ASPERA-3 on Mars Express
One year on orbit

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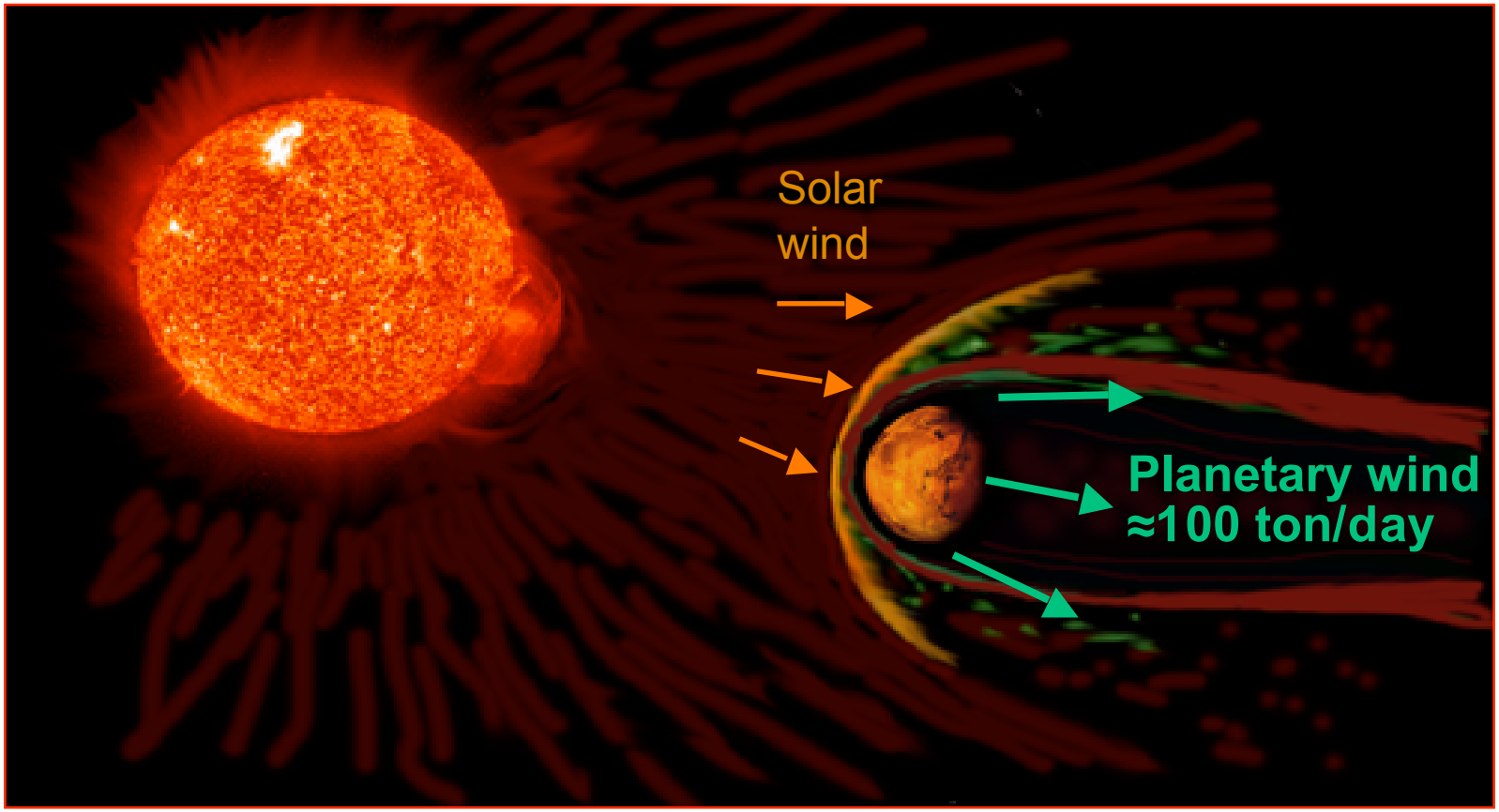
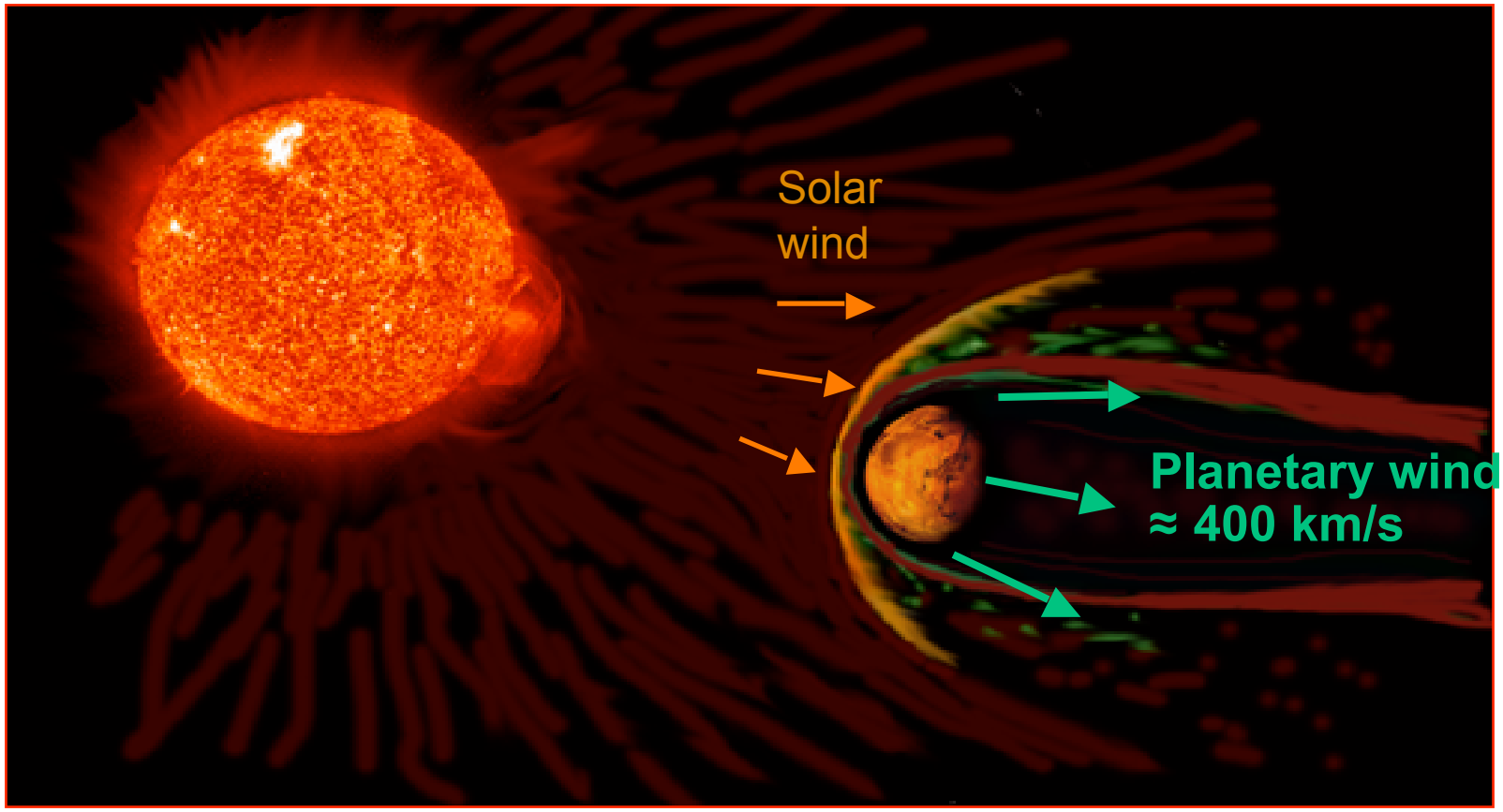
The planetary wind



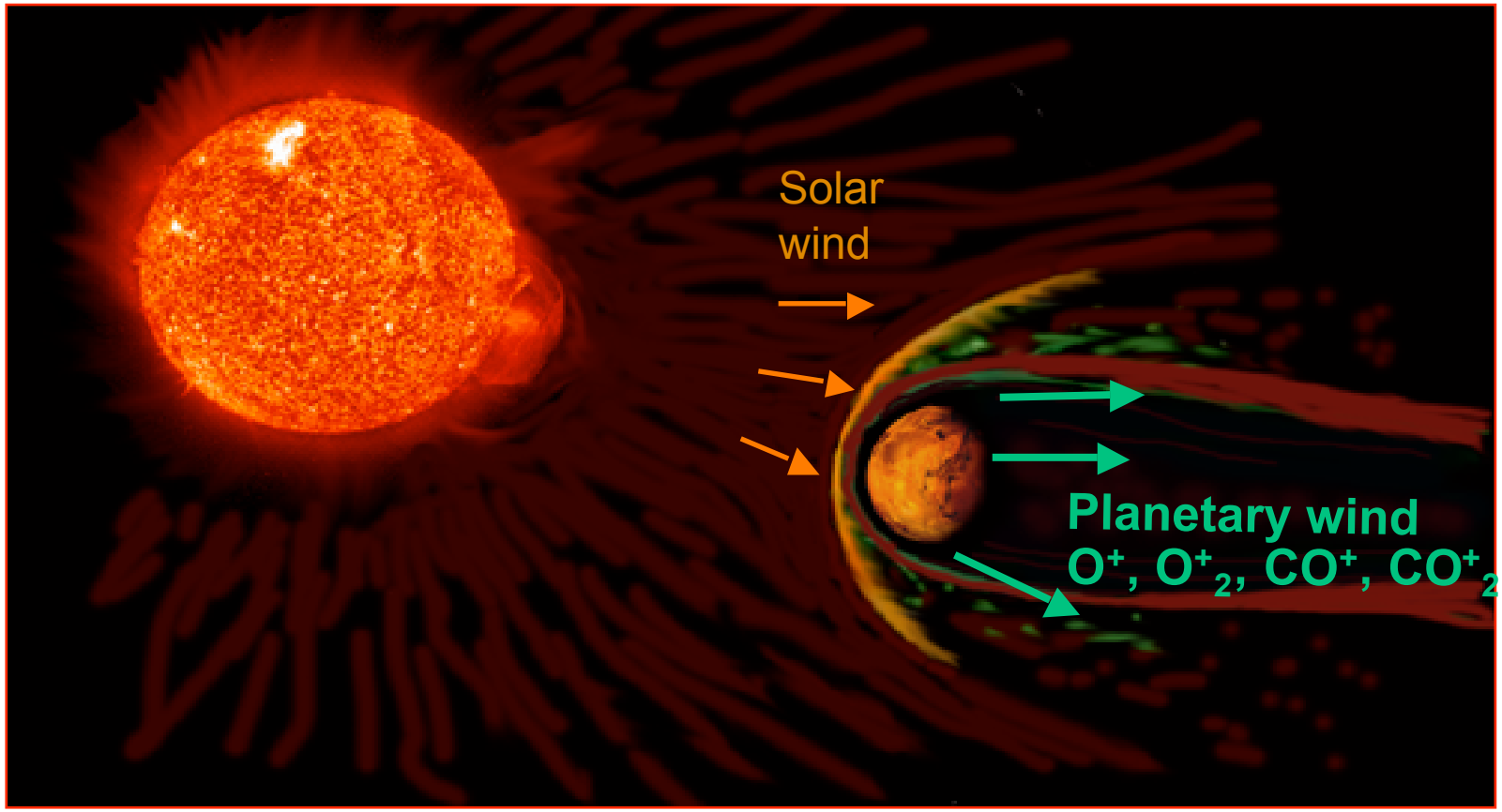
Solar wind is blowing away planetary ions and planetary materials!

The planetary wind. High speed!



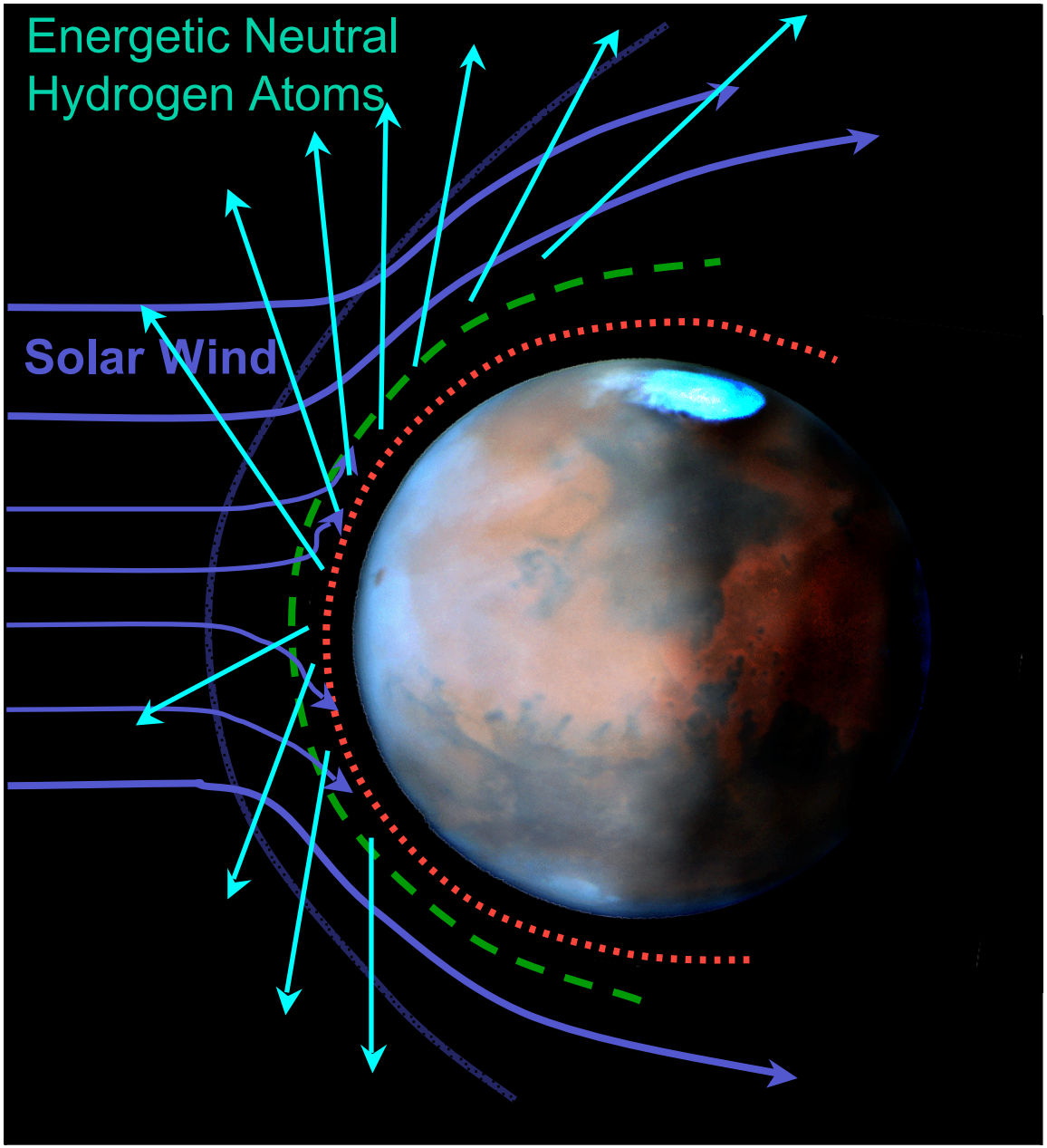
- **The solar wind penetrates deep down into the dayside atmosphere**
- **Planetary heavy ions accelerated up to very high energies!**

The planetary wind. Escaping Atomic O and O_2



- The planetary wind is dominated by atomic- and molecular oxygen.
- Carbon dioxide escapes too!
- Did water escape this way?

For the first time we see Mars ”radiates” fast atoms!



ASPERA-3 result

The interplanetary medium is important to understand Martian atmosphere evolution!