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File:

(1) Spectralon measurements (background)

[CLCLARSFTS_SPECTRALON_XCO2_XCH4_XCO_XN2O_2011_2021.txt](#)

(2) Basin measurements (33 surface target in the LA basin)

[CLCLARSFTS_BASIN_XCO2_XCH4_XCO_XN2O_2011_2021.txt](#)

1. Data columns in the file

Target#: target number, see next page

Year

Month

DayofMonth

DayofYear

LocalHour

SZA: solar zenith angle

SNR: signal noise ratio

O2 Ratio: an indicator of aerosol scattering effect, see Zeng et al. (2020)

CH4 VSF Error: Volume Scale Factor Error from GFIT (used to derive the XGHG uncertainty)

CO2 VSF Error

CO VSF Error

N2O VSF Error

O2 VSF Error

XCH4

XCH4 Uncert: Uncertainty for XGHG

XCO2

XCO2 Uncert

XN2O

XN2O Uncert

XCO

XCO Uncert

OuPr: Surface Pressure

VZA: Viewing Zenith Angle

2. CLARS-FTS Surface target ID, name, lat, and lon

0	Spectralon	34.22	-118.06
1	210Bend	34.12	-117.868
2	605and60	34.03	-118.025
3	60Industry	34	-117.883
4	AngelsStadium	33.8	-117.883
5	Corona	33.868	-117.601
6	DownTownFar	34.054	-118.305
7	DownTownNear	34.102	-118.234
8	Downey	33.93	-118.158
9	ELAWater	34.048	-118.116
10	Fontana	34.069	-117.39
11	Glendale	34.154	-118.273
12	HuntinghtonBeach	33.722	-117.975
13	LaMirada	33.91	-118.006
14	LakeMatt	33.877	-117.416
15	LongBeach405	33.821	-118.195
16	MarinaDelRey	33.99	-118.4
17	Norco	33.962	-117.573
18	NorthOC	33.863	-117.776
19	OCairPort	33.678	-117.864
20	PalosVerdes	33.81	-118.368
21	Pomona	34.043	-117.725
22	RanchoCucamonga	34.081	-117.589
23	Riverside	33.951	-117.392
24	SantaAnitaRace	34.141	-118.042
25	SantaFeDam	34.11	-117.969
26	SantaMonicaMountains	34.093	-118.47
27	UniversalCityNew	34.143	-118.357
28	WestPasadena	34.17	-118.165
29	Northridge	34.22320199	-118.5464238
30	WoodlandHills	34.177662	-118.600681
31	CanogaPark	34.207205	-118.59497
32	ShermanOaks	34.16310726	-118.4107173
33	VanNuysAirPort	34.2008018	-118.49562

Reference:

- Fu, D., Pongetti, T. J., Blavier, J.-F. L., Crawford, T. J., Manatt, K. S., Toon, G. C., Wong, K. W., and Sander, S. P.: **Near-infrared remote sensing of Los Angeles trace gas distributions from a mountaintop site**, Atmos. Meas. Tech., 7, 713–729, <https://doi.org/10.5194/amt-7-713-2014>, 2014.
- Zeng, Z.C., Xu, F., Natraj, V., Pongetti, T.J., Shia, R.L., Zhang, Q., Sander, S.P. and Yung, Y.L., 2020. Remote sensing of angular scattering effect of aerosols in a North American megacity. *Remote Sensing of Environment*, 242, p.111760.

CLARS website: <http://clars.caltech.edu/>