Use Case S6: Detailed Description

Use Case Name: Save Meteorological Data
Scenario: Save Temperature Data to a Database
Brief Description: With the System running, and the database server working, the system sends the Temperature Data to the database for archiving–including the current minimum and maximum.
Primary Actor: System
Secondary Actor: Database
Related Use Cases: **Use Case S1:** *The System Shall Monitor Temperature Data*
Use Case S6 Scenario 1: *The System Shall Save Temperature Data*
Stakeholders: Local and National Weather Buereaus and individuals desiring to archive temperature data.
Climatoligists interested in archived temperature data.

Preconditions: The System is running, the temperature is monitored, the database server is running the System is logged in/accessing the database.

Postconditions: The data is archived to the database.

Flow of Events

System	Database
1. Send Temperature Data to Database	
	2. Parse the Date into Month, Year, Day fields
	3. Place the Time data in the perspective Day field.
	4. Parse the temperature data into Metric, English and Absolute
	5. Place the Metric Temp Data in the Metric Field, the English Temp Data in the English Field, the Absolute Temp Data in the Absolute Field
6. Send the Max/Min Temperature data to the Database with the Date.	
	7. Parse the Date into Month, Year, Day fields
	8. Plase the Time data in the perspective Day field.
	9. Parse the max/min temperature into the appropriate units
	10. Place the Max/Min temperature data into the appropriate Max/Min with the appropriate units.

Exception Conditions

1a, 6a. If the Database Server is not running, then the System cannot save the data to the Database and alerts.

*a. At anytime, if the fields do not contain the current data for saving, then the Database creates the data: placing that data in the appropriate Entity for the Database.

*b. At anytime, if the data cannot be saved in the Database, then the Database alerts the System, the System alerts.

Technology and Data Variations List

*a. The Database Could be one of several different types: preferably an SQL type Database. *b. Querrying of the database via GUI interaction (if not already implemented) to be developed within 6 months.