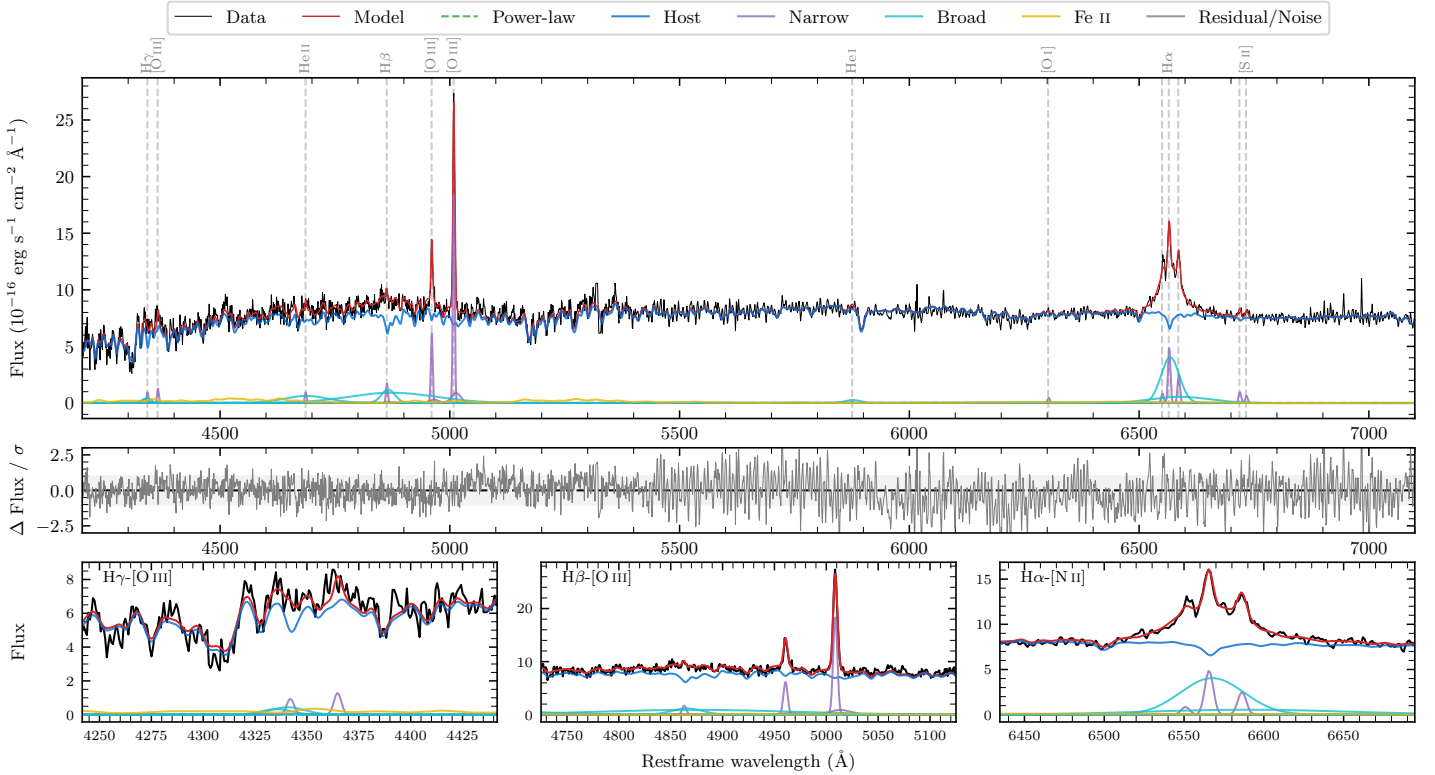
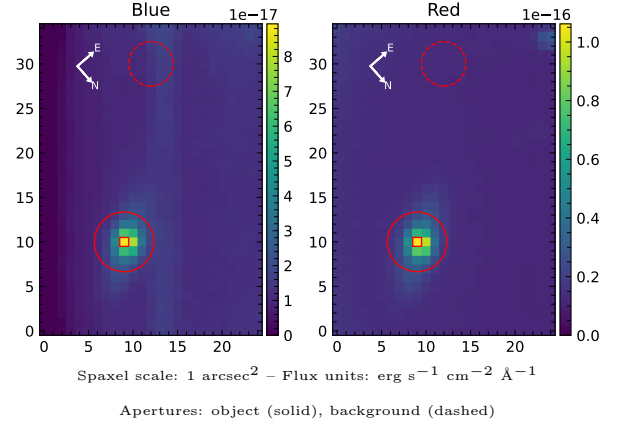


# 6dFGS gJ054731.8–304146

Spectrum ID	20363846_sp1	Spectrum type	Sy 1.2
Alt name	g0547318–304146	Quality flag	good
$z$	0.0478	AGN reference	6dFGS
RA, Dec	86.8824, –30.6961	MW $E(B - V)$	0.021
MJD	59668.41	Power law $\alpha_\nu$	$-0.72 \pm 0.89$
SNR/ $\text{\AA}$ B/R	11.7/26.6	$\log L_{5100, \text{AGN}}$	$40.68 \pm 0.57$
Obs airmass	1.17	$\log H\beta_{\text{Br}}/[\text{O III}]$	$0.35 \pm 0.03$
SMSS ID	20363846	$\log M_{L5100}/M_\odot$	$6.57 \pm 0.29$
Neighbour	None $< 15''$	$\log M_{\text{H}\alpha}/M_\odot$	$6.75 \pm 0.04$
SMSS $\langle r_6''_{\text{ap}} \rangle$	$16.31 \pm 0.05$	$\log M_{\text{H}\beta}/M_\odot$	$7.55 \pm 0.14$
2MASS $K_{\text{ext}}$	$12.53 \pm 0.13$	$\log M_{[\text{O III}]} / M_\odot$	$7.52 \pm 0.14$



## Emission Line Measurements

Line	$\log L$ ( $\text{erg s}^{-1}$ )	FWHM ( $\text{km s}^{-1}$ )	$\sigma$ ( $\text{km s}^{-1}$ )	EW ( $\text{\AA}$ )
H $\gamma$ Narrow	$39.46 \pm 0.30$	$297 \pm 63$	$303 \pm 39$	$251.90 \pm 168.78$
<b>H<math>\gamma</math> Broad</b>	<b><math>40.01 \pm 0.17</math></b>	<b><math>1355 \pm 113</math></b>	<b><math>486 \pm 38</math></b>	<b><math>736.96 \pm 179.38</math></b>
[O III] 4364	$39.50 \pm 0.21$	$291 \pm 63$	$122 \pm 25$	$279.29 \pm 81.69$
He II Narrow	$39.41 \pm 0.23$	$291 \pm 63$	$122 \pm 25$	$243.89 \pm 78.29$
<b>He II Broad</b>	<b><math>40.64 \pm 0.07</math></b>	<b><math>7420 \pm 86</math></b>	<b><math>3151 \pm 35</math></b>	<b><math>4180.22 \pm 399.39</math></b>
H $\beta$ Narrow	$39.77 \pm 0.14$	$297 \pm 63$	$304 \pm 39$	$594.47 \pm 165.71$
<b>H<math>\beta</math> Broad</b>	<b><math>41.17 \pm 0.03</math></b>	<b><math>3534 \pm 533</math></b>	<b><math>4276 \pm 118</math></b>	<b><math>14728.14 \pm 573.34</math></b>
[O III] 5007	$40.82 \pm 0.02$	$297 \pm 63$	$304 \pm 39$	$6803.07 \pm 175.06$
He I Narrow	–	–	–	–
<b>He I Broad</b>	<b><math>39.78 \pm 0.13</math></b>	<b><math>1923 \pm 92</math></b>	<b><math>817 \pm 38</math></b>	<b><math>789.10 \pm 123.14</math></b>
[O I] 6300	$39.22 \pm 0.16$	$291 \pm 63$	$122 \pm 25$	$231.71 \pm 51.07$
H $\alpha$ Narrow	$40.26 \pm 0.02$	$291 \pm 63$	$122 \pm 25$	$2690.73 \pm 77.44$
<b>H<math>\alpha</math> Broad</b>	<b><math>41.21 \pm 0.01</math></b>	<b><math>2314 \pm 73</math></b>	<b><math>1100 \pm 44</math></b>	<b><math>23969.82 \pm 301.46</math></b>
[N II] 6585	$39.97 \pm 0.04$	$291 \pm 63$	$122 \pm 25$	$1385.37 \pm 67.74$
[S II] 6718	$39.57 \pm 0.07$	$291 \pm 63$	$122 \pm 25$	$559.41 \pm 58.74$
[S II] 6732	$39.39 \pm 0.11$	$291 \pm 63$	$122 \pm 25$	$371.95 \pm 59.93$

## Emission Summary

H $\alpha$ broad SNR	7.21
H $\beta$ broad SNR	3.32
H $\gamma$ broad SNR	1.36
AGN frac	0.00
Host frac	1.00
$\log L_{5100, \text{Host}}$	43.30
Fe II/H $\beta$	0.33
Fe II/[O III]	0.74

## Quality Flags

spurious_hab/hbb	0/0
15100	2
balmer	0
balmer_snr	1
hb_width	2
balmer_width	0