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Truncation and acceptance rules for sequential tests of a Bernoulli parameter.

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THESIS

TRUNCATION AND ACCEPTANCE RULES
FOR SEQUENTIAL TESTS OF
A BERNOULLI PARAMETER

by

Jürgen Petersen

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Truncation and Acceptance Rules for Sequential Tests of a Bernoulli Parameter

by

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ABSTRACT

In the paper, Wald's Sequential Probability Ratio test for a Bernoulli parameter is studied to assess the influence of truncation on the true probabilities of error of the first and second kind. It is shown that a natural truncation point exists for every SPR test such that the desired error probabilities are not exceeded. Extended acceptance rules were described whose use allows truncation comparatively early when certain sample sizes are picked. The true error probabilities achieved are either both smaller or equal to the desired ones or one is smaller or equal and the other is exceeded. In the latter case, that probability of error that shall not be exceeded can be chosen and the other will be as small as possible. A listing of 126 SPR plans useful in quality control applications has been included which gives all described truncation points with the applicable acceptance rules and the values for the true probabilities of error.

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I. INTRODUCTION

In the field of statistical quality control, a possible way to assure quality is acceptance sampling by attributes. One objective is to keep inspection costs low and still assure the defined level of quality. Lowering inspection costs often goes hand in hand with reducing the sample size of the test. Several types of sampling plans have been developed, one of which is A. Wald's Sequential Probability Ratio plan. Whereas other sampling plans have fixed sample sizes, the maximum number of samples that have to be drawn in a sequential sampling plan is unbounded. This problem does not occur only in quality control, but also in other fields, and various approaches have been undertaken to overcome this disadvantage.

Although Wald suggested a way of truncating and redefining the acceptance criterion, he warned that this will change the envisioned protection against errors [Ref. 1]. Some more recent papers describe methods of how to determine useful properties of sample size in sequential tests, as do Aroian [Ref. 2] for truncated and Corneliussen and Ladd [Ref. 3] for untruncated sequential tests for the binomial distribution. Aroian suggested and Corneliussen and Ladd actually used numerical methods on a computer to obtain the information needed.

In this paper, we shall investigate two ways of truncating Wald's Sequential Probability Ratio test for a Bernoulli parameter. The first way fixes both probabilities of error in advance of desired levels and assures that they are met. This conforms with Wald's approach to sequential sampling. The second way fixes and assures only the probability of one error, either α or β, and allows the other to be adjusted. The objective is in either case to cut down on maximum necessary sample size. Simple and later on more generated extended acceptance rules at the truncation point are considered. The results of this paper will be presented as a display of usable truncation values for members of a broad class of sequential sampling plans which could occur in quality control.

We will proceed through the study in the following steps: The next chapter is an outline of Wald's Sequential Probability Ratio test for a Bernoulli parameter. It includes the general procedure of the test, compares planned error probabilities with truly obtained ones, describes the test by a sequential-sampling chart, and gives an analysis of how the probabilities of acceptance accumulate.

The third chapter deals with truncating Wald's sequential test where both error probabilities are fixed in advance. The acceptance rule applied throughout the chapter is that at the truncation point all continue-sampling outcomes are added to the rejection region. The chapter's result is the finding of a natural truncation point.

In Chapter IV, we truncate and use an extended acceptance region by including the closest continue-sampling outcome at the truncation point. All other outcomes are again added to the rejection region. We will define this simple extended (h_1-1) acceptance rule and then analyze the now relevant accumulation of acceptance probabilities. From this, a necessary condition is described to get true error probabilities that do not exceed the planned ones. The definition of optimal truncation where only one error probability is fixed in advance will be brought up. At the end of the chapter, formulae to calculate optimal truncation points for use with the simple extended acceptance rule are derived.

Chapter V generalizes the concept of extended acceptance rules at truncation points, and provides an outline of problems that arise when optimal truncation is to be achieved. A way to overcome these problems is discussed.

The last chapter is a comprehensive outline of the study and gives all obtained results together with an example. The reader whose main interest is application of the results may directly turn to Chapter VI.

Appendix A tabulates values for optimal and natural truncation points for some sequential plans useful in quality control.

II. WALD'S SEQUENTIAL PROBABILITY RATIO TEST

Consider a test for a Bernoulli parameter p where the null hypothesis is $p = p_0$ and the alternative is $p = p_1$. The probabilities of errors of the first and second kind are α and β, respectively. Wald [Ref. 1] developed a sequential procedure for this kind of test. It will be described in the following sections.

A. THE GENERAL METHOD

In a Wald sequential plan, samples of size 1 are drawn sequentially and after the nth sample has been inspected, a probability ratio of value r_n is calculated. Then a decision about the outcome of the test is made by comparing the probability ratio value r_n against two test-plan specific values A and B as follows:

* If $r_n \geq A$ then stop sampling and accept the null hypothesis,
* if $r_n \leq B$ then stop sampling and reject the null hypothesis, and
* if $B < r_n < A$ then continue sampling.

Wald proposed to assign in practice A the value $(1-\beta)/\alpha$ and B the value $\beta/(1-\alpha)$. At the same time, he pointed out that with those values, the planned error probabilities α and β are not exactly met.

B. PLANNED AND TRUE ERROR PROBABILITIES

Some truncation rules that we bring up in this paper make use of appreciable differences between planned and truly achieved error probabilities. In these truncated plans, the differences as they occur in Wald's untruncated sequential tests are reduced as much as possible while still satisfying the stated risks.

Wald has shown that, with his test procedure, one needs only worry about three combinations of all possible ways true error probabilities (α', β') can differ from the planned α and β [Ref. 1, p. 44-46]:

Either (1) $\alpha' \leq \alpha$ and $\beta' \leq \beta$,

or (2) $\alpha' \leq \alpha$ and $\beta' > \beta$,

or (3) $\alpha' \geq \alpha$ and $\beta' \leq \beta$.

For use in a test plan, the true risk combination (1) is satisfactory in that the planned error probabilities will never be exceeded. In combinations (2) and (3), however, one of the true error probabilities will exceed its planned value while the other will not.

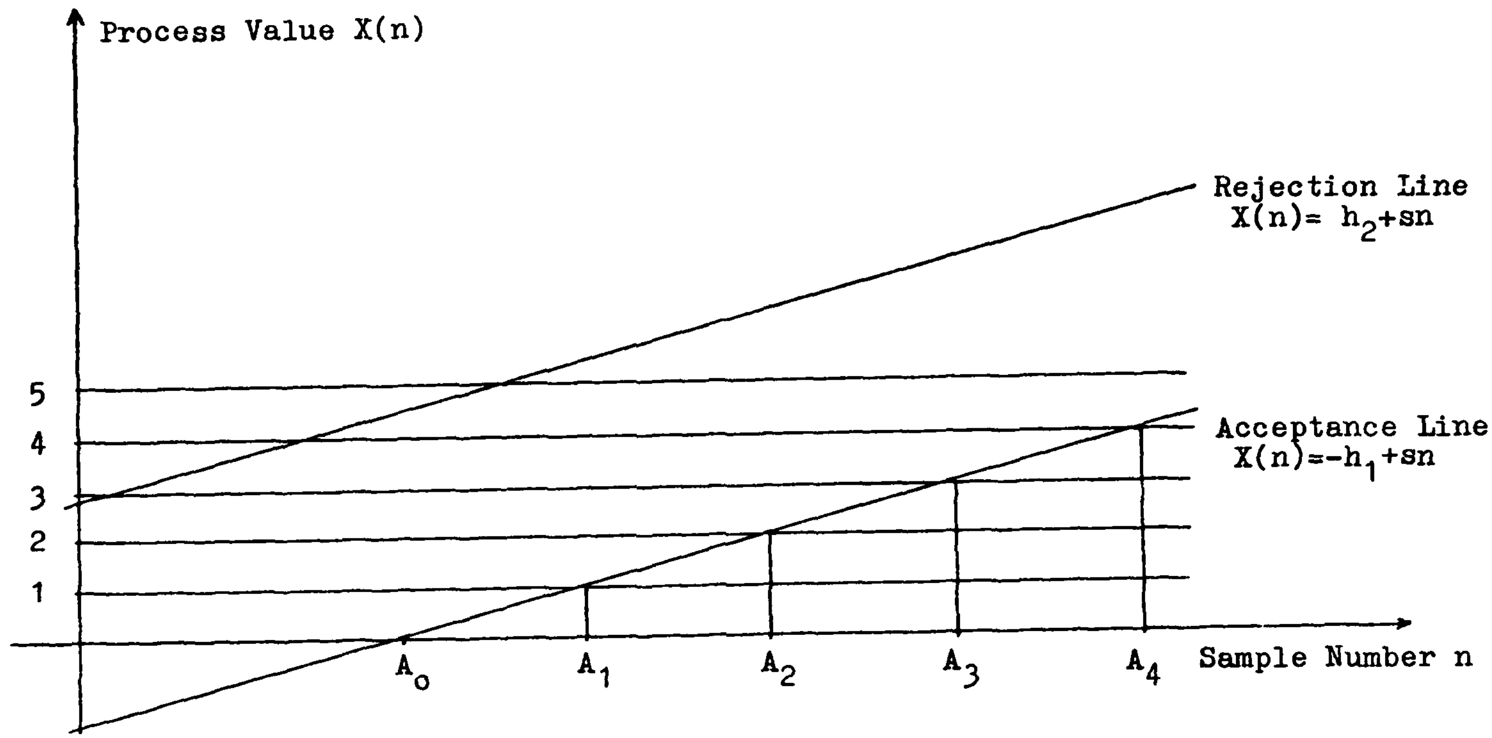
Wald pointed out that although the planned error probabilities are exceeded, the difference is insignificant for practical purposes. Accordingly, as we deal with the application of sequential plans, this assurance is used to include combinations (2) and (3) into combination (1) and say: although one of the true error probabilities may be greater than planned, since the difference is insignificant, we may treat it as it they were equal.

Besides the general description of Wald plans, a graphical representation of sequential sampling plans will prove helpful. This representation will be given in the following section.

C. DESCRIPTION BY SEQUENTIAL-SAMPLING CHART

In the field of quality control, the sequential-sampling chart is used as a tool to implement Wald's Sequential Probability Ratio test. It describes sequential sampling as a special random walk in two dimensions. In this study, the chart is used to clarify concepts and notation. The chart shown in Figure 1 does not represent a specific plan but rather an illustrative example.

In the notion of a sequential sampling plan as a random walk, each possible outcome of the test process is defined by the sample number n together with the value of the process at n, denoted by X(n). (The value of the process can be illustrated for the case when the outcome of each single inspection is classified as good or bad: X(n) represents the number of bad items that were found among the total of n items inspected.) The two limit lines which, as absorbing boundaries, separate the continue-sampling



The letters h_1, h_2, and s are test parameters. The letters A_0, A_1, A_2, A_3, A_4, denote sample numbers at which an acceptance decision is possible.

Figure 1 - A SEQUENTIAL-SAMPLING CHART

region from the rejection and acceptance region, respectively, are described by

$$X(n) = h_2 + sn$$

and

$$X(n) = -h_1 + sn$$

where h_1, h_2 and s are plan parameters.

Once the process crosses the upper limit line, rejection of the null hypothesis will follow. The value of the process at the sample number n, X(n), can take on integer values such that X(n) = i, i = 0, 1, 2, ..., n. As the test proceeds, it is possible that a decision to accept the null hypothesis takes place. For that, it is necessary that the process crosses the acceptance limit line while having a certain process value X(n) = i. Depending on the value of the slope s, not all values of n represent possible points where acceptance can occur. Let us denote the sample number n at which acceptance can occur for X(n) = i by A_i and call these sample number values acceptance points. This means that we have acceptance points at n = A_0, A_1, A_2, ... and, starting from A_0, these points partition the sample number axis in disjoint intervals $[A_i, A_{i+1}-1]$, which we shall denote as $[A_i, A_{i+1})$. The intervals will be of nearly equal size.

D. ANALYSIS OF ACCEPTANCE PROBABILITIES

The objective of this study is to find truncation points for sequential test plans for Bernoulli parameters, and to assess their compliance with the desired specifications. Judgment will be made on the ground of how close the true error probabilities α' and β' are to the desired ones α and β. Subsequently we will calculate β' directly as the probability of accepting the null hypothesis when the alternative hypothesis is true. The value for α' will be obtained by assessing $(1-\alpha')$, the probability of accepting the null hypothesis when it is in fact true. We will analyze in this section how these two probabilities of acceptance accumulate over the course of the test.

In the last section, we saw that the sample number axis may be divided into intervals $[0, A_0)$, $[A_0, A_1)$, $[A_1, A_2)$, ... where the A_i are the acceptance points of the plan. Now we associate with each of the acceptance points A_i an unconditional termination probability that the test will terminate at A_i with an acceptance decision. The sum of the termination probabilities associated with all A_i's is the probability to accept the null hypothesis as it represents all possible ways to achieve acceptance in an untruncated Wald sequential sampling plan.

Analogous to the above, the sum of termination probabilities associated with acceptance points that have values less than or equal to n is the probability of accepting the null hypothesis when at most n samples are drawn. We will denote this acceptance probability by $P_a(n)$. To indicate under which assumption the probability was calculated, we will write $P_a(n|H_0)$ if the null hypothesis is true, or $P_a(n|H_1)$ if the alternative is true.

The following statements about the probability of acceptance when at most n samples can be drawn are true:

(i) Since $h_1 > 0$, $P_a(0) = 0$.

(ii) As n is enlarged, $P_a(n)$ never decreases but increases at the acceptance points A_0, A_1, A_2, ...

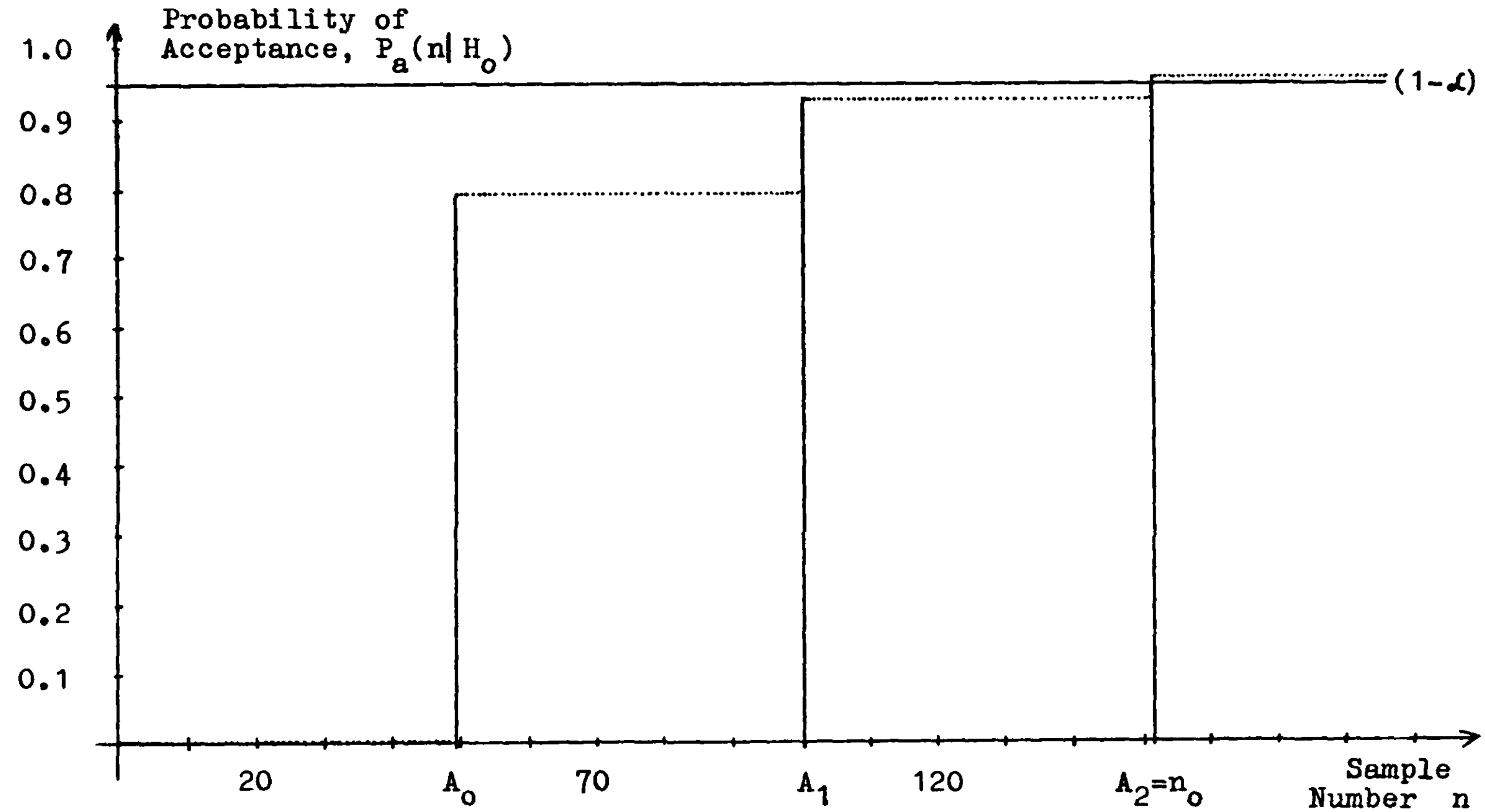
(iii) For all n in the interval $[A_i, A_{i+1})$, $P_a(n) = P_a(A_i)$.

With truncation at n, and rejecting there if we have not accepted at an acceptance point,

(iv) $P_a(n|H_0) = (1-\alpha')$ and

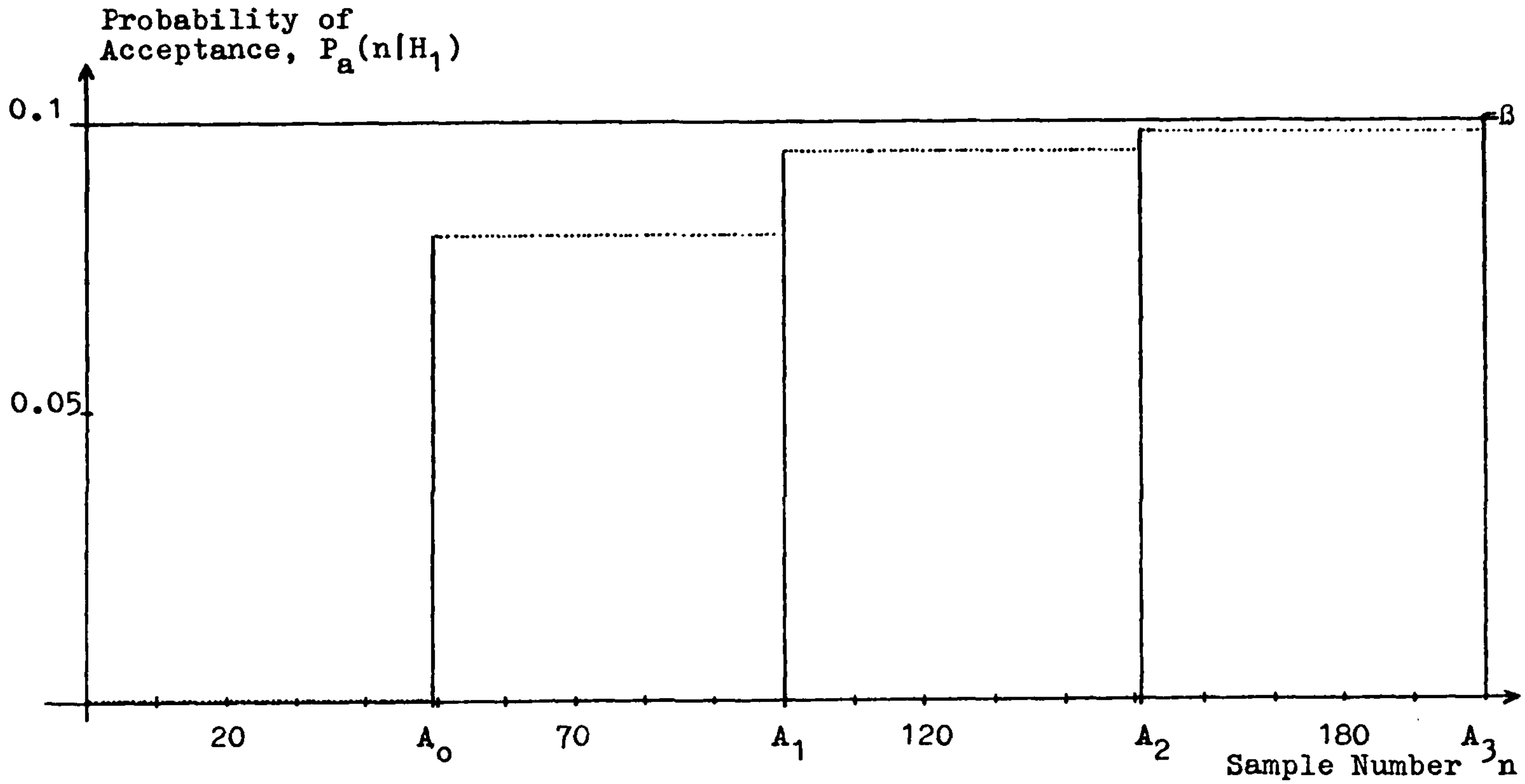
(v) $P_a(n|H_1) = \beta'$, where the primes refer to true error probabilities.

Figures 2 and 3 depict the accumulation of the two probabilities $P_a(n|H_0)$ and $P_a(n|H_1)$, respectively, for an arbitrary sequential probability ratio plan. The ordinate values were calculated by means of a computer algorithm. The algorithm accounts for rejection as well as acceptance, i.e., only sampling developments are considered that lie between



The graph shows the accumulated acceptance probability with H_o true when at most n samples are drawn. If no acceptance occurs at an acceptance point, then reject. The underlying plan is H_o:p=0.005, H_1:p=0.05, α=0.05, β=0.1 . Here, A_o, A_1, A_2, denote the first three acceptance points. Also, A_2 is identical with the point n_o.

Figure 2 - ACCUMULATED ACCEPTANCE PROBABILITY WHEN AT MOST N SAMPLES ARE DRAWN (NULL HYPOTHESIS TRUE)



The graph shows the accumulated probability of acceptance with H_1 true when at most n samples are drawn. If no acceptance occures at an acceptance point, then reject. The underlying test plan is the same as in Figure 2. Here, A_0, A_1, A_2, A_3, denote the first four acceptance points.

Figure 3 - ACCUMULATED ACCEPTANCE PROBABILITY WHEN AT MOST N

SAMPLES ARE DRAWN (ALTERNATIVE TRUE)

the acceptance and rejection limit lines until absorption in the acceptance region occurs.

In Section B of this chapter, we investigated combinations of differences between planned and true error probabilities. There we said that for our application purposes only the combination $\alpha' \leq \alpha$ and $\beta' \leq \beta$ will be relevant as an outcome of an untruncated sequential sampling plan. The combination can equivalently be stated as

$$(1 - \alpha') \geq (1 - \alpha)$$

and

$$\beta' \leq \beta \ .$$

For any test plan that we truncate at the sample number n, we have by definition

$$P_a(n|H_0) = 1 - \alpha'$$

and

$$P_a(n|H_1) = \beta' \ .$$

Suppose that we let n approach infinity, i.e., we do not restrict the plan at all. Then we can write symbolically

$$P_a(\infty|H_0) \geq (1 - \alpha) \ ,$$

and

$$P_a(\infty|H_1) \leq \beta \ .$$

From $P_a(\infty|H_0) \geq (1 - \alpha)$ follows that there must be one or more values for n for which $P_a(n|H_0) \geq (1 - \alpha)$. We will denote the smallest of those sample number values by n_0, i.e.,

$$P_a(n_0|H_0) \geq (1 - \alpha) \ ,$$

such that $P_a(n|H_0) < (1 - \alpha)$ whenever $n < n_0$. The accumulation of $P_a(n|H_0)$ as the value of n is increased can be observed in Figure 2.

Consider in turn the probability of accepting the null hypothesis when in fact it is false and the alternative is true. Here, as n increases, the true error probability is smaller than or equal to the planned one ($\beta' \leq \beta$), and thus possible values for $P_a(n|H_1)$ are such that $0 \leq P_a(n|H_1) \leq \beta$. Hence for control of type II error, it is not necessary to specify a certain sample number in the sense that we defined n_0 when the null hypothesis was true. Rather the planned error probability β will not be exceeded regardless of the value that n assumes.

Figure 3 shows an example of the case where the acceptance probability $P_a(n|H_1)$ approaches in magnitude the neighborhood of the number $\beta = 0.1$ as the sample number increases.

We have seen now how the probabilities of acceptance for our two special cases behave in general. This yields a remarkable but simple result that will be explained in the course of the next chapter.

III. TRUNCATING THE SEQUENTIAL PROBABILITY RATIO TEST

Wald spent some effort on the problem of truncating his test procedure. He warns that [Ref. 1, p. 61]:

> By truncating the sequential process at the nth trial we shall, however, change the probability of error of the first and second kind.

We will see in this chapter that for all sequential sampling plans there exists a truncation point at which neither of the two specified error probabilities will be exceeded. In the chapter that follows, we will look for a way to truncate even earlier than that. There, however, we will have to allow most of the time some decrease in protection against the one or the other error.

A. EXISTENCE OF A NATURAL TRUNCATION POINT

We claim that for every sequential probability ratio sampling plan for a Bernoulli parameter, a sample number n_0 can be found at which the plan can be truncated and yet the specified error probabilities α and β are met. We will call this sample number n_0 the natural truncation point of the plan, since there is no reason to continue sampling beyond that point. The decision at the truncation point will be: If no acceptance has taken place up to and at the sample number n_0, then reject the null hypothesis.

The support for the claim follows the outline of the last section where we analyzed the acceptance probabilities.

During the test process the probability of acceptance increases only at acceptance points A_0, A_1, A_2, ... With the null hypothesis true, the probability of acceptance $P_a(n|H_0)$ will equal or exceed the level $(1 - \alpha)$ at higher sample numbers. The smallest value of n for which this is true will be the natural truncation point n_0.

We do not really need to consider here the probability of acceptance with the alternative hypothesis true because this probability $P_a(n|H_1)$ will at most insignificantly be greater than β. There remains to say that a still better result than the one given by natural truncation can be obtained when one alters the acceptance rule. Our goal is to cut down on necessary sample size even below the natural truncation point and still achieve as good a protection against errors as before. In cases where this is still not enough, we may allow one or the other error probability to increase but then always the true error probabilities shall be assessed.

IV. A SIMPLE EXTENDED ACCEPTANCE RULE

Up to now, the way by which we deciced in a truncated sequential sampling plan whether to accept or to reject was that if no decision was made after the last sample was examined we rejected the null hypothesis. From here on, slightly more complicated acceptance rules will be allowed. They will be applied for decisions when the outcome of the final inspection would again lead to "continue sampling." A rule to include one or more of continue-sampling outcomes into the acceptance region will be called an extended acceptance rule.

A. DEFINITION OF THE ACCEPTANCE RULE

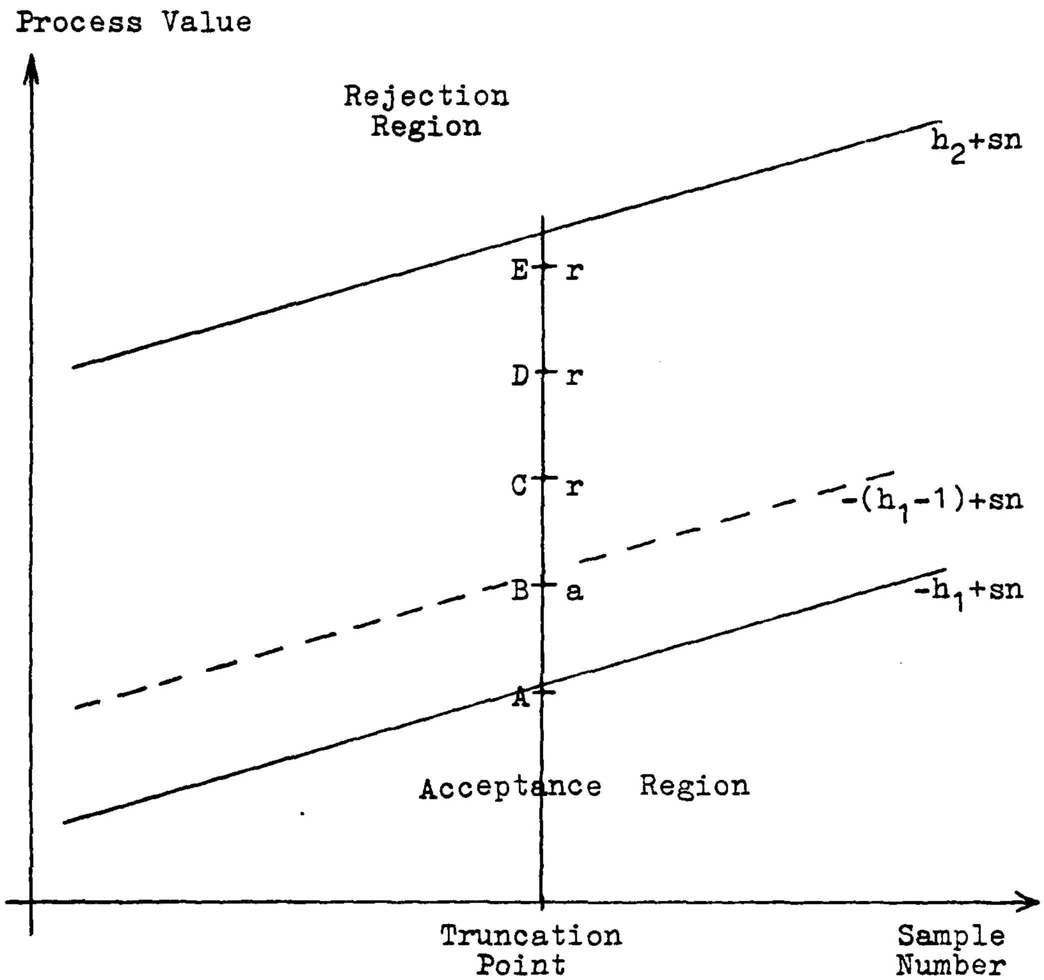
Reaching back to the graphical representation of the sequential-sampling chart as well as to our analysis of acceptance probabilities gives the basis for the following development. Let the natural truncation point n_0 be identical to the acceptance point A_k. Consider any sample number interval $[A_i, A_{i+1})$, i = 0, 1, 2, ..., (k-2), i.e., an interval where the acceptance point A_i is greater or equal to A_0, and A_{i+1} is strictly smaller than the natural truncation point A_k. In such intervals, the acceptance decision can take place only at the acceptance number A_i, as was shown previously, and the decision to accept can be made only if the value of the sampling process $X(n)$ at A_i is $X(A_i) = i$.

Suppose that the result of the A_ith sample tells us to continue sampling but the test is to be truncated at that sample number. If the outcome in the continue-sampling region is such that the process value is $X(A_i) = i + 1$ (the outcome closest to the acceptance region), then we will accept the null hypothesis. Otherwise, we will reject it. This acceptance rule will be called the $(h_1 - 1)$ rule since the final decision under this rule for a plan with plan parameter h_1 is the same as the final decision made with the non-extended acceptance rule but for a plan whose acceptance line intercept with the ordinate is $(h_1 - 1)$. (This is shown in Figure 4 by the dashed line.) We demonstrated the rule for a value of n equal to the acceptance point A_i but the rule can be applied for all sample numbers in the interval $[A_i, A_{i+1})$. Figure 4 shows schematically the assignment of sampling outcomes to the acceptance and rejection regions.

B. ACCEPTANCE PROBABILITIES INSIDE INTERVALS

In Chapter II, we worked with the overall picture of the sequential-sampling chart. Now we must have a close-up look at it.

The intervals $[A_i, A_{i+1})$, $i = 1, 2, 3, \ldots$, defined by pairs of adjacent acceptance points, partition the sample



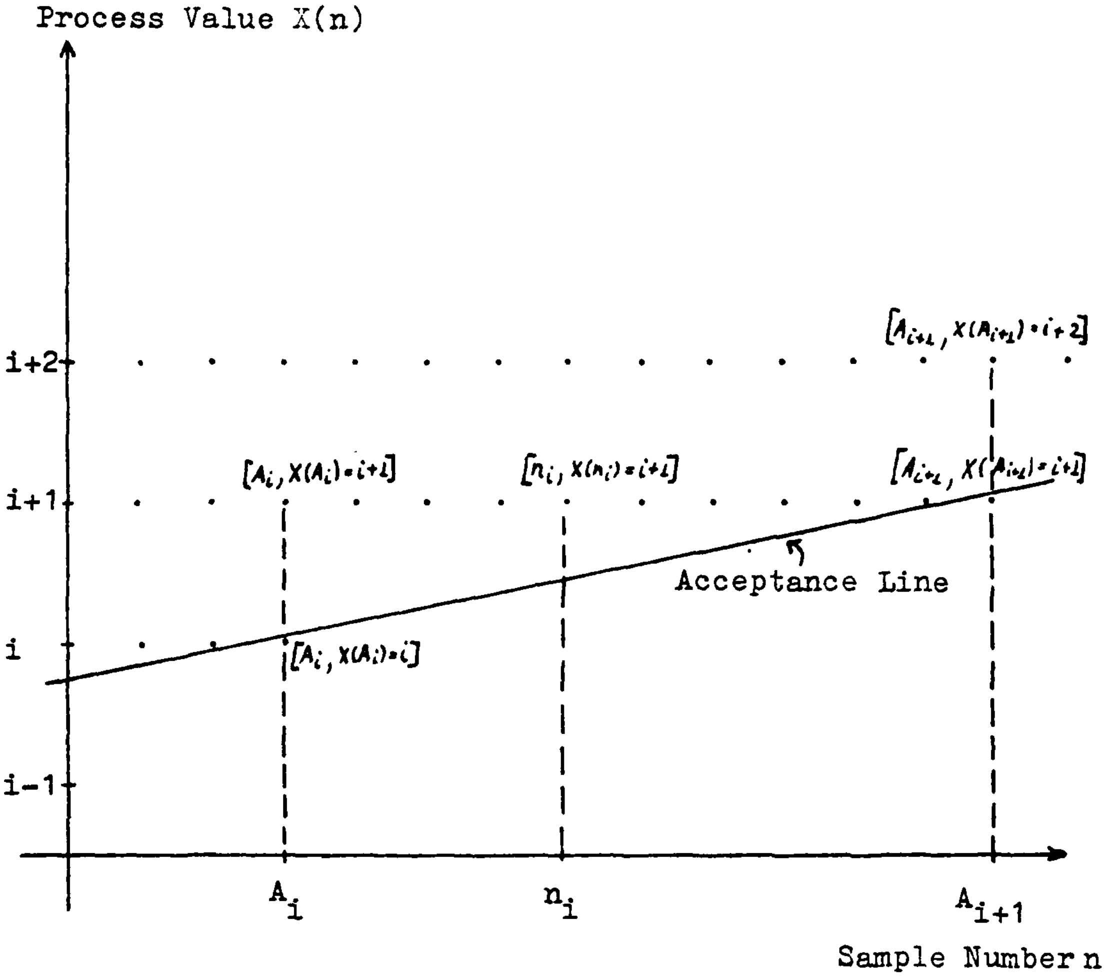
The points B,C,D and E represent the sampling outcomes of the continue-sampling region at the truncation point. Outcome B is described as the closest, outcome E as the farthest from the acceptance region. The (h_1-1) acceptance rule assigns B to the acceptance region (shown by "a") and C,D and E to the rejection region (shown by "r").

Figure 4 - SCHEME FOR ASSIGNING SAMPLING OUTCOMES AT THE TRUNCATION POINT (SIMPLE EXTENDED ACCEPTANCE RULE)

number axis. We are going to study the development of the probabilities of acceptance to get a picture of the effects that extending the acceptance rule will have on the probabilities and hence on the probabilities of errors. The intervals under consideration are only those that contain sample numbers smaller than the natural truncation point.

Figure 5 is an enlarged portion from a sequential-sampling chart. It will be needed for the derivation that follows. (It is a characteristic of charts used in quality control that the intervals $[A_i, A_{i+1})$ are quite large. Plans where the acceptance points are very close together or even adjacent may not give the results that will be derived in the following part of the paper.)

Earlier in the text, we defined $P_a(n)$ to be the probability of accepting the null hypothesis when at most n samples can be drawn. There a non-extended acceptance rule was in use. Now we denote with $P_a'(n)$ the acceptance probability that refers to the truncation under the simple extended $(h_1 - 1)$ acceptance rule. When we define a third probability, namely the probability that the sampling process reaches the lattice point $(n, X(n) = j)$, to be $P[X(n) = j]$, then the extended probability of acceptance for truncating at the acceptance point A_i, $i = 0, 1, 2, \ldots$, will be



The lattice points that the test process is able to reach are represented by black dots. The sample number n_i shows the chosen truncation point. The acceptance points are A_i and A_{i+1}.

Figure 5 - DESCRIPTION OF THE LATTICE FIELD ON AN INTERVAL

$$P_a'(A_i) = P_a(A_i) + P[X(A_i) = i + 1],\ i = 0, 1, 2, \ldots \quad (1)$$

Consider now that instead of A_i we truncate the sampling process at a sample number n_i inside the interval $[A_i, A_{i+1})$ and stay with the extended acceptance rule. There the probability of acceptance becomes

$$P_a'(n_i) = P_a(A_i) + P[X(n_i) = i + 1] \ . \quad (2)$$

The probability that appears as the second part of the sum can be written as

$$P[X(n_i) = i + 1] = P[X(A_i) = i + 1](1 - p)^{n_i - A_i} , \quad (3)$$

since in order for the process to have the value i + 1 at the sample number $n = n_i$ it must be that the process already had this value at $n = A_i$. Here, p represents the true Bernoulli parameter. The second factor $(1 - p)^{n_i - A_i}$ follows from the fact that it takes the process $(n_i - A_i)$ failures to move from A_i to n_i.

The obtained probability (3) is a decreasing function in n_i, and thus as we choose truncation points further out in the $[A_i, A_{i+1})$ interval, the total probability of acceptance $P_a'(n_i)$ will decrease. Using (3), (2) becomes

$$P_a'(n_i) = P_a(A_i) + P[X(A_i) = i + 1](1 - p)^{n_i - A_i} .$$

We notice that if we allow $n_i = A_{i+1}$, then $P_a'(n_i) = P_a(A_i + 1)$.

Now we are ready to work toward a conclusion. Since A_{i+1} is strictly smaller than the natural truncation point, applying the non-extended acceptance rule with the null hypothesis H_0 true all acceptance probabilities obtainable up to A_{i+1} will be smaller than $(1 - \alpha)$. Equivalently with the alternative hypothesis H_1 true the probability of acceptance will be smaller or equal to the planned error probability β.

Once again we look at the case where the null hypothesis is true. Suppose that truncating at the acceptance point A_i under the simple extended $(h_1 - 1)$ acceptance rule yields a total probability of acceptance that exceeds the value $(1 - \alpha)$, i.e.,

$$P_a'(A_i | H_0) > 1 - \alpha \ .$$

However, for a truncation point n_i inside the interval $[A_i, A_{i+1})$ the total acceptance probability

$$P_a'(n_i) \text{ approaches } P_a(A_{i+1})$$

as

$$n_i \text{ approaches } A_{i+1} \ .$$

Together with the fact that

$$P_a(A_{i+1}|H_0) < 1 - \alpha$$

it must be that for rational values of n we are able to find a sample number n_i that will give us a probability of acceptance such that

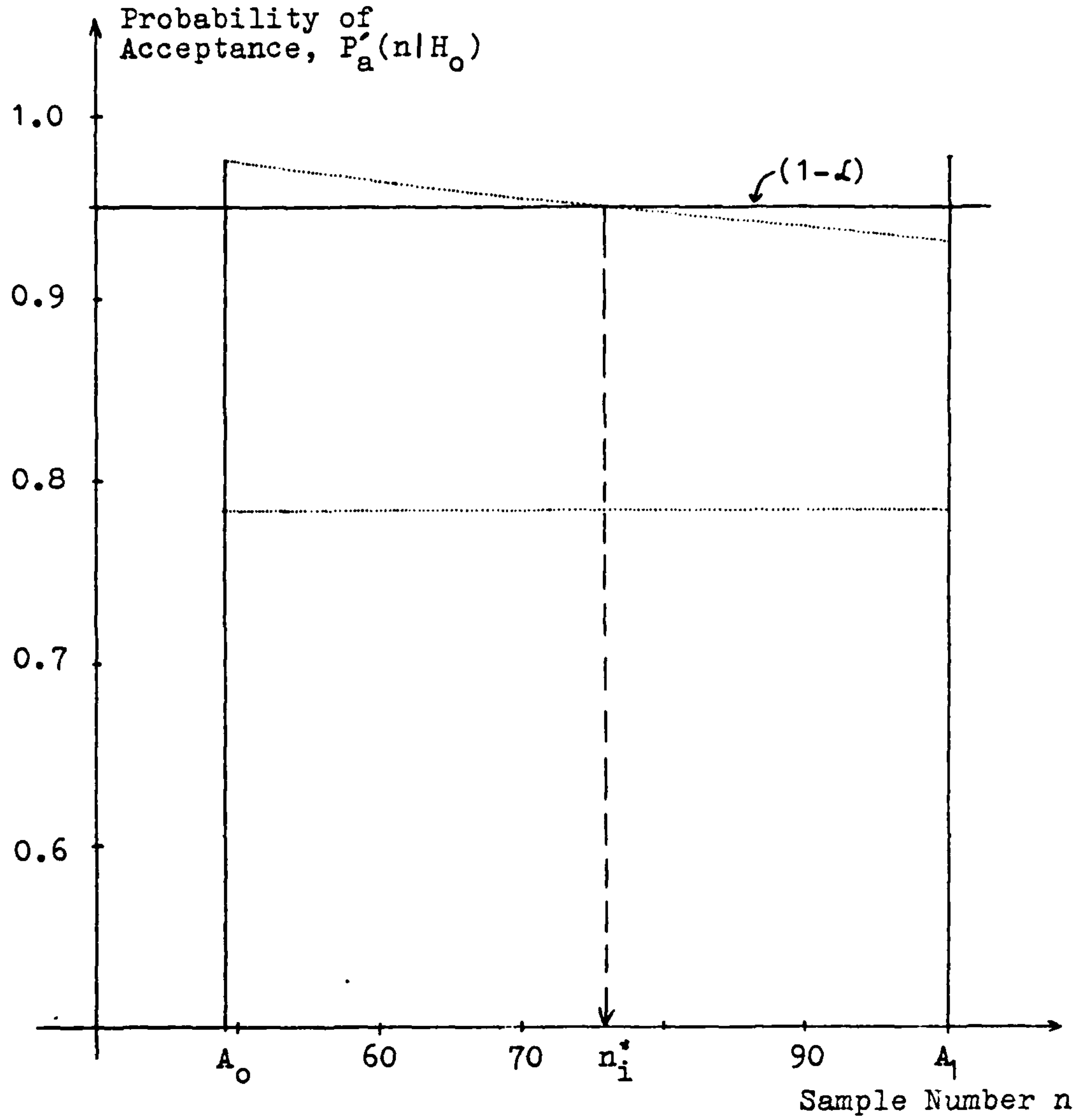
$$P_a'(n_i|H_0) = 1 - \alpha \ .$$

Let us integerize by cutting off decimal values and call the result n_i^*. This number will be a truncation point in the interval $[A_i, A_{i+1})$ that yields the closest value α' to the planned error probability α while not exceeding α. Figure 6 explains the derivation graphically.

In a similar manner the closest value to the desired probability of error of the second kind, β, can be found. Using the simple extended acceptance rule $(h_1 - 1)$ and truncating at the sample number n_i will yield the total acceptance probability $P_a'(n_i|H_1)$. As n_i increases through the interval the value of $P_a'(n_i|H_1)$ will decrease. So, when $P_a(A_{i+1}|H_1)$ is strictly smaller than β, we are able to find a smallest sample number n_i^{**} for which it is still true that

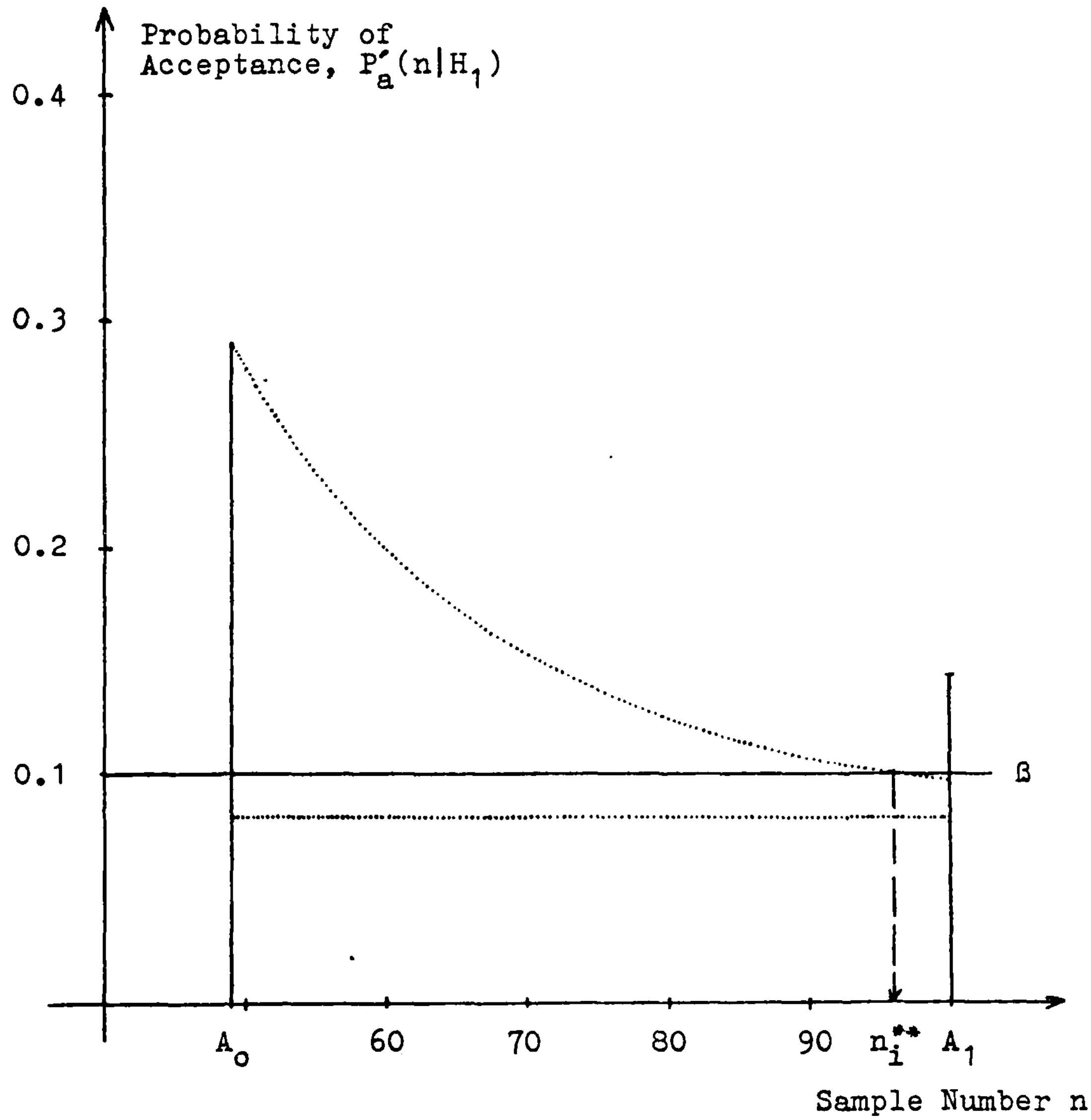
$$P_a'(n_i^{**}) \leq \beta \ .$$

The sample number n_i^{**} represents the earliest possible truncation point in the interval that will still assure the planned error probability β. Refer to Figure 7 for an example.



The graph shows the accumulated acceptance probability over the interval $[A_0, A_1)$ when H_0 is true and the simple extended acceptance rule is applied (upper curve). Values shown are for the test $H_0: p=0.005$, $H_1: p=0.05$, $\alpha=0.05$, $\beta=0.1$. For comparison the acceptance probability when the simple extended acceptance rule is not applied is shown (lower curve). Using the upper curve and choosing n_i^* as a truncation point yields a true error probability α' which is closest to α without exceeding it.

Figure 6 - ACCUMULATED ACCEPTANCE PROBABILITY WITH THE SIMPLE EXTENDED ACCEPTANCE RULE (NULL HYPOTHESIS TRUE)



The graph shows the accumulated acceptance probability over the interval $[A_0, A_1)$ for the test in Figure 6 when H_1 is true and the simple extended acceptance rule is applied (upper curve). For comparison the probability when the rule is not applied is shown (lower curve). Using the upper curve and choosing n_i^{**} as a truncation point yields a true error probability β' which is closest to β without exceeding it.

Figure 7 - ACCUMULATED ACCEPTANCE PROBABILITY WITH THE SIMPLE EXTENDED ACCEPTANCE RULE (ALTERNATIVE TRUE)

Note that it need not be that the extended probability of acceptance for the left side interval limit point, $P_a'(A_i|H_1)$, is greater than or equal to β. If it is not greater than β then it is clear that $n_i^{**} = A_i$.

Also note that with H_0 true we have not talked about the smallest sample number that allows us to hold the error probability α but rather we talked about the largest sample size n_i^* that would do that. Obviously the smallest sample number for that purpose would likewise be equal to A_i but this definition would not be useful. Under an extended acceptance rule the true error probability β' will be much smaller and hence more favorable when we move further out in the interval.

Up to here we looked at the truncation points n_i^* and n_i^{**} separately. What happens to the true error probability β' when we truncate at the sample number n_i^*? Conversely, what happens to α' when we truncate at n_i^{**}? One can think of two possibilities:

(i) Both of the planned error probabilities are satisfied or

(ii) only one is satisfied and the other is exceeded.

In the following two sections we will investigate both possibilities.

C. HOLDING BOTH PLANNED ERROR PROBABILITIES

We showed in the last section that when the necessary assumptions to use the simple extended acceptance rule are satisfied the two special sample numbers n_i^* and n_i^{**} can be found for each interval leftward of the natural truncation point. At sample number n_i^* we are assured that when we truncate there the allowed error probability α will not be exceeded. This is the largest sample number that has this property in the interval. Similarly, n_i^{**} is the smallest sample number for which β is not exceeded. Thus, if $n_i^{**} \leq n_i^*$ for the interval $[A_i, A_{i+1})$, then we will have both planned error probabilities not exceeded when we truncate at a sample number n such that $n_i^{**} \leq n \leq n_i^*$.

For the experimenter the sample number n_i^{**} is the most favorable as it gives him the smallest required maximum sample size in the range of the considered interval while both planned error probabilities are met. When one looks at the computed results of truncation points in Appendix A, one can see that a great number of sequential sampling plans have at least one interval where n_i^{**} is smaller or equal to n_i^*. Those intervals are listed under "Hold Alpha and Beta." However, sometimes no such truncation points exist. For intervals closest to the natural truncation point this may be the case when at the natural truncation point the true error probability β' is not strictly smaller than β.

D. OPTIMAL TRUNCATION WITH ONE ERROR FIXED

We will now consider the case where the values of the two sample numbers n_i^* and n_i^{**} will be such that n_i^* is smaller than n_i^{**}. This implies that when one error probability is met the other is likely to be exceeded. An example was given back in Figures 6 and 7 where $n_1^* = 76$ and $n_1^{**} = 95$.

This gives rise to the following definition for an optimal way to truncate a sequential sampling process inside one of its intervals $[A_i, A_{i+1})$:

(i) If holding the α-requirement is desired and flexibility with the β-requirement is allowed when using the sample number n_i^* as truncation point will be optimal in the sense that it gives the smallest actual error probability β' that can be obtained in the interval.

(ii) Likewise, if the β-requirement must be met and the α-requirement can be handled more loosely, then truncating the process at the sample number n_i^{**} will yield optimality in the sense that the true error probability α' achieved will be the lowest possible for that interval.

This constrained optimality concept is rather powerful as it tells us that for sequential sampling plans, when the sample number axis is partitioned into sufficiently large intervals by the acceptance points, there exist within most intervals "best" truncation points (depending on whether α or β is fixed).

The concept holds not only for the extended $(h_1 - 1)$ acceptance rule case but also for the higher order $(h_1 - m)$ cases, as will be shown later. The reason that we treated the $(h_1 - 1)$ acceptance rule separately and extensively is that first, it is the easiest to analyze and second, it is the easiest to calculate numerically: Once a basic computer program has been set up that describes the sampling process numerically at the acceptance points, a simple formula can be employed to calculate the sample numbers n_i^* and n_i^{**} exactly for each interval $[A_i, A_{i+1})$. The explicit formulae to calculate the two numbers will be developed in the section that follows.

E. FORMULAE FOR OPTIMAL TRUNCATION

Earlier we suggested that optimal truncation points can be found for sequential sampling plans where the simple extended $(h_1 - 1)$ acceptance rule is applicable. The formulae that we will derive in the following paragraphs will yield numerical values for the optimal truncation points n_i^* and n_i^{**}. At the end of the section special situations employing these formulae are discussed.

Suppose numerical values for the following expressions are given:

(i) $[A_i, A_{i+1})$, $i = 1, 2, 3, \ldots, (k - 2)$, which represents an interval on the sample number axis and where A_k refers to the acceptance point that is the natural truncation point.

(ii) $P_a(A_i|H_0)$ and $P_a(A_i|H_1)$, the unextended probabilities of accepting the null hypothesis accumulated during the sampling process up to and including the A_i'th sample.

(iii) $P[X(A_i) = i + 1|H_0]$ and $P[X(A_i) = i + 1|H_1]$ denote the probabilities that at the sample number A_i the sampling process has the value $(i + 1)$ for the respective hypothesis.

Let us first consider the case where the null hypothesis H_0 is true. Under the $(h_1 - 1)$ acceptance rule we wish to find n_i^*, the optimal truncation point to hold the error probability α. We restrict ourselves to test plans where the total acceptance probability P_a' is such that

$$P_a'(A_i|H_0) = P_a(A_i|H_0) + P[X(A_i) = i + 1|H_0] > (1 - \alpha) .$$

Thus it must be for the optical truncation point on the interval $[A_i, A_{i+1})$ that

$$P_a(A_i|H_0) + P[X(A_i) = i + 1|H_0](1 - P_0)^{n_i - A_i} \geq (1 - \alpha) .$$

where P_0 is the Bernoulli parameter under the null hypothesis.

Solving this for the optimal truncation point n_i^* leads to

$$(1 - P_0)^{n_i - A_i} \leq \frac{1 - \alpha - P_a(A_i|H_0)}{P[X(A_i) = i + 1|H_0]} \quad ,$$

and after taking logarithms to

$$n_i^* = \text{int}\left[\frac{\log(1-\alpha-P_a(A_i)) + A_i \log(1-P_0) - \log(P[X(A_i) = i+1])}{\log(1-P_0)}\right]$$

$$= \text{int}\left[A_i + \frac{\log(1-\alpha-P_a(A_i)) - \log(P[X(A_i) = i+1])}{\log(1-P_0)}\right] .$$

where int[ ] denotes the integer function and all values are obtained for the case where the null hypothesis H_0 is true.

When the alternative hypothesis H_1 is true, we wish to find n_i^{**}, the optimal truncation point to hold the error probability β. If

$$P_a'(A_i|H_1) = P_a(A_i|H_1) + P[X(A_i) = i+1|H_1](1-P_1)^{n_i-A_i} \geq \beta \quad ,$$

then, in a manner similar to the previous derivation, we obtain

$$n_i^{**} = \text{int}\left[A_i + \frac{\log(\beta-P_a(A_i)) - \log(P[X(A_i) = i+1])}{\log(1-P_1)} + 1\right] \quad ,$$

where again int[ ] represents the integer function and all values are calculated with the alternative hypothesis true. The parameter P_1 is the one hypothesized under H_1.

Implementing these formulae on a computer involves little difficulty and thus the numbers n_i^* and n_i^{**} can easily be obtained. (We will see later that when more extended acceptance rules are used, the values cannot be explicitly calculated and we will have to search for them along the interval.)

Up to now we have not touched the interval $[A_{k-1}, A_k)$ which lies directly before the natural truncation point A_k. The use of the derived formulae is restricted in this interval. The formula for n_i^*, the optimal truncation point to hold α, is never valid in this interval because from the definition of the natural truncation point n_0 and the $(h_i - 1)$ acceptance rule, $P_a'(n_i|H_0)$ approaches $P_a(n_0|H_0)$ from above as n_i approaches n_0 from the left. This implies, however, that the true error probability α' will always be smaller than or equal to α regardless of where we truncate in the interval. The formula for n_i^{**}, the optimal truncation point to hold β, is not valid, when at the natural truncation point the true error prob[illegible] β' is not strictly less than the planned β. No optimal truncation point exists in this case because β' will exceed β regardless where we truncate in the interval with the $(h_1 - 1)$ acceptance rule.

In the following chapter we will, different from the approach in this chapter, include more outcomes of the continue-sampling region at the truncation point into the acceptance region and look for implications that arise.

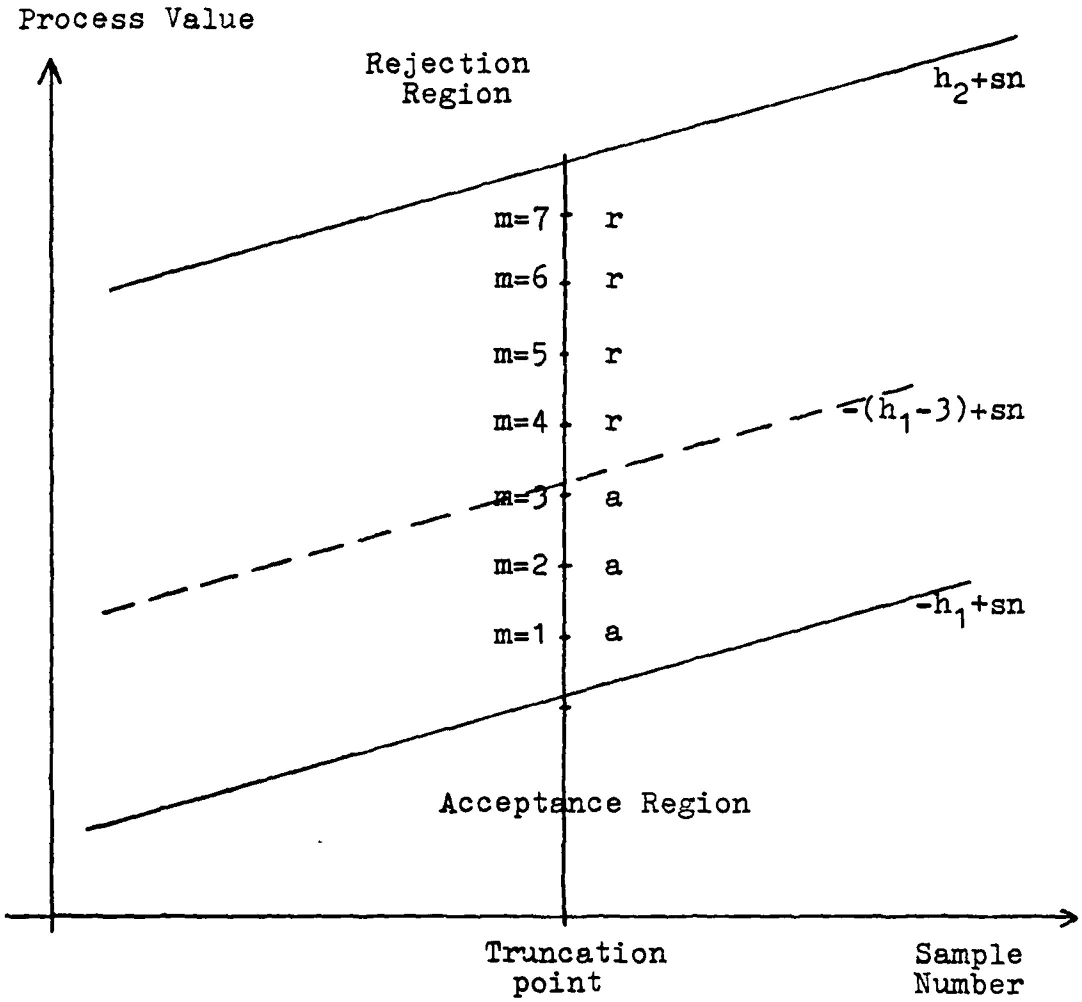
V. GENERAL EXTENDED ACCEPTANCE RULES

When one wants to use natural truncation one will recognize that this rule will still yield relatively large maximum sample sizes. In practical tests an experimenter might be forced to cut sampling somewhere far below that range of sample sizes that allow for natural truncation. Also, one might encounter sequential sampling plans that are not suitable for the simple extended acceptance rule because there is not enough probability mass that is added to the acceptance probability when only the closest continue-sampling outcome is included into the acceptance region. Do we have to give up the search for useful truncation points then? The answer is "no" but before we work on that answer let us describe what we mean by a general extended acceptance rule.

A. DESCRIPTION

Suppose that the sequential test is to be truncated at the sample number n_i where n_i is contained in the acceptance point interval $[A_i, A_{i+1})$. Furthermore, suppose that the outcome of the n_ith sample is "continue sampling." If this outcome is such that the process value $X(n_i)$ satisfies

$$i < X(n_i) \leq i + m ,$$



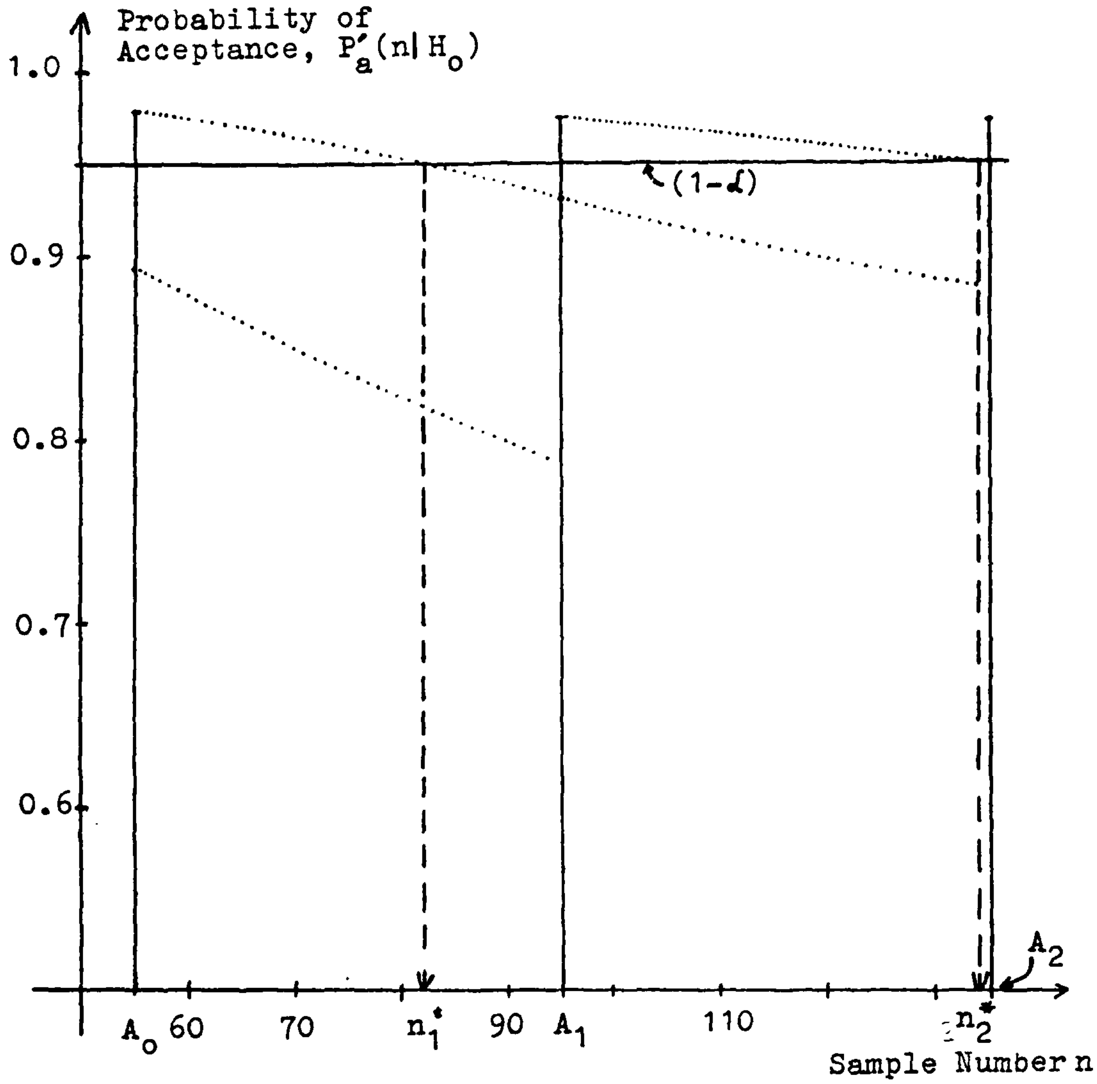
The points m=1,2,...,7 represent sampling outcomes in the continue-sampling region at the truncation point. The general extended acceptance rule (h_1-m) with m=3 assigns the outcomes m=1,2 and 3 to the acceptance region (shown by "a") and the outcomes m=4,5,6 and 7 to the rejection region (shown by "r").

Figure 8 - SCHEME FOR ASSIGNING SAMPLING OUTCOMES AT THE TRUNCATION POINT (GENERAL EXTENDED ACCEPTANCE RULE)

where m is an integer greater than i, then we include this outcome into the acceptance region and accept the null hypothesis. Otherwise we reject the null hypothesis. We could denote this acceptance rule by $(h_1 - m)$ in general and, substituting integer values for m, m = 1, 2, 3, ... ; $(h_1 - 1)$, $(h_1 - 2)$, $(h_1 - 3)$, ... in particular. Figure 8 shows the scheme of assigning sampling outcomes to the acceptance and rejection regions for the $(h_1 - 3)$ acceptance rule.

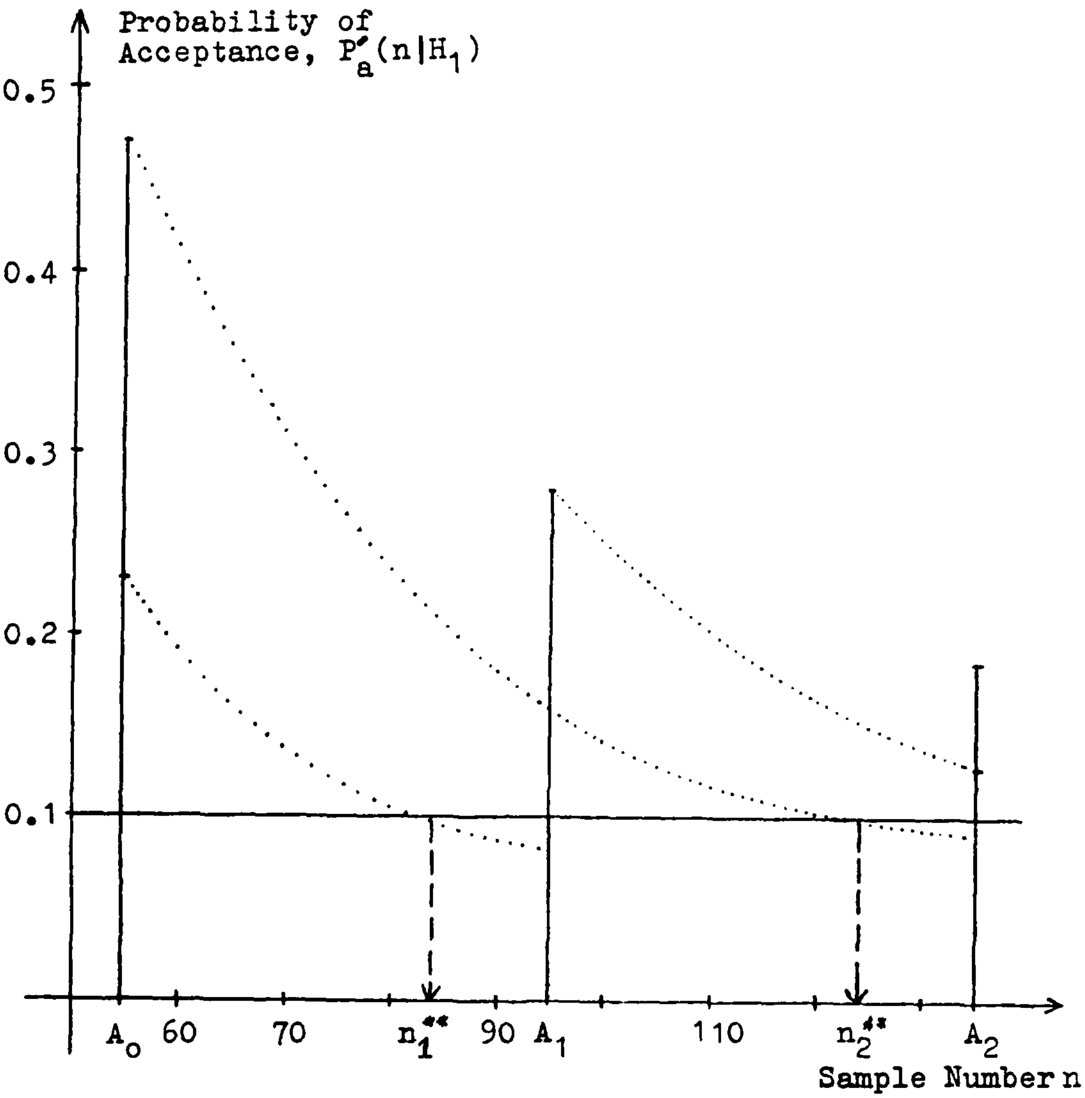
B. EXTENDED ACCEPTANCE OPTIMAL TRUNCATION

Now we will look closer at the actual probabilities of acceptance as they are implied by general extended acceptance rules. The basic approach to the analysis resembles the one in Section C in Chapter II and Section B of Chapter IV. In the former chapter the general picture was given and in the latter the simple extended acceptance rule was derived. From Figure 9 where the null hypothesis is true, it can be seen that on the interval $[A_0, A_1)$ as well as on the interval $[A_1, A_2)$, the necessary acceptance rule must be the $(h_1 - 2)$ rule in order to hold the α-requirement somewhere in each interval. Figure 10, however, with the alternative hypothesis true, shows that the $(h_1 - 2)$ acceptance rule overshoots the β-requirement at all sample numbers contained in the intervals. This pattern will become worse when an even higher order acceptance rule is applied.



The graph shows the accumulated acceptance probability for the test H_o:p=0.01, H_1:p=0.05, α=0.05, β=0.1 when H_o is true and the acceptance rule (h_1-2) is applied (upper curve). For comparison the respective probability with the (h_1-1) rule is shown (lower curve). Optimal trunction points are n_1^*=82 and n_2^*=134 when the upper curve is used. True error probabilities β are 0.22 and 0.13 respectively.

Figure 9 - ACCUMULATED ACCEPTANCE PROBABILITY WITH A GENERAL EXTENDED ACCEPTANCE RULE (NULL HYPOTHESIS TRUE)



The graph shows the accumulated acceptance probability for the test in Figure 9 when H_1 is true and the acceptance rule (h_1-2) is applied (upper curve). For comparison the respective probability with the (h_1-1) rule is shown (lower curve). Optimal truncation to hold β requires use of the lower curve. Truncation points are then n_1^{**}=84, n_2^{**}=124 and the true error probabilities α' are 0.19 and 0.10 respectively.

Figure 10 - ACCUMULATED ACCEPTANCE PROBABILITY WITH A GENERAL EXTENDED ACCEPTANCE RULE (ALTERNATIVE TRUE)

What implications do the results have for the concept of optimal truncation? We will work it out for the case that we are not allowed to exceed the planned error probability α.

Suppose we have the acceptance point interval $[A_i, A_{i+1})$, and let truncation occur at the sample number n_i inside the interval. We seek an extended acceptance rule $(h_1 - m)$ that will satisfy the α-requirement. Associated with this rule will be a true error probability β'. An optimal result (the smallest achievable true error probability β') will be obtained when the parameter m is as small an integer as possible. Note that this will automatically result in the single extended acceptance rule $(h_1 - 1)$ if it is applicable. It follows then that it is generally consistent to denote the found optimal truncation point for the interval $[A_i, A_{i+1})$ by n_i^* as we did it earlier.

When we have to hold the β-requirement then we work along nearly the same path: Instead of selecting the smallest possible parameter m for the general extended acceptance rule $(h_1 - m)$ we will search for the largest value. This in turn gives the smallest true error probability α' at the truncation point n_i^{**}.

We see that the optimal truncation concept is not lost with general extended acceptance rules. The simple extended $(h_1 - 1)$ acceptance rule is merely a special case of the general rule.

The next chapter provides a comprehensive review of the results of this paper. Appendix A gives numerical values of natural and optimal truncation points for a wide range of sequential sampling plans that are useful in quality control.

VI. RESULTS

The starting point is Wald's Sequential Probability Ratio test procedure to test for a Bernoulli parameter p_0. The objective of this study was to investigate the influence of test truncation on the true probabilities of error of the first and second kind compared to the desired errors, and to recommend truncation rules and acceptance rules when limiting the sample size is necessary.

It was shown that a natural truncation point exists for every sampling plan, and it may be found by numerical methods on a computer. Stopping the test at the plan's natural truncation point n_0 and rejecting the null hypothesis when an acceptance decision has not yet occurred gives the assurance that both planned error probabilities are satisfied. Sampling beyond the natural truncation point is not necessary. (In Appendix A the natural truncation points are given for each considered sequential sampling plan.)

During the sampling process decisions about accepting the null hypothesis are possible at acceptance points. These points partition the sample number axis into intervals. Extended acceptance rules, which are applied at a truncation point, allow to meet the planned probability of error of the first kind at any desired truncation point. Under an extended acceptance rule, m of the most adjacent sampling outcomes of the continue-sampling region at the final sample are included into the acceptance region. The decision rule then is that if no acceptance decision can be made the null hypothesis should be rejected.

This rule increases the true probability of error of the second kind. Using a suitable extended acceptance rule will for most intervals result in truncation points that give the following protection against errors:

(1) The planned probability of error of the first kind are met, but the one of the second kind is exceeded.

(2) The planned probability of error of the second kind is met, but the one of the first kind is exceeded.

(3) Both planned probabilities of error are met.

In Case (1) an optimal truncation point exists when the smallest value for m is used that still results in the planned probability of error of the first kind when the null hypothesis is true. The truncation point is optimal in the sense that the planned probability of error of the first kind is satisfied while the smallest obtainable true probability of error of the second kind is achieved. (In Appendix A those truncation points are listed under "Hold Alpha.")

In Case (2) an optimal truncation point exists when the value for m is used that, when the alternative hypothesis is true, will make the true probability of error of the second kind smaller or equal to the planned one. Optimality means that here the true probability of error of the first kind is as small as possible for any truncation point on that interval while the planned probability of error of the second kind is satisfied. (In Appendix A those truncation points are listed under "Hold Beta.")

The protection as described in Case (3) occurs when Case (1) and Case (2) use the same m-value for the extended acceptance rule and the optimal truncation point from Case (2) is smaller or equal to the optimal truncation point in Case (1). (The smallest sample number that results is listed in Appendix A under "Hold Alpha and Beta.") When the value of m can be set equal to 1.0 then the numerical calculations are simplified and the analysis is quite easy.

A limitation on the methods described may come up in connection with test plans outside quality control whenever acceptance points of the plan are very close together or even next to each other. However, the natural truncation concept will always be valid.

This study did not assess the average amount of inspection necessary to obtain a decision when the recommended truncation rules are applied. One reason is that the used computer algorithm is not applicable for the necessary calculations. We suggest the investigation of this topic using some algorithm like the one described by Corneliussen and Ladd in Ref. 3. It is hoped that this work will not only be useful to those working with quality control problems, but will also generate interest in further studies in this area.

APPENDIX A

TABULATED VALUES FOR NATURAL AND OPTIMAL TRUNCATION POINTS

On the following pages 126 sequential plans are listed. Sets of α- and β- values considered are:

$\alpha = 0.05, \quad \beta = 0.05,$

$\alpha = 0.05, \quad \beta = 0.1,$

$\alpha = 0.1, \quad \beta = 0.1.$

Values of the parameters P_0 and P_1 are for each set:

P_0 = 0.005, P_1 = 0.01 through 0.1 (increments of 0.01),

P_0 = 0.010, P_1 = 0.02 through 0.1 (increments of 0.01),

P_0 = 0.015, P_1 = 0.03 through 0.1 (increments of 0.pl),

P_0 = 0.020, P_1 = 0.03 through 0.1 (increments of 0.01),

P_0 = 0.025, P_1 = 0.04 through 0.1 (increments of 0.01).

For the meaning of "natural truncation point" and the column headings "Hold Alpha and Beta," "Hold Alpha" and "Hold Beta" refer to Chapter VI. All acceptance point intervals are listed for each test starting from the natural truncation point downwards to A_0. The abbreviation "undef." in the column "Hold Alpha and Beta" means that no truncation point that satisfies at least one of the planned error probabilities can be found.

P0=0.0050	ALFA=0.050	H1= 4.217	S=0.007216
P1=0.0100	BETA=0.050	H2= 4.217	ASN=2492

NATURAL TRUNCATION POINT= 5713 — TRUE ALFA= 0.0493, TRUE BETA= 0.0499

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
5574	5712	1	5621	0.0436	0.0500
5436	5573	1	5458	0.0494	0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
5297	5435	2	5435	0.049	0.050	1	5302	0.050	0.050
5158	5296	2	5274	0.050	0.050	1	5151	0.055	0.050
5020	5157	2	5069	0.050	0.050	2	5150	0.052	0.050
4881	5019	3	5019	0.049	0.051	2	5001	0.053	0.050
4743	4880	3	4876	0.050	0.051	2	4853	0.055	0.050
4604	4742	3	4690	0.050	0.052	2	4707	0.056	0.050
4465	4603	3	4510	0.050	0.053	2	4562	0.058	0.050
4327	4464	3	4334	0.050	0.054	2	4416	0.060	0.050
4188	4326	4	4326	0.050	0.054	2	4275	0.063	0.050
4050	4187	4	4161	0.050	0.056	2	4133	0.066	0.050
3911	4049	4	3991	0.050	0.058	2	3991	0.069	0.050
3773	3910	4	3823	0.050	0.061	2	3849	0.073	0.050
3634	3772	4	3658	0.050	0.064	2	3708	0.077	0.050
3495	3633	4	3495	0.050	0.068	2	3567	0.082	0.050
3357	3494	5	3494	0.050	0.068	2	3427	0.087	0.050
3218	3356	5	3334	0.050	0.073	2	3237	0.094	0.050
3080	3217	5	3174	0.050	0.079	2	3147	0.101	0.050
2941	3079	5	3017	0.050	0.085	2	3007	0.108	0.050
2802	2940	5	2860	0.050	0.093	2	2867	0.117	0.050
2664	2801	5	2705	0.050	0.103	2	2727	0.127	0.050
2525	2663	5	2552	0.050	0.113	2	2588	0.139	0.050
2387	2524	5	2400	0.050	0.126	2	2449	0.152	0.050
2248	2386	5	2248	0.050	0.141	2	2310	0.167	0.050
2109	2247	6	2247	0.050	0.141	2	2171	0.184	0.050
1971	2108	6	2099	0.050	0.157	2	2032	0.202	0.050
1832	1970	6	1950	0.050	0.176	2	1893	0.224	0.050
1694	1831	6	1802	0.050	0.198	2	1754	0.248	0.050
1555	1693	6	1655	0.050	0.223	2	1615	0.276	0.050
1417	1554	6	1509	0.050	0.251	2	1476	0.307	0.050
1278	1416	6	1364	0.050	0.283	2	1337	0.343	0.050
1139	1277	6	1220	0.050	0.320	2	1198	0.383	0.050
1001	1138	6	1077	0.050	0.361	2	1058	0.429	0.050
862	1000	6	935	0.050	0.407	2	917	0.481	0.050
724	861	6	795	0.050	0.458	2	775	0.541	0.050
585	723	6	657	0.050	0.515	2	628	0.608	0.050

P0=0.0050	ALFA=0.050	H1= 2.101	S=0.010839
P1=0.0200	BETA=0.050	H2= 2.101	ASN= 411

NATURAL TRUNCATION POINT= 932 TRUE ALFA= 0.0438 TRUE BETA= 0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
840	931	1	930	0.0437	0.0500
748	839	1	816	0.0498	0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
656	747	2	747	0.044	0.053	1	713	0.060	0.050
563	655	2	643	0.050	0.056	1	616	0.076	0.050
471	562	2	504	0.050	0.077	1	521	0.103	0.050
379	470	2	381	0.050	0.124	1	427	0.146	0.050
287	378	3	378	0.049	0.128	1	334	0.217	0.050
194	286	3	269	0.050	0.211	1	242	0.332	0.050

P0=0.0050	ALFA=0.050	H1= 1.620	S=0.014003
P1=0.0300	BETA=0.050	H2= 1.620	ASN= 190

NATURAL TRUNCATION POINT= 402 TRUE ALFA= 0.0460 TRUE BETA= 0.0496

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
330	401	1	392	0.0451	0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
259	329	1	267	0.050	0.063	1	315	0.063	0.050
183	258	2	258	0.047	0.068	1	242	0.104	0.050
116	187	2	159	0.050	0.143	1	170	0.192	0.049

P0=0.0050	ALFA=0.050	H1= 1.392	S=0.016929
P1=0.0400	BETA=0.050	H2= 1.392	ASN= 116

NATURAL TRUNCATION POINT= 260 TRUE ALFA= 0.0396 TRUE BETA= 0.0492

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
201	259	1	249	0.0391	0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
142	200	1	163	0.050	0.062	1	190	0.061	0.050
83	141	2	141	0.040	0.087	1	132	0.125	0.050

P0=0.0050	ALFA=0.050	H1= 1.254	S=0.019703
P1=0.0500	BETA=0.050	H2= 1.254	ASN= 81

NATURAL TRUNCATION POINT= 166 TRUE ALFA= 0.0430
TRUE BETA= 0.0493

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
115	165	1	162	0.0420	0.0499

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
64	114	1	71	0.049	0.126	1	110	0.059	0.04[illegible]

P0=0.0050	ALFA=0.050	H1= 1.158	S=0.022371
P1=0.0600	BETA=0.050	H2= 1.158	ASN= 61

NATURAL TRUNCATION POINT= 142 TRUE ALFA= 0.0316
TRUE BETA= 0.0501

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
97	141	=UNDEF.=	=UNDEF.=	=UNDEF.=	=UNDEF.=

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
52	96	1	74	0.049	0.074	1	94	0.066	0.050

P0=0.0050	ALFA=0.050	H1= 1.088	S=0.024960
P1=0.0700	BETA=0.050	H2= 1.088	ASN= 48

NATURAL TRUNCATION POINT= 124 TRUE ALFA= 0.0246
TRUE BETA= 0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
84	123	=UNDEF.=	=UNDEF.=	=UNDEF.=	=UNDEF.=

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
44	83	1	80	0.050	0.051	1	82	0.051	0.050

P0=0.0050	ALFA=0.050	H1= 1.033	S=0.027485
P1=0.0800	BETA=0.050	H2= 1.033	ASN= 39

NATURAL TRUNCATION POINT= 74 — TRUE ALFA= 0.0417, TRUE BETA= 0.0490

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	FOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
38	73	1	73	0.0410	0.0496

P0=0.0050	ALFA=0.050	H1= 0.988	S=0.029969
P1=0.0900	BETA=0.050	H2= 0.988	ASN= 33

NATURAL TRUNCATION POINT= 67 — TRUE ALFA= 0.0339, TRUE BETA= 0.0504

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	FOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
33	66	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-

P0=0.0050	ALFA=0.050	H1= 0.951	S=0.032411
P1=0.1000	BETA=0.050	H2= 0.951	ASN= 28

NATURAL TRUNCATION POINT= 61 — TRUE ALFA= 0.0323, TRUE BETA= 0.0476

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	FOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
30	60	1	58	0.0307	0.0495

P0=0.0100	ALFA=0.050		H1= 4.187	S=0.014435
P1=0.0200	BETA=0.050		H2= 4.187	ASN=1232

NATURAL TRUNCATION POINT= 2854	TRUE ALFA= 0.0489
	TRUE BETA= 0.0498

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
2784	2853	1	2754	0.0477	0.0500
2715	2783	1	2772	0.0500	0.0497
2646	2714	1	2646	0.0500	0.0499
2577	2645	2	2634	0.0496	0.0500

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
2507	2576	2	2541	0.050	0.050	2	2561	0.051	0.050
2438	2506	2	2443	0.050	0.051	2	2488	0.052	0.050
2369	2437	3	2437	0.050	0.051	2	2416	0.054	0.050
2299	2368	3	2349	0.050	0.051	2	2344	0.055	0.050
2230	2298	3	2259	0.050	0.052	2	2273	0.057	0.050
2161	2229	3	2170	0.050	0.054	2	2202	0.060	0.050
2092	2160	4	2160	0.049	0.054	2	2131	0.062	0.050
2022	2091	4	2083	0.050	0.055	2	2061	0.065	0.050
1953	2021	4	1998	0.050	0.057	2	1990	0.068	0.050
1884	1952	4	1914	0.050	0.060	2	1920	0.072	0.050
1815	1883	4	1831	0.050	0.063	2	1850	0.076	0.050
1745	1814	4	1749	0.050	0.067	2	1780	0.081	0.050
1676	1744	5	1744	0.049	0.068	2	1710	0.086	0.050
1607	1675	5	1669	0.050	0.072	2	1640	0.092	0.050
1537	1606	5	1589	0.050	0.077	2	1570	0.099	0.050
1468	1536	5	1510	0.050	0.084	2	1501	0.107	0.050
1399	1467	5	1431	0.050	0.092	2	1431	0.116	0.050
1330	1398	5	1354	0.050	0.101	2	1362	0.126	0.050
1260	1329	5	1277	0.050	0.112	2	1292	0.137	0.050
1191	1259	5	1201	0.050	0.124	2	1222	0.150	0.050
1122	1190	5	1125	0.050	0.139	2	1153	0.165	0.050
1053	1121	6	1121	0.049	0.142	2	1084	0.182	0.050
983	1052	6	1050	0.050	0.155	2	1014	0.200	0.050
914	982	6	976	0.050	0.174	2	945	0.222	0.050
845	913	6	902	0.050	0.195	2	875	0.246	0.050
775	844	6	828	0.050	0.221	2	806	0.274	0.050
706	774	6	755	0.050	0.249	2	737	0.305	0.050
637	705	6	683	0.050	0.280	2	667	0.340	0.050
568	636	6	610	0.050	0.318	2	598	0.382	0.050
498	567	6	539	0.050	0.358	2	528	0.428	0.050
429	497	6	468	0.050	0.405	2	458	0.480	0.050
360	428	6	398	0.050	0.456	2	386	0.539	0.050
291	359	6	329	0.050	0.513	2	313	0.606	0.050

PO=0.0100	ALFA=0.050		H1= 2.631	S=0.018233
P1=0.0300	BETA=0.050		H2= 2.631	ASN= 335

NATURAL TRUNCATION POINT= 859	TRUE ALFA= 0.0476
	TRUE BETA= 0.0496

SAMPLE NUMBER INTERVAL		HOLD ALFA AND BETA			
FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
803	857	1	825	0.0458	0.0500
748	802	1	767	0.0495	0.0500

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
693	747	2	747	0.048	0.051	1	710	0.055	0.050
638	692	2	678	0.050	0.052	1	654	0.062	0.050
583	637	2	596	0.050	0.058	1	598	0.071	0.050
529	582	3	582	0.047	0.062	1	542	0.084	0.050
474	528	3	522	0.050	0.068	1	487	0.102	0.050
419	473	3	451	0.050	0.086	1	432	0.126	0.050
364	418	3	383	0.050	0.114	1	377	0.158	0.050
309	363	3	318	0.050	0.156	1	322	0.203	0.050
254	308	3	256	0.050	0.214	1	267	0.264	0.050
200	253	4	253	0.048	0.223	1	212	0.348	0.050
145	199	4	155	0.049	0.299	1	157	0.465	0.050

PO=0.0100	ALFA=0.050		H1= 2.078	S=0.021715
P1=0.0400	BETA=0.050		H2= 2.078	ASN= 203

NATURAL TRUNCATION POINT= 465	TRUE ALFA= 0.0432
	TRUE BETA= 0.0500

SAMPLE NUMBER INTERVAL		HOLD ALFA AND BETA			
FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
419	464	1	463	0.0431	0.0500
372	418	1	407	0.0490	0.0500

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
326	371	2	371	0.043	0.053	1	355	0.055	0.050
280	325	2	322	0.050	0.056	1	307	0.075	0.050
234	279	2	253	0.050	0.075	1	259	0.101	0.050
188	233	2	191	0.050	0.121	1	213	0.144	0.050
142	187	3	187	0.047	0.130	1	166	0.214	0.050
96	141	3	134	0.049	0.210	1	120	0.329	0.050

P0=0.0100	ALFA=0.050	H1= 1.784	S=0.024935
P1=0.0500	BETA=0.050	H2= 1.784	ASN= 130

NATURAL TRUNCATION POINT= 272 — TRUE ALFA= 0.0476, TRUE BETA= 0.0489

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
232	271	1	257	0.0449	0.0499

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
192	231	1	194	0.050	0.058	1	217	0.059	0.050
152	191	2	191	0.048	0.060	1	178	0.068	0.050
112	151	2	133	0.049	0.103	1	136	0.141	0.050
72	111	2	81	0.049	0.222	1	98	0.243	0.050

P0=0.0100	ALFA=0.050	H1= 1.597	S=0.028111
P1=0.0600	BETA=0.050	H2= 1.597	ASN= 93

NATURAL TRUNCATION POINT= 200 — TRUE ALFA= 0.0451, TRUE BETA= 0.0495

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
164	199	1	194	0.0439	0.0492

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
128	163	1	134	0.050	0.061	1	156	0.061	0.050
93	127	2	127	0.045	0.069	1	120	0.101	0.050
57	92	2	80	0.050	0.126	1	34	0.189	0.050

P0=0.0100	ALFA=0.050	H1= 1.466	S=0.031129
P1=0.0700	BETA=0.050	H2= 1.466	ASN= 71

NATURAL TRUNCATION POINT= 144 — TRUE ALFA= 0.0492, TRUE BETA= 0.0475

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
112	143	1	132	0.0450	0.0498

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
80	111	2	111	0.035	0.064	1	103	0.074	0.050
43	79	2	79	0.049	0.088	1	73	0.150	0.049

P0=0.0100	ALFA=0.050	H1= 1.368	S=0.034064
P1=0.0800	BETA=0.050	H2= 1.368	ASN= 56

NATURAL TRUNCATION POINT= 129 — TRUE ALFA= 0.0388, TRUE BETA= 0.0480

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
99	128	1	118	0.0359	0.0498

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
70	98	1	82	0.050	0.053	1	92	0.058	0.050
41	69	2	69	0.038	0.088	1	64	0.120	0.050

P0=0.0100	ALFA=0.050	H1= 1.291	S=0.036932
P1=0.0900	BETA=0.050	H2= 1.291	ASN= 46

NATURAL TRUNCATION POINT= 117 — TRUE ALFA= 0.0329, TRUE BETA= 0.0497

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
90	116	1	114	0.0324	0.0499
63	89	1	87	0.0491	0.0497

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
35	62	1	35	0.048	0.184	1	60	0.103	0.049

P0=0.0100	ALFA=0.050	H1= 1.228	S=0.039747
P1=0.1000	BETA=0.050	H2= 1.228	ASN= 39

NATURAL TRUNCATION POINT= 82 — TRUE ALFA= 0.0419, TRUE BETA= 0.0490

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
57	81	1	79	0.0404	0.0499

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
31	56	1	36	0.050	0.116	1	54	0.086	0.050

P0=0.0150	ALFA=0.050	H1= 4.156	S=0.021659
P1=0.0300	BETA=0.050	H2= 4.156	ASN= 315

NATURAL TRUNCATION POINT= 1854 — TRUE ALFA= 0.0493, TRUE BETA= 0.0495

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1808	1853	2	1839	0.0468	0.0500
1762	1807	1	1770	0.0500	0.0497
1716	1761	2	1744	0.0487	0.0500
1670	1715	2	1657	0.0499	0.0500

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1624	1669	2	1632	0.050	0.050	2	1650	0.051	0.050
1577	1623	3	1623	0.049	0.051	2	1603	0.053	0.050
1531	1576	3	1569	0.050	0.051	2	1556	0.054	0.050
1485	1530	3	1508	0.050	0.052	2	1510	0.056	0.050
1439	1484	3	1448	0.050	0.053	2	1463	0.059	0.050
1393	1438	4	1438	0.049	0.054	2	1416	0.061	0.050
1347	1392	4	1390	0.050	0.055	2	1370	0.064	0.050
1300	1346	4	1333	0.050	0.057	2	1323	0.067	0.050
1254	1299	4	1277	0.050	0.059	2	1277	0.071	0.050
1208	1253	4	1222	0.050	0.062	2	1230	0.075	0.050
1162	1207	4	1167	0.050	0.066	2	1184	0.080	0.050
1116	1161	5	1161	0.049	0.068	2	1138	0.085	0.050
1070	1115	5	1113	0.050	0.071	2	1091	0.091	0.050
1023	1069	5	1060	0.050	0.076	2	1045	0.098	0.050
977	1022	5	1007	0.050	0.083	2	999	0.106	0.050
931	976	5	955	0.050	0.090	2	952	0.114	0.050
885	930	5	903	0.050	0.100	2	906	0.124	0.050
839	884	5	852	0.050	0.110	2	860	0.136	0.050
793	838	5	801	0.050	0.123	2	814	0.149	0.050
746	792	5	751	0.050	0.136	2	767	0.163	0.050
700	745	5	701	0.050	0.153	2	721	0.179	0.050
654	699	6	699	0.049	0.155	2	675	0.198	0.050
608	653	6	651	0.050	0.172	2	629	0.220	0.050
562	607	6	602	0.050	0.193	2	583	0.244	0.050
516	561	6	552	0.050	0.219	2	536	0.271	0.050
469	515	6	504	0.050	0.246	2	490	0.303	0.050
423	468	6	455	0.050	0.280	2	444	0.339	0.050
377	422	6	407	0.049	0.316	2	398	0.380	0.049
331	376	6	360	0.050	0.355	2	351	0.425	0.050
285	330	6	312	0.049	0.404	2	304	0.477	0.050
239	284	6	266	0.050	0.452	2	257	0.538	0.050
192	238	6	220	0.050	0.509	2	208	0.605	0.050

PC=0.0150	ALFA=0.050	H1= 2.925	S=0.025541
P1=0.0400	BETA=0.050	H2= 2.925	ASN= 343

NATURAL TRUNCATION POINT= 781 — TRUE ALFA= 0.0473, TRUE BETA= 0.0496

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
741	780	1	753	0.0456	0.0500
702	740	1	711	0.0481	0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
663	701	2	701	0.047	0.050	1	671	0.051	0.050
624	662	2	660	0.050	0.051	1	630	0.055	0.050
585	623	2	600	0.050	0.053	1	590	0.061	0.050
546	584	3	584	0.047	0.055	1	551	0.068	0.050
507	545	3	545	0.050	0.057	1	511	0.076	0.050
467	506	3	493	0.050	0.064	1	471	0.087	0.050
428	466	3	443	0.050	0.074	1	432	0.102	0.050
389	427	3	395	0.050	0.090	1	393	0.121	0.050
350	388	4	388	0.047	0.097	1	353	0.144	0.050
311	349	4	348	0.050	0.112	1	314	0.175	0.050
272	310	4	303	0.050	0.141	1	275	0.214	0.050
232	271	4	258	0.049	0.183	1	236	0.265	0.049
193	231	4	215	0.050	0.235	1	197	0.332	0.049
154	192	4	173	0.050	0.302	1	157	0.415	0.050
115	153	4	131	0.049	0.354	1	117	0.525	0.050

PC=0.0150	ALFA=0.050	H1= 2.374	S=0.029174
P1=0.0500	BETA=0.050	H2= 2.374	ASN= 199

NATURAL TRUNCATION POINT= 425 — TRUE ALFA= 0.0496, TRUE BETA= 0.0492

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
390	424	1	403	0.0468	0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
356	389	1	357	0.050	0.051	1	366	0.053	0.050
322	355	2	355	0.049	0.052	1	334	0.061	0.050
288	321	2	303	0.050	0.058	1	300	0.074	0.050
253	287	2	255	0.050	0.073	1	265	0.091	0.050
219	252	3	252	0.048	0.076	1	231	0.117	0.050
185	218	3	211	0.050	0.100	1	197	0.155	0.050
150	184	3	169	0.050	0.146	1	163	0.211	0.049
116	149	3	129	0.049	0.219	1	128	0.289	0.050
82	115	3	91	0.050	0.326	1	94	0.405	0.050

P0=0.0150	ALFA=0.050	H1= 2.055	S=0.032631
P1=0.0600	BETA=0.050	H2= 2.055	ASN= 133

NATURAL TRUNCATION POINT= 278 — TRUE ALFA= 0.0495, TRUE BETA= 0.0494

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
247	277	1	267	0.0474	0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
217	246	2	246	0.042	0.053	1	235	0.057	0.050
186	216	2	216	0.050	0.055	1	203	0.073	0.050
155	185	2	169	0.050	0.073	1	172	0.099	0.050
125	154	2	128	0.050	0.116	1	141	0.142	0.050
94	124	3	124	0.046	0.120	1	110	0.211	0.050
63	93	3	90	0.050	0.203	1	80	0.328	0.049

P0=0.0150	ALFA=0.050	H1= 1.843	S=0.035958
P1=0.0700	BETA=0.050	H2= 1.843	ASN= 97

NATURAL TRUNCATION POINT= 219 — TRUE ALFA= 0.0432, TRUE BETA= 0.0484

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
191	218	1	201	0.0397	0.0499
163	190	1	176	0.0492	0.0459

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
135	162	2	162	0.043	0.055	1	150	0.067	0.050
107	134	2	128	0.049	0.063	1	123	0.098	0.050
80	106	2	89	0.050	0.125	1	96	0.157	0.050
52	79	2	54	0.048	0.261	1	69	0.265	0.049

P0=0.0150	ALFA=0.050	H1= 1.690	S=0.039134
P1=0.0800	BETA=0.050	H2= 1.690	ASN= 75

NATURAL TRUNCATION POINT= 171 — TRUE ALFA= 0.0416, TRUE BETA= 0.0481

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
146	170	1	156	0.0381	0.0499
120	145	1	134	0.0493	0.0497

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
95	119	2	119	0.042	0.059	1	110	0.073	0.050
69	94	2	89	0.050	0.080	1	86	0.122	0.049
44	68	2	54	0.050	0.182	1	61	0.219	0.049

P0=0.0150	ALFA=0.050	H1= 1.574	S=0.042330
P1=0.0900	BETA=0.050	H2= 1.574	ASN= 61

NATURAL TRUNCATION POINT= 132 — TRUE ALFA= 0.0443, TRUE BETA= 0.0478

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
109	131	1	120	0.0409	0.0499

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
85	108	1	89	0.049	0.059	1	100	0.058	0.050
61	84	2	84	0.045	0.067	1	78	0.097	0.049
33	60	2	53	0.049	0.134	1	55	0.185	0.049

P0=0.0150	ALFA=0.050	H1= 1.482	S=0.045410
P1=0.1000	BETA=0.050	H2= 1.482	ASN= 50

NATURAL TRUNCATION POINT= 121 — TRUE ALFA= 0.0376, TRUE BETA= 0.0490

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
99	120	1	113	0.0358	0.0500
77	98	1	93	0.0486	0.0499

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
55	76	2	76	0.037	0.067	1	72	0.080	0.050
33	54	2	53	0.049	0.097	1	50	0.157	0.052

PC=0.0200	ALFA=0.050	H1= 7.083	S=0.024672
P1=0.0300	BETA=0.050	H2= 7.083	ASN=2054

NATURAL TRUNCATION POINT= 5111 TRUE ALFA= 0.0493
TRUE BETA= 0.0493

SAMPLE NUMBER INTERVAL FROM	TO	F O L D ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
5070	5110	3	5084	0.0479	0.0500
5030	5069	3	5043	0.0481	0.0500
4989	5029	1	4992	0.0500	0.0498
4949	4988	3	4960	0.0485	0.0500
4908	4948	3	4919	0.0487	0.0500
4868	4907	2	4877	0.0500	0.0493
4827	4867	3	4837	0.0491	0.0500
4787	4826	3	4795	0.0493	0.0500
4746	4786	3	4754	0.0496	0.0500
4706	4745	3	4713	0.0495	0.0500

SAMPLE NUMBER INTERVAL		F O L D ALFA				F O L D BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
4665	4705	3	4668	0.050	0.050	3	4672	0.050	0.050
4625	4664	4	4664	0.050	0.050	3	4631	0.050	0.050
4584	4624	4	4618	0.050	0.050	3	4590	0.051	0.050
4543	4583	4	4569	0.050	0.050	3	4549	0.051	0.050
4503	4542	4	4520	0.050	0.050	3	4508	0.051	0.050
4462	4502	4	4471	0.050	0.050	3	4468	0.052	0.050
4422	4461	4	4422	0.050	0.051	3	4427	0.052	0.050
4381	4421	5	4421	0.050	0.051	3	4386	0.052	0.050
4341	4380	5	4374	0.050	0.051	3	4345	0.053	0.050
4300	4340	5	4327	0.050	0.051	3	4304	0.053	0.050
4260	4299	5	4279	0.050	0.051	3	4263	0.054	0.050
4219	4259	5	4232	0.050	0.051	3	4222	0.054	0.050
4179	4218	5	4185	0.050	0.051	3	4182	0.054	0.050
4138	4178	5	4138	0.050	0.052	3	4141	0.055	0.050
4098	4137	6	4137	0.050	0.052	3	4100	0.055	0.050
4057	4097	6	4091	0.050	0.052	3	4059	0.056	0.050
4017	4056	6	4045	0.050	0.052	3	4019	0.056	0.050
3976	4016	6	3999	0.050	0.053	3	3978	0.057	0.050
3936	3975	6	3952	0.050	0.053	3	3937	0.058	0.050
3895	3935	6	3906	0.050	0.053	3	3896	0.058	0.050
3854	3894	6	3861	0.050	0.054	3	3856	0.059	0.050
3814	3853	6	3815	0.050	0.054	3	3815	0.060	0.050
3773	3813	7	3813	0.050	0.054	3	3774	0.060	0.050
3733	3772	7	3769	0.050	0.055	3	3734	0.061	0.050
3692	3732	7	3724	0.050	0.055	3	3693	0.062	0.050
3652	3691	7	3679	0.050	0.055	3	3652	0.062	0.050
3611	3651	7	3634	0.050	0.056	4	3651	0.062	0.050
3571	3610	7	3589	0.050	0.057	4	3610	0.063	0.050
3530	3570	7	3544	0.050	0.057	4	3570	0.064	0.050
3490	3529	7	3499	0.050	0.058	4	3529	0.065	0.050
3449	3489	7	3454	0.050	0.059	4	3489	0.066	0.050
3409	3448	7	3410	0.050	0.060	4	3448	0.067	0.050
3368	3408	8	3408	0.050	0.060	4	3408	0.068	0.050
3328	3367	8	3365	0.050	0.060	4	3367	0.069	0.050
3287	3327	8	3321	0.050	0.061	4	3327	0.070	0.050
3246	3286	8	3276	0.050	0.062	4	3286	0.071	0.050
3206	3245	8	3232	0.050	0.063	4	3245	0.073	0.050
3165	3205	8	3188	0.050	0.064	4	3205	0.074	0.050
3125	3164	8	3144	0.050	0.066	4	3164	0.075	0.050
3084	3124	8	3100	0.050	0.067	4	3124	0.077	0.050
3044	3083	8	3057	0.050	0.068	4	3083	0.078	0.050

3003	3043	8	3013	0.050	0.069	4	3043	0.080	0.050
2963	3002	8	2969	0.050	0.071	4	3002	0.081	0.050
2922	2962	8	2926	0.050	0.072	4	2961	0.083	0.050
2882	2921	8	2882	0.050	0.074	4	2921	0.085	0.050
2841	2881	9	2881	0.050	0.074	4	2880	0.087	0.050
2801	2840	9	2839	0.050	0.076	4	2840	0.089	0.050
2760	2800	9	2795	0.050	0.078	4	2799	0.091	0.050
2720	2759	9	2752	0.050	0.079	4	2758	0.093	0.050
2679	2719	9	2709	0.050	0.081	4	2718	0.095	0.050
2638	2678	9	2666	0.050	0.084	4	2677	0.097	0.050
2598	2637	9	2623	0.050	0.086	4	2637	0.100	0.050
2557	2597	9	2580	0.050	0.088	4	2596	0.102	0.050
2517	2556	9	2537	0.050	0.091	4	2556	0.105	0.050
2476	2516	9	2494	0.050	0.093	4	2515	0.108	0.050
2436	2475	9	2452	0.050	0.096	4	2474	0.110	0.050
2395	2435	9	2409	0.050	0.099	4	2434	0.114	0.050
2355	2394	9	2366	0.050	0.102	4	2393	0.117	0.050
2314	2354	9	2324	0.050	0.105	4	2353	0.120	0.050
2274	2313	9	2281	0.050	0.108	4	2312	0.123	0.050
2233	2273	9	2239	0.050	0.112	4	2272	0.127	0.050
2193	2232	9	2197	0.050	0.115	4	2231	0.131	0.050
2152	2192	9	2154	0.050	0.119	4	2190	0.134	0.050
2112	2151	9	2112	0.050	0.123	4	2150	0.139	0.050
2071	2111	10	2111	0.050	0.124	4	2109	0.143	0.050
2030	2070	10	2070	0.050	0.128	4	2069	0.147	0.050
1990	2029	10	2028	0.050	0.132	4	2028	0.152	0.050
1949	1989	10	1986	0.050	0.137	4	1988	0.157	0.050
1909	1948	10	1944	0.050	0.141	4	1947	0.162	0.050
1868	1908	10	1902	0.050	0.146	4	1907	0.167	0.050
1828	1867	10	1860	0.050	0.152	4	1866	0.173	0.050
1787	1827	10	1818	0.050	0.158	4	1826	0.179	0.050
1747	1786	10	1776	0.050	0.164	4	1785	0.185	0.050
1706	1746	10	1734	0.050	0.170	4	1744	0.191	0.050
1666	1705	10	1692	0.050	0.177	4	1704	0.198	0.050
1625	1665	10	1651	0.050	0.183	4	1663	0.204	0.050
1585	1624	10	1609	0.050	0.190	4	1623	0.212	0.050
1544	1584	10	1567	0.050	0.198	4	1582	0.219	0.050
1504	1543	10	1526	0.050	0.205	4	1542	0.227	0.050
1463	1503	10	1484	0.050	0.214	4	1501	0.235	0.050
1422	1462	10	1443	0.050	0.222	4	1461	0.244	0.050
1382	1421	10	1401	0.050	0.231	4	1420	0.253	0.050
1341	1381	10	1360	0.050	0.240	4	1380	0.263	0.050
1301	1340	10	1319	0.050	0.249	4	1339	0.272	0.050
1260	1300	10	1277	0.050	0.260	4	1298	0.282	0.050
1220	1259	10	1236	0.050	0.270	4	1258	0.294	0.050
1179	1219	10	1195	0.050	0.281	4	1217	0.304	0.050
1139	1178	10	1154	0.050	0.292	4	1177	0.317	0.050
1098	1138	10	1112	0.050	0.305	4	1136	0.329	0.050
1058	1097	10	1071	0.050	0.318	4	1096	0.342	0.050
1017	1057	10	1030	0.050	0.331	4	1055	0.355	0.050
977	1016	10	989	0.050	0.344	4	1014	0.369	0.050
936	976	10	948	0.050	0.358	4	974	0.385	0.050
896	935	10	907	0.050	0.373	4	933	0.400	0.050
855	895	10	866	0.050	0.389	4	892	0.415	0.050
815	854	10	826	0.050	0.404	4	851	0.431	0.050
774	814	10	785	0.050	0.421	4	811	0.450	0.049
733	773	10	744	0.050	0.439	4	770	0.469	0.049
693	732	10	704	0.050	0.456	4	729	0.488	0.049
652	692	10	663	0.049	0.476	4	687	0.506	0.050
612	651	10	623	0.050	0.495	4	646	0.527	0.050
571	611	10	583	0.050	0.515	4	605	0.550	0.049
531	570	10	543	0.050	0.536	4	563	0.571	0.050
490	530	10	503	0.049	0.558	4	521	0.595	0.050
450	489	10	464	0.050	0.579	4	479	0.620	0.049
409	449	10	425	0.050	0.601	4	436	0.644	0.049
369	408	10	386	0.050	0.625	4	392	0.669	0.050

328	368	10	348	0.050	0.647	4	348	0.697	0.050
288	327	10	310	0.050	0.671	4	303	0.726	0.250

P0=0.0200	ALFA=0.050	P1= 4.125	S=0.028383
P1=0.0400	BETA=0.050	P2= 4.125	ASN= 606

NATURAL TRUNCATION POINT= 1389 — TRUE ALFA= 0.0495, TRUE BETA= 0.0495

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	FOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1355	1388	2	1372	0.0462	0.0500
1320	1354	1	1333	0.0500	0.0495
1286	1319	2	1302	0.0481	0.0500
1251	1285	2	1268	0.0493	0.0500

SAMPLE NUMBER INTERVAL		FOLD ALFA				FOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1216	1250	2	1227	0.050	0.050	2	1233	0.051	0.050
1182	1215	3	1215	0.049	0.051	2	1198	0.052	0.050
1147	1181	3	1179	0.050	0.051	2	1164	0.054	0.050
1113	1146	3	1133	0.050	0.052	2	1129	0.056	0.050
1078	1112	3	1088	0.050	0.053	2	1094	0.058	0.050
1043	1077	3	1044	0.050	0.054	2	1059	0.060	0.050
1009	1042	4	1042	0.050	0.055	2	1025	0.063	0.050
974	1008	4	1001	0.050	0.056	2	990	0.066	0.050
939	973	4	959	0.050	0.059	2	956	0.070	0.050
905	938	4	917	0.050	0.062	2	921	0.074	0.050
870	904	4	876	0.050	0.065	2	886	0.078	0.050
836	869	4	836	0.050	0.070	2	852	0.084	0.050
801	835	5	835	0.050	0.070	2	817	0.090	0.050
766	800	5	796	0.050	0.075	2	782	0.096	0.050
732	765	5	756	0.050	0.082	2	748	0.104	0.050
697	731	5	717	0.050	0.089	2	713	0.113	0.050
663	696	5	678	0.050	0.098	2	678	0.122	0.050
628	662	5	639	0.050	0.109	2	644	0.134	0.050
593	627	5	601	0.050	0.121	2	609	0.146	0.050
559	592	5	563	0.050	0.135	2	575	0.161	0.050
524	558	5	526	0.050	0.151	2	540	0.178	0.050
489	523	5	489	0.050	0.169	2	505	0.196	0.050
455	488	5	488	0.049	0.171	2	471	0.218	0.050
420	454	6	451	0.049	0.193	2	436	0.241	0.050
386	419	6	415	0.050	0.215	2	402	0.270	0.050
351	385	6	378	0.050	0.245	2	367	0.301	0.050
316	350	6	342	0.050	0.276	2	332	0.336	0.050
282	315	6	306	0.050	0.312	2	298	0.378	0.049
247	281	6	270	0.050	0.354	2	263	0.424	0.049
213	246	6	234	0.049	0.403	2	228	0.477	0.049
178	212	6	199	0.049	0.454	2	192	0.535	0.050
143	177	6	165	0.049	0.508	2	156	0.605	0.049

P0=0.0200	ALFA=0.050		H1= 3.108	S=0.032617
P1=0.0500	BETA=0.050		H2= 3.108	ASN= 304

NATURAL TRUNCATION POINT= 674 TRUE ALFA= 0.0494
TRUE BETA= 0.0492

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
644	673	2	668	0.0443	0.0500
613	643	1	619	0.0500	0.0495
583	612	2	609	0.0486	0.0500

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
552	582	2	570	0.050	0.051	2	579	0.052	0.050
522	551	2	526	0.050	0.053	2	549	0.055	0.050
491	521	3	521	0.049	0.054	2	519	0.060	0.050
461	490	3	485	0.050	0.057	2	489	0.066	0.050
430	460	3	445	0.050	0.062	2	459	0.073	0.050
400	429	3	406	0.050	0.071	2	429	0.082	0.050
369	399	3	369	0.050	0.083	2	398	0.093	0.050
339	368	4	368	0.049	0.084	2	368	0.107	0.050
309	338	4	333	0.050	0.098	2	338	0.125	0.050
278	308	4	297	0.049	0.121	2	308	0.147	0.050
248	277	4	263	0.050	0.147	2	277	0.174	0.050
217	247	4	229	0.050	0.183	2	247	0.208	0.050
187	216	4	195	0.049	0.231	2	216	0.249	0.050
156	186	4	163	0.050	0.284	2	186	0.303	0.050
126	155	4	130	0.049	0.361	2	155	0.368	0.050
95	125	4	99	0.049	0.444	2	125	0.454	0.049

P0=0.0200	ALFA=0.050		H1= 2.582	S=0.036545
P1=0.0600	BETA=0.050		H2= 2.582	ASN= 189

NATURAL TRUNCATION POINT= 427 TRUE ALFA= 0.0466
TRUE BETA= 0.0490

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
400	426	2	426	0.0408	0.0500
372	399	1	391	0.0493	0.0490

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
345	371	2	371	0.046	0.050	1	348	0.052	0.050
317	344	2	341	0.050	0.051	1	321	0.058	0.050
290	316	2	300	0.050	0.056	1	295	0.068	0.050
263	289	3	289	0.046	0.061	1	268	0.080	0.050
235	262	3	262	0.050	0.065	1	241	0.098	0.050
208	234	3	226	0.050	0.082	1	214	0.121	0.050
181	207	3	192	0.050	0.109	1	187	0.154	0.050
153	180	3	160	0.050	0.148	1	160	0.199	0.049
126	152	3	128	0.049	0.210	1	132	0.258	0.050
99	125	4	125	0.045	0.227	1	105	0.342	0.050
71	98	4	98	0.049	0.290	1	78	0.462	0.049

P0=0.0200	ALFA=0.050	H1= 2.256	S=0.040125
P1=0.0700	BETA=0.050	H2= 2.256	ASN= 132

NATURAL TRUNCATION POINT= 281 — TRUE ALFA= 0.0494, TRUE BETA= 0.0484

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
256	280	1	260	0.0451	0.0499

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
231	255	1	232	0.050	0.051	1	237	0.052	0.050
206	230	2	230	0.049	0.051	1	213	0.062	0.050
181	205	2	193	0.050	0.060	1	189	0.077	0.050
156	180	2	158	0.049	0.081	1	165	0.100	0.050
131	155	3	155	0.047	0.087	1	141	0.135	0.049
107	130	3	126	0.049	0.120	1	116	0.186	0.050
82	106	3	96	0.049	0.187	1	92	0.266	0.049
57	81	3	68	0.049	0.288	1	67	0.383	0.049

P0=0.0200	ALFA=0.050	H1= 2.031	S=0.043587
P1=0.0800	BETA=0.050	H2= 2.031	ASN= 99

NATURAL TRUNCATION POINT= 208 — TRUE ALFA= 0.0496, TRUE BETA= 0.0485

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
185	207	1	193	0.0456	0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
162	184	1	162	0.050	0.053	1	172	0.055	0.050
139	161	2	161	0.049	0.054	1	150	0.071	0.050
116	138	2	126	0.049	0.073	1	127	0.096	0.050
93	115	2	95	0.049	0.118	1	105	0.139	0.049
70	92	3	92	0.045	0.132	1	82	0.208	0.049
47	69	3	67	0.049	0.204	1	59	0.322	0.050

P0=0.0200	ALFA=0.050	H1= 1.866	S=0.046953
P1=0.0900	BETA=0.050	H2= 1.866	ASN= 77

NATURAL TRUNCATION POINT= 168 — TRUE ALFA= 0.0456, TRUE BETA= 0.0484

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
147	167	1	155	0.0419	0.0499

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
125	146	1	131	0.050	0.052	1	136	0.053	0.050
104	124	2	124	0.045	0.056	1	115	0.071	0.050
83	103	2	96	0.049	0.075	1	95	0.106	0.049
62	82	2	67	0.049	0.138	1	74	0.166	0.050
40	61	2	41	0.049	0.273	1	53	0.275	0.05[illegible]

P0=0.0200	ALFA=0.050	H1= 1.738	S=0.050253
P1=0.1000	BETA=0.050	H2= 1.738	ASN= 63

NATURAL TRUNCATION POINT= 135 — TRUE ALFA= 0.0471, TRUE BETA= 0.0480

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
115	134	1	123	0.0427	0.0500

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
95	114	1	97	0.050	0.056	1	106	0.057	0.050
75	94	2	94	0.047	0.060	1	87	0.084	0.050
55	74	2	66	0.049	0.100	1	68	0.136	0.049
35	54	2	40	0.047	0.221	1	48	0.236	0.050

PC=0.0250	ALFA=0.050		H1= 6.065	S=0.031934
P1=0.0400	BETA=0.050		H2= 6.065	ASN=1183

NATURAL TRUNCATION POINT= 2852	TRUE ALFA= 0.0499
	TRUE BETA= 0.0496

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
2821	2851	2	2833	0.0472	0.0500
2790	2820	1	2802	0.0500	0.0496
2758	2789	3	2771	0.0478	0.0500
2727	2757	3	2740	0.0481	0.0500
2696	2726	2	2708	0.0500	0.0497
2664	2695	2	2665	0.0500	0.0498
2633	2663	3	2646	0.0491	0.0500
2602	2632	3	2615	0.0496	0.0500
2570	2601	3	2584	0.0500	0.0500

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
2539	2569	3	2544	0.050	0.050	3	2552	0.050	0.050
2508	2538	4	2538	0.050	0.050	3	2521	0.051	0.050
2476	2507	4	2505	0.050	0.050	3	2490	0.051	0.050
2445	2475	4	2466	0.050	0.051	3	2458	0.052	0.050
2414	2444	4	2428	0.050	0.051	3	2427	0.052	0.050
2382	2413	4	2390	0.050	0.051	3	2396	0.053	0.050
2351	2381	4	2353	0.050	0.051	3	2365	0.054	0.050
2320	2350	5	2350	0.050	0.051	3	2333	0.054	0.050
2288	2319	5	2316	0.050	0.052	3	2302	0.055	0.050
2257	2287	5	2279	0.050	0.052	3	2271	0.056	0.050
2226	2256	5	2242	0.050	0.052	3	2240	0.057	0.050
2195	2225	5	2206	0.050	0.053	3	2208	0.058	0.050
2163	2194	5	2169	0.050	0.054	3	2177	0.059	0.050
2132	2162	5	2133	0.050	0.054	3	2146	0.060	0.050
2101	2131	6	2131	0.050	0.054	3	2114	0.060	0.050
2069	2100	6	2097	0.050	0.055	3	2083	0.062	0.050
2038	2068	6	2061	0.050	0.056	3	2052	0.063	0.050
2007	2037	6	2026	0.050	0.056	3	2021	0.064	0.050
1975	2006	6	1990	0.050	0.057	3	1989	0.065	0.050
1944	1974	6	1955	0.050	0.058	3	1958	0.067	0.050
1913	1943	6	1920	0.050	0.060	3	1927	0.068	0.050
1881	1912	6	1885	0.050	0.061	3	1895	0.070	0.050
1850	1880	6	1850	0.050	0.062	3	1864	0.071	0.050
1819	1849	7	1849	0.050	0.062	3	1833	0.073	0.050
1787	1818	7	1815	0.050	0.064	3	1801	0.075	0.050
1756	1786	7	1781	0.050	0.065	3	1770	0.077	0.050
1725	1755	7	1746	0.050	0.067	3	1739	0.079	0.050
1694	1724	7	1712	0.050	0.069	3	1708	0.081	0.050
1662	1693	7	1677	0.050	0.071	3	1676	0.084	0.050
1631	1661	7	1643	0.050	0.073	3	1645	0.086	0.050
1600	1630	7	1609	0.050	0.075	3	1614	0.089	0.050
1568	1599	7	1575	0.050	0.078	3	1582	0.091	0.050
1537	1567	7	1541	0.050	0.081	3	1551	0.095	0.050
1506	1536	7	1508	0.050	0.083	3	1520	0.098	0.050
1474	1505	7	1474	0.050	0.086	3	1489	0.101	0.050
1443	1473	8	1473	0.050	0.087	3	1457	0.105	0.050
1412	1442	8	1440	0.050	0.090	3	1426	0.109	0.050
1380	1411	8	1407	0.050	0.093	3	1395	0.113	0.050
1349	1379	8	1373	0.050	0.098	3	1363	0.117	0.050
1318	1348	8	1340	0.050	0.101	3	1332	0.121	0.050
1286	1317	8	1307	0.050	0.106	3	1301	0.126	0.050
1255	1285	8	1274	0.050	0.110	3	1269	0.131	0.050

1224	1254	8	1240	0.050	0.116	3	1238	0.137	0.050
1192	1223	8	1207	0.050	0.122	3	1207	0.143	0.050
1161	1191	8	1174	0.050	0.127	3	1175	0.148	0.050
1130	1160	8	1142	0.050	0.133	3	1144	0.155	0.050
1099	1129	8	1109	0.050	0.140	3	1113	0.162	0.050
1067	1098	8	1076	0.050	0.147	3	1082	0.170	0.050
1036	1066	8	1043	0.050	0.155	3	1050	0.177	0.050
1005	1035	8	1011	0.050	0.162	3	1019	0.185	0.050
973	1004	8	978	0.050	0.171	3	988	0.194	0.050
942	972	8	946	0.050	0.179	3	956	0.203	0.050
911	941	8	913	0.050	0.190	3	925	0.213	0.050
879	910	8	881	0.050	0.200	3	894	0.224	0.050
848	878	8	848	0.050	0.212	3	862	0.234	0.050
817	847	9	847	0.049	0.213	3	831	0.246	0.050
785	816	9	816	0.050	0.223	3	800	0.259	0.050
754	784	9	784	0.050	0.235	3	769	0.273	0.050
723	753	9	752	0.050	0.247	3	737	0.286	0.050
691	722	9	720	0.050	0.261	3	706	0.302	0.050
660	690	9	688	0.050	0.275	3	675	0.318	0.049
629	659	9	656	0.050	0.291	3	643	0.334	0.050
598	628	9	624	0.050	0.307	3	612	0.352	0.050
566	597	9	592	0.050	0.325	3	580	0.370	0.050
535	565	9	560	0.050	0.344	3	549	0.391	0.050
504	534	9	528	0.050	0.364	3	518	0.414	0.049
472	503	9	497	0.050	0.383	3	486	0.435	0.050
441	471	9	465	0.050	0.406	3	454	0.458	0.050
410	440	9	433	0.049	0.431	3	423	0.486	0.049
378	409	9	402	0.050	0.454	3	391	0.512	0.049
347	377	9	371	0.050	0.478	3	359	0.541	0.049
316	346	9	340	0.050	0.505	3	326	0.569	0.050
284	315	9	309	0.050	0.533	3	294	0.603	0.049
253	283	9	278	0.049	0.564	3	261	0.637	0.049
222	252	9	248	0.049	0.593	3	227	0.672	0.049
190	221	9	218	0.049	0.625	3	192	0.709	0.049

PC=0.0250	ALFA=0.050	HI= 4.094	S=0.036121
P1=0.0500	BETA=0.050	H2= 4.094	ASN= 461

NATURAL TRUNCATION POINT= 1111 TRUE ALFA= 0.0492
TRUE BETA= 0.0493

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1083	1110	2	1089	0.0454	0.0500
1055	1082	2	1062	0.0463	0.0500
1027	1054	2	1035	0.0473	0.0500
1000	1026	2	1008	0.0484	0.0500
972	999	2	981	0.0497	0.0500

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
944	971	2	945	0.050	0.050	2	954	0.051	0.050
917	943	3	943	0.050	0.051	2	927	0.053	0.050
889	916	3	908	0.050	0.051	2	899	0.055	0.050
861	888	3	872	0.050	0.052	2	872	0.057	0.050
834	860	3	836	0.050	0.054	2	845	0.059	0.050
806	833	4	833	0.049	0.054	2	817	0.062	0.050
778	805	4	802	0.050	0.056	2	790	0.065	0.050
751	777	4	768	0.050	0.058	2	762	0.068	0.050
723	750	4	735	0.050	0.061	2	735	0.073	0.050
695	722	4	702	0.050	0.064	2	707	0.077	0.050
668	694	4	669	0.050	0.069	2	680	0.082	0.050
640	667	5	667	0.049	0.070	2	652	0.088	0.050
612	639	5	637	0.050	0.074	2	624	0.095	0.050
534	611	5	605	0.050	0.081	2	597	0.103	0.050
557	583	5	574	0.050	0.088	2	569	0.111	0.050
529	556	5	543	0.050	0.096	2	542	0.121	0.050
501	528	5	512	0.050	0.107	2	514	0.132	0.050
474	500	5	481	0.050	0.120	2	486	0.144	0.050
446	473	5	451	0.050	0.133	2	459	0.159	0.050
418	445	5	421	0.050	0.149	2	431	0.175	0.050
391	417	5	391	0.050	0.168	2	404	0.195	0.050
363	390	6	390	0.049	0.170	2	376	0.216	0.050
335	362	6	361	0.049	0.191	2	348	0.239	0.050
308	334	6	332	0.050	0.214	2	321	0.268	0.049
280	307	6	303	0.050	0.241	2	293	0.298	0.050
252	279	6	274	0.050	0.273	2	265	0.333	0.050
225	251	6	245	0.050	0.310	2	238	0.376	0.049
197	224	6	216	0.049	0.353	2	210	0.422	0.049
169	196	6	188	0.050	0.396	2	182	0.475	0.049
142	168	6	160	0.050	0.448	2	153	0.533	0.050
114	141	6	132	0.049	0.508	2	124	0.602	0.050

P0=0.0250	ALFA=0.050	H1= 3.228	S=0.040084
P1=0.0600	BETA=0.050	H2= 3.228	ASN= 270

NATURAL TRUNCATION POINT= 605 TRUE ALFA= 0.0493
TRUE BETA= 0.0490

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
580	604	2	594	0.0440	0.0500
555	579	1	561	0.0499	0.0492
530	554	2	546	0.0476	0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
505	529	2	521	0.050	0.050	2	523	0.050	0.050
480	504	2	485	0.050	0.052	2	499	0.053	0.050
455	479	3	479	0.048	0.053	2	474	0.057	0.050
430	454	3	451	0.050	0.054	2	450	0.062	0.050
405	429	3	418	0.050	0.059	2	426	0.068	0.050
380	404	3	386	0.050	0.065	2	401	0.075	0.050
355	379	3	355	0.050	0.073	2	376	0.083	0.050
331	354	4	354	0.049	0.074	2	352	0.094	0.050
306	330	4	325	0.049	0.085	2	327	0.107	0.050
281	305	4	296	0.050	0.099	2	303	0.123	0.050
256	280	4	267	0.049	0.119	2	278	0.142	0.050
231	255	4	239	0.050	0.144	2	253	0.166	0.050
206	230	4	211	0.049	0.176	2	228	0.194	0.050
181	205	4	184	0.049	0.214	2	204	0.232	0.049
156	180	4	157	0.049	0.263	2	179	0.276	0.049
131	155	4	131	0.050	0.319	2	154	0.330	0.049
106	130	5	130	0.048	0.327	2	129	0.397	0.049
81	105	5	105	0.050	0.390	2	104	0.481	0.048

P0=0.0250	ALFA=0.050	H1= 2.734	S=0.043830
P1=0.0700	BETA=0.050	H2= 2.734	ASN= 178

NATURAL TRUNCATION POINT= 405 — TRUE ALFA= 0.0468, TRUE BETA= 0.0489

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
382	404	2	399	0.0411	0.0500
359	381	1	378	0.0499	0.0488
336	358	2	357	0.0462	0.0499
313	335	2	335	0.0499	0.0500

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
291	312	2	300	0.050	0.053	1	292	0.062	0.050
268	290	2	268	0.050	0.059	1	270	0.071	0.050
245	267	3	267	0.049	0.060	1	247	0.083	0.050
222	244	3	238	0.050	0.069	1	225	0.099	0.050
200	221	3	209	0.050	0.066	1	202	0.119	0.050
177	199	3	181	0.049	0.111	1	180	0.147	0.050
154	176	3	155	0.050	0.143	1	157	0.182	0.050
131	153	4	153	0.048	0.151	1	135	0.232	0.049
108	130	4	129	0.050	0.190	1	112	0.295	0.049
86	107	4	103	0.048	0.261	1	89	0.379	0.050
63	85	4	79	0.049	0.342	1	66	0.493	0.050

P0=0.0250	ALFA=0.050	H1= 2.411	S=0.047546
P1=0.0800	BETA=0.050	H2= 2.411	ASN= 128

NATURAL TRUNCATION POINT= 283 — TRUE ALFA= 0.0477, TRUE BETA= 0.0494

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
262	282	1	270	0.0454	0.0500

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
241	261	1	248	0.050	0.050	1	249	0.050	0.050
219	240	2	240	0.047	0.051	1	227	0.057	0.050
198	218	2	212	0.050	0.054	1	206	0.067	0.050
177	197	2	182	0.050	0.063	1	185	0.080	0.050
156	176	3	176	0.046	0.071	1	163	0.099	0.050
135	155	3	154	0.050	0.081	1	142	0.127	0.050
114	134	3	127	0.049	0.114	1	121	0.167	0.050
93	113	3	102	0.049	0.164	1	100	0.223	0.050
72	92	3	78	0.049	0.239	1	79	0.305	0.050
51	71	3	55	0.050	0.348	1	58	0.424	0.049

P0=0.0250	ALFA=0.050		H1= 2.181	S=0.051109
P1=0.0900	BETA=0.050		H2= 2.181	ASN= 93

NATURAL TRUNCATION POINT= 219 TRUE ALFA= 0.0460
TRUE BETA= 0.0487

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
200	218	1	203	0.0425	0.0500
180	199	1	185	0.0482	0.0500

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
161	179	2	179	0.046	0.052	1	167	0.057	0.050
141	160	2	155	0.049	0.056	1	148	0.071	0.050
121	140	2	127	0.050	0.071	1	129	0.091	0.050
102	120	3	120	0.043	0.087	1	110	0.124	0.050
82	101	3	101	0.049	0.105	1	91	0.174	0.049
63	81	3	77	0.049	0.165	1	71	0.248	0.050
43	62	3	54	0.048	0.269	1	52	0.368	0.049

P0=0.0250	ALFA=0.050		H1= 2.008	S=0.054587
P1=0.1000	BETA=0.050		H2= 2.008	ASN= 78

NATURAL TRUNCATION POINT= 165 TRUE ALFA= 0.0487
TRUE BETA= 0.0481

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
147	165	1	152	0.0440	0.0499

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
129	146	1	130	0.050	0.052	1	136	0.054	0.050
111	128	2	128	0.048	0.054	1	118	0.068	0.050
92	110	2	101	0.049	0.071	1	101	0.094	0.050
74	91	2	77	0.050	0.110	1	83	0.136	0.050
56	73	3	73	0.044	0.124	1	65	0.205	0.049
37	55	3	54	0.049	0.156	1	47	0.319	0.049

PC=0.0050	ALFA=0.050	H1= 3.224	S=0.007216
P1=0.0100	BETA=0.100	H2= 4.140	ASN=1863

NATURAL TRUNCATION POINT= 4605 — TRUE ALFA= 0.0499, TRUE BETA= 0.0997

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
4466	4604	1	4513	0.0490	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
4328	4465	1	4346	0.050	0.100	1	4352	0.050	0.100
4189	4327	2	4327	0.050	0.100	1	4197	0.051	0.100
4051	4186	2	4134	0.050	0.101	1	4047	0.058	0.099
3912	4050	2	3939	0.050	0.102	2	4046	0.053	0.100
3774	3911	3	3911	0.049	0.102	2	3897	0.055	0.100
3635	3773	3	3753	0.050	0.103	2	3751	0.057	0.100
3496	3634	3	3573	0.050	0.105	2	3605	0.059	0.100
3358	3495	3	3399	0.050	0.108	2	3461	0.062	0.100
3219	3357	3	3228	0.050	0.111	2	3318	0.065	0.100
3081	3218	4	3218	0.049	0.112	2	3176	0.069	0.100
2942	3080	4	3061	0.050	0.116	2	3034	0.073	0.100
2803	2941	4	2896	0.050	0.121	2	2893	0.078	0.100
2665	2802	4	2735	0.050	0.128	2	2752	0.083	0.100
2526	2664	4	2575	0.050	0.136	2	2611	0.090	0.100
2388	2525	4	2418	0.050	0.146	2	2471	0.098	0.100
2249	2387	4	2262	0.050	0.158	2	2331	0.106	0.100
2110	2248	5	2249	0.049	0.163	2	2191	0.116	0.100
1972	2109	5	2109	0.050	0.172	2	2052	0.128	0.100
1833	1971	5	1957	0.050	0.189	2	1913	0.142	0.100
1695	1832	5	1807	0.050	0.208	2	1774	0.157	0.100
1556	1694	5	1658	0.050	0.231	2	1635	0.176	0.100
1418	1555	5	1510	0.050	0.259	2	1497	0.197	0.100
1279	1417	5	1364	0.050	0.288	2	1359	0.222	0.100
1140	1278	5	1219	0.050	0.323	2	1221	0.251	0.100
1002	1139	5	1076	0.050	0.363	2	1084	0.285	0.100
863	1001	5	934	0.050	0.408	2	946	0.324	0.100
725	862	5	794	0.050	0.459	2	809	0.372	0.100
586	724	5	657	0.050	0.514	2	671	0.428	0.100
447	585	5	523	0.050	0.575	2	532	0.496	0.100

P0=0.0050	ALFA=0.050	H1= 1.606	S=0.010839
P1=0.0200	BETA=0.100	H2= 2.062	ASN= 309

NATURAL TRUNCATICN FCINT= 702 — TRUE ALFA= 0.0482, TRUE BETA= 0.0993

SAMPLE NUMBER INTERVAL FRCM	SAMPLE NUMBER INTERVAL TC	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC PCINT	TRUE ALFA	TRUE BETA
610	701	1	681	0.0463	0.1000

SAMPLE NUMBER INTERVAL FRCM	TC	HOLD ALFA: ACPT RULE M	BEST TRUNC PCINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
513	609	1	530	0.050	0.107	1	579	0.057	0.100
425	517	2	517	0.048	0.110	1	482	0.075	0.100
333	424	2	391	0.050	0.140	1	387	0.105	0.100
241	332	2	271	0.050	0.216	1	294	0.159	0.100
149	240	2	164	0.050	0.361	1	203	0.255	0.100

P0=0.0050	ALFA=0.050	H1= 1.239	S=0.014003
P1=0.0300	BETA=0.100	H2= 1.591	ASN= 142

NATURAL TRUNCATICN FCINT= 375 — TRUE ALFA= 0.0375, TRUE BETA= 0.1002

SAMPLE NUMBER INTERVAL FRCM	SAMPLE NUMBER INTERVAL TC	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC PCINT	TRUE ALFA	TRUE BETA
303	374	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-
232	302	1	294	0.0483	0.0999

SAMPLE NUMBER INTERVAL FRCM	TC	HOLD ALFA: ACPT RULE M	BEST TRUNC PCINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
160	231	1	163	0.050	0.153	1	218	0.076	0.100
89	159	2	159	0.047	0.162	1	145	0.144	0.100

P0=0.0050	ALFA=0.050	H1= 1.064	S=0.016929
P1=0.0400	BETA=0.100	H2= 1.366	ASN= 37

NATURAL TRUNCATICN FCINT= 182 — TRUE ALFA= 0.0483, TRUE BETA= 0.0996

SAMPLE NUMBER INTERVAL FRCM	SAMPLE NUMBER INTERVAL TC	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC PCINT	TRUE ALFA	TRUE BETA
122	181	1	131	0.0480	0.0998

SAMPLE NUMBER INTERVAL FRCM	TC	HOLD ALFA: ACPT RULE M	BEST TRUNC PCINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
63	121	1	71	0.049	0.221	1	116	0.094	0.099

P0=0.0050	ALFA=0.050	H1= 0.958	S=0.019733
P1=0.0500	BETA=0.100	H2= 1.231	ASN= 61

NATURAL TRUNCATION POINT= 151	TRUE ALFA= 0.0333
	TRUE BETA= 0.0998

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	F O L D ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
100	150	1	150	0.0337	0.1000

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	F O L D ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	F O L D BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
49	99	1	76	0.050	0.123	1	96	0.066	0.100

P0=0.0050	ALFA=0.050	H1= 0.886	S=0.022371
P1=0.0600	BETA=0.100	H2= 1.137	ASN= 43

NATURAL TRUNCATION POINT= 129	TRUE ALFA= 0.0256
	TRUE BETA= 0.1000

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	F O L D ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
85	128	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-
40	84	1	83	0.0491	0.0992

P0=0.0050	ALFA=0.050	H1= 0.832	S=0.024960
P1=0.0700	BETA=0.100	H2= 1.068	ASN= 36

NATURAL TRUNCATION POINT= 74	TRUE ALFA= 0.0383
	TRUE BETA= 0.0967

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	F O L D ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
34	73	1	71	0.0370	0.0935

P0=0.0050	ALFA=0.050	H1= 0.790	S=0.027489
P1=0.0800	BETA=0.100	H2= 1.014	ASN= 29

NATURAL TRUNCATION POINT= 66	TRUE ALFA= 0.0306
	TRUE BETA= 0.0994

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	F O L D ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
29	65	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-

P0=0.0050	ALFA=0.050	H1= 0.756	S=0.029963
P1=0.0900	BETA=0.100	H2= 0.970	ASN= 25

NATURAL TRUNCATION POINT= 59 TRUE ALFA= 0.0250
TRUE BETA= 0.0960

SAMPLE NUMBER INTERVAL FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
26	58	1	56	0.0235	0.0992

P0=0.0050	ALFA=0.050	H1= 0.727	S=0.032411
P1=0.1000	BETA=0.100	H2= 0.934	ASN= 21

NATURAL TRUNCATION POINT= 54 TRUE ALFA= 0.0284
TRUE BETA= 0.0965

SAMPLE NUMBER INTERVAL FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
23	53	1	51	0.0272	0.0995

P0=0.0100	ALFA=0.050	H1= 3.201	S=0.014435
P1=0.0200	BETA=0.100	H2= 4.110	ASN= 924

NATURAL TRUNCATION POINT= 2300 — TRUE ALFA= 0.0496, TRUE BETA= 0.0995

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	FOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
2231	2299	1	2231	0.0480	0.1000
2162	2230	1	2181	0.0500	0.0997
2093	2161	2	2157	0.0492	0.1000

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
2023	2092	2	2072	0.050	0.100	2	2083	0.050	0.100
1954	2022	2	1973	0.050	0.101	2	2010	0.052	0.100
1885	1953	3	1953	0.049	0.102	2	1938	0.054	0.100
1816	1884	3	1879	0.050	0.103	2	1867	0.056	0.100
1746	1815	3	1789	0.050	0.105	2	1795	0.058	0.100
1677	1745	3	1701	0.050	0.107	2	1724	0.061	0.100
1608	1676	3	1616	0.050	0.110	2	1654	0.064	0.100
1538	1607	4	1607	0.049	0.112	2	1583	0.068	0.100
1469	1537	4	1532	0.050	0.115	2	1513	0.072	0.100
1400	1468	4	1450	0.050	0.120	2	1443	0.077	0.100
1331	1399	4	1369	0.050	0.127	2	1373	0.082	0.100
1261	1330	4	1289	0.050	0.135	2	1303	0.089	0.100
1192	1260	4	1210	0.050	0.145	2	1233	0.096	0.100
1123	1191	4	1132	0.050	0.157	2	1163	0.105	0.100
1054	1122	4	1055	0.050	0.171	2	1094	0.115	0.100
984	1053	5	1053	0.049	0.172	2	1024	0.127	0.100
915	983	5	979	0.050	0.187	2	955	0.140	0.100
846	914	5	904	0.050	0.207	2	886	0.156	0.100
776	845	5	830	0.050	0.229	2	816	0.174	0.100
707	775	5	756	0.050	0.255	2	747	0.195	0.100
638	706	5	683	0.050	0.285	2	678	0.220	0.100
569	637	5	610	0.050	0.321	2	610	0.249	0.099
499	568	5	539	0.050	0.360	2	541	0.283	0.100
430	498	5	468	0.050	0.405	2	472	0.323	0.100
361	429	5	398	0.050	0.456	2	404	0.371	0.099
292	360	5	329	0.050	0.512	2	335	0.427	0.099
222	291	5	262	0.050	0.573	2	265	0.494	0.100

P0=0.0100	ALFA=0.050	H1= 2.012	S=0.018238
P1=0.0300	BETA=0.100	H2= 2.583	ASN= 290

NATURAL TRUNCATION POINT= 714 — TRUE ALFA= 0.0462, TRUE BETA= 0.0993

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
659	713	1	666	0.0446	0.1000
604	658	1	627	0.0484	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
549	603	2	603	0.046	0.102	1	570	0.054	0.100
495	548	2	545	0.050	0.103	1	514	0.062	0.100
440	494	2	464	0.050	0.114	1	458	0.073	0.100
385	439	2	390	0.050	0.124	1	402	0.089	0.100
330	384	3	384	0.048	0.140	1	347	0.112	0.100
275	329	3	322	0.050	0.168	1	292	0.146	0.100
220	274	3	257	0.050	0.222	1	238	0.194	0.099
166	219	3	195	0.049	0.302	1	184	0.265	0.099
111	165	3	127	0.050	0.409	1	130	0.369	0.099

P0=0.0100	ALFA=0.050	H1= 1.589	S=0.021715
P1=0.0400	BETA=0.100	H2= 2.040	ASN= 152

NATURAL TRUNCATION POINT= 350 — TRUE ALFA= 0.0478, TRUE BETA= 0.0979

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
304	349	1	226	0.0445	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
258	303	1	265	0.050	0.105	1	281	0.054	0.100
212	257	2	257	0.047	0.109	1	236	0.072	0.100
166	211	2	195	0.050	0.138	1	191	0.103	0.100
120	165	2	135	0.049	0.215	1	146	0.157	0.099
74	119	2	82	0.049	0.358	1	101	0.254	0.099

P0=0.0100	ALFA=0.050	H1= 1.364	S=0.024585
P1=0.0500	BETA=0.100	H2= 1.751	ASN= 93

NATURAL TRUNCATION POINT= 215 — TRUE ALFA= 0.0484, TRUE BETA= 0.0985

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
175	214	1	206	0.0463	0.0998

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
135	174	1	138	0.049	0.123	1	164	0.065	0.100
95	134	2	134	0.047	0.130	1	124	0.104	0.099
55	94	2	82	0.050	0.224	1	34	0.186	0.093

P0=0.0100	ALFA=0.050	H1= 1.221	S=0.028111
P1=0.0600	BETA=0.100	H2= 1.568	ASN= 70

NATURAL TRUNCATION POINT= 151 — TRUE ALFA= 0.0496, TRUE BETA= 0.0963

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
115	150	1	140	0.0460	0.0998

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
80	114	1	82	0.050	0.147	1	106	0.073	0.100
44	79	2	79	0.047	0.160	1	72	0.142	0.099

P0=0.0100	ALFA=0.050	H1= 1.121	S=0.031129
P1=0.0700	BETA=0.100	H2= 1.439	ASN= 53

NATURAL TRUNCATION POINT= 133 — TRUE ALFA= 0.0395, TRUE BETA= 0.0953

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
101	132	1	118	0.0360	0.0996

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
69	100	1	84	0.049	0.108	1	91	0.054	0.100
37	68	2	68	0.036	0.156	1	62	0.110	0.099

P0=0.0100	ALFA=0.050	H1= 1.046	S=0.034064
P1=0.0800	BETA=0.100	H2= 1.343	ASN= 42

NATURAL TRUNCATION POINT= 90	TRUE ALFA= 0.0475 TRUE BETA= 0.0972

SAMPLE NUMBER INTERVAL		HOLD ALFA AND BETA			
FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
61	89	1	85	0.0449	0.0998

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
31	60	1	26	0.050	0.209	1	57	0.091	0.099

P0=0.0100	ALFA=0.050	H1= 0.937	S=0.036932
P1=0.0900	BETA=0.100	H2= 1.267	ASN= 35

NATURAL TRUNCATION POINT= 81	TRUE ALFA= 0.0381 TRUE BETA= 0.0993

SAMPLE NUMBER INTERVAL		HOLD ALFA AND BETA			
FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
54	80	1	79	0.0372	0.0999

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
27	53	1	37	0.050	0.160	1	52	0.075	0.093

P0=0.0100	ALFA=0.050	H1= 0.939	S=0.039747
P1=0.1000	BETA=0.100	H2= 1.205	ASN= 29

NATURAL TRUNCATION POINT= 74	TRUE ALFA= 0.0320 TRUE BETA= 0.0986

SAMPLE NUMBER INTERVAL		HOLD ALFA AND BETA			
FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
49	73	1	71	0.0309	0.0999

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
24	48	1	28	0.049	0.128	1	47	0.063	0.099

P0=0.0150	ALFA=0.050	H1= 3.178	S=0.021659
P1=0.0300	BETA=0.100	H2= 4.080	ASN= 611

NATURAL TRUNCATION POINT= 1532 — TRUE ALFA= 0.0493, TRUE BETA= 0.0993

SAMPLE NUMBER INTERVAL FROM	TO	FOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1486	1531	2	1525	0.0464	0.1000
1440	1485	1	1459	0.0500	0.0994
1394	1439	2	1429	0.0485	0.1000
1348	1393	2	1381	0.0497	0.1000

SAMPLE NUMBER INTERVAL		FOLD ALFA				FOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1301	1347	2	1318	0.050	0.101	2	1334	0.051	0.100
1255	1300	2	1255	0.050	0.102	2	1287	0.053	0.100
1209	1254	3	1254	0.050	0.102	2	1240	0.055	0.100
1163	1208	3	1194	0.050	0.104	2	1193	0.057	0.100
1117	1162	3	1136	0.050	0.106	2	1146	0.060	0.100
1071	1116	3	1078	0.050	0.110	2	1099	0.063	0.100
1024	1070	4	1070	0.049	0.112	2	1053	0.067	0.100
978	1023	4	1022	0.050	0.114	2	1006	0.071	0.100
932	977	4	967	0.050	0.119	2	960	0.076	0.100
886	931	4	913	0.050	0.126	2	913	0.081	0.100
840	885	4	860	0.050	0.134	2	867	0.088	0.100
794	839	4	807	0.050	0.144	2	821	0.095	0.100
747	793	4	755	0.050	0.155	2	774	0.104	0.100
701	746	4	704	0.050	0.169	2	728	0.114	0.100
655	700	5	700	0.049	0.173	2	682	0.125	0.100
609	654	5	653	0.050	0.186	2	636	0.139	0.100
563	608	5	603	0.050	0.205	2	590	0.155	0.100
517	562	5	553	0.050	0.228	2	544	0.173	0.099
470	516	5	504	0.050	0.254	2	498	0.194	0.099
424	469	5	455	0.049	0.285	2	452	0.219	0.099
378	423	5	407	0.050	0.319	2	406	0.248	0.099
332	377	5	359	0.049	0.360	2	360	0.281	0.100
286	331	5	312	0.050	0.404	2	314	0.321	0.100
240	285	5	265	0.049	0.456	2	269	0.370	0.099
193	239	5	220	0.050	0.509	2	223	0.426	0.099
147	192	5	175	0.050	0.571	2	177	0.495	0.093

P0=0.0150	ALFA=0.050		H1= 2.237	S=0.025541
P1=0.0400	BETA=0.100		H2= 2.872	ASN= 259

NATURAL TRUNCATION POINT= 635 TRUE ALFA= 0.0472
TRUE BETA= 0.0991

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACCEPTANCE RULE M	BEST TRUNC POINT	AND BETA TRUE ALFA	TRUE BETA
597	635	1	606	0.0453	0.1000
558	596	1	567	0.0481	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
519	557	2	557	0.047	0.101	1	527	0.052	0.100
480	518	2	515	0.050	0.102	1	487	0.057	0.100
440	479	2	457	0.050	0.107	1	448	0.064	0.100
401	439	2	404	0.050	0.117	1	408	0.073	0.100
362	400	3	400	0.049	0.119	1	369	0.086	0.100
323	361	3	354	0.050	0.133	1	329	0.102	0.100
284	322	3	306	0.050	0.157	1	290	0.124	0.100
245	283	3	260	0.050	0.192	1	251	0.153	0.100
206	244	3	216	0.050	0.240	1	212	0.192	0.100
166	205	3	173	0.050	0.305	1	174	0.247	0.099
127	165	3	131	0.049	0.394	1	135	0.320	0.099
88	126	3	91	0.049	0.504	1	97	0.426	0.097

P0=0.0150	ALFA=0.050		H1= 1.815	S=0.029174
P1=0.0500	BETA=0.100		H2= 2.331	ASN= 149

NATURAL TRUNCATION POINT= 371 TRUE ALFA= 0.0448
TRUE BETA= 0.0984

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACCEPTANCE RULE M	BEST TRUNC POINT	AND BETA TRUE ALFA	TRUE BETA
337	370	1	346	0.0421	0.1000
303	336	1	314	0.0470	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
268	302	2	302	0.044	0.103	1	280	0.054	0.100
234	267	2	267	0.050	0.104	1	247	0.066	0.100
200	233	2	216	0.050	0.123	1	213	0.083	0.100
166	199	2	171	0.049	0.160	1	179	0.110	0.100
131	165	3	165	0.045	0.177	1	146	0.153	0.099
97	130	3	130	0.050	0.223	1	112	0.218	0.099
63	96	3	91	0.050	0.327	1	79	0.323	0.097

P0=0.0150	ALFA=0.050	H1= 1.571	S=0.032631
P1=0.0600	BETA=0.100	H2= 2.017	ASN= 100

NATURAL TRUNCATION POINT= 233 — TRUE ALFA= 0.0472, TRUE BETA= 0.0973

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
202	232	1	214	0.0433	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
171	201	1	178	0.050	0.103	1	186	0.053	0.100
141	170	2	170	0.046	0.109	1	156	0.070	0.100
110	140	2	131	0.050	0.134	1	127	0.101	0.099
79	109	2	90	0.049	0.212	1	97	0.155	0.098
49	78	2	55	0.050	0.352	1	67	0.252	0.093

P0=0.0150	ALFA=0.050	H1= 1.409	S=0.035958
P1=0.0700	BETA=0.100	H2= 1.809	ASN= 73

NATURAL TRUNCATION POINT= 179 — TRUE ALFA= 0.0425, TRUE BETA= 0.0973

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
151	178	1	165	0.0396	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
123	150	1	138	0.050	0.100	1	140	0.051	0.100
95	122	2	122	0.041	0.115	1	113	0.072	0.099
67	94	2	91	0.049	0.141	1	86	0.115	0.099
40	66	2	54	0.048	0.264	1	58	0.200	0.100

P0=0.0150	ALFA=0.050	H1= 1.292	S=0.039194
P1=0.0800	BETA=0.100	H2= 1.659	ASN= 56

NATURAL TRUNCATION POINT= 136 — TRUE ALFA= 0.0431, TRUE BETA= 0.0991

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
110	135	1	121	0.0417	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
85	109	1	94	0.050	0.109	1	104	0.057	0.100
59	84	2	84	0.041	0.128	1	79	0.091	0.099
33	58	2	54	0.048	0.196	1	53	0.167	0.093

P0=0.0150	ALFA=0.050		H1= 1.203	S=0.042330
P1=0.0900	BETA=0.100		H2= 1.545	ASN= 45

NATURAL TRUNCATION POINT= 100	TRUE ALFA= 0.0486 TRUE BETA= 0.0952

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
76	99	1	90	0.0437	0.1000

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
53	75	1	55	0.050	0.142	1	69	0.070	0.100
29	52	2	52	0.045	0.161	1	47	0.138	0.099

P0=0.0150	ALFA=0.050		H1= 1.133	S=0.045410
P1=0.1000	BETA=0.100		H2= 1.454	ASN= 38

NATURAL TRUNCATION POINT= 92	TRUE ALFA= 0.0413 TRUE BETA= 0.1003

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
69	91	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
47	68	1	56	0.050	0.118	1	67	0.062	0.100
25	46	2	46	0.037	0.167	1	44	0.119	0.099

P0=0.0200	ALFA=0.050	H1= 5.415	S=0.024672
P1=0.0300	BETA=0.100	H2= 6.953	ASN=1564

NATURAL TRUNCATION POINT= 419[illegible]	TRUE ALFA= 0.0498
	TRUE BETA= 0.0995

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
4152	4191	3	4170	0.0478	0.1000
4111	4151	3	4129	0.0480	0.1000
4071	4110	3	4087	0.0482	0.1000
4030	4070	3	4046	0.0484	0.1000
3990	4029	3	4005	0.0486	0.1000
3949	3989	2	3955	0.0500	0.0997
3903	3948	3	3923	0.0491	0.1000
3868	3907	3	3882	0.0494	0.1000
3827	3867	3	3841	0.0497	0.1000

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
3787	3826	3	3799	0.050	0.100	3	3800	0.050	0.100
3746	3786	3	3749	0.050	0.100	3	3759	0.050	0.100
3706	3745	4	3745	0.050	0.100	3	3718	0.051	0.100
3665	3705	4	3700	0.050	0.100	3	3677	0.051	0.100
3625	3664	4	3651	0.050	0.101	3	3636	0.051	0.100
3584	3624	4	3602	0.050	0.101	3	3595	0.052	0.100
3544	3583	4	3554	0.050	0.101	3	3555	0.052	0.100
3503	3543	4	3506	0.050	0.101	3	3514	0.053	0.100
3463	3502	5	3502	0.050	0.102	3	3473	0.053	0.100
3422	3462	5	3458	0.050	0.102	3	3432	0.054	0.100
3382	3421	5	3411	0.050	0.102	3	3391	0.054	0.100
3341	3381	5	3364	0.050	0.103	3	3351	0.055	0.100
3300	3340	5	3318	0.050	0.103	3	3310	0.055	0.100
3260	3299	5	3271	0.050	0.104	3	3269	0.056	0.100
3219	3259	5	3225	0.050	0.104	3	3228	0.056	0.100
3179	3218	5	3179	0.050	0.105	3	3188	0.057	0.100
3138	3178	6	3178	0.050	0.105	3	3147	0.058	0.100
3098	3137	6	3133	0.050	0.105	3	3106	0.058	0.100
3057	3097	6	3087	0.050	0.106	3	3065	0.059	0.100
3017	3056	6	3042	0.050	0.107	3	3025	0.060	0.100
2976	3016	6	2997	0.050	0.108	3	2984	0.061	0.100
2936	2975	6	2952	0.050	109	3	2943	0.062	0.100
2895	2935	6	2907	0.050	0.110	3	2903	0.063	0.100
2855	2894	6	2862	0.050	0.111	3	2862	0.064	0.100
2814	2854	6	2817	0.050	0.112	3	2821	0.065	0.100
2774	2813	7	2813	0.050	0.113	3	2781	0.066	0.100
2733	2773	7	2773	0.050	0.113	3	2740	0.067	0.100
2692	2732	7	2728	0.050	0.115	3	2700	0.068	0.100
2652	2691	7	2684	0.050	0.116	3	2659	0.069	0.100
2611	2651	7	2640	0.050	0.117	3	2618	0.071	0.100
2571	2610	7	2596	0.050	0.119	3	2578	0.072	0.100
2530	2570	7	2552	0.050	0.121	3	2537	0.074	0.100
2490	2529	7	2508	0.050	0.123	3	2496	0.075	0.100
2449	2489	7	2464	0.050	0.125	3	2456	0.077	0.100
2409	2448	7	2421	0.050	0.127	3	2415	0.078	0.100
2368	2408	7	2377	0.050	0.129	3	2375	0.080	0.100
2328	2367	7	2334	0.050	0.132	3	2334	0.082	0.100
2287	2327	7	2291	0.050	0.134	3	2293	0.084	0.100
2247	2286	7	2248	0.050	0.137	3	2253	0.086	0.100
2206	2246	8	2246	0.050	0.137	3	2212	0.089	0.100
2166	2205	8	2205	0.050	0.140	3	2172	0.091	0.100
2125	2165	8	2162	0.050	0.143	3	2131	0.093	0.100

2084	2124	8	2119	0.050	0.146	3	2091	0.096	0.100
2044	2083	8	2076	0.050	0.149	3	2050	0.099	0.100
2003	2043	8	2033	0.050	0.153	3	2010	0.102	0.100
1963	2002	8	1991	0.050	0.157	3	1969	0.105	0.100
1922	1962	8	1948	0.050	0.161	3	1928	0.108	0.100
1882	1921	8	1906	0.050	0.165	3	1888	0.111	0.100
1841	1881	8	1863	0.050	0.170	3	1847	0.115	0.100
1801	1840	8	1821	0.050	0.175	3	1807	0.118	0.100
1760	1800	8	1779	0.050	0.179	3	1766	0.122	0.100
1720	1759	8	1736	0.050	0.185	3	1726	0.127	0.100
1679	1719	8	1694	0.050	0.191	3	1685	0.131	0.100
1639	1678	8	1652	0.050	0.197	3	1645	0.136	0.100
1598	1638	8	1610	0.050	0.203	3	1604	0.140	0.100
1558	1597	8	1569	0.050	0.209	3	1564	0.145	0.100
1517	1557	8	1527	0.050	0.216	3	1523	0.151	0.100
1477	1516	8	1485	0.050	0.224	3	1483	0.156	0.100
1436	1476	8	1443	0.050	0.232	3	1442	0.162	0.100
1395	1435	8	1402	0.050	0.239	3	1402	0.169	0.100
1355	1394	8	1360	0.050	0.248	3	1361	0.175	0.100
1314	1354	8	1319	0.050	0.257	3	1321	0.182	0.100
1274	1313	8	1277	0.050	0.267	3	1281	0.190	0.100
1233	1273	8	1236	0.050	0.276	3	1240	0.197	0.100
1193	1232	8	1194	0.050	0.287	3	1200	0.206	0.100
1152	1192	8	1153	0.050	0.298	3	1159	0.214	0.100
1112	1151	8	1112	0.050	0.309	3	1119	0.223	0.100
1071	1111	8	1071	0.050	0.321	3	1079	0.234	0.100
1031	1070	9	1070	0.050	0.322	3	1038	0.243	0.100
990	1030	9	1030	0.050	0.333	3	998	0.254	0.100
950	989	9	989	0.050	0.346	3	958	0.266	0.099
909	949	9	948	0.050	0.360	3	917	0.277	0.100
869	908	9	907	0.050	0.375	3	877	0.291	0.100
828	868	9	866	0.050	0.390	3	837	0.305	0.099
787	827	9	825	0.050	0.406	3	796	0.318	0.100
747	786	9	784	0.050	0.424	3	756	0.334	0.100
706	746	9	744	0.050	0.439	3	716	0.350	0.099
666	705	9	703	0.049	0.459	3	675	0.366	0.100
625	665	9	663	0.050	0.476	3	635	0.385	0.099
585	624	9	623	0.050	0.495	3	594	0.403	0.100
544	584	9	583	0.050	0.515	3	554	0.425	0.099
504	543	9	543	0.050	0.536	3	513	0.446	0.100
463	503	8	464	0.050	0.579	3	473	0.471	0.099
423	462	8	425	0.050	0.601	3	432	0.495	0.099
382	422	8	386	0.050	0.624	3	391	0.522	0.099
342	381	8	348	0.050	0.647	3	349	0.548	0.100
301	341	8	310	0.050	0.671	3	308	0.581	0.098
261	300	8	273	0.050	0.694	3	265	0.613	0.099
220	260	8	236	0.050	0.720	3	221	0.647	0.100

PC=0.0200	ALFA=0.050	H1= 3.154	S=0.028883
P1=0.0400	BETA=0.100	H2= 4.045	ASN= 455

NATURAL TRUNCATION POINT= 1148 TRUE ALFA= 0.0490
TRUE BETA= 0.0990

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1114	1147	2	1133	0.0456	0.1000
1079	1113	2	1098	0.0465	0.1000
1044	1078	2	1064	0.0476	0.1000
1010	1043	2	1029	0.0489	0.1000

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
975	1009	2	991	0.050	0.100	2	995	0.050	0.100
940	974	2	943	0.050	0.101	2	960	0.052	0.100
906	939	3	939	0.049	0.102	2	925	0.054	0.100
871	905	3	897	0.050	0.103	2	891	0.056	0.100
837	870	3	853	0.050	0.106	2	856	0.059	0.100
802	836	3	810	0.050	0.109	2	822	0.062	0.100
767	801	3	768	0.050	0.113	2	787	0.066	0.100
733	766	4	766	0.050	0.114	2	752	0.070	0.100
698	732	4	726	0.050	0.118	2	718	0.074	0.100
664	697	4	686	0.050	0.124	2	683	0.080	0.100
629	663	4	646	0.050	0.132	2	649	0.086	0.100
594	628	4	606	0.050	0.142	2	614	0.094	0.100
560	593	4	567	0.050	0.153	2	579	0.102	0.100
525	559	4	529	0.050	0.166	2	545	0.112	0.100
490	524	4	490	0.050	0.184	2	510	0.123	0.100
456	489	5	489	0.049	0.186	2	476	0.137	0.100
421	455	5	453	0.050	0.202	2	441	0.152	0.100
387	420	5	415	0.049	0.226	2	407	0.171	0.100
352	386	5	379	0.050	0.250	2	372	0.191	0.100
317	351	5	342	0.050	0.281	2	338	0.216	0.100
283	316	5	306	0.050	0.315	2	304	0.246	0.099
248	282	5	270	0.050	0.355	2	270	0.281	0.099
214	247	5	234	0.049	0.403	2	235	0.319	0.100
179	213	5	199	0.049	0.454	2	201	0.367	0.099
144	178	5	165	0.049	0.508	2	167	0.425	0.098
110	143	5	131	0.049	0.573	2	132	0.492	0.099

P0=0.0200	ALFA=0.050	H1= 2.376	S=0.032317
P1=0.0500	BETA=0.100	H2= 3.051	ASN= 228

NATURAL TRUNCATION POINT= 560 — TRUE ALFA= 0.0481, TRUE BETA= 0.0988

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
530	559	1	532	0.0455	0.0999
500	529	1	501	0.0480	0.1000

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
469	499	2	499	0.048	0.100	1	471	0.051	0.100
439	468	2	464	0.050	0.101	1	440	0.055	0.100
408	438	2	419	0.050	0.105	1	410	0.061	0.100
378	407	2	378	0.050	0.112	1	379	0.068	0.100
347	377	3	377	0.049	0.113	1	349	0.077	0.100
317	346	3	339	0.050	0.123	1	319	0.089	0.100
286	316	3	302	0.050	0.139	1	288	0.103	0.100
256	285	3	265	0.049	0.163	1	258	0.123	0.099
225	255	3	230	0.049	0.194	1	227	0.147	0.100
195	224	3	196	0.049	0.226	1	197	0.180	0.100
164	194	4	194	0.048	0.244	1	167	0.223	0.099
134	163	4	163	0.050	0.289	1	137	0.279	0.099
103	133	4	130	0.049	0.362	1	107	0.354	0.098
73	102	4	99	0.050	0.444	1	77	0.457	0.093

P0=0.0200	ALFA=0.050	H1= 1.974	S=0.036546
P1=0.0600	BETA=0.100	H2= 2.535	ASN= 142

NATURAL TRUNCATION POINT= 356 — TRUE ALFA= 0.0455, TRUE BETA= 0.0977

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
328	355	2	352	0.0394	0.0999
301	327	1	326	0.0499	0.0973

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
273	300	1	273	0.050	0.101	1	277	0.051	0.100
246	272	2	272	0.049	0.101	1	251	0.059	0.100
219	245	2	232	0.050	0.111	1	225	0.070	0.100
191	218	2	196	0.050	0.129	1	198	0.086	0.100
164	190	3	190	0.046	0.140	1	171	0.108	0.100
137	163	3	161	0.049	0.164	1	145	0.142	0.099
109	136	3	129	0.050	0.214	1	118	0.190	0.099
82	108	3	98	0.049	0.293	1	91	0.260	0.099
55	81	3	68	0.048	0.411	1	65	0.369	0.096

P0=0.0200	ALFA=0.050	H1= 1.725	S=0.040125
P1=0.0700	BETA=0.100	H2= 2.215	ASN= 99

NATURAL TRUNCATION POINT= 243 TRUE ALFA= 0.0451
TRUE BETA= 0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
213	242	1	242	0.0449	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
193	217	1	209	0.050	0.100	1	211	0.050	0.100
168	192	2	192	0.044	0.106	1	184	0.060	0.100
143	167	2	165	0.050	0.110	1	157	0.074	0.100
118	142	2	129	0.049	0.138	1	131	0.098	0.100
93	117	2	97	0.049	0.195	1	106	0.136	0.099
68	92	2	68	0.049	0.292	1	81	0.198	0.099
43	67	3	67	0.047	0.302	1	56	0.297	0.100

P0=0.0200	ALFA=0.050	H1= 1.553	S=0.043587
P1=0.0800	BETA=0.100	H2= 1.994	ASN= 74

NATURAL TRUNCATION POINT= 174 TRUE ALFA= 0.0467
TRUE BETA= 0.0977

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
151	173	1	161	0.0432	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
128	150	1	134	0.050	0.103	1	140	0.053	0.100
105	127	2	127	0.049	0.110	1	117	0.070	0.100
82	104	2	98	0.050	0.133	1	95	0.100	0.099
59	81	2	68	0.049	0.206	1	72	0.152	0.100
36	58	2	41	0.049	0.353	1	50	0.249	0.093

P0=0.0200	ALFA=0.050	H1= 1.427	S=0.046953
P1=0.0900	BETA=0.100	H2= 1.831	ASN= 58

NATURAL TRUNCATION POINT= 137 — TRUE ALFA= 0.0442, TRUE BETA= 0.0971

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	FOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
116	136	1	126	0.0407	0.0998

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	FOLD ALFA: ACPT RULE M	FOLD ALFA: BEST TRUNC POINT	FOLD ALFA: TRUE ALFA	FOLD ALFA: TRUE BETA	FOLD BETA: ACPT RULE M	FOLD BETA: BEST TRUNC POINT	FOLD BETA: TRUE ALFA	FOLD BETA: TRUE BETA
95	115	1	102	0.049	0.103	1	106	0.052	0.100
73	94	2	94	0.043	0.115	1	86	0.075	0.100
52	72	2	69	0.050	0.147	1	66	0.122	0.093
31	51	2	41	0.049	0.276	1	45	0.211	0.093

P0=0.0200	ALFA=0.050	H1= 1.329	S=0.050253
P1=0.1000	BETA=0.100	H2= 1.706	ASN= 47

NATURAL TRUNCATION POINT= 107 — TRUE ALFA= 0.0474, TRUE BETA= 0.0991

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	FOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
87	106	1	96	0.0422	0.0995

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	FOLD ALFA: ACPT RULE M	FOLD ALFA: BEST TRUNC POINT	FOLD ALFA: TRUE ALFA	FOLD ALFA: TRUE BETA	FOLD BETA: ACPT RULE M	FOLD BETA: BEST TRUNC POINT	FOLD BETA: TRUE ALFA	FOLD BETA: TRUE BETA
67	86	1	69	0.049	0.118	1	78	0.059	0.100
47	66	2	66	0.045	0.128	1	60	0.098	0.099
27	46	2	41	0.049	0.216	1	41	0.180	0.098

AD-A094 613 NAVAL POSTGRADUATE SCHOOL MONTEREY CA F/G 12/1
TRUNCATION AND ACCEPTANCE RULES FOR SEQUENTIAL TESTS FOR A BERN--ETC(U)
SEP 80 J PETERSEN

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PO=0.0250	ALFA=0.050		H1= 4.637	S=0.031934
P1=0.0400	BETA=0.100		H2= 5.953	ASN= 892

NATURAL TRUNCATION POINT= 2338 TRUE ALFA= 0.0499
TRUE BETA= 0.0992

SAMPLE NUMBER INTERVAL		F O L D A L F A A N D B E T A			
FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
2306	2337	2	2325	0.0470	0.1000
2275	2305	1	2285	0.0500	0.0993
2244	2274	3	2262	0.0477	0.1000
2212	2243	3	2231	0.0480	0.1000
2181	2211	2	2193	0.0500	0.0995
2150	2180	2	2151	0.0500	0.0996
2119	2149	2	2137	0.0493	0.1000
2087	2118	2	2106	0.0498	0.1000

SAMPLE NUMBER INTERVAL		F O L D A L F A				F O L D B E T A			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
2056	2086	3	2070	0.050	0.100	3	2075	0.050	0.100
2025	2055	3	2031	0.050	0.100	3	2044	0.051	0.100
1993	2024	4	2024	0.050	0.101	3	2012	0.051	0.100
1962	1992	4	1992	0.050	0.101	3	1981	0.052	0.100
1931	1961	4	1954	0.050	0.101	3	1950	0.053	0.100
1899	1930	4	1916	0.050	0.102	3	1918	0.053	0.100
1868	1898	4	1879	0.050	0.103	3	1887	0.054	0.100
1837	1867	4	1842	0.050	0.103	3	1856	0.055	0.100
1805	1836	4	1805	0.050	0.104	3	1825	0.056	0.100
1774	1804	5	1804	0.050	0.104	3	1793	0.057	0.100
1743	1773	5	1769	0.050	0.105	3	1762	0.058	0.100
1711	1742	5	1733	0.050	0.106	3	1731	0.059	0.100
1680	1710	5	1697	0.050	0.107	3	1699	0.060	0.100
1649	1679	5	1661	0.050	0.109	3	1668	0.061	0.100
1617	1648	5	1626	0.050	0.110	3	1637	0.063	0.100
1586	1616	5	1590	0.050	0.112	3	1605	0.064	0.100
1555	1585	5	1555	0.050	0.113	3	1574	0.066	0.100
1524	1554	6	1554	0.050	0.114	3	1543	0.067	0.100
1492	1523	6	1520	0.050	0.115	3	1512	0.069	0.100
1461	1491	6	1485	0.050	0.118	3	1480	0.071	0.100
1430	1460	6	1451	0.050	0.120	3	1449	0.073	0.100
1398	1429	6	1416	0.050	0.123	3	1418	0.075	0.100
1367	1397	6	1382	0.050	0.125	3	1386	0.077	0.100
1336	1366	6	1348	0.050	0.128	3	1355	0.080	0.100
1304	1335	6	1314	0.050	0.132	3	1324	0.082	0.100
1273	1303	6	1280	0.050	0.135	3	1293	0.085	0.100
1242	1272	6	1246	0.050	0.140	3	1261	0.088	0.100
1210	1241	6	1213	0.050	0.143	3	1230	0.091	0.100
1179	1209	6	1179	0.050	0.148	3	1199	0.095	0.100
1148	1178	7	1178	0.050	0.149	3	1167	0.098	0.100
1116	1147	7	1146	0.050	0.153	3	1136	0.103	0.100
1085	1115	7	1112	0.050	0.159	3	1105	0.107	0.100
1054	1084	7	1079	0.050	0.165	3	1074	0.112	0.100
1023	1053	7	1046	0.050	0.171	3	1042	0.116	0.100
991	1022	7	1013	0.050	0.178	3	1011	0.122	0.100
960	990	7	980	0.050	0.185	3	980	0.128	0.100
929	959	7	947	0.050	0.194	3	948	0.133	0.100
897	928	7	914	0.050	0.203	3	917	0.140	0.100
866	896	7	882	0.050	0.211	3	886	0.147	0.100
835	865	7	849	0.050	0.221	3	855	0.155	0.100
803	834	7	817	0.050	0.231	3	823	0.162	0.100
772	802	7	784	0.050	0.243	3	792	0.171	0.100
741	771	7	752	0.050	0.255	3	761	0.180	0.100

709	740	7	720	0.050	0.267	3	730	0.191	0.100
678	708	7	688	0.050	0.281	3	699	0.202	0.099
647	677	7	655	0.050	0.298	3	667	0.212	0.100
615	646	7	623	0.049	0.313	3	636	0.225	0.100
584	614	7	591	0.049	0.331	3	605	0.238	0.100
553	583	7	560	0.050	0.346	3	574	0.253	0.100
521	552	7	528	0.050	0.366	3	543	0.269	0.099
490	520	7	496	0.050	0.387	3	512	0.286	0.099
459	489	7	465	0.050	0.407	3	481	0.304	0.099
428	458	7	433	0.049	0.431	3	450	0.324	0.099
396	427	7	402	0.050	0.454	3	418	0.343	0.100
365	395	7	371	0.050	0.478	3	387	0.366	0.100
334	364	7	340	0.050	0.504	3	356	0.392	0.099
302	333	7	309	0.050	0.533	3	325	0.420	0.099
271	301	7	278	0.049	0.564	3	294	0.450	0.098
240	270	7	248	0.049	0.593	3	262	0.480	0.099
208	239	7	218	0.049	0.625	3	231	0.518	0.093
177	207	7	189	0.049	0.655	3	198	0.553	0.100
146	176	7	160	0.049	0.689	3	166	0.598	0.093

P0=0.0250	ALFA=0.050	H1= 3.131	S=0.036121
P1=0.0500	BETA=0.100	H2= 4.019	ASN= 361

NATURAL TRUNCATION POINT= 919 TRUE ALFA= 0.0487
TRUE BETA= 0.0987

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
890	917	2	899	0.0448	0.1000
862	889	2	873	0.0458	0.0999
835	861	1	836	0.0499	0.0990
807	834	2	819	0.0481	0.0999
779	806	2	792	0.0496	0.0999

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
752	778	2	756	0.050	0.101	2	764	0.051	0.100
724	751	3	751	0.049	0.102	2	737	0.053	0.100
696	723	3	719	0.050	0.103	2	710	0.055	0.100
669	695	3	684	0.050	0.105	2	682	0.058	0.100
641	668	3	649	0.050	0.108	2	655	0.061	0.100
613	640	3	615	0.050	0.112	2	628	0.065	0.100
585	612	4	612	0.049	0.113	2	600	0.068	0.100
558	584	4	582	0.050	0.117	2	573	0.073	0.100
530	557	4	549	0.050	0.123	2	545	0.079	0.100
502	529	4	517	0.050	0.131	2	518	0.085	0.100
475	501	4	485	0.050	0.141	2	490	0.092	0.100
447	474	4	454	0.050	0.152	2	463	0.101	0.100
419	446	4	423	0.050	0.166	2	435	0.111	0.100
392	418	4	393	0.050	0.181	2	408	0.123	0.099
364	391	5	391	0.049	0.185	2	380	0.135	0.100
336	363	5	363	0.050	0.199	2	352	0.150	0.100
309	335	5	333	0.050	0.222	2	325	0.169	0.099
281	308	5	303	0.050	0.249	2	297	0.189	0.100
253	280	5	274	0.050	0.278	2	270	0.215	0.099
226	252	5	245	0.050	0.313	2	243	0.245	0.099
198	225	5	216	0.049	0.354	2	215	0.277	0.100
170	197	5	188	0.050	0.397	2	188	0.318	0.099
143	169	5	160	0.050	0.448	2	161	0.367	0.098
115	142	5	132	0.049	0.508	2	133	0.422	0.099
87	114	5	105	0.049	0.571	2	105	0.489	0.100

P0=0.0250	ALFA=0.050	H1= 2.468	S=0.040034
P1=0.0600	BETA=0.100	H2= 3.169	ASN= 203

NATURAL TRUNCATION POINT= 486 TRUE ALFA= 0.0459
TRUE BETA= 0.0980

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
461	485	2	479	0.0441	0.1000
436	460	1	438	0.0499	0.0991
411	435	2	432	0.0487	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
386	410	2	400	0.050	0.102	2	408	0.052	0.100
361	385	2	365	0.050	0.106	2	393	0.056	0.100
337	360	3	360	0.048	0.109	2	359	0.061	0.100
312	336	3	333	0.050	0.113	2	335	0.068	0.100
287	311	3	301	0.050	0.124	2	310	0.076	0.100
262	286	3	271	0.050	0.138	2	296	0.087	0.100
237	261	3	241	0.049	0.160	2	261	0.100	0.100
212	236	3	213	0.050	0.185	2	236	0.116	0.100
187	211	4	211	0.048	0.191	2	211	0.137	0.100
162	186	4	185	0.050	0.220	2	186	0.163	0.101
137	161	4	158	0.050	0.264	2	161	0.196	0.101
112	136	4	131	0.050	0.322	1	113	0.300	0.099
87	111	4	105	0.050	0.391	1	89	0.379	0.097
62	86	4	79	0.048	0.482	1	64	0.477	0.097

P0=0.0250	ALFA=0.050	H1= 2.091	S=0.043890
P1=0.0700	BETA=0.100	H2= 2.684	ASN= 133

NATURAL TRUNCATION POINT= 322 TRUE ALFA= 0.0480
TRUE BETA= 0.0977

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
299	321	2	320	0.0414	0.0999
276	298	1	284	0.0493	0.0986

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
253	275	2	275	0.047	0.100	1	255	0.053	0.100
230	252	2	247	0.050	0.103	1	233	0.060	0.100
208	229	2	215	0.050	0.113	1	211	0.070	0.100
185	207	2	185	0.050	0.130	1	189	0.084	0.100
162	184	3	184	0.049	0.132	1	167	0.104	0.099
139	161	3	157	0.050	0.156	1	144	0.130	0.100
117	138	3	130	0.050	0.198	1	122	0.168	0.099
94	116	3	104	0.050	0.259	1	99	0.217	0.100
71	93	3	79	0.049	0.343	1	77	0.291	0.099
48	70	3	55	0.049	0.457	1	55	0.398	0.097

PC=0.0250	ALFA=0.050	H1= 1.843	S=0.047546
P1=0.0800	BETA=0.100	H2= 2.367	ASN= 96

NATURAL TRUNCATION POINT= 229 TRUE ALFA= 0.0479
TRUE BETA= 0.0991

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
208	228	1	219	0.0459	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
186	207	1	192	0.050	0.101	1	197	0.052	0.100
165	185	2	185	0.047	0.104	1	175	0.060	0.100
144	164	2	159	0.050	0.111	1	154	0.073	0.099
123	143	2	130	0.050	0.133	1	132	0.091	0.100
102	122	2	103	0.049	0.175	1	111	0.120	0.099
81	101	3	101	0.047	0.186	1	90	0.164	0.099
60	80	3	78	0.049	0.246	1	69	0.230	0.099
39	59	3	55	0.050	0.349	1	49	0.338	0.096

PC=0.0250	ALFA=0.050	H1= 1.668	S=0.051109
P1=0.0900	BETA=0.100	H2= 2.141	ASN= 73

NATURAL TRUNCATION POINT= 170 TRUE ALFA= 0.0483
TRUE BETA= 0.0969

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
151	169	1	156	0.0440	0.0998

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
131	150	1	134	0.050	0.102	1	138	0.052	0.100
111	130	2	130	0.047	0.106	1	119	0.065	0.100
92	110	2	104	0.050	0.124	1	101	0.089	0.099
72	91	2	78	0.049	0.174	1	82	0.125	0.098
53	71	2	54	0.048	0.274	1	63	0.187	0.097
33	52	2	33	0.049	0.420	1	44	0.289	0.096

PO=0.0250	ALFA=0.050	H1= 1.535	S=0.054587
P1=0.1000	BETA=0.100	H2= 1.971	ASN= 53

NATURAL TRUNCATION POINT= 139 TRUE ALFA= 0.0458
TRUE BETA= 0.0950

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
120	138	2	139	0.0354	0.0998
102	119	1	108	0.0493	0.0992

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
84	101	2	101	0.044	0.107	1	91	0.066	0.100
65	83	2	79	0.050	0.127	1	74	0.095	0.100
47	64	2	54	0.048	0.206	1	57	0.150	0.093
29	46	2	33	0.049	0.346	1	40	0.250	0.095

P0=0.0050	ALFA=0.100	H1= 3.147	S=0.007213
P1=0.0100	BETA=0.100	H2= 3.147	ASN=1382

NATURAL TRUNCATION POINT= 3486 — TRUE ALFA= 0.0971, TRUE BETA= 0.1001

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
3347	3485	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-
3208	3346	1	3296	0.0992	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
3070	3207	1	3077	0.100	0.101	1	3121	0.102	0.100
2931	3069	2	3069	0.100	0.101	1	2960	0.105	0.100
2793	2930	2	2872	0.100	0.102	1	2806	0.109	0.100
2654	2792	2	2683	0.100	0.105	1	2656	0.114	0.100
2515	2653	3	2653	0.098	0.107	1	2509	0.139	0.095
2377	2514	3	2502	0.100	0.109	2	2508	0.119	0.100
2238	2376	3	2328	0.100	0.115	2	2362	0.126	0.100
2100	2237	3	2159	0.100	0.122	2	2218	0.134	0.100
1961	2099	3	1995	0.100	0.131	2	2075	0.144	0.100
1823	1960	3	1833	0.100	0.143	2	1933	0.155	0.100
1684	1822	4	1822	0.098	0.147	2	1791	0.169	0.100
1545	1683	4	1675	0.100	0.158	2	1650	0.185	0.100
1407	1544	4	1519	0.100	0.176	2	1509	0.204	0.100
1268	1406	4	1366	0.100	0.199	2	1369	0.227	0.100
1130	1267	4	1215	0.100	0.225	2	1230	0.255	0.100
991	1129	4	1065	0.100	0.259	2	1090	0.287	0.100
852	990	4	918	0.100	0.297	2	951	0.326	0.100
714	851	4	772	0.100	0.344	2	812	0.373	0.100
575	713	4	628	0.100	0.399	2	673	0.429	0.099
437	574	4	486	0.100	0.464	2	532	0.456	0.100

P0=0.0050	ALFA=0.100	H1= 1.568	S=0.010839
P1=0.0200	BETA=0.100	H2= 1.568	ASN= 229

NATURAL TRUNCATION POINT= 514 — TRUE ALFA= 0.0960, TRUE BETA= 0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
422	513	1	512	0.0959	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
330	421	1	348	0.100	0.119	1	401	0.119	0.103
237	329	2	329	0.092	0.132	1	302	0.166	0.100
145	236	2	217	0.100	0.155	1	206	0.257	0.100

P0=0.0050	ALFA=0.100	H1= 1.209	S=0.014003
P1=0.0300	BETA=0.100	H2= 1.209	ASN= 105

NATURAL TRUNCATION POINT= 230	TRUE ALFA= 0.0886
	TRUE BETA= 0.0993

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
158	229	=UNDEF.=	=UNDEF.=	=UNDEF.=	=UNDEF.=

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
87	157	1	108	0.099	0.171	1	149	0.146	0.099

P0=0.0050	ALFA=0.100	H1= 1.039	S=0.016929
P1=0.0400	BETA=0.100	H2= 1.039	ASN= 64

NATURAL TRUNCATION POINT= 121	TRUE ALFA= 0.0972
	TRUE BETA= 0.0981

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
62	120	1	119	0.0955	0.0996

P0=0.0050	ALFA=0.100	H1= 0.935	S=0.019703
P1=0.0500	BETA=0.100	H2= 0.935	ASN= 45

NATURAL TRUNCATION POINT= 99	TRUE ALFA= 0.0762
	TRUE BETA= 0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
48	98	=UNDEF.=	=UNDEF.=	=UNDEF.=	=UNDEF.=

P0=0.0050	ALFA=0.100	H1= 0.864	S=0.022371
P1=0.0600	BETA=0.100	H2= 0.864	ASN= 34

NATURAL TRUNCATION POINT= 84	TRUE ALFA= 0.0687
	TRUE BETA= 0.1012

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
39	83	=UNDEF.=	=UNDEF.=	=UNDEF.=	=UNDEF.=

P0=0.0050	ALFA=0.100	H1= 0.812	S=0.024963
P1=0.0700	BETA=0.100	H2= 0.812	ASN= 27

NATURAL TRUNCATION POINT= 73 TRUE ALFA= 0.0618
TRUE BETA= 0.1010

SAMPLE NUMBER INTERVAL FROM	TO	H O L D ACCEPTANCE RULE M	A L F A BEST TRUNC POINT	A N D TRUE ALFA	B E T A TRUE BETA
33	72	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-

P0=0.0050	ALFA=0.100	H1= 0.771	S=0.027489
P1=0.0800	BETA=0.100	H2= 0.771	ASN= 22

NATURAL TRUNCATION POINT= 65 TRUE ALFA= 0.0591
TRUE BETA= 0.0972

SAMPLE NUMBER INTERVAL FROM	TO	H O L D ACCEPTANCE RULE M	A L F A BEST TRUNC POINT	A N D TRUE ALFA	B E T A TRUE BETA
29	64	1	62	0.0580	0.0995

P0=0.0050	ALFA=0.100	H1= 0.737	S=0.029969
P1=0.0900	BETA=0.100	H2= 0.737	ASN= 18

NATURAL TRUNCATION POINT= 58 TRUE ALFA= 0.0539
TRUE BETA= 0.1017

SAMPLE NUMBER INTERVAL FROM	TO	H O L D ACCEPTANCE RULE M	A L F A BEST TRUNC POINT	A N D TRUE ALFA	B E T A TRUE BETA
25	57	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-

P0=0.0050	ALFA=0.100	H1= 0.710	S=0.032411
P1=0.1000	BETA=0.100	H2= 0.710	ASN= 16

NATURAL TRUNCATION POINT= 53 TRUE ALFA= 0.0505
TRUE BETA= 0.1043

SAMPLE NUMBER INTERVAL FROM	TO	H O L D ACCEPTANCE RULE M	A L F A BEST TRUNC POINT	A N D TRUE ALFA	B E T A TRUE BETA
22	52	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-

P0=0.0100	ALFA=0.100		H1= 3.124	S=0.014435
P1=0.0200	BETA=0.100		H2= 3.124	ASN= 686

NATURAL TRUNCATION POINT= 1672 — TRUE ALFA= 0.0999, TRUE BETA= 0.0996

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1602	1671	1	1638	0.0983	0.1000

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
1533	1601	1	1543	0.100	0.100	1	1554	0.101	0.100
1464	1532	2	1532	0.099	0.101	1	1475	0.104	0.100
1395	1463	2	1439	0.100	0.102	1	1399	0.108	0.100
1325	1394	2	1343	0.100	0.105	1	1325	0.113	0.100
1256	1324	3	1324	0.097	0.107	2	1324	0.113	0.100
1187	1255	3	1253	0.100	0.108	2	1252	0.118	0.100
1117	1186	3	1165	0.100	0.114	2	1179	0.125	0.100
1048	1116	3	1081	0.100	0.121	2	1107	0.133	0.100
979	1047	3	998	0.100	0.130	2	1036	0.143	0.100
910	978	3	917	0.100	0.142	2	965	0.154	0.100
840	909	4	909	0.097	0.147	2	894	0.167	0.100
771	839	4	838	0.100	0.157	2	824	0.184	0.100
702	770	4	760	0.100	0.175	2	754	0.203	0.100
633	701	4	683	0.100	0.197	2	684	0.226	0.100
563	632	4	608	0.100	0.223	2	614	0.253	0.100
494	562	4	533	0.100	0.256	2	544	0.285	0.100
425	493	4	459	0.100	0.296	2	475	0.325	0.099
355	424	4	386	0.099	0.342	2	405	0.371	0.100
286	354	4	314	0.099	0.398	2	336	0.428	0.099
217	285	4	243	0.099	0.463	2	266	0.496	0.099

P0=0.0100	ALFA=0.100		H1= 1.964	S=0.018233
P1=0.0300	BETA=0.100		H2= 1.964	ASN= 215

NATURAL TRUNCATION POINT= 492 — TRUE ALFA= 0.0978, TRUE BETA= 0.0993

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
437	491	1	481	0.0960	0.1000

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
382	436	1	392	0.100	0.105	1	416	0.108	0.100
327	381	2	381	0.095	0.109	1	356	0.126	0.100
273	326	2	311	0.100	0.125	1	298	0.155	0.100
218	272	2	239	0.100	0.166	1	242	0.199	0.099
163	217	2	172	0.099	0.239	1	186	0.266	0.099
108	162	2	110	0.099	0.355	1	131	0.370	0.099

P0=0.0100	ALFA=0.100	H1= 1.551	S=0.021715
P1=0.0400	BETA=0.100	H2= 1.551	ASN= 113

NATURAL TRUNCATION POINT= 256 TRUE ALFA= 0.0949 TRUE BETA= 0.0983

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
210	255	1	249	0.0928	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
164	209	1	174	0.099	0.117	1	198	0.117	0.100
118	163	2	163	0.090	0.132	1	149	0.163	0.100
72	117	2	108	0.099	0.154	1	102	0.254	0.100

P0=0.0100	ALFA=0.100	H1= 1.331	S=0.024985
P1=0.0500	BETA=0.100	H2= 1.331	ASN= 72

NATURAL TRUNCATION POINT= 174 TRUE ALFA= 0.0842 TRUE BETA= 0.0998

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
134	173	1	169	0.0824	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
94	133	1	113	0.100	0.113	1	126	0.113	0.100
54	93	2	93	0.076	0.162	1	85	0.187	0.099

P0=0.0100	ALFA=0.100	H1= 1.192	S=0.028111
P1=0.0600	BETA=0.100	H2= 1.192	ASN= 51

NATURAL TRUNCATION POINT= 114 TRUE ALFA= 0.0867 TRUE BETA= 0.0991

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
78	113	1	112	0.0854	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
43	77	1	54	0.098	0.167	1	73	0.142	0.100

P0=0.0100	ALFA=0.100	H1= 1.094	S=0.031129
P1=0.0700	BETA=0.100	H2= 1.094	ASN= 39

NATURAL TRUNCATION POINT= 100 TRUE ALFA= 0.0686
TRUE BETA= 0.0983

SAMPLE NUMBER INTERVAL		HOLD ALFA AND BETA			
FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
68	99	1	97	0.0670	0.0997

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
36	67	1	57	0.099	0.117	1	64	0.112	0.092

P0=0.0100	ALFA=0.100	H1= 1.021	S=0.034064
P1=0.0800	BETA=0.100	H2= 1.021	ASN= 31

NATURAL TRUNCATION POINT= 60 TRUE ALFA= 0.0945
TRUE BETA= 0.0995

SAMPLE NUMBER INTERVAL		HOLD ALFA AND BETA			
FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
30	59	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-

P0=0.0100	ALFA=0.100	H1= 0.963	S=0.036922
P1=0.0900	BETA=0.100	H2= 0.963	ASN= 26

NATURAL TRUNCATION POINT= 54 TRUE ALFA= 0.0850
TRUE BETA= 0.0942

SAMPLE NUMBER INTERVAL		HOLD ALFA AND BETA			
FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
27	53	1	51	0.0804	0.0993

P0=0.0100	ALFA=0.100	H1= 0.916	S=0.039747
P1=0.1000	BETA=0.100	H2= 0.916	ASN= 21

NATURAL TRUNCATION POINT= 49 TRUE ALFA= 0.0785
TRUE BETA= 0.0938

SAMPLE NUMBER INTERVAL		HOLD ALFA AND BETA			
FROM	TO	ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
24	48	1	46	0.0744	0.0990

P0=0.0150	ALFA=0.100	H1= 3.101	S=0.021659
P1=0.0200	BETA=0.100	H2= 3.101	ASN= 423

NATURAL TRUNCATION POINT= 1113 — TRUE ALFA= 0.0994, TRUE BETA= 0.0992

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1067	1112	1	1079	0.0963	0.1000
1021	1066	1	1027	0.0994	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
975	1020	2	1020	0.098	0.100	1	977	0.103	0.100
929	974	2	961	0.100	0.101	1	929	0.107	0.100
882	928	2	897	0.100	0.104	2	928	0.107	0.100
836	881	2	836	0.100	0.108	2	879	0.111	0.100
790	835	3	835	0.100	0.108	2	831	0.117	0.100
744	789	3	777	0.100	0.113	2	783	0.123	0.100
698	743	3	21	0.100	0.120	2	736	0.132	0.100
652	697	3	66	0.100	0.129	2	689	0.141	0.100
605	651	3	612	0.100	0.140	2	642	0.152	0.100
559	604	3	559	0.100	0.155	2	595	0.166	0.100
513	558	4	558	0.099	0.156	2	548	0.182	0.100
467	512	4	507	0.100	0.173	2	501	0.201	0.100
421	466	4	456	0.100	0.195	2	455	0.224	0.100
375	420	4	405	0.099	0.223	2	408	0.250	0.100
328	374	4	355	0.099	0.256	2	362	0.284	0.100
282	327	4	306	0.099	0.294	2	316	0.323	0.099
236	281	4	258	0.100	0.339	2	270	0.371	0.099
190	235	4	209	0.098	0.398	2	223	0.425	0.100
144	189	4	162	0.095	0.462	2	177	0.495	0.093

P0=0.0150	ALFA=0.100	H1= 2.183	S=0.025541
P1=0.0400	BETA=0.100	H2= 2.183	ASN= 191

NATURAL TRUNCATION POINT= 477 — TRUE ALFA= 0.0923, TRUE BETA= 0.0997

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
438	476	1	471	0.0915	0.1000
399	437	1	423	0.0976	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
360	398	1	362	0.100	0.104	1	378	0.106	0.100
321	359	2	359	0.099	0.105	1	336	0.119	0.100
282	320	2	305	0.100	0.116	1	295	0.137	0.100
243	281	2	253	0.099	0.139	1	255	0.162	0.100
203	242	2	205	0.100	0.176	1	215	0.198	0.100
164	202	3	202	0.096	0.184	1	175	0.248	0.100
125	163	3	159	0.099	0.233	1	136	0.321	0.099
86	124	3	115	0.098	0.318	1	97	0.425	0.093

P0=0.0150	ALFA=0.100	H1= 1.772	S=0.029174
P1=0.0500	BETA=0.100	H2= 1.772	ASN= 110

NATURAL TRUNCATION POINT= 267 TRUE ALFA= 0.0910
TRUE BETA= 0.0991

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
233	266	1	259	0.0889	0.1000

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
198	232	1	216	0.099	0.101	1	221	0.102	0.100
164	197	2	197	0.088	0.113	1	184	0.124	0.100
130	163	2	160	0.099	0.125	1	148	0.159	0.100
96	129	2	114	0.098	0.181	1	114	0.221	0.099
61	95	2	73	0.099	0.286	1	79	0.321	0.100

P0=0.0150	ALFA=0.100	H1= 1.533	S=0.032631
P1=0.0600	BETA=0.100	H2= 1.533	ASN= 74

NATURAL TRUNCATION POINT= 170 TRUE ALFA= 0.0939
TRUE BETA= 0.0997

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
139	169	1	165	0.0934	0.0999

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
109	138	1	116	0.099	0.116	1	133	0.117	0.099
78	108	2	108	0.089	0.133	1	100	0.163	0.099
47	77	2	72	0.098	0.192	1	68	0.252	0.099

P0=0.0150	ALFA=0.100	H1= 1.375	S=0.035958
P1=0.0700	BETA=0.100	H2= 1.375	ASN= 54

NATURAL TRUNCATION POINT= 122 TRUE ALFA= 0.0936
TRUE BETA= 0.0966

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
94	121	1	115	0.0890	0.0996

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
67	93	1	73	0.099	0.130	1	87	0.124	0.099
39	66	2	66	0.085	0.162	1	59	0.202	0.100

P0=0.0150	ALFA=0.100	H1= 1.261	S=0.039184
P1=0.0800	BETA=0.100	H2= 1.261	ASN= 42

NATURAL TRUNCATION POINT= 109 TRUE ALFA= 0.0751
TRUE BETA= 0.0982

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
84	108	1	104	0.0727	0.0999
58	83	1	79	0.0992	0.0991

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
33	57	1	35	0.097	0.219	1	53	0.167	0.098

P0=0.0150	ALFA=0.100	H1= 1.174	S=0.042330
P1=0.0900	BETA=0.100	H2= 1.174	ASN= 34

NATURAL TRUNCATION POINT= 75 TRUE ALFA= 0.0851
TRUE BETA= 0.0991

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
52	74	1	74	0.0841	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
23	51	1	36	0.098	0.164	1	49	0.142	0.093

P0=0.0150	ALFA=0.100	H1= 1.106	S=0.043410
P1=0.1000	BETA=0.100	H2= 1.106	ASN= 28

NATURAL TRUNCATION POINT= 69 TRUE ALFA= 0.0721
TRUE BETA= 0.0973

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
47	68	1	66	0.0695	0.0994

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
25	46	1	37	0.097	0.128	1	44	0.119	0.099

PO=0.0200	ALFA=0.100	H1= 5.285	S=0.024672
P1=0.0300	BETA=0.100	H2= 5.285	ASN=1100

NATURAL TRUNCATION POINT= 3093 TRUE ALFA= 0.0996
TRUE BETA= 0.0995

SAMPLE NUMBER INTERVAL FROM	TO	FCLC ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
3052	3092	2	3076	0.0973	0.1000
3011	3051	2	3031	0.0977	0.1000
2971	3010	2	2987	0.0982	0.1000
2930	2970	2	2943	0.0987	0.1000
2890	2929	2	2899	0.0993	0.1000
2849	2889	2	2856	0.0999	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	FCLC ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HCLC BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
2809	2848	3	2848	0.099	0.100	2	2813	0.101	0.100
2768	2808	3	2804	0.100	0.100	2	2770	0.101	0.100
2728	2767	3	2753	0.100	0.101	2	2729	0.102	0.100
2687	2727	3	2702	0.100	0.101	3	2727	0.102	0.100
2647	2686	3	2653	0.100	0.101	3	2685	0.103	0.100
2606	2646	4	2646	0.099	0.102	3	2643	0.104	0.100
2566	2605	4	2604	0.100	0.102	3	2601	0.105	0.100
2525	2565	4	2555	0.100	0.102	3	2559	0.105	0.100
2485	2524	4	2507	0.100	0.103	3	2517	0.106	0.100
2444	2484	4	2460	0.100	0.104	3	2476	0.108	0.100
2403	2443	4	2413	0.100	0.104	3	2434	0.109	0.100
2363	2402	4	2366	0.100	0.105	3	2392	0.110	0.100
2322	2362	5	2362	0.099	0.106	3	2351	0.111	0.100
2282	2321	5	2319	0.100	0.106	3	2310	0.113	0.100
2241	2281	5	2273	0.100	0.108	3	2268	0.114	0.100
2201	2240	5	2227	0.100	0.109	3	2227	0.116	0.100
2160	2200	5	2181	0.100	0.110	3	2186	0.118	0.100
2120	2159	5	2136	0.100	0.112	3	2144	0.119	0.100
2079	2119	5	2091	0.100	0.113	3	2103	0.121	0.100
2039	2078	5	2046	0.100	0.115	3	2062	0.123	0.100
1998	2038	5	2001	0.100	0.117	3	2021	0.125	0.100
1958	1997	6	1997	0.099	0.118	3	1980	0.128	0.100
1917	1957	6	1957	0.100	0.119	3	1939	0.130	0.100
1877	1916	6	1912	0.100	0.121	3	1898	0.133	0.100
1836	1876	6	1868	0.100	0.124	3	1857	0.136	0.100
1795	1835	6	1824	0.100	0.126	3	1816	0.139	0.100
1755	1794	6	1780	0.100	0.129	3	1775	0.142	0.100
1714	1754	6	1736	0.100	0.132	3	1734	0.145	0.100
1674	1713	6	1693	0.100	0.136	3	1694	0.149	0.100
1633	1673	6	1649	0.100	0.139	3	1653	0.153	0.100
1593	1632	6	1606	0.100	0.143	3	1612	0.156	0.100
1552	1592	6	1563	0.100	0.147	3	1571	0.161	0.100
1512	1551	6	1520	0.100	0.151	3	1530	0.165	0.100
1471	1511	6	1477	0.100	0.156	3	1490	0.170	0.100
1431	1470	6	1434	0.100	0.161	3	1449	0.175	0.100
1390	1430	6	1391	0.100	0.167	3	1408	0.181	0.100
1350	1389	7	1389	0.099	0.169	3	1367	0.186	0.100
1309	1349	7	1348	0.100	0.173	3	1327	0.193	0.100
1269	1308	7	1306	0.100	0.179	3	1286	0.199	0.100
1228	1268	7	1263	0.100	0.186	3	1245	0.206	0.100
1188	1227	7	1221	0.100	0.193	3	1205	0.214	0.100
1147	1187	7	1179	0.100	0.200	3	1164	0.222	0.100
1106	1146	7	1137	0.100	0.208	3	1123	0.230	0.100
1066	1105	7	1095	0.100	0.217	3	1083	0.240	0.100
1025	1065	7	1053	0.100	0.226	3	1042	0.249	0.100

985	1024	7	1011	0.100	0.236	3	1002	0.260	0.099
944	984	7	969	0.100	0.247	3	961	0.270	0.100
904	943	7	927	0.099	0.259	3	920	0.281	0.100
863	903	7	886	0.100	0.269	3	830	0.294	0.100
823	862	7	844	0.100	0.283	3	839	0.307	0.100
782	822	7	802	0.099	0.297	3	799	0.322	0.099
742	781	7	761	0.100	0.311	3	758	0.336	0.100
701	741	7	720	0.100	0.325	3	717	0.351	0.100
661	700	7	678	0.099	0.343	3	677	0.369	0.099
620	660	7	637	0.099	0.359	3	636	0.386	0.100
580	619	7	596	0.100	0.377	3	596	0.406	0.099
539	579	7	555	0.100	0.397	3	555	0.426	0.099
493	538	7	514	0.100	0.417	3	514	0.447	0.100
458	497	7	473	0.099	0.440	3	473	0.470	0.100
417	457	7	432	0.099	0.464	3	432	0.494	0.100
377	416	7	392	0.099	0.487	3	391	0.521	0.099
336	376	7	352	0.100	0.511	3	350	0.551	0.099
296	335	7	312	0.100	0.539	3	308	0.581	0.099
255	295	7	272	0.099	0.570	3	265	0.613	0.099
215	254	7	223	0.098	0.600	3	221	0.647	0.100

P0=0.0200	ALFA=0.100	H1= 3.073	S=0.028683
P1=0.0400	BETA=0.100	H2= 3.078	ASN= 337

NATURAL TRUNCATION POINT= 834	TRUE ALFA= 0.0987 TRUE BETA= 0.0990

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
799	833	1	805	0.0957	0.1000
765	798	1	767	0.0984	0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
730	764	2	764	0.098	0.100	1	730	0.102	0.100
696	729	2	722	0.100	0.101	2	729	0.101	0.100
661	695	2	674	0.100	0.103	2	694	0.106	0.100
626	660	2	628	0.100	0.107	2	658	0.110	0.100
592	625	3	625	0.099	0.108	2	622	0.116	0.100
557	591	3	584	0.100	0.112	2	596	0.122	0.100
522	556	3	541	0.100	0.119	2	551	0.130	0.100
483	521	3	500	0.100	0.128	2	516	0.140	0.100
453	487	3	459	0.099	0.140	2	480	0.151	0.100
419	452	3	420	0.100	0.153	2	445	0.164	0.100
384	418	4	418	0.098	0.156	2	410	0.180	0.100
349	383	4	380	0.099	0.172	2	375	0.199	0.100
315	348	4	342	0.099	0.194	2	341	0.223	0.099
280	314	4	304	0.099	0.221	2	306	0.250	0.099
246	279	4	267	0.100	0.252	2	271	0.282	0.100
211	245	4	230	0.100	0.291	2	237	0.323	0.098
176	210	4	193	0.099	0.340	2	202	0.369	0.099
142	175	4	157	0.099	0.395	2	167	0.424	0.099
107	141	4	122	0.099	0.458	2	132	0.492	0.099

P0=0.0200	ALFA=0.100	H1= 2.319	S=0.032817
P1=0.0500	BETA=0.100	H2= 2.319	ASN= 169

NATURAL TRUNCATION POINT= 406	TRUE ALFA= 0.0973
	TRUE BETA= 0.0986

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
376	405	1	389	0.0938	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
345	375	1	355	0.100	0.100	1	356	0.100	0.100
315	344	2	344	0.096	0.103	1	324	0.109	0.100
284	314	2	307	0.099	0.107	1	292	0.120	0.100
254	283	2	265	0.099	0.119	1	261	0.136	0.100
224	253	2	227	0.100	0.137	1	230	0.158	0.100
193	223	3	223	0.096	0.145	1	199	0.187	0.100
163	192	3	190	0.100	0.167	1	168	0.226	0.100
132	162	3	154	0.099	0.214	1	138	0.281	0.099
102	131	3	120	0.099	0.275	1	107	0.352	0.100
71	101	3	87	0.099	0.360	1	77	0.456	0.098

P0=0.0200	ALFA=0.100	H1= 1.927	S=0.036545
P1=0.0600	BETA=0.100	H2= 1.927	ASN= 105

NATURAL TRUNCATION POINT= 245	TRUE ALFA= 0.0965
	TRUE BETA= 0.0983

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
217	244	1	234	0.0923	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
190	216	1	197	0.100	0.103	1	204	0.104	0.100
163	189	2	189	0.094	0.109	1	176	0.123	0.100
135	162	2	155	0.099	0.123	1	148	0.152	0.099
103	134	2	119	0.099	0.164	1	120	0.195	0.099
81	107	2	86	0.098	0.235	1	92	0.261	0.099
53	80	2	55	0.098	0.351	1	65	0.366	0.099

P0=0.0200	ALFA=0.100	H1= 1.684	S=0.040125
P1=0.0700	BETA=0.100	H2= 1.684	ASN= 73

NATURAL TRUNCATION POINT= 167 — TRUE ALFA= 0.0954, TRUE BETA= 0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
142	166	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
117	141	1	123	0.100	0.110	1	136	0.113	0.100
92	116	2	116	0.091	0.122	1	109	0.146	0.099
67	91	2	86	0.099	0.156	1	32	0.200	0.100
42	66	2	55	0.100	0.251	1	57	0.301	0.093

P0=0.0200	ALFA=0.100	H1= 1.516	S=0.043587
P1=0.0800	BETA=0.100	H2= 1.516	ASN= 55

NATURAL TRUNCATION POINT= 127 — TRUE ALFA= 0.0938, TRUE BETA= 0.0990

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
104	126	1	124	0.0921	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
81	103	1	87	0.099	0.115	1	98	0.115	0.100
58	80	2	80	0.088	0.134	1	74	0.160	0.099
35	57	2	54	0.098	0.189	1	51	0.252	0.097

P0=0.0200	ALFA=0.100	H1= 1.392	S=0.046959
P1=0.0900	BETA=0.100	H2= 1.392	ASN= 43

NATURAL TRUNCATION POINT= 94 — TRUE ALFA= 0.0971, TRUE BETA= 0.0979

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
73	93	1	91	0.0943	0.0995

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA: ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
51	72	1	55	0.099	0.138	1	68	0.131	0.099
30	50	2	50	0.085	0.171	1	46	0.213	0.093

P0=0.0200	ALFA=0.100	H1= 1.297	S=0.050253
P1=0.1000	BETA=0.100	H2= 1.297	ASN= 35

NATURAL TRUNCATION POINT= 86	TRUE ALFA= 0.0806
	TRUE BETA= 0.1000

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
66	85	-UNDEF.-	-UNDEF.-	-UNDEF.-	-UNDEF.-

SAMPLE NUMBER INTERVAL FROM	TO	HOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	HOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
46	65	1	57	0.058	0.111	1	63	0.110	0.100
26	45	1	26	0.095	0.251	1	42	0.181	0.099

P0=0.0250	ALFA=0.100	H1= 4.526	S=0.031934
P1=0.0400	BETA=0.100	H2= 4.526	ASN= 662

NATURAL TRUNCATION POINT= 1739 — TRUE ALFA= 0.0990, TRUE BETA= 0.0994

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
1708	1738	2	1730	0.0960	0.1000
1677	1707	2	1695	0.0966	0.1000
1645	1676	1	1648	0.1000	0.0994
1614	1644	2	1628	0.0983	0.1000
1583	1613	2	1595	0.0992	0.1000

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
1551	1582	2	1559	0.100	0.100	2	1562	0.100	0.100
1520	1550	3	1550	0.099	0.101	2	1529	0.101	0.100
1489	1519	3	1518	0.100	0.101	2	1496	0.102	0.100
1457	1488	3	1478	0.100	0.101	2	1464	0.104	0.100
1426	1456	3	1439	0.100	0.102	2	1432	0.105	0.100
1395	1425	3	1401	0.100	0.103	2	1399	0.107	0.100
1363	1394	3	1363	0.100	0.104	2	1367	0.109	0.100
1332	1362	4	1362	0.100	0.104	2	1335	0.110	0.100
1301	1331	4	1326	0.100	0.105	2	1303	0.112	0.100
1270	1300	4	1289	0.100	0.107	2	1271	0.115	0.100
1233	1269	4	1252	0.100	0.109	2	1239	0.117	0.100
1207	1237	4	1216	0.100	0.111	2	1207	0.119	0.100
1176	1206	4	1180	0.100	0.113	3	1206	0.119	0.100
1144	1175	4	1145	0.100	0.115	3	1175	0.122	0.100
1113	1143	5	1143	0.099	0.116	3	1143	0.125	0.100
1082	1112	5	1110	0.100	0.118	3	1112	0.129	0.100
1050	1081	5	1075	0.100	0.121	3	1080	0.132	0.100
1019	1049	5	1040	0.100	0.125	3	1049	0.136	0.100
988	1018	5	1005	0.100	0.129	3	1017	0.140	0.100
955	987	5	971	0.100	0.133	3	986	0.145	0.100
925	955	5	937	0.100	0.138	3	954	0.150	0.100
894	924	5	902	0.100	0.144	3	922	0.155	0.100
862	893	5	869	0.100	0.149	3	891	0.162	0.100
831	861	5	835	0.100	0.156	3	859	0.168	0.100
800	830	5	801	0.099	0.164	3	828	0.175	0.100
769	799	6	799	0.098	0.166	3	796	0.182	0.100
737	768	6	768	0.100	0.172	3	765	0.191	0.100
706	736	6	735	0.100	0.180	3	734	0.200	0.099
675	705	6	702	0.100	0.189	3	702	0.209	0.100
643	674	6	669	0.100	0.200	3	671	0.220	0.099
612	642	6	636	0.100	0.211	3	639	0.231	0.100
581	611	6	603	0.100	0.224	3	608	0.244	0.100
549	580	6	570	0.099	0.238	3	577	0.259	0.099
518	548	6	538	0.100	0.252	3	545	0.272	0.100
487	517	6	505	0.099	0.269	3	514	0.289	0.099
455	486	6	473	0.100	0.285	3	482	0.305	0.100
424	454	6	441	0.100	0.303	3	451	0.325	0.099
393	423	6	408	0.099	0.327	3	420	0.347	0.099
361	392	6	376	0.099	0.349	3	388	0.368	0.100
330	360	6	344	0.099	0.373	3	357	0.393	0.099
299	329	6	312	0.099	0.400	3	326	0.422	0.098
267	298	6	281	0.100	0.426	3	294	0.449	0.099
236	266	6	249	0.099	0.459	3	262	0.480	0.100
205	235	6	218	0.099	0.490	3	231	0.518	0.098
174	204	6	187	0.099	0.526	3	198	0.552	0.100
142	173	6	156	0.098	0.567	3	166	0.598	0.098

P0=0.0250	ALFA=0.100	H1= 3.055	S=0.036121
P1=0.0500	BETA=0.100	H2= 3.055	ASN= 263

NATURAL TRUNCATION POINT= 666 TRUE ALFA= 0.0982
TRUE BETA= 0.0989

SAMPLE NUMBER INTERVAL FROM	TO	FOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
639	665	1	642	0.0950	0.0999
611	638	1	612	0.0976	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	FOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	FOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
583	610	2	610	0.097	0.100	1	583	0.101	0.100
556	582	2	579	0.100	0.100	2	582	0.101	0.100
528	555	2	540	0.100	0.103	2	554	0.105	0.100
500	527	2	503	0.100	0.106	2	525	0.109	0.100
473	499	3	499	0.098	0.108	2	496	0.114	0.100
445	472	3	468	0.100	0.111	2	468	0.121	0.100
417	444	3	433	0.099	0.118	2	440	0.129	0.100
390	416	3	400	0.099	0.127	2	412	0.139	0.100
362	389	3	368	0.100	0.138	2	384	0.150	0.100
334	361	3	336	0.100	0.152	2	356	0.163	0.100
307	333	4	333	0.097	0.157	2	328	0.179	0.099
279	306	4	305	0.100	0.169	2	300	0.198	0.100
251	278	4	274	0.100	0.191	2	272	0.220	0.100
224	250	4	243	0.099	0.220	2	244	0.247	0.100
196	223	4	213	0.098	0.253	2	217	0.282	0.099
168	195	4	184	0.099	0.289	2	189	0.320	0.099
140	167	4	155	0.100	0.335	2	161	0.366	0.099
113	139	4	126	0.099	0.391	2	133	0.421	0.100
85	112	4	97	0.097	0.462	2	106	0.494	0.097

P0=0.0250	ALFA=0.100	H1= 2.409	S=0.040084
P1=0.0600	BETA=0.100	H2= 2.409	ASN= 150

NATURAL TRUNCATION POINT= 360 TRUE ALFA= 0.0981
TRUE BETA= 0.0985

SAMPLE NUMBER INTERVAL FROM	TO	FOLD ALFA AND BETA ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
335	359	1	344	0.0942	0.0999
310	334	1	317	0.0999	0.0999

SAMPLE NUMBER INTERVAL FROM	TO	FOLD ALFA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	FOLD BETA ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
285	309	2	309	0.096	0.102	1	291	0.108	0.100
260	284	2	278	0.100	0.105	1	265	0.118	0.100
235	259	2	244	0.100	0.115	1	240	0.132	0.099
210	234	2	212	0.100	[illegible]	1	214	0.149	0.100
185	209	3	209	0.096	0.137	1	189	0.173	0.099
160	184	3	181	0.099	0.157	1	164	0.205	0.099
135	159	3	152	0.099	0.191	1	139	0.248	0.093
110	134	3	124	0.099	0.238	1	114	0.304	0.098
86	109	3	96	0.097	0.307	1	89	0.378	0.097
61	85	3	70	0.099	0.387	1	64	0.477	0.097

P0=0.0250	ALFA=0.100	H1= 2.040	S=0.043380
P1=0.0700	BETA=0.100	H2= 2.040	ASN= 99

NATURAL TRUNCATION POINT= 229	TRUE ALFA= 0.0985 TRUE BETA= 0.0975

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
207	228	1	216	0.0932	0.0998

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
184	206	1	187	0.099	0.103	1	193	0.104	0.100
161	183	2	183	0.096	0.106	1	169	0.118	0.100
138	160	2	154	0.100	0.117	1	146	0.140	0.100
115	137	2	123	0.098	0.148	1	123	0.173	0.100
93	114	2	95	0.097	0.200	1	100	0.220	0.100
70	92	3	92	0.090	0.220	1	78	0.294	0.098
47	69	3	69	0.098	0.278	1	55	0.396	0.098

P0=0.0250	ALFA=0.100	H1= 1.799	S=0.047546
P1=0.0800	BETA=0.100	H2= 1.799	ASN= 71

NATURAL TRUNCATION POINT= 165	TRUE ALFA= 0.0966 TRUE BETA= 0.0994

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
144	164	1	162	0.0952	0.0999

SAMPLE NUMBER INTERVAL		HOLD ALFA				HOLD BETA			
FROM	TO	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA	ACPT RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
122	143	1	127	0.099	0.107	1	137	0.109	0.100
101	121	2	121	0.092	0.115	1	114	0.132	0.100
80	100	2	96	0.099	0.134	1	92	0.171	0.079
59	79	2	69	0.100	0.193	1	70	0.232	0.099
38	58	2	44	0.098	0.305	1	49	0.336	0.093

P0=0.0250	ALFA=0.100	H1= 1.628	S=0.051109
P1=0.0900	BETA=0.100	H2= 1.628	ASN= 54

NATURAL TRUNCATION POINT= 130	TRUE ALFA= 0.0910 TRUE BETA= 0.0990

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
111	129	1	127	0.0894	0.0997

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
91	110	1	99	0.099	0.105	1	105	0.106	0.100
71	90	2	90	0.086	0.120	1	84	0.135	0.100
52	70	2	69	0.099	0.142	1	64	0.190	0.093
32	51	2	43	0.096	0.244	1	44	0.286	0.099

P0=0.0250	ALFA=0.100	H1= 1.498	S=0.054587
P1=0.1000	BETA=0.100	H2= 1.498	ASN= 43

NATURAL TRUNCATION POINT= 101	TRUE ALFA= 0.0930 TRUE BETA= 0.0968

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA AND BETA: ACCEPTANCE RULE M	BEST TRUNC POINT	TRUE ALFA	TRUE BETA
83	100	1	95	0.0883	0.0995

SAMPLE NUMBER INTERVAL FROM	SAMPLE NUMBER INTERVAL TO	HOLD ALFA: ACPT RULE M	HOLD ALFA: BEST TRUNC POINT	HOLD ALFA: TRUE ALFA	HOLD ALFA: TRUE BETA	HOLD BETA: ACPT RULE M	HOLD BETA: BEST TRUNC POINT	HOLD BETA: TRUE ALFA	HOLD BETA: TRUE BETA
65	82	1	70	0.100	0.111	1	77	0.112	0.099
46	64	2	64	0.087	0.131	1	58	0.156	0.100
28	45	2	43	0.097	0.187	1	40	0.247	0.093

```
      IMPLICIT REAL*8 (A-H,O-Z)
      INTEGER*2 NREJCT(200)
      EXTERNAL BINOMI
      DIMENSION MACCPT(200),MREJCT(200)
      COMMON/A/PROB(200,2),P,Q,LAST,NEW,MAGIC,IP,INCACC /B/PMATRX(2,200,
     115),IX
      ZERO = 0.000000000000100
      NATURL=-1
      WRITE(6,666)
 10   READ(5,20) ALFA, BETA, PONE, PTWO, P
 20   FORMAT (5F10.4)
      IF(ALFA.LT.0) STOP
      IF(P.EQ.PONE) IP=1
      Q=1.000-P
      INCACC=0
      IF(P.EQ.PTWO) GO TO 135
      PSTOP = 1.000-ALFA
 100  DENOM = DLOG10(PTWO*(1.000-PONE)/(PONE*(1.000-PTWO)))
      H1 = (DLOG10((1.000-ALFA)/BETA))/DENOM
      H2 = (DLOG10((1.000-BETA)/ALFA))/DENOM
      S = DLOG10((1.000-PONE)/(1.000-PTWO))/DENOM
      IASN =(H1*H2/(S*(1.000-S)))
      WRITE(6,110)
 110  FORMAT('0',/)
      WRITE(6,112)
 112  FORMAT(' ',15X,'_________________________',13X,'_________________
     1___')
      WRITE(6,114) PONE, ALFA, H1, S
 114  FORMAT(' ',14X,'| P0=',F6.4,1X,'| ALFA=',F5.3,1X,'|',11X,'| H1=',F
     16.3,1X,'|S=',F8.6,'|')
      WRITE(6,116) PTWO, BETA, H2, IASN
 116  FORMAT(' ',14X,'| P1=',F6.4,1X,'| BETA=',F5.3,1X,'|',11X,'| H2=',F
     16.3,1X,'| ASN=',I4,1X,'|')
      WRITE(6,118)
 118  FORMAT('+',15X,'_________________________',13X,'_________________
     1___')
      HOOPS=H1+H2
      IF(HOOPS.LT.15.000) GO TO 140
      WRITE(6,130)
 130  FORMAT('0','THE SIZE OF MATRIX PMATRX IS NOT SUFFICIENT. CASE OMIT
     1TED.')
      READ(5,20) ALFA, BETA, PONE, PTWO, P
      READ(5,655) ISKIP
      GO TO 10
 135  IP=2
 140  PACCPT = 0.000
      LAST = 1
      NEW = 2
      MAGIC = 1
      DO 170 J= 1,2
      DO 160 I = 1,200
      PROB(I,J) = -1.000
 160  CONTINUE
 170  CONTINUE
C
C     BUILT ACCEPTANCE AND REJECTION ARRAYS
C
 200  N = 0
      LIMIT = 3 * IASN
      DO 210 I = 1,200
      X = (N+H1)/S
      MACCPT(I) = X
      DIFF = X-MACCPT(I)
      IF(DIFF.GT.ZERO) MACCPT(I) = MACCPT(I) + 1
      MA = MACCPT(I)
      IF(MA.GT.LIMIT) GO TO 250
      N = N + 1
 210  CONTINUE
      WRITE (6,215)
 215  FORMAT('0','ARRAY LENGTH OF MACCPT EXCEEDED. CASE OMITTED.')
      READ(5,20) ALFA, BETA, PONE, PTWO, P
      GO TO 10
 250  N = H2 + 1.0
```

```
      DIFF = R2 - N + 1.0
      IF(DIFF.GT.ZERO) N = N+1
      DO 260 I = 1,200
      NREJCT(I) = N
      X = (N - 1.000 - R2)/S
      MREJCT(I) = X + 1.0
      MR = MREJCT(I)
      IF(MR.GT.LIMIT) GO TO 295
      N = N+1
  260 CONTINUE
  295 ID = 0
      IX = 0
      IA = MREJCT(1)
      IB = MACCPT(1)
      IF(IA.GT.IB) GO TO 314
C
C     FROM ZERO TO R2
C
  300 ID = ID + 1
      NSTOP = NREJCT(1) - 1
      MNEW = MREJCT(1) - 1
      DO 310 I = 1,NSTOP
      NNEW = I - 1
      PROB(I,1) = BINOMI(MNEW,NNEW,P,Q)
  310 CONTINUE
      GO TO 320
C
C     FROM ZERO TO AC
C
  314 IX = IX + 1
      NSTOP = NREJCT(1) - 1
      MNEW = MACCPT(1)
      DO 318 I = 2 ,NSTOP
      NNEW = I - 1
      PROB(I,1) = BINOMI(MNEW,NNEW,P,Q)
      PMATRX(IB,IX,NNEW)=PROB(I,1)
  318 CONTINUE
      PACCPT = BINOMI(MNEW,0,P,Q)
      PMATRX(IB,IX,15)=PACCPT
      GO TO 375
C
C     FROM R TO R
C
  320 MCOMP = MACCPT(1)
      ID = ID + 1
      M = MREJCT(ID)
      IF(M.GT.MCOMP) GO TO 350
      NSTART = 0
      NSTOP = NREJCT(ID) - 2
      MIN = 0
      MAX = 0
      MARK = 1
      MOLD = MNEW
      MNEW = MREJCT(ID) - 1
      CALL GO (NSTART,NSTOP,MIN,MAX,MARK,MNEW,MOLD)
      GO TO 320
C
C     FROM R TO A
C
  350 ID = ID - 1
  351 IX = IX + 1
      NSTART=IX
      NSTOP = NREJCT(ID) - 1
      MIN=IX-1
      MAX = NSTART
      MARK = 1
      INDACC=1
      MOLD = MNEW
      MNEW = MACCPT(IX)
      CALL GO (NSTART,NSTOP,MIN,MAX,MARK,MNEW,MOLD)
      ACCPT = PROB(MIN,NEW) * BINOMI(MNEW-MOLD,0,P,Q)
      PACCPT = PACCPT + ACCPT
      PMATRX(IB,IX,15)=PACCPT
```

```
      IF(PACCPT.LT.PSTOP) GO TO 358
      NATURL=MACCPT(IX)
      GO TO 10
358   IF(MACCPT(IX).EQ.NATURL)  GO TO 400
      INDACC=0
C
C     FROM A TO R
C
 375  IO = IO + 1
      NSTART=IX
      NSTOP = MREJCT(IO) -2
      MIN = NSTART
      MAX = NSTART
      MARK = (-1)
      MOLD = MNEW
      MNEW = MREJCT(IO) - 1
      CALL GO (NSTART,NSTOP,MIN,MAX,MARK,MNEW,MOLD)
      GO TO 351
C
C     NATURAL TRUNCATION POINT
C
400   WRITE(6,405)
405   FORMAT(' ',15X,'_____________________________________________________
     1__________')
      PTRUEA=1.000-PMATRX(1,IX,15)
      WRITE(6,406) NATURL, PTRUEA
406   FORMAT(' ',14X,'|NATURAL TRUNCATION POINT=',I5,5X,'TRUE ALFA=',F7.
     14,3X,'|')
      PTRUEB=PMATRX(2,IX,15)
      WRITE(6,407) PTRUEB
407   FORMAT(' ',14X,'|',39X,'TRUE BETA=',F7.4,3X,'|')
      WRITE(6,408)
408   FORMAT('+',15X,'_____________________________________________________
     1__________')
410   IX=IX-1
      IIII=0
      TRUEAA=1.0
      TRUEAB=1.0
      IWATCH=0
      IF(IX.EQ.0) GO TO 650
      GO TO 570
418   WRITE(6,408)
      WRITE(6,405)
      WRITE(6,420)
420   FORMAT(' ',14X,'|SAMPLE NUMBER|    H O L D   A L F A    |    H O L D
     1B E T A    |')
      WRITE(6,422)
422   FORMAT(' ',14X,'|    INTERVAL    |ACPT|BEST |              |ACPT|BEST |
     1                 |')
      WRITE(6,424)
424   FORMAT(' ',14X,'|                       |RULE|TRUNC| TRUE| TRUE|RULE|TRUNC|
     1TRUE| TRUE|')
      WRITE(6,426)
426   FORMAT(' ',14X,'| FROM |   TO   |  M  |POINT| ALFA| BETA|  M  |POINT|
     1ALFA| BETA|')
      WRITE(6,408)
      GO TO 598
C
C     HOLD ALFA
C
500   IX=IX-1
      IIII=IIII+1
      IF(IX.EQ.0) GO TO 650
      TOTALP=PMATRX(1,IX,15)
      DO 510 I=1,14
      MALFA=I
      TOTALP=TOTALP+PMATRX(1,IX,I)
      IF(TOTALP.GE.PSTOP) GO TO 520
510   CONTINUE
520   IF(MALFA.GT.1) GO TO 550
      INCREM=(DLOG10(PSTOP-PMATRX(1,IX,15))-DLOG10(PMATRX(1,IX,1)))/DLOG
     110(1.000-PLNE)
      NCPTS=MACCPT(IX)+INCREM
```

```
      TRUEAA=1.000-TRUE(1,1,PONE,INCREM)
      TRUEAB=TRUE(2,1,PTWO,INCREM)
      GO TO 570
550   MLEFT=MACCPT(IX)
      MRIGHT=MACCPT(IX+1)
553   MIDDLE=(MLEFT+MRIGHT)*0.5
      TOTAL=TRUE(1,MALFA,PONE,MIDDLE-MACCPT(IX))
      IF(MIDDLE.EQ.MLEFT) GO TO 560
      IF(TOTAL.GE.FSTOP) MLEFT=MIDDLE
      IF(TOTAL.LT.FSTOP) MRIGHT=MIDDLE
      GO TO 553
560   TRUEAA=1.000-TOTAL
      NOPTS=MIDDLE
      TRUEAB=TRUE(2,MALFA,PTWO,MIDDLE-MACCPT(IX))
C
C     HOLD BETA
C
570   TOTALP=PMATRX(2,IX+1,15)
      IHOLDA=0
      IHOLDB=2
      IF(TOTALP.LT.BETA) GO TO 577
571   WRITE(6,405)
      WRITE(6,572)
      WRITE(6,573)
      WRITE(6,574)
      WRITE(6,408)
      IRIGHT=MACCPT(IX+1)-1
      WRITE(6,575) MACCPT(IX), IRIGHT
575   FORMAT(' ',14X,'|',I5,1X,'|',I5,1X,'| -UNDEF.-  | -UNDEF.-  |  -UNDE
     1F.-  |  -UNDEF.-  |')
      IWATCH=1
      GO TO 500
577   DO 580 I=1,14
      MBETA=I
      TOTALP=TOTALP+PMATRX(2,IX+1,I)
      IF(TOTALP.GT.BETA) GO TO 585
580   CONTINUE
585   IF(MBETA.GT.1) GO TO 590
      INCREM=1.0+((DLOG10(BETA-PMATRX(2,IX,15)) -DLOG10(PMATRX(2,IX,1)))
     1/DLOG10(1.000-PTWO))
      NOPTSS=MACCPT(IX)+INCREM
      IF(NOPTSS.GE.NATURL) GO TO 571
      TRUEBA=1.000-TRUE(1,1,PONE,INCREM)
      TRUEBB=TRUE(2,1,PTWO,INCREM)
      GO TO 596
590   MLEFT=MACCPT(IX)-1
      MRIGHT=MACCPT(IX+1)-1
593   MIDDLE=(MLEFT+MRIGHT+1)*0.5
      TOTAL=TRUE(2,MBETA,PTWO,MIDDLE-MACCPT(IX))
      IF(MIDDLE.EQ.MRIGHT) GO TO 595
      IF(TOTAL.GT.BETA) MLEFT=MIDDLE
      IF(TOTAL.LE.BETA) MRIGHT=MIDDLE
      GO TO 593
595   TRUEBB=TOTAL
      NOPTSS=MIDDLE
      TRUEBA=1.000-TRUE(1,MBETA,PONE,MIDDLE-MACCPT(IX))
596   IF(TRUEAA.LE.ALFA.AND.TRUEAB.LE.BETA) IHOLDA=1
      IF(TRUEBA.LE.ALFA.AND.TRUEBB.LE.BETA) IHOLDB=1
      IF(IHOLDA.EQ.1.OR.IHOLDB.EQ.1) GO TO 700
      IF(IWATCH.EQ.1) GO TO 418
598   IWATCH=0
C
C     OUTPUT AND RETURN
C
600   IRIGHT=MACCPT(IX+1)-1
      WRITE(6,605) MACCPT(IX), IRIGHT,          MALFA, NOPTS, TRUEAA, TRUE
     1AB, MBETA,NOPTSS, TRUEBA,  TRUEBB
605   FORMAT(' ',14X,'|',I5,1X,'|',I5,1X,'|',I3,1X,'|',I4,1X,'|',F5.3,'|
     1',F5.3,'|',I3,1X,'|',I4,1X,'|',F5.3,'|',F5.3,'|')
      IF(IIII.LE.50) GO TO 500
      WRITE(6,660)
      WRITE(6,110)
      IIII=-20
```

```
      GO TO 500
650   WRITE(6,408)
      READ(5,655) ISKIP
655   FORMAT(I1)
      IF(ISKIP.EQ.1) WRITE(6,660)
660   FORMAT('1')
      GO TO 10
C
C     HOLD ALFA AND BETA
C
700   IF(IWATCH.EQ.1) GO TO 710
      WRITE(6,405)
      WRITE(6,572)
      WRITE(6,573)
      WRITE(6,574)
      WRITE(6,408)
572   FORMAT(' ',14X,'|SAMPLE NUMBER|     H O L D     A L F A     A N D
     1B E T A    |')
573   FORMAT(' ',14X,'|    INTERVAL    |ACCEPTANCE|BEST TRUNC|      TRUE    |
     1    TRUE    |')
574   FORMAT(' ',14X,'| FROM  |  TO   |  RULE   M |   POINT   |     ALFA    |
     1    BETA    |')
710   IWATCH=1
      IRIGHT=MACCPT(IX+1)-1
      IF(IHOLDA.NE.IHOLDB) GO TO 720
      IF(NOPTSS.GE.NOPTS) WRITE(6,740) MACCPT(IX), IRIGHT, MALFA , NOPTS
     1,TRUEAA, TRUEAB
      IF(NOPTSS.LT.NOPTS) WRITE(6,740) MACCPT(IX), IRIGHT, MBETA, NOPTSS
     1, TRUEBA, TRUEBB
740   FORMAT(' ',14X,'|',I5,1X,'|',I5,1X,'|',I6,4X,'|',I8,2X,'|',F9.4,2X
     1,'|',F9.4,2X,'|')
      GO TO 500
720   IF(IHOLDA.EQ.0) GO TO 730
      WRITE(6,740) MACCPT(IX), IRIGHT, MALFA, NOPTS, TRUEAA, TRUEAB
      GO TO 500
730   WRITE(6,740) MACCPT(IX), IRIGHT, MBETA, NOPTSS, TRUEBA, TRUEBB
      GO TO 500
      END
```

```
      SUBROUTINE OC (NSTART,NSTOP,MIN,MAX,MARK,MNEW,MOLD)
      IMPLICIT REAL*8 (A-H,O-Z)
      EXTERNAL BINOMI
      COMMON/A/PROB(200,2),P,Q,LAST,NEW,MAGIC,IP,INDACC /3/PMATRX(2,200,
     115),IX
      NSTART = NSTART + 1
      NSTOP = NSTOP + 1
      MIN = MIN + 1
      MAX = MAX + 1
      MDIFF = MNEW - MOLD
      DO 820 NNEW = NSTART,NSTOP
      SUM = 0.000
      IF(MARK.EQ.1.AND.MAX.EQ.NSTOP) MAX = MAX - 1
      DO 810 NOLD = MIN,MAX
      SUM = SUM + PROB(NOLD,LAST) * BINOMI(MDIFF,NNEW-NOLD,P,Q)
  810 CONTINUE
      PROB(NNEW,NEW) = SUM
      MAX = MAX + 1
  820 CONTINUE
      IF(INDACC.NE.1) GO TO 850
      IPOINT=0
      DO 830 NNEW=NSTART,NSTOP
      IPOINT=IPOINT+1
      PMATRX(IP,IX,IPOINT)=PROB(NNEW,NEW)
  830 CONTINUE
  850 NEW=NEW-MAGIC
      LAST = LAST + MAGIC
      MAGIC = MAGIC * (-1)
      RETURN
      END
```

```
900   DOUBLE PRECISION FUNCTION BINOMI (N,K,P,Q)
      IMPLICIT REAL*8 (A-H,O-Z)
      RATIO = P/Q
      IF(N.LT.K) GO TO 920
      BINOMI = Q ** N
      IF(K.EQ.0) GO TO 930
      DO 910 L = 1,K
      BINOMI = BINOMI * RATIO * (N-L+1) / L
910   CONTINUE
      GO TO 930
920   BINOMI = 0.000
930   RETURN
      END
```



```
      DOUBLE PRECISION FUNCTION TRUE(IP,INCLUD,P,INCREM)
      IMPLICIT REAL*8 (A-H,O-Z)
      COMMON/B/PMATRX(2,200,15),IX
      TRUE=PMATRX(IP,IX,15)
      DO 960 I=1,INCLUD
      ADD=0.0
      DO 950 J=1,I
      ADD=ADD+PMATRX(IP,IX,J)*BINOMI(INCREM,I-J,P,1.0D0-P)
950   CONTINUE
      TRUE=TRUE+ADD
960   CONTINUE
      RETURN
      END
```

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