

**Use Case 1: Request Mission Data****Scope:** Data Feeder**Primary Actor:** none**Secondary Actor:** (Lunar Mission)System**Related Use Cases:** *Use Case 2: Request to Load a Parameter File, Use Case 3: Start the Data Feeder***Stakeholders & Interests:**

- (Lunar Mission) System: Requests Mission Data for current mission
- Flight Controller: Wants a simulation with as similar as possible to an actual mission
- Engineers/Tecnicians: Wants a simulation agnostic to source

**Pre-Conditions:** Data Feeder is started, Parameter File is loaded, Data Feeder is generating required mission data *See Use Case 2: Request to Load Parameter File*, (Lunar Mission) System is running.**Post-Conditions:** Requested Data Returned to the (Lunar Mission) System**Flow of Events:**

(Lunar Mission)System	Data Feeder
1. Request selected Mission Data	
	2. Returns the requested data as Specified
3. Periodically loops back to 1 for the durration of the Phase, State or Mission	
4. Stops collecting data upon completion of Phase, State or Mission	

**Alternative Flows:**

- 2a If the data is not available, then the Data Feeder returns an error
- 2b If the Data Feeder encounters an error while generating requested data, then the Data Feeder returns an error

**Special Requirements:**

- None

**Open Issues**

- 2a If the query rate is faster than the Data Feeder update rate, then the current queried data could be similar to the previous queried data.