

Translator support for CACTI



A new role

- Each AMF deployment will get a Translator, for CACTI it is me.
- The Translator will have several roles. Main role is to enable smooth communications between Science and Infrastructure.
- Specific role is the shepherd the product generation process across the translator team.





Science product development led by team of scientists

Translator Group





Connor Flynn Aerosol POC







Scott Collis Convective POC

Scott Giangrande High-latitude POC

Shaocheng Xie Modeling POC



Krista Gaustad Software Development



Justin Monroe Data Quality





CLIMATE RESEARCH FACILITY

Laura Riihimaki

Warm Boundary

Layer POC

Aim for CACTI

- In a nutshell: To go into the deployment knowing the critical measurements for our core VAPs and selected optional VAPs.
- Work with the DQO to monitor these data streams (stoplight like approach).
- Work with the Translator team to ensure rapid VAP generation to allow swift dissemination of Science results.





Core VAPs

VAP	Primary Measurement	Translator/Coord	Developer	Instrument POCs
AERINF	longwave spectral radiance	Riihimaki	Shippert	
AOD	aerosol optical depth	Flynn	Ermold	
AOP	aerosol optical properties from AOS	Flynn	Ermold	
KAZR-ARSCL	cloud boundaries, radar reflectivity, radar moments	Giangrande		
DLPROF	UV wind profiles, clear air vertical velocity stats	Riihimaki	Sivaraman	Newsom
INTERPSONDE	profiles of temp, humidity, pressure, wind	Giangrande		
LSSONDE	profiles of temp, humidity, pressure, wind			
MPLCLDMASK	cloud mask, attenuated backscatter, depolarization ratio	Riihimaki	Donna Flynn/Siv <mark>araman</mark>	
MWRRET	liquid water path, precipitable water vapor	Riihimaki	Gaustad	
PBLHT	PBL Height	Riihimaki	Sivaraman	
QCECOR	latent heat flux, sensible heat flux	Xie	Qi Tang	
QCRAD	LW, SW surface irradiances	Riihimaki	Howie/Shi	
RADFLUX	clear sky broadband surface irradiances, cloud fraction	Riihimaki	Howie/Gaustad	





Optional VAPS

VAP	Primary Measurement	Translator/Coord	Developer	Instrument POC
AERIoe	Boundary-layer temp, humidity, LWP, PWV	Riihimaki	Shippert	
ARMBE	Hourly-mean data with additional QCs	Xie	Qi Tang	
CFAD	Reflectivity CFAD for comparison to simulator output	Xie	Y. Zhang	
MERGEDSOND	profiles of temp, humidity, pressure, wind	Giangrande		
MFRSRCIP	Column-intensive aerosol properties	Flynn	Shi	
MFRSRCLDOD	cloud optical depth, effective radius (when mwr data available)	Riihimaki	Shi	
MICROBASE	ice water content, liquid water content, cloud droplet size			
NDROP	droplet number concentration, cloud adiabaticity	Riihimaki	Sivaraman	
SASHEVISAOD	aerosol optical depth, hyperspectral from 375-1020 nm	Flynn	Ermold	
SASHENIRAOD	aerosol optical depth, in bands from 1000-1700 nm			
SURFSPECALB	spectral surface albedo	Riihimaki	Gaustad	
VARANAL	Large-scale advective tendencies of temperature and moisture,	Xie	Shuaiqi Tang	
	vertical velocity, and analysis domain mean surface and TOA fluxes			





VAPs in Development that can be run

VAP	Primary Measurement	Translator/Coord	Developer	Instrument POCs
PCCPP	point cloud of cloud points product from stereo cameras	Romps		
CMAC2.0	Corrected refl. dealiased winds, spec. differentail phase, rainfall rates on radar coords.	Collis	Sherman	Radar Eng team
SAPR-MMCG	Moments mapped to a cartesian grid	Collis	Sharman	
SAPR-QVP	Quasi-Vertical Profiles	Collis	Picel	
SAPR-VAD	Wind profiles in precipitation	Collis	Sherman	





For now

- Questions on products and ARM and you don't know who to ask.. You can ask me.
- Talk to Adam and Steve about your priorities.
- Being loud will not guarantee you priorities are met but it does not hurt.



