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| **American-Made Solar Forecasting Prize****Solar Forecast Arbiter Code Examples**Below are two (Python) code examples for the Solar Forecast Arbiter Tool:  **Q1: How can I download reference data?****A1: You can download data via the SFA Dashboard or by using the SFA API. Here is an example using the API via the SFA’s Python package (solarforecastarbiter):**```import pandas as pdfrom solarforecastarbiter.io import api # API authenticationtoken = api.request\_cli\_access\_token(“your\_email@email.com”, “your\_password”)session = api.APISession(token) # get data for a specific Observationobservation\_id = “9dfe124a-7e49-11e9-98c3-0a580a8003e9”  # GHI at Table Mountain Boulder COstart = pd.Timestamp(“2022-01-01 12:00:00”)end = pd.Timestamp(“2022-01-01 13:00:00”)df = session.get\_observation\_values(observation\_id, start, end)print(df.head())    # check the data # NOTE: same process applies to get reference forecast data# For more info, see [https://solarforecastarbiter-core.readthedocs.io/en/latest/api.html#sfa-api](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsolarforecastarbiter-core.readthedocs.io%2Fen%2Flatest%2Fapi.html%23sfa-api&data=04%7C01%7Cemily.evans%40nrel.gov%7Cd752136eafe34ce01e6708d9df599487%7Ca0f29d7e28cd4f5484427885aee7c080%7C0%7C0%7C637786399277577541%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C2000&sdata=kr%2FRqs2t8KUD3gAZB1d%2FDhr8hsHjpecysIF9XKV6ie0%3D&reserved=0)``` **Q2: How can I get the UUID values?****A2: You can look up UUID values via the SFA Dashboard or by using the SFA API. Here is an example using the API via the SFA’s Python package (solarforecastarbiter):** ```from solarforecastarbiter.io import api # API authenticationtoken = api.request\_cli\_access\_token(“your\_email@email.com”, “your\_password”)session = api.APISession(token) # get a list of all sites your account has access tosites = session.list\_sites() # iterate through sites and print the site names & UUID valuefor site in sites:    print(site.name, site.site\_id) # NOTE: same process applies to get UUID values for observations, forecasts, etc.# For more info, see [https://solarforecastarbiter-core.readthedocs.io/en/latest/api.html#sfa-api](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsolarforecastarbiter-core.readthedocs.io%2Fen%2Flatest%2Fapi.html%23sfa-api&data=04%7C01%7Cemily.evans%40nrel.gov%7Cd752136eafe34ce01e6708d9df599487%7Ca0f29d7e28cd4f5484427885aee7c080%7C0%7C0%7C637786399277577541%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C2000&sdata=kr%2FRqs2t8KUD3gAZB1d%2FDhr8hsHjpecysIF9XKV6ie0%3D&reserved=0)```  |
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