Use Case I3S3: Detailed Description

Use Case Name: Manage Mission Data
Scenario: S3 View Dewpoint Data
Brief Description: WIth the System Running, the User requests to view the current Dewpoint Data (regardless if an IButton Mission is running).
Actors: User
Related Use Cases:
Use Case I3S1: **View Temperature Data**,
Use Case I3S2: **View Humidity Data**

Stakeholders: Users who what to view the current Dewpoint Data from the current IButton Mission.

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

Postconditions: The Dewpoint data is retrieved from the IButton and presented to the User for display. (In either textual or graphical form).

Flow of Events

User	System
1. Request Dewpoint Data for viewing	
	2. Retrieves the current Temperature data.
	3. Retrieves the current Humidity data.
	4. Calculates the current Dewpoint
	5. Separates the Dewpoint data by Date.
	6. Determines the Min/Max of the current Dewpoint data and the associated Date/Time
	7. Presents the requested Dewpoint data to the User for viewing.
8. Determines how to view the data (in **Text or Graphical** format) Makes the request to the System	
	9. Presents the data in the requested format.

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

2a. If the Temperature Data of the current mission cannot be retrieved, then the system indicates the error to the user with the reason (See **Use Case I3S1, Exception Condition 2a**).

3a. If the Humidity Data of the current mission cannot be retrieved, then the system indicates the error to the user with the reason (See **Use Case I3S2, Exception Condition 2a**).

4a. If the System is not capable of calculating the Dewpoint data (See **Exception Conditions 2a, 3a**), then the System indicates the issue and the reason.

5a. If the associated Date/Time of the requested Dewpoint data is not retrievable, then the System indicates the error to the User with the reason (*One Wire Network Issues, One Wire Device Issues, other forms of data retrieval exceptions*).