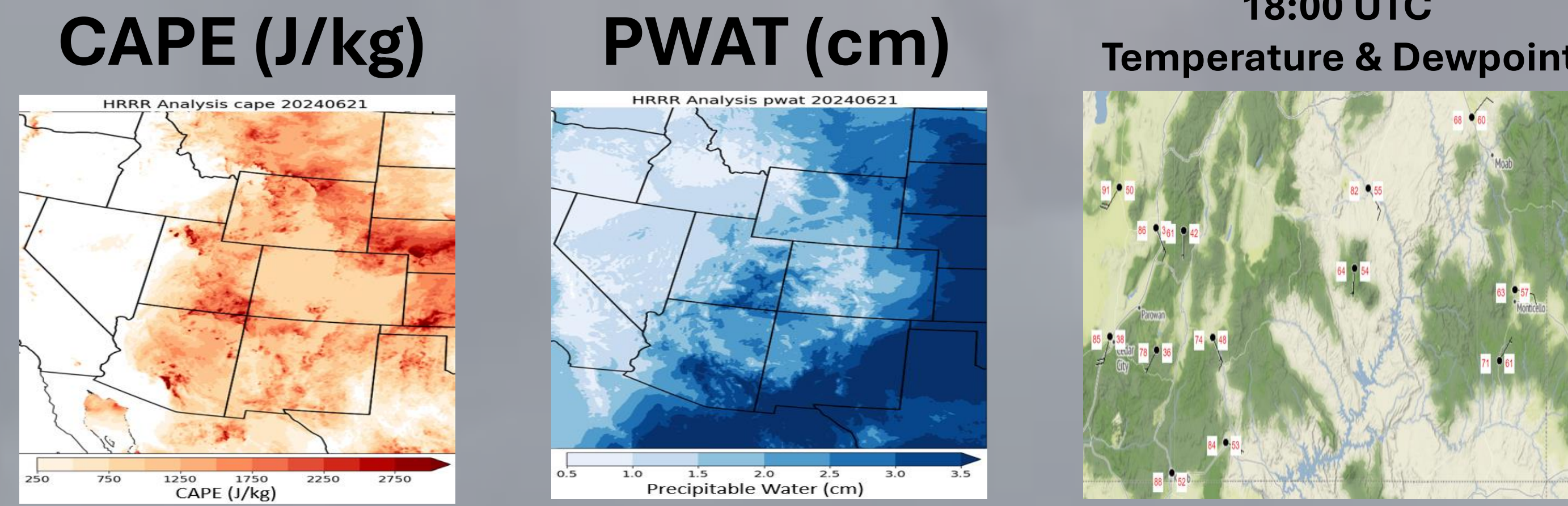


Background

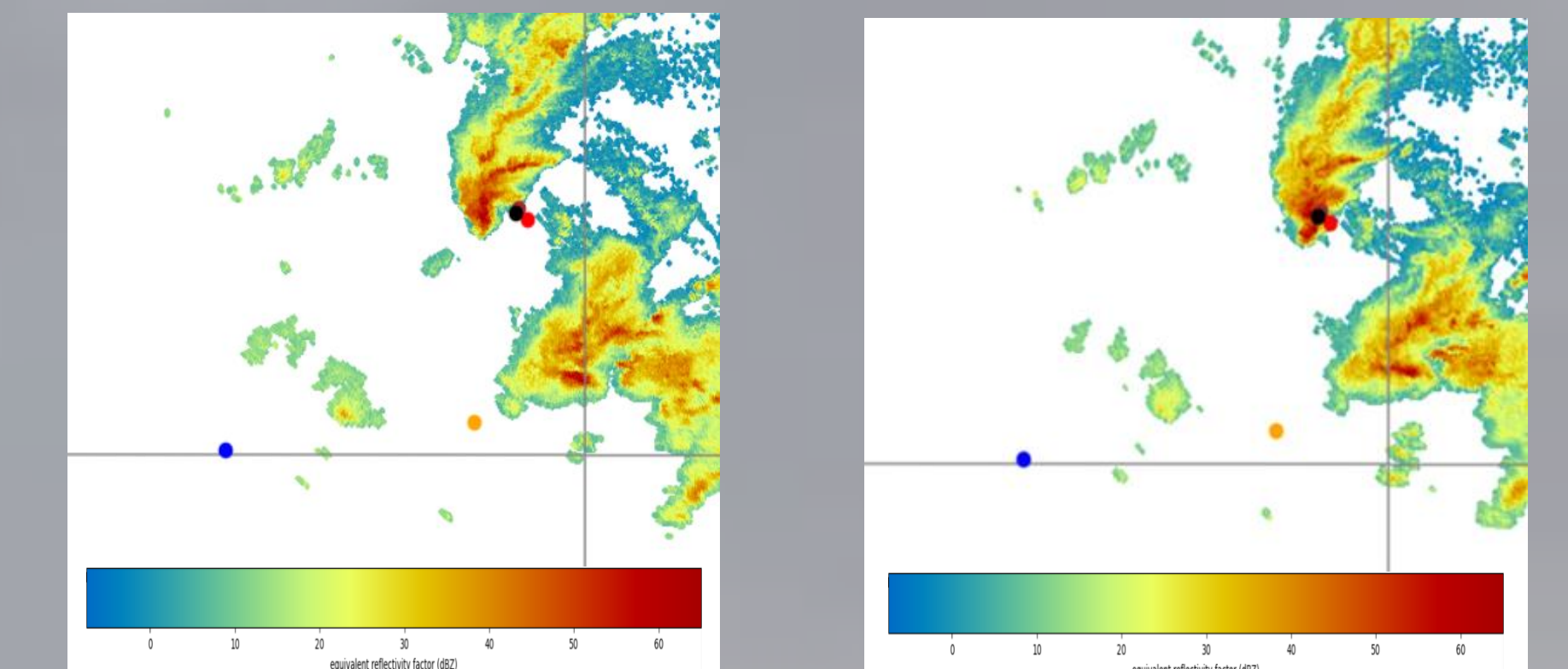
- Across southeastern Utah:
 - Moisture from Tropical Storm Alberto
 - Monsoonal southwesterly flow aloft
 - Instability (Convective Available Potential Energy, CAPE) and moisture (Precipitable Water, PWAT) at very high levels (upwards of 90th percentile)
 - Dewpoint temperatures above 60°F (>15°C)
 - Exposed sedimentary rock contributes to rapid runoff through slot canyons

Mesoscale Conditions

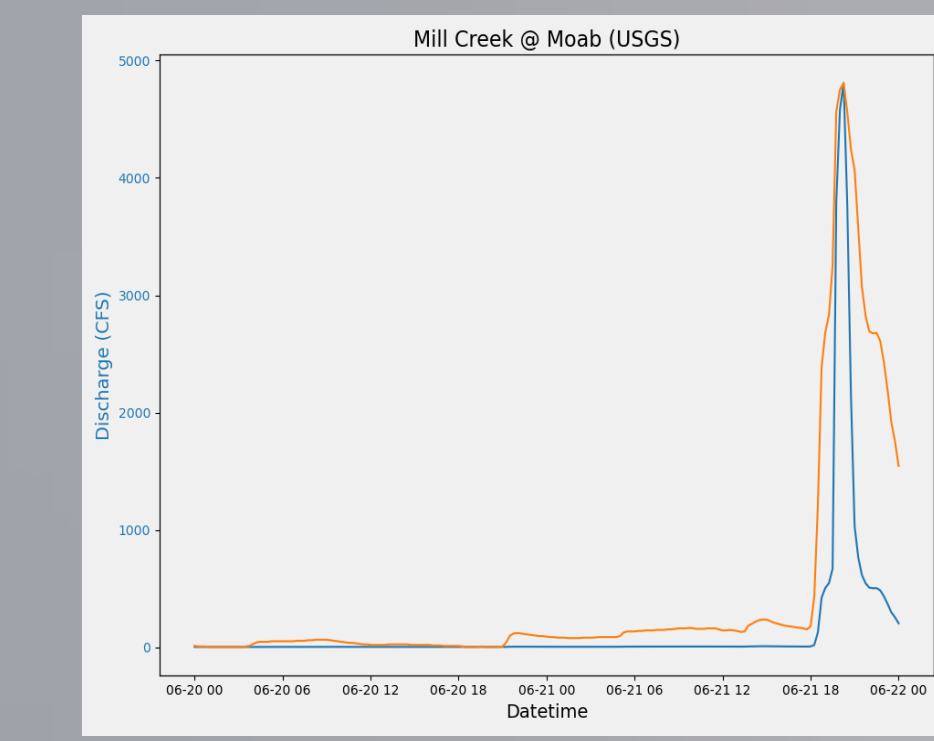


Moab

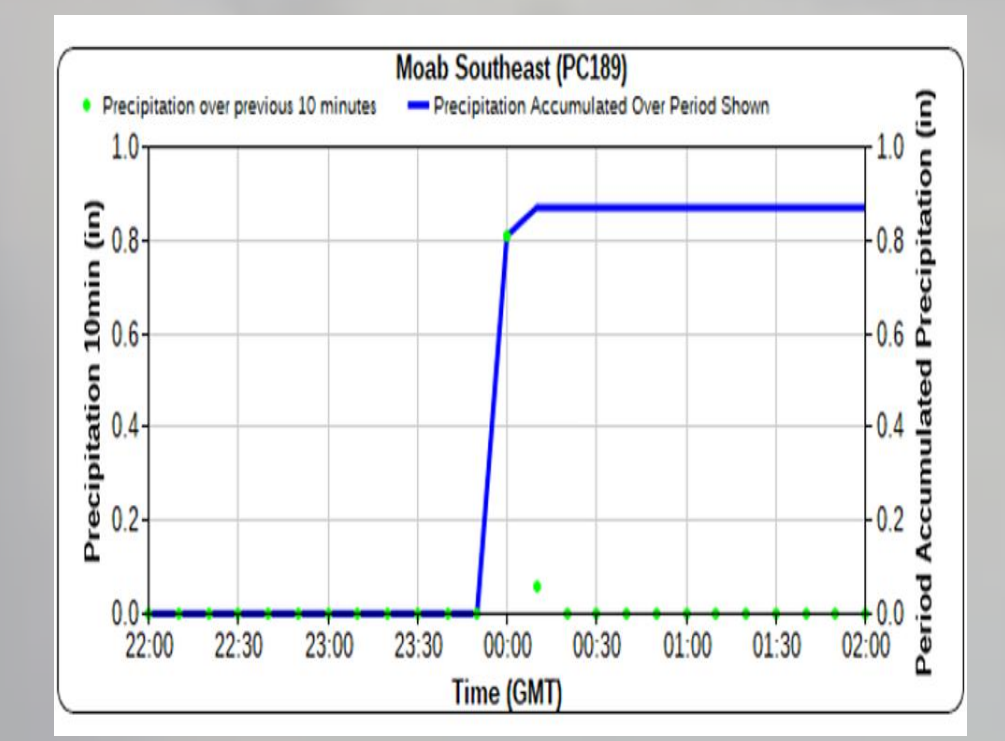
KGJX Composite Reflectivity



Mill Creek Discharge and Gage Height



Moab Accumulated Precipitation

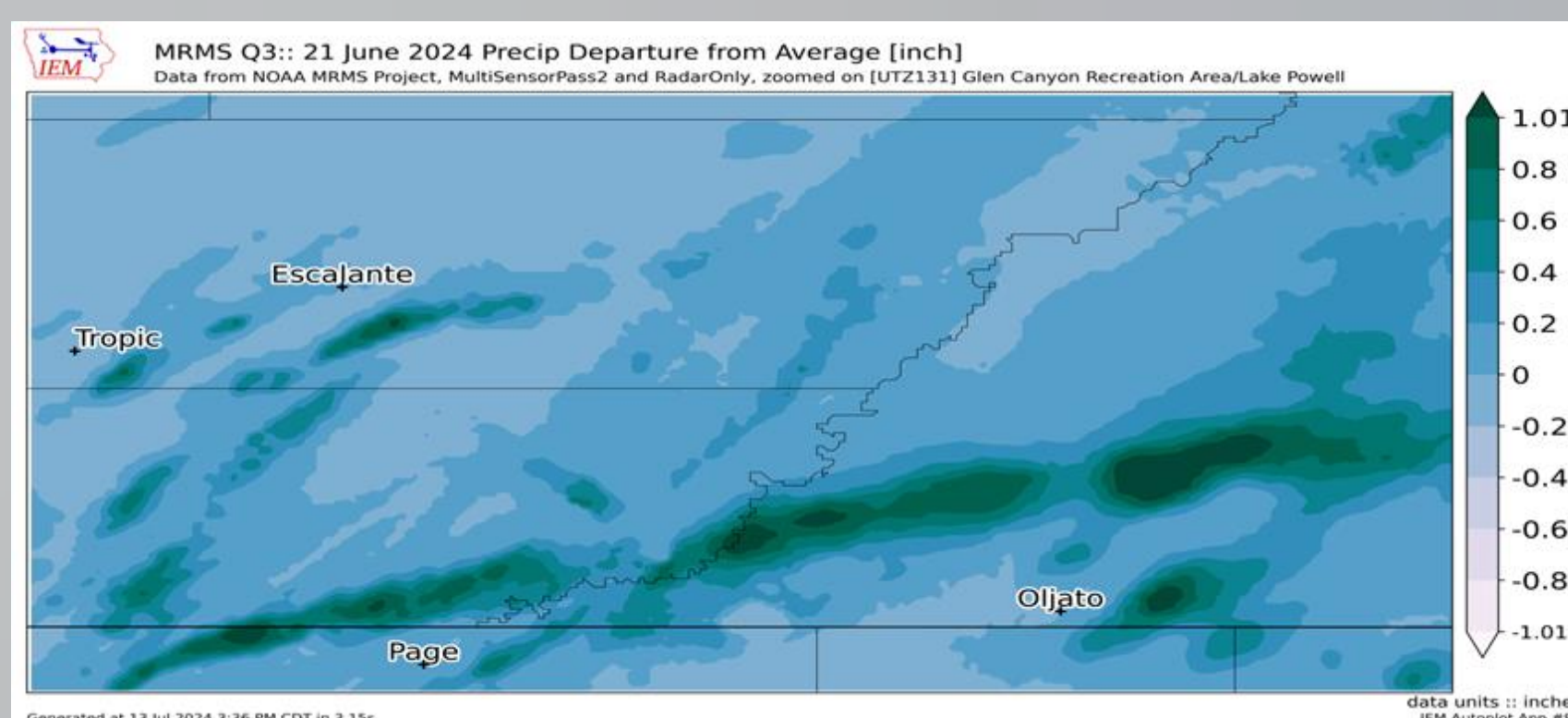
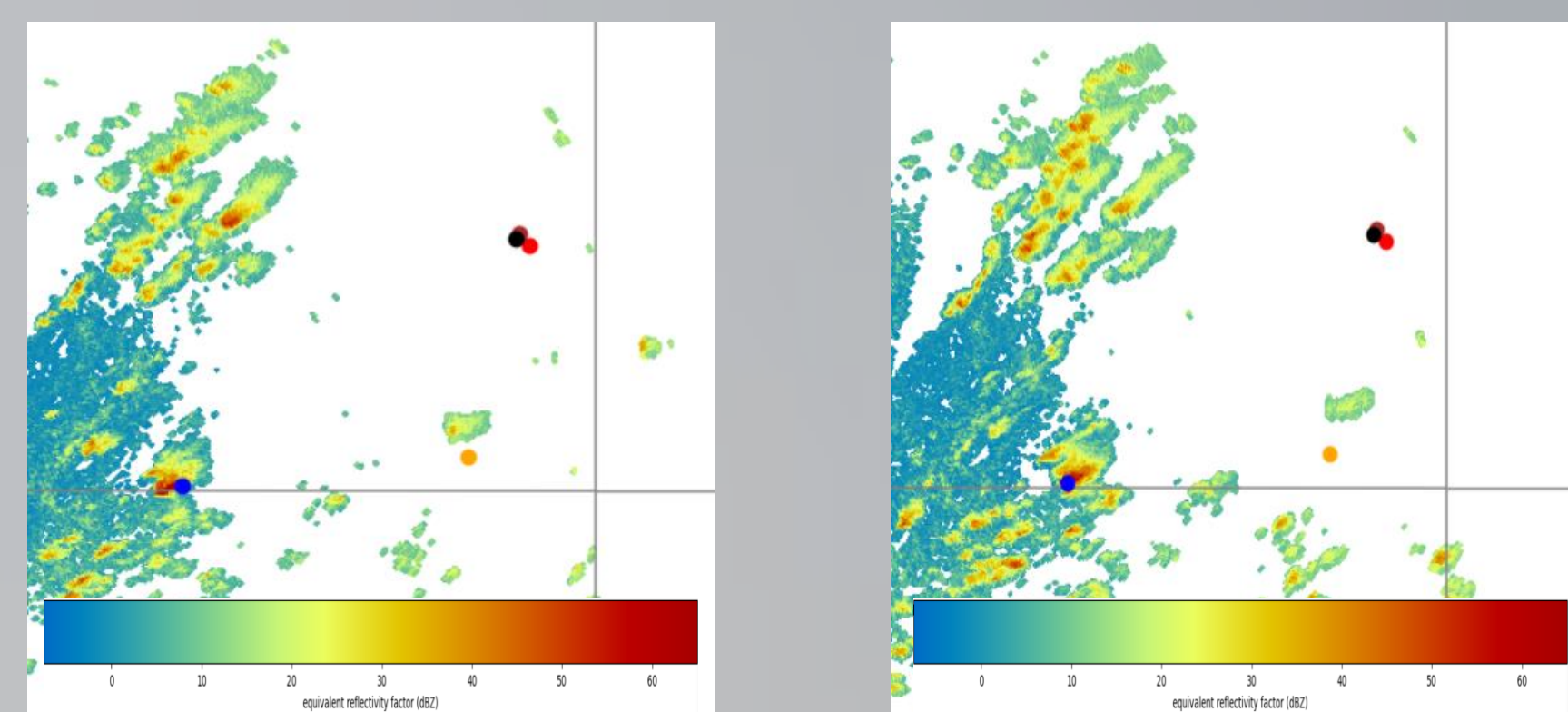


~ 2.5 times average June rainfall fell during 10 min.

- Flooding caused widespread damage to homes, businesses, and public areas
- Rescues performed for 20 stranded hikers in nearby Grandstaff Canyon
- Two individuals perished riding ATV in Mill Creek drainage

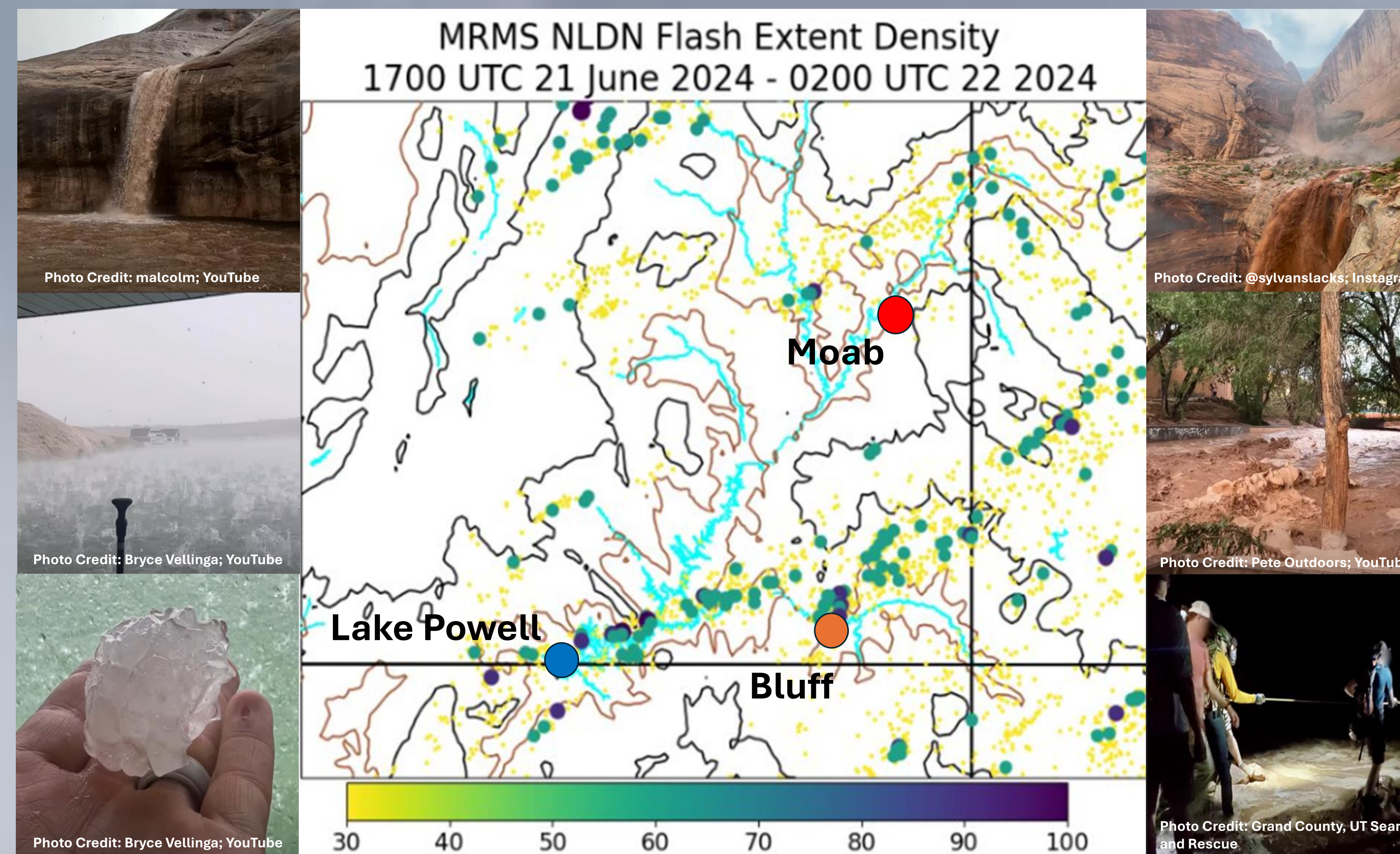
Lake Powell

KICX Composite Reflectivity



MRMS Daily Precipitation Departure from Average (in.)

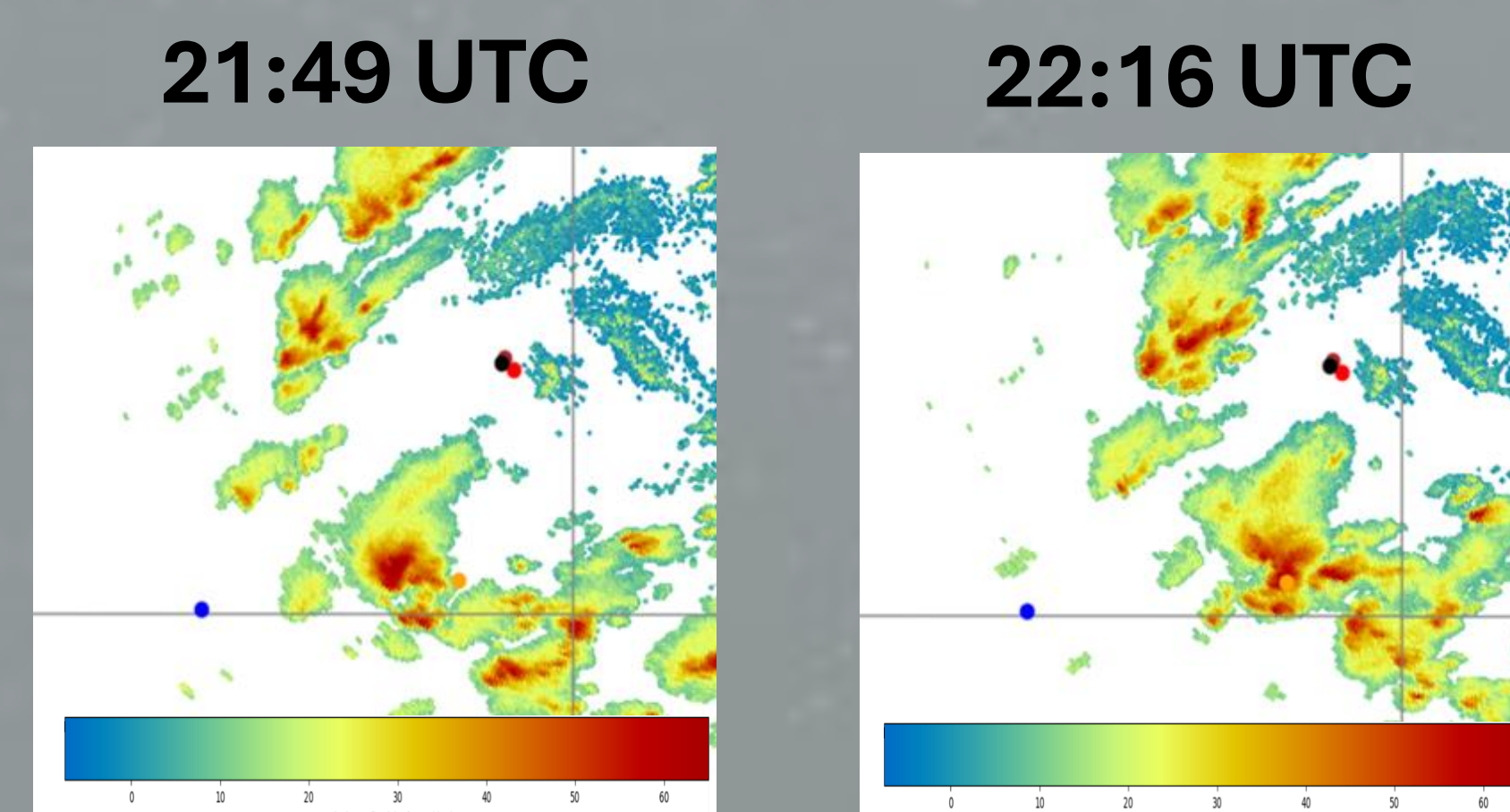
- Intense rainfall led to flash flooding in local slot canyons, including Blue Pool Wash
- Golf ball sized hail pelted boaters on Lake Powell
- Boat capsized between Warm Creek and Padre Bays



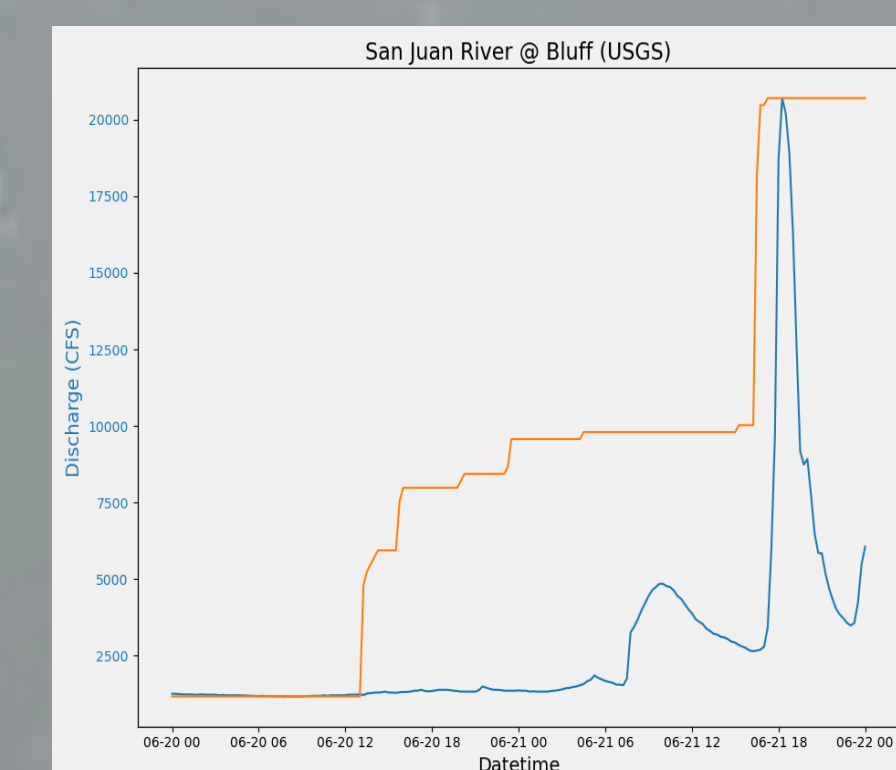
Bluff

- Heavy rains led to tenfold flow increases on San Juan River during 1 hour period
- Recreational rafts, boats, and equipment washed downstream and destroyed section of highway 163 washed out

KGJX Composite Reflectivity



San Juan River Discharge and Accumulated Precipitation



Summary

- Above average instability and moisture combined with strong mid-tropospheric winds provided environment favorable for strong convection
- Thunderstorms and lightning developed preferentially in distinct southwest to northeast oriented bands across southeastern Utah
- Hazardous winds capsized at least one boat on Lake Powell
- Boaters on San Juan River avoided injuries, but lost large amounts of equipment as the river flows increased tenfold in 1 hour
- Near and in Moab, extensive property damage, rescues required, and two lives lost

Acknowledgements

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