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Level-1 Geometry Validation Session

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- **Sentinel-2 geometric performance** performed by the OPT-MPC and by CNES is generally **very good and equivalent between the 3 units**

- **Sen2VM** (Sentinel-2 Viewing Model) tool is providing an explicit geolocation information for L1B products, making them more user-friendly. The tool is freely available for the users.
  - the geolocation is performed by band and by detector and therefore the overlaps are preserved
  - adaptability to other missions? => feasible if we replace SXGEO with ASGARD

- **DGGS** (Discrete Global Grid System) shows very good potential for storage of DataCubes of geophysical observations. EO data can be stored using a grid level thinner than the sensor resolution. L1C products can be generated with negligible error compared to the traditional approach. Final DGGS solution for Copernicus remains open for now.
  - gain of storage by using DGGS => 33% percentage is saved for the overlapping areas
  - recommendation when performing the resampling to get from a level to another to keep the interpolation scheme + uncertainty of the pixels inside the cell

- **Sentinel-2 Global Reference Image** : V1 soon available on CDSE STAC Catalog. V2 aims at improving usability of the GRI as a reference layer for other applications than S2 processing. Interest of radiometric harmonisation at a UTM scale to be analysed

- **EDAP**: defines a generic framework and methodologies to assess the data quality and maturity of optical missions. The open-source **KARIOS** tool is proposed for geometric performance analysis