



# Bound Together or Falling Apart? University of Strong Properties Foraging Association in Red Knots

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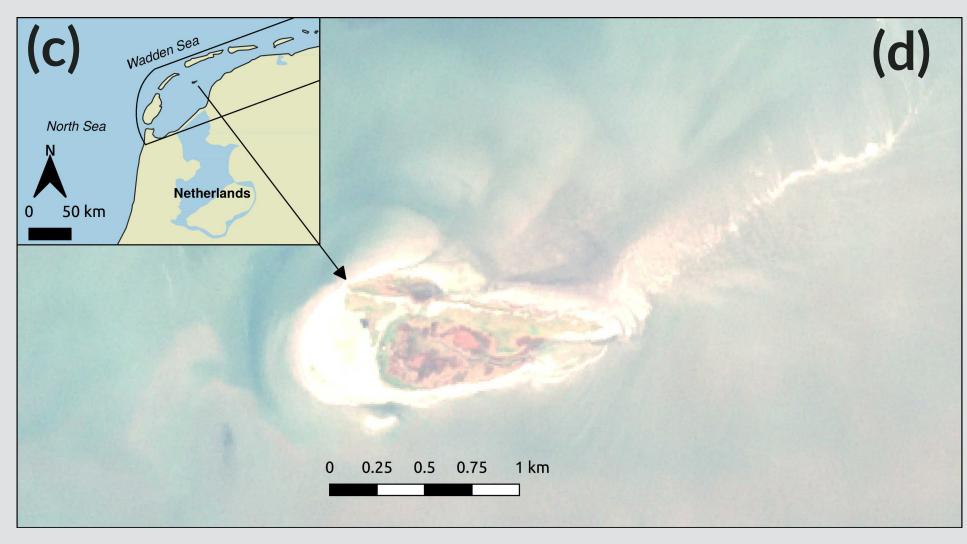
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#### Background

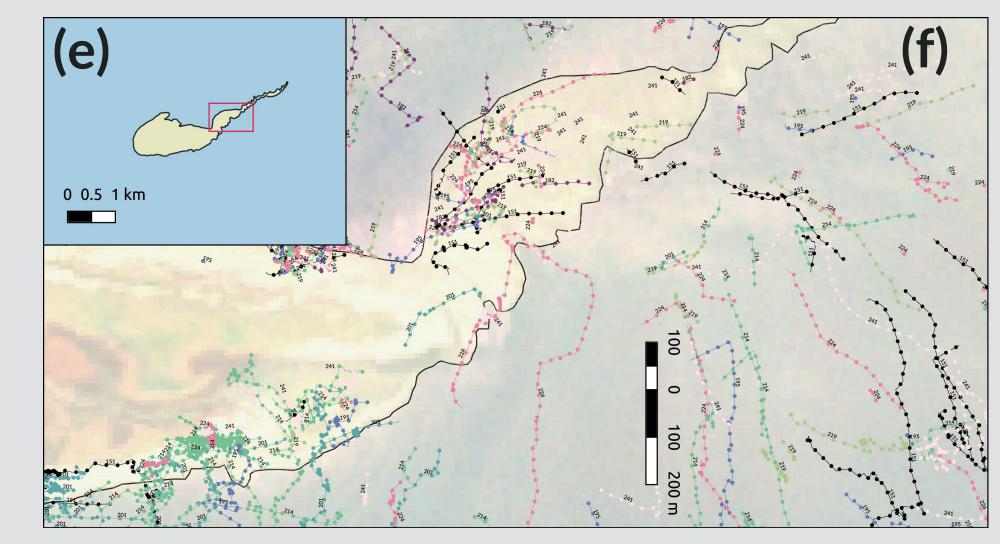
1 Waders such as red knots Calidris canutus gather in large non-breeding flocks in the Wadden Sea, where they forage on intertidal mudflats

2 Waders are highly social, but they have no 'friends' — no consistent nonrandom association between individuals (cite, cite)

3 ATLAS allows high frequency tracking of multiple knots, and calculation of pairwise 'coherence' (cite)



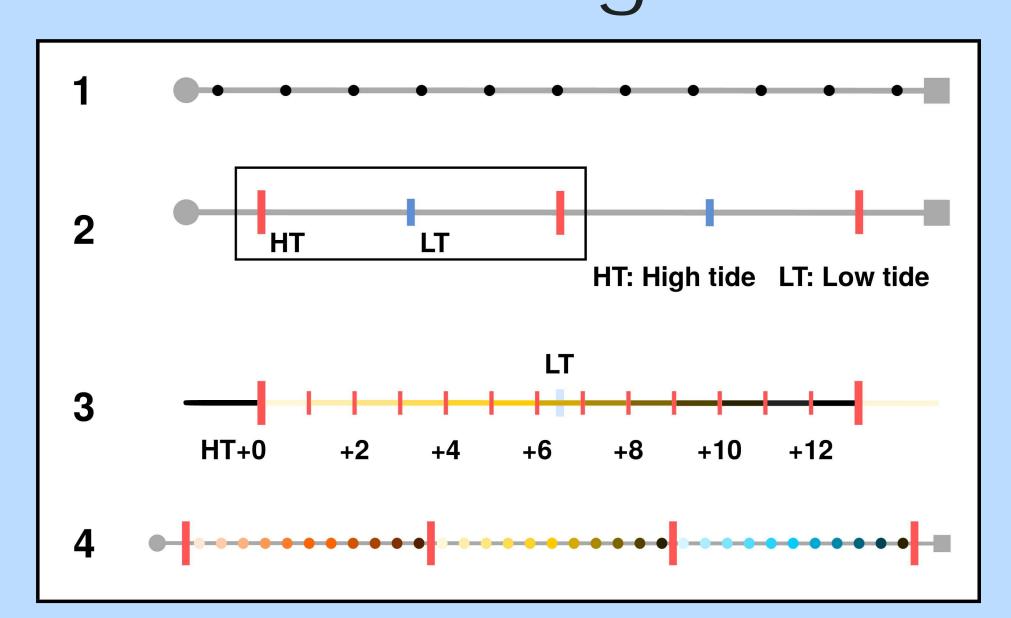




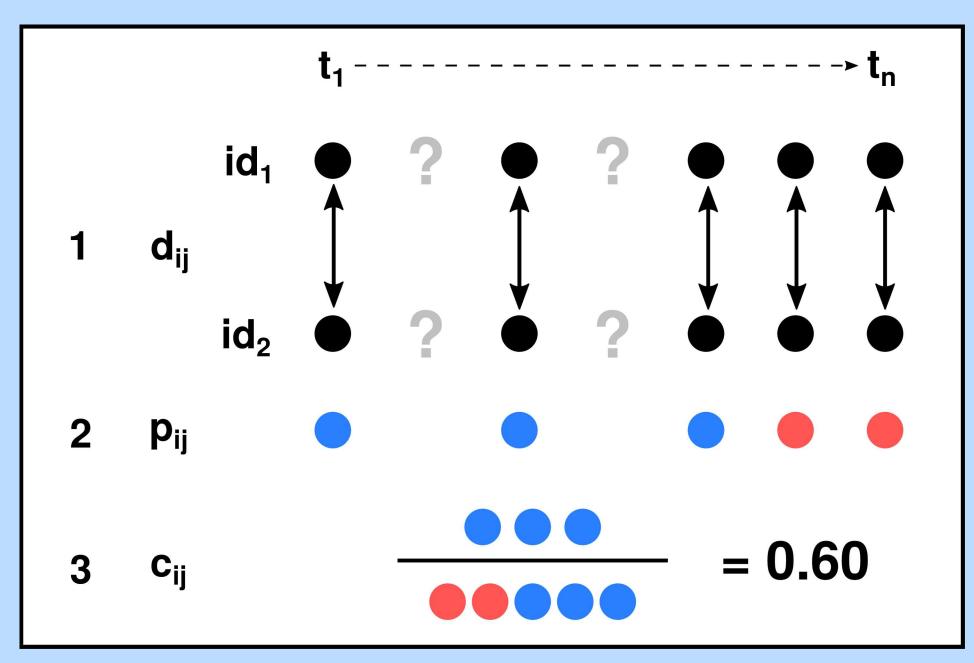
<sup>e</sup>Tracking towers — <sup>f</sup>Knot positions

<sup>a</sup>Red knot — <sup>b</sup>Wadden Sea mudlfats

## Data handling

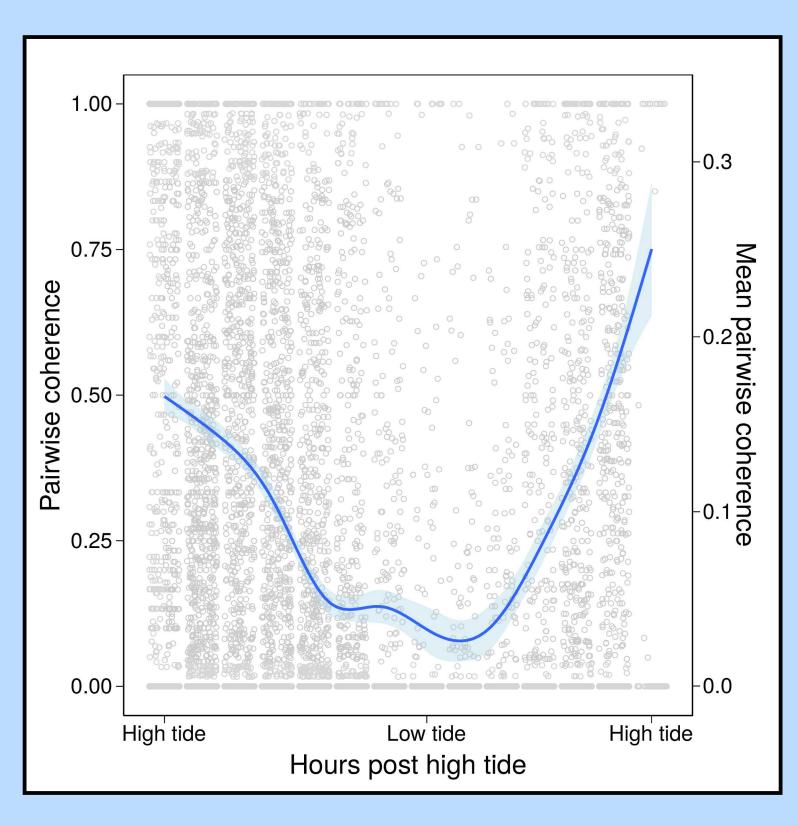


- 1 Obtained the 'lifetime' track
- 2 Identified tidal intervals from waterlevel data (cite)
- 3 Classified data by tidal interval
- 4 Classified data by hours since high tide



- 1 Distances between time-matched positions
- 2 Count distances < proximity threshold 3 Calculate coherence

#### Good title for results



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