



Venus Monitoring Camera for Venus Express

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The Venus Monitoring Camera (VMC) is part of the Venus Express payload. One of the main goals of the Venus Express mission is to study the dynamics of the Venus atmosphere. This objective requires global imaging of the planet. The VMC is designed to meet this goal with a relatively wide field of view of 17.5° . The VMC will take images of Venus in four narrow band filters from UV to near-IR all sharing once CCD. The spatial resolution will be 0.2 km to 45 km depending on the distance from the planet. The full disc of Venus will be in the FOV near the apocentre of the orbit. The camera will complement other instruments of Venus Express 1.) by tracking cloud motions at ~ 70 km (cloud tops) and at ~ 50 km (main cloud layer) altitude; 2.) by mapping O_2 night-glow and its variability 3.) by mapping the night-side thermal emission from the surface and studying of the lapse rate and H_2O content in the lower 6 - 10 km. In addition the camera will provide imaging context for the whole mission and its movies will be of significant interest for science but also for the public outreach programme.