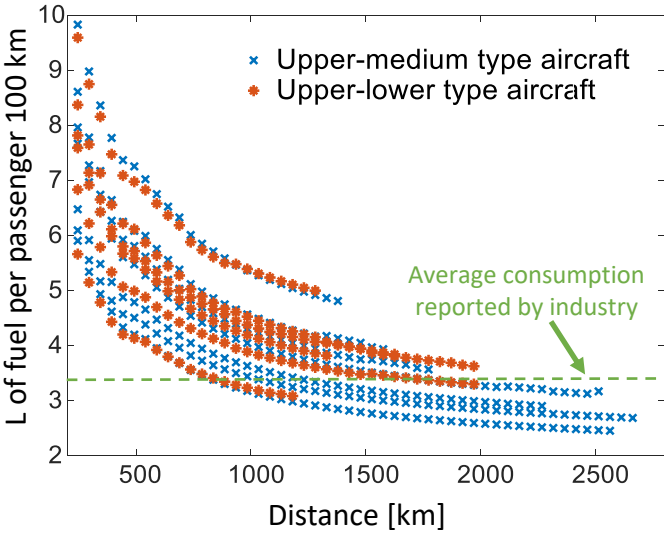


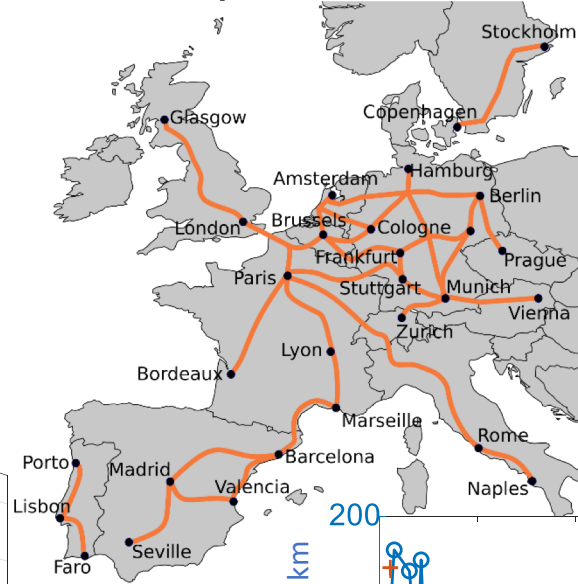
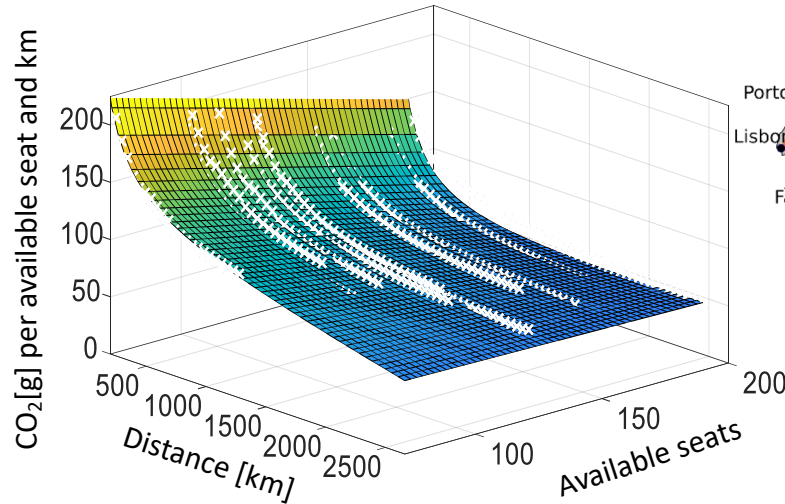
Estimation of flight CO₂ emissions and travel time with analytical models

Consideration of available seats for transport model comparison



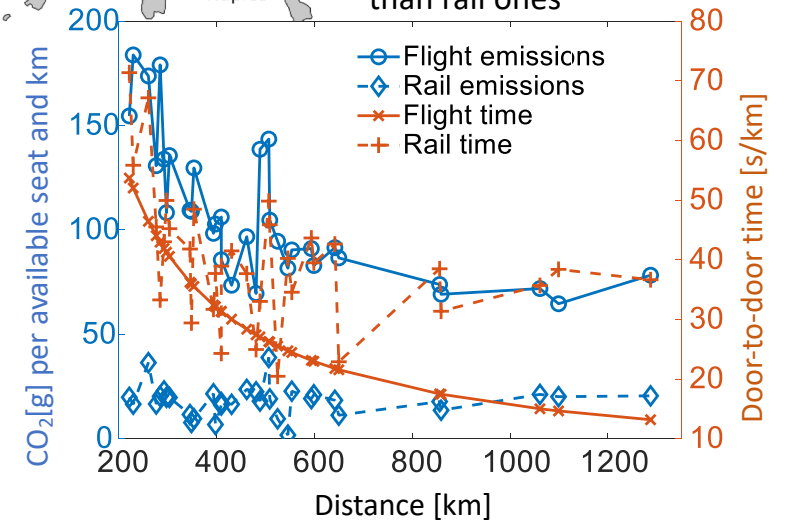
Short flights much + inefficient
 & use + fuel per PAX per 100km than average values reported by industry

Analytical model estimates emissions:
 function of distance & number of seats transported in the aircraft



Door-to-door travelling times for train links up to 4h comparable with air

Air emissions per PAX & km decrease over distance but remain significantly higher than rail ones



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