1 0 Noise Features

	Actual Low	Actual High
Pred. Low	122.87 (122.79 , 122.92)	13.03 (12.98 , 13.11)
Pred High	11.13 (11.08 , 11.21)	3.97 (3.89 , 4.02)

Table 1: CV Confusion Matrix for alpha = 0.1. The parentheses are .25 and .75 quantiles.

	Actual Low	Actual High
Pred. Low	100.83 (100.72 , 100.72)	4.87 (4.98 , 4.98)
Pred High	33.17 (33.28, 33.28)	$12.13 \ (\ 12.02 \ ,\ 12.02 \)$

Table 2: CV Confusion Matrix for alpha = 0.3. The parentheses are .25 and .75 quantiles.

	Actual Low	Actual High
Pred. Low	72.54 (72.54 , 72.54)	2.96 (2.96 , 2.96)
Pred High	$61.46 \; (\; 61.46 \; , \; 61.46 \;)$	14.04 (14.04 , 14.04)

Table 3: CV Confusion Matrix for alpha = 0.5. The parentheses are .25 and .75 quantiles.

Feature	Number Times
uvot_detection	91

Table 4: Splits for alpha = 0.1 model. The Number Times column is the number of trees the given feature appeared in out of a total of 100 created for cross validation.

Feature	Number Times
$uvot_detection$	98

Table 5: Splits for alpha = 0.3 model. The Number Times column is the number of trees the given feature appeared in out of a total of 100 created for cross validation.

Feature	Number Times
uvot_detection	100

Table 6: Splits for alpha = 0.5 model. The Number Times column is the number of trees the given feature appeared in out of a total of 100 created for cross validation.

Feature	No. Times First Split
$uvot_detection$	91

Table 7: Splits for alpha = 0.1 model. The Number Times column is the number of trees the given feature was the first split in a total of 100 created for cross validation.

Feature	No. Times First Split
$uvot_detection$	98

Table 8: Splits for alpha = 0.3 model. The Number Times column is the number of trees the given feature was the first split in a total of 100 created for cross validation.

Feature	No. Times First Split
uvot_detection	100

Table 9: Splits for alpha = 0.5 model. The Number Times column is the number of trees the given feature was the first split in a total of 100 created for cross validation.

2 10 Noise Features

	Actual Low	Actual High
Pred. Low	122.46 (122.09 , 122.81)	13.44 (13.09 , 13.81)
Pred High	11.54 (11.19, 11.91)	3.56 (3.19 , 3.91)

Table 10: CV Confusion Matrix for alpha = 0.1. The parentheses are .25 and .75 quantiles.

	Actual Low	Actual High
Pred. Low	99.49 (98.96 , 100.45)	6.21 (5.25 , 6.74)
Pred High	34.51 (33.55, 35.04)	10.79 (10.26, 11.75)

Table 11: CV Confusion Matrix for alpha = 0.3 . The parentheses are .25 and .75 quantiles.

	Actual Low	Actual High
Pred. Low	71.54 (71.34 , 72.54)	3.96 (2.96 , 4.16)
Pred High	62.46 (61.46, 62.66)	13.04 (12.84, 14.04)

Table 12: CV Confusion Matrix for alpha = 0.5. The parentheses are .25 and .75 quantiles.

Feature	Number Times
uvot_detection	92
f8	9
f4	8
f6	3
f2	2
f9	2
f10	2
f7	1

Table 13: Splits for alpha = 0.1 model. The Number Times column is the number of trees the given feature appeared in out of a total of 100 created for cross validation.

Feature	Number Times
uvot_detection	97
f4	8
f8	5
f9	2
f10	2
f3	1
f5	1
f7	1

Table 14: Splits for alpha = 0.3 model. The Number Times column is the number of trees the given feature appeared in out of a total of 100 created for cross validation.

Feature	Number Times
uvot_detection	99
f4	9
f8	4
f10	4
f9	3
f5	2
f7	2
f2	1
f3	1

Table 15: Splits for alpha = 0.5 model. The Number Times column is the number of trees the given feature appeared in out of a total of 100 created for cross validation.

Feature	No. Times First Split
uvot_detection	92

Table 16: Splits for alpha = 0.1 model. The Number Times column is the number of trees the given feature was the first split in a total of 100 created for cross validation.

Feature	No. Times First Split
uvot_detection	97
f8	1

Table 17: Splits for alpha = 0.3 model. The Number Times column is the number of trees the given feature was the first split in a total of 100 created for cross validation.

Feature	No. Times First Split
$uvot_detection$	99

Table 18: Splits for alpha = 0.5 model. The Number Times column is the number of trees the given feature was the first split in a total of 100 created for cross validation.