

Meteorology – what will you expect?



General meteorology

Synoptic meteorology

Wetter systems, Fronts, ...

**Weather info
for Pilots**

Climatology

**Aviation weather
(„Hazards“)**

Altimetry

barometric altitu
measureme

Wind

General Meteorology

The atmosphere (layers, constituents)

Meteorological variables

Temperature, pressure, humidity

Energy budget and radiation

ICAO Standard atmosphere

Static Stability

Clouds and precipitation

First introduction into Wind

Aviation weather

„Hazards“

Aircraft icing

Thunderstorms

Wind shear, turbulence

Tornadoes

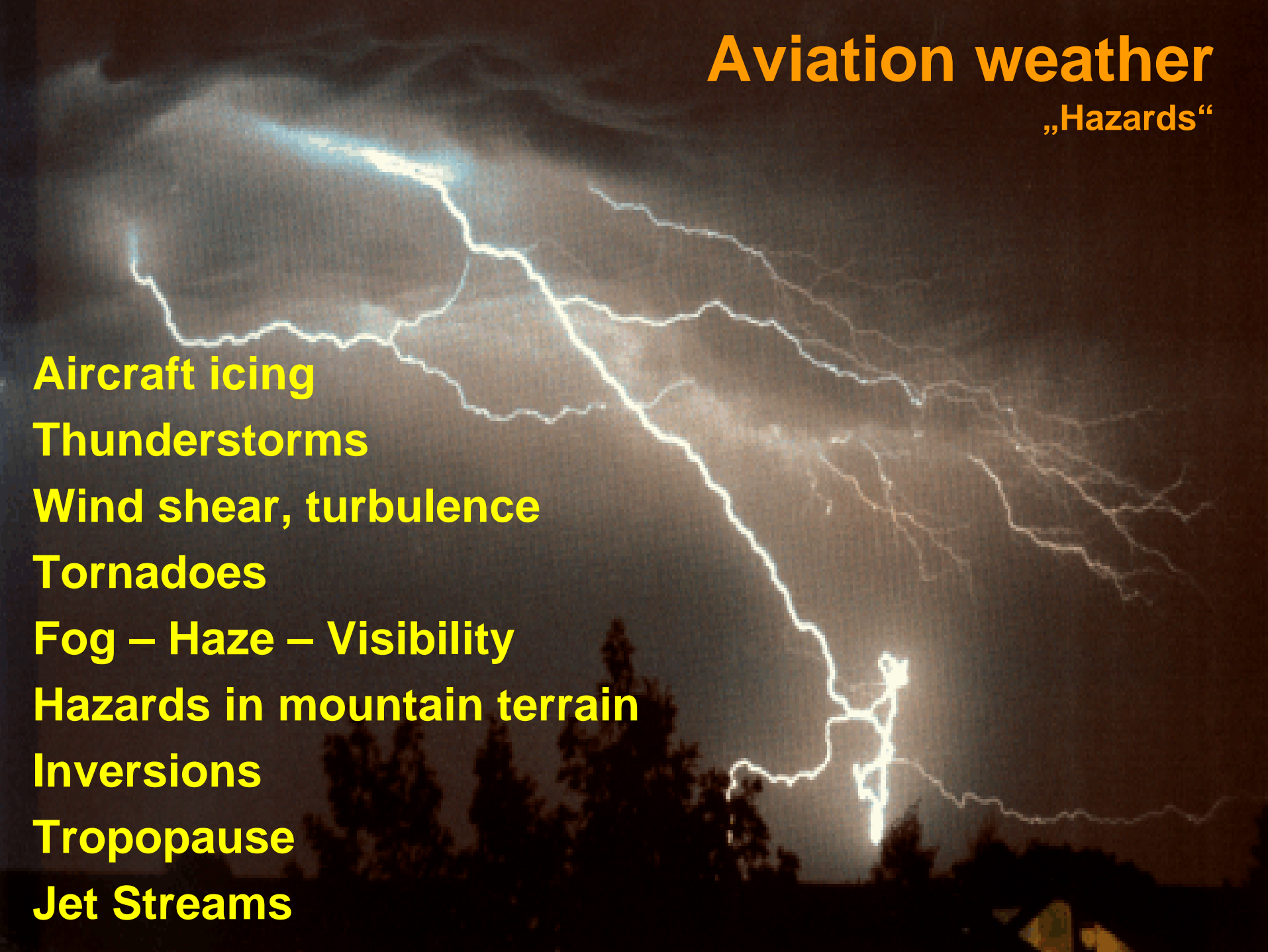
Fog – Haze – Visibility

Hazards in mountain terrain

Inversions

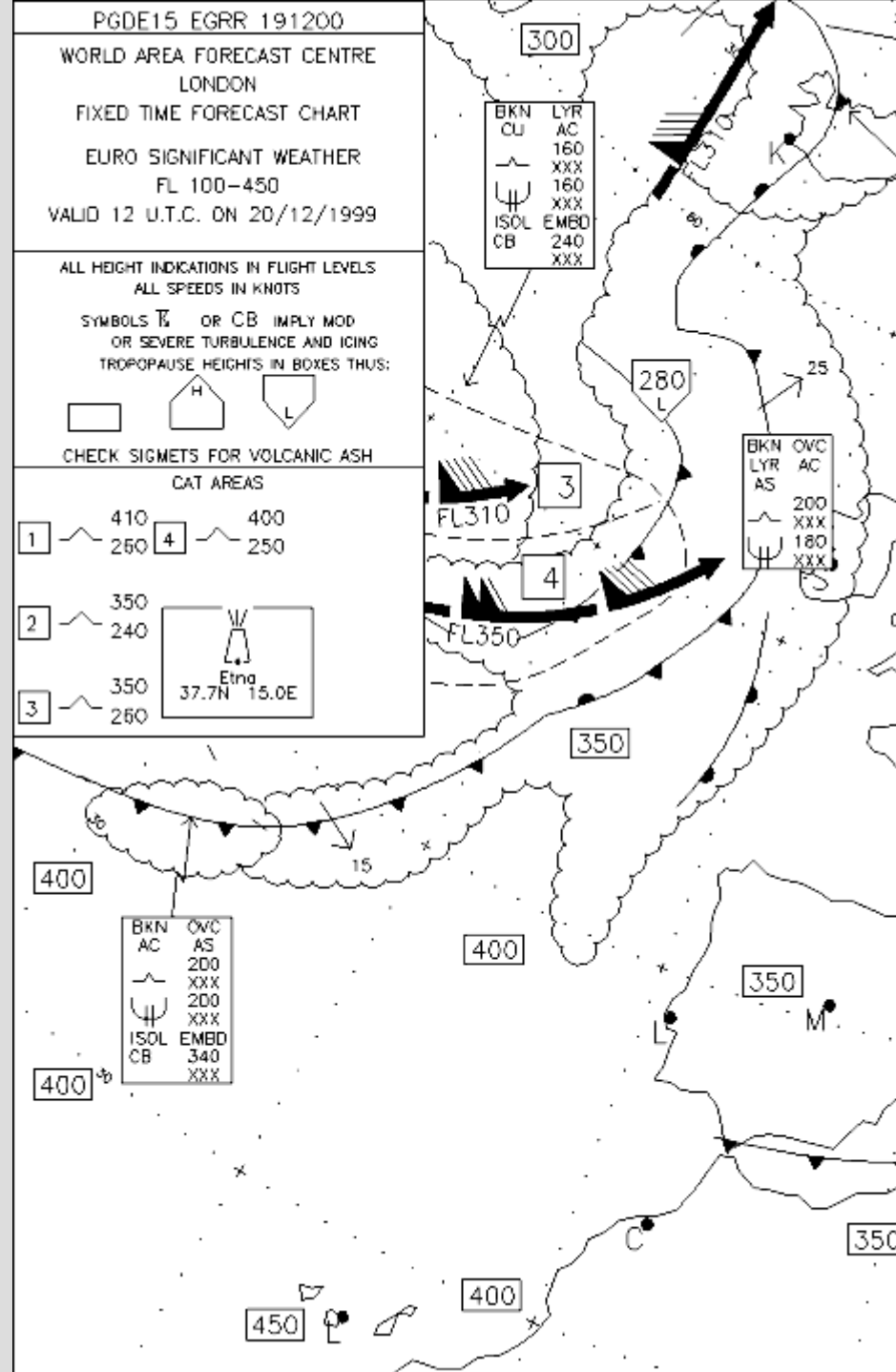
Tropopause

Jet Streams



Wetter information for Pilots

Flight weather consultation
Coded weather reports
(METAR, TAF)
Wetter maps
Meteorological briefing
Weather information
during flight





Barometric altitude measurement⁴

Terms of altitude

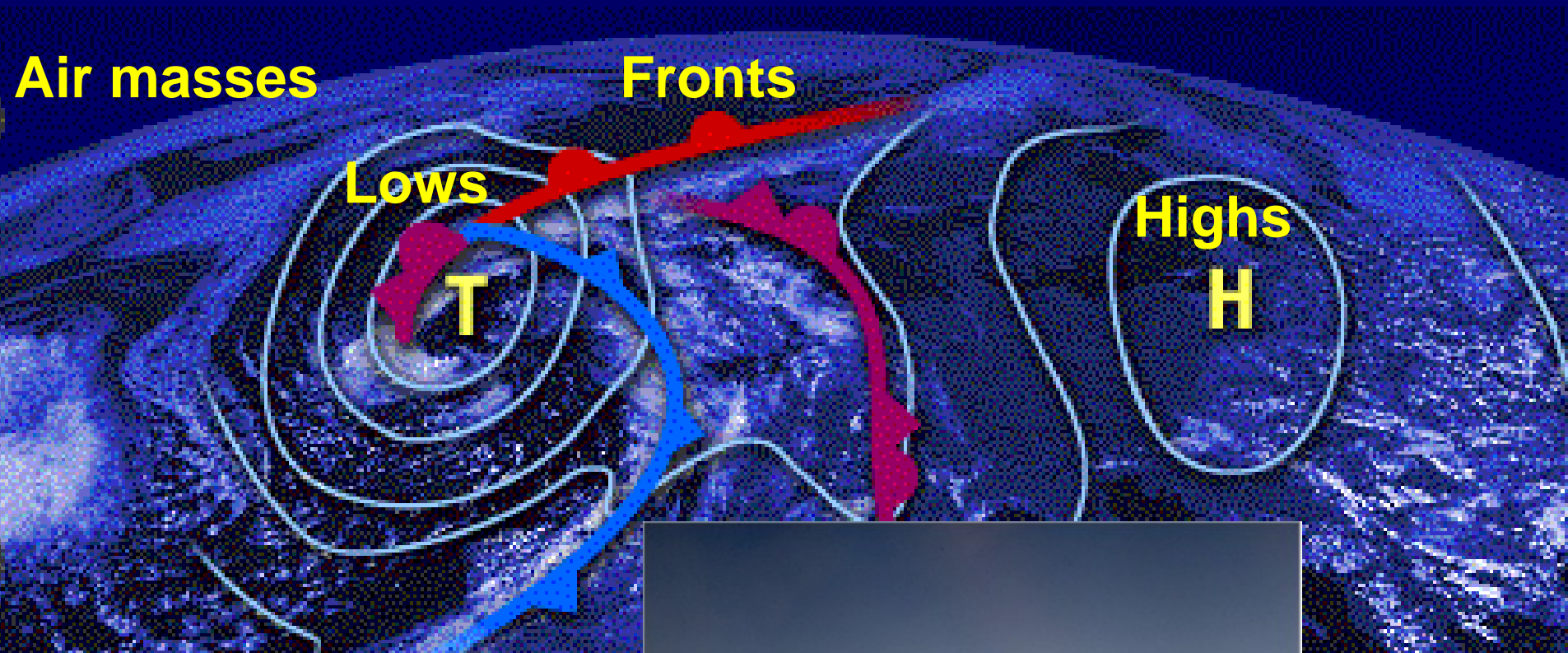
Pressure altitude – true altitude

Deviations of altimeter readings from true altitudes

Density altitude



Synoptic Meteorology



Wind

Development

Driving forces

Types of wind

Diurnal and annual variation

Regional winds (scirocco, foehn, ...)



Climatology

A wide-angle photograph of a massive glacier flowing through a mountain range. The glacier is the central focus, showing a complex network of crevasses and ridges. In the background, several sharp mountain peaks are visible, some with patches of snow. The sky is a deep blue with some white clouds. The overall scene is a dramatic representation of a cold climate.

Driving factors

Climate and weather

Climate zones

Regional specialities

Global meteorological Systems

Distribution of hours

• General Meteorology	26 h
• Altimetry	10 h
• Aviation meteorology	26 h
• Meteorological Informationen	22 h
• Wind	12 h
• Synoptic Meteorology	26 h
• Climatology	24 h

In total
146 hours
meteorology

