

Model Report: TabTransformer Ensemble (Field-Level)

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Script: /home/mmann1123/Documents/github/South_Africa_Crop_Comp/deep_learn/src/Deep Learning/Pixel_Field_Level

Data Split:

```
train_count: 4802658
val_count: 1205790
test_count: 1531914
random_seed: 42
split_method: fid-wise
```

Metrics (test set):

```
Accuracy: 0.8024
Cohen Kappa: 0.7197
F1 Weighted: 0.7985
F1 Macro: 0.7305
```

Hyperparameters:

```
n_d: 64
n_a: 64
n_steps: 5
gamma: 1.5
n_independent: 2
n_shared: 2
lr: 0.001
scheduler: StepLR(step=10, gamma=0.9)
max_epochs: 100
patience: 10
batch_size: 1024
n_models: 5
seeds: [42, 101, 202, 303, 404]
```

Per-Class Metrics

Class	Precision	Recall	F1-Score	Support
1	0.568	0.658	0.610	120
2	0.721	0.700	0.710	140
3	0.919	0.850	0.883	107
4	0.903	0.953	0.927	380
5	0.655	0.434	0.522	83

Confusion Matrix

