

Use Case 2: Request Archived Weather Data

Scope: Weather Station

Level: User Goal

Primary Actor: User

Secondary Actor: Archiving System (Database)

Scenario: Request Archived Heat Index Data

Related Use Cases: N/A

Stakeholders and Interests:

- User: Wants to retrieve archived heat index data.
- Weather Services: Wants to retrieve and compare archived heat index data for the purpose of comparing to other weather stations, and for accuracy of instrumentation and correction of Weather Station placement if needed.
- National Weather Service: Wants archived spotter weather data.
- Weather Scientists and Observers: Wants to observe archived meteorological data in a given locale.

Preconditions: The Weather Station has archived the heat index data for the given time frame requested; the archiving system is available for requested data retrieval.

Success Guaranties (Postconditions): Archived heat index data is retrieved from the archiving system, and returned to the User.

Main Success Scenario:

User	System
1. Request Archived Heat Index Data at a given time in the desired units (Metric, English, Absolute).	
	2. Queries the external archiving system for the dewpoint data at the requested time.
	3. Presents the archived data to the User in the desired Units.

Alternative Flows:

2a. If the external archiving system is not available at the requested time:

2a1. System alerts the user—with a possible reason as to why.

2b. If the external archiving system is not available:

2b1. System will try another (redundant) archiving system to see if the data is available in the redundant system—alerting the user of the issue and indicating its search in another archiving system.

2b2. System informs user if another archiving system is not available.

- 2c. If the no heat index data is available at the User requested time:
- 2c1. System alerts the User of the unavailability of the requested dewpoint data.

Special Requirements: Somehow we want the archiving systems to be ATOM(ic) to recover from a crash as best as possible.