Consolidation of Aeolus FMA and FMB datasets in the DSI X-PReSS Consortium: Methodology used to generate Master Datasets and the results that have been achieved

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We present the methodology and results of the Aeolus VC01 and L0 FM-A and FM-B datasets consolidation performed by the X-PReSS team as part of the ESA (European Space Agency) Data Service Initiative (DSI) managed by ESA’s Ground Segment Operations Division. The goal of this activity is to generate master datasets and gap lists as well as assess data completeness for both future ESA reprocessing campaigns and data preservation activities. The consolidation was carried out first by removing fully overlapping products, products completely covered by other products (inside) and black-listed products. Secondly, remaining products HDR and DBL files were scanned to detect filename misalignments with specifications, intra-products and inter-products gaps and corrupted products. Ancillary data from several Aeolus facilities (KSAT, DISC, FOS, PDGS) were used for gaps justification and blacklisted products identification. For FM-A VC01, 4219 products were analysed. Out of these, 3927 were classified as Master, 142 as inside, 3 as Duplicates and 147 as Blacklisted. 57 gaps were found. No data corruption was found. No duplicated source packet data was found. Consolidation results are available at ESA and includes: list of gaps with metadata and known justification, list of duplicated events with metadata, list of Instrument Function IDs with metadata, master dataset list and a list of discarded products including known justification.