

**Supporting Information.** Odonne, G., M. van den Bel, M. Burst, O. Brunaux, M. Bruno, E. Dambrine, D. Davy, M. Desprez, J. Engel, B. Ferry, V. Freycon, P. Grenand, S. Jérémie, M. Mestre, J.F. Molino, P. Petronelli, D. Sabatier, and B Hérault. 2019. Long-term influence of early human occupations on current forests of the Guiana Shield. *Ecology*.

## Appendix S1.

### Radiocarbon datations of charcoals from the sampled A sites

Charcoals found in anthropized plots were dated by the Radiocarbon Laboratory (A. Mickiewicz University, Poznań, Poland). Samples of charcoal dug from pits (after mechanical removal of macroscopic contamination visible under a binocular microscope) were treated with 1M HCl (80°C, 20+ min), 0.025-0.2M NaOH and then 0.25M HCl (80°C, 1 hour). After treatment with each reagent, the samples were rinsed with deionized water (Millipore) until pH = 7. Content of <sup>14</sup>C in samples of carbon was measured using the spectrometer “Compact Carbon AMS” (National Electrostatics Corporation, USA) as described by Goslar et al. (2004). The measurement was performed by comparing intensities of ionic beams of <sup>14</sup>C, <sup>13</sup>C and <sup>12</sup>C measured for each sample and for standard samples (modern standard: “Oxalic Acid II” and standard of <sup>14</sup>C-free carbon: “background”). In each AMS run, 30-33 samples of unknown age were measured, alternating with measurements of 3-4 samples of modern standard and 1-2 samples of background (coal). Conventional <sup>14</sup>C age was calculated using correction for isotopic fractionation according to Stuiver and Polach (1977), based on the ratio of <sup>13</sup>C/<sup>12</sup>C measured in the AMS spectrometer simultaneously with the ratio <sup>14</sup>C/<sup>12</sup>C. Calibration of <sup>14</sup>C age was performed using the program OxCal ver. 3.10 (Bronk Ramsey, 2001, 2005). Calibration was performed against the <sup>14</sup>C calibration curve IntCal04.

Stuiver, M., Polach, H.A., 1977. Discussion reporting of <sup>14</sup>C data. *Radiocarbon* 19, 355–363.

Goslar, T., Czernik, J., Goslar, E., 2004. Low-energy <sup>14</sup>C AMS in Poznań radiocarbon laboratory, Poland. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms* 223, 5–11.

Bronk Ramsey, C., 2005. OxCal v3. 10 Radiocarbon Calibration Package.

Bronk Ramsey, C., 2001. Development of the radiocarbon calibration program. *Radiocarbon* 43, 355–363.