

1. Io has a noticeable amount of volcanoes. The Volcano Plumes are often quite large and be seen in satellite pictures even. It is also colored in a very strange manner with various amounts of different shades of yellow and orange. Io most likely originated by being formed out of various debris that came together over a great amount of time.
2. Europa is another moon of Jupiter it has great amounts of ice on it's surface along with the large tracks of dirt which look almost as if dirt bikes rode across the entire moon. Since it is about the same age as Jupiter likely it's formation was related to the creation of Jupiter. Most likely in is comprised of various debris that came together to form the planet similarly to Io.
3. Ganymede is a really neat looking moon with it's white craters that really contrast to it's otherwise Grey surface. The planet nearly looks like it's sparkling with the white spots. Ganymede appears to be fully differentiated consisting of an iron core and its precise thickness of the different layers of the interior vary due to the composition of silicates and the amount of sulfur in the core. The moon probably formed by an accretion in Jupiter's subnebula a disk of gas that was surrounding Jupiter after its formation. Titan formed in a similar fashion to the other icy moons however Titan was cold enough to allow the molecule Nitrogen to become solid.
5. Titan is composed primarily of water ice and rocky material. It has a thick orange atmosphere that is orange due to a dense organonitrogen haze. Also the planet is shown to have sand Dunes on it similar to what Earth has.
6. Enceladus is quite interesting indeed. The blue ice fractures show in a very stark manner compared to the white parts of the surface. It is interesting to see how many line and grooves are upon the surface. They nearly look like people ride motor bikes all about the surface to give them such a distinguished look. I could not find much on the origin of Enceladus but I did find that scientists believe it is a very young moon indeed and it is still geologically active. So likely it's origins don't stem as far back as other objects in the solar system.

