Use Case 2: Request Archived Weather Data

Scope: Weather Station Level: User Goal Primary Actor: User

Secondary Actor: Archiving System (Database) Scenario: Request Archived Barometric Pressure Data

Related Use Cases: N/A Stakeholders and Interests:

• User: Wants to retrieve archived barometric pressure data.

- Weather Services: Wants to retrieive and compare archived barometric pressure 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 to observe archived meteorological data in a given locale.

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

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

Main Success Scenario:

User	System
1. Request Archived Barometric Pres-	
sure Data at a given time in the desired	
units (Metric, English, Absolute).	
	2. Queries the external archiving sys-
	tem for the barometric pressure 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 request time, then the system alerts the user—with a possible reason as to why.

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

2c. If the no barometric pressure data is available at the User requested time, then the System alerts the User of the unavailability of the requested barometric pressure data.

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