Use Case I3S1: Detailed Description

Use Case Name: Manage Mission Data
Scenario S1: View Temperature Data
Brief Description: With the System Running, the User requests to view the current Temperature Data (regardless if a Mission is Running).
Actors: User
Related Use Cases: N/A

Stakeholders: Users who want to view the current Temperature Data from the current mission.

Preconditions: The System is running, the iButton is connected to the receptor or another reading device. The iButton receptor or other reading device is connected to the computer.

Postconditions: The Temperature Data is retrieved from the iButton and presented to the User for display. (Either in textual or graphical form).

Flow of Events

User	System
1. Request Temperature Data for viewing	
	2. Retrieves the current temperature data
	3. Converts the temperature data into the three different units: **Metric, English, Absolute**.
	4. Retrieves the associated Date/Time for all the current temperature data
	5. Separates the temperature data by date.
	6. Determines the Min/Max of the current data, converting into the three different units: for every/all data separated by date.
	7. Presents the requested temperature data to the User for viewing.
8. Determines how to view the data (in **Text or Graphical** format) Makes request to the System	
	9. Presents the data in the requested format
10. Determines the Units **Metric, Englilsh, Absolute** and makes request to the System	
	11. Presents the data in the appropriate Units

Exception Contitions

1a. If no iButton Device is connected to the network, the the system indicates the error to the user with the reason (no iButton Atached).

2a. If the requested data of the current mission cannot be retrieved, then the system indicates the error to the user with the reason (One Wire Netwok Issues, One Wire Device Issues).