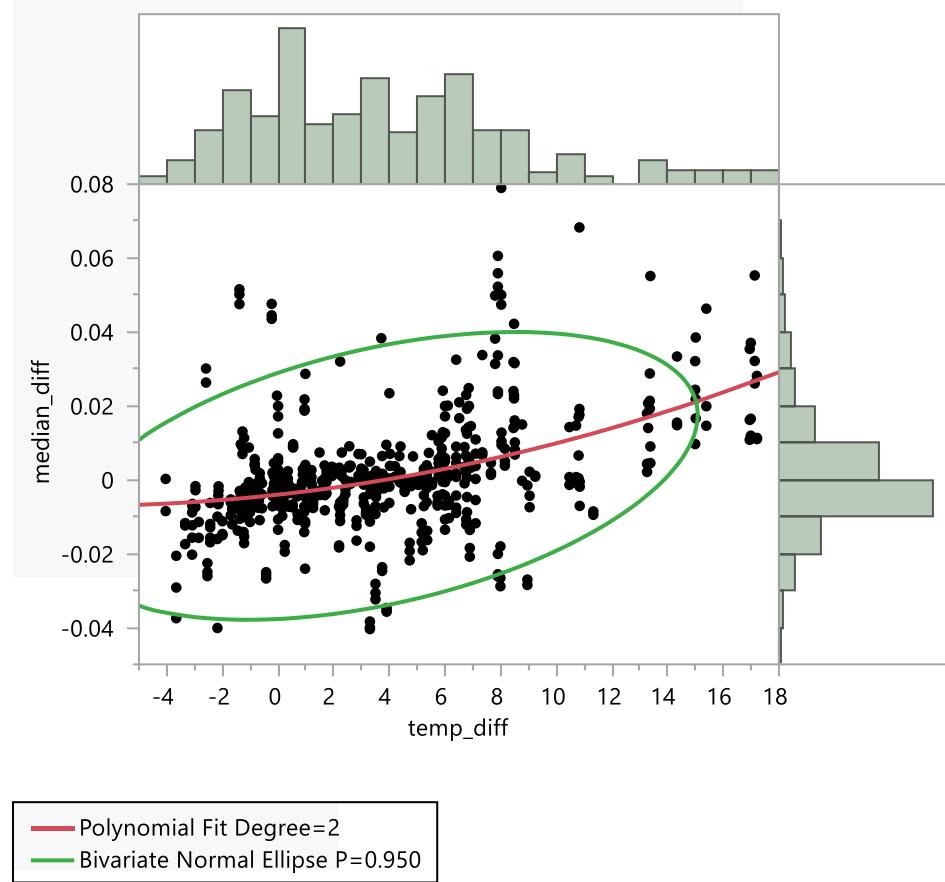


## Statistical analysis of data included in Figure 11

Analysis of individual sensor detector change in white panel reflectance by temperature change in °C measured before and after field collections for 62 events across four years that show a loose relation. Data includes all three detectors of all sensors from the "Wolverine" field collections taken 2018-2021. Results produced using JMP, build 15.2.0 SAS Institute Inc. Cary North Carolina 27513.

### Bivariate Fit of signal change (median\_diff) by temperature change (temp\_diff)



### Summary Statistics

	<b>Value</b>	<b>Lower 95%</b>	<b>Upper 95%</b>	<b>Signif. Prob</b>
Correlation	0.42445	0.354497	0.489678	<.0001*
Covariance	0.03135			
Count	567			

<b>Variable</b>	<b>Mean</b>	<b>Std Dev</b>
temp_diff	3.723794	4.640122
median_diff	0.001031	0.015918

## **Polynomial Fit Degree=2**

median\_diff = -0.004824 + 0.0012478\*temp\_diff + 5.6213e-5\*(temp\_diff-3.72379)^2

### **Summary of Fit**

RSquare	0.190149
RSquare Adj	0.187278
Root Mean Square Error	0.01435
Mean of Response	0.001031
Observations (or Sum Wgts)	567

### **Lack Of Fit**

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	161	0.07756890	0.000482	5.0339
Pure Error	403	0.03857121	0.000096	<b>Prob &gt; F</b>
Total Error	564	0.11614011		<.0001*
			<b>Max RSq</b>	
				0.7310

### **Analysis of Variance**

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	2	0.02726918	0.013635	66.2123
Error	564	0.11614011	0.000206	<b>Prob &gt; F</b>
C. Total	566	0.14340929		<.0001*

### **Parameter Estimates**

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	-0.004824	0.00079	-6.10	<.0001*
temp_diff	0.0012478	0.000152	8.20	<.0001*
(temp_diff-3.72379)^2	5.6213e-5	2.131e-5	2.64	0.0086*