

A SYNOPTIC VIEW OF THE MAGELLANIC CLOUDS:
VMC, GAIA AND BEYOND

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Galactic Outflows of the Large Magellanic Cloud

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Massive amounts of gaseous material are being ejected out of the nearby Large Magellanic Cloud (LMC). As this gaseous wind is being thrown outward, some of it may fall back into the grasp of the host galaxy while the rest will be sent hurtling into space directed toward the Milky Way. With newly acquired H-Alpha spectroscopic data, we examine this outflow and its potential impact on the surrounding environment. We have spectroscopically mapped the diffuse ionized gas of the outflow in H-alpha emission. In this study, we explore the morphology distribution and kinematics of the outflow. We find that this galaxy is currently expelling more than 10 million solar masses of gas at speeds that are on the order of 100 - 130 km/s with respect to the LMC. Understanding galaxies in our local universe enables us to decipher the inner play between a galaxy's internal processes and its surroundings.