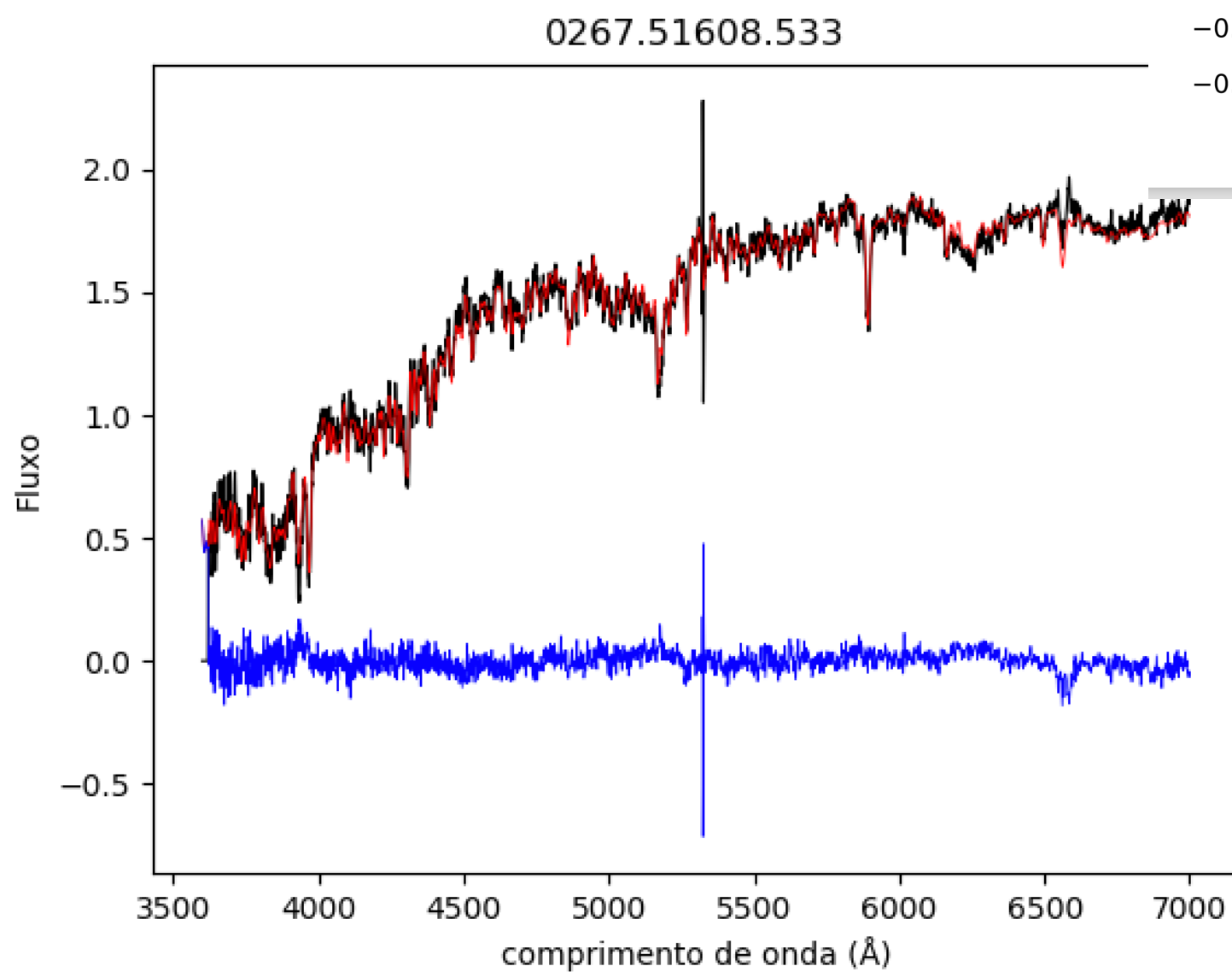
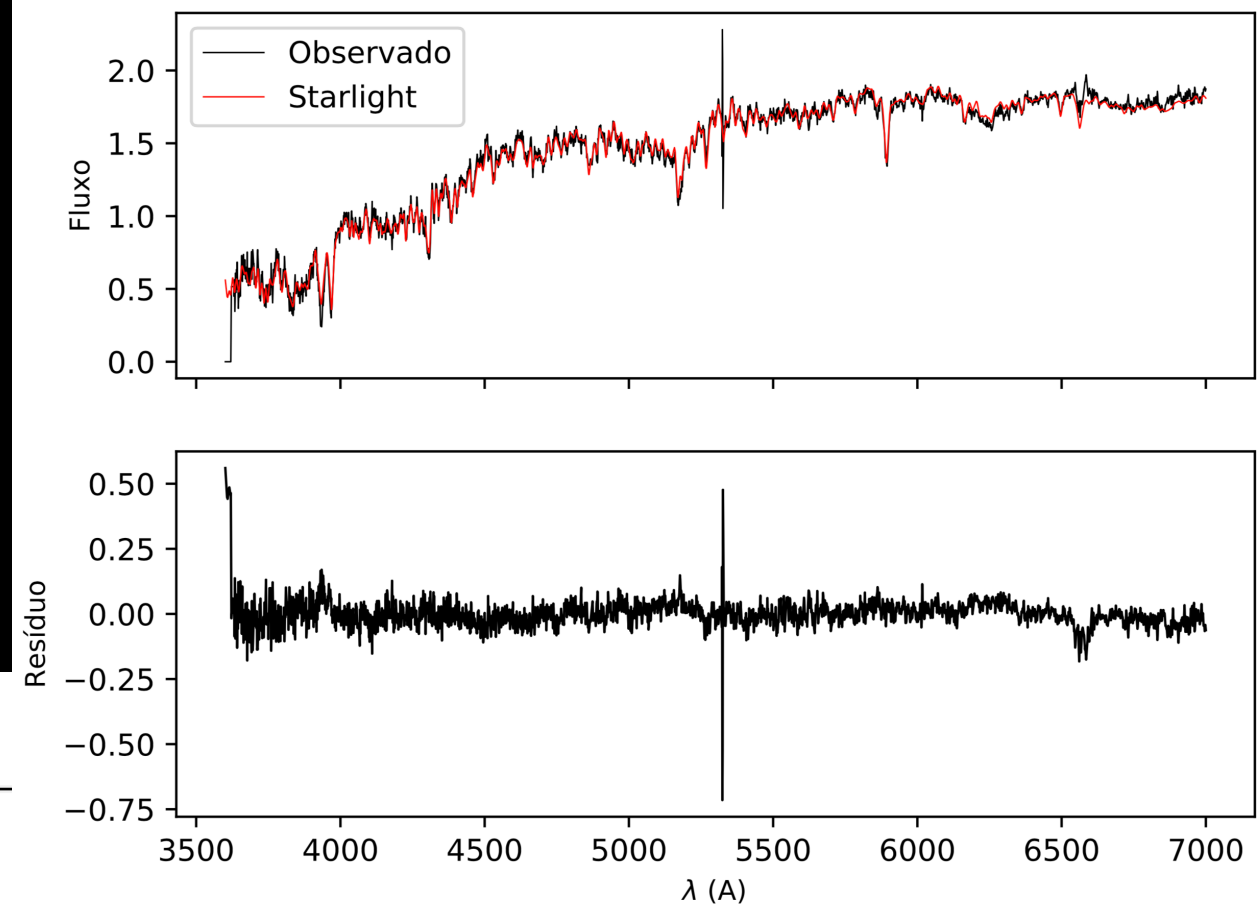
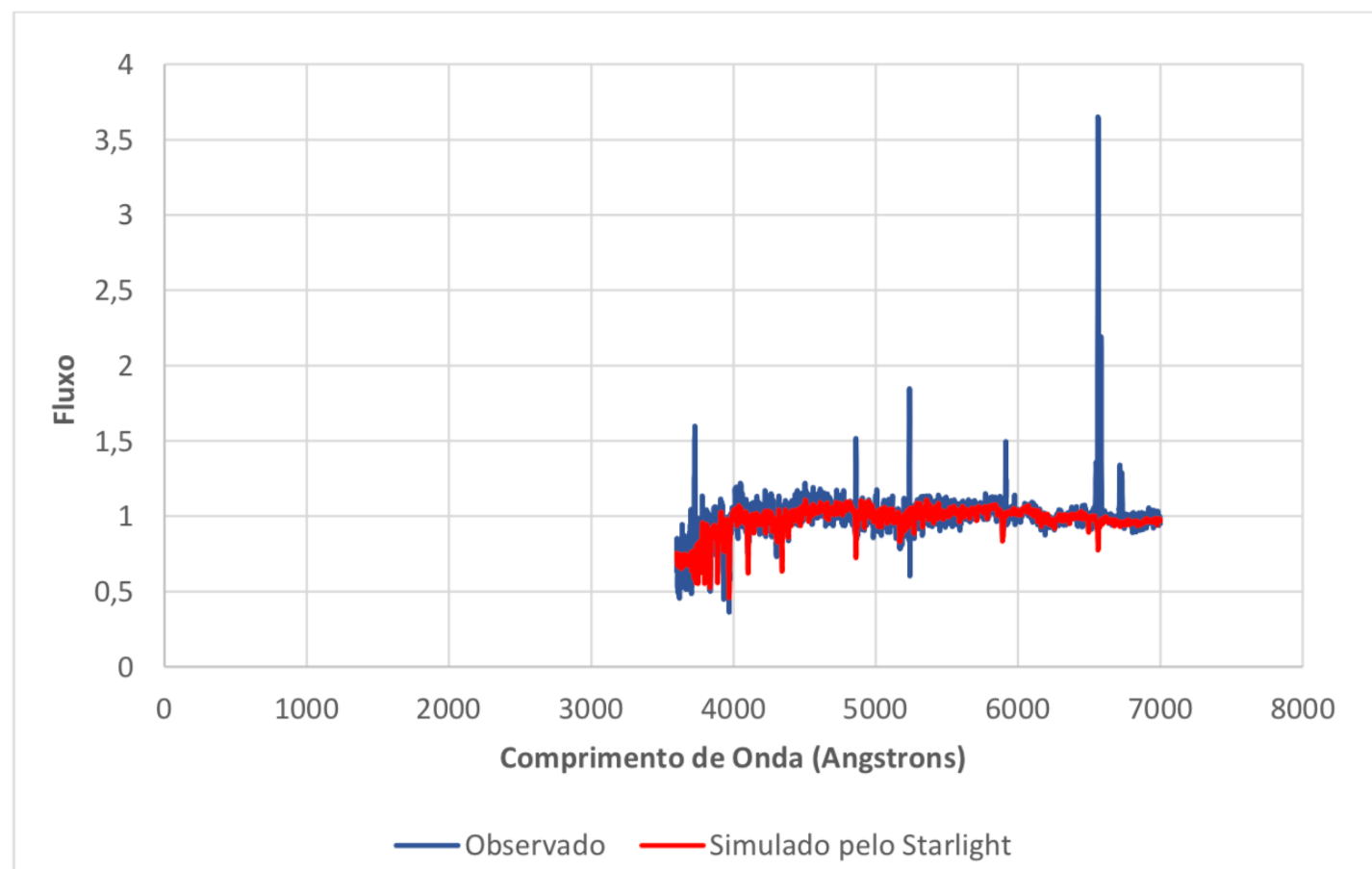
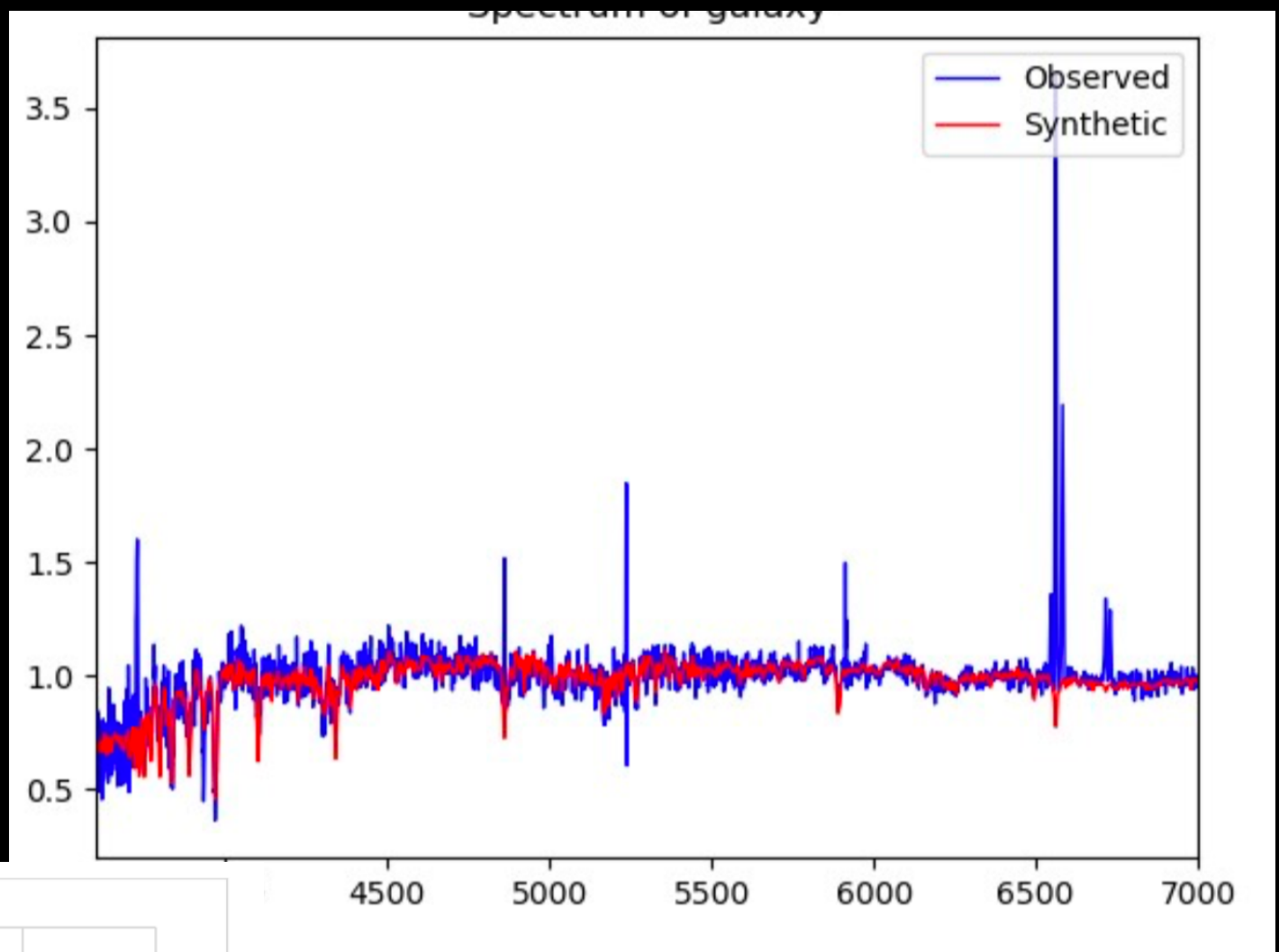


Ajuste espectral de galáxias com o Starlight

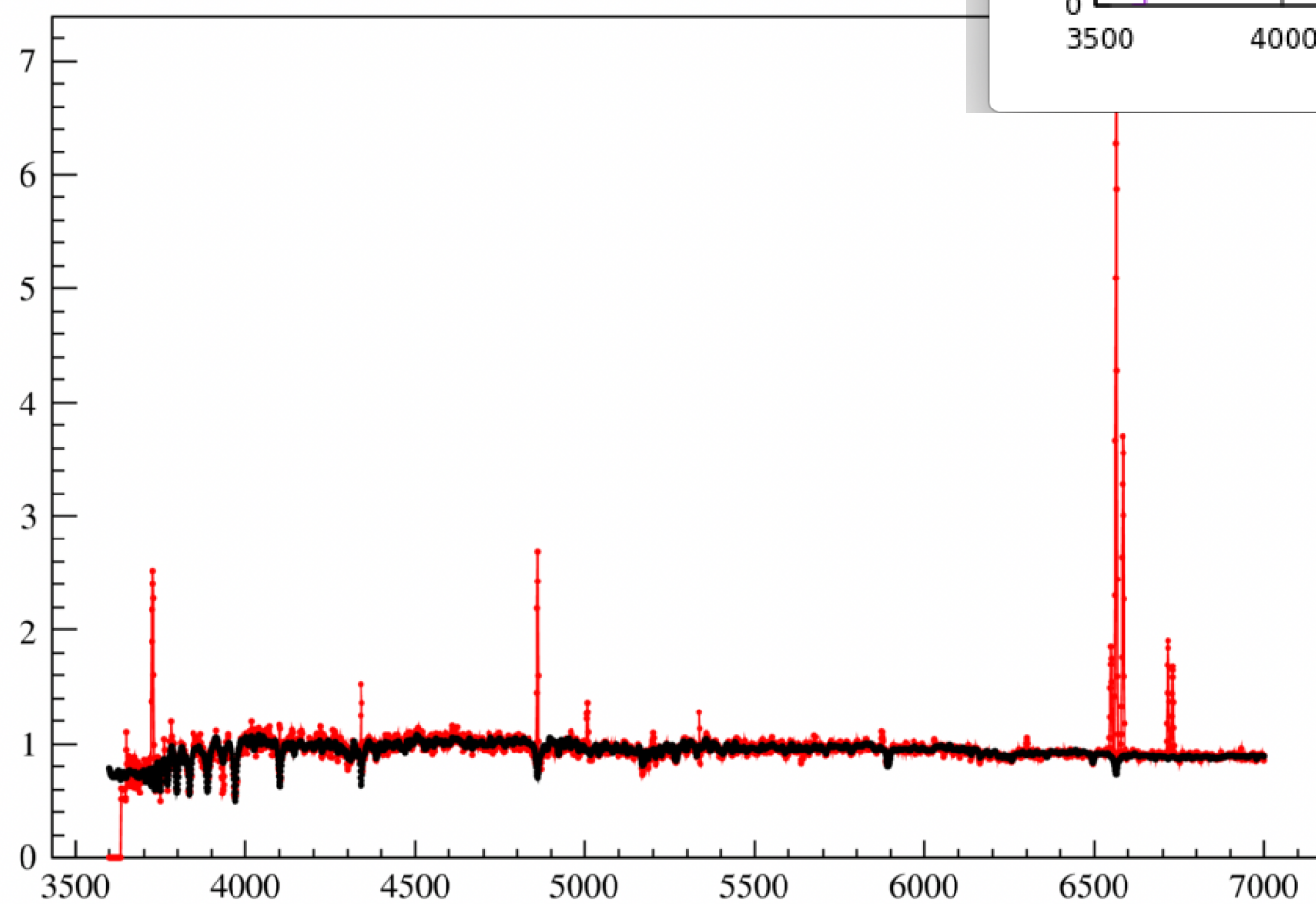
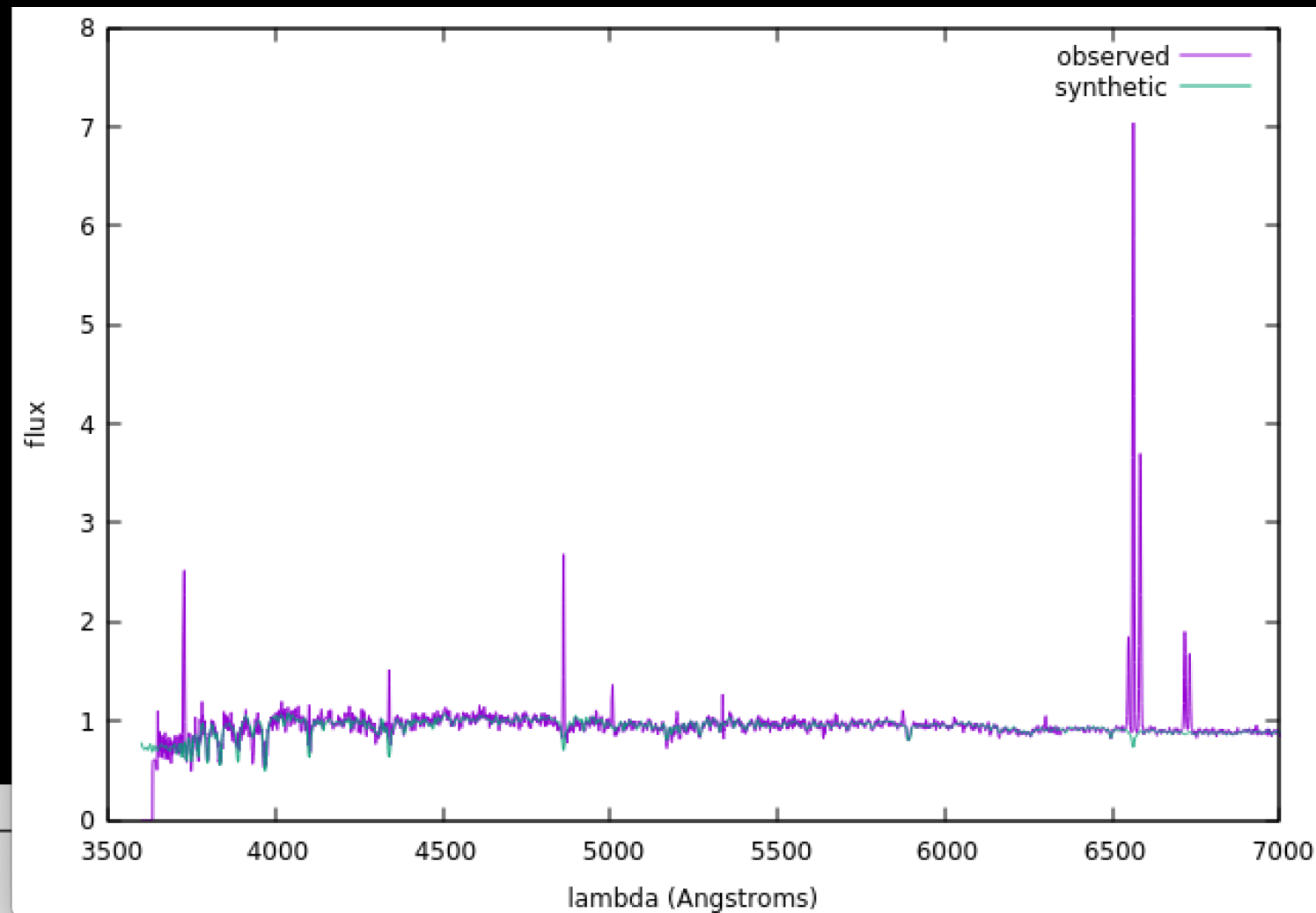
0267



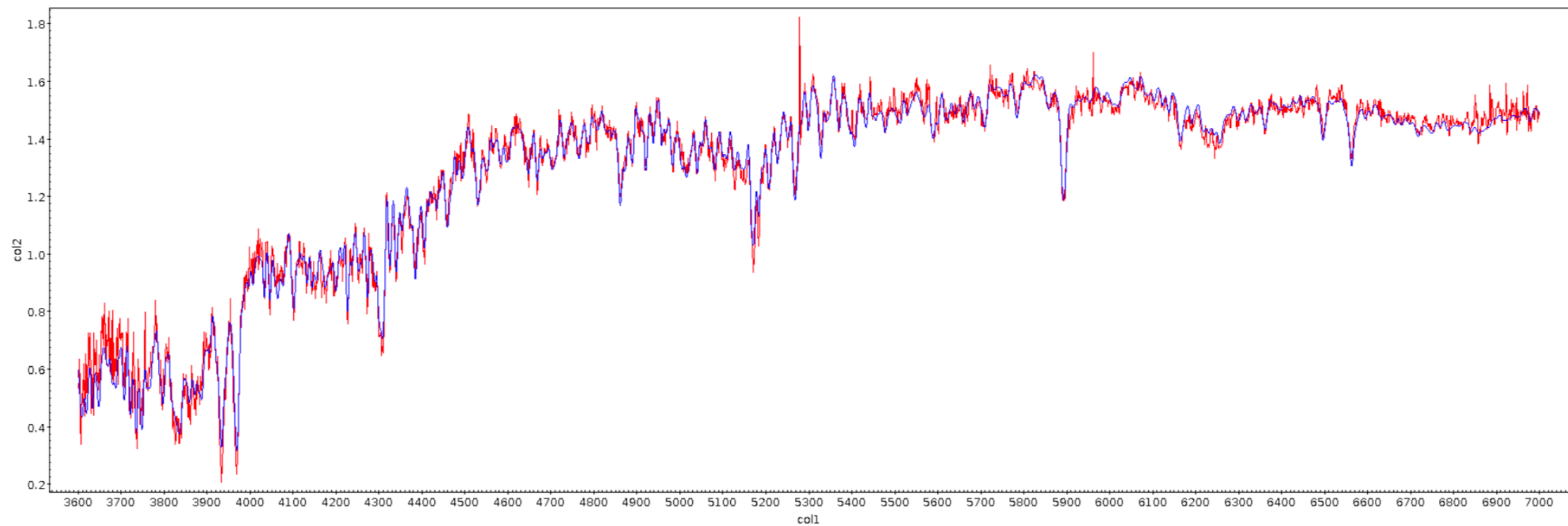
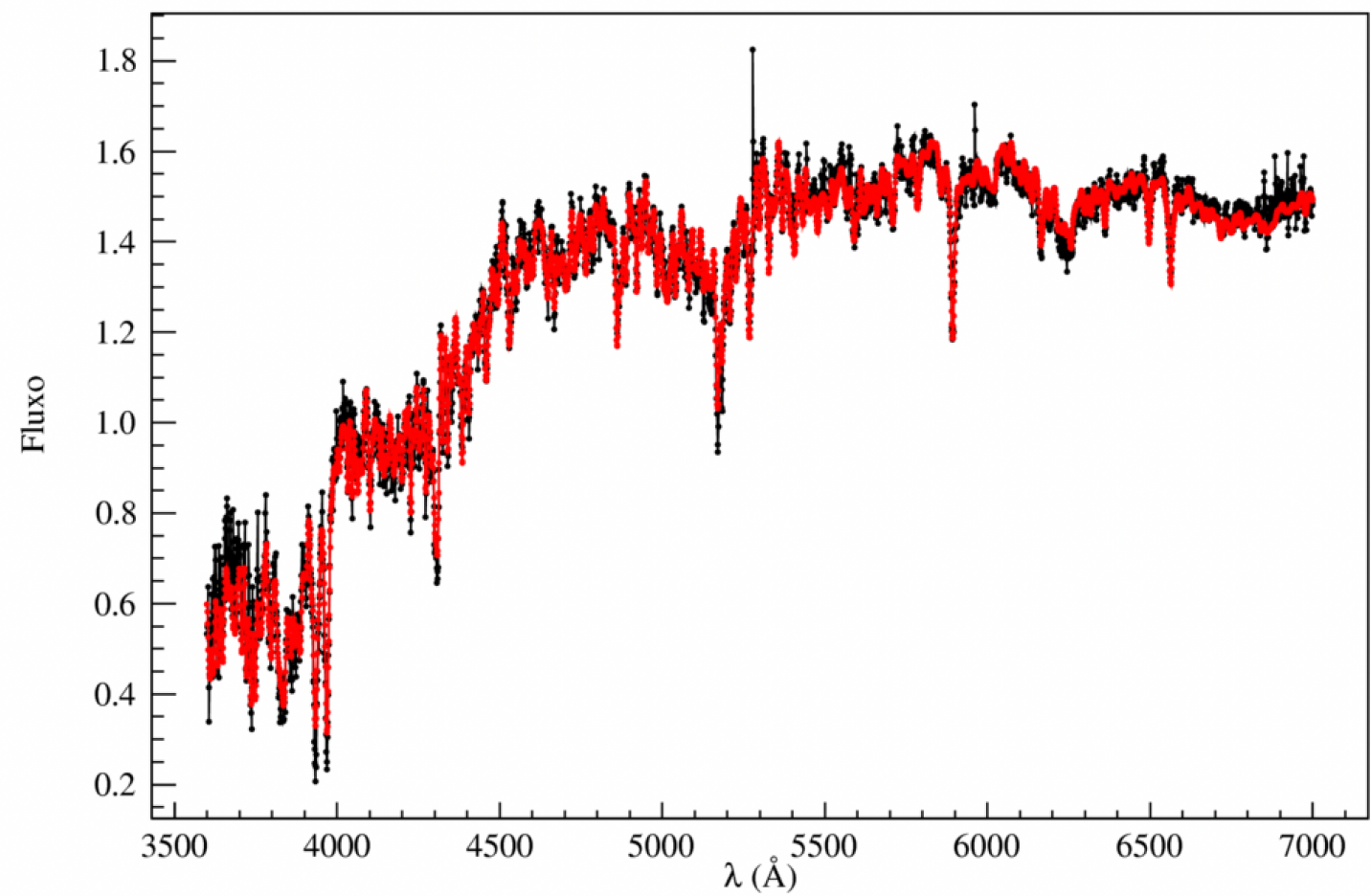
0268



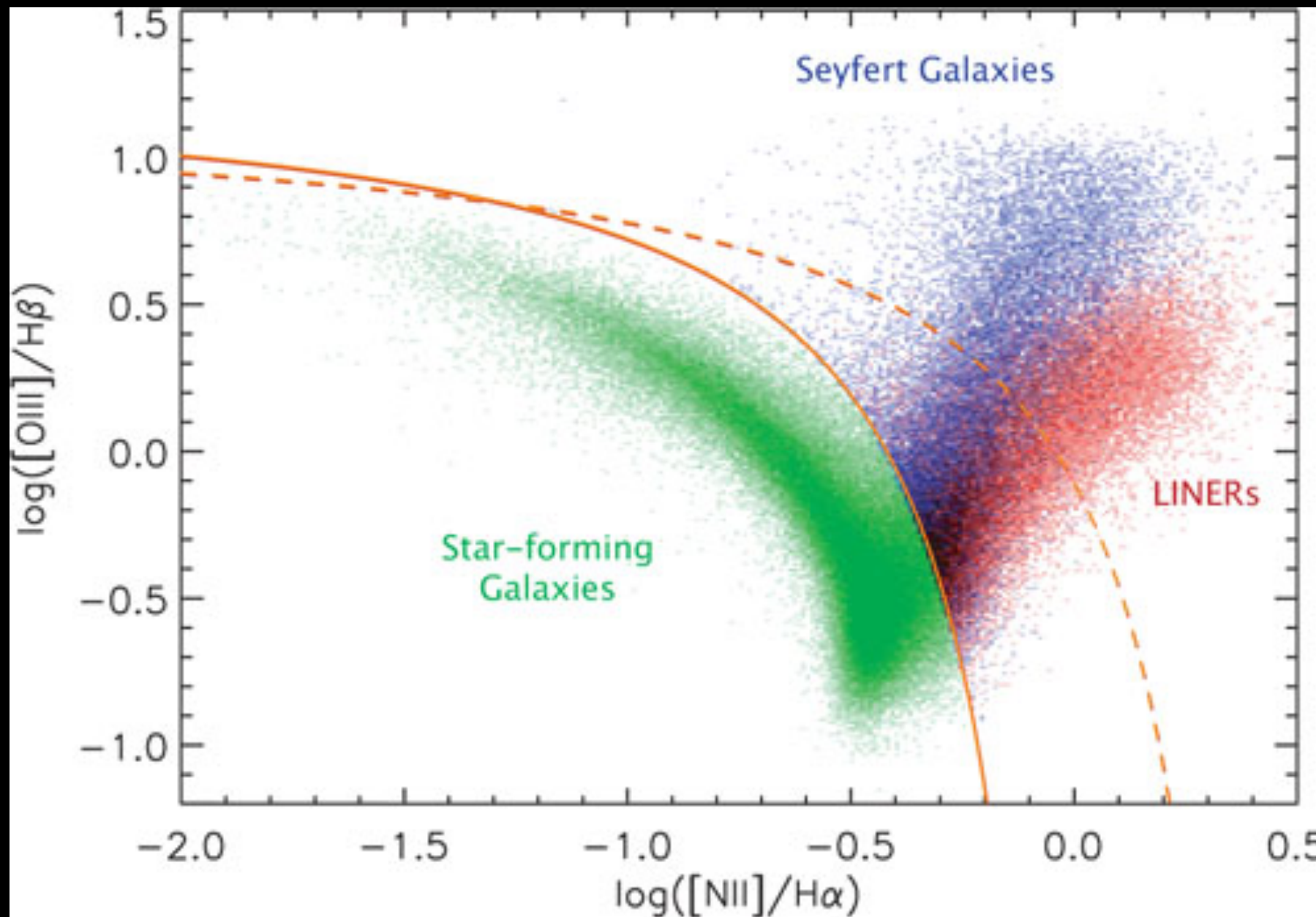
0271



0491



Diagramas de diagnóstico



Emission-line galaxies from SDSS on the line ratio diagnostic diagram of Baldwin, Phillips & Terlevich (1981, PASP, 93, 5). This diagram uses 4 strong optical emission lines, [OIII] 5007Å, [NII] 6583Å, H-α 6563Å, and H-β 4861Å, to distinguish galaxies that are dominated by ionization from young stars (labelled "Star-forming Galaxies"), from those that are ionized by an accreting supermassive black hole in the nucleus (Seyfert and LINER galaxies). The SDSS galaxies not only enable us to see the possible extent of emission line galaxies but also to distinguish the dominant ionization mechanism for this observed spread (Kewley, Groves et al 2006, MNRAS, 372, 961). The curves indicate empirical (solid) and theoretical (dashed) dividing lines between active galactic nuclei (AGN) and star-forming galaxies, based upon the SDSS observations (Kauffmann et al. 2003, MNRAS, 341, 54) and MAPPINGS III photoionization models (Kewley et al. 2002, ApJS, 142, 35).

Diagramas de diagnóstico

From Cid Fernandes et al. (2011):

Five classes of galaxies are identified within the WHAN diagram:

- (i) pure star-forming galaxies: $\log([\text{NII}]/\text{H}\alpha) < -0.4$ and $W_{\text{H}\alpha} > 3 \text{ \AA}$;
- (ii) strong AGN (i.e. Seyferts): $\log([\text{NII}]/\text{H}\alpha) > -0.4$ and $W_{\text{H}\alpha} > 6 \text{ \AA}$;
- (iii) weak AGN: $\log([\text{NII}]/\text{H}\alpha) > -0.4$ and $W_{\text{H}\alpha}$ between 3 and 6 $\text{\AA}$;
- (iv) [retired galaxies] (i.e. fake AGN): $W_{\text{H}\alpha} < 3 \text{ \AA}$;
- (v) passive galaxies (actually, lineless galaxies): $W_{\text{H}\alpha}$ and $W_{[\text{N II}]}$ $< 0.5 \text{ \AA}$.

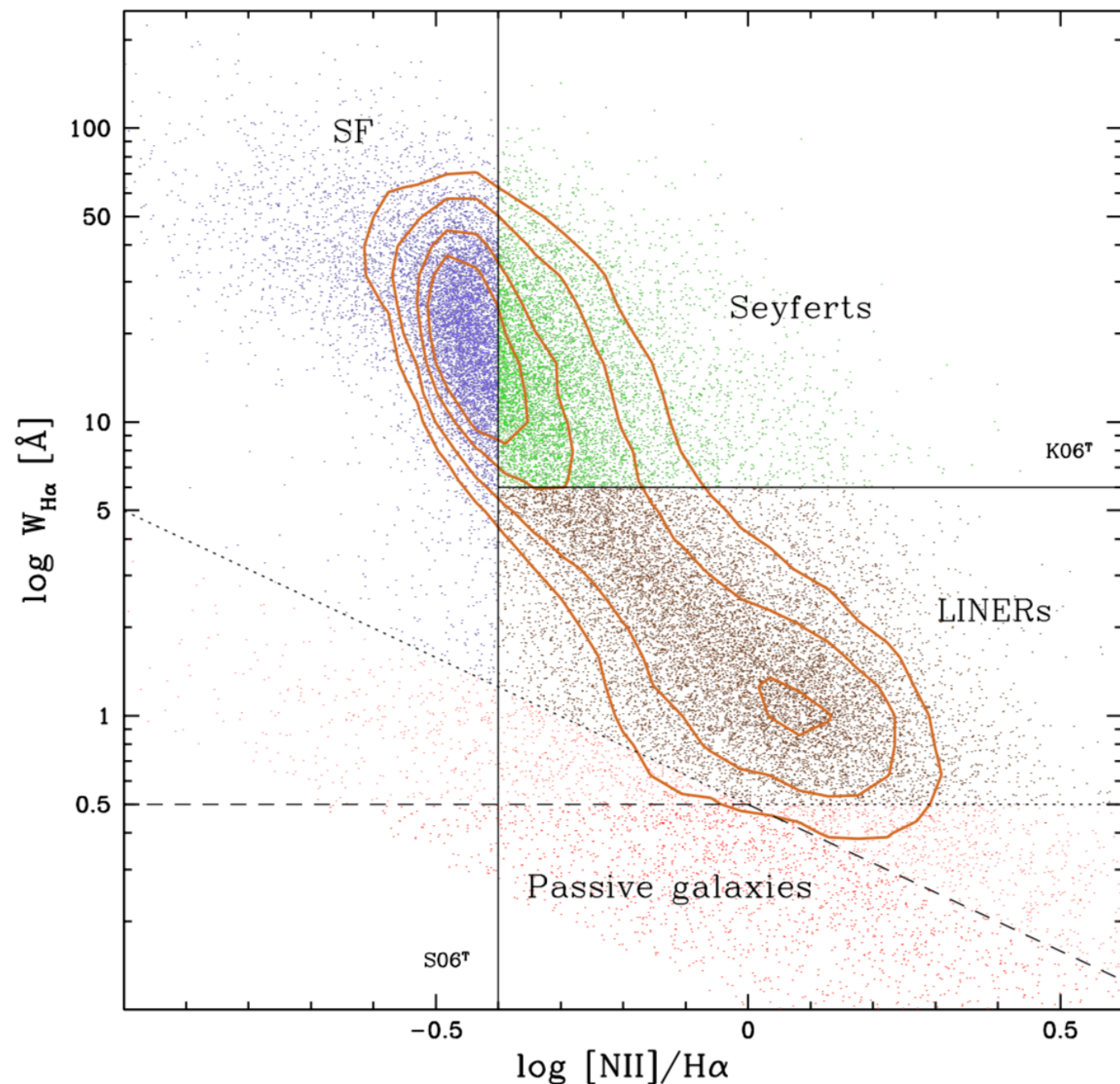
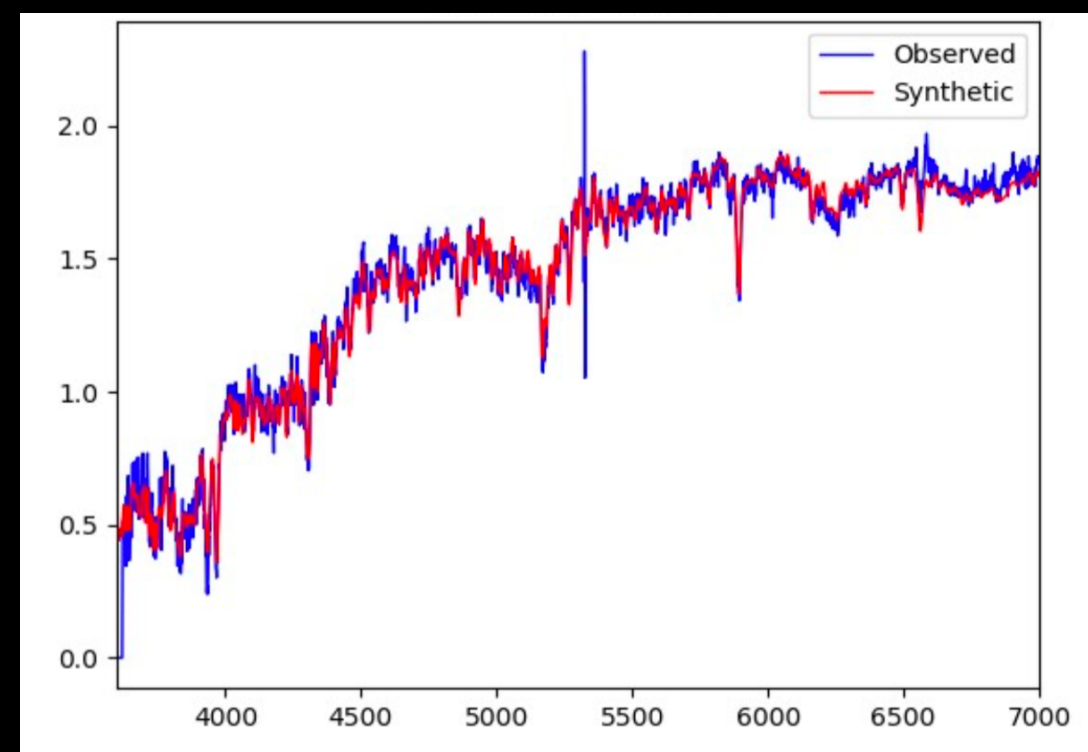
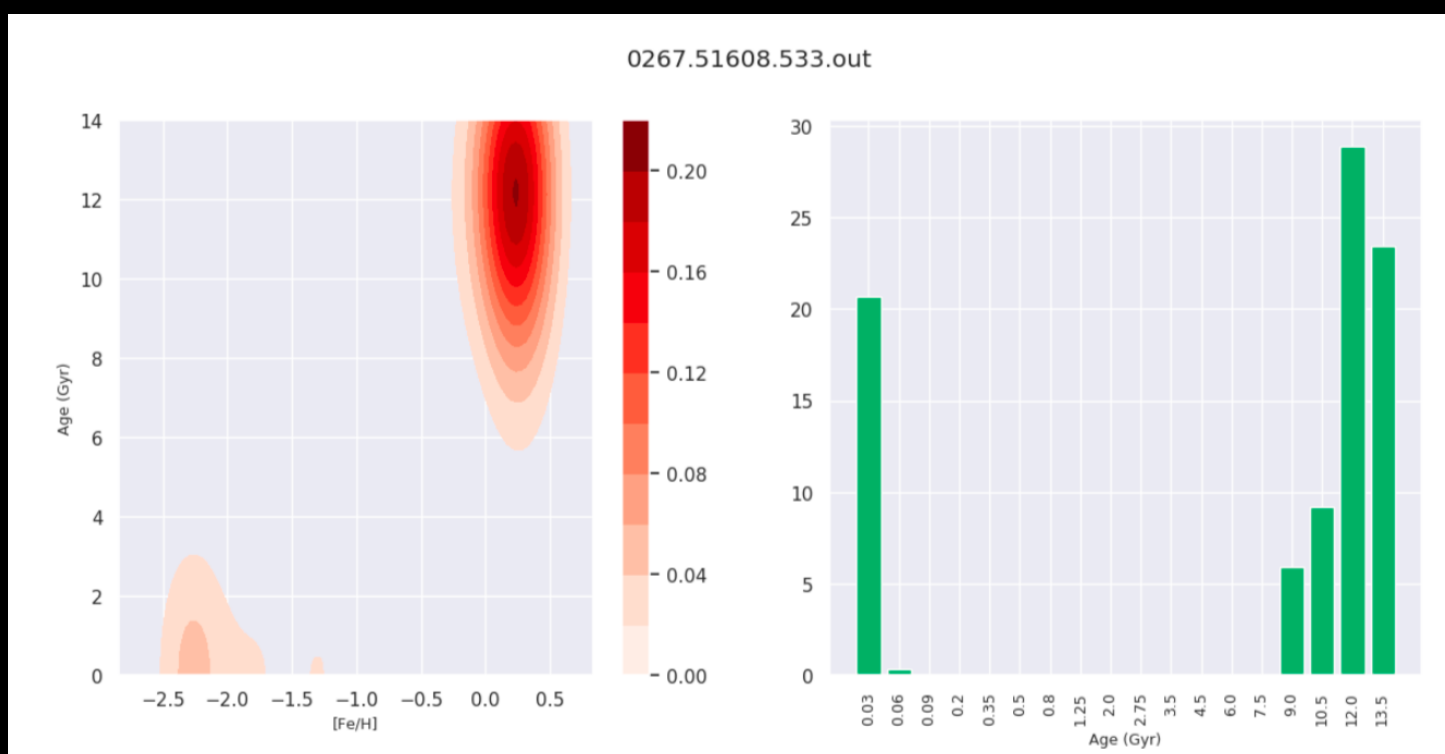
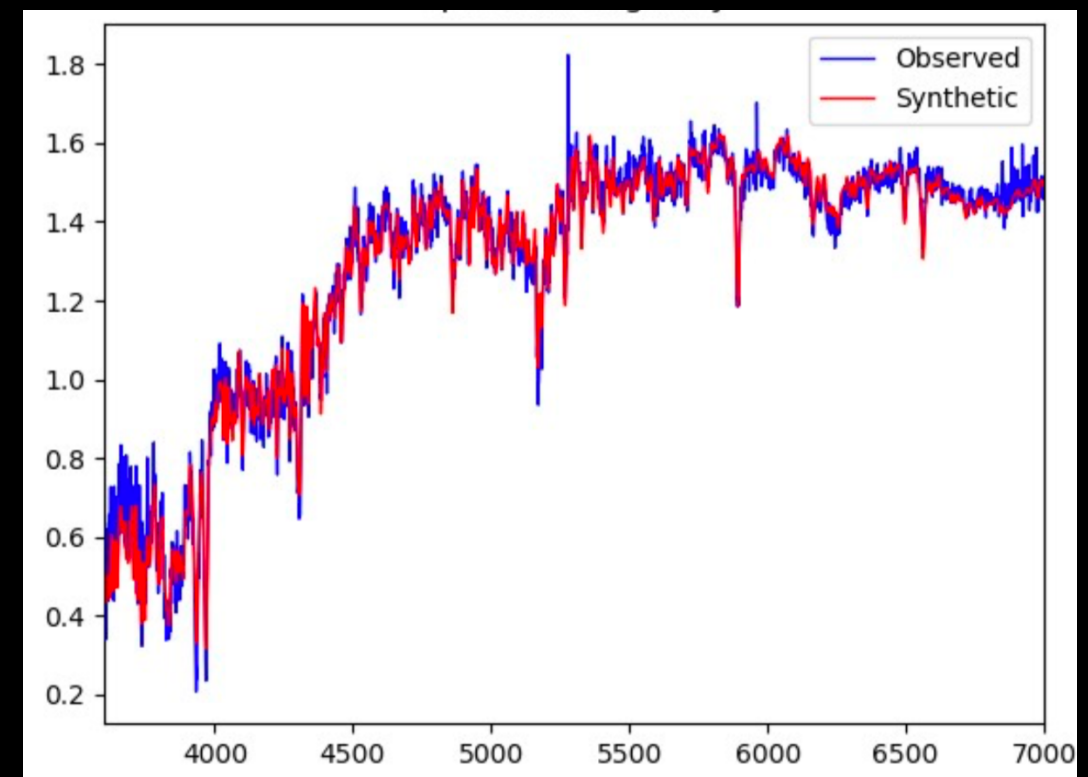
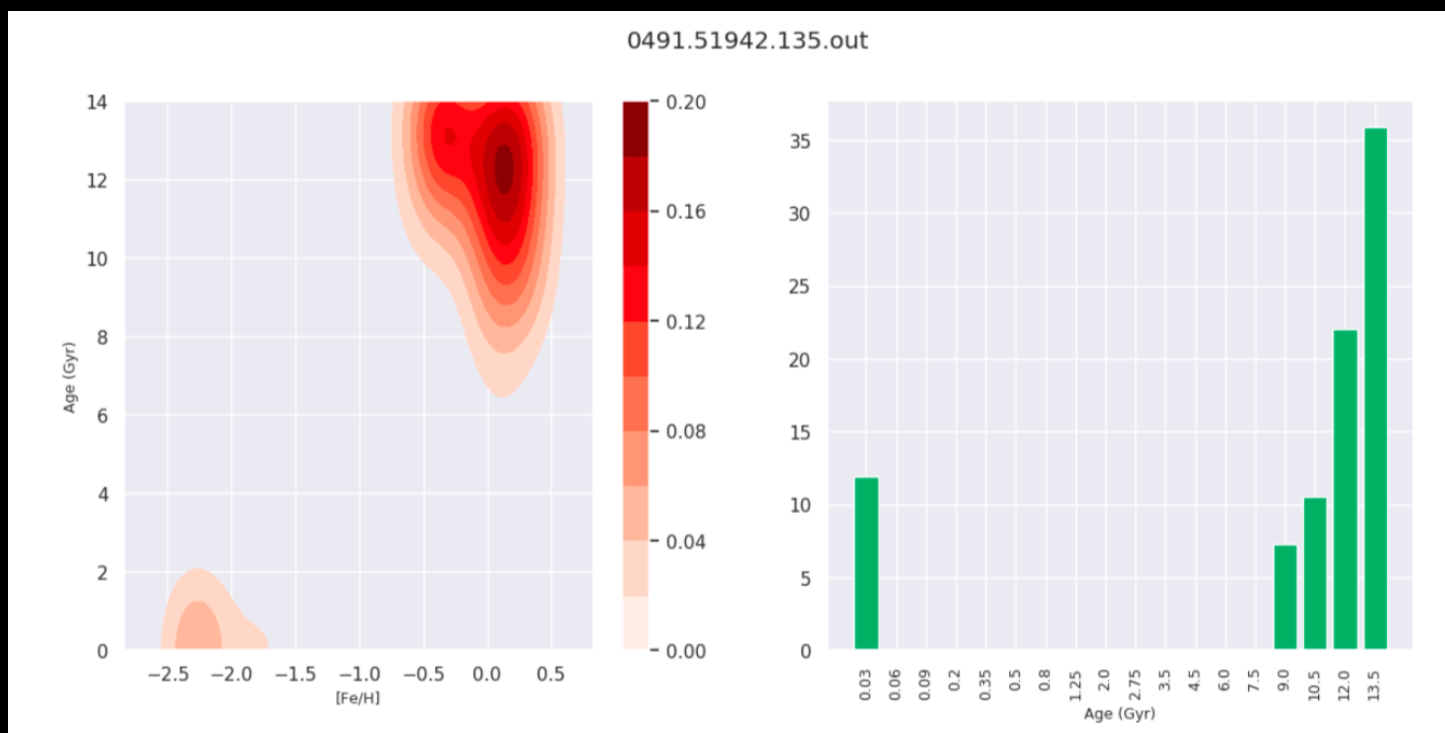


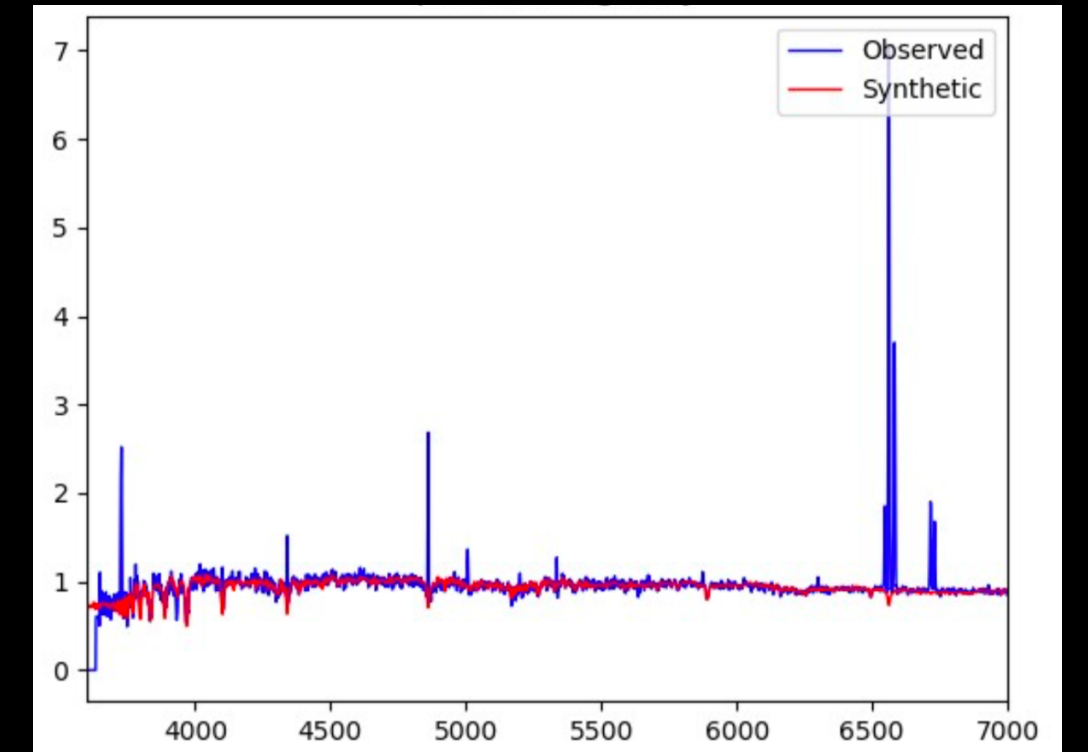
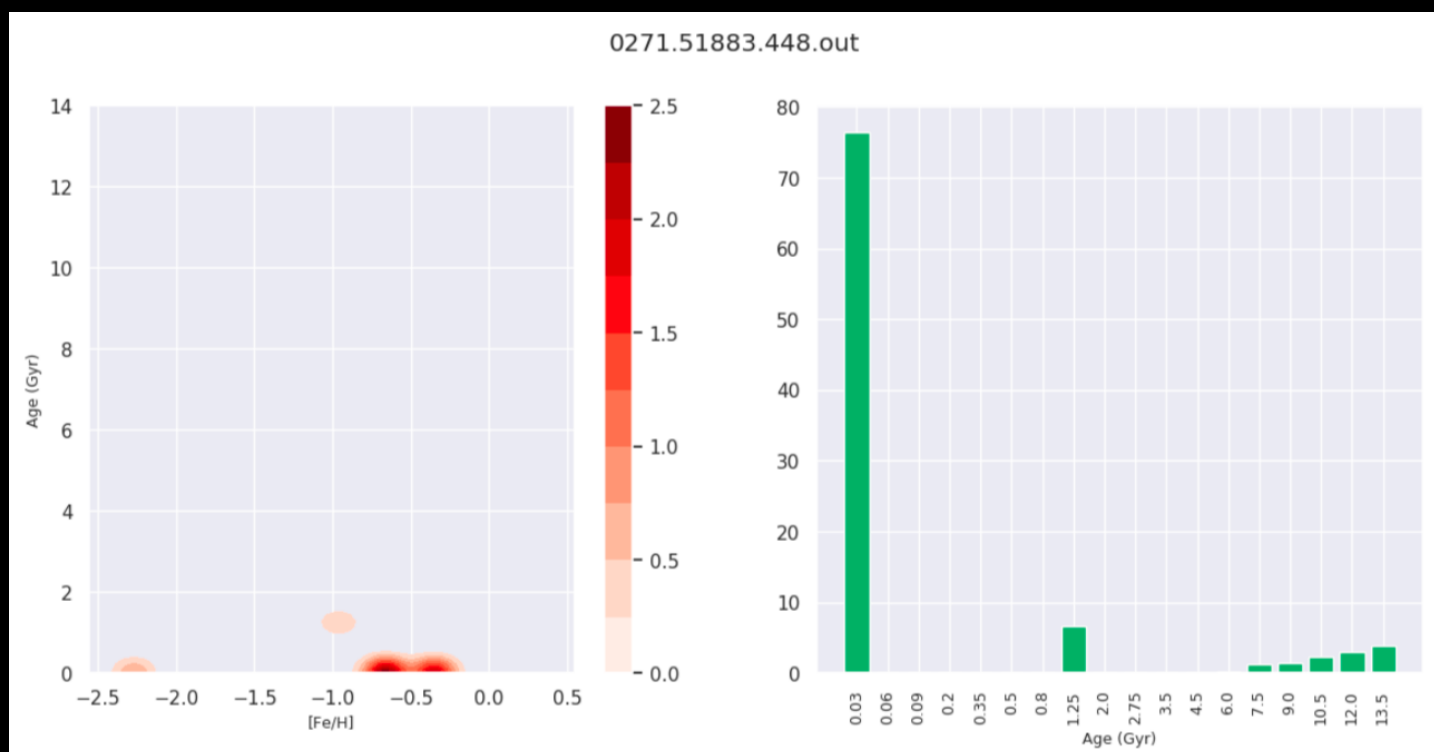
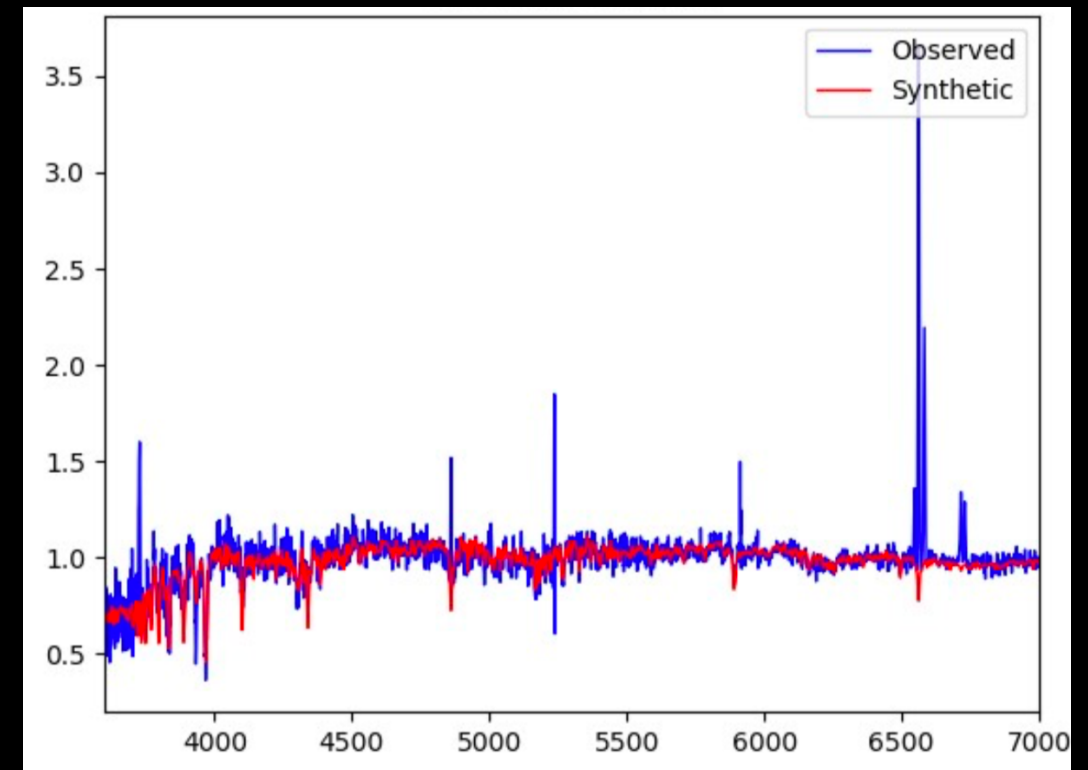
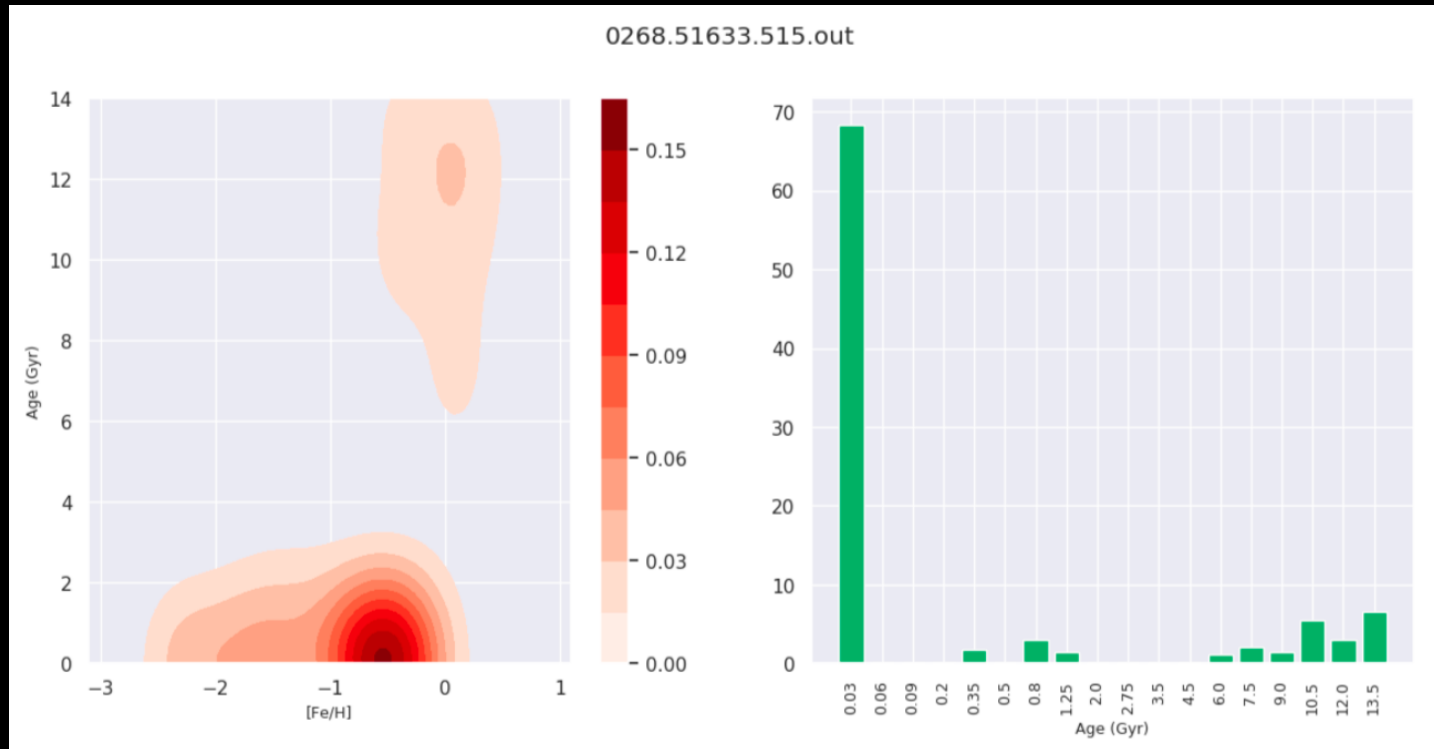
Figure 1. The WHAN diagram, used to establish emission-line classes. The line labelled S06^T represents the optimal transposition of the S06 SF/AGN spectral classification scheme, while the line at $W_{\text{H}\alpha} = 6 \text{ \AA}$ represents the transposed version of the Kewley et al. (2006) Seyfert/LINER class division. Dotted lines mark $W_{\text{H}\alpha} = 0.5$ and $W_{[\text{N II}]} = 0.5 \text{ \AA}$ limits, below which line measurements are uncertain. Passive galaxies ($W_{\text{H}\alpha}$ and $W_{[\text{N II}]} < 0.5 \text{ \AA}$; red dots) lie below the dashed line. Dots correspond to sample F and contours to sample V. Contours are drawn at number densities: 0.1, 0.2, 0.4 and 0.6 of the peak value. As in other figures in this paper, only one-tenth of the objects is plotted to avoid overcrowding.

<https://sites.google.com/site/agndiagnostics/home/whan>

As pop. Velhas



As pop. Jovens



Educated guesses !

# Galáxia	267	268	271	491	
Idade ponderada por luminosidade	9.4	2.4	1.7	10.8	
Idade ponderada por massa	12.3	10.7	10.5	12.5	
Metalicidade ponderada por luminosidade	-0.3	-0.69	-0.64	-0.3	
Metalicidade ponderada por massa	0.2	-0.04	0.03	0.05	
Educated guesses !	Bojo clássico	Pseudo-bojo	Disco (sem bojo)	Elíptica	
	Disco (sem bojo)	Bojo clássico	Pseudo-bojo	Elíptica	
	Bojo clássico	Pseudo-bojo	Disco (sem bojo)	Elíptica	
	Pseudo-bojo	Disco (sem bojo)	Elíptica	Bojo clássico	
	Elíptica	Bojo clássico	Disco (sem bojo)	Pseudo-bojo	
	Disco (sem bojo)	Bojo clássico	Pseudo-bojo	Elíptica	
	Bojo clássico	Pseudo-bojo	Disco (sem bojo)	Elíptica	
	Disco (sem bojo)	Bojo clássico	Pseudo-bojo	Elíptica	
	Bojo clássico	Pseudo-bojo	Disco (sem bojo)	Elíptica	
Mais votado:	Bojo clássico	Empate de bojos	Disco (sem bojo)	Elíptica	
	Disco (sem bojo)		Pseudo-bojo		

Results !

# Galáxia	267	268	271	491
Idade ponderada por luminosidade	9.4	2.4	1.7	10.8
Idade ponderada por massa	12.3	10.7	10.5	12.5
Metalicidade ponderada por luminosidade	-0.3	-0.69	-0.64	-0.3
Metalicidade ponderada por massa	0.2	-0.04	0.03	0.05
Educated guesses !	Bojo clássico	Pseudo-bojo	Disco (sem bojo)	Elíptica
	Disco (sem bojo)	Bojo clássico	Pseudo-bojo	Elíptica
	Bojo clássico	Pseudo-bojo	Disco (sem bojo)	Elíptica
	Pseudo-bojo	Disco (sem bojo)	Elíptica	Bojo clássico
	Elíptica	Bojo clássico	Disco (sem bojo)	Pseudo-bojo
	Disco (sem bojo)	Bojo clássico	Pseudo-bojo	Elíptica
	Bojo clássico	Pseudo-bojo	Disco (sem bojo)	Elíptica
	Disco (sem bojo)	Bojo clássico	Pseudo-bojo	Elíptica
	Bojo clássico	Pseudo-bojo	Disco (sem bojo)	Elíptica
Mais votado:	Bojo clássico	Empate de bojos	Disco (sem bojo)	Elíptica
	Disco (sem bojo)		Pseudo-bojo	

**Bojo
clássico**

**Pseudo-
bojo**

Disco

Elíptica

Interlúdio

- Se no gráfico ao lado tivermos uma S0, Sc, Starburst e Sb. Quem é quem?

