

Runoff – when rains fall on the land, some water is absorbed into the ground by infiltration to feed ground water resources. Extra precipitation runs directly into streams and oceans is called as runoff.

02.Describe the phase changes with Latent heat.

When we talk about phases, there are 3 phases as gas, liquid, and solid. To change the phase it will need energy in form of heat. That energy drives from the sun and to change phase that energy can be may absorb or released. This energy or heat, we know it as latent heat. This heat involve with the condensation/evaporation and freezing/melting. The amount of heat that absorbs or released is different with the temperature and the pressure in that particular time. Also with the temperature increases the latent heat of vaporization decreases.

When we consider the water, it has involved large amount of latent heat when it change phase. The water cycle is determined on the latent heat. It means latent heat is very important for activation of water cycle. There are main parts in water cycle like evaporation, condensation, forming precipitation types that involved latent heat. Also it involved in temperature change in the atmosphere and also in the surface. Latent heat flux involved in the phase change of water drives the atmospheric circulation and plays essential rolls in global climate. Also it's an important factor that affect the weather system, because it is a source of energy that develops, promotes, and sustains severe weather systems, such as thunderstorms and tropical cyclones. When latent heat is change in to kinetic energy and accelerate the movement of water in the atmosphere and also to create low and high pressure reigns and we can say that, flow of the wind is also determined by the latent heat.

Even latent heat is important in many ways sometimes it cause for global warming and cause to the polar ice caps reducing, and level ups the sea-level, increasing weather extremes and form storms etc.

Reference:

* How is latent heat involved in the phase changes (online) available form:

<https://www.climate-policy-watcher.org/global-climate-2/heat-latent.html>.

(Accessed: 7/31/2020)