc,df.value,label=device_id)
            ax.set_xlabel("Date Time (UTC)")
            ax.set_ylabel(data_type)
            ax.legend(loc='best')
            fig.show()
```
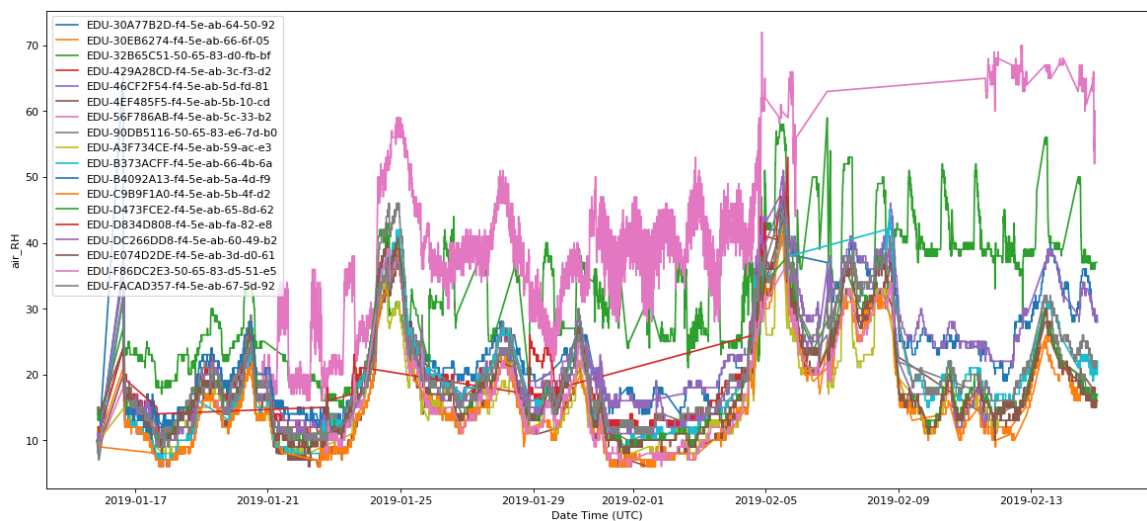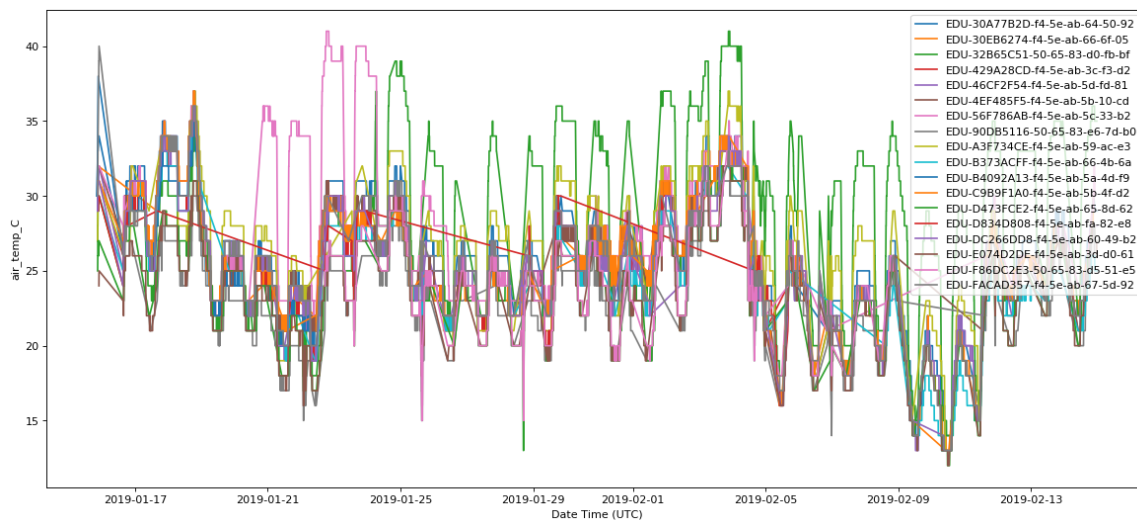
```
In [11]: plotData("air_co2")
```
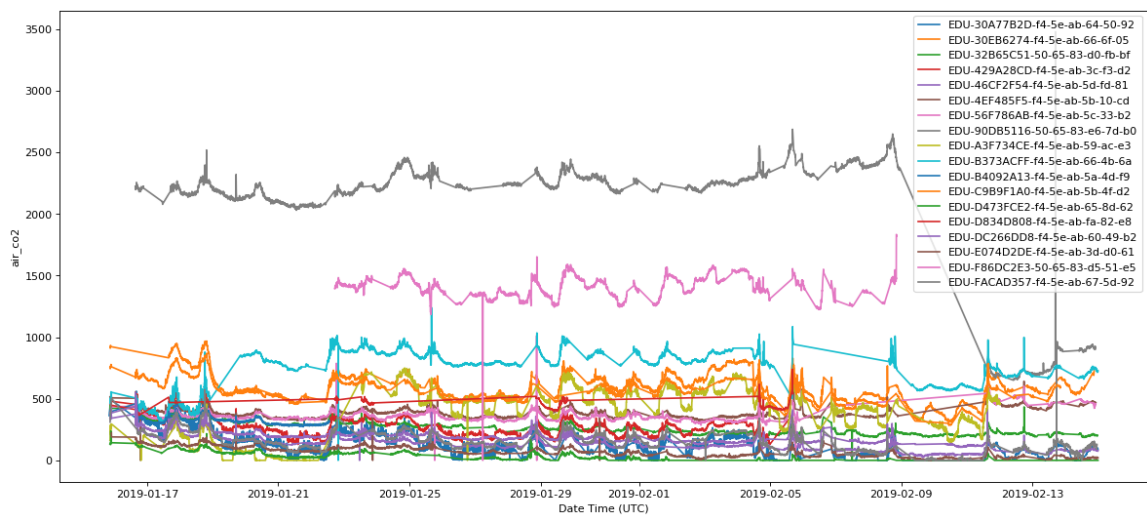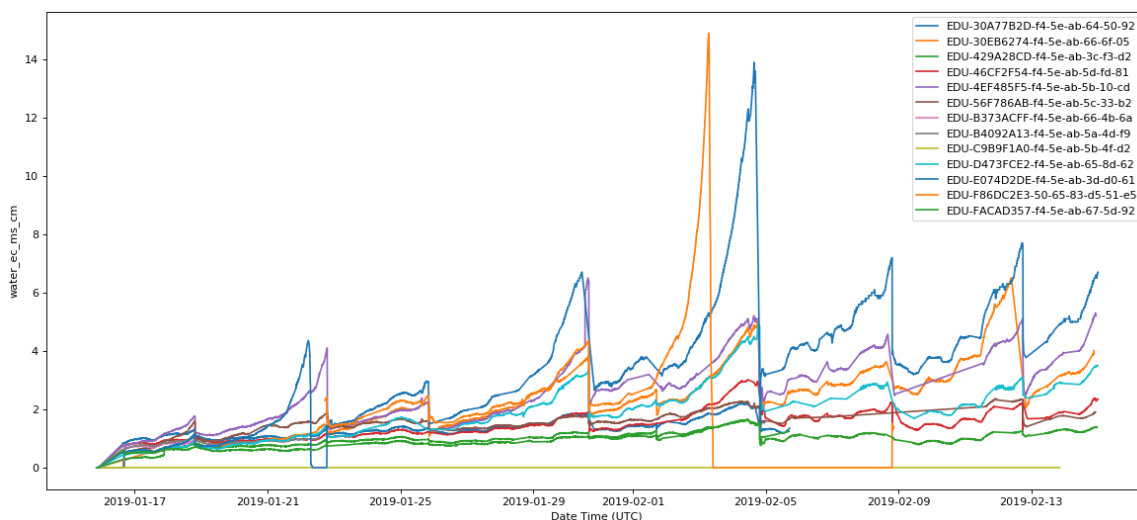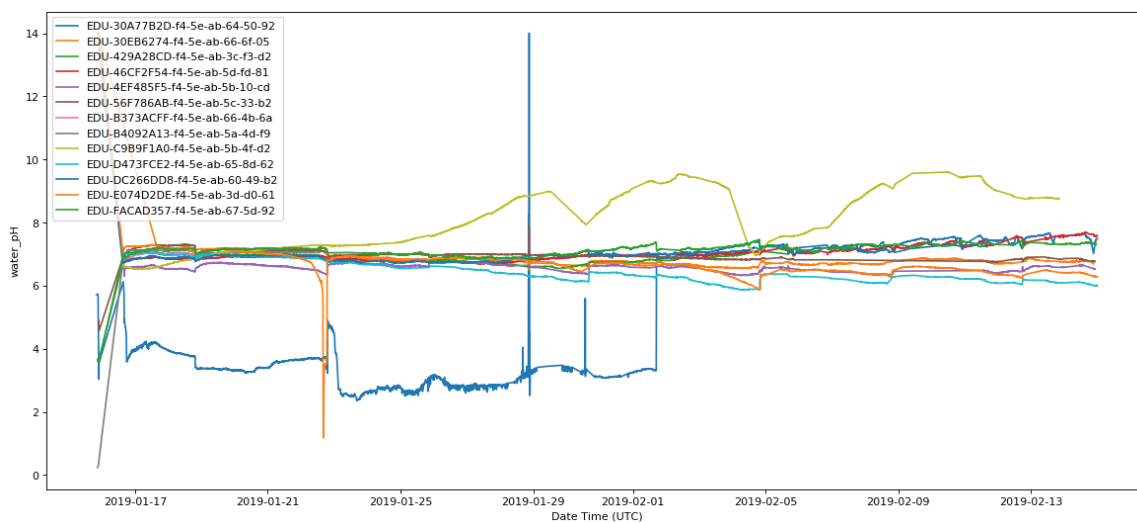


```
In [6]: plotData("air_RH")
```

In [7]: `plotData("air_temp_C")`
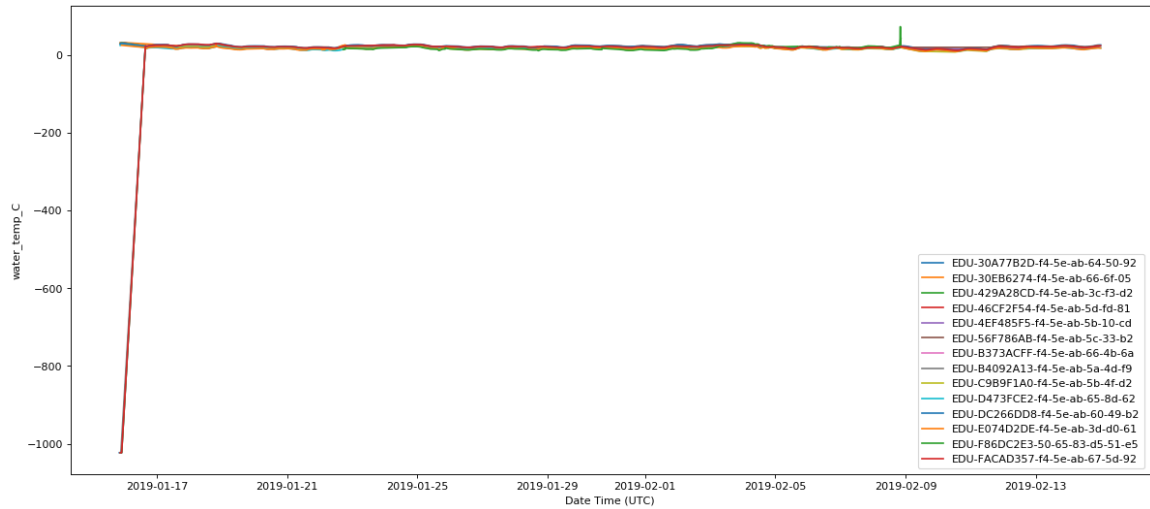

In [8]: `plotData("water_ec_ms_cm",removeSoil=True)`

In [9]: `plotData("water_pH",removeSoil=True)`

```
In [10]: plotData("water_temp_C",removeSoil=True)
```



```
In [ ]:
```