Does it ever rain on Mars?

We have explained that in today's modern world, when most of us live in urban areas and not in farms, it is difficult to appreciate the importance of rain. For us, rain is more an annoyance than a blessing….
Today, I want to share with the readers some facts about water and rain, which hopefully will help us to understand why we praise our Creator for the miracle of rain when we say the beautiful Tefila mashib haruah umorid hageshem (=You are the one Who makes the wind blow, and the rain to fall)
.
What makes our planet a unique place in the universe? You might say "life". And that is true. But there is something that enables life to exist, and which according to our Tora was created before life. Something that scientists look for when they search elsewhere in the universe to find life. You would probably say "water". And you will be partially right. To be more precise you need to say: "liquid water". Why? Because water (H2O), or the evidences of its previous existence, was found in other planets, but always in the form of ice. Our planet is blessed to be the only little place in the entire universe which possesses "liquid water", thanks to the Intelligent Design of the earth's mass, the sun's mass, and particularly the fine-tuned distance between our planet and the sun. All these allows for earth's temperature to be perfectly suited for maintaining water in a liquid sate.
But this is not the end of the story of water. Normal water, i.e., ocean's water, is not suitable for life on dry-land. All land creatures, including humans, need water-without-salt to survive. That precious liquid is called "freshwater". Freshwater allows life to exist in our planet. And the only source of freshwater in our planet is "precipitation". (Precipitation includes: snow, mist, hail and mainly "rain"). According to Maimonides (More Nebukhim 2:30) the mechanism of rain was established on the second day of Creation. When HaShem separated the upper waters (clouds, rain) from the lower water (oceans). John Lynch, the author of the BBC Book "The weather" (p.84) describe with words very similar to the ones used by the Tora, the upper waters: "We live on a water planet. The seas dominate the world, but there is also an

ocean around us and an ocean above us [=the clouds].” The Second Day of Creation was dedicated entirely to describe the miraculous mechanism of converting ocean water into the most precious liquid in the entire universe: rain. (See also melekhet mahashebet pp. 10-11, Viena edition and Rabbi Menashe ben Israel in his “Conciliator”).

Now, let’s see some numbers to appreciate a little more the miracle of rain. Freshwater is water with low concentrations of salt. Out of all the water on Earth, only 2.75% of it is fresh water. From it, 2.05% is water that is frozen in glaciers (North, South Poles), which originally comes from rain. 0.68% is groundwater, also, originally coming from rain. And just 0.0101% of all the water in our planet, is surface freshwater gathered in lakes and rivers. This 0.0101% is what all creatures that live on dry land, including us, drink for our survival! The Second Day of Creation was dedicated entirely to establish the conversion process of ocean waters into the most precious liquid in the entire universe: rain. This is why our Rabbis considered rain one of God’s most important blessings to mankind. In the second blessing of the ‘amida, when we say mashib haruah umorid hageshem we praise God for His Might (geburot), singling out His power, kindness and power to produce rain which supports and maintains life.

The sole source of freshwater in the entire universe is rain from the earth’s atmosphere.

“Imagine an entire planet where the universe’s finest liqueur is boiled out of fermenting seas by a brilliant yellow star, distilled in the skies and rained back down on the land, forming lakes and rivers of the inebriating brew. The planet, of course, is Earth, and the liqueur is freshwater.” (L. O’Hanlon, Discovery)