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Human Rights Watch - Reference notes on geographic database of conflict-affected villages and building destruction in the Central African Republic (2013-2014)

- Notes updated on June 21, 2017;
- Contact: Josh Lyons (josh.lyons@hrw.org);
- Geodatabase File name: HRW_CAR_VillageDamageData_v1.gdb;
    - version: ESRI file geodatabase v10.5.0;
    - contents: 3 feature classes:
        - 1 polygon - 'CAR_Assessment_Zones' (indicating the satellite assessed areas in western CAR);
        - 2 point feature classes:
            - 'CAR_DestroyedBuildings' - (16,340 building points);
            - 'CAR_Village_Review' - (790 village points).
- Notes:
    - This database contains a geographic layer of 790 populated places in western CAR assessed with very high resolution satellite imagery between 2013 and 2014 for possible evidence of conflict-related building destruction. In a limited number of cases the assessment was verified on the ground at the time.

    - Damages were identified through traditional photo-interpretation methods, and complimented when possible with ground assessments and authenticated social media.

    - Of the 790 total locations assessed, 125 had indications of substantial building destruction and 665 had no visible damages, based on the last available satellite image date. Areas assessed with satellite imagery in western CAR are indicated in a feature class layer ('CAR_Assessment_Zones').

    - Destruction occurring during the study period outside of these zones were neither identified nor assessed. The assessment areas were based on reported areas of conflict that had relevant satellite imagery coverage.

    - It is possible that some of the 665 unaffected village points in this database were attacked at a later date, following this initial assessment. It is also possible that some of the 125 locations with marked damages were attacked again.

    - Included in the database is a feature class ('CAR_DestroyedBuildings') containing over 16,300 severely damaged or destroyed buildings identified in most of the 125 affected villages. The capital city of Bangui, for example, has several thousand destroyed building points reflecting multiple, distinct events covered by Human Rights Watch at the time.

    - Because fire-related damages often are limited to building interiors or are obscured by heavy tree cover, and therefore cannot be identified in satellite imagery, it is likely that

the total numbers of affected villages and destroyed buildings in the assessment zones were underestimated at the time of this survey. Actual numbers were almost certainly substantially higher.

- The determination of fire as the probable source of damages identified from satellite imagery is normally made at the level of individual buildings, each evaluated separately based on the relative presence (or absence) of a set of usually distinct signatures including, for example: the presence of intact, load-bearing walls with a collapsed rooftop, the presence of fire burn scars on or immediately adjacent to the property, destroyed adjacent tree/vegetation cover, along with the absence of significant debris fields external to the building foundation. When possible, this is corroborated with thermal anomaly data collected by environmental satellite sensors, which can generally locate the presence of active fires to within one square kilometer.

- It is important to stress that this database contains data on conflict-affected villages and buildings of uneven completeness and certainty. It was not intended for public release at the original time of production, but for internal research and mission planning. A portion of the database content was highly controlled and assessed on the ground for accuracy. This data was publicly released by HRW in reports and press releases at the time. The database also contains assessments on villages that were preliminary in nature and based on a limited number of satellite image dates which were commonly of reduced image quality because of haze, cloud cover, and cloud shadows.

- The map below shows the distribution of the affected village data layer and the survey assessment areas.

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