

Developing acoustic localization for wildlife in environmental impact assessment

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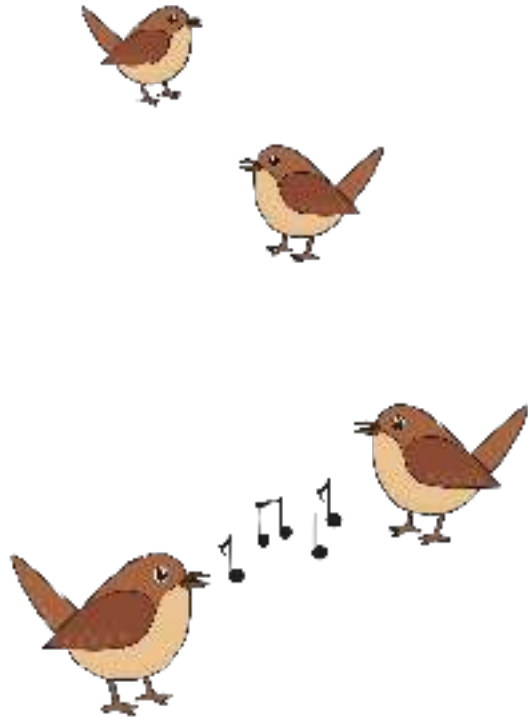
Assessing impacts



Challenges in sight



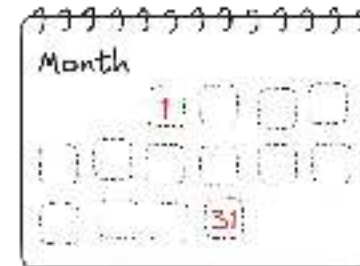
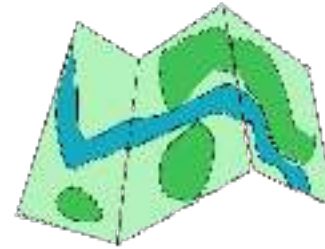
Challenges in sight



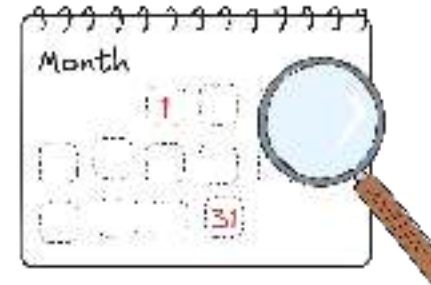
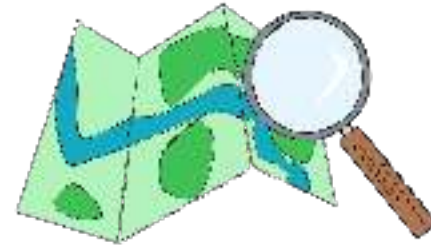
Challenges in sight



Challenges in sight



Challenges in sight

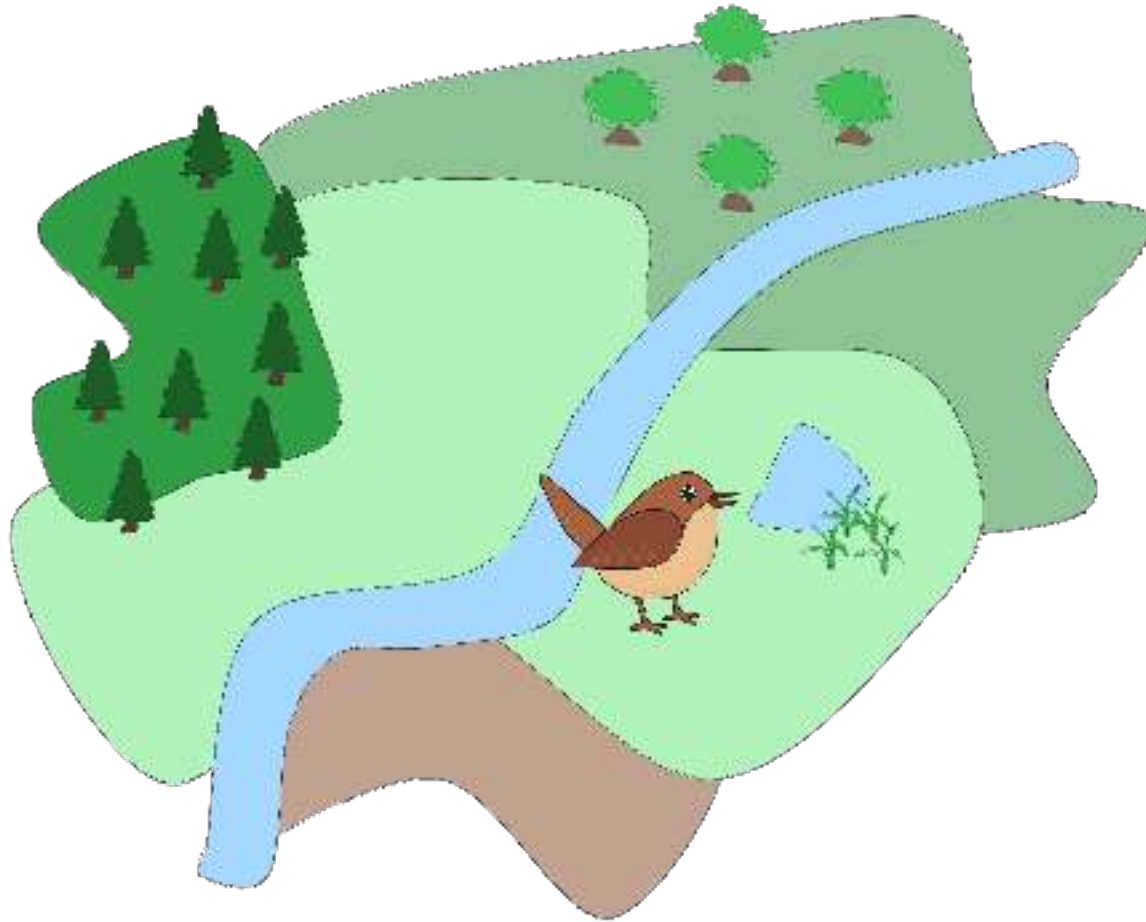


Behavioral insights

Mennill et al. ([2006](#)), Dutilleul, Sandercock, and Kålås ([2023](#)), Teixeira, Maron, and Rensburg ([2019](#))



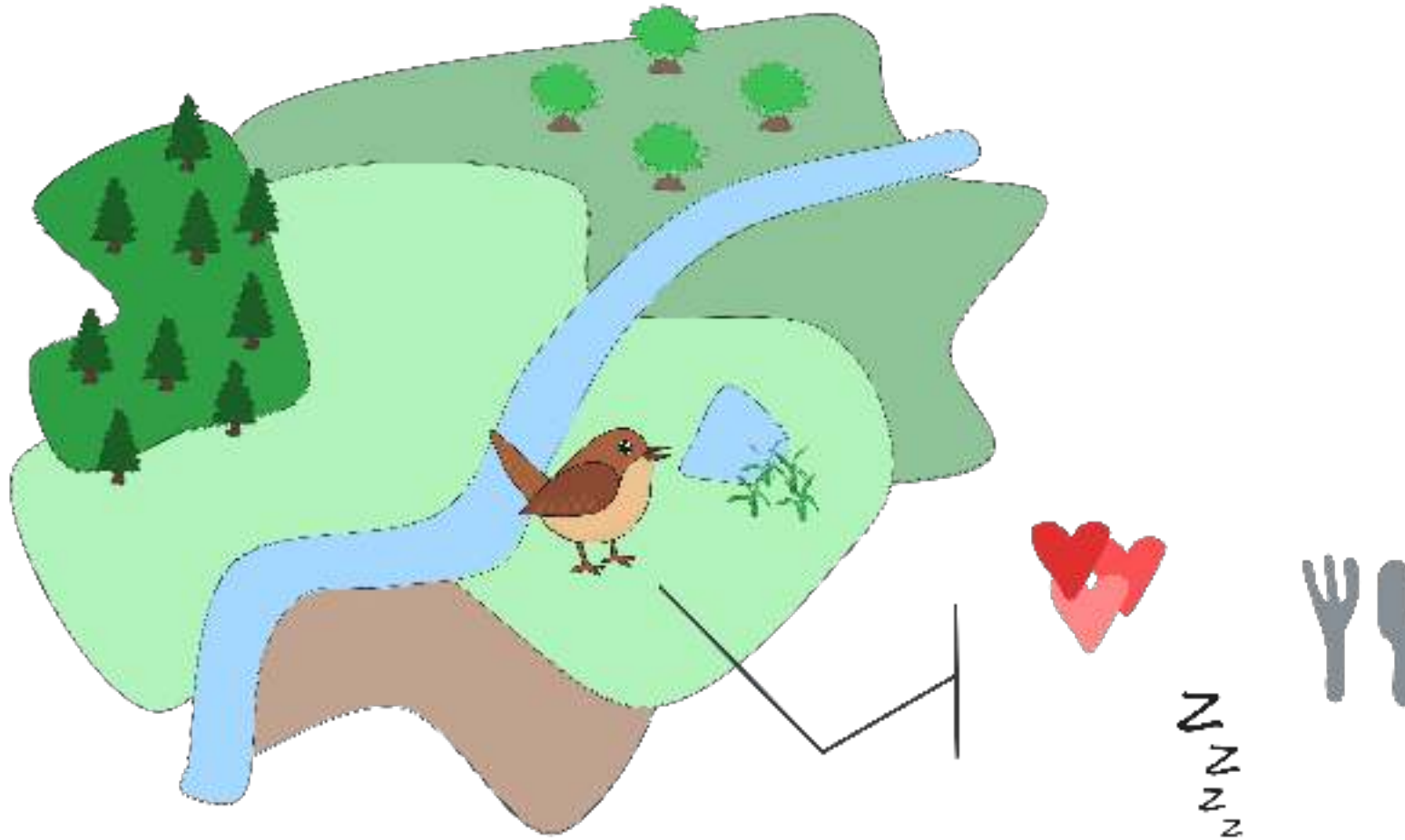
Behavioral insights



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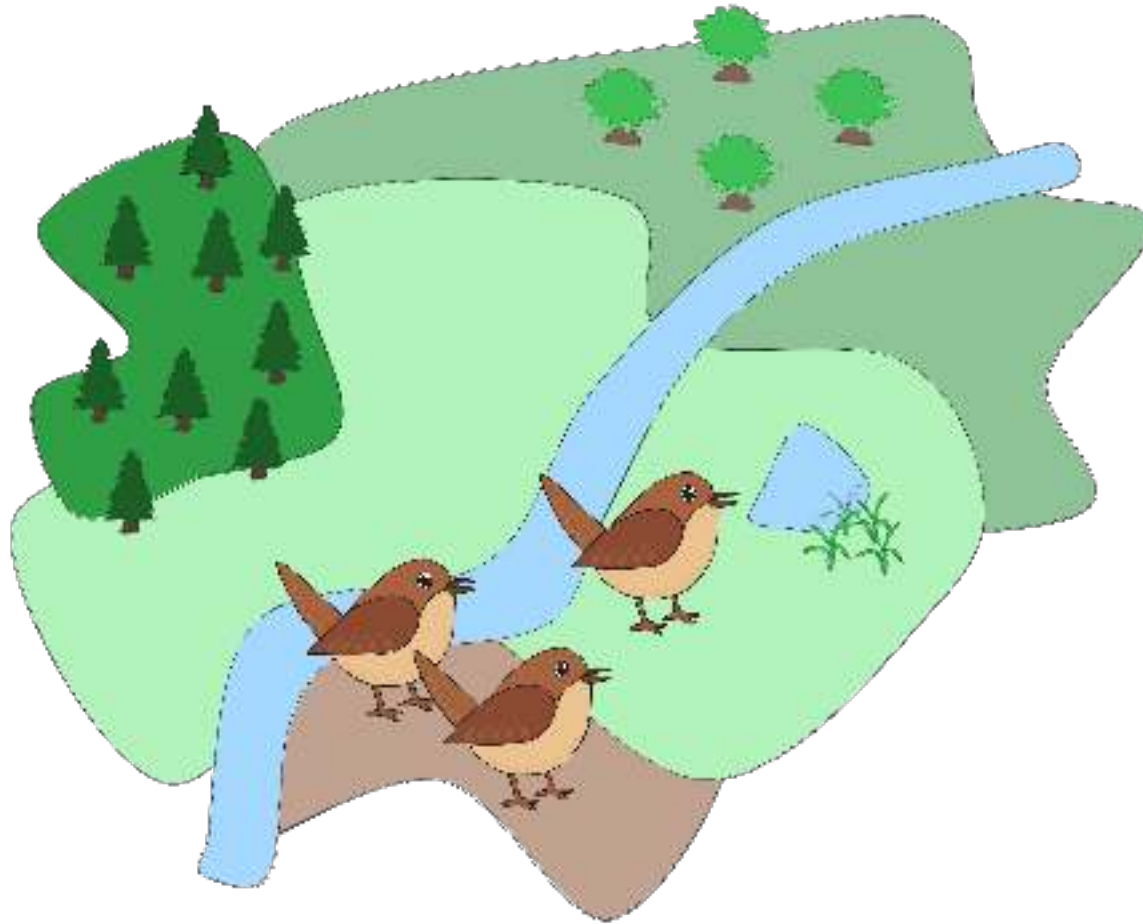
Behavioral insights



Mennill et al. (2006), Dutilleux, Sandercock, and Kålås (2023), Teixeira, Maron, and Rensburg (2019)



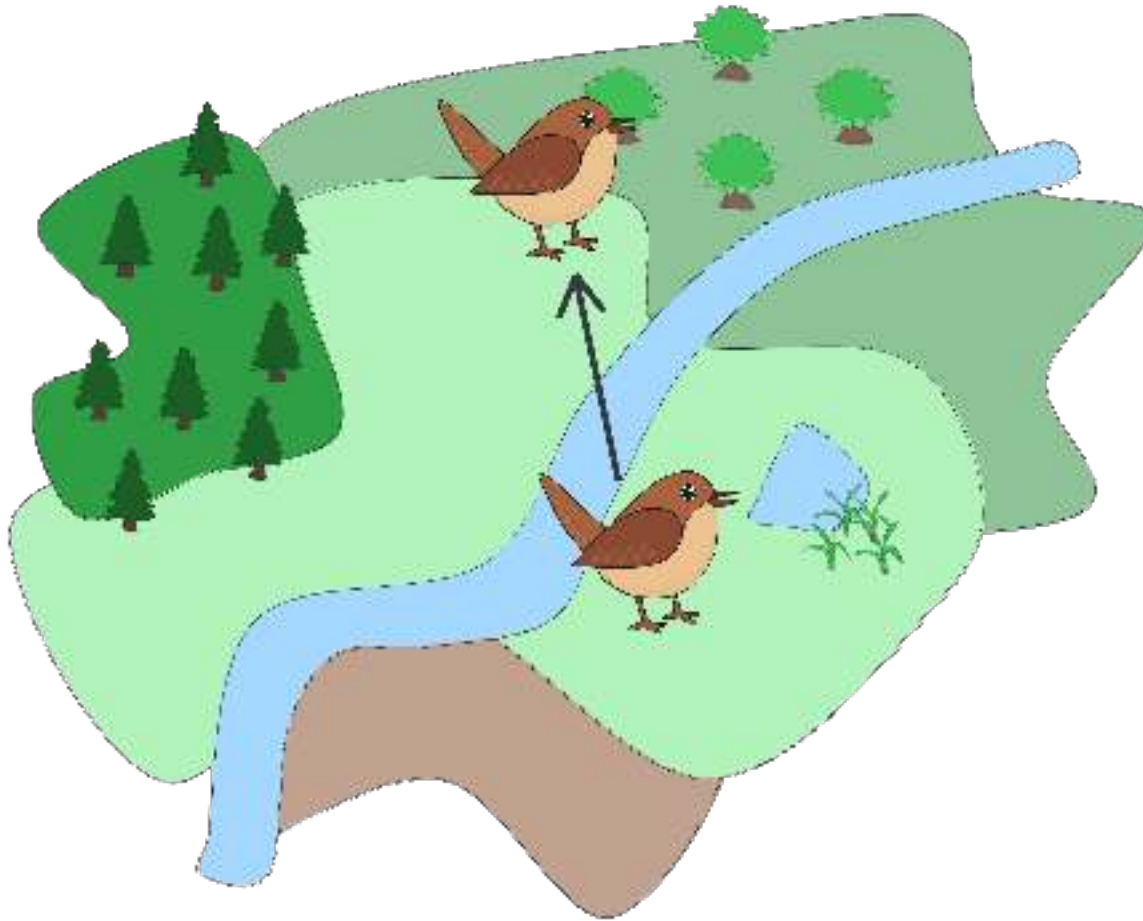
Behavioral insights



Mennill et al. ([2006](#)), Dutilleux, Sandercock, and Kålås ([2023](#)), Teixeira, Maron, and Rensburg ([2019](#))



Behavioral insights



Mennill et al. ([2006](#)), Dutilleux, Sandercock, and Kålås ([2023](#)), Teixeira, Maron, and Rensburg ([2019](#))



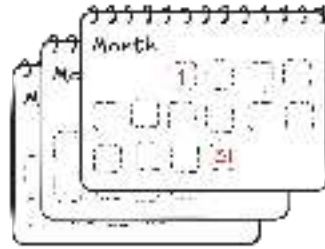
From sight to sound



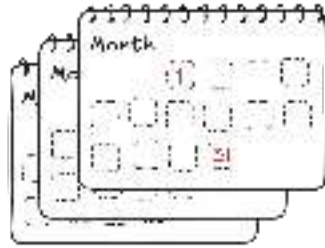
From sight to sound



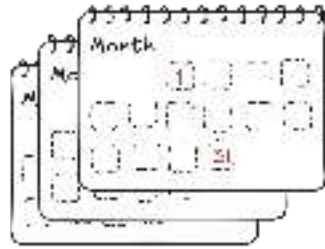
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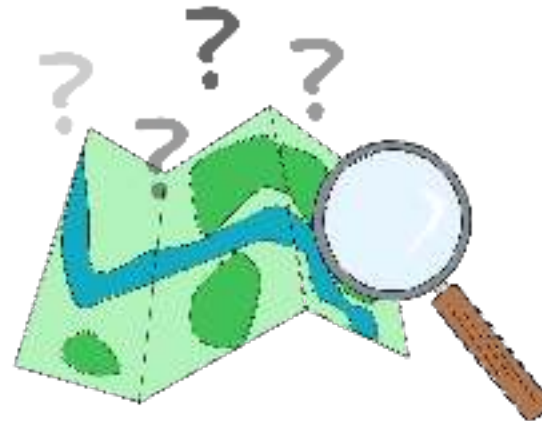
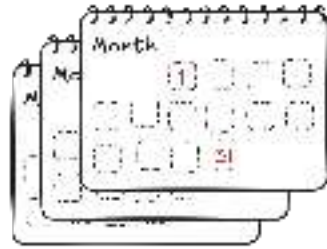
From sight to sound



From sight to sound



From sight to sound



Localizing sounds



On the field



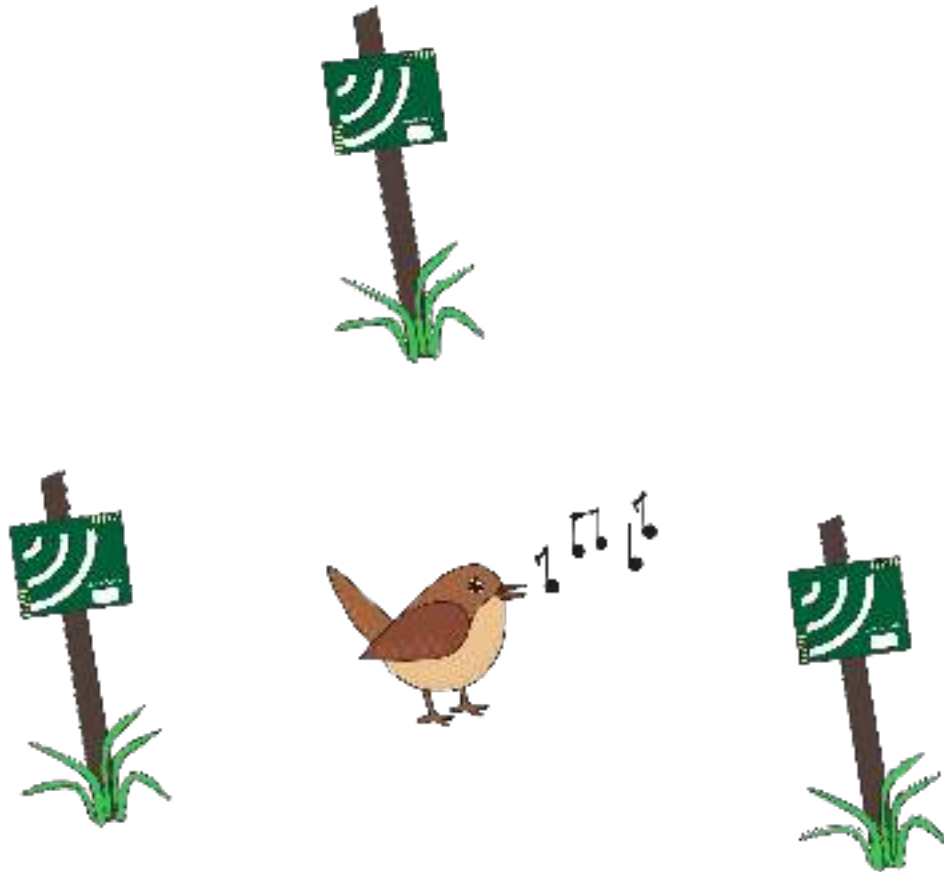
On the field



- ☐ Multiple microphones
- ☐ Time synchronization



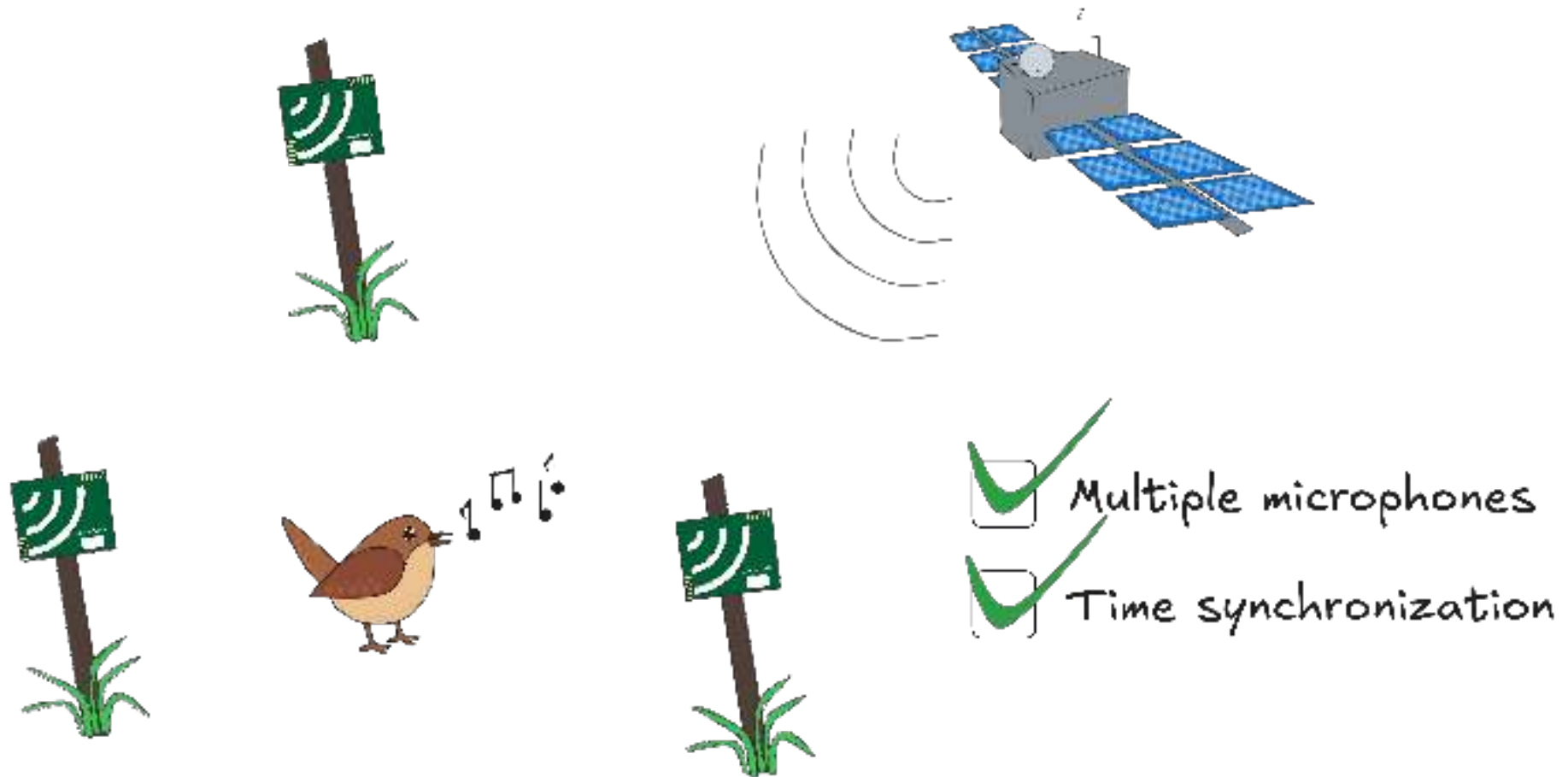
On the field



- ☒ Multiple microphones
- ☐ Time synchronization



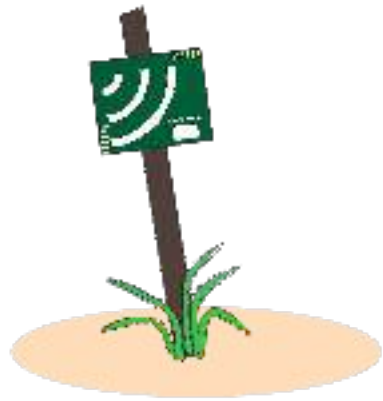
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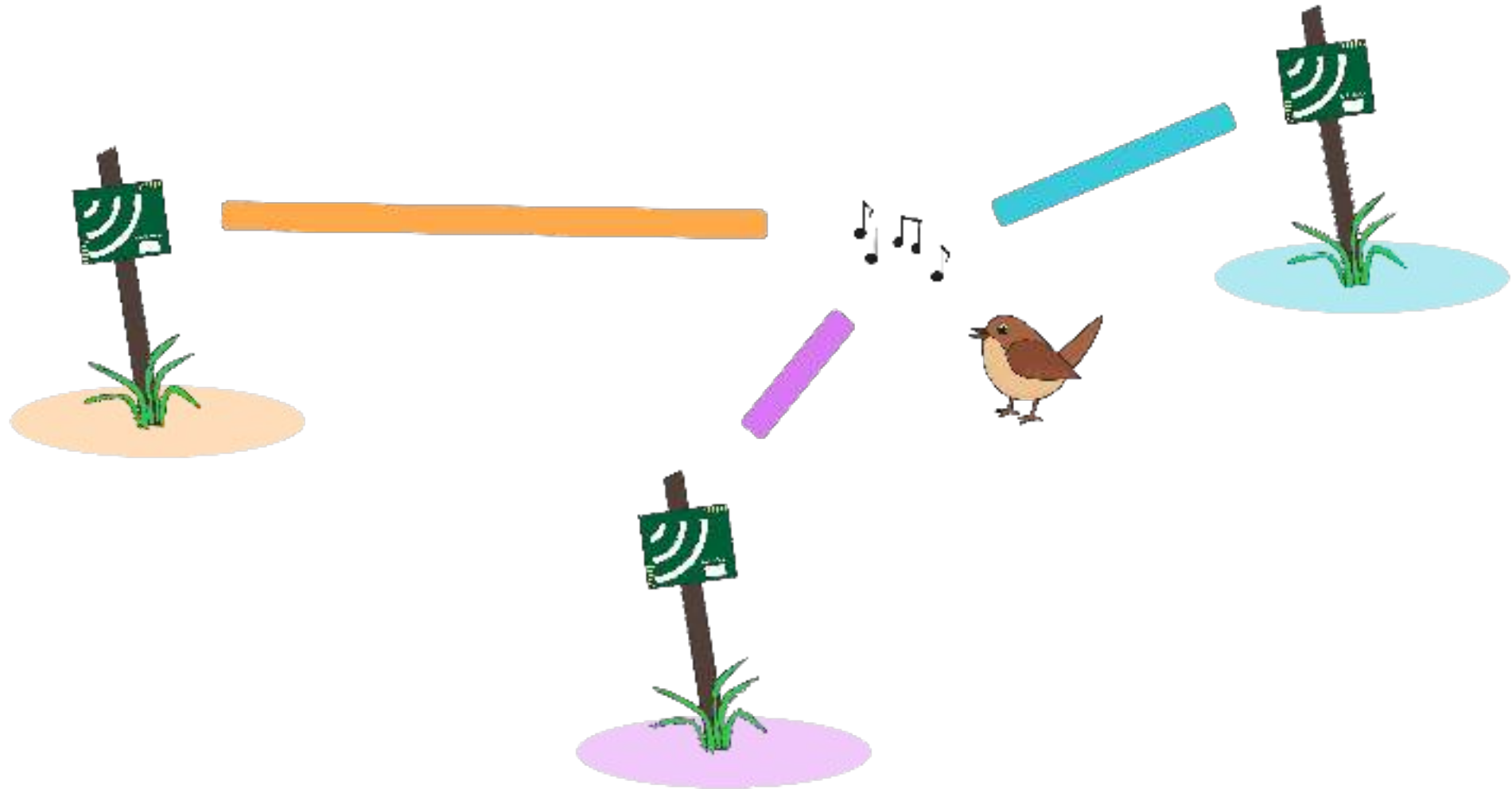
At the lab



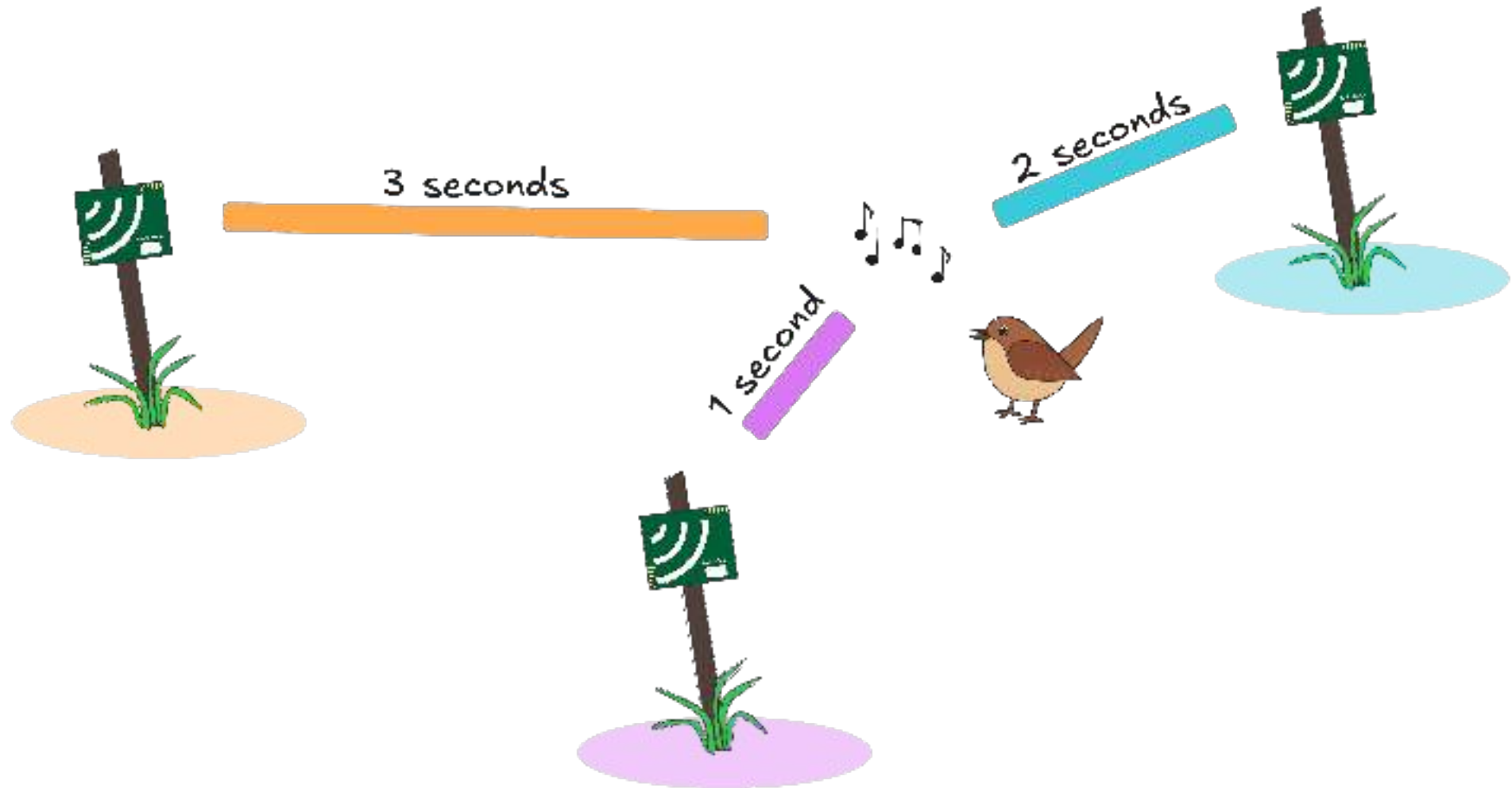
At the lab



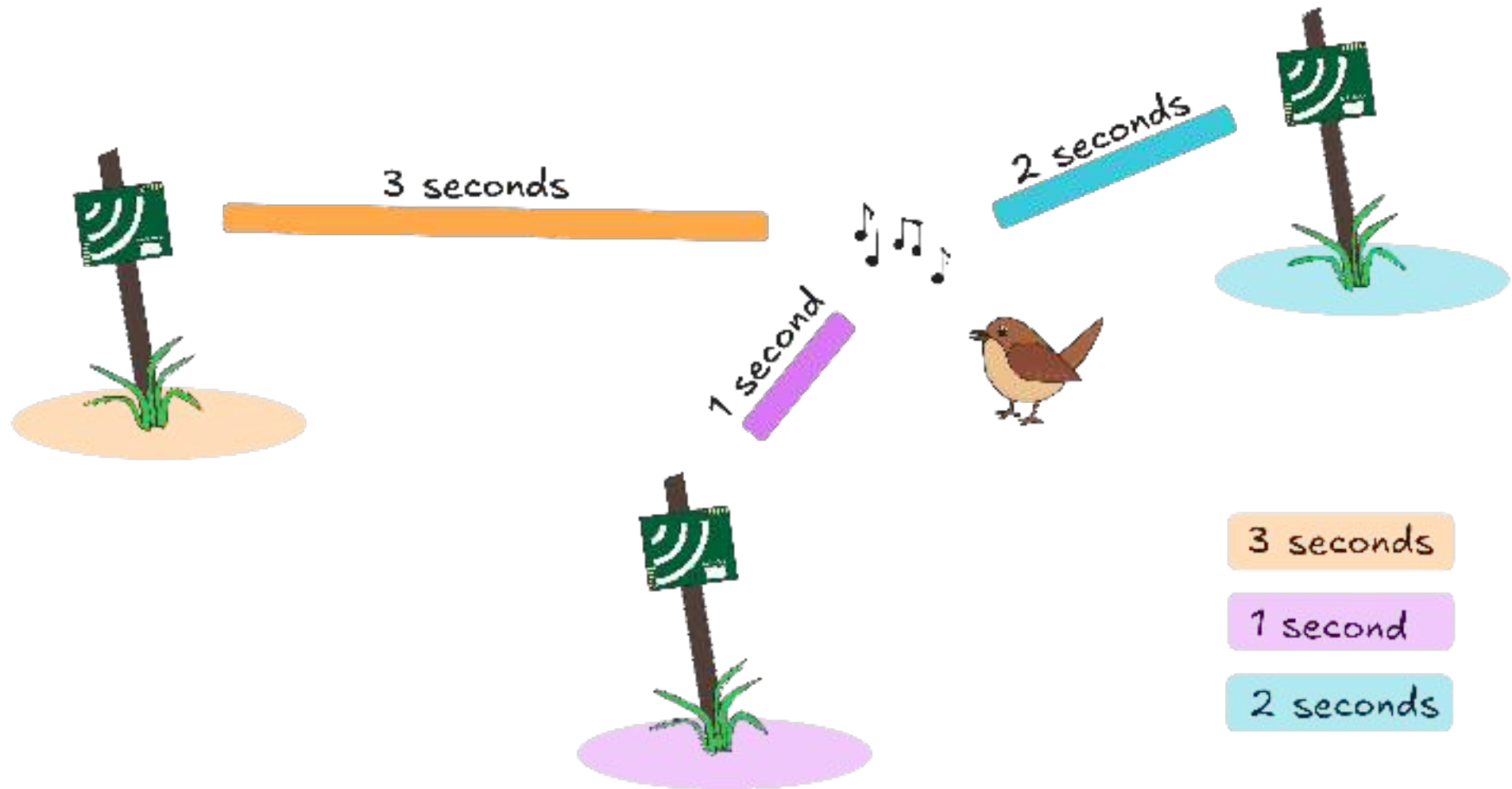
At the lab



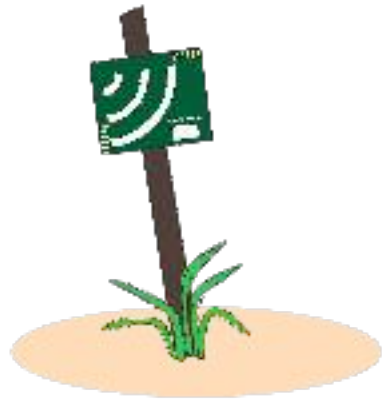
At the lab



At the lab



At the lab



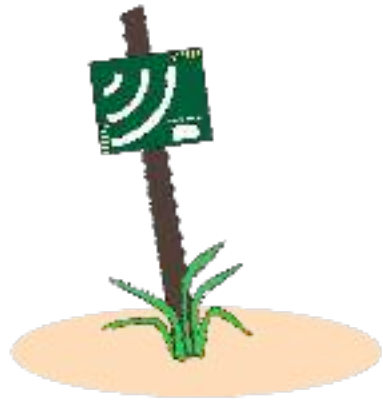
3 seconds

1 second

2 seconds



At the lab



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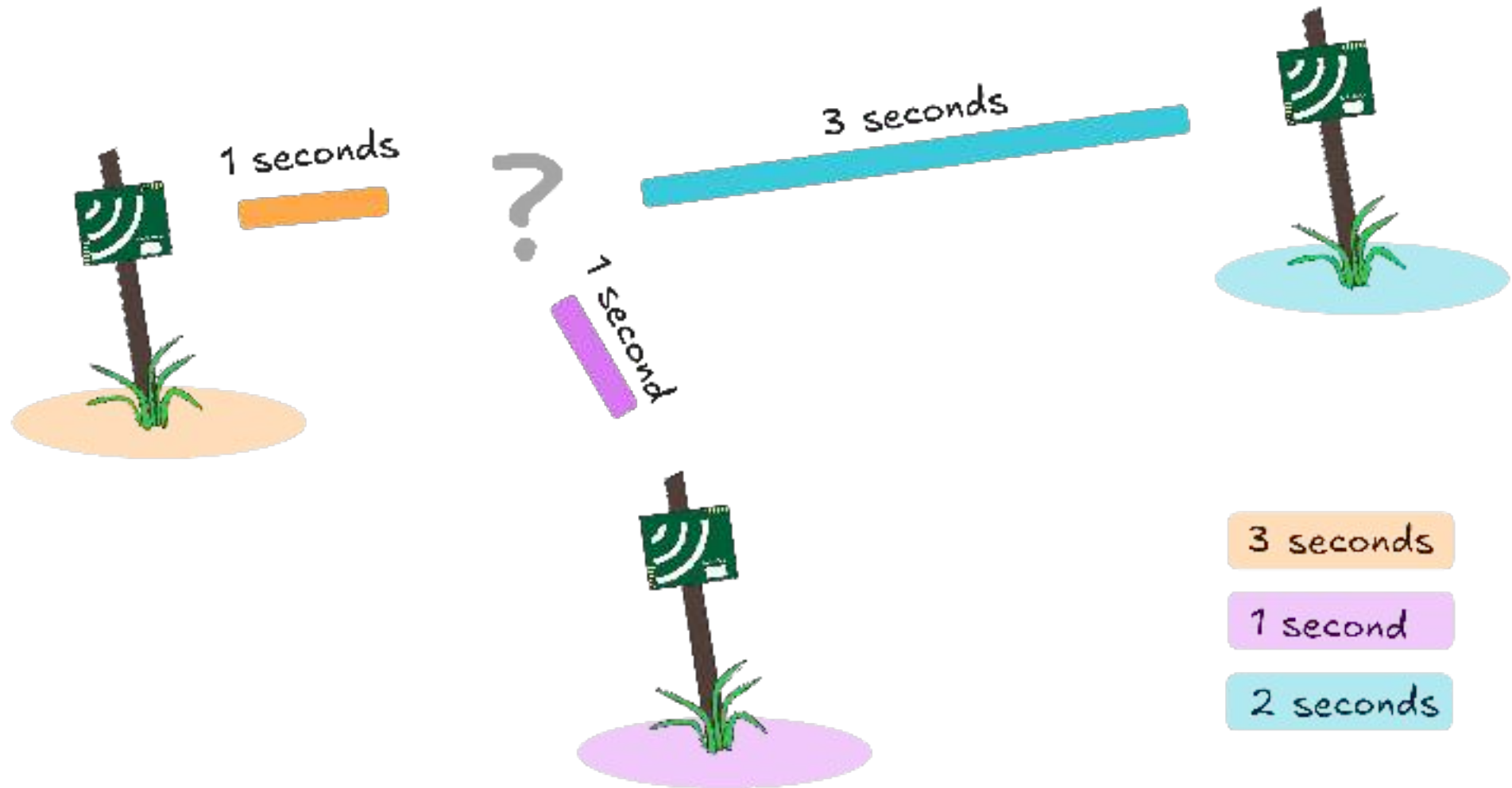
3 seconds

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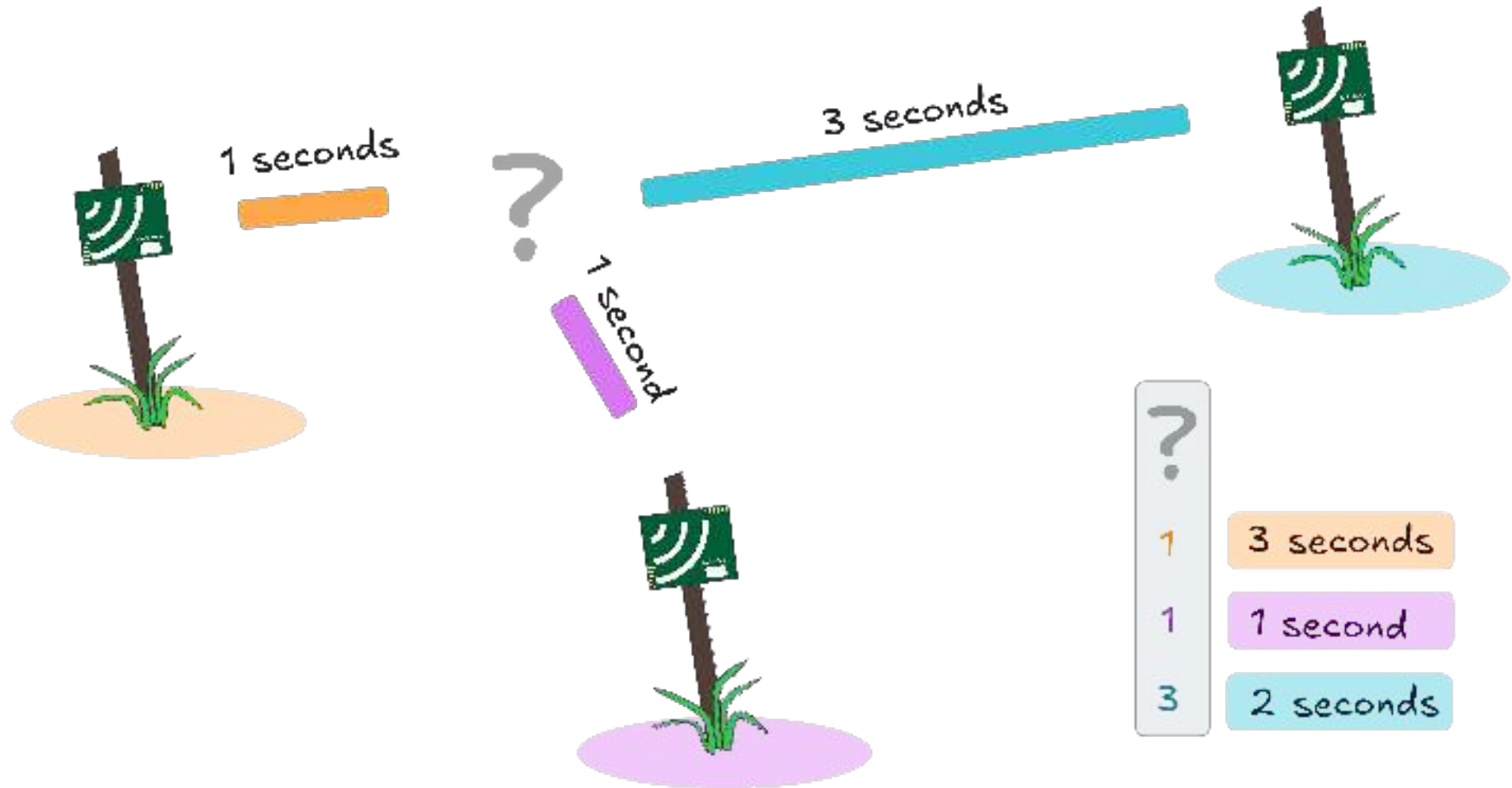
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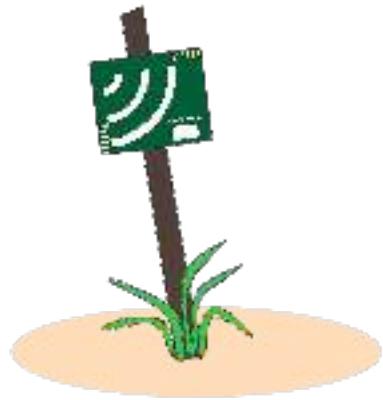
At the lab



At the lab



At the lab



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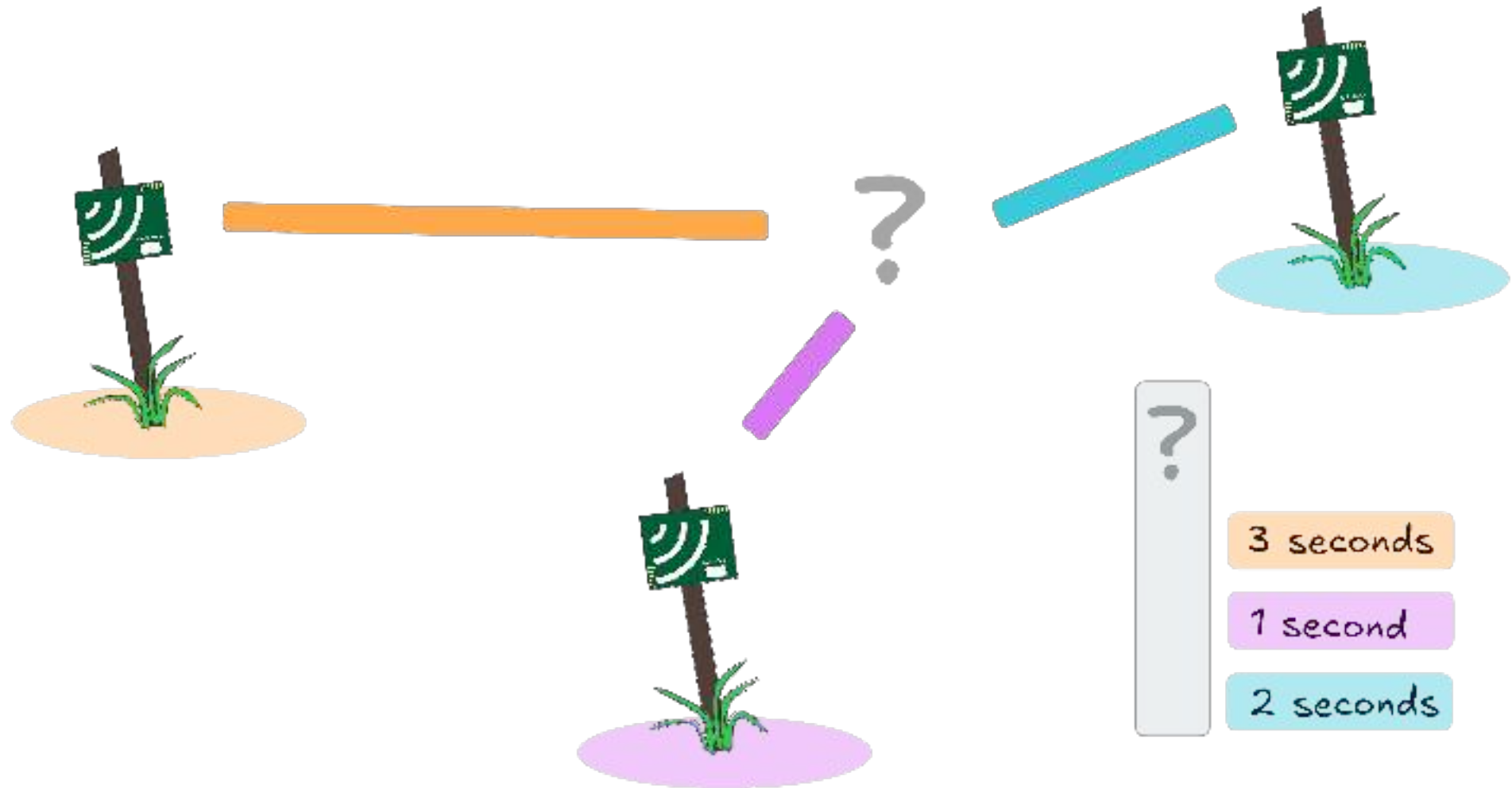
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1 second

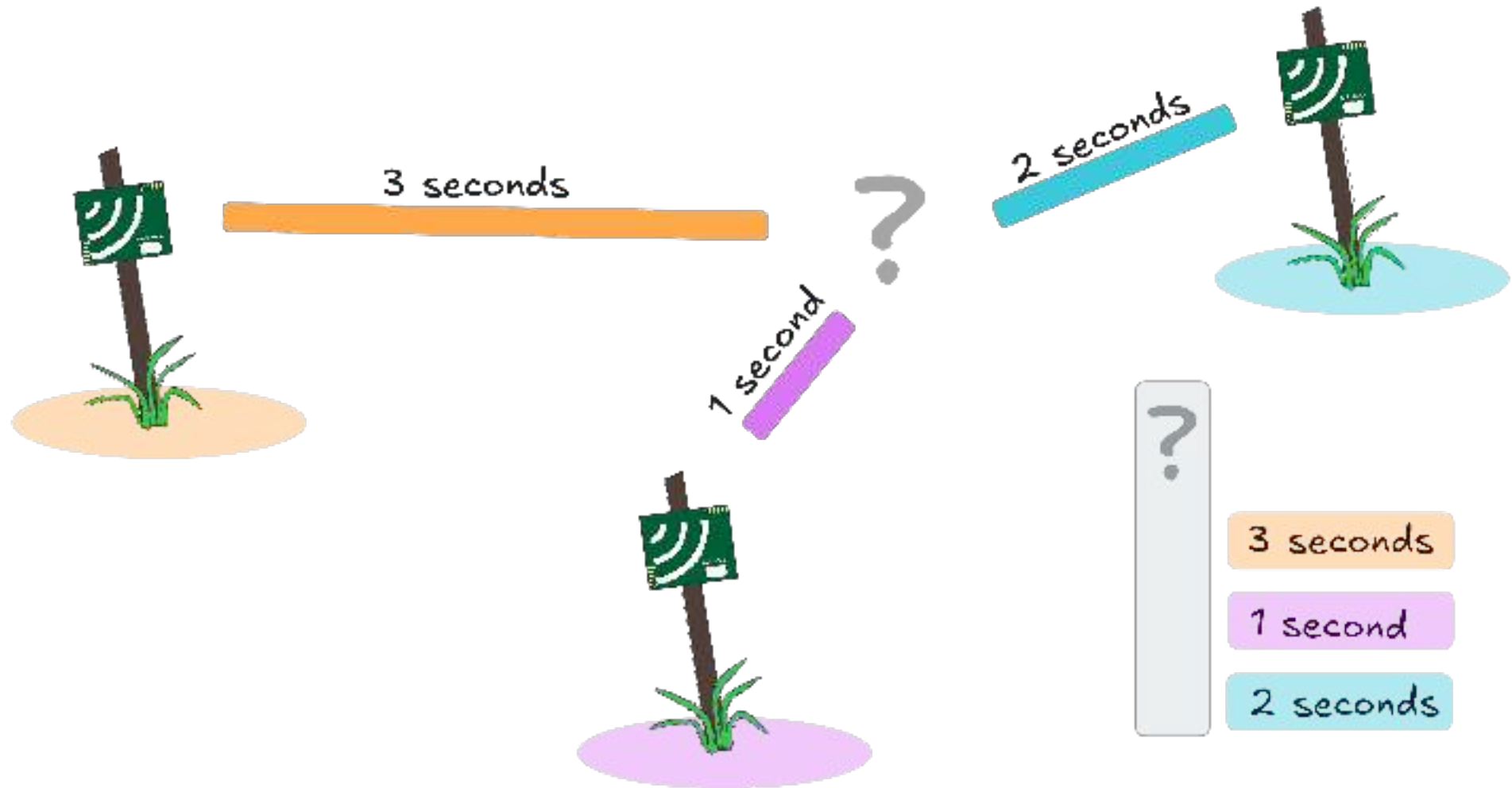
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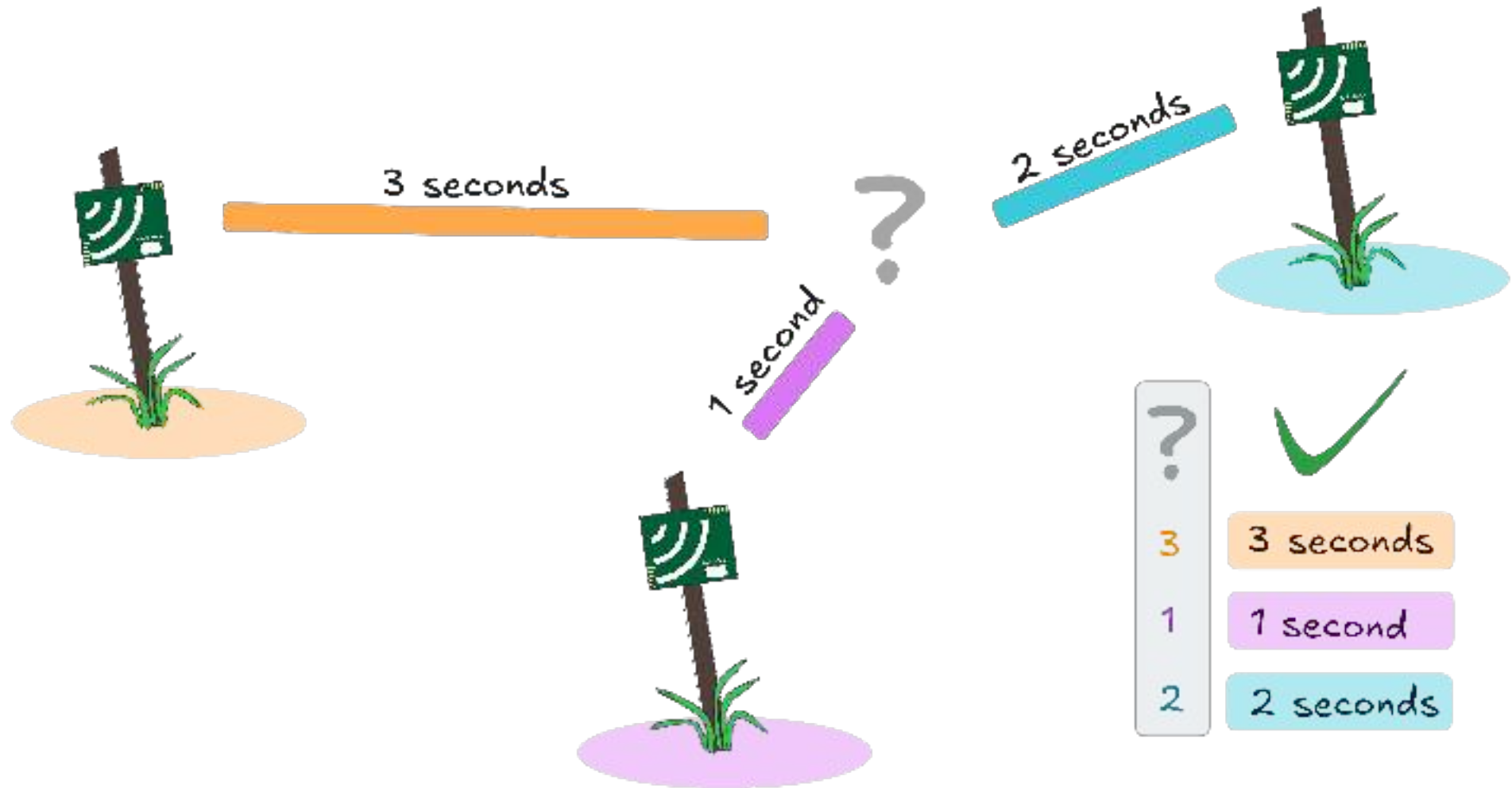
At the lab



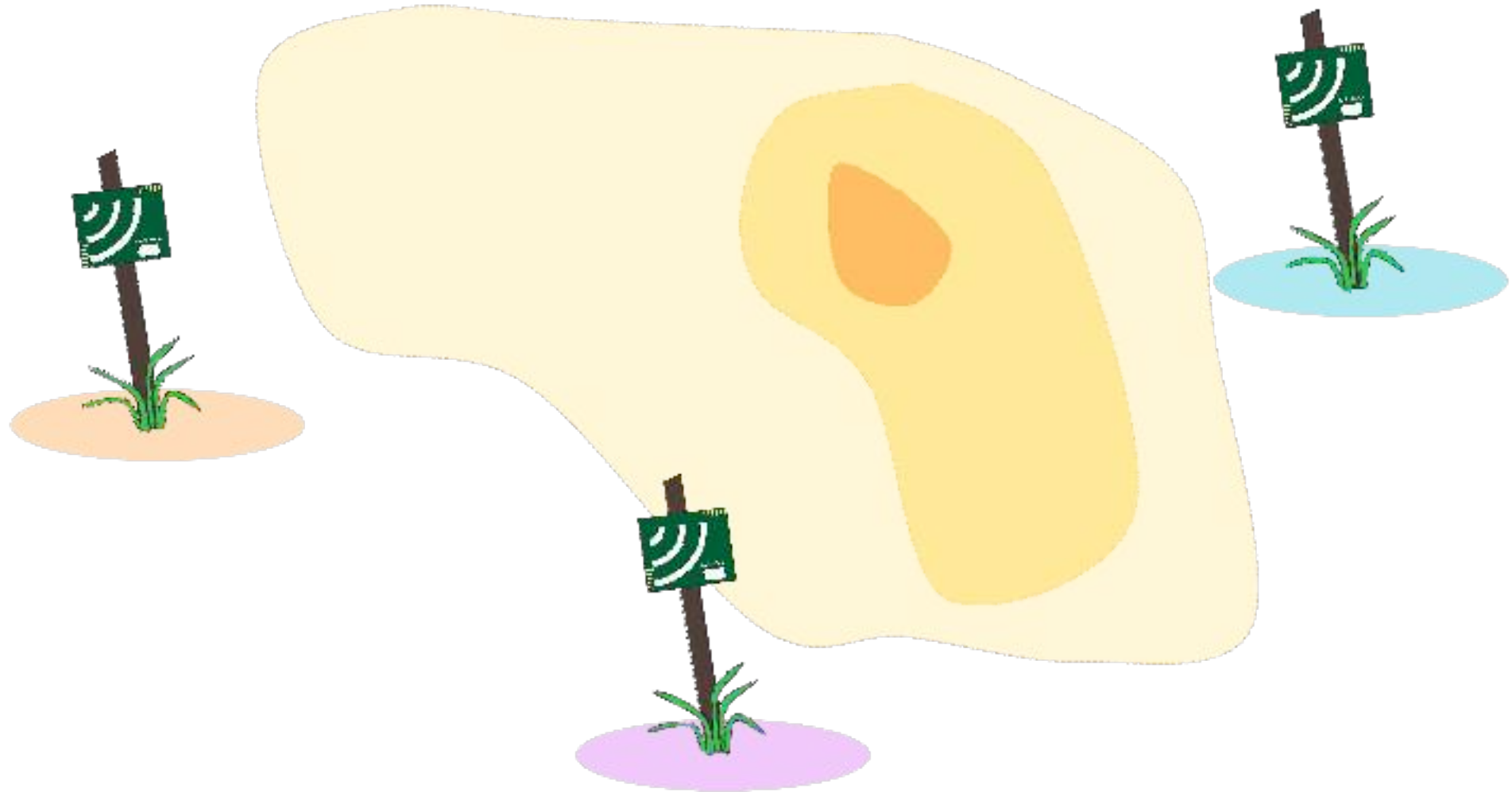
At the lab



At the lab



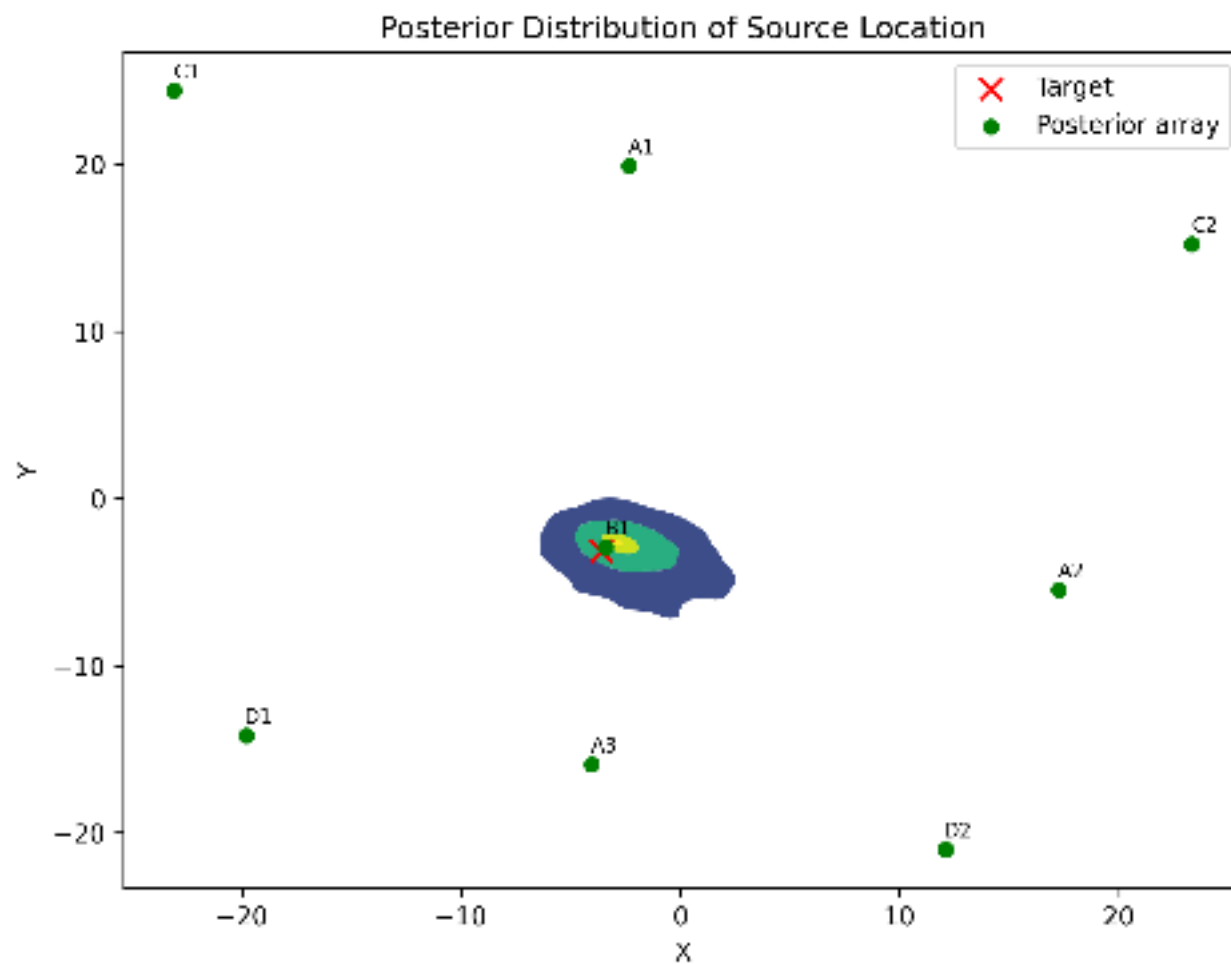
At the lab



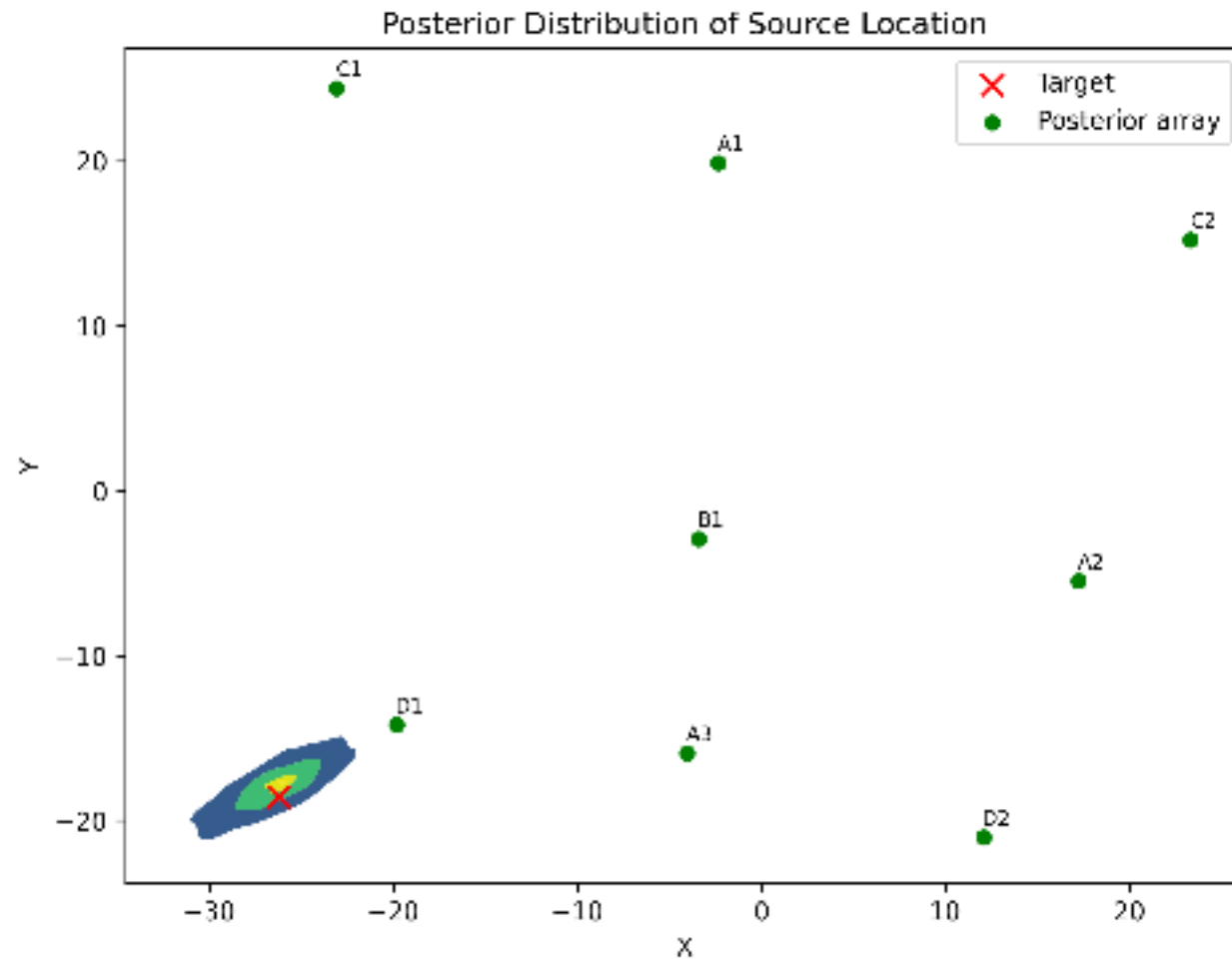
Sound source localization



Sound source localization



Sound source localization



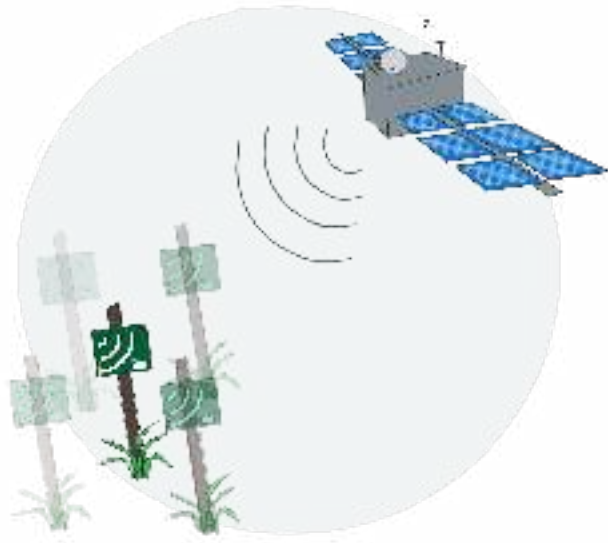
Localizing recorders



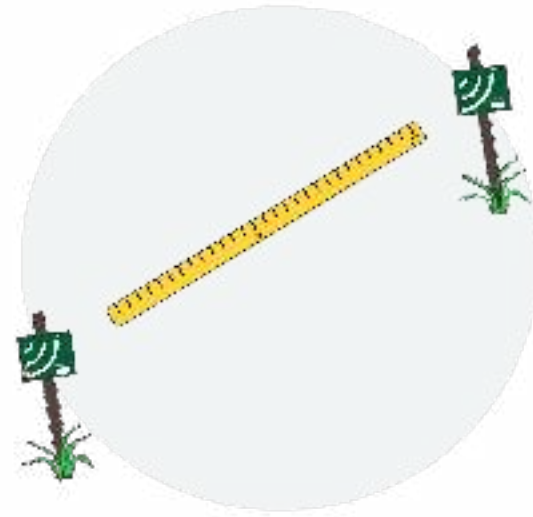
What we already know



What we already know



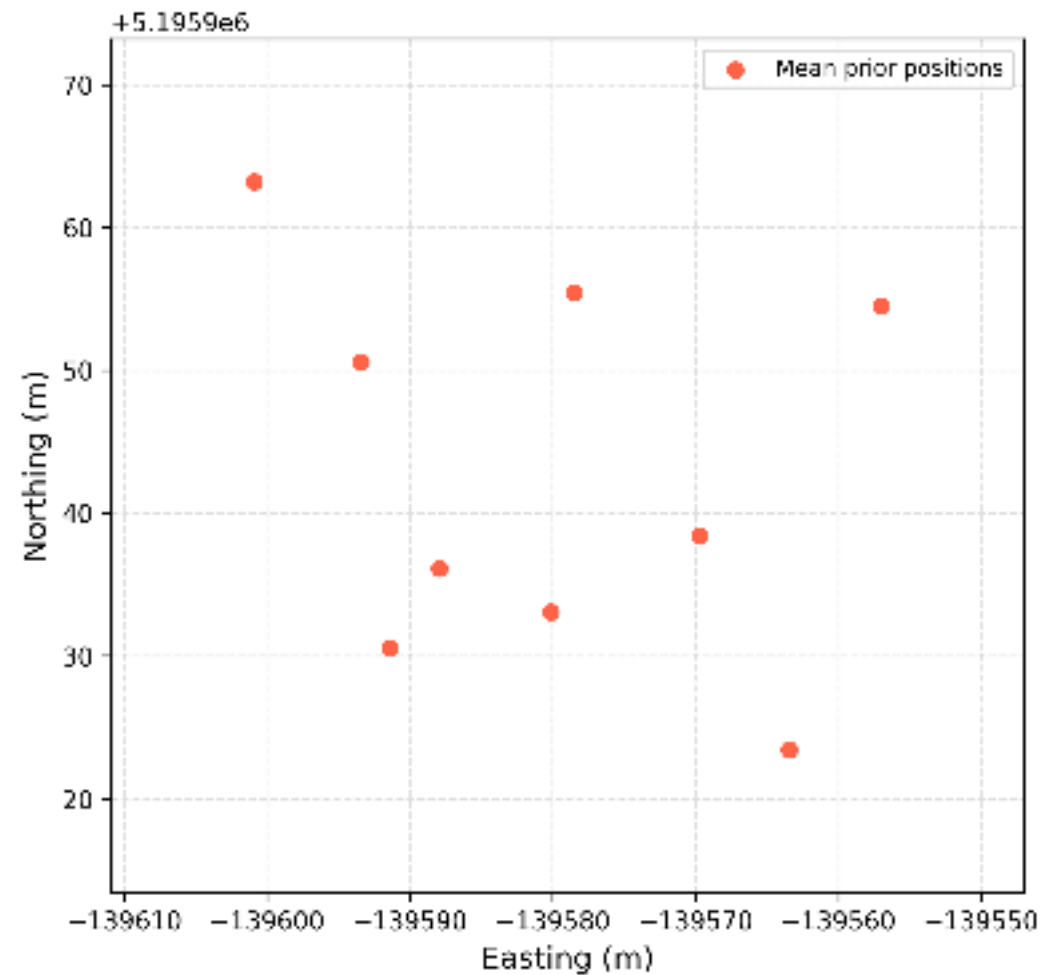
What we already know



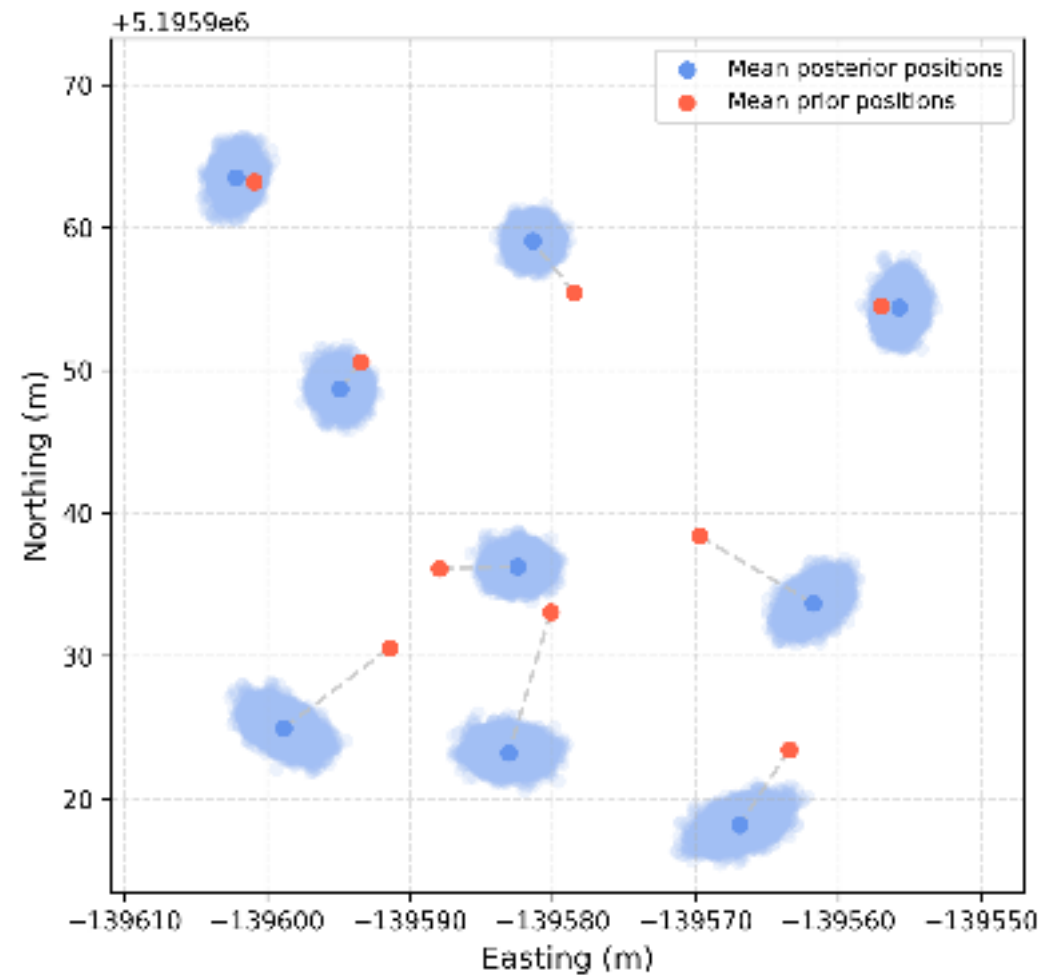
How we combine informations



How we combine informations



How we combine informations



Mapping behaviors



Linking sounds to landscape



References

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