

# 'Social Distancing' in football

Player pair distance

200 cm

150 cm

100 cm

50 cm

30 cm

33.8 sec

19.9 sec

8.5 sec

1.4 sec

0.4 sec

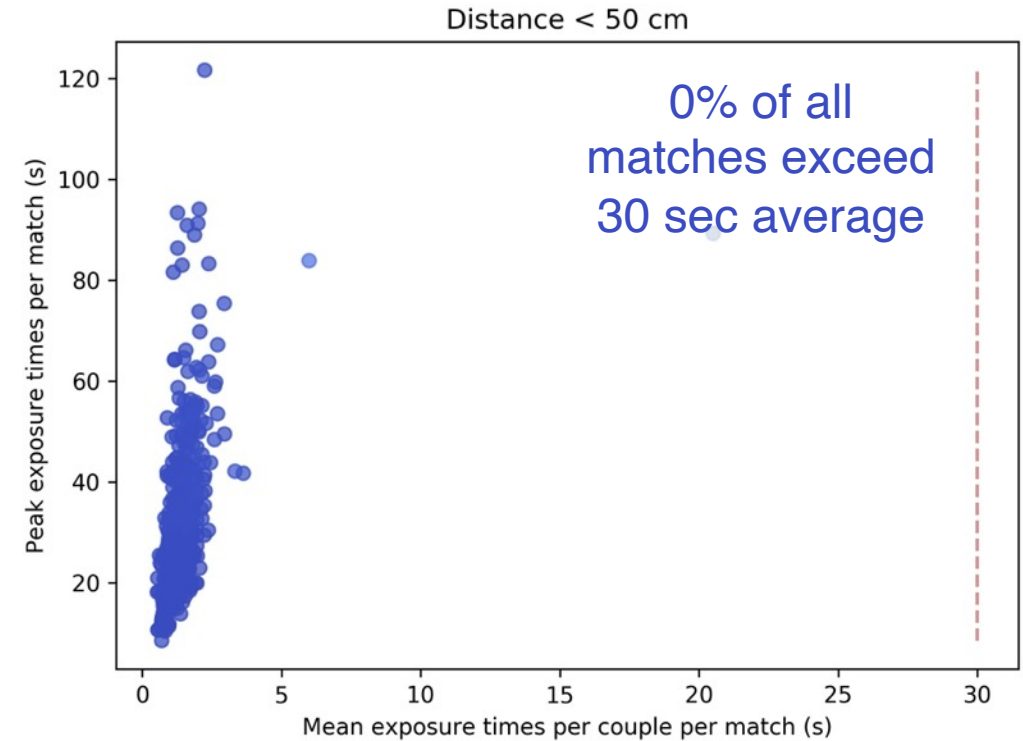
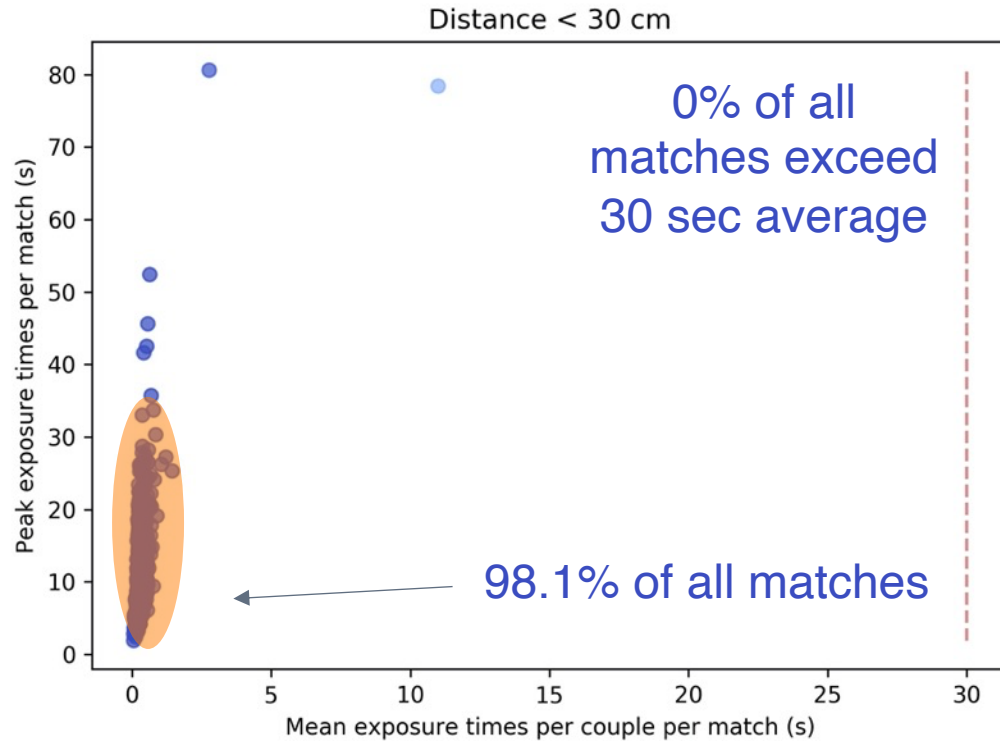
Encounter time



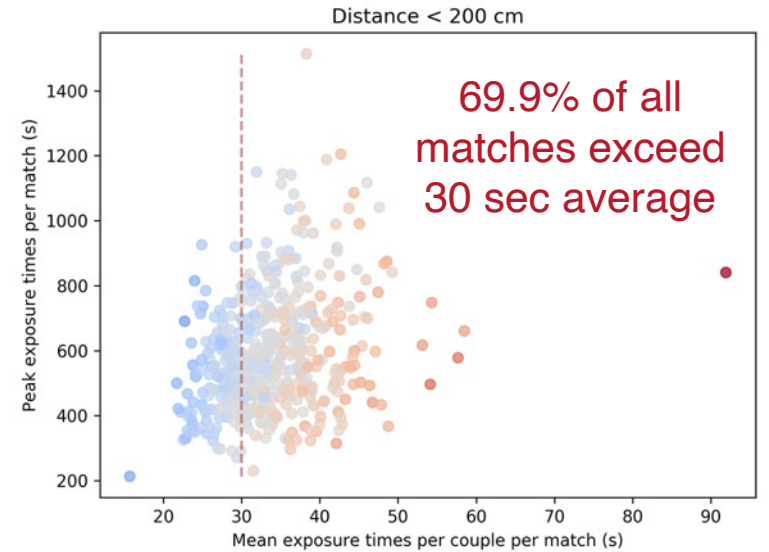
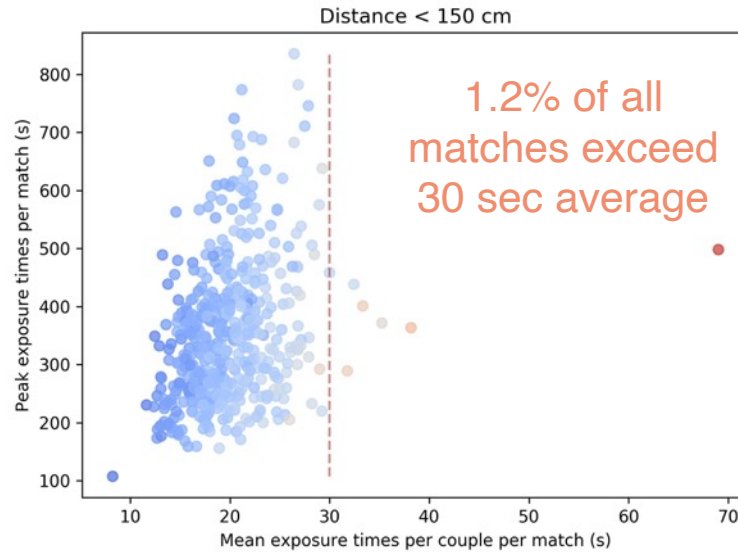
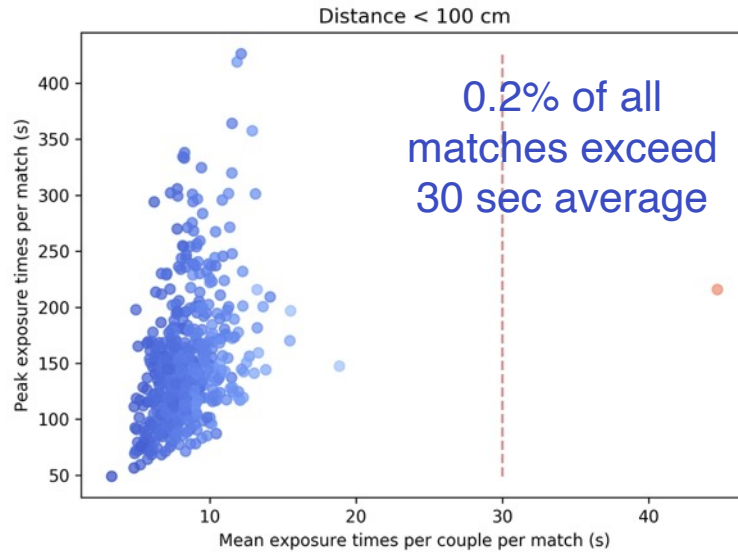




# 'Close Encounters' matches Dutch Eredivisie



- Analysis based on position data of all players of 482 matches in the Dutch Eredivisie;
- Corrected for 'goal-celebrations' and interactions during pre-match/half time and post match;
- Players have very limited number of close encounters during a match;
- In less than 10 of the matches, we see a slightly higher exposure for 1-2 player pairings.



- We see a significant increase of close encounter time for a threshold distance of >150 cm;
- For threshold distances lower than 150 cm, there is no risk for 75% of the player pairings and very limited risk for the remainder (25%);
- For all close encounters with a threshold lower than 200 cm, we see an average close encounter time which is slightly higher than 30 seconds.

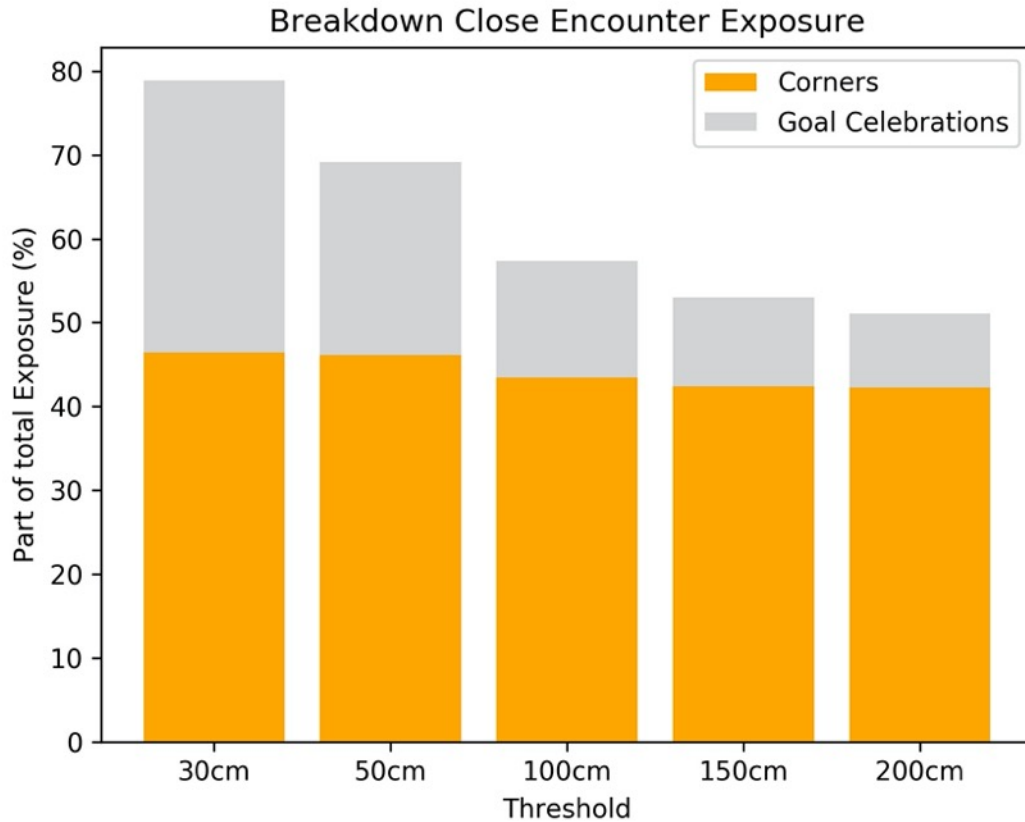


# 'Close Encounters' Matches Dutch Eredivisie



	Highest player pairing encounter time per match (sec.)	Average encounter time per player pairing (sec.)	% of player pairings with encounters > 30 sec.
Distance < 30 cm	12.1	0.4	<1%
Distance < 50 cm	32.2	1.4	<1%
Distance < 100 cm	151.9	8.5	9%
Distance < 150 cm	352.11	19.9	24%
Distance < 200 cm	591.2	33.8	39%

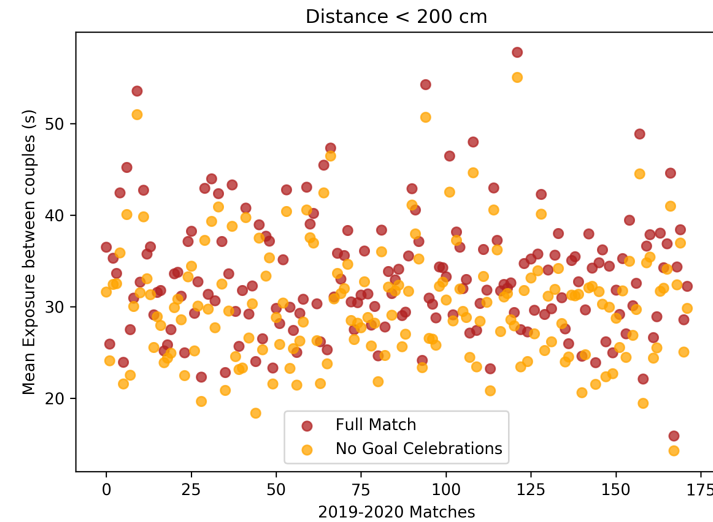
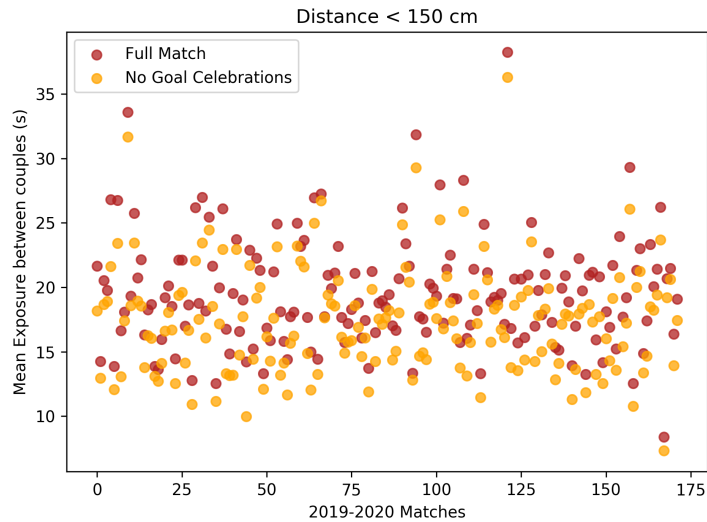
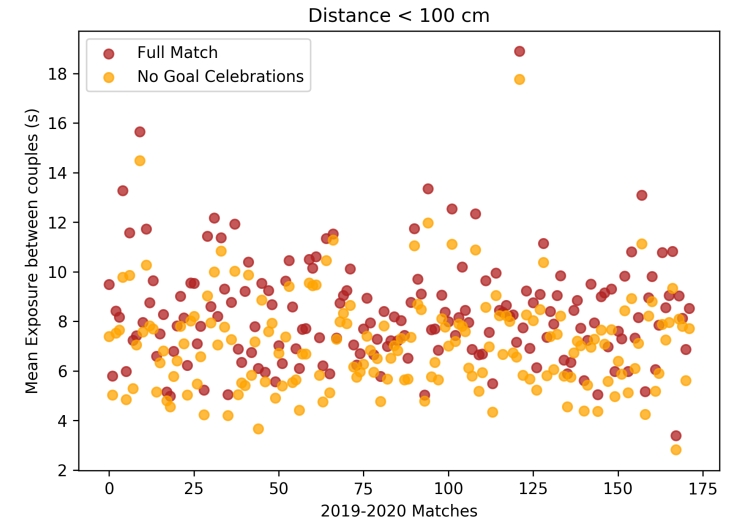
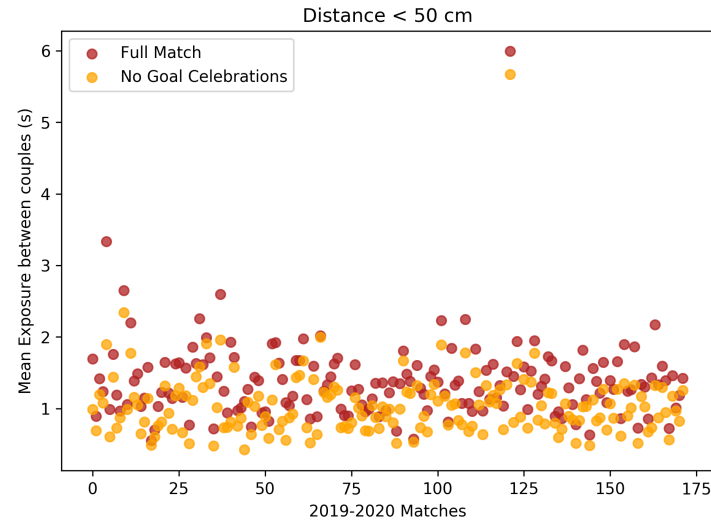
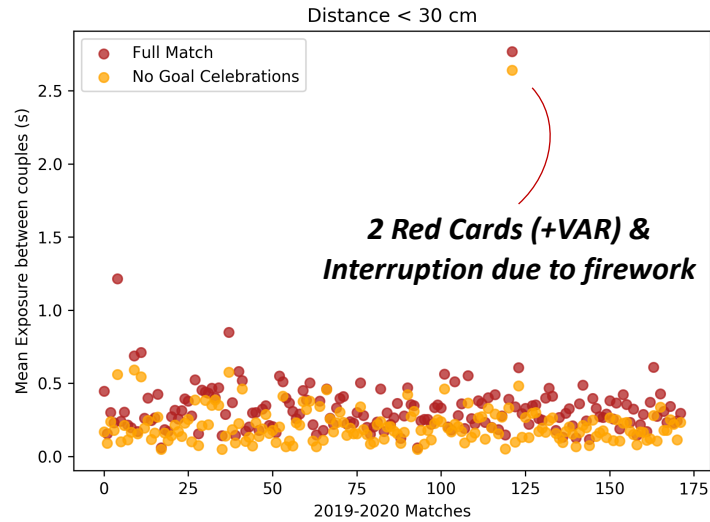
# Corner- and goal-celebration exposure



## Interpretation

- **50-80%** of the total exposure can be attributed to **corners** and 'goal celebration'.
- **Corner exposure** is mainly driven by the **duration** of the event, while goal celebration exposure is mainly driven by the **number of players** involved.
- Other high exposure events are **VAR moments, game interruptions and red cards**.

# Impact Behavioral Changes



## Interpretation

- Changing goal celebrations can result in up to a 35% reduction in mean player pairing exposure (behavioural).
- **Reducing the time** allowed for taking corner can result in up to a 45% reduction in mean player pairing exposure.



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8.5 sec

19.9 sec

33.8 sec

Encounter time

## CONTACT

**Vincent van Renesse van Duivenbode**

Managing Director

+31 (0)6 42 60 37 62

[vincent@inmotio.eu](mailto:vincent@inmotio.eu)

**Floris Goes**

Data Scientist

+31 (0)6 53 52 53 81

[Floris@inmotio.eu](mailto:Floris@inmotio.eu)