**Fao Gaul conversion 2015 <-> 2024 Summary**

**1 – Eliminate “Not Available Administrative Units”**

[na\_2015.xlsx](https://efsa815.sharepoint.com/:x:/r/sites/PLHClimateSuitability/Shared%20Documents/GIS/administrative_units/data/processed/na_2015.xlsx?d=wbf611fd46b164e67b5c084618a95f20c&csf=1&web=1&e=r8YAUg)

[na\_2024.xlsx](https://efsa815.sharepoint.com/:x:/r/sites/PLHClimateSuitability/Shared%20Documents/GIS/administrative_units/data/processed/na_2024.xlsx?d=w0f029314c2a34a7fa37f3aaaff451e99&csf=1&web=1&e=OrVNPA)

**2 – Set join columns**

* Calculate centroids based on Mercatore projection, perform spatial join on 2015 and 2024 data with max distance 50000 (distance column).
* Clean patterns (es. “Republic of” ) and special characters from gaul names. Calculate match ration between names (% of letters in common, match ratio).

Filter database applying parameters on distance column and match ratio:

* Keep rows with a match ration > 0.6
* Keep rows with a match ration between 0.4 and 0.59 **AND** distance < 2000
* Drop duplicates maintaining rows where distance is lower.

[spatial\_and\_string\_match\_filtered.xlsx](https://efsa815.sharepoint.com/:x:/r/sites/PLHClimateSuitability/Shared%20Documents/GIS/administrative_units/data/processed/spatial_and_string_match_filtered.xlsx?d=w727b8b60ab9f4978aeb60e8dfeaa5106&csf=1&web=1&e=e1VhGh)

[unmatched\_2015.xlsx](https://efsa815.sharepoint.com/:x:/r/sites/PLHClimateSuitability/Shared%20Documents/GIS/administrative_units/data/processed/unmatched_2015.xlsx?d=w77dc487357034f1db24ba48d79861597&csf=1&web=1&e=8cUq6Y)

[unmatched\_2024.xlsx](https://efsa815.sharepoint.com/:x:/r/sites/PLHClimateSuitability/Shared%20Documents/GIS/administrative_units/data/processed/unmatched_2024.xlsx?d=wcf4f1108dcaa4659bffe1e2ba98fc866&csf=1&web=1&e=ib5ygJ)

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| --- | --- | --- |
|  | **Fao Gaul 2015** | **Fao Gaul 2024** |
| **1 -“Not Available Administrative Units”** | 1150 | 482 |
| **2 - Matched** | **27819** | **27819** |
| **2 - Unmatched** | 9285 | 17222 |
| **Total** | 38258 | 45523 |