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TECTONIC MOVEMENTS. THE RIDGES IN THE ROCKS THAT OCCUR AS A RESULT OF TECTONIC MOVEMENTS.

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Annotation: This article contains information about tectonic movements, crease forms of the layer, classification, morphological classification of creases, tailings in rocks
Keywords: Horizontal, oblique, monoclinic, deformation, durability, tensile, plasticity, fragility, porosity, roughness, density, crease, consistential, postsedimentary, anticlinal, synclinal, Wing, Lock, crease, flexure, crease, crease, slip, crease, coating, gorst, rift, graben, fundamental, platform.

Introduction.

In the Earth's crust, rocks are formed in a horizontal and oblique (monoclinic) position. Under the influence of external and internal forces, they deform. A change in the size and shape of rocks is called deformation.

Rocks differ from each other not only in their chemical composition, but also in their physical and mechanical properties. Such properties include density, creaminess, durability, tightness, plasticity, fragility, porosity, ripeness of rocks. The rocks are therefore also differentiated by their resistance to each other's compression and crushing when hit.

The mechanical properties of rocks depend on their structure and external condition. It is possible to increase their plasticity by affecting the temperature, solutions, pressure on the rocks. As a result of the all-round effect of pressure, the resistance, creakiness and durability of rocks in relation to plastic deformation increase.

Rocks that do not undergo deformation minerals are very rare. Therefore, in the study of the laws of the occurrence and distribution of minerals, it is of great importance to determine the deformation conditions of rocks.

The deformation process consists of three stages in a row: creamy (elastic), plastic and distortion. The resistance of rocks to external forces relative to the resistance is called durability.

Slippery deformation. At this deformation, The Shape of the rocks changes, but as soon as the influence of external forces stops, the previous shape of the body is restored [1-5].

The ability to restore the shape and measurements of a deformed body after the cessation of the action of external forces is called the creakiness of this body.

There are several manifestations of shear deformation: stretching, compression, bending, sliding, twisting, etc.

Plastic deformation. Even when the effect of external force stops in this deformation, plastic deformation will have occurred if the body cannot restore its initial shape and size. Clay and rock salts are the most lpastic rocks.

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Plastic deformation is common and has a certain creakiness, plasticity limit. This violation of the border balance affects the presence of various folds and discontinuities. These are all processes that are mainly in the subsoil.

Materials and methods

This study used geological maps, sample analyses of rocks, and geophysical data. Stage observations were made to determine the type and size of the ridges in the rocks. Also, computer modeling methods were used to understand the interrelationships of plate movement and rocks.

Results and discussion.

The laying forms of the different types of rocks that make up the Earth's crust are diverse.

The internal energy of the Earth is disturbed by the initial horizontal laying patterns of layers of different types of rocks. As a result, the slope of the layers increases in mountainous terrain, complex folds are formed, folds are disconnected and displaced in different directions and distances [6-10].

Horizontal and vertical' tectonic movements' play a major role in the formation of these folds. So, as a result of plastic deformation, a wavy bend of layers made up of rocks is called a fold.

Folds are divided into 2 types according to their origin: concedimentary and postsedimentary. The folds that are formed at the same time as the formation of the genus are called "Consolidated" folds, the folds that appear after the formation of the genus are called "postsedimentary" folds.

The curved (convex) side facing up is called the oblique anticlinal', the downward one is called the synclinal'.

Where the anticlinal' and synclinal ' folds occur side by side, the Double Fold is.

Anticlinal' and synclinal ' folds have the following elements.

a) reduced sides on both sides of the fold - are called Wings.

b) the junction of the twisted wings is"lock",

C) the line where the axial plane intersects with the surface of the fold-forming layers is called a "sharnir".

g) the distance between the anticlinal' and synclinal' locks is called the twisted height".

The size of the Folds is characterized by their height, width and length.

Morphological classification of folds

The classification of Folds is divided according to its structure (depending on its morphology) into:

Figure 1. Straight fold.

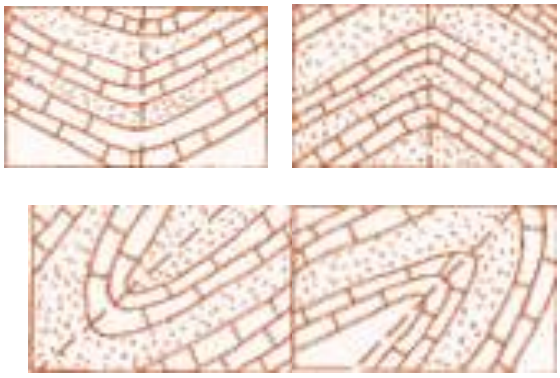

Figure 2. Curved fold.

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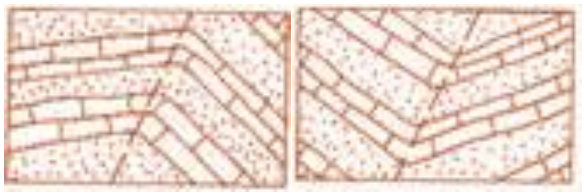

Figure 3. Inverted fold.

Figure 4. Lying fold.

Figure 5. Overturned fold.

A flexure is a tectonic structure formed as a result of knee-like bending of monoclinally lying rock layers. The flexure is mainly composed of 5 elements. In this, AB is the raised wing; VG - dropped wing; BV - a - angle of inclination of the connecting wing; a - the vertical (vertical) amplitude of the connecting wing (Figure 6).

The lying position of each element has its own parameters, and due to their diversity, flexures have different forms.

Depending on the location of the folded wing layers, there are simple, parallel, opposite flexures, vertical, oblique and horizontal flexures depending on the rotation of the bending axis. Flexures reach from several meters to many kilometers, wings can be bent from a significant degree to a vertical position. It is found mostly in the flexural platform and folded regions [11-15].

Affects the process of sedimentation, The thickness of sedimentary rocks helps to determine their facies types.

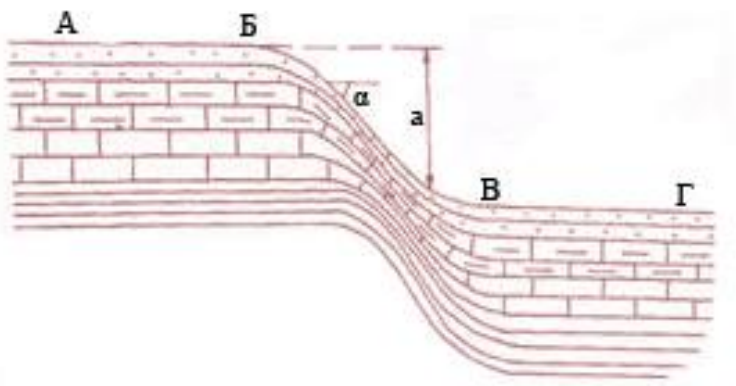

Figure 6. Flexure elements.

Flexures can be formed simultaneously with the formation of rocks or after

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the formation of rocks. If the flexure develops along with the formation of the rock, then the thickness of the rocks on one side of the flexure is much greater than on the other. Flexures of this type can be found mainly on platforms and are associated with deep, regional discontinuities. They are called "zone of flexural faults" (such zones can be found in western Uzbekistan and in the Fergana basin). Lithological types of oil and gas deposits are found in such flexures.

Cracks in rocks

Under the influence of tectonic movements, various breaks appear as a result of breaking, cracking, and breaking of the whole of rock blocks. These breaks are divided into several groups: drop-break (sbros), rise break (vzbros), displacement (sdvig), thrust (nadvig), cover (pokrov) and others. Some types of these discontinuities are more common in platforms, others in orgonogenic regions.

Each of these breaks has its own morphological structure and occurs under different dynamic and kinematic conditions.

In a dip-break (sbros), the surface of the breaker is inclined towards the downward block of the rock layers.

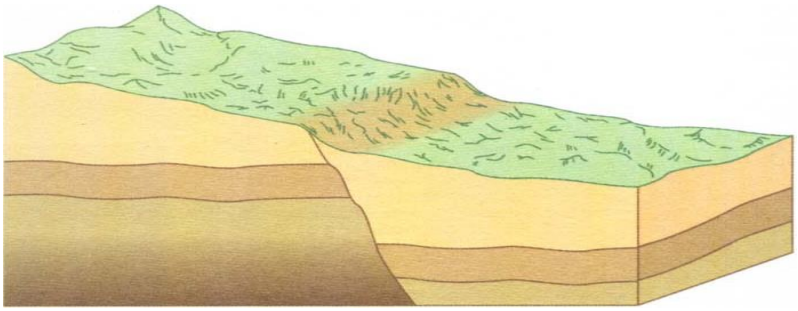

Figure 7. Download - disconnection.

Breaks are divided into the following depending on the angle of the breaker:

1. Oblique breaks - the break angle is less than 30° [they are called thrust (nadvig)].
2. Steeper breaks - the lying angle of breaks is 30°-80°.
3. Vertical breaks - the angle of the break is 80°-90°.

Depending on the layout, the cut-outs can be divided into the following:

a) b) c)

Figure 8. A plan view of the cut-off.
a-Parallel (or flat); b-Radial; c-Patsy.

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In the uplift-break (vzbros) - the surface of the breaker is inclined towards the raised block of the layer.

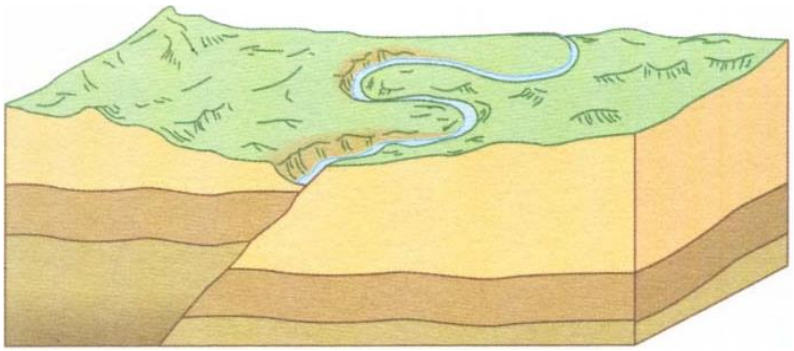

Figure 9. Rise and fall.

Displacement (sdvig) is the horizontal displacement of rock layers relative to each other along the fault plane. The shift is mostly easy to identify on the plan. In this case, the layers are separated by breaks and form blocks. These blocks are caused by tectonic movements. The trace of movement (displacement) in rock cracks can be determined by looking at the remaining surface of the wings of the crack wall. As a result of such actions, the surface of cracks is smoothed, scratched, various lines appear [16-20].

Traction (nadvig) is a special group of interruptions. As a result of thrusts, the layers can overlap or penetrate the bottom (a long distance). That is, the young layer rises above the old layer and falls under it.

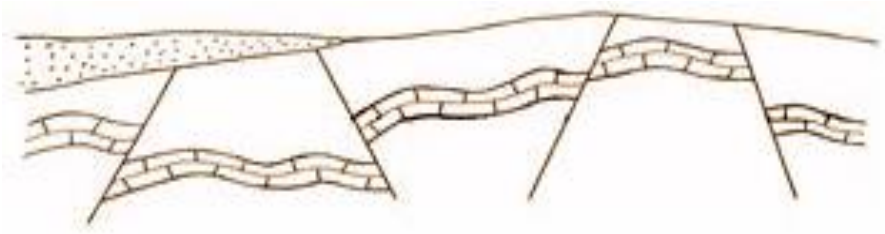

Figure 10. Friction.

Several downdip and uplift faults form grabens and horsts. Their length is much larger than their width and is usually measured in kilometers.

A graben is a part of the Earth's crust, bounded by faults, the middle part of which has sunk down. Usually, the subsidence part is always composed of younger rocks than the uplifted part. Grabens are simple and complex. Simple grabens are bounded by two faults, while complex grabens are bounded by several faults. Large grabens (depending on their characteristics) are called "rifts".

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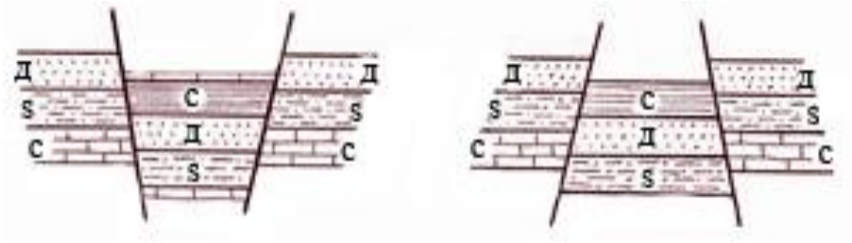

Rasm 11. Graben.

Gorst - uzilmalar bilan chegaralanib, o'rta qismida Yer po'sti ko'tarilgan bo'ladi. Ko'tarilgan qismi cho'kkan qismiga nisbatan qari jinslardan tuzilgan bo'ladi.
Gorst va grabenlarni quyidagi turlarga ajratish mumkin:
a) oddiy gorst (graben) - ikki uzilma bilan chegaralangan;
b) murakkab gorst (graben) - bir necha uzilmalar bilan chegaralangan;
v) bir tarafga engashgan gorst (graben) lar.

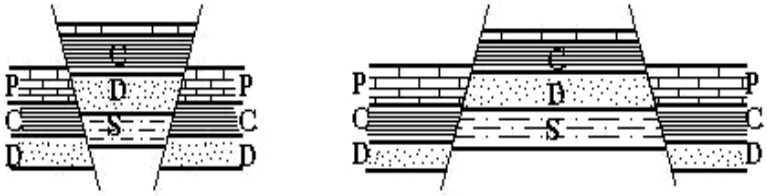

Figure 12. Gorst.

The discontinuities that make up the Gorst and graben would have fallen to great depths.
A mountain that has undergone a crease, from which the surilma sabali rises, is called an einsi mass covering.
the future genus that protrudes over the Folds is called" alloxton", the ostidi, the genus that remains in place - " autochon".
Deep Earth crevices have different views. They have a tidal (vzbros) and thrust structure in geosynclinal provinces.
The platform will have a lot of mainly drop - off (sbros). As a result of discontinuities in the fundamentals of platform phyla, large rift bottoms (avlocogens) of graben character are encountered and are often the backbone of syneclyses.
Magmatic rocks emerge from the mantle through discontinuities falling to great depths. When they reach the surface of the Earth occasionally as a result of endogenous processes, they often emerge to near-surface areas and settle around discontinuities as intrusive rocks. These junctions, which descend to great depths (600-700 km), control the development of the main regional structure elements on the Earth's surface [21-26].

Conclusion.

The ravines that form in rocks as a result of tectonic movements have a great influence on the formation and change of the Earth's crust. These intrusions play an important role in the

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understanding and forecasting of geological phenomena. The study of tectonic movements and the resulting ravages can help predict and take action against earthquakes, volcanic eruptions, and other geological processes.

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