"Weather-smart" migration

It appears that both our satellite tagged Whimbrels are highly capable of predicting weather, especially typhoons (the equivalent of tropical cyclone).

Last month when LA departed Kamchatka Peninsula, there were two large typhoons, Soulik and Cimaron (Fig 1), about 3,000km away from Kamchatka. LA might have sensed the typhoon and therefore made an early "escape" by flying south-east?

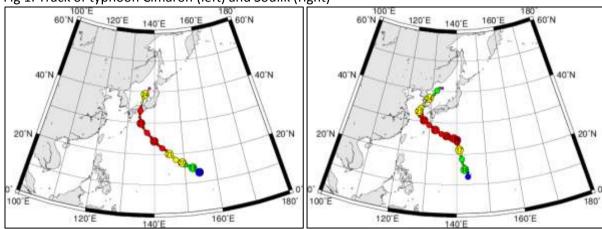


Fig 1: Track of typhoon Cimaron (left) and Soulik (right)

Source: National Institute of Informatics (agora.ex.nii.ac.jp)



Fig 2: LA's "escape route" from the typhoons

After flying continuously for more than 6 days, LA finally landed on Papua New Guinea. This single flight was nearly 7,000km, and the average speed was >46km/h! It is a surprise to see LA using a completely different southward migration route from KU and KS in 2017. It is yet to know whether this is a "regular" migration route for Whimbrels which breed in eastern Siberia or if LA is indeed making an escape from the typhoons, hopefully LA will reveal if the satellite transmitter continues to work.

LA is now staging at Abede River estuary called Deception Bay at the Gulf of Papua with dozens of islands in various sizes. Over the past month, LA has only moved between two feeding areas about 7km apart.

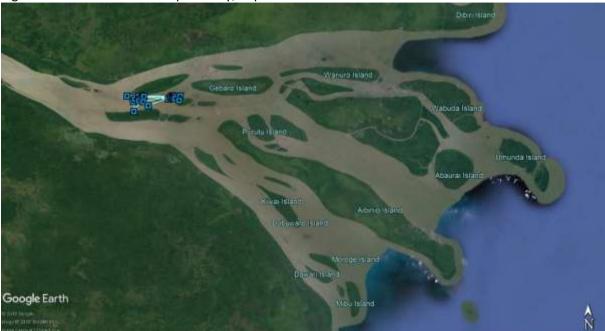


Fig 3: LA's movement in Deception Bay, Papua New Guinea

KU faced similar challenges by Typhoon Trami which centred west of the Philippines and Taiwan in the past week. After staging in Ying Kou, Liaoning Province at the Yellow Sea for 52 days, KU departed on 25-Sep, which is only a day later comparing to previous year.

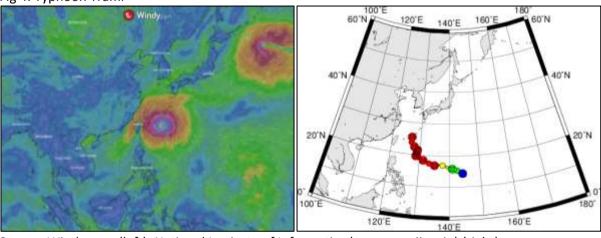


Fig 4: Typhoon Trami

Source: Windy.com (left), National Institute of Informatics (agora.ex.nii.ac.jp) (right)

However, probably to avoid the typhoon, KU has picked a westerly route compared to last year (Fig 5). As seen in Fig 4, wind is blowing south at the west side of Typhoon Trami and north at the east side of it. Choosing a westerly route allowed KU to "ride" the current and travel faster with average speed of nearly 47km/h. It was flying past the west coast of the Philippines as this update was being written. Will it head to the same stop-over site in Sulawesi as last year?



As of 28-Sep-18:



Migration summary of our Whimbrels

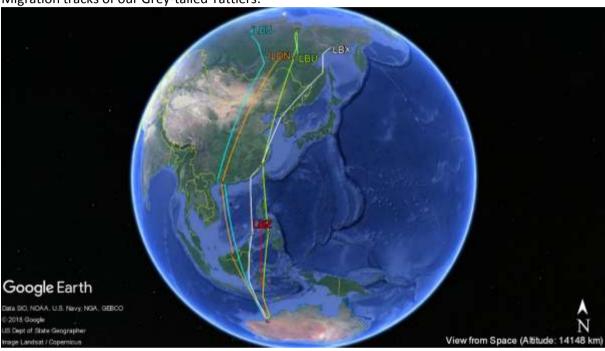
Leg Flag (track colour)	No. of days since transmitter deployment	No. of days since departing Australia (2018)	Distance travelled
LA (blue)	593 days	157 days	19,573 km
KU (yellow)	581 days	159 days	16,055 km

Satellite tagged Grey-tailed Tattler 2018:

It is disappointing that the last two transmitters on the Grey-tailed Tattlers have not send any further signal since 18-Aug. Again, there are no obvious evidence to determine whether this is due to breakdown of the tag or the death of the bird.

As of 18-Aug-18:

Migration tracks of our Grey-tailed Tattlers:



Migration summary on our Grey-tailed Tattlers

Leg Flag (track colour)	No. of workdays of transmitter	Distance travelled
LBU (green)	183 days (ceased on 18-Aug)	11,466km
LDU (blue)	173 days (ceased on 8-Aug)	10,722km
LBX (white)	122 days (ceased on 18-Jun)	9,791km
LDN (orange)	110 days (ceased on 6-Jun)	8,880 km
LBZ (red)	77 days (ceased on 4-May)	3,497km

Katherine LEUNG 28 Aug 2018