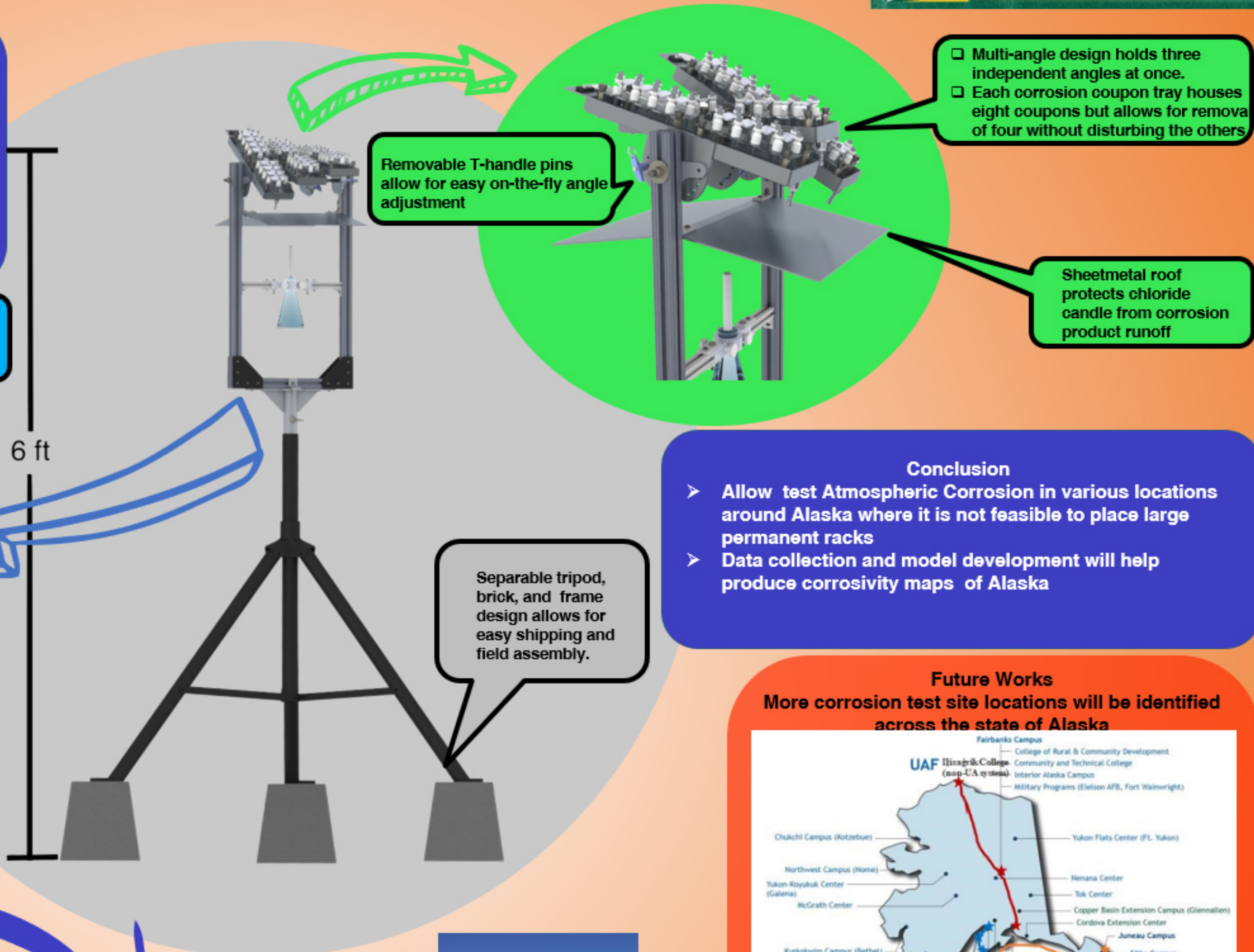
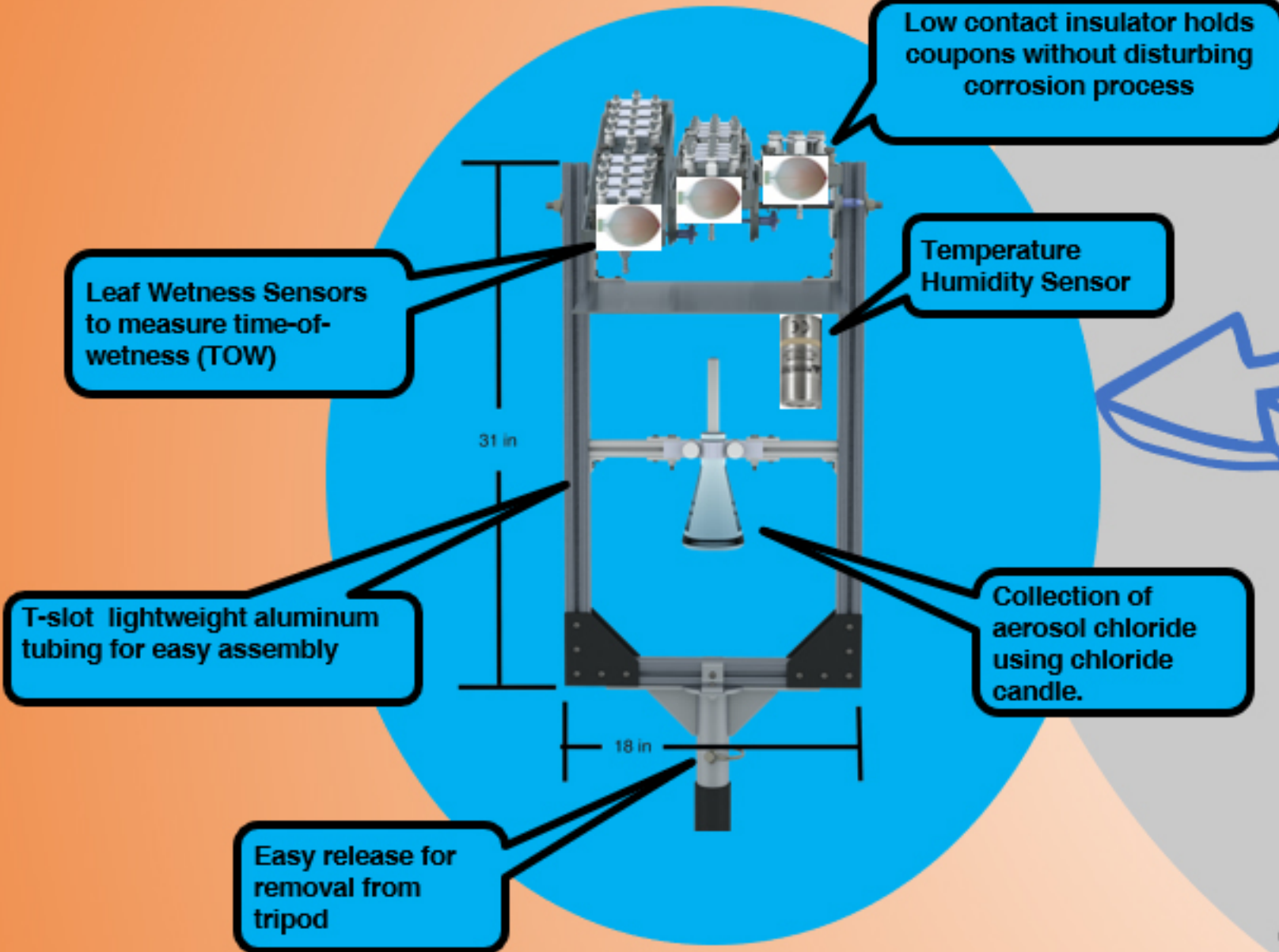


Goals

- Design a portable and easy to assemble modular atmospheric corrosion test rack that records weather parameters and corrosion rate onboard.
- Establish atmospheric corrosion test sites around the State of Alaska that enables future students' research projects and other large entities to conduct atmospheric corrosion testing.
- Obtain weather data and mass loss corrosion rate data of carbon steel coupons at these locations in order to create predictive models relating locations and atmospheric conditions to corrosion rates.

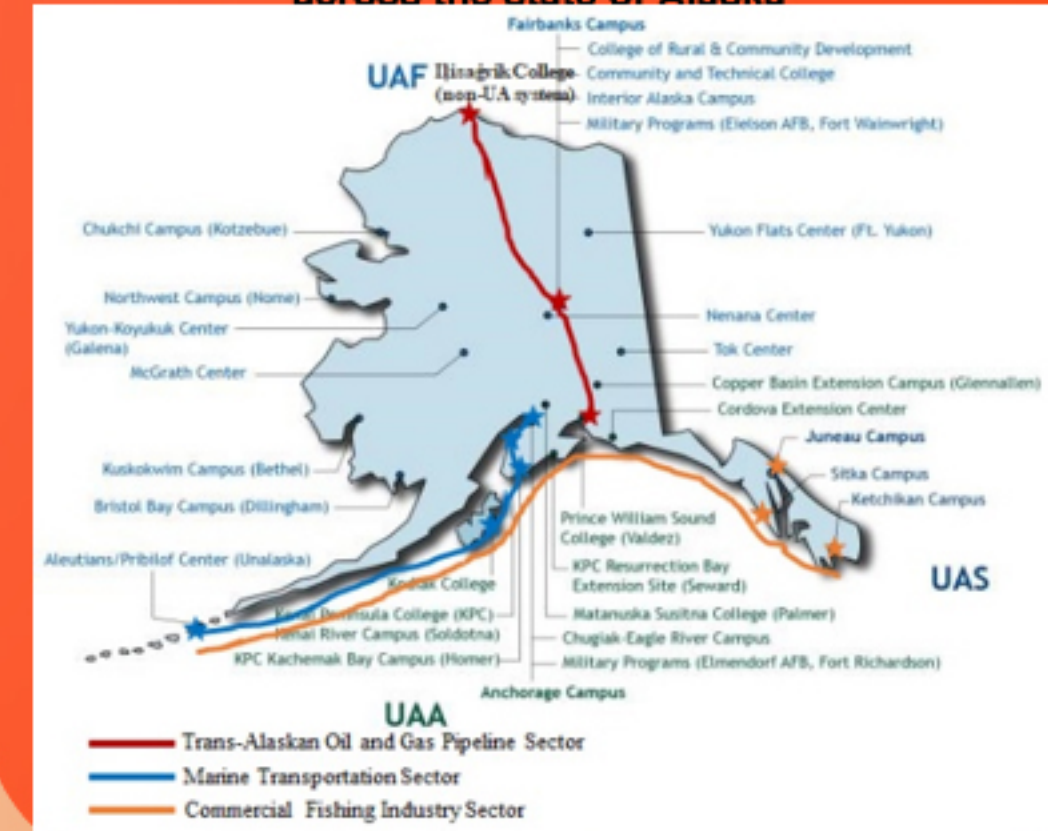


Conclusion

- Allow test Atmospheric Corrosion in various locations around Alaska where it is not feasible to place large permanent racks
- Data collection and model development will help produce corrosivity maps of Alaska

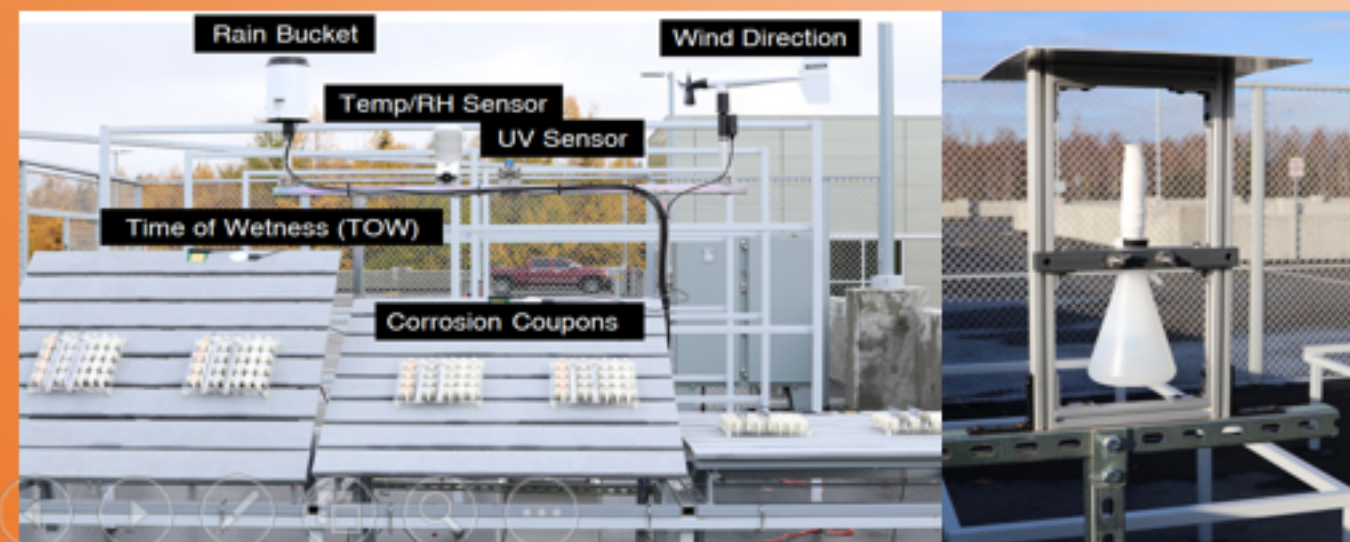
Future Works

More corrosion test site locations will be identified across the state of Alaska



Before

- Testing racks required immense setup
- Long Term and permanent locations
- Heavy and difficult to ship
- Separate corrosion testing apparatus and aerosol chloride measurement device



After

- Portable, modular, and easy field assembly
- Inexpensive to manufacture
- Multiple angles at once
- All in one corrosion testing and aerosol chloride measurement



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