**Online supplementary document**

Options()

 {

 Resolution=0.5;

 };

 Plot()

 {

 Sequence()

 {

 Boundary("Start Early Grottoes");

 Phase ("Early Grottoes")

 {

 Sequence()

 {

 Boundary("Start 268");

 Phase("Cave 268")

 {

 R\_Date("C268-4-1", 1580, 20);

 R\_Date("C268-2", 1601, 22);

 R\_Date("C268-1", 1611, 22);

 R\_Date("C268-3", 1617, 22);

 Date("Summary Date 268");

 };

 Boundary("End 268");

 };

 Sequence()

 {

 Boundary("Start 272");

 Phase("Cave 272")

 {

 R\_Date("C272-7-1", 1560, 23);

 R\_Date("C272-5-1", 1585, 20);

 R\_Date("C272A-1", 1591, 22);

 R\_Date("C272-1", 1609, 22);

 R\_Date("C272-3", 1615, 26);

 R\_Date("C272-2", 1630, 22);

 Date("Summary Date 272");

 };

 Boundary("End 272");

 };

 Sequence()

 {

 Boundary("Start 275");

 Phase("Cave 275")

 {

 R\_Date("C275-11-1", 1555, 20);

 R\_Date("C275-10-1", 1557, 20);

 R\_Date("C275-12-1", 1542, 20);

 R\_Date("C275-4", 1614, 24);

 R\_Date("C275-3", 1621, 24);

 R\_Date("C275-1", 1644, 24);

 R\_Date("C275-2", 1651, 24);

 Date("Summary Date 275");

 };

 Boundary("End 275");

 };

 };

 Boundary("End Early Grottoes");

 Boundary("Start 285");

 Phase("Cave 285")

 {

 R\_Date("C285-1", 1594, 23);

 R\_Date("C285-3", 1544, 23);

 R\_Date("C285-4", 1560, 24);

 R\_Date("C285-5", 1553, 23);

 R\_Date("C285-6", 1543, 22);

 R\_Date("C285-7", 1569, 23);

 R\_Date("C285-8", 1578, 23);

 R\_Date("C285-9", 1585, 24);

 R\_Date("C285-10", 1606, 27);

 R\_Date("C285-11", 1551, 25);

 R\_Date("C285-12", 1529, 23);

 R\_Date("C285-15", 1562, 25);

 R\_Date("C285-20", 1550, 23);

 R\_Date("C285-22", 1593, 24);

 };

 Boundary("End 285");

 };

 C\_Date("TAQ", 538, 0.5)

 {

 color="Blue";

 };

 Date ("Start Western Liang", N(AD(403),0.5));

 Date ("Start Northern Liang", N(AD(421),0.5));

 Date ("End Northern Liang", N(AD(439),0.5));

 Date ("Yungang I", U(AD(460),AD(465)));

 Date ("Yungang II", U(AD(471),AD(494)));

 Order()

 {

 Date("=Summary Date 268");

 Date("=Summary Date 272");

 Date("=Summary Date 275");

 Date("=Start Western Liang");

 Date("=Start Northern Liang");

 Date("=End Northern Liang");

 Date("=Yungang I");

 Date("=Yungang II");

 };

 };