NOAA

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Tables for Gray Whale Group Size Analysis

Trevor Joyce - NOAA Federal <trevor.joyce@noaa.gov>   Mon, Apr 21, 2025 at 3:48 PM
To: Tomo Eguchi - NOAA Federal <tomo.eguchi@noaa.gov>

Hi Tomo,

Here's the table (SIGHTINGS_GROUPS.csv) that we discussed today with all the SIGHTING_IDs that I currently have in my R dataset (~2 weeks in Jan 2024 and ~2 weeks in Jan 2025) merged with corresponding UAS "Group_Size" (Best) and "Group_Size_Min" (Minimum) information. I've also included the tables GROUPS_MIN.csv and GROUPS_BEST.csv that we discussed today for your reference.

Note that one difference between these outputs is that SIGHTINGS_GROUPS.csv table is organized on the basis of unique SIGHTING_IDs from the visual survey data. To avoid modifying the underlying visual data, in this table I haven't collapsed the "GROUP_SIZE_LAST" estimates (last visual group size) for a few of the SIGHTING_IDs where this information has been manually aggregated in the GROUPS_MIN.csv and GROUPS_BEST.csv tables (i.e., "2025-01-15_22; 2025-01-15_23", "2025-01-22_24; 2025-01-22_25", "2025-01-23_35; 2025-01-23_36"). These were visual sightings that were close together in space and time and likely both contributed to the UAS observed group. I can go through and make this adjustment if it makes your analysis simpler.

Here's a key to the column headings:
SIGHTING_ID - Concatenation of Date and Sighting Number within each day
GROUP_SIZE_LAST - Last (and presumably best?) visual group size estimate
Group_Size_Min - minimum UAS group size estimate (every group flown over will have one of these)
Group_Size - best UAS group size estimate (only groups where I had a good idea of "true" group size were assigned a best group size estimate)
Proximity - Ordinal score (0 = near perfect alignment in space and time, 1 = not perfect but an acceptable distance for inclusion in the analysis, 2 = UAS group too far from visual group to be included in analysis); I've only merged groups with scores 0-1 in these tables
Other.Confounding.Groups - Ordinal score (0 = no other groups around that could confound linkage, 1 = other possible groups around but high enough confidence in linkage to be included in analysis, 2 = too many potential alternative groups to be included in analysis); I've only merged groups with scores 0-1 in these tables
DIST_MIN - minimum radial distance from observer trailer to the nearest visual observation of the SIGHTING_ID (calculated from bearings and reticles - so a fair amount of error)
BEAUFORT_LAST - last sea state observation associated with a group
VISIBILITY_LAST - last visibility code associated with a group

Best,
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3 attachments

📄 **SIGHTINGS_GROUPS.csv**
64K

📄 **GROUPS_BEST.csv**
4K

📄 **GROUPS_MIN.csv**
7K