Objectives

• Build a set of low-cost lightning measurement tools to augment existing lightning networks in the greater D.C. area & beyond, along with potential NOAA field campaigns.
• Use high speed (90 fps) videos as ground truth for lightning sensors validation studies.
• Help better understand regional thunderstorm & lightning activity.

Results

• Successfully recorded 9 active days in MD.
• GLMs tend to miss the first strokes of cloud-to-ground flashes (CG); ground networks low-amplitude strokes.
• Ongoing 07/12 College Park storm case study. 12-stroke cloud-to-ground flash observed.
Raspberry Pi Cameras and Settings

8 cameras in operation:
5 in MD  2 in AZ  1 in OK
• 2 on campus  • 1 in Tucson
• 2 at CISESS/ESSIC  • 1 in Flagstaff
• 1 in Germantown  • 1 in OK

UMD Campus
College Park, MD

Flagstaff, AZ

Earth Networks
Germantown, MD

CISESS/ESSIC
College Park, MD

Raspberry Pi cameras