Some Suggestions for Public Available Datasets for the AI Data Management for Space Mission Simulations assignment

**1. NASA Open Data Portal**

NASA provides a wealth of datasets, including historical mission data, sensor data, and environmental measurements that can be used for space mission simulations.

* **Link**: [NASA Open Data Portal](https://data.nasa.gov/)

**2. Medical Data (MIMIC-III Clinical Database)**

For projects involving medical AI, MIMIC-III provides extensive de-identified clinical data for patient diagnoses, vital signs, and lab results. While MIMIC-III is widely used, students need to complete a data usage agreement.

* **Link**: MIMIC-III Database

**3. Geological and Earth Science Data (USGS Earth Explorer)**

The USGS Earth Explorer offers satellite and remote sensing data that can be used to simulate lunar or Martian geological analysis. Students can download geological data, satellite imagery, and other resources.

* **Link**: USGS Earth Explorer

**4. Apollo Lunar Surface Journal and Data Archive**

Contains scanned Apollo mission documents, images, and lunar samples data, ideal for exploring challenges related to integrating handwritten and scanned historical data.

* **Link**: [Apollo Lunar Surface Journal](https://www.hq.nasa.gov/alsj/)

**5. European Space Agency (ESA) Earth Observation Data**

ESA provides data from various Earth observation missions that include geospatial and environmental data, which can simulate geological or environmental monitoring aspects of space missions.

* **Link**: ESA Earth Observation Data

**6. Synthetic Medical Data (Synthea)**

Synthea generates synthetic patient records for public health research and can be used to simulate realistic medical data without privacy concerns. It's especially useful for testing AI models where privacy is a concern.

* **Link**: Synthea Synthetic Health Data