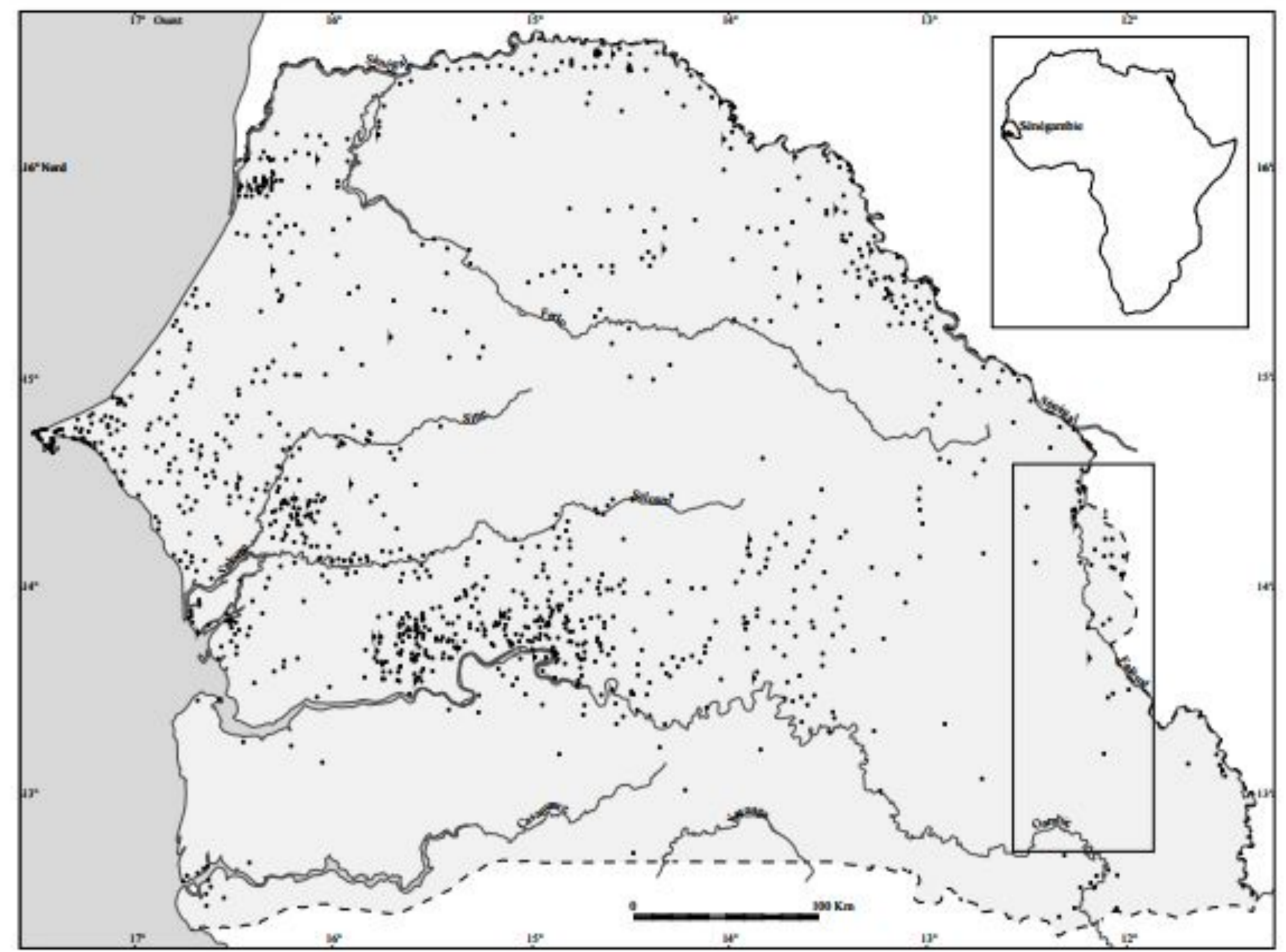


The challenge of paper-based records

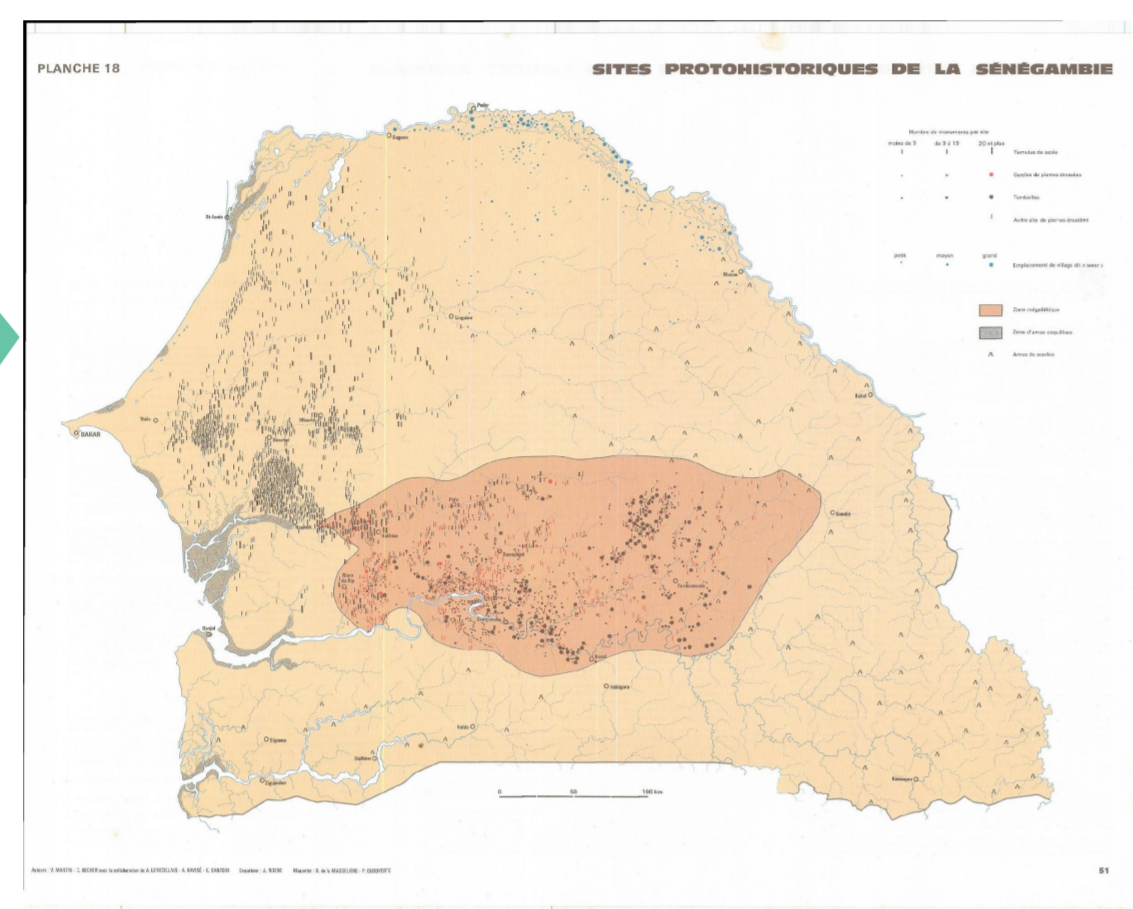
Archaeological research in Senegal from 1891 to the present day has produced a wealth of information. This 'legacy' data is generally on paper, made up of mission reports, record sheets, site distribution maps, collection record books, published and unpublished scientific documents (CRM reports, articles, books, dissertations, theses, and so on). **The digitization of these documents, which are often fragile and obsolete, has long remained an urgent challenge, hence the importance of this workstream in the MAEASaM programme.**

Among this legacy data, spatial data figures prominently. It shows that Senegal has more archaeological sites per km² than anywhere in the sub-region.

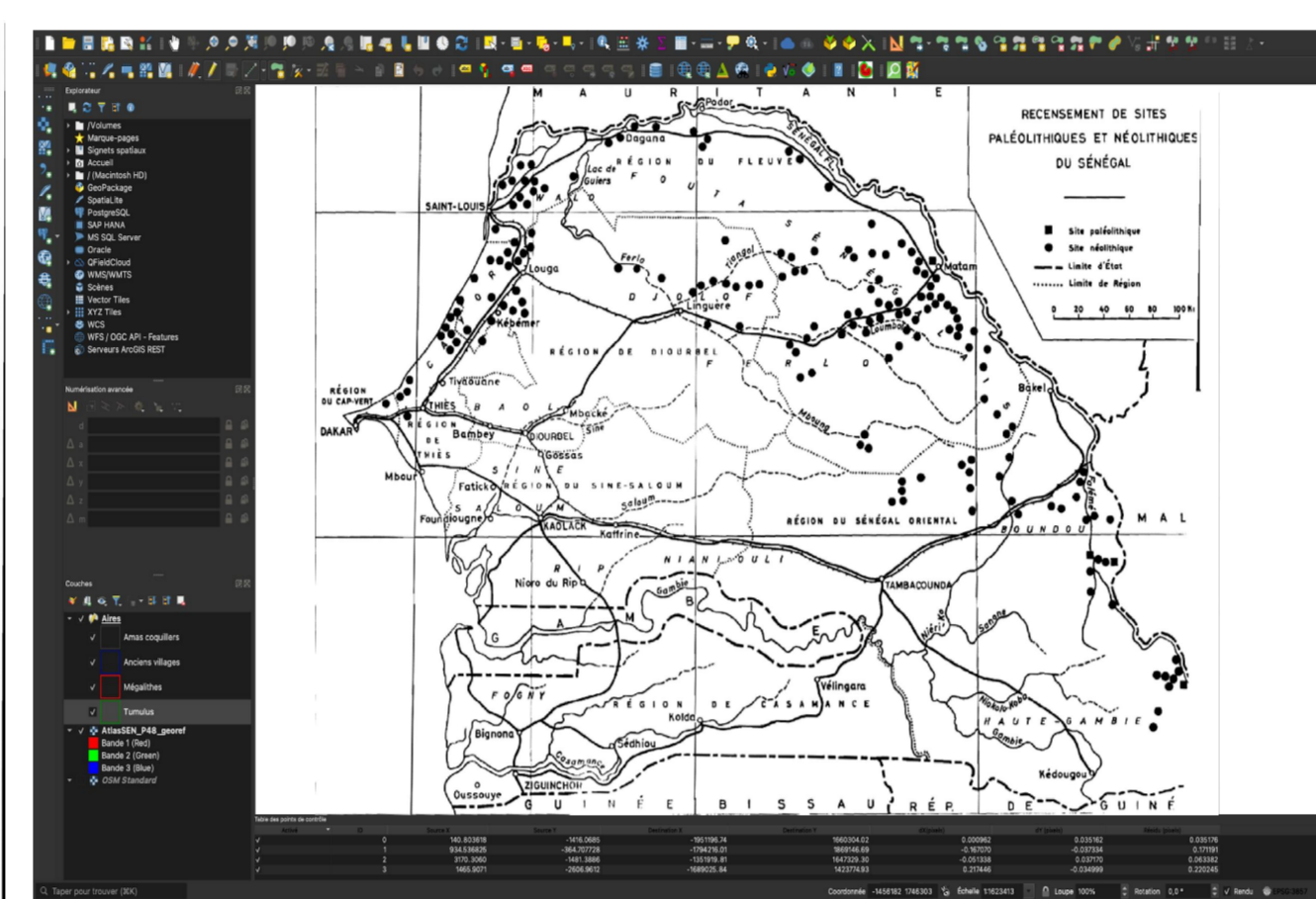


Legacy data methodology

Despite the abundance of spatial data in maps and other legacy records, **the data is generally obsolete** and sometimes unusable. Digitization is an essential process, enabling us to capture data in a format that is **usable in the digital instruments of our time.**

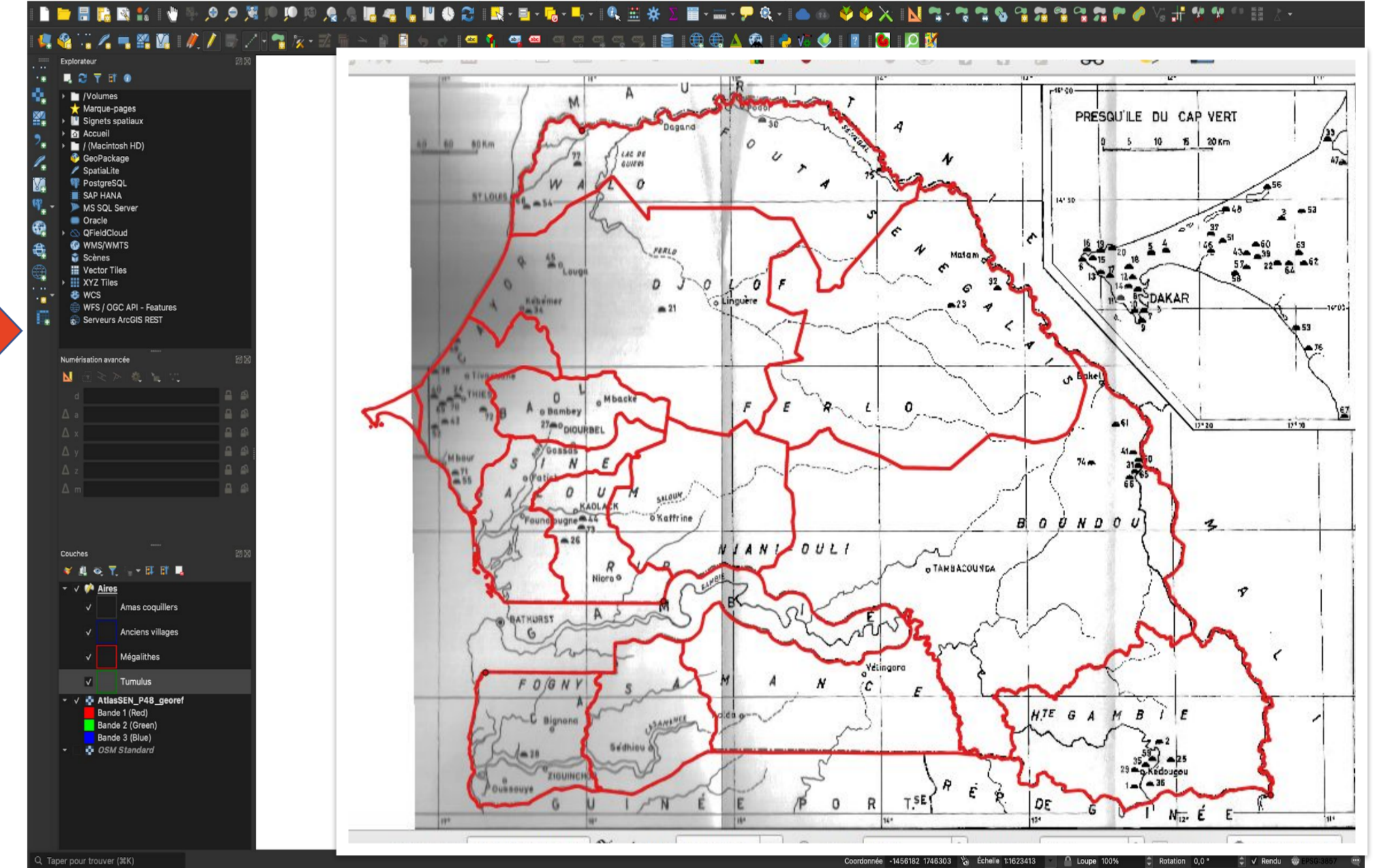


Georeferencing



The georeferencing of archaeological maps is a key step in the digitization process, whereby we assign **real-world coordinates** to each point in the dataset.

Digitization

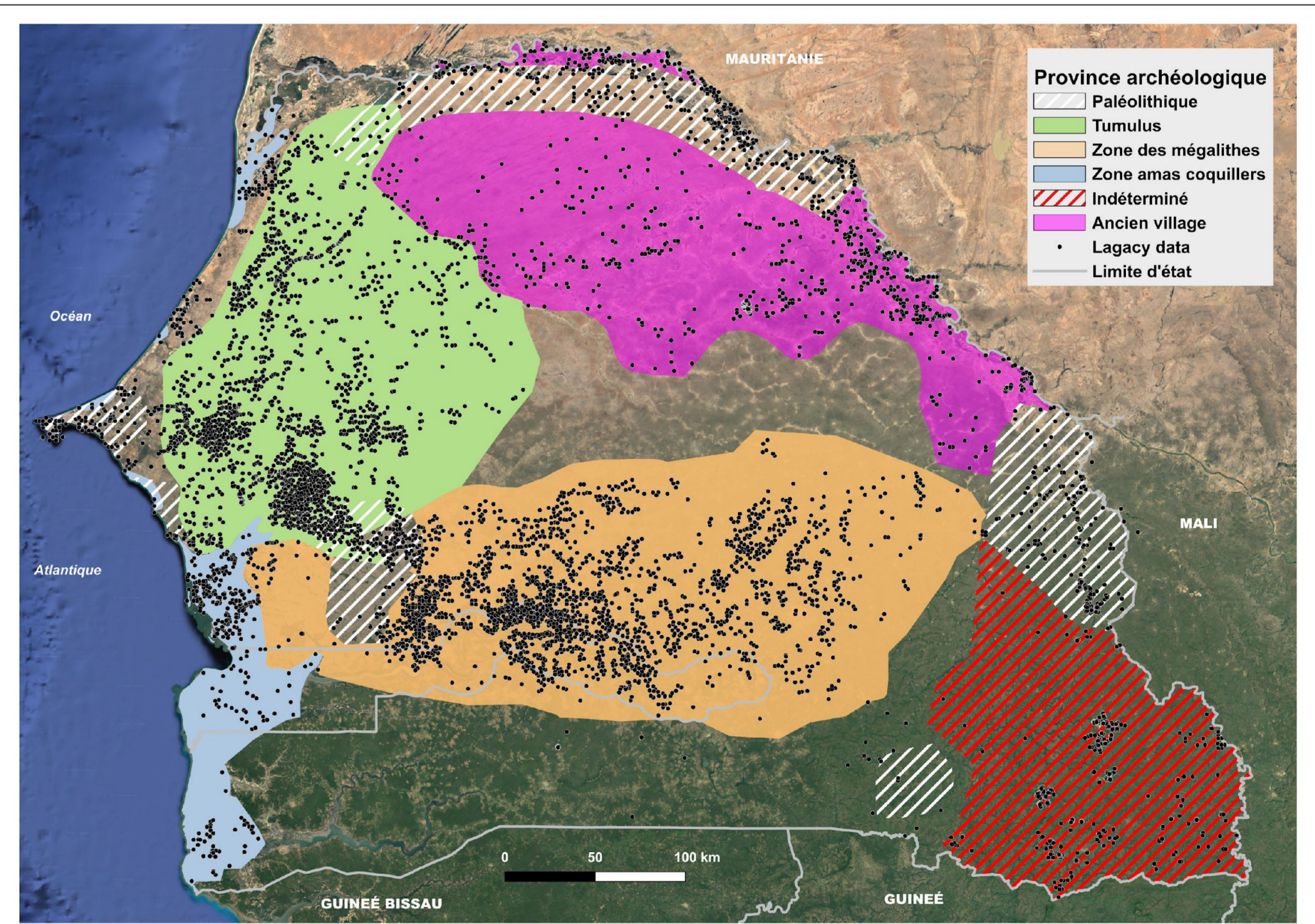


Field verification: Validating the data

The verification missions undertaken by the team in Senegal have focused on sites and areas that are representative of the archaeological landscapes of Senegal, especially the protohistoric provinces (shell mounds, megaliths, burial mounds and settlement sites), and legacy data collections. The results illustrate **the limitations of using traditional paper-based data** to identify and locate archaeological sites.

Number of sites collected: 8,503
 Sites completely treated: 1,317
 Partially treated sites: 7,186

Results of georeferencing and digitization: The projection of archaeological sites in Senegal



The verification work shows that **remote sensing data is more precise than legacy data**. Site locations are most accurate when their data is georeferenced from recent work or detailed maps; georeferenced sites from general maps and old works generally result in enormous spatial inaccuracies.



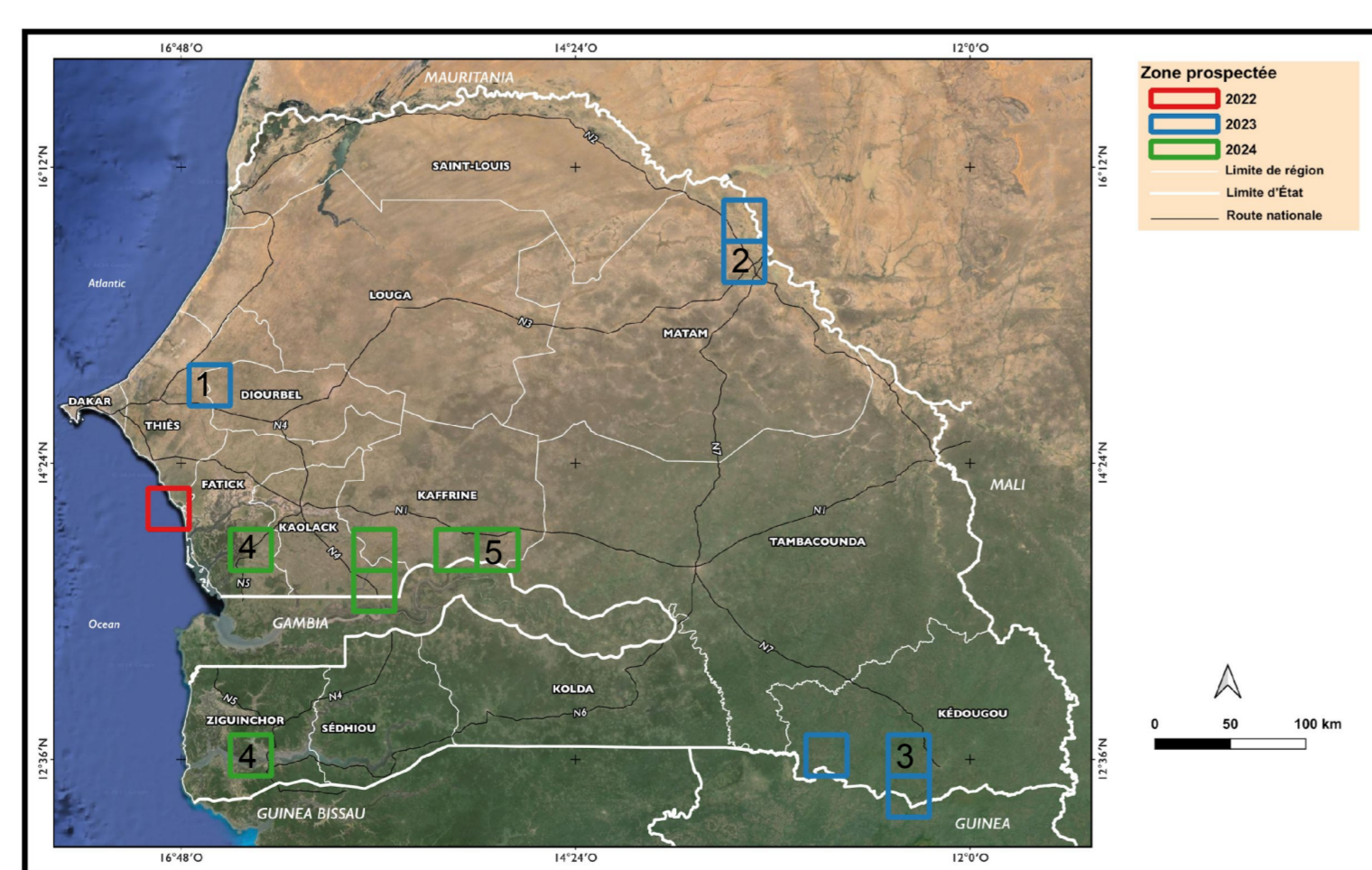
Tumulus, Kael site



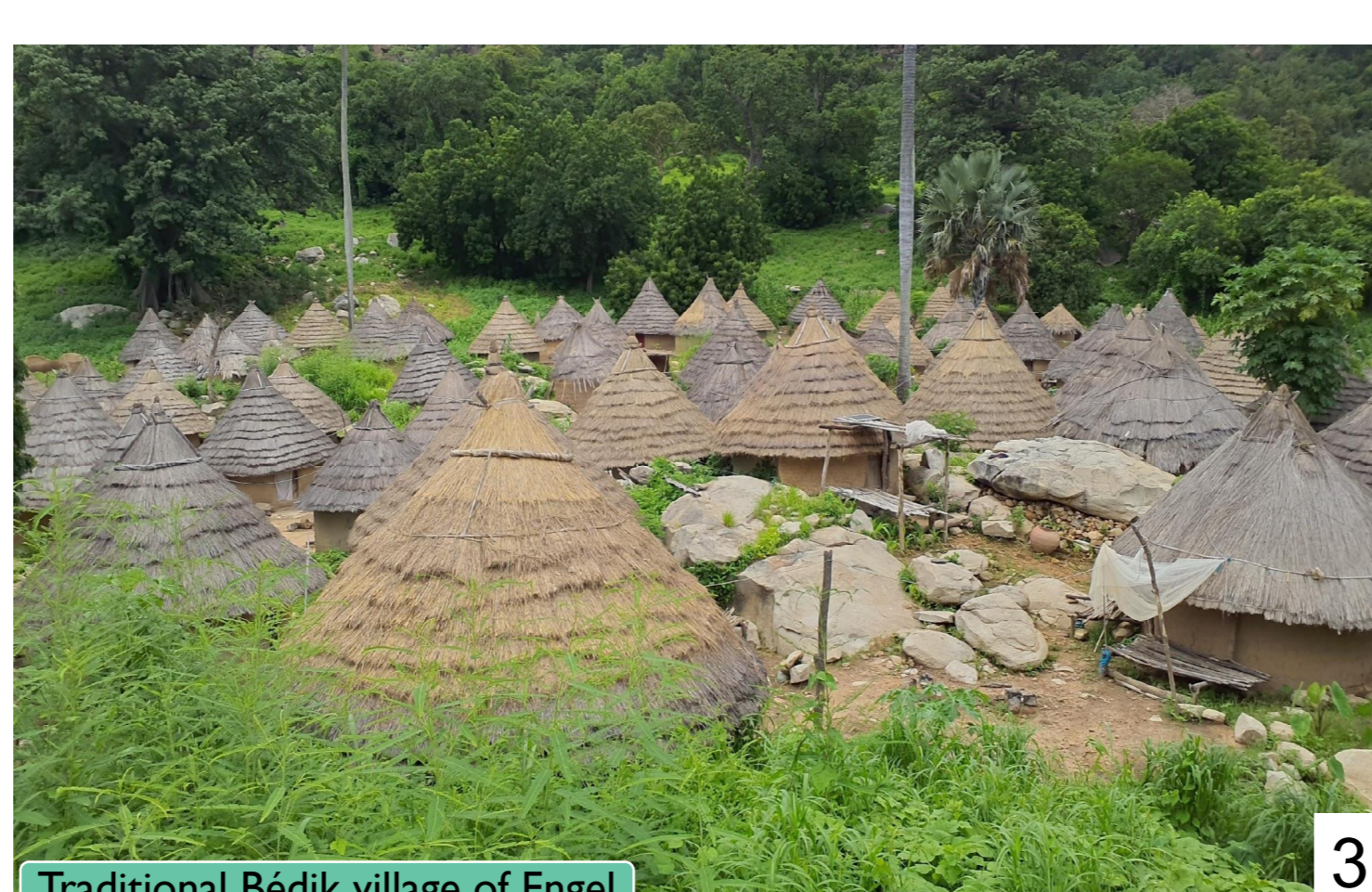
Iron reduction ruins, Sincu Garba site



Shell midden, Sokone site



Megalithic site



Traditional Bédik village of Engel

Site	Surface area (km ²)	Legacy data points verified	New sites found
Tumulus (Diourbel)	744,19	150	1
Housing sites (Matam)	740,06	94	17
Bassari landscapes (Kédougou)	375,71	47	1
Shell middens (Ziguinchor)	453,8	0	19
Shell middens (Delta Saloum)	378,28	9	8
Megaliths (Kaffrine)	593,5	31	22
Total	3285,54	331	68

