



Telescopio Nazionale Galileo Instrumentation

Spettrografo ad Alta Risoluzione Galileo (SARG)

Thorium - Argon Atlas

Green Cross Disperser (red CCD)

Spectral Range: λ (4825 – 5672)Å



DOCUMENT SARG – D036 IV

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FORWARD

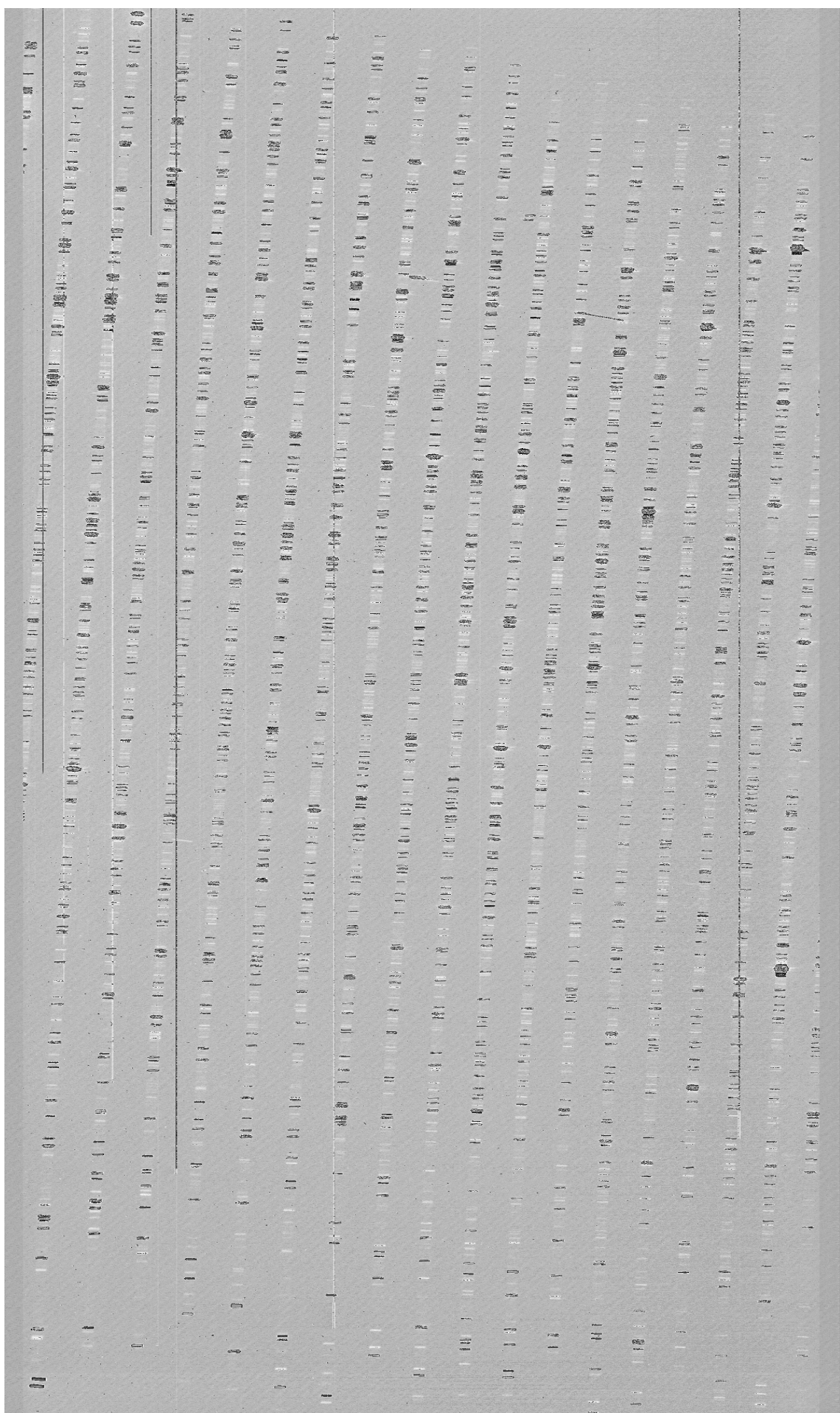
The Th-A atlas in the region ranging between the wavelengths 4825 Å and 5672 Å as imaged on the SARG red CCD with the green grism (cross disperser 2).

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

[1:1078;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



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Ap.	Order	λ_c	λ_1	λ_2	FSR	$\Delta\lambda$	Sep	Page
	#		(Å)	(Å)	(Å)	(Å/px)	(pix)	
1	109	5633.1	5591.439	5671.811	51.7	0.019622	132.06	8
2	110	5581.9	5539.743	5619.730	50.7	0.019528	129.94	9
3	111	5531.6	5488.985	5568.608	49.8	0.019439	127.66	10
4	112	5482.2	5439.144	5518.411	48.9	0.019352	125.83	11
5	113	5433.7	5390.195	5469.113	48.1	0.019267	123.89	12
6	114	5386.0	5342.117	5420.686	47.2	0.019182	121.93	13
7	115	5339.2	5294.885	5373.105	46.4	0.019097	120.20	14
8	116	5293.1	5248.478	5326.348	45.6	0.019011	118.43	15
9	117	5247.9	5202.874	5280.391	44.9	0.018925	116.61	16
10	118	5203.4	5158.051	5235.214	44.1	0.018838	115.06	17
11	119	5159.7	5113.990	5190.797	43.4	0.018752	113.51	18
12	120	5116.7	5070.669	5147.123	42.6	0.018665	111.78	19
13	121	5074.4	5028.072	5104.172	41.9	0.018579	110.42	20
14	122	5032.8	4986.179	5061.928	41.3	0.018493	109.14	21
15	123	4991.9	4944.975	5020.374	40.6	0.018408	107.59	22
16	124	4951.7	4904.445	4979.493	39.9	0.018322	106.36	23
17	125	4912.0	4864.575	4939.269	39.3	0.018236	104.77	24
18	126	4873.1	4825.352	4899.686	38.7	0.018148	/	25

