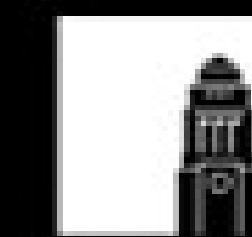


SURFACE LAYER OBSERVATIONS FROM A NETWORK OF 22 AUTOMATIC WEATHER STATIONS COVERING THE NORTHERN COPS REGION

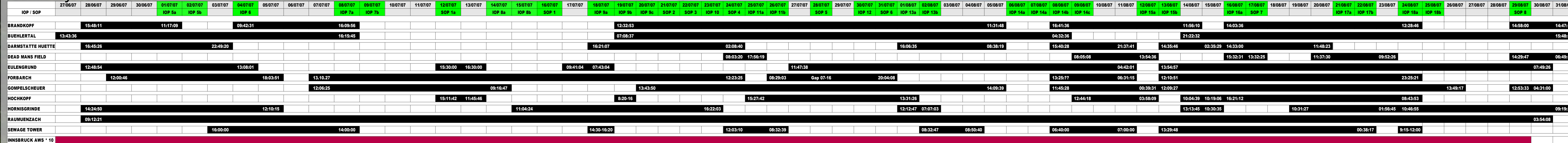
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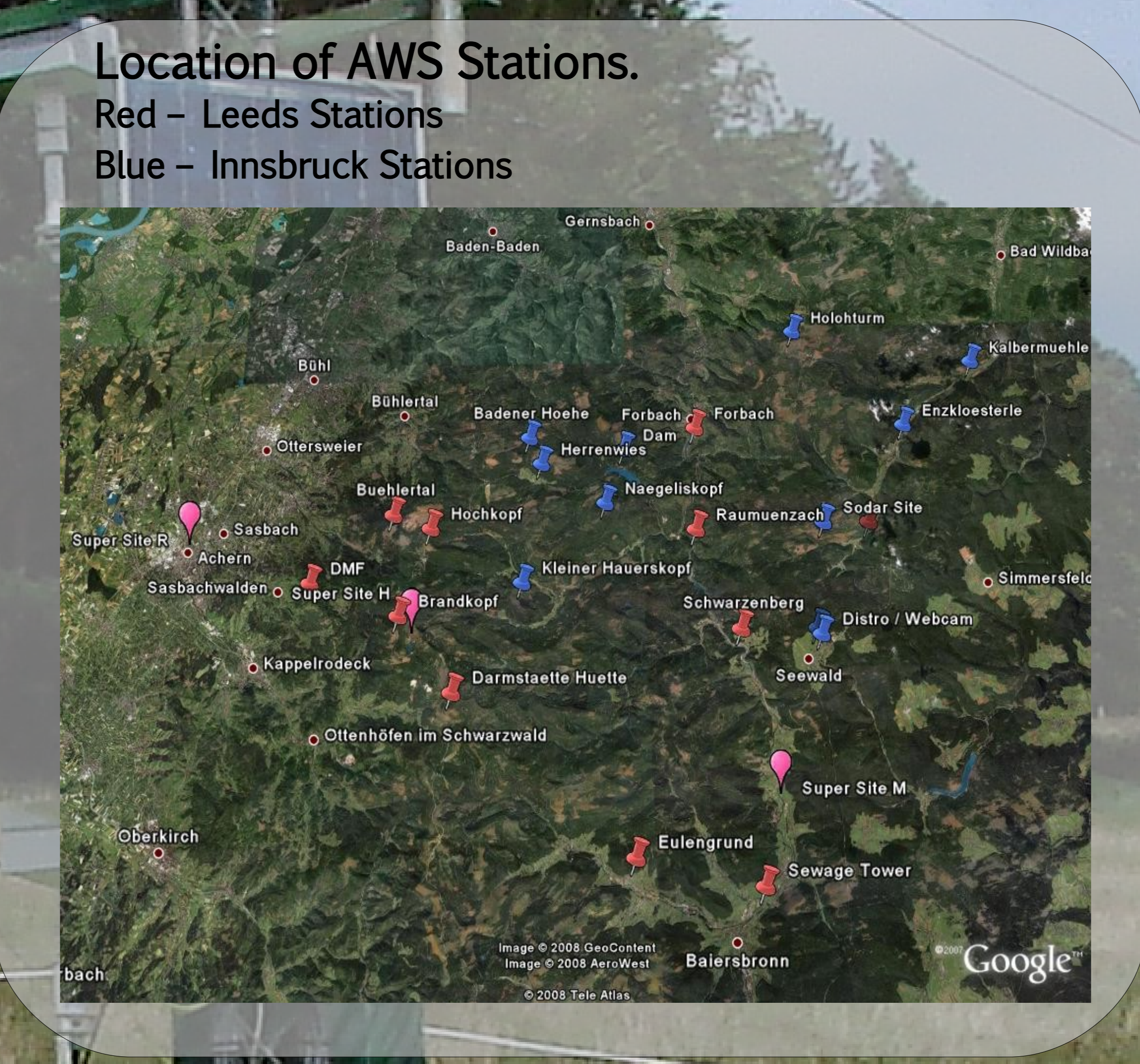
Availability of Data for ALL Automatic Weather Stations



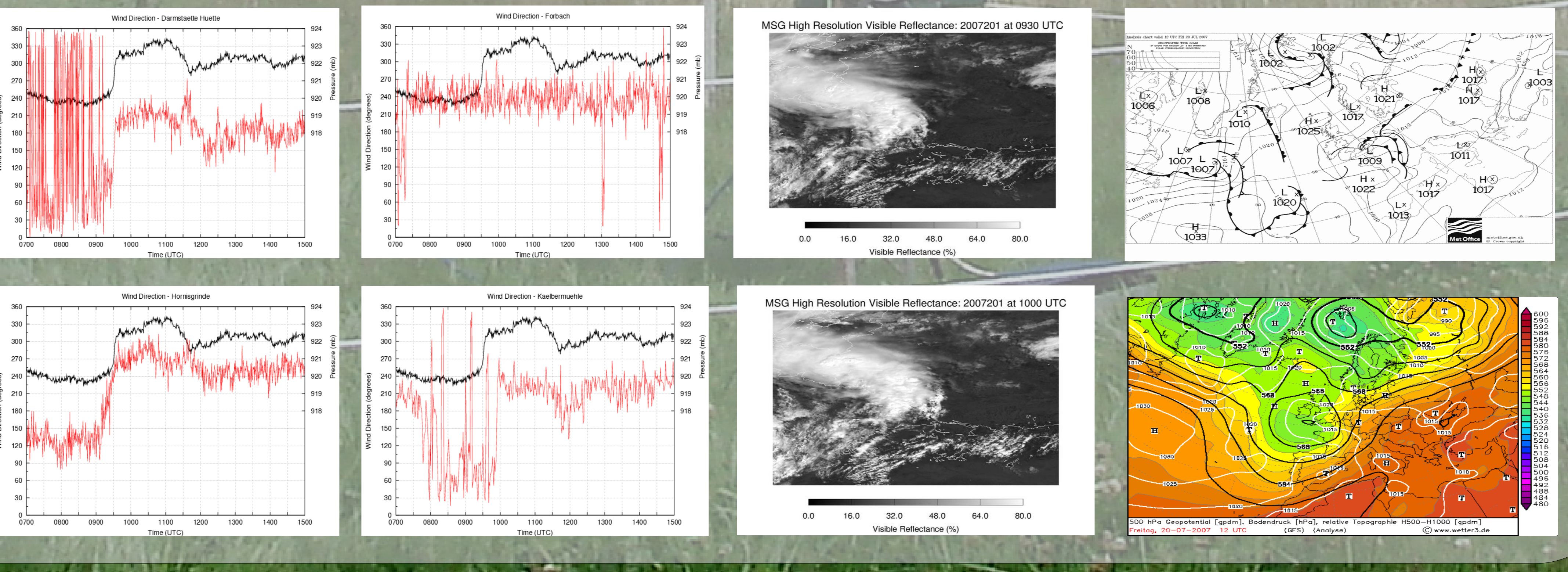
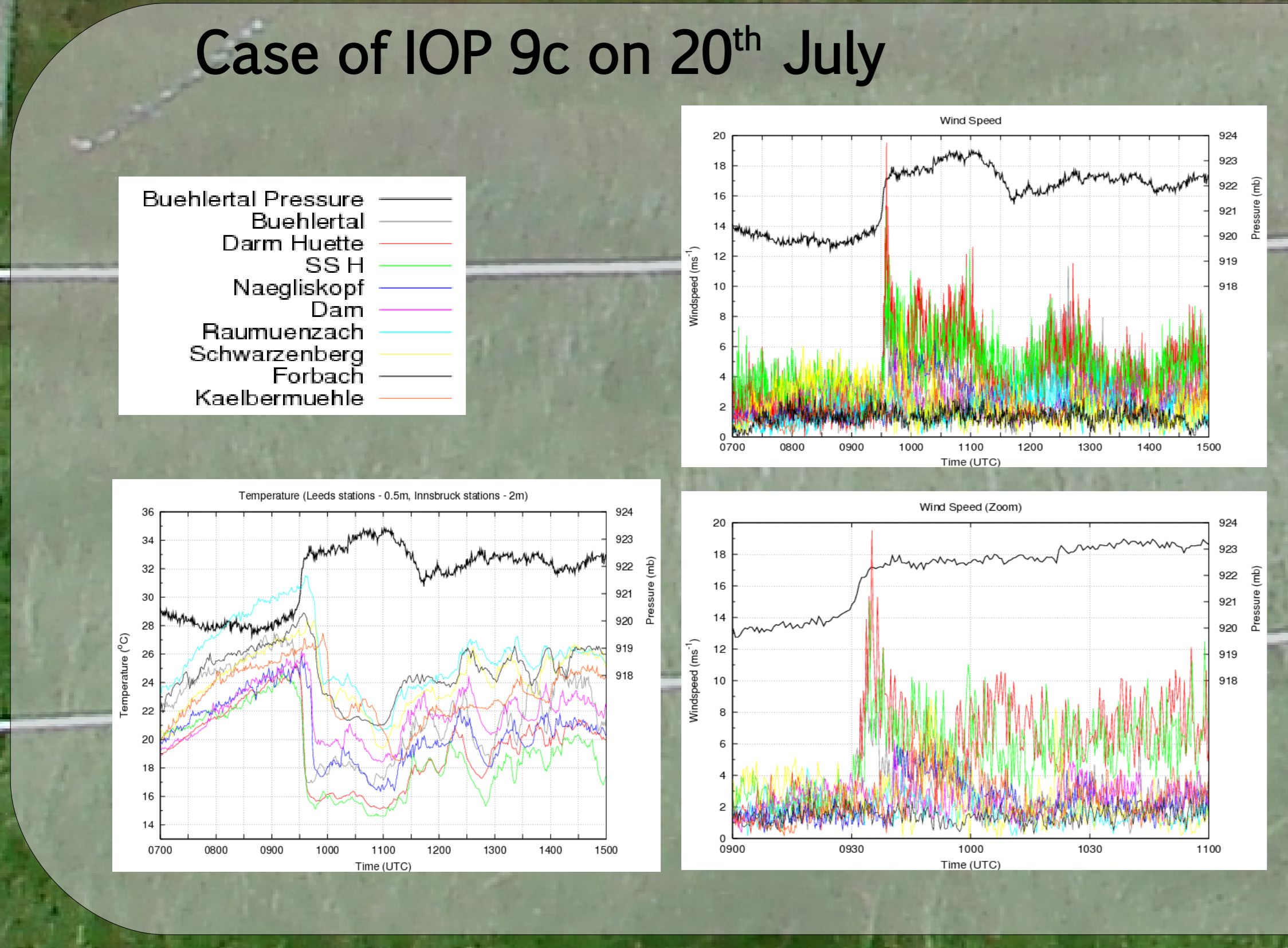
- ### INTRODUCTION
- A network of 22 AWS's deployed in Northern COPS region during July & August 2007
 - High temporal resolution of surface obs at sites identified relating to 4 categories of the region's orography
 - Inflow Valleys / Mountain ridges / Convection hotspot / Westerly Upslope Flow
 - 12 AWS's from University of Leeds
 - Pressure / Temp at 0.5 & 2.5m / 2-d Windspeed & Direction at 3m / 0.5m Relative humidity / Precipitation at 6 sites
 - Varied availability of data due to power difficulties (see above table)
 - Data logged at 4 Hz
 - 10 AWS's from University of Innsbruck
 - Pressure / Solar Radiation, Relative Humidity at 2m/ 2-d Windspeed & Direction at 3m / Soil Temp at 5 & 30 cm depth / Precipitation
 - Full availability from 29th June - 28th August
 - Data logged as 60 second averages
 - Duplicate at SS H for calibration purposes

List of Stations

SITE	UNI	CATEGORY	(m)
DMF	Leeds	Western Slope	481
Buehlertal	Leeds	Western Slope	813
Brandkopf	Leeds	Western Slope	769
SS H	Both	Ridge	1154
Hochkopf	Leeds	Western Slope	1028
Darmstaette	Leeds	Western Slope	1017
Herrenwies	Innsbruck	Hotspot / Valley	749
Hauerskopf	Innsbruck	Ridge / Hotspot	749
Badener Hoehe	Innsbruck	Ridge / Hotspot	1000
Naeglis Kopf	Innsbruck	Ridge / Hotspot	967
Dam	Innsbruck	Hotspot	669
Eulengrund	Leeds	Inflow Valley	630
Raumuenzach	Leeds	Inflow Valley	430
Forbach	Leeds	Inflow Valley	306
Schwarzenberg	Leeds	Inflow Valley	473
Sewage Site	Leeds	Inflow Valley	520 (+ Tower)
Holohturm	Innsbruck	Ridge	926
Besenfeld	Innsbruck	Ridge	867
Sodar site	Innsbruck	Ridge	842
Gompelscheuer	Leeds	Inflow Valley	672
Enzklosterle	Innsbruck	Inflow Valley	667



- ### IOP 9c - 20th July 2007 AIM
- Study development of frontal zone through its passage over COPS region from SW to NE
 - Frontal zone & embedded MCS location
 - Impact of cyclogenesis development on COPS weather
 - Impact of COPS orography on modification & organisation of MCS



- ### OBSERVED SURFACE FEATURES
- Passage of weak cold front across COPS region from West to East clearly identifiable in Temperature Observations
 - Wind data show's very complicated orographic effect
 - Apparent de-coupling of flow
 - High winds observed at high / western stations
 - Dramatic wind directional changes observed with high wind speeds
 - Significant wind features observed at some valley sites & not others
 - More plots available - please ask

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