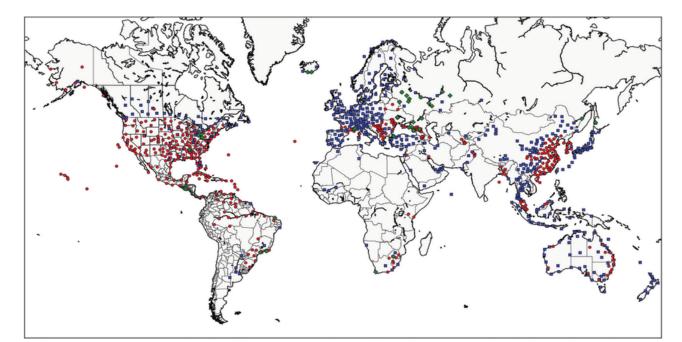


**RAAINS - 1** 

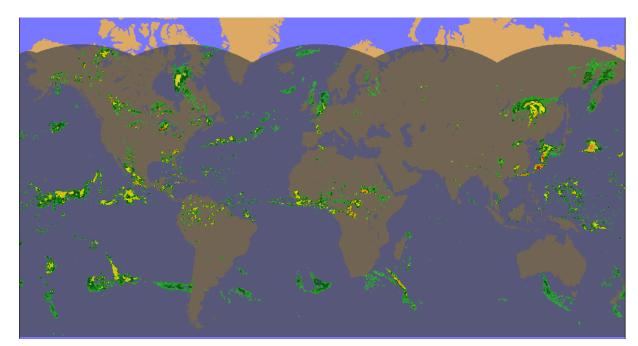
Author Initials 11/13-15/19



## Weather situational awareness provided by radar is critical for many DoD missions; however, radar coverage is not available for most of the world.

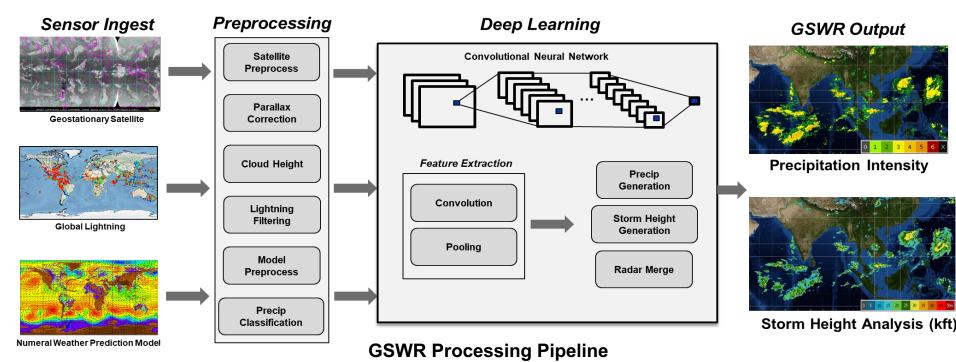


Locations of C- (Green), S- (Blue) and X- (Red) band radars<sup>1</sup>

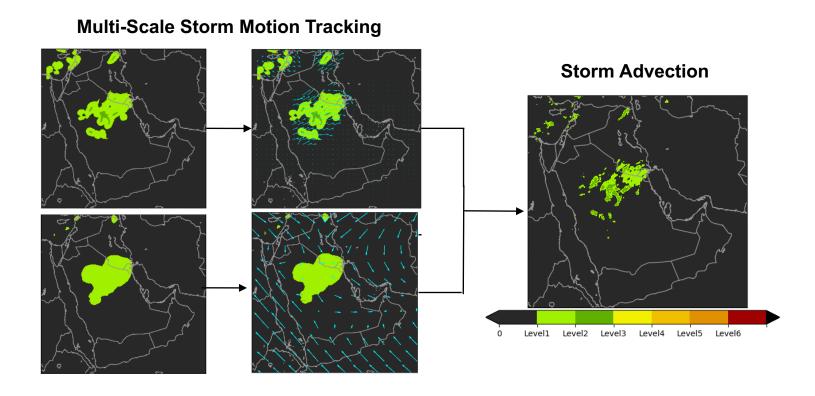


**Coverage of US & European Weather Radar Networks GSWR** fills gaps in limited weather radar coverage

# In collaboration with USAF and FAA, MIT LL has developed a Global Synthetic Weather Radar capability to fill gaps in radar coverage



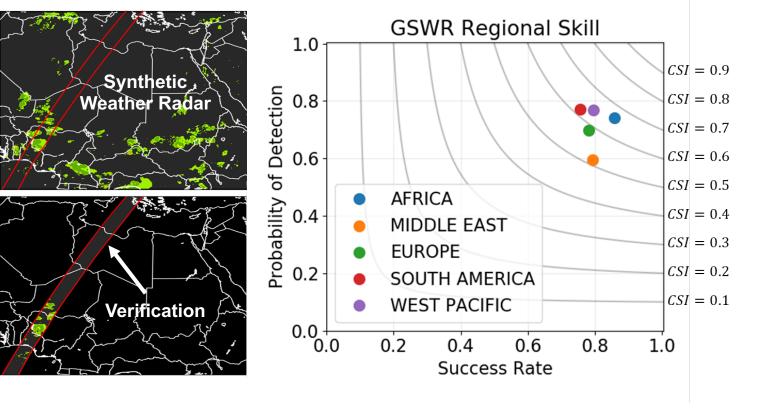
### **GSWR** generates 0-12 hour forecasts by blending short-term storm advection nowcasts with numerical weather forecasts



<sup>1</sup>Saltikoff, E., et al. "The Threat to Weather Radars by Wireless Technology, Bull. Amer. Meteor. Soc." (2015).

## GSWR is trained and validated using limited spaceborne radar observations provided by the NASA GPM

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**GPM = Global Precipitation Measurement Mission** 

#### The GSWR system is being transitioned to a cloud environment for future Air Force evaluation and use



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