

THE COMPREHENSIVE BRAZILIAN AGE DATABASE

Containing radiocarbon and luminescence ages

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The archaeological database is composed mainly of radiocarbon ages, which means they were subject to calibration using the CalPal program (Weninger and Jöris 2008), version 2020.11.

In some portions of Brazil, OSL and TL ages were widely used, and we had to cope with this issue by means of a “reverse calibration”, i.e., entering ages into the Calib program and running the calibration until a given (fictitious) radiocarbon age, once calibrated, matched as closely as possible the luminescence age. The TL/OSL ages are marked in gray, with blue numbers standing for the “fictitious” age, and the actual age appearing in the “Cal age” column.

We also decided to be inclusive in our database, and by this we mean that we are making available all radiocarbon or luminescence ages that were considered *bona fide* by the researchers who published them, regardless of the fact that other researchers consider these ages inconsistent with their own models or beliefs. The same goes for papers that select ages based on the standard deviations. A large standard deviation means low precision, not necessarily low accuracy. We take for granted that judgements about the appropriateness of the ages can be made individually by the reader, since we provided the full references. We prefer to publish an age with a large associated error than to ignore it. Once again, since we are providing the tables as supplementary material, it is up to the reader to disregard specific ages and run his/her own analysis.

In terms of the geographic location of the sites/ages, we chose to provide UTM coordinates of the nearest municipality, instead of providing “exact” locations. This decision was made on three grounds: first, in the scale of analysis we are presenting, the location of the nearest municipality is more than sufficient to provide an adequate overview of the spatial distribution of the ages; second, the majority of the sites published before the advent and popularization of handheld GPS devices do not have an accurate location and therefore, to provide an “exact” location would be meaningless; third, when trying to plot sites using available databases, be they compilations of data or first publications of a given site, it is common to observe that the apparently “exact” geographic coordinates were plainly wrong, falling outside a given region or even the state. This is something that plagues large databases, generally compiled by several researchers and their students, so we argue that it is much easier to detect errors and convey the right location of a given site, at least approximately, if the municipality is

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taken into account. Hence, our database has a redundant location scheme: state, municipality, and UTM coordinates. If by some reason the UTM is wrong, the reader at least knows in which state and municipality it is located. The only exception to this procedure was made in the Amazon region (states of Amazonas, Pará, Maranhão, Rondonia). Municipalities in the region are fairly large, and we chose to plot the location of the site when it was considered to be too far away from the nearest urbanized area.