

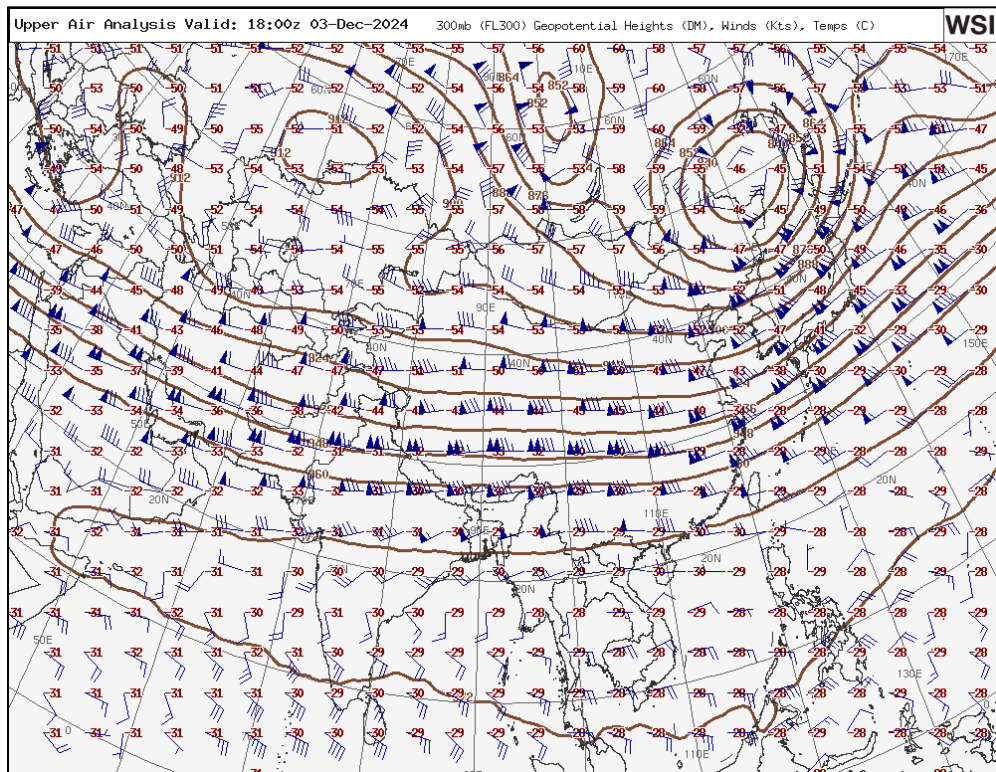
UAL152 LAX-HKG 03DEC2024

INFORMATION PROVIDED BY UNITED

Flight Number	UAL152
Date	03DEC2024
Time	2230 UTC
Aircraft Type	B789
City Pairs	LAX - HKG
Location	~60nm E of HKG
Description	TB encounter within descent resulting in FA injury
Flight Level	~FL100

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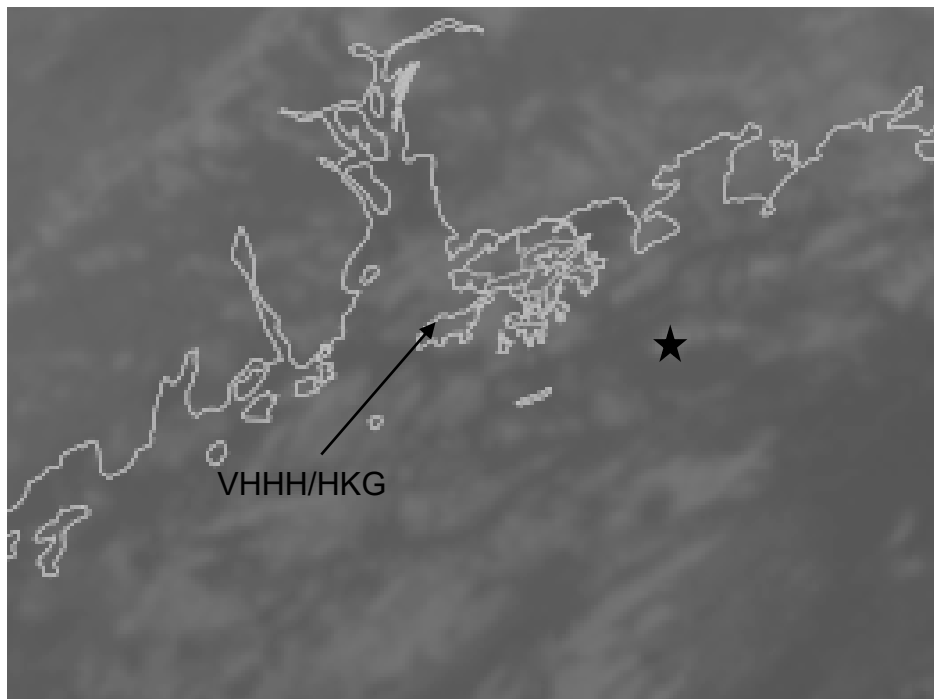
Upper-Level Winds (FL300) Valid 18z Dec 3rd



- 300mb chart depicts zonal flow over S Asia, with ridging extending over SE Asia and S/SE China
- Significant weather features were absent over SE China/Hong Kong

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Himawari-9 IR Satellite Imagery Valid 2230z Dec 3rd



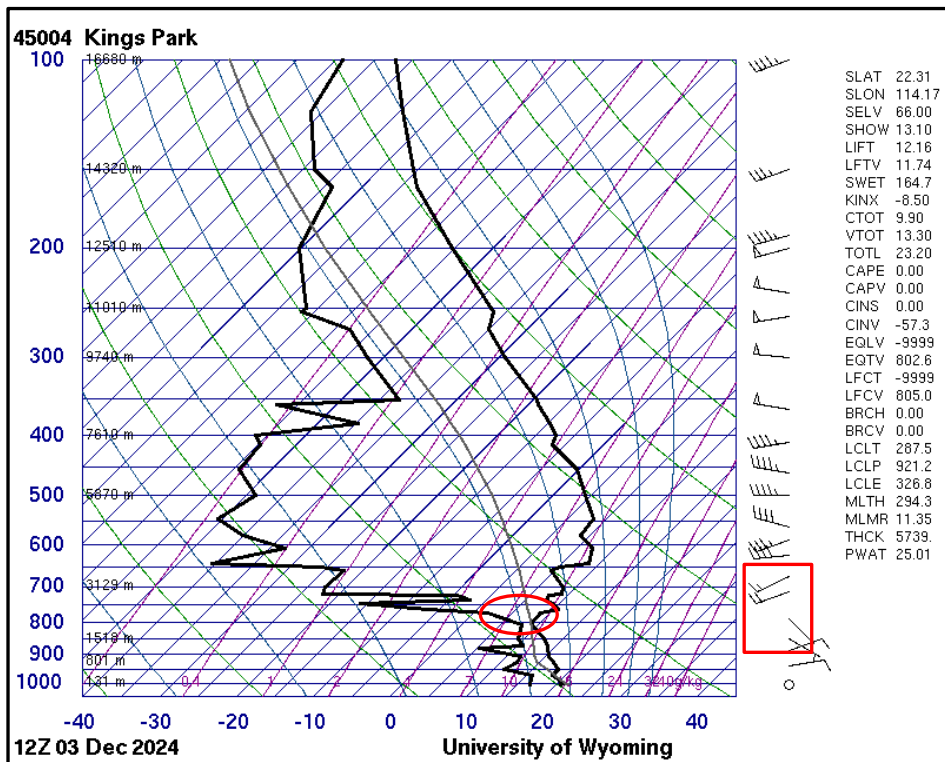
▼ METARs

VHHH	032100Z	07007KT	9999	FEW028	22/16	Q1016	NOSIG
VHHH	032130Z	09007KT	9999	FEW028	22/16	Q1016	NOSIG
VHHH	032200Z	09007KT	9999	FEW028	22/16	Q1016	NOSIG
VHHH	032230Z	08009KT	9999	FEW028	22/16	Q1016	NOSIG
VHHH	032300Z	09008KT	9999	FEW030	22/16	Q1016	NOSIG
VHHH	032330Z	08010KT	9999	FEW030	22/16	Q1017	NOSIG

- 03/2230z IR satellite imagery depicts areas of FEW to SCT cloud cover over and surrounding HKG
- Incident location 22.2N/114.7E (black star)

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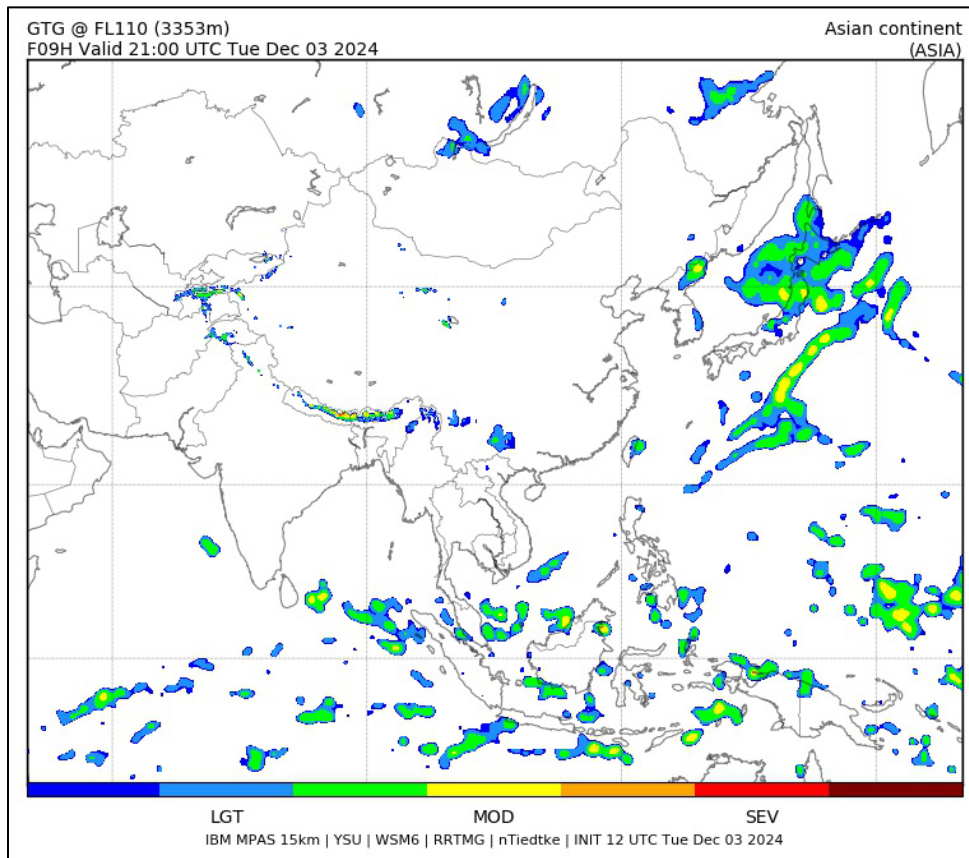
Kings Park (Hong Kong) Observed Sounding Valid 12z Dec 3rd



- Weak, low-level inversion, along with a stronger inversion at 800mb, confined cloud tops below FL100
- Notable decrease in humidity (circled in red) between 750mb and 800mb; shows strong density gradient
- Sounding data depicts weak vertical shear (within red rectangle) between 700mb and 800mb

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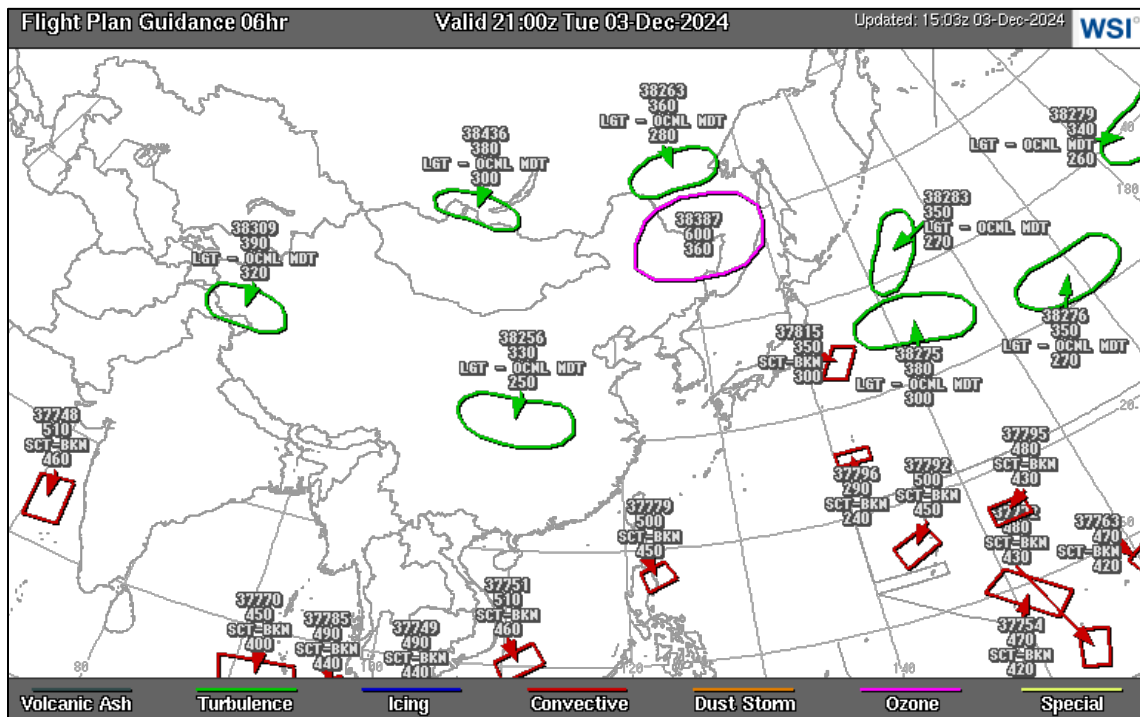
MPAS GTG Forecast @ FL110 Valid 21z Dec 3rd



- FL110 MPAS GTG data did not forecast TB over SE China/Hong Kong
- Absence of TB over SE China/Hong Kong corresponded to the lack of weather features present at the time of the incident

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Planning Stage FPGs Valid 21z Dec 3rd



- The Weather Company did not include TB nor convective FPGs over SE China/Hong Kong due to the lack of large-scale weather features

Weather Summary

- Large-scale weather pattern was not active across SE China/Hong Kong on December 3rd
- Satellite and METAR data indicated the presence of low-level cloud cover over and E of HKG, with tops below FL100
- Sounding data revealed a sharp decrease in humidity/strong density gradient near FL100 prior to the event, along with weak vertical shear
- Strong density gradient likely caused TB within the descent