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## Supplemental File S2 Core Geophysics

## and Age Control Methods

## Core Geophysics

The 109 cores collected offshore Sumatra (Supplemental File S1) were scanned at sea with a GEOTEK Multi Sensor Core Logger (MSCL), obtaining P-wave velocity, gamma ray density, resistivity, and loop magnetic susceptibility (MS) at 0.5 cm spaced intervals in $1.5-\mathrm{m}$ length sections. Split cores were imaged with a high resolution line-scan digital camera and the lithostratigraphy was described. High resolution point MS data were collected using a Bartington MS2E point sensor at 0.5 cm spacing. The cores were imaged with the Oregon State University Aquilion 64 slice X-ray Computed Tomography (CT) system with a nominal voxel size of 0.5 mm .

## Age Control Methods

Age control for stratigraphy is provided by Accelerator Mass Spectrometer (AMS) ${ }^{14} \mathrm{C}$ and ${ }^{210} \mathrm{~Pb}$ radiometric techniques. ${ }^{14} \mathrm{C}$ data is based on decay with a half-life of 5,730 years and is useful for
strata between $\sim 300-\sim 35,000$ years old (Stuiver and Braziunes, 1993). ${ }^{210} \mathrm{~Pb}$ data, based on a shorter halflife of 22 years (Noller, 2000), provides information about sedimentary deposition for the past $\sim 150$ years. We use ${ }^{210} \mathrm{~Pb}$ age data to constrain the timing of deposition for the most recently deposited sediments.

To estimate ages of the turbidites using radiocarbon, we extract the calcium carbonate shells of planktic foraminifers preserved in the hemipelagic sediment below each turbidite to provide a maximum limiting age. We utilized planktic foraminiferid species as they most closely represent the age of the youngest sea water, the surface water that is most closely in ${ }^{14} \mathrm{C}$ equilibrium with the atmosphere. We sample below each turbidite because this is the sediment closest in age to the turbidite. We do not use the age of the sediment above the turbidite because the boundary between the top of the turbidite tail and the hemipelagic sediment is difficult to identify reliably and bioturbation is concentrated at this boundary. These methods are outlined in Goldfinger et al. (2012 a).

Supplemental File S2. Core Geophysics and Age Control Methods. A general overview of core geophysics acquisition methods is first presented. Age control methods are then discussed. The OxCal code for the regional age model is presented, followed by the output "log" file and a plot of the probability density functions for this age model. Please visit http://dx.doi.org/10.1130/GES01066.S2 or the full-text article on www.gsapubs.org to view Supplemental File S2.

Trench core sites were deeper than the Carbonate Compensation Depth (CCD), the depth below which foraminiferid $\mathrm{CaCO}_{3}$ tests dissolve faster than they are deposited. Therefore foraminiferid abundance was nil in trench core sediments, so ${ }^{14} \mathrm{C}$ age control applies only to the slope cores.

Sediment samples were removed from the cores while avoiding the 0.5 cm of material nearest the core walls to avoid visible or undetected deformation and friction drag along the core walls. In some cases, highly irregular turbidite bases resulted in sampling an interval below the basal irregularities, and applying a correction to the hemipelagic thickness called the gap correction. Hemipelagic sediment samples were freeze dried to separate clay particles to improve rinsing through a sieve, washed in a dilute Calgon (sodium hexametaphosphate) solution to keep the fine particles in suspension, sieved through a $125 \mu \mathrm{~m}$ stainless steel sieve, then dried in a warm oven. Typically 25-50 individual planktic foraminifers (depending on size/weight) were identified then removed from this dried $>125$ $\mu \mathrm{m}$ size fraction using a fine sable brush moistened with distilled water. Foraminiferal sample ages were determined using Accelerator Mass Spectrometry (AMS) methods at the Keck AMS facility at University of California, Irvine in collaboration with John Southon.

The primary sources of radiocarbon error include
variation of the age in surface and near surface sea water, the sedimentation rate, the level of atmospheric radiocarbon in the atmosphere, and the basal erosion during turbidite emplacement. There does not yet exist sufficient prehistoric benthic-planktic age pairs with which to construct an age model in this region, so the reservoir correction is probably the largest source of error in this study and we have no way to evaluate this source of epistemic error. While we can evaluate basal visually to some extent, and differential erosion can be inferred between nearby cores from differences in hemipelagic thickness and the ${ }^{14} \mathrm{C}$ ages (Goldfinger et al., 2011a), there will likely be undetected erosion in these data. Sedimentation rates (Supplemental File S8) are calculated using ${ }^{14} \mathrm{C}$ age estimates and thickness of hemipelagic sediment. Sedimentation rates are used to calculate ages for turbidites that have no direct age.

The radiocarbon ages are reported in years before present (BP, measured from 1950) with a 2 standard deviation lab error (Stuiver et al., 1998). ${ }^{14} \mathrm{C}$ ages are calibrated (Stuiver and Polach, 1977) and a marine reservoir correction of $16 \pm 78$ years is made using the Marine 13 database (Reimer et al., 2013). Only two $\Delta \mathrm{R}$ values are available for the Sumatra area, and while constraints are few on this correction, we here are correlating marine sites to other nearby marine sites, thus the local correlations are valid while
absolute ages may contain additional uncertainty. One additional correction we make to the calibrated age is the sediment gap thickness correction (thickness of sediment between the turbidite and the sample; see OxCal code below). For individual ages, we propagate these uncertainties using RMS (root mean square) calculations using estimates of the uncertainties at each step. This calculation includes the lab uncertainties and results in the final reported 95.4\% error range for each radiocarbon age. In later sections of the paper, we calculate region wide mean event ages. For these, we average the ages (using the combine function in OxCal ), and again apply RMS calculations to the averaged error ranges to produce the $95 \%$ error ranges for each averaged age. No lab multipliers were applied to the data.

## OxCal Code for the calibration of ages displayed in Table 5 B.

```
Options()
{
Plot()
BCAD=FALSE;
Curve("Marine13","Marine13.14c");
Delta_R("LocalMarine",16,78);
Sequence("2004 Region Gap")
{
    Boundary("Start", -8000);
    {
    R_Date("RR0705_108PC_312.5_314.5_SUM-043", 6115, 20) +
N(47,39);
    };
    Boundary("T-42")
    {
    };
    R Date("RR0705 103PC 383 385 SUM-253", 6020, 25) +
N(1\overline{3},22);
    };
    Boundary("T-41")
    {
    };
    {
    R_Date("RR0705_103PC_324_326_SUM-224", 5575, 25) +
N(1\overline{7},29);
    };
```

```
Boundary("T-40")
    {
};
    R_Date("RR0705_103PC_300.5_302.5_SUM-053", 5360, 25) +
N(0,23);
    };
    Boundary("T-39")
{
};
    R Date("RR0705_108PC_257_259_SUM-042", 4840, 20) +
N(44,23);
    };
    Boundary("T-38")
{
};
    Date("Sum-T-38");
    };
    Boundary("T-37")
    {
    };
    Date("Sum-T-37");
    };
    Boundary("T-36")
{
    };
    Date("Sum-T-36");
    };
    Boundary("T-35")
    {
    };
    Date("Sum-T-35");
};
Boundary("T-34")
{
};
Date("Sum-T-34");
};
    Boundary("T-33")
{
    };
    R_Date("RR0705_103PC_209_211_SUM-050", 4360, 20) +
N(3,31);
    };
    Boundary("T-32")
{
};
{
Date("Sum-T-32");
};
Boundary("T-31")
{
};
{
Date("Sum-T-31");
};
Boundary("T-30")
{.
};
{
Date("Sum-T-30");
};
Boundary("T-29")
{
};
{
    {
    {
{
    {
```



```
    R_Date("RR0705_108PC_194_196_SUM-194", 4340, 20) +
N(24,35);
    };
    Boundary("T-28")
    {
    };
    Date("Sum-T-28");
    };
    Boundary("T-27")
    {
    };
    };
    Combine("Sum-T-27")
    {
    R_Date("RR0705_108PC_175_177_SUM-046", 4070, 15) +
N(57,96);
    R_Date("RR0705_103PC_174_176_SUM-087", 3925, 20) +
N(123,46);
    };
    };
    B;
    {
    };
{
    Date("Sum-T-26");
    };
    Boundary("T-25")
{
    };
{
    Date("Sum-T-25");
    };
    Boundary("T-24")
    {
    };
{
    Date("Sum-T-24");
    };
    };
{
    };
{
    Date("Sum-T-23");
    };
    Boundary("T-22")
    {
};
{
    Date("Sum-T-22");
};
    Boundary("T-21")
{
};
    Combine("Sum-T-21")
    {
    R_Date("RR0705_108PC_132.5_134.5_SUM-081", 3035, 15) +
N(0,\overline{39});
    R_Date("RR0705_104PC_326_328_SUM-235", 3000, 35) +
```



```
        R_Date("RR0705_103PC_111_113_SUM-055", 2985, 20) +
N(28,46);
    R_Date("RR0705_103TC_079_081_SUM-180", 2985, 20) +
N(0,92);
    };
    };
Boundary("T-20")
{
~~~ \(\mathrm{N}(2 \overline{4}, 35)\);
    {
};
    R_Date("RR0705_103PC_092_094_SUM-085", 2705, 15) +
N(36,60);
    };
    Boundary("T-19")
    {
    };
    {
    Date("Sum-T-19");
    };
    Boundary("T-18")
    {
    };
    {
    Date("Sum-T-18");
    };
    Boundary("T-17")
    {
    };
    {
    Date("Sum-T-17");
    };
    Boundary("T-16")
    {
    };
    {
    R_Date("RR0705_96PC_399_401_SUM-232", 2410, 20) +
N(1\overline{3},20);
    };
    Boundary("T-15")
    {
    };
    {
    Date("Sum-T-15");
    };
    Boundary("T-14")
    {.
    };
    {
    R_Date("RR0705_104PC_207_209_SUM-115", 2420, 220) +
N(17,28);
    };
    Boundary("T-13")
    {
    };
    };
    Date("Sum-T-13");
    };
    Boundary("T-12")
    {
    };
    Date("Sum-T-12");
    };
    Boundary("T-11")
    {
    };
    {
    Combine("Sum-T-11")
    {
    R_Date("RR0705_103TC_039_041_SUM-179", 2065, 20) +
N(0,104);
    R_Date("RR0705_96PC_374_376_SUM-090", 2115, 20) +
N(7,18);
    };
    };
    Boundary("T-10")
    {
    };
    };
```

```
    Combine("Sum-T-10")
    R_Date("RR0705_108PC_039_041_SUM-080", 2015, 15) +
N(41,31);
    R_Date("RR0705_108TC_020_022_SUM-172", 1930, 20) +
N(44,132);
    R_Date("RR0705_104PC_158_160_SUM-082", 2040, 20) +
N(5,47);
    R_Date("RR0705_103PC_049_051_SUM-054", 1940, 25) +
N(18,46);
    R_Date("RR0705_103TC_036_038_SUM-178", 1890, 20) +
N(24,177);
    };
    };
    Boundary("T-9")
    {
    };
    Date("Sum-T-9");
    };
    Boundary("T-8")
    {
    };
    {
    Date("Sum-T-8");
    };
    Boundary("T-7")
    {
    };
    {
    Combine("Sum-T-7")
    {
    R_Date("RR0705_104PC_122_124_SUM-061", 1630, 45) +
N(16,40);
    R_Date("RR0705_96PC_287.5_289.5_SUM-089", 1490, 15) +
N(3,\overline{27});
    };
    };
    Boundary("T-6")
    {
    };
    Date("Sum-T-6");
    Date("Sum-T-6");
    };
    Boundary("T-5")
    {
    };
    {
    Combine("Sum-T-5")
    { R_Date("RR0705_103PC_020_022_SUM-084", 1225, 20) +
N(5,46);
    R_Date("RR0705_103TC_012.5_014.5_SUM-177", 1310, 20) +
N(0,206);
    };
};
Boundary("T-4")
{;
{;
    Combine("Sum-T-4")
    {
N(9,45);
    R_Date("RR0705_104TC_047.5_049.5_SUM-175", 1220, 20) +
N(11,170);
    };
};
Boundary("T-3")
{
};
Combine("Sum-T-10")
R_Date("RR0705_108PC_039_041_SUM-080", 2015, 15) + \(\mathrm{N}(41,31)\);
R_Date("RR0705_108TC_020_022_SUM-172", 1930, 20) + \(\mathrm{N}(44,132)\);
R_Date("RR0705_104PC_158_160_SUM-082", 2040, 20) + N(5,47);
R_Date("RR0705_103PC_049_051_SUM-054", 1940, 25) + \(\mathrm{N}(18,46)\);
R_Date("RR0705_103TC_036_038_SUM-178", 1890, 20) + (24,177);
{
```

```
    {
    Combine("Sum-T-3")
    {
    R_Date("RR0705_104PC_049.5_051.5_SUM-060", 1065, 20) +
N(9,\overline{45});
    R_Date("RR0705_96PC_222_224_SUM-228", 1145, 15) +
N(9,\overline{3});
    };
    };
    Boundary("T-2")
    {
    };
    {
    R_Date("RR0705_104TC_011_013_SUM-176", 705, 20) +
N(32,170);
    };
    Boundary("T-1")
    {
    };
    {
    Date("Sum-T-1");
    };
    Boundary("T-0", 2007)
    {
    };
};
};
```

OxCAL $\log$ file for ages in Table 5 B .
OxCal v4.2.4 Bronk Ramsey (2013); r:5
IntCal13 atmospheric curve (Reimer et al 2013)
FALSE
OxCal v4.2.4 Bronk Ramsey (2013); r:5
Marine 13 Curve(Marine13.14c)
Marine 13 marine curve (Reimer et al 2013)
LocalMarine Delta_R $(16,78)$
68.2\% probability
-64 (68.2\%) 96
95.4\% probability
-141 (95.4\%) 173
-8000
: -8000
( Boundary Start
Start Boundary (-8000)
$68.2 \%$ probability
8002BC (68.2\%) 8001BC
95.4\% probability

8002BC (95.4\%) 8001BC
) Boundary Start
RR0705_108PC_312.5_314.5_SUM-043 R_Date $(6115,20)$
$68.2 \%$ probability
4675BC (68.2\%) 4485BC
95.4\% probability

4766BC (95.4\%) 4387BC
$\mathrm{N}(47,39)$
$68.2 \%$ probability
7 (68.2\%) 87
95.4\% probability
-31 (95.4\%) 125
( Calculate
RR0705_108PC_312.5_314.5_SUM-043+N(47,39)
$68.2 \%$ probability
4633BC (68.2\%) 4428BC
95.4\% probability

4732BC (95.4\%) 4326BC
) Calculate
T-42 Boundary()
RR0705_103PC_383_385_SUM-253 R_Date $(6020,25)$
$68.2 \%$ probability

4552BC (68.2\%) 4365BC
$95.4 \%$ probability
4671BC (95.4\%) 4317BC
$\mathrm{N}(13,22)$
$68.2 \%$ probability
-9 (68.2\%) 35
95.4\% probability
-31 (95.4\%) 57
( Calculate
RR0705_103PC_383_385_SUM-253+N(13,22)
$68.2 \%$ probability
4547BC (68.2\%) 4355BC
95.4\% probability

4661BC (95.4\%) 4292BC
) Calculate
T-41 Boundary()
RR0705_103PC_324_326_SUM-224 R_Date $(5575,25)$
68.2\% probability

4131BC ( 0.5\%) 4129BC
4117BC (67.7\%) 3916BC
95.4\% probability

4216BC (95.4\%) 3798BC
$\mathrm{N}(17,29)$
68.2\% probability
-13 (68.2\%) 47
95.4\% probability
-41 (95.4\%) 75
( Calculate
RR0705_103PC_324_326_SUM-224+N(17,29)
$68.2 \%$ probability
4108BC (68.2\%) 3888BC
95.4\% probability

4206BC (95.4\%) 3771BC
) Calculate
T-40 Boundary()
RR0705_103PC 300.5_302.5_SUM-053 R_Date $(5360,25)$
$68.2 \%$ probability
3857BC (68.2\%) 3661BC
95.4\% probability

3946BC (95.4\%) 3616BC
$\mathrm{N}(0,23)$
$68.2 \%$ probability
-23 (68.2\%) 23
95.4\% probability
-46 (95.4\%) 46
( Calculate
RR0705_103PC_300.5_302.5_SUM-053+N( 0,23 )
$68.2 \%$ probability
3860BC ( $68.2 \%$ ) 3665BC
$95.4 \%$ probability
3954BC (95.4\%) 3602BC
) Calculate
T-39 Boundary()
RR0705_108PC_257_259_SUM-042 R_Date $(4840,20)$
$68.2 \%$ probability
3306BC (68.2\%) 3062BC
95.4\% probability

3351BC ( $95.4 \%$ ) 2920BC
$\mathrm{N}(44,23)$
$68.2 \%$ probability
21 (68.2\%) 67
95.4\% probability
-2 (95.4\%) 90
( Calculate
RR0705_108PC_257_259_SUM-042+N(44,23)
$68.2 \%$ probability
3255BC ( $68.2 \%$ ) 3009BC
95.4\% probability

3318BC (95.4\%) 2871BC
) Calculate
T-38 Boundary()

Sum-T-38
T-37 Boundary()
Sum-T-37
T-36 Boundary()
Sum-T-36
T-35 Boundary()
Sum-T-35
T-34 Boundary()
Sum-T-34
T-33 Boundary()
RR0705_103PC_209_211_SUM-050 R_Date $(4360,20)$
$68.2 \%$ probability
2659BC (68.2\%) 2425BC
$95.4 \%$ probability
2821BC ( $1.3 \%$ ) 2798BC
2781BC ( $94.1 \%$ ) 2304BC
$\mathrm{N}(3,31)$
$68.2 \%$ probability
-29 (68.2\%) 35
95.4\% probability -59 (95.4\%) 65
( Calculate
RR0705_103PC_209_211_SUM-050+N $(3,31)$
$68.2 \%$ probability

$$
2657 \mathrm{BC}(68.2 \%) 2412 \mathrm{BC}
$$

95.4\% probability

2806BC (95.4\%) 2292BC
) Calculate
T-32 Boundary()
Sum-T-32
T-31 Boundary()
Sum-T-31
T-30 Boundary()
Sum-T-30
T-29 Boundary()
RR0705_108PC_194_196_SUM-194 R_Date $(4340,20)$
$68.2 \%$ probability
2626BC (68.2\%) 2391BC
95.4\% probability

2766BC (95.4\%) 2267BC
$\mathrm{N}(24,35)$
68.2\% probability
-12 (68.2\%) 60
95.4\% probability
-46 (95.4\%) 94
( Calculate
RR0705_108PC_194_196_SUM-194+N( 24,35 )
$68.2 \%$ probability

$$
2607 \mathrm{BC}(68.2 \%) 2360 \mathrm{BC}
$$

95.4\% probability

2751BC ( $95.4 \%$ ) 2232BC
) Calculate
T-28 Boundary()
Sum-T-28
T-27 Boundary()
RR0705_108PC_175_177_SUM-046 R_Date $(4070,15)$
$68.2 \%$ probability
2255BC ( $68.2 \%$ ) 2020BC
$95.4 \%$ probability
2378BC ( $95.4 \%$ ) 1911BC
$\mathrm{N}(57,96)$
$68.2 \%$ probability
-41 (68.2\%) 155
95.4\% probability -135 (95.4\%) 249
( Calculate
RR0705_108PC_175_177_SUM-046+N(57,96)
68.2\% probability

2230BC ( $68.2 \%$ ) 1924BC
95.4\% probability

2385BC (95.4\%) 1780BC
) Calculate
RR0705_103PC_174_176_SUM-087 R_Date $(3925,20)$
$68.2 \%$ probability
2052BC (68.2\%) 1817BC
$95.4 \%$ probability
2173BC (95.4\%) 1718BC
$\mathrm{N}(123,46)$
$68.2 \%$ probability
76 (68.2\%) 170
95.4\% probability

31 (95.4\%) 215
(Calculate
RR0705_103PC_174_176_SUM-087+N(123,46)
68.2\% probability

1942BC (68.2\%) 1693BC
95.4\% probability

2060BC ( $95.4 \%$ ) 1570BC
) Calculate
( Combine Sum-T-27
Posterior
$68.2 \%$ probability
2017BC (68.2\%) 1827BC
95.4\% probability

2111BC (95.4\%) 1734BC
Agreement 82.4\%
Posterior $68.2 \%$ probability 2017BC (68.2\%) 1827BC
95.4\% probability

2111BC (95.4\%) 1734BC
Agreement 89.3\%
Sum-T-27 Combine()
X2-Test: df=1 T=1.834(5\% 3.841)
$68.2 \%$ probability
2017BC (68.2\%) 1827BC
95.4\% probability

2111BC (95.4\%) 1734BC
Agreement $\mathrm{n}=2 \mathrm{Acomb}=80.5 \%(\mathrm{An}=50.0 \%)$
) Combine Sum-T-27
T-26 Boundary()
Sum-T-26
T-25 Boundary()
Sum-T-25
T-24 Boundary()
Sum-T-24
T-23 Boundary()
Sum-T-23
T-22 Boundary()
Sum-T-22
T-21 Boundary()
RR0705_108PC_132.5_134.5_SUM-081 R_Date $(3035,15)$
$68.2 \%$ probability
928BC ( $68.2 \%$ ) 767BC
95.4\% probability

1066BC (94.8\%) 691BC
681BC ( $0.6 \%$ ) 665BC
$\mathrm{N}(0,39)$
$68.2 \%$ probability
-40 (68.2\%) 40
95.4\% probability
-78 (95.4\%) 78
( Calculate
RR0705_108PC_132.5_134.5_SUM-081+N( 0,39 )
$68.2 \%$ probability
942BC ( $68.2 \%$ ) 759BC
95.4\% probability

1073BC (95.4\%) 662BC
) Calculate
RR0705_104PC_326_328_SUM-235 R_Date $(3000,35)$
68.2\% probability

915BC (68.2\%) 731BC
95.4\% probability

1016BC (95.4\%) 556BC
$\mathrm{N}(6,25)$
68.2\% probability
-20 (68.2\%) 32
95.4\% probability
-44 (95.4\%) 56
(Calculate
RR0705_104PC_326_328_SUM-235+N(6,25)
$68.2 \%$ probability
914BC (68.2\%) 720BC
95.4\% probability

1020BC (95.4\%) 550BC
) Calculate
RR0705_103PC_111_113_SUM-055 R_Date $(2985,20)$
68.2\% probability

900BC ( $68.2 \%$ ) 722BC
95.4\% probability

986BC (95.4\%) 551BC
$\mathrm{N}(28,46)$
68.2\% probability
-19 (68.2\%) 75
95.4\% probability -64 (95.4\%) 120
( Calculate
RR0705_103PC_111_113_SUM-055+N( 28,46 )
$68.2 \%$ probability
881BC ( $68.2 \%$ ) 672BC
$95.4 \%$ probability
981BC (95.4\%) 512BC
) Calculate
RR0705_103TC_079_081_SUM-180 R_Date $(2985,20)$
$68.2 \%$ probability
900BC ( $68.2 \%$ ) 722BC
95.4\% probability

986BC ( $95.4 \%$ ) 551BC
$\mathrm{N}(0,92)$
68.2\% probability
-94 (68.2\%) 94
95.4\% probability
-184 (95.4\%) 184
(Calculate
RR0705_103TC 079_081_SUM-180+N(0,92)
$68.2 \%$ probability
933BC (68.2\%) 666BC
$95.4 \%$ probability
1063BC (95.4\%) 502BC
) Calculate
( Combine Sum-T-21
Posterior
68.2\% probability

853BC (68.2\%) 765BC
95.4\% probability

905BC (95.4\%) 724BC
Agreement 121.2\%
Posterior
$68.2 \%$ probability
853BC ( $68.2 \%$ ) 765BC
95.4\% probability 905BC (95.4\%) 724BC
Agreement 135.8\%
Posterior
68.2\% probability

853BC (68.2\%) 765BC
95.4\% probability

905BC (95.4\%) 724BC
Agreement 126.7\%
Posterior
68.2\% probability

853BC ( $68.2 \%$ ) 765BC
$95.4 \%$ probability

905BC (95.4\%) 724BC
Agreement 136.5\%
Sum-T-21 Combine()
X2-Test: $\mathrm{df}=3 \mathrm{~T}=0.362(5 \% 7.815)$
68.2\% probability

853BC (68.2\%) 765BC
95.4\% probability

905BC ( $95.4 \%$ ) 724BC
Agreement $\mathrm{n}=4$ Acomb=168.7\%(An=35.4\%)
) Combine Sum-T-21
T-20 Boundary()
RR0705_103PC_092_094_SUM-085 R_Date $(2705,15)$
68.2\% probability

573BC ( $68.2 \%$ ) 344BC
95.4\% probability

716BC (95.4\%) 239BC
$\mathrm{N}(36,60)$
68.2\% probability
-25 (68.2\%) 97
95.4\% probability
-84 (95.4\%) 156
( Calculate
RR0705_103PC_092_094_SUM-085+N(36,60)
$68.2 \%$ probability
555BC (68.2\%) 291BC
95.4\% probability

705BC (95.4\%) 172BC
) Calculate
T-19 Boundary()
Sum-T-19
T-18 Boundary()
Sum-T-18
T-17 Boundary()
Sum-T-17
T-16 Boundary()
RR0705_96PC_399_401_SUM-232 R_Date $(2410,20)$
$68.2 \%$ probability
179BC (68.2\%) 30AD
95.4\% probability

320BC (95.4\%) 108AD
$\mathrm{N}(13,20)$
$68.2 \%$ probability
-7 (68.2\%) 33
95.4\% probability
-27 (95.4\%) 53
( Calculate
RR0705_96PC_399_401_SUM-232+N(13,20)
$68.2 \%$ probability
167BC ( $68.2 \%$ ) 46AD
$95.4 \%$ probability
306BC (95.4\%) 129AD
) Calculate
T-15 Boundary()
Sum-T-15
T-14 Boundary()
RR0705_104PC_207_209_SUM-115 R_Date $(2420,220)$
$68.2 \%$ probability
381 BC ( $68.2 \%$ ) 187AD
95.4\% probability

719BC (95.4\%) 418AD
$\mathrm{N}(17,28)$
68.2\% probability
-12 (68.2\%) 46
95.4\% probability
-39 (95.4\%) 73
( Calculate
RR0705_104PC_207_209_SUM-115+N(17,28)
68.2\% probability

365BC (68.2\%) 209AD
95.4\% probability

704BC (95.4\%) 440AD
) Calculate
T-13 Boundary()
Sum-T-13
T-12 Boundary()
Sum-T-12
T-11 Boundary()
RR0705_103TC_039_041_SUM-179 R_Date $(2065,20)$
68.2\% probability 234AD (68.2\%) 430AD
95.4\% probability 136AD (95.4\%) 538AD
$\mathrm{N}(0,104)$
$68.2 \%$ probability -106 (68.2\%) 106
95.4\% probability -208 (95.4\%) 208
( Calculate
RR0705_103TC_039_041_SUM-179+N( 0,104 )
68.2\% probability 183AD (68.2\%) 473AD
95.4\% probability 40AD (95.4\%) 616AD
) Calculate
RR0705_96PC_374_376_SUM-090 R_Date $(2115,20)$
68.2\% probability 169AD (68.2\%) 370AD
95.4\% probability

75AD (95.4\%) 456AD
$\mathrm{N}(7,18)$
68.2\% probability
-11 (68.2\%) 25
95.4\% probability -29 (95.4\%) 43
( Calculate
RR0705_96PC_374_376_SUM-090+N(7,18)
$68.2 \%$ probability 176AD (68.2\%) 381AD
$95.4 \%$ probability 77AD (95.4\%) 469AD
) Calculate
( Combine Sum-T-11
Posterior
68.2\% probability 215AD (68.2\%) 382AD
95.4\% probability 129AD (95.4\%) 450AD
Agreement 120.3\%
Posterior
$68.2 \%$ probability 215AD (68.2\%) 382AD
95.4\% probability 129AD (95.4\%) 450AD
Agreement 108.0\%
Sum-T-11 Combine()
X2-Test: $\mathrm{df}=1 \mathrm{~T}=0.067(5 \% 3.841)$
$68.2 \%$ probability
215AD (68.2\%) 382AD
95.4\% probability

129AD (95.4\%) 450AD
Agreement $\mathrm{n}=2$ Acomb=120.3\%(An=50.0\%)
) Combine Sum-T-11
T-10 Boundary()
RR0705_108PC_039_041_SUM-080 R_Date $(2015,15)$
$68.2 \%$ probability
273AD (68.2\%) 477AD
95.4\% probability

187AD (95.4\%) 584AD
$\mathrm{N}(41,31)$
$68.2 \%$ probability
9 (68.2\%) 73
$95.4 \%$ probability
-21 (95.4\%) 103
( Calculate
RR0705_108PC_039_041_SUM-080+N(41,31)
$68.2 \%$ probability
318AD (68.2\%) 532AD
95.4\% probability

222AD (95.4\%) 637AD
) Calculate
RR0705_108TC_020_022_SUM-172 R_Date $(1930,20)$
$68.2 \%$ probability
402AD (68.2\%) 585AD
95.4\% probability

298AD (95.4\%) 659AD
$\mathrm{N}(44,132)$
68.2\% probability
-91 (68.2\%) 179
95.4\% probability
-220 (95.4\%) 308
( Calculate
RR0705_108TC_020_022_SUM-172+N(44,132)
68.2\% probability

370AD (68.2\%) 691AD
95.4\% probability

205AD (95.4\%) 847AD
) Calculate
RR0705_104PC_158_160_SUM-082 R_Date $(2040,20)$
68.2\% probability

250AD (68.2\%) 450AD
95.4\% probability

156AD (95.4\%) 557AD
$\mathrm{N}(5,47)$
68.2\% probability
-43 (68.2\%) 53
95.4\% probability
-89 (95.4\%) 99
( Calculate
RR0705_104PC_158_160_SUM-082+N(5,47)
$68.2 \%$ probability
248AD (68.2\%) 472AD
95.4\% probability

142AD (95.4\%) 587AD
) Calculate
RR0705_103PC_049_051_SUM-054 R_Date $(1940,25)$
$68.2 \%$ probability
390AD (68.2\%) 580AD
95.4\% probability

282AD (95.4\%) 650AD
$\mathrm{N}(18,46)$
$68.2 \%$ probability
-29 (68.2\%) 65
95.4\% probability
-74 (95.4\%) 110
( Calculate
RR0705_103PC_049_051_SUM-054+N(18,46)
$68.2 \%$ probability
394AD (68.2\%) 604AD
95.4\% probability

279AD (95.4\%) 694AD
) Calculate
RR0705_103TC_036_038_SUM-178 R_Date $(1890,20)$
68.2\% probability

440AD (68.2\%) 611AD
95.4\% probability

351AD (95.4\%) 682AD
$\mathrm{N}(24,177)$
68.2\% probability
-157 (68.2\%) 205
95.4\% probability
-330 (95.4\%) 378
( Calculate
RR0705_103TC_036_038_SUM-178+N(24,177)
68.2\% probability

347AD (68.2\%) 748AD
95.4\% probability

150AD (95.4\%) 941AD
) Calculate
( Combine Sum-T-10
Posterior
68.2\% probability

393AD (68.2\%) 508AD
95.4\% probability

339AD (95.4\%) 570AD
Agreement 121.4\%
Posterior
68.2\% probability 393AD (68.2\%) 508AD
95.4\% probability 339AD (95.4\%) 570AD
Agreement 119.5\%
Posterior
68.2\% probability

393AD (68.2\%) 508AD
95.4\% probability

339AD (95.4\%) 570AD
Agreement 95.9\%
Posterior
68.2\% probability 393AD (68.2\%) 508AD
95.4\% probability 339AD (95.4\%) 570AD
Agreement 114.7\%
Posterior
68.2\% probability

393AD (68.2\%) 508AD
95.4\% probability

339AD (95.4\%) 570AD
Agreement 121.7\%
Sum-T-10 Combine()
X2-Test: $\mathrm{df}=4 \mathrm{~T}=1.486$ (5\% 9.488)
$68.2 \%$ probability
393AD (68.2\%) 508AD
95.4\% probability

339AD (95.4\%) 570AD
Agreement $\mathrm{n}=5$ Acomb=134.6\%(An=31.6\%)
) Combine Sum-T-10
T-9 Boundary()
Sum-T-9
T-8 Boundary()
Sum-T-8
T-7 Boundary()
RR0705_104PC_122_124_SUM-061 R_Date $(1630,45)$
$68.2 \%$ probability
687AD (68.2\%) 874AD
95.4\% probability

621AD (95.4\%) 988AD
$\mathrm{N}(16,40)$
68.2\% probability
-25 (68.2\%) 57
95.4\% probability
-64 (95.4\%) 96
( Calculate
RR0705_104PC_122_124_SUM-061+N(16,40)
68.2\% probability

697AD (68.2\%) 900AD
95.4\% probability

616AD (95.4\%) 1017AD
) Calculate
RR0705_96PC_287.5_289.5_SUM-089 R_Date $(1490,15)$
$68.2 \%$ probability
836AD (68.2\%) 1016AD
95.4\% probability

726AD (95.4\%) 1081AD
$\mathrm{N}(3,27)$
68.2\% probability
-25 (68.2\%) 31
95.4\% probability
-51 (95.4\%) 57
( Calculate
RR0705_96PC_287.5_289.5_SUM-089+N(3,27)
68.2\% probability

833AD (68.2\%) 1018AD
95.4\% probability

729AD (95.4\%) 1098AD
) Calculate
( Combine Sum-T-7
Posterior 68.2\% probability 792AD (68.2\%) 942AD
95.4\% probability

729AD (95.4\%) 1013AD
Agreement 98.0\%
Posterior
68.2\% probability

792AD (68.2\%) 942AD
95.4\% probability

729AD (95.4\%) 1013AD
Agreement 98.9\%
Sum-T-7 Combine()
X2-Test: $\mathrm{df}=1 \mathrm{~T}=0.959$ ( $5 \% 3.841$ )
$68.2 \%$ probability 792AD (68.2\%) 942AD
95.4\% probability

729AD (95.4\%) 1013AD
Agreement $\mathrm{n}=2 \mathrm{Acomb}=97.8 \%(\mathrm{An}=50.0 \%)$
) Combine Sum-T-7
T-6 Boundary()
Sum-T-6
T-5 Boundary()
RR0705_103PC_020_022_SUM-084 R_Date $(1225,20)$
$68.2 \%$ probability
1117AD (68.2\%) 1280AD
95.4\% probability

1033AD (95.4\%) 1320AD
$\mathrm{N}(5,46)$
68.2\% probability
-42 (68.2\%) 52
95.4\% probability
-87 (95.4\%) 97
( Calculate
RR0705_103PC_020_022_SUM-084+N $(5,46)$
$68.2 \%$ probability
1102AD (68.2\%) 1285AD
95.4\% probability

1007AD (95.4\%) 1362AD
) Calculate
RR0705_103TC_012.5_014.5_SUM-177 R_Date(1310,20) 68.2\% probability

1035AD (68.2\%) 1197AD
95.4\% probability

958AD (95.4\%) 1280AD
$\mathrm{N}(0,206)$
68.2\% probability
-210 (68.2\%) 210
95.4\% probability
-412 (95.4\%) 412
( Calculate
RR0705_103TC 012.5_014.5_SUM-177+N(0,206)
$68.2 \%$ probability
891AD (68.2\%) 1340AD
95.4\% probability

670AD (95.4\%) 1560AD
) Calculate
( Combine Sum-T-5

Posterior
68.2\% probability

1097AD (68.2\%) 1268AD
95.4\% probability 1012AD (95.4\%) 1341AD
Agreement 102.7\%
Posterior
68.2\% probability 1097AD (68.2\%) 1268AD
95.4\% probability 1012AD (95.4\%) 1341AD
Agreement 127.4\%
Sum-T-5 Combine()
X 2 -Test: $\mathrm{df}=1 \mathrm{~T}=0.138$ (5\% 3.841)
$68.2 \%$ probability 1097AD (68.2\%) 1268AD
95.4\% probability

1012AD (95.4\%) 1341AD
Agreement $\mathrm{n}=2$ Acomb $=120.9 \%$ ( $\mathrm{An}=50.0 \%$ )
) Combine Sum-T-5
T-4 Boundary()
RR0705_104PC_067.5_069.5_SUM-062 R_Date $(1265,15)$
68.2\% probability 1068AD (68.2\%) 1230AD
95.4\% probability 1010AD (95.4\%) 1297AD
$\mathrm{N}(9,45)$
$68.2 \%$ probability
-37 (68.2\%) 55
95.4\% probability -81 (95.4\%) 99
( Calculate
RR0705_104PC_067.5_069.5_SUM-062+N(9,45)
$68.2 \%$ probability
1072AD (68.2\%) 1255AD
95.4\% probability

987AD (95.4\%) 1336AD
) Calculate
RR0705_104TC_047.5_049.5_SUM-175 R_Date(1220,20)
68.2\% probability
$1123 \mathrm{AD}(68.2 \%)$ 1283AD
95.4\% probability

1034AD (95.4\%) 1324AD
$\mathrm{N}(11,170)$
68.2\% probability
-162 (68.2\%) 184
95.4\% probability -329 (95.4\%) 351
(Calculate
RR0705_104TC_047.5_049.5_SUM-175+N(11,170)
68.2\% probability

1010AD (68.2\%) 1391AD
95.4\% probability

825AD (95.4\%) 1573AD
) Calculate
( Combine Sum-T-4
Posterior
$68.2 \%$ probability
1088AD (68.2\%) 1254AD
95.4\% probability

1010AD (95.4\%) 1327AD
Agreement 104.5\%
Posterior
68.2\% probability

1088AD (68.2\%) 1254AD
95.4\% probability

1010AD (95.4\%) 1327AD
Agreement 128.1\%
Sum-T-4 Combine()
X2-Test: $\mathrm{df}=1 \mathrm{~T}=0.027(5 \% 3.841)$
$68.2 \%$ probability

1088AD (68.2\%) 1254AD
95.4\% probability

1010AD (95.4\%) 1327AD
Agreement $\mathrm{n}=2 \mathrm{Acomb}=122.9 \%$ ( $\mathrm{An}=50.0 \%$ )
) Combine Sum-T-4
T-3 Boundary()
RR0705_104PC_049.5_051.5_SUM-060 R_Date $(1065,20)$
68.2\% probability

1279AD (68.2\%) 1405AD
95.4\% probability

1197AD (95.4\%) 1454AD
$\mathrm{N}(9,45)$
68.2\% probability
-37 (68.2\%) 55
95.4\% probability
-81 (95.4\%) 99
( Calculate
RR0705_104PC_049.5_051.5_SUM-060+N( 9,45 )
68.2\% probability
$1267 \mathrm{AD}(68.2 \%) 1424 \mathrm{AD}$
95.4\% probability

1179AD (95.4\%) 1497AD
) Calculate
RR0705_96PC_222_224_SUM-228 R_Date $(1145,15)$
$68.2 \%$ probability
$1184 \mathrm{AD}(68.2 \%)$ 1330AD
95.4\% probability

1095AD (95.4\%) 1410AD
$\mathrm{N}(9,38)$
$68.2 \%$ probability
-30 (68.2\%) 48
95.4\% probability
-67 (95.4\%) 85
( Calculate
RR0705_96PC_222_224_SUM-228+N(9,38)
68.2\% probability

1186AD (68.2\%) 1356AD
95.4\% probability

1090AD (95.4\%) 1436AD
) Calculate
( Combine Sum-T-3
Posterior
68.2\% probability

1250AD (68.2\%) 1365AD
95.4\% probability

1194AD ( $95.4 \%$ ) 1425AD
Agreement 106.5\%
Posterior
68.2\% probability

1250AD (68.2\%) 1365AD
95.4\% probability

1194AD (95.4\%) 1425AD
Agreement 109.7\%
Sum-T-3 Combine()
X2-Test: $\mathrm{df}=1 \mathrm{~T}=0.446(5 \% 3.841)$
68.2\% probability

1250AD (68.2\%) 1365AD
95.4\% probability

1194AD (95.4\%) 1425AD
Agreement $\mathrm{n}=2 \mathrm{Acomb}=111.6 \%$ ( $\mathrm{An}=50.0 \%$ )
) Combine Sum-T-3
T-2 Boundary()
RR0705_104TC_011_013_SUM-176 R_Date $(705,20)$
Warning! Date may extend out of range-705+/-20BP $68.2 \%$ probability
1525AD (68.2\%) 1684AD
95.4\% probability

1465AD (95.4\%) 1810AD
$\mathrm{N}(32,170)$
68.2\% probability
-141 (68.2\%) 205
95.4\% probability
-308 (95.4\%) 372
( Calculate
RR0705_104TC_011_013_SUM-176+N( 32,170 )
68.2\% probability

1421 AD (68.2\%) 1880AD
95.4\% probability

1207AD (95.4\%) 2623AD
) Calculate
T-1 Boundary()
Sum-T-1
2007
: 2007
( Boundary T-0
T-0 Boundary (2007)
$68.2 \%$ probability
2006AD (68.2\%) 2007AD
95.4\% probability 2006AD (95.4\%) 2007AD
) Boundary T-0
( Sequence 2004 Region Gap
2004 Region Gap Sequence()
) Sequence 2004 Region Gap
i : Sorting values...
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Posterior
( $\mathrm{MCMC}(30000)$
Overall agreement 123.2\%
Dynamic agreement 174.8\%
LocalMarine Posterior
68.2\% probability
-106 (68.2\%) -17
95.4\% probability
-138 (95.4\%) 12
Agreement 84.4\%
Start Posterior
$68.2 \%$ probability
8002BC (68.2\%) 8001BC
95.4\% probability 8002BC ( $95.4 \%$ ) 8001BC
Agreement 100.0\%
Posterior
68.2\% probability

4717BC (68.2\%) 4578BC
95.4\% probability

4778BC (95.4\%) 4514BC
RR0705_108PC 312.5_314.5_SUM-043 Posterior
$68.2 \%$ probability
4745BC ( $68.2 \%$ ) 4622BC
$95.4 \%$ probability
4792BC (95.4\%) 4562BC
Agreement 79.2\%
Posterior
68.2\% probability
-3 (68.2\%) 72
95.4\% probability
-40 (95.4\%) 107
Agreement 99.9\%
T-42 Posterior
$68.2 \%$ probability
4646BC (68.2\%) 4498BC
95.4\% probability

4715BC (95.4\%) 4436BC
Posterior
$68.2 \%$ probability
4581BC (68.2\%) 4451BC
95.4\% probability

4652BC (95.4\%) 4402BC
RR0705_103PC_383_385_SUM-253 Posterior $68.2 \%$ probability
4595BC (68.2\%) 4467BC
95.4\% probability

4668BC (95.4\%) 4433BC
Agreement 97.4\%
Posterior
$68.2 \%$ probability -4 (68.2\%) 39
95.4\% probability -26 (95.4\%) 61
Agreement 99.7\%
T-41 Posterior $68.2 \%$ probability 4530BC (50.4\%) 4273BC 4266BC ( $17.8 \%$ ) 4159BC
95.4\% probability 4595BC (95.4\%) 4007BC
Posterior
$68.2 \%$ probability
4155BC (68.2\%) 3992BC
95.4\% probability 4222BC (95.4\%) 3937BC
RR0705_103PC_324_326_SUM-224 Posterior $68.2 \%$ probability 4162BC (68.2\%) 4008BC
$95.4 \%$ probability
4221BC (95.4\%) 3967BC
Agreement 91.9\%
Posterior
$68.2 \%$ probability
-14 (68.2\%) 44
95.4\% probability
-43 (95.4\%) 72
Agreement 100.4\%
T-40 Posterior $68.2 \%$ probability 4062BC ( $68.2 \%$ ) 3857BC
$95.4 \%$ probability 4159BC (95.4\%) 3770BC
Posterior $68.2 \%$ probability
3920BC (68.2\%) 3776BC
95.4\% probability

3969BC (95.4\%) 3707BC
RR0705_103PC_300.5_302.5_SUM-053 Posterior 68.2\% probability

3921BC (68.2\%) 3786BC
95.4\% probability

3956BC (95.4\%) 3716BC
Agreement 90.5\%
Posterior $68.2 \%$ probability -22 (68.2\%) 25
95.4\% probability
-44 (95.4\%) 47

Agreement 100.2\%
T-39 Posterior 68.2\% probability

3813BC ( $24.2 \%$ ) 3640BC
$3512 \mathrm{BC}(44.0 \%) 3250 \mathrm{BC}$
95.4\% probability 3904BC ( $95.4 \%$ ) 3200BC
Posterior
68.2\% probability

3330BC (68.2\%) 3210BC
95.4\% probability
$3417 \mathrm{BC}(95.4 \%) 3111 \mathrm{BC}$
RR0705_108PC_257_259_SUM-042 Posterior $68.2 \%$ probability
3360BC (68.2\%) 3258BC
95.4\% probability 3467BC ( $6.0 \%$ ) 3392BC 3386BC (89.4\%) 3161BC
Agreement 78.0\%
Posterior
$68.2 \%$ probability 16 (68.2\%) 62
95.4\% probability -7 (95.4\%) 85
Agreement 98.9\%
T-38 Posterior 68.2\% probability 3301BC (68.2\%) 3125BC
95.4\% probability 3376BC (95.4\%) 2983BC
Sum-T-38 Posterior
$68.2 \%$ probability
3270BC (68.2\%) 3069BC
95.4\% probability

3336BC (95.4\%) 2916BC
T-37 Posterior
$68.2 \%$ probability
3240BC (68.2\%) 3009BC
95.4\% probability

3311BC (95.4\%) 2857BC
Sum-T-37 Posterior
$68.2 \%$ probability
3191BC (68.2\%) 2949BC
95.4\% probability

3275BC (95.4\%) 2809BC
T-36 Posterior
$68.2 \%$ probability
3149BC (68.2\%) 2889BC
95.4\% probability

3246BC (95.4\%) 2755BC
Sum-T-36 Posterior
$68.2 \%$ probability
3092BC (68.2\%) 2833BC
95.4\% probability

3201BC (95.4\%) 2716BC
T-35 Posterior
$68.2 \%$ probability
3040BC (68.2\%) 2778BC
95.4\% probability

3161BC (95.4\%) 2667BC
Sum-T-35 Posterior
$68.2 \%$ probability
2981BC (68.2\%) 2731BC
95.4\% probability

3107BC ( $95.4 \%$ ) 2636BC
T-34 Posterior
$68.2 \%$ probability
2926BC (68.2\%) 2686BC
95.4\% probability

3055BC (95.4\%) 2596BC
Sum-T-34 Posterior
68.2\% probability

2866BC (68.2\%) 2651BC
95.4\% probability

2982BC (95.4\%) 2570BC
T-33 Posterior $68.2 \%$ probability 2813BC (68.2\%) 2614BC
95.4\% probability

2914BC (95.4\%) 2542BC
Posterior
$68.2 \%$ probability
2772BC (68.2\%) 2588BC
95.4\% probability

2847BC (95.4\%) 2534BC
RR0705_103PC_209_211_SUM-050 Posterior
$68.2 \%$ probability
2815BC ( $1.8 \%$ ) 2809BC
2746BC (66.4\%) 2571BC
95.4\% probability

2834BC (95.4\%) 2536BC
Agreement 72.6\%
Posterior
68.2\% probability
-40 (68.2\%) 20
95.4\% probability -69 (95.4\%) 50
Agreement 97.7\%
T-32 Posterior $68.2 \%$ probability 2744BC (68.2\%) 2562BC
$95.4 \%$ probability
2828BC (95.4\%) 2508BC
Sum-T-32 Posterior $68.2 \%$ probability
2722BC (68.2\%) 2546BC
95.4\% probability

2807BC (95.4\%) 2487BC
T-31 Posterior 68.2\% probability

2705BC (68.2\%) 2527BC
95.4\% probability

2787BC (95.4\%) 2465BC
Sum-T-31 Posterior
$68.2 \%$ probability
2680BC (68.2\%) 2507BC
$95.4 \%$ probability
2766BC (95.4\%) 2448BC
T-30 Posterior
$68.2 \%$ probability
2658BC (68.2\%) 2487BC
95.4\% probability

2747BC (95.4\%) 2432BC
Sum-T-30 Posterior
$68.2 \%$ probability
2634BC ( $68.2 \%$ ) 2469BC
95.4\% probability

2720BC (95.4\%) 2414BC
T-29 Posterior
$68.2 \%$ probability
2612BC (68.2\%) 2452BC
95.4\% probability

2698BC (95.4\%) 2400BC
Posterior
$68.2 \%$ probability
2583BC (68.2\%) 2431BC
95.4\% probability

2664BC ( $95.4 \%$ ) 2379BC
RR0705_108PC_194_196_SUM-194 Posterior
$68.2 \%$ probability
2628BC (40.7\%) 2546BC
2526BC ( $27.5 \%$ ) 2473BC
95.4\% probability

2695BC ( $95.4 \%$ ) 2453BC
Agreement 113.5\%
Posterior
$68.2 \%$ probability
16 (68.2\%) 83
95.4\% probability
-17 (95.4\%) 116
Agreement 89.3\%
T-28 Posterior
$68.2 \%$ probability
$2573 \mathrm{BC}(68.2 \%) 2323 \mathrm{BC}$
95.4\% probability

2648BC (95.4\%) 2087BC
Sum-T-28 Posterior
$68.2 \%$ probability
2433BC (68.2\%) 2092BC
95.4\% probability

2547BC ( $95.4 \%$ ) 1942BC
T-27 Posterior
68.2\% probability

2218BC (68.2\%) 1903BC
95.4\% probability

2439BC ( $95.4 \%$ ) 1819BC
Sum-T-27 Posterior
$68.2 \%$ probability
2041BC ( $68.2 \%$ ) 1858BC
95.4\% probability

2131BC ( $95.4 \%$ ) 1768BC
Posterior
68.2\% probability

2041BC (68.2\%) 1858BC
95.4\% probability

2131BC (95.4\%) 1767BC
Agreement 93.6\%
Posterior
$68.2 \%$ probability
2041BC (68.2\%) 1858BC
95.4\% probability

2131BC (95.4\%) 1768BC
Agreement 78.2\%
T-26 Posterior
$68.2 \%$ probability
2005BC (68.2\%) 1746BC
95.4\% probability

2107BC ( $95.4 \%$ ) 1526BC
Sum-T-26 Posterior
$68.2 \%$ probability
1949BC (68.2\%) 1630BC
95.4\% probability

2053BC (95.4\%) 1393BC
T-25 Posterior
$68.2 \%$ probability
1893BC (68.2\%) 1504BC
$95.4 \%$ probability
2005BC (95.4\%) 1250BC
Sum-T-25 Posterior
68.2\% probability

1807BC (68.2\%) 1386BC
$95.4 \%$ probability
1941BC (95.4\%) 1158BC
T-24 Posterior
$68.2 \%$ probability
1711BC (68.2\%) 1253BC
95.4\% probability

1881BC (95.4\%) 1049BC
Sum-T-24 Posterior
$68.2 \%$ probability
1596BC (68.2\%) 1147BC
95.4\% probability

1784BC (95.4\%) 969BC

T-23 Posterior
$68.2 \%$ probability
1478BC (68.2\%) 1032BC
95.4\% probability 1700BC ( $95.4 \%$ ) 889BC
Sum-T-23 Posterior 68.2\% probability 1339BC (68.2\%) 939BC 95.4\% probability 1582BC (95.4\%) 841BC
T-22 Posterior $68.2 \%$ probability 1206BC (68.2\%) 853BC $95.4 \%$ probability 1480BC (95.4\%) 787BC
Sum-T-22 Posterior $68.2 \%$ probability 1084BC (68.2\%) 814BC 95.4\% probability 1334BC (95.4\%) 761BC
T-21 Posterior $68.2 \%$ probability 955BC (68.2\%) 771BC
$95.4 \%$ probability 1185BC (95.4\%) 727BC
Sum-T-21 Posterior $68.2 \%$ probability 842BC ( $68.2 \%$ ) 757BC 95.4\% probability 893BC (95.4\%) 719BC
Posterior
68.2\% probability

842BC (68.2\%) 757BC
95.4\% probability

893BC (95.4\%) 719BC
Agreement 117.2\%
Posterior
$68.2 \%$ probability
842BC (68.2\%) 757BC
95.4\% probability

893BC (95.4\%) 719BC
Agreement 136.8\%
Posterior 68.2\% probability 842BC (68.2\%) 757BC
95.4\% probability 893BC (95.4\%) 719BC
Agreement 131.5\%
Posterior $68.2 \%$ probability 842BC (68.2\%) 758BC
95.4\% probability 890BC ( $95.4 \%$ ) 720BC
Agreement 137.5\%
T-20 Posterior $68.2 \%$ probability 809BC (68.2\%) 607BC $95.4 \%$ probability 855BC (95.4\%) 456BC
Posterior
$68.2 \%$ probability 682BC ( $68.2 \%$ ) 467BC
95.4\% probability

751BC (95.4\%) 376BC
RR0705_103PC_092_094_SUM-085 Posterior
$68.2 \%$ probability 702BC ( $9.2 \%$ ) 674BC 665BC (23.7\%) 596BC 591BC ( $9.3 \%$ ) 560BC 551BC ( $26.1 \%$ ) 473BC
$95.4 \%$ probability

726BC (95.4\%) 411BC
Agreement 82.0\%
Posterior
$68.2 \%$ probability
-52 (68.2\%) 64
95.4\% probability
-108 (95.4\%) 120
Agreement 96.3\%
T-19 Posterior $68.2 \%$ probability 636BC (68.2\%) 400BC
95.4\% probability 723BC (95.4\%) 287BC
Sum-T-19 Posterior
$68.2 \%$ probability 584BC (68.2\%) 340BC
95.4\% probability 681BC (95.4\%) 236BC
T-18 Posterior
68.2\% probability 533BC ( $68.2 \%$ ) 281BC
95.4\% probability 645BC (95.4\%) 181BC
Sum-T-18 Posterior
$68.2 \%$ probability 472BC ( $68.2 \%$ ) 232BC
95.4\% probability

592BC (95.4\%) 145BC
T-17 Posterior
$68.2 \%$ probability 415BC (68.2\%) 182BC
95.4\% probability

546BC (95.4\%) 102BC
Sum-T-17 Posterior
$68.2 \%$ probability 355BC (68.2\%) 151BC
95.4\% probability

473BC (95.4\%) 75BC
T-16 Posterior
$68.2 \%$ probability 298BC (68.2\%) 116BC
95.4\% probability 402BC (95.4\%) 44BC
Posterior
$68.2 \%$ probability
241BC ( $68.2 \%$ ) 83BC
95.4\% probability 320BC ( $95.4 \%$ ) 35BC
RR0705_96PC_399_401_SUM-232 Posterior
$68.2 \%$ probability 246BC (68.2\%) 95BC
95.4\% probability 327BC ( $95.4 \%$ ) 53BC
Agreement 84.1\%
Posterior
$68.2 \%$ probability -8 (68.2\%) 33
$95.4 \%$ probability
-27 (95.4\%) 52
Agreement 100.3\%
T-15 Posterior
$68.2 \%$ probability 211BC ( $68.2 \%$ ) 39BC
95.4\% probability 302BC (95.4\%) 40AD
Sum-T-15 Posterior
$68.2 \%$ probability 179BC (68.2\%) 8AD
95.4\% probability

271BC ( $95.4 \%$ ) 100AD
T-14 Posterior

| 68.2\% probability | 95.4\% probability |
| :---: | :---: |
| 150BC (68.2\%) 56AD | 346AD (95.4\%) 552AD |
| 95.4\% probability | Posterior |
| 242BC (95.4\%) 162AD | 68.2\% probability |
| Posterior | 393AD (68.2\%) 496AD |
| 68.2\% probability | 95.4\% probability |
| 106BC (68.2\%) 100AD | 346AD (95.4\%) 552AD |
| 95.4\% probability | Agreement 125.5\% |
| 200BC (95.4\%) 206AD | Posterior |
| RR0705_104PC_207_209_SUM-115 Posterior | 68.2\% probability |
| 68.2\% probability | 381AD (68.2\%) 487AD |
| 125BC (68.2\%) 89AD | 95.4\% probability |
| 95.4\% probability | 340 AD (95.4\%) 552AD |
| 226BC (95.4\%) 195AD | Agreement 118.6\% |
| Agreement 128.4\% | Posterior |
| Posterior | 68.2\% probability |
| 68.2\% probability | 393AD (68.2\%) 496AD |
| -9 (68.2\%) 47 | 95.4\% probability |
| 95.4\% probability | 346AD (95.4\%) 552AD |
| -37 (95.4\%) 75 | Agreement 100.1\% |
| Agreement 100.2\% | Posterior |
| T-13 Posterior | 68.2\% probability |
| 68.2\% probability | 393AD (68.2\%) 496AD |
| 62BC (68.2\%) 165AD | 95.4\% probability |
| 95.4\% probability | 346AD (95.4\%) 552AD |
| 161BC (95.4\%) 273AD | Agreement 114.5\% |
| Sum-T-13 Posterior | Posterior |
| 68.2\% probability | 68.2\% probability |
| 3 AD (68.2\%) 225AD | 393AD (68.2\%) 497AD |
| 95.4\% probability | 95.4\% probability |
| 105BC (95.4\%) 317AD | 343AD (95.4\%) 555AD |
| T-12 Posterior | Agreement 120.8\% |
| 68.2\% probability | T-9 Posterior |
| 65AD (68.2\%) 285AD | 68.2\% probability |
| 95.4\% probability | 413AD (68.2\%) 579AD |
| 59BC (95.4\%) 366AD | 95.4\% probability |
| Sum-T-12 Posterior | 362AD (95.4\%) 717AD |
| 68.2\% probability | Sum-T-9 Posterior |
| 133AD (68.2\%) 327AD | 68.2\% probability |
| 95.4\% probability | 466AD (68.2\%) 671AD |
| 15AD (95.4\%) 396AD | 95.4\% probability |
| T-11 Posterior | 404AD (95.4\%) 799AD |
| 68.2\% probability | T-8 Posterior |
| 197AD (68.2\%) 371AD | 68.2\% probability |
| 95.4\% probability | 532AD (68.2\%) 775AD |
| 82AD (95.4\%) 430AD | 95.4\% probability |
| Sum-T-11 Posterior | 444AD (95.4\%) 884AD |
| 68.2\% probability | Sum-T-8 Posterior |
| 268AD (68.2\%) 398AD | 68.2\% probability |
| 95.4\% probability | $631 \mathrm{AD}(68.2 \%)$ 847AD |
| 190AD (95.4\%) 446AD | 95.4\% probability |
| Posterior | 516AD (95.4\%) 930AD |
| 68.2\% probability | T-7 Posterior |
| 266AD (68.2\%) 398AD | 68.2\% probability |
| 95.4\% probability | 720AD (68.2\%) 910AD |
| 190AD (95.4\%) 445AD | 95.4\% probability |
| Agreement 129.0\% | 596AD (95.4\%) 985AD |
| Posterior | Sum-T-7 Posterior |
| 68.2\% probability | 68.2\% probability |
| 268AD (68.2\%) 398AD | $801 \mathrm{AD}(68.2 \%) 941 \mathrm{AD}$ |
| 95.4\% probability | 95.4\% probability |
| 190AD (95.4\%) 446AD | 741 AD (95.4\%) 1006AD |
| Agreement 110.2\% | Posterior |
| T-10 Posterior | 68.2\% probability |
| 68.2\% probability | $801 \mathrm{AD}(68.2 \%) 941 \mathrm{AD}$ |
| 325AD (68.2\%) 455AD | 95.4\% probability |
| 95.4\% probability | $741 \mathrm{AD}(95.4 \%)$ 1006AD |
| 242AD (95.4\%) 515AD | Agreement 98.0\% |
| Sum-T-10 Posterior | Posterior |
| 68.2\% probability | 68.2\% probability |
| 393AD (68.2\%) 496AD | $801 \mathrm{AD}(68.2 \%) 941 \mathrm{AD}$ |

95.4\% probability

741AD (95.4\%) 1006AD
Agreement 102.1\%
T-6 Posterior
$68.2 \%$ probability
846AD (68.2\%) 1024AD
95.4\% probability

773AD (95.4\%) 1120AD
Sum-T-6 Posterior $68.2 \%$ probability 922AD (68.2\%) 1099AD
95.4\% probability

837AD (95.4\%) 1177AD
T-5 Posterior
68.2\% probability 1002AD (68.2\%) 1170AD 95.4\% probability 903AD (95.4\%) 1233AD
Sum-T-5 Posterior $68.2 \%$ probability 1073AD (68.2\%) 1199AD 95.4\% probability 1015AD (95.4\%) 1253AD Posterior
68.2\% probability

1073AD (68.2\%) 1199AD
95.4\% probability

1015AD (95.4\%) 1253AD
Agreement 101.4\%
Posterior
$68.2 \%$ probability
1073AD (68.2\%) 1200AD
95.4\% probability

1009AD (95.4\%) 1256AD
Agreement 135.8\%
T-4 Posterior
$68.2 \%$ probability
1116AD (68.2\%) 1241AD
95.4\% probability 1048AD (95.4\%) 1291AD
Sum-T-4 Posterior
$68.2 \%$ probability
$1161 \mathrm{AD}(68.2 \%) 1271 \mathrm{AD}$
95.4\% probability

1101AD (95.4\%) 1316AD
Posterior
68.2\% probability
$1161 \mathrm{AD}(68.2 \%) 1271 \mathrm{AD}$
95.4\% probability

1101AD (95.4\%) 1316AD
Agreement 108.5\%
Posterior
68.2\% probability

1160AD (68.2\%) 1272AD
95.4\% probability

1097AD (95.4\%) 1319AD
Agreement 135.4\%
T-3 Posterior $68.2 \%$ probability 1202AD (68.2\%) 1322AD
95.4\% probability 1134AD (95.4\%) 1379AD
Sum-T-3 Posterior
$68.2 \%$ probability
1267AD (68.2\%) 1367AD
95.4\% probability 1222 AD (95.4\%) 1422AD
Posterior
$68.2 \%$ probability
$1267 \mathrm{AD}(68.2 \%)$ 1367AD
$95.4 \%$ probability

1222AD (95.4\%) 1422AD
Agreement 114.8\%
Posterior
68.2\% probability

1267AD (68.2\%) 1367AD
95.4\% probability

1222AD ( $95.4 \%$ ) 1422AD
Agreement 108.2\%
T-2 Posterior
$68.2 \%$ probability
1286AD (68.2\%) 1496AD
95.4\% probability

1241 AD (95.4\%) 1692AD
Posterior
68.2\% probability

1413AD (68.2\%) 1685AD
95.4\% probability

1324AD (95.4\%) 1831AD
RR0705_104TC_011_013_SUM-176 Posterior
68.2\% probability

1470AD (68.2\%) 1575AD
95.4\% probability

1456AD (95.4\%) 1643AD
Agreement 91.1\%
Posterior
68.2\% probability
-121 (68.2\%) 151
95.4\% probability
-220 (95.4\%) 292
Agreement 112.1\%
T-1 Posterior
$68.2 \%$ probability
1565AD (68.2\%) 1936AD
95.4\% probability

1431AD (95.4\%) 2008AD
Sum-T-1 Posterior
$68.2 \%$ probability
1822AD (68.2\%) 2008AD
95.4\% probability

1596AD (95.4\%) 2008AD
T-0 Posterior
$68.2 \%$ probability
2006AD (68.2\%) 2007AD
95.4\% probability

2006AD (95.4\%) 2007AD
Agreement $100.0 \%$
) $\mathrm{MCMC}(960000)$

