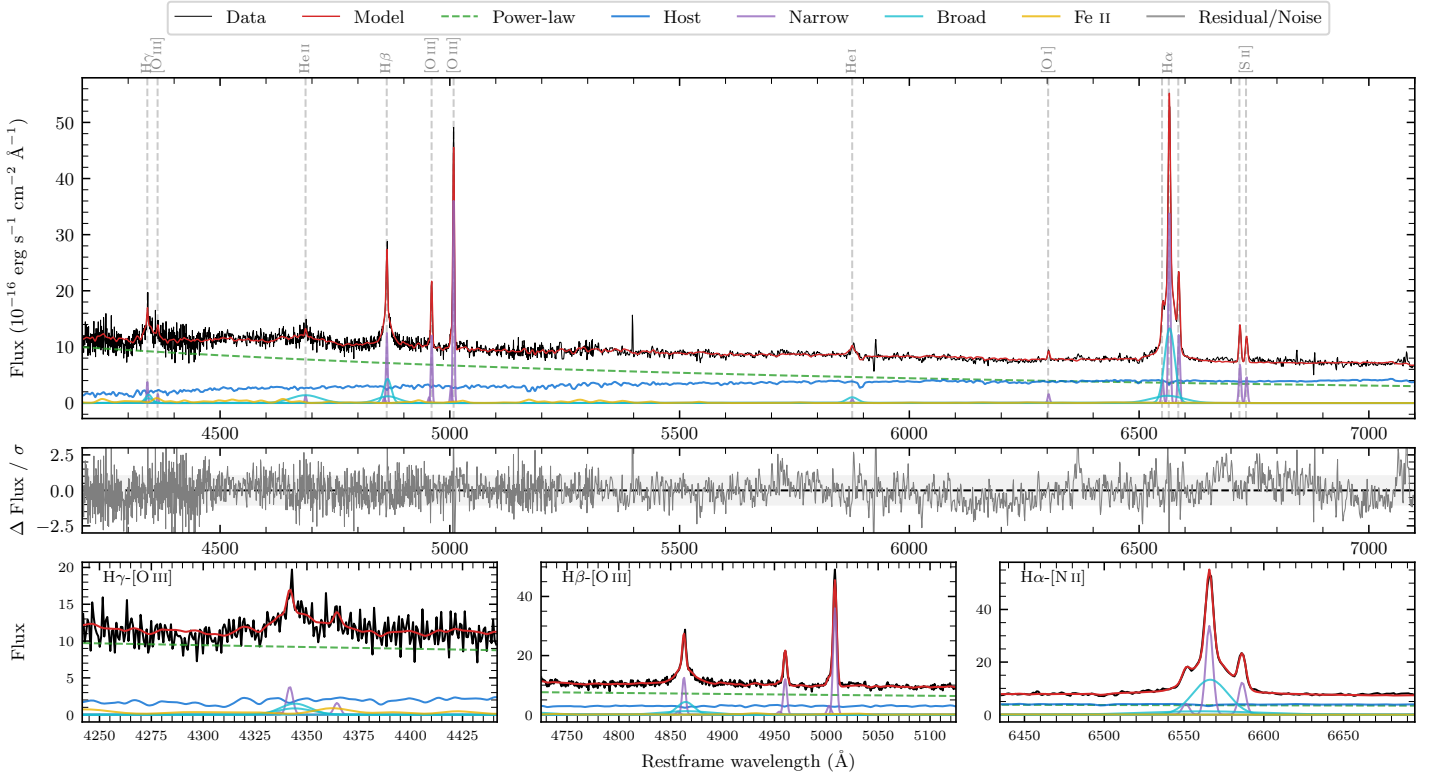
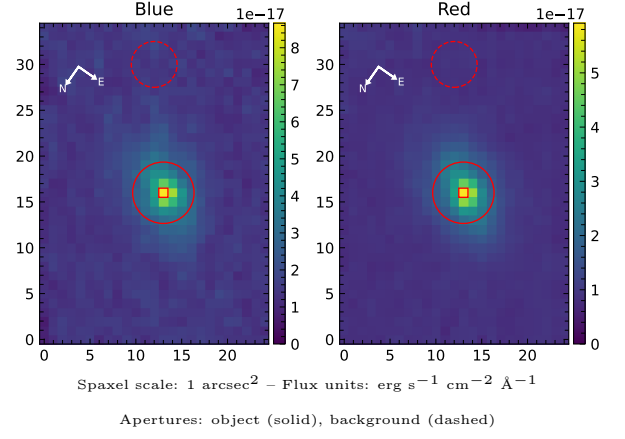


# 6dFGS gJ053940.8–484052

Spectrum ID	501443698_sp1	Spectrum type	Sy 1.5
Alt name	g0539408–484052	Quality flag	good
$z$	0.0637	AGN reference	6dFGS
RA, Dec	84.9201, –48.6810	MW $E(B - V)$	0.047
MJD	60266.66	Power law $\alpha_\nu$	$0.28 \pm 0.12$
SNR/ $\text{\AA}$ B/R	13.4/19.7	$\log L_{5100, \text{AGN}}$	$43.50 \pm 0.02$
Obs airmass	1.05	$\log H\beta_{\text{Br}}/[\text{O III}]$	$-0.03 \pm 0.03$
SMSS ID	501443698	$\log M_{L5100}/M_\odot$	$6.97 \pm 0.04$
Neighbour	None $< 15''$	$\log M_{\text{H}\alpha}/M_\odot$	$6.52 \pm 0.05$
SMSS $\langle r_6''_{\text{ap}} \rangle$	$16.74 \pm 0.06$	$\log M_{\text{H}\beta}/M_\odot$	$6.76 \pm 0.06$
2MASS $K_{\text{ext}}$	$13.00 \pm 0.13$	$\log M_{[\text{O III}]} / M_\odot$	$6.91 \pm 0.05$



## Emission Line Measurements

Line	$\log L$ (erg s <sup>-1</sup> )	FWHM (km s <sup>-1</sup> )	$\sigma$ (km s <sup>-1</sup> )	EW (Å)
H $\gamma$ Narrow	$40.21 \pm 0.11$	$248 \pm 62$	$139 \pm 25$	$1.79 \pm 0.24$
<b>H<math>\gamma</math> Broad</b>	<b><math>40.70 \pm 0.07</math></b>	<b><math>1243 \pm 82</math></b>	<b><math>436 \pm 30</math></b>	<b><math>5.28 \pm 0.49</math></b>
[O III] 4364	$39.80 \pm 0.20$	$247 \pm 62$	$103 \pm 25$	$0.70 \pm 0.20$
He II Narrow	$39.75 \pm 0.20$	$247 \pm 62$	$103 \pm 25$	$0.74 \pm 0.20$
<b>He II Broad</b>	<b><math>41.06 \pm 0.05</math></b>	<b><math>4760 \pm 72</math></b>	<b><math>2021 \pm 29</math></b>	<b><math>15.20 \pm 0.93</math></b>
H $\beta$ Narrow	$40.78 \pm 0.03$	$248 \pm 62$	$139 \pm 25$	$8.61 \pm 0.28$
<b>H<math>\beta</math> Broad</b>	<b><math>41.22 \pm 0.03</math></b>	<b><math>1377 \pm 67</math></b>	<b><math>706 \pm 55</math></b>	<b><math>23.69 \pm 0.82</math></b>
[O III] 5007	$41.25 \pm 0.01$	$248 \pm 62$	$139 \pm 25$	$27.00 \pm 0.29$
He I Narrow	$39.60 \pm 0.20$	$247 \pm 62$	$103 \pm 25$	$0.88 \pm 0.20$
<b>He I Broad</b>	<b><math>40.53 \pm 0.06</math></b>	<b><math>1514 \pm 78</math></b>	<b><math>643 \pm 32</math></b>	<b><math>7.42 \pm 0.60</math></b>
[O I] 6300	$39.96 \pm 0.07$	$247 \pm 62$	$103 \pm 25$	$2.35 \pm 0.22$
H $\alpha$ Narrow	$41.30 \pm 0.01$	$247 \pm 62$	$103 \pm 25$	$56.63 \pm 0.38$
<b>H<math>\alpha</math> Broad</b>	<b><math>41.70 \pm 0.01</math></b>	<b><math>1254 \pm 63</math></b>	<b><math>534 \pm 25</math></b>	<b><math>142.56 \pm 1.12</math></b>
[N II] 6585	$40.86 \pm 0.01$	$247 \pm 62$	$103 \pm 25$	$20.85 \pm 0.31$
[S II] 6718	$40.61 \pm 0.02$	$247 \pm 62$	$103 \pm 25$	$12.35 \pm 0.28$
[S II] 6732	$40.45 \pm 0.02$	$247 \pm 62$	$103 \pm 25$	$8.47 \pm 0.30$

## Emission Summary

H $\alpha$ broad SNR	19.01
H $\beta$ broad SNR	7.18
H $\gamma$ broad SNR	3.20
AGN frac	0.70
Host frac	0.30
$\log L_{5100, \text{Host}}$	43.14
Fe II/H $\beta$	0.75
Fe II/[O III]	0.70

## Quality Flags

spurious_hab/hbb	0/0
15100	0
balmer	0
balmer_snr	0
hb_width	1
balmer_width	0