The Agatharchides Plateau (60 x 45km) is classified as an intrusive lunar Mega Plateau, similar to the Gardner Mega Plateau. The composition of the rocks is similar to the Gruithuisen domes and the mountain Mons Hansteen. On the eastern edge of the plateau is an extremely narrow - unnamed - rille.

Unofficially this structure is named **"The Helmet"** because its shape is reminiscent of the helmets of the famous Star Wars movies.

Gassendi (110 km) is a classic "Floor Fractured crater", which has a clear incline towards the center of the Humorum basin. The crater floor is covered with narrow intersecting rilles and a large central mountain. The tilting towards Mare Humorum is clearly visible, the northern crater wall is high, the wall next to the basin is considerably lower. On the northern edge of the Humorum Basin lie the craters **Doppelmayer** and **Lee** which are similarly tilted to the basin. Before fundamental changes happened, Gassendi presumably looked very similar to Copernicus. Northeast of Gassendi begins a long and extremely narrow sinusoidal rille, the **Rima Herigonius**.

Helicon (24 km) and **Le Verrier** (21 km) are the only larger craters in the northern region of the Imbrium region. At first glance they are very similar and are one of the best examples of the lunar stratigraphy. When observing the two craters near the terminator (sunrise) impact ejecta can be seen outside Le Verrier but it is completely lacking in Helicon. It can therefore be deduced that Helicon is significantly older than Le Verrier. The ejected material from Helicon was covered by the Imbrium lava and the impact of Le Verrier took place after the lava flows of the Imbrium impact ended.

Heinzel (68 x 19km) has, due to its shape, the nickname "Peanut crater". It is the result of a superposition of 3 impacts over a total length of nearly 70 km.

Kepler (29 km) and **Encke** (28 km) are two almost equally sized craters with a polygonal form. Contrary the crater floors and their depths are very different from each other. Encke is a typical "Floor Fractured crater" with a depth of "only" 700 meter, Kepler shows a standard crater floor with a central peak and a depth of 2.7 kilometers. Kepler is a very young crater with a distinctive ray system while Encke has lost its ray system by erosion (solar wind) and therefore it must be much older than Kepler.

Krieger (23 km diameter) is a crater with a lava flooded floor. Due to a gap in the western crater wall two steep shadows are cast at sunrise, with a little imagination one can see the shape of a rabbit with its two ears.

Kies Phi (15km) is a relatively large effusive lunar shield volcano (Dome) with summit caldera of 2 km width. Because of its large diameter it is relatively easy to observe when near the terminator. The crater **Kies** (44km) lying to the east and is almost completely flooded with lava. The crater **Capuanus** is located quite a bit south of Kies and on its crater floor are three further small lunar domes. They are an exception because lunar Domes are extremely rare within craters.

Montes Harbinger (95 km) and the **Rimae Prince** - Prince (47 km) is a crater which is almost entirely flooded with lava crater and whose southwestern wall is completely absent. A number of hills and several sinusoidal rilles indicate that a land uplift and strong lunar volcanism - similar to the of Aristarchus plateau – were responsible for the origin of this region.

Rima Doppelmayer is a 130 km long, narrow and linear rille and maybe the origin of the dark pyroclastic ash deposit nearby. In the northern region the rille branched into

several segments. In the southeast is a steep lunar dome called **Liebig 1** is located, which is similar to the Dome **Mairan T** .

Rimae Hippalus are large fracture zones with a total length of 240 km. They originated from the subsidence of the lava shield of the Humorum basin. The maximum width of the rilles is about 4 kilometers.

In the Humorum region are many further system of rilles such as **Rima Hesiodus, Rimae Agatharchides, Rimae Ramsden, Rimae Palmieri, Rimae de Gasparis** and **Rimae Mersenius**.

Schiller is one of the most bizarre lunar craters. It is 180 km long but only 75 km wide. Its very unusual shape suggests a grazing impact. The formation Schiller is unique on the front of the moon.

Sinus Iridum (250 km) - the Bay of Rainbows. A lunar highlight at sunrise. The bay looks like a safe harbor with a few shallow waves (ridges) rolling toward it from the Sea of Rains (Mare Imbrium).

Sinus Iridium is one of the largest lunar craters (maybe a small basin), which is inclined to the center of the Imbrium basin. Its entire southern and eastern wall were flooded by the Imbrium lava. The two capes, Heraclides in the western area and Laplace in the eastern region, show significant height differences. Cape Laplace is significantly higher than Cape Heraclides.