



Telescopio Nazionale Galileo Instrumentation

Spettrografo ad Alta Risoluzione Galileo (SARG)

Thorium - Argon Atlas

Green Cross Disperser (blue CCD)

Spectral Range: λ (4070 – 4861)Å



DOCUMENT SARG – D036 III

Claudi R.U.

Astronomical Observatory of Padova, vicolo Osservatorio, 5 35122 Padova

Marino G.

*Centro Galileo Galilei, Calle Alvarez de Abreu, 70
38700 Santa Cruz de la Palma*

FORWARD

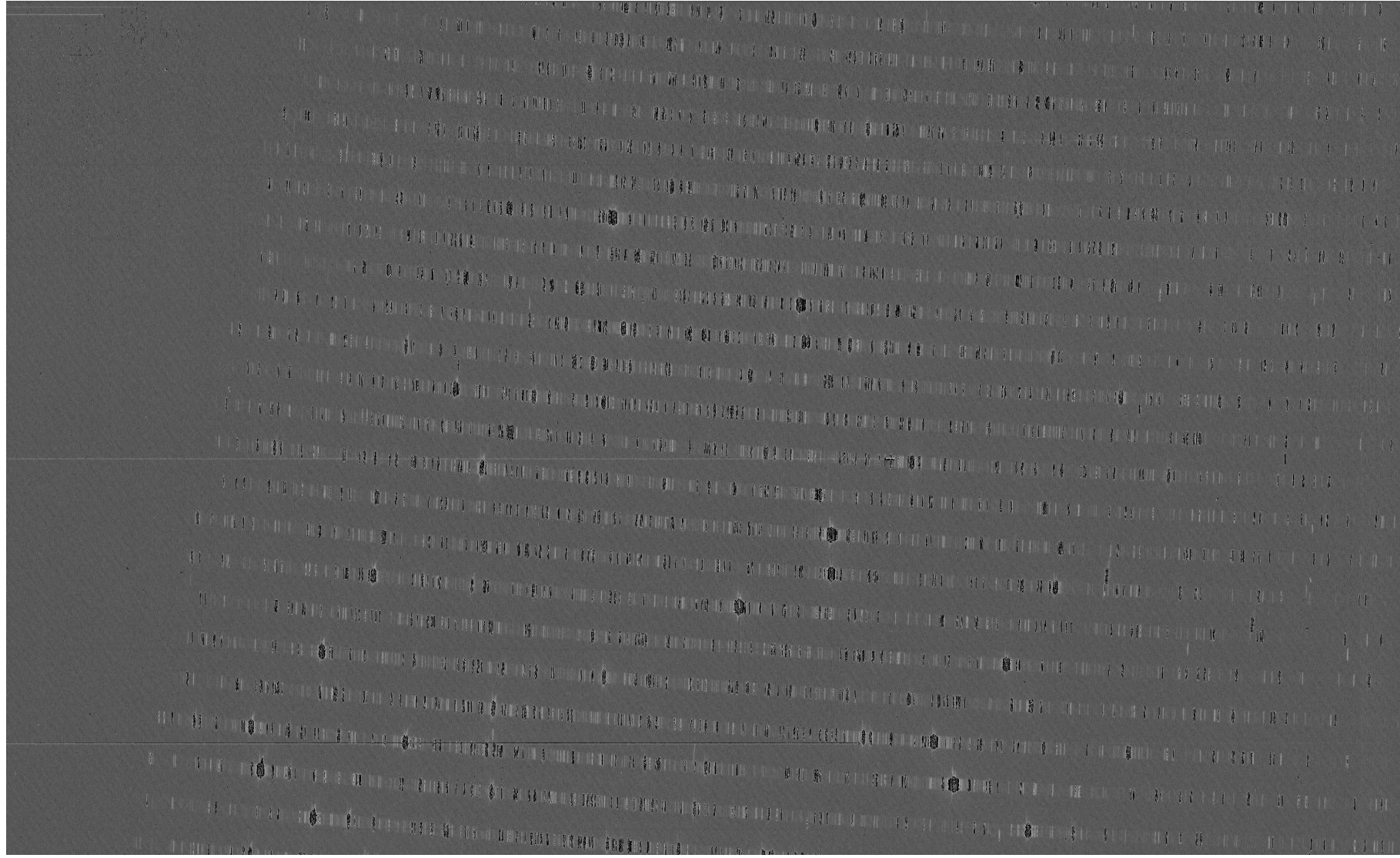
The Th-A atlas in the region ranging between the wavelengths 4070 Å and 4861 Å as imaged on the SARG blue CCD with the green grism (cross disperser 2).

The spectra were made exploiting the R= 164,000 slit and a 2×1 CCD binning. The trimming section of the blue CCD was:

[1097:2124;1:4097]

A set of information about the spectral formats is also given:

- a 2-D image of the blue CCD in 2×1 binning format (1100×4200 pixels) with the order position on to the CCD clearly indicated (the picture is enlarged in the X direction for clarity)
- a plot showing the change with the spectral order number of the separation between the order (together with the central wavelengths)
- a table listing: the aperture number (first column), the spectral order (second column), the central wavelength, corresponding to pixel 2048, the initial and ending wavelength, all in Å (third, fourth and fifth columns), the free spectral range (in Å), the average $\Delta\lambda/\text{pix}$, the spectral order separation at the centre of the order in pixels (the scale on detector is 0.16 arcsec/pixel). In the last column the number of the page where one can find the corresponding 1-D spectrum plot with the identification of some line.
- A plot showing the residuals of the wavelength solution



149
148
147
146
145
144
143
142
141
140
139
138
137
136
135
134
133
132
131
130
129
128
127

Ap.	Order	λ_c	λ_1	λ_2	FSR	$\Delta\lambda$	Sep	Page
	#		(\AA)	(\AA)	(\AA)	($\text{\AA}/px$)	(pix)	
1	127	4834.7	4786.793	4860.698	38.1	0.018043	/	8
2	128	4796.9	4748.793	4822.355	37.5	0.017960	102.34	9
3	129	4759.7	4711.392	4784.609	36.9	0.017875	101.44	10
4	130	4723.1	4674.575	4747.445	36.3	0.017791	100.18	11
5	131	4687.1	4638.330	4710.851	35.8	0.017706	98.94	12
6	132	4651.6	4602.642	4674.814	35.2	0.017620	97.96	13
7	133	4616.6	4567.499	4639.321	34.7	0.017535	96.92	14
8	134	4582.1	4532.889	4604.360	34.2	0.017449	95.92	15
9	135	4548.2	4498.799	4569.918	33.7	0.017363	95.06	16
10	136	4514.7	4465.217	4535.986	33.2	0.017277	93.68	17
11	137	4481.8	4432.133	4502.55	32.7	0.017192	93.32	18
12	138	4449.3	4399.536	4469.601	32.2	0.017106	91.98	19
13	139	4417.3	4367.413	4437.128	31.8	0.017020	91.16	20
14	140	4385.7	4335.756	4405.121	31.3	0.016935	90.64	21
15	141	4354.6	4304.554	4373.569	30.9	0.016850	89.72	22
16	142	4324.0	4273.796	4342.464	30.5	0.016765	88.78	23
17	143	4293.7	4243.474	4311.795	30.0	0.016680	88.08	24
18	144	4263.9	4213.578	4281.554	29.6	0.016596	87.42	25
19	145	4234.5	4184.099	4251.731	29.2	0.016512	86.94	26
20	146	4205.5	4155.029	4222.319	28.8	0.016428	85.96	27
21	147	4176.9	4126.358	4193.308	28.4	0.016345	84.86	28
22	148	4148.7	4098.078	4164.691	28.0	0.016263	84.46	29
23	149	4120.8	4070.182	4136.459	27.7	0.016181	/	30

