

Martin's Dusters

Real Time Weather Data Aiding in Crop Dusting Services



Case Study Summary

Location: Colusa, CA

Participating Organization: Martin's Dusters, Owner Frank Martin

Problem: Due to treacherous wind shear that emerges from the complex terrain, his airplane dusting business required reliable wind forecasts in the area near Dixon, CA.

Solution: We used our vast weather station network to accurately develop a wind forecast to improve his productivity, which increases crop yield for his customers, the growers.

Products Used: Campbell Sci. CR800 datalogger and RM Young Wind Monitor

Frank Martin, the owner of Martin's Dusters, is a helicopter/fixed wing pilot that caters to growers needs with regards to aerial applications across the Sacramento Valley. When dealing with any type of aircraft, many problems can arise and one very important problem that Frank has to deal with, is the wind.

The Sacramento Valley is home to a myriad of farming operations, ranging from rice fields and vineyards to almond, walnut and stone fruit orchards. Helicopters and fixed wing aircraft are used to apply the seed to new rice fields in the spring and make chemical applications to the crops during the growing season. Aircraft are a very effective tool in crop spraying as they cover more acreage in a more efficient fashion than individuals spraying on the ground.

When a complicated weather pattern develops, Mr. Martin contacts Western Weather Group with regards to the wind flow across the region. This is very important to Frank because it can affect the number of employees he needs, locations he can/cannot spray and/or if he can even fly. Western weather Group's solution for Frank was using our industrial grade weather stations to help create a personalized wind forecast that aids him in his efforts regarding these problems. The outcome of our forecasts along with the interaction with on-staff meteorologists have remarkably increased his productivity in the air and on the ground.