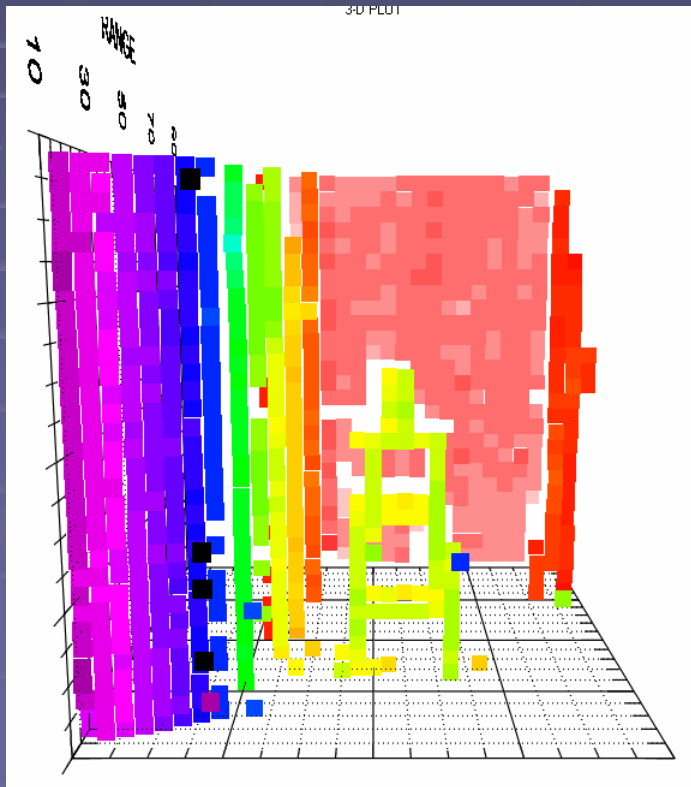
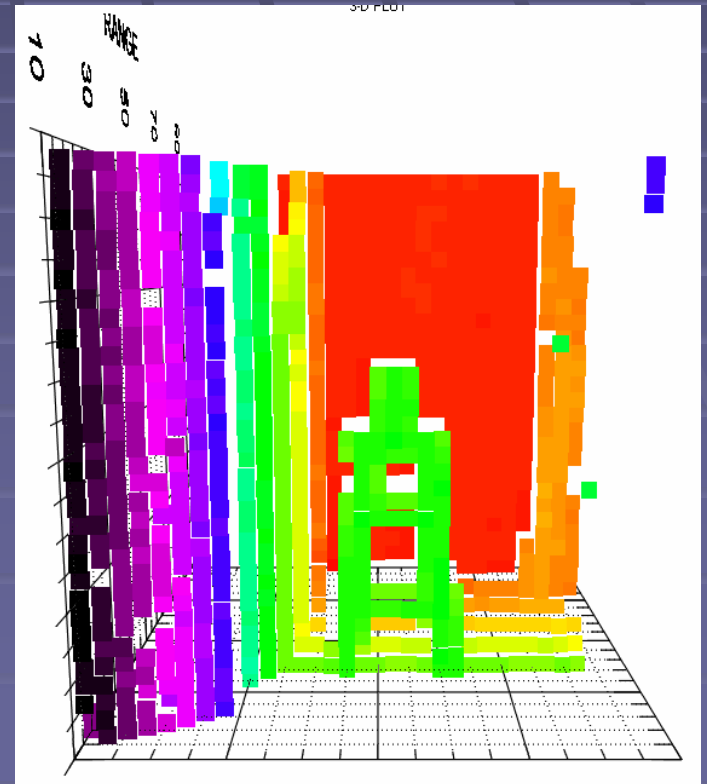


InGaAs APD DETECTORS ARE CLEARLY MORE SENSITIVE TO LIGHT THAN PINs

32 X 32 FLASH LADAR NON-APD IMAGE



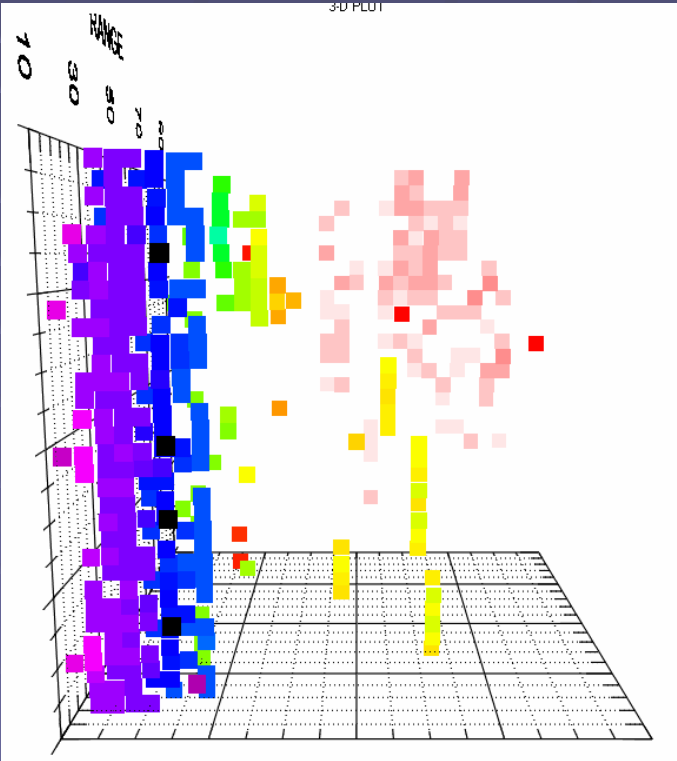
32 X 32 FLASH LADAR APD IMAGE



InGaAs APD DETECTORS ARE CLEARLY MORE SENSITIVE TO LIGHT THAN PINs

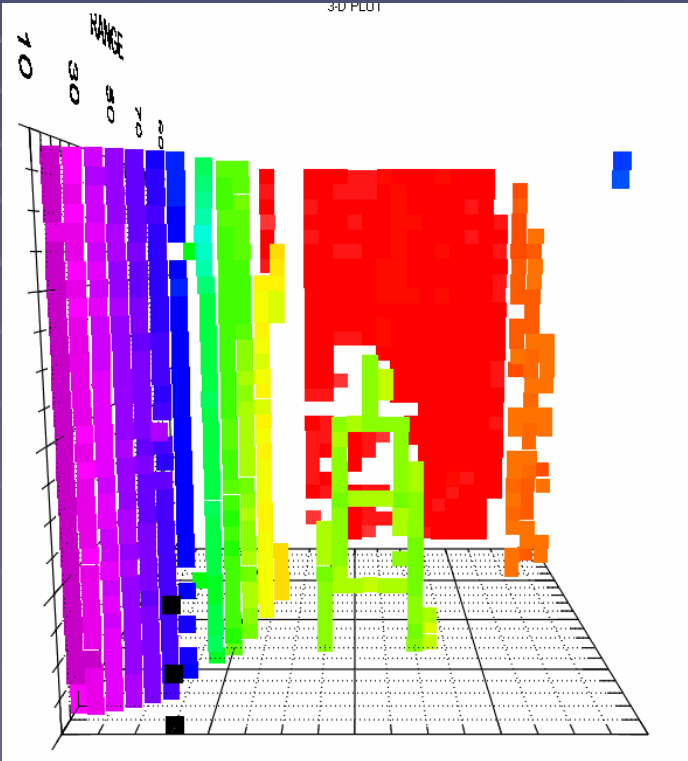
32 X 32 FLASH LADAR NON-APD IMAGE

5% TRANSMISSION



32 X 32 FLASH LADAR APD IMAGE

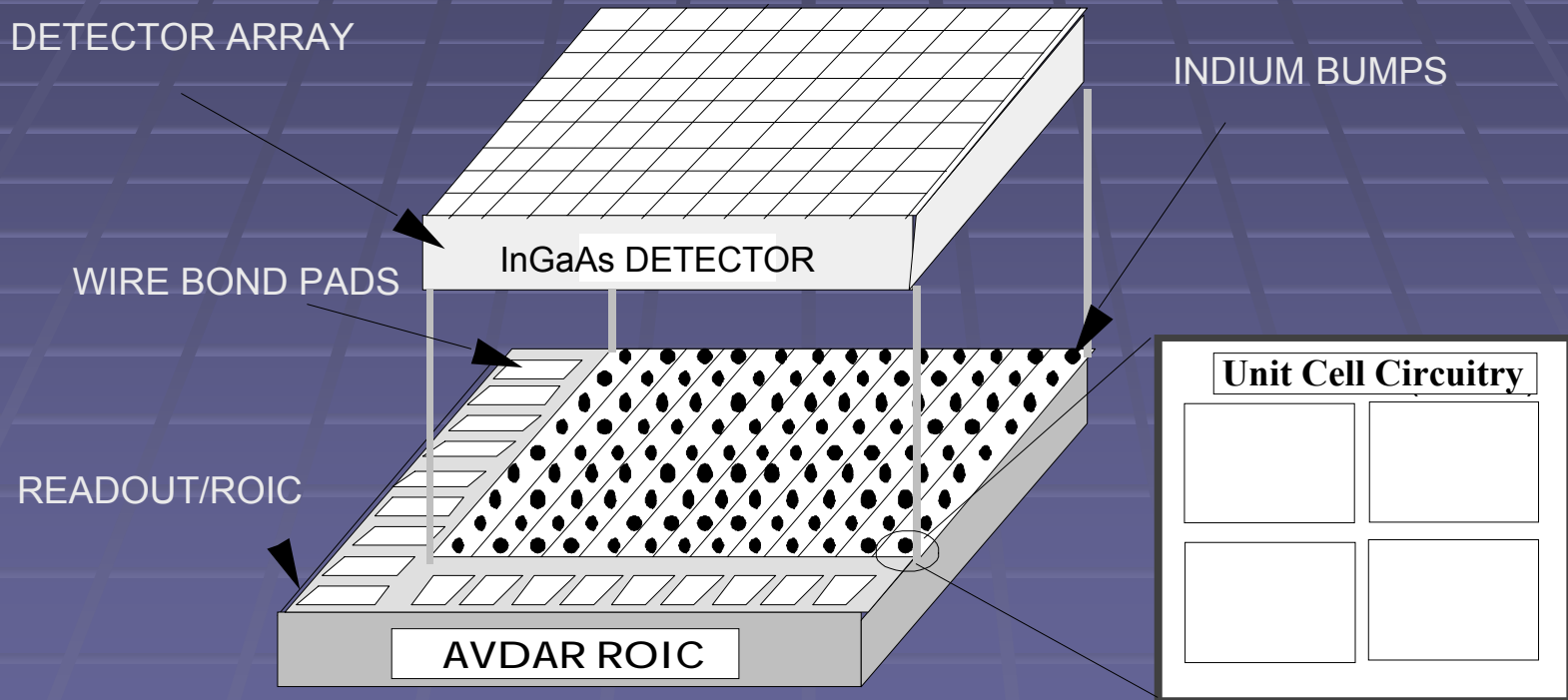
5% TRANSMISSION



32 X 32 Test Configuration

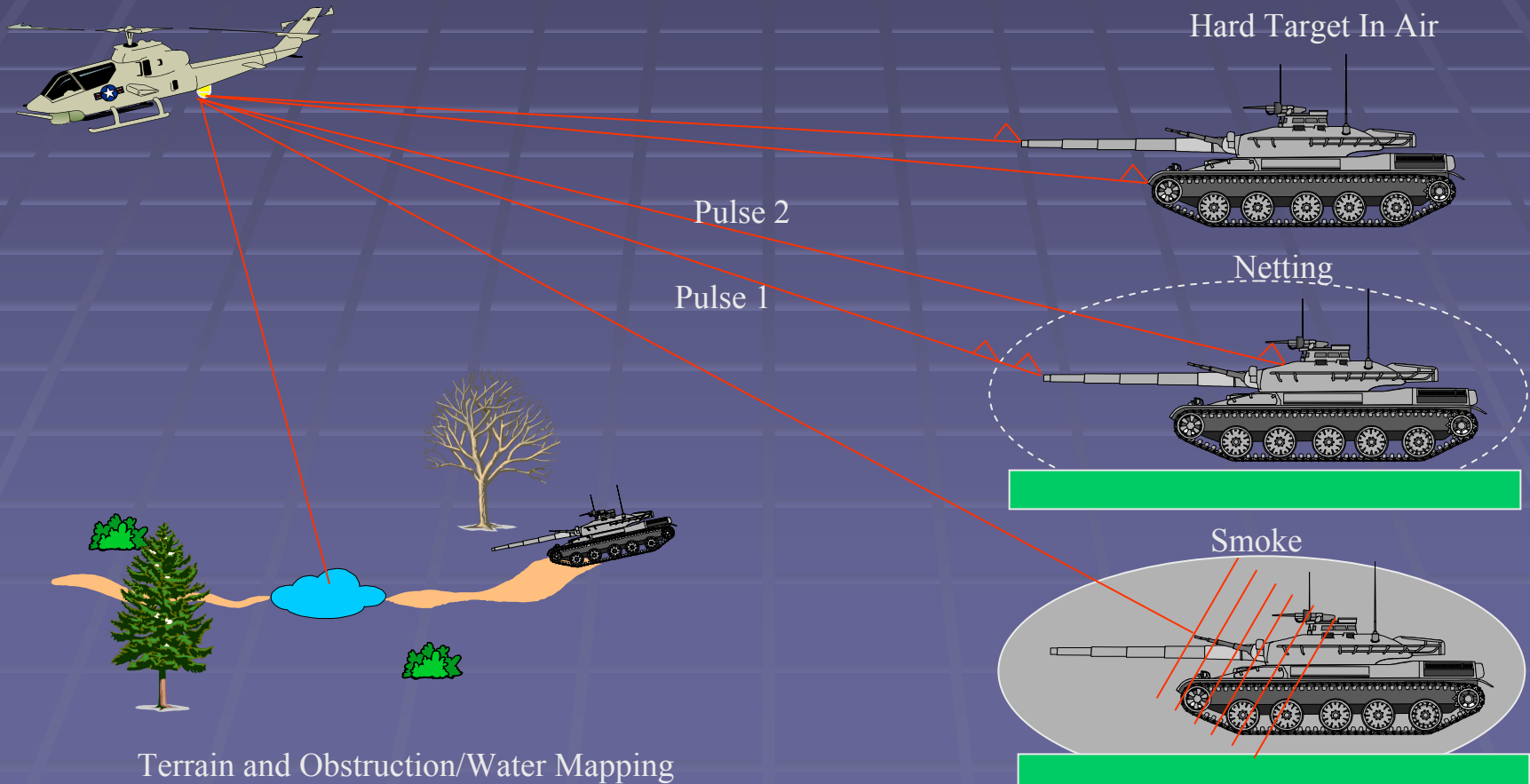


AVDAR HYBRID



Multi-mode Operation

Chip has peripheral circuitry for supporting multiple returns (i.e., smoke penetration)



Conclusions

- Compact Large-Array Flash Ladar is Feasible
- ROICs Incorporating Digital and Analog Functions are Versatile and Accurate
- InGaAs APD Arrays are Feasible for Reducing Required Laser Energy