

Additive Manufacturing at ESA From Technologies to Applications Developments

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Additive Manufacturing has emerged as a game changing technology in Space Industry less than 20 years ago. Since then, the number of people involved in Additive Manufacturing has exploded and today, two parallel paths are followed in parallel with strong interactions between those. One the one hand, the Additive Manufacturing Technologies are matured based on a better understanding of the Additive Manufacturing processes and the impact they have on materials properties. On the other hand, space parts are developed under the leadership of end users dealing with e.g. structures, mechanisms, optics, radio-frequencies. The presentation will present a selection of technologies and applications developed within technology programmes and enabling today the installation of the first Additively Manufactured parts on ESA space missions.