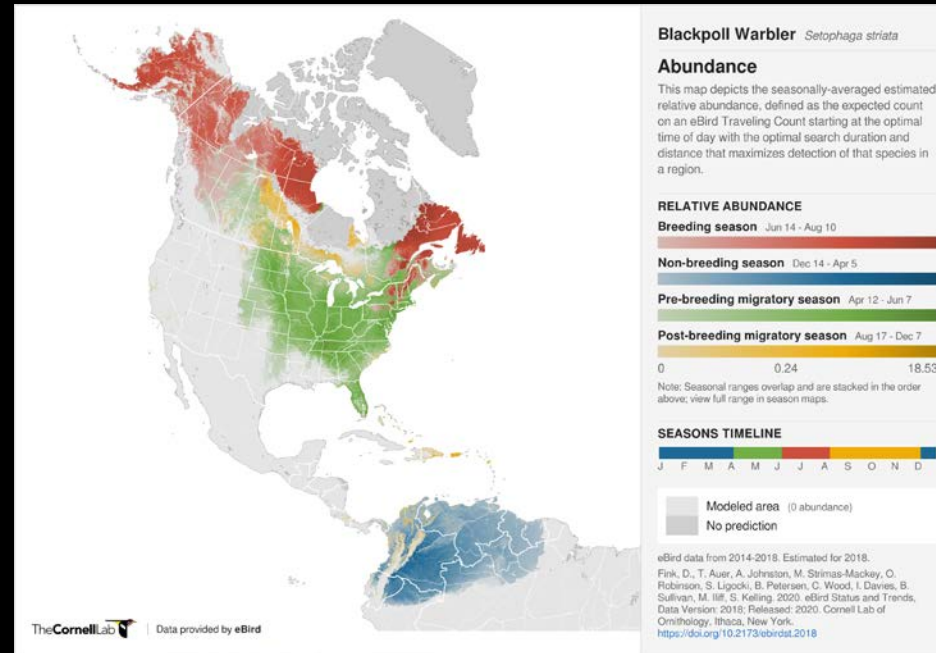
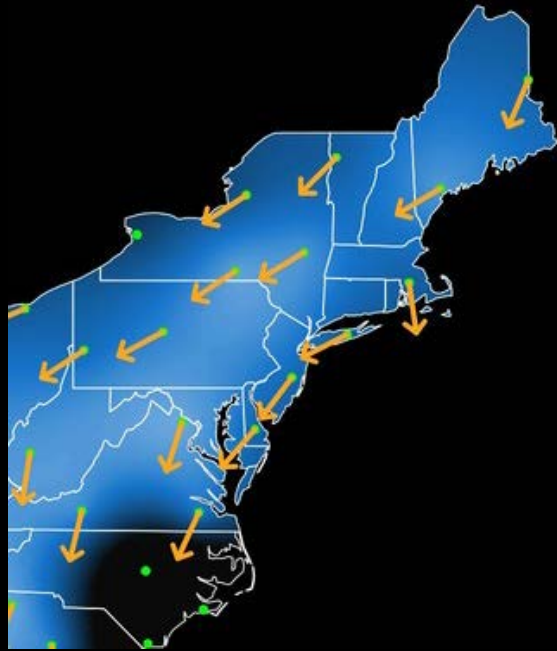
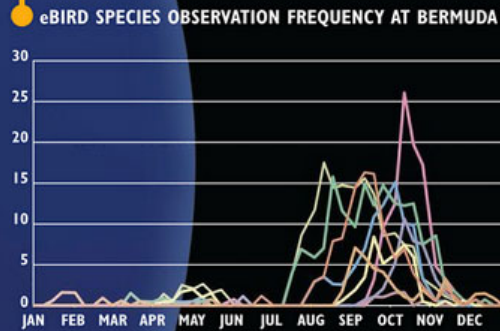


Migration of terrestrial birds in the offshore environment



the Atlantic Journey of FALL MIGRANTS

Previous research showed that Blackpoll Warblers attempt a risky open-ocean migration route in autumn. Recent analyses of eBird data—including eBird observations from Bermuda (below)—document several other migratory bird species migrating out over the Atlantic Ocean as well. Seen from space, the risk makes sense. The birds are taking a direct route from North America to South America.



- WHITE-RUMPED SANDPIPER
- AMERICAN GOLDEN-PLOVER
- BOBOLINK
- PECTORAL SANDPIPER
- RED-EYED VIREO
- YELLOW-BILLED CUCKOO
- BLACKPOLL WARBLER
- SOLITARY SANDPIPER
- CONNECTICUT WARBLER

A boreal songbird's 20,000 km migration across North America and the Atlantic Ocean



Blackpoll Warbler southward migration

- Breeding sites
- ▲ Stopover sites
- Estimated over-wintering grounds
- Migration tracks (do not represent actual migratory paths)

DeLuca, WV, Woodworth, BK, Mackenzie, SA, Newman, AEM, Cooke, H, Phillips, LM, Freeman, N, Sutton, AO, Tauzer, L, McIntyre, C, Stenhouse, I, Weidensaul, S, Taylor, PD & Norris, DR. 2019. A boreal songbird's 20,000 km migration across North America and the Atlantic Ocean. *Ecology*.



Coastal Marine Institute

Interactions Between Migrating Birds and Offshore Oil and Gas Platforms in the Northern Gulf of Mexico

Final Report



“Migration Over the Gulf Project” (MOGP), provides data and analyses of trans-Gulf bird migration from three years of intensive study on 13 offshore platforms in the northern Gulf of Mexico.

Platforms have three primary proximate impacts on migrant birds. They:

- 1) provide habitat for resting and refueling;
- 2) induce nocturnal circulations; and
- 3) result in some mortality through collisions.

Coastal Marine Institute

Interactions Between Migrating Birds and Offshore Oil and Gas Platforms in the Northern Gulf of Mexico

Final Report



“The impact of nocturnal circulation events on spring and fall trans-Gulf migrants remains poorly known, and this phenomenon should be examined in a focused observational study . . .

. . . the goals of such a study should be to quantify in greater detail the dimensions of the circulation phenomenon, to try to determine why some platforms often induce circulations and others never do, to assess the rate of turnover during major circulation events, and to model the energetic impacts on migrants.”

Coastal Marine Institute

Interactions Between Migrating Birds and Offshore Oil and Gas Platforms in the Northern Gulf of Mexico

Final Report



Circulations were highly variable in size and composition. The numbers of birds involved varied from a single individual to many hundreds of migrants.

Although a wide variety of species was recorded in circulations, herons, shorebirds, swallows, and warblers were the dominant components.

Certain species seemed especially prone to becoming involved in circulations, including Pied-billed Grebe, Sora, Upland Sandpiper, American Golden-Plover, Bay-breasted Warbler, and Magnolia Warbler.

Data on terrestrial birds in offshore environments

Ambio 2015, 44(Suppl. 4):S557–S571
DOI 10.1007/s13280-015-0707-z



Developing an automated risk management tool to minimize bird and bat mortality at wind facilities

Julia Robinson Willmott, Greg M. Forcey,
Lauren A. Hooton

High Seas				
All Years				
Overview				
267 Species 4475 Checklists				
Last Seen				
SPECIES NAME				
COUNT				
DATE				
BY				
bird sp. - Aves sp.				
passerine sp. - Passeriformes sp.				
warbler sp. (Parulidae sp.)				
1 Prairie Warbler				
2 Palm Warbler				
3 Blackpoll Warbler				
4 Yellow Warbler				
5 Common Yellowthroat				
6 Nashville Warbler				
7 Black-and-white Warbler				



3	Blackpoll Warbler	Setophaga striata	1	8 Sep 2013	Finn Jørgensen	
Orphan Basin, High Seas						
Only one seen today.						
4	Yellow Warbler	Setophaga petechia	2	17 Aug 2019	James (Jim) Holmes	
Carnival Cruise Glory 8:17:19 Leg 10 of 25 (25.476, -87.831), High Seas						
giving flight calls, all yellow						
5	Common Yellowthroat	Geothlypis trichas	1	11 Sep 2013	Finn Jørgensen	
Orphan Basin, High Seas						
Still around our deck.						
6	Nashville Warbler	Liothyris ruticapilla	1	28 Aug 2014	Laurie Dugan	
Western Atlantic, High Seas						
https://scontent-iad.xx.fbcdn.net/hphotos-xpt1/v/t1.0-9/10606271_10105276260019500_838258681576800627_n.jpg?oh=1e0e05c58729926288e844071f8677cd&oe=55A2996F						
Bird landed on vessel in close proximity to observers. Seemed unbothered by people.						
Warbler-sized bird. Gray upper parts with yellow belly and neck. White eye ring.						
I embedded a link to a photo on my Facebook account (which may or may not work) as I do not have a photo-sharing account.						
7	Black-and-white Warbler	Mniotilta varia	1	11 Nov 2013	Finn Jørgensen	
Orphan Basin, High Seas						
This bird is not verified, no photo, we can not count it, but important to register a possible Black and white Warbler. Most important is to register it as a warbler seen out here on this late date. Maybe best to register as a warbler sp with comment?						
8	Northern Waterthrush	Parkesia noveboracensis	1	17 Sep 2013	Finn Jørgensen	
Orphan Basin, High Seas						
Landed on deck, seen during the whole day.						

S566

Ambio 2015, 44(Suppl. 4):S557–S571

Table 3 Call counts of all bird species (presented in taxonomic order) detected by nocturnal flight call analyses and manually identified to species or taxonomic group. Data were collected at FPSLT deployment (03 April–12 December 2012) during spring (03 April–31 May), breeding season (01 June–15 July), fall (16 July–31 October), and winter (01 November–12 December)

Common Name	Scientific Name	Spring	Breeding	Fall	Winter	Total
Species level identifications						
Royal tern	<i>Thalasseus maximus</i>	1	0	0	0	1
Least bittern	<i>Ixobrychus exilis</i>	0	0	1	0	1
Green heron	<i>Butorides virescens</i>	0	0	7	0	7
Veery	<i>Catharus fuscescens</i>	0	0	14	0	14
Gray-cheeked thrush	<i>Catharus minimus</i>	0	0	81	0	81
Swainson's thrush	<i>Catharus ustulatus</i>	0	0	114	0	114
Hermit thrush	<i>Catharus guttatus</i>	0	0	0	20	20
Wood thrush	<i>Hylocichla mustelina</i>	1	0	4	0	5
American pipit	<i>Anthus rubescens</i>	0	0	0	5	5
Ovenbird	<i>Seiurus aurocapilla</i>	13	0	76	0	89
Northern waterthrush	<i>Parkesia noveboracensis</i>	0	0	9	0	9
Black-and-white warbler	<i>Mniotilta varia</i>	0	0	33	0	33
Prothonotary warbler	<i>Protonotaria citrea</i>	1	0	0	0	1
Common yellowthroat	<i>Geothlypis trichas</i>	12	0	21	0	33
American redstart	<i>Setophaga ruticilla</i>	0	0	69	0	69
Cape May warbler	<i>Setophaga tigrina</i>	0	0	476	0	476
Northern parula	<i>Setophaga americana</i>	3	0	209	0	212
Magnolia warbler	<i>Setophaga magnolia</i>	0	0	6	0	6
Bay-breasted warbler	<i>Setophaga castanea</i>	0	0	14	0	14
Blackburnian warbler	<i>Setophaga fusca</i>	0	0	4	0	4
Yellow warbler	<i>Setophaga petechia</i>	2	0	2	0	4
Chestnut-sided warbler	<i>Setophaga pensylvanica</i>	0	0	2	0	2
Blackpoll warbler	<i>Setophaga striata</i>	16	0	32	0	48
Black-throated blue warbler	<i>Setophaga caerulescens</i>	1	0	54	0	55
Palm warbler	<i>Setophaga palmarum</i>	1	0	324	0	325
Yellow-rumped warbler	<i>Setophaga coronata</i>	7	0	196	0	203
Canada warbler	<i>Cardellina canadensis</i>	2	0	0	0	2
Chipping sparrow	<i>Spizella passerina</i>	18	0	0	0	18
Savannah sparrow	<i>Passerculus sandwichensis</i>	0	0	10	0	10
White-throated sparrow	<i>Zonotrichia albicollis</i>	24	0	1	0	25
Dark-eyed junco	<i>Junco hyemalis</i>	1	0	0	0	1
Blue grosbeak	<i>Passerina caerulea</i>	0	0	1	0	1
Indigo bunting	<i>Passerina cyanea</i>	30	0	9	0	39
Bobolink	<i>Dolichonyx oryzivorus</i>	0	0	11	0	11
Genus-level identifications						
Thrush sp.	<i>Catharus sp.</i>	0	0	29	0	29
Setophaga wood warbler sp.	<i>Setophaga sp.</i>	18	0	134	0	152
Family-level identifications						
Species belonging to wood warblers family	<i>Parulidae sp.</i>	4	0	20	2	26
Species belonging to buntings family	<i>Emberizidae sp.</i>	0	0	3	0	3
Order-level identifications						
Species belonging to the order of passerines	<i>Passeriformes</i>	43	3	431	7	484
Class-level identifications						
Birds	<i>Aves</i>	6	1	1	0	8
Total		204	4	2398	34	2640







NOAA Surveys (Birds, Mammals, Fisheries) – Diversity Offshore (T. Johnson, photos)



NOAA Surveys (Birds, Mammals, Fisheries) – Diversity Offshore (T. Johnson, photos)



NOAA Surveys (Birds, Mammals, Fisheries) – Diversity Offshore (T. Johnson, photos)

Flocking (intra- and interspecific behaviors, stopover) and predation



The **Cornell** Lab of Ornithology

BirdCast

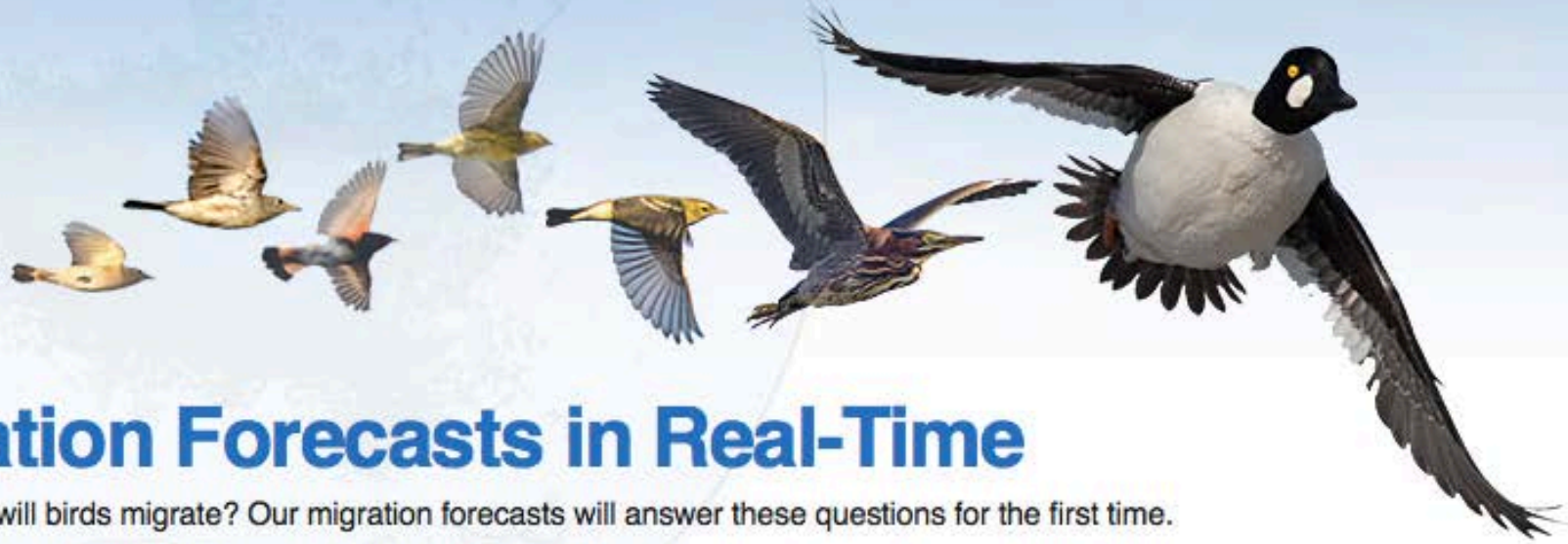
[News & Announcements](#)

[Research](#)

[People](#)

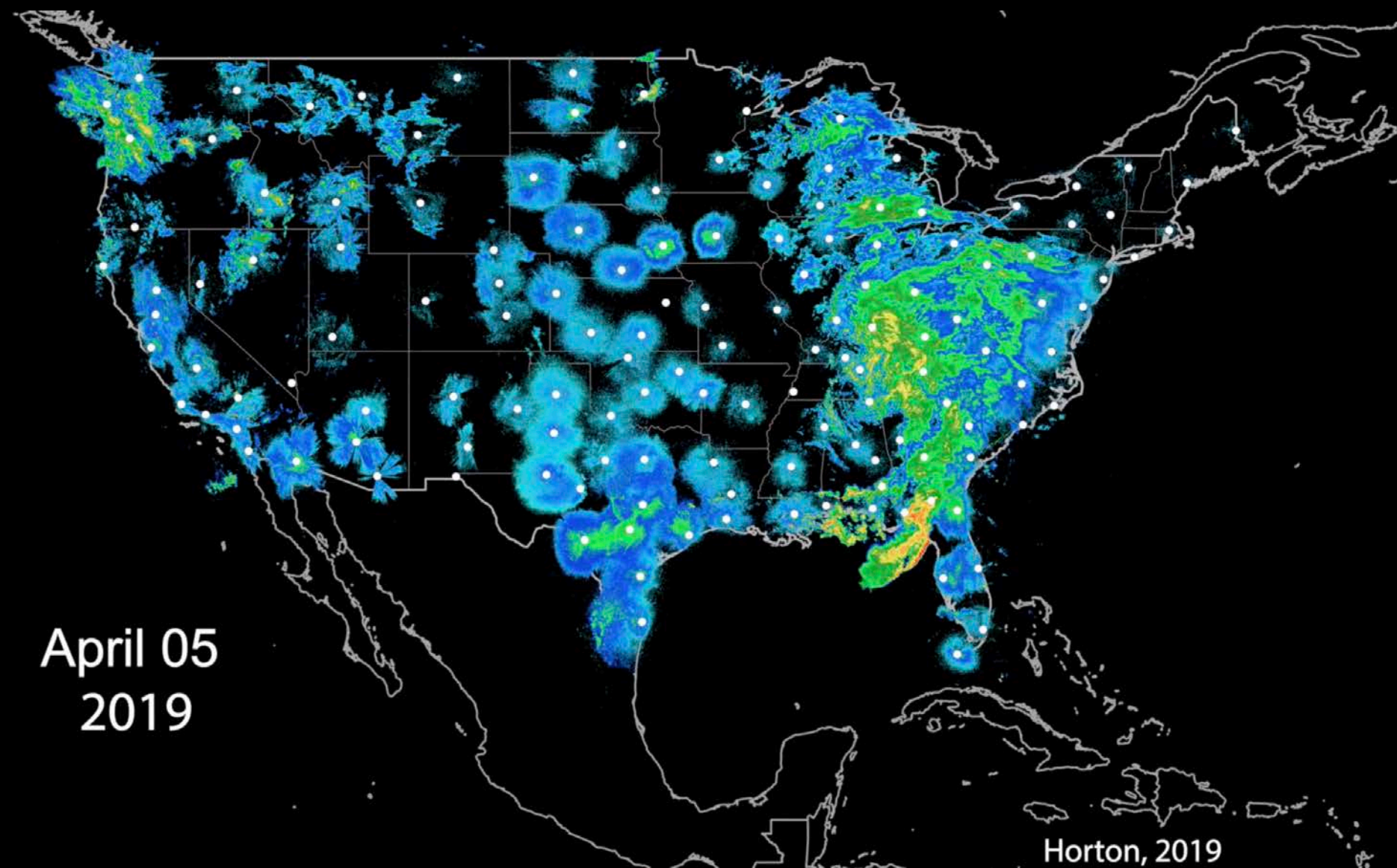
[Scientific Discussions](#)

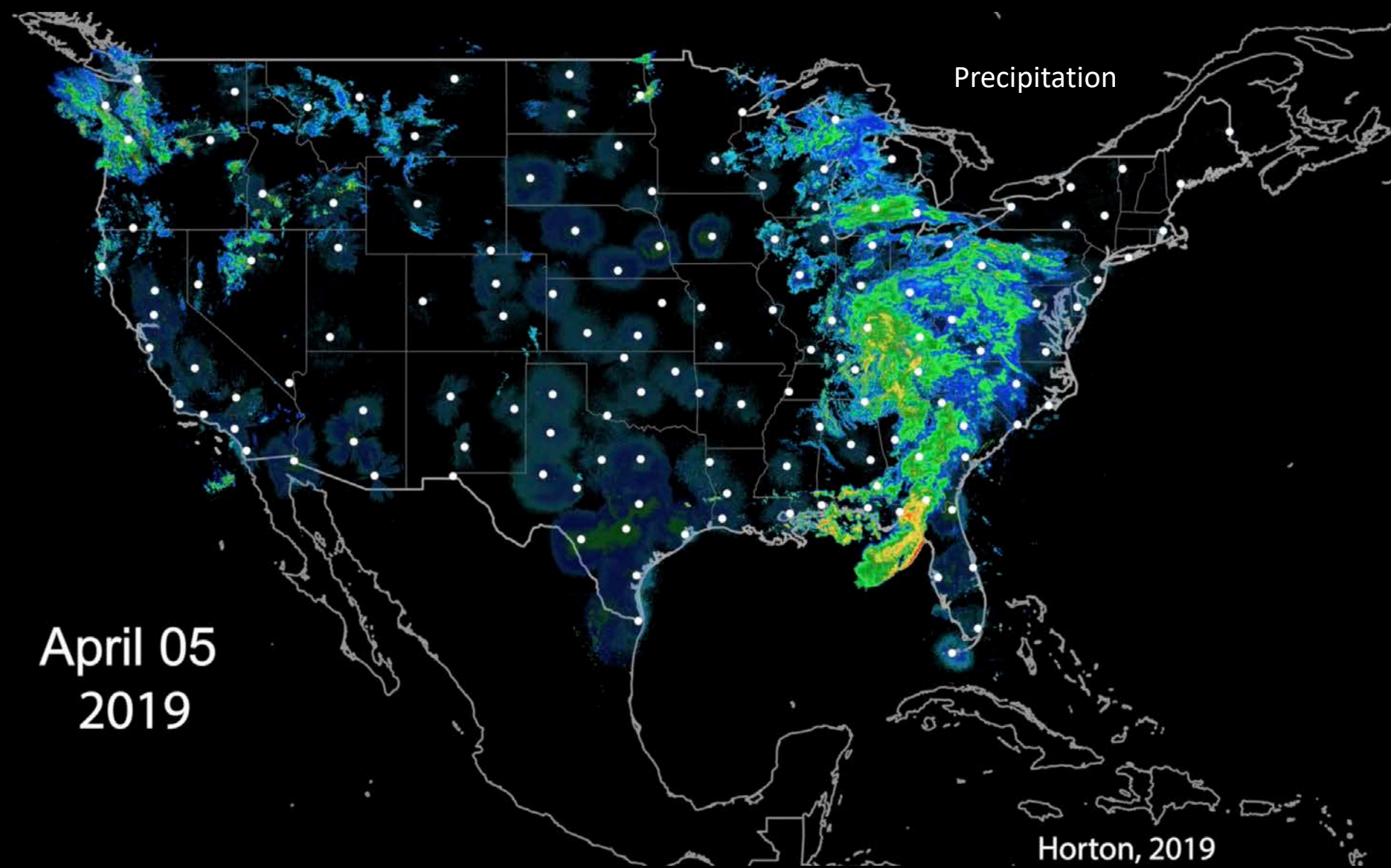
[Live Migration Maps](#)



Bird Migration Forecasts in Real-Time

When, where, and how far will birds migrate? Our migration forecasts will answer these questions for the first time.

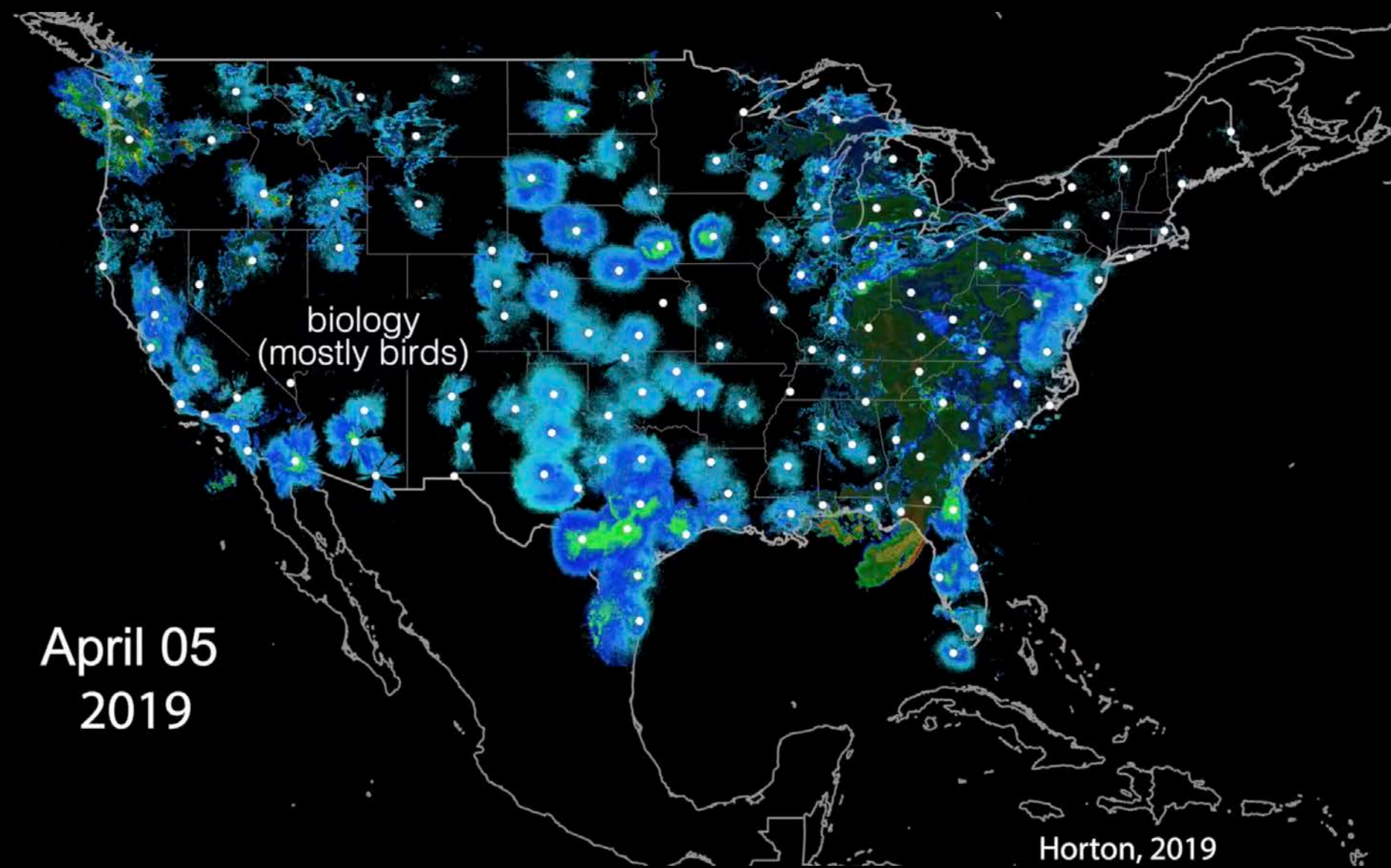




April 05
2019

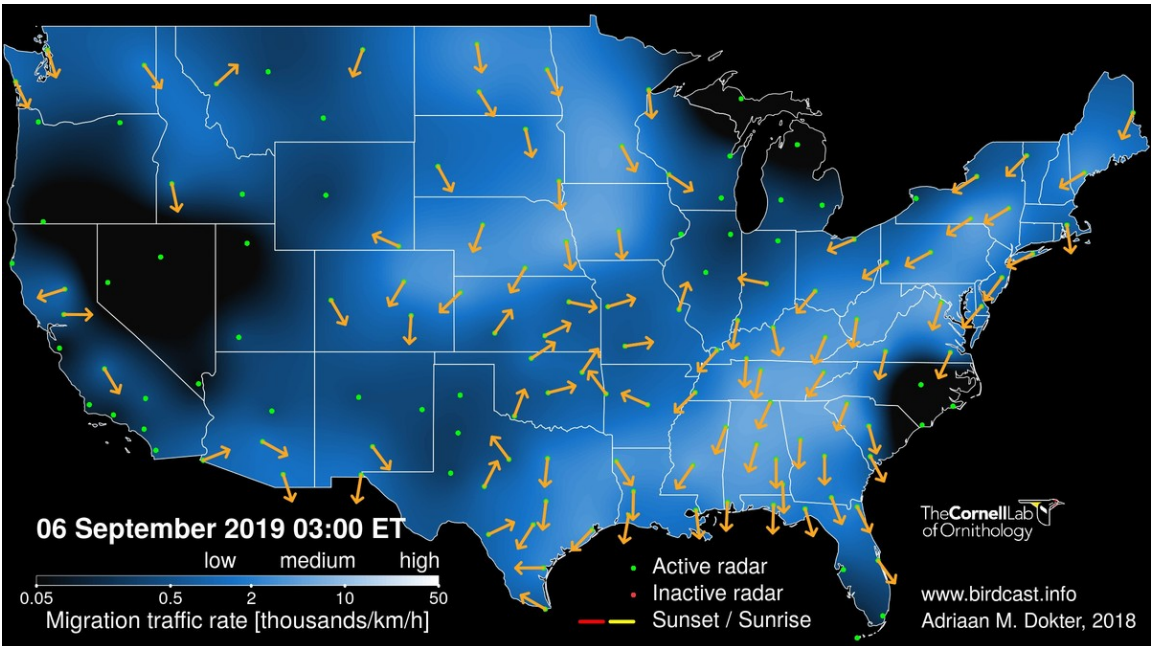
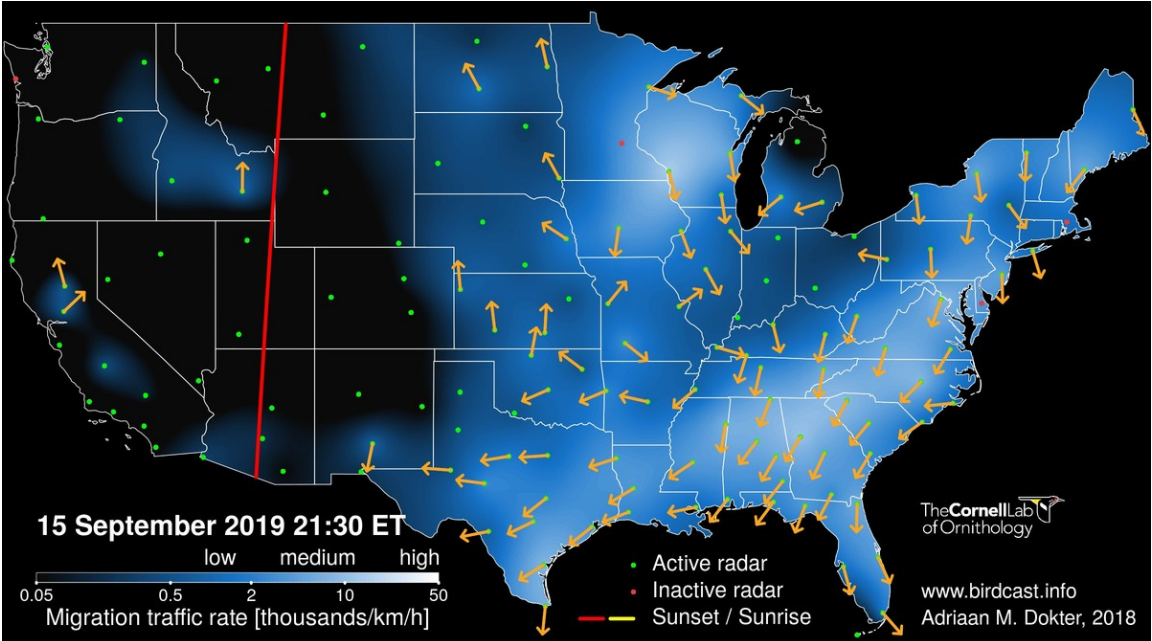
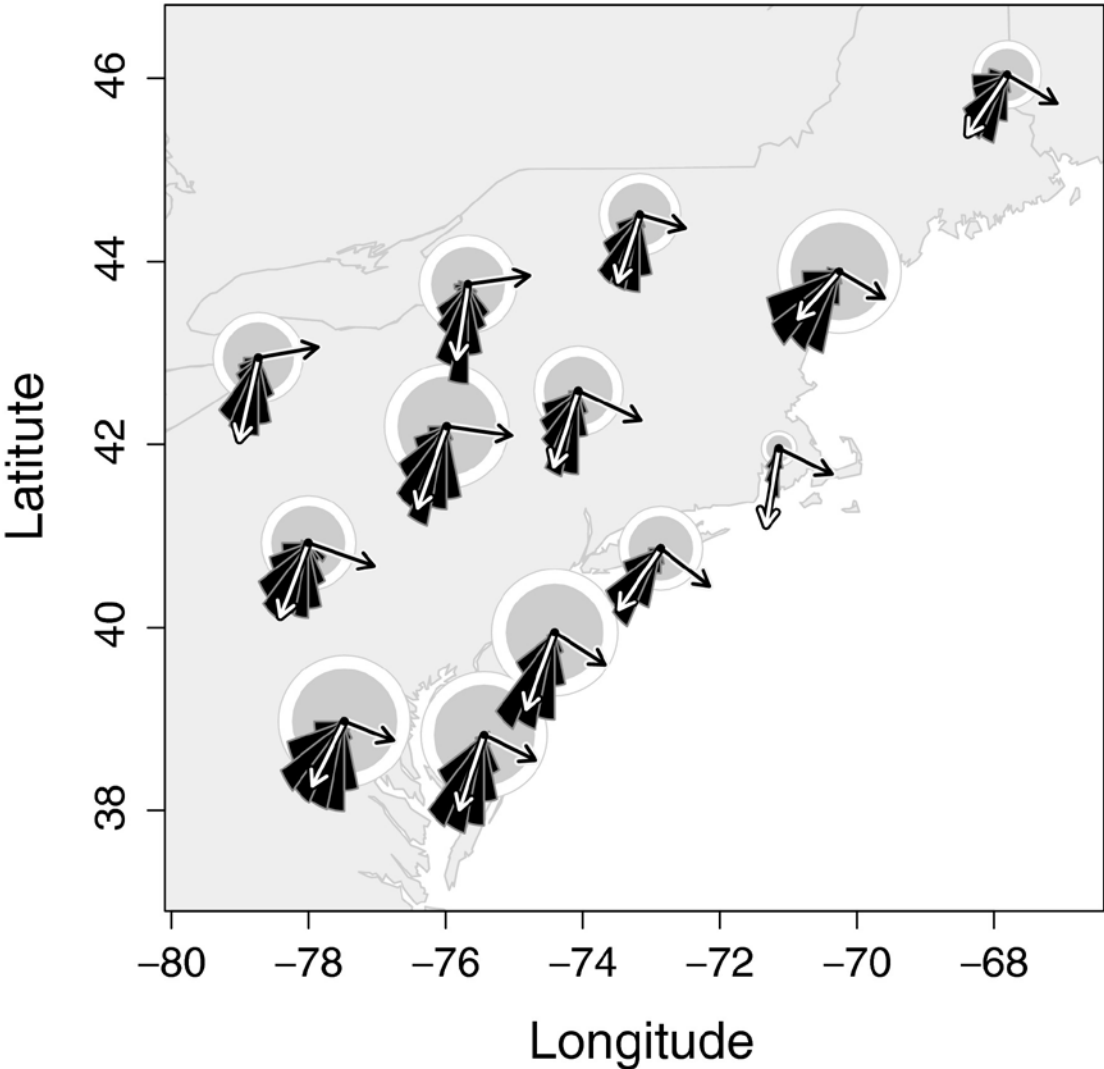
Precipitation

Horton, 2019

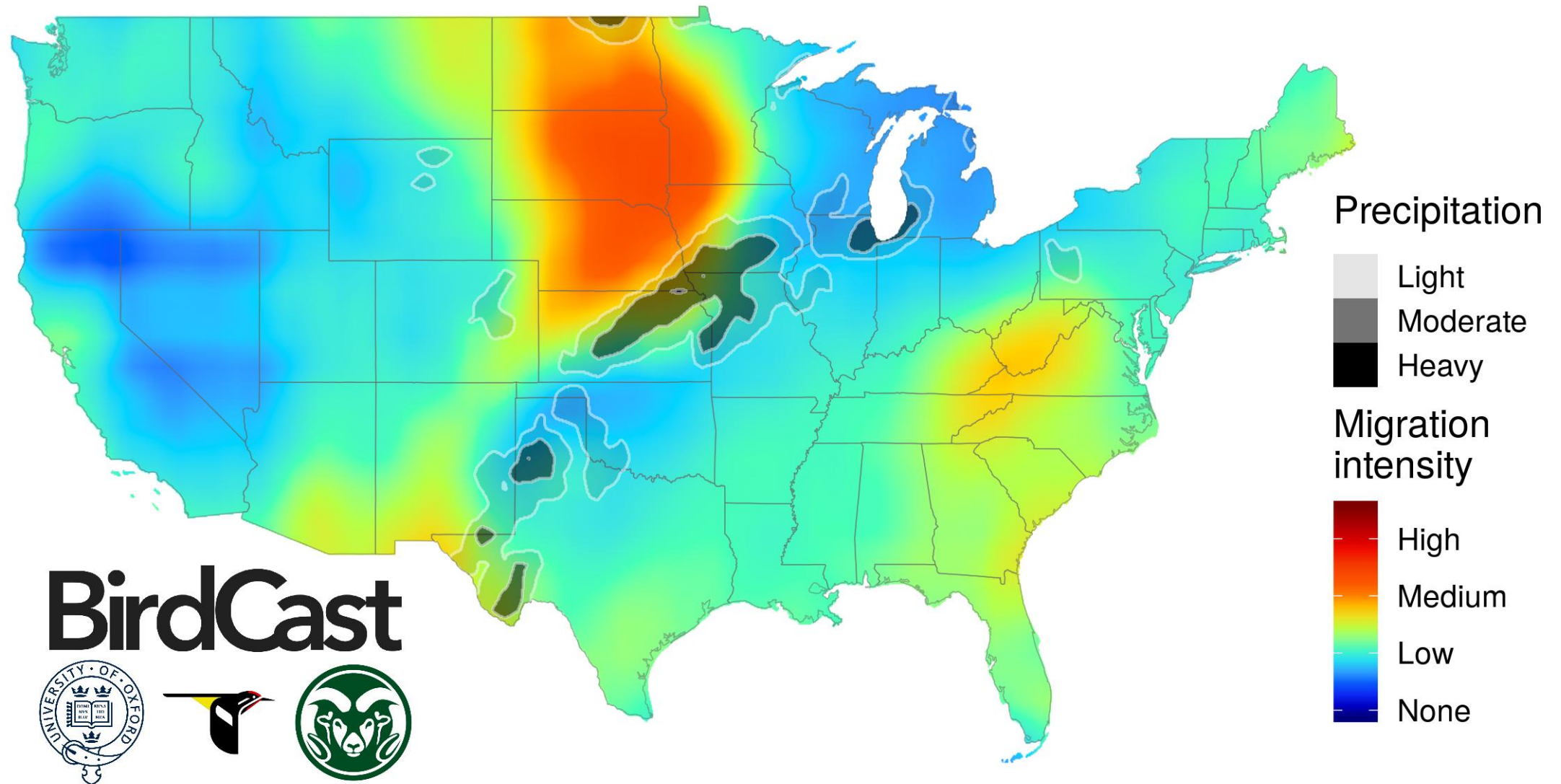




Migration over the western North Atlantic ...



Night of September 21-22, 2019

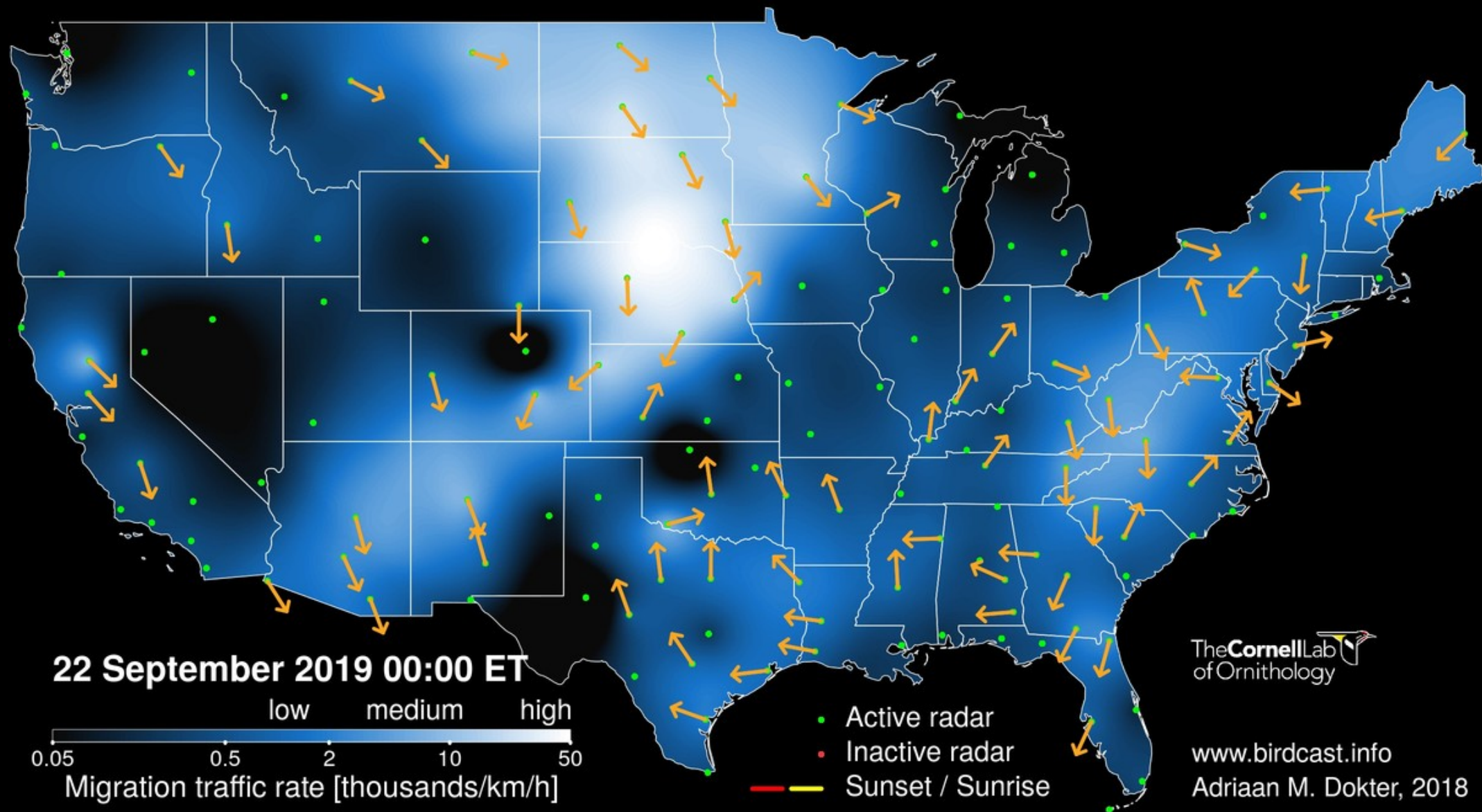


BirdCast



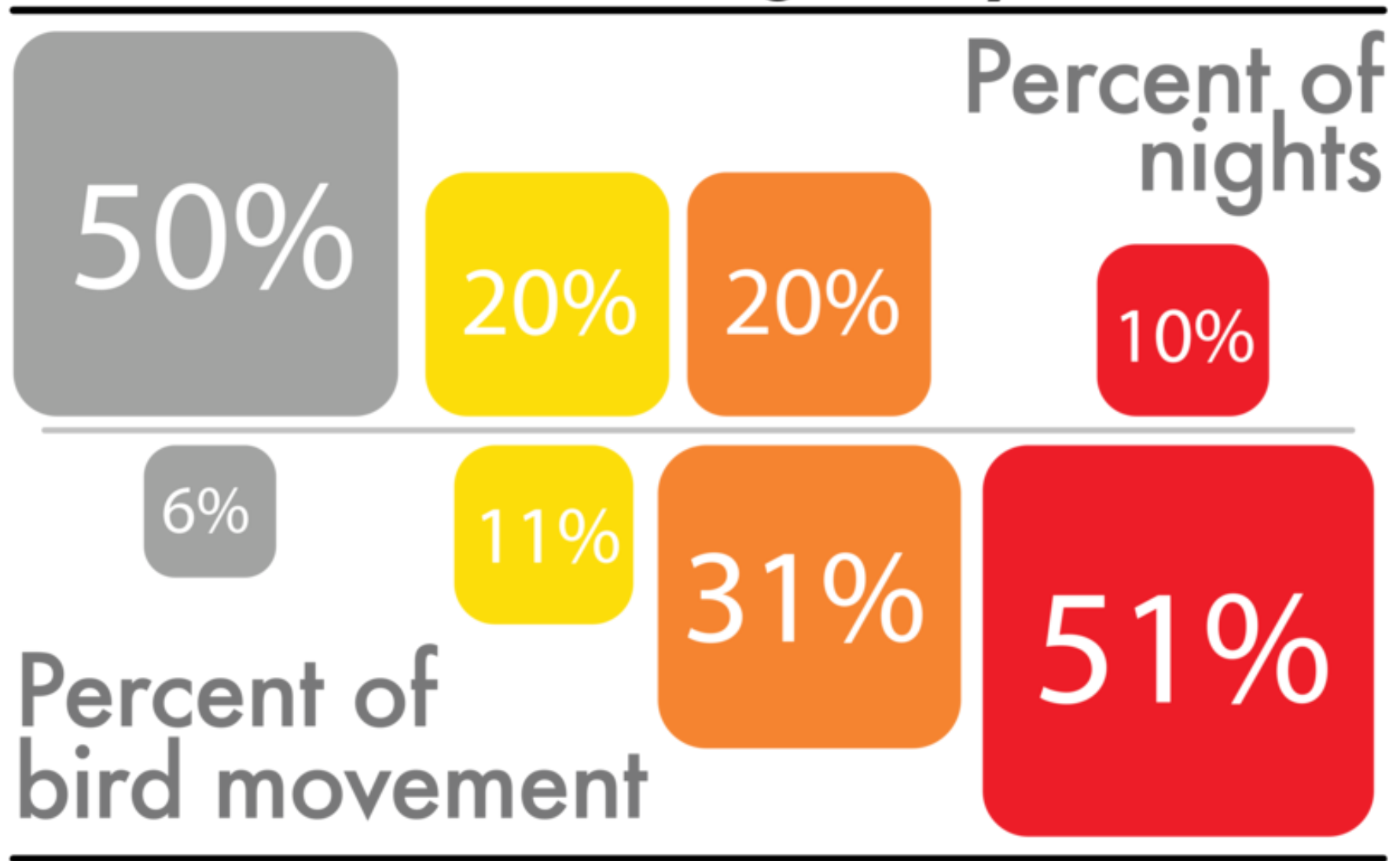
Van Doren and Horton 2019

Generated 19 Sep 2019 at 18:00 UTC (19 Sep at 14:00 ET)



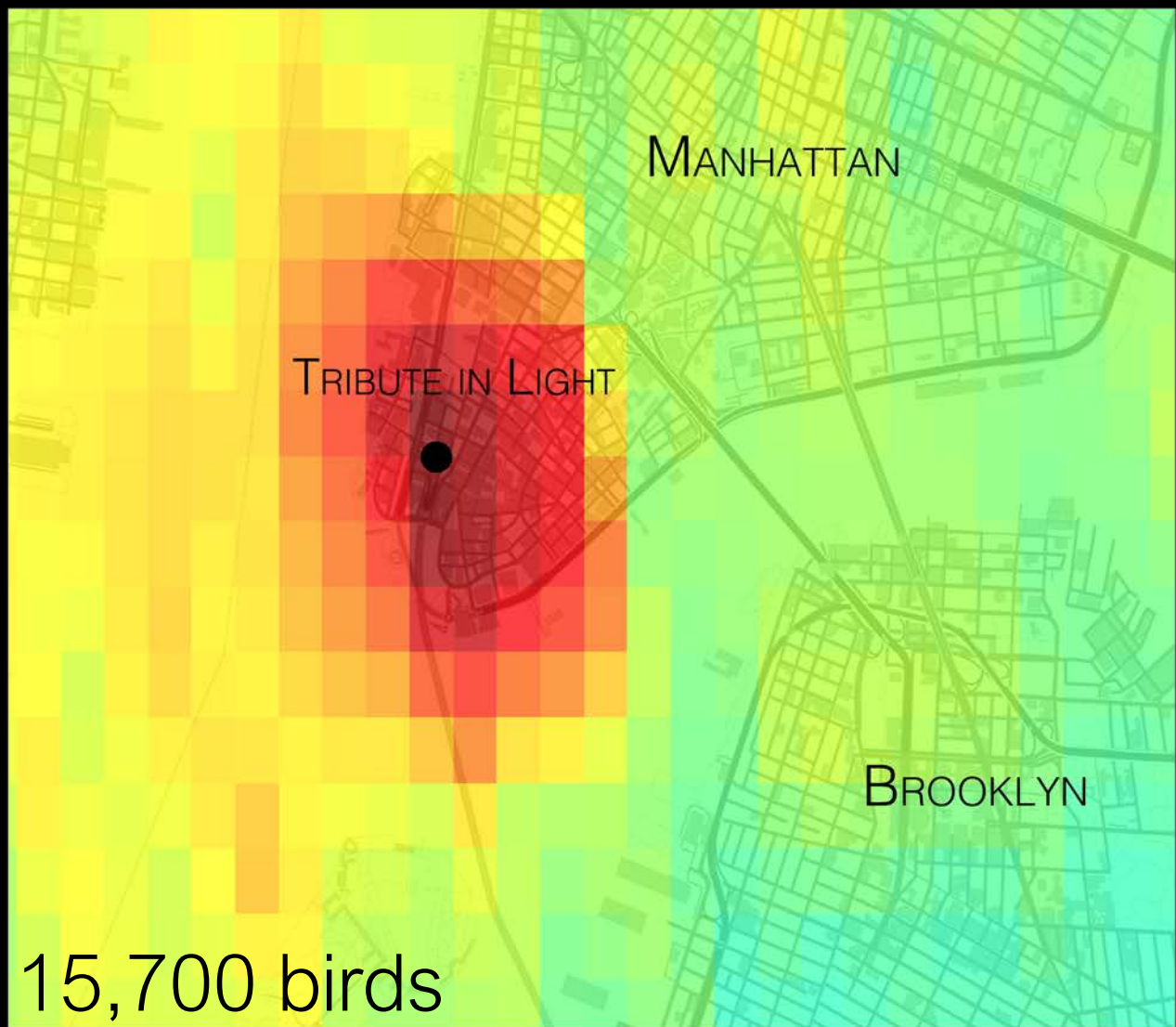
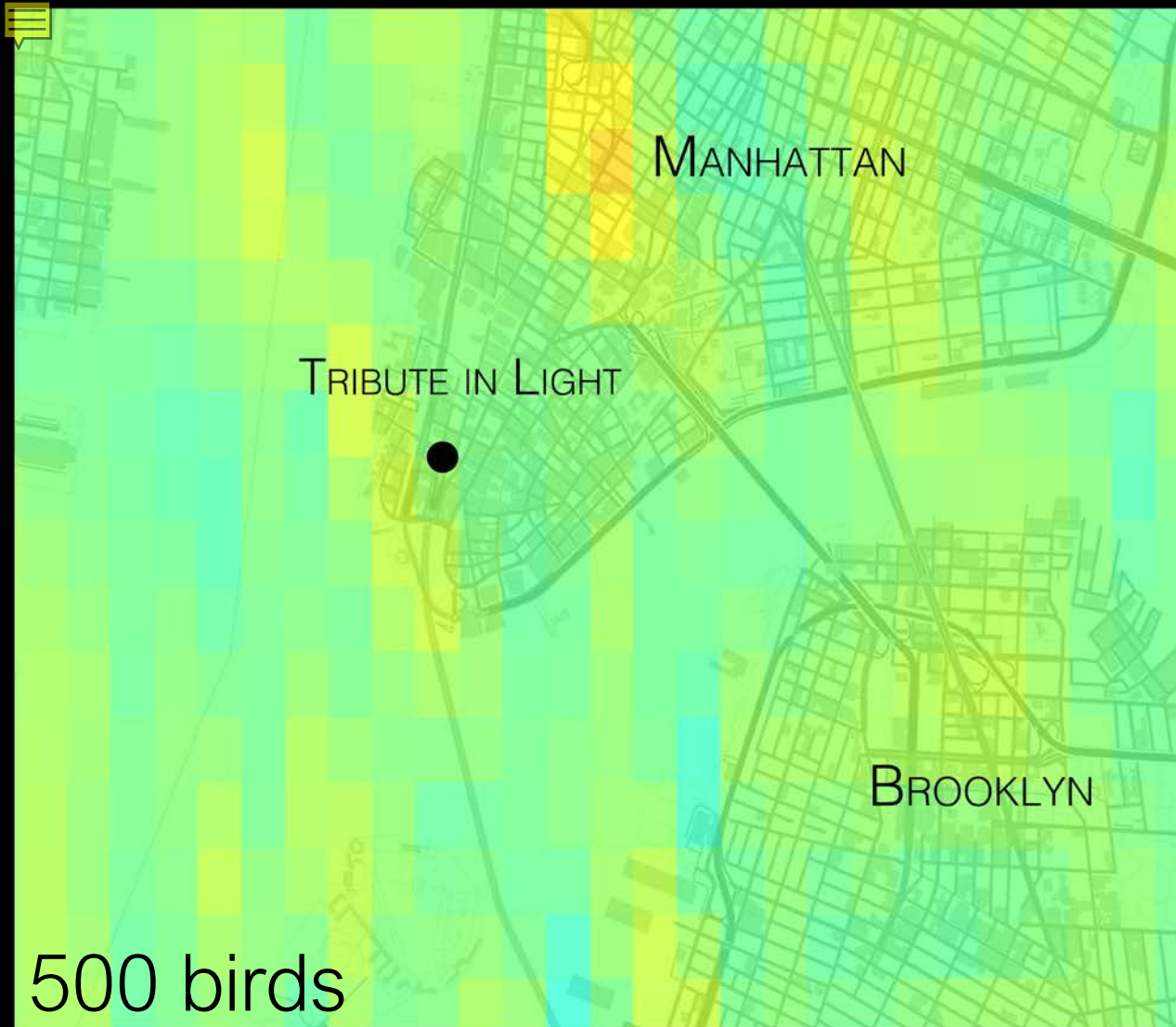


10% of nights per season account for more than 50% of migratory movements



National 9/11 Museum & Memorial Tribute in Light





Sept 11th, 2015 10:12 pm

Sept 11th, 2015 10:32 pm

Fewer birds

More birds

A horizontal color scale bar with 15 segments, transitioning from dark blue on the left to dark red on the right, with intermediate colors of light blue, cyan, green, yellow, and orange.

The Cornell Lab of Ornithology

birdcast.info
@DrBirdCast

