

Atmos 5300

Review, Dec 9, 2020

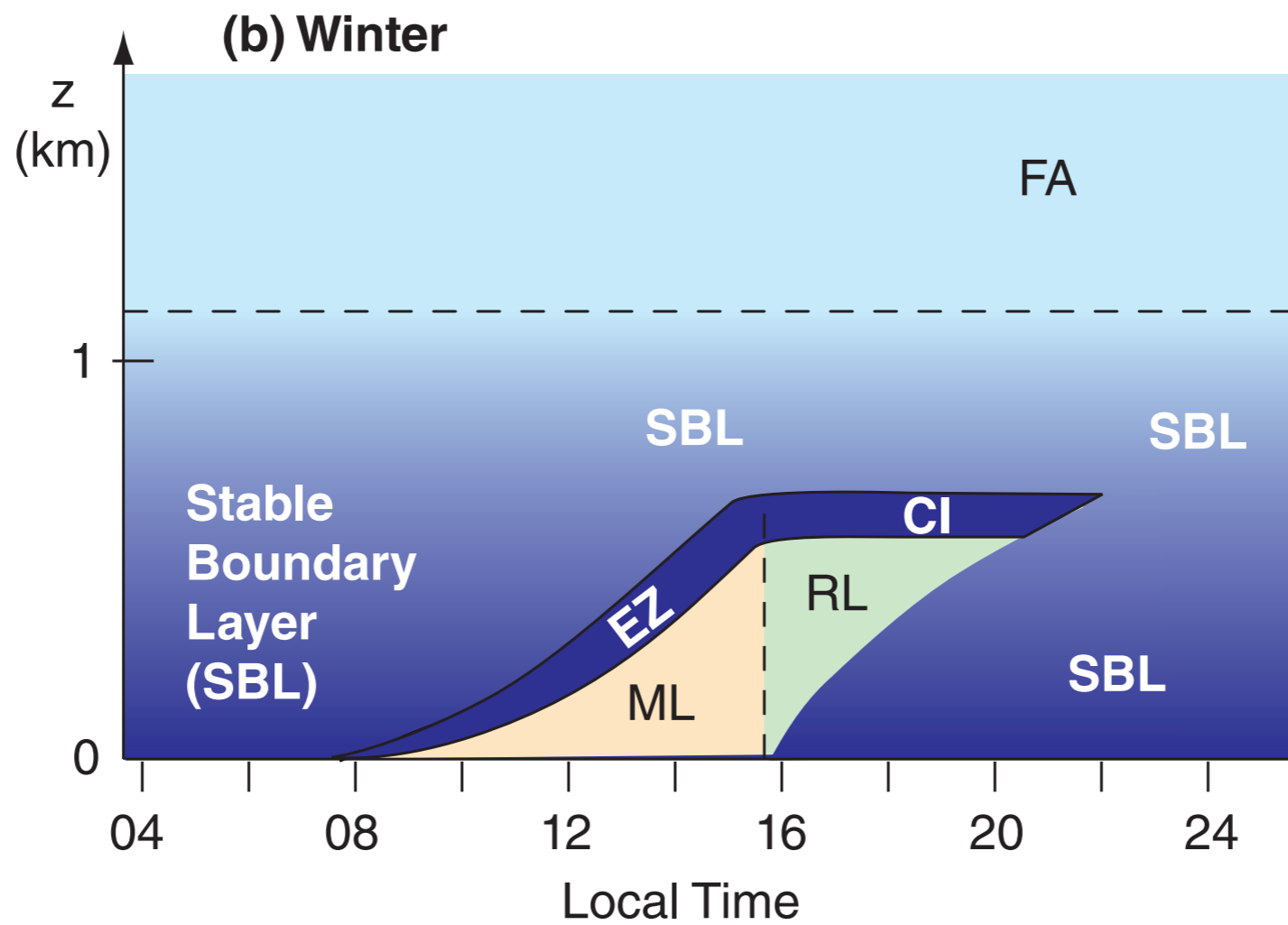
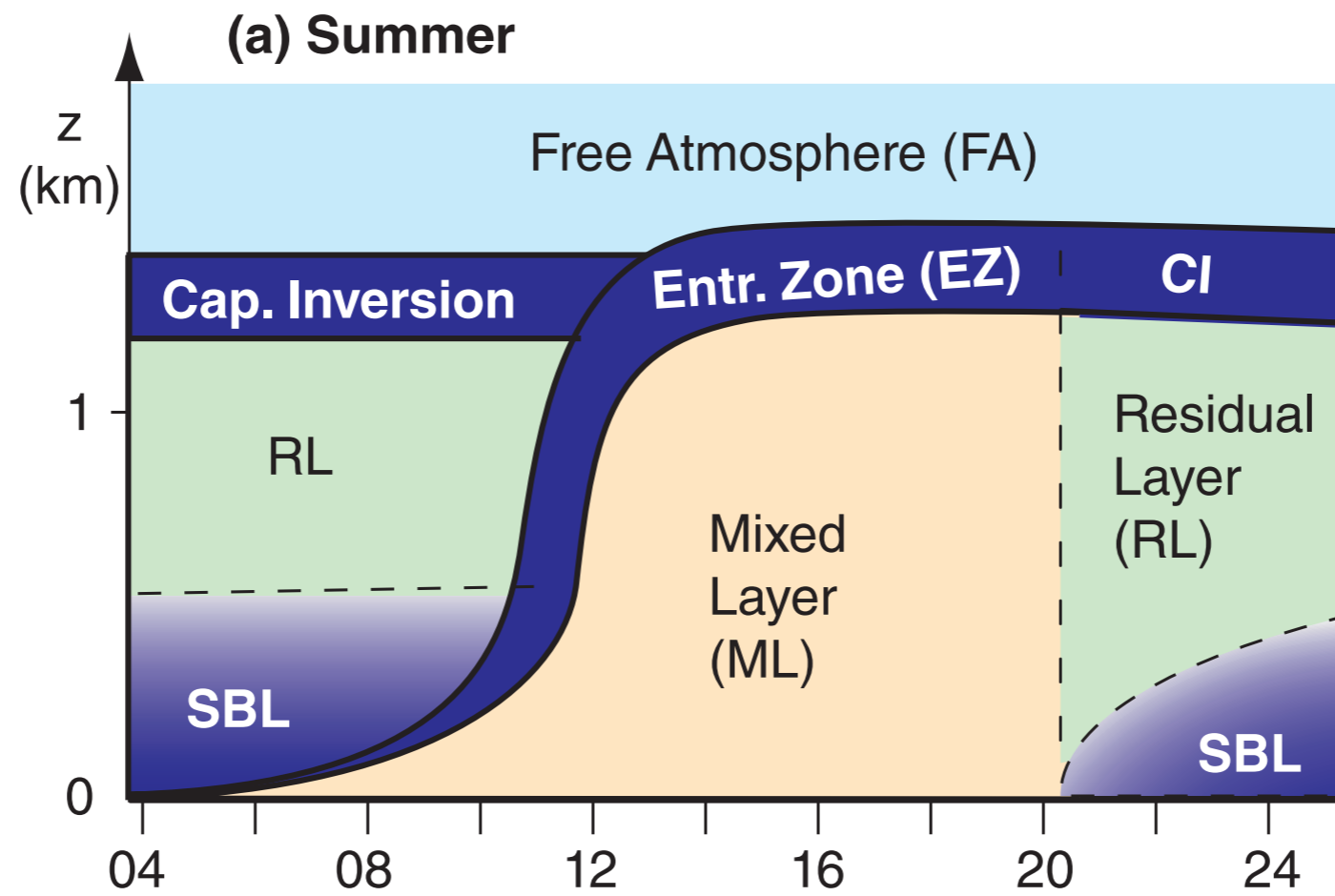
- Can you print a plot for the exam?
- You can each ask for one hint during the exam via private chat.

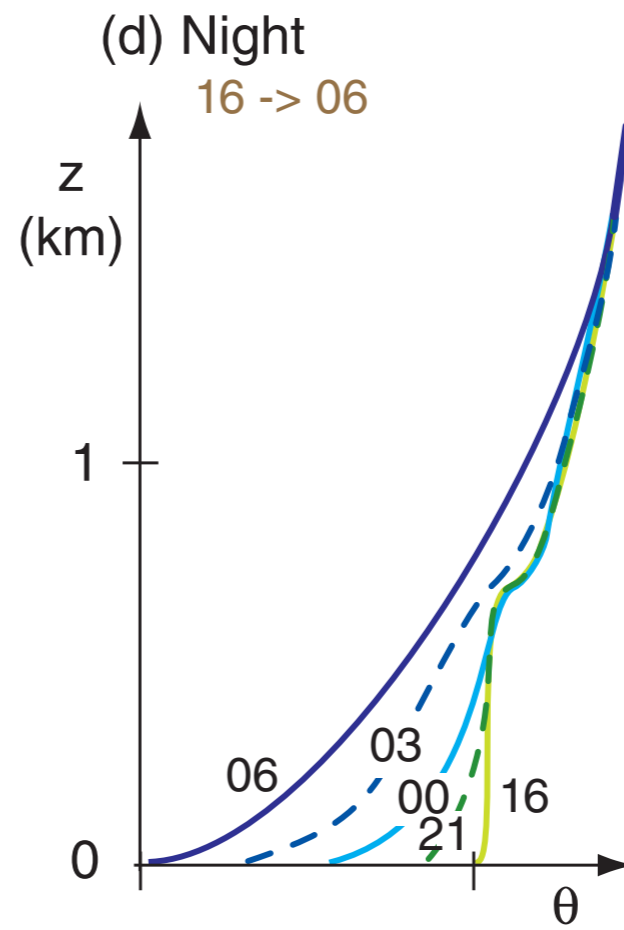
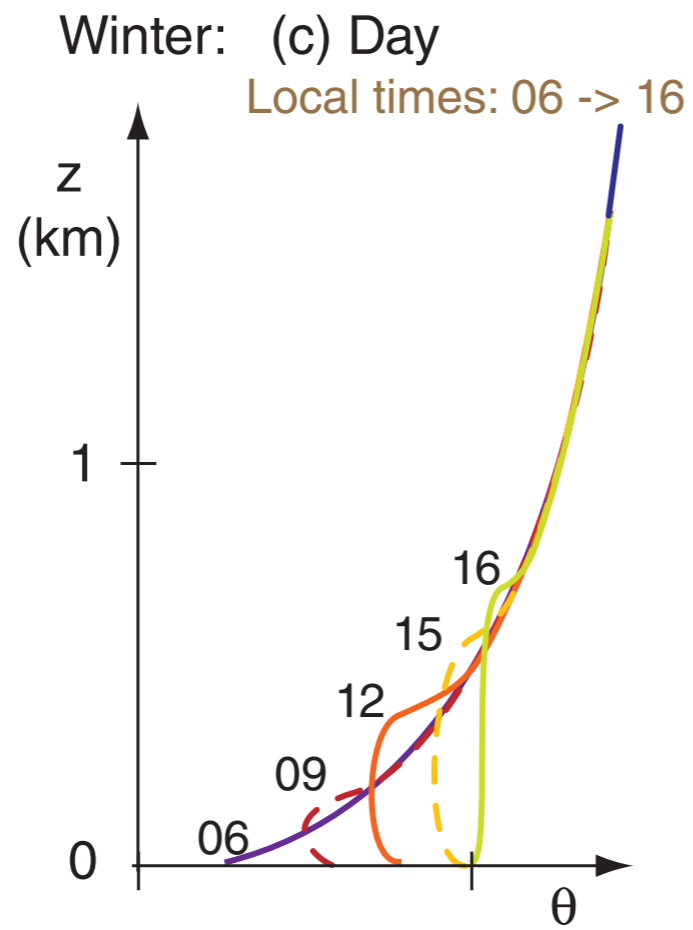
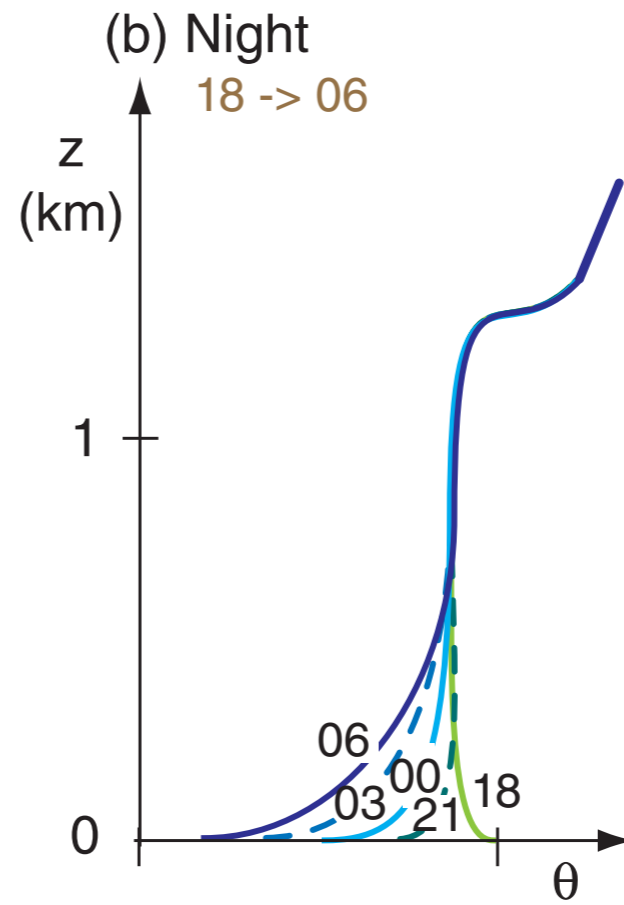
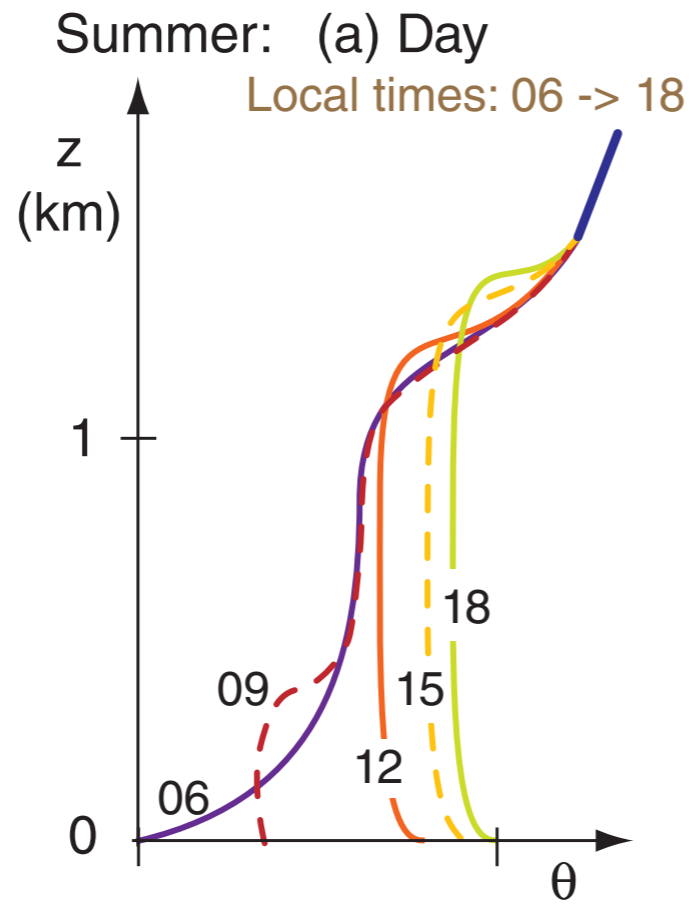
- **Winter time BL**

- Compare soundings and diurnal cycle SLC now vs Sep.
- What would happen with a snow covered valley?
- What happens if BL becomes cloud-capped?
- What does it take to ventilate the CAP?

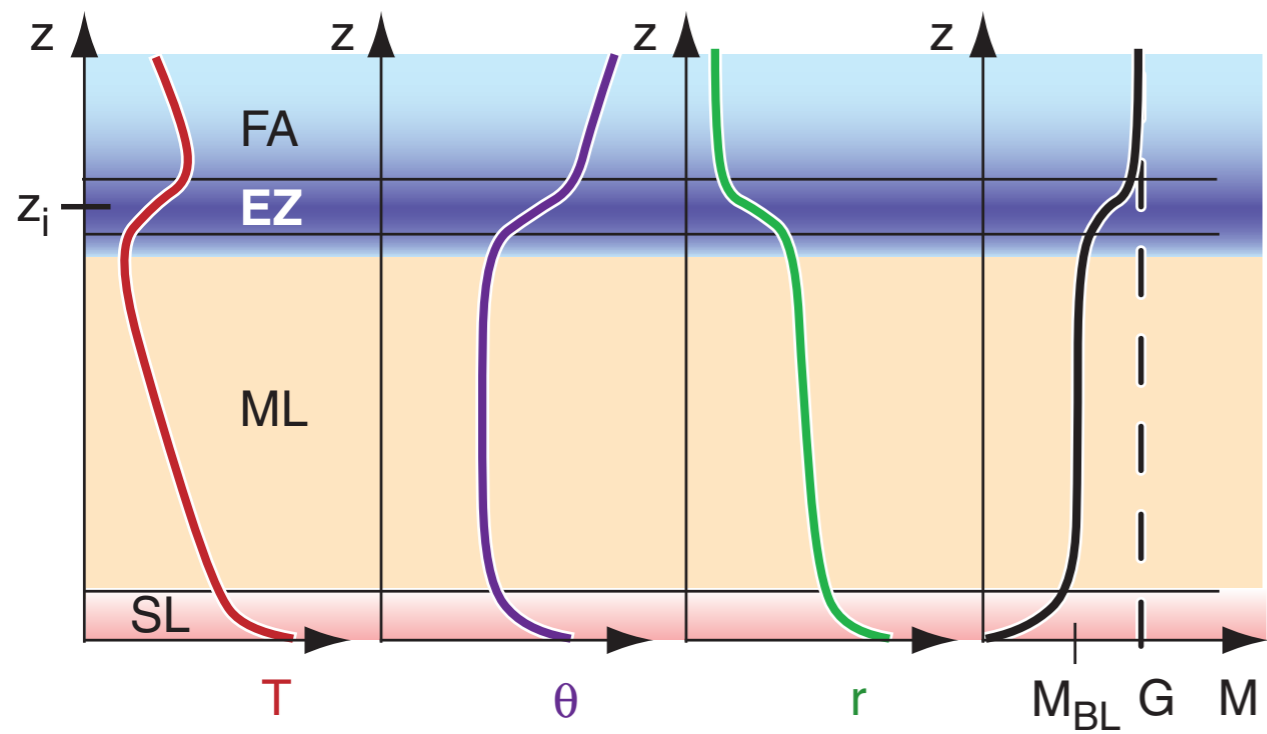
- **Surface layer wind profiles**

- How to determine z_0 ? What if SL is not neutral?
- How do variations in stability (and L) affect the profile?

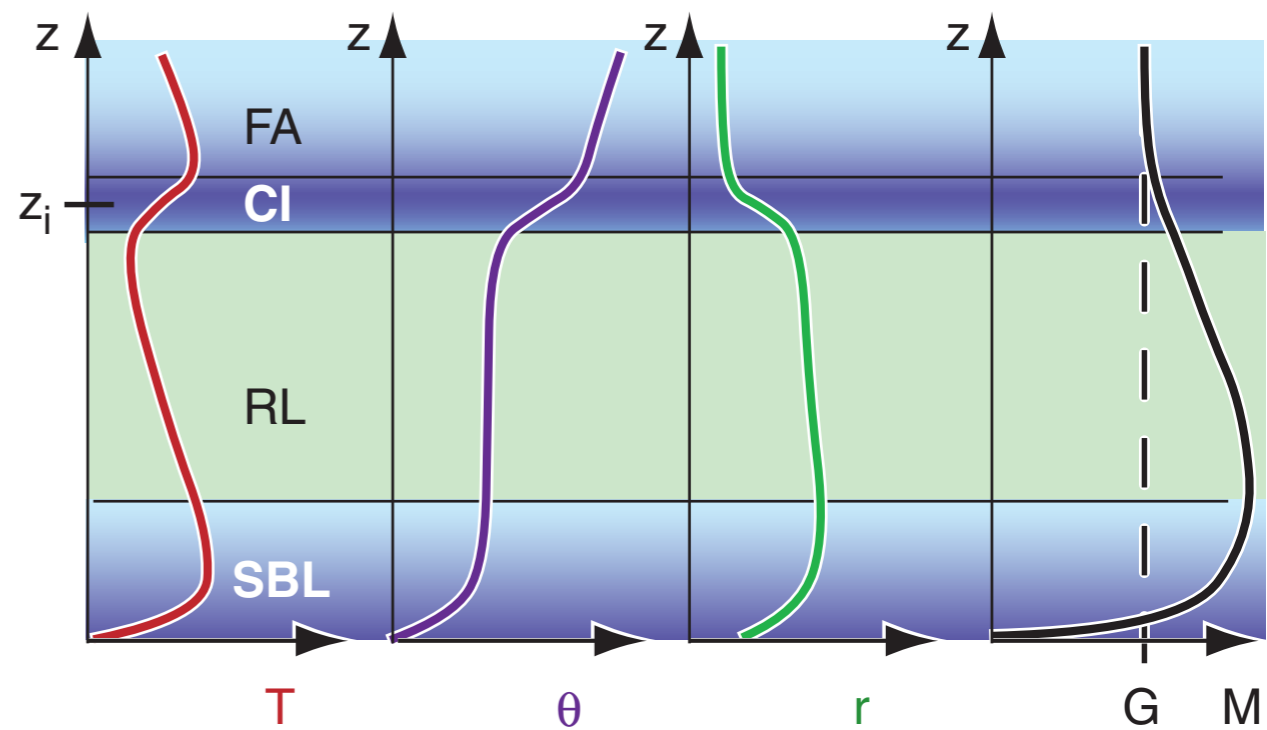




(a) DAY (3 PM)



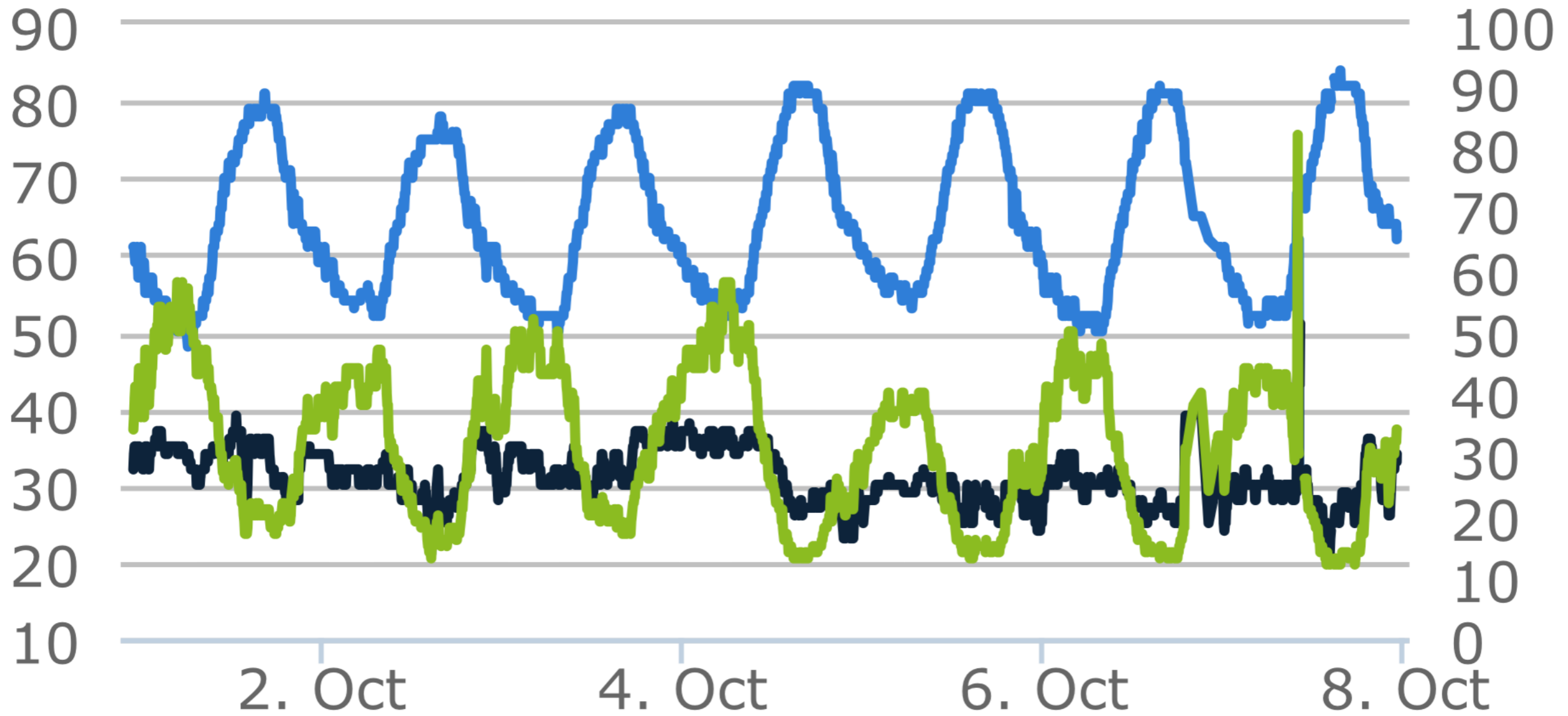
(b) NIGHT (3 AM)



Temperature, Dew Point & Humidity



Pinch the chart to zoom in

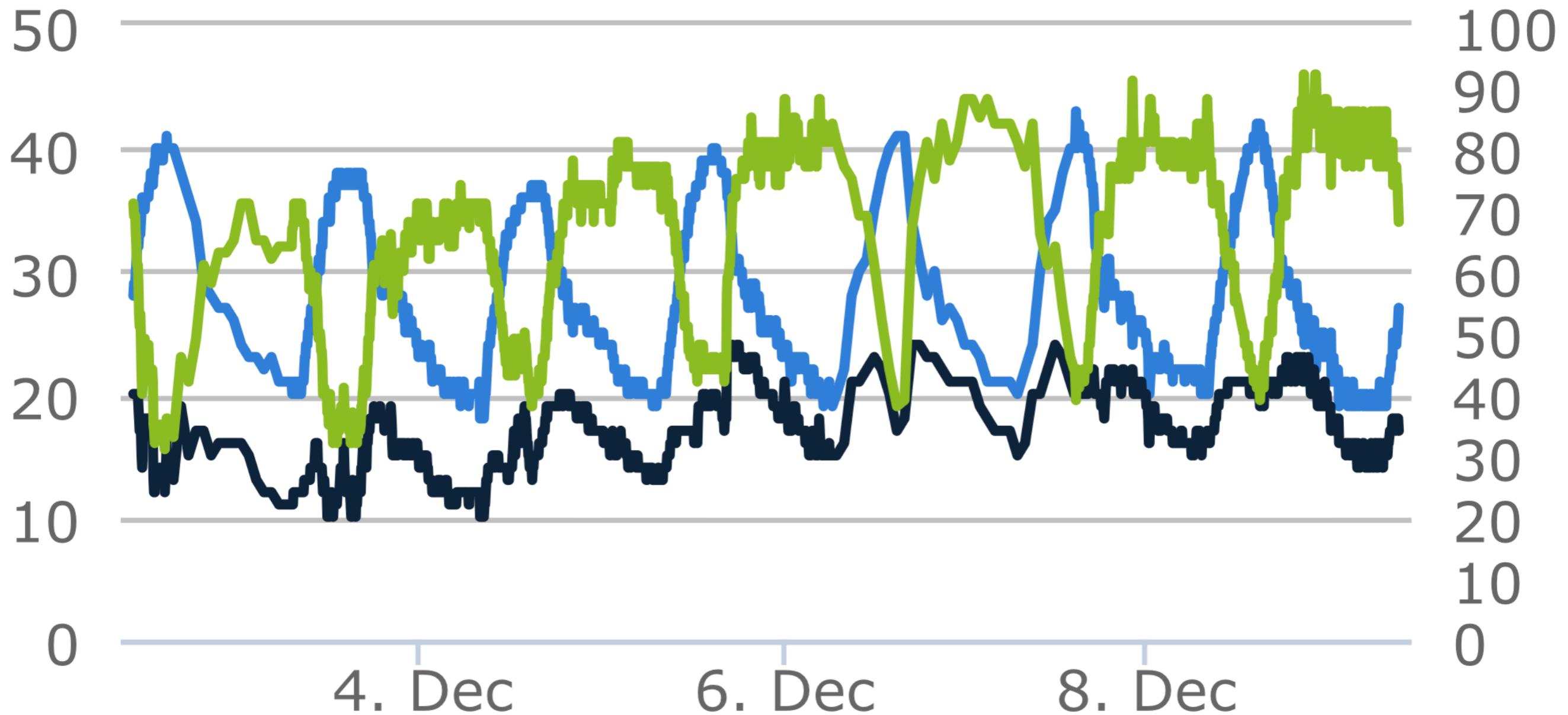


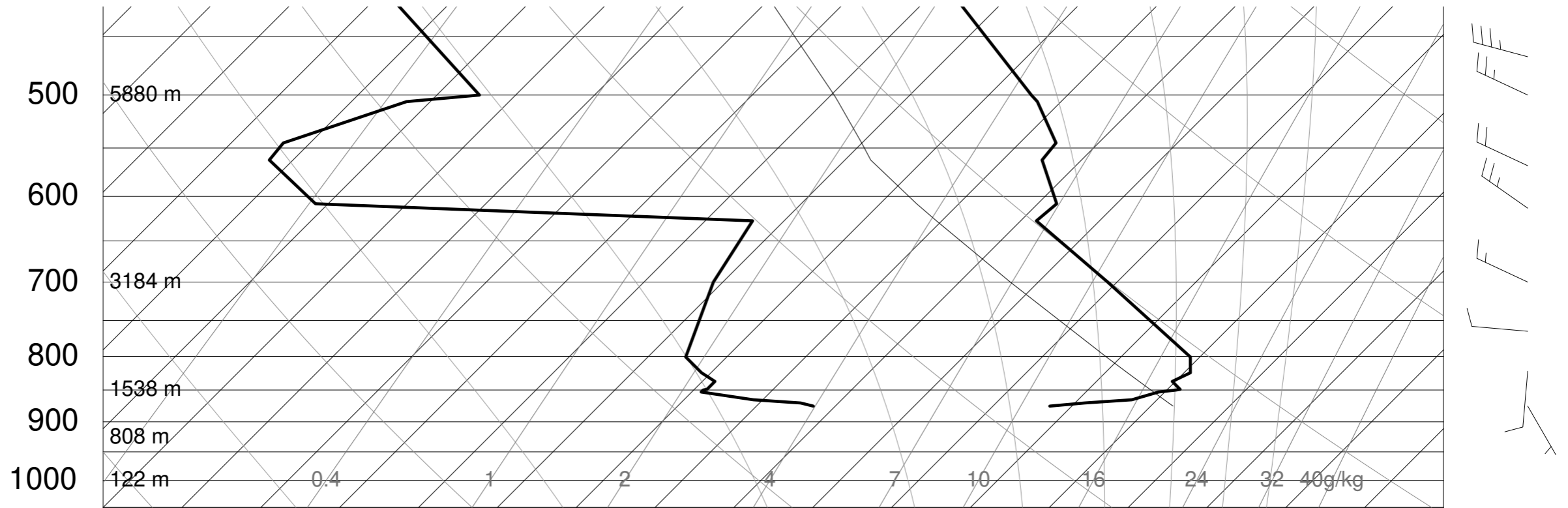
(Click to hide)

— Temperature — Dewpoint — Rel Humidity

Temperature, Dew Point & Humidity

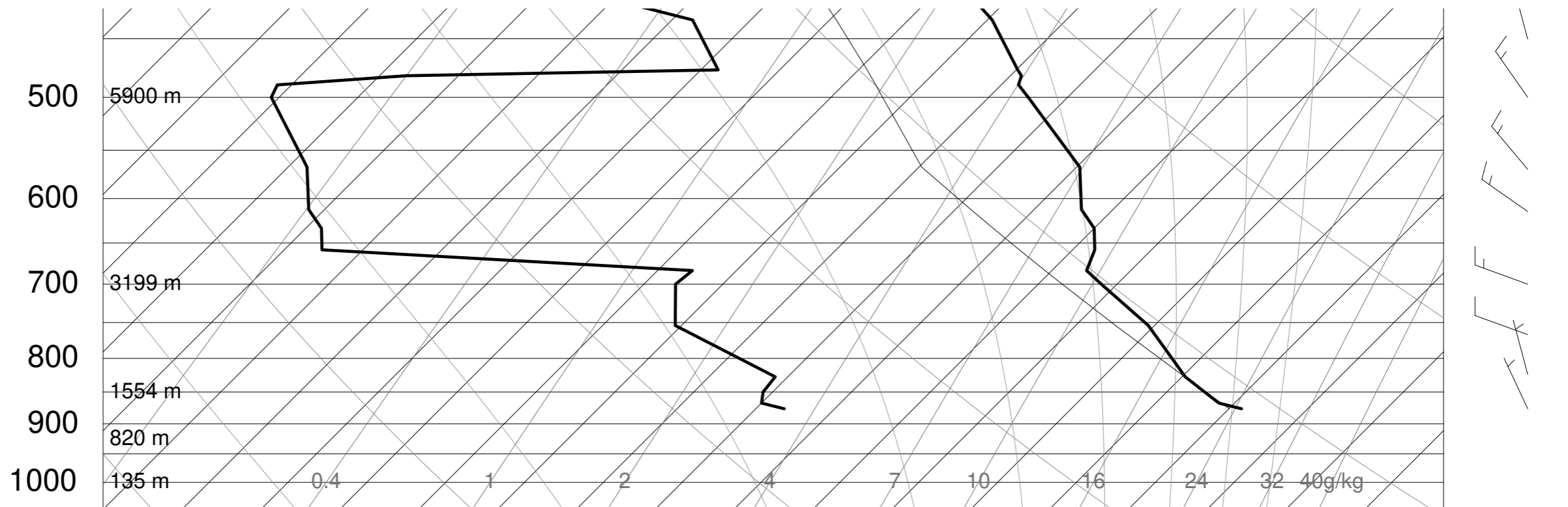
Pinch the chart to zoom in





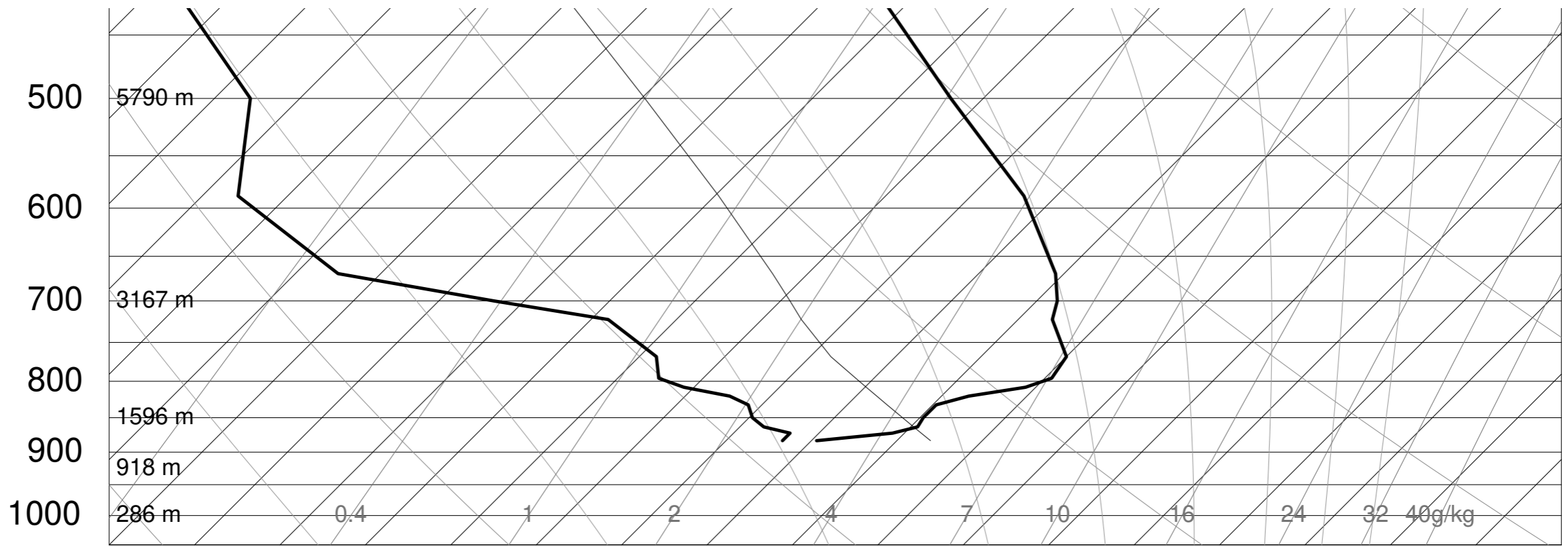
12Z 05 Oct 2020

University of Wyoming



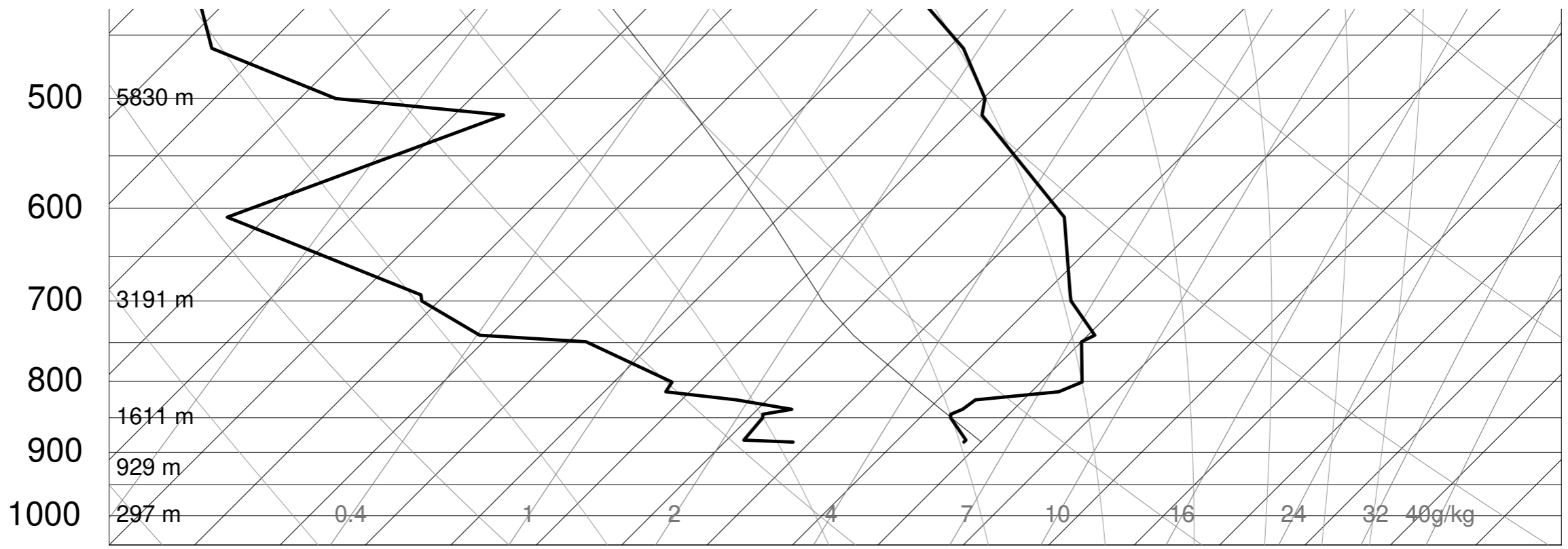
00Z 06 Oct 2020

University of Wyoming



12Z 07 Dec 2020

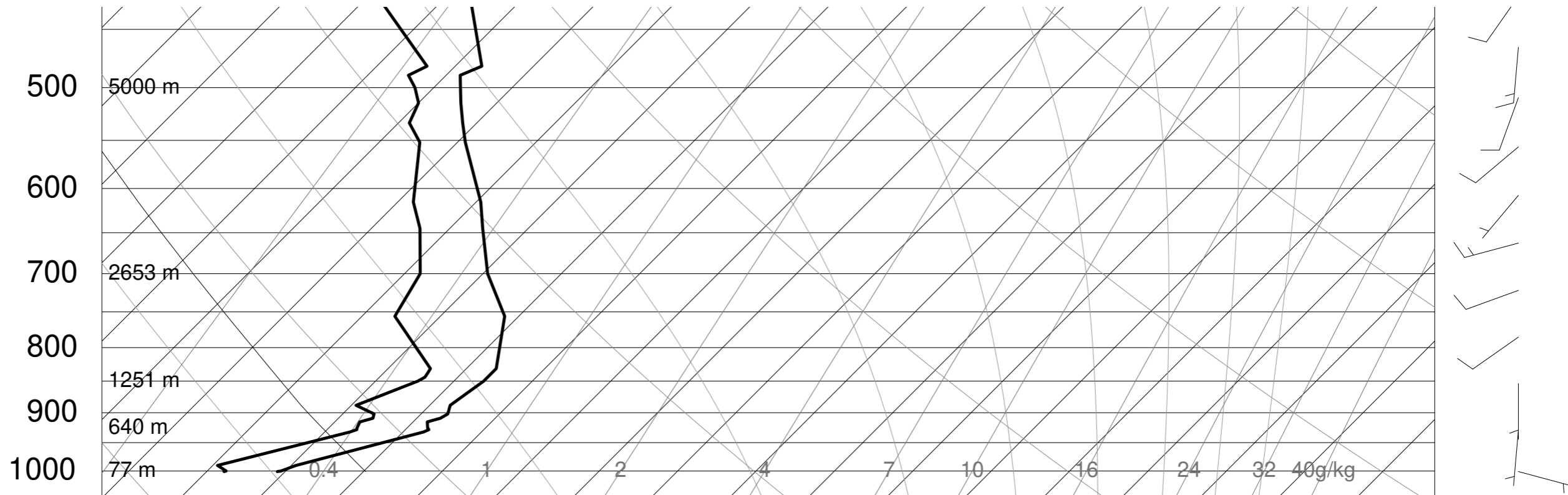
University of Wyoming



00Z 08 Dec 2020

University of Wyoming

Insert sequences of soundings here



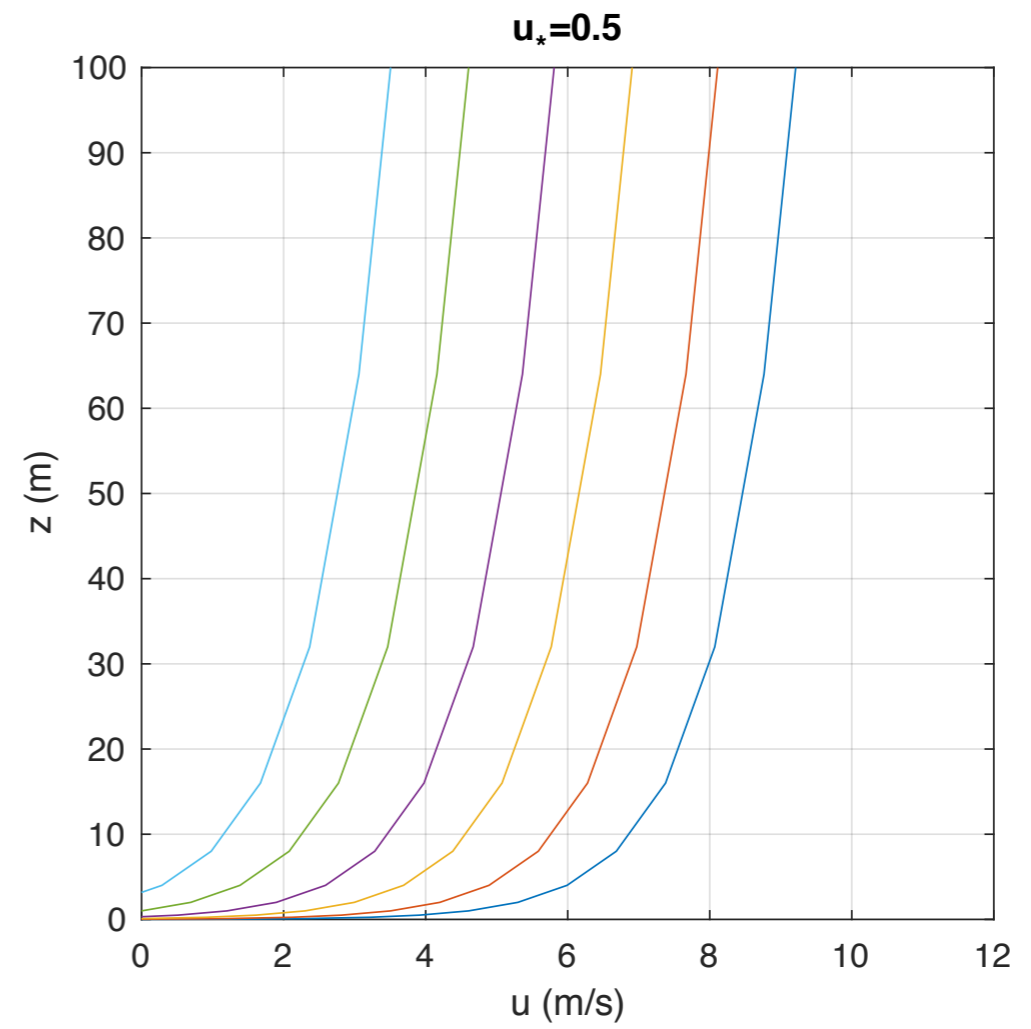
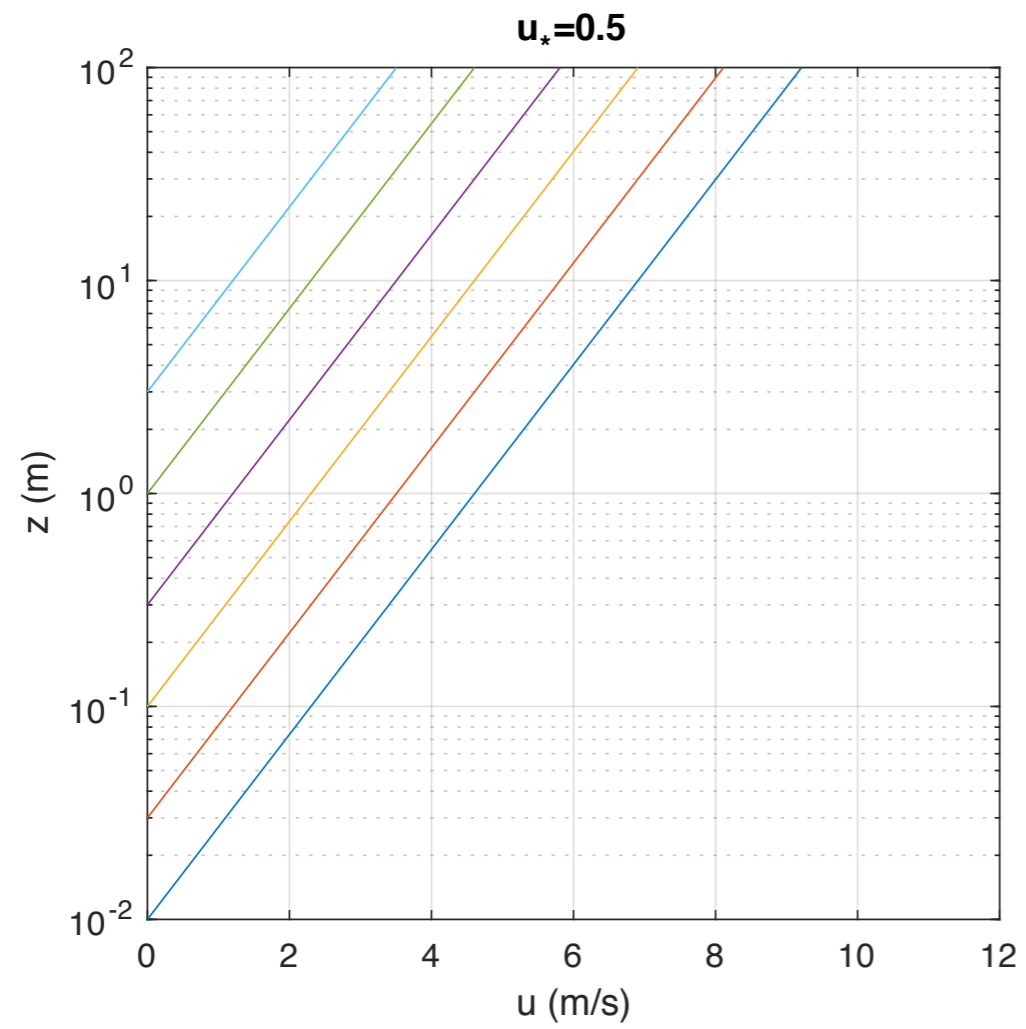
12Z 09 Dec 2020

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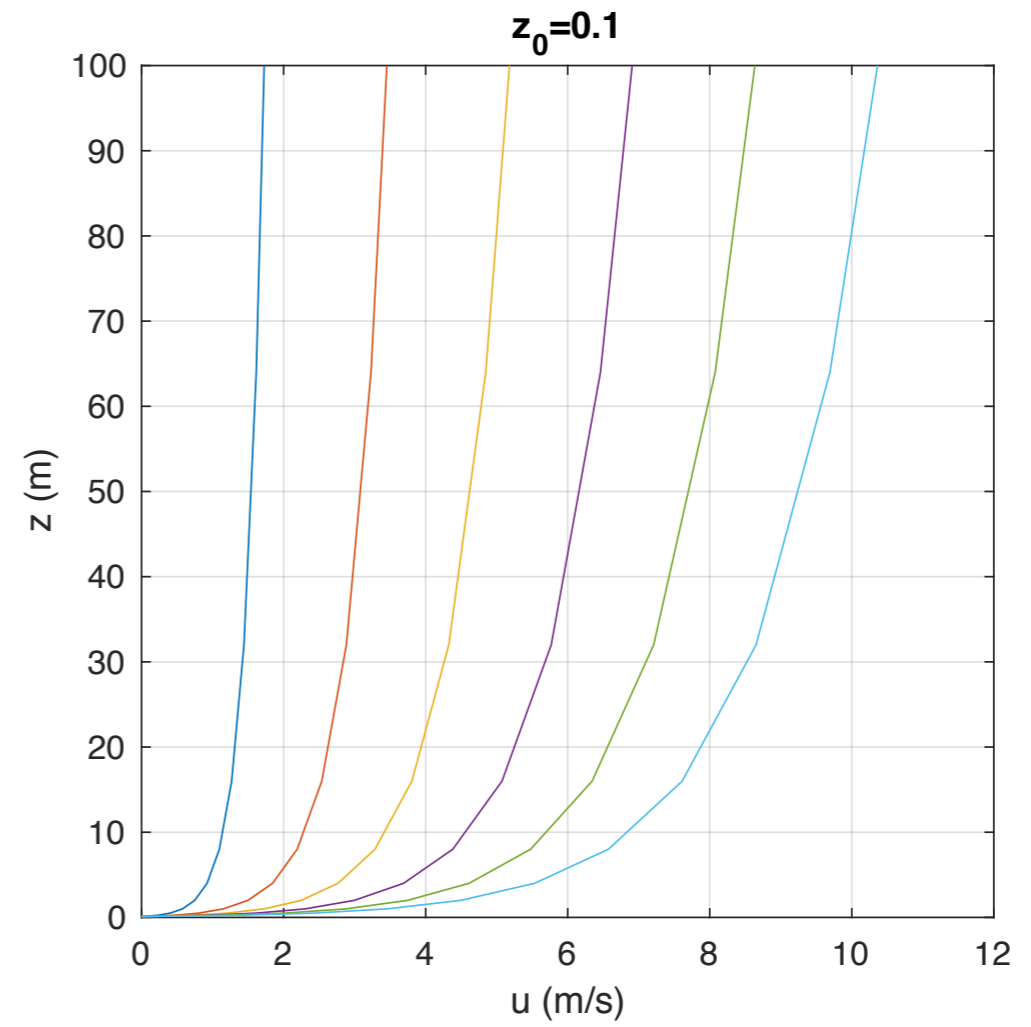
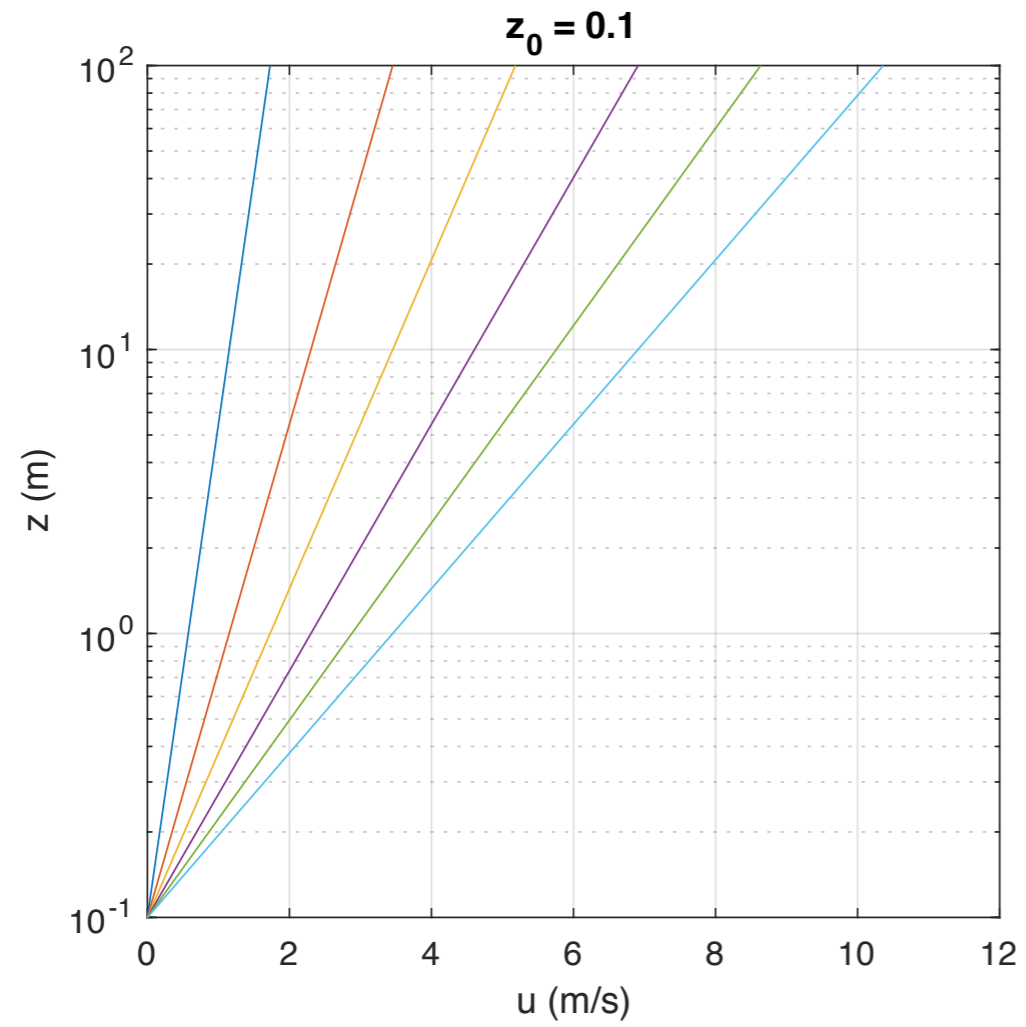
Insert wind profiles with different L , for same u^* and z_0

Insert wind profiles with different u^* , for same L and z_0

What parameter is different for each profile?

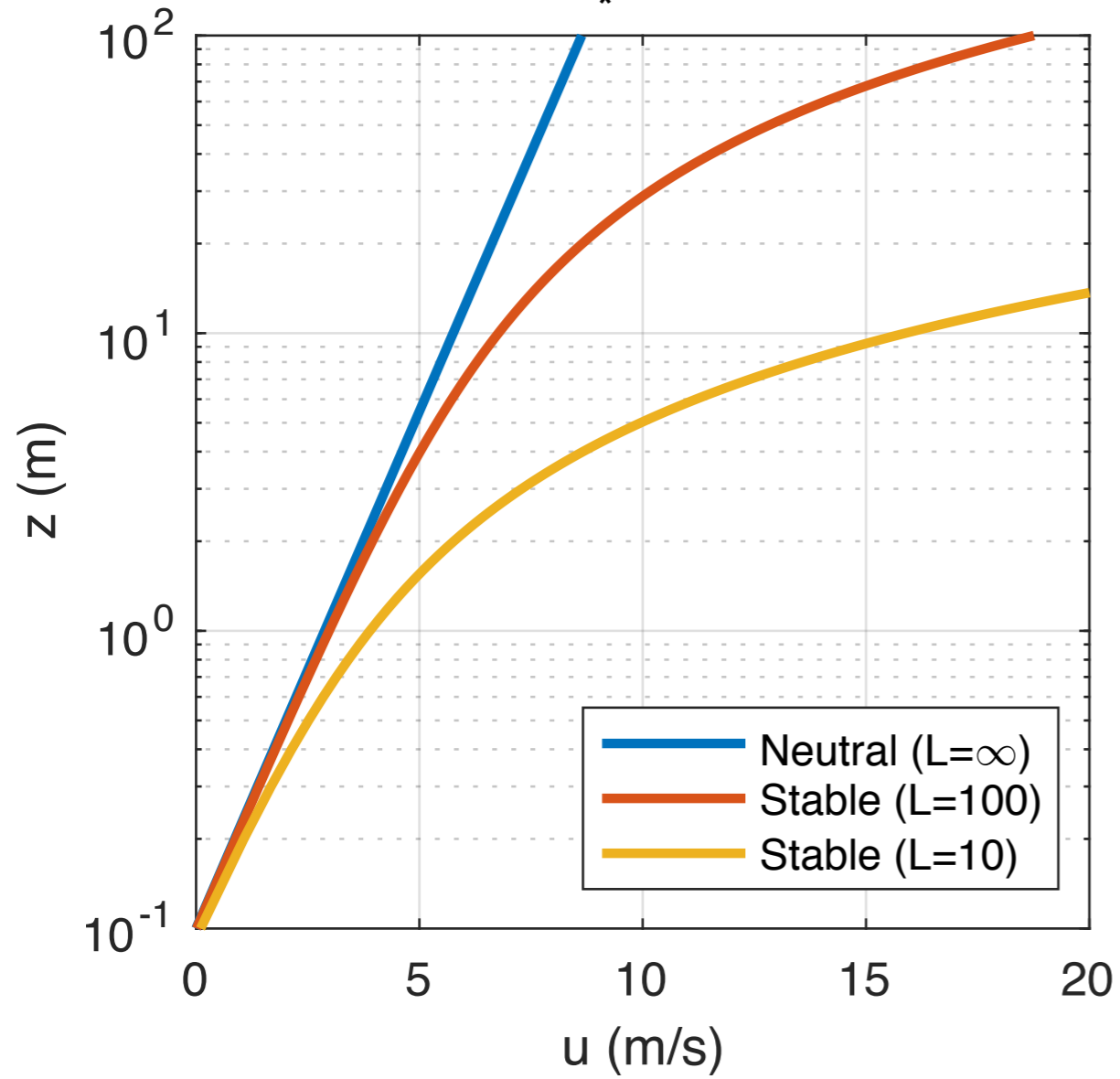


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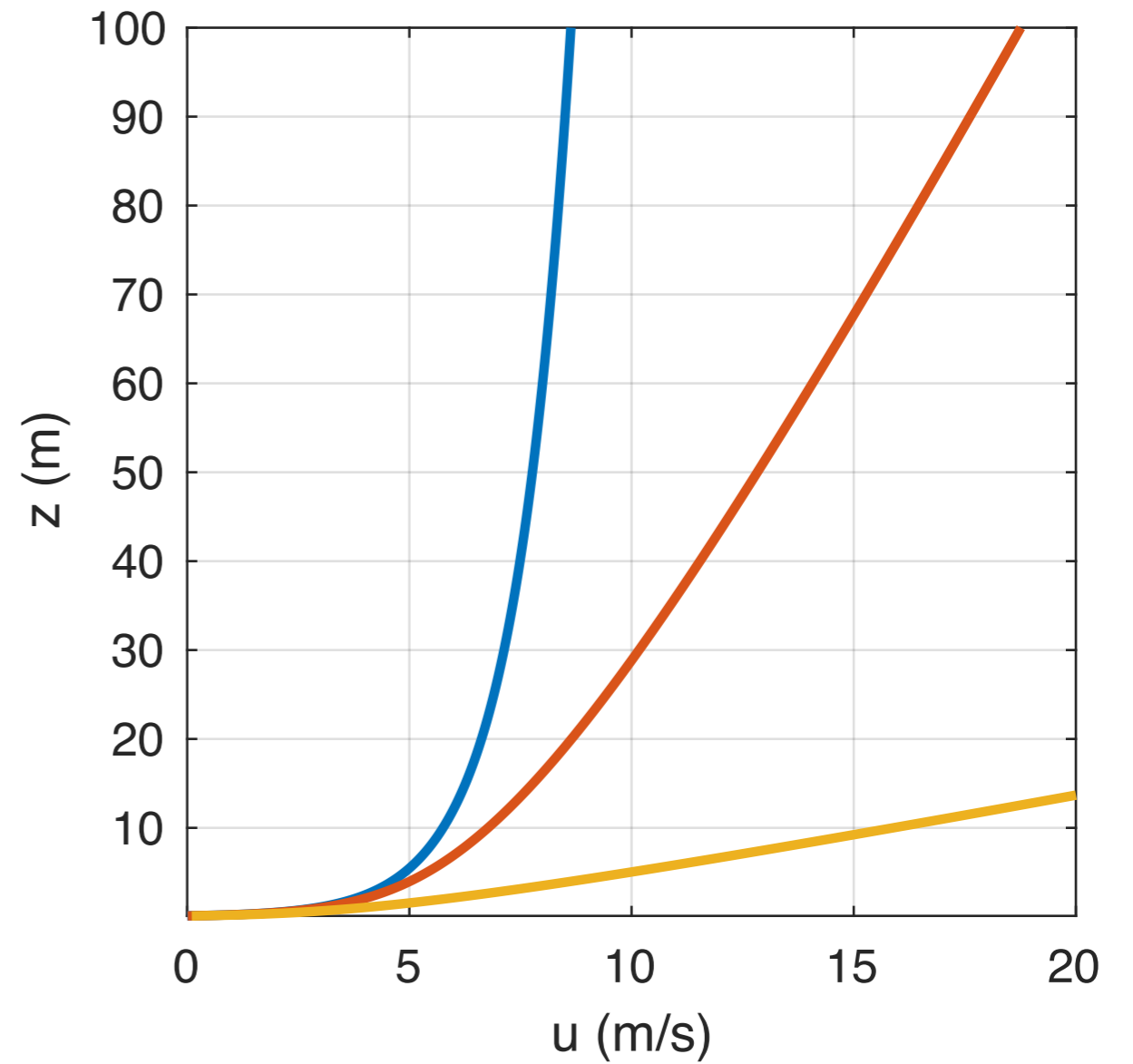


What parameter is different for each profile?

$u_* = 0.5$

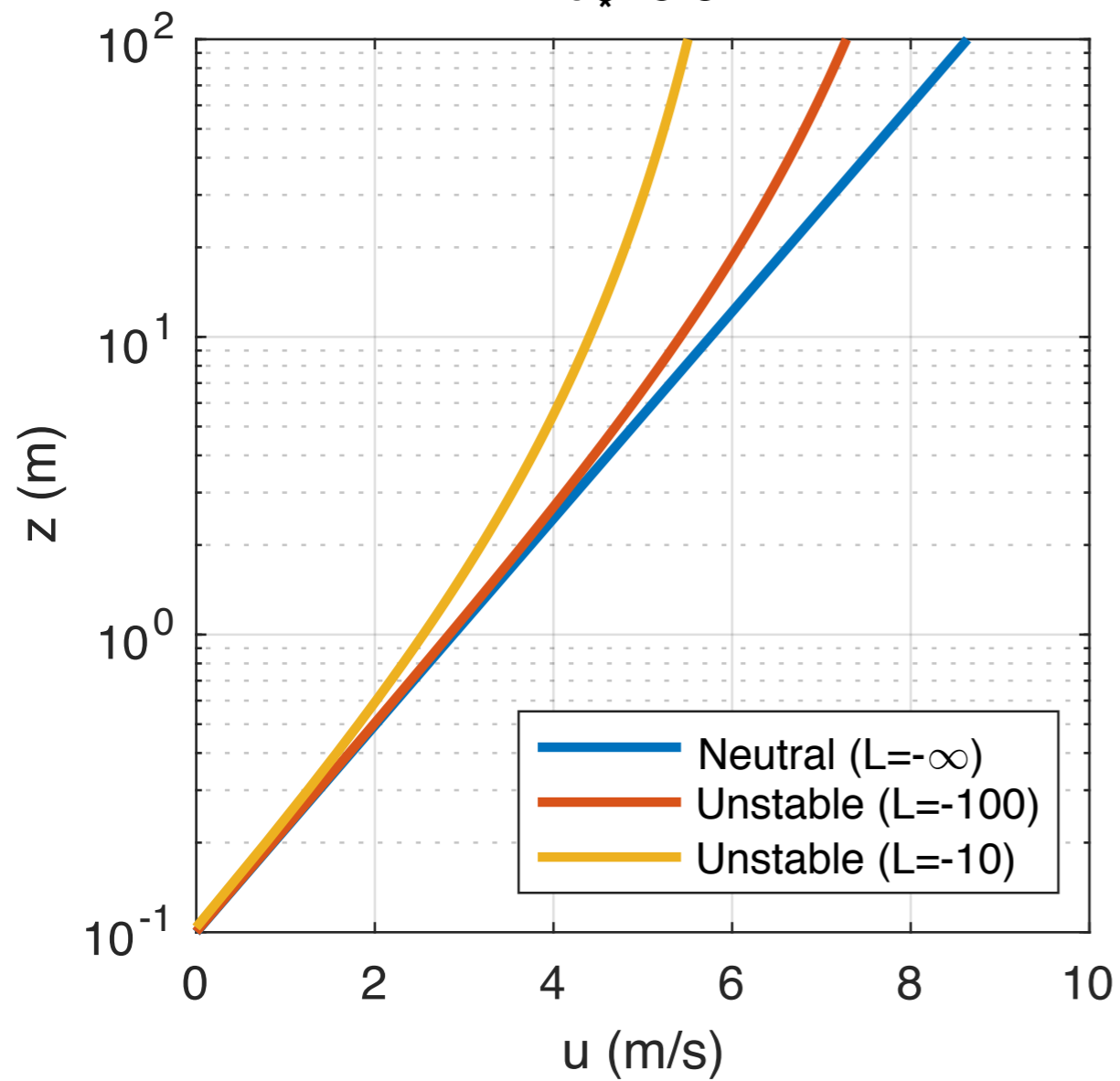


$u_* = 0.5$



What parameter is different for each profile?

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