

Introduction

This document provides a complete practical workflow for running *cigale2s* including configuration, checking, and execution using real command-line examples.

To download examples, follow this [link](https://amubox.univ-amu.fr/s/z7bQgew6cqbWw2b): <https://amubox.univ-amu.fr/s/z7bQgew6cqbWw2b>

[Here]\$ ls -alrt

```
total 142
drwxrwx--T 16 root  cigale  16 Apr 1 10:55 ..
-rw-r--r--  1 dburgare cigale 23040 Apr 1 11:12 jwst_nirspec_prism_disp.fits
drwxr-xr-x  2 dburgare cigale   9 Apr 1 11:33 spectra
-rw-r--r--  1 dburgare cigale 23040 Apr 1 11:47 subaru_pfs_bin10_disp.fits
drwxr-xr-x  3 dburgare cigale   7 Apr 1 11:53 .
-rw-r--r--  1 dburgare cigale 120960 Apr 1 11:53 jades_cigale2s.fits
-rw-r--r--  1 dburgare cigale 120960 Apr 1 11:53 pfs_cigale2s.fits
```

[Here]\$ conda activate cigale_spec

```
=====
===== fitting JWST NIRSpec prism spectra =====
=====
```

(cigale_spec) [Here]\$ pcigale init

Code Investigating GALaxy Emission
 Boquien et al. (2019) & Burgarella et al. (2025) (<https://cigale.lam.fr>)
 CIGALE version: cigale_spec 2023.0.dev0 — Python version: 3.11.5 — Platform: linux-x86_64

[INFO] The initial configuration file was created. Please complete it with the data file name and the pcigale modules to use.

(cigale_spec) [Here]\$ ls -alrt

```
total 161
drwxrwx--T 16 root  cigale  16 Apr 1 10:55 ..
-rw-r--r--  1 dburgare cigale 23040 Apr 1 11:12 jwst_nirspec_prism_disp.fits
drwxr-xr-x  2 dburgare cigale   9 Apr 1 11:33 spectra
-rw-r--r--  1 dburgare cigale 23040 Apr 1 11:47 subaru_pfs_bin10_disp.fits
-rw-r--r--  1 dburgare cigale 120960 Apr 1 11:53 jades_cigale2s.fits
-rw-r--r--  1 dburgare cigale 120960 Apr 1 11:53 pfs_cigale2s.fits
-rw-r--r--  1 dburgare cigale  4234 Apr 1 11:54 pcigale.ini
drwxr-xr-x  3 dburgare cigale   9 Apr 1 11:54 .
-rw-r--r--  1 dburgare cigale  185 Apr 1 11:54 pcigale.ini.spec
```

(cigale_spec) [Here]\$ cp pcigale.ini pcigale.ini.0**(cigale_spec) [Here]\$ cp pcigale.ini.spec pcigale.ini.spec.0****(cigale_spec) [Here]\$ cp pcigale.ini pcigale.ini.1****(cigale_spec) [Here]\$ pcigale genconf**

Code Investigating GALaxy Emission
 Boquien et al. (2019) & Burgarella et al. (2025) (<https://cigale.lam.fr>)
 CIGALE version: cigale_spec 2023.0.dev0 — Python version: 3.11.5 — Platform: linux-x86_64


```
(cigale_spec) [Here]$ cp pcigale.ini pcigale.ini.2
(cigale_spec) [Here]$ cp pcigale.ini pcigale.ini.3
(cigale_spec) [Here]$ ls -alrt
```

total 534

```
drwxrwx--T 16 root   cigale   16 Apr 1 10:55 ..
-rw-r--r--  1 dburgare cigale 23040 Apr 1 11:12 jwst_nirspec_prism_disp.fits
drwxr-xr-x  2 dburgare cigale   9 Apr 1 11:33 spectra
-rw-r--r--  1 dburgare cigale 23040 Apr 1 11:47 subaru_pfs_bin10_disp.fits
-rw-r--r--  1 dburgare cigale 120960 Apr 1 11:53 jades_cigale2s.fits
-rw-r--r--  1 dburgare cigale 120960 Apr 1 11:53 pfs_cigale2s.fits
-rw-r--r--  1 dburgare cigale  4234 Apr 1 11:54 pcigale.ini.0
-rw-r--r--  1 dburgare cigale   185 Apr 1 11:54 pcigale.ini.spec.0
-rw-r--r--  1 dburgare cigale  4363 Apr 1 11:56 pcigale.ini.1
-rw-r--r--  1 dburgare cigale 18704 Apr 1 11:57 spec2phot_jades_100431_20260401T095827Z.dat
-rw-r--r--  1 dburgare cigale  1625 Apr 1 11:57 spec2phot_anchors_jades_100431_20260401T095827Z.dat
-rw-r--r--  1 dburgare cigale 18677 Apr 1 11:57 spec2phot_jades_1003_20260401T095828Z.dat
-rw-r--r--  1 dburgare cigale   965 Apr 1 11:57 spec2phot_anchors_jades_1003_20260401T095828Z.dat
-rw-r--r--  1 dburgare cigale 18677 Apr 1 11:57 spec2phot_jades_10000865_20260401T095828Z.dat
-rw-r--r--  1 dburgare cigale   416 Apr 1 11:57 spec2phot_anchors_jades_10000865_20260401T095828Z.dat
-rw-r--r--  1 dburgare cigale 18677 Apr 1 11:57 spec2phot_jades_101062_20260401T095828Z.dat
-rw-r--r--  1 dburgare cigale  1514 Apr 1 11:57 spec2phot_anchors_jades_101062_20260401T095828Z.dat
-rw-r--r--  1 dburgare cigale 194557 Apr 1 11:57 jades_cigale2s.dat
-rw-r--r--  1 dburgare cigale  2329 Apr 1 11:57 pcigale.ini.spec
-rw-r--r--  1 dburgare cigale 66755 Apr 1 11:57 pcigale.ini.2
-rw-r--r--  1 dburgare cigale 49610 Apr 1 12:03 pcigale.ini
drwxr-xr-x  3 dburgare cigale   23 Apr 1 12:03 .
-rw-r--r--  1 dburgare cigale 49610 Apr 1 12:03 pcigale.ini.3
```

```
(cigale_spec) [Here]$ pcigale check
```

Code Investigating GALaxy Emission
 Boquien et al. (2019) & Burgarella et al. (2025) (<https://cigale.lam.fr>)
 CIGALE version: cigale_spec 2023.0.dev0 — Python version: 3.11.5 — Platform: linux-x86_64

General information

Data file	jades_cigale2s.fits
Parameters file	None
Number of objects	4
Redshift	1.89 to 4.93
Bands fitted	jwst (14) — prism_Band_0000 (1) — prism_Band_0001 (1) — prism_Band_0002 (1) — prism_Band_0003 (1) — prism_Band_0004 (1) — prism_Band_0005 (1) — prism_Band_0006 (1) — prism_Band_0007 (1) — prism_Band_0008 (1) — prism_Band_0009 (1) — prism_Band_0010 (1) — prism_Band_0011 (1) — prism_Band_0012 (1) — prism_Band_0013 (1) — prism_Band_0014 (1) — prism_Band_0015 (1) — prism_Band_0016 (1) — prism_Band_0017 (1) — prism_Band_0018 (1) — prism_Band_0019 (1) — prism_Band_0020 (1) — prism_Band_0021 (1) — prism_Band_0022 (1) — prism_Band_0023 (1) — prism_Band_0024 (1) — prism_Band_0025 (1) — prism_Band_0026 (1) — prism_Band_0027 (1) — prism_Band_0028 (1) — prism_Band_0029 (1) — prism_Band_0030 (1) — prism_Band_0031 (1) — prism_Band_0032 (1) — prism_Band_0033 (1) — prism_Band_0034 (1) — prism_Band_0035 (1) — prism_Band_0036 (1) — prism_Band_0037 (1) — prism_Band_0038 (1) — prism_Band_0039 (1) — prism_Band_0040 (1) — prism_Band_0041 (1) — prism_Band_0042 (1) — prism_Band_0043 (1) — prism_Band_0044 (1) — prism_Band_0045 (1) — prism_Band_0046 (1) — prism_Band_0047 (1) — prism_Band_0048 (1) — prism_Band_0049 (1) — prism_Band_0050 (1) — prism_Band_0051 (1) — prism_Band_0052 (1) — prism_Band_0053 (1) — prism_Band_0054 (1) — prism_Band_0055 (1) — prism_Band_0056 (1) — prism_Band_0057 (1) — prism_Band_0058 (1) — prism_Band_0059 (1) — prism_Band_0060 (1) — prism_Band_0061 (1) — prism_Band_0062 (1) — prism_Band_0063 (1) — prism_Band_0064 (1) — prism_Band_0065 (1) — prism_Band_0066 (1) — prism_Band_0067 (1) — prism_Band_0068 (1) — prism_Band_0069 (1) — prism_Band_0070 (1) — prism_Band_0071 (1) — prism_Band_0072 (1) — prism_Band_0073 (1) — prism_Band_0074 (1) — prism_Band_0075 (1) — prism_Band_0076 (1) — prism_Band_0077 (1) — prism_Band_0078 (1) — prism_Band_0079 (1) — prism_Band_0080 (1) — prism_Band_0081 (1) — prism_Band_0082 (1) — prism_Band_0083 (1) — prism_Band_0084 (1) — prism_Band_0085 (1) — prism_Band_0086 (1) — prism_Band_0087 (1) — prism_Band_0088 (1) — prism_Band_0089 (1) — prism_Band_0090 (1) — prism_Band_0091 (1) — prism_Band_0092 (1) — prism_Band_0093 (1) — prism_Band_0094 (1) — prism_Band_0095 (1) — prism_Band_0096 (1) — prism_Band_0097 (1) — prism_Band_0098 (1) — prism_Band_0099 (1) — prism_Band_0100 (1) — prism_Band_0101 (1) — prism_Band_0102 (1) — prism_Band_0103 (1) — prism_Band_0104 (1) — prism_Band_0105 (1) — prism_Band_0106 (1) — prism_Band_0107 (1) — prism_Band_0108 (1) — prism_Band_0109 (1) — prism_Band_0110 (1) — prism_Band_0111 (1) — prism_Band_0112 (1) — prism_Band_0113 (1) — prism_Band_0114 (1) — prism_Band_0115 (1) — prism_Band_0116 (1) — prism_Band_0117 (1) — prism_Band_0118 (1) — prism_Band_0119 (1) — prism_Band_0120 (1) — prism_Band_0121 (1) — prism_Band_0122 (1) — prism_Band_0123 (1) — prism_Band_0124 (1) — prism_Band_0125 (1) — prism_Band_0126 (1) — prism_Band_0127 (1) — prism_Band_0128 (1) — prism_Band_0129 (1) — prism_Band_0130 (1) — prism_Band_0131 (1) — prism_Band_0132 (1) — prism_Band_0133 (1) — prism_Band_0134 (1) — prism_Band_0135 (1) — prism_Band_0136 (1) — prism_Band_0137 (1) — prism_Band_0138 (1) — prism_Band_0139 (1) — prism_Band_0140 (1) — prism_Band_0141 (1) — prism_Band_0142 (1) — prism_Band_0143 (1) — prism_Band_0144 (1) — prism_Band_0145 (1)


```

prism_Band_0909 (1) — prism_Band_0910 (1) — prism_Band_0911 (1) — prism_Band_0912 (1) — prism_Band_0913 (1) — prism_Band_0914 (1) — prism_Band_0915 (1) —
prism_Band_0916 (1) — prism_Band_0917 (1) — prism_Band_0918 (1) — prism_Band_0919 (1) — prism_Band_0920 (1) — prism_Band_0921 (1) — prism_Band_0922 (1) —
prism_Band_0923 (1) — prism_Band_0924 (1) — prism_Band_0925 (1) — prism_Band_0926 (1) — prism_Band_0927 (1) — prism_Band_0928 (1) — prism_Band_0929 (1) —
prism_Band_0930 (1) — prism_Band_0931 (1) — prism_Band_0932 (1) — prism_Band_0933 (1) — prism_Band_0934 (1) — prism_Band_0935 (1) — prism_Band_0936 (1) —
prism_Band_0937 (1) — prism_Band_0938 (1) — prism_Band_0939 (1) — prism_Band_0940 (1) — prism_Band_0941 (1) — prism_Band_0942 (1) — prism_Band_0943 (1) —
prism_Band_0944 (1) — prism_Band_0945 (1) — prism_Band_0946 (1) — prism_Band_0947 (1) — prism_Band_0948 (1) — prism_Band_0949 (1) — prism_Band_0950 (1) —
prism_Band_0951 (1) — prism_Band_0952 (1) — prism_Band_0953 (1) — prism_Band_0954 (1) — prism_Band_0955 (1) — prism_Band_0956 (1) — prism_Band_0957 (1) —
prism_Band_0958 (1) — prism_Band_0959 (1) — prism_Band_0960 (1) — prism_Band_0961 (1) — prism_Band_0962 (1) — prism_Band_0963 (1) — prism_Band_0964 (1) —
prism_Band_0965 (1) — prism_Band_0966 (1) — prism_Band_0967 (1) — prism_Band_0968 (1) — prism_Band_0969 (1) — prism_Band_0970 (1) — prism_Band_0971 (1) —
prism_Band_0972 (1) — prism_Band_0973 (1) — prism_Band_0974 (1) — prism_Band_0975 (1) — prism_Band_0976 (1) — prism_Band_0977 (1) — prism_Band_0978 (1) —
prism_Band_0979 (1) — prism_Band_0980 (1) — prism_Band_0981 (1) — prism_Band_0982 (1) — prism_Band_0983 (1) — prism_Band_0984 (1) — prism_Band_0985 (1) —
prism_Band_0986 (1) — prism_Band_0987 (1) — prism_Band_0988 (1) — prism_Band_0989 (1) — prism_Band_0990 (1) — prism_Band_0991 (1) — prism_Band_0992 (1) —
prism_Band_0993 (1) — prism_Band_0994 (1) — prism_Band_0995 (1) — prism_Band_0996 (1) — prism_Band_0997 (1) — prism_Band_0998 (1) — prism_Band_0999 (1) —
prism_Band_1000 (1)

```

```

Spectroscopy | True
Properties fitted | None
Number of models | 7872 (1968 per redshift)
Cores used | 8/8
Analysis module | pdf_analysis

```

SED modules

```

SFH | sfhdelayed
SSP | bc03
nebular | nebular
dust attenuation | dustatt_modified_starburst
dust emission | None. Options are: casey2012, dale2014, dl2007, dl2014, mbb, schreiber2016, themis.
AGN | None. Options are: fritz2006, skirtor2016.
X-ray | None. Options are: xray.
radio | None. Options are: radio.
restframe_parameters | None. Options are: restframe_parameters, restframe_parameters_1wave,
restframe_parameters_3bands, restframe_parameters_wEW.
redshifting | redshifting

```

***** IMPORTANT ***** after ‘*pcigale genconf*’, the spectrum is added to the input file, here *jades_cigale2s.fits*. However, because very often the number of resolution elements in the spectrum is too large for a fits file, a new *jades_cigale2s.dat* is created. You need to replace *jades_cigale2s.fits* by *jades_cigale2s.dat* in *pcigale.ini*, as shown below.

```

[doc_cigale2s]$ conda activate cigale_spec
(cigale_spec) [doc_cigale2s]$ pcigale run

```

Code Investigating GALaxy Emission
Boquien et al. (2019) & Burgarella et al. (2025) (<https://cigale.lam.fr>)
CIGALE version: cigale_spec 2023.0.dev0 — Python version: 3.11.5 — Platform: linux-x86_64

General information

```

Data file | jades_cigale2s.dat
Parameters file | None
Number of objects | 4
Redshift | 1.89 to 4.93
Bands fitted | jwst (14) — prism_Band_0000 (1) — prism_Band_0001 (1) — prism_Band_0002 (1) — prism_Band_0003 (1) — prism_Band_0004 (1) — prism_Band_0005 (1) —
prism_Band_0006 (1) — prism_Band_0007 (1) — prism_Band_0008 (1) — prism_Band_0009 (1) — prism_Band_0010 (1) — prism_Band_0011 (1) — prism_Band_0012 (1) —
prism_Band_0013 (1) — prism_Band_0014 (1) — prism_Band_0015 (1) — prism_Band_0016 (1) — prism_Band_0017 (1) — prism_Band_0018 (1) — prism_Band_0019 (1) —
prism_Band_0020 (1) — prism_Band_0021 (1) — prism_Band_0022 (1) — prism_Band_0023 (1) — prism_Band_0024 (1) — prism_Band_0025 (1) — prism_Band_0026 (1) —
prism_Band_0027 (1) — prism_Band_0028 (1) — prism_Band_0029 (1) — prism_Band_0030 (1) — prism_Band_0031 (1) — prism_Band_0032 (1) — prism_Band_0033 (1) —
prism_Band_0034 (1) — prism_Band_0035 (1) — prism_Band_0036 (1) — prism_Band_0037 (1) — prism_Band_0038 (1) — prism_Band_0039 (1) — prism_Band_0040 (1) —
prism_Band_0041 (1) — prism_Band_0042 (1) — prism_Band_0043 (1) — prism_Band_0044 (1) — prism_Band_0045 (1) — prism_Band_0046 (1) — prism_Band_0047 (1) —
prism_Band_0048 (1) — prism_Band_0049 (1) — prism_Band_0050 (1) — prism_Band_0051 (1) — prism_Band_0052 (1) — prism_Band_0053 (1) — prism_Band_0054 (1) —
prism_Band_0055 (1) — prism_Band_0056 (1) — prism_Band_0057 (1) — prism_Band_0058 (1) — prism_Band_0059 (1) — prism_Band_0060 (1) — prism_Band_0061 (1) —
prism_Band_0062 (1) — prism_Band_0063 (1) — prism_Band_0064 (1) — prism_Band_0065 (1) — prism_Band_0066 (1) — prism_Band_0067 (1) — prism_Band_0068 (1) —

```


... MANY WARNINGS LIKE THE TWO ABOVE ...

```
----- Block 1/10 -----
[INFO] Computing models.
👍 Model 788/788 ----- 100% 0:01:56 0:00:00 223.3/s
[INFO] Done.
[INFO] Estimating the physical properties.
👍 Object 4/4 ----- 100% 0:00:00 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.

----- Block 2/10 -----
[INFO] Computing models.
👍 Model 788/788 ----- 100% 0:01:54 0:00:00 210.6/s
[INFO] Done.
[INFO] Estimating the physical properties.
👍 Object 4/4 ----- 100% 0:00:00 0:00:00 19.2/s
[INFO] Done.
[INFO] Block processed.

----- Block 3/10 -----
[INFO] Computing models.
👍 Model 788/788 ----- 100% 0:01:52 0:00:00 223.2/s
[INFO] Done.
[INFO] Estimating the physical properties.
👍 Object 4/4 ----- 100% 0:00:00 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.

----- Block 4/10 -----
[INFO] Computing models.
👍 Model 788/788 ----- 100% 0:01:54 0:00:00 223.2/s
[INFO] Done.
[INFO] Estimating the physical properties.
👍 Object 4/4 ----- 100% 0:00:00 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.

----- Block 5/10 -----
[INFO] Computing models.
👍 Model 788/788 ----- 100% 0:01:59 0:00:00 199.1/s
[INFO] Done.
[INFO] Estimating the physical properties.
👍 Object 4/4 ----- 100% 0:00:01 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.

----- Block 6/10 -----
[INFO] Computing models.
👍 Model 788/788 ----- 100% 0:00:30 0:00:00 458.1/s
[INFO] Done.
[INFO] Estimating the physical properties.
● Object 0/4 ----- 0% 0:00:00 -:-:- 0.0/sjades_1003
SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_1003 All models invalid after scaling mask — skipping
jades_10000865 SKIP: no finite model flux in 'jwst.nircam.F182M'
● Object 0/4 ----- 0% 0:00:00 -:-:-
0.0/sjades_10000865 All models invalid after scaling mask — skipping
jades_101062 SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_101062 All models invalid after scaling mask — skipping
👍 Object 4/4 ----- 100% 0:00:00 0:00:00 2.5/s
```

[INFO] Done.

[INFO] Block processed.

Block 7/10

[INFO] Computing models.

👍 Model 788/788 100% 0:00:30 0:00:00 456.8/s

[INFO] Done.

[INFO] Estimating the physical properties.

● Object 0/4 0% 0:00:00 -:-:-- 0.0/sjades_1003

SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_1003 All models invalid after scaling mask — skipping

jades_10000865 SKIP: no finite model flux in 'jwst.nircam.F182M'

jades_10000865 All models invalid after scaling mask — skipping

🟡 Object 2/4 50% 0:00:00 -:-:--

0.0/sjades_101062 SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_101062 All models invalid after scaling mask — skipping

👍 Object 4/4 100% 0:00:01 0:00:00 1.8/s

[INFO] Done.

[INFO] Block processed.

Block 8/10

[INFO] Computing models.

👍 Model 788/788 100% 0:00:30 0:00:00 736.9/s

[INFO] Done.

[INFO] Estimating the physical properties.

● Object 0/4 0% 0:00:00 -:-:-- 0.0/sjades_1003

SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_1003 All models invalid after scaling mask — skipping

jades_10000865 SKIP: no finite model flux in 'jwst.nircam.F182M'

jades_10000865 All models invalid after scaling mask — skipping

🟡 Object 2/4 50% 0:00:00 -:-:--

0.0/sjades_101062 SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_101062 All models invalid after scaling mask — skipping

👍 Object 4/4 100% 0:00:00 0:00:00 2.5/s

[INFO] Done.

[INFO] Block processed.

Block 9/10

[INFO] Computing models.

👍 Model 788/788 100% 0:00:02 0:00:00 735.8/s

[INFO] Done.

[INFO] Estimating the physical properties.

● Object 0/4 0% 0:00:00 -:-:--

0.0/sjades_100431 SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_100431 All models invalid after scaling mask — skipping

jades_1003 SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_1003 All models invalid after scaling mask — skipping

jades_10000865 SKIP: no finite model flux in 'jwst.nircam.F182M'

jades_10000865 All models invalid after scaling mask — skipping

jades_101062 SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_101062 All models invalid after scaling mask — skipping

👍 Object 4/4 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

Block 10/10

[INFO] Computing models.

👍 Model 780/780 100% 0:00:02 0:00:00 783.7/s

[INFO] Done.

[INFO] Estimating the physical properties.

● Object 0/4 0% 0:00:00 -:-:--

0.0/sjades_100431 SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_100431 All models invalid after scaling mask — skipping
jades_1003 SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_1003 All models invalid after scaling mask — skipping
jades_10000865 SKIP: no finite model flux in 'jwst.nircam.F182M'
jades_10000865 All models invalid after scaling mask — skipping
jades_101062 SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_101062 All models invalid after scaling mask — skipping

👍 Object 4/4 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

————— Global analysis

[INFO] Estimating the physical properties.

[INFO] Computing the best fit spectra.

👍 Object 4/4 ————— 100% 0:00:15 0:00:00 0.0/s

[INFO] Done.

[INFO] Sanity check of the analysis results.

[INFO] 0.0% of the objects have $\chi^2_{\text{red}} \sim 0$ and 100.0% $\chi^2_{\text{red}} < 0.5$.

[INFO] Saving the analysis results.

[INFO] Analysing the mock observations.

————— Block 1/10

[INFO] Computing models.

👍 Model 788/788 ————— 100% 0:02:06 0:00:00 198.8/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 4/4 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

————— Block 2/10

[INFO] Computing models.

👍 Model 788/788 ————— 100% 0:02:01 0:00:00 210.3/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 4/4 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

————— Block 3/10

[INFO] Computing models.

👍 Model 788/788 ————— 100% 0:02:02 0:00:00 160.1/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 4/4 ————— 100% 0:00:00 0:00:00 30.0/s

[INFO] Done.

[INFO] Block processed.

————— Block 4/10

[INFO] Computing models.

👍 Model 788/788 ————— 100% 0:02:10 0:00:00 193.7/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 4/4 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

————— Block 5/10

[INFO] Computing models.

👍 Model 788/788 ————— 100% 0:01:53 0:00:00 237.7/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 4/4 ————— 100% 0:00:01 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.
————— Block 6/10

[INFO] Computing models.

👍 Model 788/788 ————— 100% 0:00:29 0:00:00 451.8/s
[INFO] Done.
[INFO] Estimating the physical properties.
● Object 0/4 ————— 0% 0:00:00 -:-:- 0.0/sjades_1003
SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_1003 All models invalid after scaling mask — skipping
● Object 0/4 —————

————— 0% 0:00:00 -:-:-

0.0/sjades_10000865 SKIP: no finite model flux in 'jwst.nircam.F182M'

jades_10000865 All models invalid after scaling mask — skipping

jades_101062 SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_101062 All models invalid after scaling mask — skipping

👍 Object 4/4 ————— 100% 0:00:00 0:00:00 29.4/s
[INFO] Done.
[INFO] Block processed.
————— Block 7/10

[INFO] Computing models.

👍 Model 788/788 ————— 100% 0:00:29 0:00:00 526.5/s
[INFO] Done.
[INFO] Estimating the physical properties.
● Object 0/4 ————— 0% 0:00:00 -:-:- 0.0/sjades_1003
SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_1003 All models invalid after scaling mask — skipping
jades_10000865 SKIP: no finite model flux in 'jwst.nircam.F182M'
jades_10000865 All models invalid after scaling mask — skipping

● Object 2/4 ————— 50% 0:00:00 -:-:-

0.0/sjades_101062 SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_101062 All models invalid after scaling mask — skipping

👍 Object 4/4 ————— 100% 0:00:00 0:00:00 20.0/s
[INFO] Done.
[INFO] Block processed.
————— Block 8/10

[INFO] Computing models.

👍 Model 788/788 ————— 100% 0:00:28 0:00:00 737.1/s
[INFO] Done.
[INFO] Estimating the physical properties.
● Object 0/4 ————— 0% 0:00:00 -:-:- 0.0/sjades_1003
SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_1003 All models invalid after scaling mask — skipping
jades_10000865 SKIP: no finite model flux in 'jwst.nircam.F182M'
jades_10000865 All models invalid after scaling mask — skipping

● Object 2/4 ————— 50% 0:00:00 -:-:-

0.0/sjades_101062 SKIP: no finite model flux in 'jwst.nircam.F090W'

jades_101062 All models invalid after scaling mask — skipping

👍 Object 4/4 ————— 100% 0:00:00 0:00:00 20.0/s
[INFO] Done.
[INFO] Block processed.
————— Block 9/10

[INFO] Computing models.

👍 Model 788/788 ————— 100% 0:00:02 0:00:00 812.3/s
[INFO] Done.
[INFO] Estimating the physical properties.
● Object 0/4 ————— 0% 0:00:00 -:--:--
0.0/sjades_100431 SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_100431 All models invalid after scaling mask — skipping
jades_1003 SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_1003 All models invalid after scaling mask — skipping
jades_10000865 SKIP: no finite model flux in 'jwst.nircam.F182M'
jades_10000865 All models invalid after scaling mask — skipping
jades_101062 SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_101062 All models invalid after scaling mask — skipping
👍 Object 4/4 ————— 100% 0:00:00 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.
————— Block 10/10 —————
[INFO] Computing models.
👍 Model 780/780 ————— 100% 0:00:02 0:00:00 847.6/s
[INFO] Done.
[INFO] Estimating the physical properties.
● Object 0/4 ————— 0% 0:00:00 -:--:--
0.0/sjades_100431 SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_100431 All models invalid after scaling mask — skipping
jades_1003 SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_1003 All models invalid after scaling mask — skipping
jades_10000865 SKIP: no finite model flux in 'jwst.nircam.F182M'
jades_10000865 All models invalid after scaling mask — skipping
jades_101062 SKIP: no finite model flux in 'jwst.nircam.F090W'
jades_101062 All models invalid after scaling mask — skipping
👍 Object 4/4 ————— 100% 0:00:00 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.
————— Global analysis —————
[INFO] Estimating the physical properties.
[INFO] Computing the best fit spectra.
👍 Object 4/4 ————— 100% 0:00:14 0:00:00 10.0/s
[INFO] Done.
[INFO] Saving the mock analysis results.
[INFO] Run completed! 👍
[INFO] End: 2026-04-01/12:31:54
[INFO] Total duration: 0:23:56
(cigale_spec) [doc_cigale2s]\$ pcigale-plots sed
👍 Object 4/4 ————— 100% 0:00:01 0:00:00 3.7/s
[INFO] Done.
(cigale_spec) [doc_cigale2s]\$ pcigale-plots pdf
🟡 PDF 8/20 ————— 40% 0:00:01 0:00:01
20.0/s[WARNING] Missing stat FITS for jades_100431 stellar.metallicity_log: no match for
out/jades_100431[_s]_stat_stellar.metallicity_log.fits (and could not build from out/pdfcounts)
[WARNING] Missing stat FITS for jades_1003 stellar.metallicity_log: no match for
out/jades_1003[_s]_stat_stellar.metallicity_log.fits (and could not build from out/pdfcounts)
[WARNING] Invalid PDF normalization in jades_100431_stat_sfh.age_main.fits for jades_100431 sfh.age_main
🟡 PDF 10/20 ————— 50% 0:00:01 0:00:05
2.5/s[WARNING] Invalid PDF normalization in jades_1003_stat_sfh.age_main.fits for jades_1003 sfh.age_main
[WARNING] Could not read PDF from jades_100431_stat_nebular.zgas_log.fits for jades_100431 nebular.zgas_log:
All-NaN slice encountered
[WARNING] Could not read PDF from jades_1003_stat_nebular.zgas_log.fits for jades_1003 nebular.zgas_log: All-
NaN slice encountered

PDF 14/20 ————— 70% 0:00:03 0:00:02

4.4/s[WARNING] Missing stat FITS for jades_10000865 stellar.metallicity_log: no match for out/jades_10000865[_s]_stat_stellar.metallicity_log.fits (and could not build from out/pdfcounts)

PDF 14/20 ————— 70% 0:00:03 0:00:02

4.4/s[WARNING] Invalid PDF normalization in jades_10000865_stat_sfh.age_main.fits for jades_10000865 sfh.age_main

PDF 15/20 ————— 75% 0:00:03 0:00:02

2.8/s[WARNING] Could not read PDF from jades_10000865_stat_nebular.zgas_log.fits for jades_10000865 nebular.zgas_log: All-NaN slice encountered

PDF 17/20 ————— 85% 0:00:04 0:00:01

3.2/s[WARNING] Missing stat FITS for jades_101062 stellar.metallicity_log: no match for out/jades_101062[_s]_stat_stellar.metallicity_log.fits (and could not build from out/pdfcounts)

[WARNING] Invalid PDF normalization in jades_101062_stat_sfh.age_main.fits for jades_101062 sfh.age_main

PDF 20/20 ————— 100% 0:00:05 0:00:00 2.5/s

[WARNING] Could not read PDF from jades_101062_stat_nebular.zgas_log.fits for jades_101062 nebular.zgas_log: All-NaN slice encountered

[INFO] Done.

[\(cigale_spec\) \[doc_cigale2s\]\\$ pcigale-plots corner](#)

Object 4/4 ————— 100% 0:00:11 0:00:00 5.0/s

[INFO] Done.

[\(cigale_spec\) \[doc_cigale2s\]\\$](#)

=====
=====
===== fitting SUBARU PFS spectra =====
=====

[\(cigale_spec\) \[Here\]\\$ pcigale genconf](#)

```
Code Investigating GALaxy Emission
Boquien et al. (2019) & Burgarella et al. (2025) (https://cigale.lam.fr)
CIGALE version: cigale_spec 2023.0.dev0 — Python version: 3.11.5 — Platform: linux-x86_64
```

**** Information: There are 3 objects to analyze ****
There are no good pseudo-filters, create them with: pcigale-filters spec (mode)

[\(cigale_spec\) \[Here\]\\$ pcigale-filters spec bin10_pfs subaru_pfs_bin10_disp.fits](#)

Median grid step: 0.800 nm
Min/Max grid step: 0.800 / 0.800 nm
Approx R at 0.5um from median step: 625.0
Importing the spectral resolution for mode 'bin10_pfs'
Number of pseudo-filters: 688
Wavelength range: 430.360 – 979.960 nm

[pcigale-filters list | grep -E "bin10_pfs_Band_|Pivot" to print information on the pseudo-filters](#)

[\(cigale_spec\) \[Here\]\\$ pcigale genconf](#)

```
Code Investigating GALaxy Emission
Boquien et al. (2019) & Burgarella et al. (2025) (https://cigale.lam.fr)
CIGALE version: cigale_spec 2023.0.dev0 — Python version: 3.11.5 — Platform: linux-x86_64
```

**** Information: There are 3 objects to analyze ****


```

bin10_pfs_Band_498 (1) — bin10_pfs_Band_499 (1) — bin10_pfs_Band_500 (1) — bin10_pfs_Band_501 (1) — bin10_pfs_Band_502 (1) — bin10_pfs_Band_503 (1) —
bin10_pfs_Band_504 (1) — bin10_pfs_Band_505 (1) — bin10_pfs_Band_506 (1) — bin10_pfs_Band_507 (1) — bin10_pfs_Band_508 (1) — bin10_pfs_Band_509 (1) —
bin10_pfs_Band_510 (1) — bin10_pfs_Band_511 (1) — bin10_pfs_Band_512 (1) — bin10_pfs_Band_513 (1) — bin10_pfs_Band_514 (1) — bin10_pfs_Band_515 (1) —
bin10_pfs_Band_516 (1) — bin10_pfs_Band_517 (1) — bin10_pfs_Band_518 (1) — bin10_pfs_Band_519 (1) — bin10_pfs_Band_520 (1) — bin10_pfs_Band_521 (1) —
bin10_pfs_Band_522 (1) — bin10_pfs_Band_523 (1) — bin10_pfs_Band_524 (1) — bin10_pfs_Band_525 (1) — bin10_pfs_Band_526 (1) — bin10_pfs_Band_527 (1) —
bin10_pfs_Band_528 (1) — bin10_pfs_Band_529 (1) — bin10_pfs_Band_530 (1) — bin10_pfs_Band_531 (1) — bin10_pfs_Band_532 (1) — bin10_pfs_Band_533 (1) —
bin10_pfs_Band_534 (1) — bin10_pfs_Band_535 (1) — bin10_pfs_Band_536 (1) — bin10_pfs_Band_537 (1) — bin10_pfs_Band_538 (1) — bin10_pfs_Band_539 (1) —
bin10_pfs_Band_540 (1) — bin10_pfs_Band_541 (1) — bin10_pfs_Band_542 (1) — bin10_pfs_Band_543 (1) — bin10_pfs_Band_544 (1) — bin10_pfs_Band_545 (1) —
bin10_pfs_Band_546 (1) — bin10_pfs_Band_547 (1) — bin10_pfs_Band_548 (1) — bin10_pfs_Band_549 (1) — bin10_pfs_Band_550 (1) — bin10_pfs_Band_551 (1) —
bin10_pfs_Band_552 (1) — bin10_pfs_Band_553 (1) — bin10_pfs_Band_554 (1) — bin10_pfs_Band_555 (1) — bin10_pfs_Band_556 (1) — bin10_pfs_Band_557 (1) —
bin10_pfs_Band_558 (1) — bin10_pfs_Band_559 (1) — bin10_pfs_Band_560 (1) — bin10_pfs_Band_561 (1) — bin10_pfs_Band_562 (1) — bin10_pfs_Band_563 (1) —
bin10_pfs_Band_564 (1) — bin10_pfs_Band_565 (1) — bin10_pfs_Band_566 (1) — bin10_pfs_Band_567 (1) — bin10_pfs_Band_568 (1) — bin10_pfs_Band_569 (1) —
bin10_pfs_Band_570 (1) — bin10_pfs_Band_571 (1) — bin10_pfs_Band_572 (1) — bin10_pfs_Band_573 (1) — bin10_pfs_Band_574 (1) — bin10_pfs_Band_575 (1) —
bin10_pfs_Band_576 (1) — bin10_pfs_Band_577 (1) — bin10_pfs_Band_578 (1) — bin10_pfs_Band_579 (1) — bin10_pfs_Band_580 (1) — bin10_pfs_Band_581 (1) —
bin10_pfs_Band_582 (1) — bin10_pfs_Band_583 (1) — bin10_pfs_Band_584 (1) — bin10_pfs_Band_585 (1) — bin10_pfs_Band_586 (1) — bin10_pfs_Band_587 (1) —
bin10_pfs_Band_588 (1) — bin10_pfs_Band_589 (1) — bin10_pfs_Band_590 (1) — bin10_pfs_Band_591 (1) — bin10_pfs_Band_592 (1) — bin10_pfs_Band_593 (1) —
bin10_pfs_Band_594 (1) — bin10_pfs_Band_595 (1) — bin10_pfs_Band_596 (1) — bin10_pfs_Band_597 (1) — bin10_pfs_Band_598 (1) — bin10_pfs_Band_599 (1) —
bin10_pfs_Band_600 (1) — bin10_pfs_Band_601 (1) — bin10_pfs_Band_602 (1) — bin10_pfs_Band_603 (1) — bin10_pfs_Band_604 (1) — bin10_pfs_Band_605 (1) —
bin10_pfs_Band_606 (1) — bin10_pfs_Band_607 (1) — bin10_pfs_Band_608 (1) — bin10_pfs_Band_609 (1) — bin10_pfs_Band_610 (1) — bin10_pfs_Band_611 (1) —
bin10_pfs_Band_612 (1) — bin10_pfs_Band_613 (1) — bin10_pfs_Band_614 (1) — bin10_pfs_Band_615 (1) — bin10_pfs_Band_616 (1) — bin10_pfs_Band_617 (1) —
bin10_pfs_Band_618 (1) — bin10_pfs_Band_619 (1) — bin10_pfs_Band_620 (1) — bin10_pfs_Band_621 (1) — bin10_pfs_Band_622 (1) — bin10_pfs_Band_623 (1) —
bin10_pfs_Band_624 (1) — bin10_pfs_Band_625 (1) — bin10_pfs_Band_626 (1) — bin10_pfs_Band_627 (1) — bin10_pfs_Band_628 (1) — bin10_pfs_Band_629 (1) —
bin10_pfs_Band_630 (1) — bin10_pfs_Band_631 (1) — bin10_pfs_Band_632 (1) — bin10_pfs_Band_633 (1) — bin10_pfs_Band_634 (1) — bin10_pfs_Band_635 (1) —
bin10_pfs_Band_636 (1) — bin10_pfs_Band_637 (1) — bin10_pfs_Band_638 (1) — bin10_pfs_Band_639 (1) — bin10_pfs_Band_640 (1) — bin10_pfs_Band_641 (1) —
bin10_pfs_Band_642 (1) — bin10_pfs_Band_643 (1) — bin10_pfs_Band_644 (1) — bin10_pfs_Band_645 (1) — bin10_pfs_Band_646 (1) — bin10_pfs_Band_647 (1) —
bin10_pfs_Band_648 (1) — bin10_pfs_Band_649 (1) — bin10_pfs_Band_650 (1) — bin10_pfs_Band_651 (1) — bin10_pfs_Band_652 (1) — bin10_pfs_Band_653 (1) —
bin10_pfs_Band_654 (1) — bin10_pfs_Band_655 (1) — bin10_pfs_Band_656 (1) — bin10_pfs_Band_657 (1) — bin10_pfs_Band_658 (1) — bin10_pfs_Band_659 (1) —
bin10_pfs_Band_660 (1) — bin10_pfs_Band_661 (1) — bin10_pfs_Band_662 (1) — bin10_pfs_Band_663 (1) — bin10_pfs_Band_664 (1) — bin10_pfs_Band_665 (1) —
bin10_pfs_Band_666 (1) — bin10_pfs_Band_667 (1) — bin10_pfs_Band_668 (1) — bin10_pfs_Band_669 (1) — bin10_pfs_Band_670 (1) — bin10_pfs_Band_671 (1) —
bin10_pfs_Band_672 (1) — bin10_pfs_Band_673 (1) — bin10_pfs_Band_674 (1) — bin10_pfs_Band_675 (1) — bin10_pfs_Band_676 (1) — bin10_pfs_Band_677 (1) —
bin10_pfs_Band_678 (1) — bin10_pfs_Band_679 (1) — bin10_pfs_Band_680 (1) — bin10_pfs_Band_681 (1) — bin10_pfs_Band_682 (1) — bin10_pfs_Band_683 (1) —
bin10_pfs_Band_684 (1) — bin10_pfs_Band_685 (1) — bin10_pfs_Band_686 (1) — bin10_pfs_Band_687 (1)

```

Spectroscopy | True

Properties fitted | None

Number of models | 1

Cores used | 8/8

Analysis module | pdf_analysis

SED modules

```

SFH          | sfhdelayed
SSP          | bc03
nebular      | nebular
dust attenuation | dustatt_modified_starburst
dust emission  | None. Options are: casey2012, dale2014, dl2007, dl2014, mbb, schreiber2016, themis.

AGN          | None. Options are: fritz2006, skirtor2016.
X-ray        | None. Options are: xray.
radio        | None. Options are: radio.
restframe_parameters | None. Options are: restframe_parameters, restframe_parameters_1wave,
restframe_parameters_3bands, restframe_parameters_wEW. |
redshifting  | redshifting

```

[\(cigale_spec\) \[Here\]\\$ pcigale check](#)

Code Investigating GALaxy Emission
 Boquien et al. (2019) & Burgarella et al. (2025) (<https://cigale.lam.fr>)
 CIGALE version: cigale_spec 2023.0.dev0 — Python version: 3.11.5 — Platform: linux-x86_64

General information


```

bin10_pfs_Band_594 (1) — bin10_pfs_Band_595 (1) — bin10_pfs_Band_596 (1) — bin10_pfs_Band_597 (1) — bin10_pfs_Band_598 (1) — bin10_pfs_Band_599 (1) —
bin10_pfs_Band_600 (1) — bin10_pfs_Band_601 (1) — bin10_pfs_Band_602 (1) — bin10_pfs_Band_603 (1) — bin10_pfs_Band_604 (1) — bin10_pfs_Band_605 (1) —
bin10_pfs_Band_606 (1) — bin10_pfs_Band_607 (1) — bin10_pfs_Band_608 (1) — bin10_pfs_Band_609 (1) — bin10_pfs_Band_610 (1) — bin10_pfs_Band_611 (1) —
bin10_pfs_Band_612 (1) — bin10_pfs_Band_613 (1) — bin10_pfs_Band_614 (1) — bin10_pfs_Band_615 (1) — bin10_pfs_Band_616 (1) — bin10_pfs_Band_617 (1) —
bin10_pfs_Band_618 (1) — bin10_pfs_Band_619 (1) — bin10_pfs_Band_620 (1) — bin10_pfs_Band_621 (1) — bin10_pfs_Band_622 (1) — bin10_pfs_Band_623 (1) —
bin10_pfs_Band_624 (1) — bin10_pfs_Band_625 (1) — bin10_pfs_Band_626 (1) — bin10_pfs_Band_627 (1) — bin10_pfs_Band_628 (1) — bin10_pfs_Band_629 (1) —
bin10_pfs_Band_630 (1) — bin10_pfs_Band_631 (1) — bin10_pfs_Band_632 (1) — bin10_pfs_Band_633 (1) — bin10_pfs_Band_634 (1) — bin10_pfs_Band_635 (1) —
bin10_pfs_Band_636 (1) — bin10_pfs_Band_637 (1) — bin10_pfs_Band_638 (1) — bin10_pfs_Band_639 (1) — bin10_pfs_Band_640 (1) — bin10_pfs_Band_641 (1) —
bin10_pfs_Band_642 (1) — bin10_pfs_Band_643 (1) — bin10_pfs_Band_644 (1) — bin10_pfs_Band_645 (1) — bin10_pfs_Band_646 (1) — bin10_pfs_Band_647 (1) —
bin10_pfs_Band_648 (1) — bin10_pfs_Band_649 (1) — bin10_pfs_Band_650 (1) — bin10_pfs_Band_651 (1) — bin10_pfs_Band_652 (1) — bin10_pfs_Band_653 (1) —
bin10_pfs_Band_654 (1) — bin10_pfs_Band_655 (1) — bin10_pfs_Band_656 (1) — bin10_pfs_Band_657 (1) — bin10_pfs_Band_658 (1) — bin10_pfs_Band_659 (1) —
bin10_pfs_Band_660 (1) — bin10_pfs_Band_661 (1) — bin10_pfs_Band_662 (1) — bin10_pfs_Band_663 (1) — bin10_pfs_Band_664 (1) — bin10_pfs_Band_665 (1) —
bin10_pfs_Band_666 (1) — bin10_pfs_Band_667 (1) — bin10_pfs_Band_668 (1) — bin10_pfs_Band_669 (1) — bin10_pfs_Band_670 (1) — bin10_pfs_Band_671 (1) —
bin10_pfs_Band_672 (1) — bin10_pfs_Band_673 (1) — bin10_pfs_Band_674 (1) — bin10_pfs_Band_675 (1) — bin10_pfs_Band_676 (1) — bin10_pfs_Band_677 (1) —
bin10_pfs_Band_678 (1) — bin10_pfs_Band_679 (1) — bin10_pfs_Band_680 (1) — bin10_pfs_Band_681 (1) — bin10_pfs_Band_682 (1) — bin10_pfs_Band_683 (1) —
bin10_pfs_Band_684 (1) — bin10_pfs_Band_685 (1) — bin10_pfs_Band_686 (1) — bin10_pfs_Band_687 (1)

```

```

Spectroscopy | True
Properties fitted | None
Number of models | 5904 (1968 per redshift)
Cores used | 8/8
Analysis module | pdf_analysis

```

SED modules

```

SFH | sfhdelayed
SSP | bc03
nebular | nebular
dust attenuation | dustatt_modified_starburst
dust emission | None. Options are: casey2012, dale2014, dl2007, dl2014, mbb, schreiber2016, themis.

AGN | None. Options are: fritz2006, skirtor2016.
X-ray | None. Options are: xray.
radio | None. Options are: radio.
restframe_parameters | None. Options are: restframe_parameters, restframe_parameters_1wave,
restframe_parameters_3bands, restframe_parameters_wEW. | redshifting | redshifting

```

***** IMPORTANT ***** after '*pcigale genconf*', the spectrum is added to the input file, here *pfs_cigale2s.fits*. However, because very often the number of resolution elements in the spectrum is too large for a fits file, a new *pfs_cigale2s.dat* is created. You need to replace *pfs_cigale2s.fits* by *pfs_cigale2s.dat* in *pcigale.ini*, as shown below.

(cigale_spec) [Here]\$ pcigale run

```

Code Investigating GALaxy Emission
Boquien et al. (2019) & Burgarella et al. (2025) (https://cigale.lam.fr)
CIGALE version: cigale_spec 2023.0.dev0 — Python version: 3.11.5 — Platform: linux-x86_64

```

General information

```

Data file | pfs_cigale2s.dat
Parameters file | None
Number of objects | 3
Redshift | 0.16 to 0.42
Bands fitted | jwst (14) — bin10_pfs_Band_000 (1) — bin10_pfs_Band_001 (1) — bin10_pfs_Band_002 (1) — bin10_pfs_Band_003 (1) — bin10_pfs_Band_004 (1) — bin10_pfs_Band_005 (1) —
bin10_pfs_Band_006 (1) — bin10_pfs_Band_007 (1) — bin10_pfs_Band_008 (1) — bin10_pfs_Band_009 (1) — bin10_pfs_Band_010 (1) — bin10_pfs_Band_011 (1) —
bin10_pfs_Band_012 (1) — bin10_pfs_Band_013 (1) — bin10_pfs_Band_014 (1) — bin10_pfs_Band_015 (1) — bin10_pfs_Band_016 (1) — bin10_pfs_Band_017 (1) —
bin10_pfs_Band_018 (1) — bin10_pfs_Band_019 (1) — bin10_pfs_Band_020 (1) — bin10_pfs_Band_021 (1) — bin10_pfs_Band_022 (1) — bin10_pfs_Band_023 (1) —
bin10_pfs_Band_024 (1) — bin10_pfs_Band_025 (1) — bin10_pfs_Band_026 (1) — bin10_pfs_Band_027 (1) — bin10_pfs_Band_028 (1) — bin10_pfs_Band_029 (1) —

```



```

| bin10_pfs_Band_684 (1) — bin10_pfs_Band_685 (1) — bin10_pfs_Band_686 (1) — bin10_pfs_Band_687 (1)
| Spectroscopy | True
| Properties fitted | None
| Number of models | 5904 (1968 per redshift)
| Cores used | 8/8
| Analysis module | pdf_analysis

```

SED modules

```

| SFH | sfhdelayed
| SSP | bc03
| nebular | nebular
| dust attenuation | dustatt_modified_starburst
| dust emission | None. Options are: casey2012, dale2014, dl2007, dl2014, mbb, schreiber2016, themis.

| AGN | None. Options are: fritz2006, skirtor2016.
| X-ray | None. Options are: xray.
| radio | None. Options are: radio.
| restframe_parameters | None. Options are: restframe_parameters, restframe_parameters_1wave,
restframe_parameters_3bands, restframe_parameters_wEW. |
| redshifting | redshifting

```

[INFO] Start: 2026-04-01/15:29:54

[INFO] Initialising the analysis module.

[WARNING] norm in the input file but not to be taken into account in the fits.

[WARNING] ['bin10_pfs_Band_625', 'bin10_pfs_Band_626', 'bin10_pfs_Band_627', 'bin10_pfs_Band_628', 'bin10_pfs_Band_629', 'bin10_pfs_Band_630', 'bin10_pfs_Band_631', 'bin10_pfs_Band_632', 'bin10_pfs_Band_633', 'bin10_pfs_Band_634', 'bin10_pfs_Band_635', 'bin10_pfs_Band_636', 'bin10_pfs_Band_637', 'bin10_pfs_Band_638', 'bin10_pfs_Band_639', 'bin10_pfs_Band_640', 'bin10_pfs_Band_641', 'bin10_pfs_Band_642', 'bin10_pfs_Band_643', 'bin10_pfs_Band_644', 'bin10_pfs_Band_645', 'bin10_pfs_Band_646', 'bin10_pfs_Band_647', 'bin10_pfs_Band_648', 'bin10_pfs_Band_649', 'bin10_pfs_Band_650', 'bin10_pfs_Band_651', 'bin10_pfs_Band_652', 'bin10_pfs_Band_653', 'bin10_pfs_Band_654', 'bin10_pfs_Band_655', 'bin10_pfs_Band_656', 'bin10_pfs_Band_657', 'bin10_pfs_Band_658', 'bin10_pfs_Band_659', 'bin10_pfs_Band_660', 'bin10_pfs_Band_661', 'bin10_pfs_Band_662', 'bin10_pfs_Band_663', 'bin10_pfs_Band_664', 'bin10_pfs_Band_665', 'bin10_pfs_Band_666', 'bin10_pfs_Band_667', 'bin10_pfs_Band_668', 'bin10_pfs_Band_669', 'bin10_pfs_Band_670', 'bin10_pfs_Band_671', 'bin10_pfs_Band_672', 'bin10_pfs_Band_673', 'bin10_pfs_Band_674', 'bin10_pfs_Band_675', 'bin10_pfs_Band_676', 'bin10_pfs_Band_677', 'bin10_pfs_Band_678', 'bin10_pfs_Band_679', 'bin10_pfs_Band_680', 'bin10_pfs_Band_681', 'bin10_pfs_Band_682', 'bin10_pfs_Band_683', 'bin10_pfs_Band_684', 'bin10_pfs_Band_685', 'bin10_pfs_Band_686', 'bin10_pfs_Band_687'] removed as no valid data was found.

[WARNING] ['bin10_pfs_Band_625', 'bin10_pfs_Band_626', 'bin10_pfs_Band_627', 'bin10_pfs_Band_628', 'bin10_pfs_Band_629', 'bin10_pfs_Band_630', 'bin10_pfs_Band_631', 'bin10_pfs_Band_632', 'bin10_pfs_Band_633', 'bin10_pfs_Band_634', 'bin10_pfs_Band_635', 'bin10_pfs_Band_636', 'bin10_pfs_Band_637', 'bin10_pfs_Band_638', 'bin10_pfs_Band_639', 'bin10_pfs_Band_640', 'bin10_pfs_Band_641', 'bin10_pfs_Band_642', 'bin10_pfs_Band_643', 'bin10_pfs_Band_644', 'bin10_pfs_Band_645', 'bin10_pfs_Band_646', 'bin10_pfs_Band_647', 'bin10_pfs_Band_648', 'bin10_pfs_Band_649', 'bin10_pfs_Band_650', 'bin10_pfs_Band_651', 'bin10_pfs_Band_652', 'bin10_pfs_Band_653', 'bin10_pfs_Band_654', 'bin10_pfs_Band_655', 'bin10_pfs_Band_656', 'bin10_pfs_Band_657', 'bin10_pfs_Band_658', 'bin10_pfs_Band_659', 'bin10_pfs_Band_660', 'bin10_pfs_Band_661', 'bin10_pfs_Band_662', 'bin10_pfs_Band_663', 'bin10_pfs_Band_664', 'bin10_pfs_Band_665', 'bin10_pfs_Band_666', 'bin10_pfs_Band_667', 'bin10_pfs_Band_668', 'bin10_pfs_Band_669', 'bin10_pfs_Band_670', 'bin10_pfs_Band_671', 'bin10_pfs_Band_672', 'bin10_pfs_Band_673', 'bin10_pfs_Band_674', 'bin10_pfs_Band_675', 'bin10_pfs_Band_676', 'bin10_pfs_Band_677', 'bin10_pfs_Band_678', 'bin10_pfs_Band_679', 'bin10_pfs_Band_680', 'bin10_pfs_Band_681', 'bin10_pfs_Band_682', 'bin10_pfs_Band_683', 'bin10_pfs_Band_684', 'bin10_pfs_Band_685', 'bin10_pfs_Band_686', 'bin10_pfs_Band_687'] removed as no valid data was found.

... MANY WARNINGS LIKE THE TWO ABOVE ...

Block 1/10

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:07 0:00:00 1074.9/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

Block 2/10

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:07 0:00:00 1634.4/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

Block 3/10

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:07 0:00:00 1614.9/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

Block 4/10

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:07 0:00:00 880.6/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

Block 5/10

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:07 0:00:00 1076.5/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

Block 6/10

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:10 0:00:00 1349.3/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

Block 7/10

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:08 0:00:00 1350.5/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

Block 8/10

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:07 0:00:00 980.5/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 19.7/s

[INFO] Done.

[INFO] Block processed.

Block 9/10

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:07 0:00:00 1100.5/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

Block 10/10

[INFO] Computing models.

👍 Model 585/585 ————— 100% 0:00:08 0:00:00 877.5/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

————— Global analysis —————

[INFO] Estimating the physical properties.

[INFO] Computing the best fit spectra.

👍 Object 3/3 ————— 100% 0:00:03 0:00:00 0.0/s

[INFO] Done.

[INFO] Sanity check of the analysis results.

[INFO] 0.0% of the objects have $\chi^2_{\text{red}} \sim 0$ and 100.0% $\chi^2_{\text{red}} < 0.5$.

[INFO] Saving the analysis results.

[INFO] Analysing the mock observations.

————— Block 1/10 —————

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:09 0:00:00 1225.8/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

————— Block 2/10 —————

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:08 0:00:00 1453.9/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

————— Block 3/10 —————

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:08 0:00:00 1340.5/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

————— Block 4/10 —————

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:07 0:00:00 1350.1/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

————— Block 5/10 —————

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:08 0:00:00 1337.3/s

[INFO] Done.

[INFO] Estimating the physical properties.

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

[INFO] Block processed.

————— Block 6/10 —————

[INFO] Computing models.

👍 Model 591/591 ————— 100% 0:00:08 0:00:00 1135.2/s

```
[INFO] Done.
[INFO] Estimating the physical properties.
👍 Object 3/3 _____ 100% 0:00:00 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.
_____ Block 7/10 _____
[INFO] Computing models.
👍 Model 591/591 _____ 100% 0:00:08 0:00:00 1701.7/s
[INFO] Done.
[INFO] Estimating the physical properties.
👍 Object 3/3 _____ 100% 0:00:00 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.
_____ Block 8/10 _____
[INFO] Computing models.
👍 Model 591/591 _____ 100% 0:00:07 0:00:00 1349.0/s
[INFO] Done.
[INFO] Estimating the physical properties.
👍 Object 3/3 _____ 100% 0:00:00 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.
_____ Block 9/10 _____
[INFO] Computing models.
👍 Model 591/591 _____ 100% 0:00:08 0:00:00 975.9/s
[INFO] Done.
[INFO] Estimating the physical properties.
👍 Object 3/3 _____ 100% 0:00:00 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.
_____ Block 10/10 _____
[INFO] Computing models.
👍 Model 585/585 _____ 100% 0:00:07 0:00:00 1921.8/s
[INFO] Done.
[INFO] Estimating the physical properties.
👍 Object 3/3 _____ 100% 0:00:00 0:00:00 0.0/s
[INFO] Done.
[INFO] Block processed.
_____ Global analysis _____
[INFO] Estimating the physical properties.
[INFO] Computing the best fit spectra.
👍 Object 3/3 _____ 100% 0:00:02 0:00:00 10.0/s
[INFO] Done.
[INFO] Saving the mock analysis results.
[INFO] Run completed! 👍
[INFO] End: 2026-04-01/15:32:59
[INFO] Total duration: 0:03:05
```

(cigale_spec) [Here]\$ pcigale-plots pdf --xlinear

usage: pcigale-plots [-h] [-c CONFIG_FILE] {pdf,sed,corner} ...

pcigale-plots: error: unrecognized arguments: --xlinear

(cigale_spec) [Here]\$ pcigale-plots sed --xlinear

```
👍 Object 3/3 _____ 100% 0:00:00 0:00:00 10.0/s
```

[INFO] Done.

(cigale_spec) [Here]\$ pcigale-plots sed --xlinear --xrange 0.35:0.95

```
👍 Object 3/3 _____ 100% 0:00:00 0:00:00 9.8/s
```

[INFO] Done.

(cigale_spec) [Here]\$ pcigale-plots sed --xlinear --xrange 0.35:0.95 --yrange 1e-3:1e-1

👍 Object 3/3 ————— 100% 0:00:00 0:00:00 10.0/s

[INFO] Done.

(cigale_spec) [Here]\$ pcigale-plots mock

👍 Parameter 5/5 ————— 100% 0:00:00 0:00:00 0.0/s

[INFO] Done.

(cigale_spec) [Here]\$ pcigale-plots corner

👍 Object 3/3 ————— 100% 0:00:02 0:00:00 20.0/s

[INFO] Done.