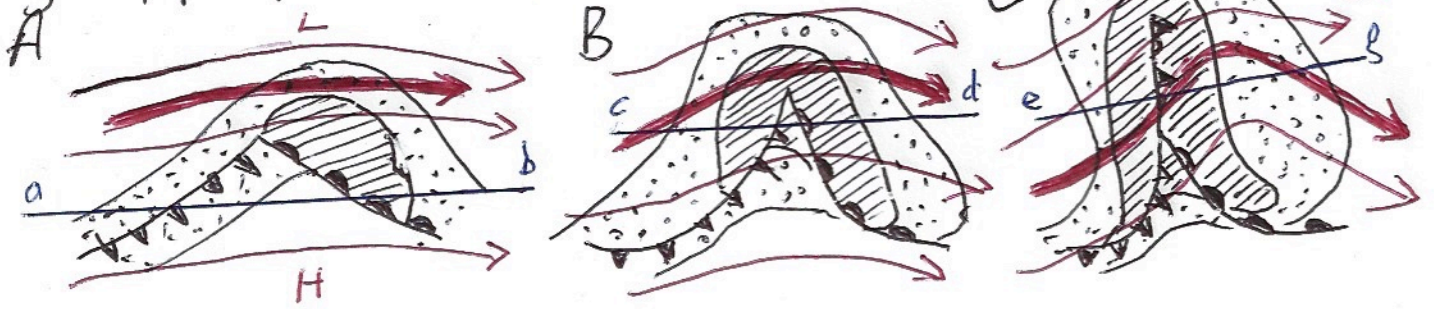


STAGES IN THE DEVELOPMENT OF AN OCCLUDING DEPRESSION

Upper winds and the polar front jet stream in relation to surface fronts, precipitation areas and cloud

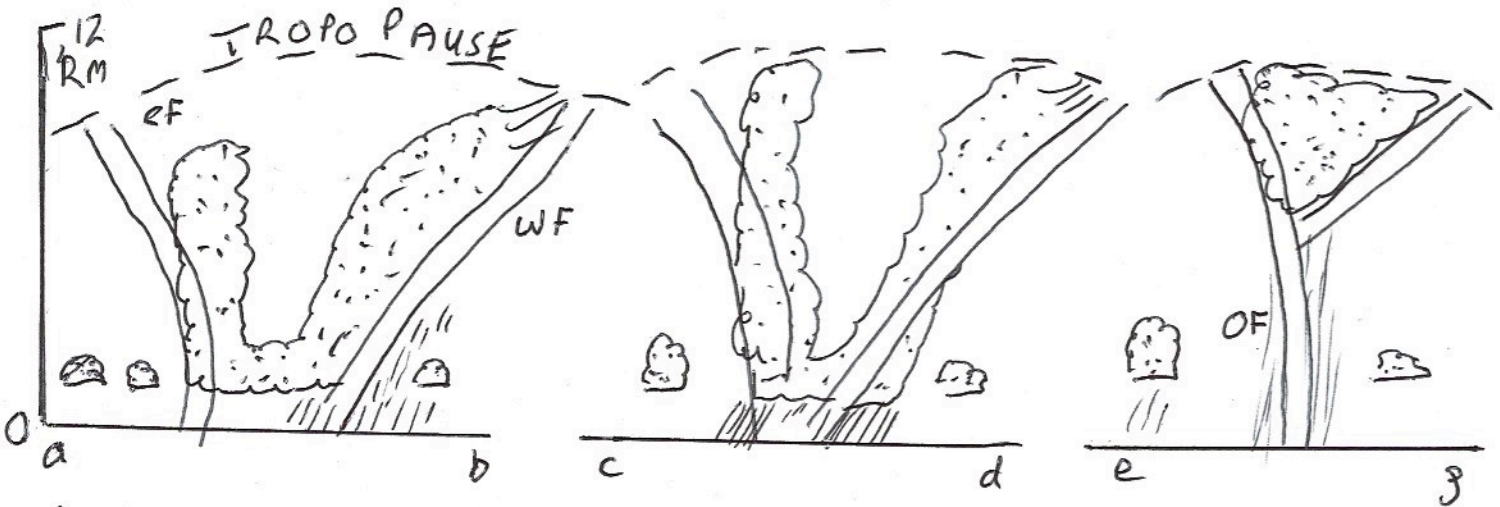


FRONTAL DEPRESSION

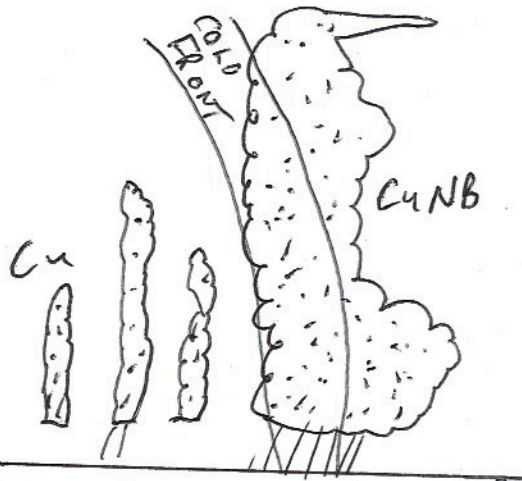
PRE-OCCLUSION

OCCLUSION

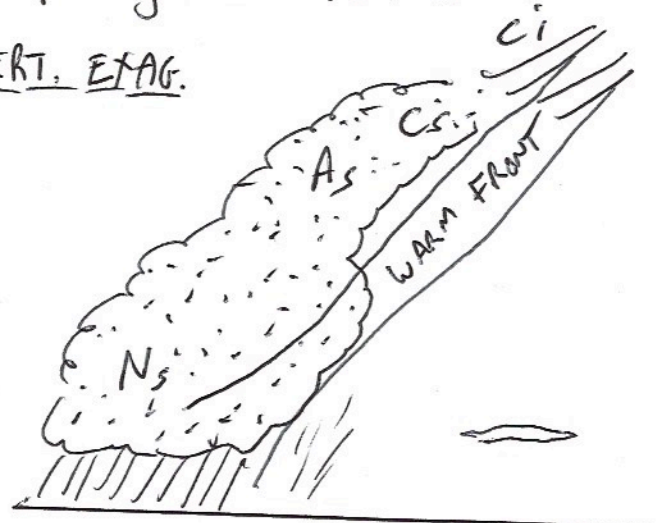
☁️ CLOUD ☔ PRECIPITATION → UPPER WINDS → JET STREAM



Research on fronts using RADIOSONDE, RADAR, FLIGHTS, SATELLITES has seen a move away from simple 'frontal' models

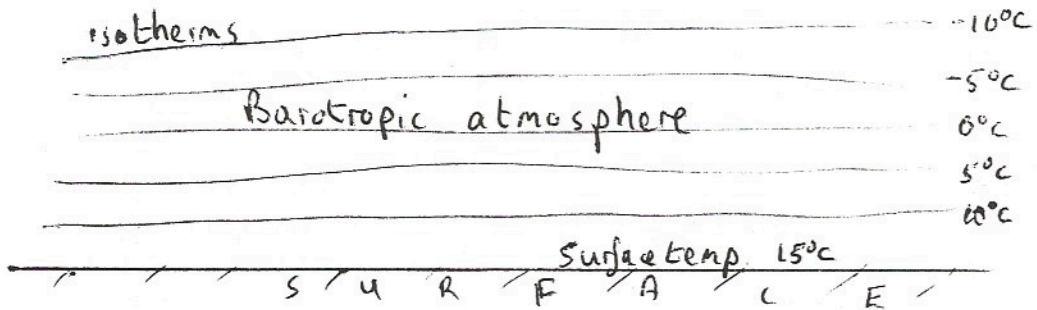


MUCH VERT. ETAG.



- New ideas - Great complexity of fronts. Hard to give one model.
- Frontal cloud usually steeper than fronts suggest.
 - release of instability and not just gentle upgliding.
 - Frontal zones (Baroclinic) not just lines.

A BAROTROPIC ATMOSPHERE (AIR MASS)



A FRONT (Baroclinic)

