

Analysis of automated curation tool

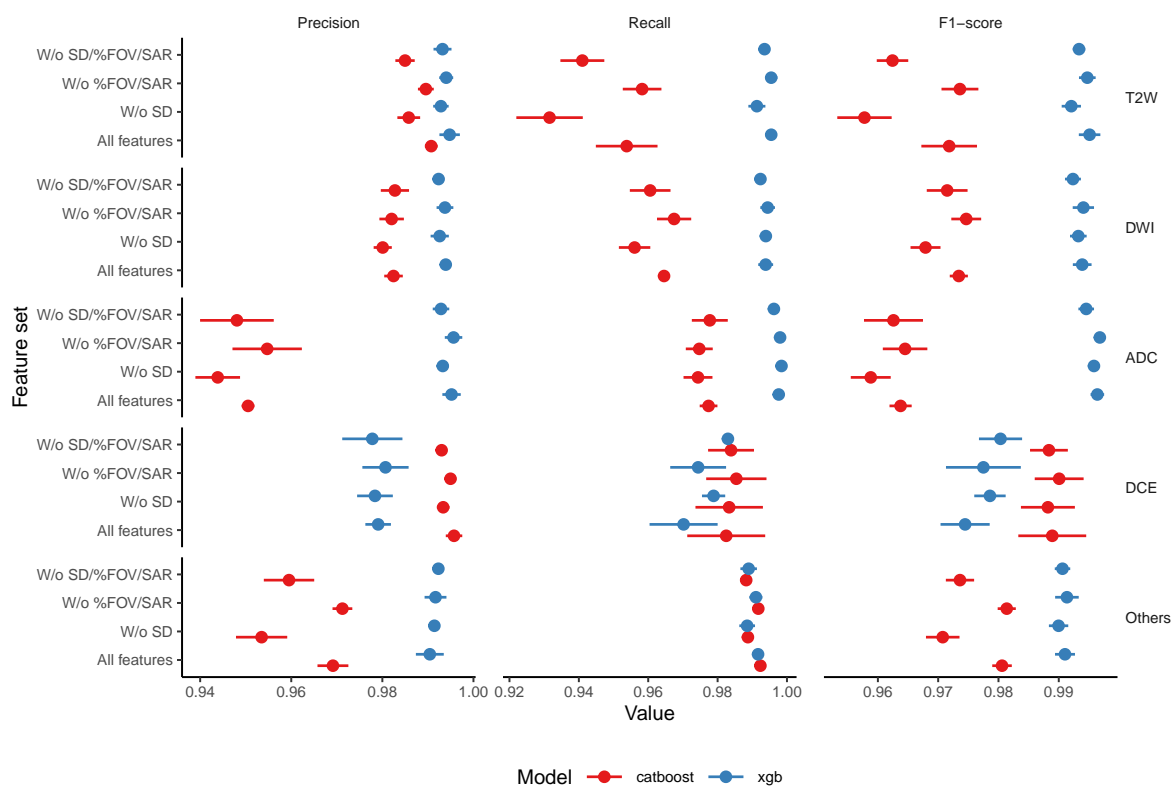
José Guilherme de Almeida

Nickolas Papanikolaou

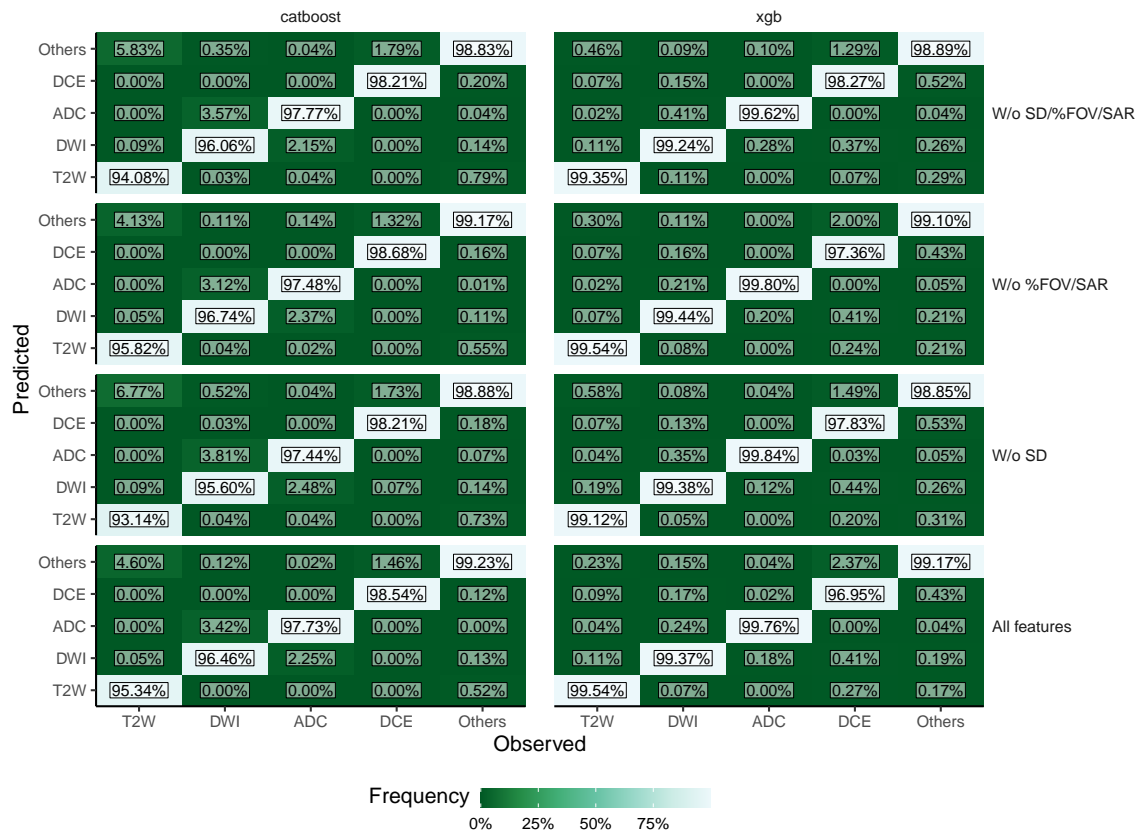
Data preparation

CV results

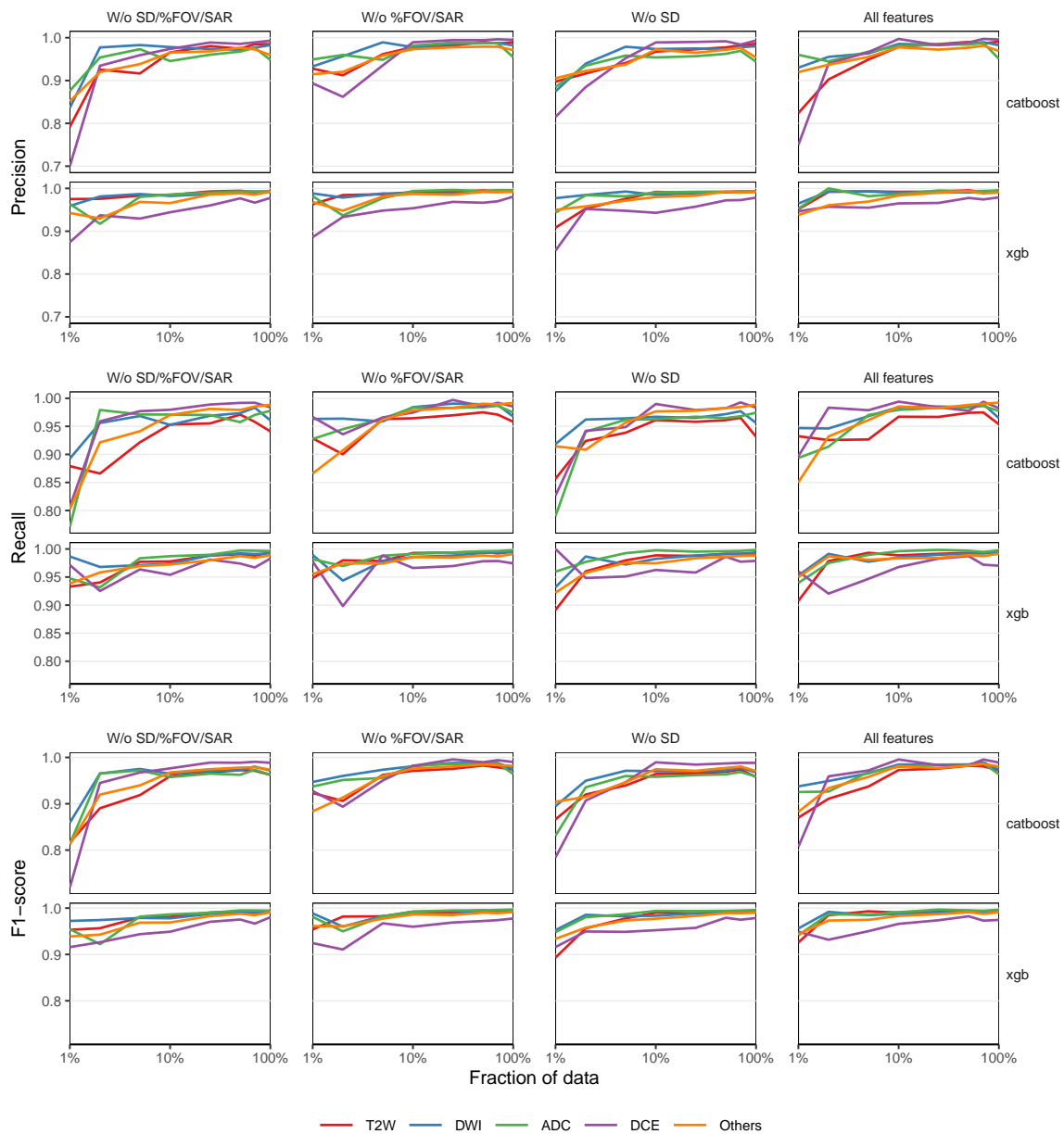
Frequency based metrics



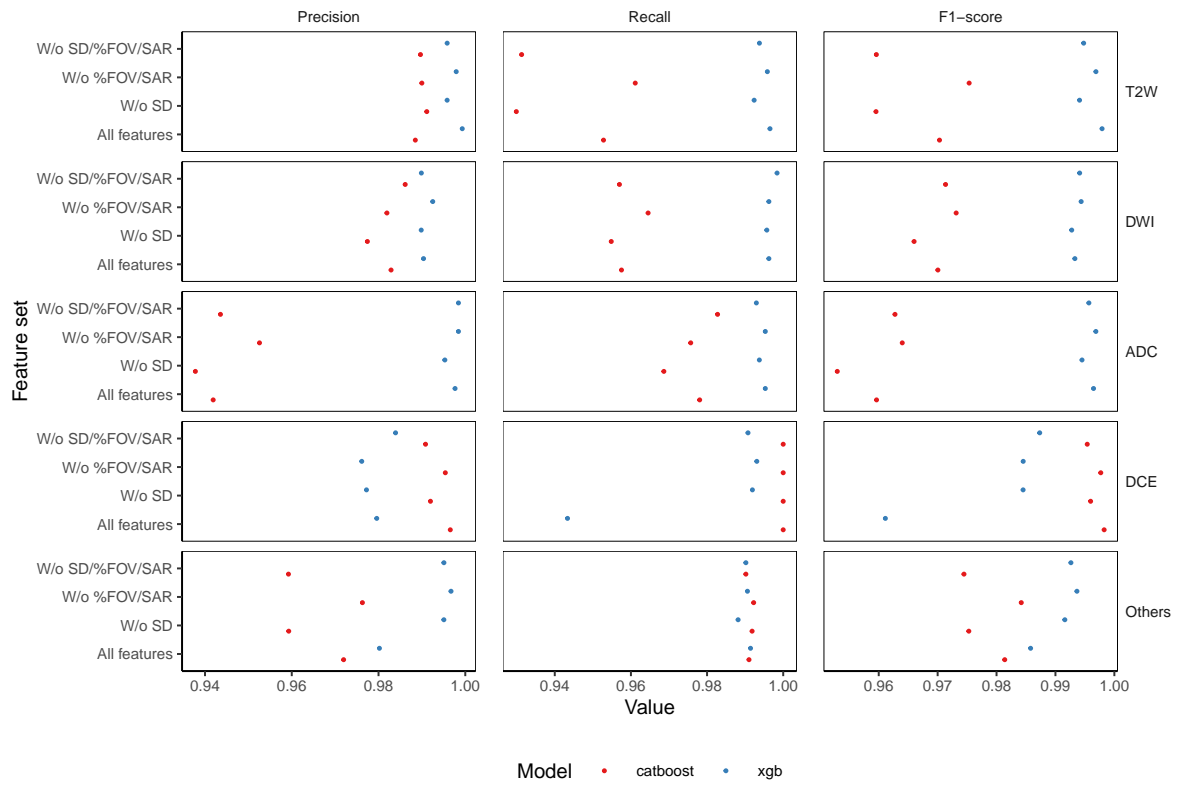
Confusion matrix



Learning curves



Test results





Linear analysis

[1] "precision"

modelcatboost, 0.96200,0.00639,151.0000,5.60e-46

modelxgb, 0.97800,0.00639,153.0000,3.36e-46

relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar, 0.00290,0.00602, 0.4

relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar:series_description, 0.

relevel(factor(exclusion), "standard")series_description,-0.00180,0.00602, -0.2990,7.67e-01

setdce, 0.01580,0.00674, 2.3400,2.60e-02

setdwi, 0.01570,0.00674, 2.3300,2.66e-02

setothers, 0.00853,0.00674, 1.2700,2.15e-01

sett2, 0.02280,0.00674, 3.3900,1.93e-03[1] ""

[1] "recall"

modelcatboost, 0.974000,0.00811,120.0000,6.14e-43

modelxgb, 0.992000,0.00811,122.0000,3.58e-43

relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar, 0.006240,0.00765, 0.

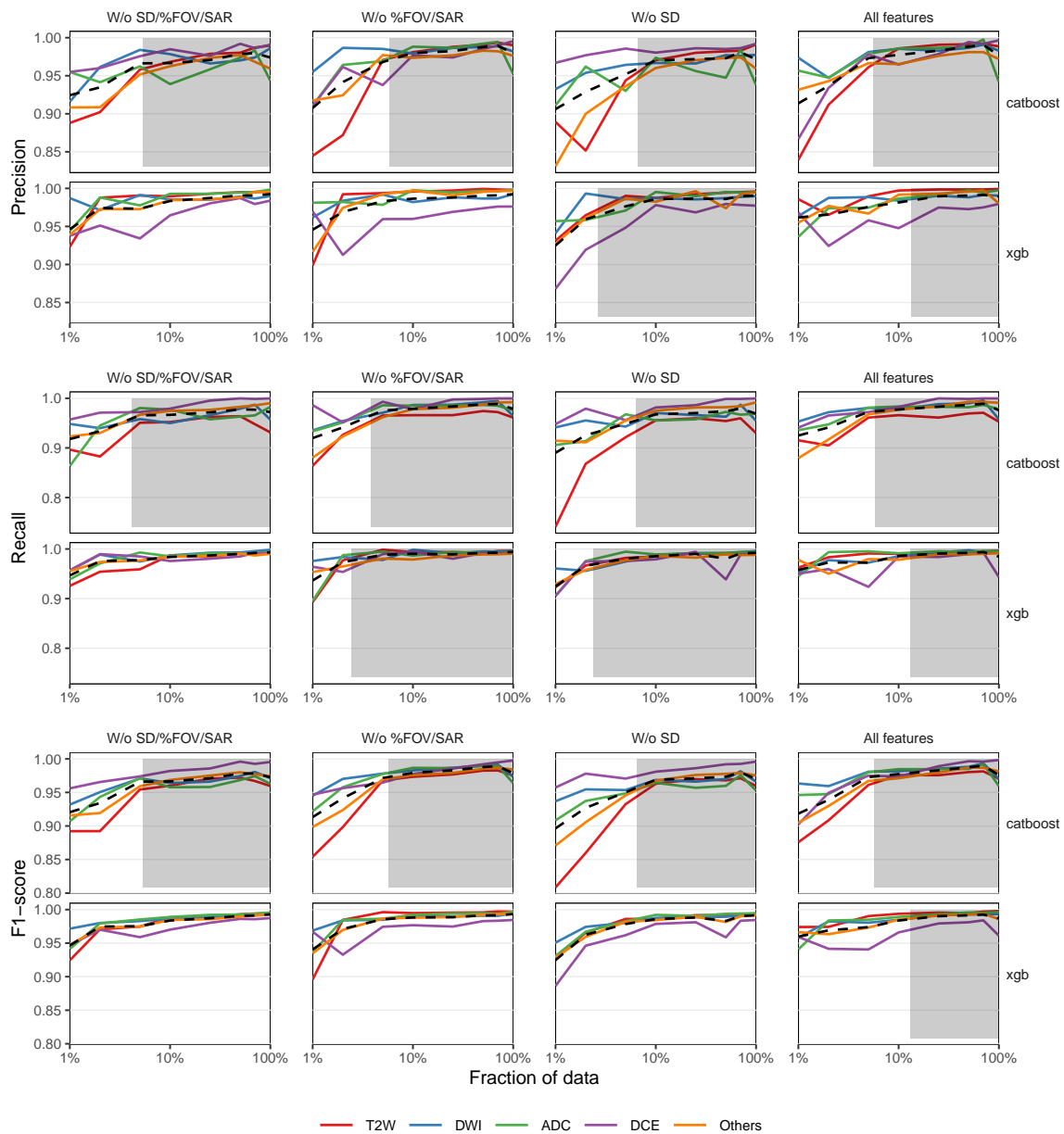
relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar:series_description, 0.0

```

relevel(factor(exclusion), "standard")series_description, 0.000484,0.00765, 0.0633,9.50e-01
setdce, 0.004580,0.00855, 0.5350,5.96e-01
setdwi,-0.007750,0.00855, -0.9060,3.72e-01
setothers, 0.005400,0.00855, 0.6320,5.32e-01
sett2,-0.016100,0.00855, -1.8800,6.92e-02[1] ""
[1] "f1-score"
modelcatboost, 0.96800,0.00555,174.000,6.02e-48
modelxgb, 0.98500,0.00555,177.000,3.54e-48
relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar, 0.00464,0.00524, 0.8
relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar:series_description, 0.
relevel(factor(exclusion), "standard")series_description,-0.00070,0.00524, -0.134,8.95e-01
setdce, 0.01020,0.00585, 1.750,9.00e-02
setdwi, 0.00403,0.00585, 0.688,4.97e-01
setothers, 0.00702,0.00585, 1.200,2.40e-01
sett2, 0.00320,0.00585, 0.547,5.88e-01[1] ""

```

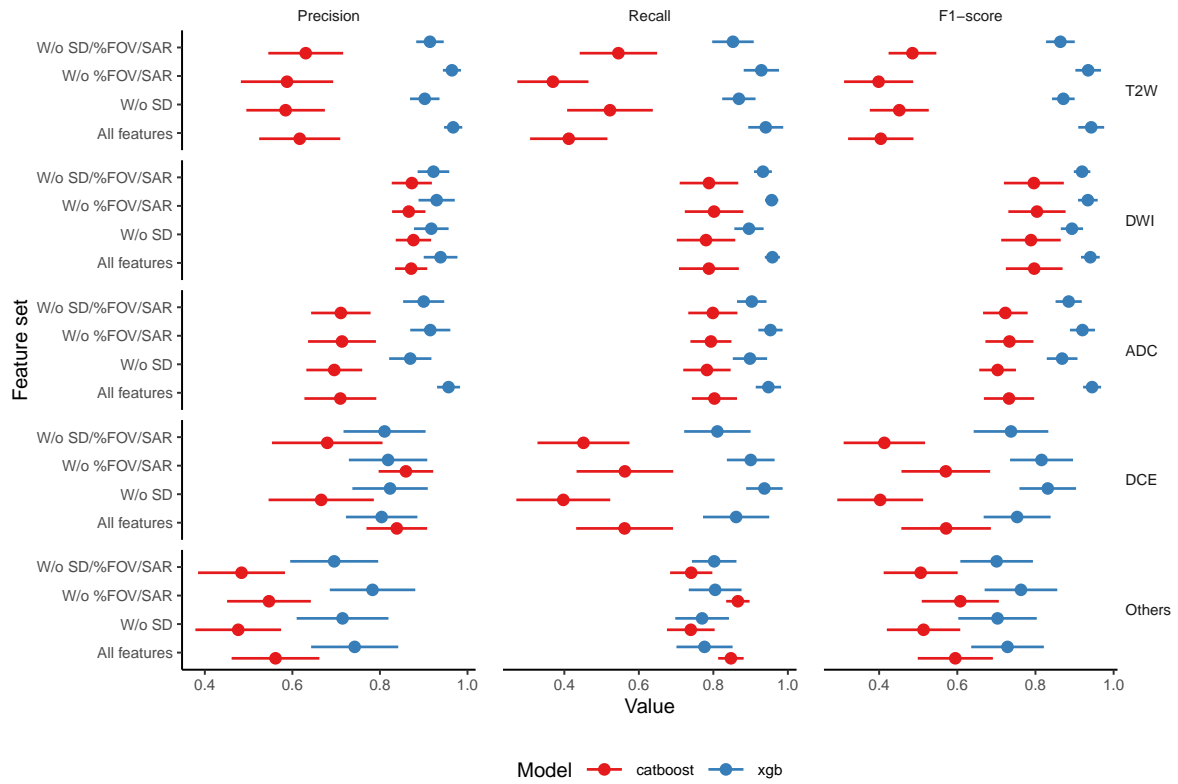
Learning curves

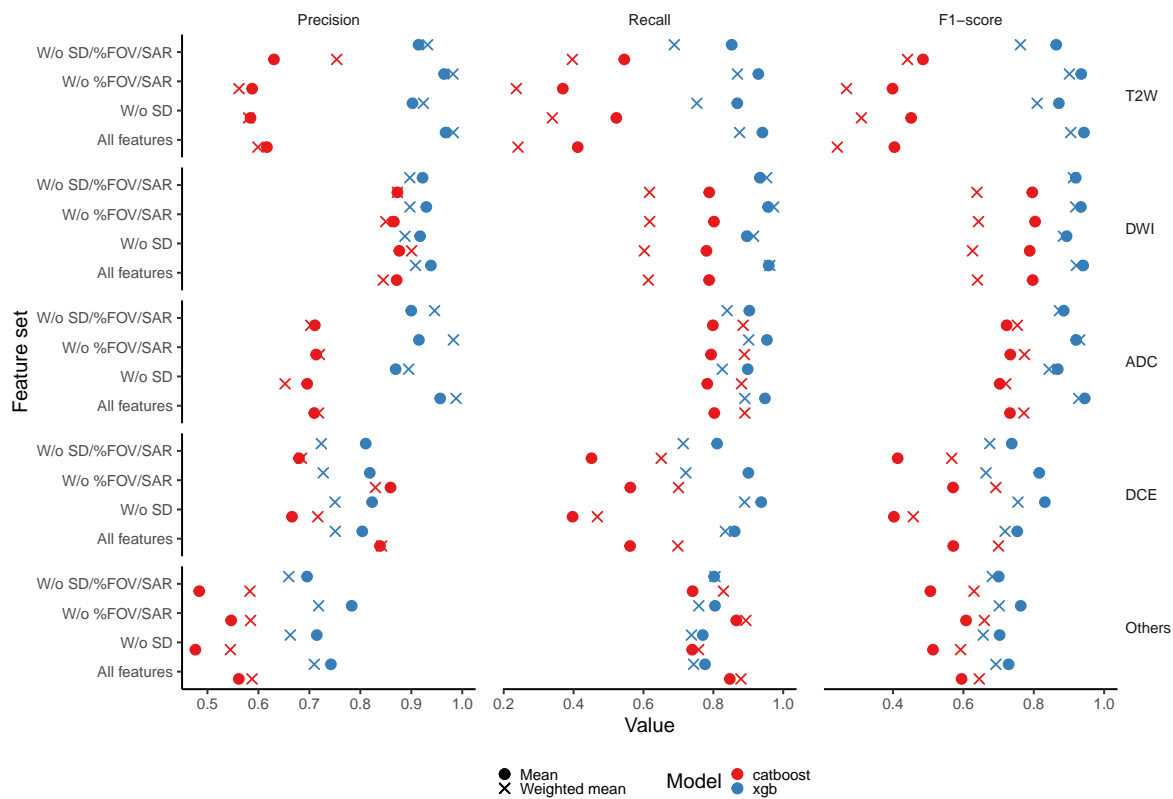


Leave one group out

CV results

Frequency based metrics





```

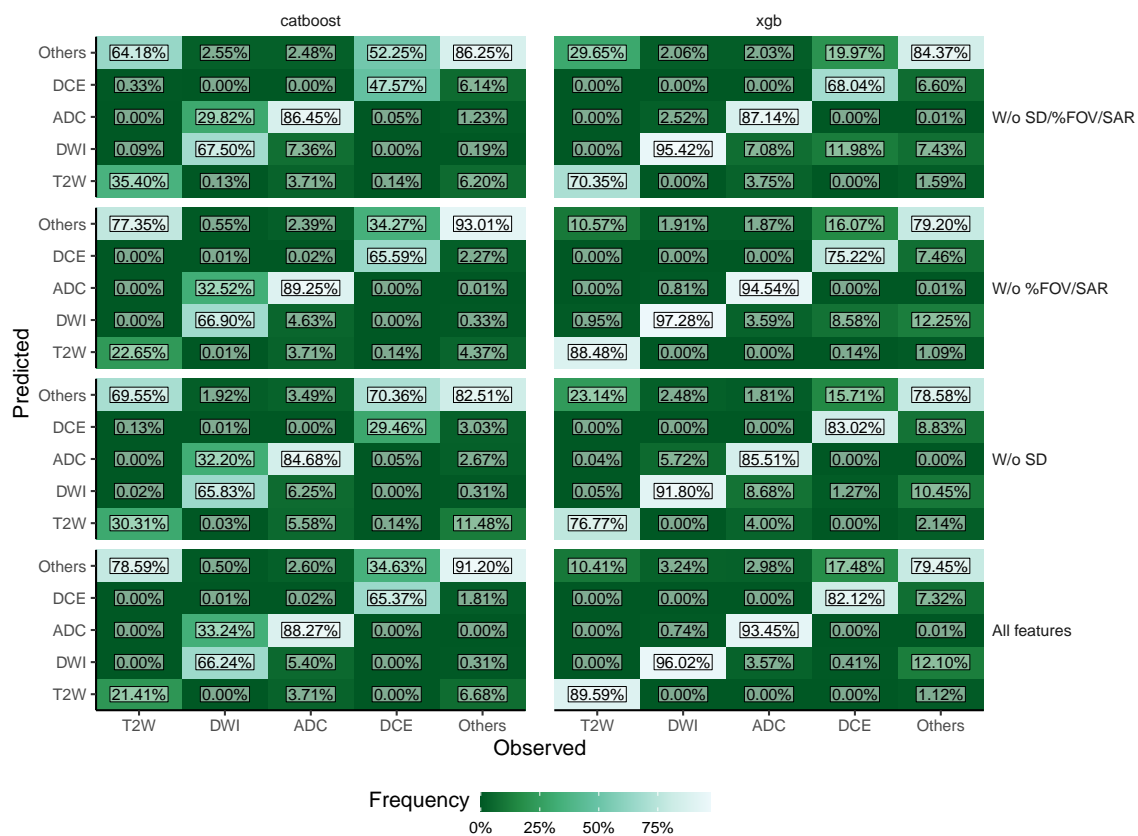
|
| :-----
|modelcatboost
|modelxgb
|relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar
|relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar:series_description
|relevel(factor(exclusion), "standard")series_description
|setdce
|setdwi
|setothers
|sett2
|
| :-----
|modelcatboost
|modelxgb

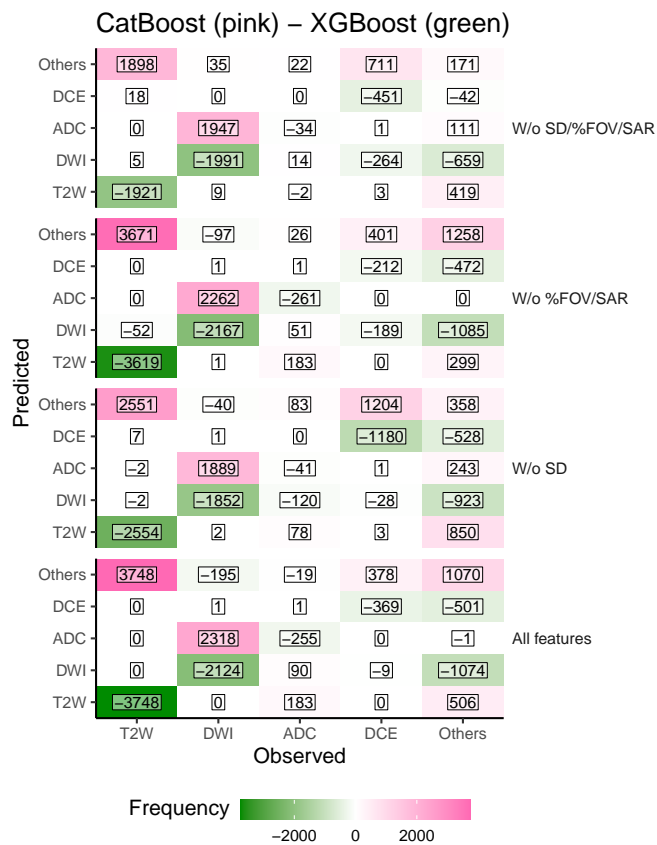
```

```
|relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar
|relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar:series_description
|relevel(factor(exclusion), "standard")series_description
|setdce
|setdwi
|setothers
|sett2
```

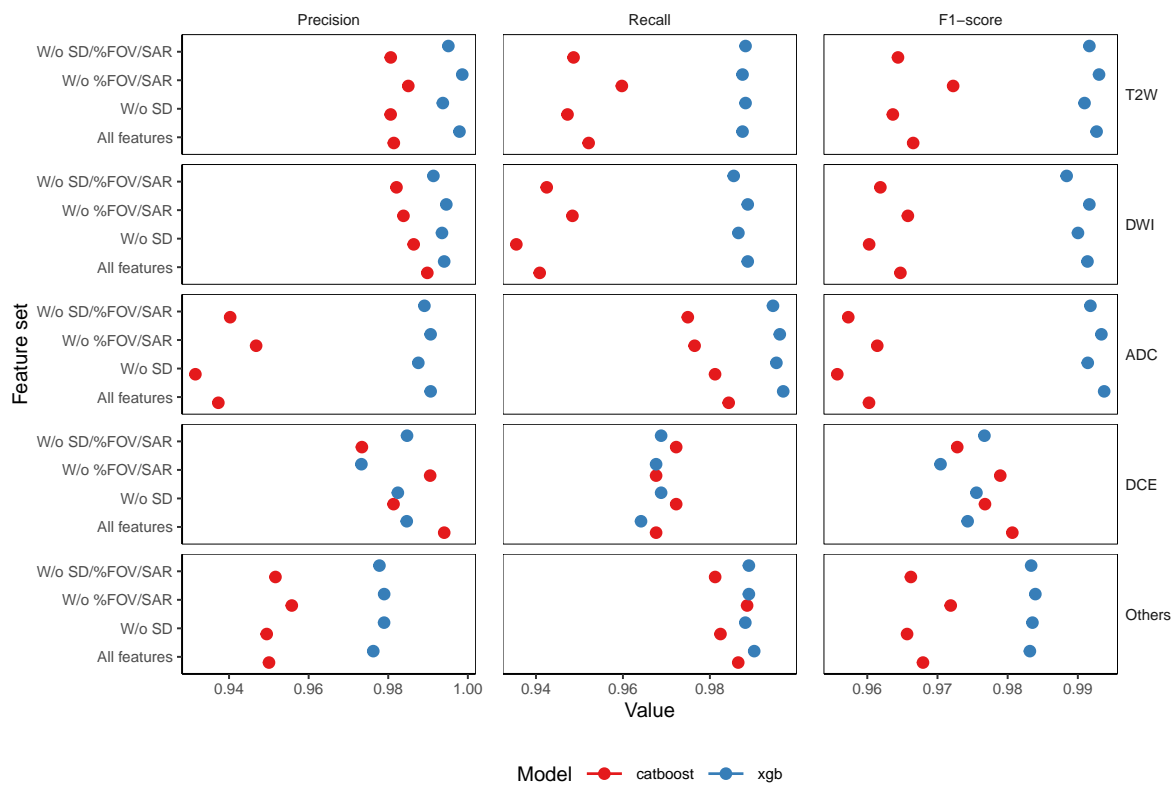
```
|
|:-----
|modelcatboost
|modelxgb
|relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar
|relevel(factor(exclusion), "standard")percent_phase_field_of_view:sar:series_description
|relevel(factor(exclusion), "standard")series_description
|setdce
|setdwi
|setothers
|sett2
```

Confusion matrix





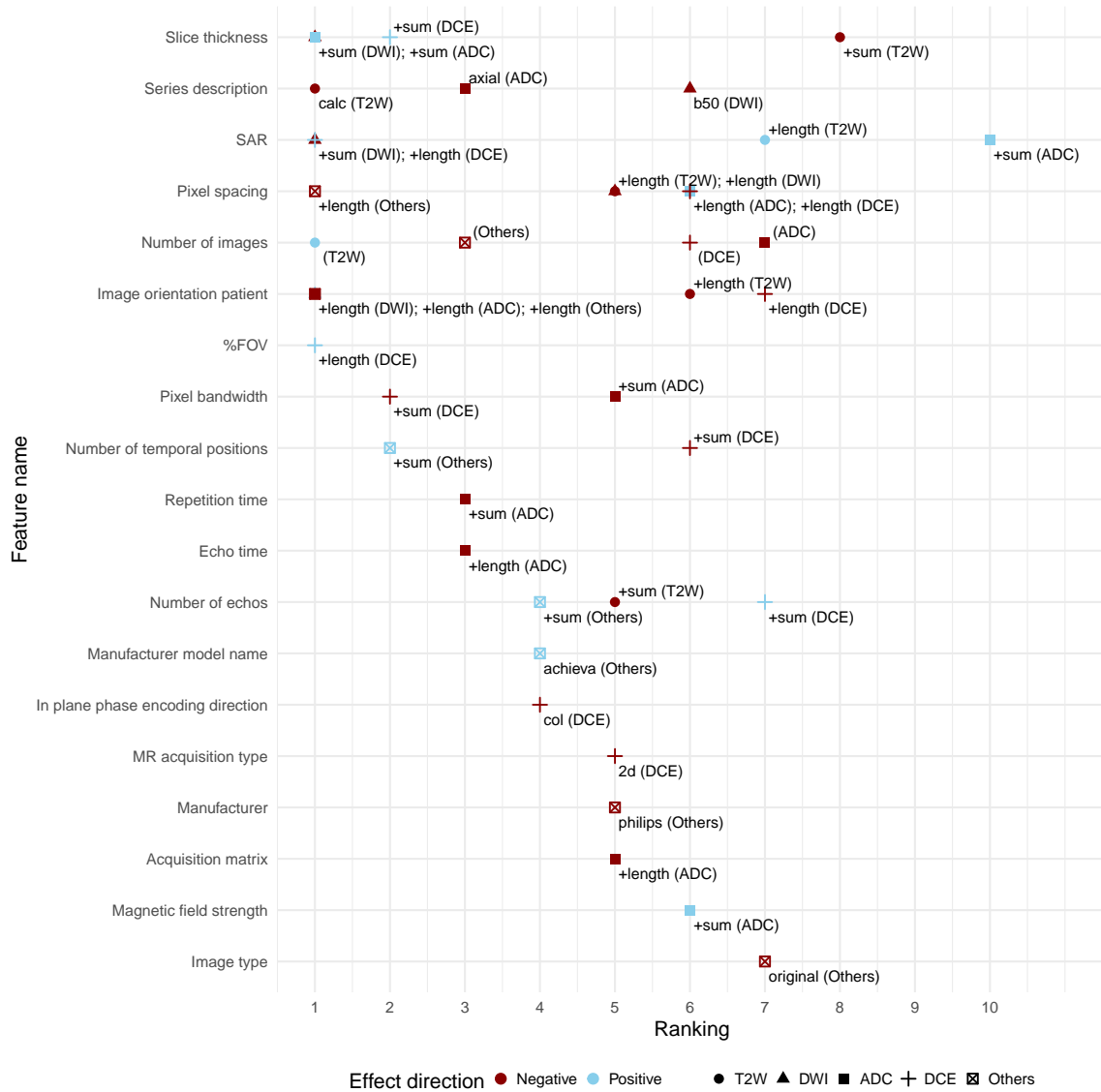
Test results





Feature importance

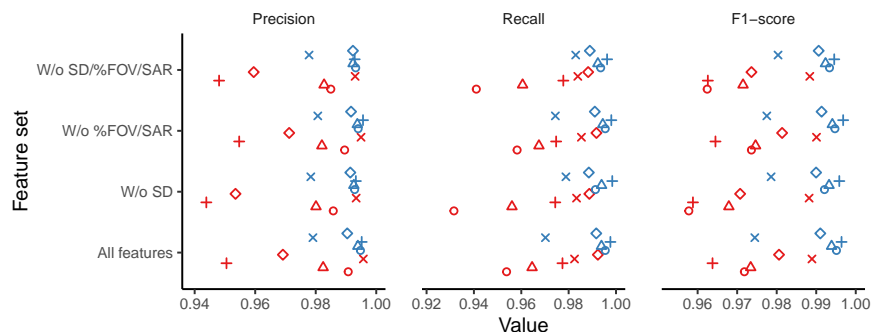
This was not included in the publication as there were no significant trends detected.



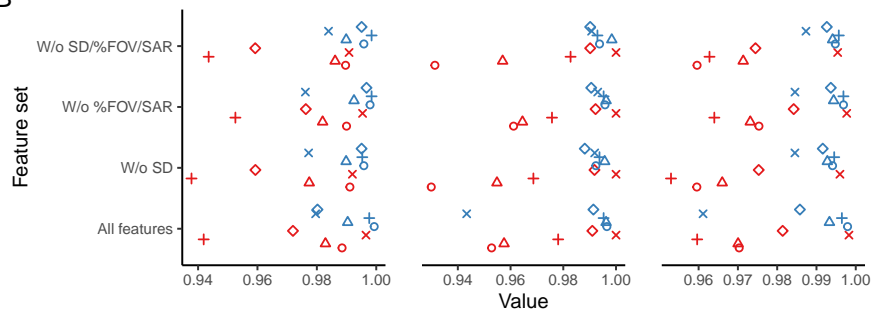


Panels

A

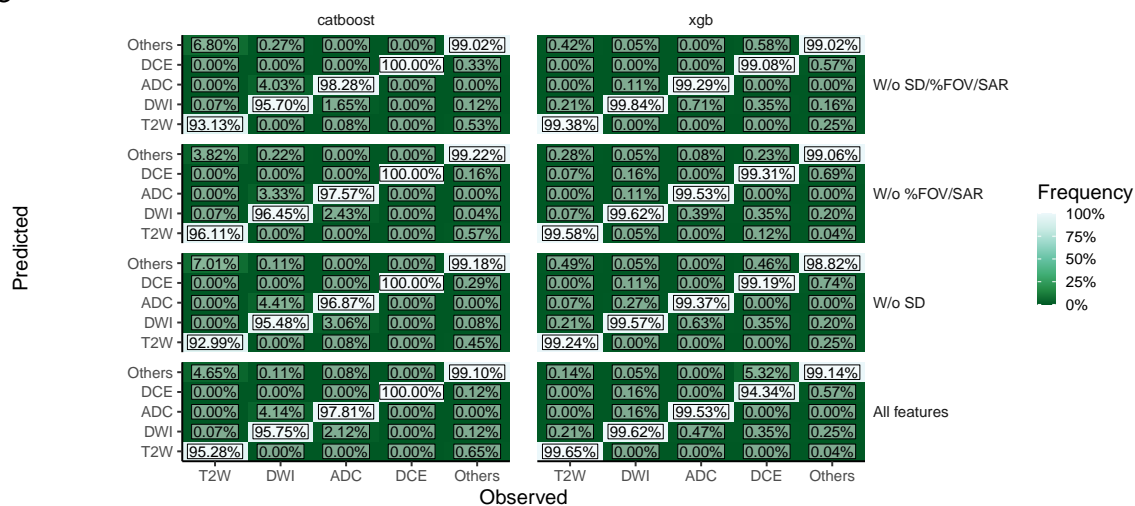


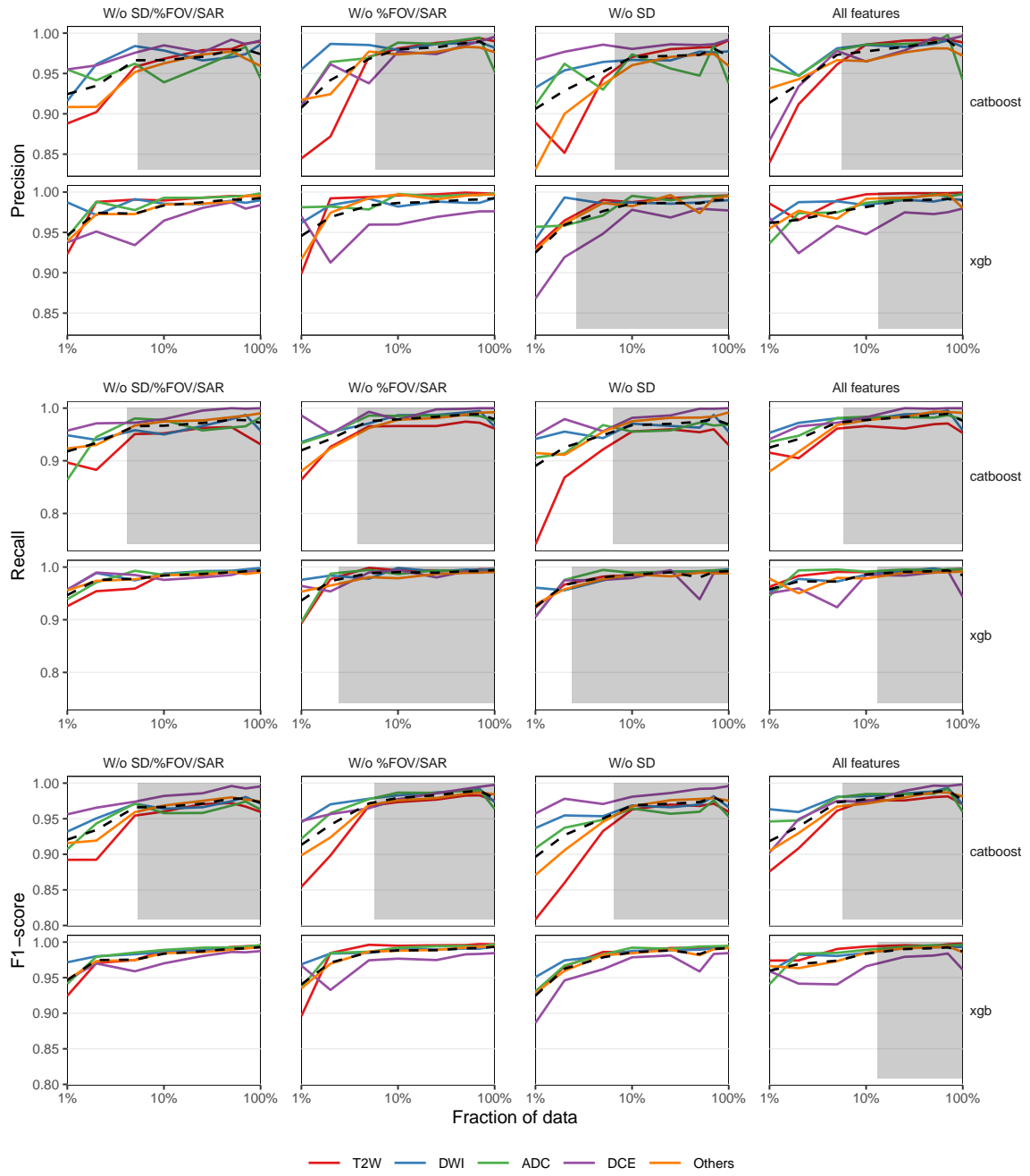
B

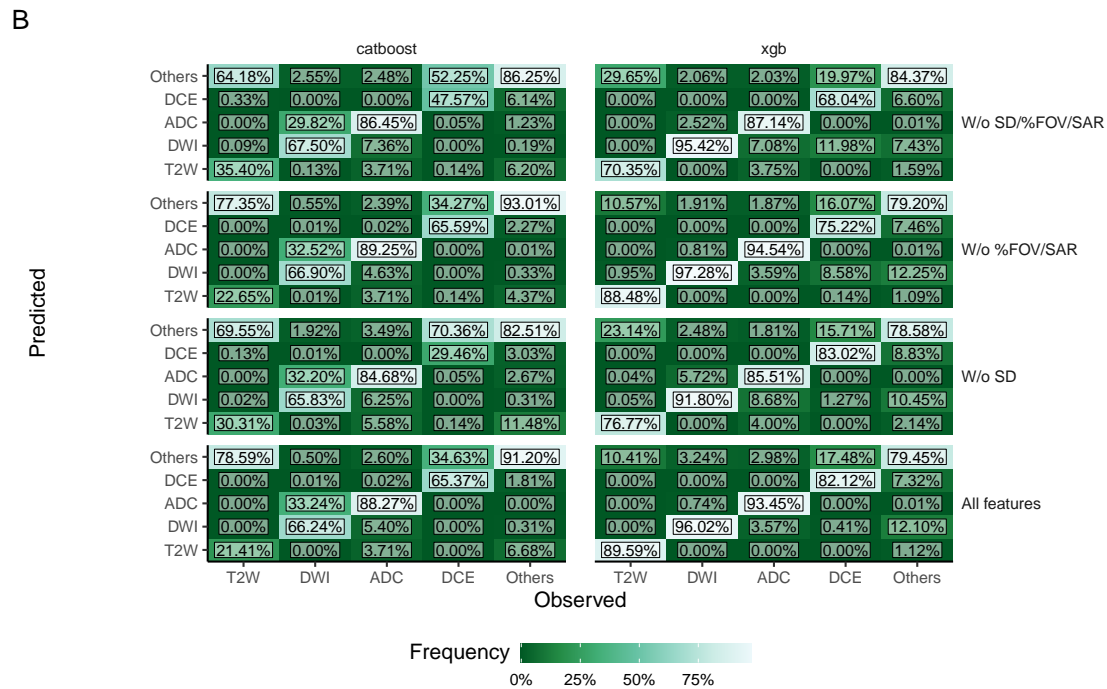
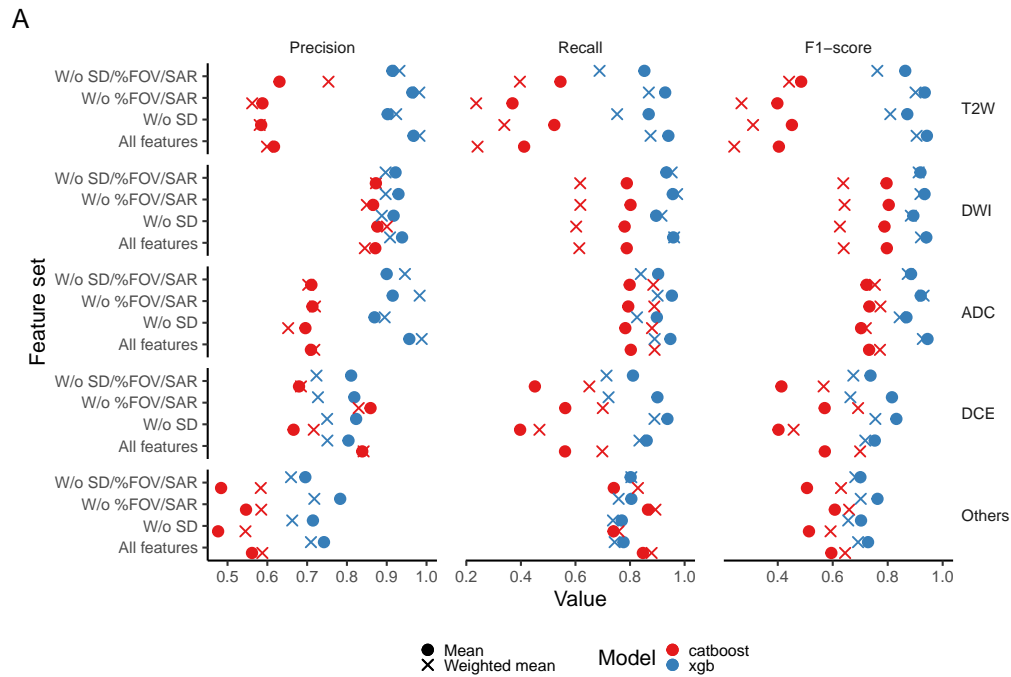


Seq. type ○ T2W + ADC ◇ Others
△ DWI × DCE
Model ● catboost ● xgb

C







#figure(

```

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