**Table S1. Representative larger sites through time, estimated median age and size. (plotted in Fig. 3).**

|  |  |  |
| --- | --- | --- |
| **Site** | **Age** | **Size (hectares)** |
| Xinglonggou | -5800 | 3 |
| Zhaobaogou | -4950 | 6 |
| Dongshanzui | -3485 |  |
| Fushanzhuang | -3500 | 35 |
| Xihe | -5900 | 10 |
| Dadiwan | -5500 | 1 |
| Wuluoxipo | -5250 | 2 |
| Bajuia | -5500 | 12 |
| Jiangzhai | -4600 | 5 |
| Banpo | -4500 | 5 |
| Diantoubao | -4000 | 70 |
| Cangdi | -4000 | 15.1 |
| Yangshaocun | -3750 | 30 |
| Xipo | -3600 | 40 |
| Dadiwan  | -3200 | 50 |
| Dantu | -2800 | 13.4 |
| Liangchengzhen | -2200 | 272 |
| Taosi (Early) | -2200 | 56 |
| Yangwangcheng | -2200 | 367 |
| Zhangiazhaili | -2100 | 75 |
| Wangchenggang | -2000 | 50 |
| Taosi (Late) | -2000 | 289 |
| Taipu | -2000 | 70 |
| Shimao | -2000 | 400 |

**Table S2 Pre-Yangshao sites with archaeological millet evidence. (plotted in Fig. 4 - also in excel Table S3).**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Site | Province | Latitude | Longitude | Broad Period | Early/ Late | Regional phase | Start Date BC/AD | Finish Date BC/AD | Est. Date Median BC/AD | wild Oryza | Panicum  | Setaria  | References |
| Bianbiandong | Shandong | 36.06167 | 118.4714 | Neolithic | - | Post-Houli | -5400 | -4900 | -5150 |  | Pa | Se | Sun et al. 2014 |
| Cishan | Hebei | 36.57585 | 114.1241 | Neolithic | Early | Cishan  | -6102 | -5600 | -5851 |  | Pa | Se | Lu et al. 2009 |
| Dadiwan | Gansu | 35.00789 | 105.9089 | Neolithic | Early | Dadiwan | -5800 | -5400 | -5600 |  | Pa |  | Liu et al. 2004; Barton 2009 |
| Dingzhuang | Henan | 34.04989 | 113.8184 | Neolithic | Early | Peiligang | -7000 | -5000 | -6000 |  |  | Se | Song 2011 |
| Donghulin | Beijing | 39.987 | 115.7495 | Neolithic | Early | Doughulin | -9050 | -7550 | -8300 |  | Pa | Se | Yang et al. 2012; Zhao et al 2020 |
| Fudian | Henan | 34.56363 | 112.8648 | Neolithic | Early | Peiligang | -6000 | -5000 | -5500 |  |  | Se | Lee et al. 2007; Bestel et al. 2014 |
| Fuxin 12D16 | Inner Mongolia | 42.1557 | 121.896 | Neolithic | Early | Xinglongwa | -5500 | -5300 | -5400 |  | Pa | Se | Shelach-Lavi et al 2019 |
| Fuxin 12D56 | Inner Mongolia | 42.155 | 121.89 | Neolithic | Early | Xinglongwa | -5900 | -5700 | -5800 |  | Pa |  | Shelach-Lavi et al 2019 |
| Lixian 7 | Gansu | 34.18909 | 105.1784 | Neolithic | Early | Dadiwan I | -6050 | -5350 | -5700 |  | Pa |  | Ji, 2009; An et al. 2010 |
| Mangha | Inner Mongolia | 43.96963 | 122.1966 | Early Neolithic | (?) | (?) | - | - | -5800 |  | Pa | Se | Sun et al 2014 |
| Nanzhuangtou | Hebei | 39.11137 | 115.657 | Neolithic | Early | Nanzhuangtou | -8500 | -7700 | -8100 |  |  | Se | Yang et al. 2012; 2015 |
| Niuwabao | Hebei | 36.59404 | 114.0488 | Neolithic | Early | Cishan  | -6500 | -5000 | -5750 |  |  | Se | Ren 1996; Liu et al 2008 |
| Peiligang | Henan | 34.43643 | 113.6583 | Neolithic | Early | Peiligang | -6043 | -5569 | -5806 |  |  | Se | Lu 1999: Table 4; Zhang and Hung 2013: Table 2 |
| Qianbuxia | Shandong | 36.74782 | 119.3816 | Neolithic | Early | Houli | -6500 | -5500 | -6000 |  | Pa | Se | Jin 2006 |
| Shawoli | Henan | 34.62597 | 113.6813 | Neolithic | Early | Peiligang | -5948 | -5692 | -5820 |  |  | Se | Wang 1984; Zhu 2013; Zhang and Hung 2010 |
| Shizitan Loc. 9 | Shanxi | 36.08992 | 110.5827 | Palaeolithic | Upper | - | -11850 | -10750 | -11300 |  |  | Se | Bestel et al. 2014 |
| Shizitan Loc. 9 | Shanxi | 36.08992 | 110.5827 | Palaeolithic | Upper | - | -10750 | -9650 | -10200 |  |  | Se | Bestel et al. 2014 |
| Wuluoxipo | Henan | 34.63843 | 113.0049 | Neolithic | Early | Peiligang | -6000 | -5000 | -5500 |  |  | Se | Zuo et al. 2016; Lee et al. 2007 |
| Xihe | Shandong | 36.70589 | 117.6301 | Neolithic | Early | Houli | -6070 | -5900 | -5985 | Or  |  | Se | Jin et al 2014 |
| Xinglonggou | Inner Mongolia | 42.38727 | 120.0907 | Neolithic | Eary | Xinglongwa | -6200 | -5400 | -5800 |  | Pa | Se | Zhao 2004; Liu et al. 2015 |
| Xinle | Liaoning | 41.848 | 123.4137 | Neolithic | Early | Xinle | -5500 | -4500 | -5000 |  | Pa |  | Yan 1992 |
| Yuezhuang | Shandong | 36.61994 | 116.8286 | Neolithic | Early | Houli | -6060 | -5750 | -5905 | Or  | Pa | Se | Crawford et al.2006 |
| Zhangmatun | Shandong | 36.71993 | 117.1128 | Neolithic | Early | - | -7050 | -6500 | -6775 |  | Pa | Se | Wu et al. 2014 |
| Zhuzhai | Henan | 34.82523 | 113.3055 | Neolithic | Early | - | -5974 | -5823 | -5898.5 | Or  | Pa | Se | Bestel et al 2018 |

**Table S3. Millet sites in China, Korea, Japan, and Russia (plotted in Fig. 5. see separate csv/excel file).**

**Table S4. Grain metrics for archaeological *Panicum* and *Setaria*.(plotted in Fig. 6. see separate csv / excel file).**

**Table S5. Isotopic measurements on Chinese pig or dog collagen. (plotted in Fig. 7 and Fig. 8 bottom)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Site** | **Culture** | **Age BC** | **δ13C** | **δ 15N** | **source** |
| dog | Xinglonggou 1 | Xinlongwa | -5800 | -11 | 8.5 | Liu et al 2012 |
| dog | Xinglonggou 1 | Xinlongwa | -5800 | -11.6 | 9.4 | Liu et al 2012 |
| dog | Xinglonggou 1 | Xinlongwa | -5800 | -19 | 8.3 | Liu et al 2012 |
| dog | Xinglonggou 1 | Xinlongwa | -5800 | -17.2 | 8.1 | Liu et al 2012 |
| dog | Xinglonggou 1 | Xinlongwa | -5800 | -11.9 | 8.3 | Liu et al 2012 |
| dog | Xinglonggou 1 | Xinlongwa | -5800 | -21.2 | 6.1 | Liu et al 2012 |
| dog | Dadiwan | Dadiwan | -5500 | -19.9 | 6.2 | Barton et al. 2009 |
| dog | Dadiwan | Dadiwan | -5500 | -19.8 | 5.9 | Barton et al. 2009 |
| dog | Dadiwan | Dadiwan | -5500 | -10.2 | 7.3 | Barton et al. 2009 |
| dog | Dadiwan | Dadiwan | -5500 | -10.2 | 7.5 | Barton et al. 2009 |
| dog | Dadiwan | Dadiwan | -5500 | -11.1 | 7.7 | Barton et al. 2009 |
| Dog | Wayaogou | Banpo | -4300 | -11 | 9.7 | Chen et al 2016 |
| dog | Wayaogou | Banpo | -4300 | -10.9 | 7.1 | Chen et al 2016 |
| dog | Wayaogou | Banpo | -4300 | -11.3 | 9.7 | Chen et al 2016 |
| dog | Xipo | Yangshao | -3800 | -8.18 | 6.91 | Pechenkina et al. 2005 |
| dog | Dadiwan | Late Banpo | -3750 | -7.9 | 7.9 | Barton et al. 2009 |
| dog | Dadiwan | Late Banpo | -3750 | -8.2 | 8.6 | Barton et al. 2009 |
| dog | Dadiwan | Late Banpo | -3750 | -10.7 | 8.7 | Barton et al. 2009 |
| dog | Dadiwan | Late Banpo | -3750 | -9.3 | 9 | Barton et al. 2009 |
| dog | Dadiwan | Late Banpo | -3750 | -13 | 8.6 | Barton et al. 2009 |
| dog | Dadiwan | Late Banpo | -3750 | -13.1 | 8.7 | Barton et al. 2009 |
| Dog | Dongying | Late Yangshao | -2550 | -14.6 | 6.9 | Chen et al 2016 |
| dog | Dongying | Late Yangshao | -2550 | -9.1 | 5.9 | Pechenkina et al. 2005 |
| dog | Kangjia | Longshan | -2300 | -8.97 | 9.48 | Pechenkina et al. 2005 |
| dog | Kangjia | Longshan | -2300 | -14.53 | 9.84 | Pechenkina et al. 2005 |
| dog | Wadian | Late Longshan | -2100 | -10.9 | 8.1 | Chen et al. 2016b |
| dog | Wadian | Late Longshan | -2100 | -10.5 | 5.9 | Chen et al. 2016b |
| dog | Wadian | Late Longshan | -2100 | -11 | 6.1 | Chen et al. 2016b |
| dog | Wadian | Late Longshan | -2100 | -10.6 | 7.2 | Chen et al. 2016b |
| dog | Wadian | Late Longshan | -2100 | -9.1 | 6.5 | Chen et al. 2016b |
| dog | Wadian | Late Longshan | -2100 | -10.3 | 8.5 | Chen et al. 2016b |
| dog | Wadian | Late Longshan | -2100 | -8.5 | 8.4 | Chen et al. 2016b |
| dog | Xinglonggou III | Lower Xiajiadian | -1900 | -7.4 | 7.1 | Liu et al 2012 |
| dog | Zhangdeng | Proto-Shang | -1700 | -7.6 | 7.6 | Hou et al. 2013 |
| dog | Zhangdeng | Proto-Shang | -1700 | -8.8 | 6.7 | Hou et al. 2013 |
| dog | Zhangdeng | Proto-Shang | -1700 | -6.7 | 7.3 | Hou et al. 2013 |
| dog | Zhangdeng | Proto-Shang | -1700 | -7.4 | 7.7 | Hou et al. 2013 |
| **Species** | **Site** | **Culture** | **Age BC** | **δ13C** | **δ 15N** | **source** |
| pig | Yuezhuang | Houli | -5905 | -18.1 | 4.7 | Hu et al 2008 |
| pig | Yuezhuang | Houli | -5905 | -19 | 9.1 | Hu et al 2008 |
| pig | Yuezhuang | Houli | -5905 | -10.6 | 6.4 | Hu et al 2008 |
| pig | Yuezhuang | Houli | -5905 | -20 | 6 | Hu et al 2008 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -20.9 | 4.8 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -20.3 | 4.8 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -19.6 | 4.5 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -20.6 | 5.3 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -22 | 3.2 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -18.3 | 7.2 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -20.3 | 4.6 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -20 | 5.1 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -20 | 5.1 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -20.2 | 4.6 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -19.9 | 4 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -21.6 | 2.8 | Liu et al 2012 |
| pig | Xinlonggou 1 | Xinlongwa | -5800 | -19.8 | 5 | Liu et al 2012 |
| pig | Dadiwan | Dadiwan | -5500 | -12 | 8.3 | Barton et al. 2009 |
| pig | Dadiwan | Dadiwan | -5500 | -16.3 | 6.2 | Barton et al. 2009 |
| pig | Dadiwan | Dadiwan | -5500 | -20.4 | 5.6 | Barton et al. 2009 |
| pig | Dadiwan | Dadiwan | -5500 | -20.9 | 7.2 | Barton et al. 2009 |
| pig | Dadiwan | Dadiwan | -5500 | -19.3 | 5.3 | Barton et al. 2009 |
| pig | Dadiwan | Dadiwan | -5500 | -19.1 | 7 | Barton et al. 2009 |
| pig | Dadiwan | Dadiwan | -5500 | -19 | 5.6 | Barton et al. 2009 |
| Pig | Wayaogou | Banpo | -4300 | -16.6 | 7.2 | Chen et al 2016a |
| Pig | Wayaogou | Banpo | -4300 | -10.7 | 5.9 | Chen et al 2016a |
| Pig | Wayaogou | Banpo | -4300 | -17.6 | 4.7 | Chen et al 2016a |
| Pig | Wayaogou | Banpo | -4300 | -17 | 5.4 | Chen et al 2016a |
| Pig | Wayaogou | Banpo | -4300 | -9 | 6.3 | Chen et al 2016a |
| Pig | Wayaogou | Banpo | -4300 | -10.9 | 6.4 | Chen et al 2016a |
| Pig | Wayaogou | Banpo | -4300 | -10.1 | 6.2 | Chen et al 2016a |
| Pig | Wayaogou | Banpo | -4300 | -12.4 | 5 | Chen et al 2016a |
| pig | Xipo | Yangshao | -3800 | -7.4 | 7.49 | Pechenkina et al. 2005 |
| pig | Xipo | Yangshao | -3800 | -7.65 | 7.96 | Pechenkina et al. 2005 |
| Pig | Dongying | Yangshao | -3750 | -9.8 | 6.1 | Chen et al 2016 |
| Pig | Dongying | Yangshao | -3750 | -9.2 | 7.7 | Chen et al 2016 |
| pig | Dadiwan | Late Banpo | -3750 | -8.5 | 8 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -15.7 | 7.2 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -8.3 | 8.4 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -14.7 | 8.5 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -17.5 | 6.4 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -7 | 7.7 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -9.7 | 9.2 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -9 | 9.2 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -10 | 8.8 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -6.3 | 8.1 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -6.5 | 8.6 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -8.8 | 8.4 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -11.5 | 9.9 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -12.2 | 8.9 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -9.1 | 9.1 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -11.4 | 9.6 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -9.2 | 8.8 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -8.2 | 9.1 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -8.3 | 8.7 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -14.9 | 6.8 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -9 | 8.4 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -9 | 8.6 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -7.7 | 7.9 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -8.3 | 8.9 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -9 | 8.2 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -11 | 7.8 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -12.3 | 9.3 | Barton et al. 2009 |
| pig | Dadiwan | Late Banpo | -3750 | -8.3 | 7.6 | Barton et al. 2009 |
| pig | Xinglonggou II  | Hongshan | -3750 | -19.8 | 3.8 | Liu et al 2012 |
| pig | Xinglonggou II  | Hongshan | -3750 | -20.9 | 3.4 | Liu et al 2012 |
| Pig | Dongying | Late Yangshao | -2550 | -14.6 | 6.3 | Chen et al 2016a |
| Pig | Dongying | Late Yangshao | -2550 | -15.4 | 5.9 | Chen et al 2016a |
| Pig | Dongying | Late Yangshao | -2550 | -8 | 7.5 | Chen et al 2016a |
| Pig | Dongying | Late Yangshao | -2550 | -7.8 | 9.1 | Chen et al 2016a |
| Pig | Dongying | Late Yangshao | -2550 | -8.2 | 7.6 | Chen et al 2016a |
| Pig | Dongying | Late Yangshao | -2550 | -9.5 | 7.1 | Chen et al 2016a |
| Pig | Dongying | Late Yangshao | -2550 | -9.7 | 7.4 | Chen et al 2016a |
| pig | Kangjia | Longshan | -2300 | -11.53 | 7.77 | Pechenkina et al. 2005 |
| pig | Kangjia | Longshan | -2300 | -11.76 | 9.57 | Pechenkina et al. 2005 |
| pig | Kangjia | Longshan | -2300 | -7.53 | 8.71 | Pechenkina et al. 2005 |
| pig | Wadian | Late Longshan | -2100 | -12.3 | -12.4 | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -27.7 |  | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -11.8 | 5.5 | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -12.4 | 7.5 | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -24.2 |  | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -11.3 | 5.7 | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -13.2 | 6.1 | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -11.3 | 7.2 | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -16.1 | 8.7 | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -8.1 | 6.9 | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -8.3 | 6.8 | Chen et al. 2016b |
| pig | Wadian | Late Longshan | -2100 | -9.2 | 7.7 | Chen et al. 2016b |
| pig | Xinglonggou III | Lower Xiajiadian | -1900 | -6.8 | 8.8 | Liu et al 2012 |
| pig | Xinglonggou III | Lower Xiajiadian | -1900 | -8.1 | 9 | Liu et al 2012 |
| pig | Xinglonggou III | Lower Xiajiadian | -1900 | -7.7 | 7.1 | Liu et al 2012 |
| pig | Xinglonggou III | Lower Xiajiadian | -1900 | -19.3 | 3.9 | Liu et al 2012 |
| pig | Xinglonggou III | Lower Xiajiadian | -1900 | -7.1 | 8.5 | Liu et al 2012 |
| pig | Xinglonggou III | Lower Xiajiadian | -1900 | -13.3 | 7.2 | Liu et al 2012 |
| pig | Xinglonggou III | Lower Xiajiadian | -1900 | -11.3 | 7 | Liu et al 2012 |
| pig | Xinglonggou III | Lower Xiajiadian | -1900 | -7.4 | 8.4 | Liu et al 2012 |
| pig | Zhangdeng | Proto-Shang | -1700 | -6.5 | 7.7 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -8.8 | 7.1 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -7.1 | 7.6 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -9.2 | 7.8 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -6.9 | 7.1 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -11.2 | 7.9 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -6.8 | 7.5 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -9.1 | 7.7 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -6.5 | 8.1 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -6.4 | 7.4 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -8.8 | 8 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -8 | 6.6 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -6.6 | 8.4 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -6.9 | 8.3 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -7.5 | 8.2 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -6.4 | 7.6 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -7.3 | 7.1 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -8.1 | 7.6 | Hou et al. 2013 |
| pig | Zhangdeng | Proto-Shang | -1700 | -7.3 | 7.8 | Hou et al. 2013 |

**Table S6. Archaeological Pig metrics (M3). (Plotted in Fig. 8 top and middle; data mainly from Luo 2012; Wang et al. 2015; plus Song et al. 2019).**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Regions** | **Lattitude** | **Longitude** | **Site** | **Period** | **n** | **Median Age (BC)** | **Maximum** | **Minimum** | **Average** | **Standard deviation** |
| Huai | 33.62003 | 113.67398 | Jiahu | Peiligang | 12 | -6200 | 46.66 | 36.39 | 42.23 | 3.074 |
| Huai | 33.850178 | 116.81665 | Shishanzi | Shishanzi Culture | 3 | -4900 | 40 | 36 | 38.33 | 2.082 |
| Huai | 31.426149 | 119.60866 | Xixi | Majiabang | 2 | -4450 | 38.06 | 37.99 | 38.03 | 0.0620358 |
| Huai | 32.84267 | 119.50378 | Longqiuzhuang | Longqiuzhuang | 5 | -4250 | 42.3 | 32.4 | 38.72 | 2.127 |
| Huai | 31.687743 | 119.49164 | Sanxingcun | Sanxingcun | 16 | -4000 | 41.08 | 34.08 | 37.07 | 2.692 |
| Huai | 33.358139 | 116.74968 | Yuchisi | Late Dawenkou | 12 | -2700 | 39.5 | 30.1 | 36.19 | 3.722 |
| Huai | 33.358139 | 116.74968 | Yuchisi | Longshan  | 11 | -2350 | 44.6 | 28.18 | 34.12 | 3.332 |
| Huai | 32.349686 | 118.35082 | Heying | L. Shang/ Western Zhou | 11 | -1000 | 38.68 | 28.74 | 32.96 | 3.748 |
| Northeast | 42.387265 | 120.0907 | Xinglonggou | Xinglongwa | 24 | -5600 | 49.74 | 32.16 | 42.35 | 3.535 |
| Northeast | 43.307245 | 118.24077 | Baiyinchanghan | Xinglongwa | 3 | -5550 | 46.6 | 41.5 | 43.4 | 2.787 |
| Northeast | 42.388145 | 120.12193 | Xinglongwa | Xinglongwa | 74 | -5500 | 49.27 | 32.87 | 42.32 | 3.447 |
| Northeast | 42.352249 | 120.16786 | Zhaobaogou | Zhaobaogou | 3 | -4850 | 45 | 41 | 43.3 | 2.066 |
| Northeast | 42.330121 | 120.69642 | Dadianzi | Lower Xiajiadian Culture | 3 | -1600 | 39.38 | 36 | 37.17 | 1.915 |
| Northeast | 39.07985 | 121.70023 | Dazuizi | Shang period | 4 | -1300 | 37 | 30.5 | 32.75 | 2.958 |
| Yangtze | 25.214385 | 110.28437 | Zengpiyan | 12000-7000 BP | 12 | -9500 | 47.46 | 36.57 | 41.31 | 3.632 |
| Yangtze | 30.037222 | 107.86056 | Lower Yuxi | Chengbeixi Culture (8500-700 BP) | 2 | -5100 | 36.3 | 35.5 | 35.9 | 0.565 |
| Yangtze | 25.020501 | 99.035929 | Tangzigou | Tangzigou Culture | 4 | -5000 | 47 | 35.83 | 41.48 | 4.746 |
| Yangtze | 30.891489 | 110.883 | Liulinxi | Chengbeixi Culture | 2 | -4950 | 41.8 | 41.6 | 41.7 | 0.141 |
| Yangtze | 30.14459 | 120.21678 | Kuahuqiao | Kuahuqiao Culture (8000-7000 BC) | 13 | -5500 | 42.37 | 34.29 | 38.54 | 2.942 |
| Yangtze | 30.4032 | 110.61633 | Shazui | Daxi Culture (7000-5300 BP) | 10 | -4150 | 44.54 | 29 | 38.7 | 5.657 |
| Yangtze | 31.718677 | 120.06586 | Weidun | Majiabang (7000-5500 BP) | 11 | -4050 | 47.5 | 36.5 | 40.7 | 3.4668928 |
| Yangtze | 23.886187 | 106.54818 | Gexinqiao | c.6000 BP | 3 | -4000 | 39.4 | 36.7 | 38.63 | 1.686 |
| Yangtze | 29.869105 | 116.03475 | Saidun | Xuejiagang Culture (5500-4800 BP) | 13 | -3100 | 47 | 30 | 37.42 | 3.92 |
| Yangtze | 32.273717 | 112.94924 | Diaolongbei Phase 3 | 5300-4800 BP | 16 | -3050 | 39.35 | 33.19 | 36.03 | 2.165 |
| Yangtze | 31.15817 | 121.4607 | Maqiao | Liangzhu Culture | 1 | -2300 |  |  | 38.08 |  |
| Yangtze | 31.15817 | 121.4607 | Maqiao | Maqiao Culture | 9 | -1600 | 42.94 | 36.64 | 40.15 | 2.184 |
| Yellow Riv | 36.61994 | 116.82861 | Yuezhuang | Houli (Pre-Yangshao) |  | -6100 |  |  | 43.55 |  |
| Yellow Riv | 36.575851 | 114.12407 | Cishan | Cishan (Pre-Yangshao) Culture | 3 | -6000 | 45 | 39.2 | 41.4 | 3.143 |
| Yellow Riv | 36.705893 | 117.63012 | Xihe | Houli (Pre-Yangshao) | 3 | -5800 | 48.44 | 35.68 | 39.95 | 7.5388315 |
| Yellow Riv | 35.00789 | 105.90893 | Dadiwan | Laoguantai (Pre-Yangshao) Culture to Late Yangshao Period | 66 | -5500 | 46 | 30.8 | 37.06 | 3.2267309 |
| Yellow Riv | 34.274517 | 109.048 | Banpo | Early Yangshao Culture | 1 | -4900 |  |  | 35.8 |  |
| Yellow Riv | 35.650252 | 111.31338 | Zhucun | Early Yangshao Culture | 1 | -4700 |  |  | 36.6 |  |
| Yellow Riv | 40.527477 | 112.7195 | Shihushan I | Early Yangshao Culture | 7 | -4600 | 42.7 | 35.4 | 39.41 | 2.573 |
| Yellow Riv | 36.74782 | 119.38156 | Qianbuxia | Houli (Pre-Yangshao) Culture to Dawenkou Culture | 2 | -4550 | 39.8 | 36.3 | 38.05 | 2.475 |
| Yellow Riv | 35.00088 | 109.03325 | Wayaogou | 7000-6000 BP | 18 | -4500 | 43.5 | 33.5 | 39.1 | 2.7472075 |
| Yellow Riv | 35.708568 | 114.99935 | Xishuipo | Early Yangshao Culture | 196 | -4250 | 47.28 | 30.06 | 37.8 | 2.978 |
| Yellow Riv | 34.386072 | 107.15504 | Beishouling | Late Laoguantai (Pre-Yangshao) Culture to Early Yangshao Culture | 25 | -4000 | 44 | 32 | 37.99 | 2.749 |
| Yellow Riv | 34.535052 | 109.8632 | Quanhucun | Middle Yangshao Culture | 18 | -3750 | 44.7 | 28.4 | 33.5 | 4.4779482 |
| Yellow Riv | 34.498614 | 110.70213 | Xipo | Middle Yangshao Culture | 21 | -3100 | 39.27 | 27.1 | 34.67 | 3.025 |
| Yellow Riv | 34.915174 | 113.54054 | Xishan | Late Yangshao Culture | 5 | -3050 | 39 | 29 | 35.4 | 4.099 |
| Yellow Riv | 34.378741 | 109.21794 | Jiangzhai | Early Yangshao Culture to Longshan Culture | 19 | -3000 | 41 | 31.4 | 36.24 | 2.127 |
| Yellow Riv | 34.620925 | 110.32183 | Xiwangcun | Late Yangshao Culture | 3 | -2975 | 39.9 | 32.31 | 35.31 | 4.037 |
| Yellow Riv | 34.506689 | 117.79506 | Liangwangcheng | Dawenkou | 2 | -2750 | 37.26 | 33.46 | 36.36 | 3.3676598 |
| Yellow Riv | 34.930211 | 117.41169 | Jianxin | Late Dawenkou (5000-4500 BP) | 4 | -2700 | 36.65 | 30.38 | 33.4 | 3.0455373 |
| Yellow Riv | 34.955829 | 112.28364 | Zhouli III | Miaodigou II Period | 1 | -2400 | 36.29 |  | 36.29 |  |
| Yellow Riv | 36.409345 | 116.26095 | Jiaochangpu | Longshan Culture | 7 | -2200 | 37.09 | 31.19 | 34.7 | 2.361 |
| Yellow Riv | 34.187452 | 113.40494 | Wadian | Longshan Culture | 5 | -2150 | 37.49 | 30.4 | 35.13 | 2.804 |
| Yellow Riv | 35.67515 | 111.40137 | Taosi | Longshan Culture | 5 | -2125 | 36.09 | 29.83 | 33.02 | 2.373 |
| Yellow Riv | 34.11667 | 115.18333 | Shantaisi | Longshan Culture | 14 | -2100 | 37.31 | 29.28 | 33.2 | 2.591 |
| Yellow Riv | 34.473131 | 113.85836 | Guchengzhai | Erlitou Culture | 4 | -1850 | 35.22 | 29.04 | 32.1 | 3.187 |
| Yellow Riv | 33.636378 | 109.98016 | Donglongshan | End of Neolithic to Early Bronze Age | 11 | -1825 | 37.2 | 24.7 | 31.7 | 3.9396509 |
| Yellow Riv | 34.70329 | 112.71664 | Erlitou | Erlitou Culture | 21 | -1800 | 36.78 | 27.3 | 33.45 | 2.673 |
| Yellow Riv | 39.644814 | 110.43185 | Zhukaigou | Late Longshan Period to Early Shang Period | -1600 | 36.5 | 29.1 | 32.8 |  |
| Yellow Riv | 34.473131 | 113.85836 | Guchengzhai | Early Shang | 4 | -1550 | 31.47 | 27.06 | 29.39 | 1.834 |
| Yellow Riv | 34.726725 | 112.7668 | Yanshi | Early Shang | 468 | -1500 | 39.82 | 23.44 | 32.7 | 2.899 |
| Yellow Riv | 34.70329 | 112.71664 | Erlitou | Early Shang | 9 | -1500 | 36.8 | 30.06 | 33.39 | 2.478 |
| Yellow Riv | 36.14148 | 114.33711 | Huayuanzhuang | Middle Shang | 8 | -1300 | 37.7 | 27.08 | 31.42 | 3.311 |
| Yellow Riv | 36.120856 | 114.32416 | Yinxu | Late Shang |  | -1275 |  |  | 31.4 |  |
| Yellow Riv | 36.113782 | 114.31332 | Heihelu | Late Shang | 98 | -1250 | 39.08 | 26.23 | 32.96 | 2.696 |
| Yellow Riv | 37.414487 | 110.78855 | Gaohong | Shang Period | 2 | -1200 | 32.21 | 28.83 | 30.52 | 2.39 |
| Yellow Riv | 34.473131 | 113.85836 | Guchengzhai | Late Shang | 6 | -1200 | 32.19 | 24.91 | 28.56 | 2.574 |
| Yellow Riv | 34.898975 | 117.22149 | Qianzhangda | Late Shang to Early Western Zhou | 40 | -1150 | 39.62 | 23.33 | 32.54 | 3.108 |
| Yellow Riv | 34.212782 | 108.72212 | Fengxi | Late Shang to Western Zhou | 5 | -1050 | 29.8 | 26.43 | 28.15 | 2.356 |
| Yellow Riv | 35.735798 | 111.56082 | Tianma-Qucun | Western Zhou | 29 | -900 | 36 | 26 | 31.59 | 2.4648512 |
| Yellow Riv | 34.396971 | 113.74747 | Zhonghang | Spring and Autumn | 4 | -650 | 32.85 | 25.35 | 30.1 | 3.6429872 |
| Yellow Riv | 35.735798 | 111.56082 | Tianma-Qucun | Spring and Autumn | 10 | -600 | 37 | 27 | 31.27 | 3.2493802 |
| Yellow Riv | 34.898975 | 117.22149 | Qianzhangda | Eastern Zhou | 3 | -500 | 35.93 | 28.5 | 32.23 | 3.715 |
| Yellow Riv | 34.396971 | 113.74747 | Zhonghang | Warring States | 28 | -400 | 38.7 | 25.4 | 30.93 | 2.681 |
| Yellow Riv | 34.473131 | 113.85836 | Guchengzhai | Warring States | 2 | -300 | 34.69 | 30.51 | 32.6 | 2.956 |

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