



Paula 2.0: Second migratory track of red knot

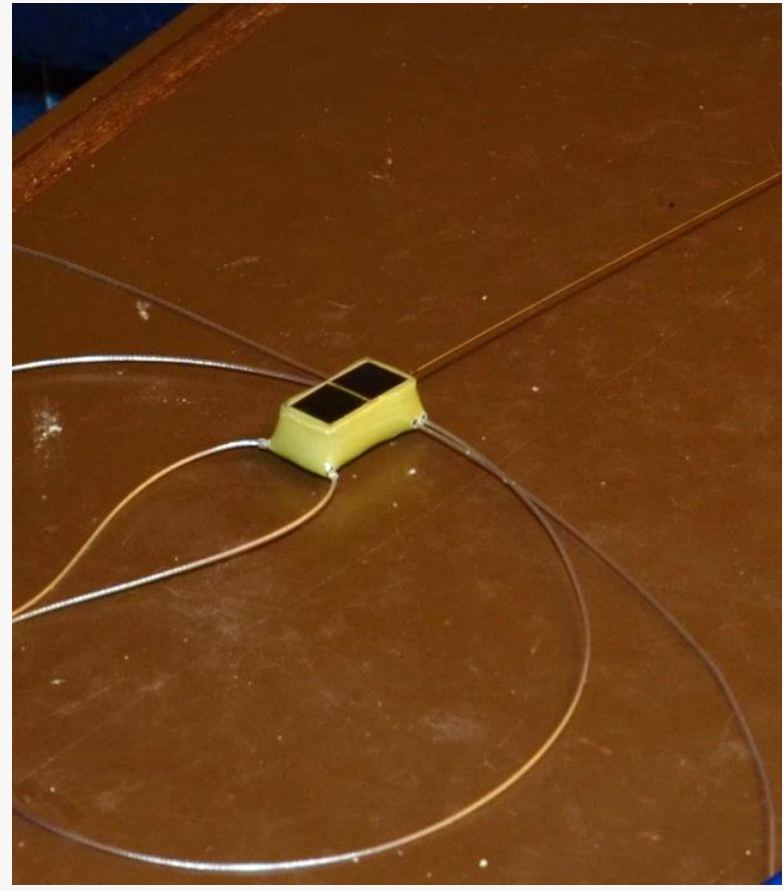
One tagged Red Knot commutes **twice** from Wadden Sea to Canadian breeding grounds and shows us the details of this migration

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The Technique



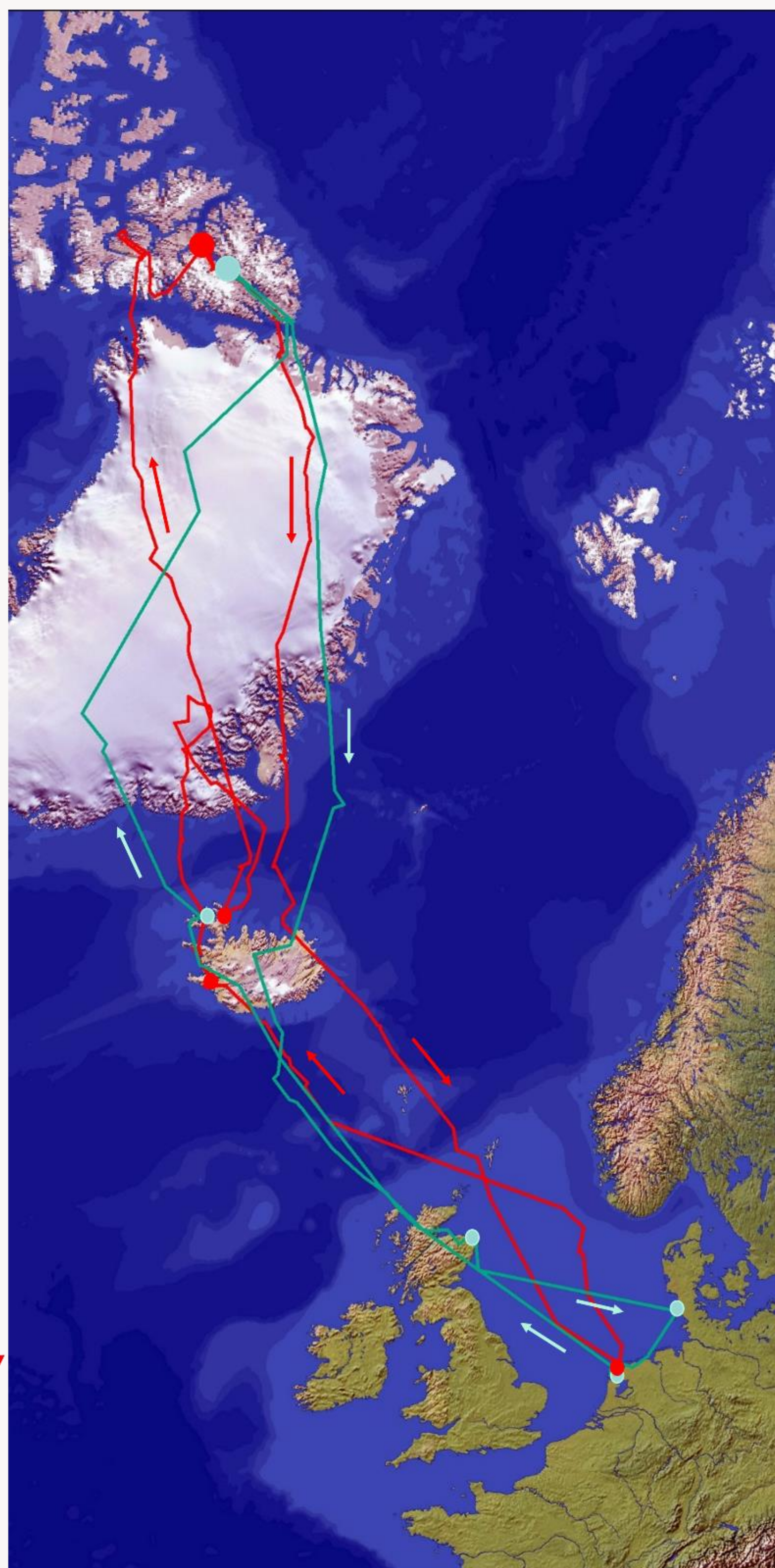
- 2g Solar PTT
- Transmits virtually continuously, *if properly charged!*
- Integrated full-body harness [1]

The Track

2016

Spring Fall

6 June-12 July
30 May
18 May-4 June
15 July
17 May



2017

Spring Fall

1 June-29 July
12-30 May
1-6 August
11 May 13 August

The Bird



One adult (2+ cy) female Red Knot (*Calidris canutus islandica*) released in the Wadden Sea on 22 April 2016 (upper). She returned to the Wadden Sea on the 15 July 2016 (lower left) and again on 14 August 2017 (lower right).



Findings

1. On southward migration some Red Knots skip Iceland *but they do visit other stopover sites in Northern Europe* [2, see 3 for an overview] **YES**
2. Female Red Knots are not site faithful to their breeding location [4] **YES**

Multiple migratory tracks of the same individual such as these first from Paula, trigger the idea that we may be able to separate the individual and environmental contributions to variation in migratory itineraries. Additional on-the-ground-observations on the 'state' (moult, abdominal profiles) of tagged individuals would enable even finer analyses of the various correlates of migratory variation.

[1] Chan, Y., Brugge, M., Tibbitts, T. L., Dekinga, A., Porter, R., Klaassen, R. H. G. & Piersma, T. 2015. Testing an attachment method for solar-powered tracking devices on a long-distance migrating shorebird. *J. Ornithol.* 157: 277.

[2] Dietz, M.W., Spaans, B., Dekinga, A., Klaassen, M., Korthals, H., van Leeuwen, C. & Piersma, T. 2010. Do red knots (*Calidris canutus islandica*) routinely skip Iceland during southward migration? *Condor* 112:48-55

[3] Davidson, N. C. & Wilson, J. R. 1992. The Migration system of the European-wintering Knot *Calidris canutus islandica*. *Wader Study Group Bull.* 64, Suppl.:39-51

[4] Tomkovich, P. S. & Solovlev, M. Yu. 1994. Site fidelity in high arctic breeding waders, Ostrich: *Journal of African Ornithology*, 65:2, 174-180.

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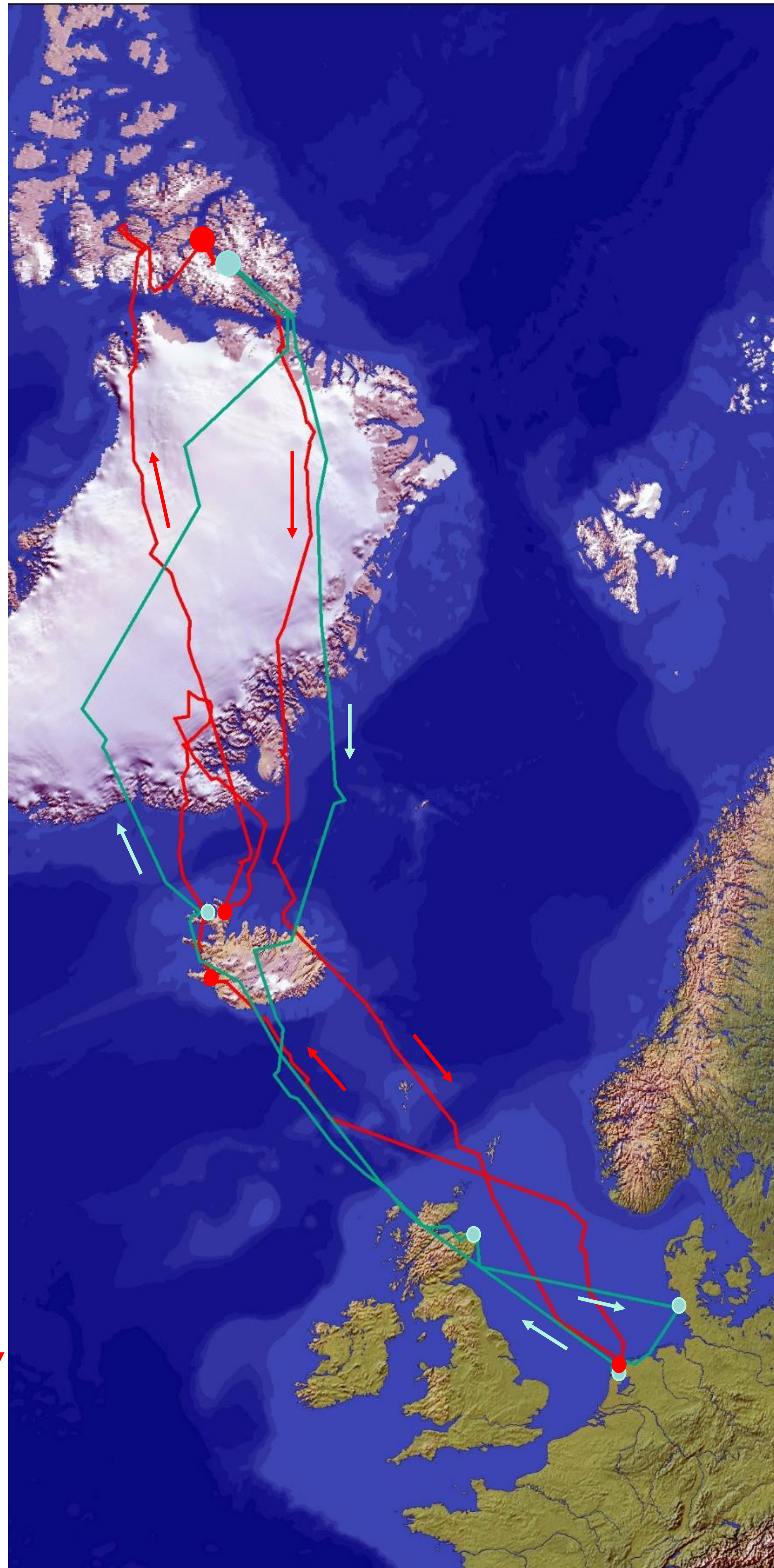
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Photo credit: Jan Wijmenga & Benjamin Gnep

Spring Fall

6 June-
12 July



Spring Fall

1 June-
29 July

