

TRACTOR FLEET MONITORING USING CAN VEHICLE LOGGERS

REBEL CT4 PROVIDES EFFICIENT FIELD TESTING OF TRACTORS



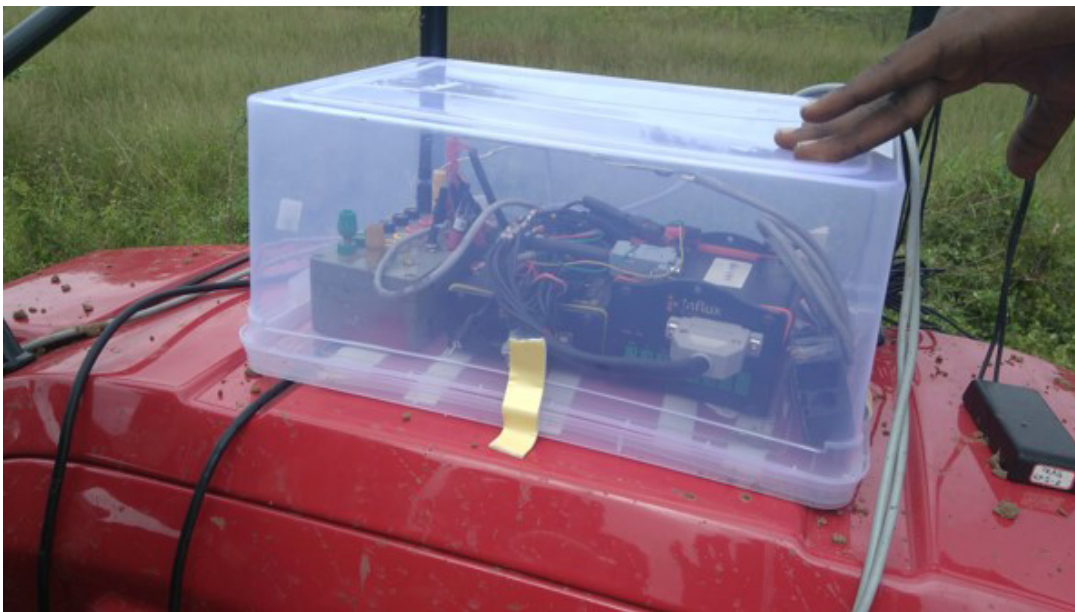
A customer needed to gather data from multiple tractors working in the field in various locations. Collecting data from each tractor had become challenging due to multiple unfavorable conditions. Data needed to be collected across multiple geographical locations. Each location had variable climatic and soil conditions. In addition, the required data collection needed skilled technicians to be in multiple locations at the same time, an impossible task. The customer also wanted to collect data from all of the tractors at the same time.

INSTALLATION

In order to provide successful and efficient field testing of the tractors at multiple locations across the country (and abroad), Influx Technology provided the customer with Rebel series data loggers. Each tractor in the fleet was fitted with a [Rebel CT4](#) to collect electronic control unit (ECU) and instrumentation data and transmit it to the cloud server. ECU data includes high-speed CAN Calibration Protocol (CCP) / Universal Measurement and Calibration Protocol (XCP) data. Along with the Rebel CT4, a [K-Box](#) device was provided to measure parameters such as flow, RPM, plough depth, etc.

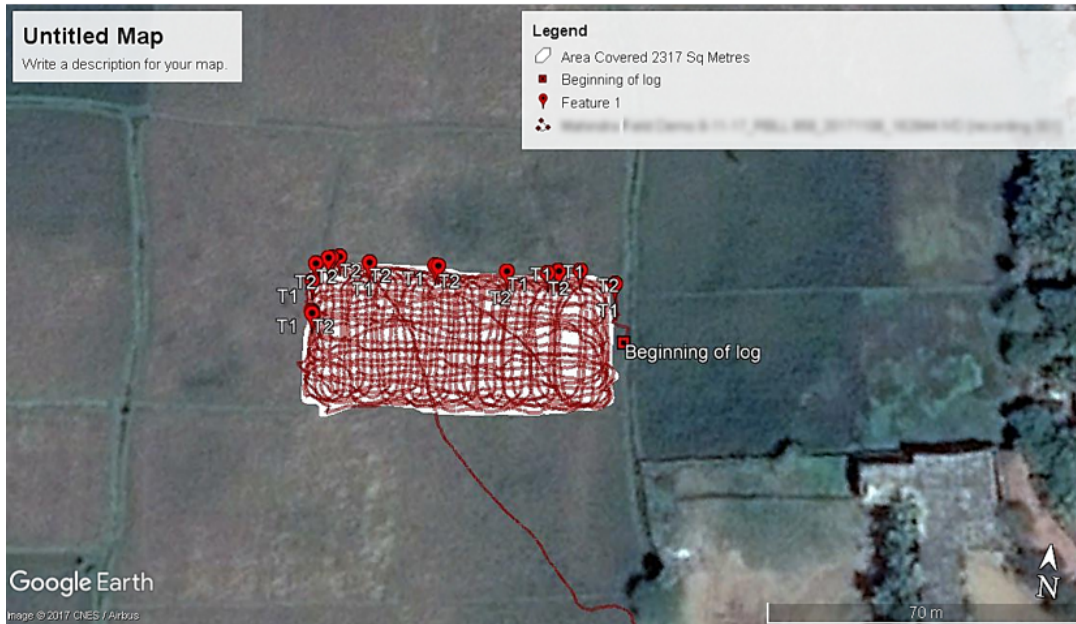
USAGE

Critical data is transmitted live to the [StreamLog](#) server over 3G/4G, using the stream data feature. The customer uses this streamed data to improve vehicle calibration. Accurate location data from the Influx rebel logger estimates the area covered during a test. GPS enabled the customer to plot the track coordinates and study the area covered in detail. The customer has set up email alerts and stream data transfer over SFTP to their cloud data processing system to ensure easy access to data at all times.



Rebel CT4 unit fitted to a tractor in the customer's fleet. From "Tractor Fleet Monitoring" by Influx Technology, 2022.

In this case, the user needs to change the configurations in the logger to match the different versions of the vehicle calibration after updating it with a different A2L file, failing which the data may be incorrect. Since the customer is using StreamLog, they can easily switch the configuration over the air.



Example map of location covered by the tractor during a test. From "Tractor Fleet Monitoring" by Influx Technology, 2022.

ABOUT THE AUTHOR

This Application Note has been adapted from an article written by Influx Technology. [Influx Technology](#) is the manufacturer of the Rebel CT Flexray, part of the Rebel series of data loggers ideal for vehicle engineering teams.

For more information on the [Influx Rebel CT4](#), or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or www.DataLoggerInc.com.