KAHRE, SCOTT M., Castle Mountain Technology LLC, 3 Boone Rd., Garden Valley, ID 83622. Improved sugar beet storage management via remote data collection, monitoring, and reporting of long-term ventilated storage conditions.

Active management of temperature conditions within long-term sugar beet storage piles is of critical importance to the success of today's long processing campaigns. Many facilities now utilize forced ventilation systems with sophisticated control algorithms to maintain pile temperatures within pre-set limits. However, many beet storage locations are far from factories, and are thus unattended for most of the storage season following the end of harvest. With only periodic visits by company staff, pile temperature and ventilation equipment problems can go unnoticed for days or even weeks, leading to millions of dollars in sucrose losses. To address this problem, the Amalgamated Sugar Company LLC has installed a remote data collection and history system integrated with their company-wide dataPARC enterprise information platform. This solution collects data from the ventilated pile temperature probes, fans, and ambient sensors, and continuously transmits it via the internet to a central corporate server. This data is then made available to staff throughout the company in the form of graphical displays, trends, and reports. A web-interface has also been implemented for mobile data access. The use of these tools has greatly improved company staff's access to real-time information when making pile management decisions.