Stars of Heaven

Richard Balogh Adult Sunday School, July 3, 2022 All Scripture is NASB, 1995 All Strong's word definitions are from The Complete Word Study Dictionary

Psalms 19:1 The heavens are telling of the glory of God; And their expanse is declaring the work of His hands.

First, let us review the topics covered so far and highlight the threads common to them all. The first thread is The Law of Cause and Effect where all things that had a beginning or have changed must have been caused to do so. Simply put, nothing happens without a reason. God Himself is the only exception to this Law because He is eternal without a beginning and He does not change. So for both the actions of men as well as of God there is always a "why" which the Bible typically states plainly or infers. The second thread is that it is better to ask "why" God did this or that because the Law of cause and effect will likely provide an answer. But the question of "how" God did this or that is typically unanswerable by us since we are unable to fully understand how God is able to do miracles. Miracles by definition are exceptions to natural laws so we are at a huge loss to explain them. Contrasting man with God, God says in Isaiah 55:8-9

"For My thoughts are not your thoughts, Nor are your ways My ways," declares the LORD. "For as the heavens are higher than the earth, So are My ways higher than your ways And My thoughts than your thoughts.

Our first science in light of Scripture topic was on Easter Sunday this year and dealt with the future bodily resurrection of all believers. Just as Jesus rose from the dead in His glorified body that was really His body since many saw Him and recognized Him, our resurrected bodies will be recognizable as well. We attempted to answer how God will do this considering our bodies will have decayed in the grave. We speculated that since cause and effect identifies God as the author of the order of atoms that makeup our DNA, that information, or the order of atoms, is a quality that is not the atoms themselves. The DNA's information is carried by atoms in our earthly body, known by God since He authored it. We speculated that perhaps this information will be used by God to order the imperishable building blocks of our resurrected bodies. But this scenario is only speculation. Maybe this will be how He will resurrect our bodies, maybe not. But what is clear is why we will be resurrected bodily, not as an

unrecognizable spirit. It is so that no one can dispute that you, once dead, are no longer dead. Our future bodily resurrection will demonstrate for a fact that Jesus really conquered death and the grave not only for Himself but also for everyone. So this first topic illustrated the second thread in this series: that when asking the question "why" instead of "how" we will likely find an answer. Then our second meeting discussed light and why God created light on the first day of creation three days before creating the sun, moon and stars. He separated the darkness from light by having the light shine on earth from one direction thereby making the first clock whereby evening and morning the first day was defined before it is used repeatedly to conclude each of the remaining days of creation. So He made light as necessary part of the first clock. As the earth turns light causes darkness to flee over one half of the earth and the day begins. Roughly twelve hours later the turning earth brings night to that same half of the earth. It makes sense that God first makes the clock that defines what a day is before using the term day for the other days of creation. At our last meeting we discussed the importance of water. Since water is necessary for life to exist, and God plainly states that He made the earth to be inhabited, water was essential at the beginning of creation on day one before He made living creatures. The third and most important thread woven through this series is the fact that God is awesome. Nothing is hidden from His sight therefore He is aware of and provides for all our needs. Nothing is too difficult for Him so His will cannot be thwarted. Since He is Creator of everything – nature and Scripture – there should be a better understanding of what science observes in nature when we also read the revelation of that subject in the Scriptures. Since He is the Author of everything we should expect more complete insight just as Sir Francis Bacon stated...God wrote two books...nature and Scripture. Consistent with this expectation is the description that Paul gives of the Spiritual man "who appraises all things"

Continuing in our Science in light of Scripture series, this morning we will now turn our attention to the stars.

Take a minute to write what you would include in your own definition of the stars:

Now circle the parts of your definition that you learned from Scripture.

1 Thessalonians 5:21-22 But examine everything carefully; hold fast to that which is good; abstain from every form of evil.

Scripture makes a strong claim to be the truth

In 2 Timothy 3:16-17 Paul says

All Scripture is inspired by God and profitable for teaching, for reproof, for correction, for training in righteousness; so that the man of God may be adequate, equipped for every good work.

God gives a science exam to Job in Job chapters 38-42 were God repeatedly asks "...where were you [Job] when I..." stressing the point that God the Creator was there and therefore an eye witness to creation. In a court of law a credible eye witness is the best witness, particularly when they are trustworthy and God cannot lie (Titus 1:2). The exam begins with these words spoken by God to Job in" Job 38:2-4

"Who is this that darkens counsel By words without knowledge?

"Now gird up your loins like a man, And I will ask you, and you instruct Me!

"Where were you when I laid the foundation of the earth? Tell Me, if you have understanding,

Later God asks Job in verses 31-33

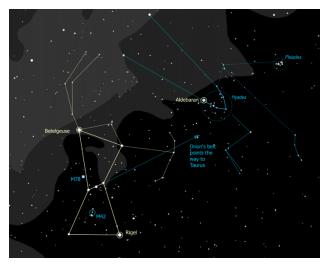
"Can you bind the chains of the Pleiades, Or loose the cords of Orion?

"Can you lead forth a constellation in its season, And guide the Bear with her satellites?

"Do you know the ordinances of the heavens, Or fix their rule over the earth?

The Pleiades in Taurus and stars in the neighboring constellation Orion are two of only 30 open clusters visible to the naked eye whose members are relatively close to the other members in their cluster and therefore gravitationally bound to the rest of the stars in their neighborhood.. To "Bind the chains" and" loose the cords" alludes to the stronger than normal gravitational attraction within these two open clusters by virtue of their close distance ordained by God when He placed them in the expanse. Amos 5:8 says

He who made the Pleiades and Orion And changes deep darkness into morning, Who also darkens day into night, Who calls for the waters of the sea



And pours them out on the surface of the earth, The LORD is His name.

The Vulgate replaces "Pleiades" with "Hyades", see Star chart above

About half way through the exam Job replies in Job 40:1-7

Then the LORD said to Job, "Will the faultfinder contend with the Almighty?

Let him who reproves God answer it."Then Job answered the LORD and said,

"Behold, I am insignificant; what can I reply to You? I lay my hand on my mouth.

"Once I have spoken, and I will not answer;

Even twice, and I will add nothing more."

Then the LORD answered Job out of the storm and said, "Now gird up your loins like a man; I will ask you, and you instruct Me.

At the end of the exam Job replies in Job 42:1-6

Then Job answered the LORD and said,"I know that You can do all things,

And that no purpose of Yours can be thwarted.'Who is this that hides counsel without knowledge?'

"Therefore I have declared that which I did not understand, Things too wonderful for me, which I did not know."

'Hear, now, and I will speak; I will ask You, and You instruct me.'

"I have heard of You by the hearing of the ear; But now my eye sees You;

Therefore I retract, And I repent in dust and ashes."

What do you think God's purpose was in giving this exam to Job?

What is meant by "heavens"?

God made the expanse on the second day (Gen 1:6-8) and on the fourth day added the Sun, Moon and stars

Genesis 1:14-19

Then God said, "Let there be lights in the expanse of the heavens to separate the day from the night, and let them be for signs and for seasons and for days and years; and let them be for lights in the **expanseH7549** of the **heavensH8064** to give light on the earth"; and it was so. God made the two great lights, the greater light to govern the day, and the lesser light to govern the night; He made the stars also. God placed them in the **expanse7549** of the **heavensH8064** to give light on the earth, [18] and to govern the day and the night, and to separate the light from the darkness; and God saw that it was good. There was evening and there was morning, a fourth day.

7549. רָקִיעַ rāqiya`: A masculine noun meaning an expanse, the firmament, an extended surface. Literally, this word refers to a great expanse and, in particular, the vault of the heavens above the earth. It denotes the literal sky that stretches from horizon to horizon (Ge 1:6-8); the heavens above that contain the sun, moon, and stars (Ge 1:14); or any vaulted ceiling or expanse that stands above (Eze 10:1). By extension, the psalmist uses the word to refer to the infinite and sweeping power of the Lord (Ps 150:1).

8064. Digits a may im: A masculine noun meaning sky, heaven, abode, firmament, air, stars. Although the word is plural or dual in form, it can be translated into English as singular or plural depending on the context. The word describes everything God made besides the earth: God made the heavens of the universe (Ge 1:1; 14:19); the firmament or expanse which He created around the earth was named sky or heaven as well (Ge 1:8). He stretched out the heavens (Isa 40:22); creating them (Isa 42:5; 45:18). The heavens that humans observe with their senses are indicated by this word. The stars are part of the heavens (Ge 15:5) and are personified in some cases (Jdg 5:20); the sun and the moon, along with the stars, make up a major part of the hosts of heaven (Dt 4:19). Unfortunately, these things were worshiped as gods by even the Israelites (Je 8:2). The heavens became a source of knowing the future and life in general, for scanners of the heavens and astrologers searched the heavens for signs (Isa 47:13). A favorite pagan deity was the Queen of Heaven whom the people worshiped (Je 7:18; 44:17).

The meaning of heavens depends on the context

First use of heavens is Genesis 1:1 In the beginning God created the <u>heavensH8064</u> and the earth.

The Earth's atmosphere Genesis 1:20

Then God said, "Let the waters teem with swarms of living creatures, and let birds fly above the earth in the open expanse of the **heavensH8064**."

The starry heavens Genesis 1:14-15

Then God said, "Let there be lights in the expanse of the <u>heavensH8064</u> to separate the day from the night, and let them be for signs and for seasons and for days and years; [15] and let them be for lights in the expanse of the heavens to give light on the earth"; and it was so.

Where God dwells Psalms 14:2-3 The LORD has looked down from <u>heavenH8064</u> upon the sons of men To see if there are any who understand, Who seek after God. They have all turned aside, together they have become corrupt; There is no one who does good, not even one.

Above where men live Ecclesiastes 3:1

There is an appointed time for everything. And there is a time for every event under <u>heavenH8064</u>

The new heavens in the future. Isaiah 65:17

"For behold, I create new <u>heavensH8064</u> and a new earth; And the former things will not be remembered or come to mind.

What is the context of Psalms 19:1-6 [1] The heavensH8064 are telling of

the glory of God; And their expanse is declaring the work of His hands.

[2] Day to day pours forth speech,And night to night reveals knowledge.[3] There is no speech, nor are there words;

Their voice is not heard.

[4] Their line has gone out through all the earth,

And their utterances to the end of the world.

In them He has placed a tent for the sun,

[5] Which is as a bridegroom coming out of his chamber;

It rejoices as a strong man to run his course.

[6] Its rising is from one end of the heavensH8064,

And its circuit to the other end of them;

And there is nothing hidden from its heat.

Warren Wiersby comments on Psalms 19:1-4

God's wisdom, power, and glory are seen in His creation. Modern science would have us study "natural laws" and leave God out, but **the psalmist looked at the marvels of heaven and earth and saw God.** See also Ps 8 and Ps 29, as well as Isa 40:12-31. Jesus saw His Father's handiwork in the lilies and the birds (Mt 6:24-34). Both by day and by night, God's creation is speaking (Isaiah v. 2), but this speech is not heard with the human ear. Verse 3 should read, "There is no speech or language where their voice is not heard" (NIV). We hear the voice of God in creation by seeing His wisdom and power. Certainly so complex an entity as our universe (and the universes beyond our own universe) demands a Creator and Sustainer. To believe that the universe evolved out of nothing and arranged itself in this orderly manner is folly. Creation speaks a universal language to all nations (Psalms vv. 3-4). It is this fact that Paul used in Ro 1:18-32 to prove that all people everywhere are under the wrath of God. "Are the heathen lost?" is an oft-repeated question, and the answer is "Yes." On what basis are they lost if they

THE HEAVENS ARE GOD'S GIANT CANVAS of self-revelation that speaks continuously. There's not a split second of time when there's not a revelation of God in the skies. Every single day. Every single night. Every week. Every year. Ever since they were created. It's 24/7. The heavens are known and seen everywhere. *"The skies proclaim the work of his hands. Day after day they pour forth speech; night after night they display knowledge"* (PSALM 19:1–2 NIV). The skies preach a thousand sermons a day to the human heart. God's revelation in the heavens is also universal. Anyone can see it, and anyone can see it anytime, anywhere. It's inaudible, so anyone can understand it. The heavens don't speak Russian, Chinese, or English. The heavens speak a language everyone can understand. *"There is no speech or language where their voice is not heard. Their voice goes out into all the earth, their words to the ends of the world"* (PSALM 19:3–4).

Today, with our stunning technology, we can read the fine print of God's revelation in the skies and see distant worlds that defy comprehension. God's voice is clearer than ever before. Are we listening? And worshiping? | MARK HITCHCOCK have never heard the Gospel? On the basis of God's revelation in creation. The heathen see God's power and wisdom, His "eternal Godhead," in creation and know that they have a responsibility to Him.

The heavens were stretched

Isaiah 45:12

"It is I who made the earth, and created man upon it. I <u>stretchedH5186</u> out the <u>heavens8064</u> with My hands And I <u>ordained6680</u> all their host.

6680. צָּוָה sāwāh: A verb meaning to order, to direct, to appoint, to command, to charge, to be ordered, to be commanded. The word means to give an order or to command, to direct someone; it indicates commands given to people in various situations... God commands not only people but creation: He created all things by His command (Ps 33:9; 148:5); He commanded the clouds not to send their rain on a disobedient vineyard (i.e., Israel [Ps 78:23; Isa 5:6]); He commands the entire heavenly realms (Isa 45:12). God commands historical processes; He will ultimately set up David, His ruler, as the one who commands (Isa 55:4).

Isaiah 51:13

That you have forgotten the LORD your Maker, Who <u>stretchedH5186</u> out the <u>heavensH8064</u> And laid the foundations of the earth, That you fear continually all day long because of the fury of the oppressor, As he makes ready to destroy? But where is the fury of the oppressor?

5186. נְטָה nāṭāh: A verb meaning to stretch out, to extend; to pay attention. It is used often of simply extending or stretching out something: a hand, an arm is extended or a staff or javelin is pointed (Ex 6:6; 7:5,19; 9:22,23; 10:12,13,21,22; Jos 8:18).

Jeremiah 51:15

It is He who made the earth by His power, Who established the world by His wisdom, And by His understanding He <u>stretchedH5186</u> out the <u>heavensH8064</u>.

Isaiah 44:24

Thus says the LORD, your Redeemer, and the one who formed you from the womb, "I, the LORD, am the maker of all things, <u>StretchingH5186</u> out the <u>heavensH8064</u> by Myself And <u>spreadingH7554</u> out the earth all alone, **7554. רָקַע rāqa**`: A verb meaning to beat, to stamp, to stretch out. The fundamental picture is that of a smith pounding a piece of metal that in turn causes the metal to spread out as it flattens. This word conveys the action of flattening metal for some specific use (Ex 39:3); stamping one's foot on the ground as a symbol of displeasure (Eze 6:11); the laying out of the earth in creation (Isa 42:5); and the flattening of an enemy (2Sa 22:43).

Isaiah 42:5

Thus says God the LORD, Who created the <u>heavensH8064</u> and <u>stretched H5186</u> them out, Who <u>spreadH7554</u> out the earth and its offspring, Who gives breath to the people on it And spirit to those who walk in it,

Isaiah 40:22

It is He who sits above the circle of the earth, And its inhabitants are likes pop grasshoppers, Who <u>stretches H5186</u> out the <u>heavensH8064</u> like a curtain And <u>spreadsH4969</u> them out like a tent to dwell in.

4969. mātaḥ: A verb referring to spreading out, stretching out. It is used of God's act of expanding the sky like spreading out a curtain (Isa 40:22).

Job 9:7-10

[7] Who commands the sun not to shine,

And setsH2856 a sealH2856 upon the starsH3556;

[8] Who alone stretchesH5186 out the heavensH8064

And tramples down the waves of the sea;

[9] Who makes the Bear, Orion and the Pleiades,

And the chambers of the south;

[10] Who does great things, unfathomableH2714

And wondrous works without number.

2714. חֲקֶר ḥēqer: A masculine noun referring to a search, an inquiry, something to be searched out. The Lord's understanding is declared to be unsearchable.

3556. וֹכְר kôkāb: A masculine noun meaning star. Its primary referents are a star and/or the stars of heaven (Ge 1:16) which God created. These shining heavenly bodies have several functions: to rule over the night (Ge 1:16; Ps 136:9); to give light; to praise God (Ps 148:3). They were used in idioms and metaphors often: to symbolize rulership and a coming ruler (Nu 24:17).

Pagans and apostate Israelites worshiped them as gods (Dt 4:19); they were used in pagan astrology or augury to know the future (Isa 47:13); yet the Lord of Israel communicates with them and commands them (Job 9:7); they were used to represent Joseph's brothers (Ge 37:9): their number is used figuratively to represent the many descendants of Abraham and the patriarchs (Ge 15:5; 22:17; 26:4; Ex 32:13); prideful and haughty nations are represented as stars (Ob 4), especially the king of Babylon (Isa 14:13); the Lord can use stars in battle to fight for His people (Jdg 5:20); they shout for joy in personification (Job 38:7). The Lord has numbered them (Ps 147:4); but even these shining bodies are not pure or clean in His sight (Job 25:5).

Jeremiah 10:12

It is He who made the earth by His power,

Who established the world by His wisdom;

And by His understanding He has stretchedH5186 out the heavensH8064

Zechariah 12:1

The burden of the word of the LORD concerning Israel.

Thus declares the LORD who <u>stretchesH5186</u> out the <u>heavensH8064</u>, lays the foundation of earth, and forms the spirit of man within him,

Isaiah 48:12-13

"Listen to Me, O Jacob, even Israel whom I called; I am He, I am the first, I am also the last. "Surely My hand founded the earth, And My right hand <u>spreadH2946</u> out the <u>heavensH8064</u>; When I call to them, they stand together.Isaiah 51:13

2946. not tappe to spread out. It is used in a magnificent metaphor to describe the spreading out of the heavens by the Lord's right hand (Isa 48:13), as a person might spread out a scroll.

Psalms 104:2

Covering Yourself with light as with a cloak,

StretchingH5186 out heaven8064 like a tent curtain."

Why is "stretching" significant? Because the most convincing evidence in support of a big bang origin of the universe is the Hubble Law where astronomers commonly observe that the farther away a galaxy is from earth the faster it is receding from earth. This observation is true for any expansion (such as inflating a balloon), not only from an explosion. So perhaps – this is conjecture – the stretching described in Scripture is the cause of the Hubble Law. Demonstration.

The travel time "problem" for light to reach earth

The apparent problem of light taking many years to reach earth from distant stars is not a problem for God for several reasons

- The speed of anything depends on the reference frame of the observer. Let's say you are sitting in your parked car. Would you believe me if I said that you are moving at a speed of over 700 miles per hour right now? Measured from space that is your speed but measured with respect to anything with you, such as the speedometer in your car, your speed is 0.
- 2. Light is instantaneous in its reference frame. Now since God is light (1 John) and also the Father of light (James 1:17) because He created light (Gen.1), it is reasonable to conclude that His actions are also instantaneous in His frame of reference.
- 3. Notice that God has "no variation or shifting shadow" (James 1:17) both require time since variation and shifting shadows only exist during a period of time. Furthermore, God sees all of time from 2Peter 3:8 "But do not let this one fact escape your notice, beloved, that with the Lord one day is like a thousand years, and a thousand years like one day." He is not bound to accomplish His will within a period of time since He is in a different reference frame where time is not required to do anything unlike in our reference frame where time is always required in order for us to do everything. God is eternal Dt 33:27; Ps 90:2; Rev 4:8-10; 1 Tim 1:17 and not bound by time.
- 4. As an example, Christ appeared and met with the disciples in the closed room (John 20:26), His absence of time limitations allowed Him to appear without using the door. We cannot walk through the wall because it exists in that same space at the same time we attempt to walk through it. Christ, being independent of time has no such restriction as time for Him is not a factor to consider.

- Since speed is distance divided by time, as in miles-per-hour, if time (the denominator) is 0, then speed becomes infinitely large. God is not only fast, He takes no time to travel anywhere! That is why God can be everywhere at the same time. We say that He is omnipresent Ps 139:7; Je 23:24.
- 6. God is omnipotent because He does not require time to do things as we require. Work is defined as force times distance. Power is work divided by time. Once again we see that as the denominator approaches zero, the power becomes infinitely large.
- 7. Consider the word "ways" in this verse: His ways are not our ways...Isaiah 55:9 "For as the heavens are higher than the earth, So are My ways higher than your ways And My thoughts than your thoughts. The word "ways" H1870 is the same word used for the way to the dwelling of light in Job 38:19 "Where is the way[h1870] to the dwelling[h7931] of light[h216]? And darkness[h2822], where[h335] is its place[h4725], And in Job 38:24 "Where[h335] is the way[h1870] that the light[h216] is divided[h2505a],

Or the east[h6921] wind[h6921] scattered[h6327a] on the earth[h776]?

 Must the God of the Bible wait for light to travel to it's destination? The Scriptures do not describe such a limitation...it is man's concern dealing within man's reference frame.

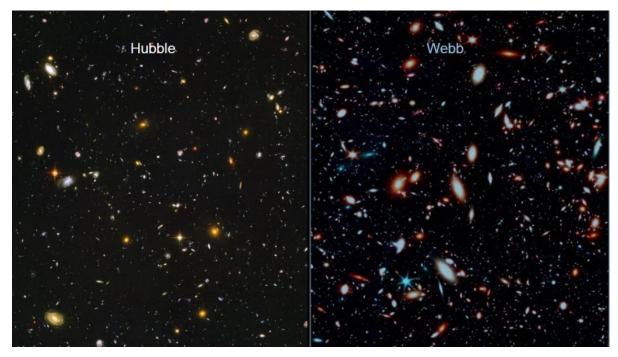
Can the stars be counted?

Genesis 15:5-6

And He took him outside and said, "Now look toward the heavens, and count the stars, if you are able to count them." And He said to him, "So shall your descendants be." Then he believed in the LORD; and He reckoned it to him as righteousness.

- 1. With the unaided eye on a moonless night from sunset to sunrise a total of about 6,000 stars are visible if the observer could be everywhere on earth. But more realistically, if we stay at the same latitude counting all night the earth still blocks half of them.
- 2. Galileo in 1610 looking through his telescope found "...others which have never before been seen, have now become visible and comprise a tenfold increase in the number of stars"
- 3. In 1852-1859 a survey with a larger telescope found another tenfold increase.

- 4. The largest earthbound telescopes can see about 6,000,000,000 stars or about 30,000 stars in every area of sky equal to the area of the full moon about the number Galileo counted in the entire sky!
- 5. When using indirect methods such as the total mass to explain the orbital motion of stars, the number jumps to an average of 200,000,000,000 stars assuming all have the same mass as the Sun in our Milky Way Galaxy alone!
- 6. To date, several hundred billion (200,000,000,000) galaxies have been imaged, each having the same average number of stars as our Milky Way Galaxy...do the math and the total number of stars is enormous.
- 7. Larger telescopes will allow even fainter galaxies to be discovered so the end is not yet in sight. See Hubble and Webb telescopic images of roughly the same location in space, only a fraction of the diameter of the full moon. Each smudge is a galaxy composed of hundreds of millions of stars!



Jeremiah 33:19-22 (NASB1995)

[19] The word of the LORD came to Jeremiah, saying, [20] "Thus says the LORD, 'If you can break My covenant for the day and My covenant for the night, so that day and night will not be at their appointed time, [21] then My covenant may also be broken with David My servant so that he will not have a son to reign on his throne, and with the Levitical priests, My ministers. [22] '**As the host of heaven cannot be counted** and the sand of the sea cannot be measured, so I will multiply the descendants of David My servant and the Levites who minister to Me.'" Considering Jeremiah lived way before telescopes so only about 3,000 to 6,000 stars could be seen with the unaided eye, let's read an imaginary dialogue between Jeremiah and an astronomer of the day...

For signs and for seasons, for days and for years

Joshua 10:12-14

Then Joshua spoke to the LORD in the day when the LORD delivered up the Amorites before the sons of Israel, and he said in the sight of Israel,

"O sun, stand still at Gibeon,

And O moon in the valley of Aijalon."

So the sun stood still, and the moon stopped,

Until the nation avenged themselves of their enemies.

Is it not written in the book of Jashar? And the sun stopped in the middle of the sky and did not hasten to go down for about a whole day. There was no day like that before it or after it, when the LORD listened to the voice of a man; for the LORD fought for Israel.

Matthew 2:2

"Where is He who has been born King of the Jews? For we saw His star in the east and have come to worship Him."

Signs for future events

Luke 21:25-31

"There will be signs in sun and moon and stars, and on the earth dismay among nations, in perplexity at the roaring of the sea and the waves, men fainting from fear and the expectation of the things which are coming upon the world; for the powers of the **heavensG3772** will be shaken. "Then they will see THE SON OF MAN COMING IN A CLOUD with power and great glory. "But when these things begin to take place, straighten up and lift up your heads, because your redemption is drawing near."

Then He told them a parable: "Behold the fig tree and all the trees; as soon as they put forth leaves, you see it and know for yourselves that summer is now near. "So you also, when you see these things happening, recognize that the kingdom of God is near.

3772. οὐρανός ouranós; gen. ouranoú, masc. noun. Heaven, sky, air. The Greek equivalent of H8064 heavens in OT