# James and Astronomy (James 1:13-18): All the Christian Needs to Know about Solar Parallax

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## **INTRODUCTION**

The Bible is the self-revelation of God. It reveals the absolute truth about the Lord and His creation. The Scriptures give special revelation about the Lord Jesus Christ as Creator and Savior. The Bible writers build their teaching of the great redemptive truths upon the physical realities of the created heavens and earth (e.g., Ps. 19:1-14; Mal. 4:2). James is no exception as he based several truths about God and sin's temptation upon the physical objects and movements within the created heavens. This simple believer and member of the holy family of Joseph and Mary had a thorough understanding of the workings of the heavens and illustrated the Lord's perfections in contrast to sin. Using several technical terms historically associated with astronomy, James revealed a biblical cosmogony<sup>3</sup> upon which he taught redemptive analogies. He used at least four terms that relate to astronomy, including "do [not] err" (planasthe  $\pi \lambda \alpha \nu \hat{\alpha} \sigma \theta \epsilon$ ), "lights" (ton photon  $\tau \hat{\omega} \nu \phi \dot{\omega} \tau \omega \nu$ ), "variableness" (parallage  $\pi \alpha \rho \alpha \lambda \lambda \alpha \gamma \dot{\eta}$ ), and "shadow of turning" (tropes aposkiasma  $\tau \rho o \pi \hat{\eta} \zeta \ \dot{\alpha} \pi o \sigma \kappa i \alpha \sigma \mu \alpha$ ). The terms, when used biblically, give the absolute heavenly foundation upon which redemptive truths are understood. Since the Apostle John assured his audience of local church members that "ye know (oida [o $i\delta\alpha$ ] = absolutely) all things" (I Jn. 2:20), it follows that Christians, with the Scriptures and the Holy Spirit (I Jn. 2:27), may have absolute knowledge not only about redemptive truths but also about His creation.<sup>4</sup> This essay will show exegetically that James used several analogies from creation to teach that the Lord does not tempt men to sin. The primary import of this passage teaches that God is unchanging in His goodness toward man. The secondary emphases relate to biblical revelation about planets, stellar lights, solar parallax and tropic movements. James revealed under inspiration all the absolute knowledge the Christian needs to know, and for that matter can possibly know, about these astronomical phenomena.

<sup>&</sup>lt;sup>1</sup>For instance, the Lord Jesus Christ taught many truths from parables, building a spiritual truth upon a physical truth. In Mt. 13 he assumed the physical reality of seeds, tares, leaven, treasure, pearls, and nets, and taught spiritual realities built upon these items from the natural realm.

<sup>&</sup>lt;sup>2</sup>Of the four men named James in the New Testament (NT), only the half-brother of the Lord Jesus Christ (Mt. 13:55) is the plausible explanation. James believed in Jesus as Savior only after His resurrection (Jn. 7:5; I Cor. 15:7), was counted among the apostles (Gal. 1:19), and became a leader in Jerusalem (Acts 15:13).

<sup>&</sup>lt;sup>3</sup>I.e., origin and movements of the heavens.

<sup>&</sup>lt;sup>4</sup>The Lord's *ekklesia* (ἐκκλεσία), the visible assembly of immersed believers with pastors and deacons is "the pillar and ground of the truth" (Mt. 28:19-20; I Tim. 3:15), needs only the authoritative and sufficient Scriptures to understand all truth (II Tim. 3:16-17).

#### **CONTEXT**

James wrote his epistle to Christian Jews who were scattered about, although meeting in synagogues and organized as local churches (cf. Jam. 1:1; 2:2; 5:14). These early churches were undergoing severe persecution (cf. Acts 8:1-4; 11:19; 12:1 ff.) and needed the divine perspective concerning trials and temptations. In the aforementioned *pericope* (1:13-18), James lists five reasons why God is not the source for the temptation to sin. Having declared that trials (*peirasmois*) are to be endured (1:2-12), James now asserted that temptations are to be resisted. He needed to instruct his audience as to the source for the enticement to evil.

The writer's first argument dealt with the nature of God (v. 13). God's holy nature perfectly resists sin (cf. Lev. 11:44-45). He has no fallen nature to submit to the appeal of evil (literally "evils"). He "cannot be tempted with evil, neither tempteth (peirazomenos) he any man," James declared. The nature of the Godhead is separated absolutely from all moral wickedness. Why would a Christian Jew think that the holy God of Abraham, Isaac and Jacob would tempt a believer to ungodliness?

The second argument James established was that temptation comes from within man.<sup>5</sup> Using the present passive verb "is tempted" and the two present passive participles "is drawn away" and "enticed," the writer focused on the culprit--"his own lust." Man's Adamic nature (cf. Pss. 51:5; 58:3; Rom. 3:23) lures and snares its victim, the man himself. Following the genealogical motif, James expressed the origin and destination of sin. When temptation comes to man's lust, his old nature conceives and gives birth to sin. When the sin is mature, it bears offspring in terms of death. Man is the culpable one, and not God, with regard to the enticement to sin.

Next, James warned his audience about being deceived (I Cor. 6:9; 15:33; Gal. 6:7). The present passive imperative "err" (planasthe) with the negation ( $me \mu \dot{\eta}$ ) suggests that his audience was actively engaged in thinking of God as the author of temptation. The verb planao is translated twenty-four times in the AV as "deceive," six times as "err," five times as "go astray," twice as "seduce," once as "wander," and once as "be out of the way." It is the root from which the noun "planet" comes, and a planet is an astral object which "wanders" around the sun. James' audience was allowing itself to go astray in deception about God's role in temptation. James used an apt illustration for Christians whose theological perspective strays from the Scriptures (cf. also Jam. 5:19). They were like "wandering stars" that go astray (cf. Jude 1:13).

In contrast to the deceived perspective some held, James asserted that the fourth reason God was not the author of temptation is His nature of goodness (v. 17). Only good comes from the Lord (Ps. 34:8) as His act of giving  $(dosis)^6$  is good and His gift (dorema) is perfect. His benefits are from above, rather than "earthly, sensual, devilish" (cf. Jam. 3:15), descending from the loving Heavenly Father. To illustrate the magnitude of the Lord's beneficence, James affirmed that God, as "the Father of lights" (patros ton photon  $\pi\alpha\tau\rho\delta\zeta$   $\tau\hat{\omega}\nu$   $\phi\hat{\omega}\tau\omega\nu$ ), created the astral lights known as the morning light, sun, moon, and stars for man's continued blessing (cf. Gen. 1:2-5; 14-18). But the Lord God,

<sup>&</sup>lt;sup>5</sup>This statement does not ignore that Satan is the great tempter and who knows how to appeal to the lusts of Adam's sons (Mt. 4:1, 3).

<sup>&</sup>lt;sup>6</sup>Cf. Phil. 4:15.

<sup>&</sup>lt;sup>7</sup>Cf. Ps. 84:11; Mal. 4:2; Eccl. 12:2. God is likened to the sun and He created the lights.

unlike the sun, has no variableness (parallage)<sup>8</sup> or shadow of turning (tropes aposkiasma). The sun's apparent movement from the perspective of observers on earth at two different points simultaneously or its "parallax," and its movement above and below the equator (cf. Rom. 8:39) or its "tropic," are observationally indiscernible. Nevertheless, the Lord never changes (cf. Mal. 3:6) in contrast to the indiscernible parallactical angle and tropical movement of the sun.

James concluded with his fifth argument that God does not entice to temptation. The Lord is the God of creation not destruction. His will includes begetting (cf. v. 15) man through the instrumentality of the word of truth (cf. II Cor. 6:7; Eph. 1:13) for regeneration (cf. Jn. 3:3, 5). James assured his audience that God's purpose was to give them eternal life through the new birth so that these Christian Jews would become firstfruits (cf. Ex. 34:22; Lev. 23:10) of the anticipated greater harvest of mankind (cf. Rom. 11:25). James effectively repudiated any notion from his audience that God tempts man to sin. He based his arguments on the biblical nature of God, man, and the heavens. As his audience was deeply inculcated in biblical knowledge based on the OT Scriptures, they would have understood James explicit and implicit teaching, including his cosmological analogies. The remainder of this essay will address the implications of James' biblical model for his cosmological analogies and will repudiate evolutionary theories that contradict this model.

## **BIBLICAL ASTRONOMY**

# James' Astronomy

Because of James' early childhood education from his godly parents Joseph and Mary, he would have learned and understood the biblical teaching concerning the Old Testament (OT) cosmogony. His epistle is replete with references to twenty-two OT books and numerous analogies from the natural realm, including vegetation, procreation, astronomy, animal husbandry, anatomy, hydrology, etc. He built his spiritual truths on the reality of the natural realm, in which he had a solid biblical education. James assumed his audience would have a basic understanding of the heavenly terms and expressions he employed in his analogies. Concerning the origin and structure of the created heavens and earth, James understood the following Scriptural truths.

1. James knew that God created the heavens and earth from no existing material (*creatio ex nihilo*), but through the Logos (*creatio ex Deo*) during the creation week (cf. Gen. 1:1; Jn. 1:1-3; Heb. 11:3).

<sup>&</sup>lt;sup>8</sup>This biblical *hapax legomena* (word used only once, although compare II Kings 9:20 [LXX]) refers to change or variation. Lexicographers such as Arndt and Gingrich cite ancient usage of *parallage* in Aeschylus and Plato. William F. Arndt and F. Wilbur Gingrich, *A Greek-English Lexicon of the New Testament and Other Early Christian Literature* (Chicago: The University of Chicago Press, 1957), p. 625.

<sup>&</sup>lt;sup>9</sup>These two nouns are *hapax legomena* and form the genitive construction. In this case the genitive is one of cause, "a shadow because of change."

<sup>&</sup>lt;sup>10</sup>Cf. Lk. 9:56: "For the Son of man is not come to destroy men's lives, but to save them."

- 2. On the first day He created a darkened sphere (cf. Isa. 40:22; Prov. 8:27) of water called earth, and the Spirit Himself moved over the surface of the earth, illuminating the sphere as He moved over it as the light source (cf. Gen. 1:2; Ps. 104:2).
- 3. On the second day God created the firmament (= Heavens [dual ending on Heavens means this refers to only the atmosphere and stellar "outer space"]) and placed it between the waters under (i.e., the earth) and the waters above the firmament, the outer limit of His physical creation (cf. Gen. 1:6-8; Ps. 148:4).
- 4. By the end of the third day the cosmos was clearly geocentric, with the light source in the heavens moving around the stationary earth (cf. Gen. 1:2-13).
- 5. On the fourth day, God created and put the greater light, the lesser light and stars in the firmament for the benefit of the earth. The earth was distinct from the revolving heavens with its various component parts, such as sun, moon, and stars. These moving lights became the basis for the daily, seasonal and yearly light sources for the stationary earth (cf. Gen. 1:14-18).
- 6. The remainder of the OT Scripture builds upon the revelatory truth of the creation week, consistently teaching that the earth is stationary, and that the heavens, including the sun and stars which were placed in the heavens, move around it.
- 7. James knew that from Joshua's perspective the sun and moon moved phenomenologically around the earth (cf. Josh. 10:12), but he also knew that from God's perspective, Who is outside of His creation and Who declared absolutely that the sun and moon moved, and He caused them to stop (cf. Josh. 10:13; Hab. 3:11).
- 8. James knew that the author of Judges taught absolutely that the stars moved through their respective courses in the heavens (cf. Judg. 5:20).
- 9. James knew that King David taught absolutely that the sun moved through its circuit as a racer around the track (cf. Ps. 19:4-6).
- 10. James knew that wise Solomon taught absolutely several natural phenomena moved relative to the stationary earth, including the sun, wind, and rivers (cf. Eccl. 1:5-7).
- 11. James knew that the prophet Isaiah recorded absolutely that the shadow of the sun (and therefore the sun) moved ten degrees backward as a cosmological sign (cf. Isa. 38:8b).
- 12. James knew that the psalmist Asaph revealed absolutely that the sun rose and went down relative to the stationary earth (cf. Ps. 50:1).
- 13. James knew that Eliphaz declared absolutely that God walked in "the circuit of heaven" which carries the sun, moon, and stars (cf. Job 22:14).
- 14. James knew that the OT Scriptures taught absolutely and consistently that the sun, moon, and heavens moved relative to the stationary earth, with the exception of the Lord's shaking the earth in judgment, along with the heavens, during the Tribulation (cf. Job 38:14; Isa. 13:13; and 24:19-20).
- 15. James knew that God affirmed absolutely that the heavens could not be measured accurately and absolutely (cf. Jer. 31:37).<sup>11</sup>

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<sup>&</sup>lt;sup>11</sup>Thomas M. Strouse, "Biblical Geocentricity," *The Biblical Astronomer* 109 (2004): 69-

#### The Problem of the Parallax

Since the Lord's stepbrother used the Greek noun *parallege* from which "parallax" comes, it behooves the Christian to know what the biblical writer meant to be able to refute false theories. James compared God's absolute lack of variation with the indiscernible "parallax" of the sun from the observer's perspective. Man, who can not physically measure the real parallactical angle of the sun, should believe by faith that the Lord is absolutely immovable with regard to fulfilling His promises.

## History of Parallax

The Greek word James employed means "variation, change, alteration or vicissitude."<sup>12</sup> In the context it seems he contrasted God's lack of parallax with that of the sun's change, whether apparent or real. It may refer only to the sun's diurnal, annual and tropical movements in the heavens. Mayor asserts, "We may therefore take the word to express the contrast between the natural sun, which varies its position in the sky from hour to hour and month to month, and the eternal Source of all light." However, the writer may have referred to the vox technica of astronomy, acknowledging the angle of parallax for the simple triangulation calculations necessary for distances. Solar parallax refers the sun's apparent shift when viewed simultaneously from two different vantage points. <sup>14</sup> An astronomical definition of parallax is the "apparent displacement of an object due to a motion of the observer." <sup>15</sup> The simple experience of parallax would occur when one puts his thumb over an object viewed from a distance and attempts to view the object with one eye closed and then the other. The thumb seems to "move" back and forth, first blocking the view of the object and then moving off of the object when viewed by the other eye. Parallax produces angles from which distances may be determined The trigonometric parallax method, or triangulation, is the through trigonometry. foundation for astrometry, the measurement of star distances.

The sun's parallax is of utmost importance to evolutionary astronomers since it would give not only the alleged distance from earth to sun, but also would establish the Astronomical Unit (AU).<sup>16</sup> The ancient Greek astronomers attempted to understand the

<sup>&</sup>lt;sup>12</sup>H. G. Liddell, *An Intermediate Greek-English Lexicon* (NY: Harper & Brothers, Publ., 1899), p. 599.

<sup>&</sup>lt;sup>13</sup>Joseph B. Mayor, *The Epistle of St. James* (Grand Rapids: Zondervan Publ. House, 1954), p. 60.

are in two different locations. The attempt to measure the sun's parallax is only for the purpose to determine angles and distances. In order to determine the height of an isosceles triangle, one would have to know any two consecutive sides or angles: side, angle, side (SAS) or angle, side, angle (ASA). The sun does have real motion against its background (i.e., the constellations), although heliocentric astronomers term this "apparent motion."

<sup>&</sup>lt;sup>15</sup>George O. Abell, *Exploration of the Universe*, (Chicago: Holt, Rinehart and Winston, 1974), p. 688.

and has become the "absolute" basis for astrometry as 1 AU. Backhaus lists five reasons astronomers want to know the sun's parallax. 1) The sun's distance from earth would help determine the magnitude of the solar system. 2) Solar system distances help determine

phenomena of the heavens. For instance, Aristarchus of Samos (310-230 BC) tried to determine the sun's distance through somewhat accurate calculations of the moon's phases, concluding that the sun was about twenty times as distant from the earth as the moon. Furthermore, he determined the relative sizes of the earth, moon and sun, postulating that the earth must rotate upon its axis and revolve around the stationary sun.

Other ancient Greek astronomers such as Hipparchus (c. 160-127 BC) and Ptolemy (2<sup>nd</sup> century BC) made further calculations to determine the relative distance of the moon from the earth through the use of eclipses. Although these astronomers made refined advances based on previous work, they rejected the hypothesis that the earth rotated and revolved around the sun. The major problem the ancients had in determining absolutely the distances of astral objects was the severe limitations placed on geometric triangulation. The base for their triangle was the diameter of the earth at about 8,000 miles. Because of the far distance even to the moon, the triangle was "long and skinny." Two of the angles of the triangle were almost 90 degrees each, producing near parallel sides for the triangle. The truth of Jeremiah's prophecy that the heavens could not be measured absolutely held firm (cf. Jer. 31:37). Until the time of the Reformation (16<sup>th</sup> century) astronomers were complacent with their mathematical limitations and Christians were satisfied with their biblical geocentricity.

# The Need and Result of Solar Parallax

Through the influence of the notion of *Sol Invictus* the Roman Empire prepared the way for incipient heliocentricity, <sup>17</sup> which finally blossomed by the work of Copernicus (AD 1473-1543), Kepler (1571-1630), and Galileo (1564-1642). Copernicus, greatly influenced by Greek philosophy and astronomy, rejected the geocentrism of the Bible and posited the heliocentric theory that his book *De Revolutionibus Orbium Coelestium* (1543) declared. Kepler attempted to calculate the parallax of Mars, which planet is far closer than the sun, to measure the sun's distance (1600). Galileo, of course, popularized Copernicanism in his *Dialogo dei Due Massimi Sistemi* in 1632. Later astronomers attempted to refine the sun's parallax by observing the transits of the planets Mercury and Venus across the sun's disc.

The theory of heliocentricity postulates that the earth revolves around the sun yearly in an orbit having a diameter of 186,000,000 miles. This anti-biblical and unproved assumption now gave new momentum to triangulation for distances because the base line was no longer the earth's diameter of 8,000 miles but its orbit of 186,000,000 (2 x 93,000,000) miles. This change based on the unproved assumption of heliocentricity, immediately expanded the distances of the stars by the factor of 23,500 times. Friedrich W. Bessel employed this new perspective and measured the parallax of the star 61 Cygni, concluding that it was more than 10 light years from the earth

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astrophysical properties of the sun and planets. 3) Gravitation factored into these distances help determine planet's positions more accurately. 4) This leads to better astronomical navigating. 5) Stellar parallax helps determine the size of the universe. U. Backhaus, "Astronomy On-Line Project: Measuring the Sun's Parallax" <a href="http://didaktik.physik.uni-essen.de">http://didaktik.physik.uni-essen.de</a>, 7-4-05, pp. 2-4.

<sup>&</sup>lt;sup>17</sup>Gerardus D. Bouw, *Geocentricity*, (Cleveland: Association for Biblical Astronomy, 1992), pp. 153-155.

 $<sup>^{18}186,000,000 \</sup>text{ miles/8,000 miles} = 23,500.$ 

(1838). His work became foundational for measuring the heavens and fostering other speculative alternatives of astrometrics. Although evolutionary astronomers considered Bessel's detection of stellar parallax the *coup de grace* for geocentricity, the biblical writer James implied the reality of solar parallax about eighteen centuries earlier (cf. Jam. 1:17). The simple and biblical fact of the matter is that the stars move diurnally with the sun within the revolving firmament relative to the stationary earth.

The erroneous distances based on heliocentric assumptions, exacerbated by the factor of 23,500 times, go hand in glove with the near infinite age of the heavens at fifteen billion years. Evolutionary science, in rejecting biblical revelation, can neither measure the vastness of the heavens, nor comprehend the newness of the Lord's creation. In contrast, the Bible teaches that the immeasurable heavens are confined within the water above the firmament (cf. Gen. 1:1-18; Ps. 148:4) were created a mere 6,000 years ago (cf. Gen. 5, 10-11; Mt. 1:17; Jude 1:14). For instance, Eliphaz made the inspired observation, stating "Is not God in the height of heaven? And behold the height of the stars, how high they are!" (Job. 22:12). Again, David asserted the truth about vast distances within the heavens, stating, "for as the heaven is high above the earth, so great is his mercy toward them that fear him" (Ps. 103:11).<sup>21</sup>

## The Exegesis of Jer. 31:37

Atheistic evolutionists have completely rejected the Scriptures and consequently built a system of "science falsely so called" (I Tim. 6:20). However, creationists who have accepted the heliocentric model have capitulated to some of the myths of evolutionists. For instance, creationist Steidl in describing stellar parallax, asseverates,

By measuring the amount the star appears to shift, and knowing the size of the earth's orbit, one can use trigonometry to find the distance to that star. The distance of stars out to about 300 light years is measurable in this way. This is only a fraction of the size of our galaxy, the Milky way, let alone the rest of the universe...It is easy to see that with all the assumptions which must be made, and the statistical manipulations which must be carried out, there will be large

<sup>&</sup>lt;sup>19</sup>Abell, p. 120.

<sup>&</sup>lt;sup>20</sup>Wright lists 25 methods additional to that of trigonometric parallax to help refine the measurement of the sun's parallax, all of which are based on speculative evolutionary assumptions: Moving Cluster, Secular Parallax, Statistical Parallax, Kinematic Distance, Expansion Parallax, Light Echo Distance, Spectroscopic Visual Binaries, Baade-Wesselink Method, Spectroscopic Eclipsing Binaries, Expanding Photosphere Method, Main Sequence Fitting, Spectroscopic Parallax, RR Lyrae Distance, Cepheid Distance, Planetary Nebula Luminosity Function, Brightest Stars, Largest H II Region Diameters, Surface Brightness Fluctuations, Type I-a Supernovae, Tully-Fisher Relation, Faber-Jackson Relation, Brightest Cluster Galaxies, Gravitation Lens Time Delay, Sunyaev-Zeldovich Effect, and Hubble Law. Edward L. Wright, "The ABC's of Distances," <a href="http://astro.ucla.edu">http://astro.ucla.edu</a>. July 7, 2005, pp. 1-8. This large number of various techniques shows the impossibility to measure the sun's distance accurately or absolutely.

<sup>&</sup>lt;sup>21</sup>Cf. "For as the heavens are higher than the earth, so are my ways higher than your ways, and my thoughts than your thoughts" (Isa. 55:9).

uncertainties in the distances of extremely distant objects. In fact, the cosmic distance scale is admittedly unreliable. <sup>22</sup>

Steidl, following the assumptions of evolutionists, bases the "local" stellar distances on the earth having an 186,000,000-mile diameter orbit around the sun. He admits that beyond the possible trigonometric calculations of close stars, other methods, based on heliocentric and evolutionary assumptions, produce greater, albeit unreliable, distances. However, to the Christian who believes in biblical geocentricity and rejects the notion that the earth has an orbit, triangulation cannot accurately and absolutely be calculated for the sun's parallax, and consequently stellar distances cannot be measured with reasonable accuracy or biblical authority. Of course, the Lord Jesus Christ created the heavens and earth with these physical and mathematical constraints, allowing Him to make the challenge to mankind:

Thus saith the LORD, which giveth the sun for a light by day, and the ordinances of the moon and of the stars for a light by night, which divideth the sea when the waves thereof roar; The LORD of host is his name: If those ordinances depart from before me, saith the LORD, then the seed of Israel also shall cease from being a nation before me for ever. Thus saith the LORD; If heaven above can be measured, and the foundations of the earth searched out beneath, I will also cast off all the seed of Israel for all that they have done, saith the LORD (Jer. 31:35-37).

During the creation week the Lord Jesus Christ (Col. 1:16) placed the sun, moon and stars in the firmament for lights and established the regulation of the sea waves. These natural constants are part of His divine ordinances which will not change, the Lord declared. Using the conditional particle ('im \(\sigma\)) (Jer. 31:36-37), Jehovah asserted His immutability of purpose with regard to fulfilling the New Covenant promises to Israel (vv. 31-34), challenging mankind with the impossible task of measuring the heavens or the foundations of the earth.

The Lord's challenging statement "If heaven above can be measured...I will also cast off" reveals several truths. 1) The expression represents the classic construction for a contingency, with 'im in the protasis and the imperfect verb ('eme'as אַבּאָבּא) in the apodosis. 2) Heaven (shamayim שֵׁבְּיִי ) is an anarthrous dual noun referring to both the atmosphere and the stellar outer space. 3) The verb "can be measured" (yimmadu בְּבַּיִּרוֹ ) is the Niphal imperfect, third person, masculine, plural form of madad (בְּבַּיִּרוֹ ). The Authorized Version translates this verb as "measure," "mete out," "mete," or "stretched" fifty-one times in the OT. The Niphal verb stem is passive, forcing the reader to determine the subject of the verb, which in this case is mankind. The verb madad refers to the actual physical measuring of an object. For instance, Boaz "measured (madad) six measures of barley" for Ruth to carry to Naomi (Ruth 3:15). His measurement was no doubt accurate and based on a human standard for barley measurements. Likewise,

<sup>&</sup>lt;sup>22</sup>Paul M. Steidl, *The Earth, the Stars, and the Bible* (Phillipsburg, NJ: Presbyterian and Reformed Publishing Co., 1979), pp. 130, 187.

Ezekiel predicted that the construction of the Millennial Temple would be based on accurate measurements, utilizing the verb *madad* thirty-three times for measuring various dimensions for the building of the Temple (cf. Ezk. 40-47). 4) Since man does not have the mathematical or physical wherewithal to measure stellar distances accurately and authoritatively, the Lord assured the immutable promise of the New Covenant. God has determined that man never has, cannot now, and never will measure the heavens accurately and absolutely. 5) Christians are left with the divine revelation of the Scriptures (II Tim. 3:16-17) that reveals absolutely both the vastness of God's creation and its immeasureableness. James hinted at the reality of solar parallax and Jeremiah declared that man cannot measure the heavens. 6) Evolutionary schemes and theories cannot satisfy the Christian because they are based on the Satanic lies of the Garden and result in myths (cf. Gen. 3:4-5).<sup>23</sup> Christians must rejoice in the full extent of truth that the Lord God has determined to give through His Scriptures.

# The Planets, Lights and Tropics

## The Planets

The noun "planet," although not found in the Bible, <sup>24</sup> astronomically refers to an astral object that wanders through its orbit. Planets as such have orbits around the sun that is in the heavens. The Lord placed the sun with its wandering planets in the firmament. The earth, however, is distinct from the heavens (i.e., firmament) and was never placed in the heavens (cf. Gen. 1:1-19). <sup>25</sup> Therefore, the earth is **not** a planet, although evolutionists have inculcated their anti-biblical teaching upon the terminology of the western world. <sup>26</sup> The closest the Bible comes to referring to a planet is Jude's reference (1:13) to likening apostates to "wandering stars" (asteras planetai). Since the noun planet is not mentioned in Scripture, the Lord surely does not place any importance on this part of His creation other than to give a spiritual warning for mankind to avoid apostasy by straying from the revealed truth. <sup>27</sup> Professed Christians should give no thought to whether planets will give further knowledge about the origin and purpose of the heavens. <sup>28</sup> When a man contemplates planets, his concern should be if he would become a "wandering star."

<sup>&</sup>lt;sup>23</sup>Satan taught (cf. I Tim. 4:1-3) basic Gnostic Pantheism, postulating the deification and deathlessness of man. Corollaries to these tenets included evolution and "the flesh is evil" doctrine.

doctrine.  $^{24}$ Although the Hebrew word *mazzaloth* is translated "planets" in II Ki. 23:5 (cf. Job 38:32 for the Hebrew *mazzoroth*).

<sup>&</sup>lt;sup>25</sup>The Bible writers utilize the expression *"heaven and earth"* at least thirty-one times, always distinguishing between these two realms (cf. e.g., Mt. 24:35).

<sup>&</sup>lt;sup>26</sup>Even many Christians have been brainwashed by evolutionary philosophy in using un-Scriptural terminology. The Bible never once calls the earth a *planet*.

<sup>&</sup>lt;sup>27</sup>How ironic it is that evolutionists are "wandering stars."

<sup>&</sup>lt;sup>28</sup>The Christian already knows that the Lord's purpose on earth is to meet the spiritual needs of lost mankind. John summarized this truth, saying, "For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life" (Jn. 3:16).

# The Lights

James asserted that God was the Father of lights, corroborating other Scripture (cf. Isa. 45:7). As the Father, He created light by giving the divine fiat "Let there be light" (yehiy 'or אוֹר") on Day One (Gen. 1:2). As He had spoken His creation into existence (Heb. 11:3) He spoke the creation of light into existence. His vocalized consonants "Let there be light" produced the vibrations which manifested "light" ('or The psalmist revealed that Jehovah initially covered Himself "with light as with a garment" (Ps. 104:2) and moved upon the face of the earth as the original light source (Gen. 1:2), dispelling darkness with light. This apparently was the morning light (cf. I Sam. 14:36; 25:22, 34, 36; 29:10; II Sam. 17:22; 23:4; II Kings 7:9; Isa. 58:8; Mi. 2:1) of the first day and the first of the four created lights. Solomon referred to "the sun, or the light, or the moon, or the stars" (Eccl. 12:2), 30 all of which have separate glories (cf. I Cor. 15:41). Later, on the fourth day, the sun, moon, and stars also contributed as moving light sources for the heavens.

# The Tropics

James used the term *trope* ("turning") in his expression "shadow of turning" referring to a shadow caused by turning. As he utilized other astronomical terms to teach spiritual realities about God, it seems he was referring to the seasonal shadows cast by the sun in its annual orbit around the earth. Since the axis of the stationary earth is absolutely north and south (Job 26:7),<sup>31</sup> the sun's plane is not coincident with the earth's but is oblique by 23 1/2 degrees, causing shadows to be cast on the different hemispheres from the region of the Poles to the Tropics. Only the area between the two Tropics,<sup>32</sup> including the equator, receives direct sunlight, and especially twice a year when the sun is directly overhead on the equator. On the summer solstice (June 22), the sun passes the zenith at its highest point on the Northern Hemisphere on the first day of summer, shining directly and causing summer, while at the same time shining obliquely on the Southern Hemisphere causing winter. This is reversed six months later at the winter solstice (Dec. 22). The region from the equator to 23 1/2 degrees North latitude and from the equator to 23 1/2 degrees South latitude receives direct sunlight and is warm year around (i.e., tropical).

<sup>&</sup>lt;sup>29</sup>The Scripture gives the Lord's quote, revealing these actual words, which were His breath (II Tim. 3:16), and consequently His words vibrated light into existence (this would suggest that light is a wave rather than a particle). Could it be that Quantum Physics, with its Ten Superstrings theory of vibrating strings as the ultimate fundament, is catching up with the Bible?

<sup>&</sup>lt;sup>30</sup>All four nouns are articular and the last three are separated with the *waw* conjunction, distinguishing four distinct lights.

<sup>&</sup>lt;sup>31</sup>The Lord created the earth's axis north and south with reference to the heavens. The psalmist Ethan stated, "The heavens are thine, the earth also is thine: as for the world and the fulness thereof, thou hast founded them. The north and the south thou hast created them..." (Ps. 89:11-12). Even the New Jerusalem will be located absolutely with respect to the directions of north, south, east and west in the New Heavens and Earth (cf. Rev. 21:1; 13).

<sup>&</sup>lt;sup>32</sup>The Tropic of Cancer and Tropic of Capricorn were so named because the sun's relationship with these two sectors or signs of the zodiac.

The point that James seemed to make was that on a daily basis it is nearly impossible to detect the sun's tropical movement as it moves around the earth and causes the various seasons. He compares the Lord's absolute immovability in relationship to His redemptive purposes with this almost indiscernible solar movement.

## **CONCLUSION**

The stepbrother of the Lord Jesus Christ, under inspiration, wrote to Christian Jews scattered throughout the Mediterranean basin. As they underwent trials in the form of persecution, some of them concluded that God was tempting them to sin. James effectively dispatched of that false notion by giving at least five reasons that God does not tempt man to sin. These reasons centered on the holy nature of God, the old nature of man, the tendency for man to be deceived, the good nature of God, and the creative nature of God. In developing his arguments, James assumed the truths of biblical cosmology to advance his defense of the Lord's nature and person. These realities in nature include truth about the planets, lights, parallax, and tropics. 1) The planets, as wandering stars, depict apostates who deviate from the truth. 2) The good Lord created the heavenly lights, as great and brilliant as they may be. 3) James implied that the sun's apparent parallax is almost imperceptible, contrasting the absolute immovability of the Lord God with this slight parallactical angle. 4) Finally, to emphasize the Lord's absolute immutability with regard to His promises, James declared that Jehovah did not move or turn, unlike the imperceptible but real seasonal movement of the sun relative to the Tropics. The Lord Jesus Christ created the heavens and earth and then revealed within His Scriptures the full extent that man may know absolutely about the physical phenomena. The creation has built in limitations so that man, neither evolutionist nor creationist can measure accurately and absolutely the heavens, as Jeremiah predicted. All the Christian can know or needs to know is that planets revolve around the sun, the lights are in subjection to God the Father, and the sun has parallax, and it has tropical movement around the earth. The evolutionist can only speculate about the heavens and posit anti-biblical myths. The Christian knows absolutely, "The heavens declare the glory of God; and the firmament sheweth his handywork" (Ps. 19:1).