



OICA – vehicles geometry with regard to boosters

IG CRS no 35

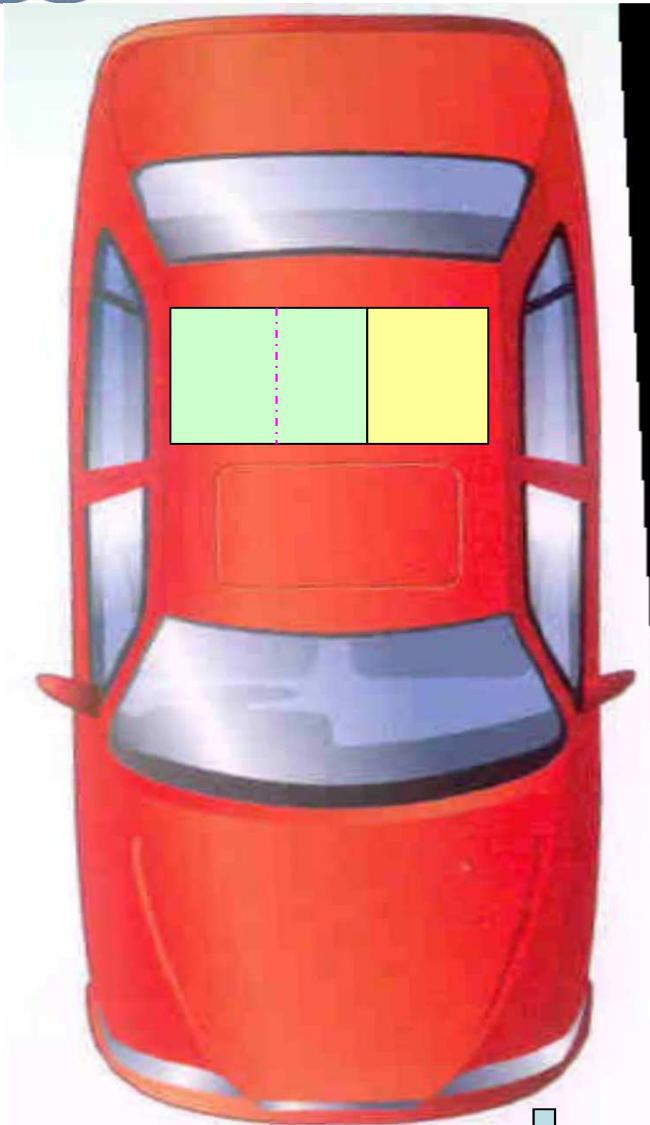


1/ 2 approaches regarding the relative position of ISOFIX lower anchorages with regard to the buckles

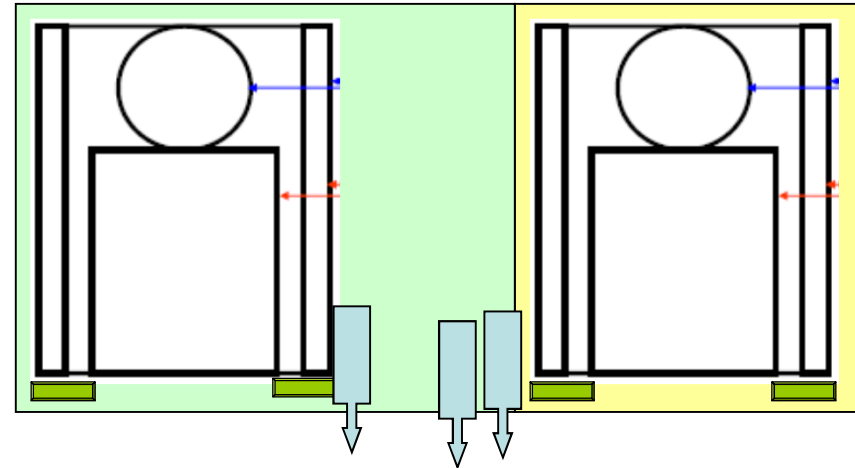
- 1.1. Extreme relative positions (JAMA)
- 1.2. Statistical clouds (ISO doc)



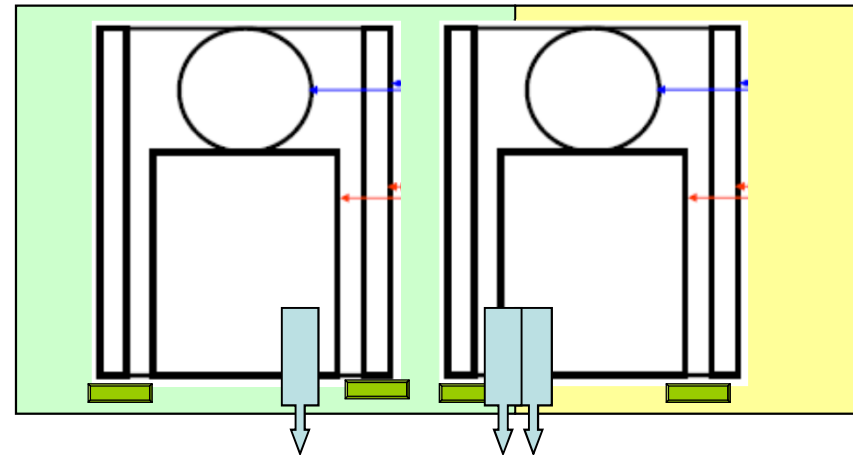
1.1. Scheme of two possible ISOFIX seating positions



Front View of rear bench- Vehicle A-2

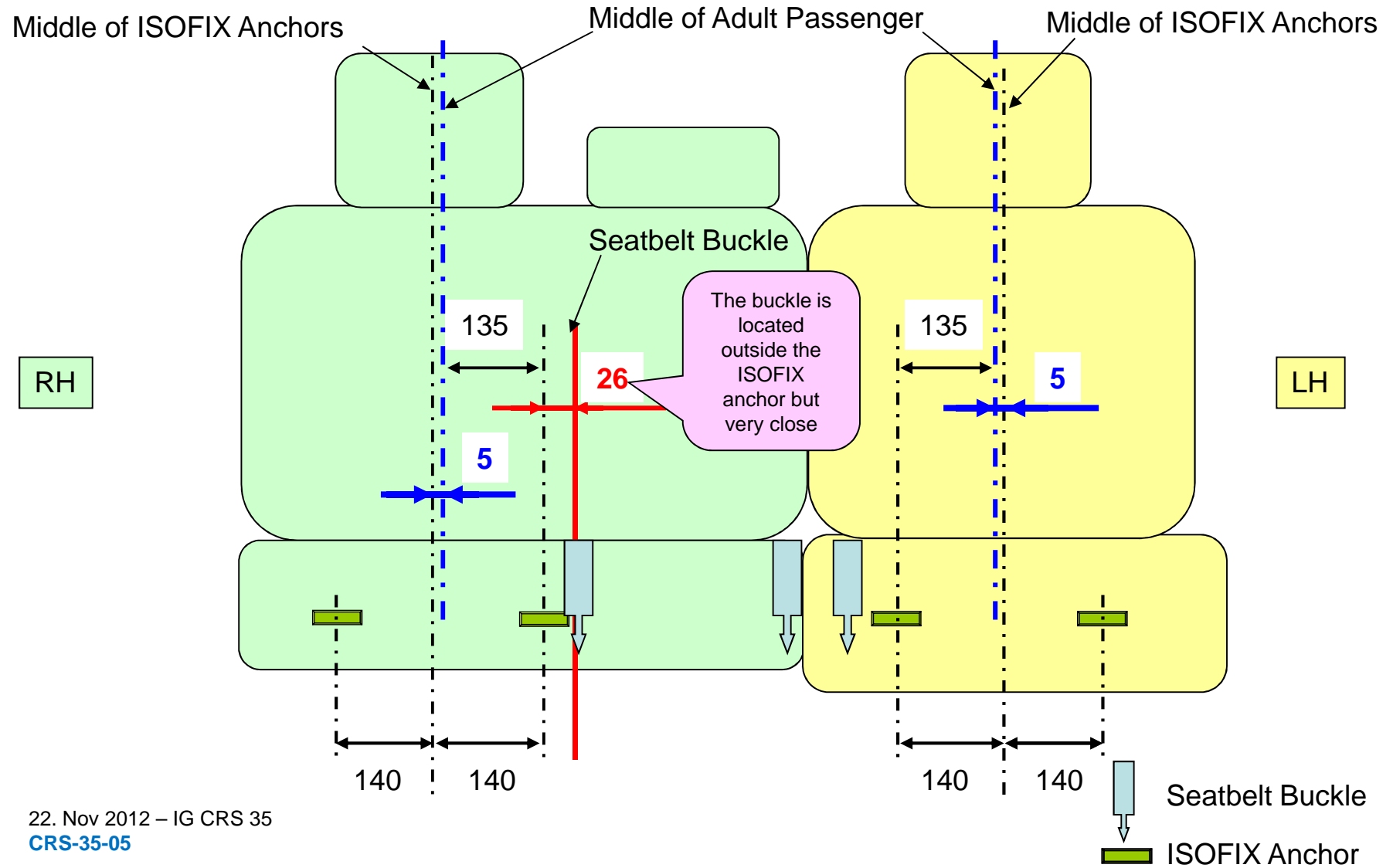


Front View of rear bench- Vehicle A-1





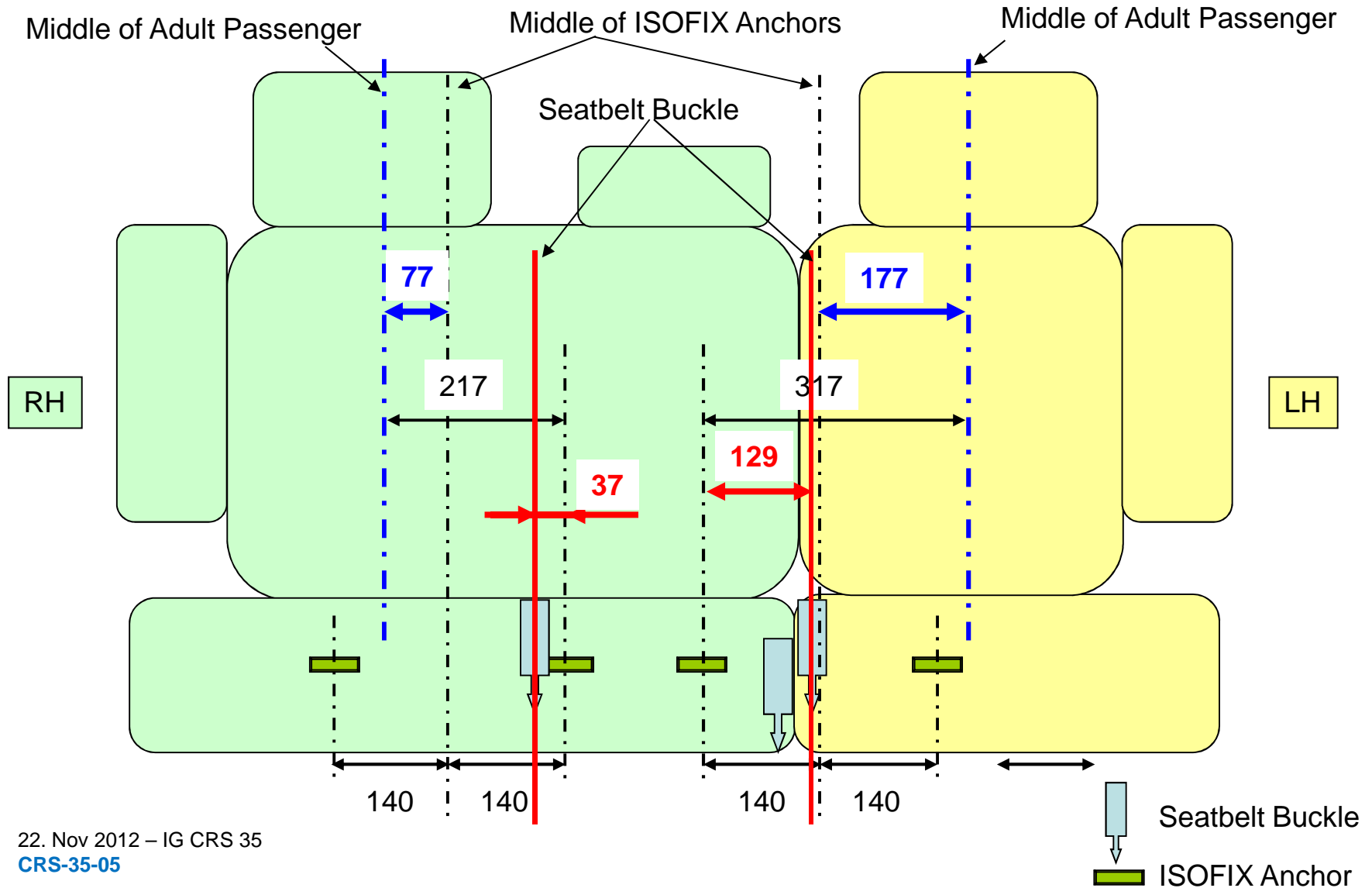
Front View rear bench- Vehicle A-2





JAMA Research for ISO-FIX CRS Anchors and Adult Seating Positions

Front View rear bench- Vehicle A-1





1.2. Explanation of the next ISO slide synthesis

**Following synthesis is extracted from ISO/TC 22/SC 12/WG 1
(courtesy of S Weber- Audi)**

**⇒ N914 CASPER TUB analysis of car measurements
for ISO TF Compatibility (H Johanssen).**

- Focus on rear seat as data on front seat ISOFIX is limited
- Left and right rear seat often different in the same car=> Results for both included in graph

Assessed Cars



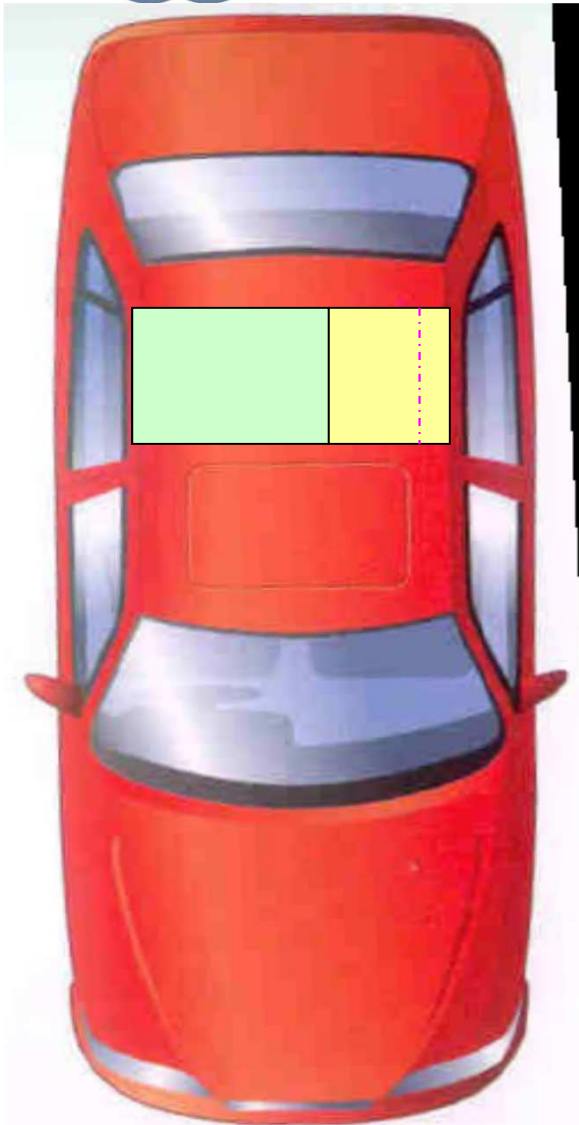
- Alfa: 159, MiTo
- Audi: A3, A4, A6
- BMW: 1, 3, 5 (E70), Mini, X3, X5
- Chevrolet: Matiz
- Citroen: C1, C2, C3, C3 Picasso, C4, C4 Picass
- Dacia: Logan, Sandero
- FIAT: 500, Bravo, Croma, Panda, Punto, Sedici,
- Ford: Fiesta, Mondeo
- Kia: Picanto
- Honda Civic
- Lancia: Delta
- Mazda: 6

Assessed Cars (continued)



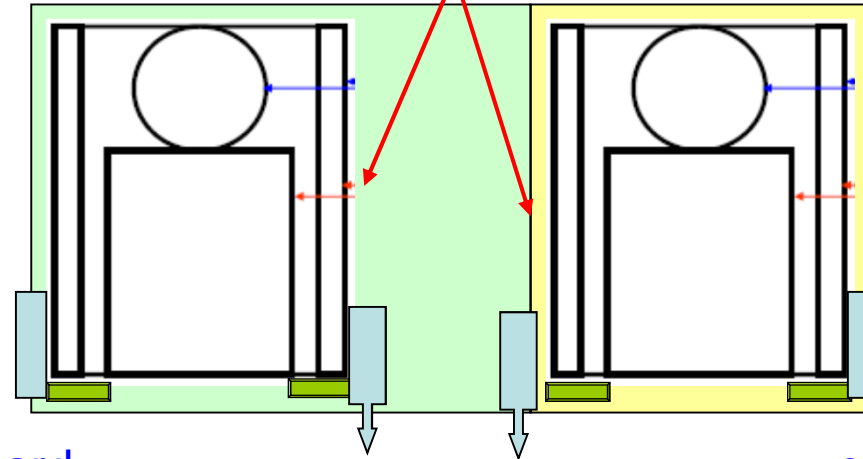
- Nissan: Micra, Qashqai
- Opel: Agila, Astra H, Corsa, Insignia, Meriva, Zafira
- Peugeot: 207, 308
- Renault: Clio, Megane, Modus, Scenic, Twingo
- SEAT: Altea, Ibiza
- Skoda: Fabia, Octavia, Roomster
- Suzuki: Swift
- Toyota: Auris, Aygo, Rav4, Yaris
- VW: Caddy, Golf, Passat, Polo, Tiguan, Touran

Explanation of the next ISO slide synthesis



22. Nov 2012 – IG CRS 35
CRS-35-05

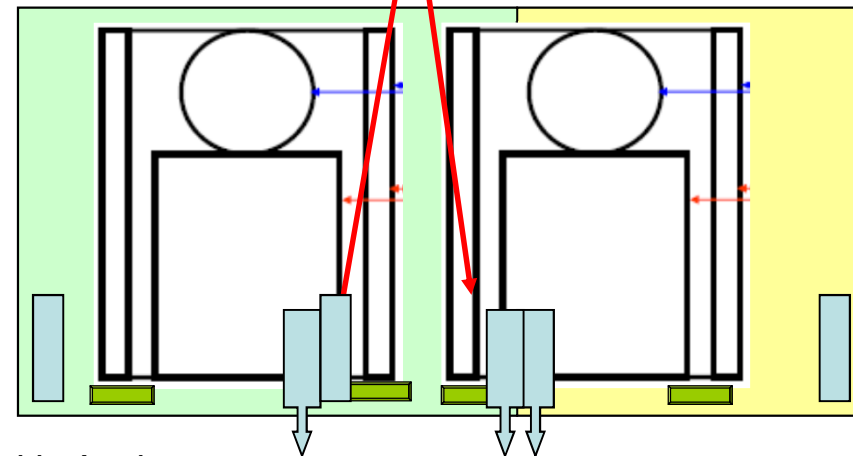
+ Distance of **inboard** Isofix to **inboard** buckle



outboard

outboard

Negative distance of **inboard** Isofix to **inboard** buckle



 Seatbelt Buckle Anchor

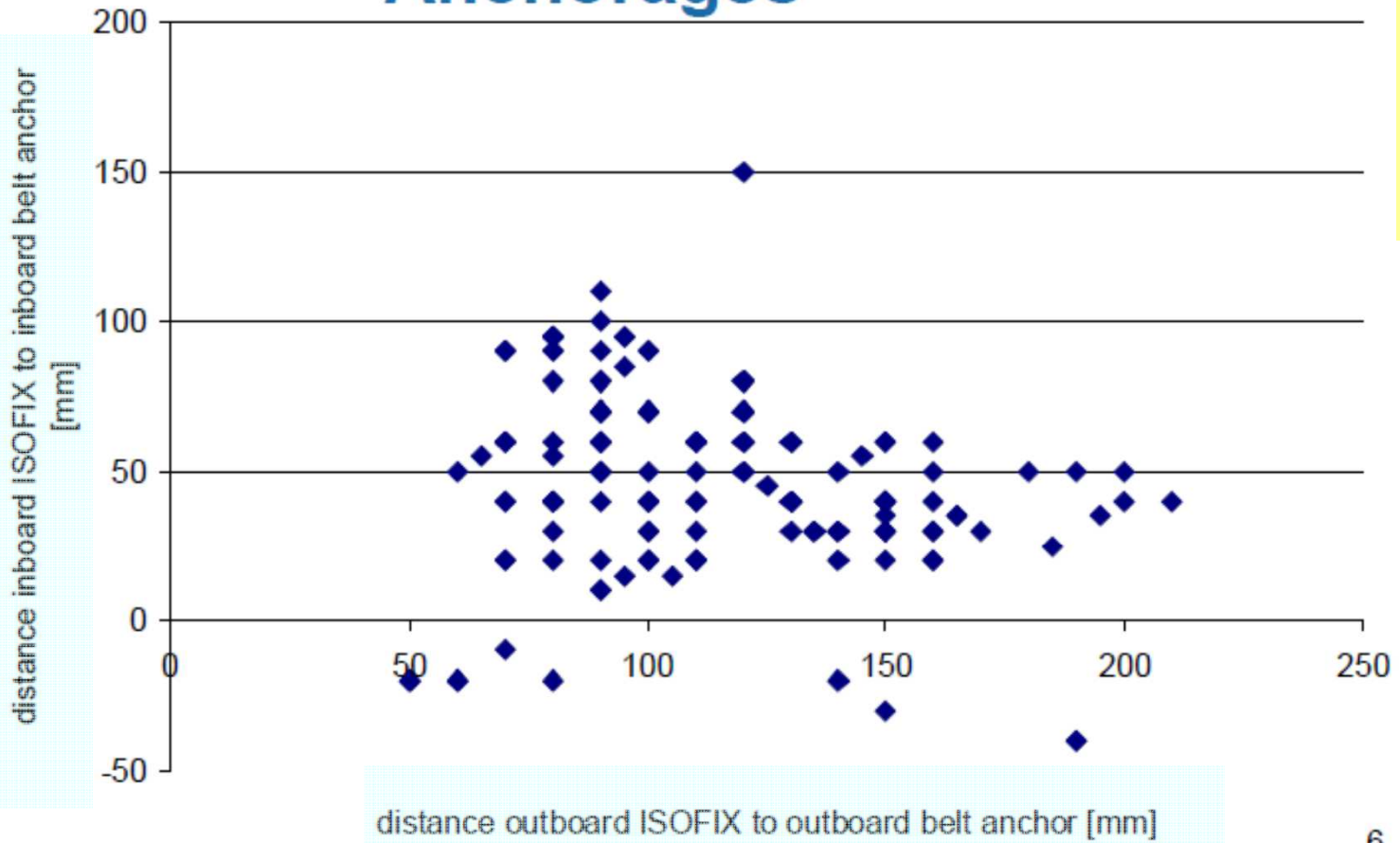
 ISOFIX Anchor



ISO TF4 compatibility group

CASPER

ISOFIX Anchorage Position w.r.t Belt Anchorages



Ne
So
there
sol



Conclusion regarding isofix position with regard to seat belt buckle anchors

Result of the ISO/CASPER work:

- ⇒ Statistics show around 200mm dispersion
- ⇒ The inner isofix anchorage overlaps sometimes the corresponding buckle (negative distance), which forbids the « mixed isofix + seatbelt boosters ».

Result of the JAMA research:

- ⇒ This overlap can reach until 129mm.
- ⇒ Even without overlap, proximity with buckle shall be addressed.



2/ Gabarit work in progress:

ISO (Dorel modified) 135 gabarit still interferes in the lower area with the buckles :

⇒ OICA will propose a modified lower area in order to better accommodate the buckles.

⇒ next IG (January 2013)



3/ Phase 2& 3 philosophy draft written by the Chairman during the last IG meeting

⇒ pros/cons in terms of number of available cars /seating positions

✚ OICA suggestion: i-size seating position = only phase 1 constraints

✚ **Universal Boosters = seat-belted without isofix**

+	-
Misuse solved for phase 1 CRSs with a maximum of compatible cars	