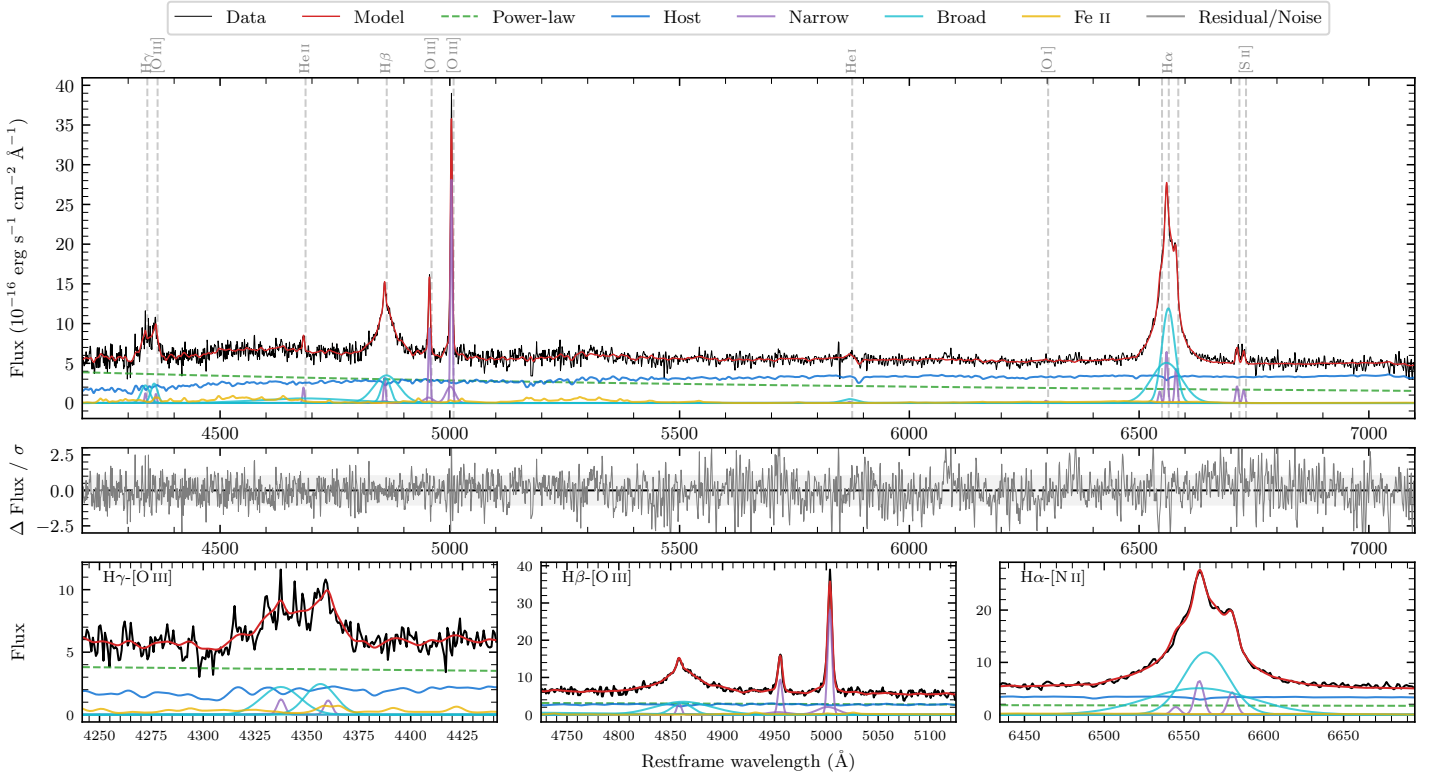
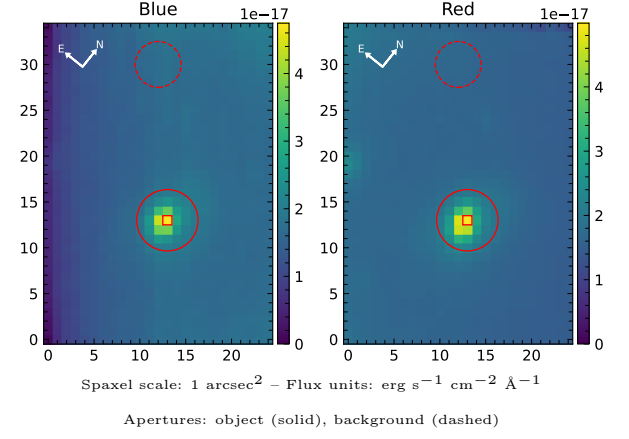


# 2MASS J16161077–1014059

Spectrum ID	192188594_sp2	Spectrum type	Sy 1.5
Alt name	g1616108–101406	Quality flag	good
$z$	0.0767	AGN reference	6dFGS
RA, Dec	244.0449, –10.2350	MW $E(B - V)$	0.234
MJD	59671.7	Power law $\alpha_\nu$	$-0.23 \pm 0.32$
SNR/ $\text{\AA}$ B/R	9.2/14.6	$\log L_{5100, \text{AGN}}$	$43.32 \pm 0.05$
Obs airmass	1.09	$\log H\beta_{\text{Br}}/[\text{O III}]$	$0.20 \pm 0.02$
SMSS ID	192188594	$\log M_{L5100}/M_\odot$	$7.34 \pm 0.07$
Neighbour	13.9", 192188595	$\log M_{\text{H}\alpha}/M_\odot$	$7.11 \pm 0.03$
SMSS $\langle r_6''_{\text{ap}} \rangle$	$17.35 \pm 0.06$	$\log M_{\text{H}\beta}/M_\odot$	$7.43 \pm 0.06$
2MASS $K_{\text{ext}}$	$12.57 \pm 0.08$	$\log M_{[\text{O III}]} / M_\odot$	$7.49 \pm 0.06$



## 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	$40.09 \pm 0.25$	$316 \pm 63$	$326 \pm 29$	$2.25 \pm 1.00$
<b>H<math>\gamma</math> Broad</b>	<b><math>41.19 \pm 0.04</math></b>	<b><math>2475 \pm 171</math></b>	<b><math>844 \pm 43</math></b>	<b><math>28.66 \pm 1.19</math></b>
[O III] 4364	$39.93 \pm 0.26$	$300 \pm 63$	$127 \pm 25$	$1.58 \pm 0.48$
He II Narrow	$40.19 \pm 0.10$	$300 \pm 63$	$127 \pm 25$	$3.29 \pm 0.50$
<b>He II Broad</b>	<b><math>41.38 \pm 0.06</math></b>	<b><math>15475 \pm 275</math></b>	<b><math>6572 \pm 116</math></b>	<b><math>50.81 \pm 3.81</math></b>
H $\beta$ Narrow	$40.55 \pm 0.08$	$316 \pm 63$	$326 \pm 29$	$8.02 \pm 1.13$
<b>H<math>\beta</math> Broad</b>	<b><math>41.70 \pm 0.01</math></b>	<b><math>2312 \pm 161</math></b>	<b><math>1196 \pm 45</math></b>	<b><math>113.65 \pm 2.03</math></b>
[O III] 5007	$41.51 \pm 0.01$	$316 \pm 63$	$326 \pm 29$	$76.54 \pm 1.31$
He I Narrow	$39.21 \pm 0.41$	$300 \pm 63$	$127 \pm 25$	$0.51 \pm 0.43$
<b>He I Broad</b>	<b><math>40.53 \pm 0.08</math></b>	<b><math>2053 \pm 160</math></b>	<b><math>872 \pm 67</math></b>	<b><math>10.72 \pm 1.18</math></b>
[O I] 6300	$39.49 \pm 0.25$	$300 \pm 63$	$127 \pm 25$	$1.12 \pm 0.45$
H $\alpha$ Narrow	$40.86 \pm 0.02$	$300 \pm 63$	$127 \pm 25$	$27.73 \pm 0.64$
<b>H<math>\alpha</math> Broad</b>	<b><math>42.13 \pm 0.01</math></b>	<b><math>1843 \pm 66</math></b>	<b><math>850 \pm 25</math></b>	<b><math>513.26 \pm 2.08</math></b>
[N II] 6585	$40.68 \pm 0.03$	$300 \pm 63$	$127 \pm 25$	$18.50 \pm 0.60$
[S II] 6718	$40.38 \pm 0.04$	$300 \pm 63$	$127 \pm 25$	$9.66 \pm 0.75$
[S II] 6732	$40.26 \pm 0.06$	$300 \pm 63$	$127 \pm 25$	$7.33 \pm 0.78$

## Emission Summary

H $\alpha$ broad SNR	25.90
H $\beta$ broad SNR	10.04
H $\gamma$ broad SNR	4.35
AGN frac	0.50
Host frac	0.50
$\log L_{5100, \text{Host}}$	43.31
Fe II/H $\beta$	0.50
Fe II/[O III]	0.78

## Quality Flags

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