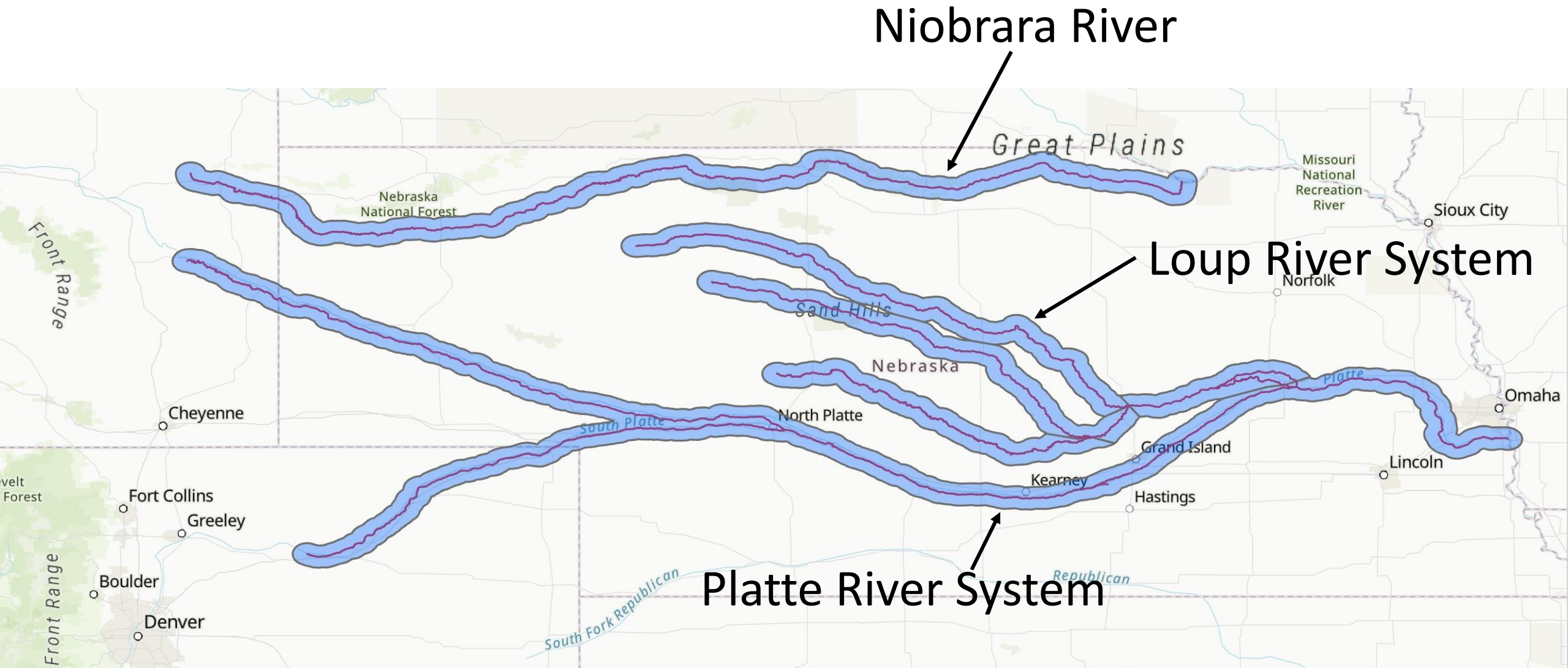


Whooping Crane Stopover/Flyover – Working Group Update

Patrick Farrell

July 2024 TAC Meeting

Investigation Extent



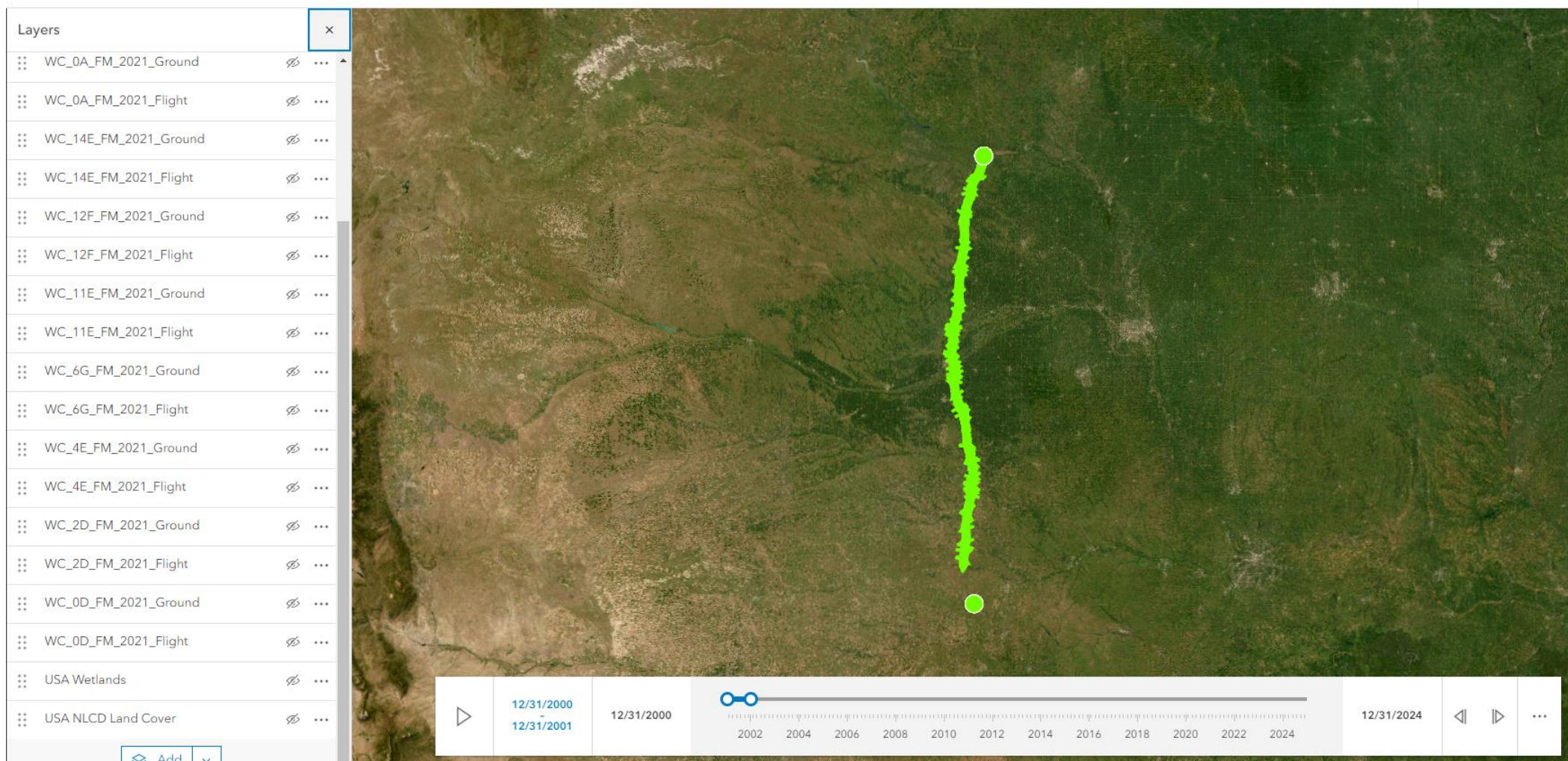
What Information Are We Using?

Cellular Telemetry Data (2017 – 2022)

WC Working Group - Cell Telemetry Data Example

Open in Map Viewer Classic

Pa
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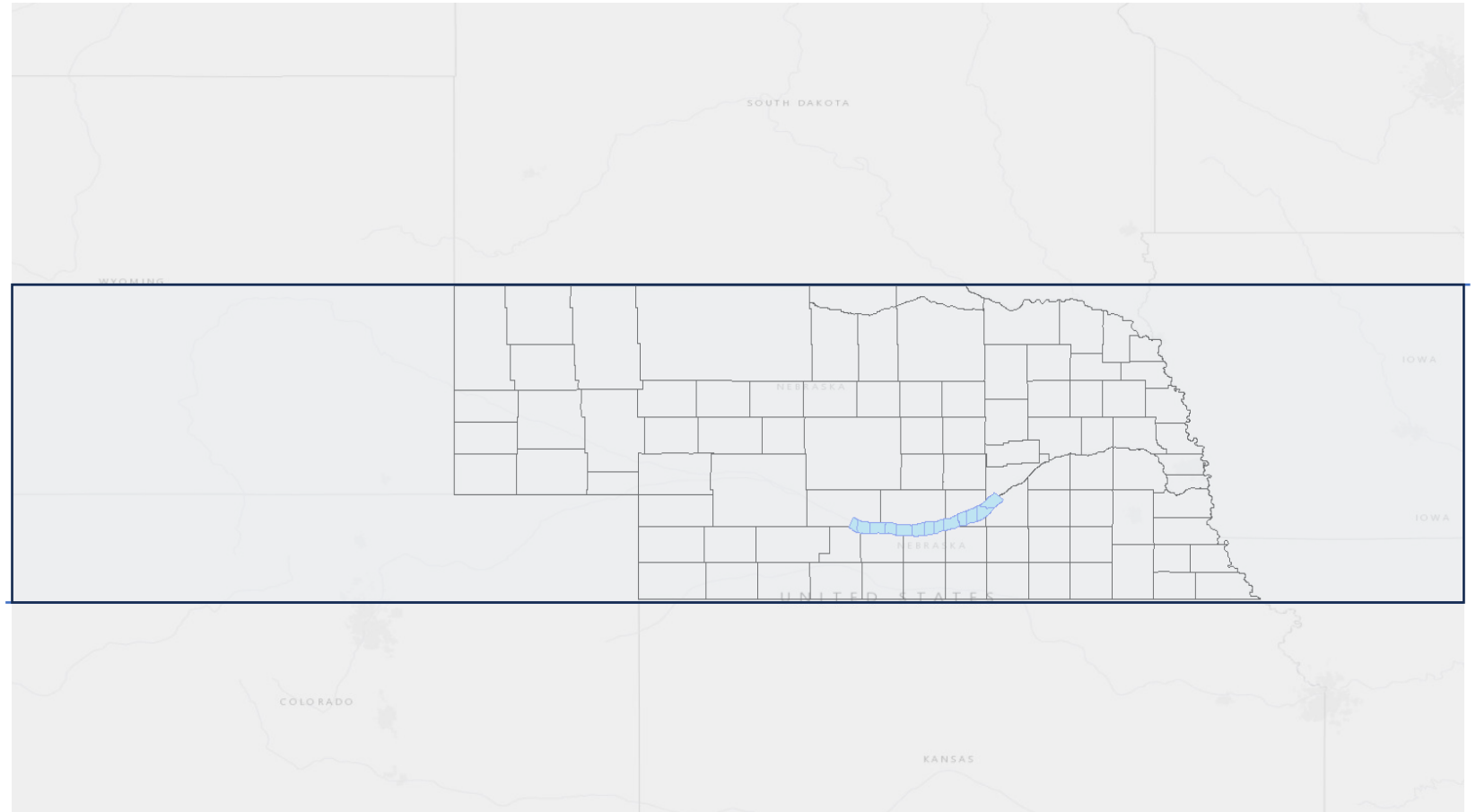


Goals of the Working Group

Explanatory Variable	Description
Unmanageable Non-Habitat Variables	
Time of Day	Number of hours before dark (daily sunset plus 30 mins) for the last location recorded before a stopover and for the flyover locations.
On-Channel Habitat Variables	
Unobstructed Channel Width	Width of active channel unobstructed by tall vegetation or wooded islands measured perpendicular to midline of the channel at use or available location.
Landcover Habitat Variables	
Landcover	Predominant landcover type within buffer area
Wetland	Proportion of buffer area covered by wetland or water surface extent.

Telemetry Data Summary*

- **315 migration events**
- **91 individual birds**
 - 160 fall
 - 155 spring
- **276 total stopovers**
 - 181 fall
 - 95 spring
- **153 riverine stops**
 - 102 in fall
 - 51 spring



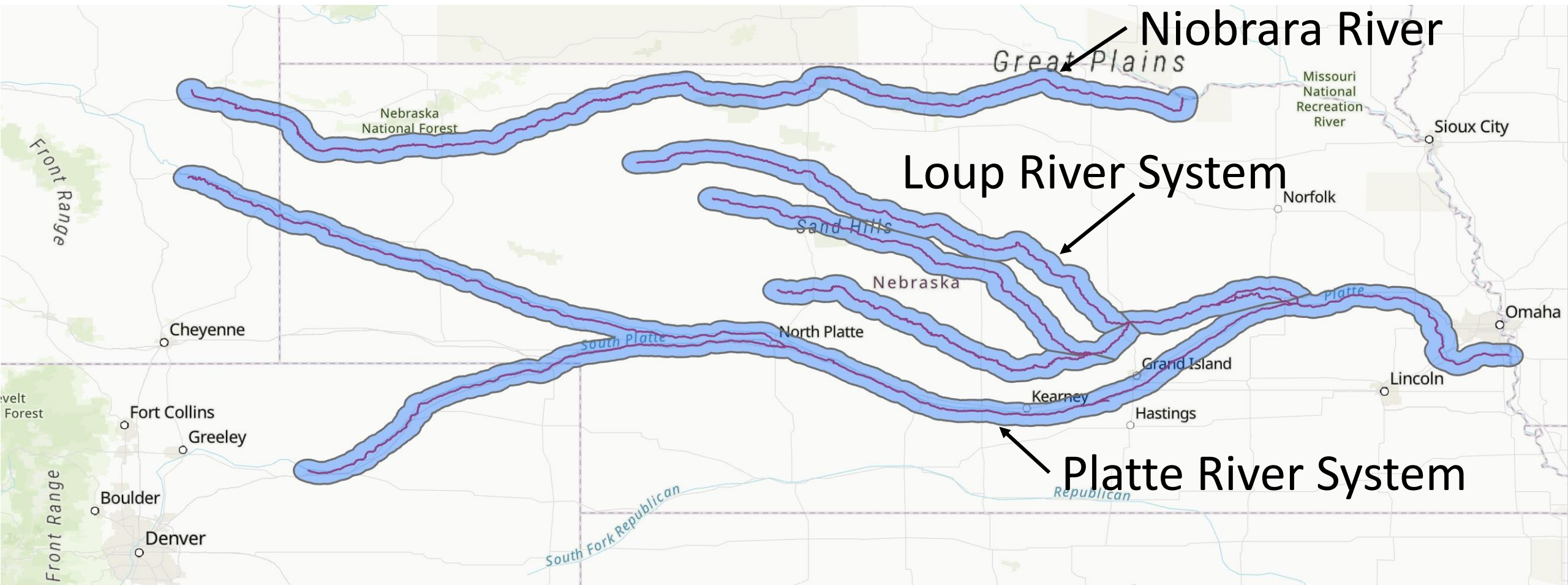
Telemetry Data Summary – River Systems*

- River Stopovers

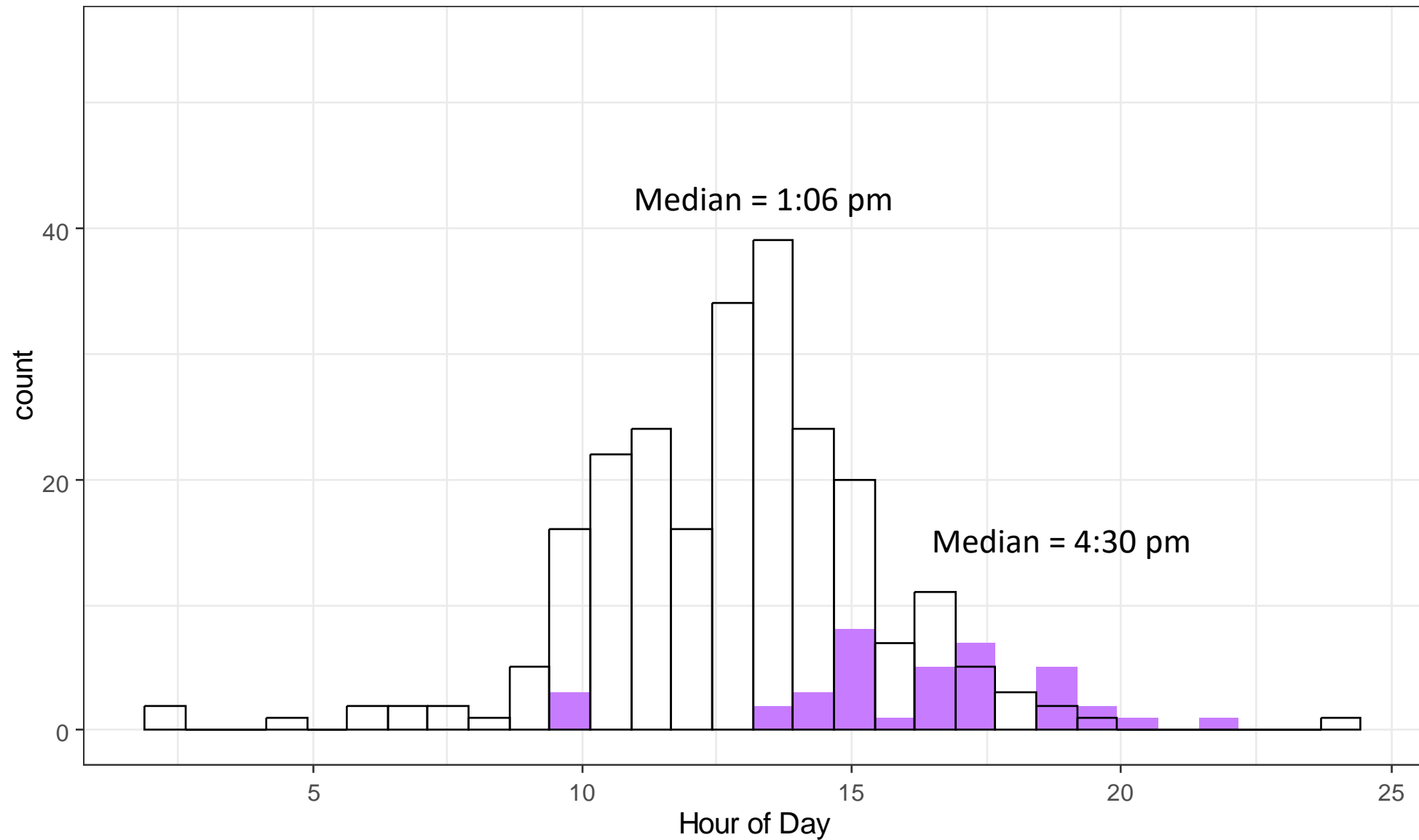
- Loup System = 71
- Niobrara = 44
- Platte River = 38

- River Flyovers

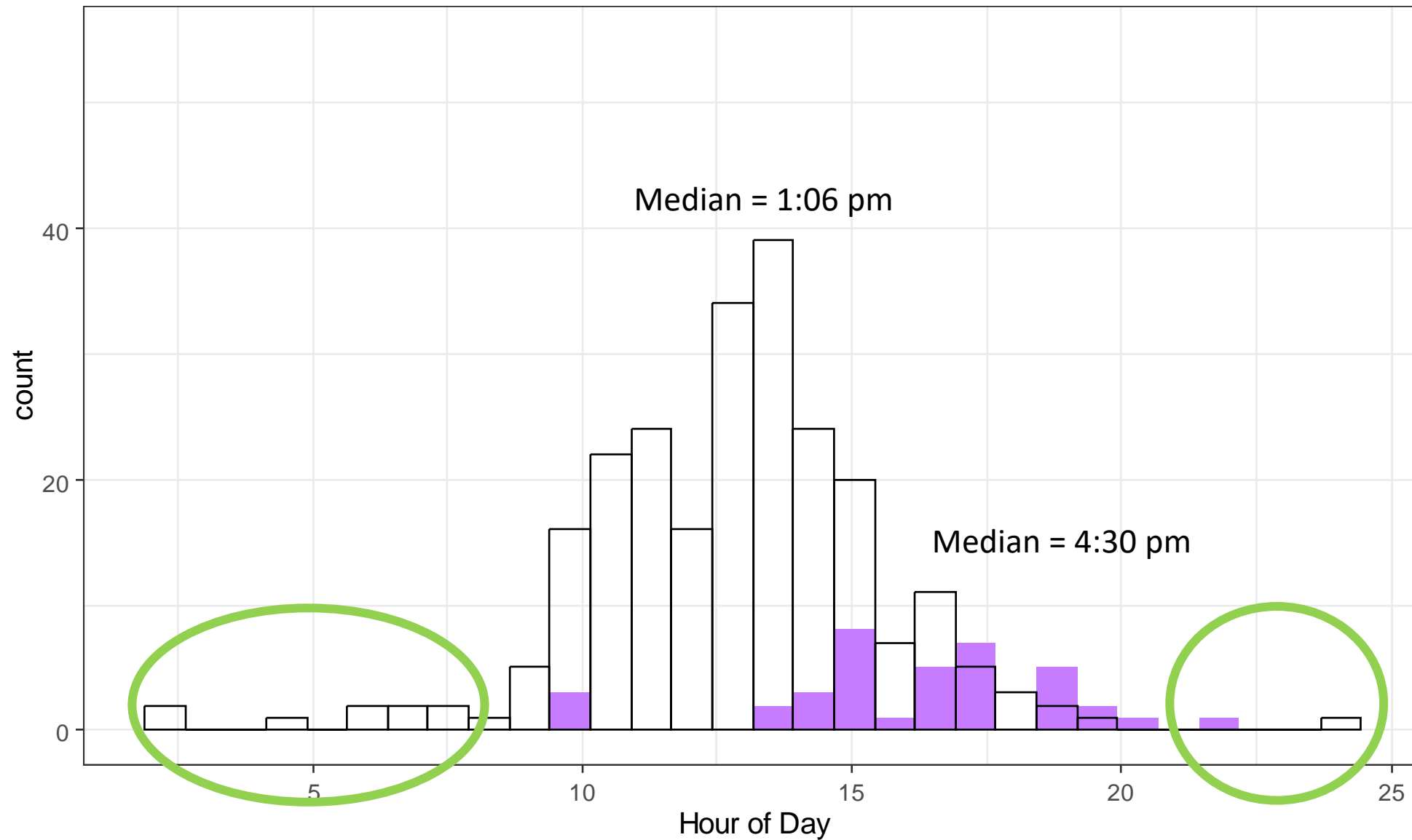
- Loup System = 659
- Niobrara = 232
- Platte River = 240



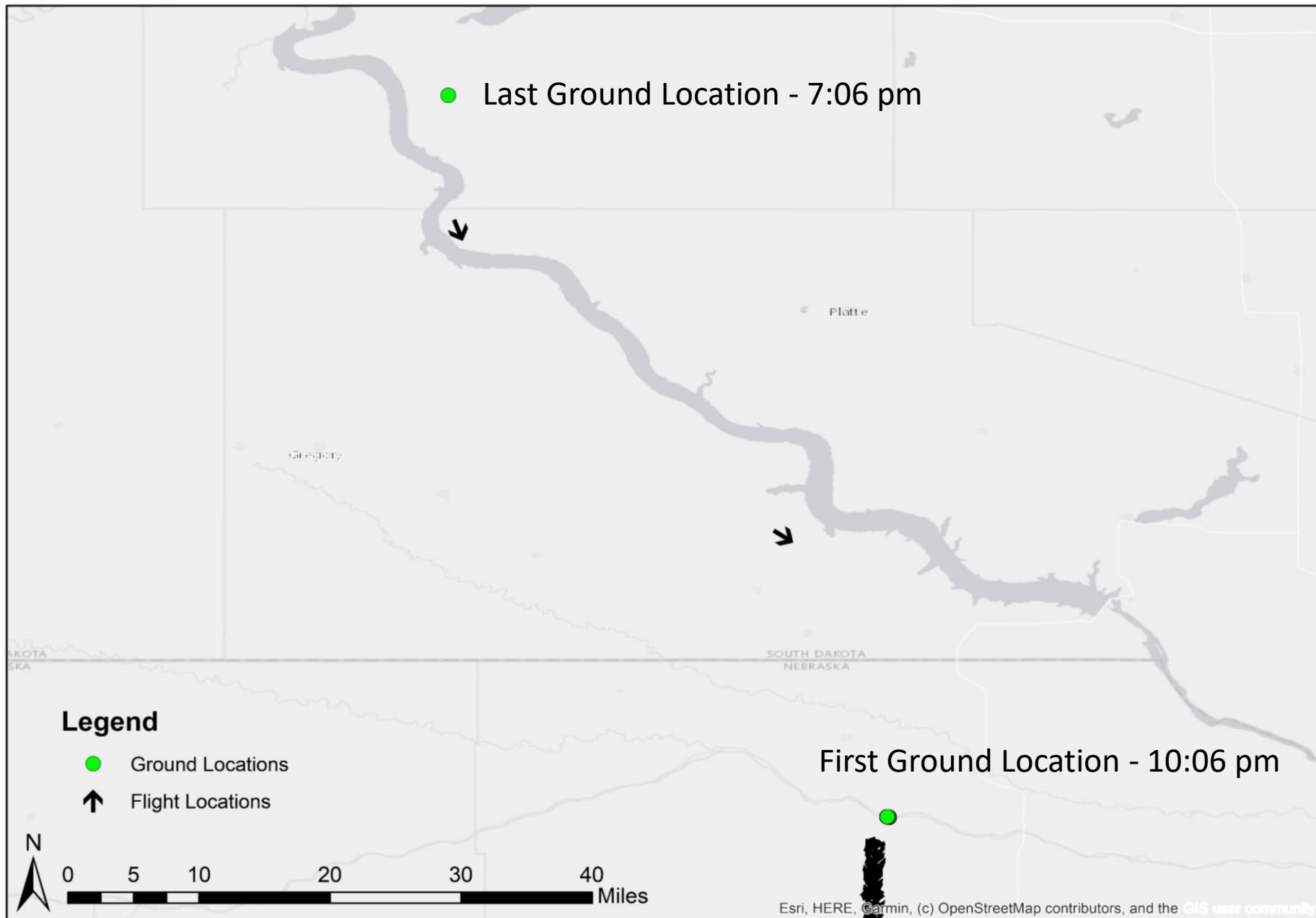
Telemetry Data Summaries – Stopover Timing*



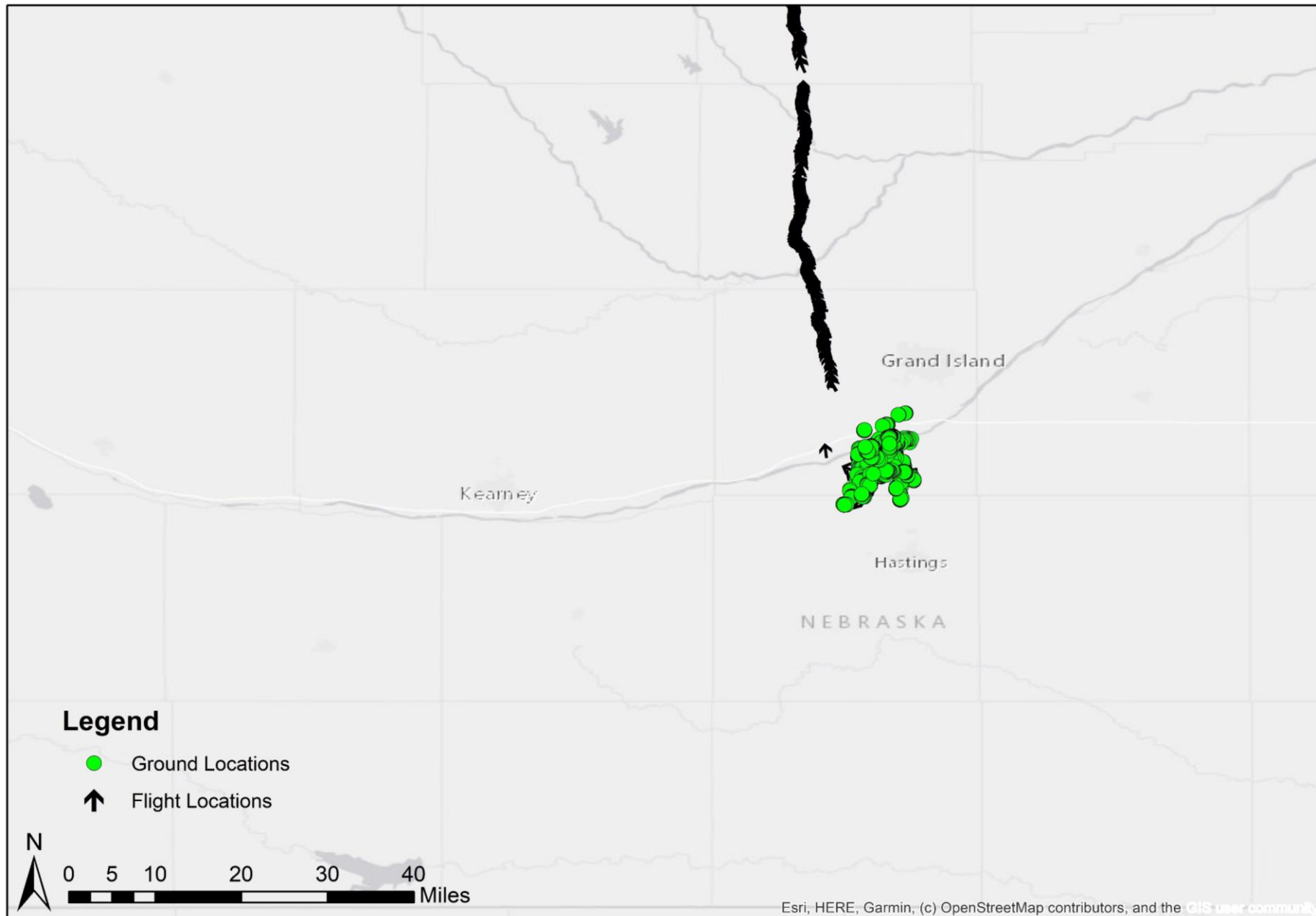
Telemetry Data Summaries – Late Initiation of Stopovers*



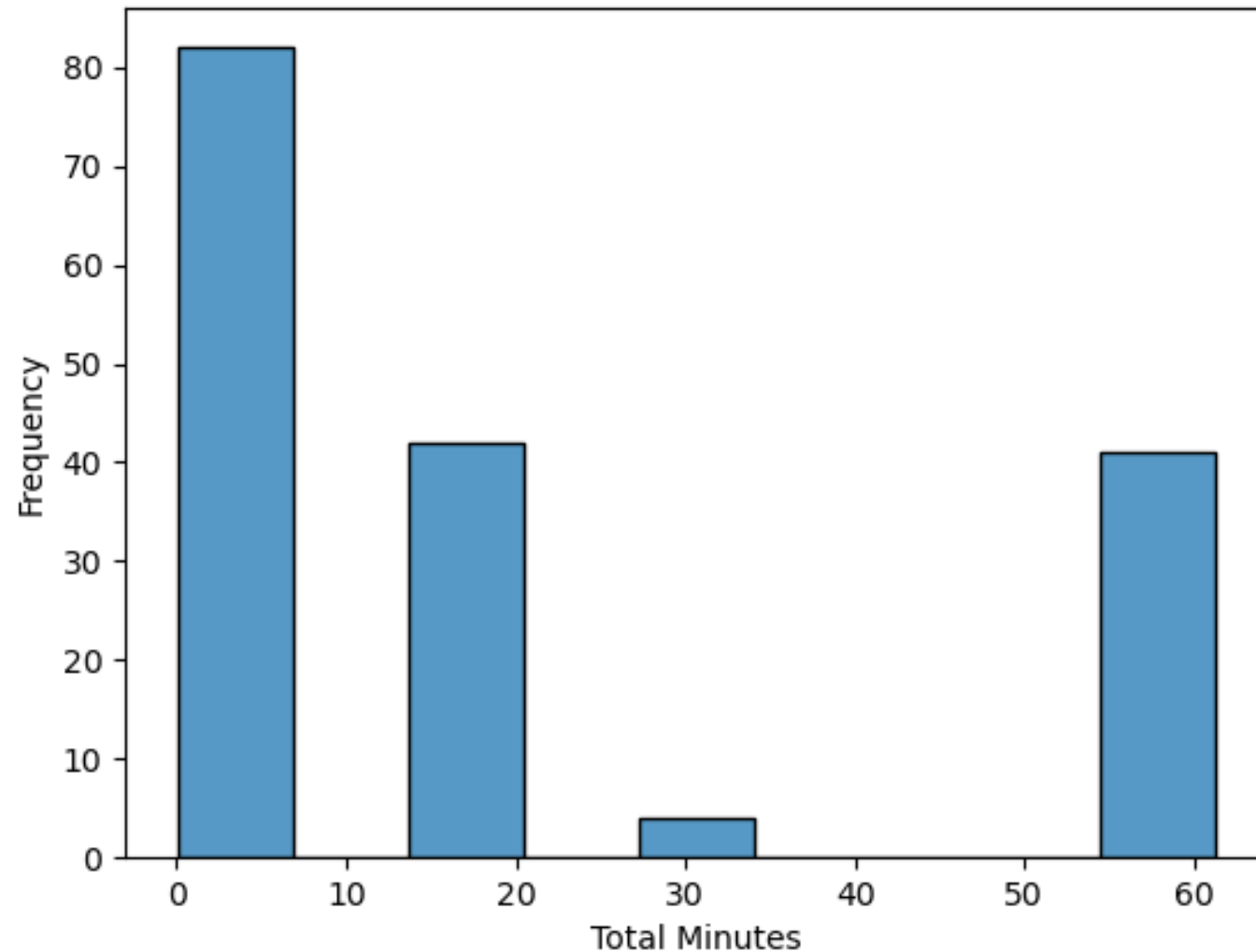
Data Quality Investigation – Late Night Stopovers



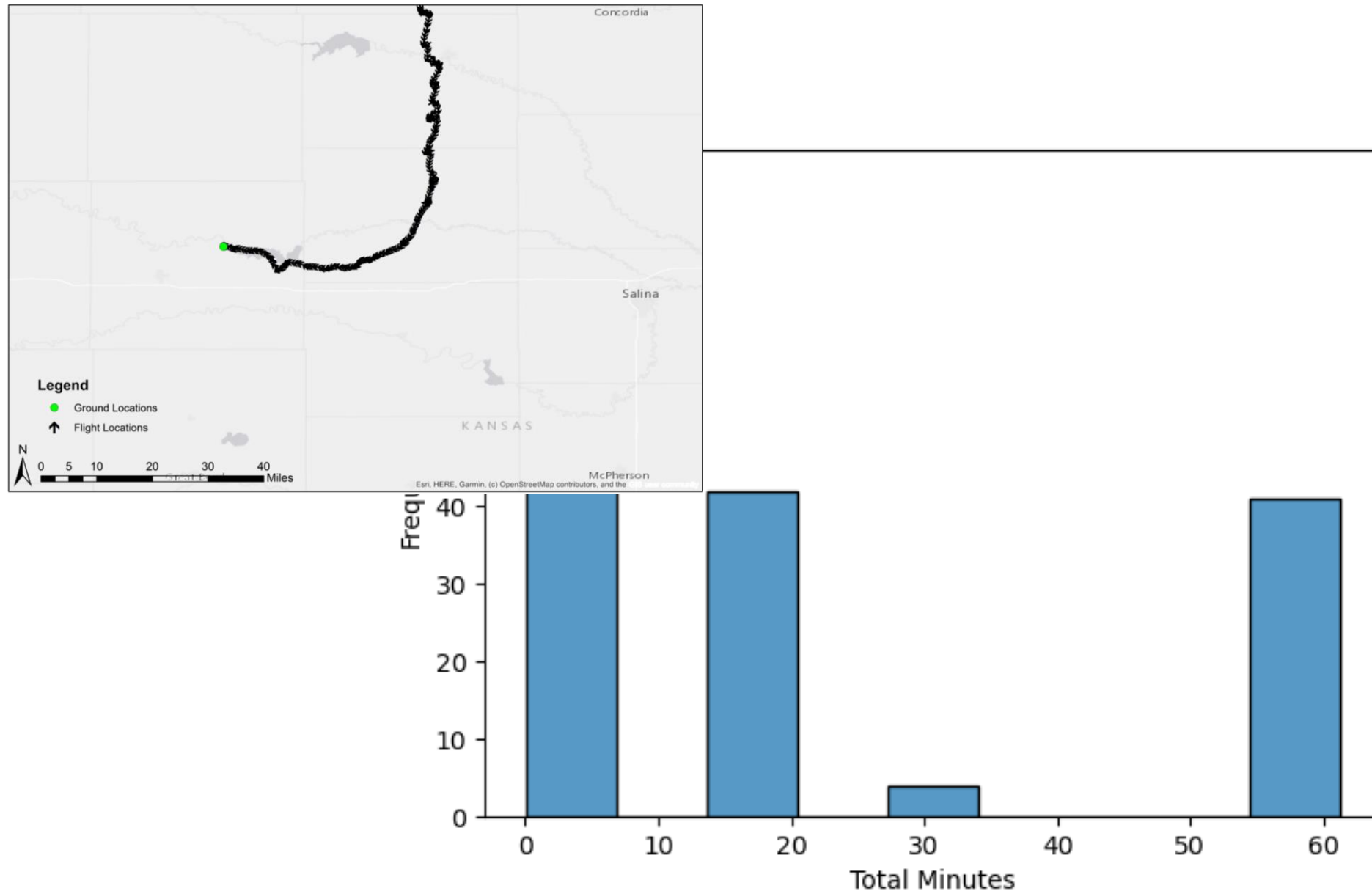
Data Quality Investigation – Incomplete Paths



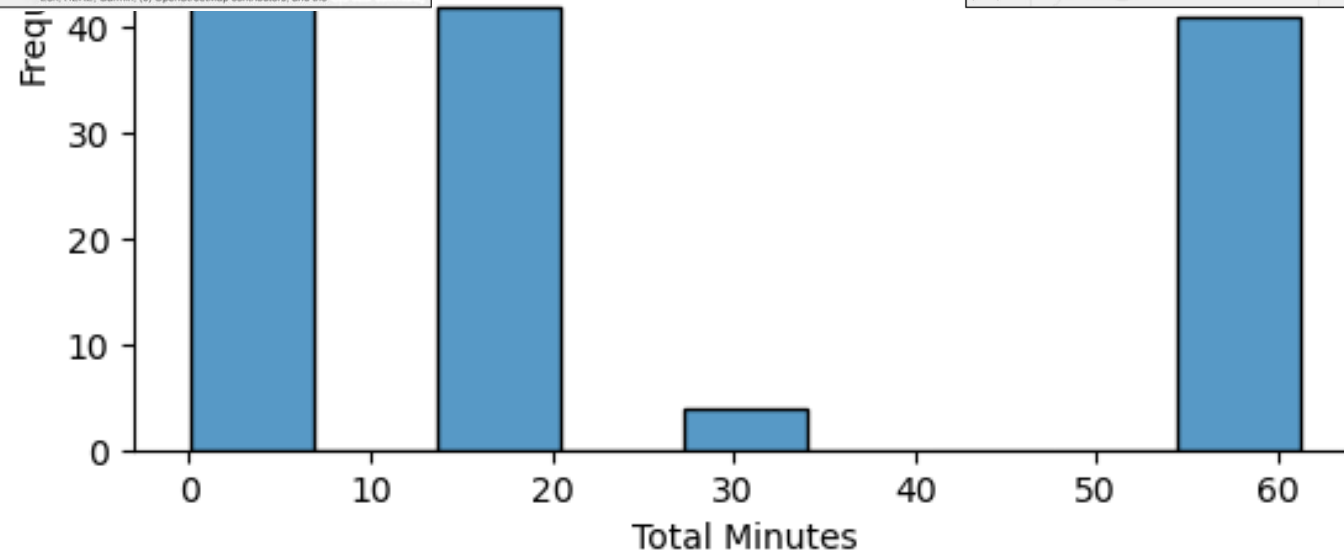
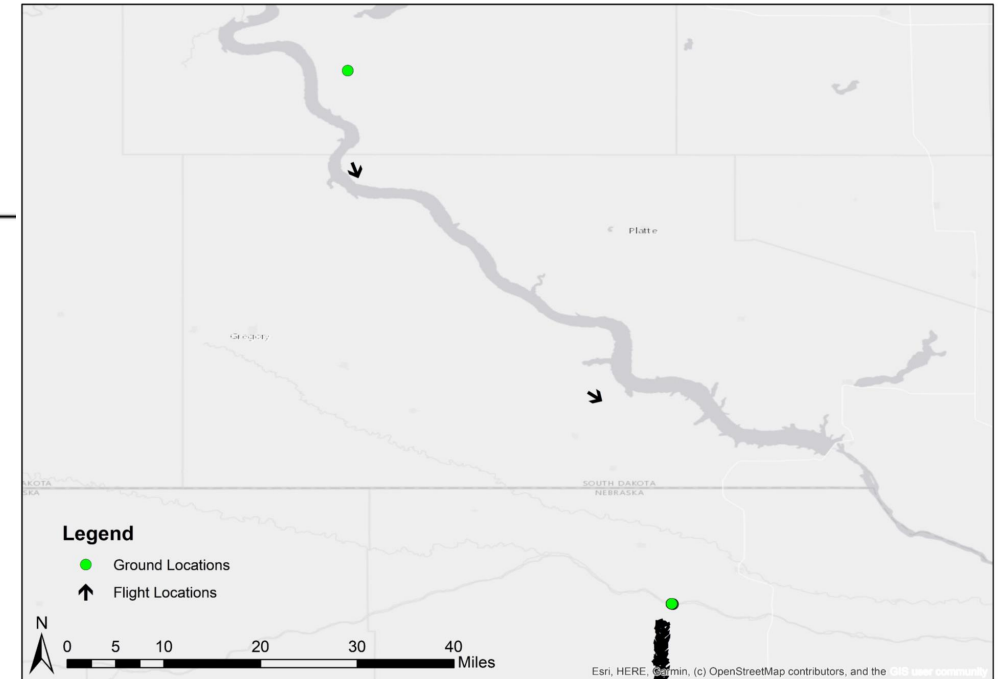
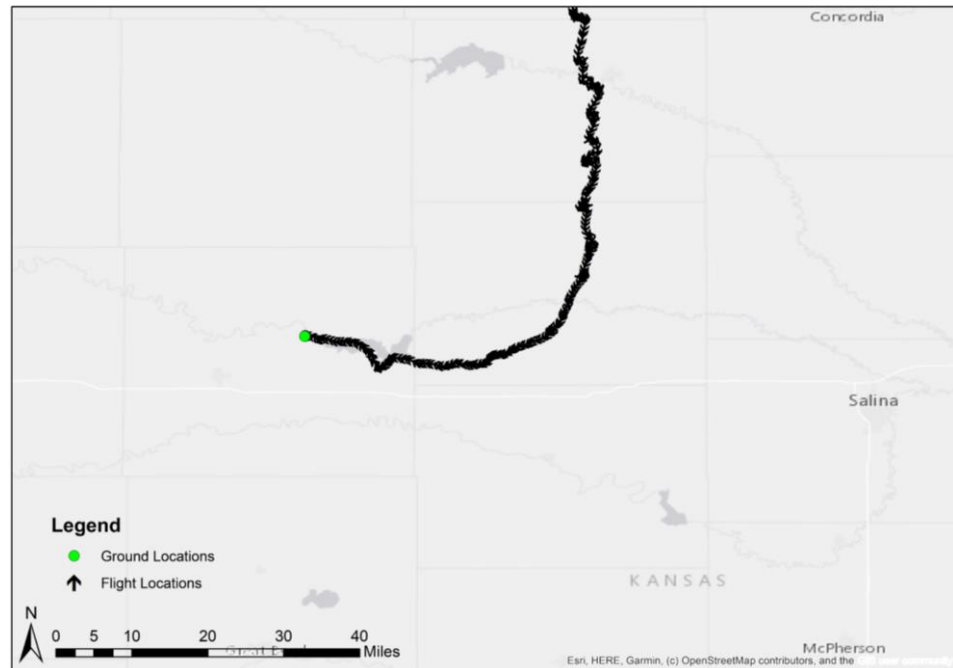
Data Quality Investigation – Timeframe of Stopover Initiation



Data Quality Investigation – Timeframe of Stopover Initiation



Data Quality Investigation – Timeframe of Stopover Initiation



Other Information for Working Group

- Birds traveling together
- Distance since last stopover
- Time migrating since last stopover
- Separate different sections of the Loup/Platte