Description of Airbus grids for NASA CRM (Common Research Model) Wing-Body and Wing-Body-Tail configurations

- Structured, multi-block grids
- Generated following DPW committee gridding guidelines

• Seven grids available: four grid levels for the $iH=0^{\circ}$ geometry (Coarse, Medium, Fine, Extra-fine), and three more geometries at Medium grid level ($iH=-2^{\circ}$, $iH=+2^{\circ}$, No tails)

• Grids characteristics:

Grid level	Number of nodes	Number of zones
Coarse	4.6 millions	146
Medium (no tails)	8.9 millions	128
Medium (with tails)	13.5 millions	167
Fine	37.2 millions	228
Extra-fine	108.3 million	334

Grids specificities :

• There is one non-coincident plane located between wing and tail



• Grid coordinates are in mm

• The origin of the grid coordinate system is shifted w.r.t. the one of original geometries : Δx = 2990.5 mm, Δz = -6008.7 mm

The reference geometry data in metric system for the provided grids is given below :

$$\begin{split} S_{REF} &= 191.845 \text{ m}^2 \text{ (half aircraft)} \\ C_{REF} &= 7005.3 \text{ mm} \\ X_{REF} &= 36668.3 \text{ mm} \\ Z_{REF} &= -1488.8 \text{ mm} \end{split}$$

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