# **Text S2: Explanation and description of results of the cleanup operations within land boundary datasets.**

After these cleanup operations, a total area of 865,766 hectares in overlapping polygons was deleted. This represents 2.8% of the original area. The cleanup operations with the LAU dataset were exactly the same. The outcome was the exclusion of 315,229 hectares representing 2.3% of the original area, resulting in a dataset without overlaps. These operations were carried out also on INCRA and Terra Legal datasets, but no significant overlaps were found so there was no cleanup operation. As there were no overlaps, INCRA and Terra Legal were merged and again no overlaps were found, as INCRA accounted for private properties certified in the geo-referencing system and Terra Legal accounted for land possessions that actually are not yet properties as they do not have a land title. Thus INCRA as referenced here means private properties certified by INCRA and land possessions registered in the Terra Legal program (Table S1).

The resulting figures after erasing and merging datasets are: CAR maintained the same area as it was not erased, but it was used to erase LAU. LAU lost 7,768,221 hectares (58% of the original area) because this area was already in CAR, so CAR was favored. Then CAR-LAU erased INCRA and was merged with the remaining area. INCRA lost 17,458,414 hectares (62% of the original area) because this area was already identified in CAR-LAU. All datasets refer only to the state of Mato Grosso. Only INCRA is a national dataset and Terra Legal encompasses all states in the Brazilian Legal Amazon (nine states); however, both were limited to cover only Mato Grosso. Terra Legal found no overlaps because the boundaries identified by this program are not yet private properties, but they are in the process of being registered as such.