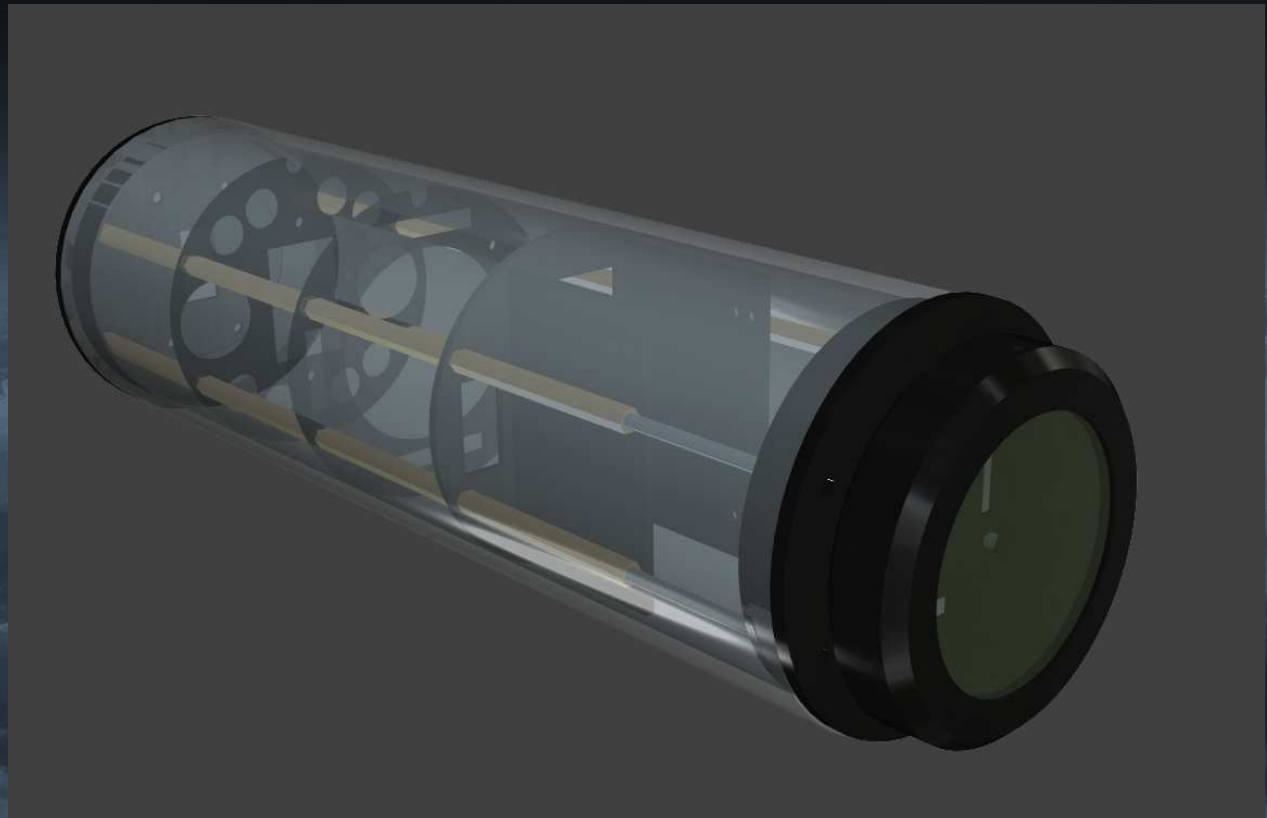


Latest developments in POLISH FIREBALL NETWORK

Mariusz Wiśniewski

Przemysław Żołądek



All sky?



Tests

POINTGREY BLACKFLY 0.9MPiX MONO

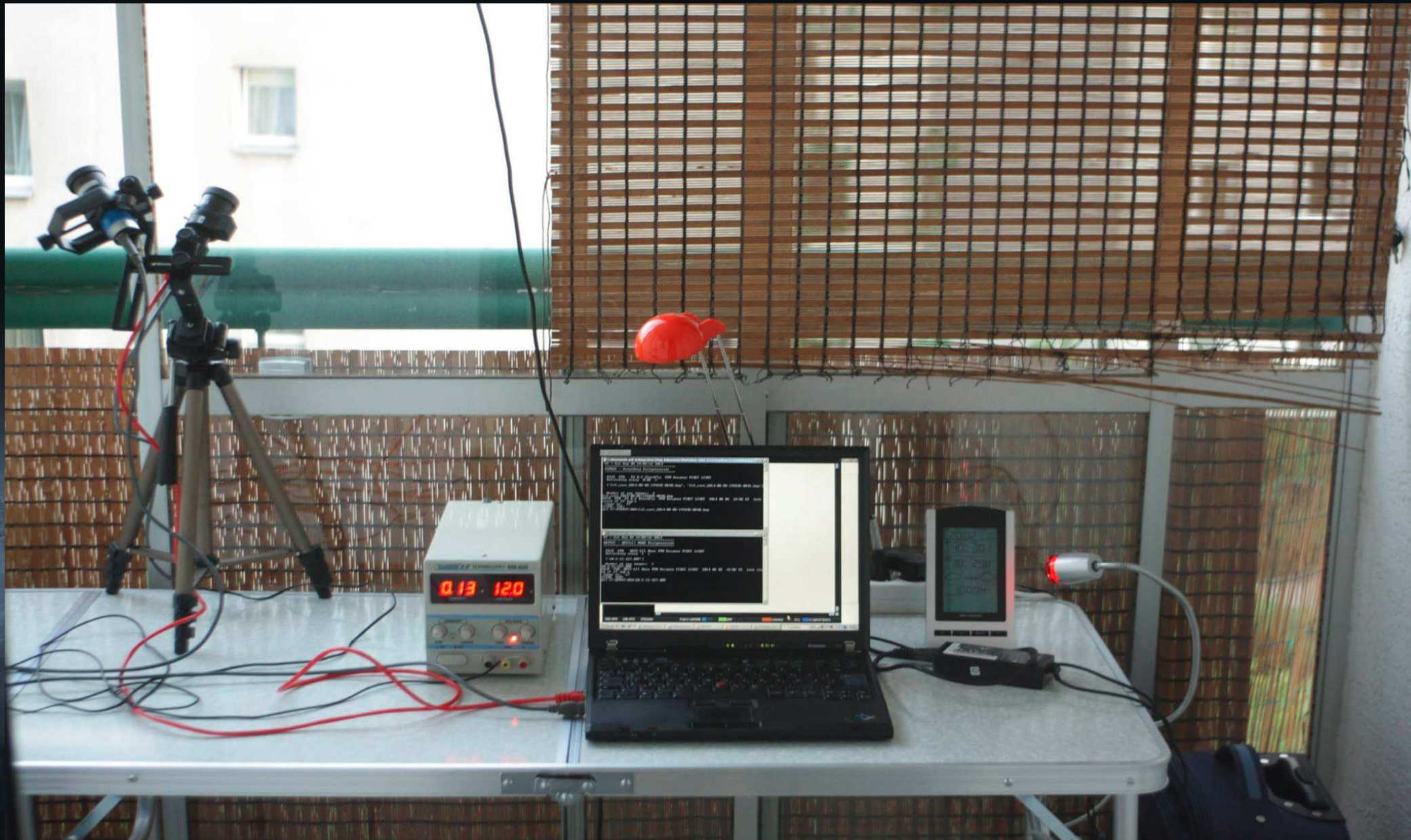


Tests

QHY 5-LII MONO



Tests of cameras



Tests of lenses

PENTAX



COMPUTAR



FUJINON

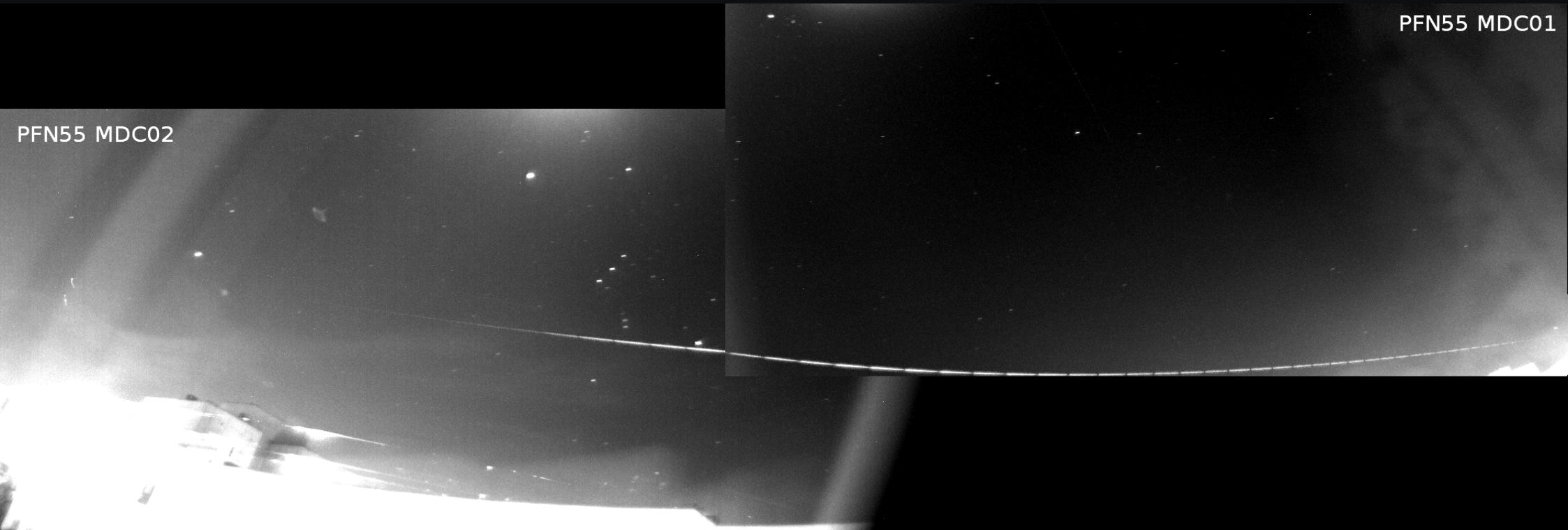


TAMRON



First results

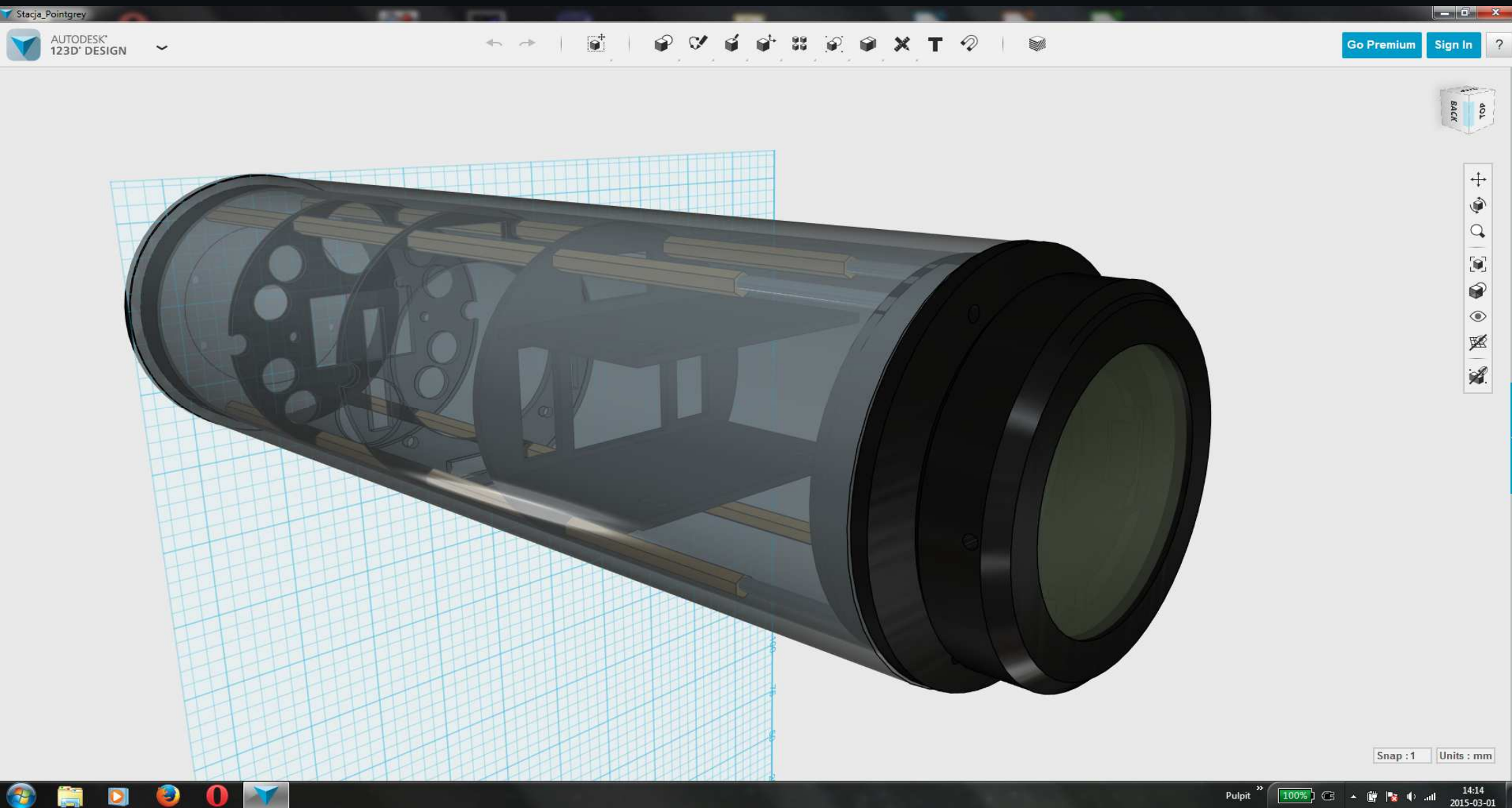
Earthgrazer, 16.09.2014



PFN55 MDC01

PFN55 MDC02

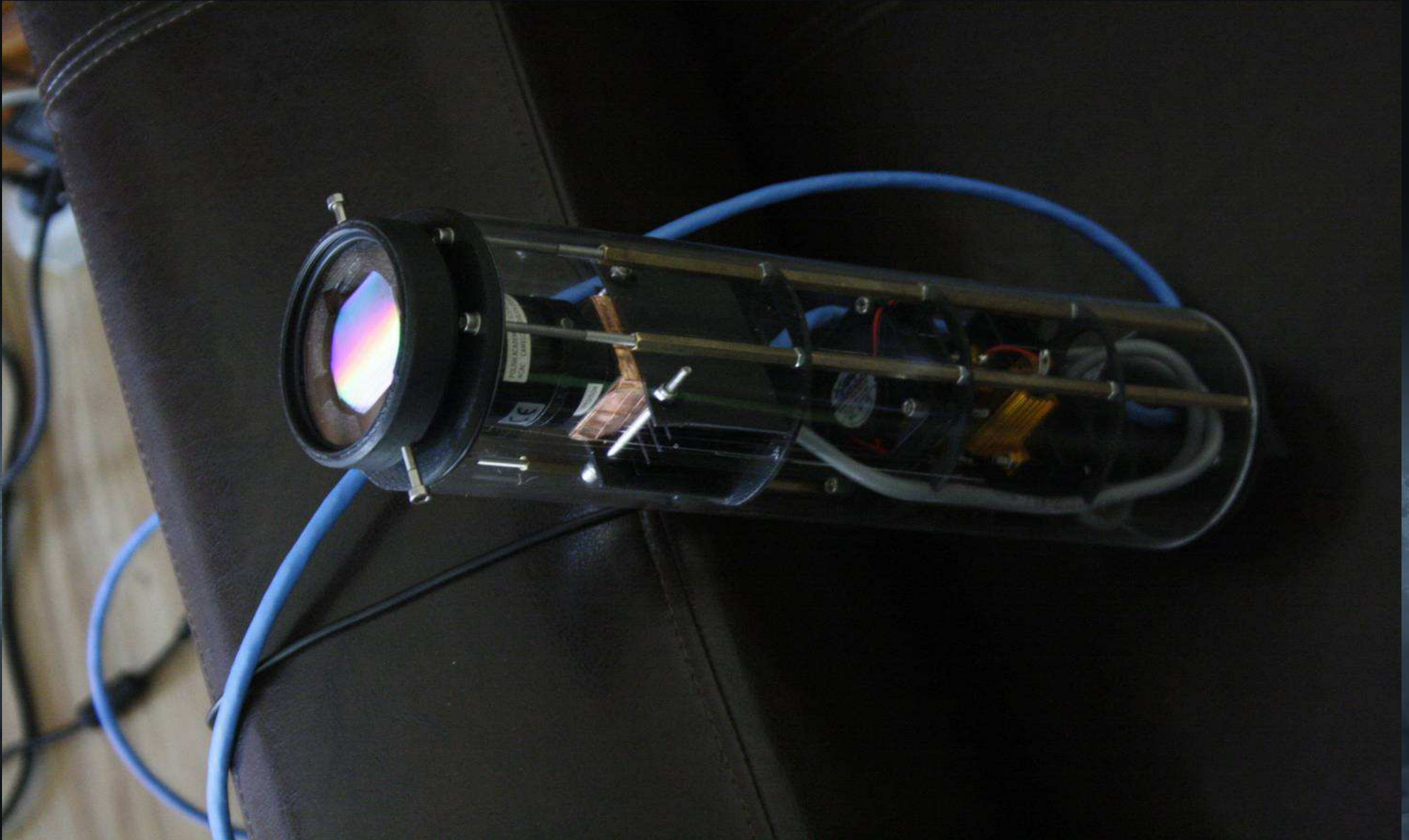
CGMS1 – AUTODESK 123D



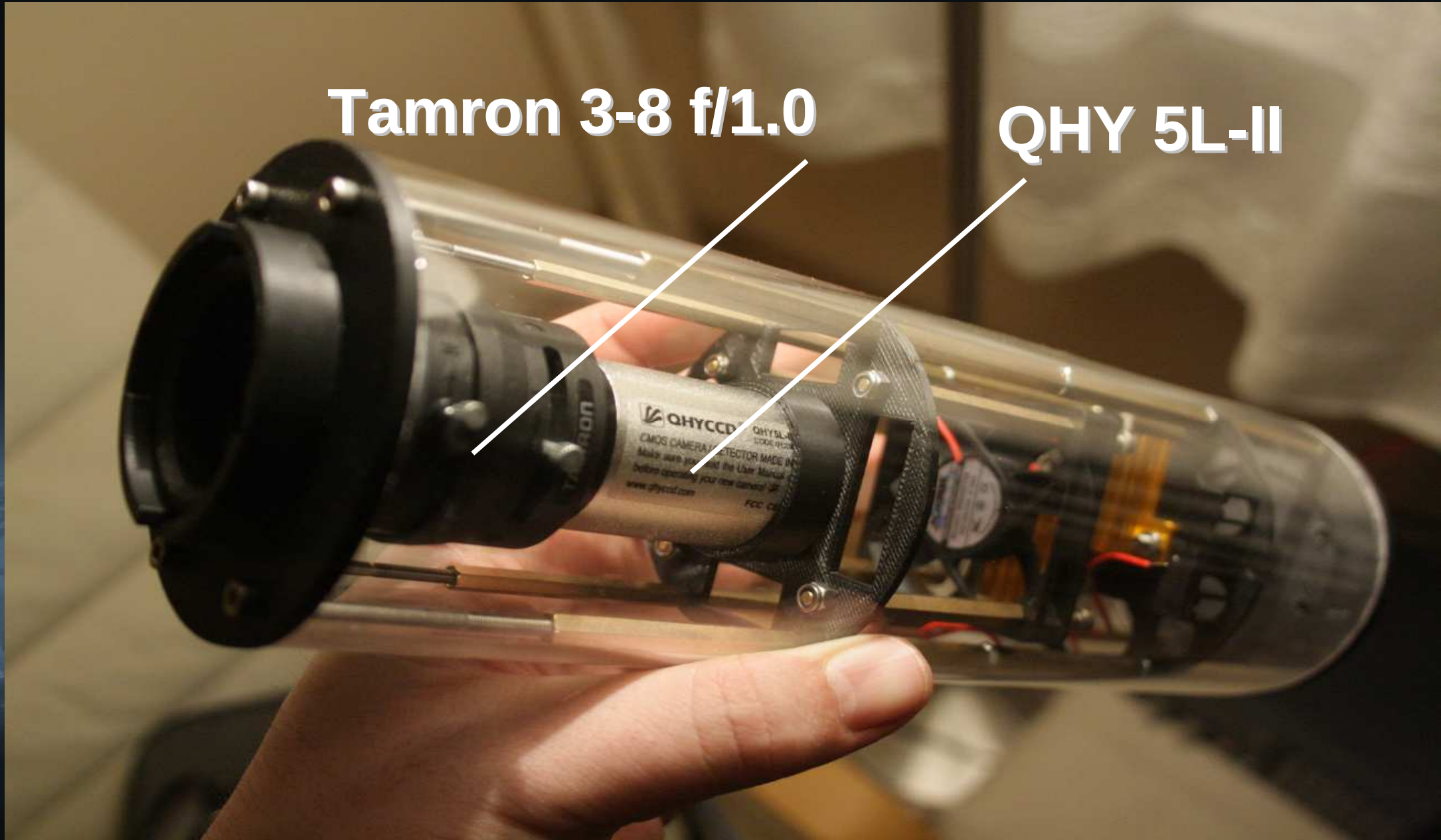
CGMS1 – Assembly



CGMS1 – spectroscopy, grating 1000 lpmm



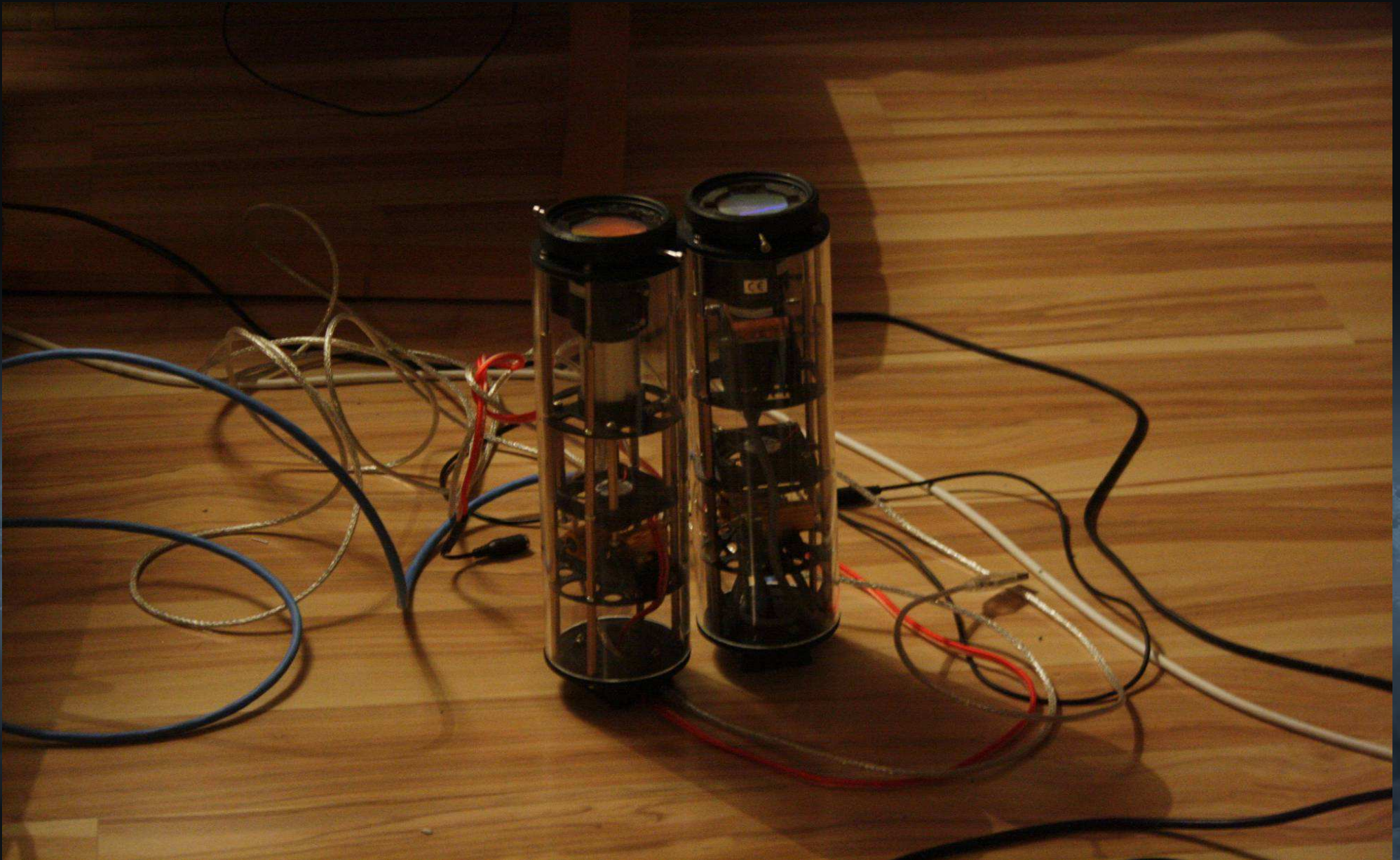
CGMS2 – spectroscopy with QHY



CGMS2 – spectroscopy with QHY



CGMS1 & CGMS2



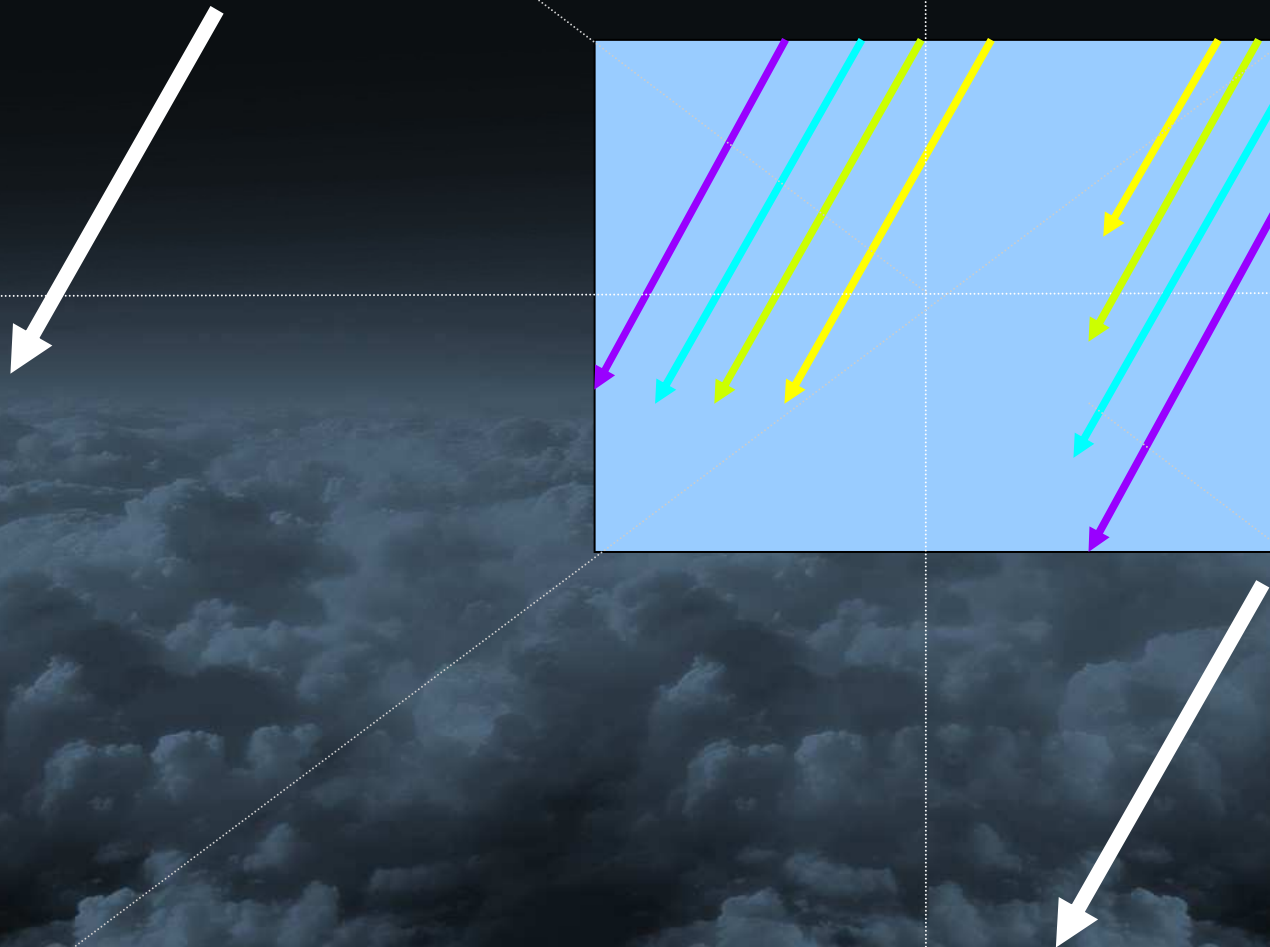
CGMS1 i CGMS2 – technical data

PARAMETR	CGMS-1	CGMS-2
Kamera	Pointgrey BlackFly 0.9M	QHY 5-LII Mono
Sensor	CCD	CMOS
Resolution	1288 x 786 (0.9)	1280 x 960 (1.3)
Lens	Tokina 3-8 f/1.0	Tamron Mpix 3-8 f/1.0
f	4 mm	4 mm
FOV	65 deg	70 deg
LM for meteors	+1m	+2m
Dyffraction grating	2 x 1000 lpm, crossed	2 x 1000 lpm, crossed
Resolution	8A/piksel + 5.5 A/pixel	8 A/pixel + 5.5 A/pixel
LM for meteor spectra	-5m	-4m
Size	280mm x 80mm	280mm x 80mm
Weight	1kg	1kg

CGMS1 – crossed gratings

First order spectrum in 4 directions

Diagonal spectrum $1 * \sqrt{2}$ if 4 directions



First results

PKIM PFN 55 Ursynow MDC01 2014 10 24 04:01 UT 1min stack of 300 images



First results

PKIM PFM 55 URSYNOW ITDC01 2014 09 23 20:34 UT 1MIN STACK OF 120 IMAGES



First results

PKIM PFM 55 Ursynow MDC01 CGMS1 1000 1/mm exp:250ms 4fps 2015 08 11 01:46 UT 1min stack of 224 images



New digital HD cameras

DMK 23GX 236



Resolution **1920 x 1200**

ExMor, Sony IMX 236 LL **1/2.8"**

Interface GIGE

Price **299 Euro**

New digital HD cameras



New digital HD cameras



New digital HD cameras

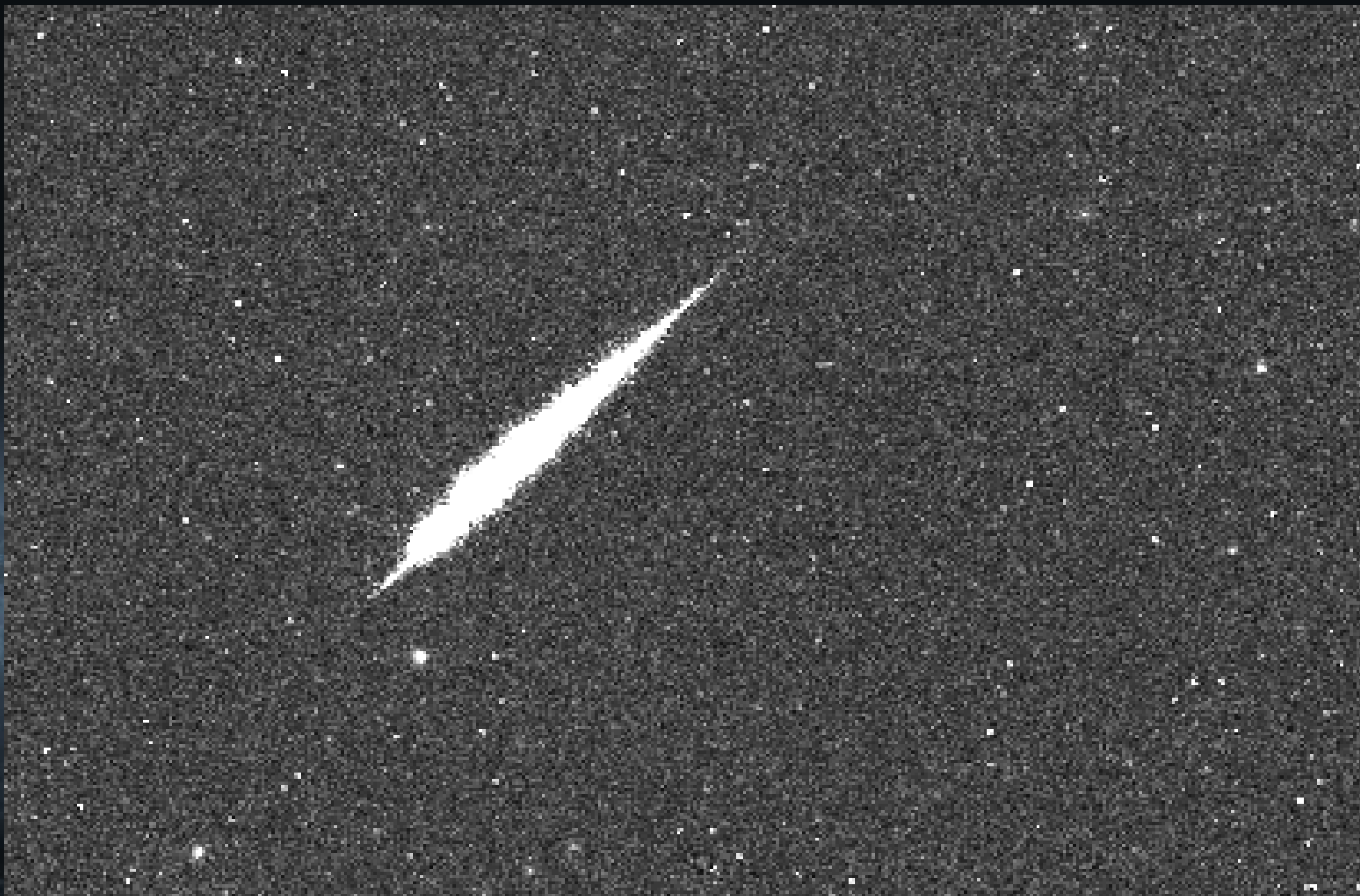


FOV 130x80 deg 1920x1200 4"/pixel

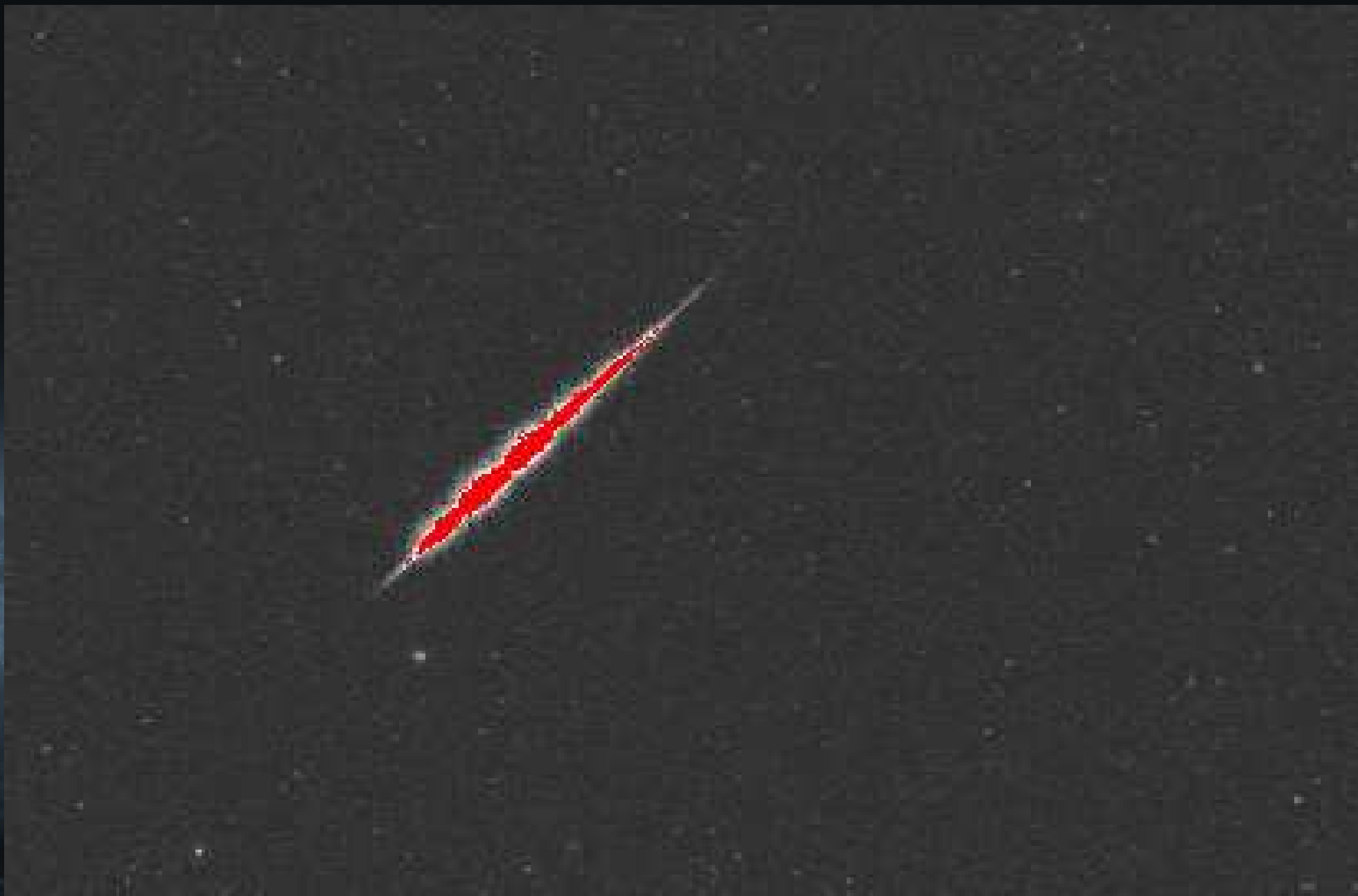
New digital HD cameras



New digital HD cameras



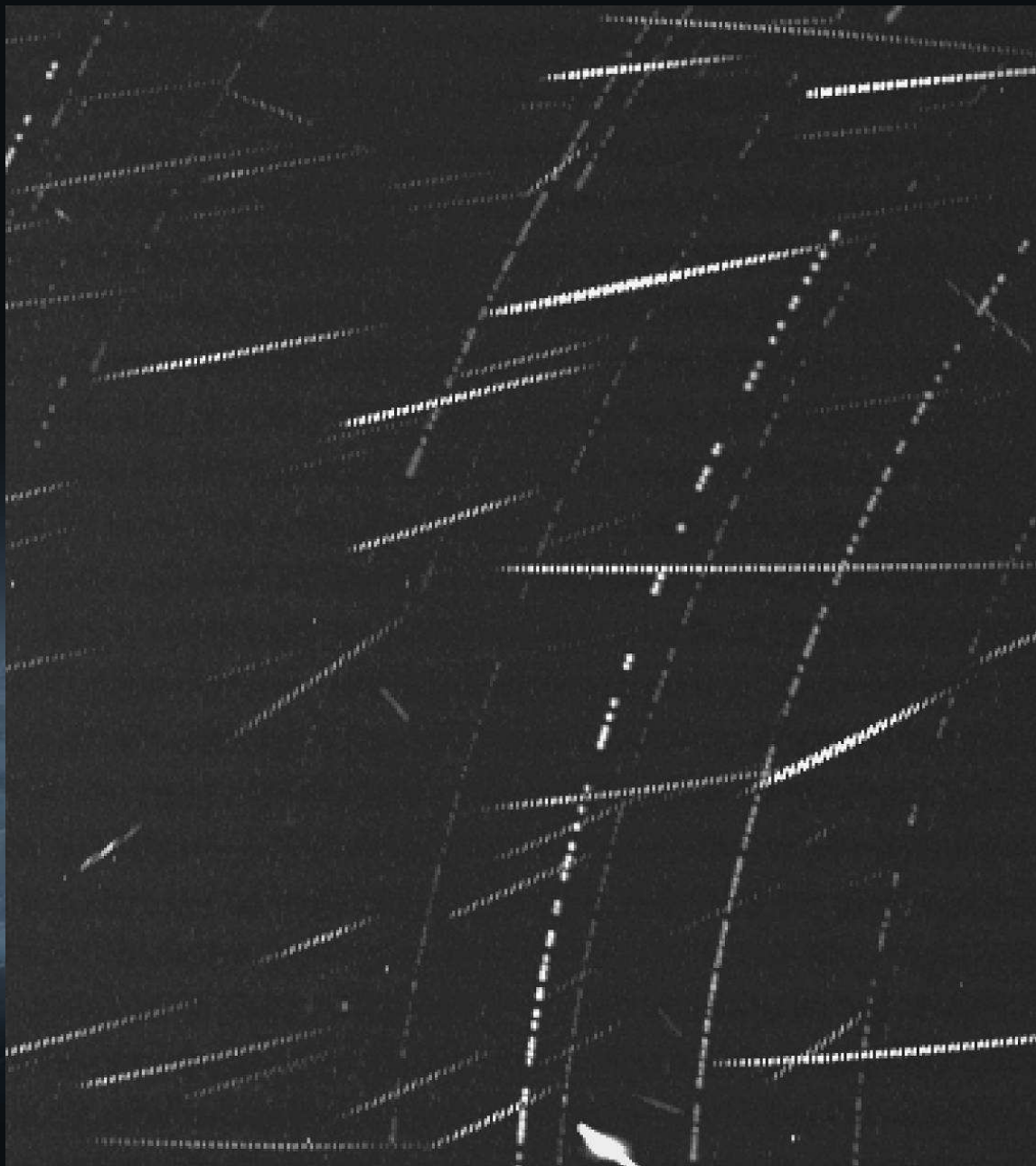
New digital HD cameras



New digital HD cameras



New digital HD cameras



New digital HD cameras



New digital HD cameras



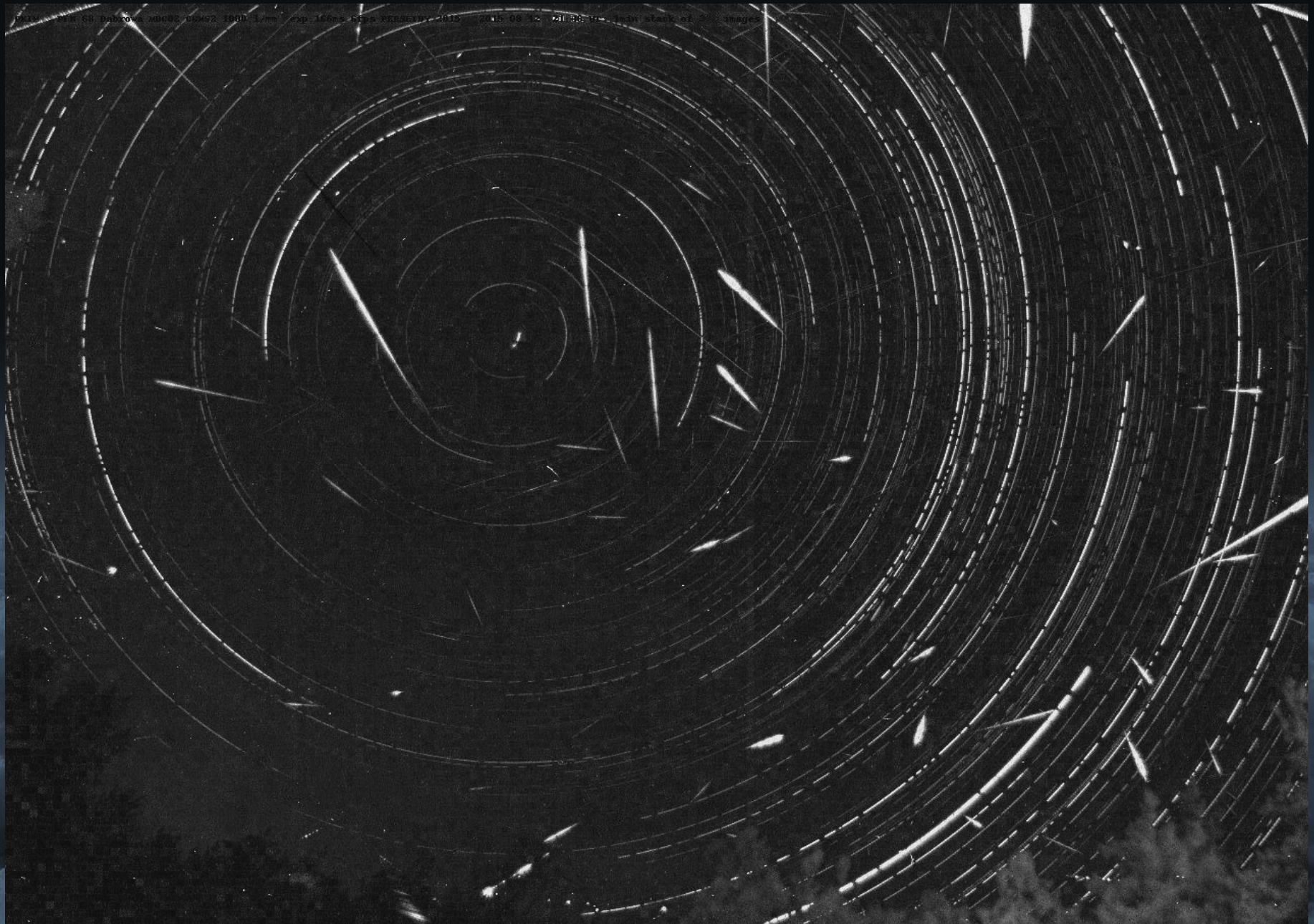
New digital HD cameras



New digital HD cameras



New digital HD cameras



Sensitive analog cameras



Mintron 12v6

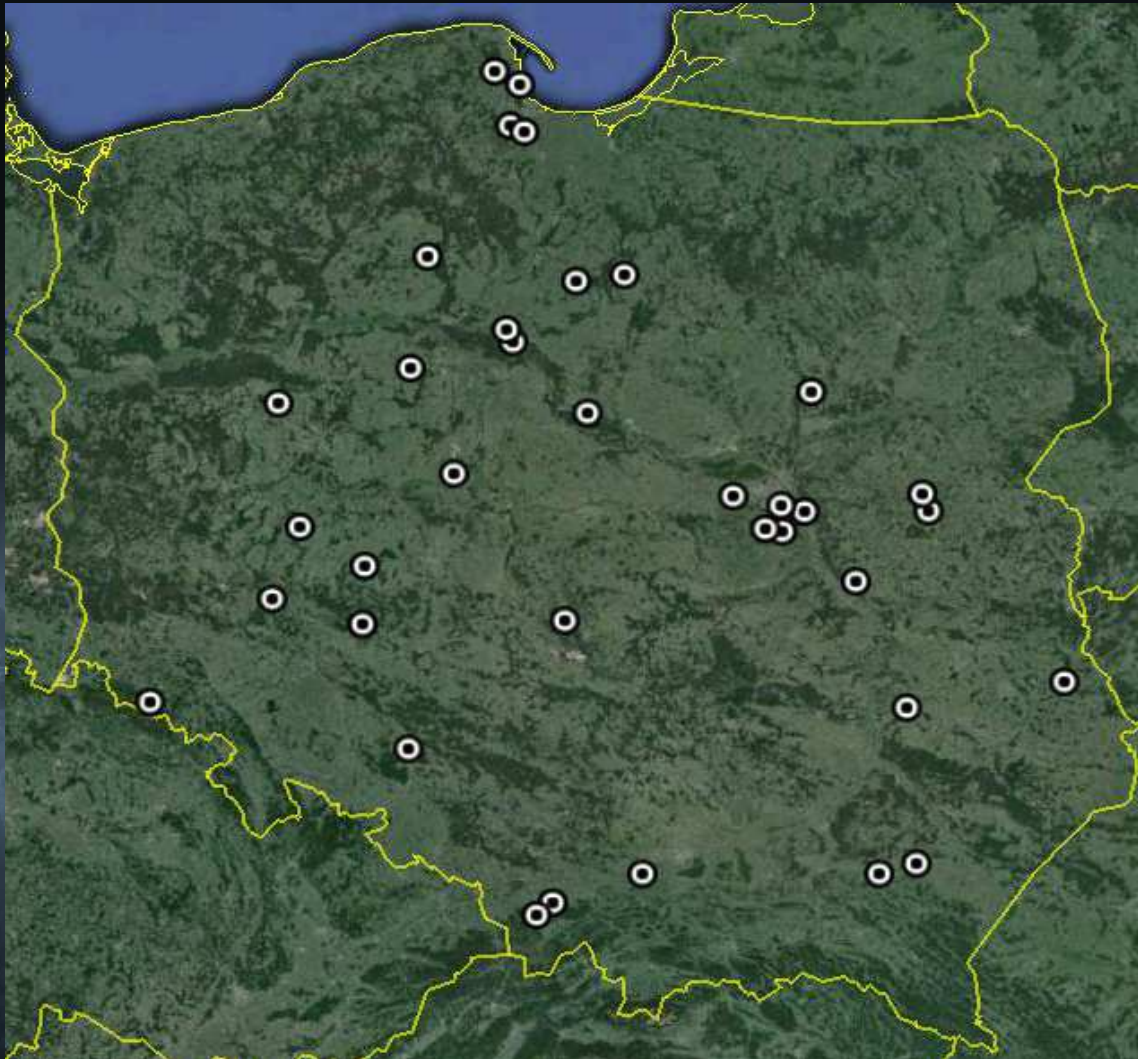
Sensitive analog cameras



Sensitive analog cameras



Summary



Thank you :)

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