

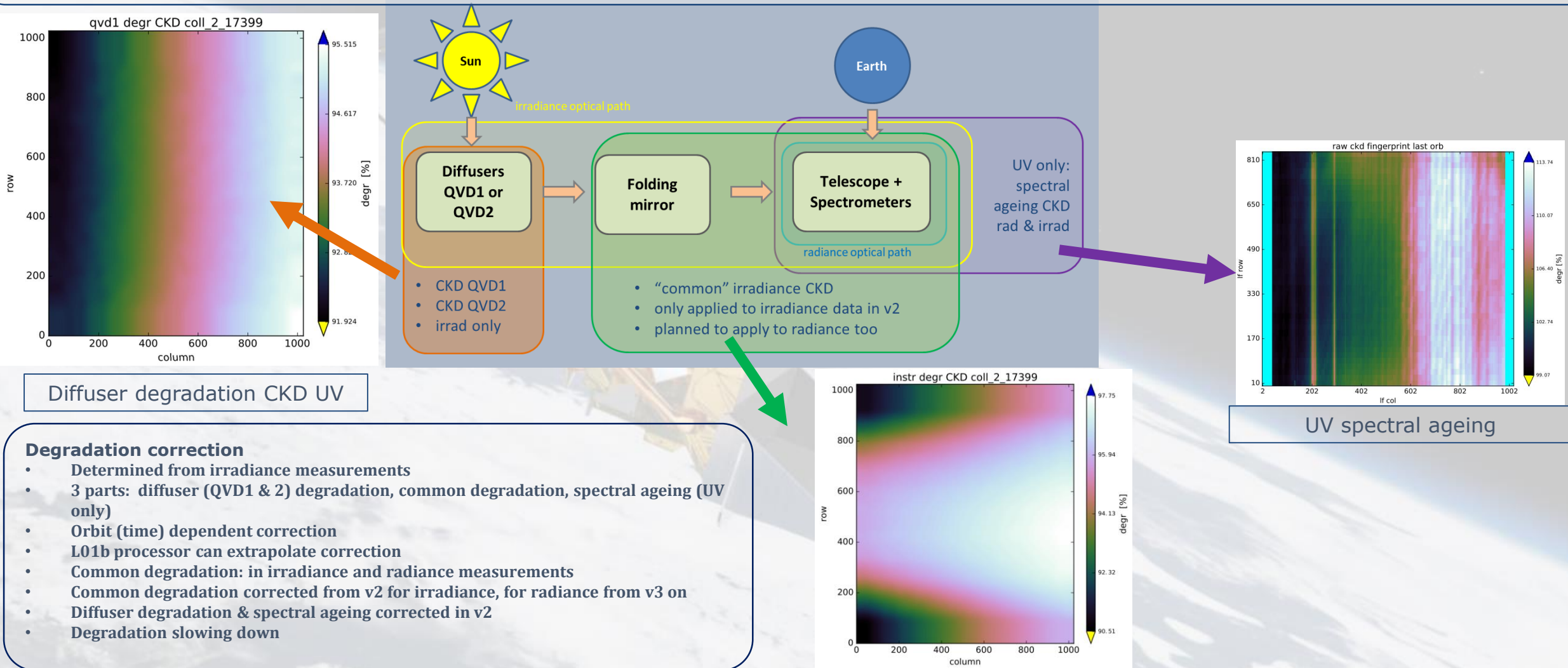


# Correction of instrument ageing in TROPOMI L01b processing



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Diffuser degradation CKD UV

UV spectral ageing

Common degradation CKD UV

- Degradation correction**
- Determined from irradiance measurements
  - 3 parts: diffuser (QVD1 & 2) degradation, common degradation, spectral ageing (UV only)
  - Orbit (time) dependent correction
  - L01b processor can extrapolate correction
  - Common degradation: in irradiance and radiance measurements
  - Common degradation corrected from v2 for irradiance, for radiance from v3 on
  - Diffuser degradation & spectral ageing corrected in v2
  - Degradation slowing down