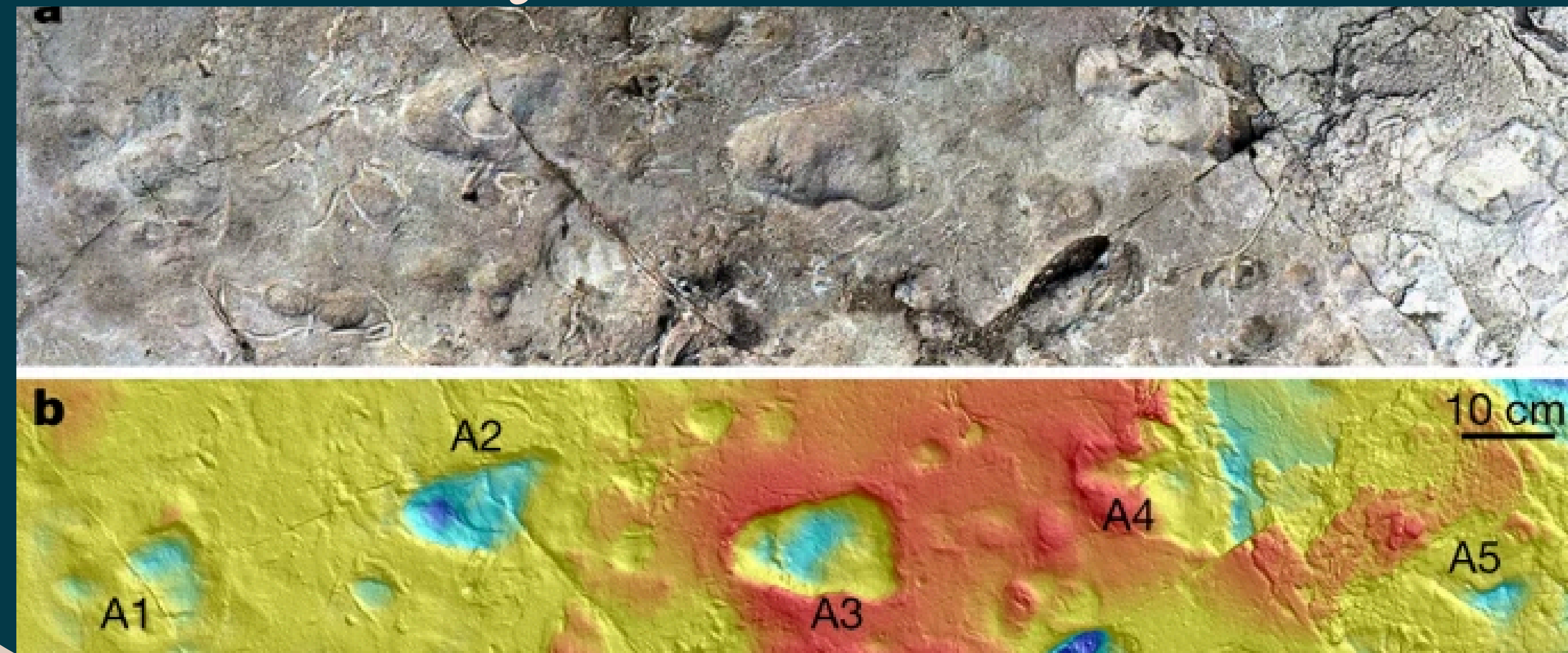


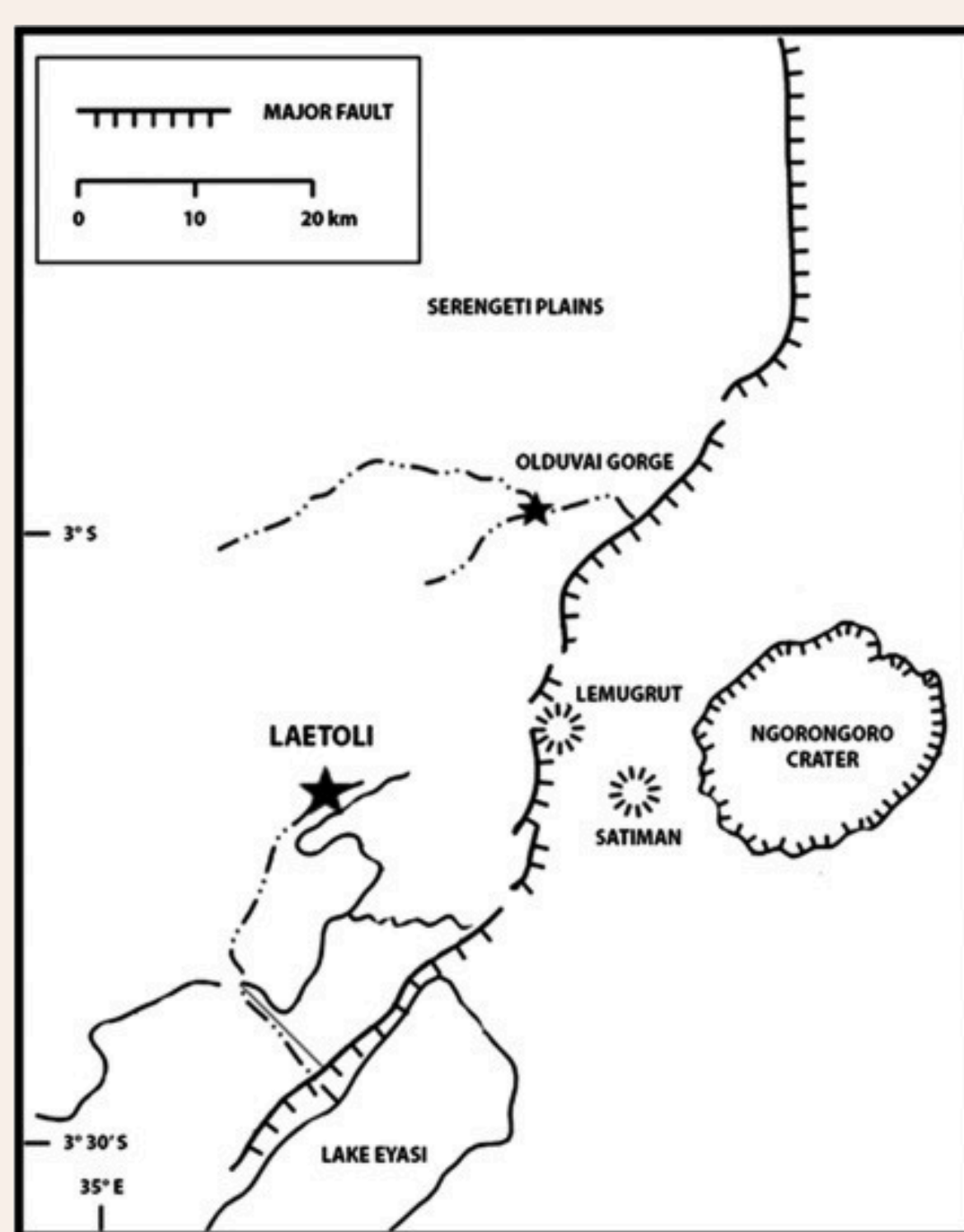
Upper Laetoli Beds: Laetoli, Tanzania



Modified from Su, D.F., and T. Harrison. 2014

Location

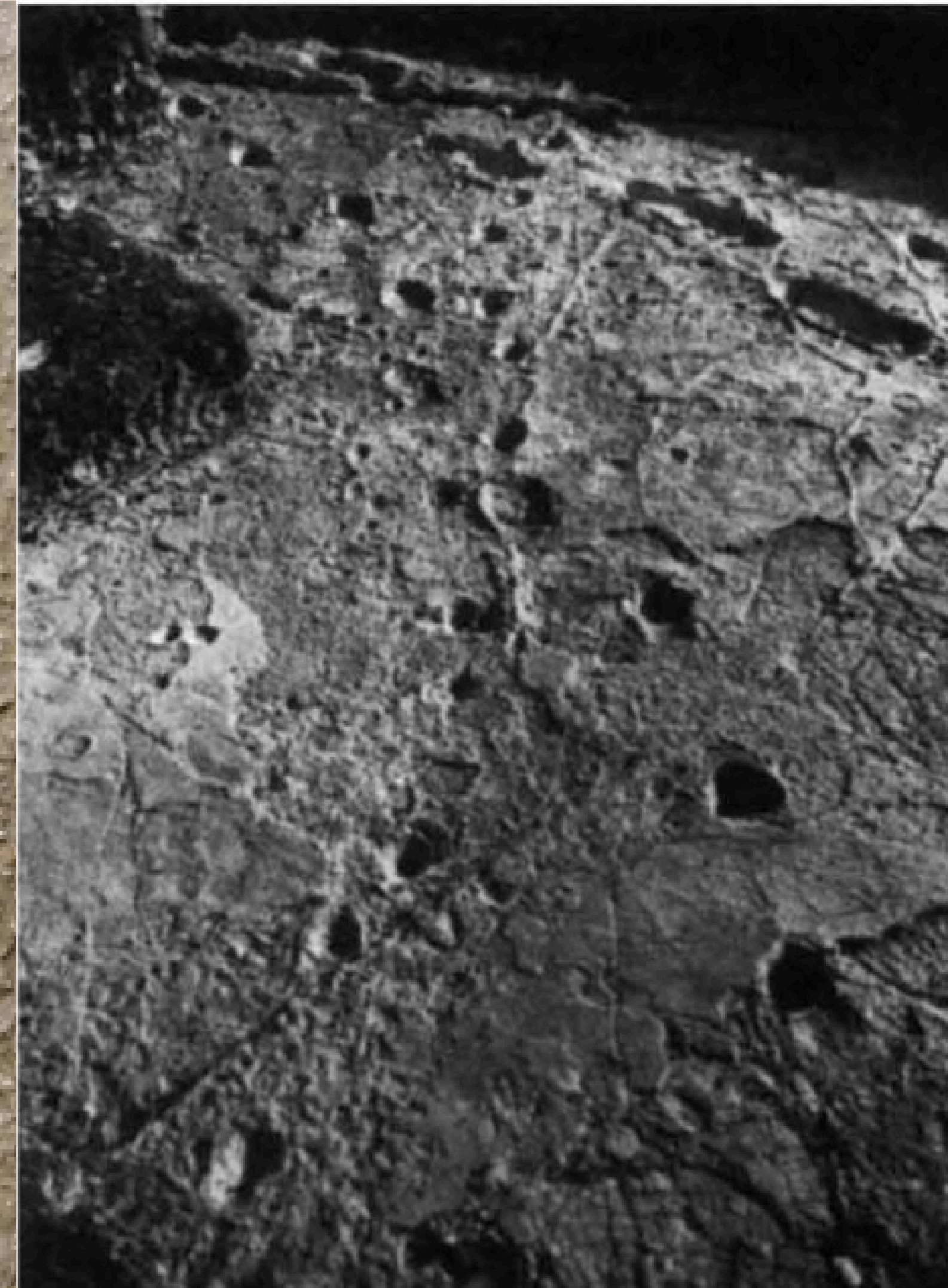
- *Laetoli* is an excavation site in northern Tanzania. It was first visited by Louis and Mary Leakey in 1935 accompanied by Peter Kent.
- The sediment present at the site represents approximately 4.36 million years of geographic time, however the main focus is the timespan between 3.85–3.63 million years ago.
- To reconstruct the paleoenvironmental structure of the area, over 20,000 fossil specimen were recovered including mammals, birds, reptiles and amphibians, terrestrial gastropods, insects, and plants.
- Based on the specimen of bovids found along with a lack of evidence for aquatic life, it was deduced that the site comprised of various closed woodland, open woodland, bushland, shrubland, and grassland, with riverine woodland and forest along seasonal watercourses.



Modified from Su, D.F., and T. Harrison. 2014



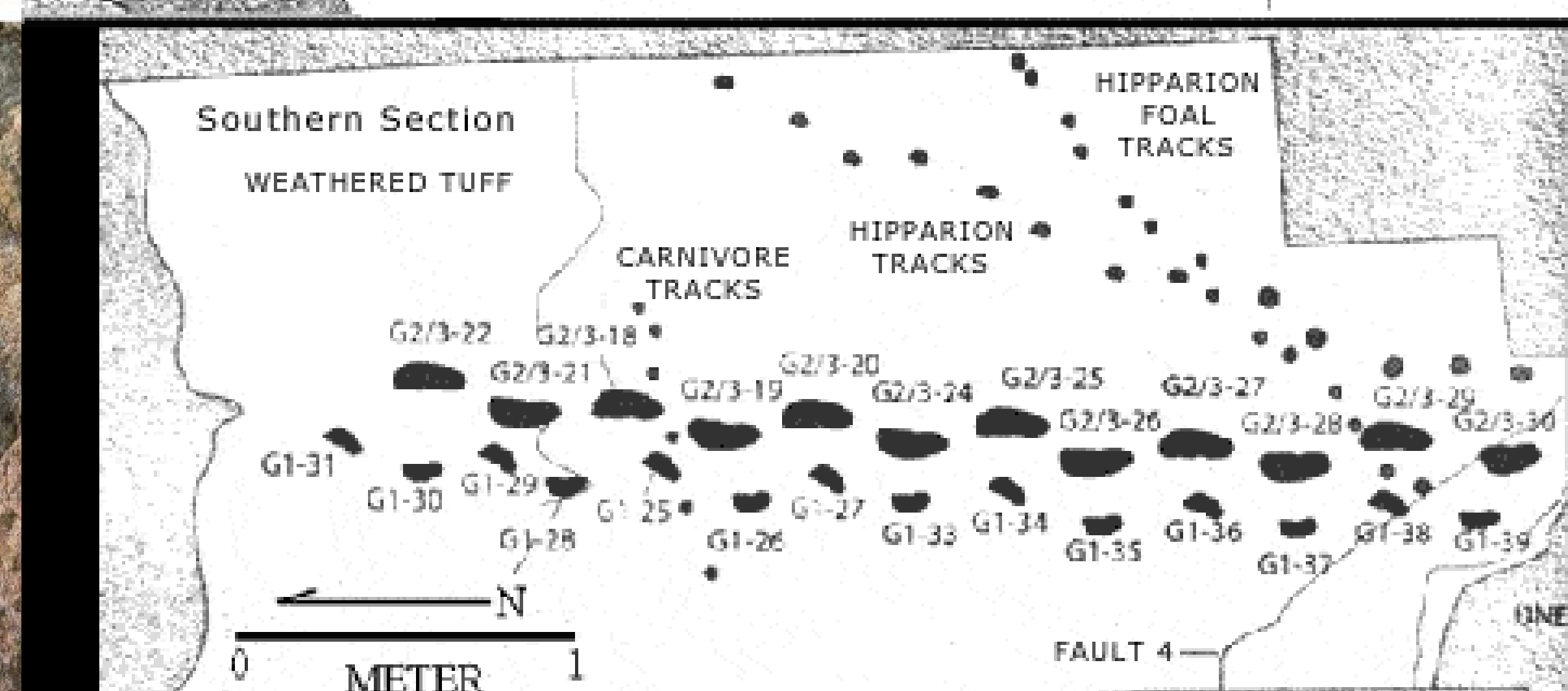
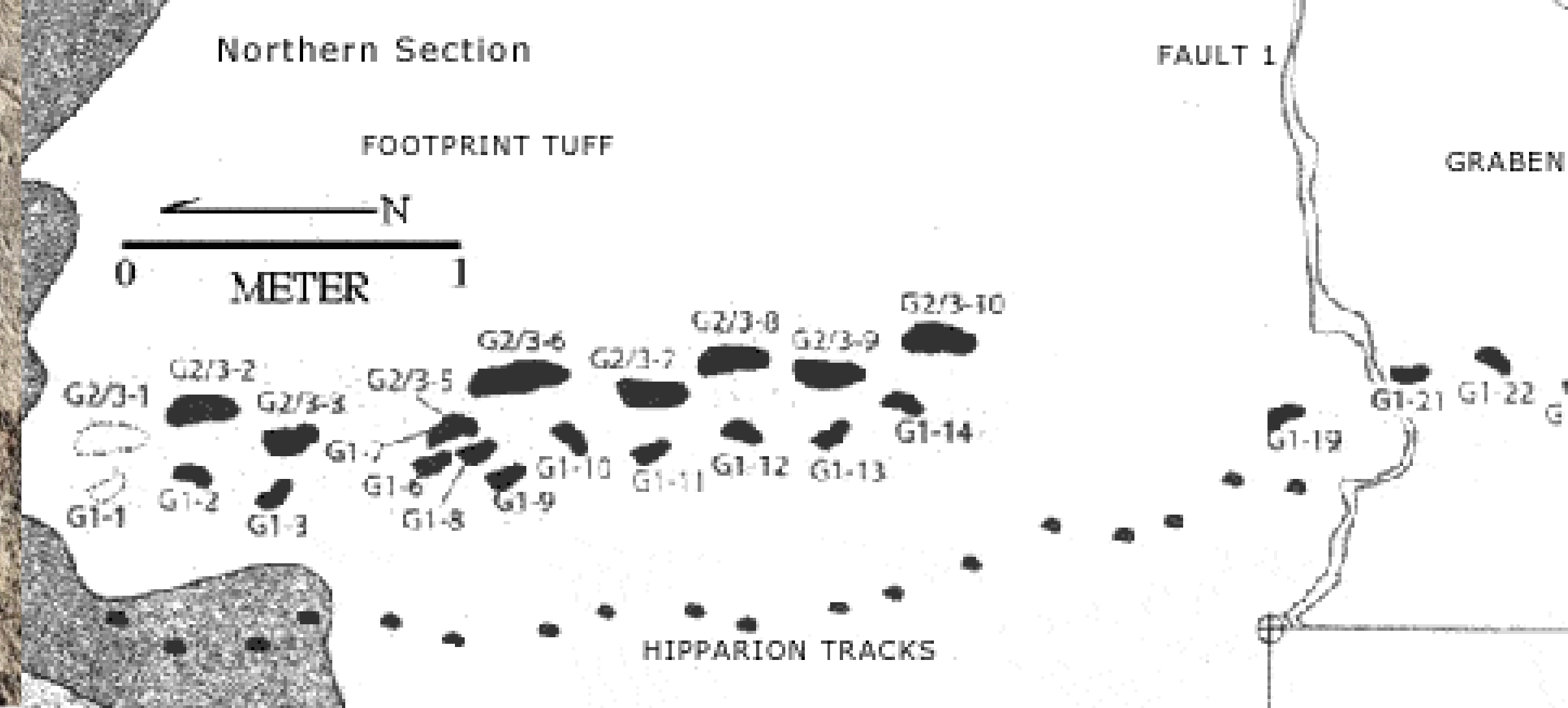
Modified from Su, D.F., and T. Harrison. 2014



Modified from Renders, E. 1984



Modified from Su, D.F., and T. Harrison. 2014



Modified from Grace, L. 2001

TYPES FOUND

- Oldest hominin footprints discovered, specifically those of *Australopithecus afarensis*
- Lots of diverse mammal fossils including extinct relatives of elephants.
- The site also contains various types of birds, reptiles, gastropods, and insects



Modified from Su, D.F., and T. Harrison. 2014

Fossils

TYPES NOT FOUND

- There are only a handful of amphibian fossils and there are no fossils belonging to fish
- No real fossils of water dwelling organisms
- Not an aquatic environment

Conclusion

- Many fossils have been recovered at this site, especially hominin specimens
 - >30 specimens of *Australopithecus afarensis*
- Diverse vertebrate fauna (>20,000 specimens)
- Has the oldest known trail of hominin footprints-> supporting evidence for early hominin bipedalism
- Has a depositional setting very different from other sites of the same area & time
 - Evidence for rivers/large bodies of water being permanent = non-existent
 - Tuffs: fossils formed subaerially through airfall or reworked volcanic ashes

Collection History/Famous Researchers

- Among the most significant early discoveries are the fossils of *Australopithecus afarensis*, which are central to understanding early hominin evolution.
- The site has produced many mammalian fossils, from *Macroselididae* like *Rhynchocyon pliocaenicus* to proboscideans such as *Deinotherium bozasi* and *Stegodon*.
- Recent paleontological efforts have added to the record to include smaller species like rodents and gastropods, reflecting ecological shifts/the evolving biodiversity of the region
- Mary Leakey - Discovered the *Laetoli* Footprints
- Terry Harrison - Enhanced the understanding of the ecological conditions during that time
- Andrew Hill - Focused on the geological/depositional settings at *Laetoli*