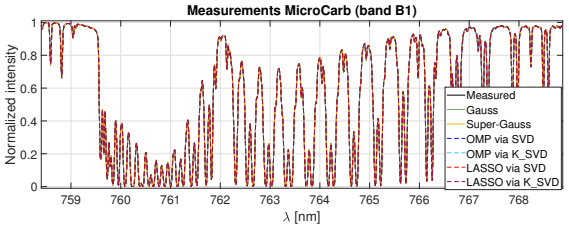
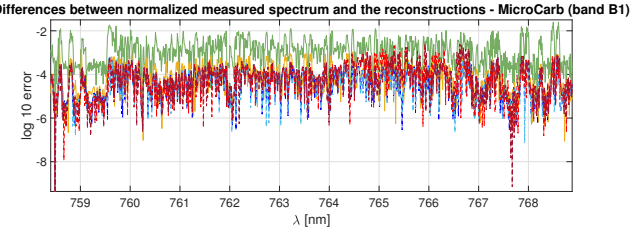
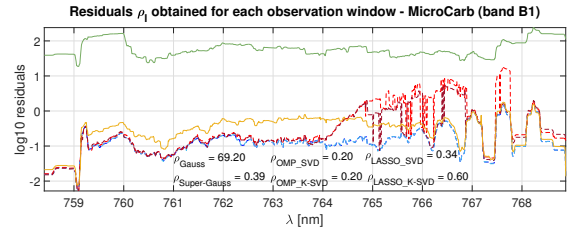

Measurements MicroCarb (band B1)
Normalized intensity
λ [nm]
Measured
Gauss
Super-Gauss
OMP via SVD
OMP via K_SVD
LASSO via SVD
LASSO via K_SVD

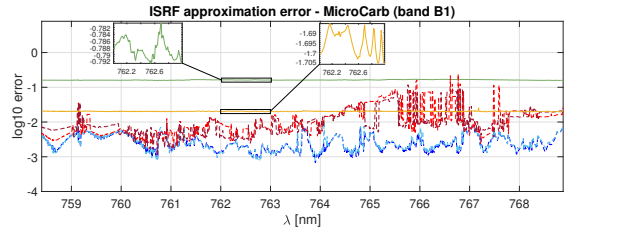
(a)


Differences between normalized measured spectrum and the reconstructions - MicroCarb (band B1)
log 10 error
λ [nm]

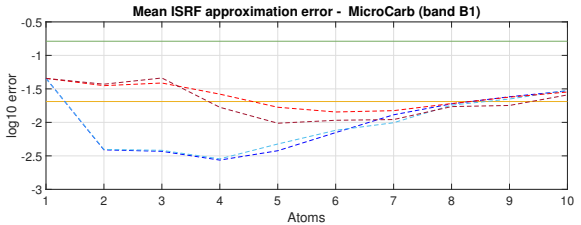
(b)


Residuals ρ_l obtained for each observation window - MicroCarb (band B1)
log10 residuals
λ [nm]
ρ_{Gauss} = 69.20
ρ_{OMP_SVD} = 0.20
ρ_{LASSO_SVD} = 0.34
$\rho_{Super\text{-}Gauss}$ = 0.39
$\rho_{OMP_K\text{-}SVD}$ = 0.20
$\rho_{LASSO_K\text{-}SVD}$ = 0.60

(c)


ISRF approximation error - MicroCarb (band B1)
log10 error
λ [nm]

(d)


Mean ISRF approximation error - MicroCarb (band B1)
log10 error
Atoms

(e)