



Jamstats User Manual

Everything you need to know to run Jamstats and get the most out of all the tables and plots

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What is Jamstats for?

Jamstats extracts data from the CRG Roller Derby Scoreboard, or from a JSON file output by the scoreboard, and makes it useful.

The main use cases are:

- Announcers tracking current skaters, jammers, pivots and penalties
- Coaches getting insights into how their teams played



Starting Jamstats

Graphical Argument Interface

- Double-clicking on the jamstats .exe file will bring up this interface
- Jamstats takes a ton of parameters
 - You can ignore most of them!
 - The critical ones are at the top
- To connect to a scoreboard server, enter its info as the “scoreboard server” parameter
 - E.g.: “172.28.12.7:8000”
- Jamstats will start on the IP address and port specified by “jamstatsip” and “jamstatsport”.
 - Jamstats will tell you where to point your browser in text output after you hit “Start”
 - By default, “localhost:8080”
- The rest of the parameters all tell you what they do

jamstats

Plot stats from a CRG scoreboard json file or server (v4 or higher)

Optional Arguments

jsonfile

Scoreboard JSON file to read. If this argument is specified, will read from a file. Either this or scoreboardserver must be specified.

Browse

outfile

File to write. If this argument is specified, will write a PDF or TSV file. If ends with ".pdf", write plots to a PDF. If ".tsv" or ".txt" write data to tab-separated values file.

Browse

jamstatsip

IP address to serve to, e.g., "192.168.4.21"

anonymizeteams

☐ Replace team names with 'Team 1' and 'Team 2'?

theme

Plot theme. This is how you make the plots dark.

▼

teamcolor1

Set the color for team 1. Can be of the form 'green' or of the form '#00FF00'

minrefreshseconds

Minimum number of seconds between scoreboard data refreshes.

scoreboardserver

server:port to connect to, e.g., localhost:8000. If this argument is specified, will connect to a server. Either this or jsonfile must be specified

jamstatsport

Port to serve to, if running webserver

anonymize

☐ Replace actual skater names with random pregenerated ones?

debug

☐ enable debug logging

mode

Mode of operation. 'pdf' writes to a pdf file. 'web' runs a web server. 'auto' infers the behavior by whether you specify a scoreboard server or a json file.

▼

teamcolor2

Set the color for team 2. Can be of the form 'green' or of the form '#00FF00'

Cancel

Start



Overview of the web interface

What are all these tables and plots?

They're divided into three sections to make it easier to find what you want

Tables	
Current Skaters	Data on skaters in the current jam
Teams Summary	Basic game info like score, # jams with lead, # star passes...
Recent Penalties	The last 10 penalties called, in reverse order
Team Rosters	Numbers and names of each skater from both teams
Officials Roster	Names and positions of each ref and NSO
Basic Plots	
Score by Jam	Score over time throughout the game
Team Penalty Counts	Total counts of each type of penalty, for each team
Team 1 Jammers	Stats for Team 1's and Team 2's jammers: # jams jammed, total points, mean net points/jam...
Team 2 Jammers	
Team 1 Skaters	Penalty counts and number of jams skated for each team member
Team 2 Skaters	
Advanced Plots	
Lead Summary	Plots describing how often each team has gotten lead, called off, etc., and time to initial pass
Jam Details (Period 1)	All details for every jam, for each team: lead, lead loss, calloff, star passes, etc.
Jam Details (Period 2)	
Jammer Summary	How many jammers each team played, how many jams they jammed, points vs. # jams



Tables

Current Skaters

Data about every skater in the current jam and in the previous jam

Screen will update to a new jam *after* the jam starts

- Jammers will show as (NI) until they complete their initial pass
- They'll show as (LO) if they get a penalty, even if they weren't lead
- Star Pass will show as (SP) on the Pivot

Period 2, Jam 13

Team 1

Position	Number	Name	Penalty
J	667	Sneak Attrack	
P	18	Boba Teen	
B	2	Rejected	
B	208	Scar Wylde	Cut (Not Yet)
B	83	Wheela Monster	

Team 2

Position	Number	Name	Penalty
J (L)	823	Max May-wheeled	
P	8	Global Harming	
B	20	Ada Hatelace	
B	371	Penalty Fox	
B	64	Nasty, Brutish and Me	

Skater order: Jammer, then Pivot, then blockers in derby order

Previous jam:

Period 2, Jam 12

Team 1

Position	Number	Name	Penalty
J	24	Sassassin	
P	18	Superscar	Direction (Served)
B	200	Bad Assassin	Direction (Served)
B	613	Scartillery	
B	82	Nat Twenty	

Team 2

Position	Number	Name	Penalty
J (L)	64	Kestrel	
P	823	Unarmed Strike	
B	033	Roll for Damage	
B	20	Scarlight Express	Back Block (Served)
B	8	Artemis Foul	

Positions: P=Pivot, J=Jammer, B=Blocker
Position notes: (NI)=No Initial, (L)=Lead, (LO)=Lost, (SP)=Star Pass

If you don't have lineup tracking, Jammer, Pivot (if tracked) and all skaters who get penalties in this jam will still show up

Penalty status:

◦ Not Yet: skater on way to box

◦ Serving: skater in box

◦ Served: skater has completed serving penalty

Color key explains penalty statuses

Teams Summary

Counts of a bunch
of different things
for each team

Team	Team 1	Team 2
Score	179	155
Lead	7	12
Lost	7	4
Calloff	0	9
NoInitial	2	2
StarPass	1	3
Skaters played	15	16

Teams Summary

Status:

• Not Yet: player hasn't reported

• Serving: player is in box

• Served: player is back out of box

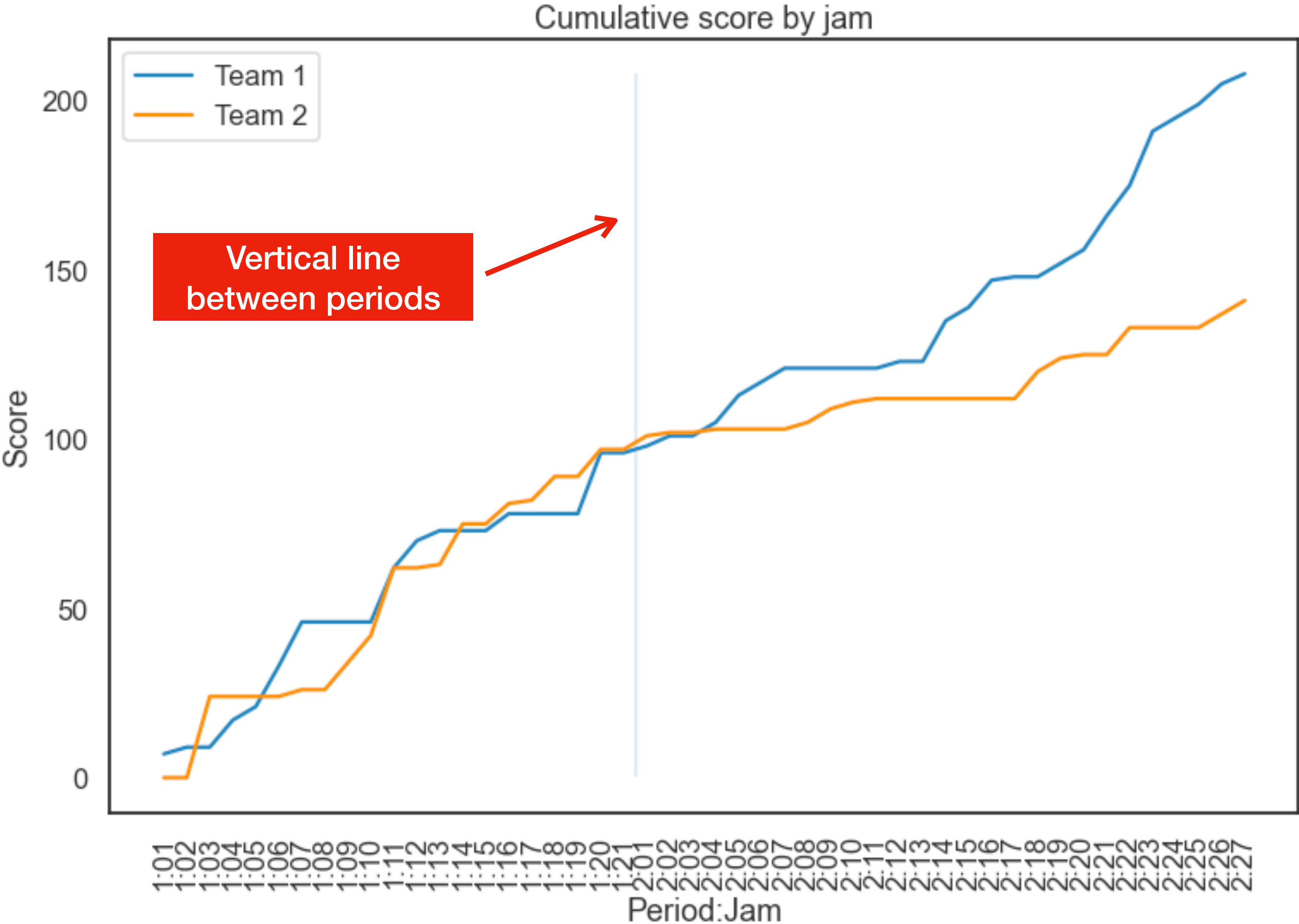
Information about the last 10 penalties called. Most recent penalty is first.

Team	Skater	Penalty	Status	Period	Jam	Time in Jam
Team 2	Global Harming	Cut	Not Yet	2	7	2:23
Team 2	Scar Wylde	Back Block	Served	2	7	0:51
Team 1	Elenavalanche	Cut	Served	2	7	0:18
Team 2	Scar Wylde	Cut	Served	2	6	1:07
Team 2	Bad Assassin	Forearm	Served	2	5	1:17
Team 1	Wheela Monster	Illegal Contact	Served	2	4	0:10
Team 1	No Regrette	Illegal Procedure	Served	2	3	1:25
Team 1	Fate Skar	Cut	Served	2	3	0:21
Team 1	Fate Skar	Cut	Served	2	1	1:12
Team 2	Boba Teen	Multiplayer	Served	2	1	1:04



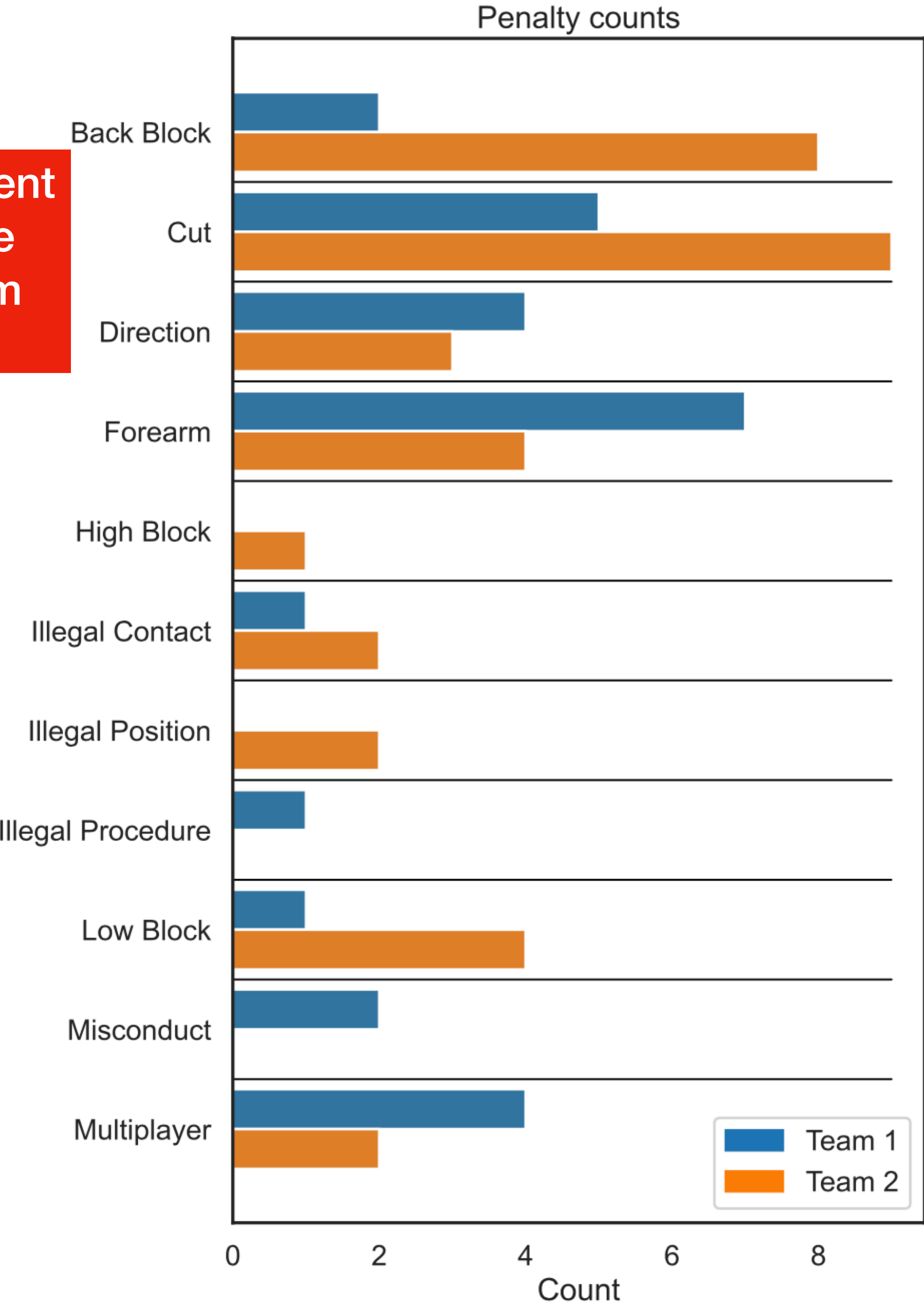
Basic Plots

Score by Jam

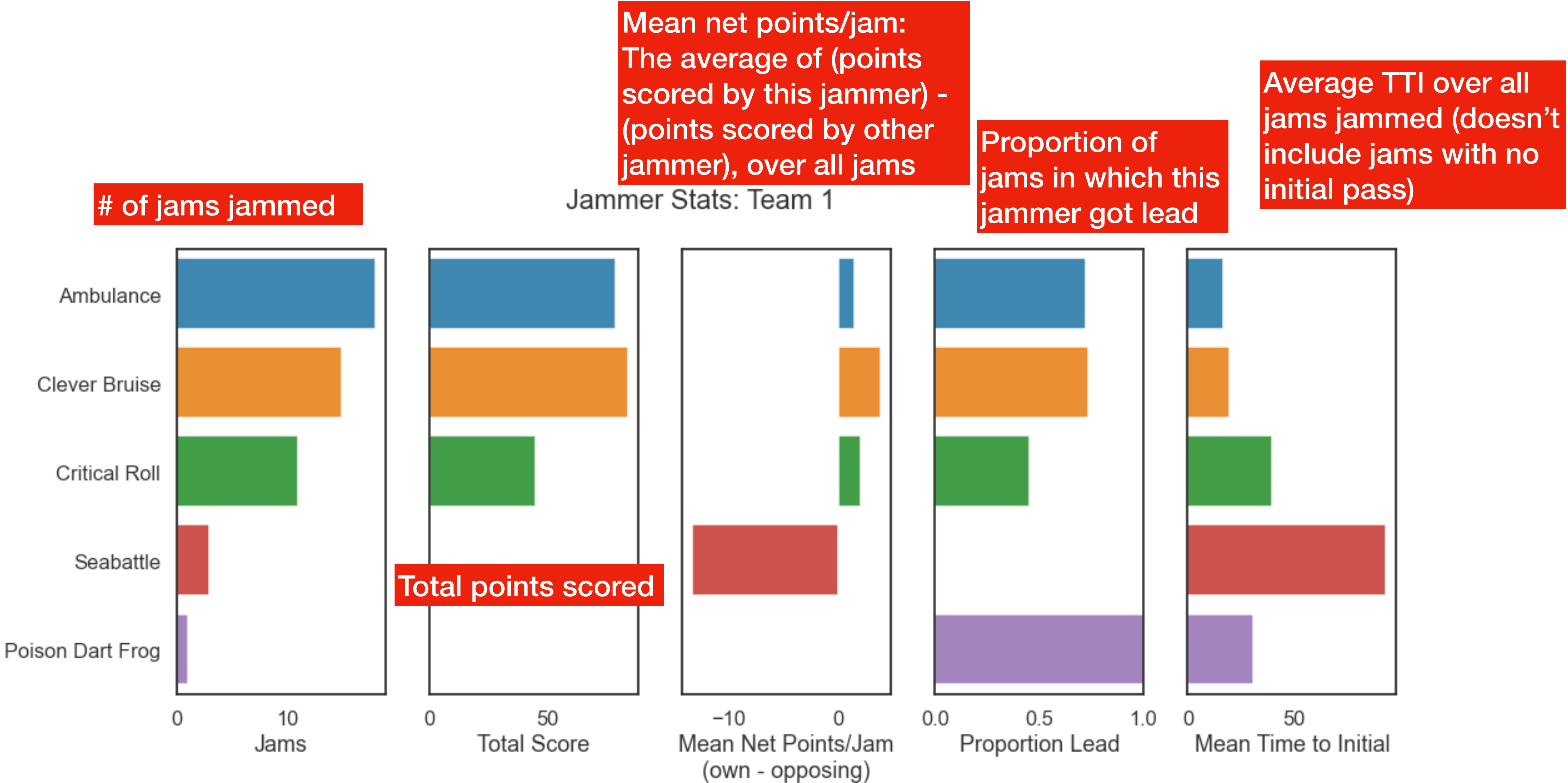


Team Penalty Counts

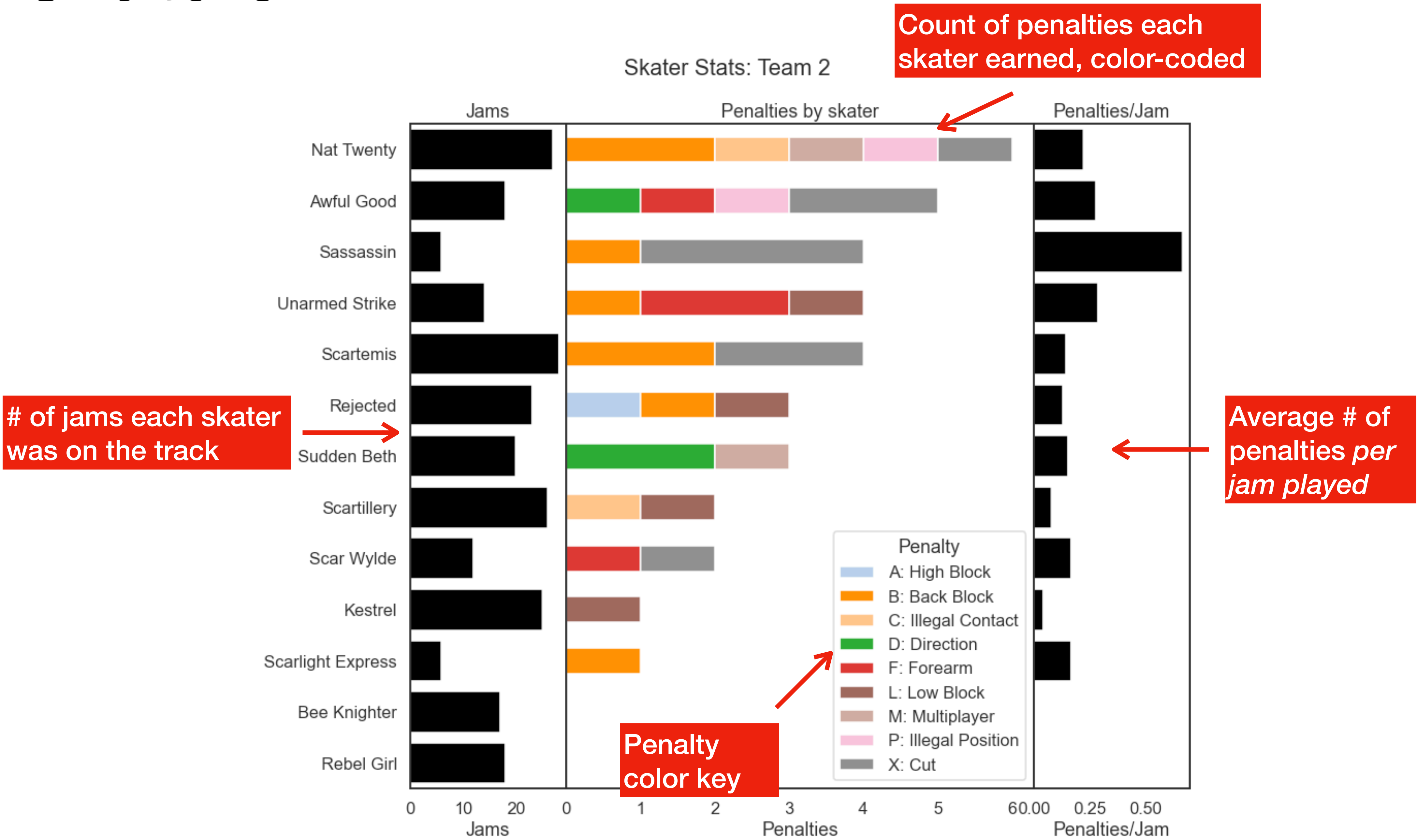
Same refs, different results... where could your team tighten up?



Jammers



Skaters



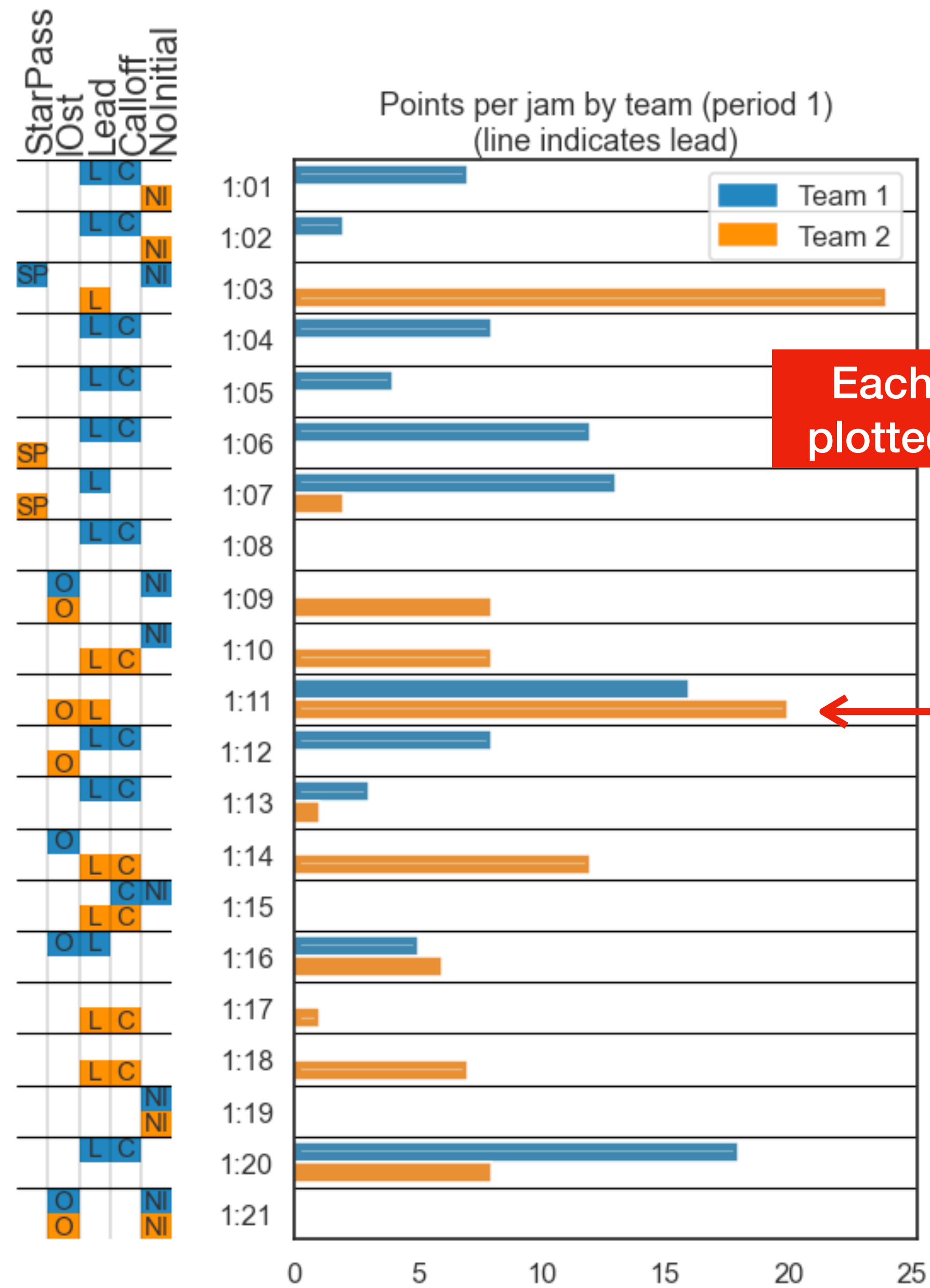


Advanced Plots

Jam Details

Jam attributes per team per jam, in similar format to scoresheets

- SP: Star Pass
- O: Lost lead
- L: Lead
- C: Called off jam
- NI: No initial pass



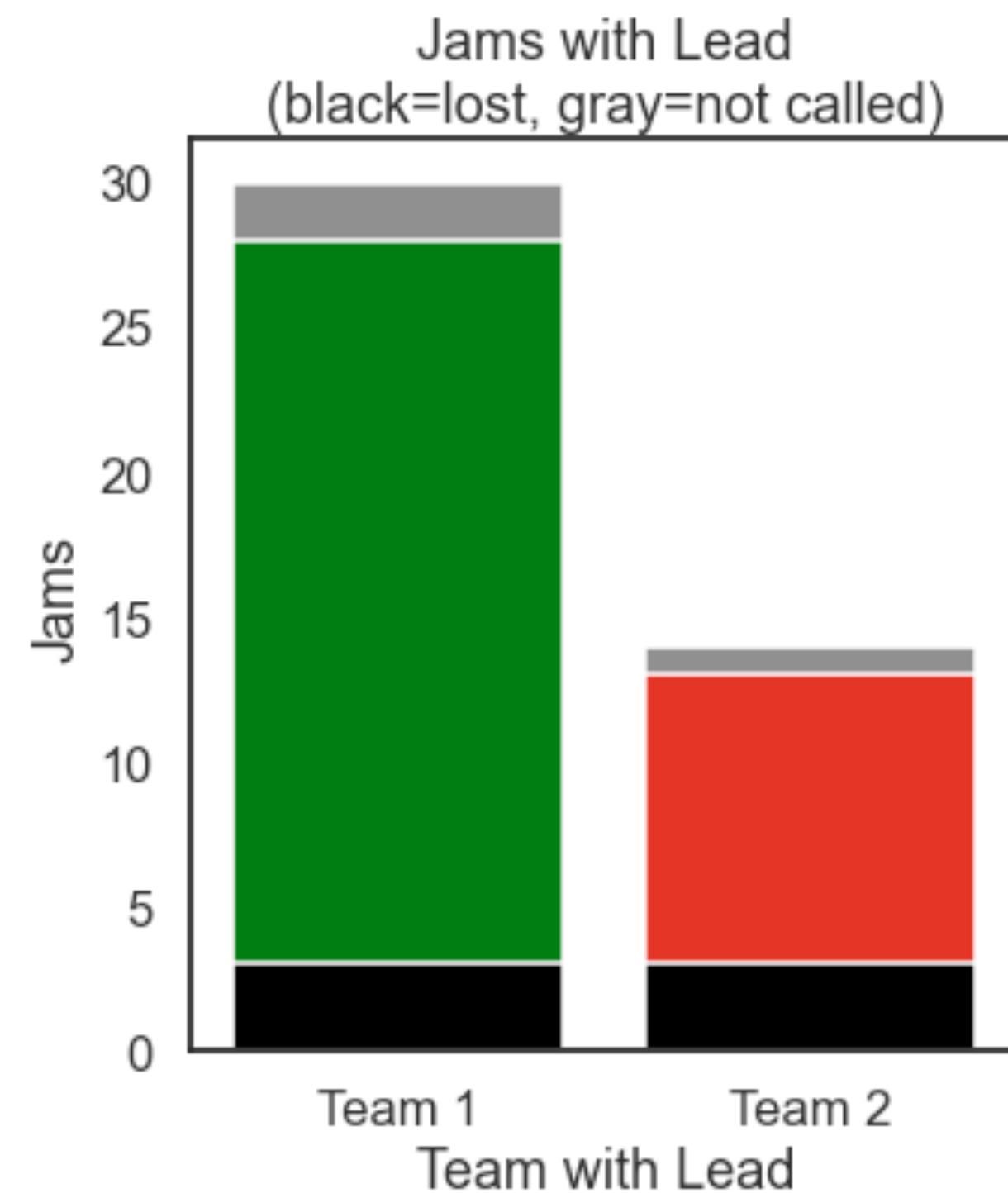
Each team's score plotted for every jam

Thin white line indicates lead

Lead Summary

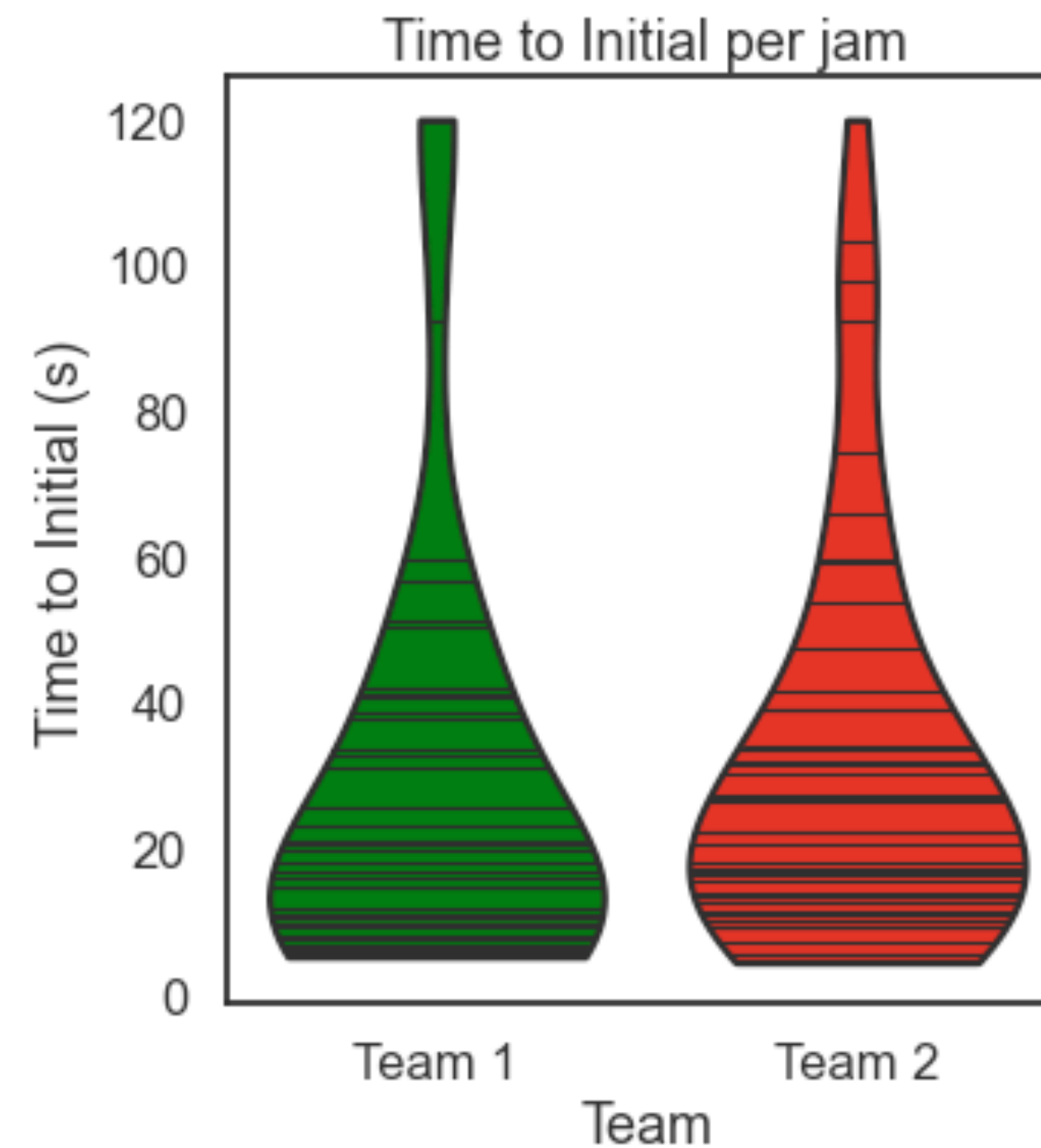
Stacked bar plot shows number of jams in which each team had lead. Colors:

- Gray: not called off
- Team color: called off
- Black: lost lead



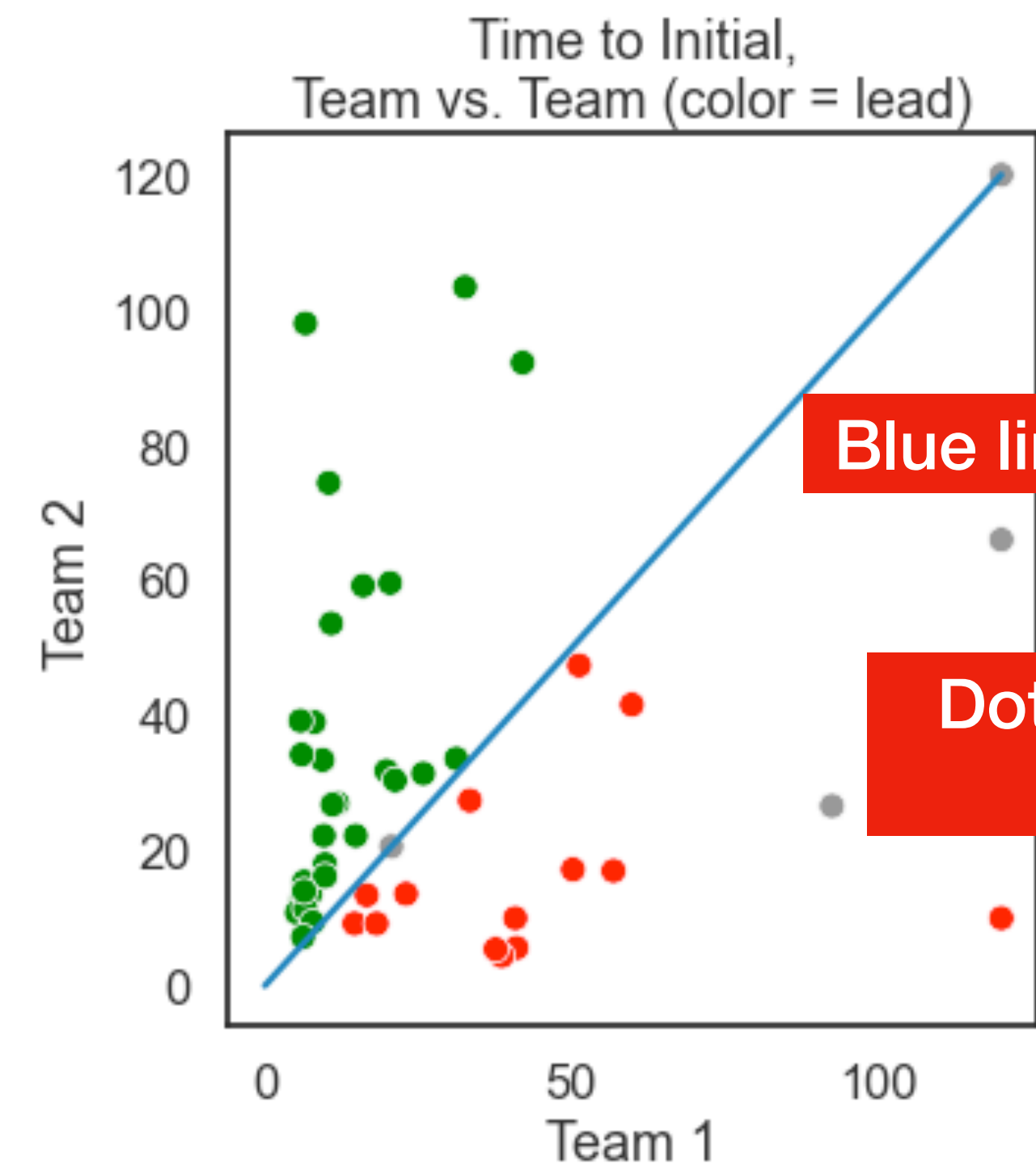
Violin plots show the distribution of TTI per jam, for each team. Lines in the middle are individual jam TTIs.

More lower-down data means faster TTIs!



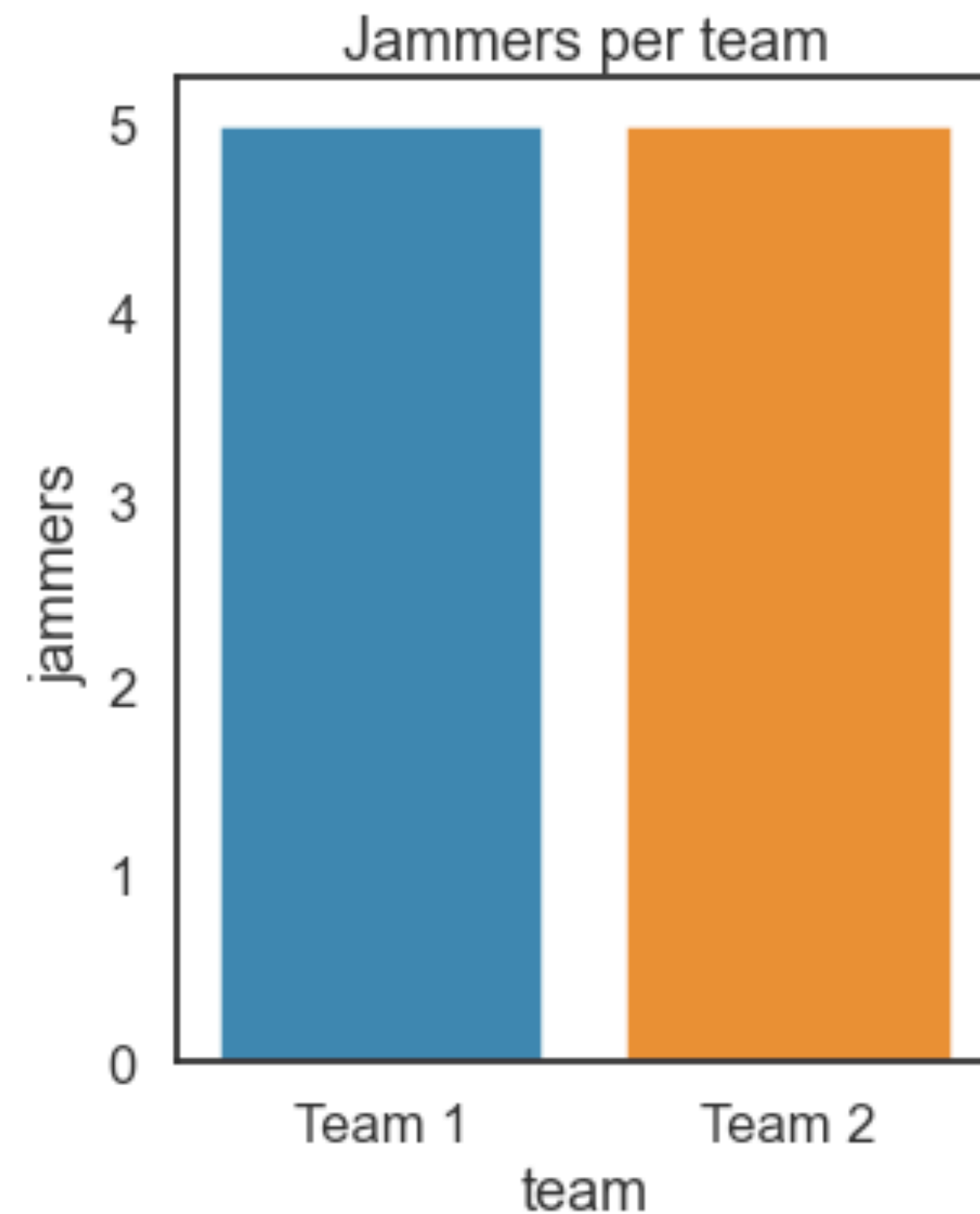
TTI: Time to Initial Pass

This plot compares TTI between teams for each jam. Each dot is a jam, with TTI for each team on its axis.



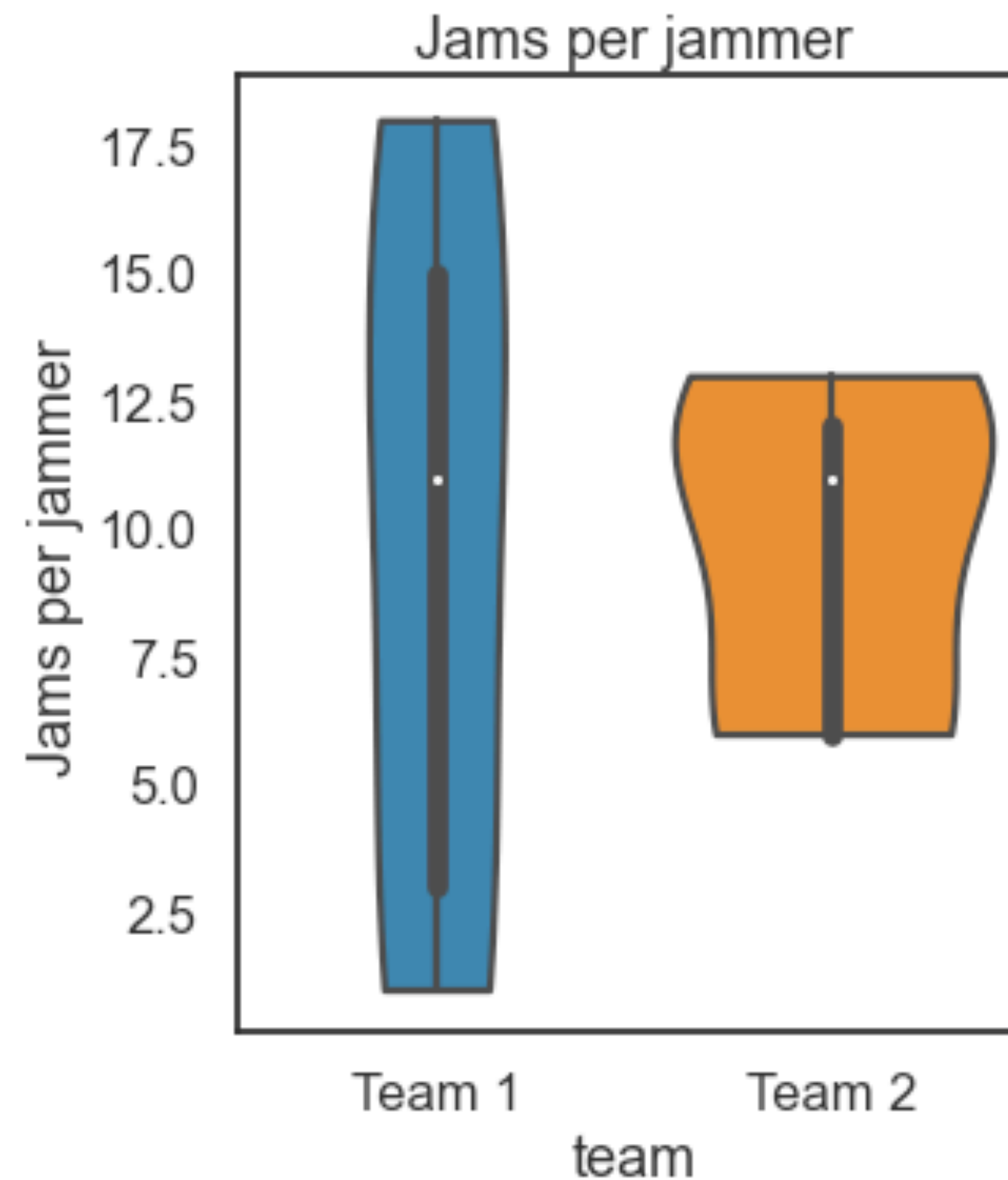
Jammer Summary

How many
jammers jammed
for each team



Distribution of the number of jams
jammed per jammer (white dot:
median)

These two teams used the same #
of jammers, but Team 2 spread
the jams around more evenly.



One dot per jammer,
colored by team.

- X axis: number of jams that jammer jammed
- Y axis: average points scored per jam

