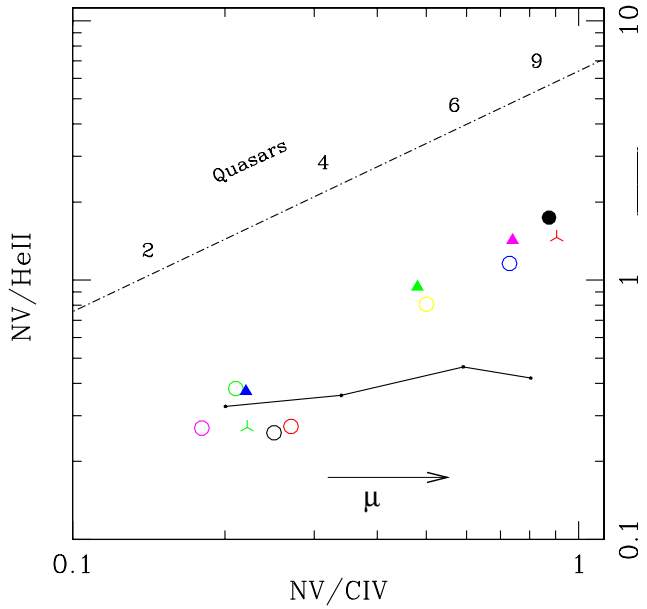
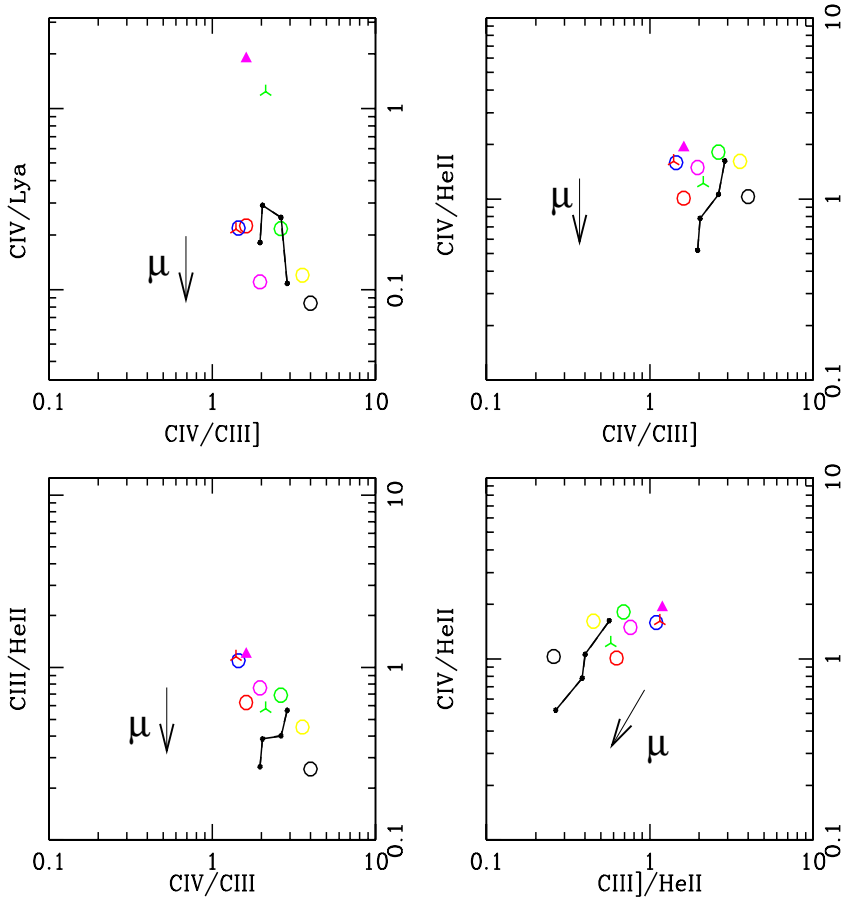


The black solid line represents a sequence with fixed parameters except the gas to dust ratio

The gas/dust ratio (μ) relative to the solar value is 0 (no dust), 0.5, 1, 1.5

The sequence shows that C depletion can produce large NV/CIV, but not large NV/HeII. This ratio remains almost constant.



These models show that objects with large μ and therefore high depletion should show low CIV/HeII and CIII]/HeII. However, according to the NV diagram, this is not the case. Objects with large NV/CIV (and therefore, high depletion) show large C/He ratios (see for instance