

"As for the earth, we constructed it, and placed on it stabilizers (mountains), and we grew on it a perfect balance of everything." (The Holy Qur'an, Chapter 15, Verse 19)

SCIENCE

6 Scientific Verses in this Section



QUR'AN on EARTH

QUR'AN SPEAKS ABOUT EARTH



Till here we saw all about space, universes, galaxies and stars.

Lets come to basic and talk about earth : the planet we live.

 .. *Him Who created the earth in two periods (space elapses) , and ascribe ye unto Him rivals? He (and none else) is the Lord of the Worlds.* 

(The Holy Qur'an, Chapter 41, verses 9-12)

...and ultimately the earth was born.

Earth underwent thru many phases since it birth. Science can give you a very precise information regarding it.

We all know that fact that ...

 *".... and His (earthly) domain was completely covered with water ..."* 

(The Holy Qur'an, Chapter 11, verses 7)

Scientists say that during the 'Late Proterozoic' period, the entire land area (all current countries) was one complete bunch. The globe's evolution later stretched the land area from what it was to what it is today.

Below are six pictures to demonstrating the yet to come Qur'anic verse.

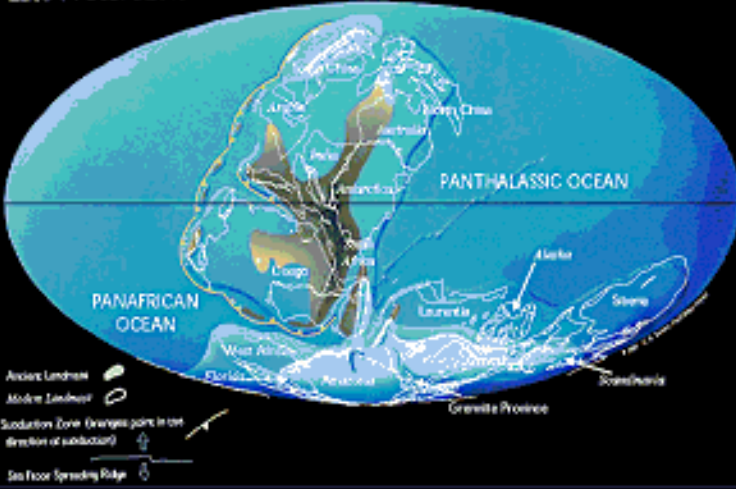
(Read from the left.)

1st picture is of the earth as it was in it's 'Late Proterozoic Period' (650 Ma)

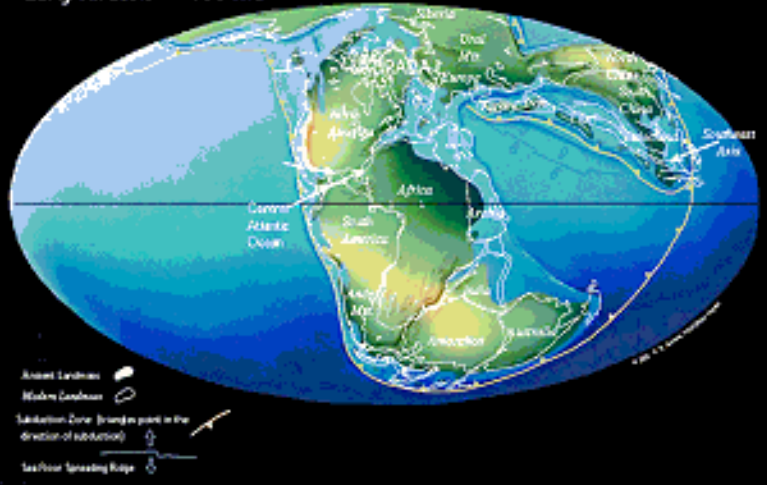
2nd picture is of 'Early Jurassic Era' (195 Ma)

3rd picture shows how earth was in 'Late Jurassic Time' (152 Ma)

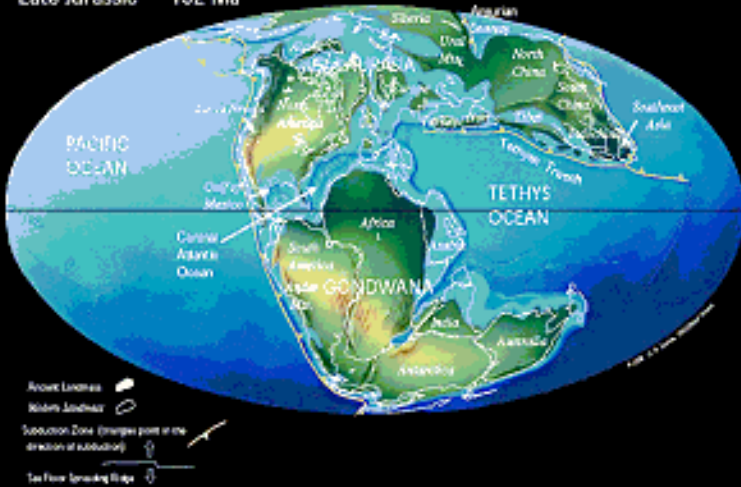
Late Proterozoic 650 Ma



Early Jurassic 195 Ma



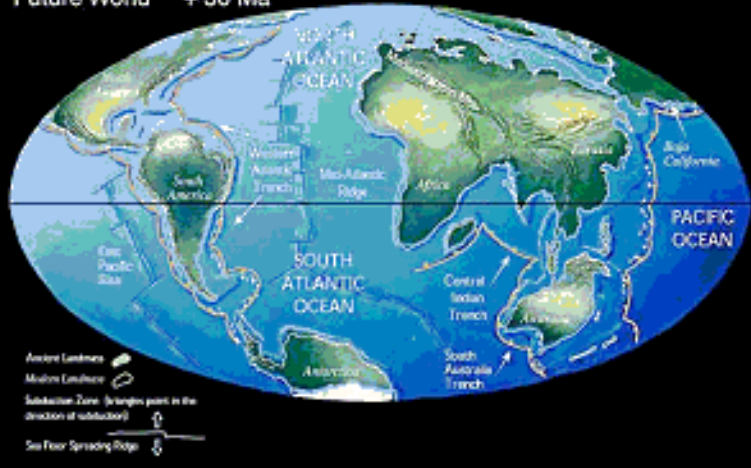
Late Jurassic 152 Ma



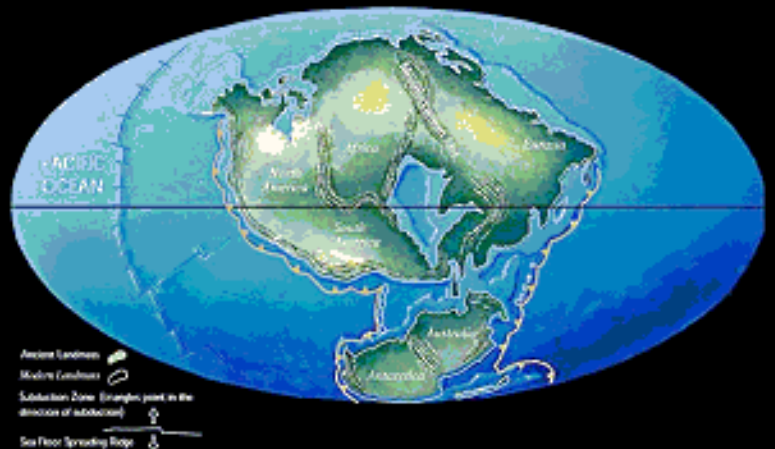
Modern World



Future World + 50 Ma



Future World + 250 Ma



4th picture is the 'Modern World' (Year 2004)

5th picture shows how the future world be (Plus 50 Ma)

6th picture again shows the land outlay getting reduced, bringing countries closer (Plus 250 Ma)

The Qur'an says it clear much longer that..

"See they not that We gradually REDUCE THE LAND from its outlying borders?"
(The Holy Qur'an, Chapter 13, Verse 41)

MOUNTAINS AND THE HOLY QUR'AN

"Have We not made the earth as a bed, and the mountains as pegs?"

A book entitled Earth is a basic reference textbook in many universities around the world. One of its two authors is Professor Emeritus Frank Press. He was the Science Advisor to former US President Jimmy Carter, and for 12 years was the President of the National Academy of Sciences, Washington, DC. His book says that **mountains have underlying roots**. These roots are deeply embedded in the ground, thus, mountains have a shape like a peg (see figures 7, 8, and 9).

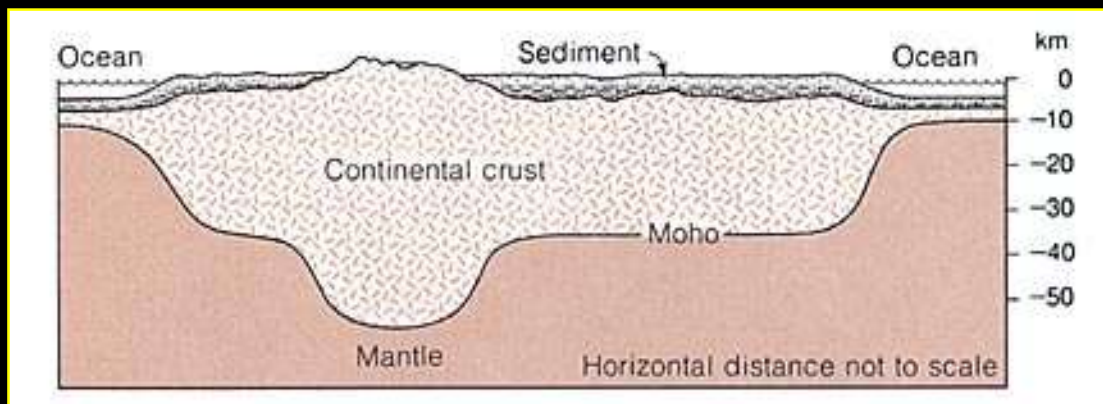


Figure 7: Mountains have deep roots under the surface of the ground. (Earth, Press and

Siever, p. 413.)

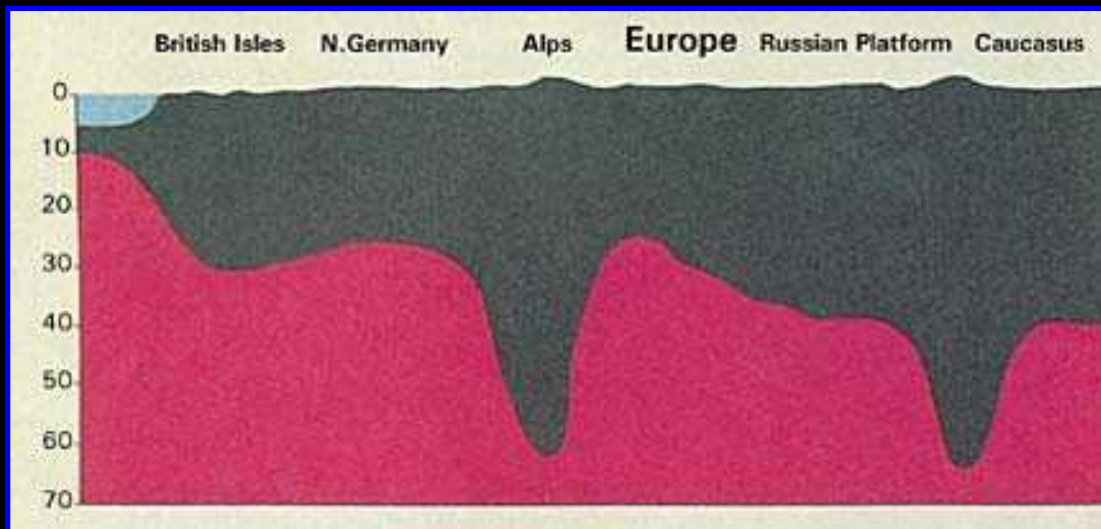


Figure 8: Schematic section. The mountains, like pegs, have deep roots embedded in the ground. (Anatomy of the Earth, Cailleux, p. 220.)

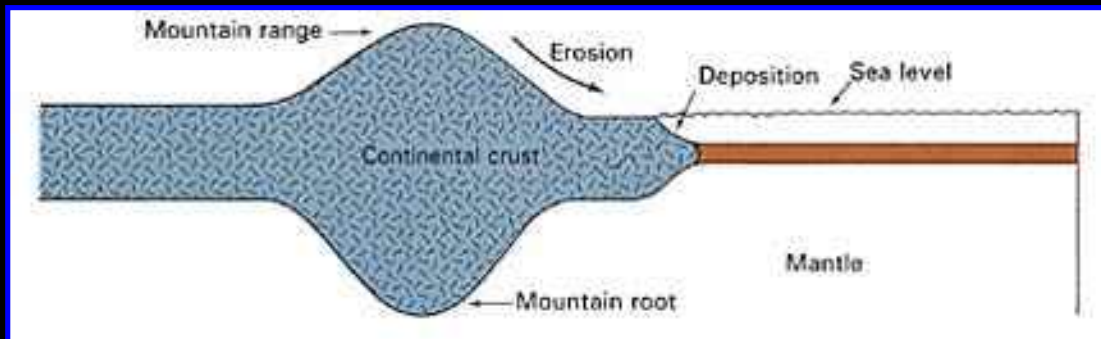




Figure 9: Another illustration shows how the mountains are peg-like in shape, due to their deep roots. (Earth Science, Tarbuck and Lutgens, p. 158.)

This is how the Qur'an has described mountains. God has said in the Qur'an:

 *"Have We not made the earth as a bed, and the mountains as pegs?"* 

(The Holy Qur'an, Chapter 78, Verse 6-7)

Modern earth sciences have proven that mountains have deep roots under the surface of the ground (see figure 9) and that these roots can reach several times their elevations above the surface of the ground. So the most suitable word to describe mountains on the basis of this

information is the word 'peg,' since most of a properly set peg is hidden under the surface of the ground. The history of science tells us that the theory of mountains having deep roots was introduced only in the latter half of the nineteenth century.

Mountains also play an important role in stabilizing the crust of the earth. They hinder the shaking of the earth. God has said in the Qur'an:

 *"And He has set firm mountains in the earth so that it would not shake with you....."* 

(The Holy Qur'an, Chapter 16, Verse 15)

Likewise, the modern theory of plate tectonics holds that mountains work as stabilizers for the earth. This knowledge about the role of mountains as stabilizers for the earth has just begun to be understood in the framework of plate tectonics since the late 1960's.

Could anyone during the time of the Prophet Muhammad have known of the true shape of mountains? Could anyone imagine that the solid massive mountain which he sees before him actually extends deep into the earth and has a root, as scientists assert? A large number of books of geology, when discussing mountains, only describe that part which is above the surface of the earth. This is because these books were not written by specialists in geology.

However, modern geology has confirmed the truth of the Qur'anic verses.



EARTH'S MOVEMENT IN SPACE



The earth rotates round the sun once every 365.25 days. Whilst doing so it is

tilted on it's axis at an angle of 33 degrees. As a result the seasons occur making it possible for the habitation of the planet. If the earth were not tilted on its axis the poles would have been submerged in continuous cold darkness preventing the seasonal thaw of the polar ice.

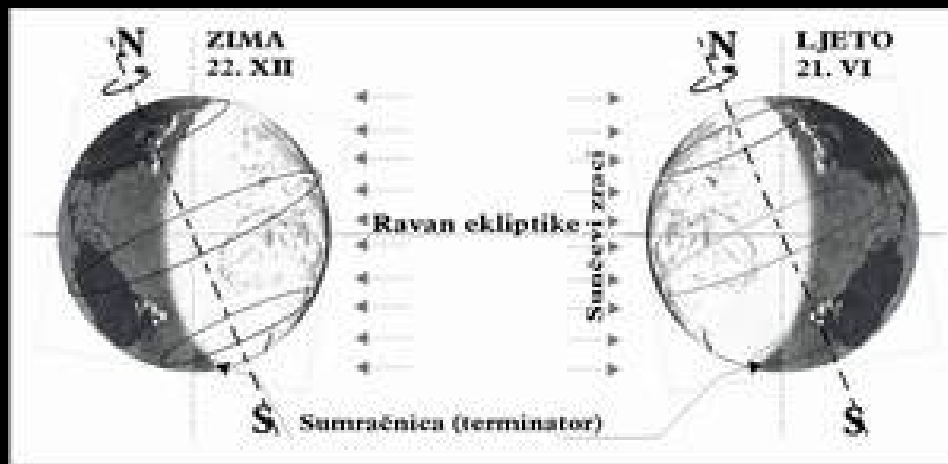
The accumulating ice would eventually result in nonshifting frozen poles and little water elsewhere.

The rotation of the earth around the sun was not known in the 7th century. At that time it was still thought of the earth as a nonmoving planet at the center of the universe. Due to the apparent movement of the sun, moon and stars in the sky, it was thought that they are moving around the earth.

The movement of the earth in space is confirmed in the following verse:

“When you look at the mountains, you think that they are standing still. But they are moving, like the clouds. Such is the manufacture of God, who perfected everything. He is fully Cognizant of everything you do.”

(The Holy Qur'an, Chapter 27, Verse 88)



Since the earth is moving in space thus everything on earth is moving with it, including the mountains.

The earth rotates about an axis going from the south to the North Pole. The main force acting on the earth is the force of gravity from the sun. Because this force acts on the center of mass of the earth it does produce any torque with respect to

the axis of rotation and so the angular momentum cannot change. This is what gives us a day of constant length since prehistoric times. Not only that but the axis of rotation of earth is tilted with respect to the plane formed by the orbit of earth around the sun.

This tilt is what causes the seasons to change through the year because when we are on one side of the sun the tilt causes the northern hemisphere to see the sun at closer to normal angle of incidence than when the earth is on the other side of the sun. The result is the difference in climate between summer and winter at a given geographical location. It is because the angular momentum associated with the earths almost circular trajectory about the sun is conserved that it takes exactly half a year each year to get from one side of the sun to the other.



THE EARTH'S RELIEF

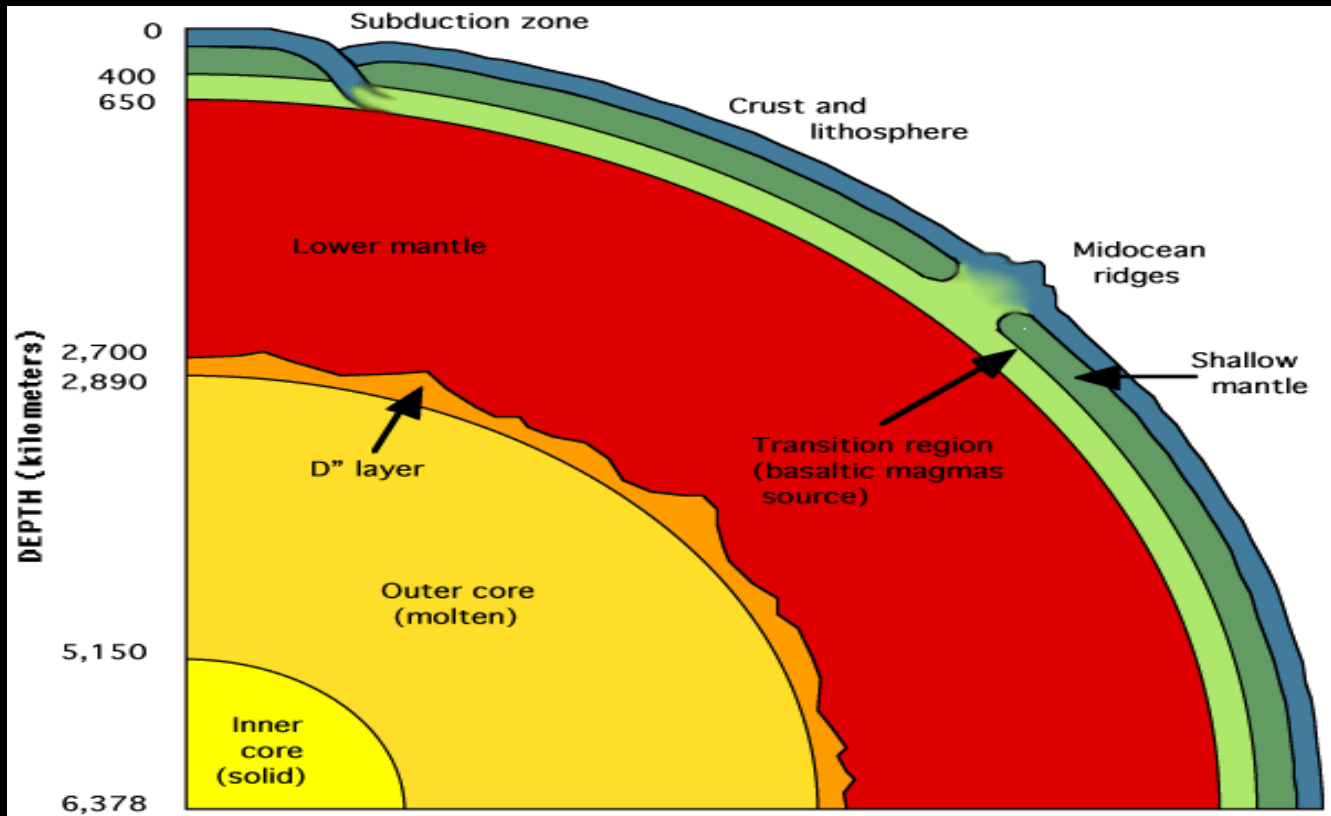


As you know that the continents were probably a single mass at the end of the primary era, then subsequently broke apart. This process took millions of years to balance the earth and the seas.. Some continents or parts of continents have moreover emerged through the formation of mountains in maritime zones (e.g. the North Atlantic continent and part of Europe).

According to modern ideas, the dominating factor in the formation of the land that emerged was the development of mountain ranges.

The evolution of the land, since the formation of all mountains relieves had repercussions on the [balance between the sea and the continents](#).



The soil is the carpet which has been spread out is the Earth's crust, a solidified shell on which we can live, since the globe's sub-strata are very hot, fluid and hostile to any form of life.



"For you God made the earth a carpet so that you travel along its roads and the paths of valleys."

(Holy Qur'an, Chapter 71, Verses 19 - 20)



 *"The earth, We have spread it out. How excellently We did that."* 

(Holy Qur'an, Chapter 51, Verse 48)


 **EFFECT OF HIGH ALTITUDE ON MAN** 




Another scientific knowledge that was referred to in the Qur'an centuries before man's actual discovery of it relates to the composition of the atmosphere. It is now known that the higher we ascend in the sky the less air we would find, and thus the less oxygen so vital for respiration.

A person flying at great heights in aircraft or air balloon would feel a sharp contraction of the lungs causing pain.

Allah The All Mighty says in the Qur'an:

 *"So, whomsoever ALLAH intends to guide, HE expands his bosom for the acceptance of Islam; and whomsoever HE intends that he should go astray, HE makes his bosom narrow and close, as though he was mounting up into the skies.*

Thus does ALLAH inflict punishment on those who do not believe. 

(The Holy Qur'an, Chapter 6, Verse 125)

It has been proven by aeronautics that when man is exposed to high altitude, space; he suffers from some physiological symptoms that would vary between feeling tightness in his chest and getting into a critical stage if he continues being exposed to high altitude and low atmospheric pressure. Is there any relationship between what was mentioned in the verse and recent scientific discoveries??

Scientific facts concerning the state of man in high altitude:

1. Layers of the atmosphere and its physiological effect on man:

a. The Physiologically Sufficient area for human being is from sea level up to 10,000 feet above sea level. The oxygen in this layer is physiologically sufficient for human survival.

b. The Physiologically Insufficient area, is between 10,000 -50,000 feet. In this area there is a deficiency in oxygen, in addition to low atmospheric pressure. This would result in clear physiological symptoms on the human body, and so

symptoms of Hypoxia (oxygen deficiency) and Desparism (low atmospheric pressure) take place.

c. Near Space Area (of the earth): from 50,000 feet. From the physiological point of view man can't live in altitudes higher 50,000 feet even if he breathes 100% oxygen. He should then wear a space suit to tolerate the decrease in atmospheric pressure and oxygen deficiency.

2. Symptoms of the stages of Hypoxia:

This is divided into four stages depending on the atmospheric pressure , altitude and blood oxygen concentration.

a. From sea level to 10,000 feet no symptoms of Hypoxia appear.

b. From 10,000-16,000 feet physiological compensatory systems of the human body prevent symptoms of Hypoxia from appearing except if the period of exposure is too long. Then breathing becomes faster and deeper, pulse and blood pressure also increase.

c. From 16,000-25,000 feet, physiological systems do not function and cannot provide tissues with sufficient oxygen, and the afore mentioned symptoms appear. At this stage we find a clear explanation of the tightness of the chest one feels at this altitude (Note: Qur'an verse 6:125).

d. The Critical Stage is from 25,000 feet and higher. At this stage man completely loses consciousness due to the failure of the nervous system. Changes that occur in the chest reach their maxima at this altitude and then there will be complete physiological failure of heart functions and respiration.

3. Drop in Atmospheric Pressure:

When man is exposed to low atmospheric pressure at high altitude (as what happens to air passengers when the pressure adjustment system fails inside the airplane), several symptoms occur as a result of the expansion of gases and their increase in the human body. Gases confined in the body cavities such as the stomach, when expanding press on the lungs, which cause breathing difficulty, disturbances, and tightness of the chest. The same thing would happen in the colon, lungs, teeth, middle ear and sinuses and all this causes severe pain in the body. In addition to this all gases dissolved in the body cells e.g. nitroge, would cause suffocation leading to severe chest pain.

Scientific signs in the Qur'an:

The Holy Qur'an in verse: *"And whomsoever He wills to send astray He makes his breast closed and constricted....."* 6:125 mentions that tightness would occur in the chest when going up in the sky, which has now been proven by modern science. Ascending to higher altitudes causes the symptoms of Hypoxia and Desparism. This leads to tightness of the chest because of the expansion of gases in the body cavities and their pressure on the lungs. In addition to this the evolving of the dissolved gases (in the body) in the form of bubbles at high altitude causes severe chest pains.

So the words of Allah *"He makes his breast closed"* present a brief and precise explanation to the physiological changes occurring in man at these high altitudes. This scientific fact mentioned in the Qur'an, was not discovered except after years of research. As for the word "constricted" it refers to what happens to man when he continues to rise in high altitude until he gets to the Critical Height as mentioned before which is 25,000 feet and higher when man loses consciousness due to failure of the nervous system.



Michael the Elder (Great) as Quoted in 'Michael the Elder, Chronique de Michael Syrien, Patriarche Jacobite d' Antioche,' J.B. Chabot, Editor, Vol. II, Paris, 1901.

"This is why the God of vengeance, who alone is all-powerful, and changes the empire of mortals as He will, giving it to whomsoever He will, and uplifting the humble beholding the wickedness of the Romans who throughout their dominions, cruelly plundered our churches and our monasteries and condemned us without pity, brought from the region of the south the sons of Ishmael, to deliver us through them from the hands of the Romans.



**Mysteries
Unfold**



Previous Page

Next Page



Next Subject



Next Topic : "Qur'an on Clouds"