Updated status and future plans of BepiColombo

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The ESA-JAXA joint mission BepiColombo is now on the track to Mercury. BepiColombo will achieve a comprehensive exploration at Mercury with two spacecraft: "Mio" (Mercury Magnetospheric Orbiter: MMO) and "Bepi" (Mercury Planetary Orbiter: MPO). They were successfully launched by Ariane-5 launch vehicle from Kourou in French Guiana on 20 October 2018. Mio is fully dedicated to investigating Mercury' s environment with a complete package of plasma instruments (particles, electric fields, and magnetic fields), a spectral imager of sodium exosphere, and a dust monitor. During the cruise to Mercury, in addition to two spacecraft MMO Sunshield and Interface Structure (MOSIF) and Mercury Transfer Module (MTM) are all integrated together. After the commissioning operations of spacecraft, we are focusing on preparing science operations for interplanetary cruise and planetary flybys. Some science instruments can be used even in the composite spacecraft configuration. The first and second flybys will happen at the Earth in April 2020 and at Venus in October 2020, respectively. Here we report the updated status of BepiColombo mission, initial results of the commissioning operations and Earth flyby observations, and the future plans for interplanetary cruise and planetary flybys.

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