

GEOCENTRISM

Scripture

Geocentrism is the view that the earth is the center of the universe, and that the universe (sun, moon, stars, planets) revolves around the earth. Most geocentrists also believe that the earth stands still and does not rotate on its axis. Geocentrism is in contrast to heliocentrism, which is the view that the earth rotates on its axis and, along with the other planets, revolves around the sun. While it is permissible for Christians to hold the heliocentric view, heliocentrism can only be advanced as a theory, not a certainty (because neither heliocentrism nor geocentrism can be scientifically proven definitively). In fact, three Popes (Paul V, Urban VIII and Alexander VII) have officially declared that heliocentrism is opposed to Sacred Scripture and condemned the notion that heliocentrism was a truth to be believed with certainty. Instead, the Scriptures, the Apostolic Tradition and teachings of the Church support a geocentric cosmology vis-à-vis a heliocentric one. Nota Bene: I am a faithful Catholic, not a scientist. I am obedient to the Magisterium of the Catholic Church. When presented with a question of faith (such as how God created the universe), I look to the Scriptures, the Tradition and the teachings of the Catholic Church for the answer. I do not rely upon modern scientists who have been unable to prove heliocentrism and disprove geocentrism, especially those who deny the inerrancy of Scripture and generally abhor the Catholic faith.

I. The Earth Does Not Move

When interpreted literally, the Scriptures teach us that the earth does not move. Should we interpret the Scriptures literally? The Catholic Church, having adopted the rule of St. Augustine, teaches "not to depart from the literal and obvious sense, except only where reason makes it untenable or necessity requires; a rule to which it is the more necessary to adhere strictly in these times, when the thirst for novelty and unrestrained freedom of thought make the danger of error most real and proximate." Pope Leo XIII, *Providentissimus Deus*, No. 15, 1893. This was affirmed by Pope Pius XII in *Humani Generis*, No. 36, 1950.

The Catechism of the Catholic Church, paragraph 116, also says: "The literal sense is the meaning conveyed by the words of Scripture and discovered by exegesis, following the rules of sound interpretation: "All other senses of Sacred Scripture are based on the literal."

In other words, we are to interpret the Scriptures literally unless there is a compelling reason to interpret them otherwise. This is why the Church interprets literally, for example, Matt. 16:18 (Peter is the rock); Matt. 19:9 (remarriage after divorce is adultery); Matt. 26:26-28 ("this is my body"); John 6:51-58 ("eat my flesh"; "drink my blood"); John 3:5 (born of water means baptism); John 20:23 ("whose sins you forgive are forgiven"); 1 Peter 3:21 ("baptism saves you"); and James 5:14-15 ("anoint the sick with oil to save them and forgive their sins").

We must also remember that the Scriptures were dictated to the sacred writers by the Holy Ghost. Thus, we take God's Word for what it says, for He is the author of Scripture. There does not seem to be a compelling reason to depart from the literal and obvious sense of the following Scriptures which teach, both implicitly and explicitly, that the earth does not move.

Certainly, a literal interpretation is not untenable, nor does necessity require an alternative interpretation (because science has not disproved the geocentric theory; in fact, science also provides more evidence for geocentrism):

1 Sam. 2:8 – “For the pillars of the earth are the Lord’s, and on them he has set the world.”

2 Sam. 22:16; Psalm 18:15 – “Then the channels of the sea were seen, the foundations of the world were laid bare...” (Describing the earth as having “foundations” is consistent with an earth that is fixed and established and does not move, as many Scriptures reveal).

1 Chron. 16:30 – “yea, the world stands firm, never to be moved.” This and many other passages say very plainly that the earth does not move.

Job 26:7 – “He stretches out the north over the void, and hangs the earth upon nothing.”

Job 38:4; cf. Job 9:6 – “Where were you when I laid the foundation of the earth?”

Psalm 8:29 – “...when he marked out the foundations of the earth.”

Psalm 93:1 – “Yea, the world is established; it shall never be moved.”

Psalm 96:10 – “Yea, the world is established, it shall never be moved.”

Psalm 102:25 – “Of old thou didst lay the foundation of the earth, and the heavens are the work of thy hands.”

Psalm 104:5 – “Thou didst set the earth on its foundations, so that it should never be shaken.”

Psalm 119:90 – “thou has established the earth, and it stands firm.”

Isaiah 24:18 – “...for the windows of heaven are opened, and the foundations of the earth tremble.”

Isaiah 48:13 – “My hand laid the foundation of the earth, and my right hand spread out the heavens...”

Isaiah 66:1 – “Thus says the Lord: ‘Heaven is my throne and the earth is my footstool.’”

When the Scriptures say the world is “established” (in Hebrew, “kun”), it indicates that the establishment is ongoing. See, for example, 1 Chron. 22:10, Judges 16:26,29 and Ezra 3:3 where “kun” is used to explain an ongoing lack of motion.

The only time Scripture says the earth will “move” (in Hebrew, “mot” – see “mot” in Job 41:23; Psalm 125:1; 140:10; and Isa. 41:7) is in the context of the end of the world, where God will come in judgment (e.g. Psalm 76:8). This coincides with the apocalyptic literature of, inter alia, Matt. 24:29-30 and 2 Peter 3:10-13, but never suggests actual motion.

Gen. 1:1-5; 14-19 – God created the earth on the first day, and the sun, moon and stars on the fourth day. God created them to “give light upon the earth.” The heavenly bodies were therefore created for the earth, to adorn it, and to mark its seasons. The earth is God’s focal point. This ordering is another indicator that the earth is the center of the universe. How could the sun be the center, if it wasn’t created until the fourth day? This also raises the question: How did the earth have “evening and morning” on days one to three, before the sun was created on day four? Scripture reveals this is because the universe has light that is independent of the sun and stars. In fact, St. Thomas Aquinas hypothesized that God created the sun and stars on day four from this effusive light that He created on day one (just like God created man on day six from the dirt He created on day one). This effusive light is what brought about the “evening and morning” periods of days one through three.

Job 38:18-20,24 – in these verses, although Job knows the sun gives light, God asks Job “where is the way to the dwelling of light” and “where is the way the light is divided?” Job cannot answer God’s questions. Why can’t he, if Job knows that the sun gives light? God is referring to the light He created without any dimensional source. For example, Psalm 74:16 says “You have prepared the light and the sun,” which distinguishes the two sources of light. Ecclesiastes 12:1-2 also says “Remember your Creator...before the sun and the light, and the moon and the stars are darkened.” The sacred writer distinguishes between “the sun” and “the light,” and also indicates that there are four separate sources of light.

Gen. 1:1; 2:1,4; Psalm 113:6; Jer. 10:11; 32:17; 51:48; Joel 3:16; Hag. 2:6,21; Jud. 13:18; cf. Psalm 102:25; Isaiah 24:18; 48:13 – here are some examples where God distinguishes “between the heavens and the earth.” The earth is unique and distinguishable from the rest of the heavens.

Gen. 14:19,22; Ex. 20:11; 31:17; Deut. 4:26; 30:19; 31:28; 2 Sam. 18:9; 2 Kings 19:15; 2 Chron. 2:2; Ez. 5:11; Psalms 69:34; 115:15; 121:2; 124:8; 134:3; 146:6; Isaiah 37:16; Jer. 23:24; 33:25; 4 Ez. 2:14; 6:38; Tob. 7:18; 1 Macc. 2:37; Jud. 7:28; 9:12; Matt. 5:18; 11:25; 24:35; Mark 13:31; Luke 10:21; 16:17; 21:33; Acts 17:24; Rev. 14:7; cf. Matt. 28:18; Eph. 4:8-10; Phil. 2:10; Col. 1:16 – more examples where God distinguishes between “heaven and earth.” The Scriptures clearly teach that the earth is unique among the rest of the universe.

John 17:24 – Jesus says “...behold my glory which thou hast given me in thy love for me before the foundation of the world.” Jesus’ language also suggests a world that has a firm, unmovable foundation.

II. The Sun, Moon and Stars Move

Joshua 10:12-14 – “Then spoke Joshua to the Lord in the day when the Lord gave the Amorites over to the men of Israel; and he said in the sight of Israel, ‘Sun, stand thou still at Gibeon, and thou Moon in the valley of Aijalon.’ And the sun stood still, and the moon stayed, until the nation took vengeance on their enemies. Is this not written in the Book of Jashar? The sun stayed in the midst of heaven, and did not hasten to go down for about a whole day. There has been no day like it before or since, when the Lord hearkened to the voice of a man; for the Lord fought for Israel.” This is the most powerful passage which supports a geocentric view of the universe. This passage clearly says that both the sun and moon stopped moving. This is the literal reading of the passage, and the passage does not warrant a figurative or phenomenological interpretation. Why? First, the book of Joshua was written to record actual historical events in the history of Israel (as opposed to figurative or poetic literature found elsewhere in Scripture), and there is no compelling reason to interpret it other than literally. Second, heliocentrists believe the moon moves. Therefore, it would be contradictory for them to claim that Joshua told the moon to stand still literally, but told the sun to stand still figuratively. The most reasonable conclusion is that both the moon and sun were moving, and both the moon and sun stopped moving at Joshua’s command. Finally, Joshua records that the sun stopped over Gibeon, while the moon stopped over Aijalon. These are two distinct points on the earth which confirm the coordinates of cessation of movement of the sun and moon. There are other Scriptures which also indicate that the sun, moon and stars are moving:

Judges 5:20 – “From heaven fought the stars, from their courses they fought against Sisera.”

Judges 5:31 – “So perish all thine enemies, O Lord! But thy friends be like the sun as he rises in his might.”

2 Kings 20:11 – “And Isaiah the prophet cried to the Lord; and he brought the shadow back ten steps, by which the sun had declined on the dial of Ahaz.”

Job 9:7 – “who commands the sun, and it does not rise.”

Psalms 19:5-6 – “In them he has set a tent for the sun, which comes forth like a bridegroom leaving his chamber, and like a strong man runs its course with joy. Its rising is from the end of the heavens, and its circuit to the end of them; and there is nothing hid from its heat.”

Psalms 104:19 – “Thou hast made the moon to mark the seasons; the sun knows its time for setting.”

Ecclesiastes 1:5 – “The sun rises and the sun goes down, and hastens to the place where it rises.”

Wisdom 13:2 – “but they supposed that either fire or wind or swift air, or the circle of the stars, or turbulent water, or the luminaries of heaven were the gods that rule the world.”

Sirach 43:2 – “The sun, when it appears, making proclamation as it goes forth, is a marvelous instrument, the work of the Most High.”

Sirach 43:5 – “Great is the Lord who made it; and at his command it hastens on its course.”

Sirach 46:4 – “Was not the sun held back by his hand? And did not one day become as long as two?”

Isaiah 38:7-8 – “This is the sign to you from the Lord, that the Lord will do this thing that he has promised: Behold, I will make the shadow cast by the declining sun on the dial of Ahaz turn back ten steps. So the sun turned back on the dial the ten steps by which it had declined.”

Habakkuk 3:11 – “The sun and moon stood still in their habitation, at the light of thine arrows as they sped, at the flash of thy glittering spear.”

1 Esdras 4:34 – “The earth is vast, and heaven is high, and the sun is swift in its course, for it makes the circuit of the heavens and returns to its place in one day.”

James 1:11 – “for the sun rises with its scorching heat...”

Jude 13: – “wandering stars for whom the nether gloom of darkness has been reserved forever.” A “wandering star” is called a “planet.” If the earth does not wander, it is not a planet.

Mark 16:2 – the Apostle says “And very early on the first day of the week they went to the tomb when the sun had risen.” Mark is drawing a clear parallel between the risen sun and the risen Son at this poignant moment when the women discovered that Jesus had risen from the dead. Just as the sun rises literally, so Jesus rose literally as well. Scripture also refers to Jesus as the “Sun of Justice” (see Mal. 4:2).

Genesis 1:14-15, 17 – God said, “let there be lights in the firmament of the heavens”; and “God set them in the firmament of the heavens.” Geocentrists generally believe that God placed the stars and planets in the “firmament” (which scientists often call the “aether”) described by Moses in Genesis. The firmament is a shell containing the heavenly bodies and rotates around a fixed earth.

Dan. 12:3 – “And those who are wise shall shine like the brightness of the firmament; and those who turn many to righteousness, like the stars for ever and ever.” This demonstrates that there is a relationship between the stars and the firmament, and yet a distinction between the two as well (the stars have been placed in the firmament).

Sirach 43:1 – “the pride of the heavenly heights is the clear firmament...” This text suggests that the firmament is clear (not visible), and that the firmament shows the “heavenly heights” (the stars, which are imbedded in the firmament).

Gen. 15:12,17; 19:23; 28:11; 32:31; Ex. 17:12; 22:3,26; Lev. 22:7; Num. 2:3; Deut. 11:30; 16:6; 23:11; 24:13; 24:15; Josh. 1:4; 8:29; 10:12,13,27; 12:1; Judges 9:33; 14:18; 19:14; 2 Sam. 2:24; 3:35; 23:4; 1 Kings 22:36; 2 Chron. 18:34; Psalm 50:1; 104:22; 113:3; Isa. 13:10; 41:25; 45:6; 59:19; 60:20; Jer. 15:9; Dan. 6:14; Amos 8:9; Jonah 4:8; Mic. 3:6; Nah. 3:17; Mal. 1:11; Matt. 5:45; 13:6; Mark 1:32; 4:6; 16:2; Luke 4:40; Eph. 4:26 – more examples where the sun “rises,” “sets,” “goes up,” and “goes down.”

Tradition / Church Fathers

In 1564, the Council of Trent (Session IV, April 8) infallibly declared that that no one could “in matters of faith and of morals pertaining to the edification of Christian doctrine...interpret the sacred Scriptures...even contrary to the unanimous consent of the Fathers.”

This infallible declaration was restated by the First Vatican Council: “In consequence, it is not permissible for anyone to interpret holy scripture in a sense contrary to this, or indeed against the unanimous consent of the fathers” (On Revelation, April 24, 1870, chapter 2, no. 9).

Pope Leo XIII explained why we are required to hold to the interpretation of the Fathers when they are unanimous: “the Holy Fathers, We say, are of supreme authority, whenever they all interpret in one and the same manner any text of the Bible, as pertaining to the doctrine of faith or morals; for their unanimity clearly evinces that such interpretation has come down from the Apostles as a matter of Catholic faith” (Providentissimus Deus, 1893, no. 14).

In other words, when the Fathers are unanimous about an interpretation of Scripture, their understanding comes from the Sacred Deposit of Faith handed down by Christ and the Apostles. The Fathers unanimously interpreted the Scriptures to support a geocentric cosmology. According to Trent and Vatican I (two dogmatic ecumenical councils of the Catholic Church), we are not permitted to depart from their interpretation of the Scriptures, because their interpretation is deemed to have come from the Apostles. Those who reject geocentrism must explain why they do not submit to this rule of biblical interpretation set forth by two infallible councils.

With that, let us look at some of the quotes from the Fathers.

Things to consider when reading the Fathers regarding the earth and sun:

- 1) The Fathers never say the earth moves, except at the end of time.
- 2) The Fathers always say the earth is at rest at the center of the universe.
- 3) The Fathers never say the sun is the center of the universe.
- 4) The Fathers never say the sun does not move around the earth, even in their scientific analysis of the cosmos.
- 5) The Fathers always say the earth is the center of the universe.
- 6) The Fathers always say the sun moves as the moon moves.
- 7) The Fathers recognize that some of the Greeks held that the earth moves and rotates, but they do not accept that teaching.
- 8) The Fathers accept the Chaldean, Egyptian and Greek teaching that the earth is at the center of the universe and does not move.

9) The Fathers hold that the earth was created first, by itself, and only afterward the sun, moon and stars.

10) The Fathers hold that light was created after the earth, but that this light preceded the light of the sun and stars.

The following patristic commentaries were taken from the book *Galileo Was Wrong* by Robert Sungenis and Robert Bennett. Copying or distribution of this material is not permitted except by permission from both authors. Many of the hundreds of citations from the Fathers regarding the motion of the sun have not been included in this list, due to the redundancy it would create. Only those quotes which have the most logical and comparative relevance have been listed.

The Fathers on the Geocentric Cosmos

Ambrose: Worthy surely was he to stand forth as a man who might stay the course of the river, and who might say: "Sun, stand still," and delay the night and lengthen the day, as though to witness his victory. Why? a blessing denied to Moses—he alone was chosen to lead the people into the promised land. A man he was, great in the wonders he wrought by faith, great in his triumphs. The works of Moses were of a higher type, his brought greater success. Either of these then aided by divine grace rose above all human standing. The one ruled the sea, the other heaven. (Duties of the Clergy, Bk II, Ch XX, 99)

Ambrose: But they say that the sun can be said to be alone, because there is no second sun. But the sun himself has many things in common with the stars, for he travels across the heavens, he is of that ethereal and heavenly substance, he is a creature and is reckoned amongst all the works of God. He serves God in union with all, blesses Him with all, praises Him with all. Therefore, he cannot accurately be said to be alone, for he is not set apart from the rest. (Exposition of the Christian Faith, Bk V, Ch II)

Anatolius of Alexandria: Eudemus relates in his *Astrologies* that Enopides found out the circle of the zodiac and the cycle "of the great year. And Thales discovered the eclipse of the sun and its period in the tropics in its constant inequality. And Anaximander discovered that the earth is poised in space and moves round the axis of the universe. And Anaximenes discovered that the moon has her light from the sun and found out also the way in which she suffers eclipse. And the rest of the mathematicians have also made additions to these discoveries. We may instance the facts—that the fixed stars move round the axis passing through the poles, while the planets remove from each other round the perpendicular axis of the zodiac; and that the axis of the fixed stars and the planets is the side of a penta-decagon with four-and-twenty parts. (XVII)

Aphrahat: For the sun in twelve hours circles round, from the east unto the west; and when he has accomplished his course, his light is hidden in the night-time, and the night is not disturbed by his power. And in the hours of the night the sun turns round in his rapid course, and turning round begins to run in his accustomed path. (Demonstrations, 24).

Archeleus: When the light had been diffused everywhere, God began to constitute the universe, and commenced with the heaven and the earth; in which process this issue appeared, to wit, that the midst, which is the locality of earth covered with shadow, as a consequence of the interpositions of the creatures which were called into being, was found to be obscure, in such wise that circumstances required light to be introduced into that place, which was thus situated in the midst. (Disputation with Manes, 22).

Arnobius: The moon, the sun, the earth, the ether, the stars, are members and parts of the world; but if they are parts and members, they are certainly not themselves living creatures (Arnobius Against the Heathen, Book 3, 350)

Athanasius: but the earth is not supported upon itself, but is set upon the realm of the waters, while this again is kept in its place, being bound fast at the center of the universe. (Against the Heathen, Book I, Part I)

Athanasius: For who that sees the circle of heaven and the course of the sun and the moon, and the positions and movements of the other stars, as they take place in opposite and different directions, while yet in their difference all with one accord observe a consistent order, can resist the conclusion that these are not ordered by themselves, but have a maker distinct from themselves who orders them? or who that sees the sun rising by day and the moon shining by night, and waning and waxing without variation exactly according to the same number of days, and some of the stars running their courses and with orbits various and manifold, while others move without wandering, can fail to perceive that they certainly have a creator to guide them? (Against the Heathen, Bk 1, Part III, 35)

For by a nod and by the power of the Divine Word of the Father that governs and presides over all, the heaven revolves, the stars move, the sun shines, the moon goes her circuit, and the air receives the sun's light and the aether his heat, and the winds blow: the mountains are reared on high, the sea is rough with waves, and the living things in it grow the earth abides fixed..." (Against the Heathen, Bk 1, Part III, 44)

Athenagoras: to Him is for us to know who stretched out and vaulted the heavens, and fixed the earth in its place like a center (Why the Christians do not Offer Sacrifices, Ch XIII)

Augustine: Let not the philosophers, then, think to upset our faith with arguments from the weight of bodies; for I don't care to inquire why they cannot believe an earthly body can be in heaven, while the whole earth is suspended on nothing. For perhaps the world keeps its central place by the same law that attracts to its center all heavy bodies. (City of God, Bk XIII, Ch 18)

Augustine: For an eclipse of the sun had also happened; and this was attributed to the divine power of Romulus by the ignorant multitude, who did not know that it was brought about by the fixed laws of the sun's course (City of God, Bk III, Ch 15)

Augustine: This he said either of those things of which he had just been speaking—the succession of generations, the orbit of the sun, the course of rivers,—or else of all kinds of creatures. that are born and die. (City of God, Bk XII, Ch 13).

Augustine: What is there so arranged by the Author of the nature of heaven and earth as the exactly ordered course of the stars? What is there established by laws so sure and inflexible? And yet, when it pleased Him who with sovereignty and supreme power regulates all He has created, a star conspicuous among the rest by its size and splendor changed its color, size, form, and, most wonderful of all, the order and law of its course! Certainly, that phenomenon disturbed the canons of the astronomers, if there were any then, by which they tabulate, as by unerring computation, the past and future movements of the stars, so as to take upon them to affirm that this which happened to the morning star (Venus) never happened before nor since. But we read in the divine books that even the sun itself stood still when a holy man, Joshua the son of Nun, had begged this from God until victory should finish the battle he had begun; and that it even went back, that the promise of fifteen years added to the life of king Hezekiah might be sealed by this additional prodigy. But these miracles, which were vouchsafed to the merits of holy men, even when our adversaries believe them, they attribute to magical arts; so Virgil, in the lines I quoted above, ascribes to magic the power to "Turn rivers backward to their source, And make the stars forget their course." (City of God, Book XXI, Ch 8).

Augustine: Who else save Joshua the son of Nun divided the stream of the Jordan for the people to pass over, and by the utterance of a prayer to God bridled and stopped the revolving sun? Who save Samson ever

quenched his thirst with water flowing forth from the jawbone of a dead ass? Who save Elias was carried aloft in a chariot of fire? (Tractates, XCI, Ch XV, 24-25, 2).

Augustine: I desire to know the power and nature of time, by which we measure the motions of bodies, and say (for example) that this motion is twice as long as that. For, I ask, since "day" declares not the stay only of the sun upon the earth, according to which day is one thing, night another, but also its entire circuit from east even to east, according to which we say, "So many days have passed" (the nights being included when we say "so many days," and their spaces not counted apart), since, then, the day is finished by the motion of the sun, and by his circuit from east to east, I ask, whether the motion itself is the day, or the period in which that motion is completed, or both? For if the first be the day, then would there be a day although the sun should finish that course in so small a space of time as an hour. If the second, then that would not be a day if from one sunrise to another there were but so short a period as an hour, but the sun must go round four-and-twenty times to complete a day. If both, neither could that be called a day if the sun should run his entire round in the space of an hour; nor that, if, while the sun stood still, so much time should pass as the sun is accustomed to accomplish his whole course in from morning to morning. I shall not therefore now ask, what that is which is called day, but what time is, by which we, measuring the circuit of the sun, should say that it was accomplished in half the space of time it was wont, if it had been completed in so small a space as twelve hours; and comparing both times, we should call that single, this double time, although the sun should run his course from east to east sometimes in that single, sometimes in that double time. Let no man then tell me that the motions of the heavenly bodies are times, because, when at the prayer of one the sun stood still in order that he might achieve his victorious battle, the sun stood still, but time went on. For in such space of time as was sufficient was that battle fought and ended. I see that time, then, is a certain extension. But do I see it, or do I seem to see it? Thou, O Light and Truth, wilt show me. (Confessions, Bk XI, Ch XXIII, 30)

Basil: There are inquirers into nature who with a great display of words give reasons for the immobility of the earth...It is not, they go on, without reason or by chance that the earth occupies the center of the universe...Do not then be surprised that the world never falls: it occupies the center of the universe, its natural place. By necessity it is obliged to remain in its place, unless a movement contrary to nature should displace it. If there is anything in this system which might appear probable to you, keep your admiration for the source of such perfect order, for the wisdom of God. Grand phenomena do not strike us the less when we have discovered something of their wonderful mechanism. Is it otherwise here? At all events let us prefer the simplicity of faith to the demonstrations of reason. (Nine Homilies on the Hexameron, 10)

Basil: If the sun, subject to corruption, is so beautiful, so grand. so rapid in its move-meant, so invariable in its course; if its grandeur is in such perfect harmony with and due proportion to the universe: if, by the beauty of its nature, it shines like a brilliant eye in the middle of creation; if finally, one cannot tire of contemplating it, what will be the beauty of the Sun of Righteousness? (Homilies, 6)

Basil: From thence the sun, returning to the summer solstice, in the direction of the North, gives us the longest days. And, as it travels farther in the air, it burns that which is over our heads, dries up the earth, ripens the grains and hastens the maturity of the fruits of the trees. (Homilies, 6, 8).

Basil: It will not lead me to give less importance to the creation of the universe, that the servant of God, Moses, is silent as to shapes; he has not said that the earth is a hundred and eighty thousand furlongs in circumference; he has not measured into what extent of air its shadow projects itself whilst the sun revolves around it, nor stated how this shadow, casting itself upon the moon, produces eclipses. (Homilies, IX).

Basil: In the midst of the covering and veil, where the priests were allowed to enter, was situated the altar of incense, the symbol of the earth placed in the middle of this universe; and from it came the fumes of incense. (The Mystic Meaning of the Tabernacle, Bk V, Ch VI; Clement of Rome, Stromata, Bk V)

Basil: Like tops, which after the first impulse, continue their evolutions, turning upon themselves when once fixed in their centre; thus nature, receiving the impulse of this first command, follows without interruption the course of ages, until the consummation of all things. (Homilies, V, 10)

John Cassian: He was a man who, after the close of his life had been decreed and the day of his death determined by the Lord's sentence, prevailed by a single prayer to extend the limits set to his life by fifteen years, the sun returning by ten steps, on which it had already shone in its course towards its setting, and by its return dispersing those lines which the shadow that followed its course had already marked, and by this giving two days in one to the whole world, by a stupendous miracle contrary to the fixed laws of nature. Yet after signs so great and so incredible, after such immense proofs of his goodness, hear the Scripture tell how he was destroyed by his very successes. (Twelve Books on the Institutes, Bk XI, Ch X).

Chrysostom: Dost thou not see how God is daily blasphemed and mocked by believers and unbelievers, both in word and in deed? What then? Has He for this extinguished the sun? or stayed the course of the moon? Has He crushed the heavens and uprooted the earth? Has He dried up the sea? Has He shut up the fountains of waters? or confounded the air? Nay, on the contrary, He makes His sun to rise, His rain to descend, gives the fruits of the earth in their seasons, and thus supplies yearly nourishment to the blasphemers, to the insensible, to the polluted, to persecutors; not for one day or two, but for their whole life. Imitate Him then, emulate Him as far as human powers admit. Can thou not make the sun arise? (Homilies on First Timothy, Homily VI)

Chrysostom: And what took place at a later period were few and at intervals; for example, when the sun stood still in its course, and started back in the opposite direction. And this one may see to have occurred in our case also. For so even in our generation, in the instance of him who surpassed all in ungodliness, I mean Julian, many strange things happened. Thus, when the Jews were attempting to raise up again the temple at Jerusalem, fire burst out from the foundations and utterly hindered them all. (Homilies on Matthew, Homily IV)

Chrysostom: And again, David saith of the sun, that "he is as a bridegroom coming out of his chamber, and rejoiceth as a giant to run his course." Seest thou how he places before thee the beauty of this star, and its greatness? For even as a bridegroom when he appears from some stately chamber, so the sun sends forth his rays under the East; and adorning the heaven as it were with a saffron-colored veil, and making the clouds like roses, and running unimpeded all the day; he meets no obstacle to interrupt his course. Beholdest thou, then, his beauty? (Homilies to Antioch, Homily X)

Chrysostom: For He not only made it, but provided also that when it was made, it should carry on its operations; not permitting it to be all immoveable, nor commanding it to be all in a state of motion. The heaven, for instance, hath remained immoveable, according as the prophet says, "He placed the heaven as a vault, and stretched it out as a tent over the earth." But, on the other hand, the sun with the rest of the stars, runs on his course through every day. And again, the earth is fixed, but the waters are continually in motion; and not the waters only, but the clouds, and the frequent and successive showers, which return at their proper season. (Homilies to Antioch, Homily XII)

Chrysostom: [Speaking of the end of the world]: For the heaven shall be disturbed and the earth shall be shaken from its foundations by reason of the fury of the wrath of the Lord of Sabaoth, in the day when His wrath shall come upon us." And again "windows" he saith "shall be opened from the Heaven, and the

foundations of the earth shall be shaken the earth shall be mightily confounded, the earth shall be bent low, it shall be perplexed with great perplexity, the earth shall stagger grievously like the drunkard and the reveller; the earth shall shake as a hut, it shall fall and not be able to rise up again: for iniquity has waxed mighty therein. And God shall set His hand upon the host of the Heaven in the height in that day, and upon the kingdoms of the earth, and He shall gather together the congregation thereof into a prison, and shall shut them up in a stronghold." And Malachi speaking concordantly with these said "Behold the Lord almighty cometh, and who shall abide the day of His coming or who shall stand when He appeareth? for He cometh like a refiner's fire, and like fullers soap: and He shall sit refining and purifying as it were silver, and as it were gold." (Letters to Theodor, Letter I, 12)

Chrysostom: Consider of how great value is the righteous man. Joshua the son of Nun said, "Let the sun stand still at Gibeon, the moon at the valley of Elom" (Josh. x. 12), and it was so. Let then the whole world come, or rather two or three, or four, or ten, or twenty worlds, and let them say and do this; yet shall they not be able. But the friend of God commanded the creatures of his Friend, or rather he besought his Friend, and the servants yielded, and he below gave command to those above. Seest thou that these things are for service fulfilling their appointed course?

This was greater than the [miracles] of Moses. Why (I ask)? Because it is not a like thing to command the sea and the heavenly [bodies]. For that indeed was also a great thing, yea very great, nevertheless it was not at all equal [to the other]. Why was this? The name of Joshua [JESUS], was a type. For this reason then, and because of the very name, the creation revered him. What then! Was no other person called Jesus? [Yes]; but this man was on this account so called in type; for he used to be called Hoshea. Therefore the name was changed: for it was a prediction and a prophecy. He brought in the people into the promised land, as JESUS [does] into heaven; not the Law; since neither did Moses [bring them in], but remained without. (Homily on the Epistle to the Hebrews, Homily VIII)

Chrysostom: Therefore, it was, that Joshua, the son of Nave, said, "Let the sun stand still in Gibeon, and the moon over against the valley of Ajalon." And again the prophet Isaiah made the sun to retrace his steps, under the reign of Hezekiah; and Moses gave orders to the air, and the sea, the earth, and the rocks. Elisha changed the nature of the waters; the Three Children triumphed over the fire. Thou seest how God hath provided for us on either hand; leading us by the beauty of the elements to the knowledge of His divinity; and, by their feebleness, not permitting us to lapse into the worship of them. (Homily to Antioch, Homily X)

Clement of Rome: The sun and moon, with the companies of the stars, roll on in harmony according to His command, within their prescribed limits, and without any deviation. (First Epistle to the Corinthians, Ch XX).

Clement of Rome: the Creator, long-suffering, merciful, the sustainer, the benefactor, ordaining love of men, counselling purity, immortal and making immortal, incomparable, dwelling in the souls of the good, that cannot be contained and yet is contained, who has fixed the great world as a centre in space, who has spread out the heavens and solidified the earth (Homily II, Ch XLV)

Clement of Rome: For it is manifest even to the unbelieving and unskilful, that the course of the sun, which is useful and necessary to the world, and which is assigned by providence, is always kept orderly; but the courses of the moon, in comparison of the course of the sun, seem to the unskilful to be inordinate and unsettled in her waxings and wanings. For the sun moves in fixed and orderly periods: for from him are hours, from him the day when he rises, from him also the night when he sets; from him months and years are reckoned, from him the variations of seasons are produced; while, rising to the higher regions, he tempers the spring; but when he reaches the top of the heaven, he kindles the summer's heats: again, sinking, he

produces the temper of autumn; and when he returns to his lowest circle, he bequeaths to us the rigour of winter's cold from the icy binding of heaven. (Pseudo-Clementine, Bk VIII, Ch XLV)

Cyril of Jerusalem: And he, who could not hope to live because of the prophetic sentence, had fifteen years added to his life, and for the sign the sun ran backward in his course Well then, for Ezekias' sake the sun turned back but for Christ the sun was eclipsed, not retracing his steps, but suffering eclipse, and therefore shewing the difference between them, I mean between Ezekias and Jesus. (Catechetical Lectures, II, 15)

Cyril of Jerusalem: the earth, which bears the same proportion to the heaven as the center to the whole circumference of a wheel, for the earth is no more than this in comparison with the heaven: consider then that this first heaven which is seen is less than the second, and the second than the third, for so far Scripture has named them..." (Catechetical Lectures, VI, 3)

Ephraim the Syrian: The sun in his course teaches thee that thou rest from labour. (On Admonition and Repentance)

Eusebius: The vast expanse of heaven, like an azure veil is interposed between those without, and those who inhabit his royal mansions: while round this expanse the sun and moon, with the rest of the heavenly luminaries (like torch-bearers around the entrance of the imperial palace), perform, in honor of their sovereign, their appointed courses; holding forth, at the word of his command, an ever-burning light to those whose lot is cast in the darker regions without the pale of heaven. (Oration of Constantine, Ch 1).

Eusebius: to whom he has permitted the contemplation of celestial objects, and revealed the course and changes of the sun and moon, and the periods of the planets and fixed stars. (Oration of Constantine, Ch VI).

Eusebius: Even so one and the same impression of the solar rays illumines the air at once, gives light to the eyes, warmth to the touch, fertility to the earth, and growth to plants. The same luminary constitutes the course of time, governs the motions of the stars, performs the circuit of the heavens, imparts beauty to the earth, and displays the power of God to all: and all this he performs by the sole and unaided force of his own nature. (Oration of Constantine, Ch XII)

Gregory Nanzianzus: But who gave him motion at first? And what is it which ever moves him in his circuit, though in his nature stable and immovable, truly unwearied, and the giver and sustainer of life, and all the rest of the titles which the poets justly sing of him, and never resting in his course or his benefits? How comes he to be the creator of day when above the earth, and of night when below it? or whatever may be the right expression when one contemplates the sun? (Orations, Oration XXVIII, XXX)

Gregory Nanzianzus: The sun is extolled by David for its beauty, its greatness, its swift course, and its power, splendid as a bridegroom, majestic as a giant; while, from the extent of its circuit, it has such power that it equally sheds its light from one end of heaven to the other, and the heat thereof is in no wise lessened by distance. (Funeral Orations for St. Basil, 66).

Gregory of Nyssa: "This is the book of the generation of heaven and earth," saith the Scripture, when all that is seen was finished, and each of the things that are betook itself to its own separate place, when the body of heaven compassed all things round, and those bodies which are heavy and of downward tendency, the earth and the water, holding each other in, took the middle place of the universe; while, as a sort of bond and stability for the things that were made, the Divine power and skill was implanted in the growth of things, guiding all things with the reins of a double operation (for it was by rest and motion that it devised the genesis of the things that were not, and the continuance of the things that are), driving around, about the heavy and

changeless element contributed by the creation that does not move, as about some fixed path, the exceedingly rapid motion of the sphere, like a wheel, and preserving the indissolubility of both by their mutual action, as the circling substance by its rapid motion compresses the compact body of the earth round about, while that which is firm and unyielding, by reason of its unchanging fixedness, continually augments the whirling motion of those things which revolve round it, and intensity is produced in equal measure in each of the natures which thus differ in their operation, in the stationary nature, I mean, and in the mobile revolution; for neither is the earth shifted from its own base, nor does the heaven ever relax in its vehemence, or slacken its motion. (On the Making of Man, 30, 1, 1)

Gregory of Nyssa: But, boasting as they do that they know these things, let them first tell us about the things of inferior nature; what they think of the body of the heavens, of the machinery which conveys the stars in their eternal courses, or of the sphere in which they move; for, however far speculation may proceed, when it comes to the uncertain and incomprehensible it must stop. For though any one say that another body, like in fashion (to that body of the heavens), fitting to its circular shape, checks its velocity, so that, ever turning in its course, it revolves conformably to that other upon itself, being retained by the force that embraces it from flying off at a tangent, yet how can he assert that these bodies will remain unspent by their constant friction with each other? And how, again, is motion produced in the case of two coeval bodies mutually conformed, when the one remains motionless (for the inner body, one would have thought, being held as in a vice by the motionlessness of that which embraces it, will be quite unable to act); and what is it that maintains the embracing body in its fixedness, so that it remains unshaken and unaffected by the motion of that which fits into it? (Answer to Eunomius' Second Book)

Gregory of Nyssa: And how does earth below form the foundation of the whole, and what is it that keeps it firmly in its place? what is it that controls its downward tendency? If any one should interrogate us on these and such-like points, will any of us be found so presumptuous as to promise an explanation of them? No! the only reply that can be given by men of sense is this:—that He Who made all things in wisdom can alone furnish an account of His creation. For ourselves, "through faith we understand that the worlds were framed by the word of God," as saith the Apostle. (Answer to Eunomius' Second Book)

Gregory of Nyssa: "...the vault of heaven prolongs itself so uninterruptedly that it encircles all things with itself, and that the earth and its surroundings are poised in the middle, and that the motion of all the revolving bodies is round this fixed and solid center..." (On the Soul and Resurrection)

Gregory of Nyssa: "...on whatever side the sun's rays may fall on some particular point of the globe, if we follow a straight diameter, we shall find shadow upon the opposite point, and so, continuously, at the opposite end of the direct line of the rays shadow moves round that globe, keeping pace with the sun, so that equally in their turn both the upper half and the under half of the earth are in light and darkness..." (On the Soul and Resurrection)

Gregory of Nyssa: And when you look at the waning and waxing moon you are taught other truths by the visible figure of that heavenly body, viz. that it is in itself devoid of light, and that it revolves in the circle nearest to the earth, and that it is lit by light from the sun; just as is the case with mirrors, which, receiving the sun upon them, do not reflect rays of their own, but those of the sun, whose light is given back from their smooth flashing surface. Those who see this, but do not examine it, think that the light comes from the moon herself. But that this is not the case is proved by this; that when she is diametrically facing the sun she has the whole of the disc that looks our way illuminated; but, as she traverses her own circle of revolution quicker from moving in a narrower space, she herself has completed this more than twelve times before the sun has

once traveled round his; whence it happens that her substance is not always covered with light. (On the Soul and Resurrection).

Gregory Thaumaturgos: And the life of men weareth away, as day by day, and in the periods of hours and years, and the determinate courses of the sun, some are ever coming, and others passing away. And the matter is like the transit of torrents as they fall into the measureless deep of the sea with a mighty noise. And all things that have been constituted by God for the sake of men abide the same: as, for instance, I that man is born of earth, and departs to earth again; that the earth itself continues stable; that the sun accomplishes its circuit about it perfectly, and rolls round to the same mark again; and that the winds in like manner, and the mighty rivers which flow into the sea, and the breezes that beat upon it, all act without forcing it to pass beyond its limits, and without themselves also violating their appointed laws. (On Ecclesiastes, Ch 1, 2)

Hippolytus: When Hezekiah, king of Judah, was still sick and weeping, there came an angel, and said to him: "I have seen thy tears, and I have heard thy voice. Behold, I add unto thy time fifteen years. And this shall be a sign to thee from the Lord: Behold, I turn back the shadow of the degrees of the house of thy father, by which the sun has gone down, the ten degrees by which the shadow has gone down," so that day be a day of thirty-two hours. For when the sun had run its course to the tenth hour, it returned again. And again, when Joshua the son of Nun was fighting against the Amorites, when the sun was now inclining to its setting, and the battle was being pressed closely, Joshua, being anxious lest the heathen host should escape on the descent of night, cried out, saying, "Sun, stand thou still in Gibeon; and thou moon, in the valley of Ajalon," until I vanquish this people. And the sun stood still, and the moon, in their places, so that day was one of twenty-four hours. And in the time of Hezekiah the moon also turned back along with the sun, that there might be no collision between the two elemental bodies, by their bearing against each other in defiance of law. And Merodach the Chaldean, king of Babylon, being struck with amazement at that time—for he studied the science of astrology, and measured the courses of these bodies carefully – on learning the cause, sent a letter and gifts to Hezekiah, just as also the wise men from the east did to Christ. (Fragments, I, Discourse on Hezekiah).

Hippolytus: We find in the commentaries, written by our predecessors, that day had thirty-two hours. For when the sun had run its course, and reached the tenth hour, and the shadow had gone down by the ten degrees in the house of the temple, the sun turned back again by the ten degrees, according to the word of the Lord, and there were thus twenty hours. And again, the sun accomplished its own proper course, according to the common law, and reached its setting. And thus there were thirty-two hours. (Fragments, III, Discourse on Hezekiah).

Hippolytus: For what richer beauty can there be than that of the circle of heaven? And what form of more blooming fairness than that of earth's surface? And what is there swifter in the course than the chariot of the sun? And what more graceful car than the lunar orb? And what work more wonderful than the compact mosaic of the stars? And what more productive of supplies than the seasonable winds? And what more spotless mirror than the light of day? And what creature more excellent than man?(Discourse on the Holy Theophany, 1)

Hippolytus: [Refuting the view of the Greek Ecphantus]: "And that the earth in the middle of the cosmical system is moved round its own center towards the east." (The Prooemium, Ch XIII)

Irenaeus: The sun also, who runs through his orbit in twelve months, and then returns to the same point in the circle (Against Heresies, Bk I, Ch XVII, 1)

Jerome: In Exodus we read that the battle was fought against Amalek while Moses prayed, and the whole people fasted until the evening. Joshua, the son of Nun, bade sun and moon stand still, and the victorious army prolonged its fast for more than a day. (Against Jovinianus, Bk 2).

Jerome: The moon may dispute over her eclipses and ceaseless toil, and ask why she must traverse every month the yearly orbit of the sun. The sun may complain and want to know what he has done that he travels more slowly than the moon. (Against the Pelagians, Bk I, 19)

John Damascene: For it is night when the sun is under the earth, and the duration of night is the course of the sun under the earth from its rising till its setting. (The Orthodox Faith, Bk 2, Ch 7)

Justin Martyr: The former, after he had been named Jesus (Joshua), and after he had received strength from His Spirit, caused the sun to stand still. (Dialogue with Trypho, Ch CXIII)

Justin Martyr: And again, when the land was given up to you with so great a display of power, that you witnessed the sun stand still in the heavens by the order of that man whose name was Jesus (Joshua), and not go down for thirty-six hours, as well as all the other miracles which were wrought for you as time served; and of these it seems good to me now to speak of another, for it conduces to your hereby knowing Jesus, whom we also know to have been Christ the Son of God, who was crucified, and rose again, and ascended to heaven, and will come again to judge all men, even up to Adam himself. (Dialogue with Trypho, Ch CXXXII)

Mathetes: by whom He made the heavens – by whom he enclosed the sea within its proper bounds–whose ordinances all the stars faithfully observe–from whom the sun has received the measure of his daily course to be observed – whom the moon obeys, being commanded to shine in the night, and whom the stars also obey, following the moon in her course; by whom all things have been arranged, and placed within their proper limits (To Diognetes, Ch 7).

Methodius: And, of a truth, it seemed worth while to inquire also about the sun,—what is the manner of his being set in the heaven; also what is the orbit he traverses; also whither it is that, after a short time, he retires; and why it is that even he does not go out of his proper course: but he, too, as one may say, is observing a commandment of a higher power, and appears with us just when he is allowed to do so, and departs as if he were called away. (Concerning Free Will)

Methodius: Resuming then, let us first lay bare, in speaking of those things according to our power, the imposture of those who boast as though they alone had comprehended from what forms the heaven is arranged, in accordance with the hypothesis of the Chaldeans and Egyptians. For they say that the circumference of the world is likened to the turnings of a well-rounded globe, the earth having a central point. For its outline being spherical, it is necessary, they say, since there are the same distances of the parts, that the earth should be the center of the universe, around which, as being older, the heaven is whirling. For if a circumference is described from the central point, which seems to be a circle, for it is impossible for a circle to be described without a point, and it is impossible for a circle to be without a point,—surely the earth consisted before all, they say, in a state of chaos and disorganization. (Banquet of the Ten Virgins, Discourse VIII, Ch XIV)

Tertullian: In Exodus, was not that position of Moses, battling against Amalek by prayers, maintained as it was perseveringly even till “sunset,” a “late Station?” Think we that Joshua the son of Nun, when warring down the Amorites, had breakfasted on that day on which he ordered the very elements to keep a Station? The sun “stood” in Gibeon, and the moon in Ajalon; the sun and the moon “stood in station until the People was avenged of his enemies, and the sun stood in the mid heaven.” When, moreover, (the sun) did draw toward

his setting and the end of the one day, there was no such day beforetime and in the latest time (of course, (no day) so long), "that God," says (the writer), "should hear a man" – (a man,) to be sure, the sun's peer, so long persistent in his duty – a Station longer even than late. (On Fasting, Ch X)

Memoirs of Edessa: For look at the sun, and the moon, and the signs of the zodiac,(4) and all the other creatures which are greater than we in some points, and see how individual freedom has been denied them, and how they are all fixed in their course by decree, so that they may do that only which is decreed for them, and nothing else. For the sun never says, I will not rise at my appointed time; nor the moon, I will not change, nor wane, nor wax; nor does any one of the stars say, I will not rise nor set. (Book of the Laws)

Magisterium / History

Following is a brief chronological summary of the historical developments and Magisterial pronouncements in connection with the Church's teaching on the universe:

1564 – Council of Trent (Session IV, April 8): the Council infallibly teaches that no one could "in matters of faith and of morals pertaining to the edification of Christian doctrine...interpret the sacred Scriptures...even contrary to the unanimous consent of the Fathers." The Fathers unanimously interpreted the Scriptures as supporting a geocentric cosmology.

1613 – Galileo publishes his Letters on Sunspots in which he praised the Copernican (heliocentric) theory.

1615 – Galileo writes a letter to one of his students, Fr. Benedetto Castelli, proclaiming the truth of Copernicanism, stating that "Scripture...in physical disputes should be reserved to the last place" as an authority for resolving those disputes. Galileo writes a similar letter to Dutchess Christina of Lorraine. Fr. Paolo Antonio Foscarini, a Carmelite friar, also writes a book defending the compatibility of Copernicanism with Scripture.

1615 – On April 12, Robert Cardinal Bellarmine (a saint and Doctor of the Church) writes a letter to Fr. Foscarini, advising him that Copernicanism is contrary to Scripture.

The following is list of Cardinal Bellarmine's most salient quotes:

1. "to affirm that the sun really is fixed in the center of the heavens...and the earth... revolves with great speed around the sun, is a very dangerous thing...by injuring our holy faith and rendering the Holy Scriptures false."
2. "the Council (of Trent) prohibits expounding the Scriptures contrary to the common agreement of the holy Fathers. And if Your Reverence would read not only the Fathers but also the commentaries of modern writers on Genesis, Psalms, Ecclesiastes, and Josue, you would find that all agree in explaining (ad litteram) that the sun is in the heavens and moves swiftly around the earth, and that the earth is far from the heavens and stands immobile in the center of the universe. Now consider whether the Church could encourage giving to Scripture a sense contrary to the holy Fathers and all the Latin and Greek commentators."
3. "Nor may it be answered that this is not a matter of faith...It would be just as heretical to deny that Abraham had two sons and Jacob twelve, as it would be to deny the virgin birth of Christ, for both are declared by the Holy Ghost through the mouths of the prophets and apostles."
4. "If there were a true demonstration that the sun was in the center of the universe...and that the sun did not travel around the earth, but the earth circled around the sun, then it would be necessary to proceed with great

caution in explaining the passages of Scripture which seemed contrary...But I do not believe that there is any such demonstration."

5. "I add the words 'the sun also riseth and the sun goeth down, and hasteneth to the place where he ariseth, etc.' were those of Solomon, who not only spoke by divine inspiration but was a man wise above all others and most learned in human sciences and in the knowledge of all created things, and his wisdom was from God. Thus it is not too likely that he would affirm something which was contrary to a truth either already demonstrated, or likely to be demonstrated."

1616 – On March 5, the Congregation of the Index condemns all writings which treated Copernicanism as anything but an unproven hypothesis. The Congregation declared that such a theory was "false and contrary to Holy Scripture, which teaches the motion of the earth and the immobility of the sun, and which is taught by Nicolas Copernicus in *De revolutionibus orbium caelestium*...being spread by... Father Paolo Antonio Foscarini...Therefore, so that this opinion may not spread any further to the prejudice of Catholic truth, it decrees that the said... *De revolutionibus orbium caelestium*...be suspended until corrected; but that the book of the Carmelite Father, Paolo Foscarini, be prohibited and condemned." Pope Paul V presided at this Congregation and, while his name is not on the decree, approved and ordered the decree as supreme teacher of the Church.

1632 – Galileo publishes the book *Dialogue Concerning the Two Chief World Systems* in which he openly and enthusiastically advocated the Copernican system and ridiculed the geocentric system. This publication was in direct conflict with the Council of Trent's teaching that one could not hold a position contrary to the unanimity of the Fathers, Cardinal Bellarmine's letter holding the Copernican theory contrary to Scripture, and the Congregation of the Index's ban on all books that taught the Copernican theory.

1633 – On June 22, the Holy Office formally condemns Galileo for heresy: "We say, pronounce, sentence and declare that you, the said Galileo...have rendered yourself in the judgment of this Holy office vehemently suspected of heresy, namely, of having believed and held the doctrine which is false and contrary to the Sacred and Divine Scriptures, that the sun is the center of the world and does not move from east to west and that the earth moves and is not the center of the world...after it has been declared and defined as contrary to Holy Scripture...From which we are content that you be absolved, provided that...you abjure, curse, and detest before us the aforesaid errors and heresies and every other error and heresy contrary to the Catholic and Apostolic Roman Church." Pope Urban VIII took full responsibility for the condemnation of Galileo by enforcing "in forma communi" the Congregation's prohibitions against books holding the Copernican system as truth.

1633 – Galileo signs a statement which reads "with a sincere heart and unfeigned faith I abjure, curse and detest the aforesaid errors and heresies and generally every other error, heresy and sect whatsoever contrary to the Holy Church...but, should I know any heretic or person suspected of heresy, I will denounce him to the Holy Office or to the inquisitor or Ordinary of the place where I may be..." 1664 – Pope Alexander VII issues *Speculatore Domus Israel* in which he solemnly sanctioned the condemnation of all books affirming the earth's movement and the sun's stability. Pope Alexander VII published a new official Index which included the Congregations prohibitions from 1596 to 1664. The pope declared "We, having taken the advice of our Cardinals, confirm and approve with Apostolic authority by the tenor of these presents, and command and enjoin all persons everywhere to yield to this Index a constant and complete obedience."

1758 – Pope Benedict XIV removes Copernicus' book from the Index, after editors removed nine sentences which taught that heliocentrism was a certainty. This was consistent with the Congregation's decree in 1616

that the book would be banned until "corrected." However, the Church's condemnations of Copernicanism on the grounds that its teachings are heretical and contrary to Scripture is not (and never has been) overturned.

1870 – The First Vatican Council, Canons and Decrees, Chapter III, infallibly declares that "the Church, which together with the apostolic office of teaching, has received a charge to guard the deposit of faith, derives from God the right and duty of proscribing false science, lest any should be deceived by philosophy and vain deceit. Therefore all faithful Christians are not only forbidden to defend as legitimate conclusions of science such opinions as are known to be contrary to the doctrines of the faith, especially if they have been condemned by the Church, but are altogether bound to account them as errors which put on the fallacious appearance of truth." The Council also affirms the inerrancy of Scripture by dogmatically stating: "These books the church holds to be sacred and canonical not because she subsequently approved them by her authority after they had been composed by unaided human skill, nor simply because they contain revelation without error, but because, being written under the inspiration of the holy Spirit, they have God as their author, and were as such committed to the church." Dogmatic Constitution on the Catholic Faith, chapter 2, paragraph 7, 1870.

1885 – Father William Roberts publishes his book *The Pontifical Decrees Against the Doctrine of the Earth's Movement*. In this book, Fr. Roberts presents a strong case for the position that the Church's condemnation of heliocentrism is infallible. He concludes: (1) Alexander VIII's *Speculatores* was a papal act of supreme authority by which the pope, in the face of the whole Church, confirmed and approved the decrees with his Apostolic authority, and made himself responsible for their publication, that heliocentrism was false; (2) heliocentrism was false because the Church declared it a heresy, and whoever says an opinion is heresy ipso facto says that the contradictory of that opinion has been revealed by God with sufficient certainty to oblige a Catholic to accept it by an act of divine faith; and, (3) infallible teachings, even those ex-cathedra, do not generally generate any fresh obligation of faith, but protect and vindicate one that already exists.

1893 – Pope Leo XIII issues *Providentissimus Deus* which affirms the teaching of the Council of Trent that the Scriptures are inerrant in all matters written, not just matters relating to salvation. The pope states "But it is absolutely wrong and forbidden either to narrow its inspiration to certain parts only of Holy Scripture or to admit that the sacred writer has erred...For all the books which the Church receives as sacred and canonical are written wholly and entirely, with all their parts, at the dictation of the Holy Spirit; and so far is it from being impossible that any error can coexist with inspiration, that inspiration not only is essentially incompatible with error, but excludes and rejects it as absolutely and necessarily as it is impossible that God Himself, the supreme Truth, can utter that which is not true. This is the ancient and unchanging faith of the Church"

1907 – On July 3, Pope Pius X issues the encyclical *Lamentabili Sane* which condemned the errors of the modernists. In connection with creation, science and the inerrancy of Scripture, the following errors, inter alia, were expressly condemned: -Since the deposit of Faith contains only revealed truths, the Church has no right to pass judgment on the assertions of the human sciences (no. 5). -They are free from all blame who treat lightly the condemnations passed by the Sacred Congregation of the Index or by the Roman Congregations (no. 8). -Divine inspiration does not extend to all of Sacred Scriptures so that it renders its parts, each and every one, free from every error (no. 11). -Scientific progress demands that the concepts of Christian doctrine concerning God, creation, revelation, the Person of the Incarnate Word, and Redemption be re-adjusted (no. 64).

1920 – On September 15, Pope Benedict XV issues *Spiritus Paraclitus* in which he likewise affirms the teaching of the Council of Trent, the First Vatican Council, and *Lamentabili Sane* on the inerrancy of the Scriptures. The pope states "by these precepts and limits [set by the Fathers of the Church]...wish, indeed, that inspiration

itself pertain to all ideas, rather even to the individual words of the Bible..." The pope condemns contrary opinions by stating "For their belief is that that only which concerns religion is intended and is taught by God in the Scriptures; but that the rest, which pertains to the profane disciplines...is left to the feebleness of the writer...But how rashly, how falsely this is affirmed."

1950 – On August 12, Pope Pius XII issues the encyclical *Humani Generis* which addressed false opinions that were threatening to undermine Catholic doctrine. The pope, in echoing St. Augustine and *Providentissimus Deus*, declared that the modern exegete's desire to depart from a literal interpretation of Scripture in favor of a non-literal interpretation was foreign to Catholic teaching: "Further, according to their fictitious opinions, the literal sense of Holy Scripture and its explanation, carefully worked out under the Church's vigilance by so many great exegetes, should yield now to a new exegesis, which they are pleased to call symbolic or spiritual." (no. 23). "Everyone sees how foreign all this is to the principles and norms of interpretation rightly fixed by our predecessors of happy memory, Leo XIII in his Encyclical *Providentissimus Deus*, and Benedict XV in the Encyclical *Spiritus Paraclitus*, as also by Ourselves in the Encyclical *Divino Afflante Spiritu*." (no. 24).

1994 Catechism of the Catholic Church – paragraph 105 says "God is the author of Sacred Scripture. The divinely revealed realities, which are contained and presented in the text of Sacred Scripture, have been written down under the inspiration of the Holy Spirit. For Holy Mother Church, relying on the faith of the apostolic age, accepts as sacred and canonical the books of the Old and New Testament, whole and entire, with all their parts, on the grounds that, written under the inspiration of the Holy Spirit, they have God as their author and have been handed on as such to the Church herself." (Emphasis added.)

What is the conclusion? Heliocentrism cannot be taught as a certainty. It is only a hypothesis, and a hypothesis can either be a possibly true explanation, or an avowedly false one. Science has not proven either geocentrism or heliocentrism, but the Scriptures, the Apostolic Tradition, and the Magisterium of the Church support the geocentric position.

In fact, the Church has other dogmatic, infallible teachings such as the Immaculate Conception of Mary with less Scriptural, papal, patristic and medieval support than geocentrism. The Church has also not annulled her condemnations of heliocentrism. Those who hold the geocentric view believe that God made the earth the spiritual and material center of the universe for the Incarnation of His only-begotten Son, where Jesus' sacrifice is perpetually offered "from the rising of the sun to its setting" (Mal. 1:11), and where Jesus dwells in His Eucharistic presence under the appearance of bread and wine.

It is, therefore, consistent with Catholic teaching to believe that Jesus Christ, the God-man, has united divinity with humanity at the center of the universe which is earth. On a more basic level, if the earth is the center of the universe, then this means that someone (God) put it there. Given the dynamics of the universe, the relative positions of the heavenly bodies, and the size of the earth, it would be impossible for the earth to be the center of the universe unless a divine agent worked out all the details.

If the earth is indeed the center, then God is trying to tell us that we are special to Him. We are unique. We are destined to be with Him forever. This is why He opens His written revelation with the creation account. This is also why the atheists and agnostics want so badly to disprove geocentrism, because if they can do that, they can argue that there is no God. They want to argue that there is no God because they don't want to be accountable to Him. If science would definitively disprove the geocentric theory, then, as St. Bellarmine suggests, "it would be necessary to proceed with great caution in explaining the passages of Scripture which seemed contrary, and we would rather have to say that we did not understand them than to say that something was false which has been demonstrated."