

Verification and Structuring of Rocket Impact Reports in Israel

(Oct–Nov 2023)

Executive Brief

The report analyzes two specific rocket and missile impact events in Israel between October 25 and November 5, 2023. Incidents were chosen for their geographic diversity and strong corroborating digital evidence. Open-Source analysis indicates a systematic pattern of strikes by Hamas and Hezbollah targeting civilian infrastructure, including residential areas and medical facilities. High-confidence verification was achieved through cross-correlation of media forensics, official Red Alert data and geospatial triangulation. Data visualization shows a shift in impact density from the Gaza envelope and Tel Aviv in October to the Northern border by early November. All findings derive exclusively from publicly available sources, ensuring full reproducibility.

Data Collection Framework: Source material was drawn from four primary streams: visual evidence from local and international media organizations, including The Times of Israel, official statements from IDF operational updates and government security reports, analytical context from independent research institutions, including the Meir Amit ITIC, and temporal data from Home Front Command alert logs.

Verification and Analysis Workflow: Each incident underwent a multi-step verification process, using geospatial tools like Google Maps and OpenStreetMap for impact site identification. Metadata checks were conducted for photographic integrity, while archival research was cross-referenced with verified social channels. Final confirmation required triangulation from multiple independent and official sources.

Analytical Tools: Primary geospatial tools included Google Earth Pro, Google Maps, and OpenStreetMap for impact site identification and triangulation. These were selected for their publicly accessible imagery, cross-verification capability, and reproducibility by independent analysts.

Limitations and Transparency: Environmental and technical constraints – including low-resolution satellite updates and restricted area access – may affect exact impact identification. Social media content was used only when independently verifiable through established reports. The report excludes classified or SIGINT information, relying solely on public-domain sources. A Confidence Assessment is included for each incident to ensure transparency and reproducibility.

Key Verification Findings: Two impact sites confirmed with High Confidence through multi-feature architectural triangulation

Technical Verification Spotlight: Kiryat Shmona



Side-by-side comparison: On the left, the "Source Image" (from news); on the right, the reference imagery (Google Earth).

Technical Verification Spotlight: Rishon LeZion



Side-by-side comparison: On the left and middle, the "Source Image" (from social media/news); on the right, the reference imagery (Google Earth).