

# Cloud morphology from the Venus Monitoring Camera observations

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For about 4 years Venus Monitoring Camera onboard ESA's Venus Express collects images of the planet in four narrow band filters. The UV filter is centered at the characteristic wavelength of the unknown UV absorber (365 nm). Three other channels give the planet's view in the visible and near-IR ranges. The highly elliptical polar orbit of the satellite provides a favorable combination of global views with resolution of ~50 km to close-up snapshots resolving features of about few hundreds meters. Brightness contrasts in the images vary from ~30% in the UV to 5% in other filters. The UV imaging is focused on the cloud top morphology that bears the information about dynamical process and distribution of the UV absorber. Low latitudes (< 40 deg) are dominated by relatively dark clouds that have mottled and fragmented appearance clearly indicating the presence of turbulence in the sub-solar region. At ~50 degrees latitude this pattern gives way to streaky clouds suggesting that horizontal flow prevails here. Poleward from ~60 degrees the planet is covered by almost featureless bright polar hood sometimes crossed by dark thin (~300 km) spiral or circular structures. In addition to the features observed in the lower and middle latitudes by the earlier missions, VMC monitors the details of the polar clouds poorly studied before. We will present latitudinal, diurnal, and temporal variations of the cloud top morphology.