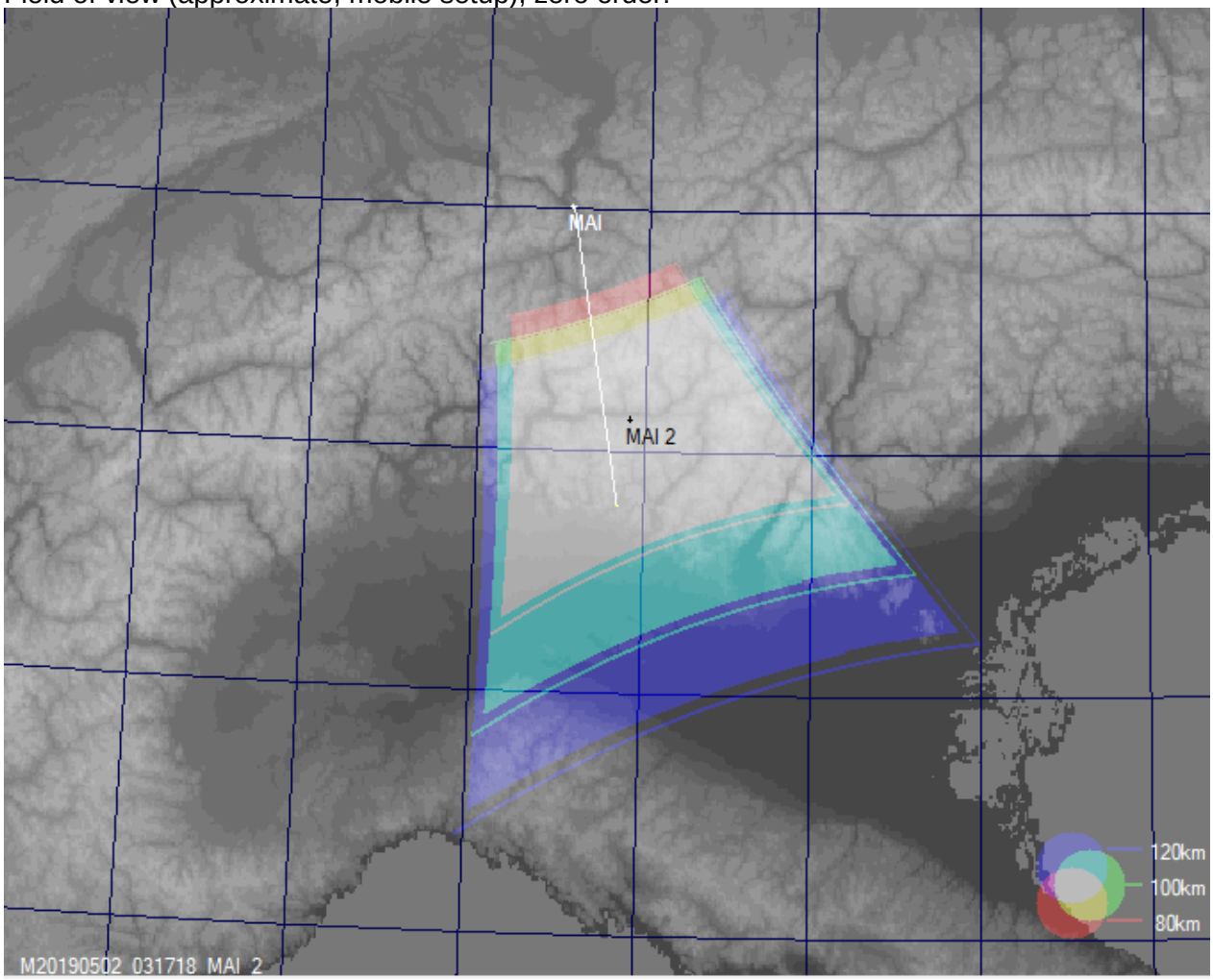
Meteor spectra 2019, jan - jun

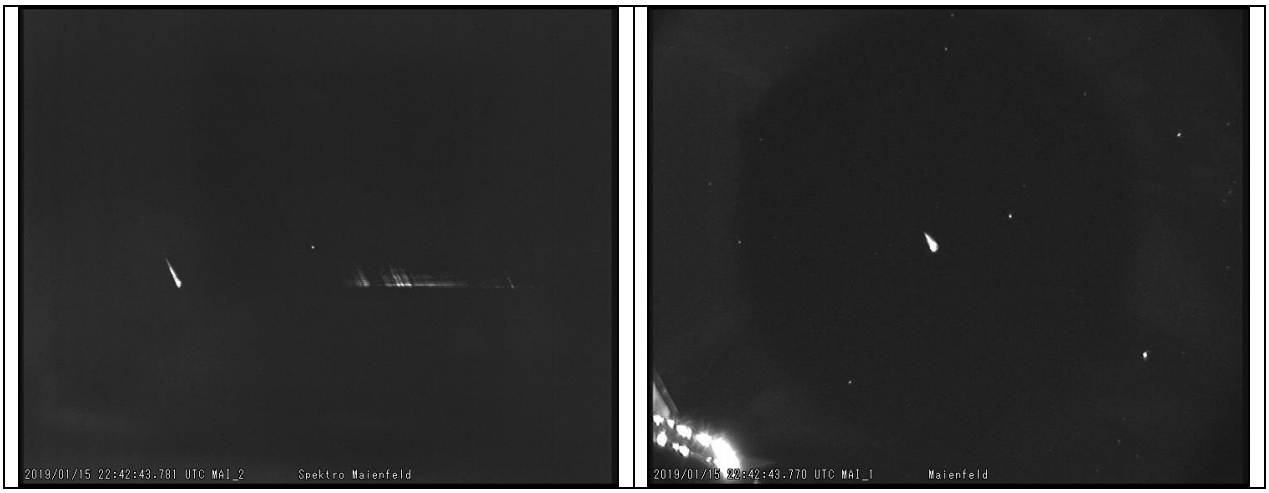
Overview

This is a collection of meteor spectra obtained at Maienfeld (MAI_2), with a Watec 902H2 ultimate
20.3.2019
MAI_2 lens changed Fujinon YV → Tamron VG412 ASIR
MAI_1 lens changed Tamron 13VG308 ASIR → Tamron VG412 ASIR
Field of view (approximate, mobile setup), zero order:



Spectra analyzed with Python m_pype62.py

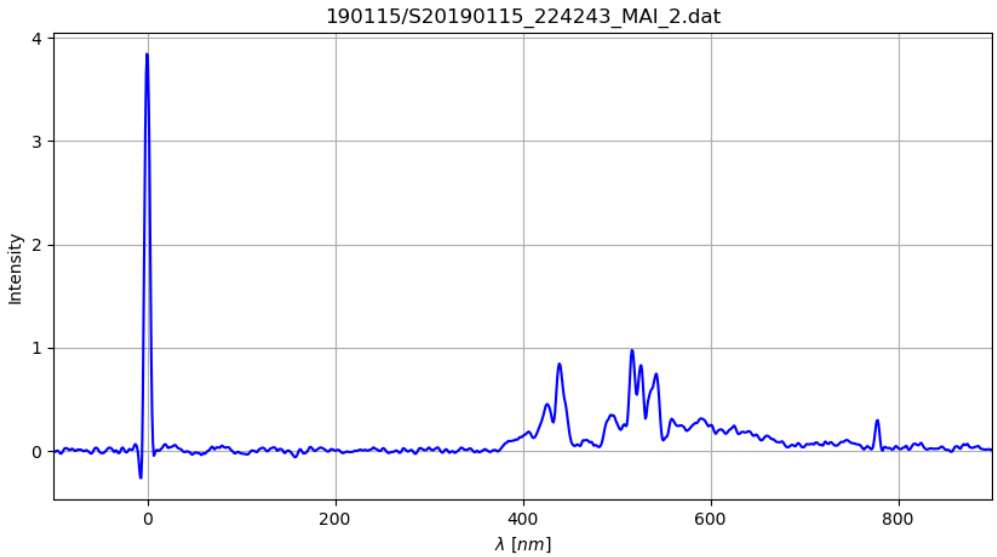
M20190115_224243_MAI_2, spo, -3.2m

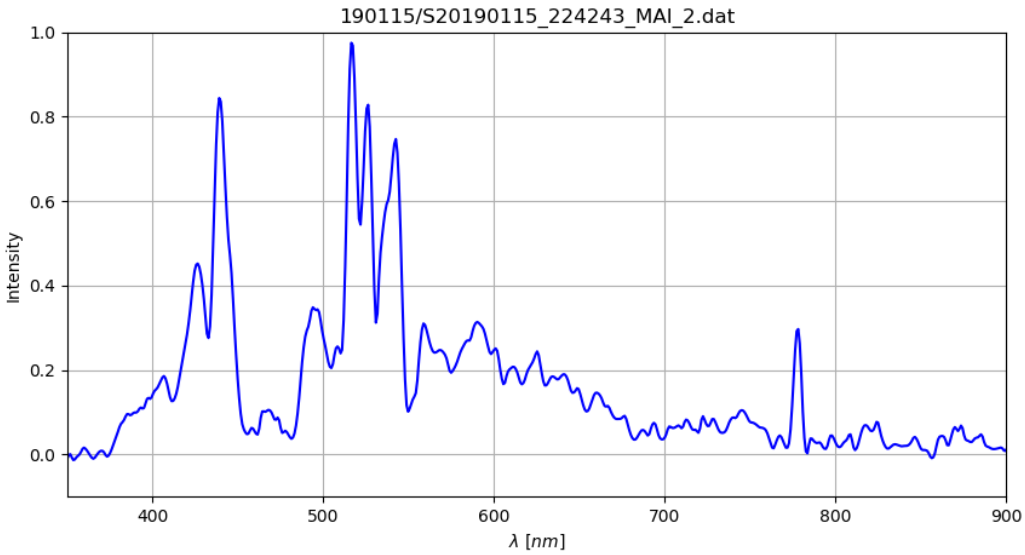


Fujinon YV F/0.95 f: 7 mm
polynom for fit lambda c: [1.971 -354.486] x00 =340

pixel	lambda	fit	error
179.81,	0.00,	-0.00,	-0.0000
574.14,	777.40,	777.40,	-0.0000

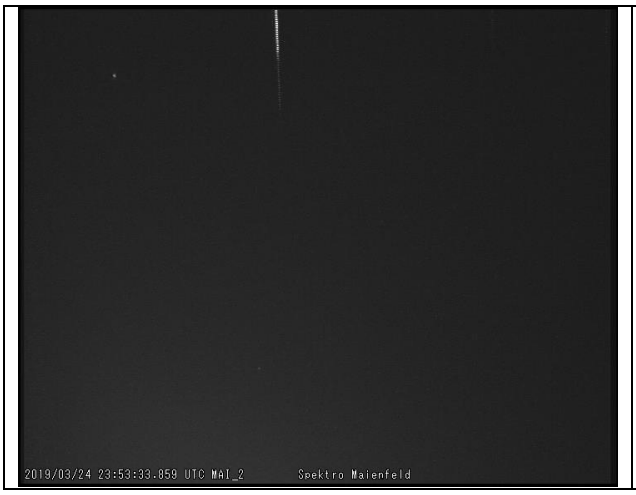
rms_x = 0.0000 spectrum 190115/r_add28cal.dat saved





Practically no Na I. Ca lines around 400nm defocused, not useful!

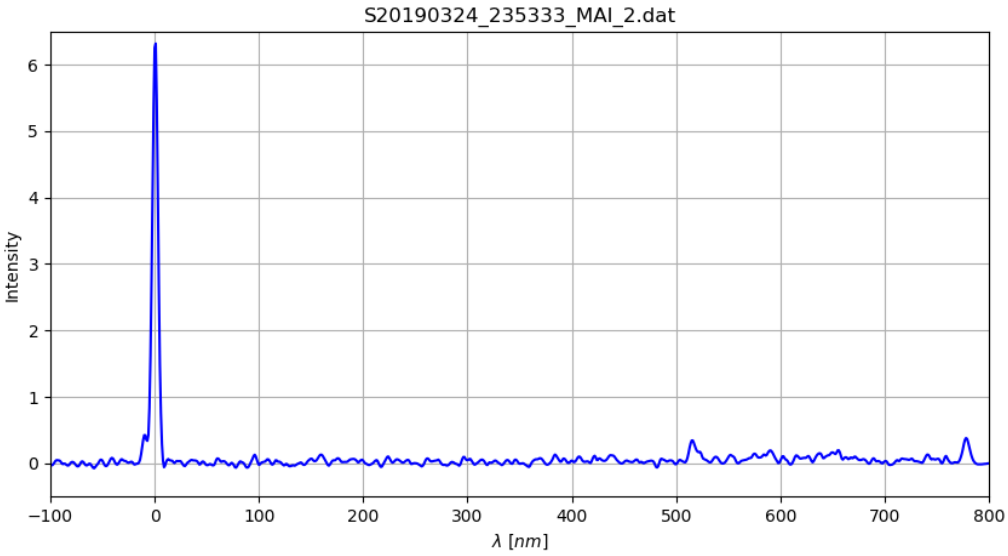
M20190324_235333_MAI_2, spo, -3.4m



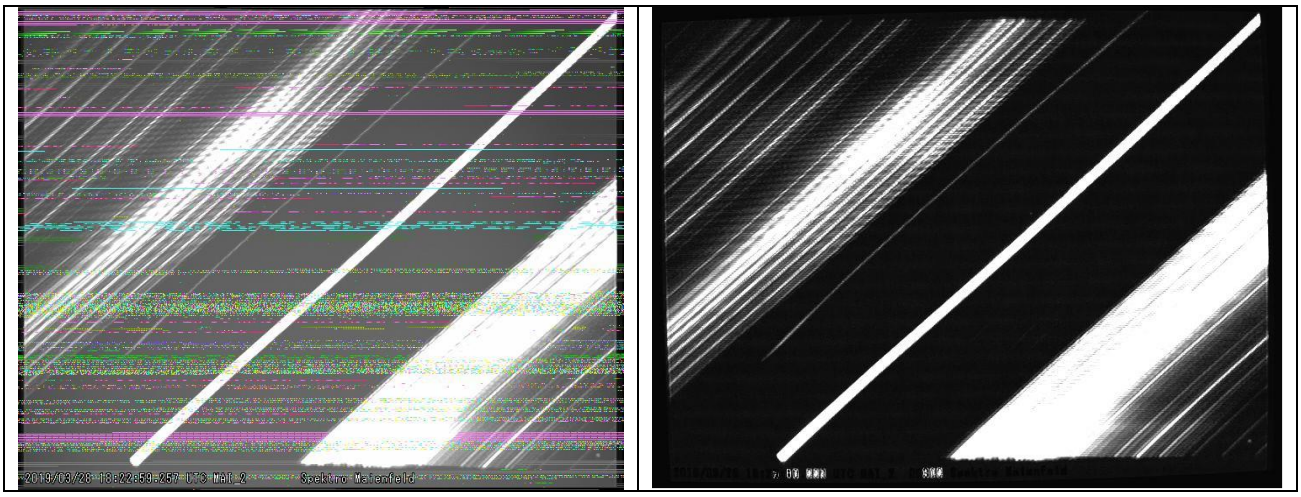
***-> polynom degree: 1
polynom for fit lambda c: [2.027 -627.61]

pixel	lambda	fit	error
309.94,	0.00,	0.53,	0.5347
564.24,	517.50,	515.92,	-1.5844
693.78,	777.40,	778.45,	1.0497

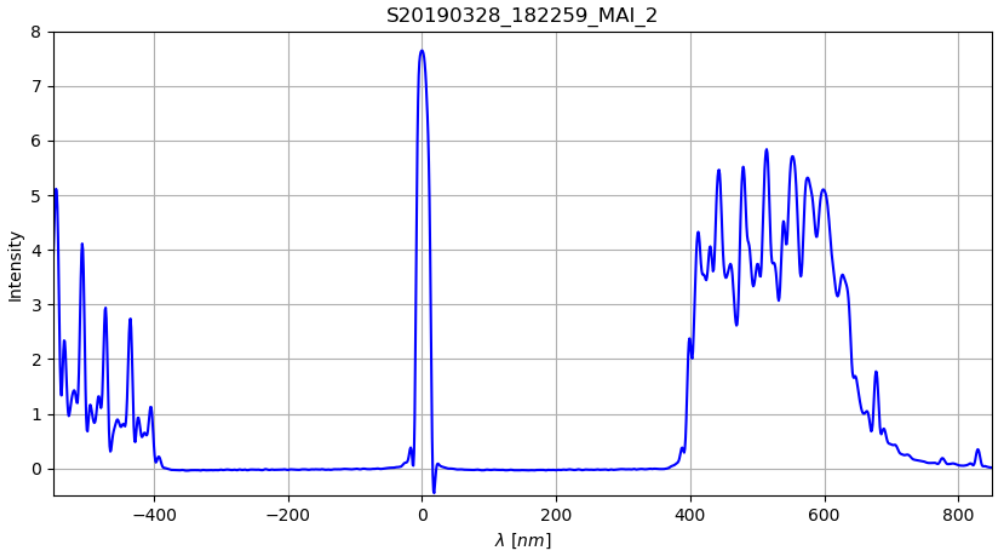
rms_x = 1.1399
spectrum out/r_add12cal.dat saved



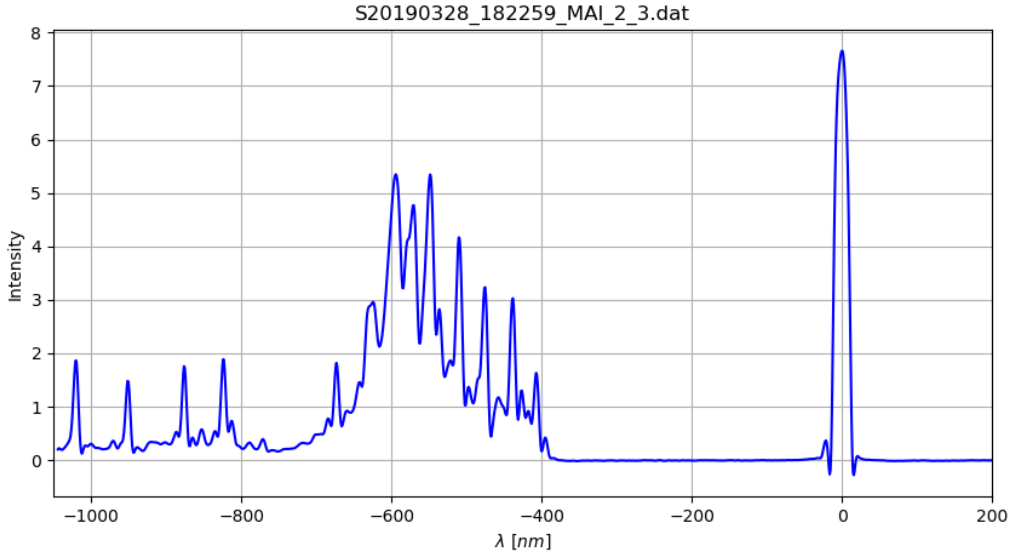
M20190328_182259_MAI_2, airplane, -5.4m



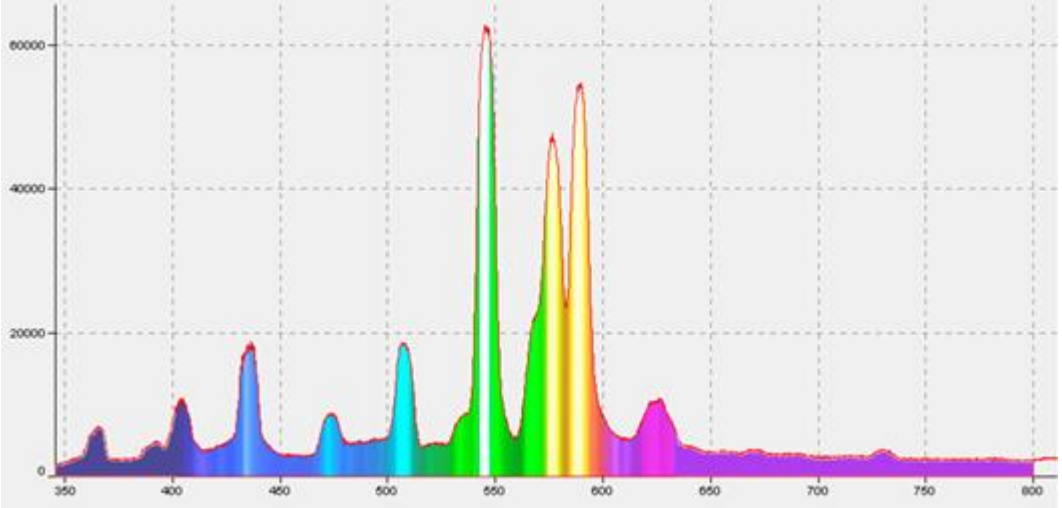
First frame with large noise
r2_add100:



r3_add60:

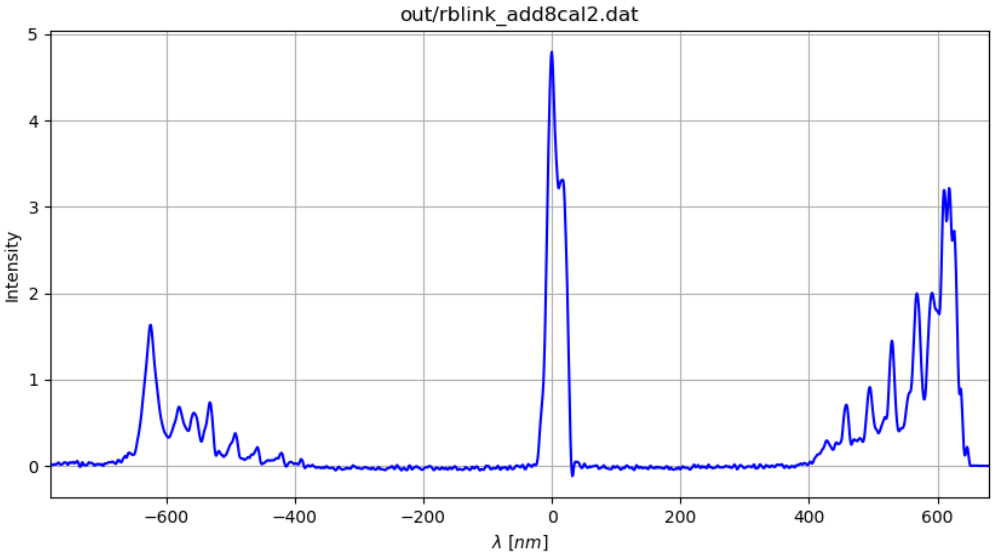


For details see ..\..\..\Python\190328\m_pipe190329.log
For comparison:

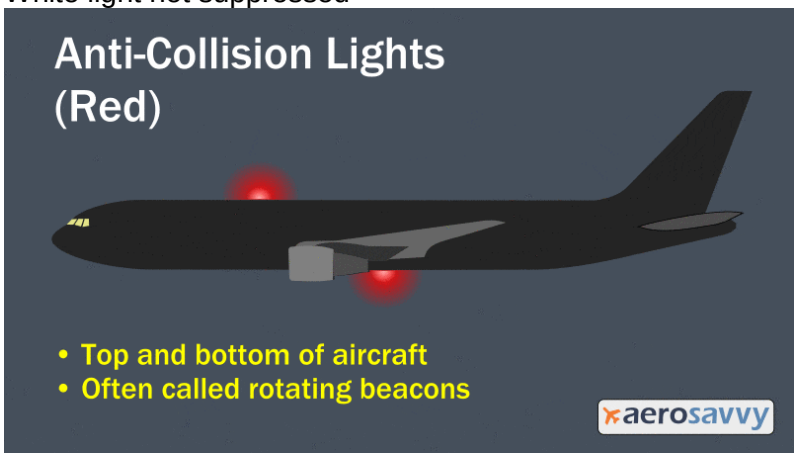


From: http://www.wikiwand.com/en/Metal-halide_lamp

Red blinking light, ..\..\..\Python\190328\m_pipe190331.log



White light not suppressed



See also mail Di. 02.04.2019 22:15

M20190603_014924_MAI_2, spo, -4.4m

***-> polynom degree: 1
polynom for fit lambda c: [**2.029** -229.723]

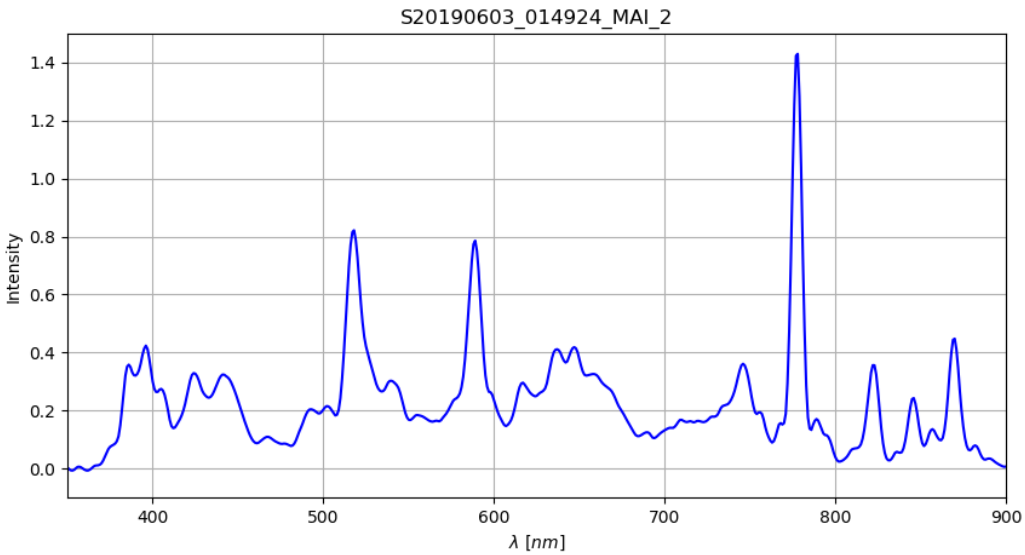
pixel	lambda	fit	error
113.49,	0.00,	0.50,	0.4976
367.98,	517.50,	516.74,	-0.7558
403.11,	589.00,	588.01,	-0.9927
497.09,	777.40,	778.65,	1.2508

rms_x = 0.9177
spectrum 190603/r_add16cal.dat saved

polynom for fit lambda c: [-6.086e-05 2.064e+00 -2.335e+02]

pixel	lambda	fit	error
113.49,	0.00,	-0.01,	-0.0119
367.98,	517.50,	517.79,	0.2906
403.11,	589.00,	588.65,	-0.3508
497.09,	777.40,	777.47,	0.0721

rms_x = 0.2307
spectrum 190603/r_add16cal.dat
saved

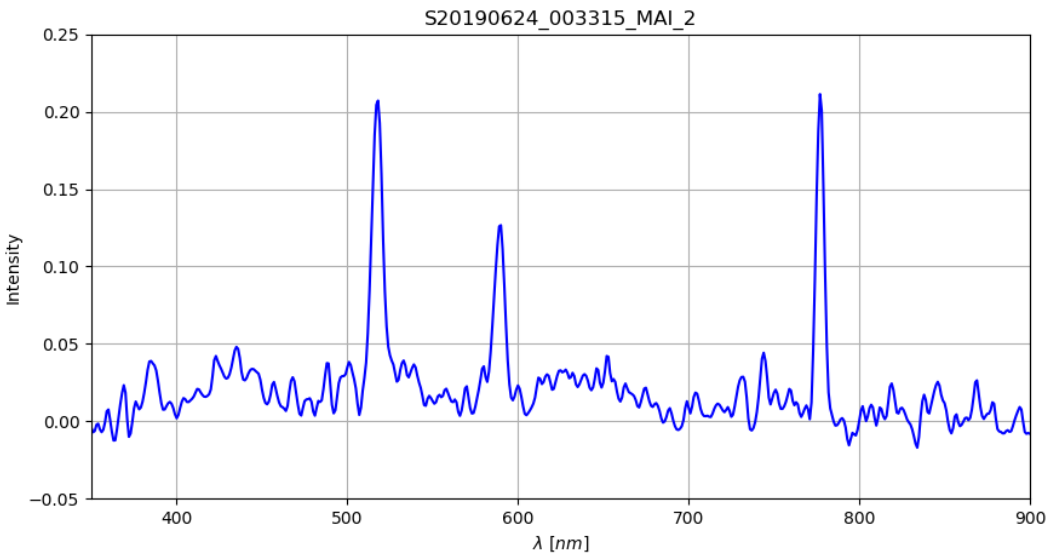


M20190624_003315_MAI_2, spo, -1.9m

***-> polynom degree: 1
polynom for fit lambda c: [**2.02** -458.314]

pixel	lambda	fit	error
226.90,	0.00,	-0.05,	-0.0465
483.12,	517.50,	517.44,	-0.0621
518.69,	589.00,	589.28,	0.2782
611.75,	777.40,	777.23,	-0.1696

rms_x = 0.1675
spectrum 190624/r_add48cal.dat saved



Content

Meteor spectra 2019 1
Overview.....1
M20190115_224243_MAI_2, spo, -3.2m 2
M20190324_235333_MAI_2, spo, -3.4m 4
M20190328_182259_MAI_2, airplane, -5.4m 5
M20190603_014924_MAI_2, spo, -4.4m 7
M20190624_003315_MAI_2, spo, -1.9m 8