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Supplementary Materials for

Climate change stimulated agricultural innovation and exchange across Asia

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The PDF file includes:

Legends for data files S1 to S3 Legends for tables S1 to S3 Legends for movies S1 to S6

Other Supplementary Material for this manuscript includes the following:

(available at advances.sciencemag.org/cgi/content/full/4/10/eaar4491/DC1)

Data file S1 (Microsoft Excel format). The chronometric data used in this analysis, radiocarbon laboratories, and associated references.

Data file S2 (.html format). Calibrated radiocarbon ranges for each site in our database (x axis) and the probability of each of these sites being in the niche during that same phase of occupation (y axis).

Data file S3 (.gz format). An archived research compendium containing all R code and data to reproduce the analysis, as well as the specification of the computing environment.

Table S1 (.csv format). Common Eurasian crops and their thermal requirements.

Table S2 (.csv format). Estimated site occupation spans and niche probabilities over those occupations for all sites in this study.

Table S3 (.csv format). Storage estimates for sites in three countries in Asia.

Movie S1 (.mp4 format). The wheat niche.

Movie S2 (.mp4 format). The barley niche.

Movie S3 (.mp4 format). The broomcorn millet niche.

Movie S4 (.mp4 format). The foxtail millet niche.

Movie S5 (.mp4 format). The buckwheat niche.

Movie S6 (.mp4 format). The rice niches.

Supplementary Material Captions:

Data file S1. The chronometric data used in this analysis, radiocarbon laboratories, and associated references.

Data file S2. Calibrated radiocarbon ranges for each site in our database (x axis) and the probability of each of these sites being in the niche during that same phase of occupation (y axis). This html file can be examined interactively and users can toggle to show data for all, several or a single crop. Users can also zoom in or out of the site to see broad trends or examine data at an individual site. Shown for wheat, barley, broomcorn and foxtail millet.

Data file S3. An archived research compendium containing all R code and data to reproduce the analysis, as well as the specification of the computing environment.

Table S1. Common Eurasian crops and their thermal requirements.

Table S2. Estimated site occupation spans and niche probabilities over those occupations for all sites in this study.

Table S3. Storage estimates for sites in three countries in Asia.

Movies S1 to S6. The wheat niche (Movie S1), The barley niche (Movie S2), The broomcorn millet niche (Movie S3), The foxtail millet niche (Movie S4), The buckwheat niche (Movie S5), and The rice niches (Movie S6). The thick white contour line is at 75% probability of being in the thermal niche; the thin white lines are at 75% in the lower and upper confidence interval reconstructions. Sites from the database appear as circles if (a) they contain botanical evidence of the crop, and (b) their estimated occupation span includes the displayed year, and are sized according to their probability of being in the niche.