Netstock Data Engineer Challenge - Weather

August 27, 2023

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME
1.0	2023-08-37	Document created	Erhardt Nel

Contents

1   Introduction

intro text here

2   API Interface

The open-meteo.com weather API interface allow for hourly or daily weather forecasts. The decision was made to use the following global cities:

- Johannesburg - South Africa

- London - United Kingdom

- New York City - United States

3   Undestanding the API Data

The Api interface allows for unauthenticated access. I will be using a simple explorative tool like Microsot Excel to onnect to to the API to understand and unpack the returned data structures. This is achieved by setting up an excel web query to the API endpoint. It is important to add the Accept-Encoding gzip header to the request because the api returns a gzipped stream.
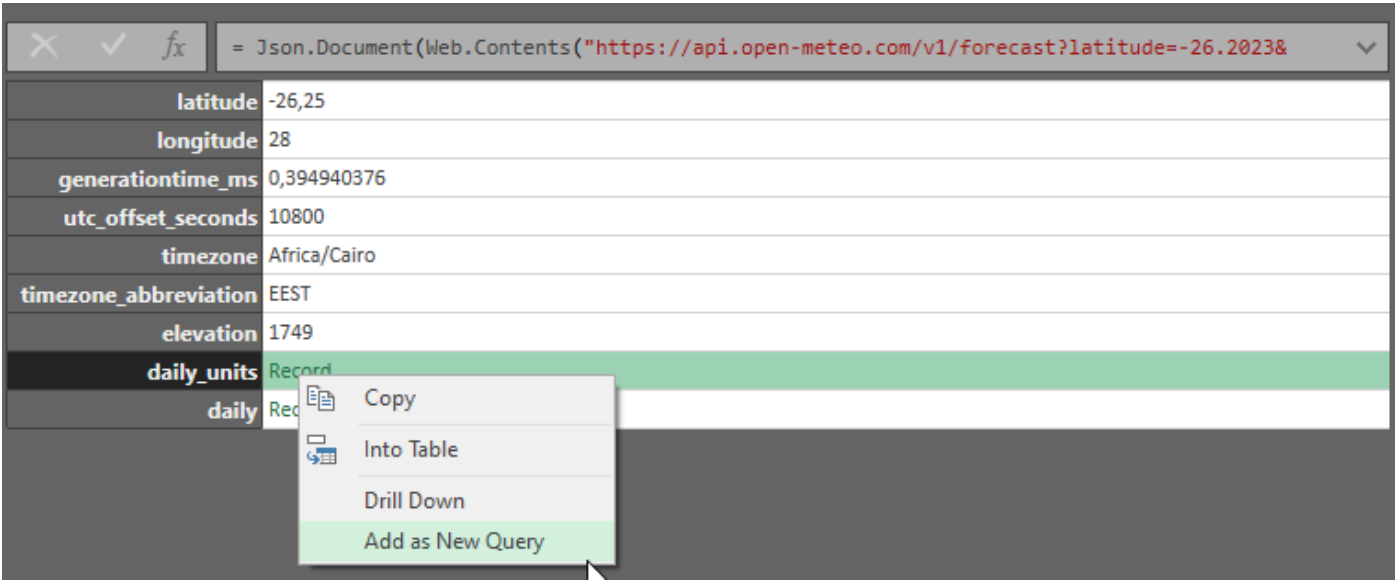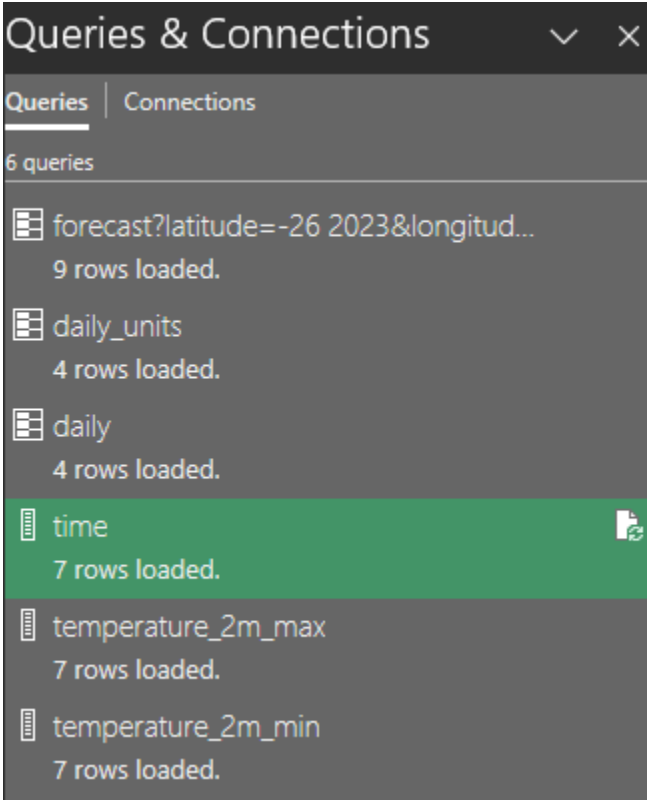
The Excel query returns mulliple nodes in JSON format. The next step is to expand each individual Json Array into a separate sub query.

We now have individual queries to all the JSON node arrays from the API result. These queries can be individaully refreshed as data tables in Excel.

This porcess allows me to quickly unpack what the data structures are in Excel Sheets.

	A
1	temperature_2m_max
2	19,3
3	19,5
4	20,3
5	20,9
6	21,7
7	22,8
8	22,8

	A
1	time
2	2023-08-27
3	2023-08-28
4	2023-08-29
5	2023-08-30
6	2023-08-31
7	2023-09-01
8	2023-09-02