Cleomedes is a crater north of Mare Crisium with a diameter of 130 km. Its narrow system of rilles is difficult to observe because of the edge distortion. On the crater floor are some small dark halo craters. The crater Tralles (43km) lies on the north-western rim. Its impact produced the great pile of rubble on the crater floor of Cleomedes.

Furnerius is with a diameter of 135 km smaller and significantly older than Petavius. On the crater floor is a long linear rille, Rima Furnerius.

Northeast of Furnerius the linear rille Rima Hase with a length of about 260 kilometers can be found (in the image marked with number 2). The width of the rille at its widest point is about 7.7 kilometers. In high-resolution LRO images it looks as if the Rima Hase has its origin in the crater Petavius. The rille is visible only under favorable libration conditions and with a Moon age between 3 and 4.5 days

Messala is a big but very old, weathered crater with a diameter of 122 km. The crater floor is covered with ejecta of the Humboldt Basin, thus it is older and was build before the Humboldt impact.

Mare Australe (diameter approximately 600 km) is located on the southeastern edge of the Moon. Optimal libration conditions are required for the imageing (are in our image of the point of optimal libration was in the region of Mare Crisium. The urface is flooded with dark Mare basalt.

Mare Crisium (620 x 570 km) is the only Mare which has no contact with any of the other Mares. LRO images show that it is not round but elliptically shaped. Either it is caused by an impact at a very flat angle or there were two separate impact events. Interesting craters in the basin: Lick, a "floor fractured crater" with significantly upwarped floor and Picard, showing a special double structure (crater in a crater).

Our picture, captured at a Moon age of 3.7 days, shows the complete system of ridges in Mare Crisium.

Mare Marginis (about 350 km) and Marginis SWIRL. The name Mare Marginis refers to its location east of Mare Crisium at the extreme edge of the full moon disc. This corresponds to the selenographic coordinates 12° N, 87° E. Its observation requires optimal libration conditions (which were given in our picture).

Near the crater Goddard, Goddard B and C Goddard is one of the few SWIRLS on the near side of the moon. SWIRLS are bright areas on the lunar surface and centers of of strong local magnetic field. Their origin is unknown. SWIRLS are often antipodal to large impact basins, the Marginis SWIRL is antipodal to the center of Mare Orientale.

Petavius (170 km) and Humboldt (200 km) are both "floor fractured craters". Humboldt is difficult to observe due to its extreme location at the egde of the Moon and requires favorable libration conditions. On the crater floor are large areas with pyroclastic ash deposits and it has a large central mountain and a distinct system of rilles.

The system of rilles on the crater floor of Petavius is spectacular. Small pyroklastic ash deposits (in the north) and a small effusive lunar domes (south) are on the crater floor.

Pontecoulant is located southwest of the Mare Australe and east of the crater Hagecius. The rim is eroded with distinct, multiple terraces, the crater interior is largely flat. It has a diameter of 91 kilometers.

Vendelinus (132 km) is a large crater on the eastern edge of the Mare Fecunditatis, south of the crater Langrenus and north of Petavius. The rim is heavily eroded, the crater floor is nearly flat with some secondary crater. Outside, on the western crater wall, are some lunar volcanic domes.

Vallis Snellius - with a total length of nearly 650 kilometers Vallis Snellius is the second longest chain of craters (after Vallis Rheita) on the front side of the Moon. Due to the strong erosion due to overlapping craters it is difficult to identify the direction of the valley (marked in the image with number 3).

The crater Snellius is located approximately in the center of the Vallis which continues in a northwesterly direction to the region of the crater Borda. In southeasterly direction it ends north of the crater Furnerius.

Directly at the northern end of Vallis Snellius there is another short linear chain of craters (marked with number 4).

Both, Vallis Rheita and Vallis Snellius, are oriented radially to the center of Mare Imbrium and have their origin presumably by the Imbrium impact.