

CARSNET updates from 2023

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Team CAMS-CMA, China

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Team Members

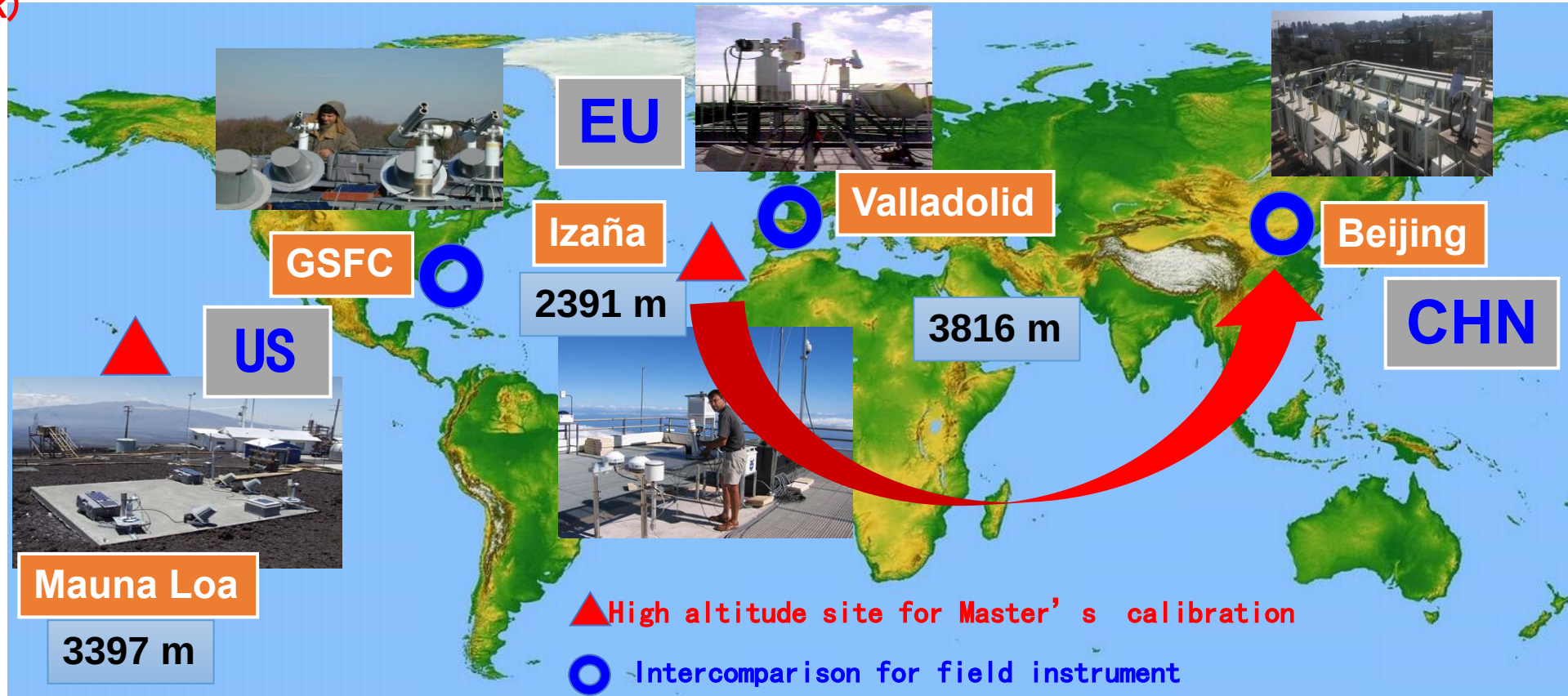
- 2 graduate student join the team, work at roof



Member	Responsibility	Major
Huizheng	Leader	Aerosol effect
Yu, Shuhui, Haoling	Roof	Detection (columnar, profile)
Yu, Ke, Lei, Dan	Sphere	Application (satellite, composition...)
Jian, Wen, Tian	Maintenance	Sea-land aerosol variation
Chang, Rui	Shipping	Dust effect
Yi, Xin	Check	City pollution

Calibration system

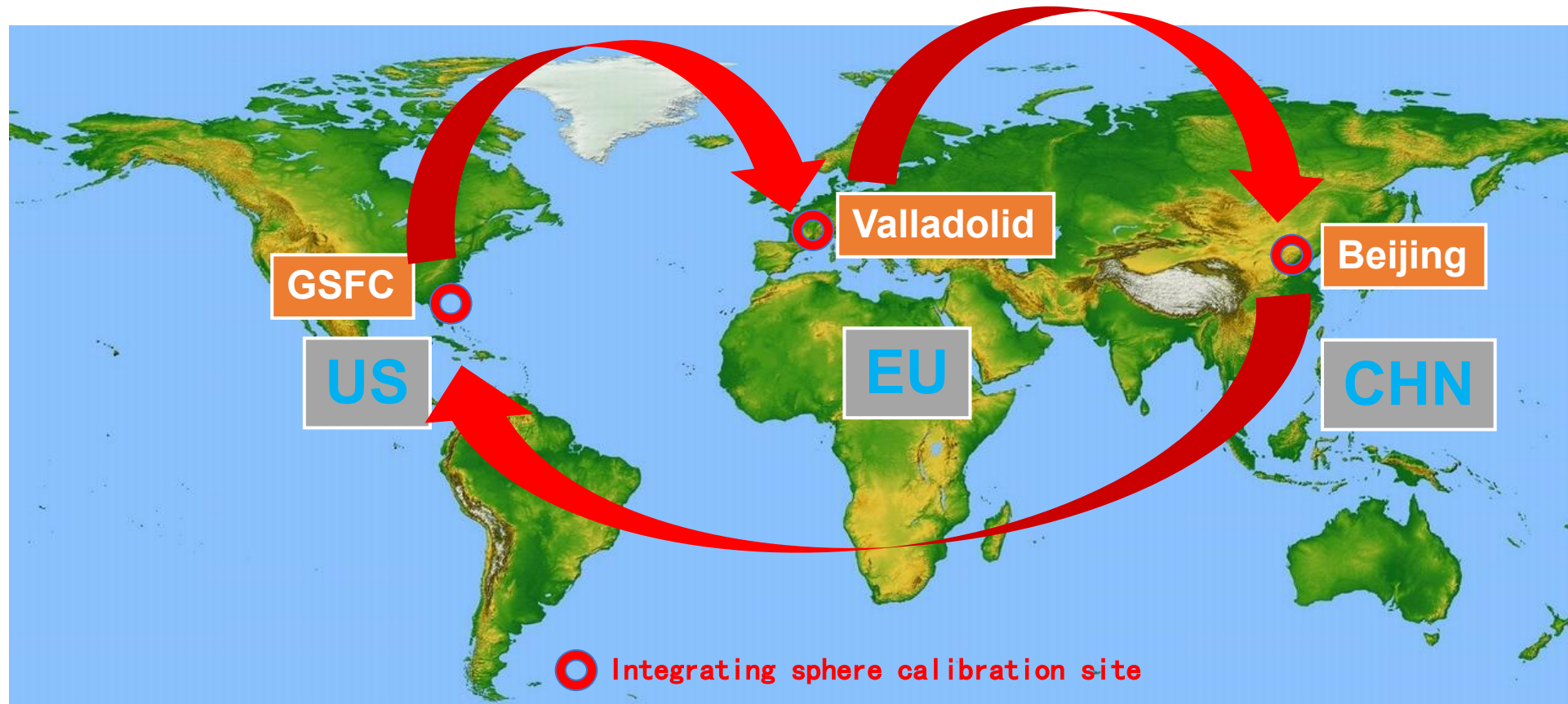
- Sun calibration (consistency with other network)



CARSNET Masters are annually calibrated at Izaña with PFR, AERONET and SKYNET's Masters, to keep consistency with other networks.

Calibration system

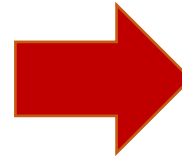
- Sphere calibration (modified by travelling master)



CARSNET integrating sphere is modified by Travelling Master, between GSFC, Valladolid and Lille, to reduce uncertainty $< 5\%$.

Calibration facility at CAMS - Roof

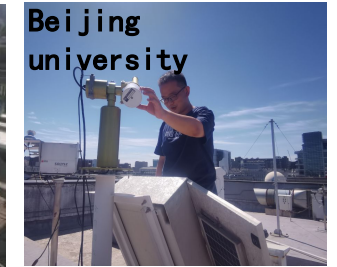
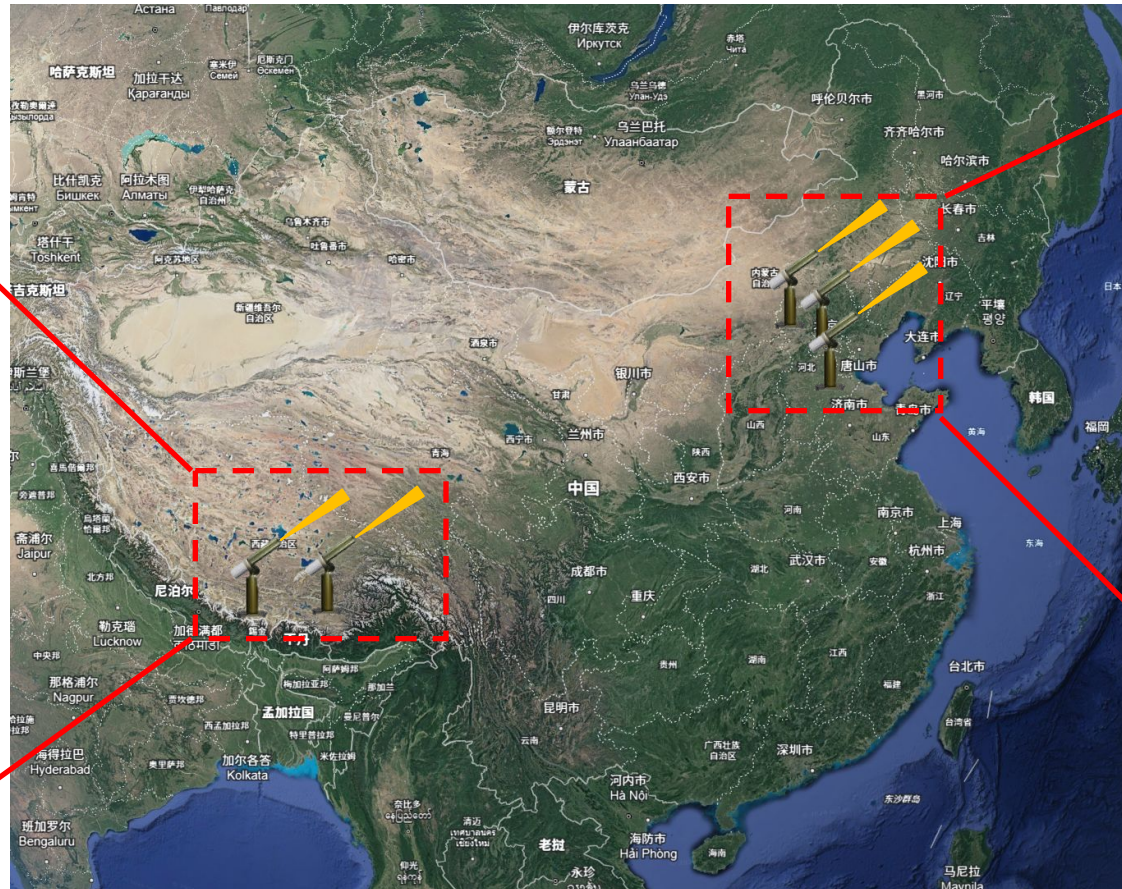
- Robots: 18 → 26 (maximum)



Currently, the observation platform has been upgraded and expanded, with 6 permanent location and 2 temporary.

AEROENT – CARSNET in China

- Present: 6 sites are active (4 in North China and 2 in the Tibet Plateau)

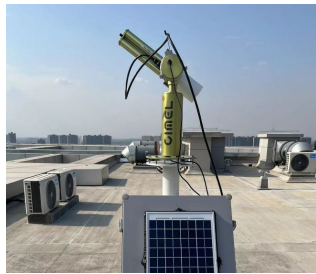
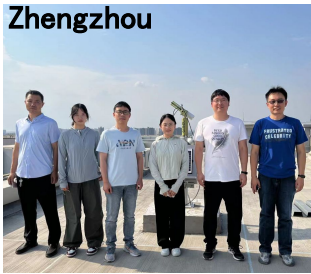


Except for the model T are running at CAMS and Beijing university, device at other sites are model 5 (even early model). Though they are old, we try to keep them awake...

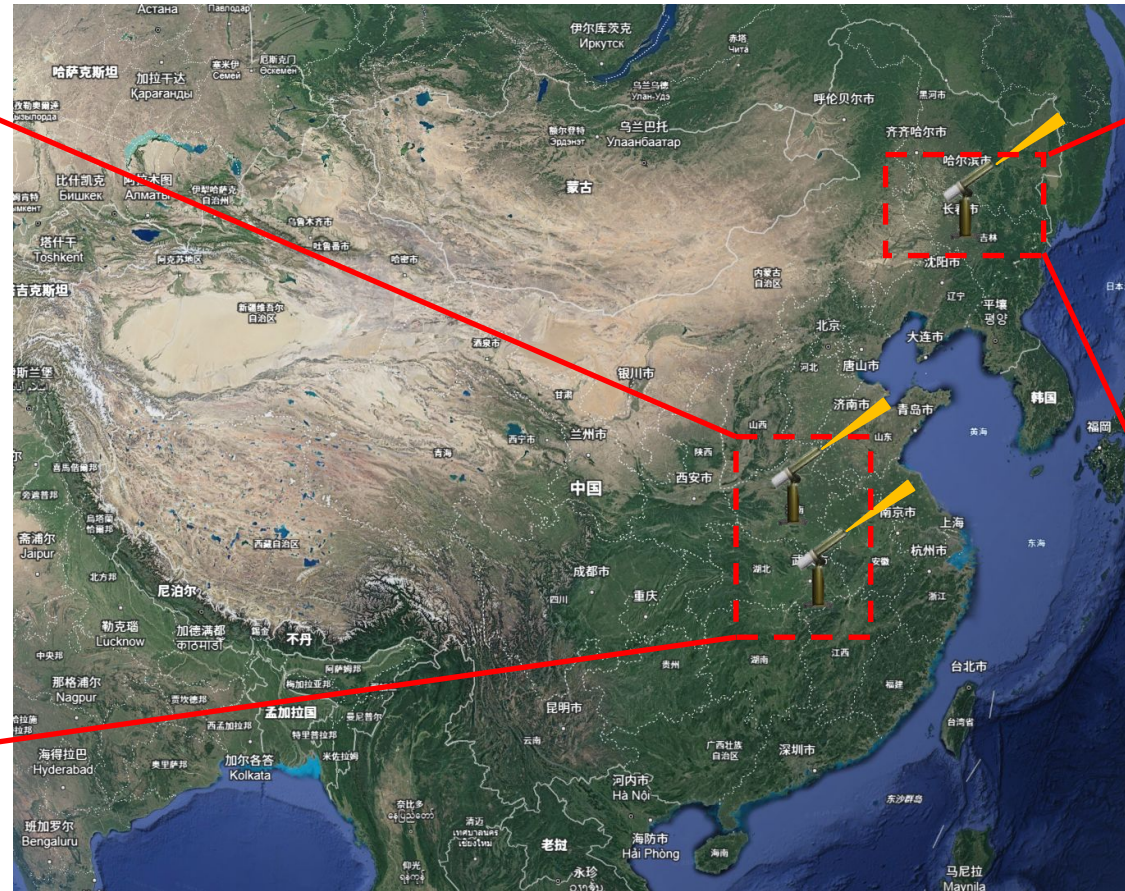
AEROENT – CARSNET in China

- New coming: 3 sites (2 in Central China and 1 in Northeast)

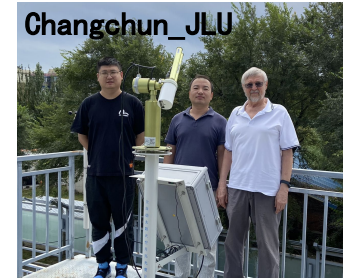
Zhengzhou



Wuhan



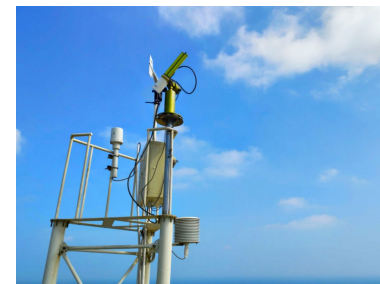
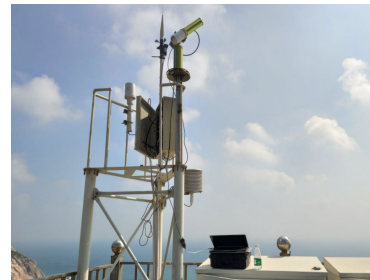
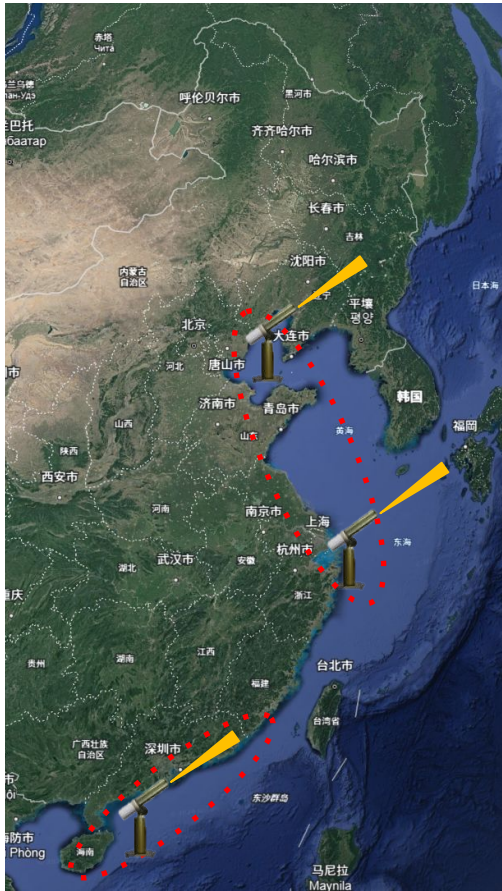
Changchun_JLU



Glad to see more and more friend join us and 3 new sites (model T) will appear. The devices of Changchun_JLU and Zhengzhou are in calibration at Beijing-CAMS, and Wuhan is in

Project and campaign

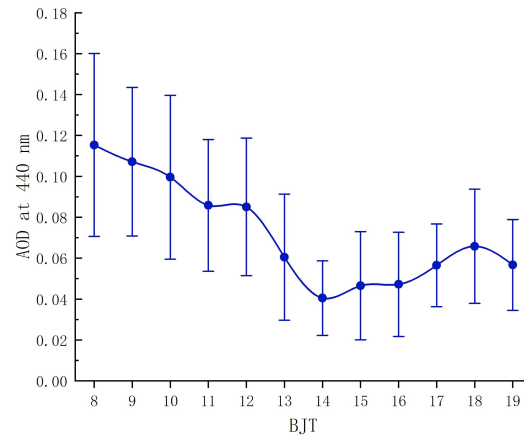
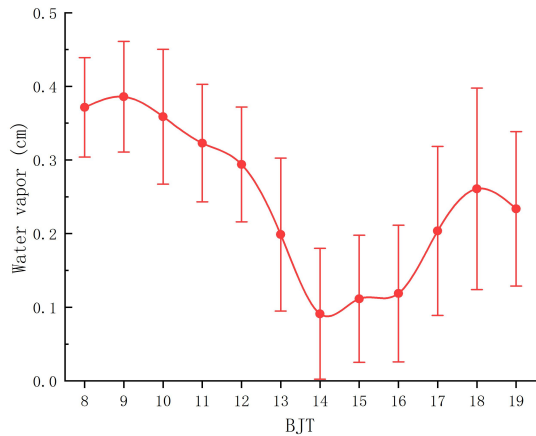
- Future plan: 2+ OC sites in Eastern Costal China



We would like to include 2 or more OC sites in costal China. There are about 10 OCs as far as I know, but they are lack of calibration and data processing.

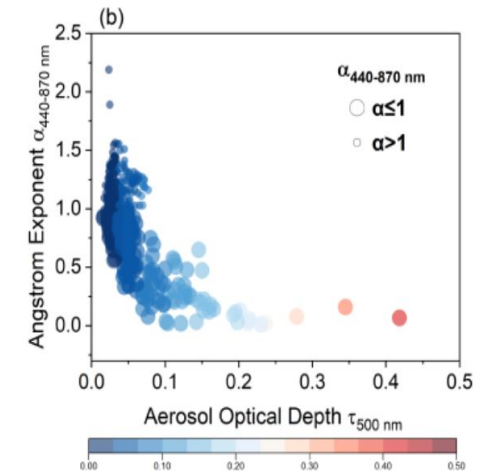
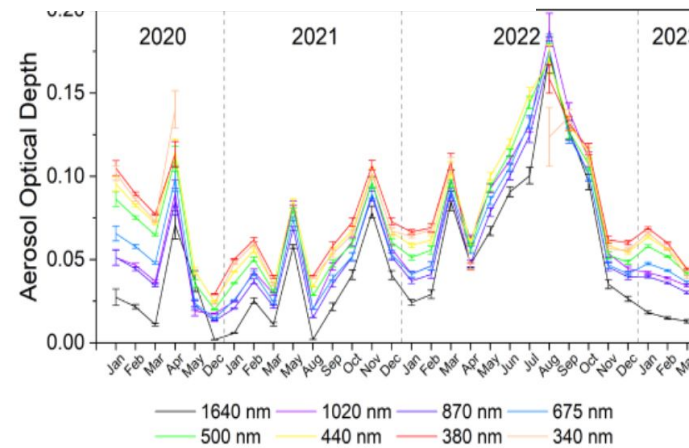
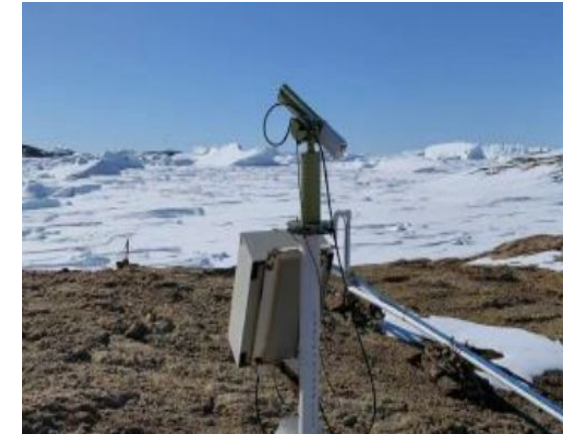
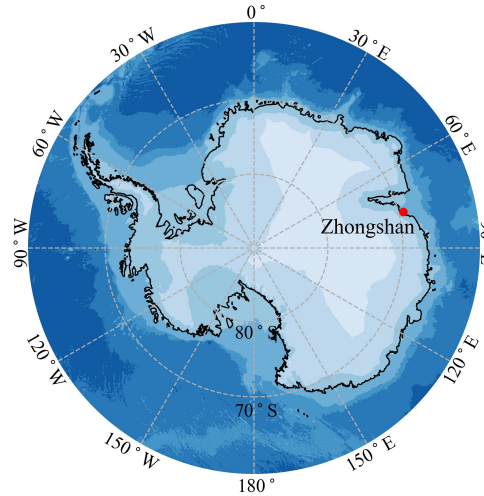
Project and campaign

● Navigation observation at Tibet Plateau



AOD at water vapor at Mt. Qomolangma (5672 m)

● Polar research at Zhongshan station



AOD from 2020 to 2023

CARSNET – AERONET updates from 2023

- ◆ Routine process:

Master calibration to be finished in the end of this year or later. Check and update the data transfer of remote sites at Tibet Plateau.

- ◆ Future Plan:

Encourage more devices to join us, especially the instruments in model T and OC.

- ◆ Acknowledgements:

Many thanks to the GOA of Valladolid (Carlos' team), Izaña observatory (África) and GSFC team (Ilya, Joel, Tom...) in their selfless and enthusiastic support to CARSNET.

Thank you for listening

Γραφειο λου τοι πιστενινδ

