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**Lehi's 600-Year Prophecy  
and the Birth of Christ**

PRELIMINARY REPORT

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## LEHI'S 600 YEAR PROPHECY AND THE BIRTH OF CHRIST

Jay H. Huber

Within two centuries after the event, the birth of Christ was being dated anywhere between 4 and 2 B.C. Seventeen and a half centuries later the spread of possible years has widened to 7 and 1 B.C.<sup>1</sup> Much of the disagreement comes from selectively stressing different clues, ignoring alternate hypotheses, and rejecting disagreeable data. Thus Martin and Mosley, in response to their work dating Christ's birth in 3 or 2 B.C., were lambasted by critics for completely overlooking all relevant historical data dating the death of Herod.<sup>2</sup>

The problem can not be completely resolved from New Testament data alone. And were we to follow in the tracks of our predecessors, it is not likely we could add anything but another voice to the fray. However, we do have additional insights to contribute; and even though the non-LDS historian may be skeptical of the Book of Mormon as a source, it does appear to add decisive information on the problem.

The Book of Mormon states that 600 "years" passed between the time Lehi left Jerusalem and the nativity, that Christ's mortality spanned 33 "years" and 4 days, and that the Nephites adopted a new era on which to base their year count shortly after the birth of Christ. It also suggests that astronomical signs appeared two years before the birth, and both before and after the birth within the same year. With this extra data Latter-day Saints should have long ago investigated the matter and laid it to rest. But such is not the case.<sup>3</sup> Instead, they have been put on the defense by critics who charge that the 600 year gap between the departure and the nativity contradicts historical fact, that this contradiction proves the Book of Mormon false. For, so the charge states, Zedekiah did not become king until March 597 B.C., after which date Lehi left Jerusalem. Herod died in 4 B.C. This is only a 593 year span.



Unfortunately, the LDS response to this challenge has been to deny the historical evidence. "Your dates have to be wrong," we reply. And, feeling threatened by rational historical analysis, we retreat into the realm of "faith," and thus sever one more cord that could unite the truths of the gospel and those of science. Perhaps in this process we also teach our people to disdain whatever appears initially to conflict with whatever we happen to feel comfortable with. Rather than vindicating the oneness of truth by resolving the apparent paradox and thereby achieving new heights of insight and awareness, we tend to react as many who reject the restoration do: shunt aside that which is not in obvious harmony with our current understanding and conclude, without examination, that the other fellow is duped or deluded.

A proper response to this challenge is sufficient justification for this paper. Additionally, by finding a resolution, we gain new insights which not only substantiate the integrity of Joseph Smith and the authenticity of the Book of Mormon, but also establish a chronological framework, against which an obscure prophecy of Daniel becomes a clear and forceful vision of the first coming of Christ. However, before considering our own case, let us be sure we fully understand the strengths of the critics.

#### The Fall of Jerusalem and the Accession of Zedekiah

According to the account in 2 Kings 24, Zedekiah was made king when Nebuchadnezzar captured Jerusalem and deported the reigning King Jehoiachin. Confirming the biblical account, a series of Babylonian tablets chronicles the major political events of each year from the accession of Nebuchadnezzar's father, Nabopolassar, to the overthrow of Babylon by Cyrus.<sup>4</sup> While gaps appear in the chronicles because of missing tablets, the events of the first eleven years of Nebuchadnezzar's reign are now described for us by this authentic Babylonian source. One of these tablets, British museum tablet 21946, records

In the seventh year, the month of Kislev, the king of Akkad mustered his troops, marched to Hatti-land, and encamped against (i.e. besieged) the city of Judah and on the second day of the month of Adar he seized the city and captured the king. He appointed there a king of his own choice (lit. heart), received its heavy tribute and sent (them) to Babylon.<sup>4</sup>

The king of Akkad referred to is Nebuchadnezzar (properly Nebuchadrezzar); "the seventh year" means the seventh year of his reign, the first year of which began on 1 Nisan after his accession year. Nisan was the first month of the Babylonian Year. Our Easter would correspond to the middle of Nisan.

The succession of Babylonian kings and their lengths of reign is well established by numerous cuneiform business documents for the century straddling the fall of Jerusalem. Such documents, dated by the day, the lunar month, and year of the current king's reign, provide a reasonably dense sequence of dates falling within each king's reign. Thus the transition from one king to the next is dated in the Babylonian calendar to within a week or two.<sup>5</sup>

To translate Babylonian dates into our calendar we need some event which can be precisely dated on both calendars. Such events are provided by astronomical observations. Ptolemy's *Almagest*, an astronomical treatise of the second century A.D. which draws upon the best works and records of its predecessors, gives over eighty such events, most of which are non-Babylonian, but positioning sun, moon, stars, and/or planets at those times with sufficient precision that they can be confirmed by astronomers. One such record states:

For in the year 5 of Nabopolassar (which is the year 127 of Nabonassar, Egyptianwise Athyr 27-28 at the end of the eleventh hour) the moon began to be eclipsed in Babylon; and the greatest extent of the eclipse was 1/4 of the diameter from the south.<sup>6</sup>

Here is an event whose year is given in terms of the Babylonian calendar and whose day, in terms of the Egyptian reckoning, is reconstructed by modern astronomers as having occurred on 22 April 621 B.C. Considering the other evidences, we can date the beginning of Nebuchadnezzar's accession year as

7 September 605 B.C. and the beginning of his first year of reign as 2 April 604. The fall of Jerusalem that preceded Zedekiah's kingship is then dated 16 March 597 B.C.<sup>7</sup>

Of course, one could argue that the Almagest is not a primary source record, as it dates seven centuries from the occurrence of the events under discussion. However, Ptolemy does not stand alone. A number of cuneiform records have been translated recording the occurrence of eclipses. These Babylonian texts, in conjunction with astronomy, establish contemporary evidence fully supporting the accepted correlation between the Babylonian and Julian calendars.<sup>8</sup> To deny the March 597 B.C. date for the fall of both Jerusalem and Jehoiachin, Zedekiah's predecessor, is either to deny the Babylonians' competence in recording the dates of contemporary events, or to postulate a significant shift in earth-moon motion over the centuries large enough to invalidate the reconstructed dating of eclipses. Either act displays an arrogance unjustified by the findings of modern scholarship on history or astronomy.

#### Dating the Death of Herod

Herod's death has traditionally been the most crucial event in secular history in dating the nativity.<sup>9</sup> There are at least four independent lines of reasoning by which the date of Herod's death can be estimated. Since all four depend at least partially upon data supplied by the Jewish historian Josephus, their independence could be questioned. But in this case the data of Josephus agree very well with other, overlapping historical data. Josephus wrote within one hundred years of the actual occurrences, with the records of Rome at his disposal. But it is important to remember, at least when using Josephus to determine the duration of the reigns of various members of Herod's family, that the years of rule are measured from 1 Nisan to 1 Nisan. Fractions of a year at either end are rounded upward. To interpret otherwise leads to inconsistencies.

Argument 1: Based on the Length of Herod's Reign

According to Josephus,<sup>10</sup> Herod received the kingdom from Anthony and Caesar (Octavian Augustus) "on the hundred and eighty fourth Olympiad, when Caius Domitius Calvinus was consul the second time, and Caius Asinius Pollio (the first time)." This statement marks the date when Herod received the kingdom according to both the Greek and Roman calendars. Reference to the consular tables indicates Calvinus and Pollio were consuls in the year 40 B.C.<sup>11</sup> Consuls served for one year, commencing on 1 January. The fourth year of the 184th Olympiad ended on 30 June of that year.<sup>12</sup> Thus Herod received the kingdom between 1 January and 30 June of 40 B.C.

Rome gave Herod permission to rule, and backed him with authority and soldiers; but to exercise that permission Herod had to control Jerusalem. Jerusalem fell to his command (and Antigonus, last of the house of the Asamoneans, of the tribe of Judah, into his hands) "when Marcus Agrippa and Caninius Gallus were consuls at Rome, on the hundred and eighty fifth Olympiad, on the third month, on the solemnity of the fast." Agrippa and Gallus were consuls during 37 B.C. The 185th Olympiad (a four year period) ended on 30 June 36 B.C. The third month refers to the Jewish calendar and not the Roman since the city was taken in the summertime. In 37 B.C. the third month corresponds almost exactly with the Julian month of June.

Whiston, in a footnote, indicates this three-year gap between obtaining the kingdom at Rome and then at Jerusalem is filled in and substantiated by Moses Chorenensis, an Armenian historian. He states that Tigranes, king of Armenia, reigned two years after Herod was made king at Rome.<sup>13</sup> After the death of Tigranes, Anthony besieged the city of Samosata, with Herod marching an army 340 miles to assist in the siege. Completing the siege and returning to Judea, Herod required another 5 months to take Jerusalem.

Herod died "having reigned, since he had procured Antigonus to be slain, thirty-four years; but since he had been declared king by the Romans, thirty-seven." (Ant 17,8,1) Basing our computation for Herod's death upon either starting point should give the same result. Since the beginning of the first year's reign from the taking of Jerusalem was in June of 37 B.C., the beginning of his 34th year would be 33 years later, or 1 Nisan 4 B.C. Similarly, if we assume he was declared king by Augustus after 1 Nisan 40 B.C.,<sup>14</sup> then the beginning of the 37th year of that count would also begin with Nisan 4 B.C. Thus this record indicates he died, at the latest, between 1 Nisan 4 and 1 Nisan 3 B.C.

#### Argument 2: Based on the Length of Reigns of Herod's Successors

Upon Herod's death, his son Archelaus exercised temporary authority based upon his father's will but pending ratification by Augustus. Herod's burial preceded Passover (14 Nisan) by at least seven days taken up by mourning, which commenced with the burial (see Wars 2,1,1), and then for Archelaus to conduct unofficial business in Jerusalem. Thus it is likely his death occurred before 1 Nisan. Archelaus was eager to go to Rome for confirmation but was not able to do so before Passover, being delayed in part by the dangers of traveling on the Mediterranean during the winter storm season.<sup>15</sup> Several months after Passover Archelaus was confirmed in his post.

Augustus terminated Archelaus' reign during the tenth year, bestowing the kingdom upon Syria and sending Cyrenius "to take account of people's effects in Syria and to sell the house of Archelaus." (Ant 17,13,2 and 5)<sup>16</sup> Cyrenius completed both tasks in the 37th year of Caesar's victory over Anthony at Actium. Since Anthony's defeat occurred on 2 September 31 B.C., the 37th year would be from 2 September 6 to 1 September A.D. 7. Both complementing and confirming Josephus, Dion Cassius (a Roman historian, A.D. 155-235) indicates Archelaus was dethroned in his tenth year, in the consulship of Lepidus and Arruntis.<sup>17</sup> This corresponds to the Julian year A.D. 6. Whether Cyrenius arrived in Judea during the fall of A.D. 6 or the spring of 7 is immaterial since either case

allows him ample time to complete his assigned tasks. And in both cases this data can not be reconciled with a death date for Herod later than Adar of 3 B.C. (Adar is the last month of the Jewish year; is precedes Nisan).

Another son, Philip, received Trachonitis and the neighboring countries from his father's testament (Wars 1,33,8), which was confirmed by Augustus when Archelaus received his kingdom after the Passover following Herod's death. Philip died in the 20th year of Tiberius, after being tetrarch of Trachonitis for 37 years. (Ant 18,4,6) A coin dated for the 37th year of his reign, thus substantiating Josephus, is described on page 228 of the Catalogue of Greek Coins of Palestine.<sup>18</sup>

The latest possible date for the beginning of Tiberius' first year, and the one which Josephus uses (Wars 2,9,1), is 19 August A.D. 14, measuring his reign from when he completely assumed power following the death of Augustus. Without bogging down in a discussion of whether that first year should end on 1 January, 1 Nisan, or 18 August of A.D. 15, the 20th year must fall in the range from January 33 to 18 August A.D. 34.

To put the latest possible construction on Herod's reign, we would assume Philip began to measure his reign from Herod's death, and that Herod died within a short period prior to 1 Nisan. But even at that, Herod would have had to die before 1 Nisan 2 B.C. in order for the beginning of Philip's 37th year to overlap even the end of Tiberius' 20th. And that is straining the data; Herod's death between Nisans 4 and 3 fits much better.

Herod Antipas received his share of his father's kingdom at the same time as Philip. He lost it during the reign of Gaius (Caligula). Antipas' brother-in-law, Agrippa, had returned to Judea as a king by act of Gaius during Gaius' second year. This kingship made Herodias (sister to Agrippa and wife to Antipas) jealous. She nagged her husband to go to Rome and seek to be made a king also. Antipas resisted for some time but eventually succumbed to her persistence.

How long Antipas resisted, unfortunately, is not known. But in petitioning for kingship, Antipas lost his tetrarchy and was exiled.

Judging from the text of Josephus,<sup>19</sup> the very latest this could have occurred would have been early in Gaius' fourth year, although the third year seems more likely, and late in the second would perhaps be equally plausible. A bronze coin exists ascribed to Herod Antipas and dated to the 43rd year of his reign.<sup>20</sup> Gaius' third year spans 18 March to 17 March A.D. 40. Even if we assume Antipas was exiled in the spring of A.D. 40, with the surviving coin being minted in anticipation of his homecoming prior to news of his misfortune arriving, his first year must still be dated at least between 1 Nisan 3 and 2 B.C. Obviously an earlier year would strain the evidence less.

### Argument 3: Based on a Lunar Eclipse

Prior to Herod's death, two Jewish leaders (Matthias and Judas), guilty of pulling down a golden eagle Herod had erected over the gate of the temple, were burned alive. On that same night there was an eclipse of the moon. The time interval between the eclipse and Herod's death has been estimated, depending upon the author, to be anywhere between one and thirteen months.

Between 8 B.C. and 1 B.C. there are six lunar eclipses commonly recognized by astronomers as having been visible at Jerusalem.<sup>21</sup>

Table 1: Eclipses Visible from Jerusalem

Date of Eclipse	Degree	Likely Date of Next Passover	Days between Eclipse and Passover
18 Nov 8 B.C.	45%	27 Mar 7 B.C.	129
23 Mar 5 B.C.	total	21 Apr 5 B.C.	28
15/16 Sep 5 B.C.	total	11 Apr 4 B.C.	209
13 Mar 4 B.C.	40%	11 Apr 4 B.C.	30
9/10 Jan 1 B.C.	total	8 Apr 1 B.C.	90
29 Dec 1 B.C.	58%	29 Mar 1 A.D.	90

The first is far too early, and the last two are too late, to harmonize with the other evidences adduced. To squeeze all of the events described by Josephus between an eclipse in March 4 B.C. and the Passover of April 4 B.C. (or similarly for March/April of 5 B.C.) is not possible, at least not if we properly understand the funeral customs of the times.

After the execution of Matthias and Judas, Herod's health deteriorated further. He tried a number of treatments suggested by his doctors. One treatment was a trip to the hot springs of Callirrhoe, on the east side of the Dead Sea, about two to three days travel from Jerusalem. Sometime after returning from Callirrhoe to Jericho, Herod executed his son Antipater, and himself died five days later.<sup>22</sup> Consideration of the funeral customs implies Passover was still a month or more distant.

The Talmud distinguishes four separate periods of mourning: 'aninuth ("secluded mourning"), between death and burial; 'abeluth ("mourning"), known also as shib'ah ("seven days"), the seven days following the funeral; sheloshim, the time until the thirtieth day after death; and the first year. . . . During the third period garments of mourning were worn and the mourners were to refrain from adornment in dress.<sup>23</sup>

Josephus clearly states (Wars 2,1,1 and 2) that both the shib'ah and a period of public mourning were over before Archelaus put on white garments, went up to the temple, feasted his friends, and thereafter began to conduct as Herod's heir. If Talmudic custom was being followed, and it is difficult to explain why it wouldn't have been, then Archelaus' trading the clothes of mourning for white garments indicates the sheloshim was also completed. It is possible that the shib'ah ended concurrent with or even after the completion of the sheloshim. Surely the embalming and funeral preparations for Herod were extensive, and there is some indication (not totally acceptable) that the funeral procession itself took approximately twenty days.<sup>24</sup>

Thus we are left with two possible sequences: 1) the eclipse occurred in September 5 B.C. and Herod died before Passover 4 B.C., or 2) the eclipse



occurred in March 4 B.C. and Herod died before Passover 3 B.C.<sup>25</sup> The only evidence the Sept. 5/Passover 4 B.C. alternative is the length of Herod's reign (argument 1), which requires death after 1 Nisan 4 B.C. Thus only a death date for Herod between March 4 B.C. and Passover 3 B.C. can be harmonized with all of the evidence.

#### Argument 4: The Governorship of Varus

While a death date after Passover 4 B.C. does not contradict any known evidence, it does require an adjustment in the time assigned to Varus as governor of Syria. From Josephus we know Varus was governor of Syria for several months after the Passover following Herod's death. We also know from coins bearing Varus' name that he was governor during the 25th, 26th, and 27th years of the Era Actium.<sup>26</sup> This has been interpreted to mean a governorship from early summer of 7 B.C. to early summer of 4 B.C.<sup>27</sup> However, for Herod to die after the Passover of 4 B.C. would require Varus' governorship to extend to early summer of 3 B.C. It is possible that he served four years, although rarely were Roman governors assigned for such a long term. It is also possible, since the 25th year of the era extended from 2 September 7 to 1 September 6 B.C., that Varus assumed office in May/June of 6 B.C. and had the first of his coins minted that same summer. Then his first year would have been from June 6 B.C. to May 5 B.C. and his third year from June 4 to May 3 B.C.

Admittedly, there is much flexibility in the evidence used to date Herod's death. The images are shadowy; we cannot be certain of the date. There are certain limitations beyond which one cuts loose from rationality and relies on faith. The table below spells out those limits provided by our historical records.

Table 2: Time Periods for the Death of Herod

Evidence	1 Nisan 6 to 1 Nisan 5 B.C.	1 Nisan 5 to Sep 5 B.C.	Sep 5 to 1 Nisan 4 B.C.	1 Nisan 4 to Passover 4 B.C.	Passover 4 to 1 Nisan 3 B.C.	1 Nisan 3 to Passover 3 B.C.	Passover 3 to 1 Nisan 2 B.C.	1 Nisan 2 to 1 Nisan 1 B.C.
37 years since declared king	D	A	A	A	A	D	D	D
34 years since fall of Jerusalem	D	D	D	A	A	D	D	D
Reign of Archelaus	D	PA	A	A	A	D	D	D
Reign of Philip	D	PA	A	A	A	A	PA	D
Reign of Antipas	D	PA	A	A	A	PA	PA	D
Lunar Eclipse	D	A	A	PA	A	PA	D	D
Varus as Governor	A	A	A	A	A	A	D	D

A: Evidence is agreeable

D: Evidence contradicts

PA: Agreeable -  
under extenuating  
circumstances

### Lehi's 600 Years

The Book of Mormon states Christ lived 33 "years" and four days in mortality.<sup>28</sup> This means that if Christ died in, say, mid-April of year X, then 33 "years" and 4 days prior to that mid April he was born. A problem arises immediately because we are not sure of the exact length of the "year" referred to by the Nephite writer. Our year almost surely would not have been of precisely the same length. Additionally, the Book of Mormon testifies of a calendrical change that occurred nine years after the birth of Christ. (3 Nephi 2:4-7) Thus we have two problems. How many days long were the Nephite years before the birth of Christ? And after the calendrical change were they the same? The Book of Mormon is most simply read as merely indicating that the starting point of the year was shifted. If that is all that occurred, then of course the pre- and post years would have been the same length. On the other hand there seems to be some circumstantial support for a more sweeping change, although nothing approaching proof in the matter. First, let us consider various possible lengths of a "year" to see if any of the reasonable, historically known year lengths can resolve our problems.

After arriving in the Americas, the party led by Lehi could have continued the lunar Israelite calendar.<sup>29</sup> If so, were months intercalated so as to keep the year in tune with the seasons as was done in Palestine? Twelve lunar months has an average length of 354 days. If intercalation occurred, then we should assume that those who kept the record carried out the intercalations with reasonable success and had a lunar year whose average length approximates 365 days in length. If there was intercalation, we should not suppose the Lehi year to be a clone of exactly like the Jewish year. For the Jewish calendar of later years was partially a product of the Babylonian captivity. Thus it took its form after Lehi's departure from Asia. The method of intercalation of the pre-exilic lunar-based calendar is not known to us, but in post-exilic times the calculation was carried out by the Sanhedrin, whose judgment as to needed adjustments was of course, based in part on local weather conditions. There is no reason to suspect Lehi and his group would or could have continued the adjustments in exactly the same form as what prevailed in Jerusalem.

Although evidence is lacking that it was ever actually used, a possible 364-day year is described in the pseudepigraphical Book of Enoch as well as in the Book of Jubilees. It consisted of exactly 52 weeks divided into 4 seasons of 13 weeks apiece.

Even before the days of Lehi, a 360-day year had historical precedence. Many of the ancient calendars had a 360-day core.<sup>30</sup> The Egyptian standard civil calendar, dating from the early third millennium B.C. consisted of a core of 12 months of 30 days each, with five extra days tagged onto the end of the year. In Mesopotamia a similar schematic calendar was used, although it never became dominant as it did in Egypt, being overshadowed by the lunar calendar. It is even speculated that the pre-exilic Israelite calendar used a 360-day base.<sup>31</sup> The popularity of the 360-day year can be attributed in part at least to its mathematical quality; it is the multiple of many more numbers than, say, 365, hence

its use facilitated computations by astronomers and calendar keepers. Whether any of this had bearing upon the calendar adopted by Lehi is beyond our current knowledge, but the possibility of a 360-day year is realistic. We omit from consideration such exotic possibilities as a 359 or 363 day year, partly because their non-divisibility would have made them unattractive. Their irregular nature, low esthetic appeal, lack of analogy in the physical world, and non-existence in historically-known ancient systems virtually assure their rejection.

Table 3 summarizes the number of Julian years equivalent to 600 of each of our possible Lehi years. The third column begins the count of 600 Lehi years, not from Lehi's departure from Jerusalem, but rather from a prior event, Zedekiah's accession. Even if we allow a maximal gap, dating Lehi's departure as virtually concurrent with Zedekiah's accession and Herod's death in the spring of 3 B.C.--the first three alternatives provide too much time for 600 such years to be squeezed in. The non-intercalated lunar year of 354 days suffers from the opposite difficulty. Six hundred such years equal but 581.5 Julian years. Thus for 600 "lunar years" to end near any of the likely years for Christ's birth would require Lehi to have stayed in Jerusalem virtually until its destruction under Nebuchadnezzar.

Table 3: Possible Lengths of One Lehi Year

<u>Length of 1 Lehi Year</u>	<u>Number of Julian Years in 600 such Lehi Years</u>	<u>Earliest Possible Ending Date for 600 Lehi Years</u>
365.25 days	600 years	March of 4 A.D.
365 days	599.59 years	October of 3 A.D.
364 days	597.95 years	February of 2 A.D.
360 days	591.38 years	August of 6 B.C.
354 days	581.52 years	September of 16 B.C.

Examination of Table 3 shows that only the 360-day year fits into the gap apparently left by Nephi's time-reckoning. One objection which might be raised against a 360-day year is that it would quickly get out of step with the seasons. Even within 18 years, the first day of the year would have migrated from, for

example, the spring equinox to the winter solstice. Admittedly such a migration seems troublesome. Yet the start of Egypt's standard civil year also migrated relative to the seasons, although at a far slower rate. The priests understood what was happening, while other portions of the society simply followed guidance in these esoteric matters, just as we do nowadays regarding "scientific" matters. Furthermore it would seem unlikely Lehi left Jerusalem on a day that was astronomically distinctive. To measure time from his "accidental" departure could have accustomed his descendents to the notion that the day on which the year began was not astronomically critical. Further, the climatic variations encountered by the migrating party would have tended to disassociate the calendar from the seasons. No matter where Lehi landed on the American continents, it is unlikely the climate would have matched that of Jerusalem, whose rainy season occupies the winter months. And if we identify Bountiful with Salalah, along the southern coast of the Arabian peninsula, a reversal of the climatic seasons would have been experienced even before crossing the ocean, since in Salalah the monsoon rains come during three of the summer months.<sup>32</sup>

The notion of a 360-day year has a number of interesting scriptural echoes. The apostle John, in the Book of Revelation, seems to equate 42 months with 3.5 "times" (years; compare Rev. 12:14 with 12:6), as well as 42 months with 1260 days (Rev 11:2 and 3). Both usages seem to imply a 12 month "year" with 30 days per "month." Similarly the Genesis account of the flood implies the use of a thirty-day month in its equating the five "months" of the flood to 150 days (see Genesis 7:11-12, 24; 8:2-4). While these observations may not apply to Lehi's calendar, there is some evidence of Lehi's using a similar calendar and no particular reason to think the contrary.

Alma 49:1 in conjunction with Alma 48:21 implies the eleventh month was near the "latter end" of the year. This in turn suggests a 12- rather than an 18-month

year. Such a tentative conclusion gains strength from the observation that on ten different occasions in the Book of Mormon, a month is named by its numerical order. Each time the month is between the first and twelfth. If the Nephites were using an 18-month calendar, one would suspect that at least once in ten tries a month of order 13 to 18 would be mentioned. The probability of the last six months not being so named, assuming the conditions of the binomial probability distribution are met, is 0.017. Thus, while proof is lacking, it seems fairly safe to conclude the Book of Mormon custodians were using a 12-month year, as we could expect from their origin in Palestine.

That these months are schematic divisions of the 360-day year and not part of a separate lunar calendar is also suggested by internal evidence from the Book of Mormon. In Alma 52:1 the first day of the first month falls on the first day of the 360-day year. In Alma 56:1, four years later, the second day of the first month also falls at the "commencement" of the 360 day year. If the months were lunar, over a four year period they would have fallen out of synchronization with the 360-day year by a significant amount; that is, the start of the fourth year would have fallen about five days before the end of the first month. Of course it could be argued that the word "commencement" in Alma 56:1 was loosely intended, that a hypothesized separate lunar calendar was intercalated in the interim. There is no way to disprove such a notion, of course, but the simplest hypothesis to adequately explain all the data ought to suffice, at least until its inadequacy has been demonstrated.

From these observations emerges the suspicion that the Nephite calendar was an Old World import, carried and operated continuously by the Nephites from their beginning. Such a conclusion also feels comfortable when we consider the similarity between our reconstructed Nephite calendar and the Egyptian standard civil calendar. The cultural borrowing of Lehi's group from Egypt, as indicated in 1 Nephi 1:2, seems here to be reaffirmed.

The Nephite calendar is an anomaly among the Meso-american systems. As fully developed the Maya calendar consisted of at least three basic components: a 365-day year (the haab), a 260-day cycle, and an accumulative count ("the long count") of the days elapsed since a base date in 3113 B.C.<sup>33</sup> This last component was comprised of units of 360 days, each called a tun. Both the tun and the 365-day haab consisted of 18 "months" of 20 days each, with the haab adding five "unlucky" days to complete the standard year. The Maya number system seems to give circumstantial evidence for the haab to have evolved from the tun.<sup>34</sup> If so, such a shift would have been initiated at least one century, and perhaps many centuries, before Christ. Evidence is fairly strong that the Maya calendar could not have been a Nephite by-product, even though the antecedents of the Maya calendar are not well known. If it was influenced by any of the Book of Mormon cultures, it would have been the Jaredite, whose spiritual roots are more closely identified with events of 3,000 B.C. than the Nephites.<sup>35</sup> But hypotheses are cheap; the Jaredite and Meso-american calendars could have developed from a common heritage or independently.<sup>36</sup>

However, it is still possible that the Nephite year structure was eventually influenced by Meso-american contacts, say, after the nativity.<sup>37</sup> Prior to that time, even if all other Meso-american cultures had adopted a 365-day year centuries before, for prophetic purposes alone the Book of Mormon writers could well have perpetuated the old 360-day year, abandoning it only when its purpose was fulfilled. Indeed, considering the conservative nature of most religious institutions, the likelihood of its abandonment after the nativity would have been increased by a much earlier general adoption and subsequent permeation of the 365-year throughout the rest of the culture.

### The Book of Mormon Account and Astronomical Events

A 360-day year not only solves a chronological problem, it allows the Book of Mormon account of signs in the heavens to dovetail with known celestial events. That the Nephites were sensitive to astronomical events during the period of Christ's birth can be inferred by their recording the prophecies of Samuel, who five years previous to the birth, had foretold a new star that would arise "such as one as ye never have beheld. . . and behold this is not all, there shall be many signs and wonders in heaven." (Hel 14:5,6). That his teachings were accepted among the believing and circulated among the non-believing is made clear by 3 Nephi 1:5-6. Thus as the end of the 600-year period approached, there was an interest in and anticipation of signs and wonders.

Two years before the advent, during the 90th year of the Judges, "great signs and wonders were shown to the people. Some of these "wonders" could have been spiritual manifestations among the people; but in the light of Samuel's predictions, we can assume that "great signs" would also have included astronomical events. The next year, the 91st year of the Judges, seems to have passed quietly. No signs were observed. Then in the commencement of the 92nd year, which was also the beginning of the 601st year since Lehi's departure (3 Nephi 1:4), there began to be "greater signs". This was the year prophesied by Samuel, but no mention is made that these "greater signs" continued. A period of quiet followed in which those who preferred to disbelieve rallied, thinking the time was past for fulfillment. A deadline was set. If the ultimate sign of the birth (a day, a night, and a day as one day) did not occur by then, those who still believed would be considered adherents of a false religion and would be killed. The sign did occur, however, on the last night before the day of reckoning. Some time thereafter a new star was seen. Then the 92nd year ended.

There seem to be three separate manifestations of heavenly signs in this account. The first occurred two years before Christ's birth and the other two



two during the year of birth. It is provocative that there happen to be three events in the astronomical record which are suitably spaced in time, to match. The first of these was identified by Johannes Kepler in 1606 after observing a triple conjunction of the planets Jupiter, Saturn, and Mars in the spring of 1604. Recalling a passage in which the Jewish writer Isaac Abravanel (1437-1508) indicated that a sign of the Messiah's appearance would be a conjunction of Saturn and Jupiter in the constellation of Pisces, Kepler calculated that such a conjunction as he observed would occur every 805 years, and hence in A.D. 799 as well as 7 B.C.

"Computations verified by the Astronomer Royal at Greenwich, England, have indeed confirmed that there was a triple conjunction of Jupiter and Saturn in 7 B.C. on May 29, Sep 29, and Dec 4. Also in Feb, 6 B.C., Mars moved into the configuration and stood so as to form a triangle with the other two planets, a situation known as a massing of the planets. The conjunction also took place in the constellation Pisces, the Fishes. . . "38

The comets or novae with which we will associate the events of the 92nd year of Judges were not generally known in the West until Biot published his catalog of comets and novae in 1846.<sup>39</sup> The record of their occurrence comes from the Chinese, whose sightings and recordings give reliable data back to the 14th century B.C. Translations and compilations of these ancient records have recently been revised, enlarged, corrected and cross-referenced with other oriental source documents.<sup>40</sup> One of these source documents is the Chhien Han Shu (A History of the Early Han Dynasty). Written during the first century A.D. by Pan Ku, the chronicles contain, scattered among other records, astronomical observations from 206 B.C. to the beginnings of the first century A.D. One such entry is the following: "During the second month of the second year of the Chien-Phing reign period a (hui) comet appeared at the Chhien-Niu (ninth lunar mansion) for over 70 days."<sup>40</sup>

A "hui" comet is also recorded as a "broom star" or sao-hsing, obtaining

such a name from its appearance: a star-like head of a comet with its tail radiating outward in some particular direction as the straws of a broom. The second month of the second year of the Chien-Phing reign period is understood to be 10 March to 7 April of 5 B.C., Julian dates. The portion of the sky represented by Chhien-Neu corresponds roughly to the constellation Capricorn, lying roughly 10 to 20 degrees south of the celestial equator, which would have been easily visible in Central America. For a comet to stay visible for 70 days, its trajectory would have to swing close to both the sun and the earth for much of its observational period. Most often this results in rapid movement of the comet against a background of stars--a fact not reported by the Chinese. Thus, some think the object, even though described as a hui comet, may have been a nova. Unfortunately, if a nova, it will be harder to correlate with the Book of Mormon account, for a nova is most prominent in its display at the very onset, whereas a comet may gradually increasing in brightness, reaching its peak nearer the middle of its observational period. This matter of delay proves crucial.

The Thung Chien Kang Mu is a history of the period 402 B.C. to A.D. 959, completed in A.D. 1189 by Chu Hsi. Corresponding to the year 4 B.C. is the entry "During the third year of the Chien-Phing reign period a (po) comet was seen at Ho Ku."<sup>40</sup> A po comet is one seen head on, or tail on, with the light of the tail radiating outward in all directions. Sometimes novas were recorded as po comets. That part of the sky designated as Ho Ku is the neighborhood of the star Altair (part of the constellation Aquila), roughly 5 to 10 degrees north of the celestial equator and again easily visible in Central America. The comet of 4 B.C. was also recorded by the Korean scholar Kim Pusik in the Samguk Sagi, the Historical Record of the Three Kingdoms, written in A.D. 1145 but relying on much older records, some being Chinese. "On a Chi-yu day in the second month of the 54th year of Hyokkose Wang a (po) comet was seen at Ho Ku." There is some confusion as to the date given. A chi-yu day did not occur in the second month of

that year in the Korean calendar. It did occur in the first and third months however, giving us two dates: 23 Feb. or 24 April. This ambiguity is removed by the much older Han Shu in whose 11th chapter is recorded "the third month, chi-yu. . . there was a hsing-po at Ho-Ku."<sup>41</sup> Thus this nova or comet can be given the rather definite date of 24 April 4 B.C. for its first sighting.

There are no other comets or novae whose dates even approximate the nativity. The latest preceding 5 B.C. is 10 B.C. and the earliest following is in A.D. 13.

The correlation between the above astronomical events and the Book of Mormon is controlled by the requirement of having the hui and po comets fall within the 601st Lehi year. Yet the number of days between 7 April 5 B.C. (the latest time for the hui comet to be sighted) and 24 April 4 B.C. is 383 days. Obviously if the 5 B.C. object were a nova, then its greatest impression would come at its commencement and the correlation fails. If it were a comet then perhaps it was first spotted late in the Chinese month and not until 20 to 30 days thereafter did it receive wide notice, causing excitement and perhaps consternation.<sup>42</sup> That would allow us to place the wonder caused by the hui comet at the very commencement, and the po comet at the very close, of the 601st year, without more than a few days of leeway, perhaps two weeks at the very most. Thus the 601st year would have to begin sometime between 29 April and 11 May of 5 B.C., and end sometime between 24 April and 7 May of 4 B.C. With such a correlation, the 599th Lehi year would include all of the planetary conjunctions mentioned above. By backtracking 600 years, Lehi's departure from Jerusalem could then be estimated to be between 13 Dec. and 25 December of 597 B.C. (Julian), which is equivalent to between 7 Dec and 19 December Gregorian.<sup>43</sup>

I Nephi 1 indicates Lehi received his prophetic calling during Zedekiah's first year. After hearing the declarations of other prophets then receiving his own witness, Lehi commenced to deliver his own teachings, most of which seem to have been ill-received. Whether these events unfolded at a leisurely pace over

the better part of a year or quickly within a month or two is undeterminable. But in either case the December departure date can be agreeable, for Zedekiah began his reign in March of 597 B.C. His accession year would have ended, and his first year begun, on either 1 Nisan (13 April) or 1 Tishri (9 October) of the same year.<sup>46</sup> A December departure agrees easily with two of the four possible combinations--a leisurely development of affairs measured from a 1 Nisan date or an accelerated development, from a 1 Tishri date.

#### Tests of Chronology for Internal Consistency

The recently reported Lucy Mack Smith letter of 23rd January, 1829, may seem to contradict this conclusion since it says that Lehi "fled from Jerusalem with his family and also his wife's family a few days before Nebuchadnezzar besieged the city and layered it in ashes. . . ." <sup>44</sup> However, since Lehi and Ishmael did not flee from Jerusalem together, is the timing of flight Ishmael's or Lehi's? Internal evidence indicates that the "few days before" represents, if anyone's then Ishmael's departure.

Of course, it is possible that the wording in the letter was loosely intended, in which case the few days could be literally months or years. That the besieging of the city occurred 18 months before it was layered in ashes suggests such an interpretation. However, the worse possible case is the literal interpretation; and even that does not conflict seriously with our emerging chronological structure.

Between Lehi's departure and Ishmael's there were two round trips from Jerusalem to the likely campsite at Al Beda, each requiring approximately a month of travel time.<sup>45</sup> The siege of Jerusalem began 15 January 588 B.C.<sup>46</sup> Thus if Ishmael's departure is estimated at 10 January 588, then Lehi had to be in his first campsite by approximately 1 December at the latest.<sup>47</sup> Yet after Lehi arrived and before the first return to Jerusalem, he "saw" the waters of

the river Laman and exhorted his son to channel his powers for righteousness in the same manner as this river ran continually to the sea. Now, all the rivers of that area are intermittent. They flow perhaps three days at a time from storm runoff. Since the winter storm season in this part of the desert is limited almost exclusively to January and February, this even would have had to occur at least one year, perhaps more, before January 588. An even longer gap is suggested by the difference in Nephi's description of himself in 1 Nephi 2:16 (being exceedingly young) and 1 Nephi 4:31 (being a man large in stature).

But that Lehi departed years before Ishmael is almost demanded by other considerations. Lehi's vision of the destruction of Jerusalem (2 Nephi 1:4) is used to give certainty to a matter over which his sons had doubt. That requires a departure from the land Bountiful (Salalah) before news of Jerusalem's destruction reached them by caravan. Since Jerusalem fell by 29 July 587, and since Salalah is three months away by caravan (2100 miles), news could be expected to reach that area some time after October 587.<sup>48</sup> Given this constraint, the eight years of sojourning in the wilderness of 1 Nephi 17:4 can not refer to that period since Ishmael's family joined the band, but rather since Lehi established his first campsite. (This argument assumes that the Smith letter does refer to Ishmael's departure.) Leaving Jerusalem in mid-December of 597, Lehi would have arrived at Al Beda in early January of 596, which corresponds to the beginning of the river-flowing season.<sup>49</sup> The birth of children (1 Nephi 17:1, 2) during the trek to Salalah suggests as much as 11 months between Ishmael's departure and the arrival at Salalah,<sup>50</sup> which would correspond to as late as mid-December of 588. This is not constraining since the spring and summer of 587 would be available for the group of eight men to build a boat.<sup>51</sup>

Neither is the eight year figure necessarily exact. By our customs, it could be any number between 7.5 and 8.5; but with a different culture, any time less

than nine years could have been meant. From January 596 to December 388 is just less than nine years--a tight squeeze, and even tighter when nine 360-day years are used. But considering the margin for error in our estimates of Ishmael's departure and of the duration of the trek to Salalah, not an impossibility or contradiction.

Another test for reasonableness in our chronology can be found in Alma 53. In an agricultural society, when there is a choice, military operations would be performed during non-agricultural months. In Yucatan the tilling and planting season is from mid-January to April, after which the rains come. (See Landa, Yucatan Before and After the Conquest, 1978, Dover, p. 37) Alma 52 and 53 give an instance of a planned military campaign that started with the commencement of the 28th year of Judges. After implementation of the plan and after the passage of an extended period of time, military operations ceased for the rest of the year. Among other things, men were then released from military service to provide food for their families and the army. By our chronology, the 28th year would have commenced between 23 May/5 June and have ended between 18 May/31 May. Thus the latter part of the year concurs with the planting season; its start, with the slack part of the agricultural year. And while the planning of warfare for the rainy season is questionable, even though military strategists delight in the unexpected, the release of soldiers for food cultivation during the appropriate season does give some slight circumstantial support for our chronology. However, such support is contingent upon further study correlating the events in Alma with our suggested calendar, to see if reasonableness can be maintained.

#### Narrowing Down the Birth Date of Christ

Having come so far, we can use the Book of Mormon evidence to better determine the birth date of the Savior. Before we do so, a few words of caution concerning the reconstructed lunar months of that time period are in order.

Since the moon's motion is highly predictable, astronomer's can compute when the moon is in conjunction with the earth and thus also when the first slivers of the crescent moon could have become visible to an observer, which would mark the beginning of the month. Tables of such calculated values for Babylon, cross checked when possible with cuneiform records, are available in Parker and Dubberstein's Babylonian Chronology 626 B.C. - A.D. 75. However, the tables are not free from error. Weather conditions could have obscured the viewing and thus have delayed the start of the month. Moreover, because of a difference in latitude, the new moon is visible in Jerusalem 37 minutes before it becomes visible in Babylon. Thus approximately one month out of every 39 could begin one day earlier in Jerusalem. Also, in striving to determine how soon a phenomenon low on the horizon could become visible, early reserachers confused theoretical predictions by the Babylonians with their actual sightings.<sup>52</sup> As a result they overestimated the limits of visibility in just those cases for which the sightings were most tenuous and critical. So an unknown (but small) number of reconstructed dates for which the moon was first observed may be a day too early. Also, since the Babylonian and Jewish methods for intercalating leap months were not the same, it was possible for the first month of the Jewish year to correspond with the second month of the Babylonian, or vice-versa, because the Jewish intercalations were dependent upon the local advance of the seasons, whereas the Babylonian were prescribed by a rigid procedure. Thus if the spring growth was unseasonably delayed by weather fluctuations, the month of Nisan would be delayed in Jerusalem but not in Babylon. This likelihood would be increased when the month would otherwise come early, in mid-March.

In spite of these objections, we shall use the dates given by Parker and Dubberstein as reasonable approximations. Those listed in table 4 were selected

so as to conform to the following requirements:<sup>53</sup>

- 1) the birth of Christ was in the 601st Lehi year, but not within the first few days,
- 2) the death of the Savior fell on a Friday, conceivably Passover, and
- 3) these two events were separated by 33 years and 4 days, the years having either 360 or 365 days each.

Table 4: Birth/Death Possibilities According to Book of Mormon Data

Number of days/year	Birth	Death
365	11 April 4 B.C.	7 April 30 A.D.
360	8 October 5 B.C.	22 April 29 A.D.
360	3 September 5 B.C.	18 March 29 A.D.

Of the listed possibilities, the last two do not require a shift in Nephite year length and provide more time for the organizing and teaching which occurred among the Nephites after the sign of birth was given but before the 601st year was ended. However, the death date of the second implies a three-day error in the reconstructed month tables (possible, but not very likely). The third case implies that the Jewish Nisan in A.D. 29 corresponded with the last month of the Babylonian year. With a proper shifting of intercalated months for the preceding two years and with early spring weather, this is possible, but there is a touch of special pleading in it.<sup>54</sup> Neither the birth date of 3 September nor 8 October have any special significance in the Jewish calendar for 5 B.C. However, since the crowding at Bethlehem is associated with the enrollment for taxation more than with a Jewish sacred day, this might not be significant.

The birthdate of 11 April 4 B.C. corresponds to Passover, thus giving a second reason for Bethlehem's crowdedness, perhaps even hinting at a natural deadline set for the enrollment. This would explain Joseph's and Mary's traveling so close to the end of Mary's term of pregnancy. The comet or Nova of



24 April 4 B.C. would have occurred at about the right time for the last leg of the magi's journey from Jerusalem to Bethlehem.<sup>55</sup> One would then need to postulate the birth (c. 11 April), the Magi visit (c. 24 April), the presentation at the temple (c. 21 May), and flight to Egypt happened in that order. It might be questioned why Herod did not act sooner to slay the Innocents. Surely had he been diligent in the matter, he might have known of the magi's departure, to avoid him, before 21 May. However, that he did not have the magi followed and spied upon is evident from his ~~now~~<sup>†</sup> knowing who the Christ child was. Since this was also the time of Herod's painful and terminal illness, as well as the time of Antipater's attempt to usurp the throne, it is plausible to argue that Herod was more involved with immediate and pressing dangers. Perhaps it was the commotion and talk occasioned by the actions of Anna and Simeon when Jesus was presented at the temple (Luke 2:25-38) which brought to Herod both awareness and vexation for being outwitted. Surely the flight to Egypt could not have come very long after the commotion at the temple, for Herod was exceedingly jealous of his throne and matters of this potential-seditious type did not go undetected for long. A September/October birth, incidentally, precludes the possibility of 24 April playing any role in the New Testament account of the nativity.

Herod's two year limit upon the infant's slaughter must have stemmed from his conversation with the magi and their dating of the first signs in the sky. Such timing is suggestive of the planetary conjunctions of 6 B.C., whose actual observation by ancient observers is attested by cuneiform tablets, although the significance of that event in the minds of people of that time cannot be reliably reconstructed.

An 11 April birth demands that Herod died after Passover in 4 B.C. As we have seen, this in turn implies that Herod's sons dated their reigns from the reading of Herod's testament rather than from Caesar's confirmation.

The Mayan data fits somewhat better an April birth also. So far there is scant evidence that the continuity of the 260-day calendar was ever broken.<sup>57</sup> The most widely accepted correlation, the Goodman-Martinez-Thompson, equates 12 Kan of the 260-day year with 25 July 1553 (Gregorian).<sup>58</sup> Twelve Kan is the 64th day of the 260-day cycle. The 568,424 day span from 12 April 4 B.C. to 25 July 1855 (Gregorian) consists of 2,186 complete cycles with exactly 64 days left over. Thus 12 April (12 April in Gregorian mode) corresponds to the first day of the 260-day cycle.

This correspondence should not be thought of as evidence that the 260-day cycle was shifted to correspond with Christ's birth. Inscriptions from B.C. times strongly suggest that the continuity of the cycle was not broken after 36 B.C. at least.<sup>59</sup> Yet the nativity came on the night before a day appointed for the slaughter of the remaining faithful. If the unbelieving were to set a date for such a slaughter, the start of the most sacred of cycles could be psychologically appropriate. Indeed there exist several historical precedents for actions of like scope being similarly timed to coincide with cycle ends.<sup>60</sup> If anciently a day was considered to have begun at sunrise rather than sunset, an 11 April birthdate is wholly consistent with the 260-day cycle.

It would have been neat had the preferred birth date turned out to correspond to the first day of the haab as well.<sup>61</sup> But since the haab existed prior to the nativity and since any Nephite adjustment to the calendar might not have endured beyond their civilization, that expectation might be unrealistic. It is quite possible that the sequence of haab days used by the surrounding cultures was not shifted at all even though a change was adopted by the Nephites. Like the Romans who once considered the 15th of March to be the start of the year, the Nephites could have chosen whichever date the nativity fell upon, even if not the first of the month, to count their years from.

### Daniel's Seventy Week Prophecy

To interpret and fit prophecy to historical data becomes risky in proportion to the vagueness of the data and uncertainty of the interpretation. A prophecy clothed with too much uncertainty falls into disuse and neglect. This, in part, has happened to Daniel's seventy week prophecy, Daniel 9:24-27. Too many modern critics, believing in neither seers nor revelators, unwilling to assume any powers exist beyond those commonly acknowledged among his peers, declares the prophecies of Daniel as fables, late interpolations, historical fiction written after the facts so as to encourage and sustain the faithful under the heat of persecution.

However, if we accept the chronology above and reject the modern ex post facto interpretation, an interesting and powerful message emerges which bears strong and exacting testimony to the first coming of Jesus Christ.<sup>62</sup> Although the time elements of the prophecy can be interpreted to fit a fall 5 B.C. or spring 4 B.C. birth, I feel it fits the spring data slightly better and will develop that interpretation only. A shift of half a year would not however, destroy the correspondence between prophecy and history, and the reader so inclined can make such adjustments for himself.

The prophecy falls into two parts, each preceded by an admonition to know and understand. The first part is a comprehensive statement of the spiritual purpose to be served by the "seventy weeks" given unto the Jews (Daniel's people): to prepare for and anoint the most Holy--which is Jesus Christ. The second part of the prophecy looks at the particular events which are to occur. The sequence of events is not entirely chronological; rather they are organized into a chiasmus.

A. A time appointed to prepare the people and city.	"Seventy weeks are determined upon thy people and upon the holy city, to finish the transgression, and to make an end of sins, and to make reconciliation for iniquity, and to bring in everlasting righteousness, and to seal up the vision and prophecy, and to anoint the most Holy.
B. Jerusalem restored	Know therefore and understand, that from the going forth of the commandment to restore and build Jerusalem
C. The Coming Messiah	unto the Messiah the Prince
D. During the 7 weeks and 62 weeks	shall be seven weeks and threescore and two weeks: the street shall be built again, and the wall, even in troublous times.
D' After 62 weeks	And after the threescore and two weeks
C' A Messiah cut off	shall Messiah be cut off, but not for himself
B' Jerusalem destroyed	and the people of the prince that shall come shall destroy the city and sanctuary
A' A time of desolation appointed	and the end thereof shall be with a flood, and unto the end of the war desolations are determined.
C Confirming the Covenant	And he shall confirm the covenant with many
D. During the week	for one week
D' In the middle of the week	and in the midst of the week
C' Sacrifices and oblations cut off	he shall cause the sacrifices and oblations to cease
B' Ordinances destroyed	and for the overspreading of abominations he shall make it desolate
A' A time of desolation appointed	even until the consummation, and that determined shall be poured upon the desolate.

One of the controversies of the prophecy is the proper identification of individuals involved. The "Most Holy" is interpreted by Jewish commentators as the innermost part of the temple. And while such an association may be in part intended, it also refers to Jesus Christ, as does "the Messiah, the Prince." However that Messiah (i.e. anointed one) who is cut off is not Jesus Christ but John the Baptist.<sup>63</sup> In the Masoretic text it reads "a messiah" rather than "the messiah." Thus in the Jewish Publication Society of America we read "and after the threescore and two weeks shall an anointed one be cut off. . . ." Among the people only kings and priests were anointed. John the Baptist, being a son of the

high priest Zachariah, was rightfully entitled to being an anointed priest. Admittedly there is no record of his being anointed by a prophet or serving as a priest in the temple. However, there is ample evidence of his being anointed by the powers of heaven.

He shall be filled with the Holy Ghost even from his mother's womb. . . .  
And he shall go before him (Christ) in the spirit and power of Elias  
to make ready a people prepared for the Lord. (Luke 1:15, 17)

Daniel's phrase "and not for himself" refers to John having fulfilled his mission honorably. His being cut off was part of the plan, and was due to no fault of his own.<sup>64</sup>

The 70 weeks constitute 490 days. The generally accepted interpretation is that each day represents one year. There are two precedents upon which this interpretation is based. 1) As the Israelites approached the promised land, Moses sent 12 men ahead to spy out its strengths and promise. Forty days later they returned, reporting to Moses that the inhabitants of the land were too strong to be taken. Only two of the twelve gave an encouraging report. That of the other ten frightened Israel; they lost faith, in return for which the Lord punished them "after the number of days in which ye searched the land, even forty days, each day for a year, shall ye bear your iniquities, even forty years."<sup>65</sup> 2) Ezekiel was a contemporary of Daniel. The 4th chapter of Ezekiel records the Lord instructing Ezekiel to teach of the impending ruin of Jerusalem by a number of signs. One of these re-established the year/day principle: "Now lie on your left side, and I will lay Israel's iniquity on you; you shall bear their iniquity, I ordain that you bear it one hundred and ninety days. . . lie down a second time on your right side, and bear Judah's iniquity for forty days; I count one day for every year. . . ." (Ezek. 4:4-6, New English Bible)

The confirming of the covenant for one week is that seven year period during which the gospel was taught exclusively to the house of Israel--from the beginning of John's ministry until the heavens declared it was time for the gospel to be

taken to the gentiles. This is in keeping with Christ's own declaration that he was sent only "unto the lost sheep of the house of Israel."<sup>66</sup> With the end of the seven year period, the Lord inaugurated the teaching of the gospel to the gentiles. Whether that occasion was marked by the conversion of Cornelius and his family or by the conversion of Paul, or by both, is not clearly stated. But in any case, the event was sanctioned by revelation at a time chosen by the Lord.

Christ's crucifixion came in the midst of this seven year period, at the beginning of his 4th year of ministry, or after the completion of approximately three and a half years since the beginning of the ministry of John the Baptist. With Christ's death, the law of sacrifice was fulfilled, its need ceased. Thus "in the midst of the week" he caused "the sacrifices and oblations to cease" as a valid spiritual ordinance,<sup>67</sup> even though they continued as a physical act.

"And for the overspreading of abominations he shall make it desolate." "It" seems to refer to either the sanctuary and temple or to the ordinances themselves as a physical act. The continued observance of sacrifices and oblations after Christ's death constituted in itself an empty and desolate practice, later to be matched by the desolation of the sanctuary itself.<sup>68</sup> The last part of verse 27 reads clearer in the Septuagint version: "And upon the temple shall be an abomination of desolations, and at the end of a time, an end shall be put to that desolation."<sup>69</sup>

Spiritually, this abomination is the continuance of ordinances whose purposes were fulfilled. When the ordinances became more important than the purposes they were to serve, they themselves became a vehicle of error and deception, to which the people gave false honor and worship--in short, an abomination. But there was a physical desecration as well. For prior to the siege and destruction of Jerusalem, civil war had erupted within the city, polluting even the inner courts of the temple itself. "The temple was defiled everywhere with murders," says Josephus.<sup>70</sup>

Even priests were slain as they "were about their sacred ministrations." After the end of the meridian of time, this spiritual and physical abomination was terminated by the destruction of the temple.<sup>71</sup>

The Roman legions which besieged and destroyed Jerusalem were led into Judea by Vespasian. Vespasian commanded the troops as they reconquered the mountain strongholds and the plain country, even to the point of setting up the siege of Jerusalem. Then as he made ready to bring the full power of his legions against the city, news of Nero's death reached him. He delayed, waiting for the government of Rome to be reordered. This respite allowed those of Jerusalem who understood Christ's warning to flee (Matt 24:15,16). When further news indicated first Galba, then Otto, and then Vitellius had become emperors and that Rome was being subjected to the plundering of foreign troops under Vitellius, he directed his attention completely to his native land. With the defeat of Vitellius, Vespasian became emperor. The destruction of Jerusalem was completed by Vespasian's son and next emperor, Titus. Thus to speak of Jerusalem's destruction by a prince is fully accurate, even if not according to Roman nomenclature.<sup>72</sup>

The period of the 490 years was to commence with the going forth of "the command to restore and build Jerusalem." This command was given to Ezra (see Ezra 7:23) to rebuild Jerusalem spiritually, and was backed up by physical means by a decree of the Persian king Artaxerxes I. From the reconstruction of this king's ruling dates,<sup>73</sup> Ezra's departure for and arrival in Jerusalem can be dated 8 April and 4 August of 458 B.C. respectively. The time elements of the prophecy fit exceedingly well if measured from Ezra's arrival at Jerusalem.<sup>74</sup> The seven weeks and 62 weeks (483 years total) are completed in August of A.D. 26. The next year is the first of the last seven and is the one in which both John the Baptist and Jesus began their ministries and John was cut off.<sup>75</sup> The fourth of the seven years spanned the gap between August of 29 and August of A.D. 30, in the middle of which (April of A.D. 30) Jesus was crucified.

The end of the 490th year, hence the beginning of the times of the gentiles,<sup>76</sup> would be August of A.D. 33. That there is good evidence dating Paul's conversion in A.D. 33/34 underscores our previous identification of the one event as being part of the inauguration of the other.<sup>77</sup>

The word "weeks" in Daniel 9:24 comes from the Hebrew word "shivim", which is the plural of the word for seven. Thus the passage could have been rendered "Seventy sevens are determined upon thy people. . ." Why the time period was given as 70 sevens and not as 49 tens or 490 ones might lie in the significance of the seven year period to the Jews. In Leviticus 25 the Lord gave Israel the law that every seventh year should be a sabbath year, a year in which the fields were to lie dormant. Even that which grew by itself, although it could be plucked and eaten, could not be stored. The sabbath year began in the fall, just before planting and seed time, and extended through the growing season until the following fall. The Lord promised a sufficiently bountiful harvest in the 6th year so as to last through to the harvest of the 8th year. After every seven sabbath years there was to be a year of Jubilee. It was also to be an unplanted year. Moreover, in it all property except that in a walled city was to be returned to the original owners, and every man in bondage was to be returned to his family.

The return of Ezra to Jerusalem marked the beginning of the post-exilic observance of sabbath and Jubilee years. With this renewal of observances, the Jubilee year was made to coincide with the seventh sabbath year. Hence it came once every 49 years rather than once every 50 years as in pre-exilic times. Thus the 70 sevens represent 70 sabbath years or 10 Jubilees. That those with Ezra were restored to their native land on a year of Jubilee makes the commencement date of the seventy week prophecy even more appropriate.

If we count forward to the beginning of Christ's ministry, then August A.D. 26 to August 27 (the first of the last seven) was a sabbath year. Seven years



later, from August A.D. 33 to August 34, the first year after the 490th, the year in which the gospel message was opened to the gentiles, was a Jubilee year. How fitting that the spiritual bondage of ignorance began to be lifted from the gentiles in such a year. One is left wondering if the saints being established in the mountains in 1847--that year being the 37th Jubilee year since 34 A.D.--and the massive return of Jews to their homeland in 1945 (also a Jubilee year) have significance in the Lord's chronology.

Written centuries prior to Christ's coming, the seventy week prophecy stands as unmovable testimony to the divinely-appointed mission of Jesus Christ. Its chiasmic form coupled with a continuous and matching time frame can not be readily waved away as coincidence. The Lord keeps his prophetic word. His prophecies are fulfilled with the same exactness expected of us in keeping his commandments. In this regard we may be confident his second coming will not differ in surety from his first.

### Conclusions

Only the 360-day year allows Lehi's 600-year prophecy to be fitted between Herod's death and Zedekiah's accession. Whether such a year length was fixed by revelation, by Old World tradition, or by personal preference is uncertain. Neither is it clear whether the year length was altered to harmonize with the surrounding culture's upon the fulfillment of the prophecy. If so, then Christ was born on or near 11 April 4 B.C. (Julian); if not, he was born in September/October of 5 B.C. In either case, the 360-day hypothesis agrees with all historical data dealing with Zedekiah and Herod, is consistent with the Book of Mormon account, and allows us a plausible explanation for the heavenly signs inferred from the Nephite account. The birth/death dates are also supported by the New Testament sequence of events surrounding the nativity, as well as Eusebius' historic quote dating Thaddeus' journey to Edessa. The 11 April date is a slightly

stronger candidate since it is in better agreement with the reconstructed lunar calendar of the Jews, and gives support for the crowdedness of the inn, the date set for the slaughter of the Nephites, and Herod's possible death date in winter (according to a late Jewish commentary).

The importance of knowing the birth of Christ to the day or month is not very great. Knowing it to within half a year becomes significant however. For otherwise Daniel's prophecy of Christ's coming is blurred, and a keener feeling of the Lord's equity in giving prophecy to his peoples as well as his exactness in fulfilling it is lost. More urgently, there are ancient passages dealing with our day. To understand them we will do well to obtain a clearer view of the past. Surely if we can't understand the past even when abundant data are before us, it is questionable that we will fully understand the present.

There are surely surviving errors in the foregoing arguments--either boldly pronounced or persisting by innuendo. Time and intelligence will eradicate such. I commend to you such efforts, for ultimately truth is identified from the merging of multiple visions.

F.A.R.M.S. Preliminary Reports are notes or tentative papers reflecting substantial research but not yet ready for final publication. They are made available to be critiqued and improved and to stimulate further research.

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Footnotes:

- 1) David Hughes in his book The Star of Bethlehem, an Astronomer's Confirmation (1979, New York, Walker and Co.; also in paperback, 1979, Pocket Books) concludes with a birthdate of 15 Sept. 7 B.C. John Mosley of Griffith Observatory and Ernest L Martin of the Foundation for Biblical Research conclude with a date in "summer or early autumn of 2 B.C." (The Planetarian, Vol 9, No. 2, page 9). LDS writers have tended to select 1 B.C.; the majority of the non-LDS authors have concluded a date between the fall of 5 B.C. and Passover of 4 B.C.
- 2) See Douglas Johnson's article "When the Star of Bethlehem Appeared" in The Planetarian, Vol 10, No 1.
- 3) The chronological table in the LDS publication of the Old and New Testament avoids dating any aspect of Jesus' life. However the Book of Mormon footnotes dating events were not altered from their traditional values - placing Lehi's departure at about 600 B.C. and Jesus' birth in 1 B.C./1 A.D. Reynolds and Sjodahl in their commentary on the Book of Mormon hedge, dating Zedekiah's accession in 597 B.C. (page 7 of Vol 1) and then later placing Lehi's departure seven years previous, in 604 B.C. (p 70, vol 1). John Sorenson of BYU proposed the resolution adopted here as early as the 1960's, thus anticipating the earliest drafts of this paper by at least a decade.
- 4) CCKW: Chronicles of the Chaldean Kings (626-556 B.C.) In the British Museum, by D.J. Wiseman, London, 1961. The first chronicle of this kind appeared in 1887. However that chronicle which relates the fall of Jerusalem is first published in the above book. See page 73
- 5) BCPD: Babylonian Chronology 626 B.C. to AD 70, by R. Parker and W. Dubberstein, Brown University Press, 1956. Gives an excellent summary and bibliography. (Cited hereafter as BCPD.)
- 6) Ptolemy's Almagest, volume 16 of The Great Books of the Western World, Encyclopedia Britannica, 1952, p 172
- 7) 16 March 597 B.C. Julian equals 2 Adar according to BCPD.
- 8) Late Babylonian Astronomical and Related Texts, Brown University Studies, volume 18, 1955, by Pinches and Strassmaier. This text gives a transcription of 30 of 44 surviving cuneiform inscriptions dealing with solar/lunar eclipses. No translations, but a table summarizes the contents of each tablet.
- 9) Another primary source record is preserved by Eusebius in his Ecclesiastical History. According to Eusebius, after Christ's death and resurrection Thaddeus, one of the seventy, was sent by the apostle Thomas to King Agbarus of Edessa, one of the nations of Arabia. Eusebius took care to present this episode "literally translated from the Syriac language" from public records maintained in Edessa. After completing his account, Eusebius states "these things were done in the three hundred and fortieth year", taking the year of occurrence also from

the public record. In his chronology Eusebius explains that the Edessens began to reckon their years from the 117th Olympiad, from the first year of Seleucus' reign in Asia. The Seleucian Era began either 7 Oct 312 B.C. or 3 April 311 B.C., depending on whether by the Macedonian or Babylonian calendar. Since the Edessen year began with the autumn equinox, their first year could have started in the fall of 312 B.C., several weeks before the beginning of the first year of the Seleucian Era by the Macedonian calendar. If so then the 340th year would have spanned from September 28 A.D. to September 29 A.D. If instead their first year were to begin with the autumnal equinox of 311 B.C., still within the first year by either reckoning, then the 340th year would have fallen from September 29 to September 30 A.D., sufficient time for Thaddeus to have traversed the distance had he been sent after Pentecost. Thus this evidence, resting upon the acceptability of the primary source from which Eusebius' translation was made, requires the crucifixion to occur in or prior to 30 A.D. Christ's birth would then be 33 years previous, in or prior to 4 B.C. See Eusebius' Ecclesiastical History, Book 1, Chapter 13; also Finegan's Handbook of Biblical Chronology section 193, for information about the Seleucian Era.

10) Josephus, Antiquities, tr. by Whiston, 1960, Kregel Publications, Grand Rapids, Mich. See section, 14,14,5.

11) HBCF: Handbook of Biblical Chronology, Jack Finegan, Princeton University Press, sections 172 to 178. A more complete discussion and consular list can be found in Greek and Roman Chronology, by Alan E. Samuel, Munchen, 1969, p. 253 ff.

12) An explanation and tables of the Greek Olympiads are available in HBCF, sections 185 to 187. Alan Samuel discusses the same on pages 189 to 194.

13) Antiquities 14, 16, 4.

14) Being in haste, Herod started for Rome from Egypt during the winter storm season, encountered severe weather, and was forced to land at Rhodes. There he had a three deck ship built and proceeded on to Rome. This delay plus no subsequent mentioning of bad weather suggests the winter storm season was over. Thus Herod's arrival in Rome is likely to be early spring; his confirmation, taking place within the week, is more likely to be after 1 Nisan than before. See Antiquities 14,14.

15) Travel upon the Mediterranean was risky during the stormy months of winter. Even governors, sent out from Rome to administer in the provinces, usually did not leave until spring, taking up their offices in early summer. Thus, if Herod died during winter, Archelaus might still wait until spring for the assurance of a safer passage. See Antiquities 17,8,4 to 17,9,3.

16) This taxing may be the one referred to by Luke. If so, Mary and Joseph went to Bethlehem for the enrollment which precedes taxation. Luke 2:2 must then be read as a parenthetical remark, in the sense of "and this taxing was first made (later), when Cyrenius became governor of Syria." Such an interpretation is still consistent with the Greek text. Decisive evidence for any particular interpretation of this taxation is lacking, and even this interpretation fails to explain the occasion for the initial enrollment.

17) See Dio Cassius iv. 27. See also Emil Schurer, A History of the Jewish People in the Times of Jesus Christ, 1896, Vol 1, p 465. (933 Sc 87ge)

18) CGCP: Catalog of Greek Coins in Palestine, George F. Hill, Bologna, 1964 (CJ705 B82)

19) Antiquities 18,7

20) CGCP, p 230

21) David Hughes, Star of Bethlehem, An Astronomer's Confirmation, p 72; or see Mosley and Martin in Planetarian, Vol 9, No. 2. Hughes uses Oppolzer's Canon of Eclipses, 1887, for reference.

22) Antiquities 17,6 to 8. While at Jericho, Herod sent out commands for many of the leading Jews to assemble at Jericho. When they had done so, he locked them in the hippodrome with instructions that they were to be slaughtered upon his death. The time to assemble them would likely increase our minimal estimate of five days at Jericho. The rejoicing occasioned by the captives' release has been linked by some to the commemorative date in the Jewish calendar of 7 Kislev, based on the Megillah Taanith (c. 70 A.D.) and later rabbinical commentary. See footnote 25.

23) The Universal Jewish Encyclopedia, KTAV Publ. House, 1969, New York, Vol 8, page 29.

24) For a discussion of the funeral customs and their implications relative to Herod's death, see Martin's article in Planetarian, Vol 11, No. 4, 4th Quarter 1982, p 4 ff. As to Herod's funeral procession, the translation of the Loeb Classical Library (B.J. 1,673 and J.A. xvii, 199) indicates the procession "travelled eight stades (one mile) each day until they had covered the 200 stades between Jericho and Herodeion. See also Abel, HP 1,406 n.1; Schurer, i, 417" Some interpret the passage as meaning they travelled 8 stades in the direction of Herodeion, and then ended the formal procession.

25) The choices have been simplified slightly. There is the possibility of the eclipse being that of March 5 B.C. and of Herod's death being before Passover 4 B.C. However, this option suffers from the same difficulty in being reconciled with the 34 years of Herod's reign after the taking of Jerusalem. Rather late commentaries on the Megillat Taanit, a Jewish list of commemorative days drawn up during the first century A.D., assigns Herod's death to either 7 Kislev or 2 Shebat. The other date is associated with Jannai's death; however, the commentary intermingles elements of Herod's death with Jannai's, hence casting doubt on its reliability as well as confusion as to which date is intended for whom. For the winter of 5/4 B.C. these two dates fell on 8 Dec and 30 Jan. For the winter of 4/3 B.C. they fell on 27 Nov and 20 Jan (BCPD). The January date receives slightly more circumstantial support from Josephus. Archelaus' holding audience just after the periods of mourning seems too close to Passover to allow for the November/December death date. If the funeral preparations and procession consumed a significant part of the 30 day sheloshim, then both it and the 7 day Shib'ah would have ended near the end of the month of February. The end of the winter storm season would be a month or more away. Passover, if there had been no intercalated month in the previous Jewish year, could have come as early as the end of March. The intervening month would be a reasonable length of time for both the developing public clamor and Archelaus' attempt to quiet it, as reported by Josephus (Wars 2,1, 2 and 3), to have taken place. (See Schurer, Vol 1, p. 467)

26) The era Actium began with the defeat of Anthony at the battle of Actium, 2 Sep 31 B.C. The coins are described on pages 158, 159 of the Catalogue of Greek Coins of Galatia, Cappadocia, and Syria, by Warwick Wroth, Bologna, 1964 (CJ 601 B82 1964).

27) A discussion of the primary evidence used in dating the governors of Syria can be found in Emil Schurer, A History of the Jewish People in the Times of Jesus Christ, 1896, Vol 1, p 350 ff.

28) 3 Nephi 8:5

29) However, the reference to "moon" in Omni 20,21 may refer to the calendar of the Mulekites. Coriantumr was apparently discovered by the people of Zarahemla before their merger with the Nephites, and died nine months later. Not having time to learn the language of the Mulekites well, he wrote the history of his people in his own tongue, which record remained untranslated until brought to Mosiah. If verse 21 is taken from the Mulekite version of the incident, then it indicates only that the Mulekites continued the Hebrew lunar calendar. But that would have no bearing on the Nephite calendar.

30) Hapd'efa'e, "a prince and chief prophet" of the town and temple of Suit during the Middle Empire of Egypt (early second millenium B.C.), made a contract with the official staff of the temple, giving indication of a 360<sup>4</sup> day year. In return for certain favors after his death, he pays them with "24 temple days out of his property", explaining that a temple day "is 1/360 of the year. If all the bread, beer, and meat that is received daily in this temple be divided, the 1/360 of the bread and beer and of everything that is received in this temple, is a temple-day which I give to you." (p 146, Life in Ancient Egypt, Adolf Erman, Dover, 1971, a reprint of the 1894 edition by MacMillan, London. Also Breasted, Ancient Records of Egypt, Vol 1, p 263, #552, Univ. of Chicago, 1906-1907) This record, antedating Lehi by nearly 1.5 millenium, establishes an honorable antiquity for a 360-day year.

31) HBCF, s. 40 for a discussion of the Egyptian calendar; s. 57 for the Mesopotamian. For speculation on the ancient Israelite calendar, see section 61.

32) The justification for so assuming can be found in In Search of Lehi's Trail, Lynn M. and Hope Hilton, 1976, Deseret Book Co., Salt Lake City.

33) An excellent introduction to the Maya calendar is S.G. Morley's An Introduction to the Study of Maya Hieroglyphs, 1915, Bulletin 57 of the Bureau of American Ethnology, Smithsonian Institute, reprinted 1975 by Dover Publications.

34) In our decimal system, a number such as 347 denotes  $3(10 \cdot 10) + 4(10) + 7(1)$ . The Maya system was similar, only it was based on 20 rather than 10. Thus one would expect to interpret 347 in a Maya inscription as  $3(20 \cdot 20) + 4(20) + 7(1)$ . But this is not the case. Instead 347 denotes  $3(18 \cdot 20) + 4(20) + 7(1)$ . If the number system arose in conjunction with a 360-day year, then it is more readily understandable why each unit in the third position would represent 360 units instead of 400. Thus keeping track of 20-day months and 18-month years could have given rise to a numerical notation far in advance of that being used in Europe or the Mediterranean area.

35) That the base date of 3113 B.C. might be an authentic relic of that era, indigenous to the Americas, is suggested by the unorthodox book Chronicles of Akakor (Karl Brugger, Delacorte Press, 1977, New York). The claims of the book have not been independently confirmed, tested or even addressed as far as I know. The chronicles relate a sketchy history of the Ugha Mongulala, a people whose calendar is typically Meso-american (20 day units) and who record the equivalent of 3166 B.C. (but by a simple and natural assumption adjustable to 3113 B.C.) as the beginning of a new era. Prior to the period of destruction marking the beginning of this era, and dated sufficiently distant from it to indicate a collapse in understanding of their own pre-cataclysmic calendar, the Ugha Mongulala were led Ina, whose role is similar to (and whose name sounds like a cognate of) Enoch's. While the possibility of forgery can not be excluded, the placement of an Enoch-like character in the American continents is not likely to be a subtle ploy of a forger who appears to know nothing of LDS beliefs. Interestingly, and again with suitable assumptions, the chronicle's internal chronology is adjustable to both the Samaritan Pentateuch's as well as the 13 baktun, pre-long count Maya tradition.

- 36) The pre-flood traditions of the Jaredites would be native American.
- 37) John L. Sorenson, in an unpublished manuscript, refers to Alma's prophecy of the destruction of the Nephites "in four hundred years from the time that Jesus Christ shall manifest himself unto them" (Alma 45:10-14). He notes that 400 years of 360 days each represent a very basic unit of time in the Meso-american system, one baktun. To mark time in terms of whole calendrical units is common among the Maya. (We do the same with our centuries.) However, also note a four hundred year precedent in the Lord's prophecy to Abraham concerning the Egyptian bondage in Genesis 15:13.
- 38) See HBCF, section 388
- 39) E. Biot, 1846, Catalogue des Etoiles Extraordinaires Observees en Chine, Connaissance Temps, Additions, p 60.
- 40) Ancient and Medieval Observations of Comets and Novae in Chinese Sources, Ho Peng Yoke, in volume 5 of Vistas of Astronomy, ed. by Beers, 1962. An excellent introductory discussion of sources and a correlated catalog of observations. See page 148.
- 41) "Can We Find the Star of Bethlehem in Far Eastern Records?", Christopher Cullen, Quarterly Journal Royal Astronomical Society, 1979, 20, P. 156. C. Cullen gives a brief historical overview and an excellent bibliography.
- 42) The 20 to 30 day gap between first sighting and maximum display is moderately conservative. A reverse situation to that hypothesized for 5 B.C. is given by Halley's comet in 1910. The comet did not become spectacular until it passed perihelion on 19 April, and was lost to the naked eye by the end of June, approximately 70 days later. On 18 May it reached maximum display, its tail stretching 3/4's of the way across the sky. Six weeks later it ceased to be visible.
- 43) This dating assumes that each of the 600 years was 360 days long, that the calendar was established from the beginning. If the first few years were 12 month lunar years, then the departure date would move forward. The first explicit mentioning of a date "from the time we left Jerusalem" occurs after their arrival in the Americas (2 Nephi 5:28).
- 44) Church News, 28 Aug 1982, p 3
- 45) The basis of this estimate is explained in In Search of Lehi's Trail, p 49.
- 46) 2 Kings 25:1 and Jer 39:1 agree that the siege began on the 10th day of the 10th month of Zedekiah's ninth year. Babylonian chronology places the date on 15 Jan 588, which agrees with the foregoing scriptural accounts provided Zedekiah's accession year ended on 1 Nisan 597 B.C. See HBCF, s. 323, 325.
- 47) The imprisonment of Jeremiah mentioned in 1 Nephi 7:14 came before Ishmael's departure, hence before the siege of Jerusalem, and can not be the one of Jer 32:1,2 which occurred during the tenth year of Zedekiah, or after 1 Nisan 587. There is an earlier incident, reported in Jer. 20:2,3 in which Jeremiah was imprisoned in stocks for a day. Some authorities date this incident just before or during the first year of Zedekiah's reign. (e.g. Interpreter's Bible, Vol 5, p 780b) Perhaps this is the incident to which Nephi referred.
- 48) A survivor and escapee of Jerusalem reached Ezekiel with the first news of the fall of Jerusalem in January of 586. See HBCF, section 332.
- 49) Such an arrival date corresponds well with the river Laman episode.
- 50) Suggests, not requires, since the phrase "our women" might refer to the wives of Ishmael's sons who were married before the departure, or even to Sariah herself. In this case arrival in Salalah could be as early as June 588, resulting in an eight year six month sojourn.
- 51) Ishmael's two sons, Laman, Lemuel, Nephi, Sam, Zoram, and Lehi.
- 52) See O. Neugebauer's article "The Babylonian Method for the Computation of the Last Visibilities of Mercury", Proceedings of the American Philosophical Society, Vol 95, No 2, April 1951, p 115-116 in particular.
- 53) The astronomical assumptions are not as critical as they sound. There are really only two possible chronologies for Christ: born in 5/4 B.C., died in 29/30 A.D. Birth in the spring of 5 B.C. strains even further the reconstructed eight years during which Lehi sojourned in the wilderness before reaching Bountiful. A 29 A.D. death is difficult to harmonize with the Passover falling on a Friday. Any earlier chronology conflicts with the 600 year prophecy, any later, with Herod's death.



54) The 19th century writers tended to favor 29 A.D. for the crucifixion. Thus Clarke's Commentary, McClintock's and Strong's Encyclopedia of Biblical Literature, and the Popular and Critical Bible Encyclopedia. With more accurate reconstruction of the lunar calendar, writers of this century have favored 30 A.D. Thus William Smith, Jack Finegan, The Interpreter's Bible.

55) The stars of the magi were most likely related to Mary by the magi. She preserved the story and passed it on again much later in her life. It is conceivable that any difference which might have existed between the star which initiated the magi's journey and that which ended it, a distinction of which Mary might have been unaware, was lost in the transmission. That the magi were in Herod's court two years later suggests that the conjunctions themselves were not enough to start them on their journey. Perhaps the Hui comet did.

56) Relative to the cuneiform tablets attesting Babylonian observations of the planetary conjunctions, see HBCF, also Keller, The Bible As History, 1956, William Morrow and Co. Various modern authors have endowed that event with astrological significance. And while the ancient world was steeped in astrology, I have not yet found an authentic source that would allow us to reconstruct that meaning which would be given to the event by the magi.

57) Quoting J Eric Thompson, p 81 of "Maya Chronology: the Correlation Question" (See next footnote):

"We have seen that the 260-day counts of the Aztecs, Yucatecan Maya, Quiche, Cakchiquel, and Jacaltecas were in conformity with a maximum error of two days. We also know that in the case of the Quiche and Jacalteca counts there is only a single day's error between them and the Yucatecan Maya count recorded by Landa in the middle of the Sixteenth Century

"The ancient mechanism has withstood close to four centuries of Spanish domination and clerical opprobrium. Driven underground, it has obstinately continued to function to the present time without the loss of a single day, . . . and has proved to be a hardy survivor of a past age. Is it credible that the sacred count should have broken down at some time prior to the arrival of the Spaniards and yet have been capable of withstanding unchanged nearly four years of alien contact?" See also page 97.

58) For a discussion of the correlation problem, see "Maya Chronology; the Correlation Question", J Eric Thompson, Carnegie Institute of Washington, Publication 456, Contributions to American Archaeology, 1933. See also Maya Hieroglyphic Writing, op. cit., p 303 ff.

59) See "The Origins of Mesoamerican Writing", Joyce Marcus, Annual Review Anthropology, 1976, 5:35-67. The earliest complete and contemporaneous calendrical inscription so far discovered is dated 320 A.D. However, more ancient inscriptions, reaching back into the first century B.C. are known bearing both the long count and the 260-day year designations. In each case the designation of the day and month of the haab has not survived. However the existence of the year bearer in some of these inscriptions virtually assures the existence of a pre-Christian haab. Traces of the haab can be dated to at least the second century B.C.

60) Thompson gives one incident and refers to another when major revolts (plots) were timed for the first day of the 260 day count. See "Maya Chronology: the Correlation Question" page 55. (op cit. footnote 58)

61) The 568,425 days from 11 April to 25 July inclusive consists of 1557 complete 365-day years plus 120 days. If 1 Pop, considered the first day of the year in later times, corresponded to 25 July 1553, then 11 April should have corresponded with 6 Mac, assuming the ancient order of months and unnamed days was identical to that of the classical period. There is evidence of a one day shift, however, in the haab sometime during the middle of the classical period which, when taken into account, causes 11 April to correspond with 7 Mac. On the same assumptions the death of Christ would have corresponded to 11 Mac. The situation relative to the other two birth dates is not any better. Three September and 8 October would correspond respectively to the 29th and 64th days of the haab. Yet with so many events of significant magnitude occurring in the birth/death month, we might expect some vestiges of the association to have come down to us. Nothing definite, however, seems to be available. The glyph representing the month of Mac is suggestive, however. According to Thompson (Maya Hieroglyphic Writing, 1971, p 113): "The glyph itself shows considerable variability. In the personified forms the main element is the head of the xoc fish, with the meaning of "count"; in the symbolic form the main element is either a sign resembling Imix or the so-called snake markings . . . and a variant of the kin sign . . . The patron of the month is a diety, identified by Beyer as the youthful head for number 3. His distinguishing marks are a close-fitting cap and the IK symbol on the side of the cheek or worn as an ornament. The symbolic form of this head is the IK sign, clearly displayed in the introductory glyph of the Tablet of the Foliated Cross, Palenque. There is no obvious connection between this god and the glyph or names of the thirteenth month."

62) The inclusion of this section of the paper is not so much part of a conservative search for truth as of a declarative faith. Its inclusion here results from the belief that when one is utterly convinced a concept is both misunderstood and of great importance, he should declare it in no uncertain terms rather than hide behind the impersonal passivity of more scholarly writing. Of course, you as the reader will have to judge the correctness of that declaration. Many of the early Christian writers (living within the first two centuries) applied this prophecy to the first advent of Jesus. Thus it was for Tertullian, Clement of Alexandria, Hippolytus, Julius Africanus, Origen, and Eusebius. Most of these interpretations suffered from being incomplete and using inexact chronologies. Not until Porphyry in the late 3rd century was the position taken of the prophecy having been written after the fact.

63) To split the messianic reference of the prophecy between Jesus and John the Baptist is mirrored in the Manual of Discipline, wherein is mentioned "the coming of the Prophet and of both the priestly and the lay Messiah", that is literally "the Messiahs ... of Aaron and Israel." See p 58 of The Dead Sea Scriptures, T.H. Gaster (Doubleday Anchor, 1957, New York) and the accompanying footnote,

64) This phrase "not for himself" is subject to much latitude of interpretation. I have selected the one most appealing to me. In the Septuagint version it is translated "though there is no crime in him" (Thompson/Muses translation). In the New English it is rendered "with no one to take his part". In the Jewish publication society, simply "be no more".

65) Numbers 14:34

66) Matt. 15:24

67) 3 Nephi 9:17

68) Christ seems to have had this prophecy in mind when he issued his warning to his followers (Mt 24:15) of the coming destruction of Jerusalem. His (or Matthew's) intent is that they could escape the destruction by understanding that portion pertaining to them. Luke (21:20) expands upon that warning, suggesting that he too applied the prophecy to his own times, that when the Roman army encircled Jerusalem, the destruction which was to result from the abomination was to be fulfilled. The Septuagint version can be interpreted even further, since it seems to suggest the desolation is to continue to the end of a time, meaning the end of a special prophetic period.

69) The Septuagint Bible, tr. by Charles Thomson, revised by C.A. Muses, Falcon's Wing Press, 1954.

70) War of the Jews, Book 5, Chapter 1, sections 2 and 3. Descriptions of the temple being defiled repeatedly by the Jews appear throughout books 4 and 5. In particular see Book 4 chapters 3 and 5; Book 5 chapters 1 and 3.

71) The forty year gap between the crucifixion and the destruction of Jerusalem is seemingly anticipated in the Zadokite document from the Dead Sea Scrolls: "About forty years will elapse from the death of the teacher of the community until all the men who take up arms and relapse in the company of the Man of Falsehood are brought to an end. At that time, the wrath of God will be kindled against Israel, and that will ensue which is described by the prophet when he says: 'No king shall there be nor priest nor judge nor any that reproves aright' cf. Hos 3:4." (Page 73 of The Dead Sea Scriptures, T.H. Gaster, Doubleday Anchor, 1957, New York) The composition of the text is placed by Gaster between 170 B.C. and 68 A.D.

72) When Josephus prophesied to Vespasian that he would live to be emperor of Rome, it is possible he had in mind this prophecy. See Wars of the Jews, Book 3, Chapter 8, sections 3 and 9.

73) Based upon cuneiform texts and the correlation between Babylonian and Julian dates, Artaxerxes I began his reign in June/July of 464 B.C. See BCPD p 17.

74) "On the first day of the first month Ezra fixed the day for departure from Babylon and on the first day of the fifth month he arrived at Jerusalem." Ezra 7:9

75) Depending upon one's assumptions, Tiberius' 15th year can fall anywhere within the span from 1 Jan 26 to 1 Nisan 30 A.D. (See HBCF, p 259-271) I am assuming Luke counted from the senate's naming Tiberius co-ruler (colleague) with Augustus, approximately October, 12 A.D. Thus the 15th year spans October 26 to October 27 A.D. John's emergence in the fall of 26 (about six months prior to Christ being "about 30", assuming an April 4 B.C. birth) easily satisfies our requirements. If Christ were born Sep/Oct of 5 B.C., then John's emergence in the spring/summer of 26 A.D. requires Tiberius' years to be counted from the same beginning point, but in the non-accession system. In this case the first year would end either 1 January 13 (Julian calendar) or 1 Nisan 13 (Jewish calendar).

76) The seventy week prophecy deals with the dispensation of the meridian of time, whose fulfillment is represented by its closing seven year period. This is in accordance with Christ's own pronouncement that "the time is fulfilled", meaning the meridian of time. This identification suggests Daniel's "time, times, and half a time" may be referring to the three prophetic periods called respectively "the meridian of time", "times of the gentiles", and "time of the end". The periods of fulfillment of these can be taken as the seven years of confirming the covenant to the Jews, the fourteen years between the organization of the church under Joseph Smith and his death, and the 3.5 year ministry of the two special witnesses in Jerusalem prior to the second coming. It is premature to say whether this tentative conclusion will be borne up by subsequent study and events. But should it be correct, none other than the LDS will accept it.

77) The dating of Paul's conversion is based upon Galatians 1:15 - 2:1, thus 14 (or possibly 17) years before the Jerusalem conference. The conference date (48 A.D. or early 49 A.D.) is estimated by Paul's activities between the conference and his appearance before Gallio at Corinth (see Acts 15 to 18). Gallio's service as proconsul is dated 51 A.D. (plus or minus a year) by stone inscriptions. See The New Testament Background, C.K. Barrett, Harper and Row, 1961). For a discussion of the problem, see Finegan, HCBF, sections 497 to 506. Finegan's conclusion is also 33/34 for Paul's conversion.