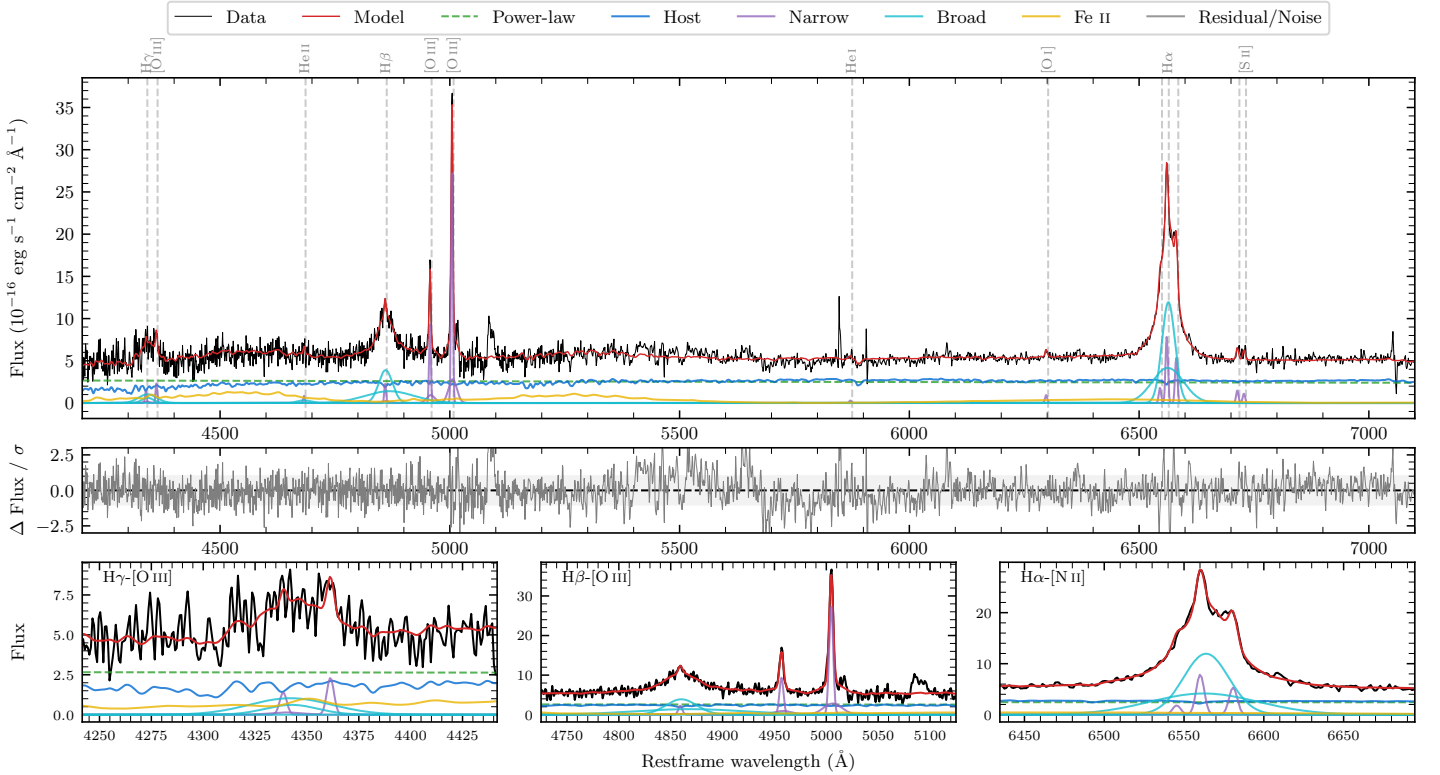
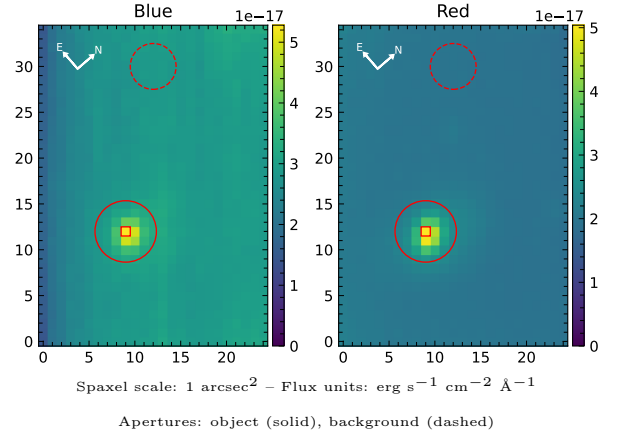


# 2MASS J16161077–1014059

|  |                    |  |                  |
|--|--------------------|--|------------------|
| Spectrum ID                                | 192188594_sp1      | 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  | 59436.36           | Power law $\alpha_\nu$                   | $-1.80 \pm 0.18$ |
| SNR/Å B/R                                  | 6.6/11.6           | $\log L_{5100, \text{AGN}}$              | $43.29 \pm 0.04$ |
| Obs airmass                                | 1.08               | $\log H\beta_{\text{Br}}/[\text{O III}]$ | $0.23 \pm 0.03$  |
| SMSS ID                                    | 192188594          | $\log M_{L5100}/M_\odot$                 | $7.46 \pm 0.05$  |
| Neighbour                                  | 13.9", 192188595   | $\log M_{\text{H}\alpha}/M_\odot$        | $7.08 \pm 0.03$  |
| SMSS $\langle r_{6''}^{\text{ap}} \rangle$ | $17.35 \pm 0.06$   | $\log M_{\text{H}\beta}/M_\odot$         | $7.57 \pm 0.05$  |
| 2MASS $K_{\text{ext}}$                     | $12.57 \pm 0.08$   | $\log M_{[\text{O III}]} / M_\odot$      | $7.62 \pm 0.05$  |



## 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                 | $40.14 \pm 0.24$                   | $301 \pm 63$                     | $318 \pm 32$                     | $3.54 \pm 1.75$                     |
| <b>H<math>\gamma</math> Broad</b> | <b><math>41.07 \pm 0.09</math></b> | <b><math>2718 \pm 393</math></b> | <b><math>1044 \pm 104</math></b> | <b><math>28.75 \pm 2.97</math></b>  |
| [O III] 4364                      | $40.20 \pm 0.15$                   | $277 \pm 63$                     | $117 \pm 25$                     | $4.02 \pm 0.86$                     |
| He II Narrow                      | $39.79 \pm 0.31$                   | $277 \pm 63$                     | $117 \pm 25$                     | $1.60 \pm 0.71$                     |
| <b>He II Broad</b>                | <b><math>40.26 \pm 0.30</math></b> | <b><math>2148 \pm 144</math></b> | <b><math>912 \pm 60</math></b>   | <b><math>4.77 \pm 2.05</math></b>   |
| H $\beta$ Narrow                  | $40.40 \pm 0.13$                   | $301 \pm 63$                     | $318 \pm 32$                     | $6.57 \pm 1.54$                     |
| <b>H<math>\beta</math> Broad</b>  | <b><math>41.73 \pm 0.02</math></b> | <b><math>2685 \pm 152</math></b> | <b><math>1775 \pm 82</math></b>  | <b><math>139.48 \pm 4.18</math></b> |
| [O III] 5007                      | $41.50 \pm 0.01$                   | $301 \pm 63$                     | $318 \pm 32$                     | $83.56 \pm 1.81$                    |
| He I Narrow                       | $39.43 \pm 0.35$                   | $277 \pm 63$                     | $117 \pm 25$                     | $0.73 \pm 0.43$                     |
| <b>He I Broad</b>                 | —                                  | —                                | —                                | —                                   |
| [O I] 6300                        | $39.97 \pm 0.12$                   | $277 \pm 63$                     | $117 \pm 25$                     | $2.57 \pm 0.44$                     |
| H $\alpha$ Narrow                 | $40.90 \pm 0.02$                   | $277 \pm 63$                     | $117 \pm 25$                     | $22.30 \pm 0.57$                    |
| <b>H<math>\alpha</math> Broad</b> | <b><math>42.10 \pm 0.01</math></b> | <b><math>1814 \pm 67</math></b>  | <b><math>851 \pm 25</math></b>   | <b><math>345.70 \pm 1.96</math></b> |
| [N II] 6585                       | $40.74 \pm 0.03$                   | $277 \pm 63$                     | $117 \pm 25$                     | $15.17 \pm 0.55$                    |
| [S II] 6718                       | $40.20 \pm 0.08$                   | $277 \pm 63$                     | $117 \pm 25$                     | $4.37 \pm 0.61$                     |
| [S II] 6732                       | $40.07 \pm 0.11$                   | $277 \pm 63$                     | $117 \pm 25$                     | $3.26 \pm 0.69$                     |

## Emission Summary

|                              |       |
|------------------------------|-------|
| H $\alpha$ broad SNR         | 19.32 |
| H $\beta$ broad SNR          | 6.32  |
| H $\gamma$ broad SNR         | 2.09  |
| AGN frac                     | 0.52  |
| Host frac                    | 0.48  |
| $\log L_{5100, \text{Host}}$ | 43.25 |
| Fe II/H $\beta$              | 1.00  |
| Fe II/[O III]                | 1.68  |

## Quality Flags

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