

Plots of Temporary Altitude-Hold Maneuver Candidates for Conflict Resolution



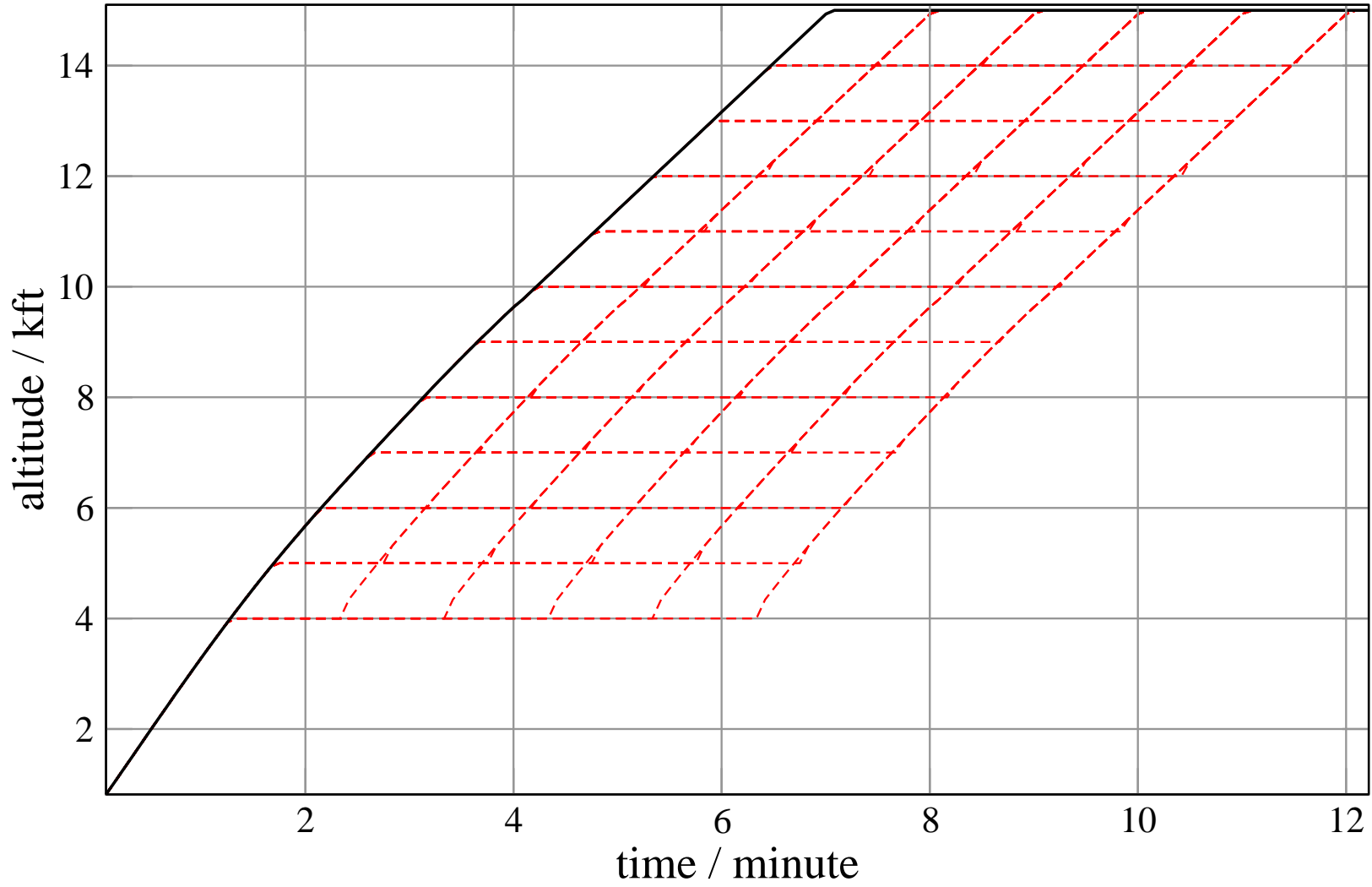
**R. A. Paielli
NASA Ames Research Center**

The following plots show temporary altitude-hold maneuver candidates for conflict resolution for a representative sample of flights. The candidate altitudes are in steps of 1,000 feet starting at 4,000 feet, and the hold times are in steps of 1 minute up to 6 minutes (these parameters can be varied). Holding a flight at a temporary altitude reduces efficiency because drag is higher at a lower altitude. Hence, a higher altitude and a shorter hold time generally yields a smaller delay. A rough approximation of the resulting delay is computed for each candidate, and the one with the least estimated delay is selected from those that resolve the conflict, if any do.

[generated with plot/TempAltPlots.scala]

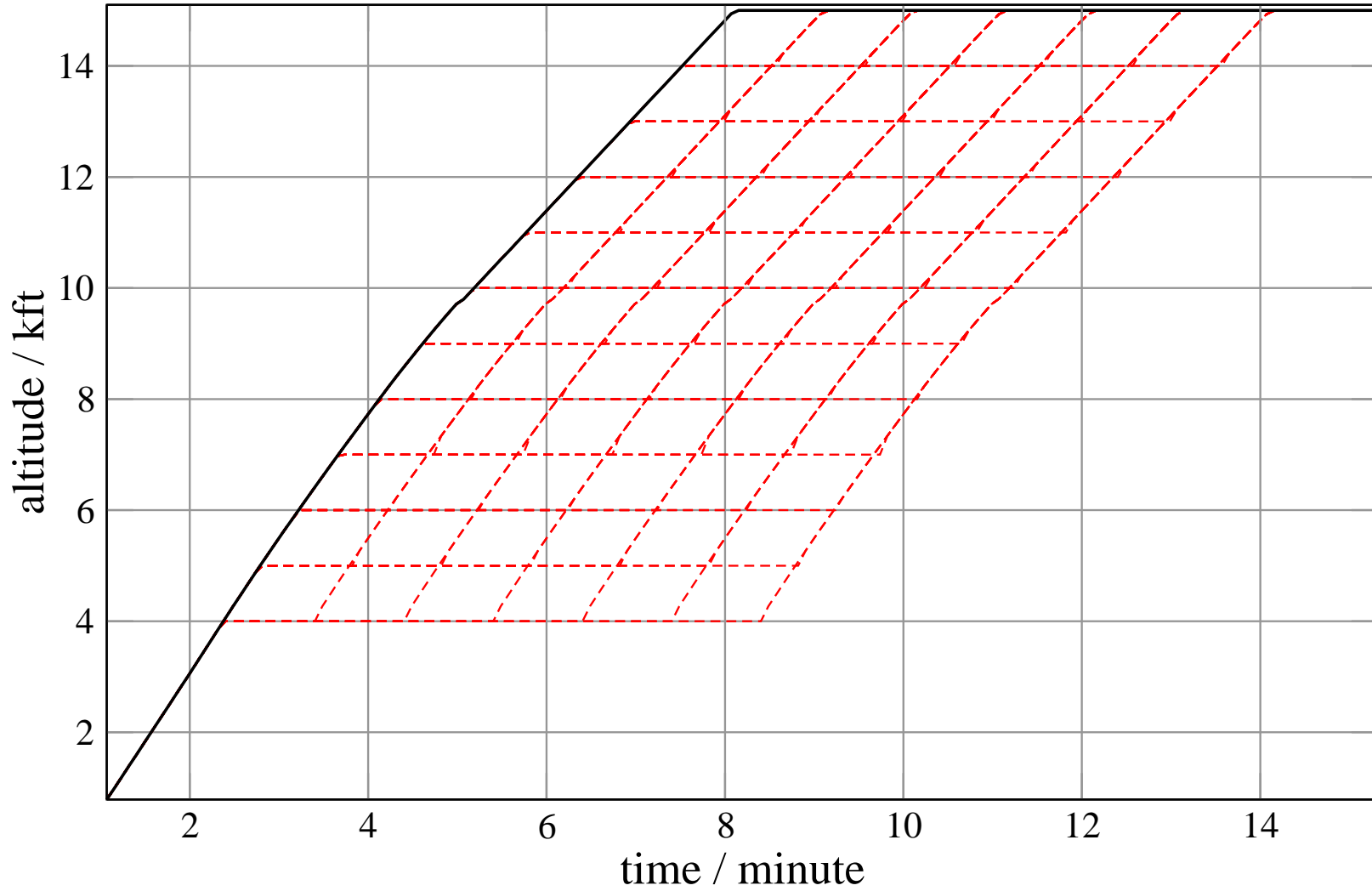
Altitude Profile

484 (CRJ2 E DFW/17R Dep)



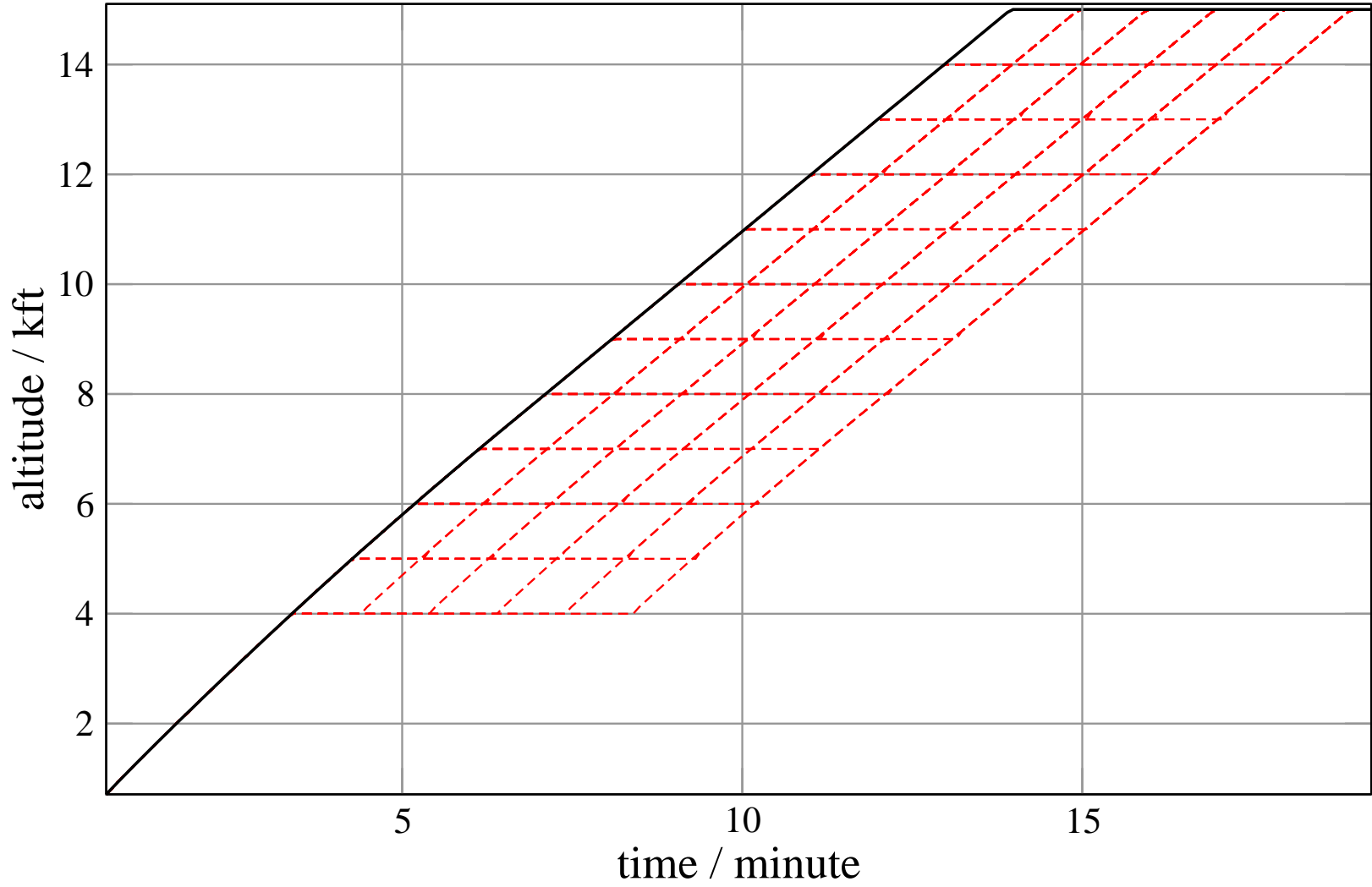
Altitude Profile

486 (MD83 D DFW/17R Dep)



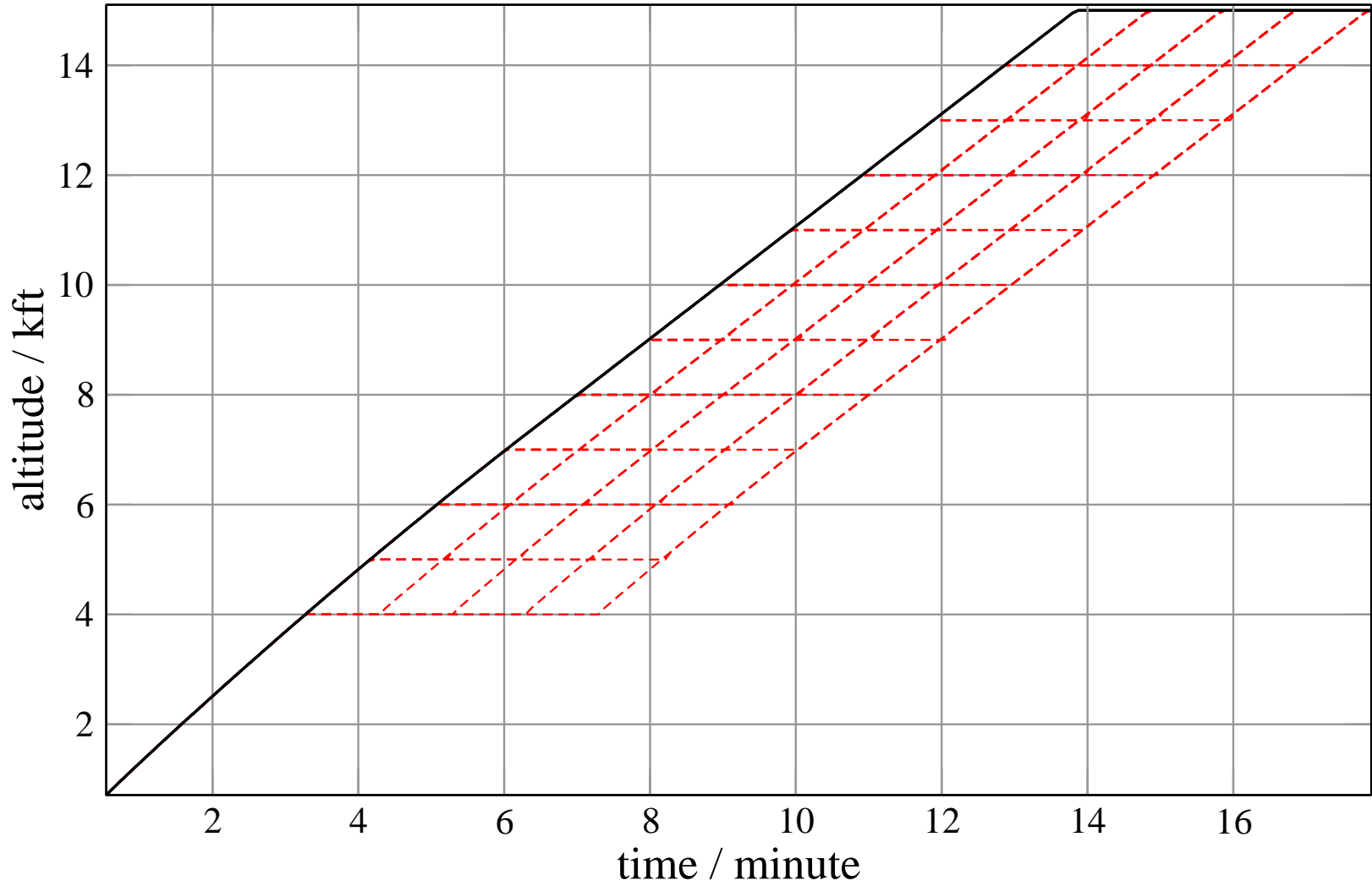
Altitude Profile

491 (BE99 F DFW/18L Dep)



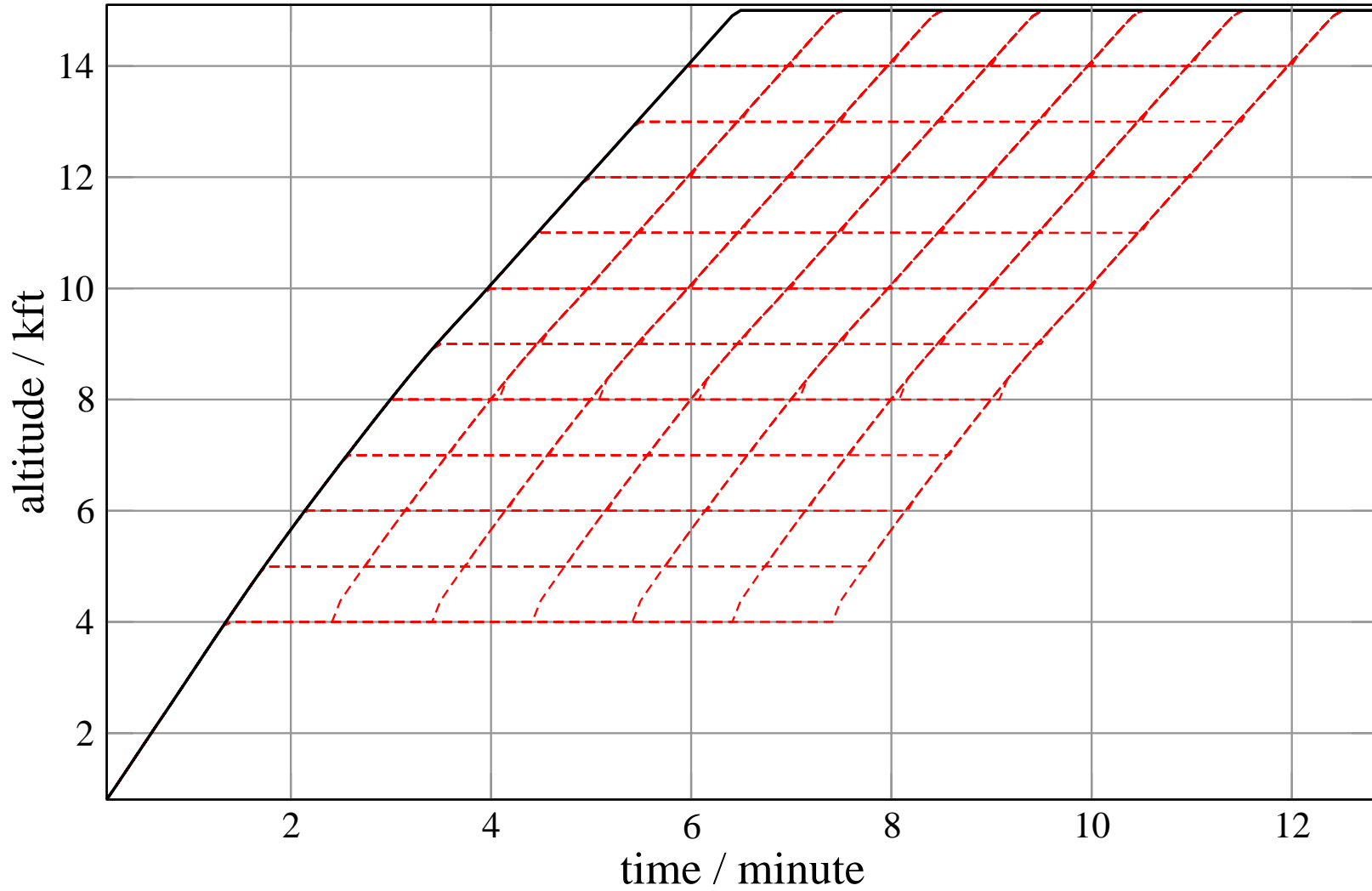
Altitude Profile

492 (BE99 F DFW/18L Dep)



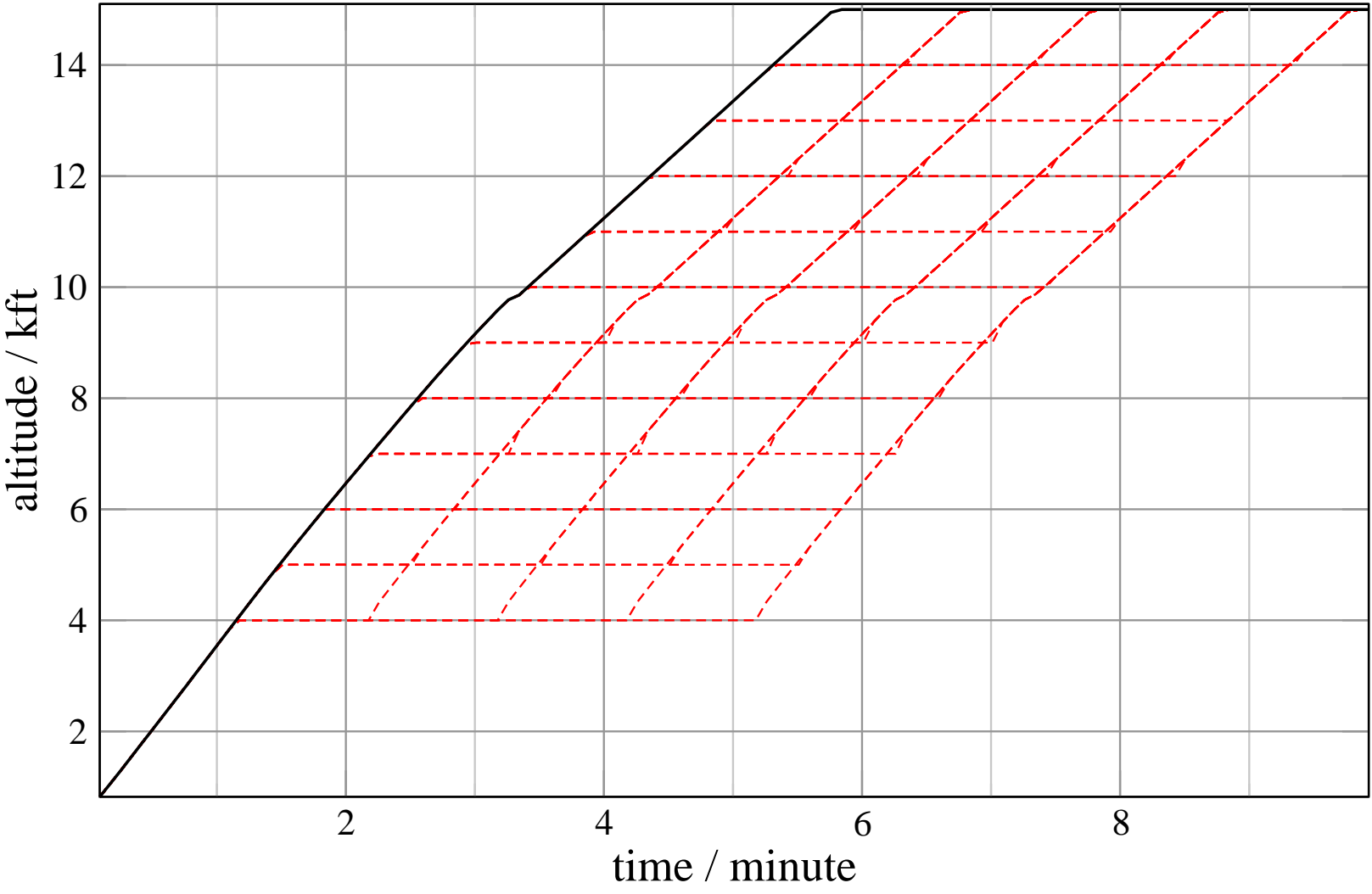
Altitude Profile

497 (MD88 D DFW/17R Dep)



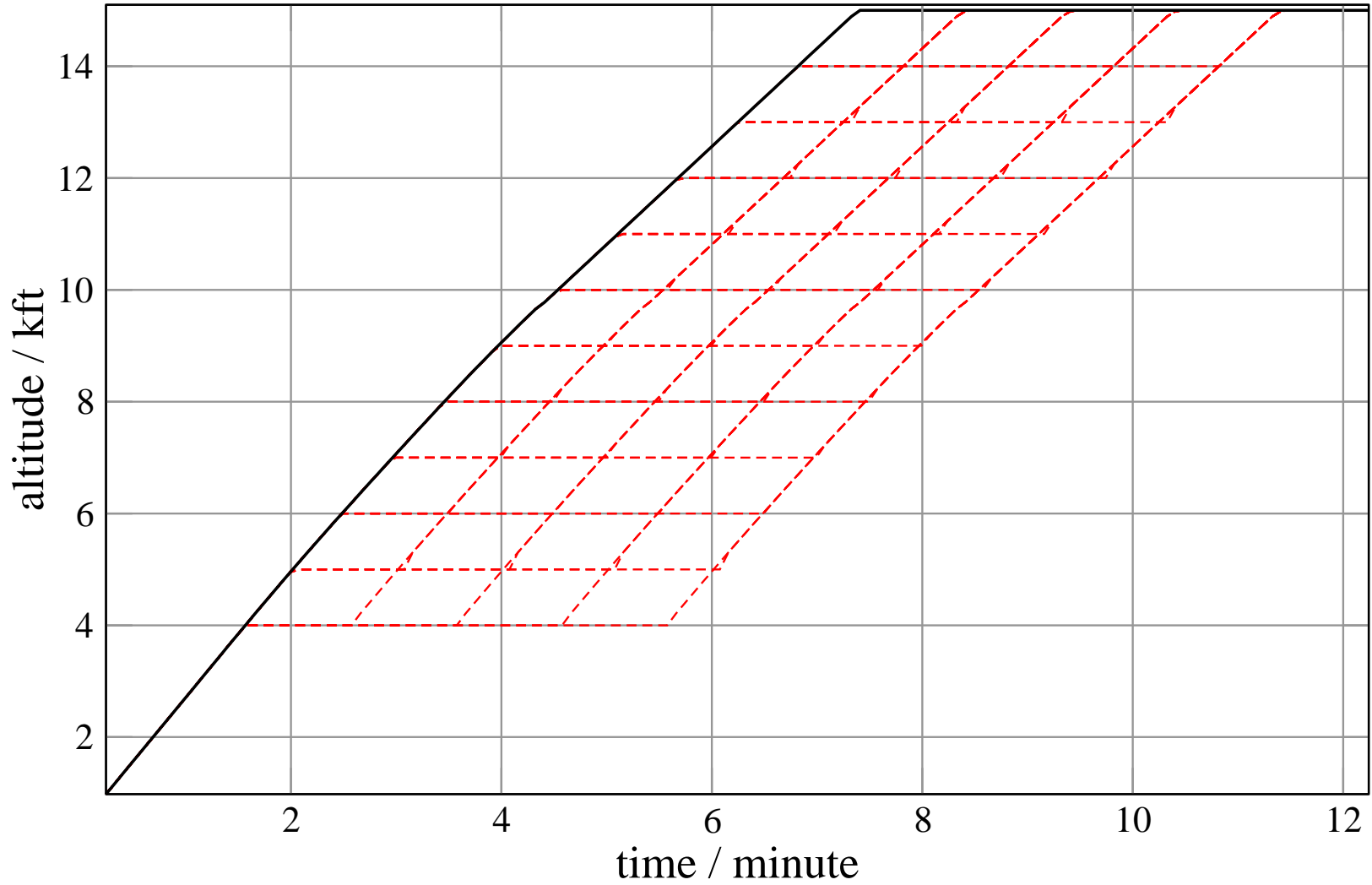
Altitude Profile

498 (E135 E DFW/18L Dep)



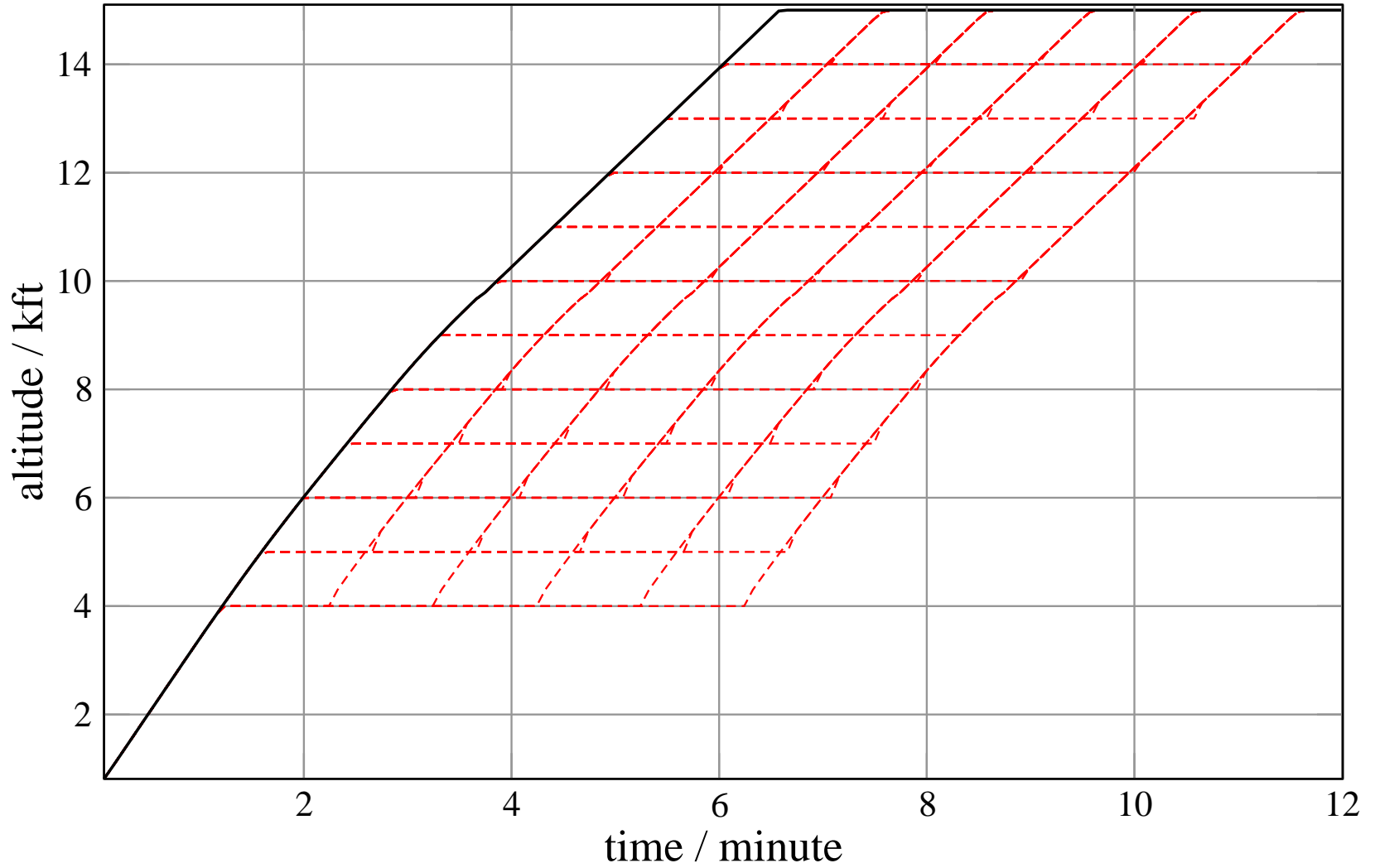
Altitude Profile

512 (B752 D DFW/17R Dep)



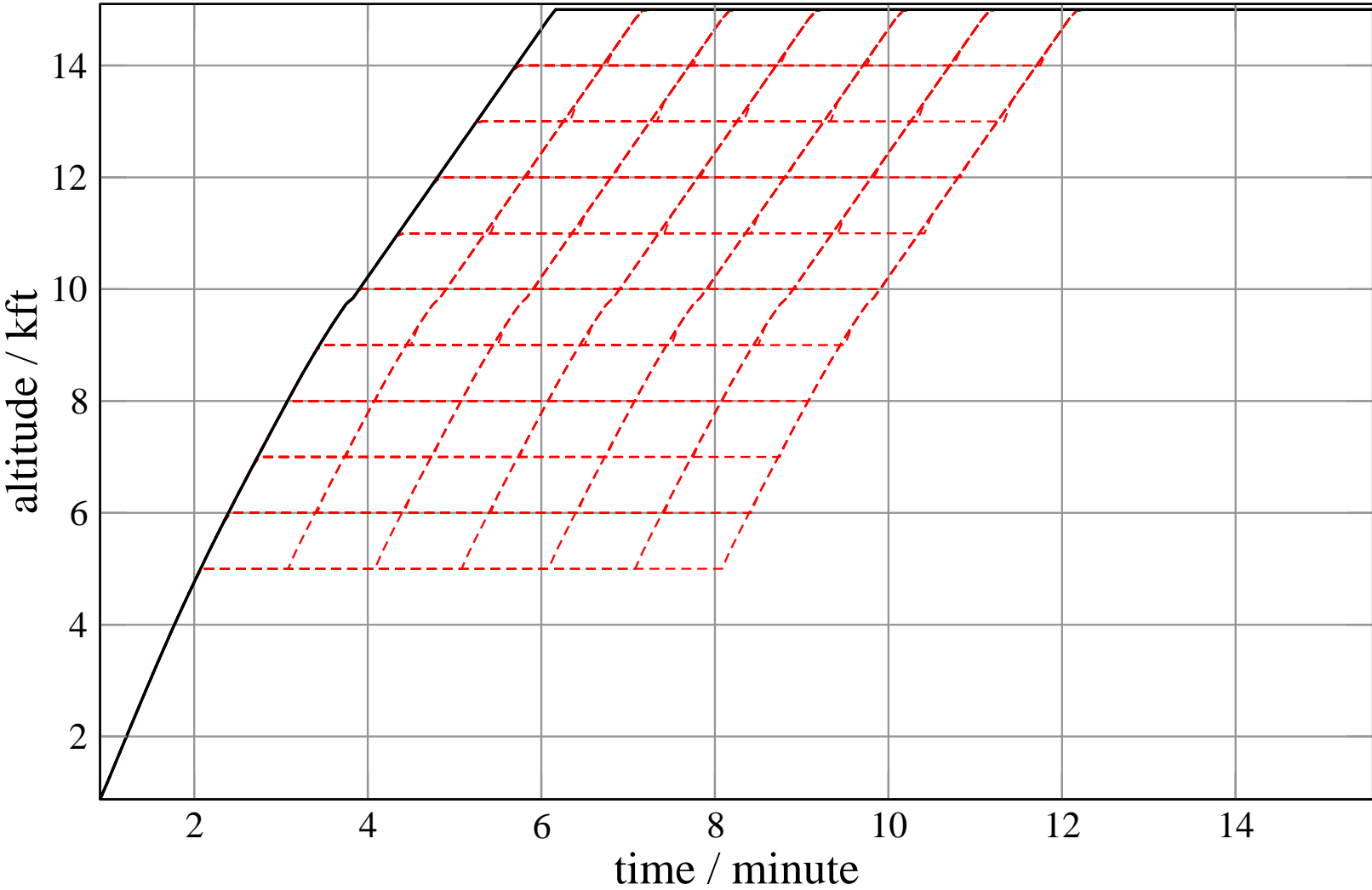
Altitude Profile

513 (A320 D DFW/18L Dep)



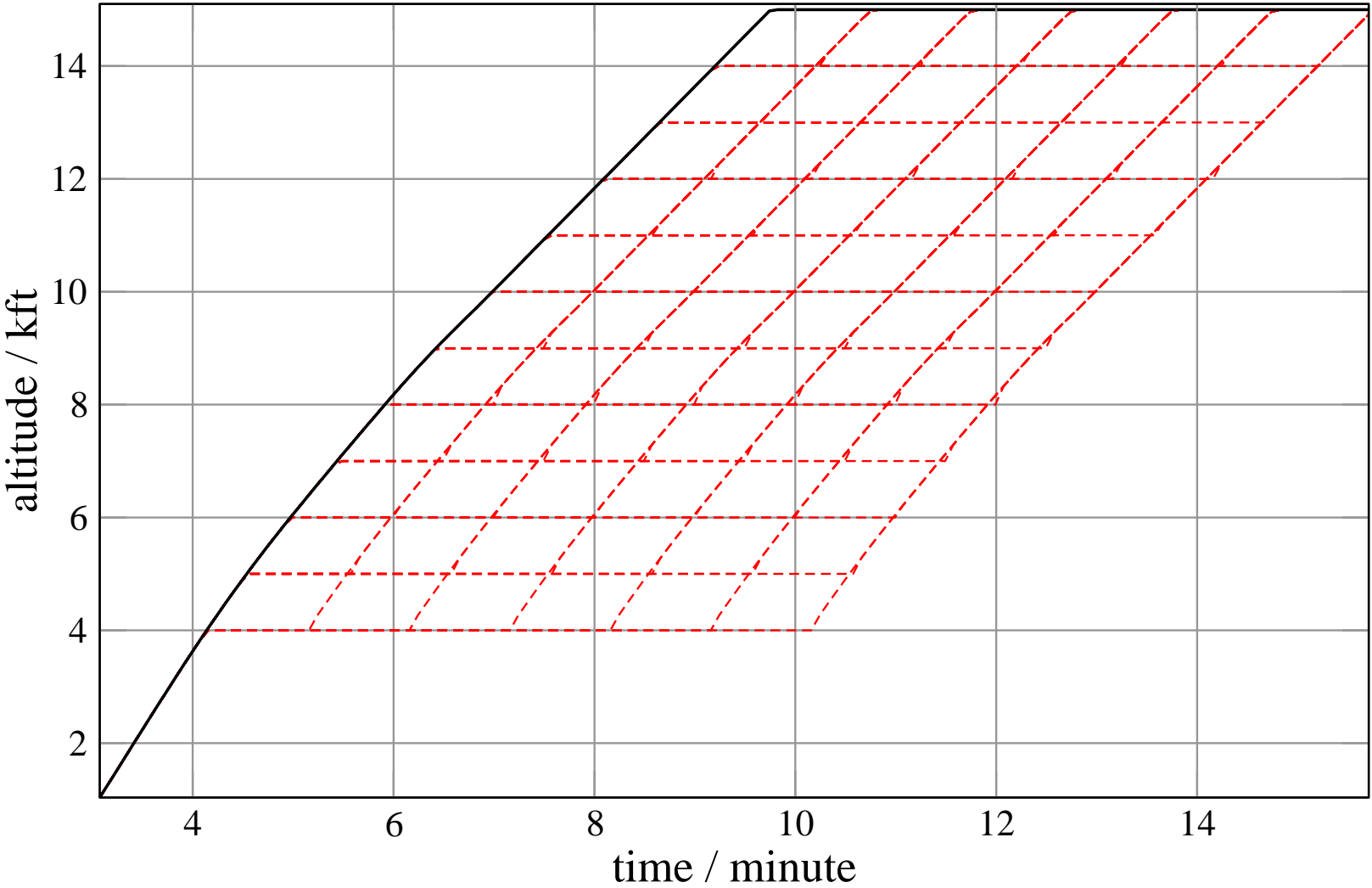
Altitude Profile

514 (E170 E DFW/17R Dep)



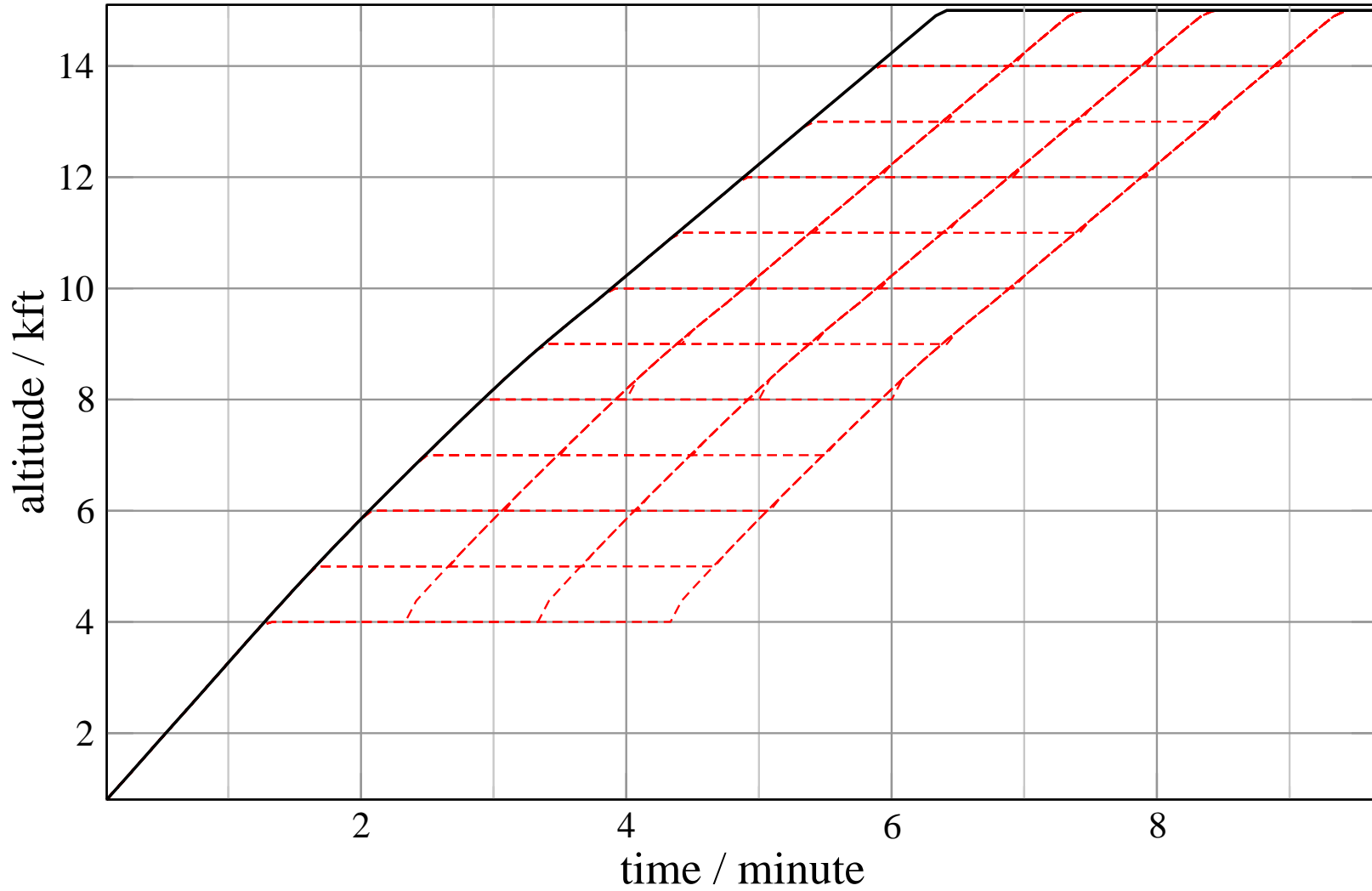
Altitude Profile

516 (E145 E DFW/18L Dep)



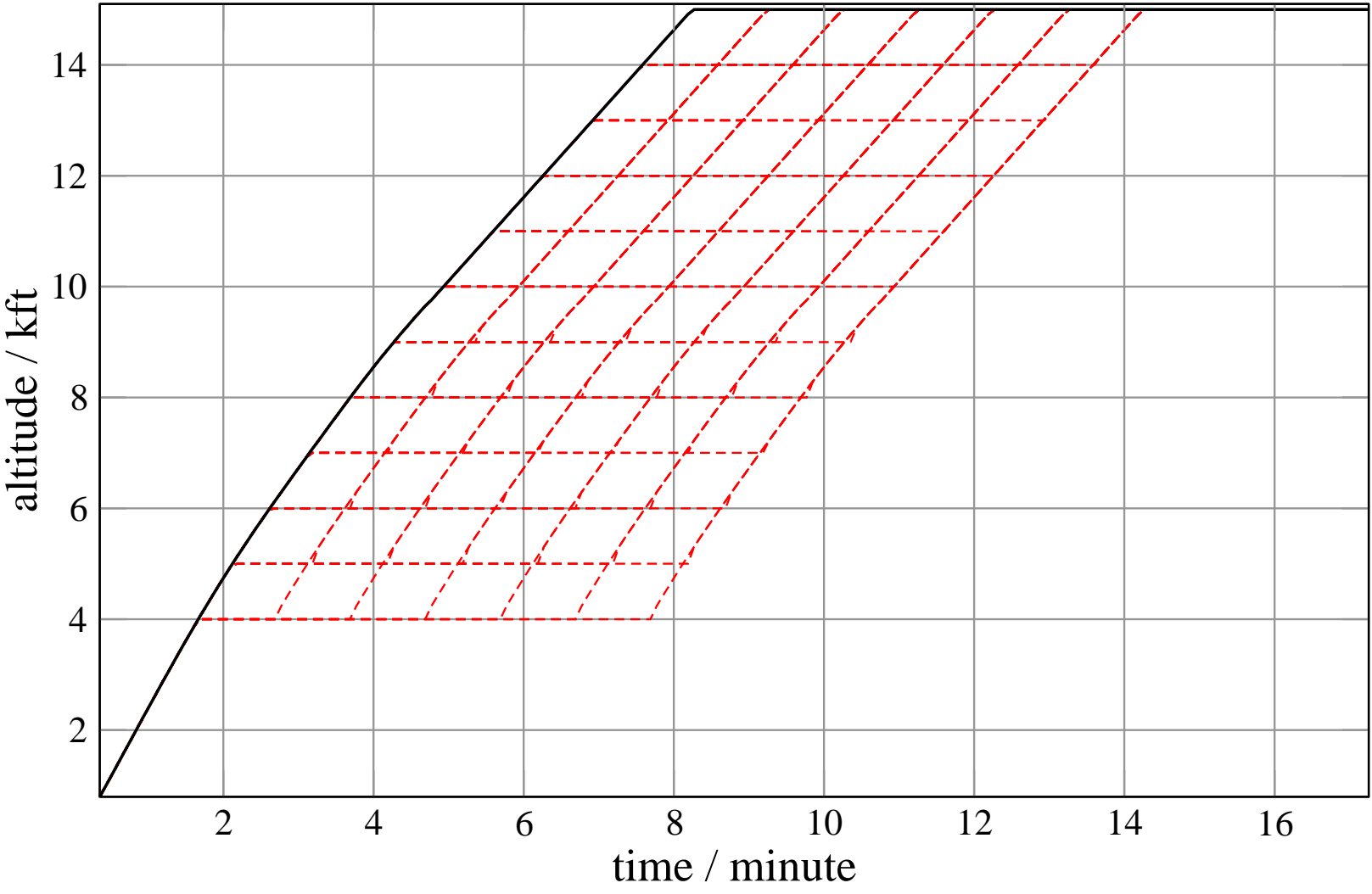
Altitude Profile

539 (MD82 D DFW/18L Dep)



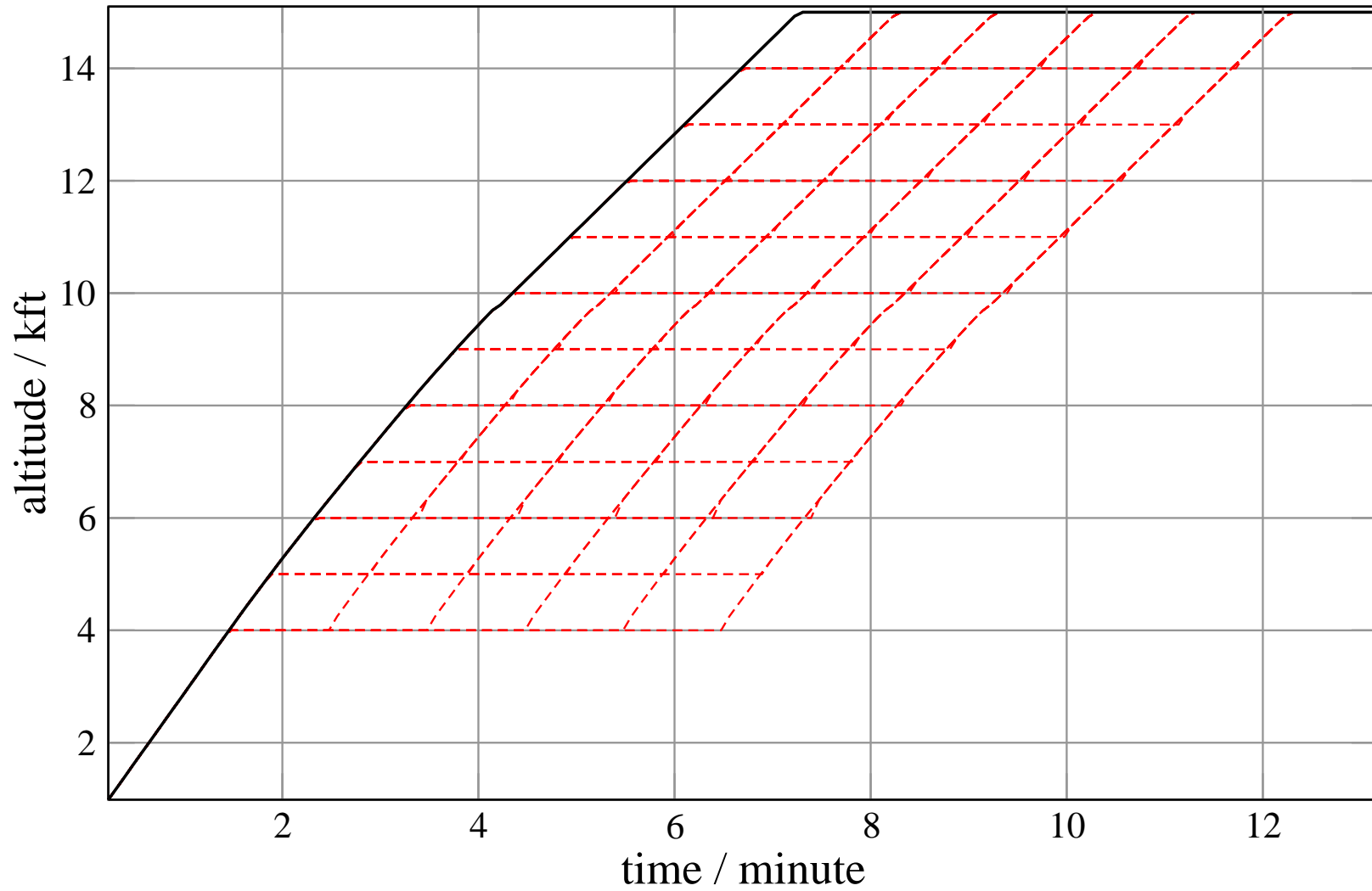
Altitude Profile

552 (E145 E DFW/18L Dep)



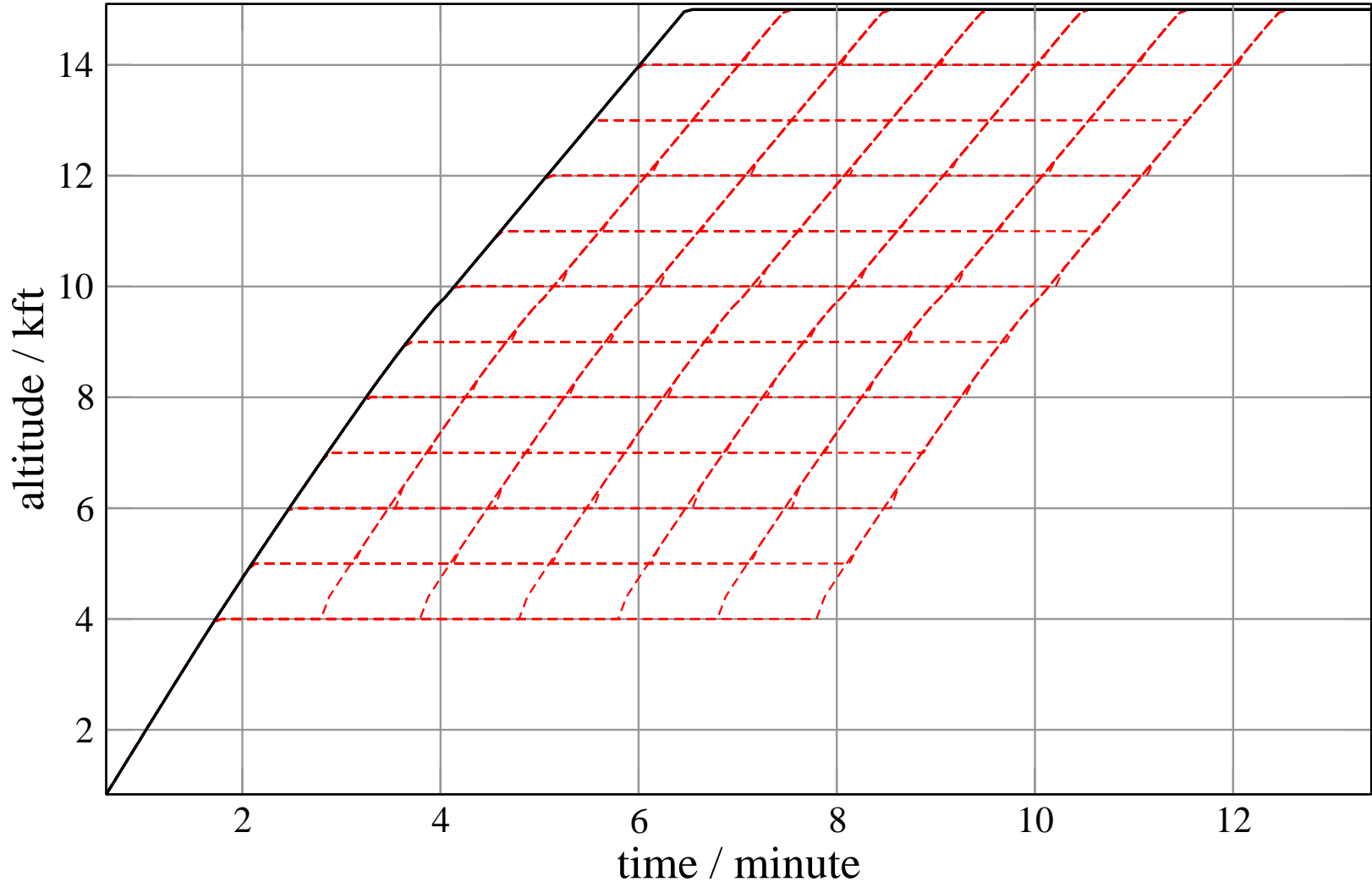
Altitude Profile

566 (CRJ7 E DFW/18L Dep)



Altitude Profile

617 (B744 B DFW/18L Dep)



Altitude Profile

892 (E135 E DFW/18L Dep)

