Below find the primary OxCal model code used for modeling Inka chronology in the Upper Loa River area.

# **Primary Model for Inka Phase/Onset of Inka Rule**

Plot()

 {

 Curve("SHCal20","shcal20.14c");

 Outlier\_Model("General",T(5),U(0,4),"t");

 Sequence()

 {

 Boundary("Start of Inka");

 Phase("1")

 {

 R\_Date("D-AMS 018352",524,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 166438",510,40)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014917",494,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 166437",440,60)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014902",354,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 010135",344,22)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 330069",340,30)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 008360",340,28)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014903",325,28)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 018353",323,20)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 330067",320,30)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 113507",290,50)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 343658",430,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343657",480,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343659",550,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343655",500,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343661",550,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291616",520,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291621",520,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291618",500,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291622",490,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 343660",490,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291617",480,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 203030",460,50)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291619",400,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 203028",390,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291620",360,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 343662",330,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 178492",460,60)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 178491",450,50)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 300556",430,40)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 343718",390,40)

 {

 Outlier("General",0.05);

 color="red";

 };

 Sum("Inka Founded Sites (32)")

 {

 };

 Interval("Duration of Inka Founded Sites");

 };

 Boundary("End of Inka");

 };

 };

# **Models for Inka Phase with Alternative Inputs**

## General Outlier Model of Entire Sample

Plot()

 {

 Curve("SHCal20","shcal20.14c");

 Outlier\_Model("General",T(5),U(0,4),"t");

 Sequence()

 {

 Boundary("Start of Inka\_Outliers included");

 Phase("1")

 {

 R\_Date("D-AMS 014916",670,29)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014915",655,24)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 018352",524,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 166438",510,40)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014917",494,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 166437",440,60)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014902",354,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 010135",344,22)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 330069",340,30)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 008360",340,28)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014903",325,28)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 018353",323,20)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 330067",320,30)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 113507",290,50)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 343658",430,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343657",480,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343659",550,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343655",500,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343661",550,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291616",520,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291621",520,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291618",500,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291622",490,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 343660",490,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291617",480,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 203030",460,50)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291619",400,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 203028",390,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291620",360,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 343662",330,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 178492",460,60)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 178491",450,50)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 300556",430,40)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 343718",390,40)

 {

 Outlier("General",0.05);

 color="red";

 };

 Sum("Inka Founded Sites (34)")

 {

 };

 Interval("Duration of Inka Founded Sites");

 };

 Boundary("End of Inka\_outliers included");

 };

 };

## Charcoal Model of Effective Sample

Plot()

 {

 Curve("SHCal20","shcal20.14c");

 Outlier\_Model("Charcoal",Exp(1,-10,0),U(0,3),"t");

 Outlier\_Model("General",T(5),U(0,4),"t");

 Sequence()

 {

 Boundary("Start of Inka\_Charcoal Model");

 Phase("1")

 {

 R\_Date("D-AMS 018352",524,23)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("Beta 166438",510,40)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("D-AMS 014917",494,23)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("Beta 166437",440,60)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("D-AMS 014902",354,23)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("D-AMS 010135",344,22)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("Beta 330069",340,30)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("D-AMS 008360",340,28)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014903",325,28)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("D-AMS 018353",323,20)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("Beta 330067",320,30)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 113507",290,50)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("Beta 343658",430,30)

 {

 Outlier("Charcoal",1);

 color="green";

 };

 R\_Date("Beta 343657",480,30)

 {

 Outlier("Charcoal",1);

 color="green";

 };

 R\_Date("Beta 343659",550,30)

 {

 Outlier("Charcoal",1);

 color="green";

 };

 R\_Date("Beta 343655",500,30)

 {

 Outlier("Charcoal",1);

 color="green";

 };

 R\_Date("Beta 343661",550,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291616",520,40)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291621",520,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291618",500,40)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291622",490,40)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 343660",490,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291617",480,40)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 203030",460,50)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291619",400,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 203028",390,40)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291620",360,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 343662",330,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 178492",460,60)

 {

 Outlier("Charcoal",1);

 color="red";

 };

 R\_Date("Beta 178491",450,50)

 {

 Outlier("Charcoal",1);

 color="red";

 };

 R\_Date("Beta 300556",430,40)

 {

 Outlier("Charcoal",1);

 color="red";

 };

 R\_Date("Beta 343718",390,40)

 {

 Outlier("Charcoal",1);

 color="red";

 };

 Sum("Inka Founded Sites (34)")

 {

 };

 Interval("Duration of Inka Founded Sites");

 };

 Boundary("End of Inka\_Charcoal Model");

 };

 };

## Charcoal Model Outliers Included

Plot()

 {

 Curve("SHCal20","shcal20.14c");

 Outlier\_Model("Charcoal",Exp(1,-10,0),U(0,3),"t");

 Outlier\_Model("General",T(5),U(0,4),"t");

 Sequence()

 {

 Boundary("Start of Inka\_Charcoal Model with Outliers");

 Phase("1")

 {

 R\_Date("D-AMS 014916",670,29)

 {

 color="blue";

 Outlier("Charcoal",1);

 };

 R\_Date("D-AMS 014915",655,24)

 {

 color="blue";

 Outlier("Charcoal",1);

 };

 R\_Date("D-AMS 018352",524,23)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("Beta 166438",510,40)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("D-AMS 014917",494,23)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("Beta 166437",440,60)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("D-AMS 014902",354,23)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("D-AMS 010135",344,22)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("Beta 330069",340,30)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("D-AMS 008360",340,28)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014903",325,28)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("D-AMS 018353",323,20)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("Beta 330067",320,30)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 113507",290,50)

 {

 Outlier("Charcoal",1);

 color="blue";

 };

 R\_Date("Beta 343658",430,30)

 {

 Outlier("Charcoal",1);

 color="green";

 };

 R\_Date("Beta 343657",480,30)

 {

 Outlier("Charcoal",1);

 color="green";

 };

 R\_Date("Beta 343659",550,30)

 {

 Outlier("Charcoal",1);

 color="green";

 };

 R\_Date("Beta 343655",500,30)

 {

 Outlier("Charcoal",1);

 color="green";

 };

 R\_Date("Beta 343661",550,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291616",520,40)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291621",520,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291618",500,40)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291622",490,40)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 343660",490,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291617",480,40)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 203030",460,50)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291619",400,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 203028",390,40)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 291620",360,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 343662",330,30)

 {

 Outlier("Charcoal",1);

 Outlier("General",0.05);

 };

 R\_Date("Beta 178492",460,60)

 {

 Outlier("Charcoal",1);

 color="red";

 };

 R\_Date("Beta 178491",450,50)

 {

 Outlier("Charcoal",1);

 color="red";

 };

 R\_Date("Beta 300556",430,40)

 {

 Outlier("Charcoal",1);

 color="red";

 };

 R\_Date("Beta 343718",390,40)

 {

 Outlier("Charcoal",1);

 color="red";

 };

 Sum("Inka Founded Sites (34)")

 {

 };

 Interval("Duration of Inka Founded Sites");

 };

 Boundary("End of Inka\_Charcoal Model with Outliers");

 };

 };

## Inka Phase with Mixed Curve

Plot()

 {

 Curve("IntCal20","intcal20.14c");

 Outlier\_Model("General",T(5),U(0,4),"t");

 Curve("SHCal20","shcal20.14c");

 Mix\_Curve("Mixed","IntCal20","SHCal20",U(0,100));

 Sequence()

 {

 Boundary("Start of Inka Phase\_Mixed Curve");

 Phase("1")

 {

 R\_Date("D-AMS 018352",524,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 166438",510,40)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014917",494,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 166437",440,60)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014902",354,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 010135",344,22)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 330069",340,30)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 008360",340,28)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014903",325,28)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 018353",323,20)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 330067",320,30)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 113507",290,50)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 343658",430,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343657",480,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343659",550,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343655",500,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343661",550,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291616",520,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291621",520,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291618",500,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291622",490,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 343660",490,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291617",480,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 203030",460,50)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291619",400,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 203028",390,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291620",360,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 343662",330,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 178492",460,60)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 178491",450,50)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 300556",430,40)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 343718",390,40)

 {

 Outlier("General",0.05);

 color="red";

 };

 Sum("Inka Founded Sites (32)")

 {

 };

 Interval("Duration of Inka Founded Sites");

 };

 Boundary("End of Inka Phase\_Mixed Curve");

 };

 };

## Inka Phase with IntCal20 Curve

Plot()

 {

 Curve("IntCal20","intcal20.14c");

 Outlier\_Model("General",T(5),U(0,4),"t");

 Sequence()

 {

 Boundary("Start of Inka Phase\_Mixed Curve");

 Phase("1")

 {

 R\_Date("D-AMS 018352",524,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 166438",510,40)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014917",494,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 166437",440,60)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014902",354,23)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 010135",344,22)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 330069",340,30)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 008360",340,28)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 014903",325,28)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("D-AMS 018353",323,20)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 330067",320,30)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 113507",290,50)

 {

 Outlier("General",0.05);

 color="blue";

 };

 R\_Date("Beta 343658",430,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343657",480,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343659",550,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343655",500,30)

 {

 Outlier("General",0.05);

 color="green";

 };

 R\_Date("Beta 343661",550,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291616",520,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291621",520,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291618",500,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291622",490,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 343660",490,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291617",480,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 203030",460,50)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291619",400,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 203028",390,40)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 291620",360,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 343662",330,30)

 {

 Outlier("General",0.05);

 };

 R\_Date("Beta 178492",460,60)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 178491",450,50)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 300556",430,40)

 {

 Outlier("General",0.05);

 color="red";

 };

 R\_Date("Beta 343718",390,40)

 {

 Outlier("General",0.05);

 color="red";

 };

 Sum("Inka Founded Sites (32)")

 {

 };

 Interval("Duration of Inka Founded Sites");

 };

 Boundary("End of Inka Phase\_Mixed Curve");

 };

 };

# **All Site-Level Phases and KDE Models on Single Plot**

Plot()

 {

 Curve("SHCal20","shcal20.14c");

 Phase()

 {

 Sequence()

 {

 Boundary("Inkawasi Abra Start")

 {

 color="red";

 };

 Phase("3")

 {

 R\_Date("D-AMS 018352",524,23);

 R\_Date("Beta 166438",510,40);

 R\_Date("D-AMS 014917",494,23);

 R\_Date("Beta 166437",440,60);

 R\_Date("D-AMS 014902",354,23);

 R\_Date("D-AMS 010135",344,22);

 R\_Date("Beta 330069",340,30);

 R\_Date("D-AMS 008360",340,28);

 R\_Date("D-AMS 014903",325,28);

 R\_Date("D-AMS 018353",323,20);

 R\_Date("Beta 330067",320,30);

 R\_Date("Beta 113507",290,50);

 Sum("Sum Inka Wasi Abra (12)")

 {

 };

 Interval("Span Inkawasi Abra");

 };

 Boundary("Inkawasi Abra End");

 };

 Sequence()

 {

 Boundary("Mino 1 Start")

 {

 color="purple";

 };

 Phase("1")

 {

 R\_Date("Beta 343659",550,30)

 {

 };

 R\_Date("Beta 343655",500,30)

 {

 };

 R\_Date("Beta 343657",480,30)

 {

 };

 R\_Date("Beta 343658",430,30);

 Sum("Sum Miño 1 (4)")

 {

 };

 Interval("Span Miño 1");

 };

 Boundary("Mino 1 End");

 };

 Sequence()

 {

 Boundary("Mino 2 Start")

 {

 color="green";

 };

 Phase("2")

 {

 R\_Date("Beta 343661",550,30);

 R\_Date("Beta 291616",520,40);

 R\_Date("Beta 291621",520,30);

 R\_Date("Beta 291618",500,40);

 R\_Date("Beta 291622",490,40);

 R\_Date("Beta 343660",490,30);

 R\_Date("Beta 291617",480,40);

 R\_Date("Beta 203030",460,50);

 R\_Date("Beta 291619",400,30);

 R\_Date("Beta 203028",390,40);

 R\_Date("Beta 291620",360,30);

 R\_Date("Beta 343662",330,30);

 Sum("Sum Miño 2 (12)")

 {

 };

 Interval("Span Miño 2");

 };

 Boundary("Mino 2 End");

 };

 Sequence()

 {

 Boundary("LR-1 Start")

 {

 color="blue";

 };

 Phase("4")

 {

 R\_Date("Beta 178492",460,60);

 R\_Date("Beta 178491",450,50);

 R\_Date("Beta 300556",430,40);

 R\_Date("Beta 343718",390,40);

 Sum("Sum LR-1 (4)")

 {

 };

 Interval("Span LR-1");

 };

 Boundary("LR-1 End");

 };

 };

 Sequence()

 {

 Boundary("AB 22/39 Start");

 Phase("AB 22/39")

 {

 R\_Date("Beta–339961",450,30)

 {

 };

 R\_Date("Beta–339960",440,30)

 {

 };

 R\_Date("Beta–339962",410,30)

 {

 };

 R\_Date("Beta–300551",380,30)

 {

 };

 Sum("Sum AB 22/39")

 {

 };

 };

 Boundary("AB 22/39 End");

 Before("Terminus Ante Quem",1590)

 {

 };

 };

 Sequence()

 {

 Boundary("AB 44 Start");

 Phase("AB 44")

 {

 R\_Date("Beta 141876",460,40)

 {

 };

 R\_Date("Beta 141875",420,60)

 {

 };

 R\_Date("Beta 141874",420,50)

 {

 };

 R\_Date("Beta 141877",360,50)

 {

 };

 Sum("Sum AB 44 (4 dates)")

 {

 };

 };

 Boundary("AB 44 End");

 Before("Term Ante Quem",1590)

 {

 };

 };

 Sequence()

 {

 Boundary("Topain All Start")

 {

 };

 Phase(Topain)

 {

 R\_Date("DAMS 17724",923,14);

 R\_Date("UGAMS 22949",810,25);

 R\_Date("UGAMS 22950",670,25);

 R\_Date("OS-114480",670,20);

 R\_Date("Beta-387477",620,30);

 R\_Date("DAMS 17718",600,22);

 R\_Date("OS-114484",680,20);

 R\_Date("OS-114481",520,20);

 R\_Date("OS-114477",900,20);

 R\_Date("UGAMS-12",670,20);

 R\_Date("OS-114472",615,20);

 R\_Date("OS-114609",550,20);

 R\_Date("Beta-451856",510,30);

 Sum("Sum Topain (13)")

 {

 };

 Interval("Interval Topain");

 };

 Boundary("Topain All End");

 };

 Sequence()

 {

 Boundary("Topain Settlement Start");

 Phase("1")

 {

 R\_Date("Beta-387477",620,30);

 R\_Date("DAMS 17718",600,22);

 R\_Date("DAMS 17724",923,14);

 R\_Date("UGAMS 22949",810,25);

 R\_Date("UGAMS 22950",670,25);

 };

 Boundary("Topain Settlement End");

 };

 Sequence()

 {

 Boundary("Topain Fields Start");

 Phase("2")

 {

 R\_Date("OS-114484",680,20);

 R\_Date("OS-114480",670,20);

 R\_Date("OS-114481",520,20);

 R\_Date("OS-114477",900,20);

 R\_Date("UGAMS-12",670,20);

 R\_Date("OS-114472",615,20);

 R\_Date("OS-114609",550,20);

 R\_Date("Beta-451856",510,30);

 };

 Boundary("Topain Fields End");

 };

 Sequence()

 {

 Boundary("Paniri Start")

 {

 };

 Phase(Paniri)

 {

 R\_Date("OS-114478",600,20);

 R\_Date("OS-114476",490,20);

 R\_Date("UGAMS 22946",420,25);

 R\_Date("Beta-387476",340,30);

 R\_Date("UGAMS 22948",170,20);

 R\_Date("DAMS 17721",625,18);

 R\_Date("DAMS 17722",582,31);

 R\_Date("DAMS 17725",534,43);

 R\_Date("DAMS 17719",530,28);

 R\_Date("OS-114475",455,20);

 R\_Date("DAMS 17723",453,43);

 R\_Date("UGAMS 22945",360,20);

 R\_Date("OS-114482",350,20);

 R\_Date("Beta-451855",320,30);

 R\_Date("OS-114606",285,20);

 R\_Date("OS-114607",200,25);

 R\_Date("OS-114479",160,20);

 Sum("Sum Paniri (17)")

 {

 };

 Interval("Interval Paniri");

 };

 Boundary("Paniri End");

 };

 KDE\_Model("Topain")

 {

 R\_Date("DAMS 17724",923,14);

 R\_Date("UGAMS 22949",810,25);

 R\_Date("UGAMS 22950",670,25);

 R\_Date("OS-114480",670,20);

 R\_Date("Beta-387477",620,30);

 R\_Date("DAMS 17718",600,22);

 R\_Date("OS-114484",680,20);

 R\_Date("OS-114481",520,20);

 R\_Date("OS-114477",900,20);

 R\_Date("UGAMS-12",670,20);

 R\_Date("OS-114472",615,20);

 R\_Date("OS-114609",550,20);

 R\_Date("Beta-451856",510,30);

 First();

 Span();

 Last();

 };

 KDE\_Model("Paniri")

 {

 R\_Date("OS-114478",600,20);

 R\_Date("OS-114476",490,20);

 R\_Date("UGAMS 22946",420,25);

 R\_Date("Beta-387476",340,30);

 R\_Date("UGAMS 22948",170,20);

 R\_Date("DAMS 17721",625,18);

 R\_Date("DAMS 17722",582,31);

 R\_Date("DAMS 17725",534,43);

 R\_Date("DAMS 17719",530,28);

 R\_Date("OS-114475",455,20);

 R\_Date("DAMS 17723",453,43);

 R\_Date("UGAMS 22945",360,20);

 R\_Date("OS-114482",350,20);

 R\_Date("Beta-451855",320,30);

 R\_Date("OS-114606",285,20);

 R\_Date("OS-114607",200,25);

 R\_Date("OS-114479",160,20);

 First();

 Span();

 Last();

 };

 };