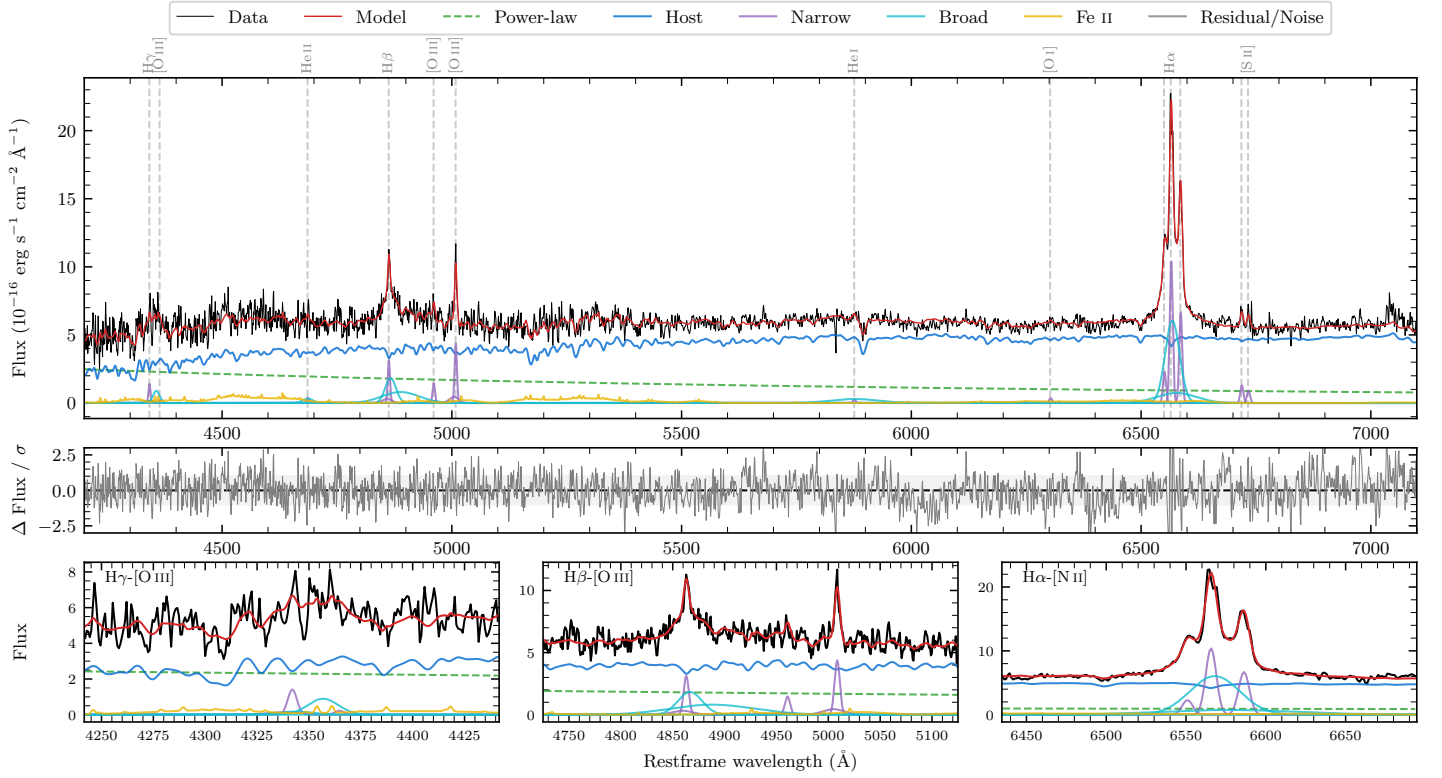
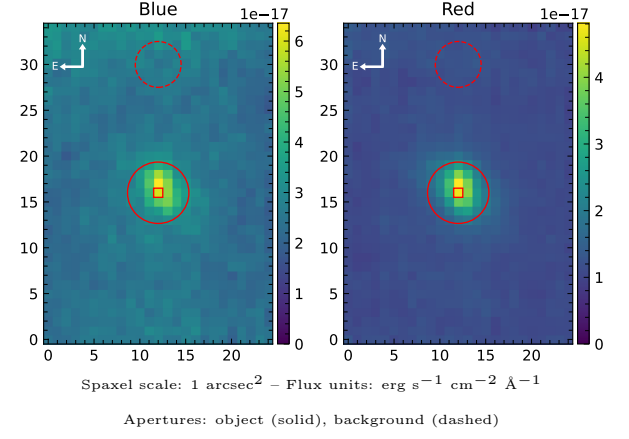


# 6dFGS gJ051518.0–160636

Spectrum ID	23732994_sp1	Spectrum type	Sy 1.2
Alt name	g0515180–160636	Quality flag	good
$z$	0.0799	AGN reference	6dFGS
RA, Dec	78.8250, –16.1100	MW $E(B - V)$	0.066
MJD	60262.63	Power law $\alpha_\nu$	$0.21 \pm 0.28$
SNR/Å B/R	9.7/18.8	$\log L_{5100, \text{AGN}}$	$43.10 \pm 0.09$
Obs airmass	1.05	$\log H\beta_{\text{Br}}/[\text{O III}]$	$0.54 \pm 0.06$
SMSS ID	23732994	$\log M_{L5100}/M_\odot$	$7.19 \pm 0.08$
Neighbour	None $< 15''$	$\log M_{\text{H}\alpha}/M_\odot$	$6.86 \pm 0.03$
SMSS $\langle r_6''_{\text{ap}} \rangle$	$16.77 \pm 0.06$	$\log M_{\text{H}\beta}/M_\odot$	$7.21 \pm 0.08$
2MASS $K_{\text{ext}}$	$12.60 \pm 0.10$	$\log M_{[\text{O III}]} / M_\odot$	$7.09 \pm 0.08$



## Emission Line Measurements

Line	$\log L$ ( $\text{erg s}^{-1}$ )	FWHM ( $\text{km s}^{-1}$ )	$\sigma$ ( $\text{km s}^{-1}$ )	EW ( $\text{Å}$ )
H $\gamma$ Narrow	$40.27 \pm 0.18$	$380 \pm 64$	$363 \pm 58$	$5.12 \pm 1.58$
<b>H<math>\gamma</math> Broad</b>	<b><math>40.56 \pm 0.13</math></b>	<b><math>1300 \pm 149</math></b>	<b><math>471 \pm 61</math></b>	<b><math>9.48 \pm 1.68</math></b>
[O III] 4364	–	–	–	–
He II Narrow	$39.60 \pm 0.39$	$358 \pm 63$	$151 \pm 25$	$1.31 \pm 0.78$
<b>He II Broad</b>	<b><math>40.19 \pm 0.27</math></b>	<b><math>1679 \pm 70</math></b>	<b><math>713 \pm 28</math></b>	<b><math>5.09 \pm 1.64</math></b>
H $\beta$ Narrow	$40.66 \pm 0.09$	$380 \pm 64$	$363 \pm 58$	$16.33 \pm 1.70$
<b>H<math>\beta</math> Broad</b>	<b><math>41.36 \pm 0.04</math></b>	<b><math>2159 \pm 172</math></b>	<b><math>1441 \pm 64</math></b>	<b><math>81.79 \pm 3.57</math></b>
[O III] 5007	$40.82 \pm 0.05$	$380 \pm 64$	$363 \pm 58$	$25.12 \pm 1.78$
He I Narrow	$39.53 \pm 0.28$	$358 \pm 63$	$151 \pm 25$	$1.84 \pm 0.77$
<b>He I Broad</b>	<b><math>40.81 \pm 0.08</math></b>	<b><math>6117 \pm 72</math></b>	<b><math>2598 \pm 29</math></b>	<b><math>34.76 \pm 3.33</math></b>
[O I] 6300	$39.70 \pm 0.18$	$358 \pm 63$	$151 \pm 25$	$3.14 \pm 0.81$
H $\alpha$ Narrow	$41.17 \pm 0.01$	$358 \pm 63$	$151 \pm 25$	$101.10 \pm 1.16$
<b>H<math>\alpha</math> Broad</b>	<b><math>41.73 \pm 0.01</math></b>	<b><math>1811 \pm 68</math></b>	<b><math>810 \pm 34</math></b>	<b><math>371.22 \pm 3.98</math></b>
[N II] 6585	$40.98 \pm 0.02$	$358 \pm 63$	$151 \pm 25$	$65.69 \pm 1.07$
[S II] 6718	$40.27 \pm 0.06$	$358 \pm 63$	$151 \pm 25$	$13.61 \pm 1.39$
[S II] 6732	$40.12 \pm 0.08$	$358 \pm 63$	$151 \pm 25$	$9.59 \pm 1.51$

## Emission Summary

H $\alpha$ broad SNR	11.39
H $\beta$ broad SNR	4.29
H $\gamma$ broad SNR	1.69
AGN frac	0.29
Host frac	0.71
$\log L_{5100, \text{Host}}$	43.50
Fe II/H $\beta$	0.78
Fe II/[O III]	2.70

## Quality Flags

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