

[Supplementary material]

Cereals, soils and iron at Sanyangzhuang: Western Han agricultural production in the Central Plains

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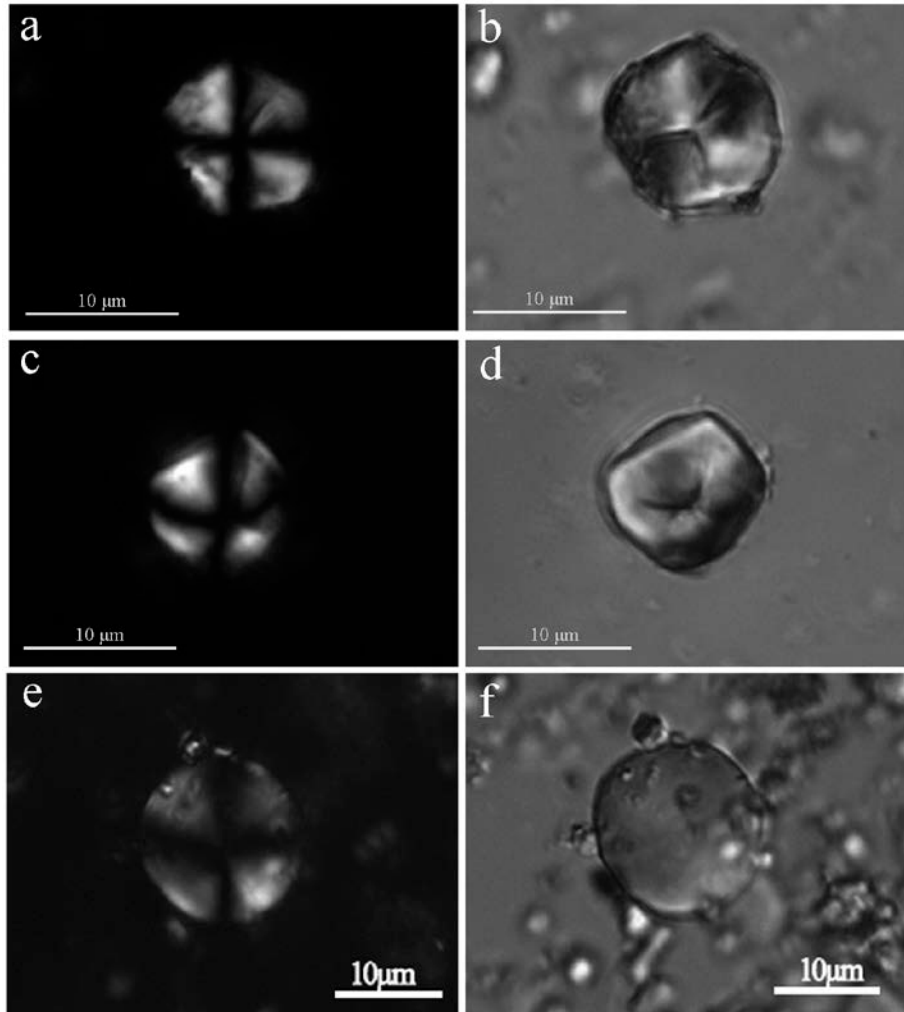


Figure S1. Microscopic images of starch grains of the three cereals at Sanyangzhuang: a–b) Setaria sp. (cross-polarised light (XPL) and plain polarised light (PPL)); c–d) Coix sp. (XPL and PPL); e–f) Triticum sp. (XPL and PPL). Note the cross extinction characteristics of the starch grains (images by Hao Zhao).



Figure S2. Satellite image (Image @ 2018 CNES/Airbus from Google Earth) of Sanyangzhuang site area. Yellow dots show the locations of the four profiles where thin section samples were collected: compound 1 (CP1), compound 3/4 (CP3/4), canal trench 1 (CT1) and canal trench 2 (CT2). Note that the modern Sanyangzhuang village is located at the bottom of the image.

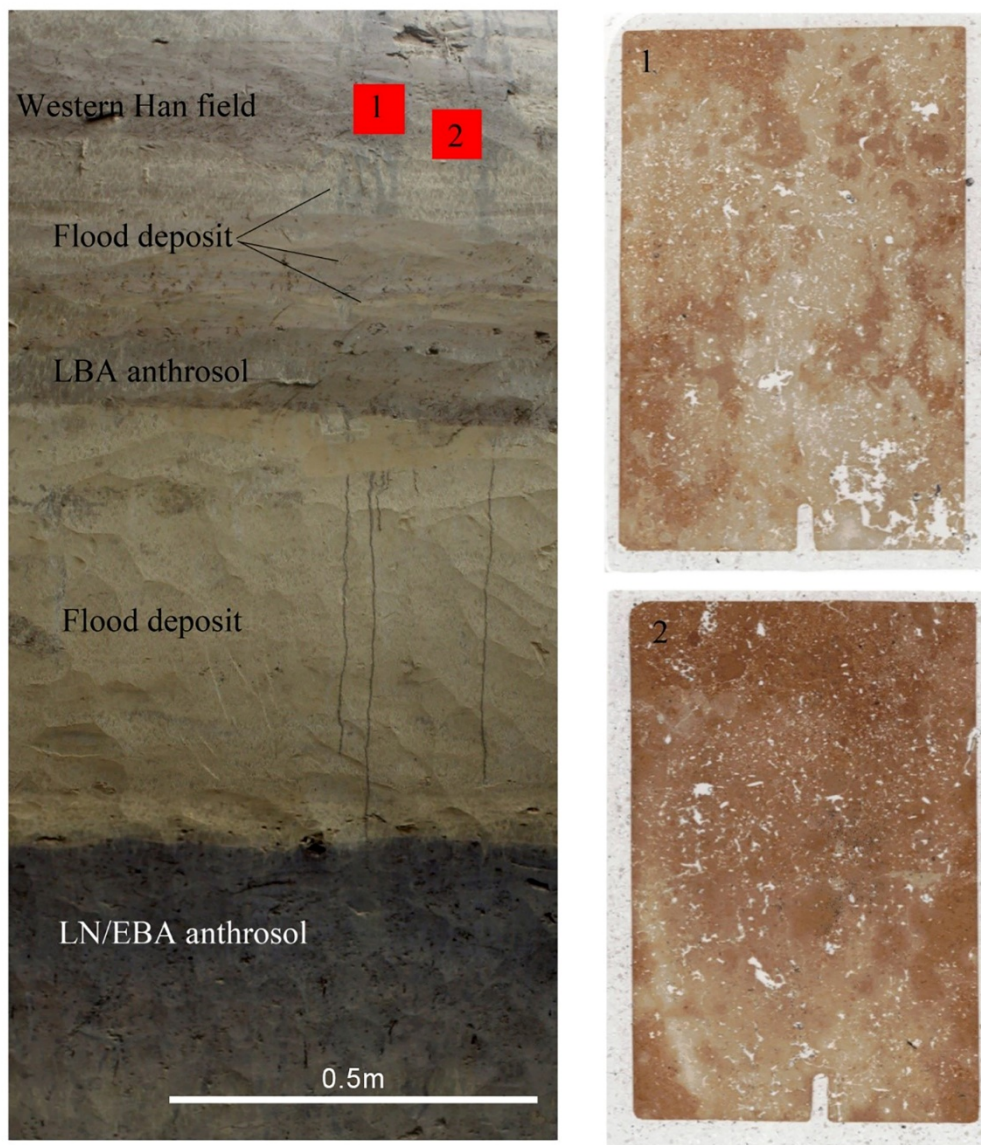


Figure S3. The profile of compound 1 (CPI) at Sanyangzhuang. Two micromorphological samples (CP1-Han-1 and CP1-Han-2) were collected from the Western Han field layer of this profile. Note that there are two layers of anthrosol dated to the Late Neolithic/Early Bronze Age (LN/EBA) and the Late Bronze Age (LBA), and several layers of flood deposit without precise dates (images by Zhen Qin).

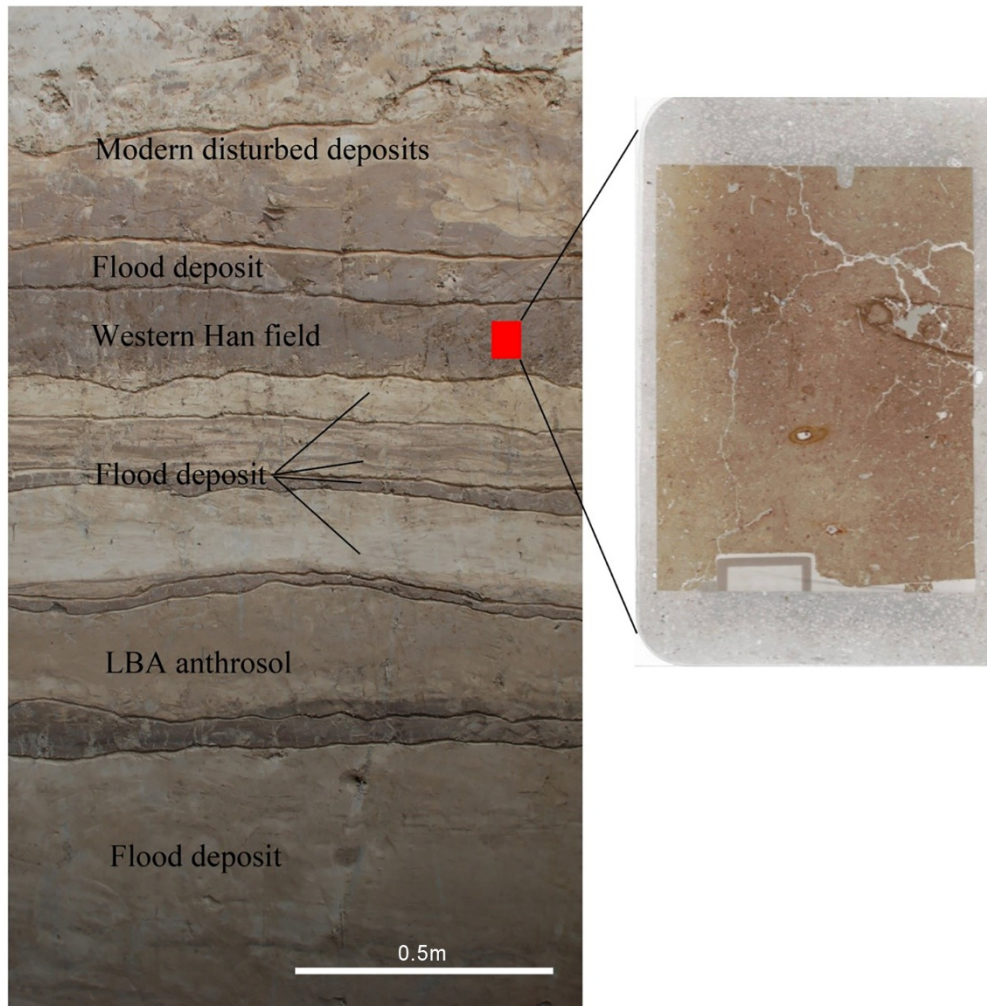


Figure S4. The profile of compound 3/4 (CP3/4) at Sanyangzhuang. One micromorphological sample (CP3/4-Han) was collected from the Western Han field layer of this profile. Note that there is a layer of anthrosol dated to the Late Bronze Age (LBA), and several layers of flood deposit without precise dates (images by Zhen Qin).

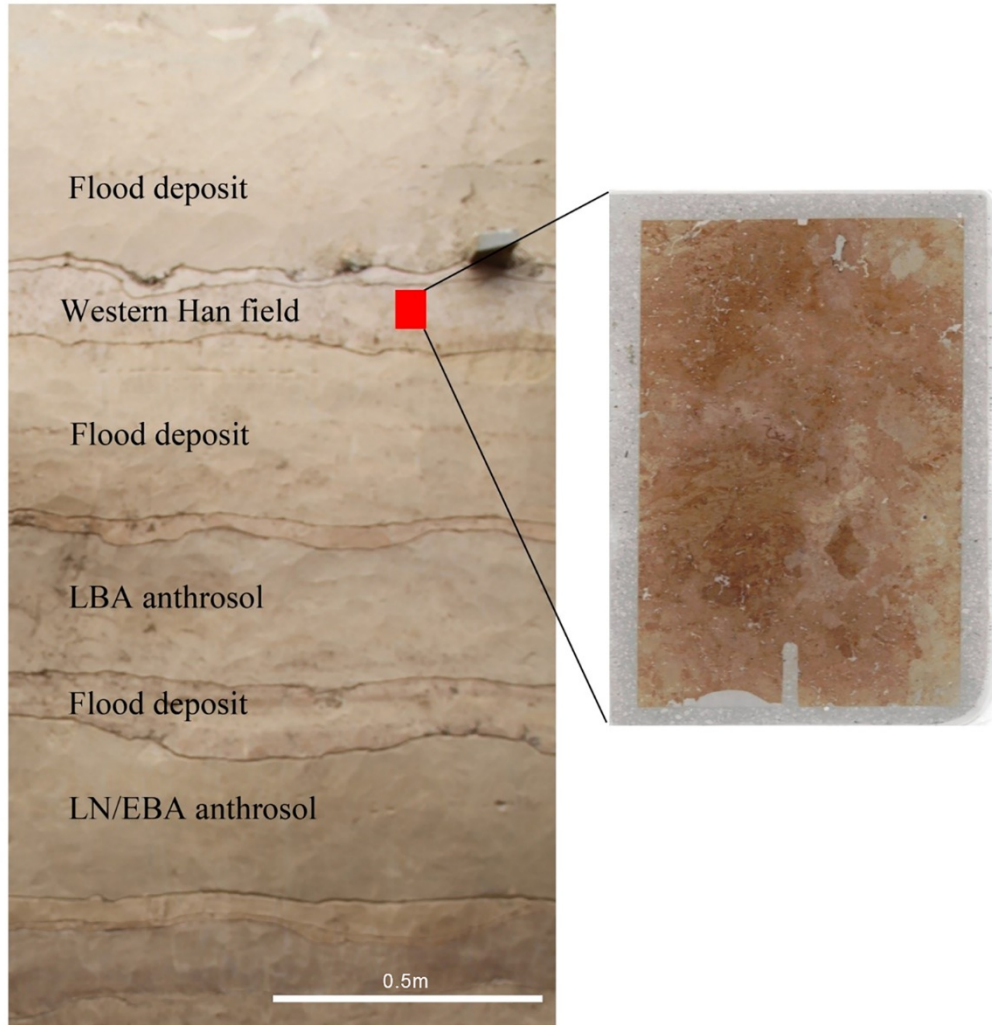


Figure S5. The profile of canal trench 1 (CT1) at Sanyangzhuang. One micromorphological sample (CT1-Han) was collected from the Western Han field layer of this profile. Note that there are two layers of anthrosol dated to the Late Neolithic/Early Bronze Age (LN/EBA) and the Late Bronze Age (LBA), and several layers of flood deposit without precise dates (images by Zhen Qin).

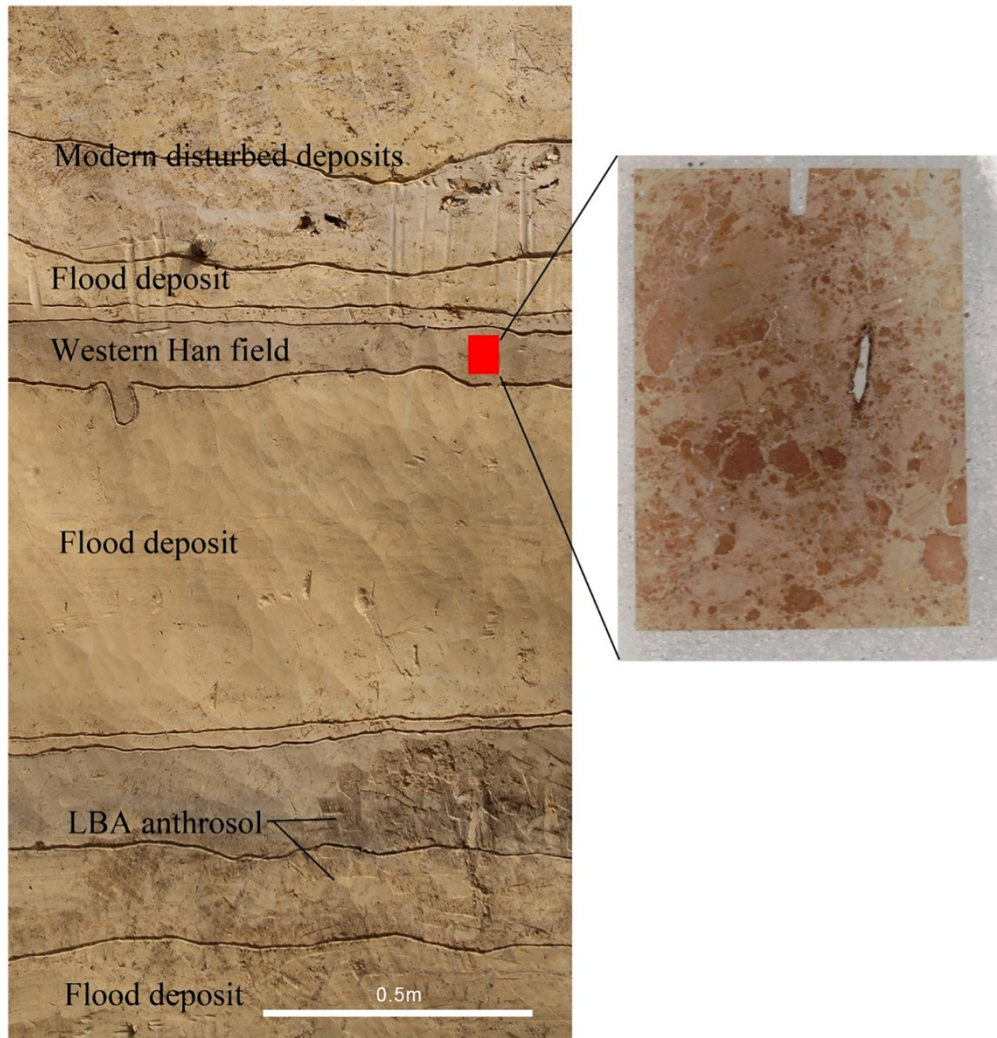


Figure S6. The profile of canal trench 2 (CT2) at Sanyangzhuang. One micromorphological sample (CT2-Han) was collected from the Western Han field layer of this profile. Note that there is a layer of anthrosol dated to the Late Bronze Age (LBA), and several layers of flood deposit without precise dates (images by Zhen Qin).