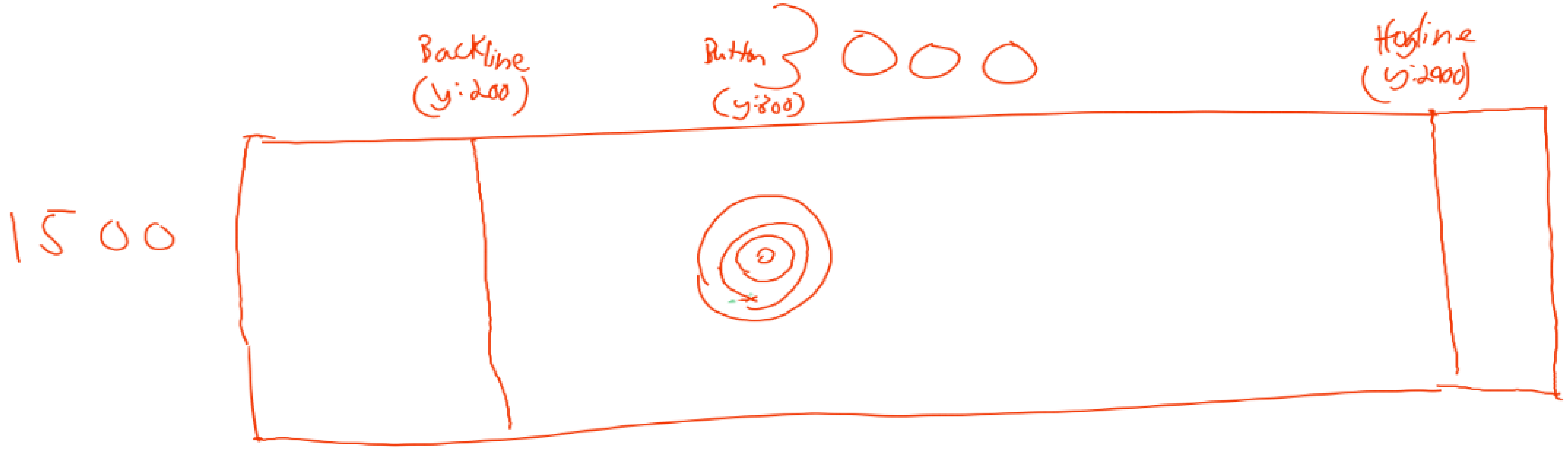

$3.048848\ 15_{mm} =$

$\frac{8230}{2700} = \frac{mm}{\text{units of } y}$

$\frac{27 \times\times}{2700}$ y and x in $\frac{1}{100} \times\times$

0.04
0.08
0.12
0.26
0.74
0.88
0.92
0.96

y = 45,726 mm
x = 4,750 mm

1st {
b2h = 1829 mm
b2b = 3658 mm
b2t = 5487 mm
b2hg = 11,888 mm
}

2nd {b2hg = 33,833 mm

house (radius)

0.003 C1 = 152 mm
0.0133 C2 = 610 mm
0.0266 C3 = 1,219 mm
0.64 C4 = 1,829 mm

1st b2C = 12,345 mm
2nd b2C = 33,376 mm

house (areas) in y

C1 = $0.00002827\ y^2$ (white)
C2 = $0.00005557\ y^2$ (blue)
C3 = $0.00222\ y^2$ (white)
C4 = $0.00503\ y^2$ (red)

models

- LSTM (need more interpretable)
- LGBM

features

- task (shot type - dummy code?)
- handle (rotation - binary cw=0)
- points (how good of shot - 0-4)*
- timeout (before shot - nan/1)
- stone placement IDs (1-12)
- LSFE (last stone first end, advantage)
- Winner (team 1 w=1, team 2 w=0)*
- result (points scored in end)*
- powerplay (1=used right side, 2=used left side, nan=not used)

*=potential outcome

game state features to add

- diff_one (team 1 score - team 2 score)
- PP_used (1=powerplay used, 0=not used)
- hypothetical_score (updates per throw: distance calc)
- current_score (updates at final of end)

next steps

- PCA/EDA