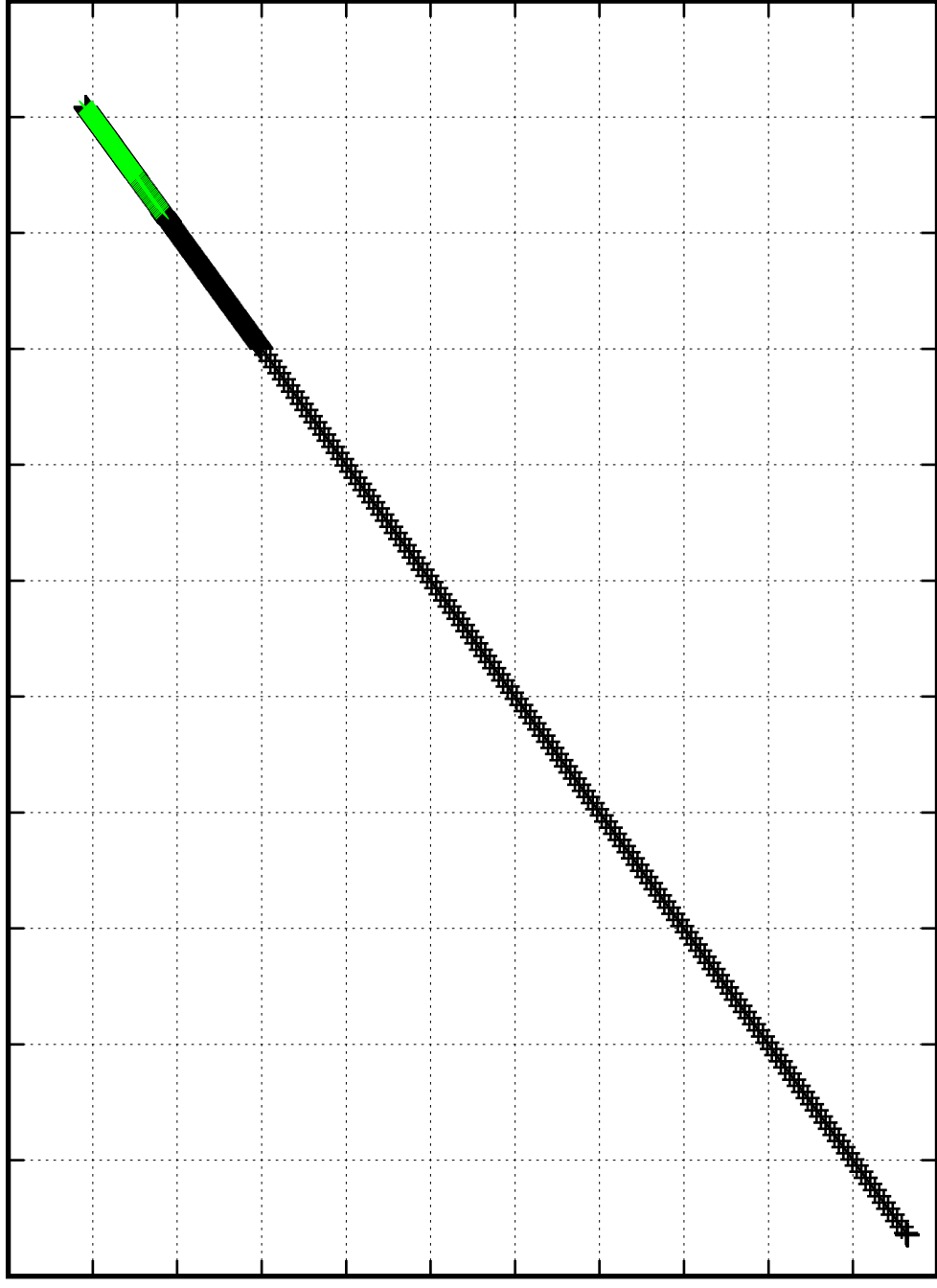


$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

t [yr]

5.5×10^6
 5×10^6
 4.5×10^6
 4×10^6
 3.5×10^6
 3×10^6
 2.5×10^6
 2×10^6
 1.5×10^6
 1×10^6
500000
0

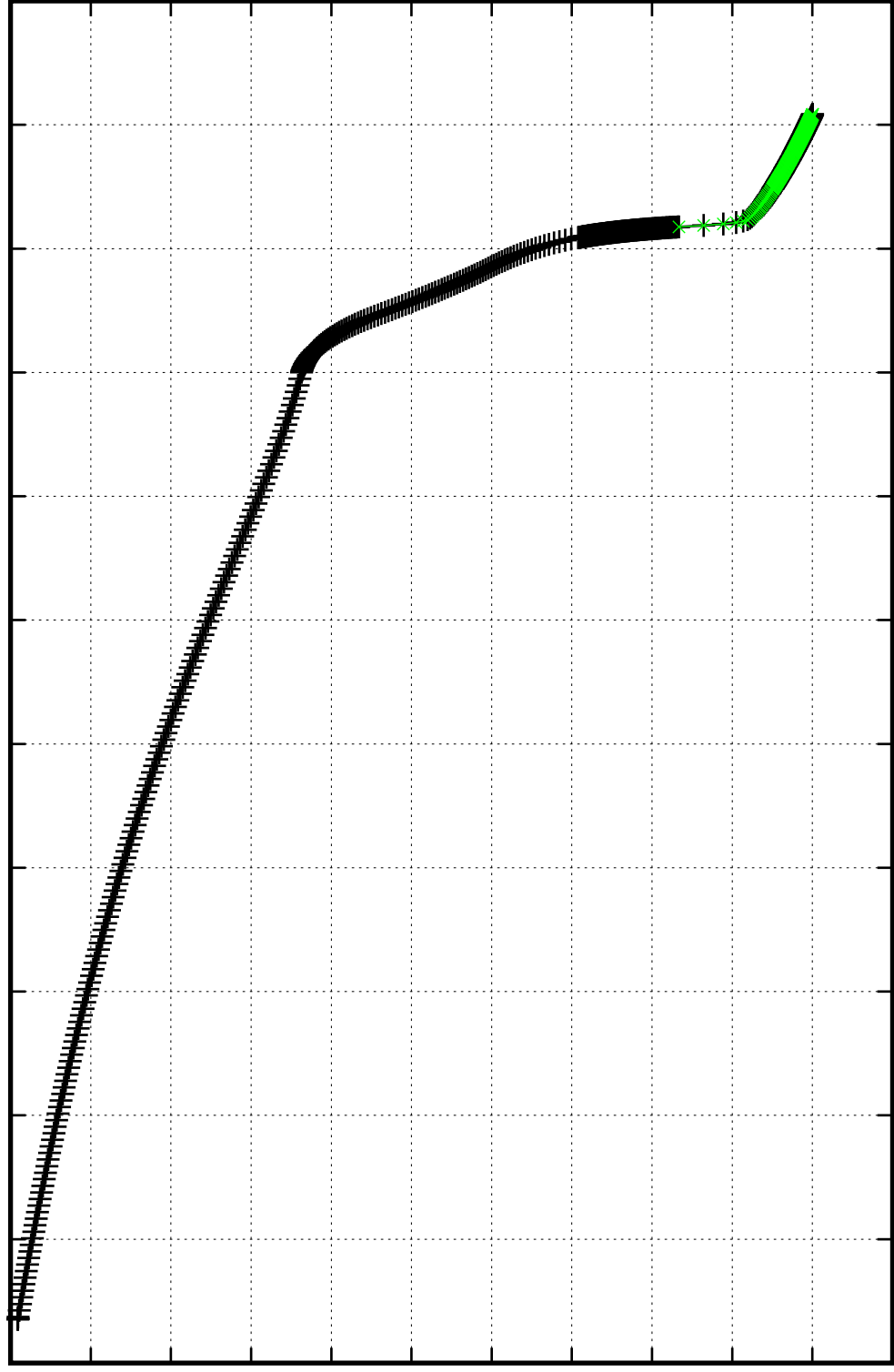


Time [Myr]

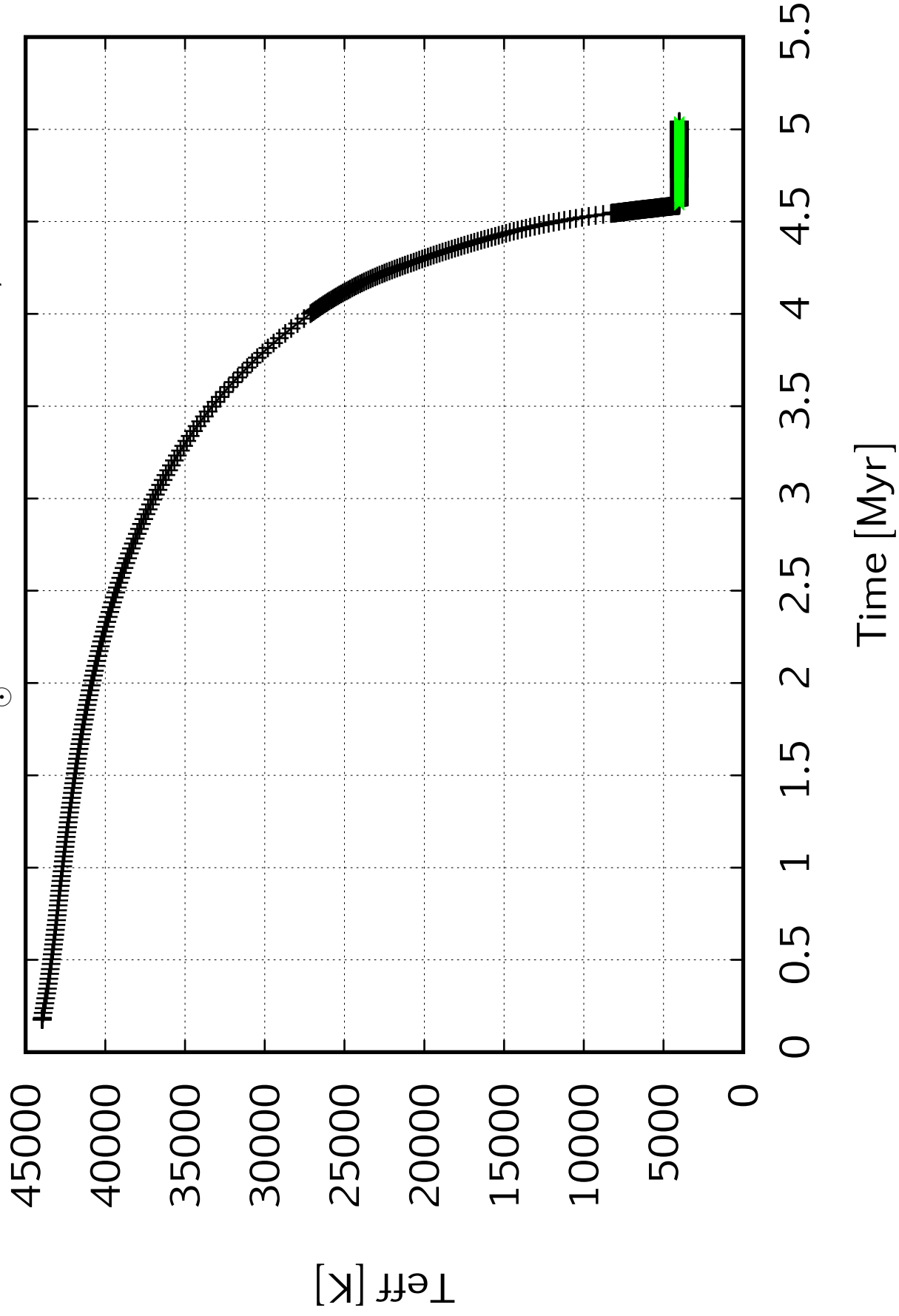
$M=40\text{ M}_{\odot}$ $Z=1.0\text{ mw}$ $v=100\text{ km/s}$

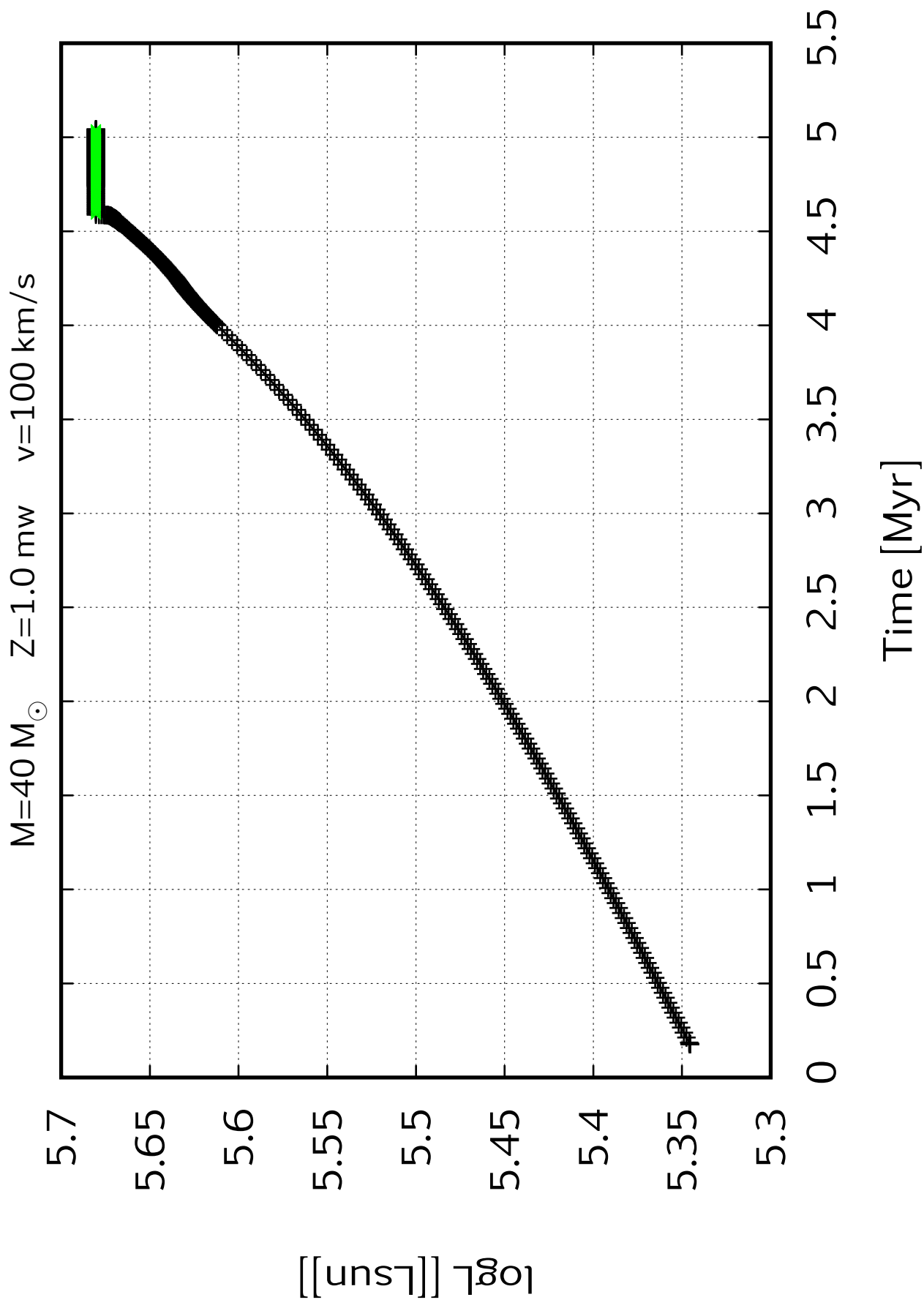
Mass [M_{sun}]

Time [Myr]

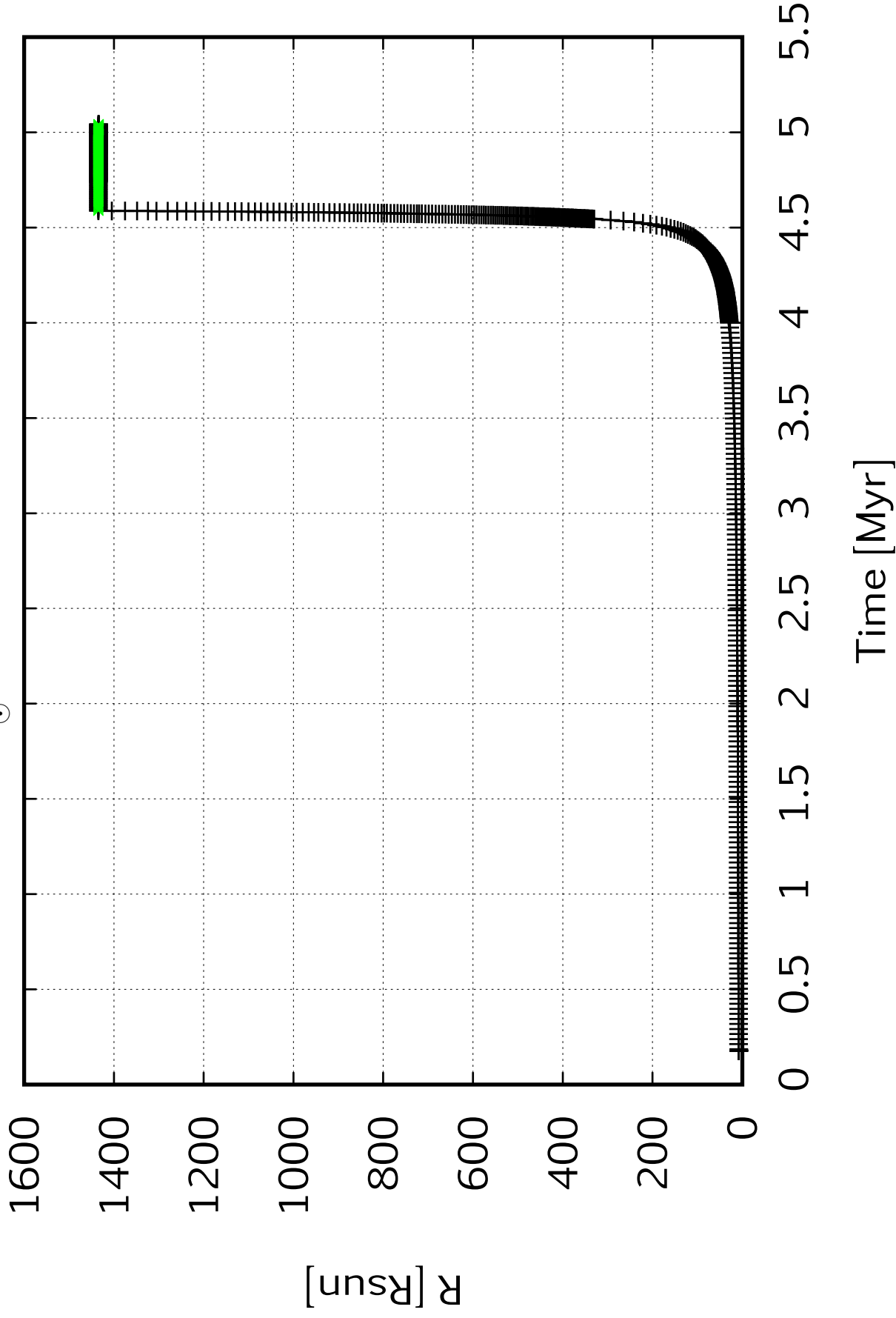


$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$

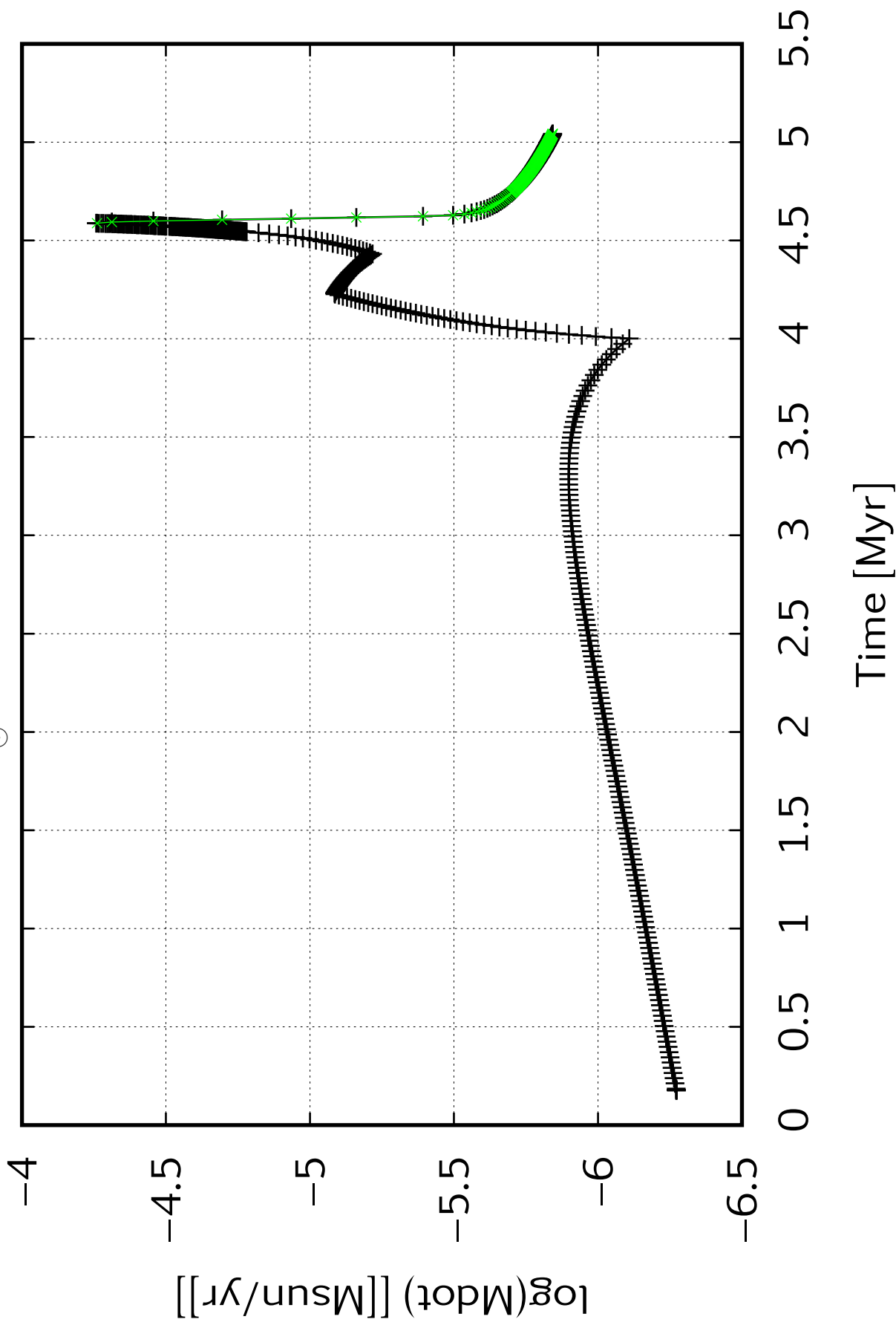




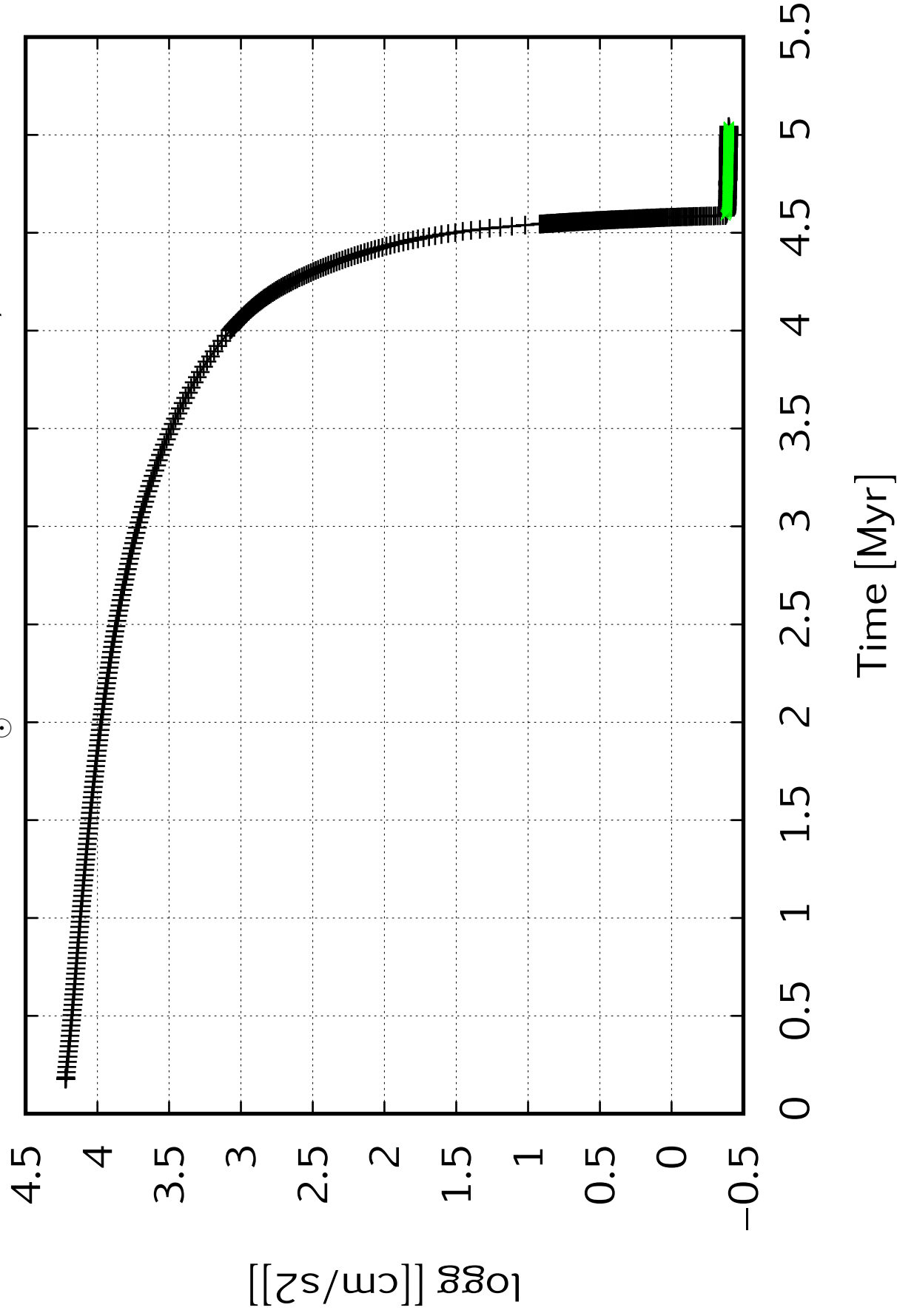
$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$



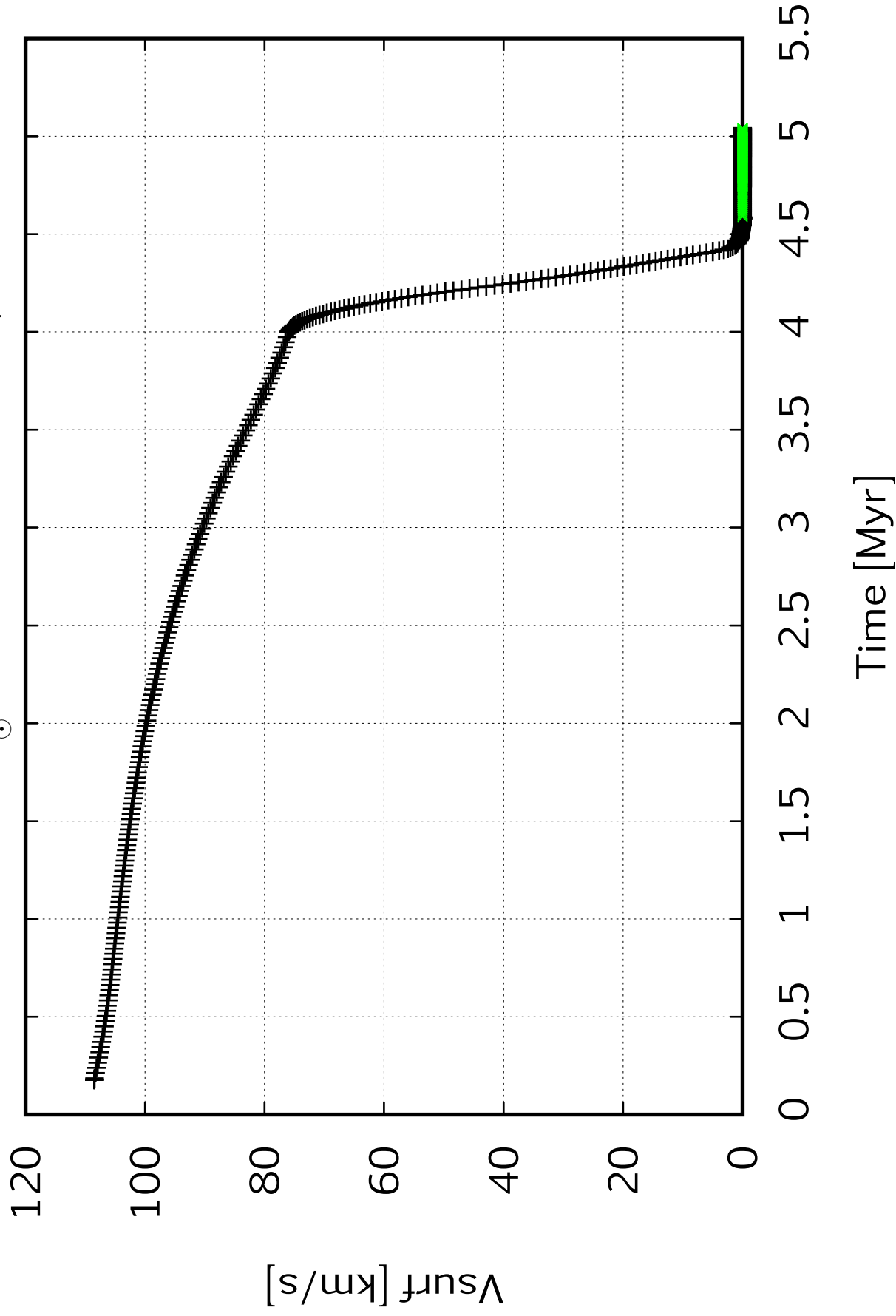
$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$



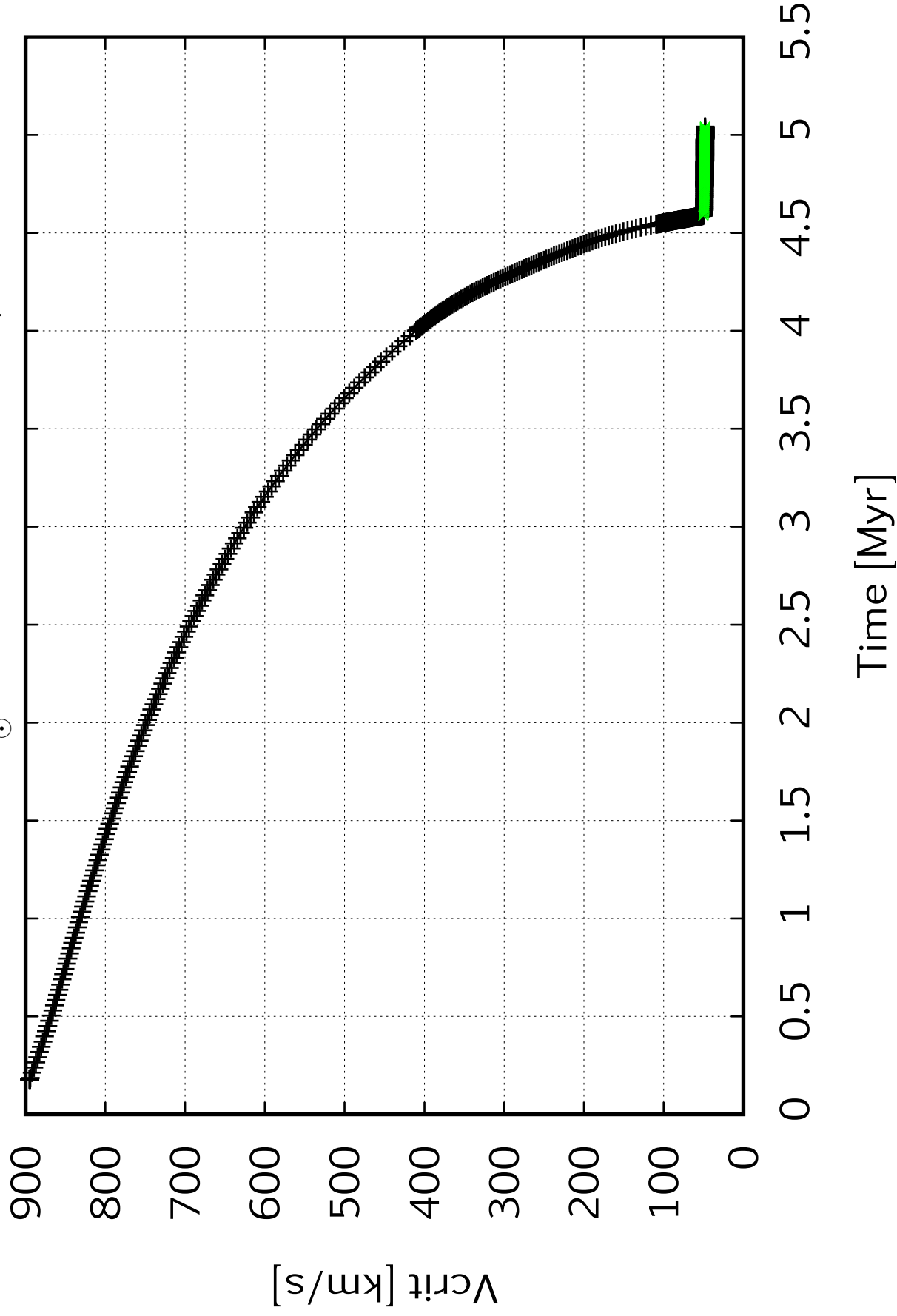
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\,\text{km/s}$



$M=40\text{ M}_{\odot}$ $Z=1.0\text{ mw}$ $v=100\text{ km/s}$



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

0.45

0.4

0.35

0.3

0.25

0.2

0.15

0.1

$\left[\frac{I}{I_{\odot}}\right]$

0

0.5

1

1.5

2

2.5

3

3.5

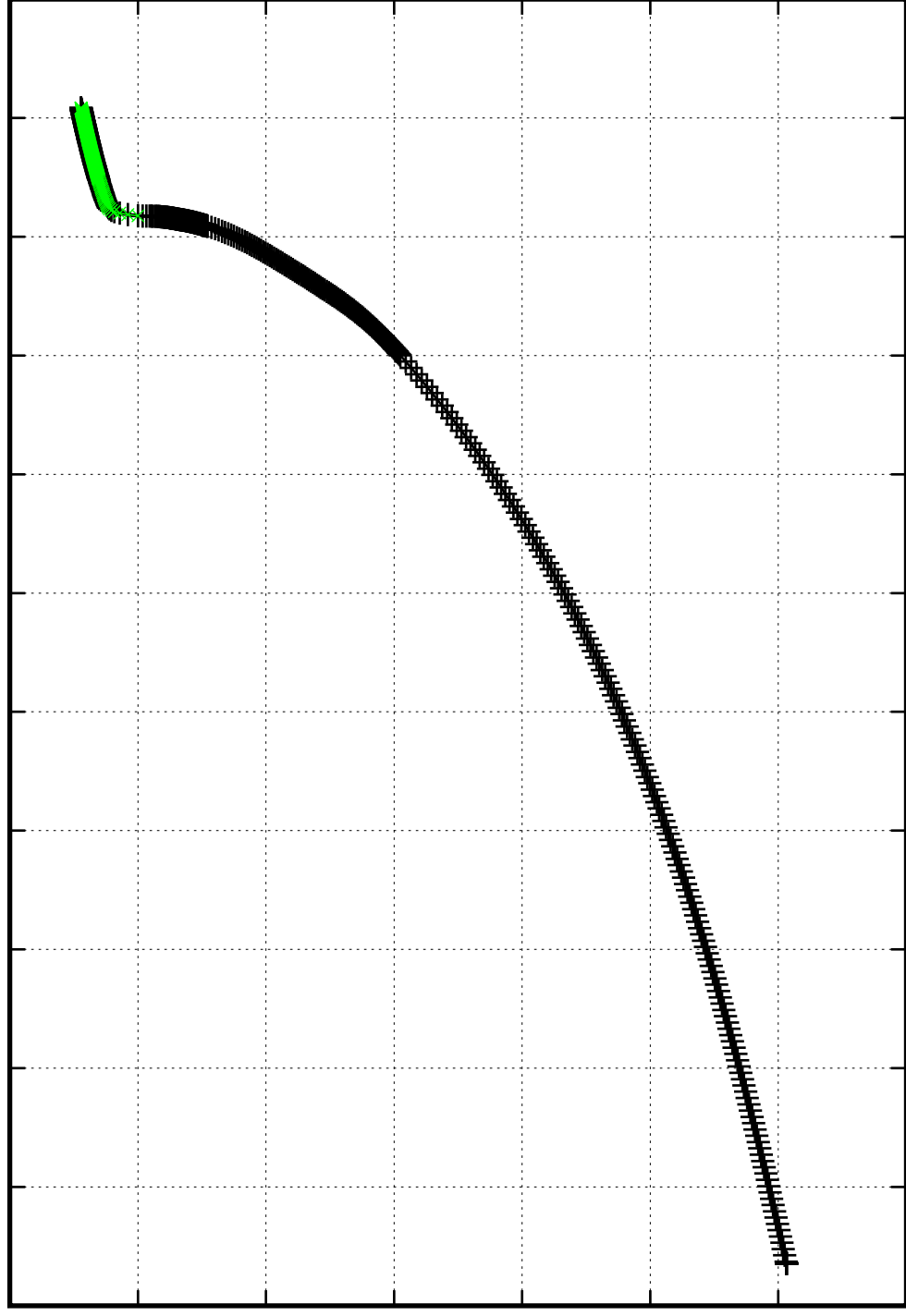
4

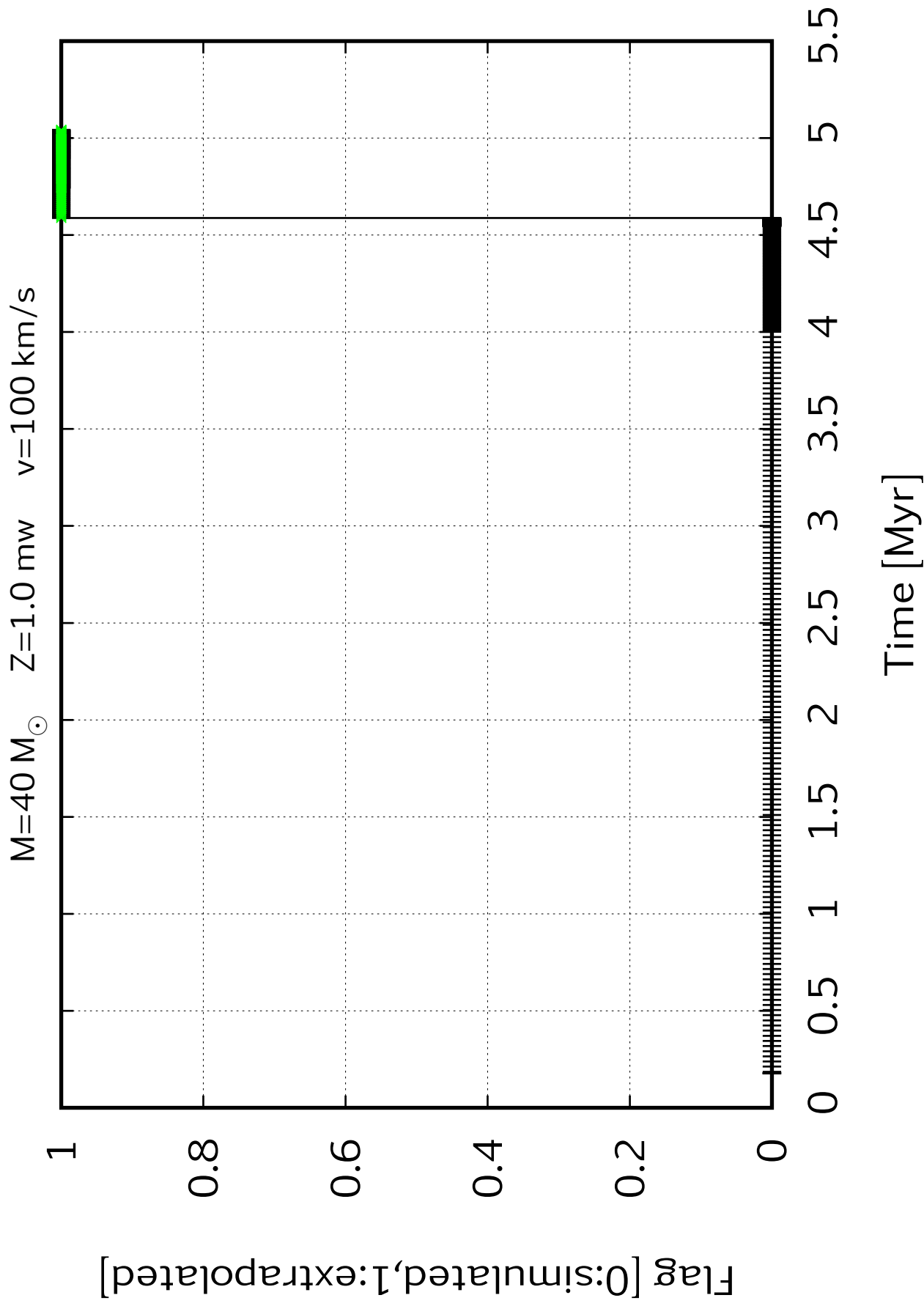
4.5

5

5.5

Time [Myr]





$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$

12.15

12.1

12.05

12

11.95

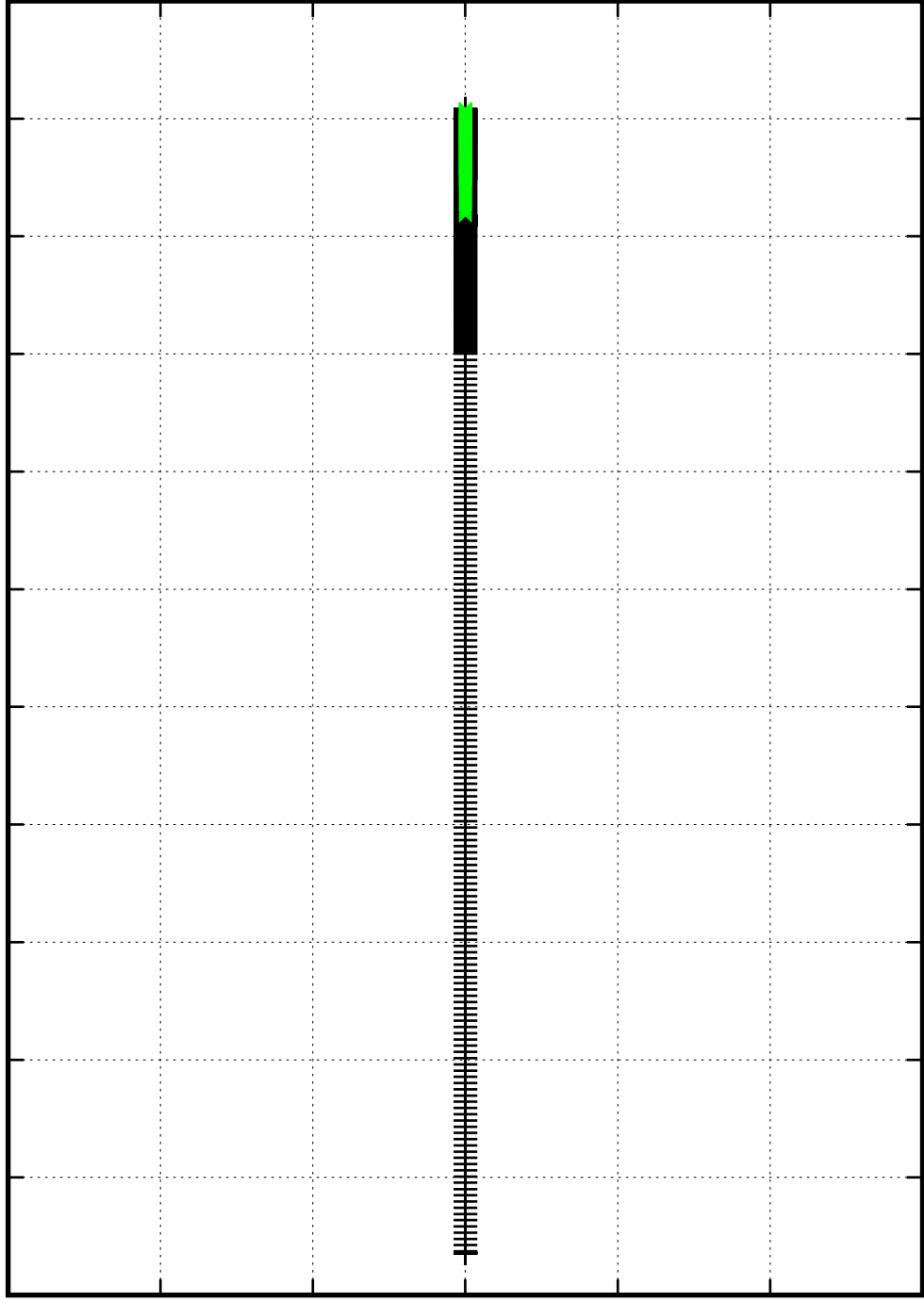
11.9

11.85

$[\text{---}] (\text{H}) \text{eps}$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

10.9583

10.9582

10.9581

10.958

10.9579

10.9578

10.9577

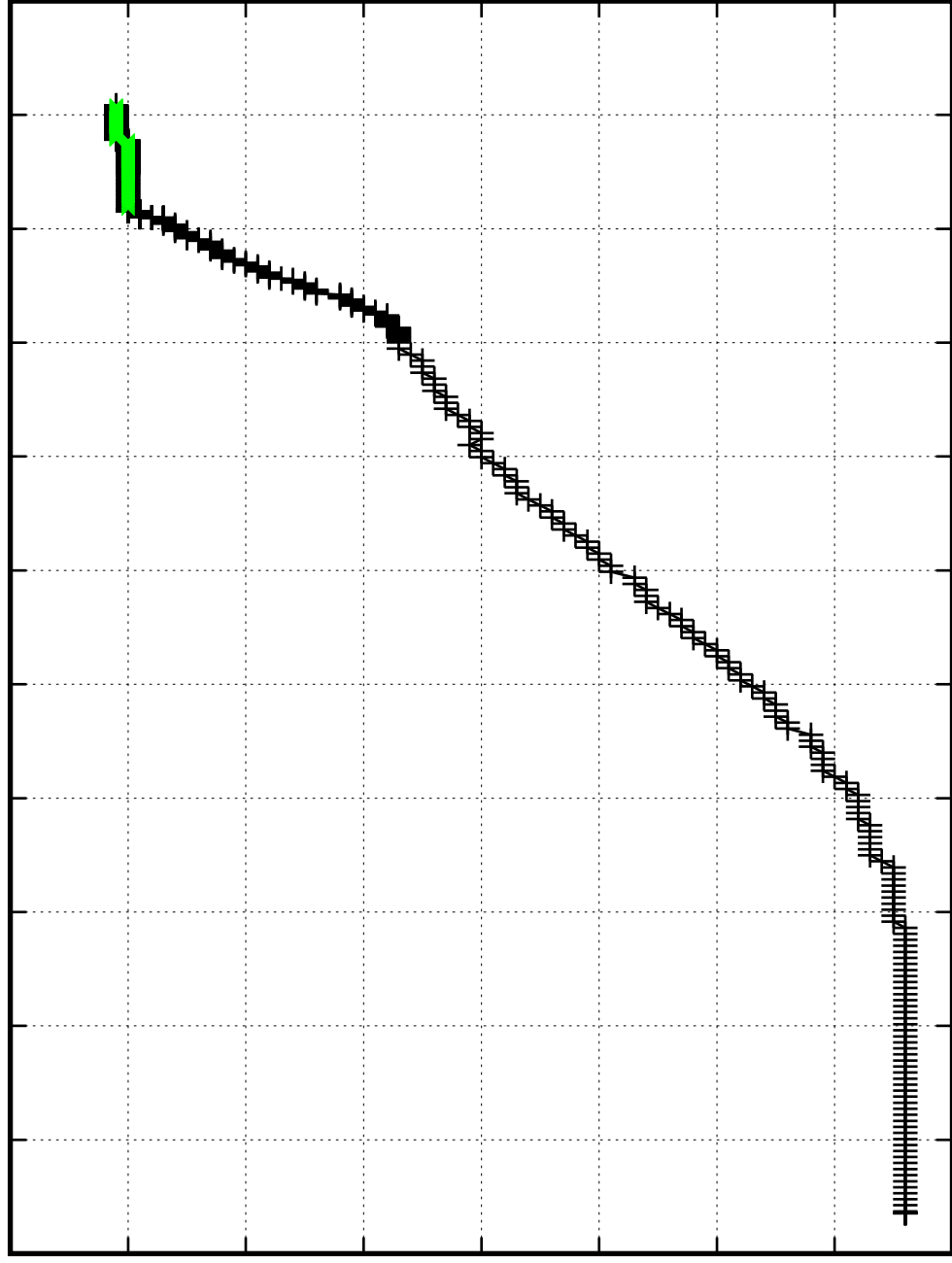
10.9576

10.9575

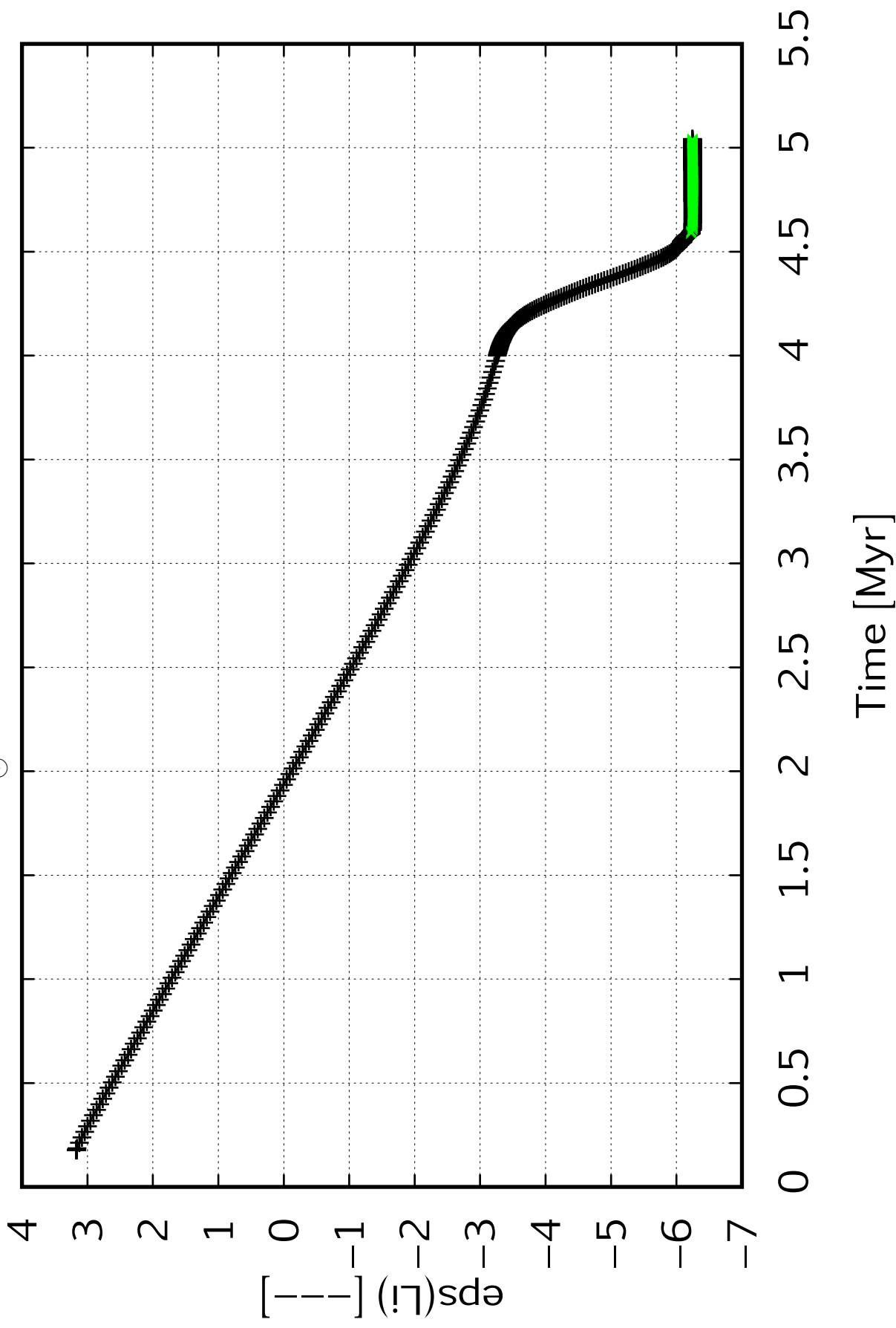
$[\text{---}] (\text{He})$ eps

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

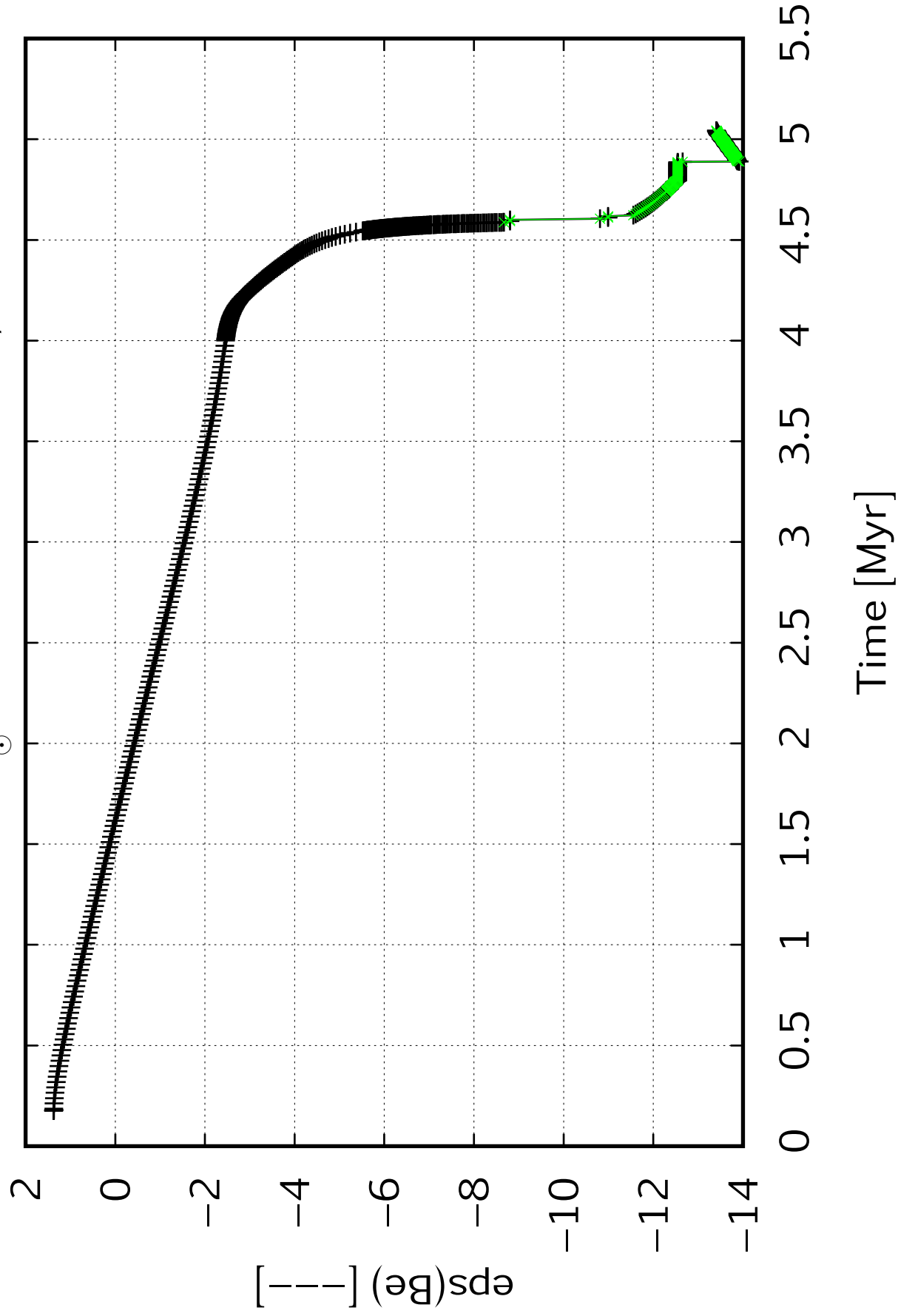
Time [Myr]



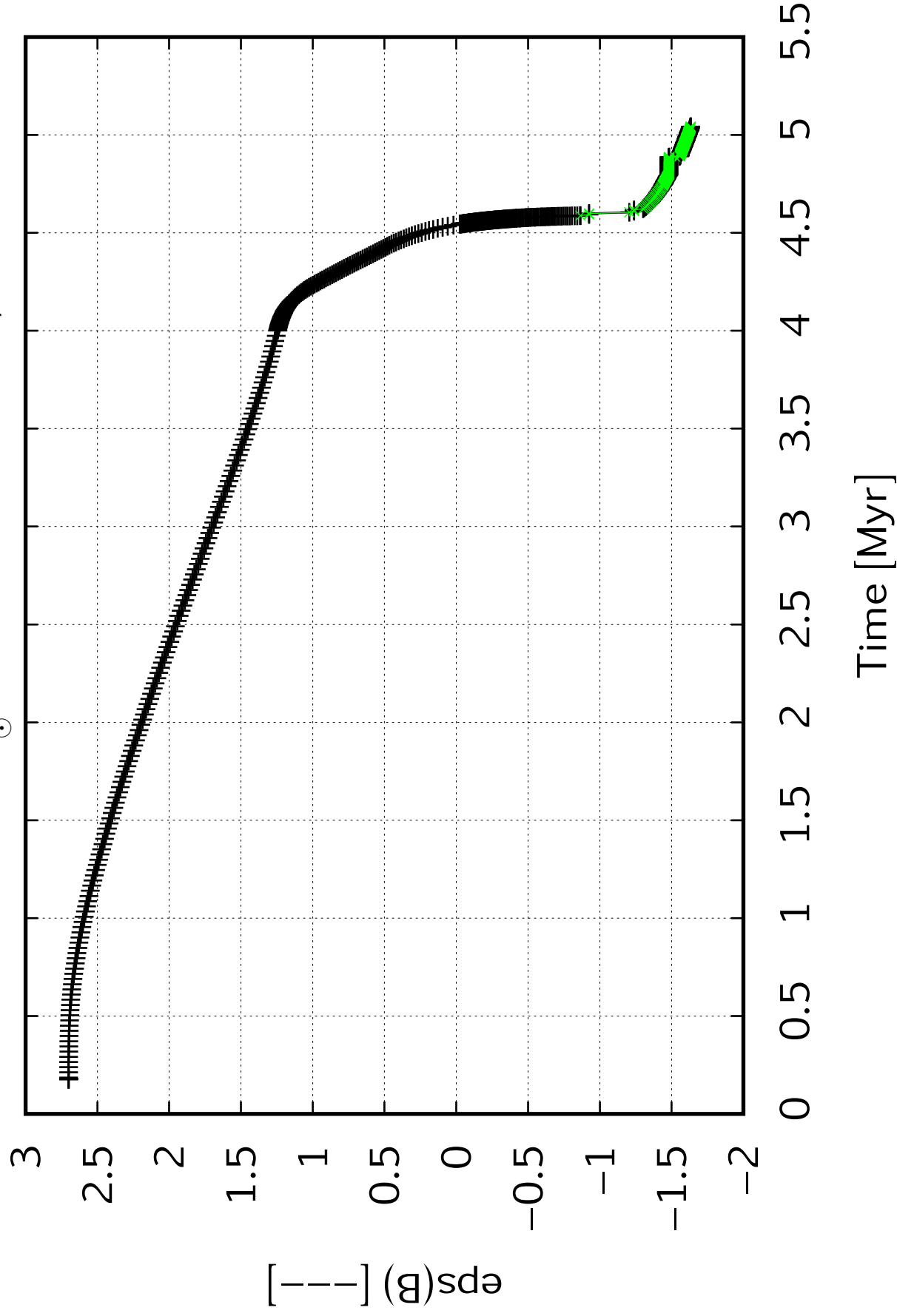
$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$



$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$



$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$



$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$

8.135

8.13

8.125

8.12

8.115

8.11

8.105

8.1

8.095

$[\text{---}] (\text{C})$
eps(C)

0

0.5

1

1.5

2

2.5

3

3.5

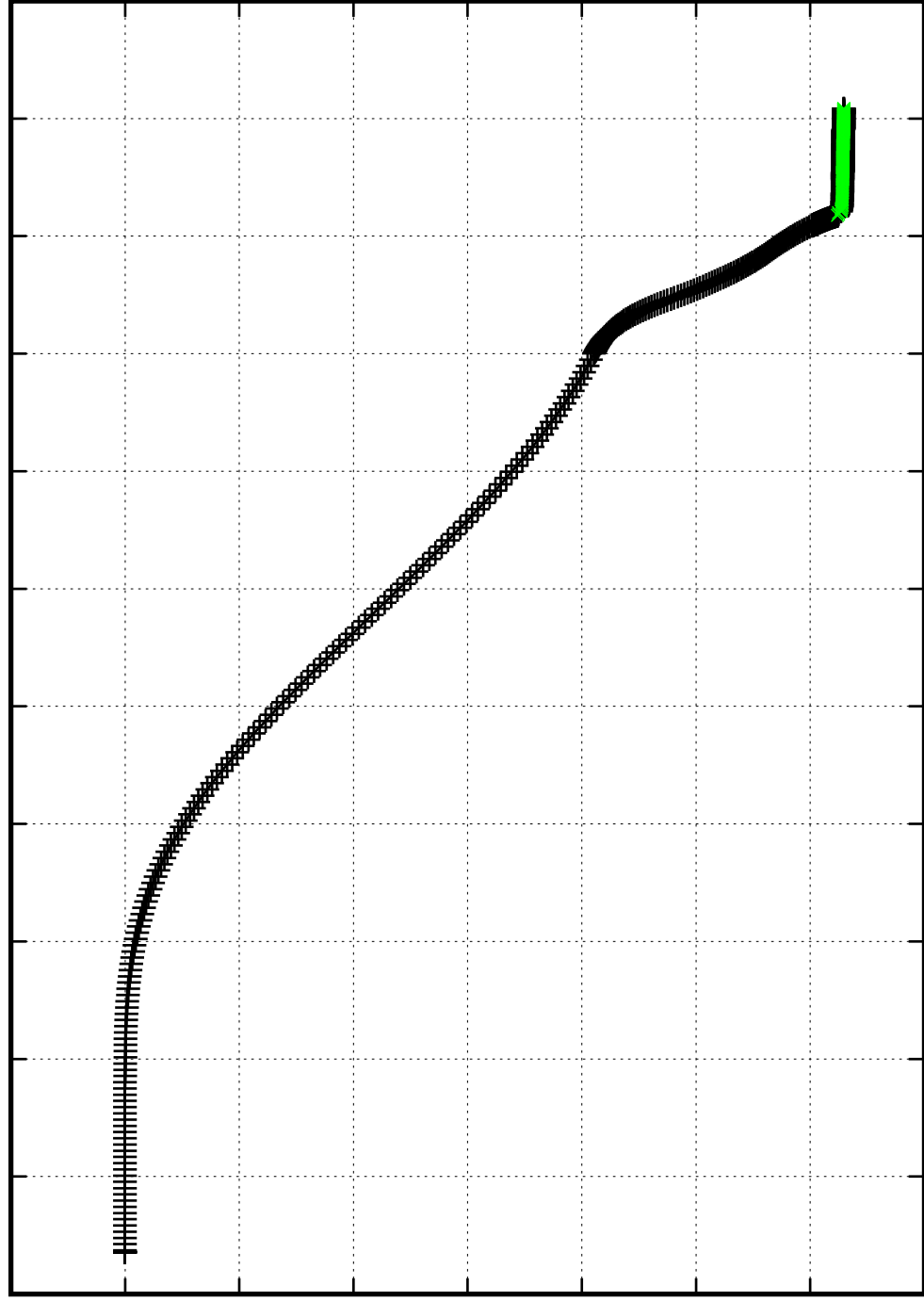
4

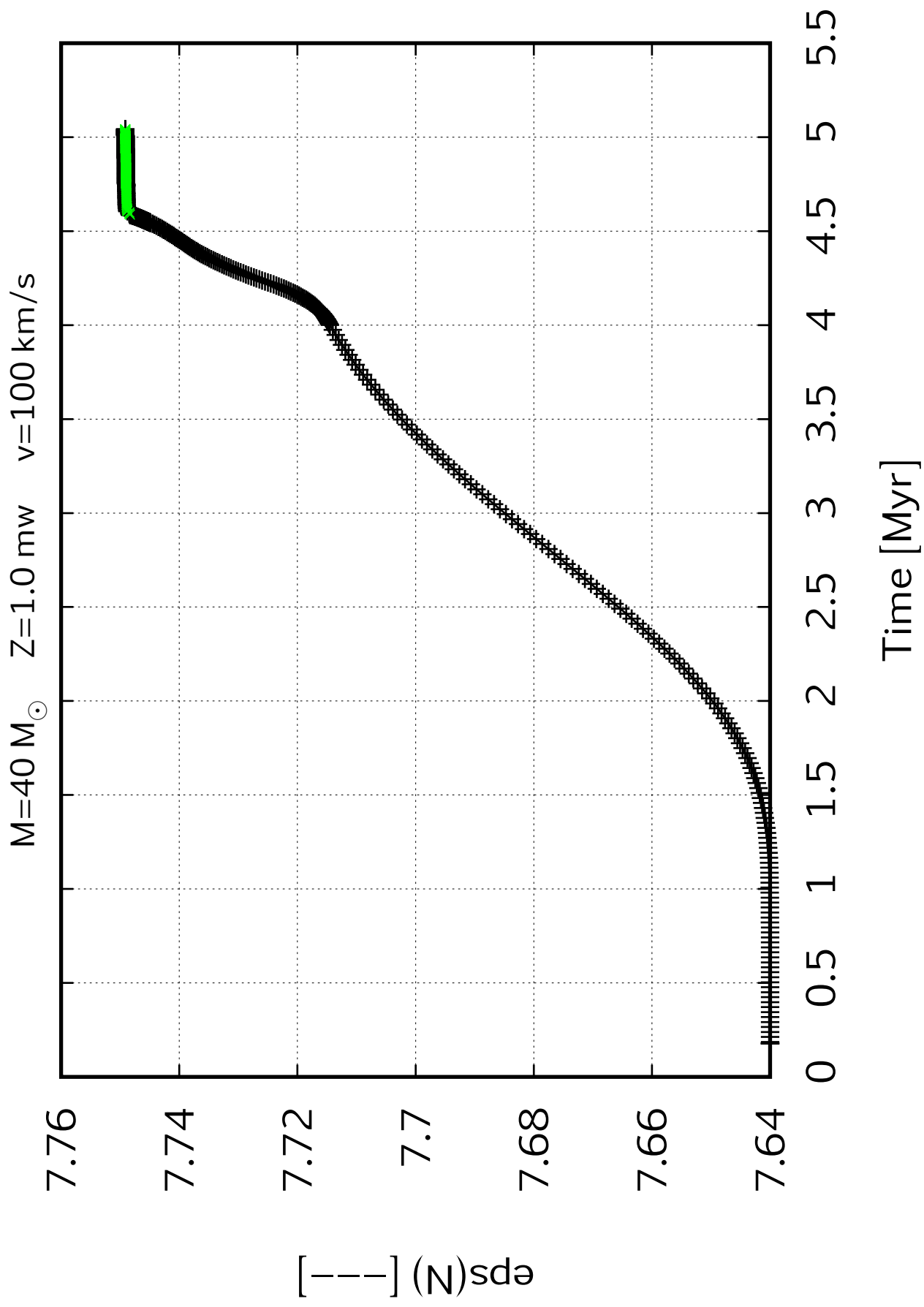
4.5

5

5.5

Time [Myr]





$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$

8.5505

8.55

8.5495

8.549

8.5485

8.548

8.5475

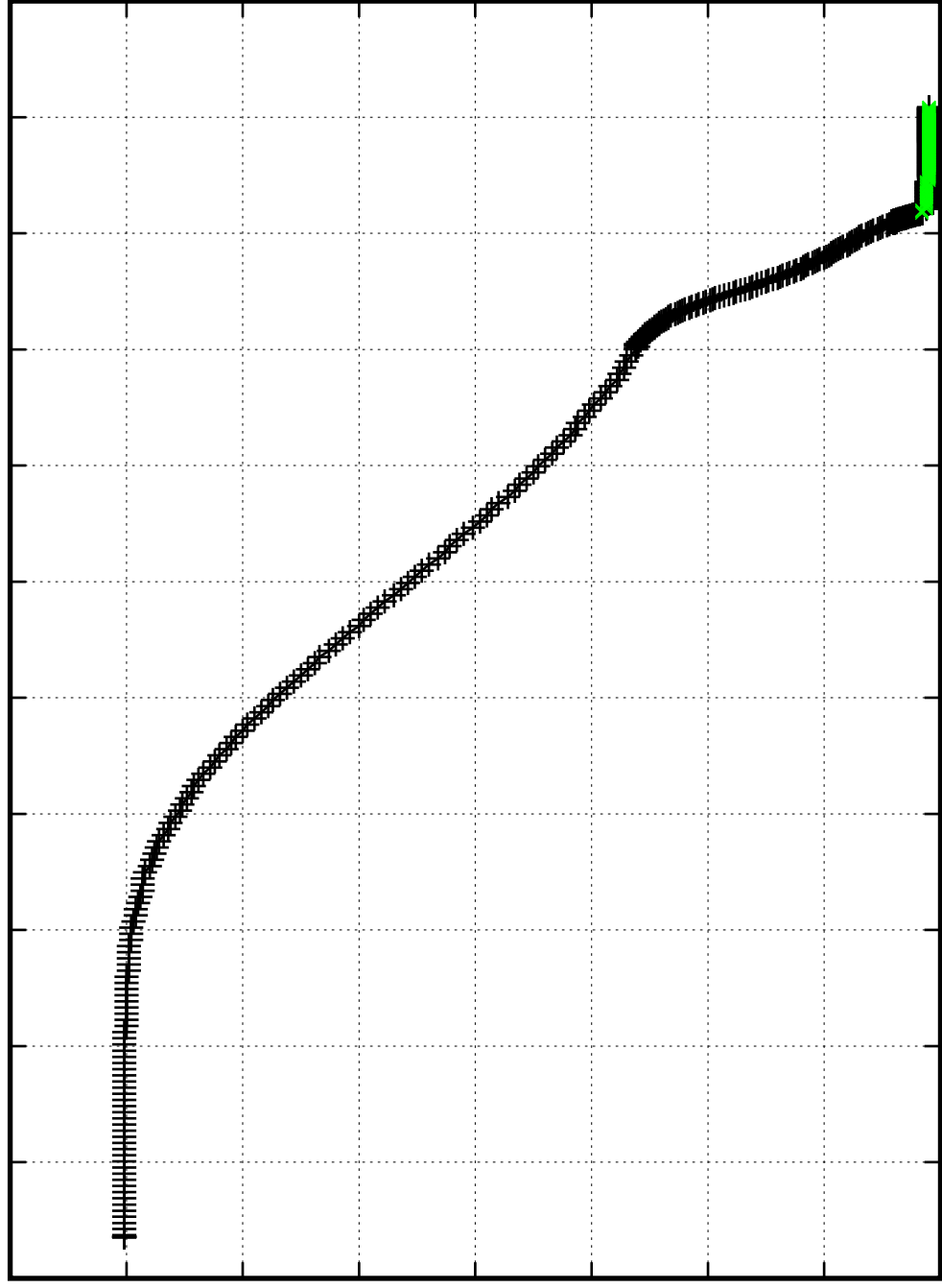
8.547

8.5465

$[\text{O}]/\text{ps}(\text{O})$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$

4.562

4.56

4.558

4.556

4.554

4.552

4.55

4.548

4.546

4.544

eps(F) [— — —]

0

0.5

1

1.5

2

2.5

3

3.5

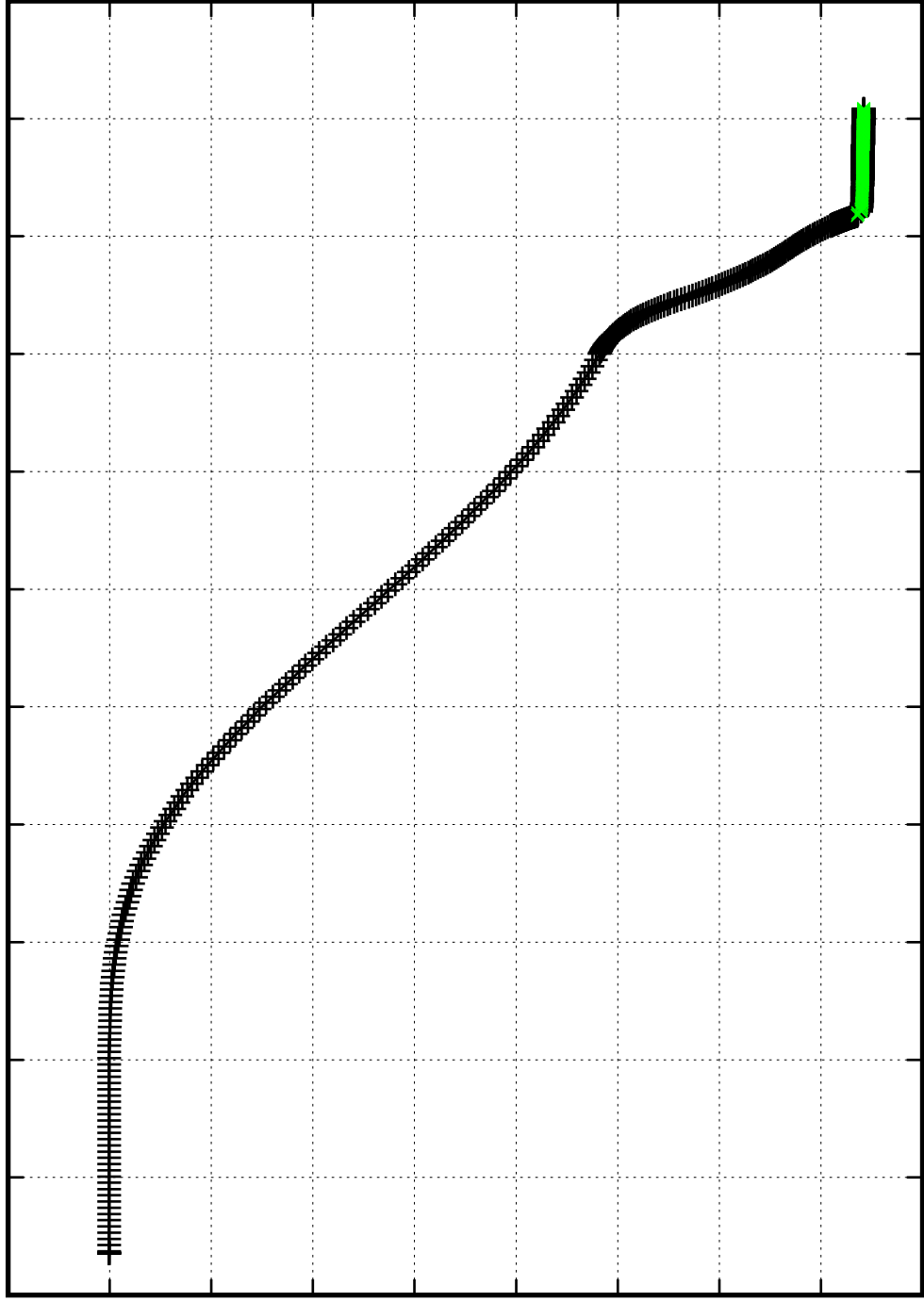
4

4.5

5

5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$

7.84003

7.84002

7.84002

7.84002

7.84001

7.84001

7.84000

7.84000

eps(Ne) [—]

0

0.5

1

1.5

2

2.5

3

3.5

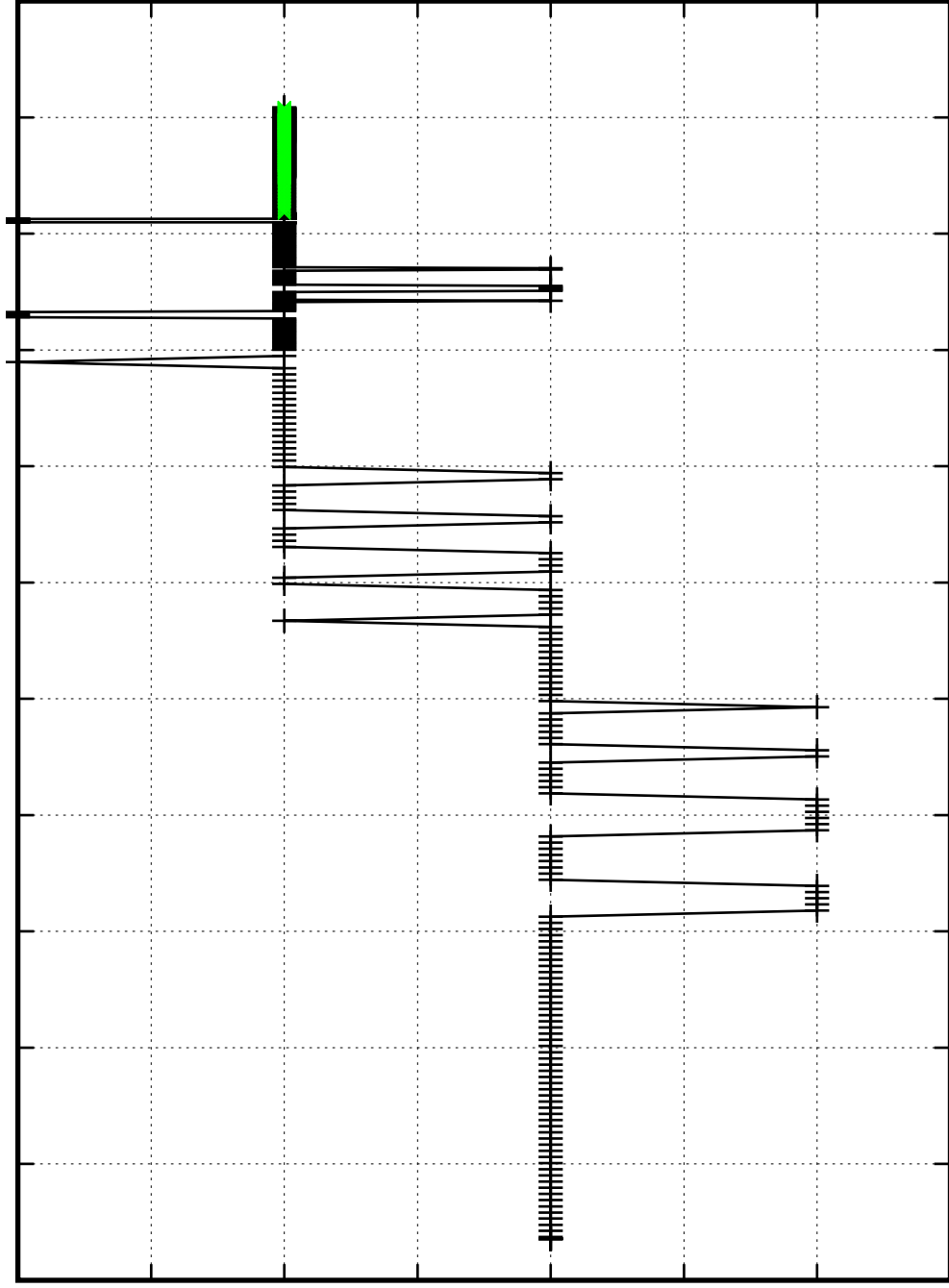
4

4.5

5

5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$

6.178

6.177

6.176

6.175

6.174

6.173

6.172

6.171

6.17

$\epsilon_{\text{ps}}(\text{Na})$ [—]

0

0.5

1

1.5

2

2.5

3

3.5

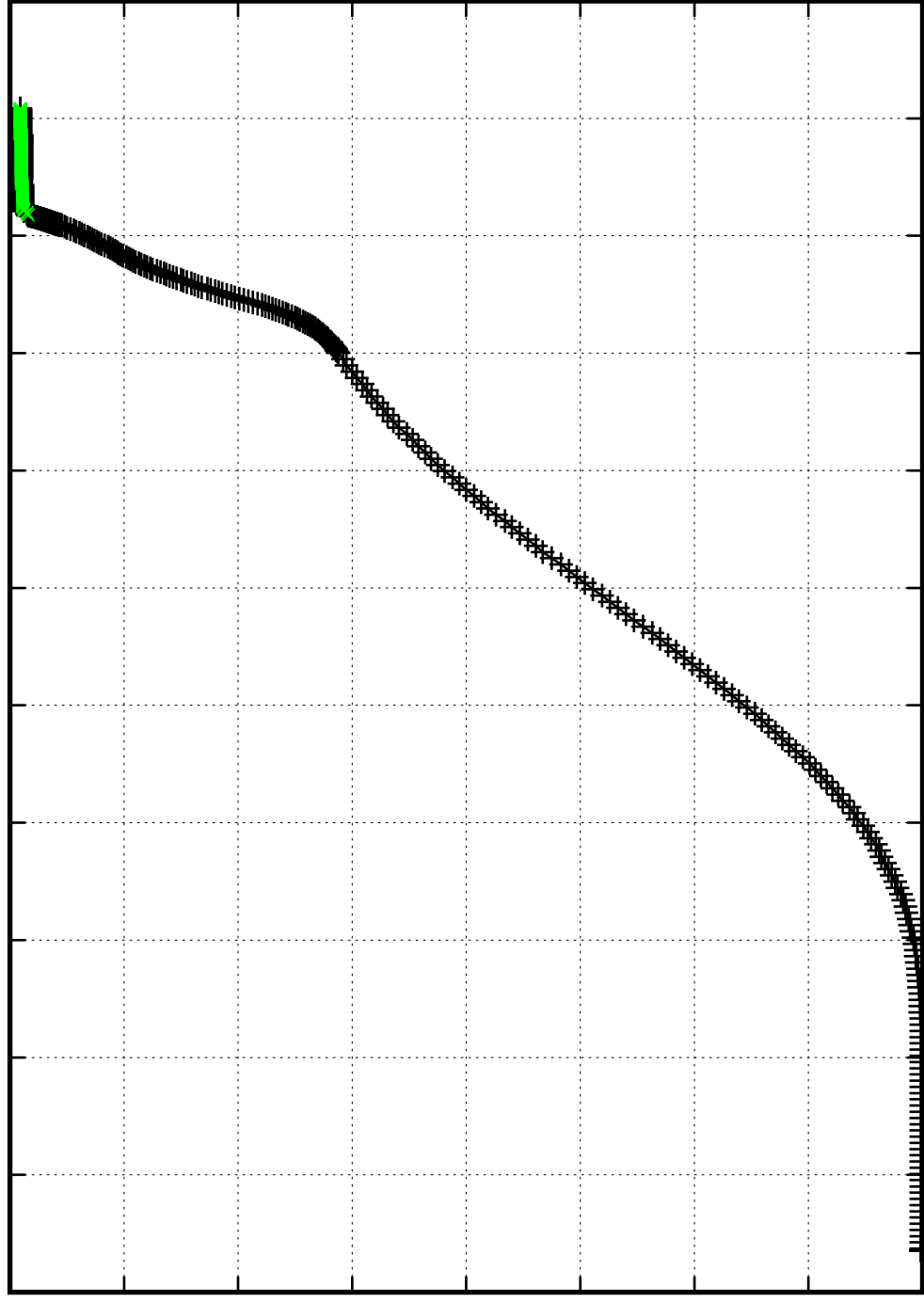
4

4.5

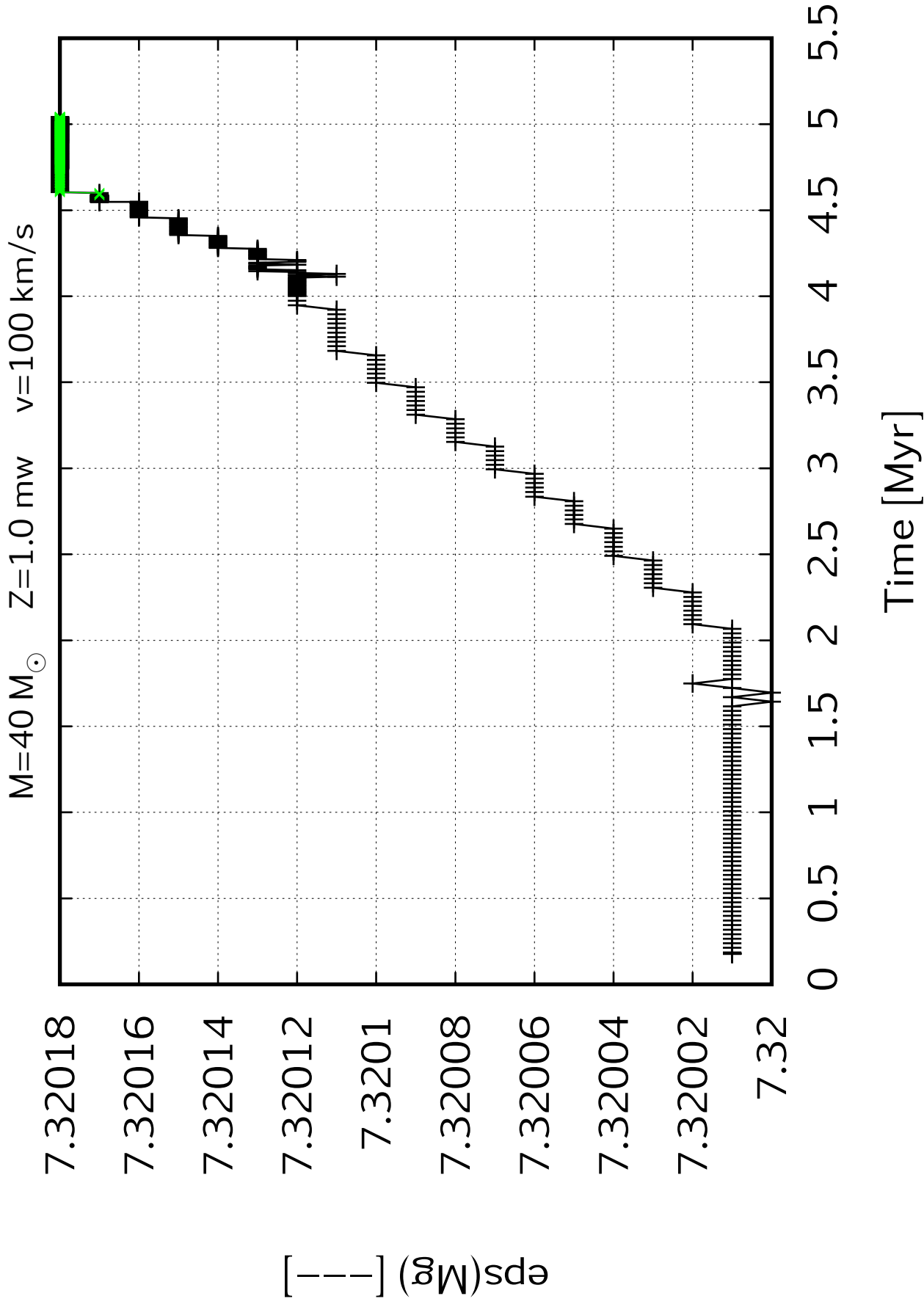
5

5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s



$M=40\ M_{\odot}$ $Z=1.0$ mw $v=100\ \text{km/s}$

6.37035

6.3703

6.37025

6.3702

6.37015

6.3701

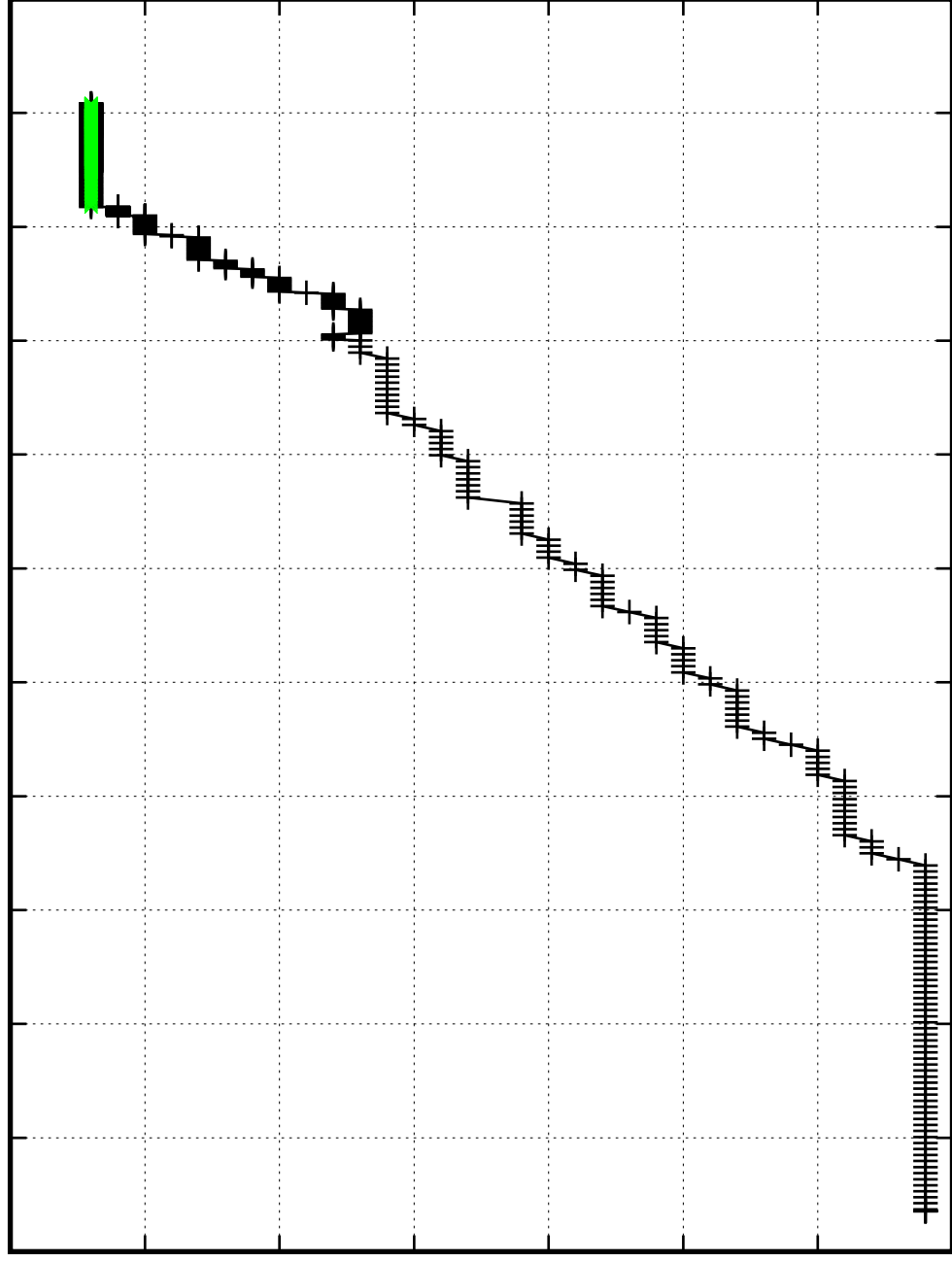
6.37005

6.37

$[\text{---}]$ $\text{eps}(\text{Al})$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



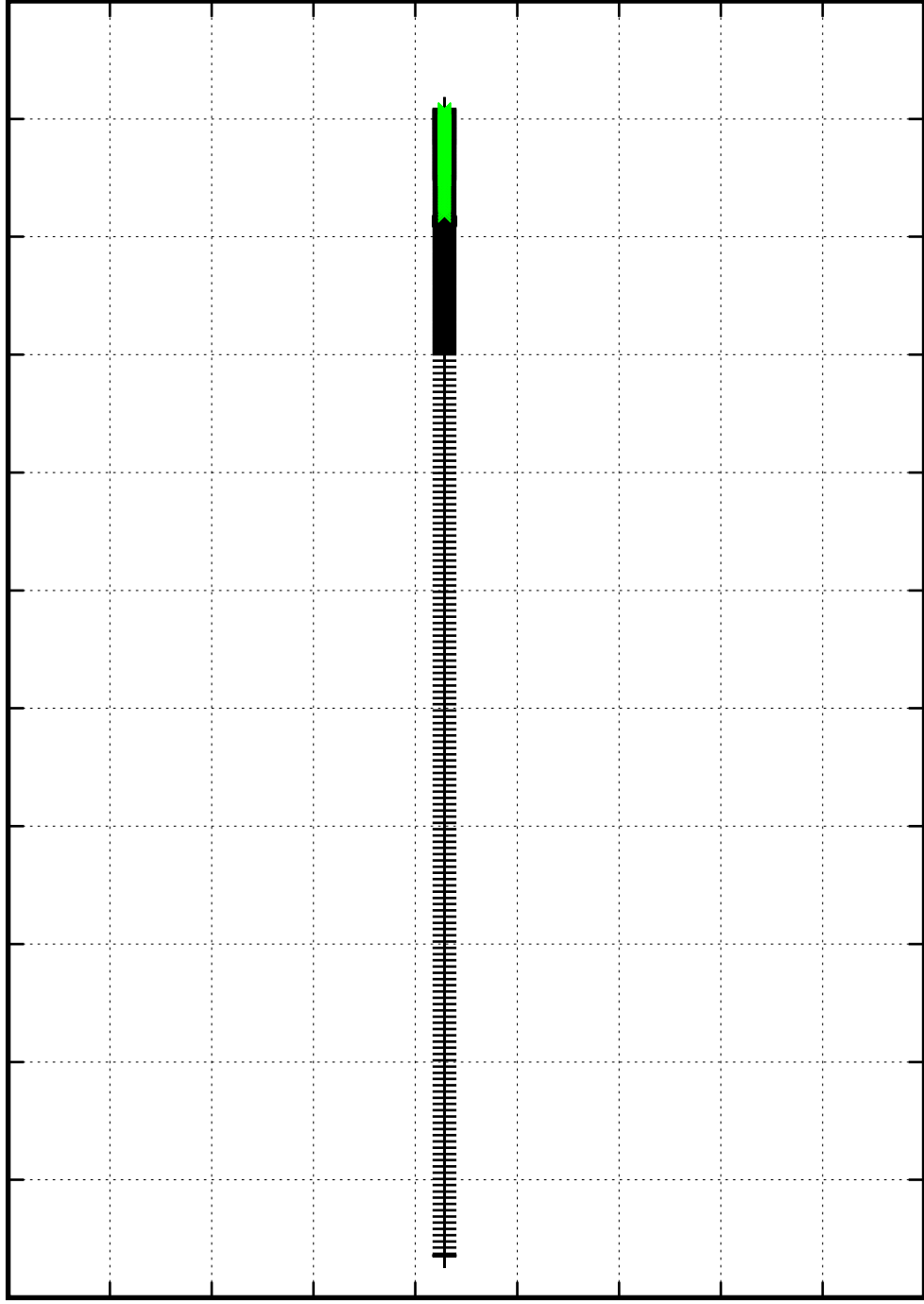
$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$

He-core-size [M_{sun}]

19.05
19
18.95
18.9
18.85
18.8
18.75
18.7
18.65
18.6

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$

15.25

15.2

15.15

15.1

15.05

15

14.95

14.9

CO-core-size [M_{sun}]

0

0.5

1

1.5

2

2.5

3

3.5

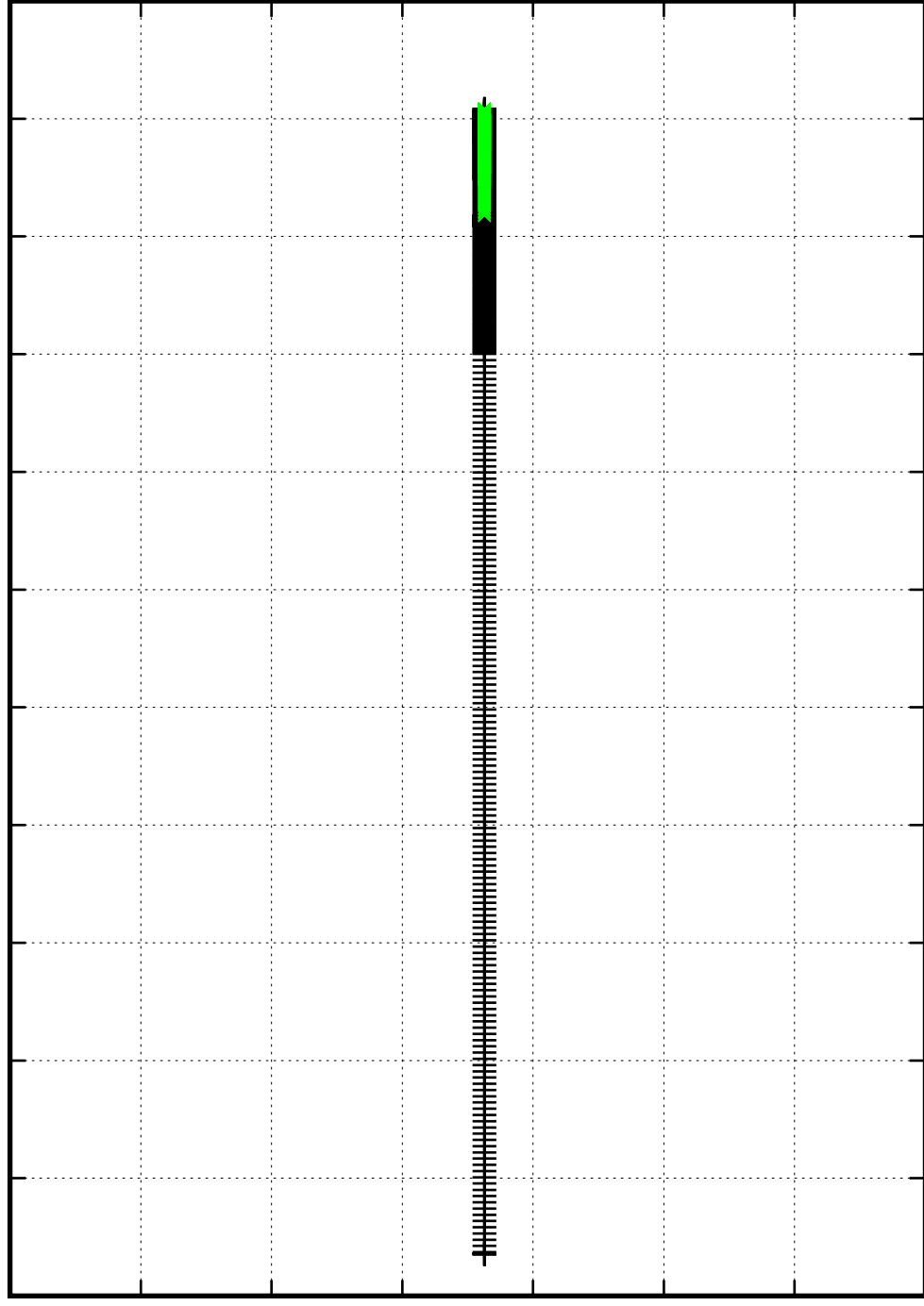
4

4.5

5

5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

0.7274

0.72735

0.7273

0.72725

0.7272

0.72715

0.7271

0.72705

$[\text{I}]\text{H}\alpha$

0

0.5

1

1.5

2

2.5

3

3.5

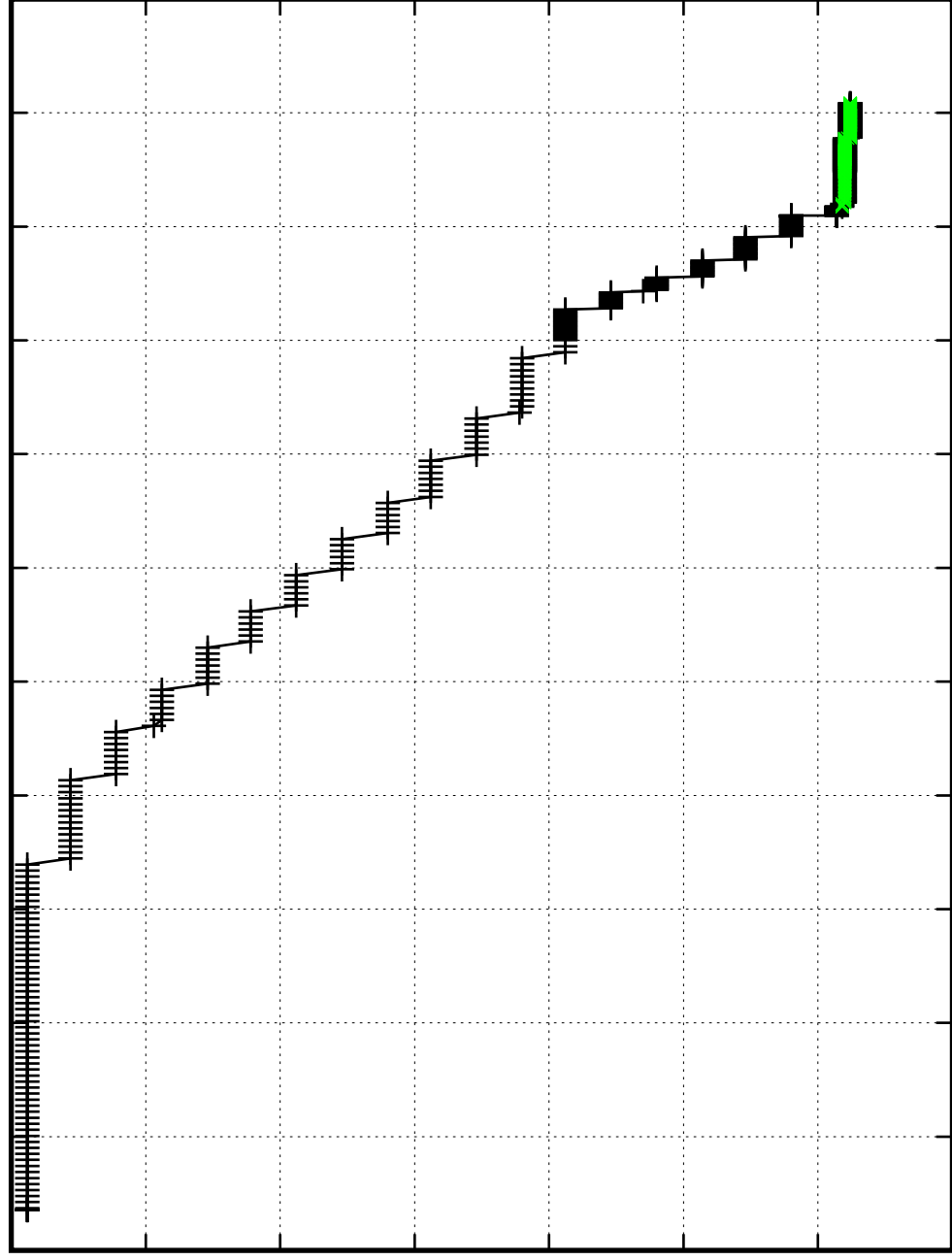
4

4.5

5

5.5

Time [Myr]



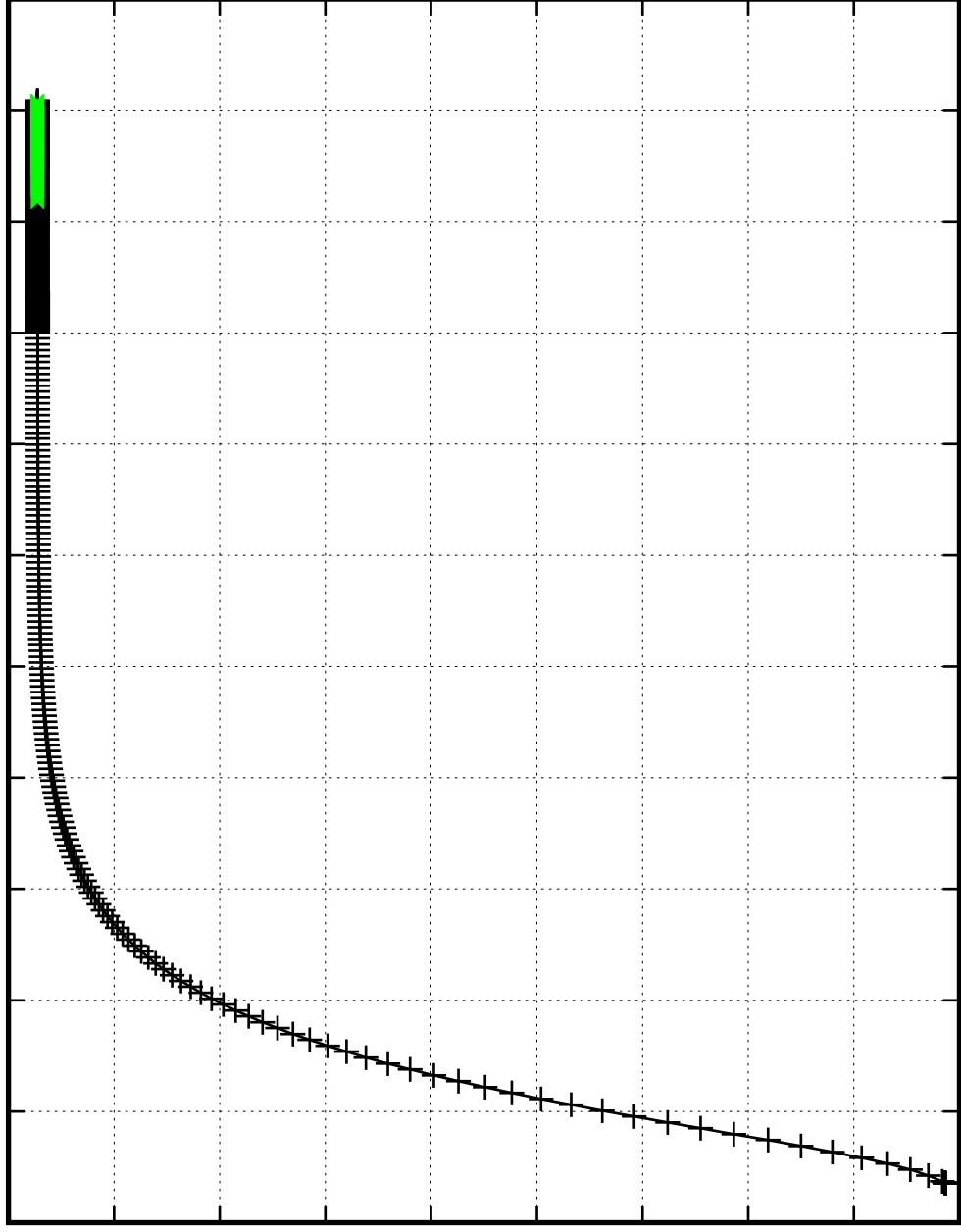
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

1.8×10^{-11}
 1.6×10^{-11}
 1.4×10^{-11}
 1.2×10^{-11}
 1×10^{-11}
 8×10^{-12}
 6×10^{-12}
 4×10^{-12}
 2×10^{-12}
0

$[\text{---}] \text{H}_2$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



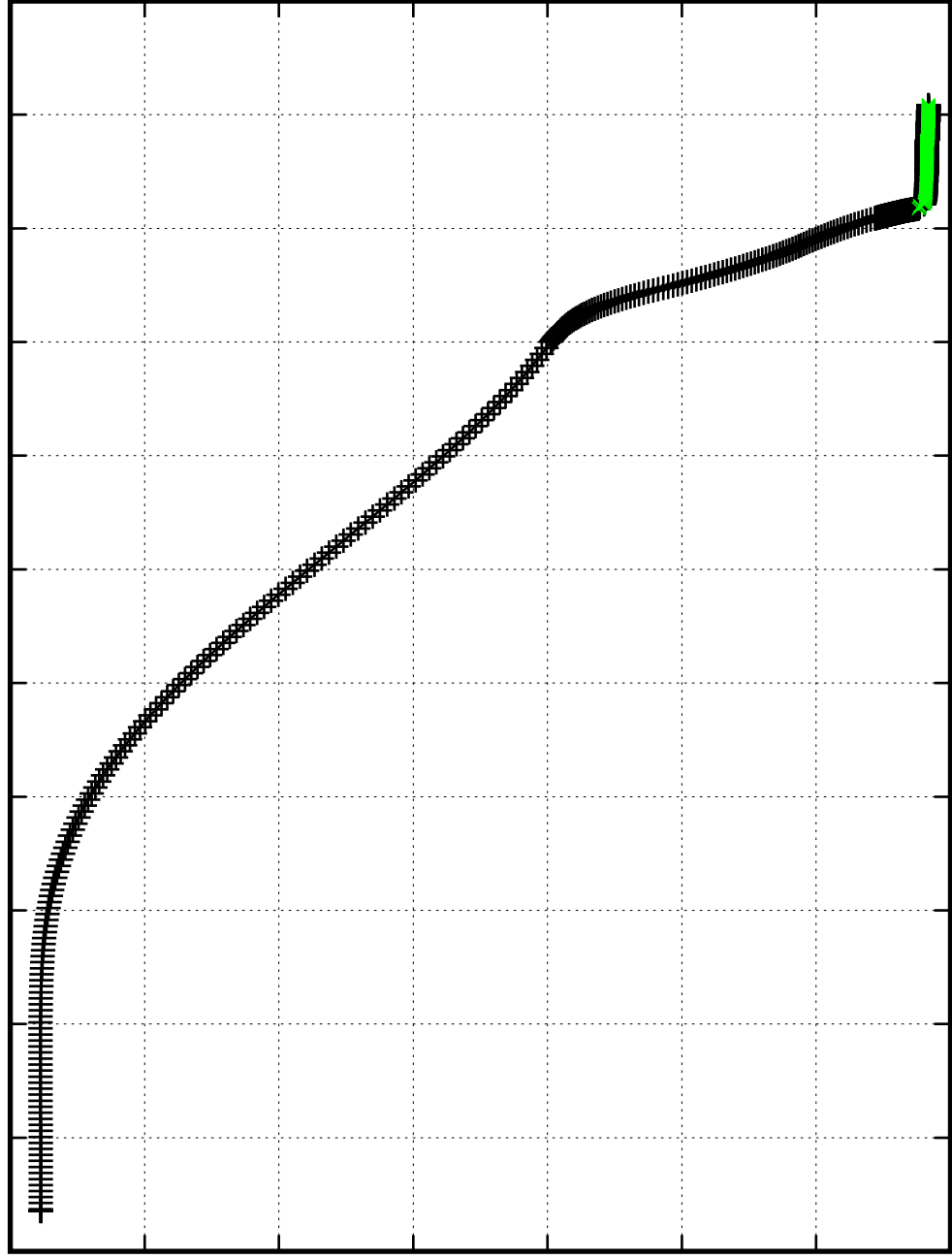
$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$

$[\text{He III}]$

0.000033
0.000032
0.000031
0.000030
0.000029
0.000028
0.000027
0.000026

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

0.26415

0.2641

0.26405

0.264

0.26395

0.2639

0.26385

0.2638

$s_{\text{He4}} []$

0

0.5

1

1.5

2

2.5

3

3.5

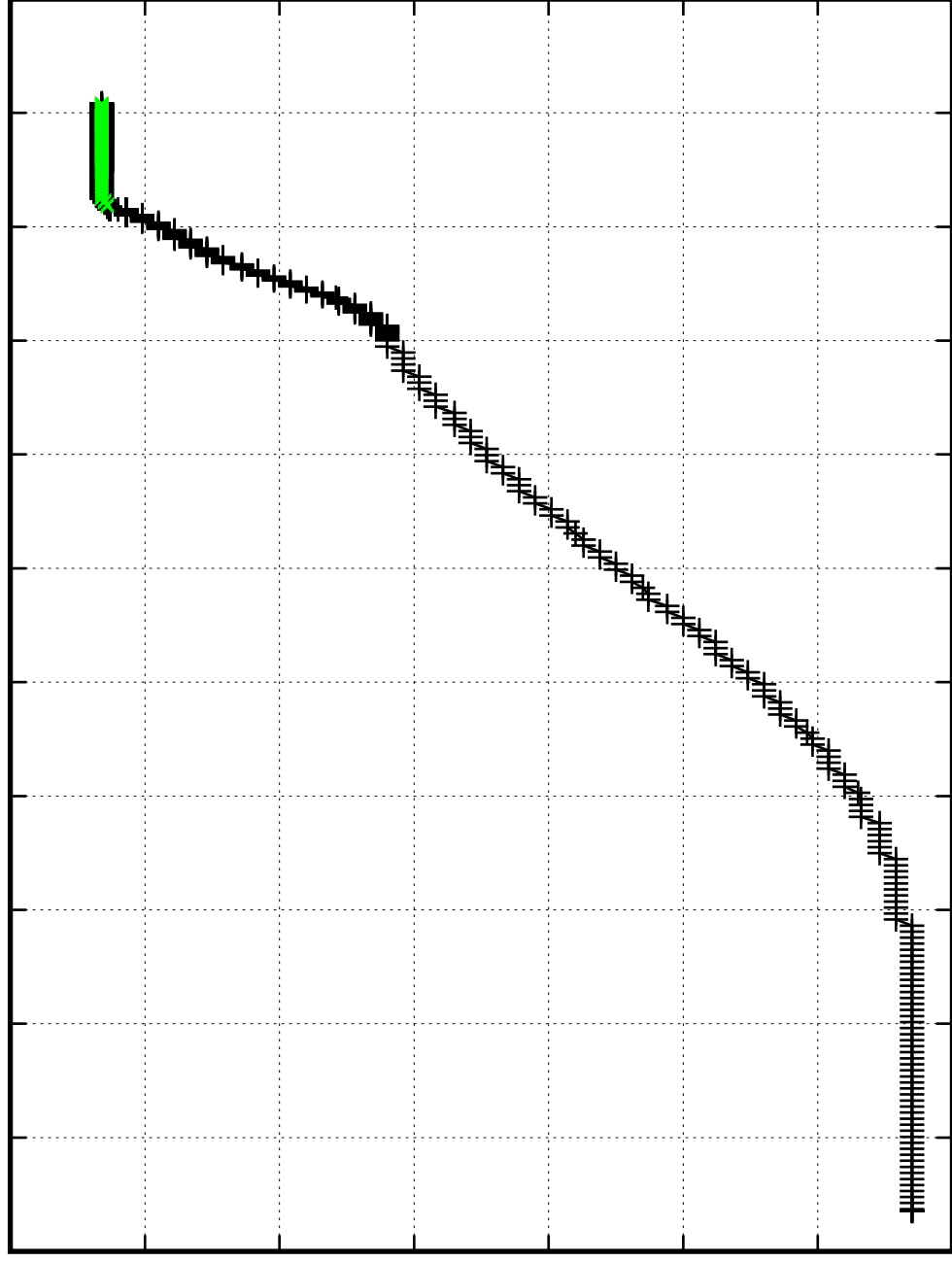
4

4.5

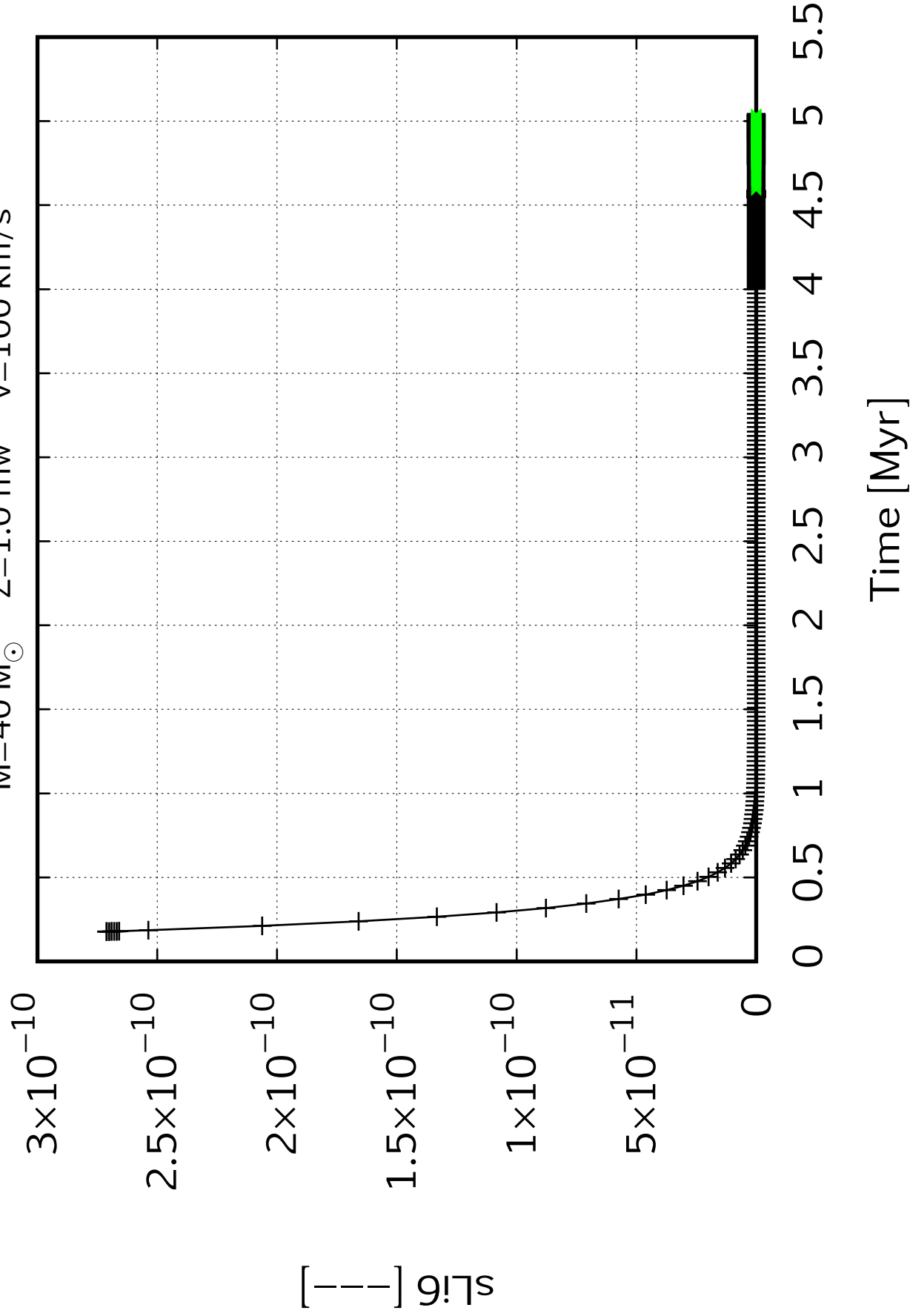
5

5.5

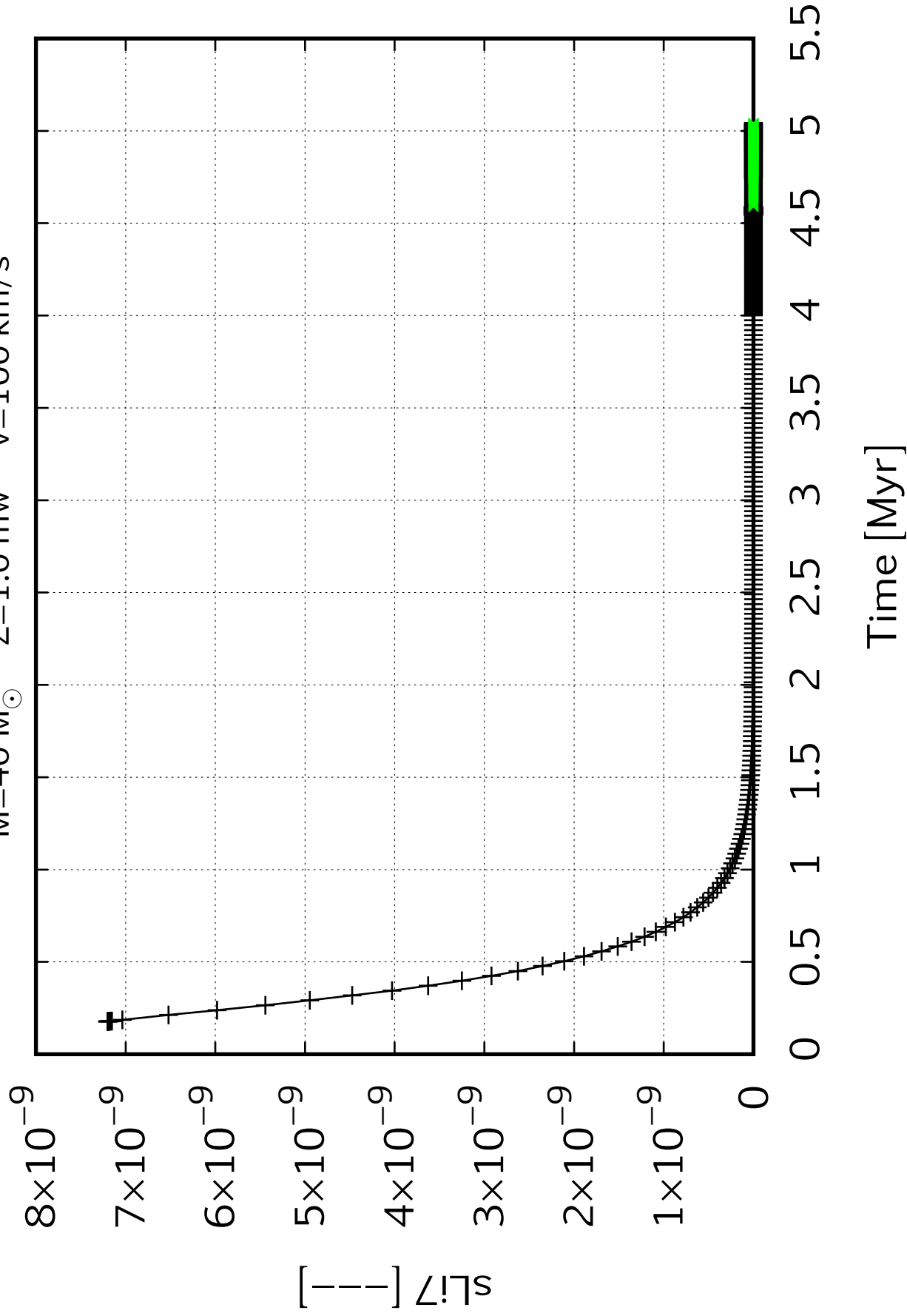
Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

3×10^{-21}

2.5×10^{-21}

2×10^{-21}

1.5×10^{-21}

1×10^{-21}

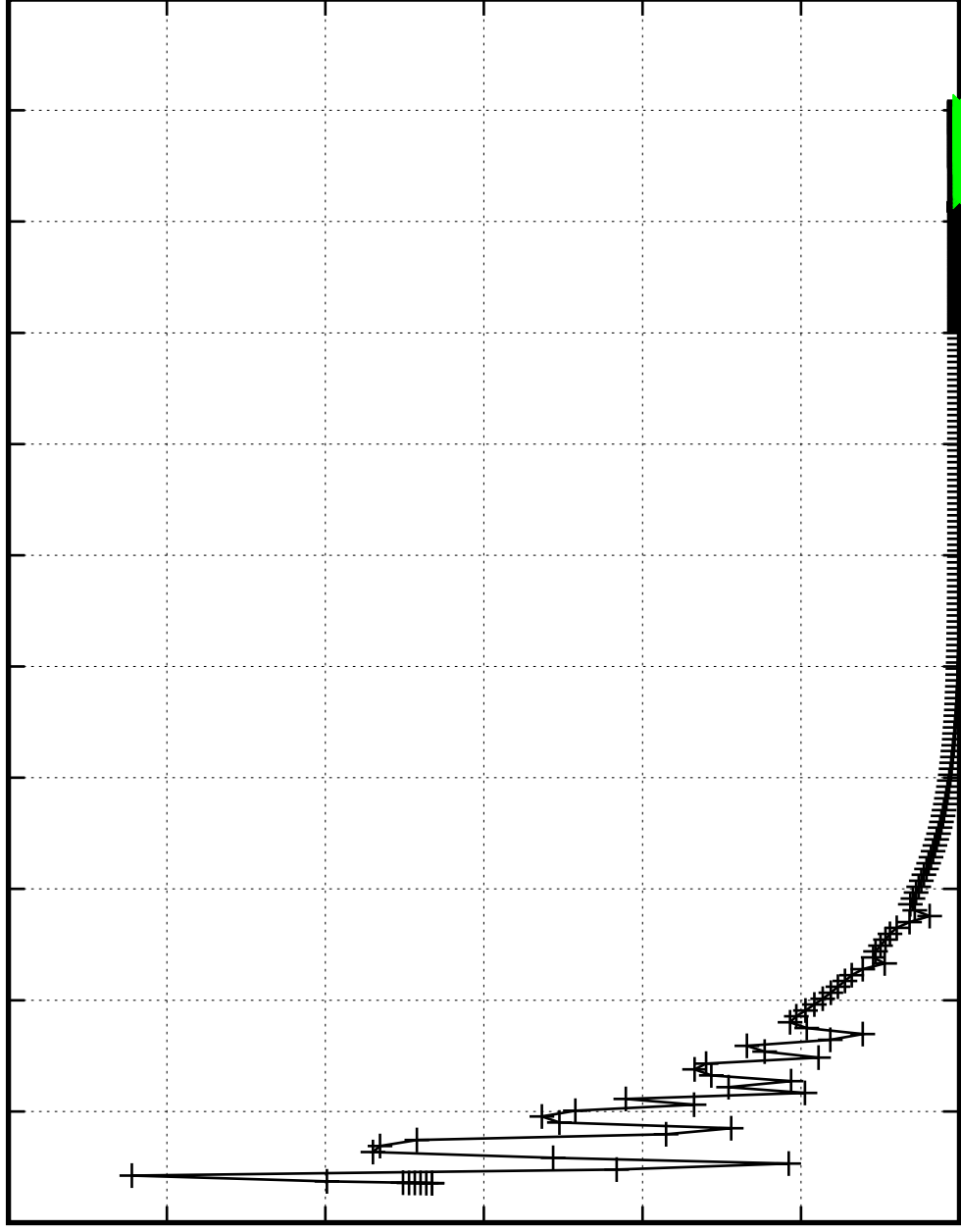
5×10^{-22}

0

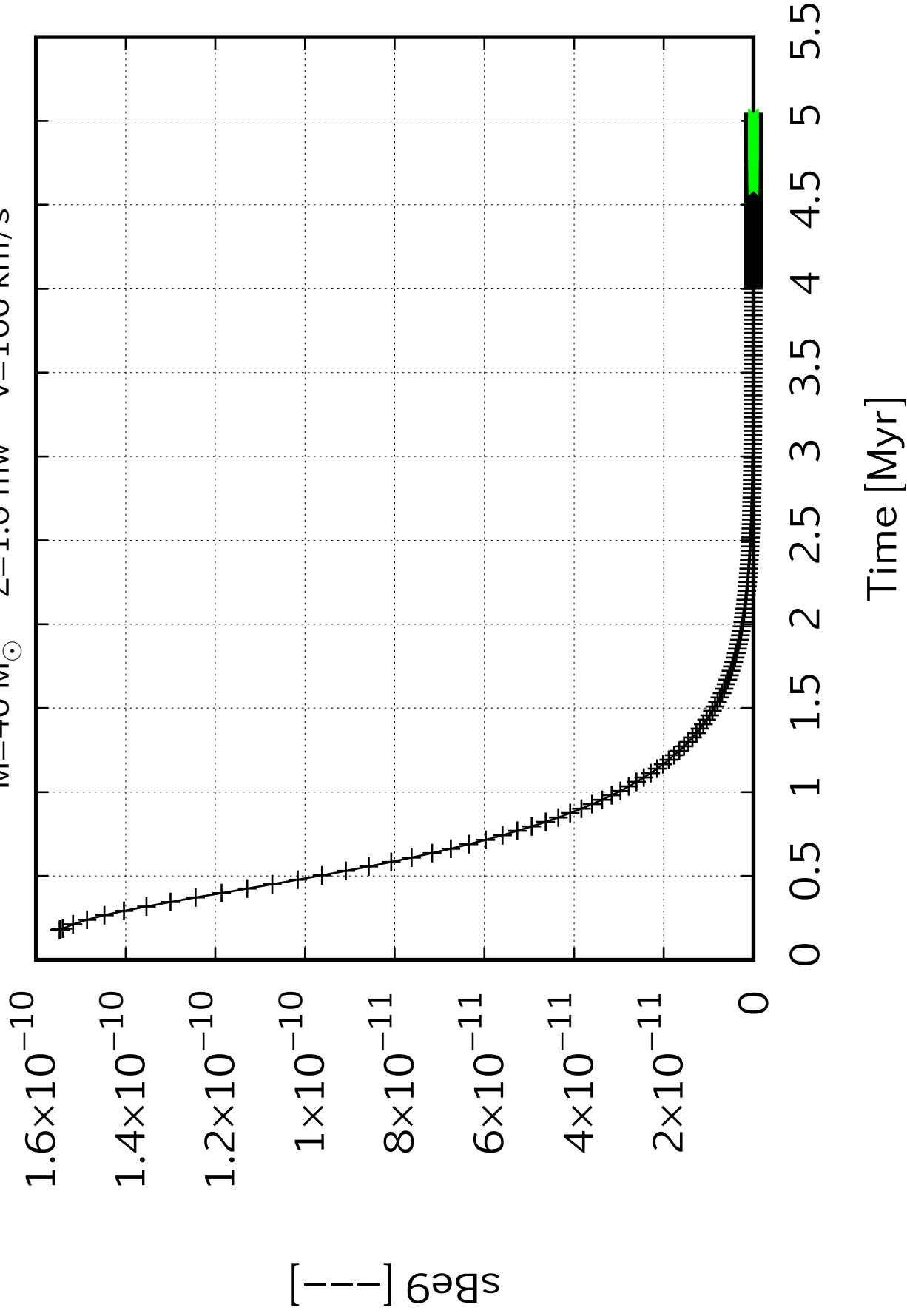
$[\text{--}] \text{ sBe7 } [\text{--}]$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

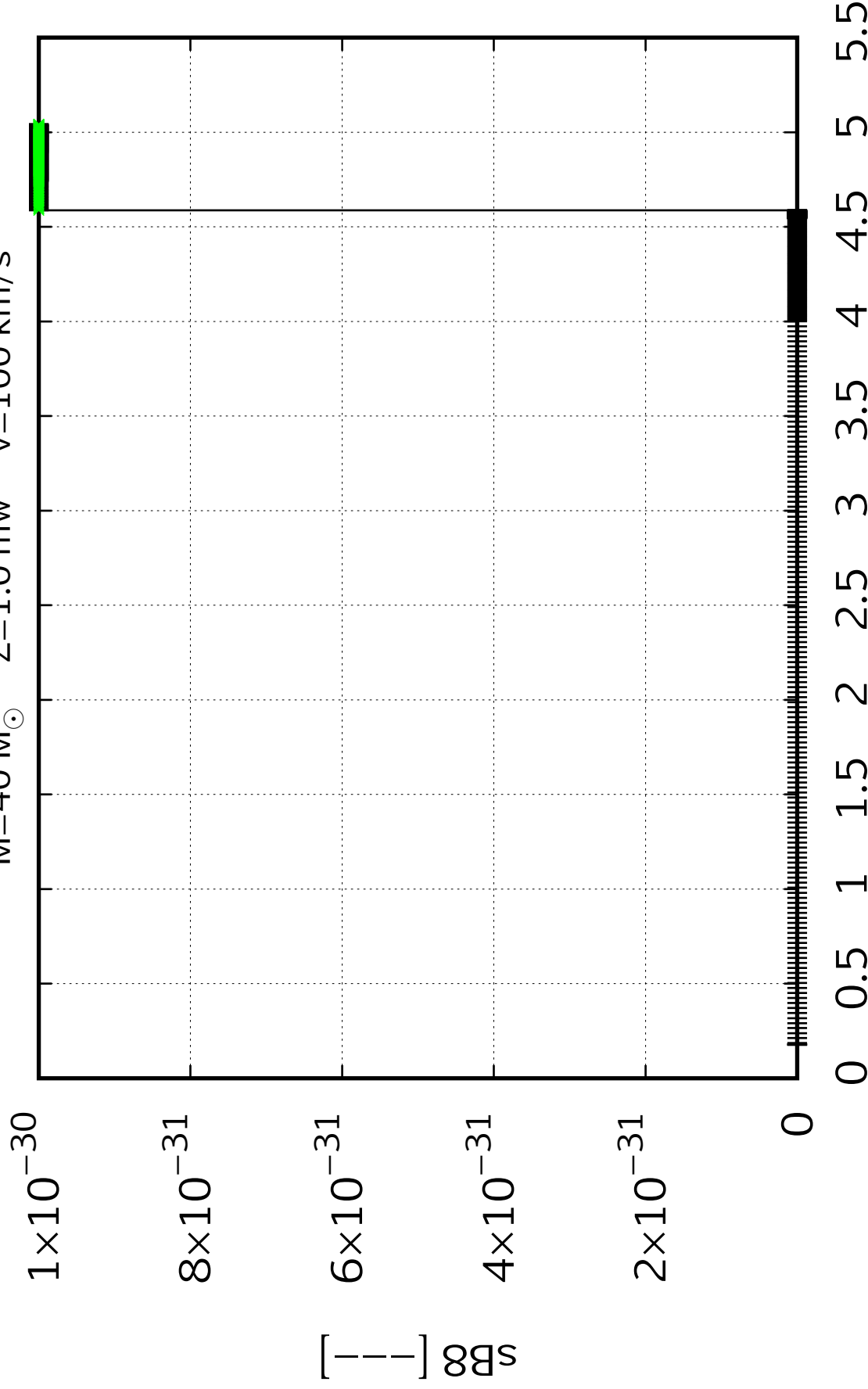
Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$

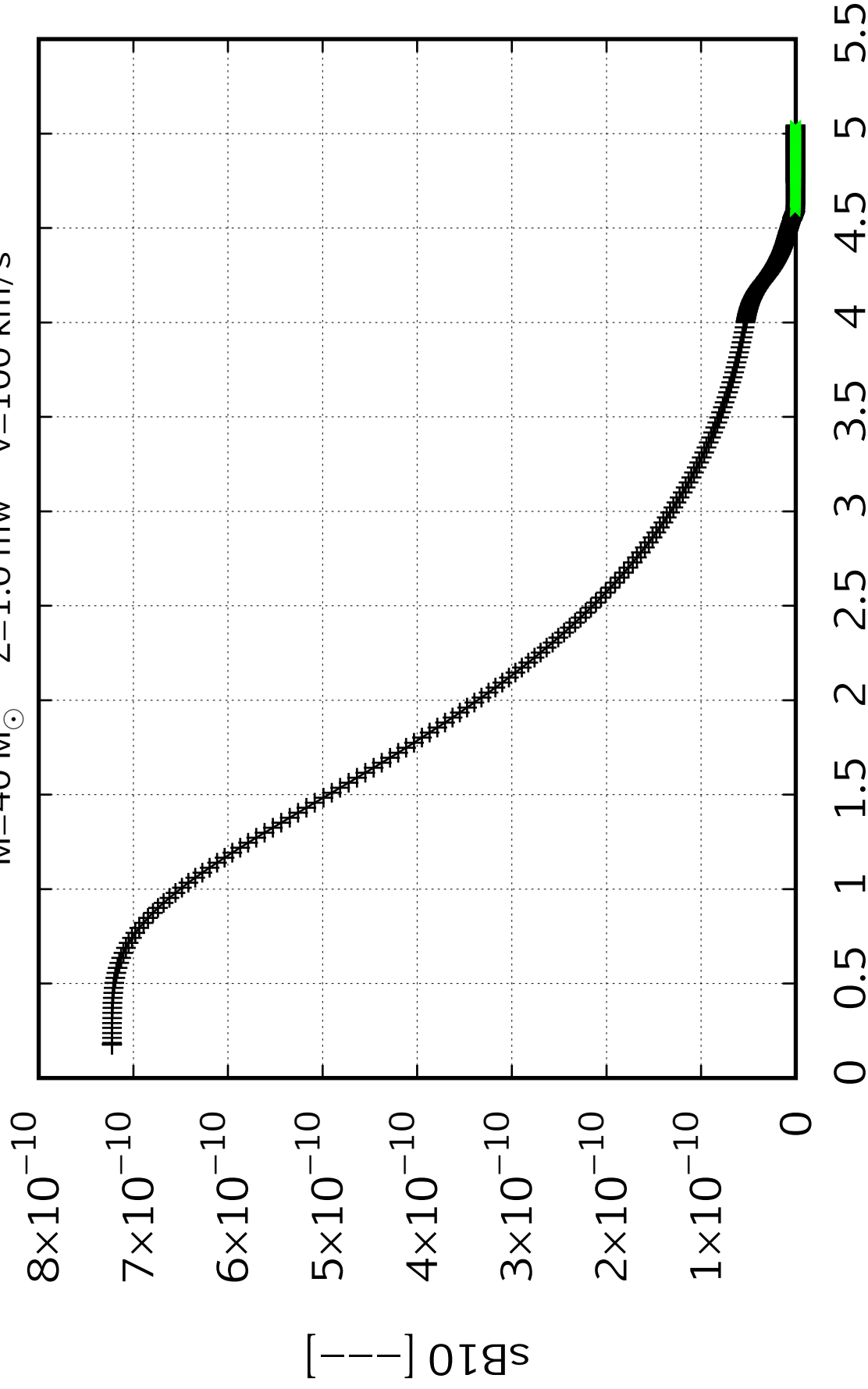


$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$



Time [Myr]

$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

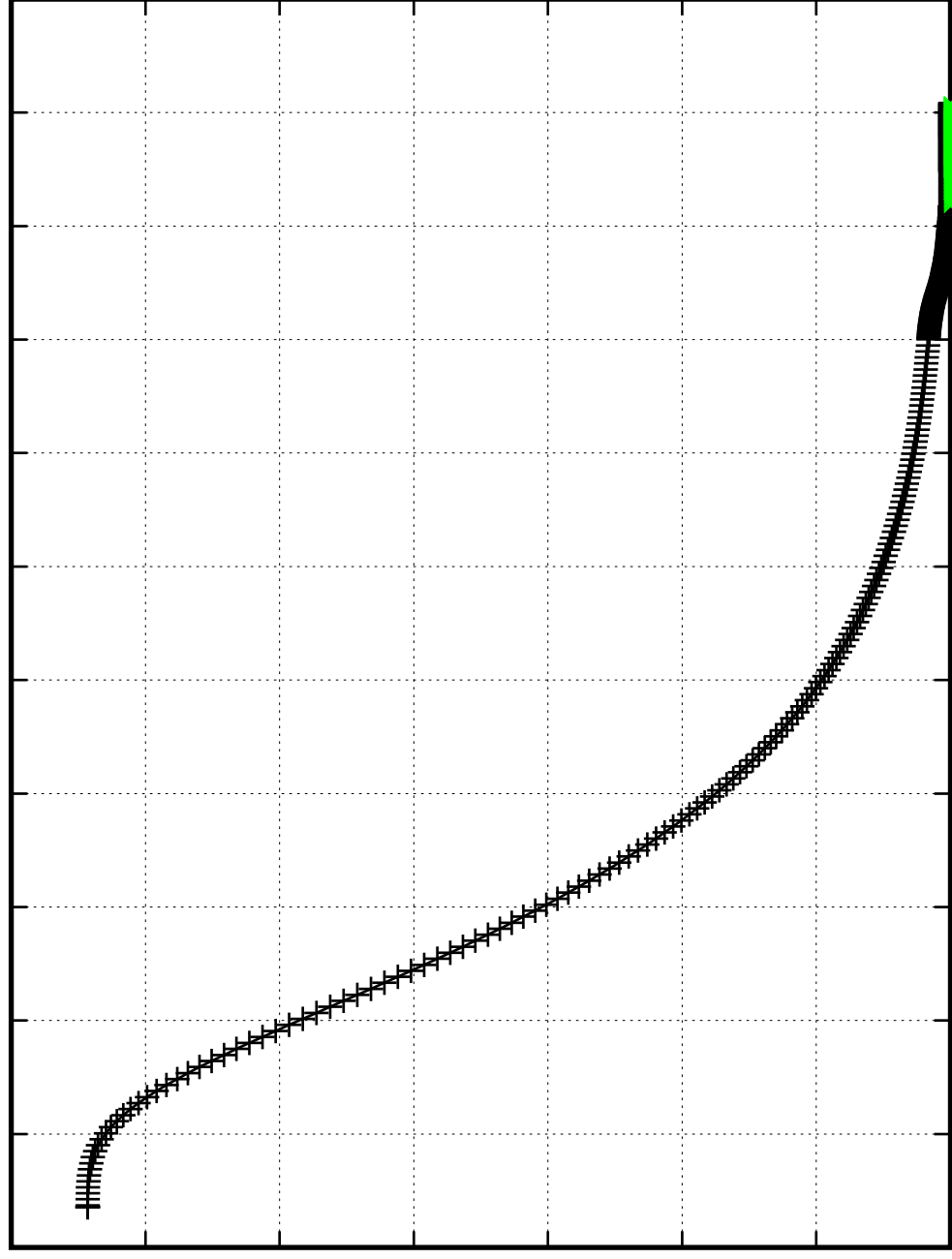


Time [Myr]

$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

3.5×10^{-9}
 3×10^{-9}
 2.5×10^{-9}
 2×10^{-9}
 1.5×10^{-9}
 1×10^{-9}
 5×10^{-10}
0

$[I_{11}^s]$



Time [Myr]

$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

1×10^{-30}

8×10^{-31}

6×10^{-31}

4×10^{-31}

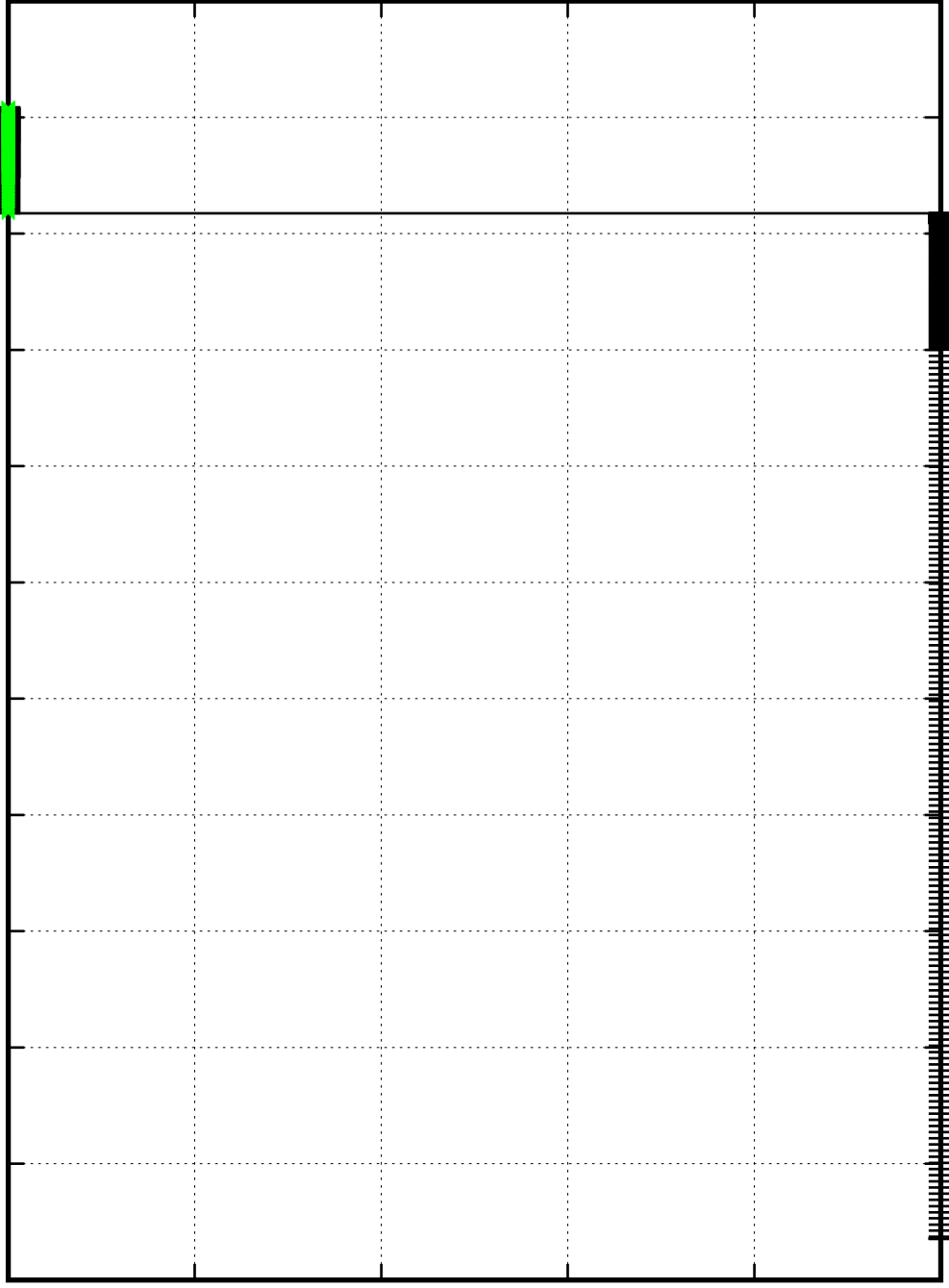
2×10^{-31}

0

$[C\,II]$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



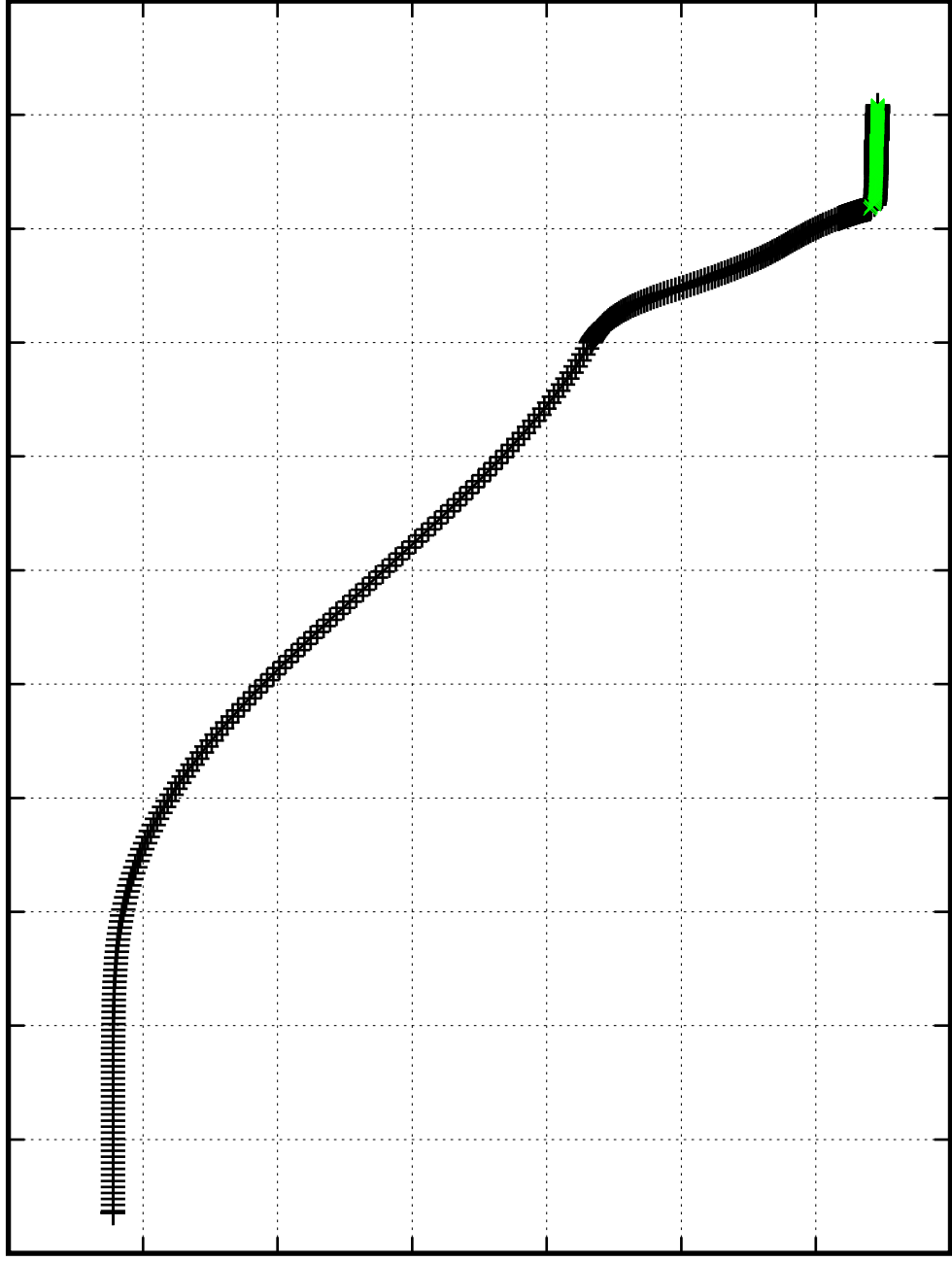
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

$s_{\text{C12}}[-]$

0.00118
0.00116
0.00114
0.00112
0.0011
0.00108
0.00106
0.00104

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

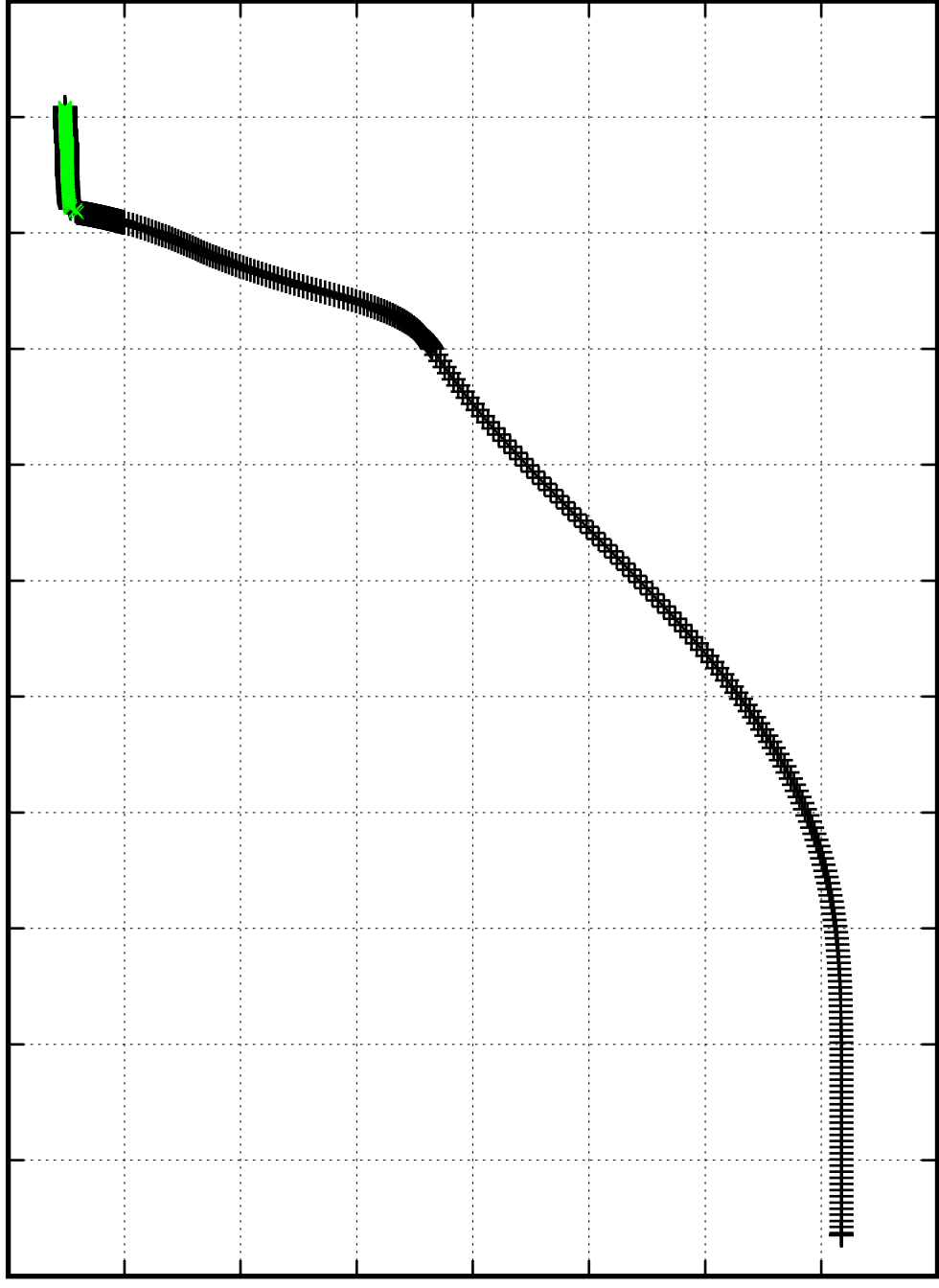
Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

$[\text{--}]^s\text{C13}[\text{--}]$

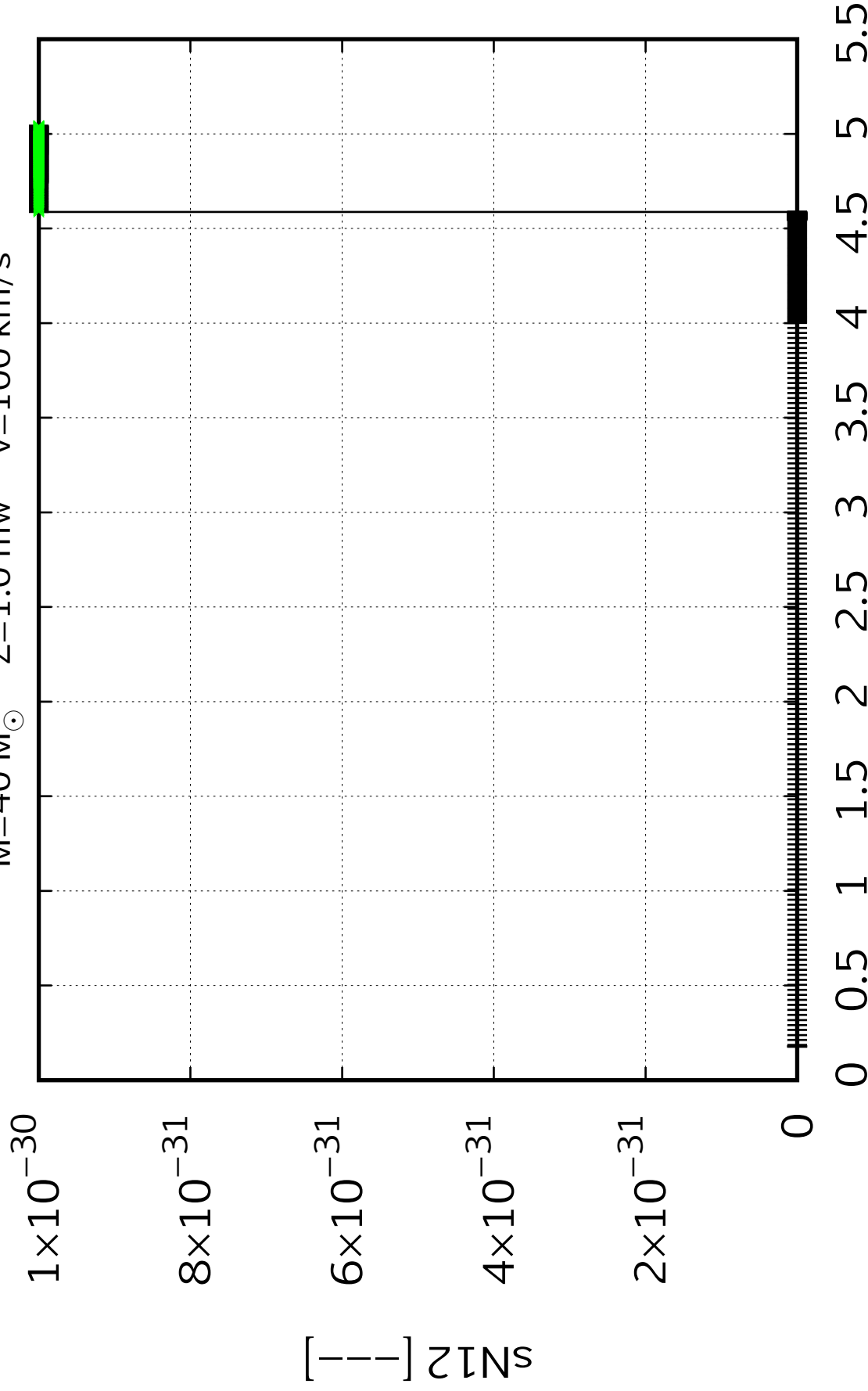
0.00005
0.00005
0.00004
0.00004
0.00003
0.00003
0.00002
0.00002
0.00001



0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]

$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$



Time [Myr]

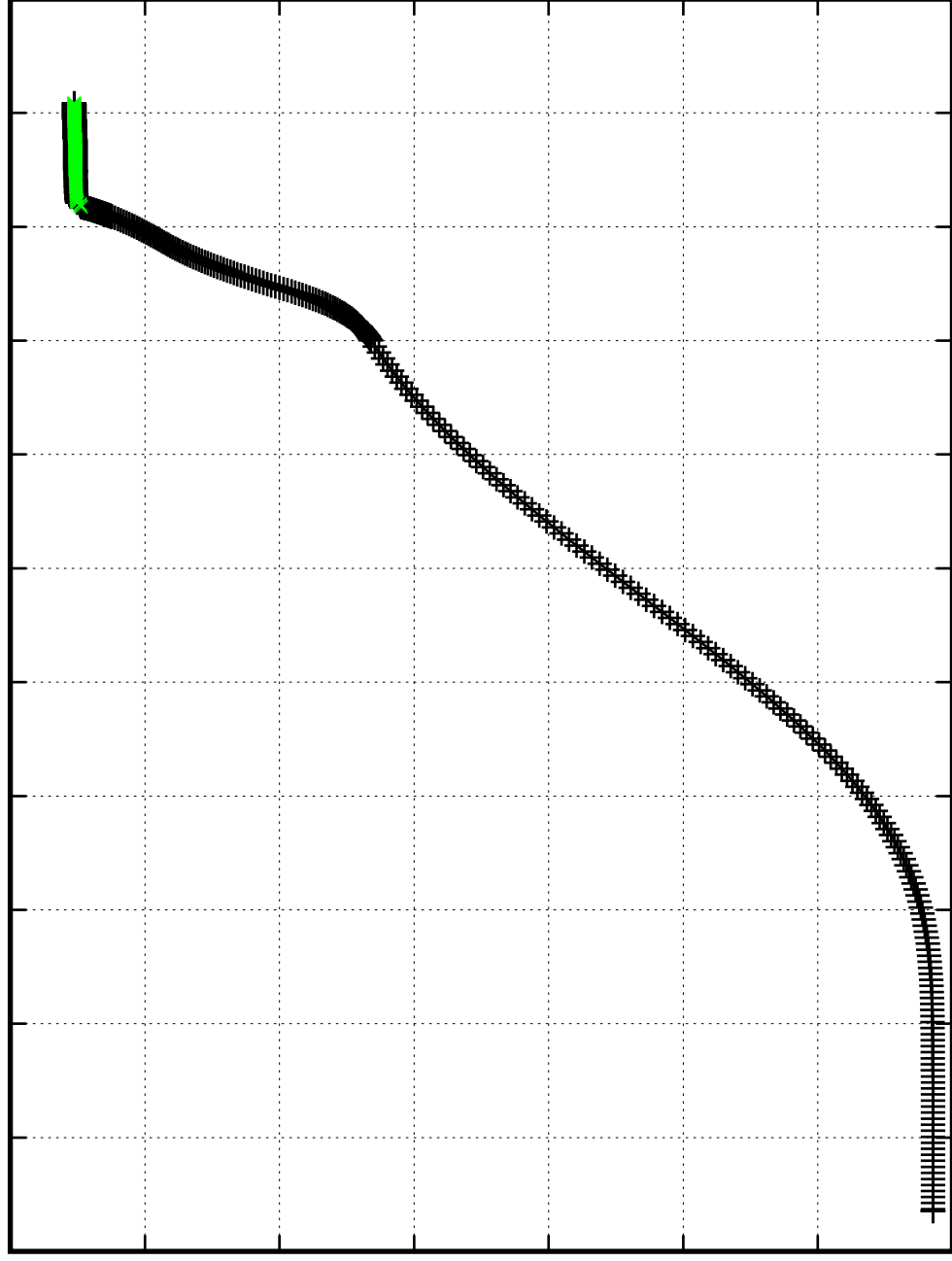
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

$sN14[-]$

0.00058
0.00056
0.00054
0.00052
0.0005
0.00048
0.00046
0.00044

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

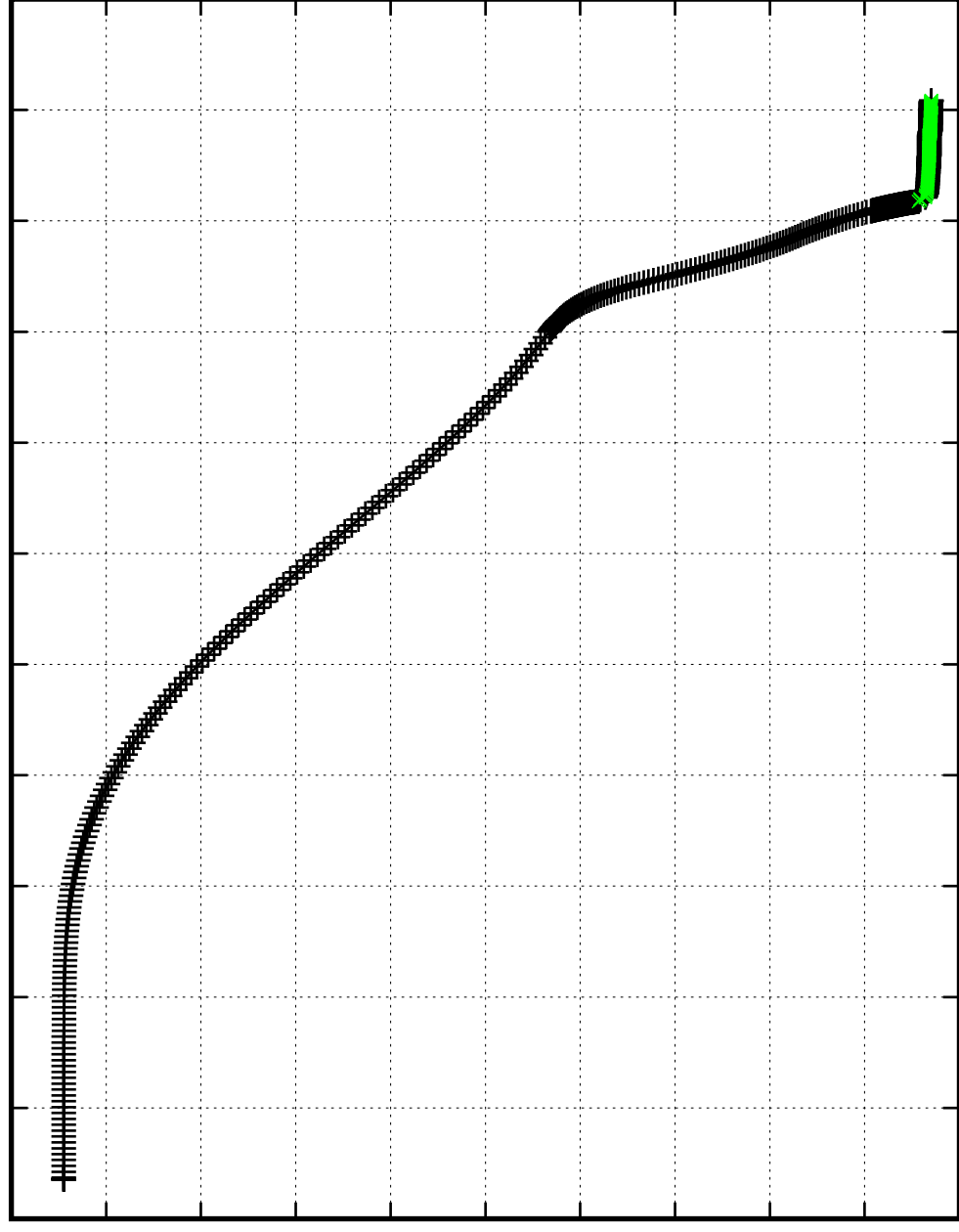
Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

0.00000018
0.00000017
0.00000016
0.00000015
0.00000014
0.00000013
0.00000012
0.00000011
0.00000010
0.00000009
0.00000008

$[\text{--}]_{15}^{\text{S}}$



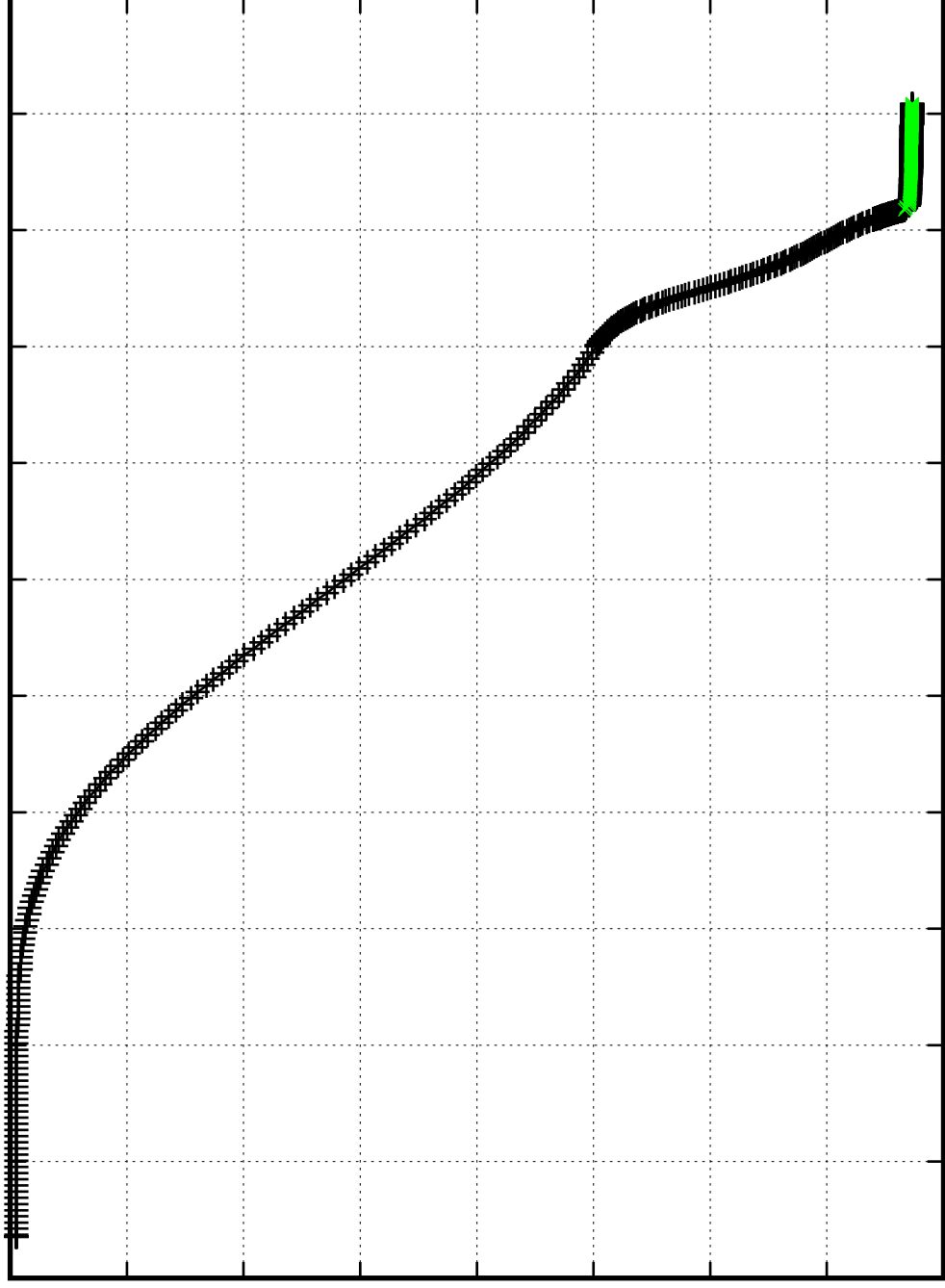
Time [Myr]

$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

$[\text{O16}]$
0.00412
0.00411
0.00411
0.00410
0.00410
0.00409
0.00409
0.00409
0.00408

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

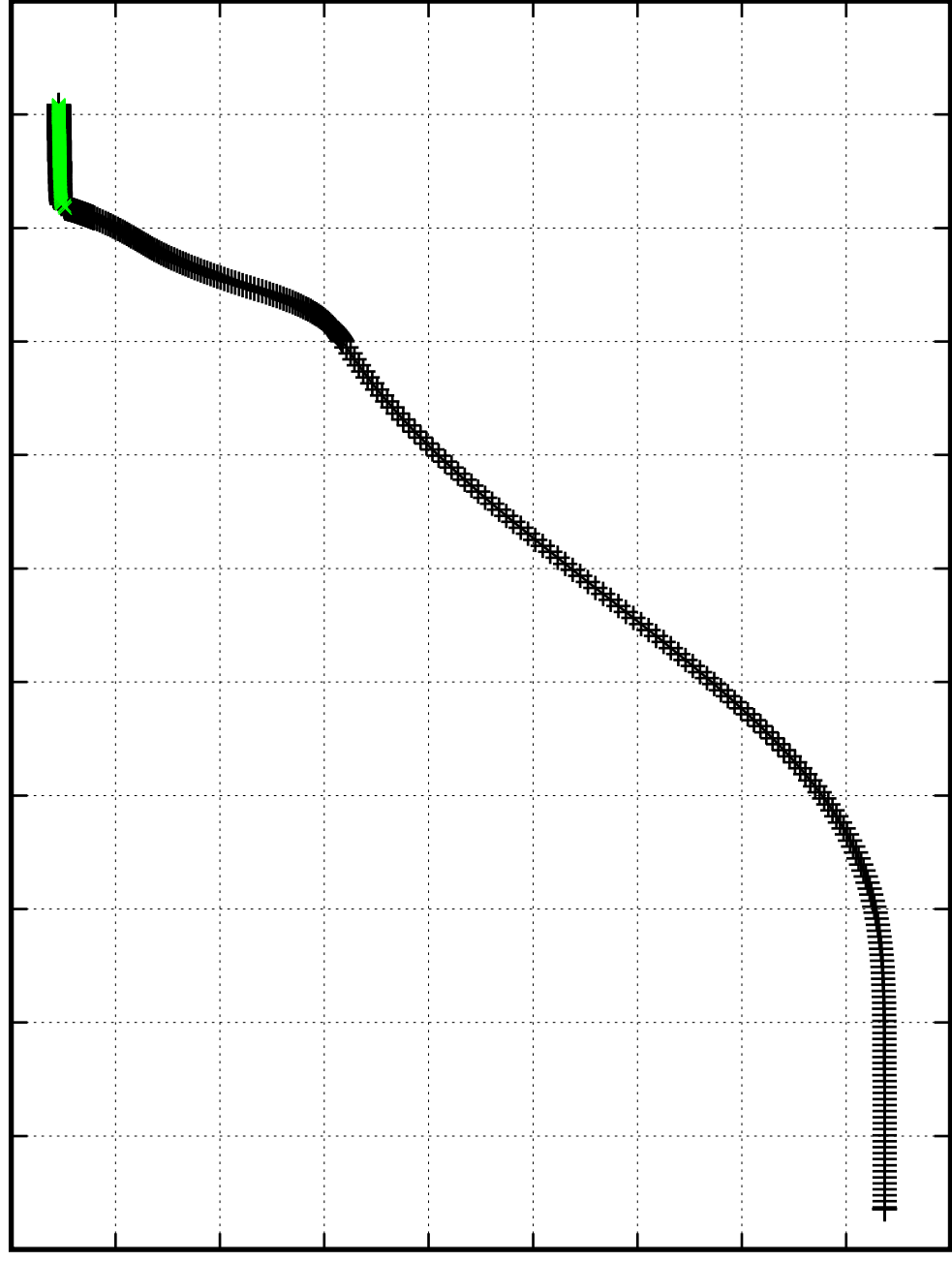
Time [Myr]



$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$

$[\text{O17}]$

0.000010
0.000009
0.000008
0.000007
0.000006
0.000005
0.000004
0.000003
0.000002
0.000001

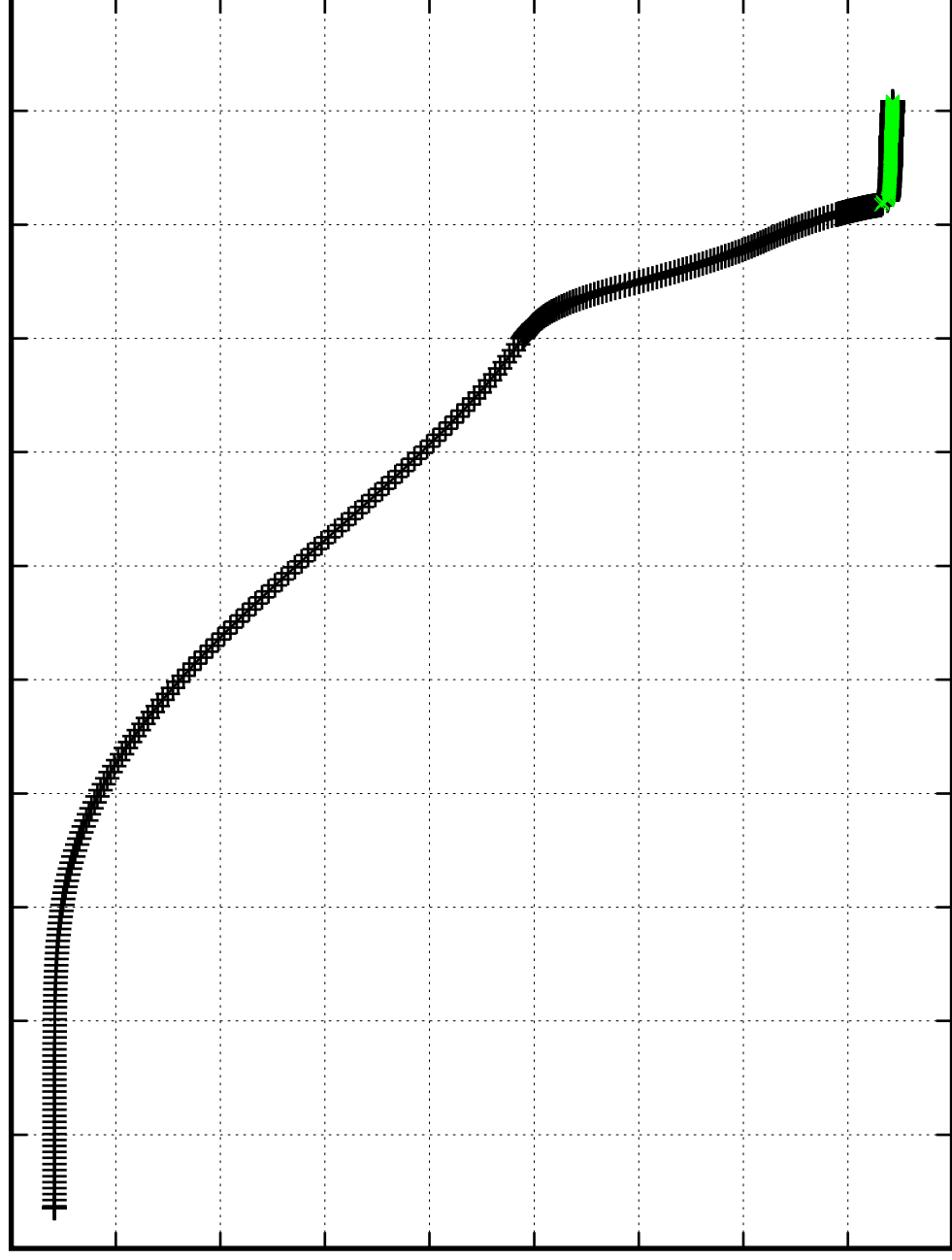


Time [Myr]

$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

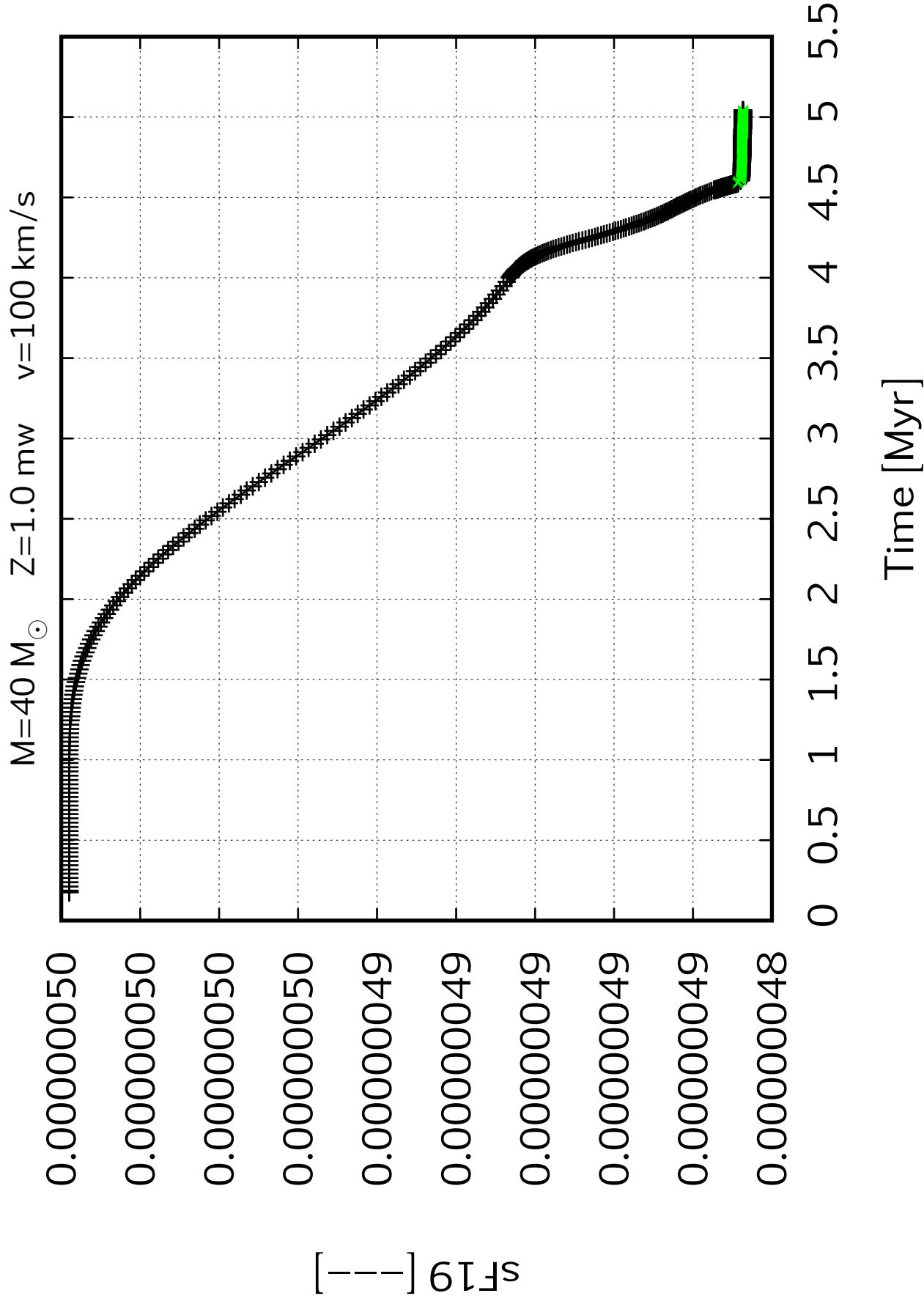
0.000010
0.000009
0.000009
0.000008
0.000008
0.000007
0.000007
0.000006
0.000005
0.000005

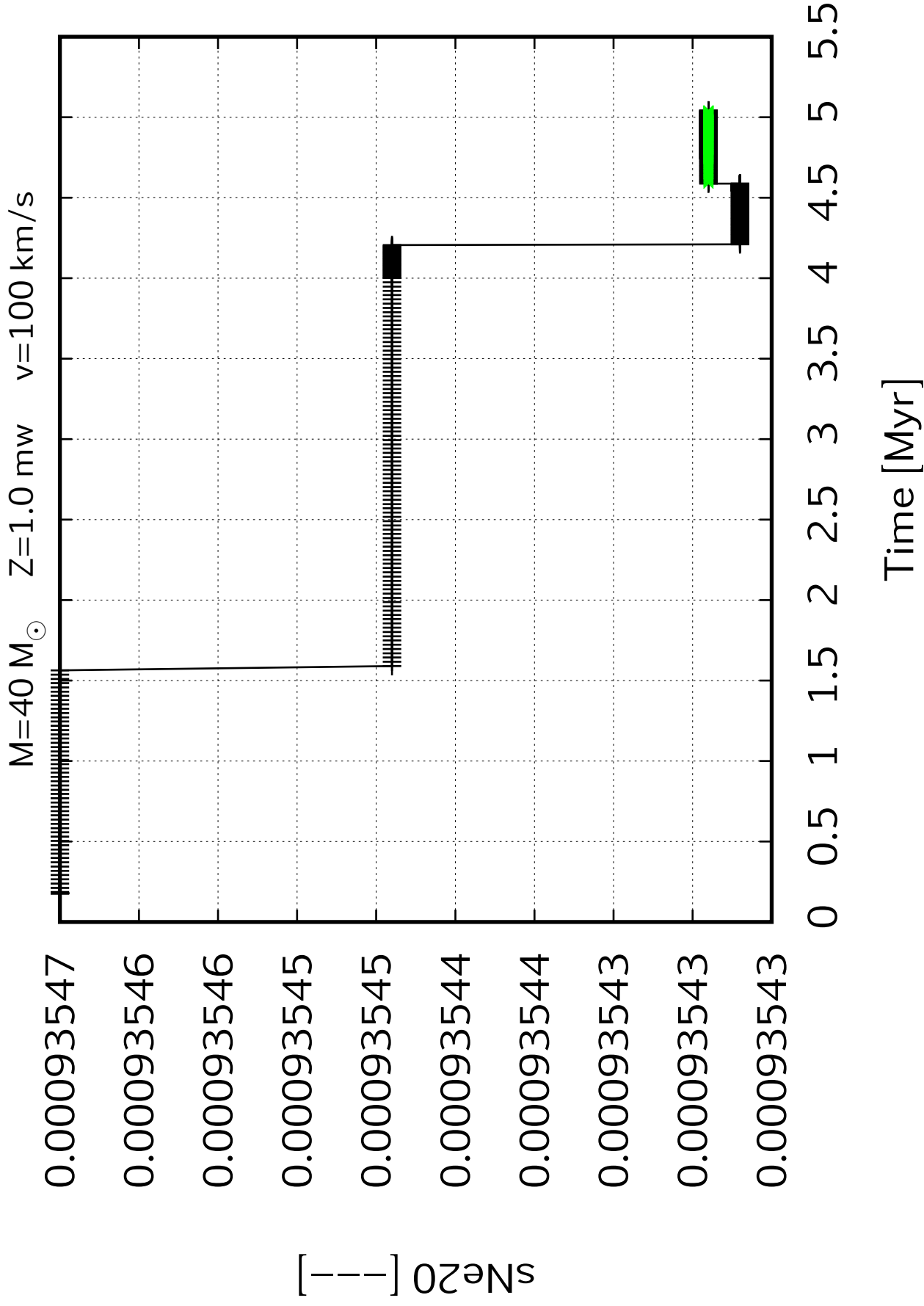
$[\text{O18}]$

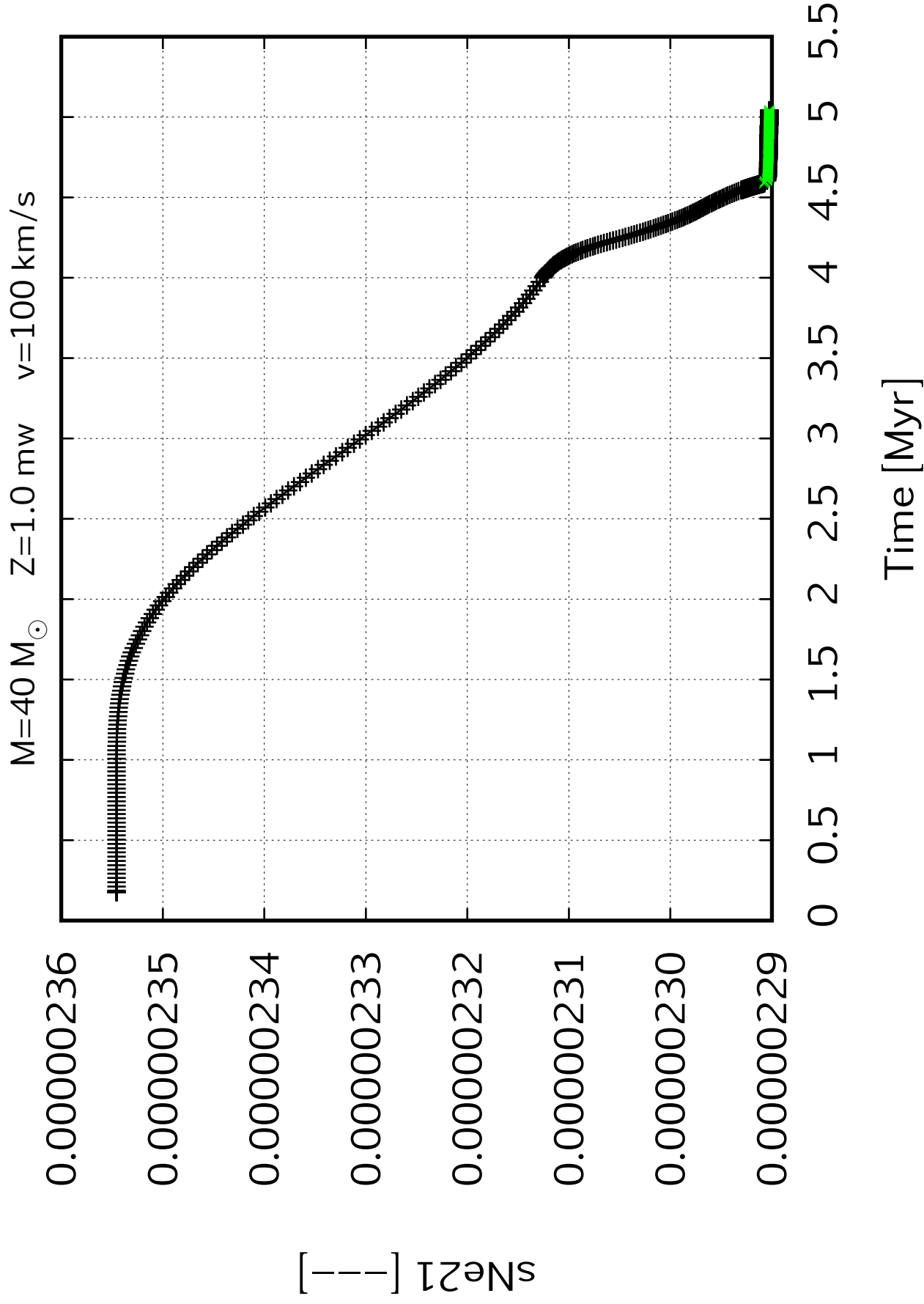


0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]







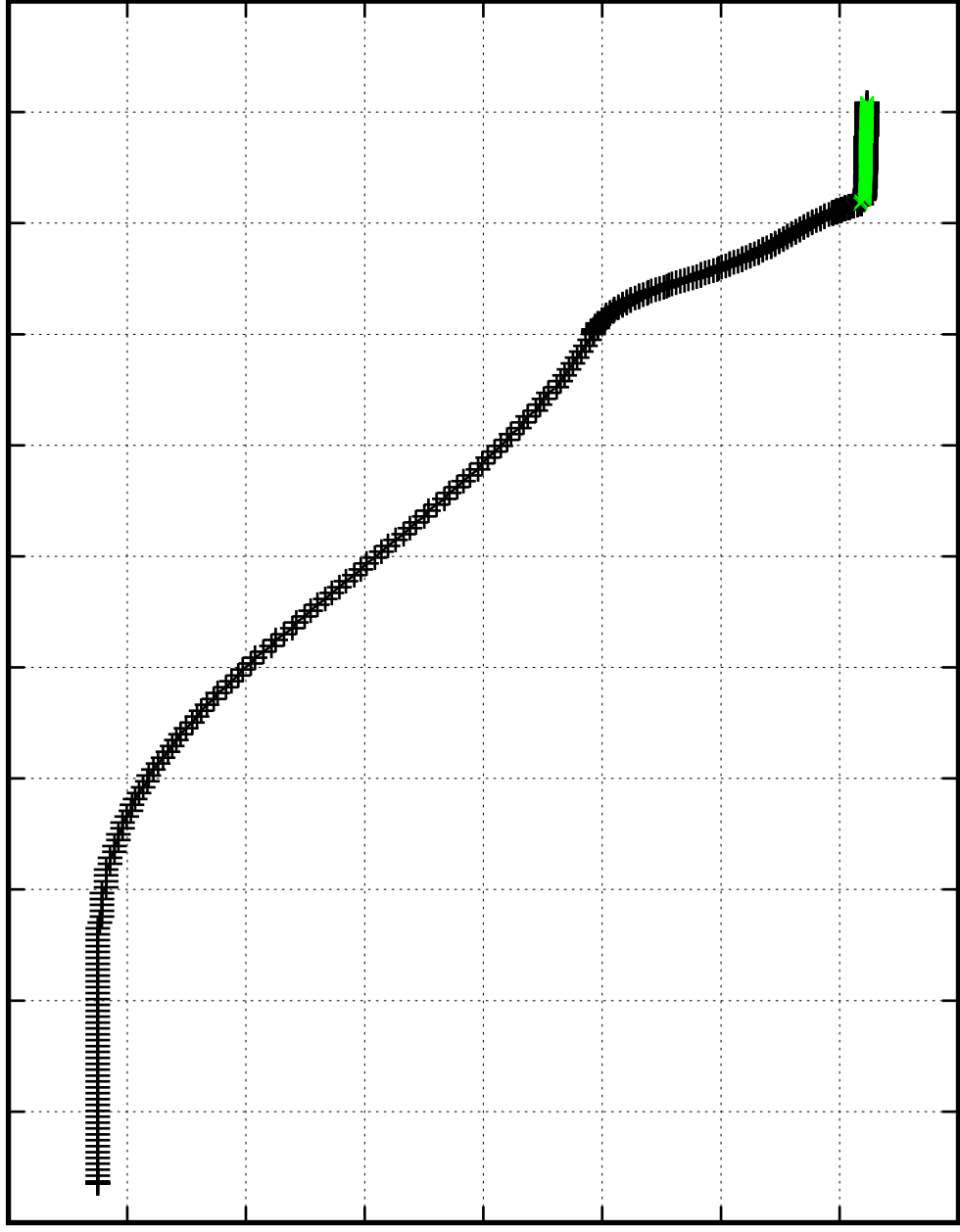
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

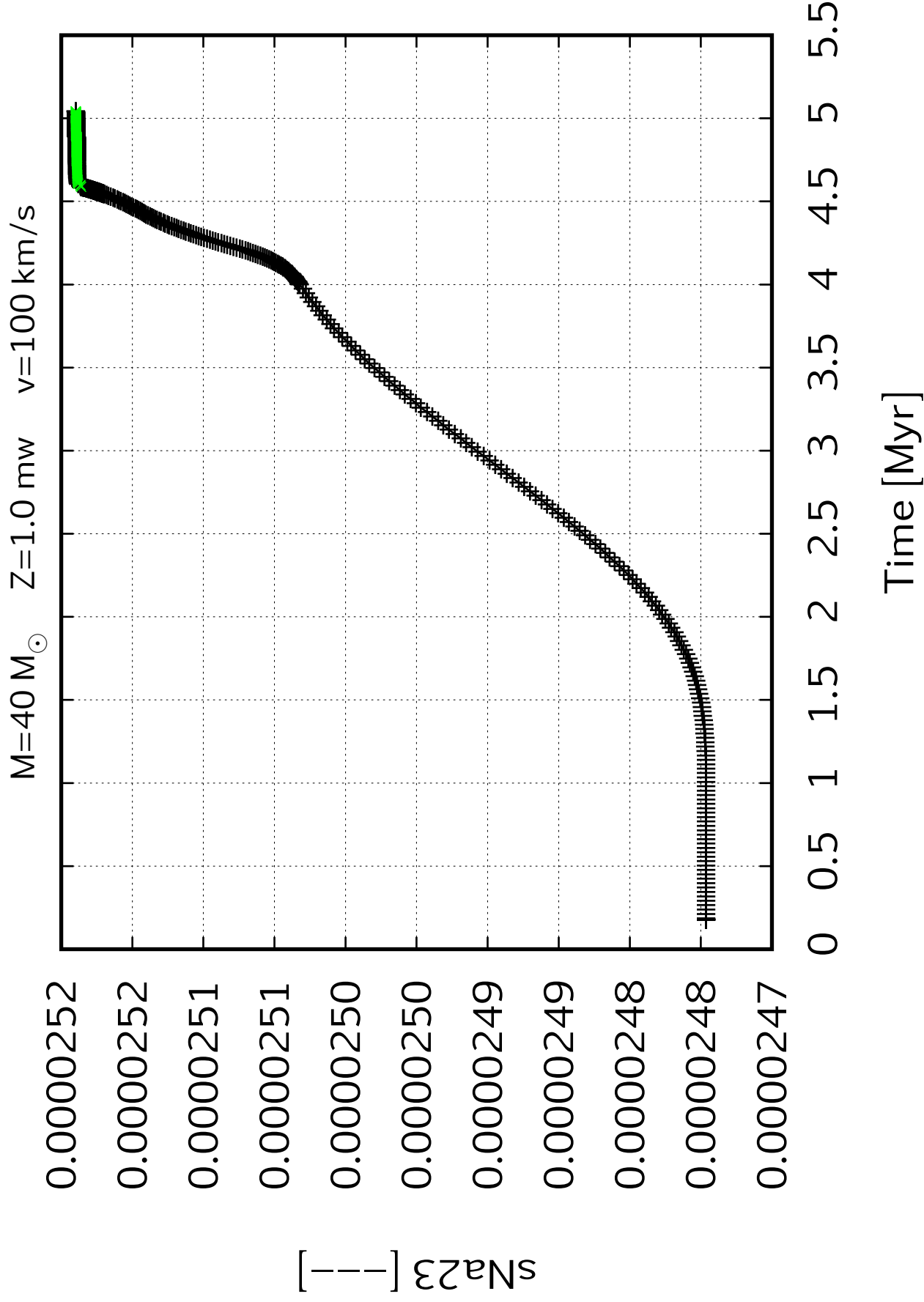
0.0000757
0.0000757
0.0000756
0.0000756
0.0000755
0.0000755
0.0000754
0.0000754
0.0000753

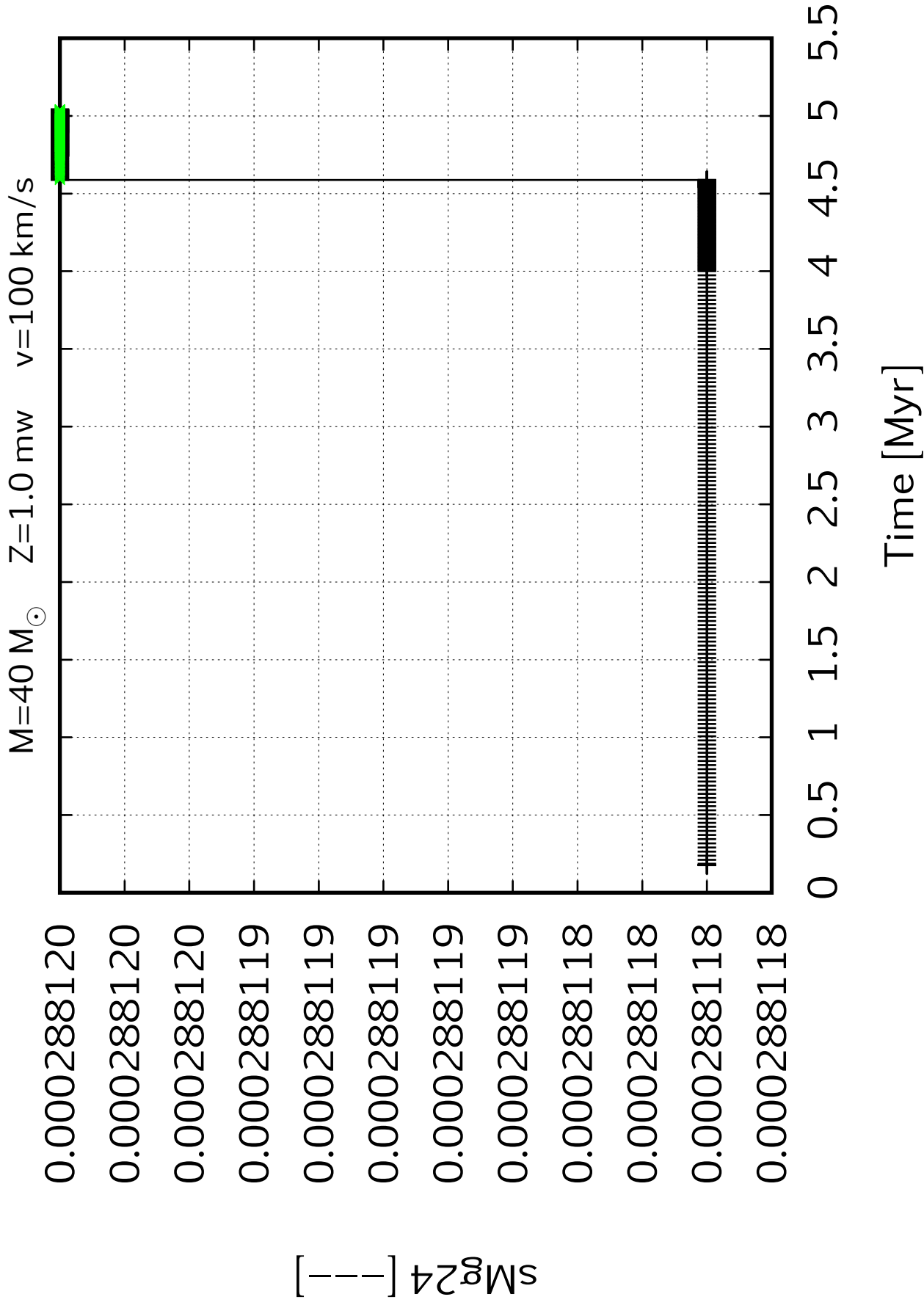
$[\text{--}]^{\text{Ne22}}$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



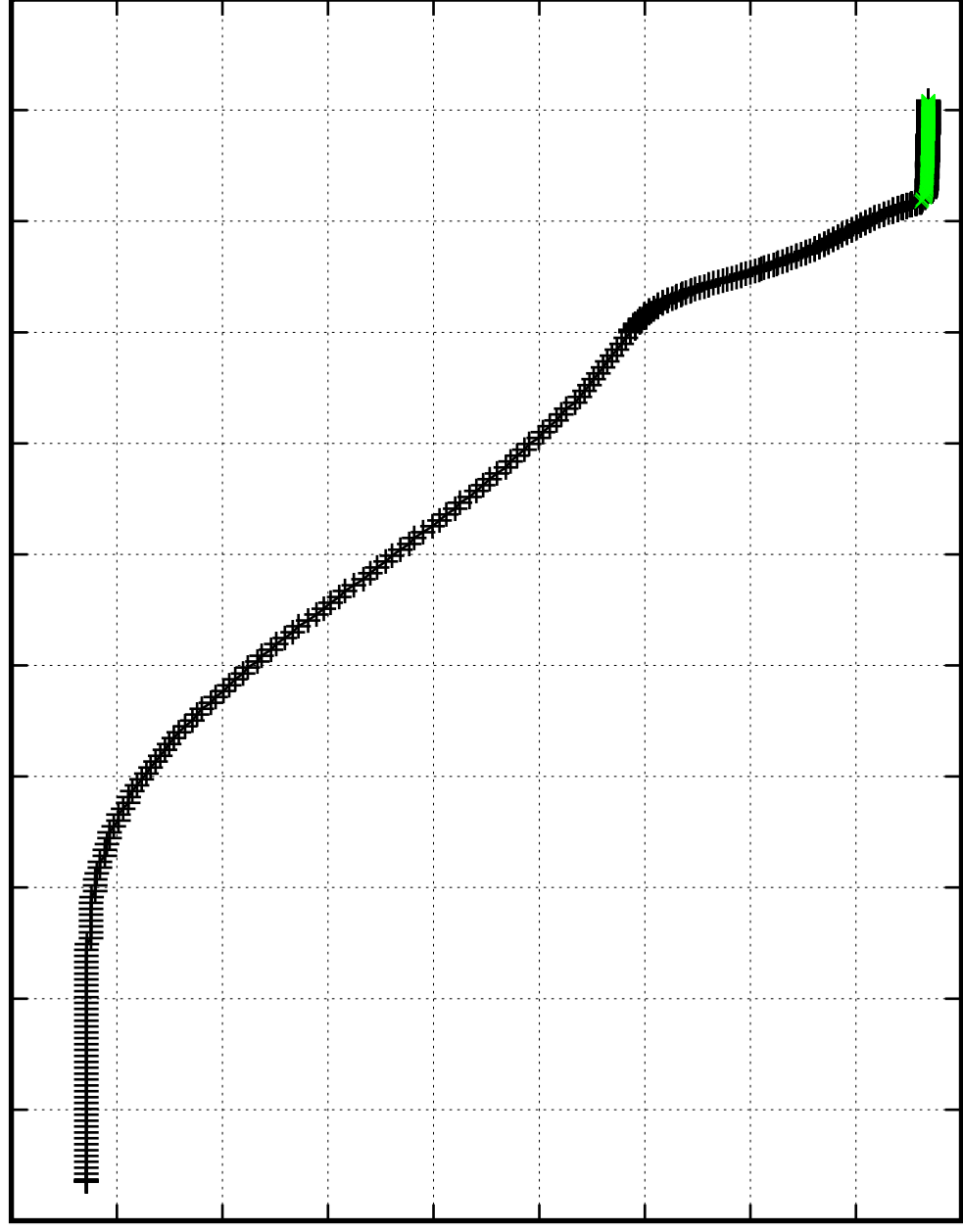




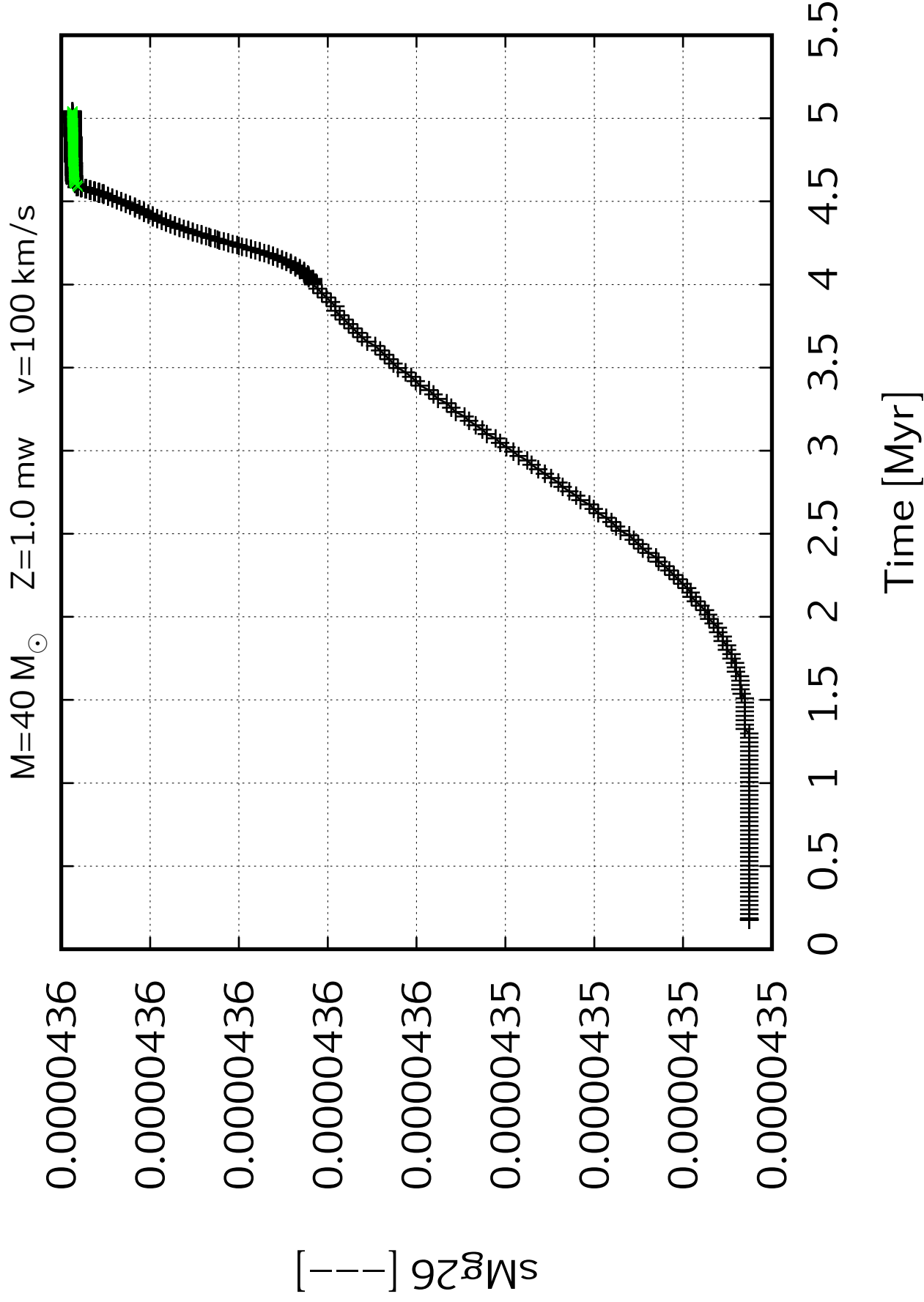
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

0.0000380
0.0000380
0.0000380
0.0000380
0.0000379
0.0000379
0.0000379
0.0000379
0.0000379
0.0000378

$[\text{--}] \text{Mg}_{25}$



Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

3×10^{-9}

2.5×10^{-9}

2×10^{-9}

1.5×10^{-9}

1×10^{-9}

5×10^{-10}

0

$[\text{--}]^{\text{Al26}}$

0

0.5

1

1.5

2

2.5

3

3.5

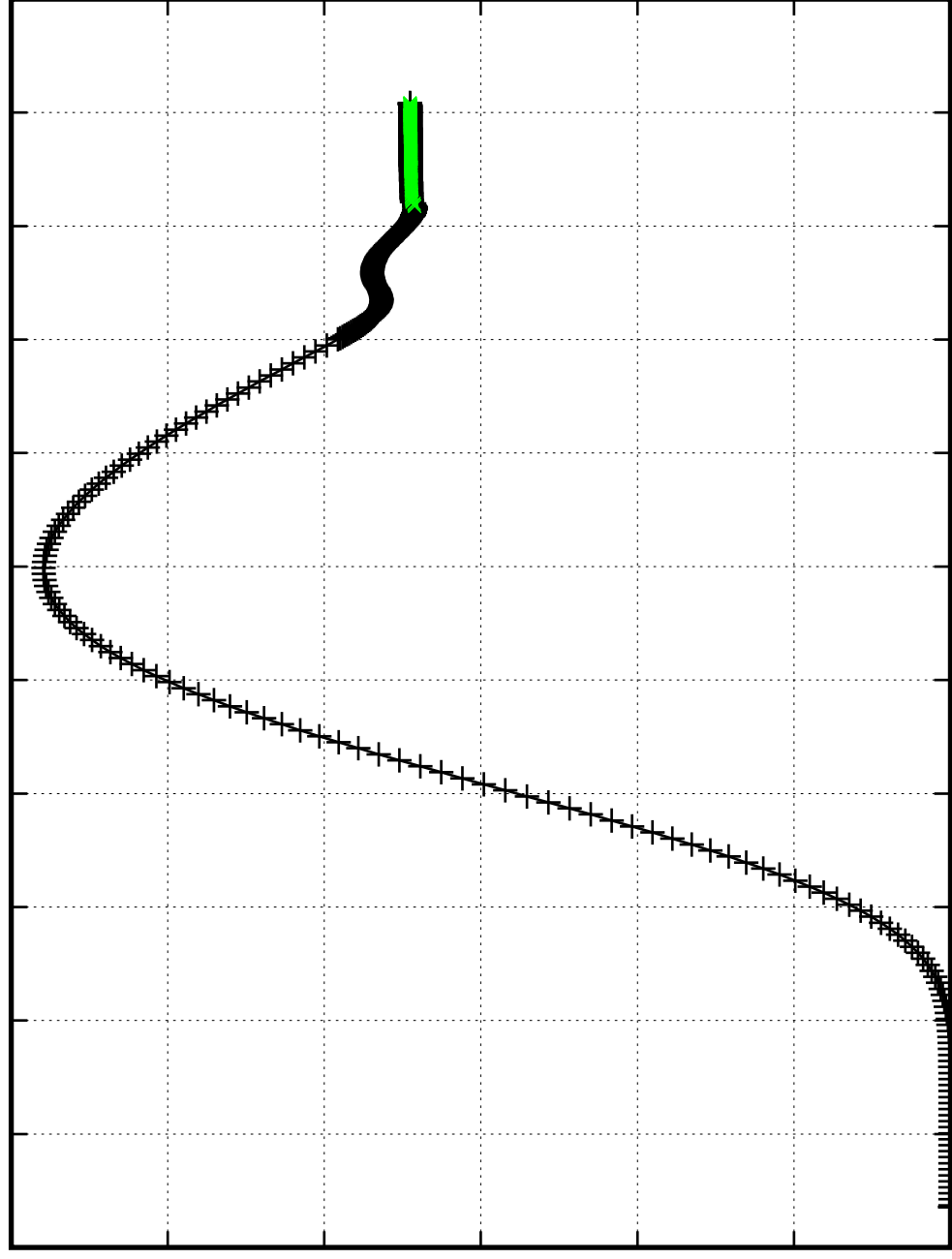
4

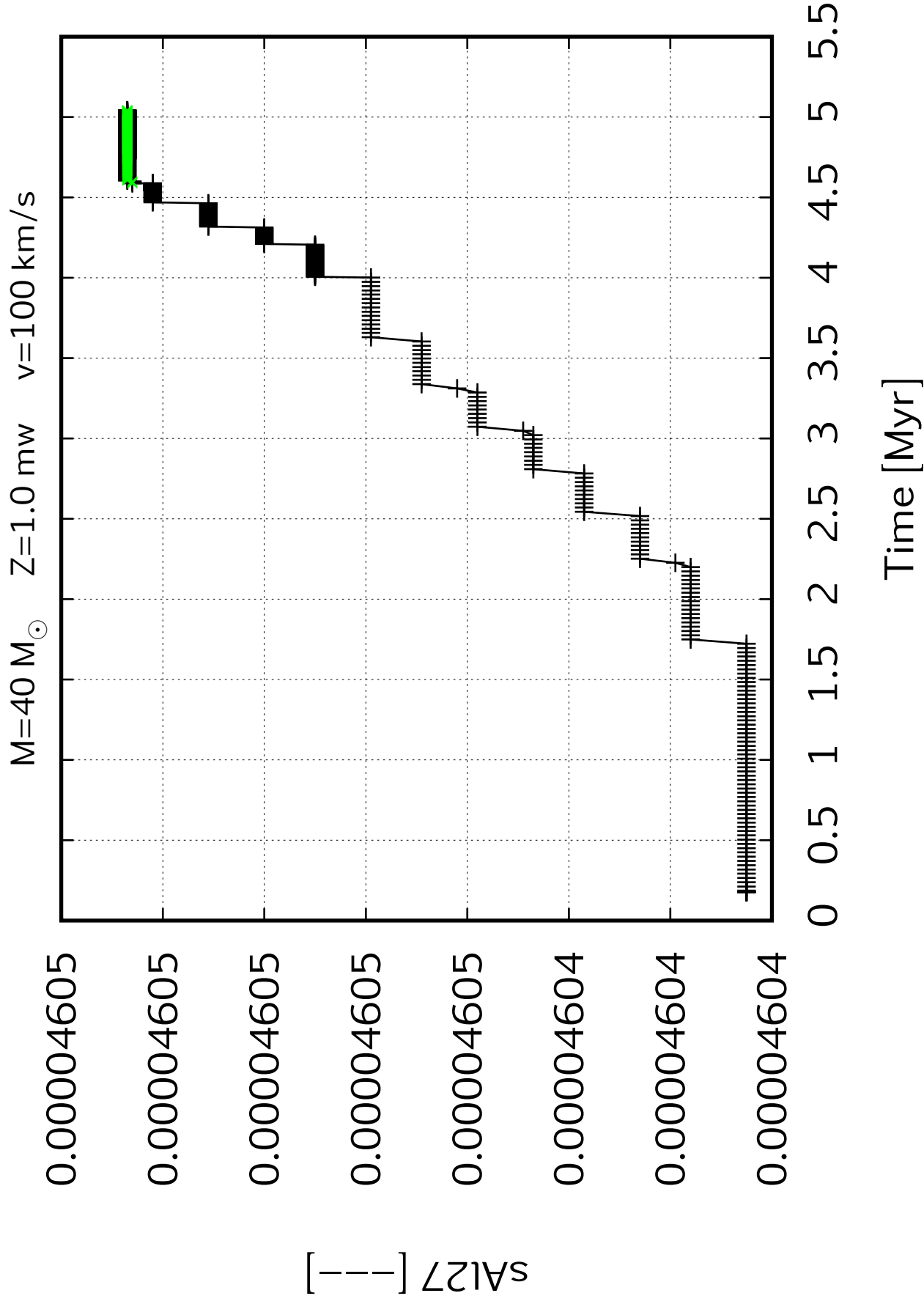
4.5

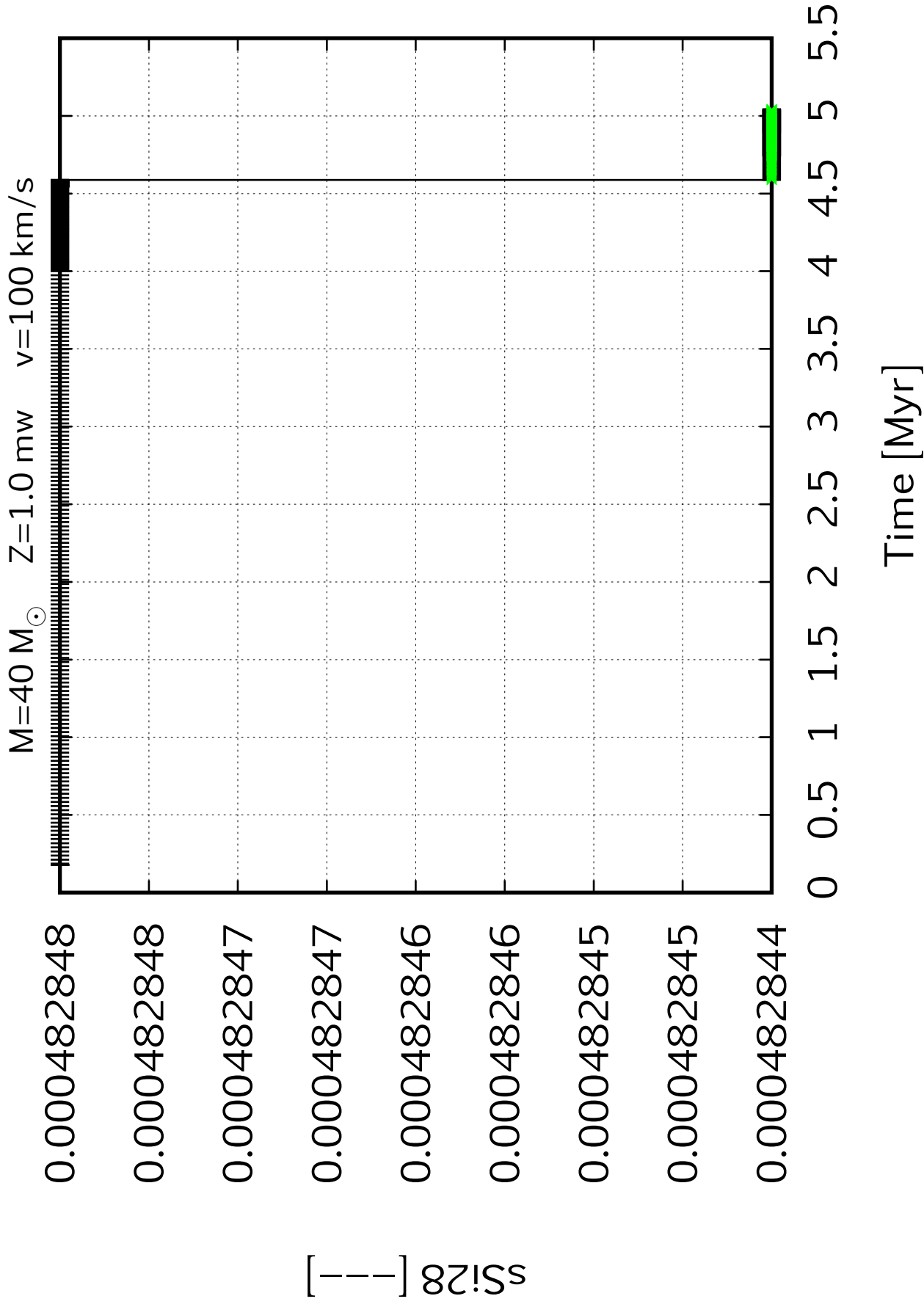
5

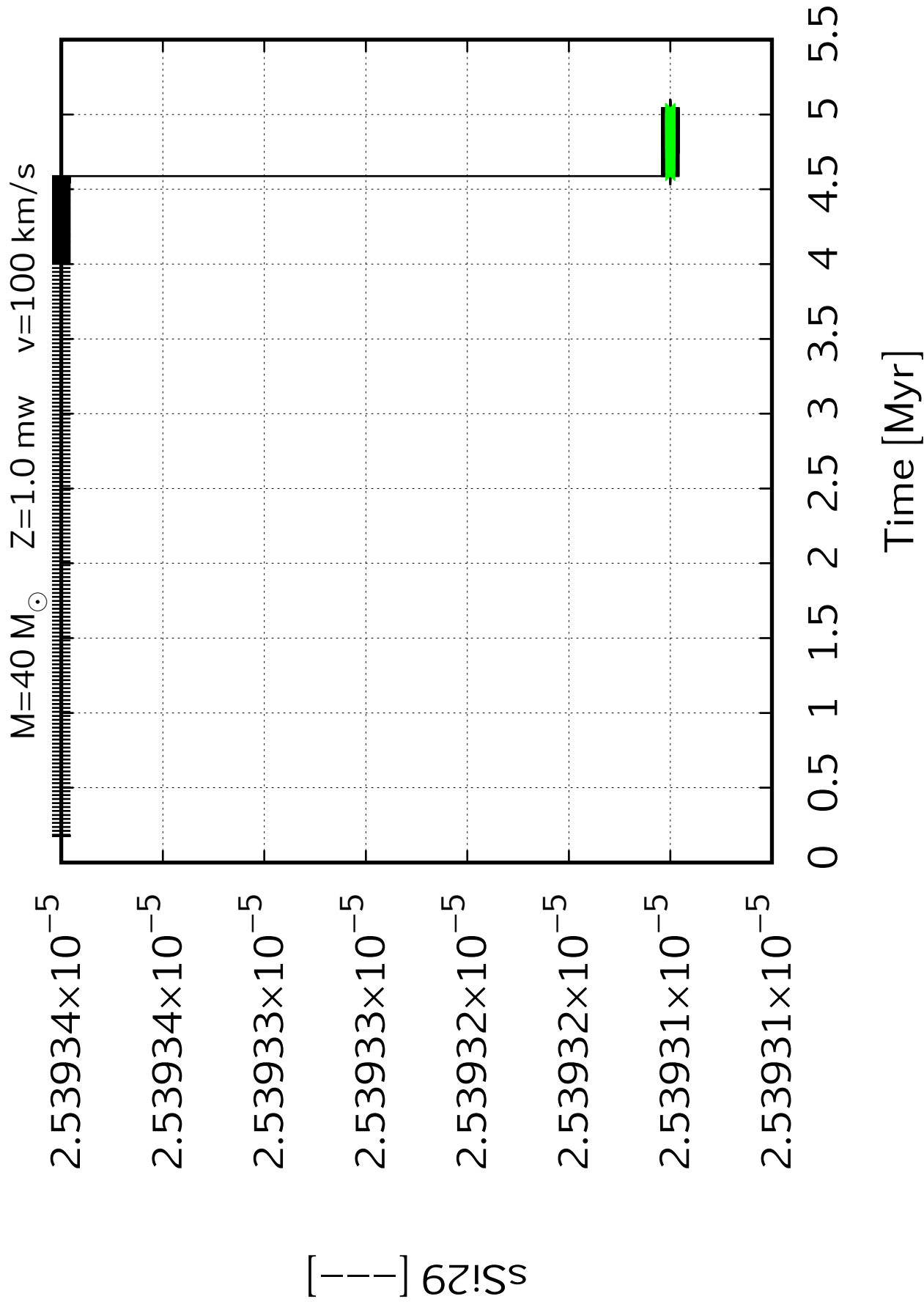
5.5

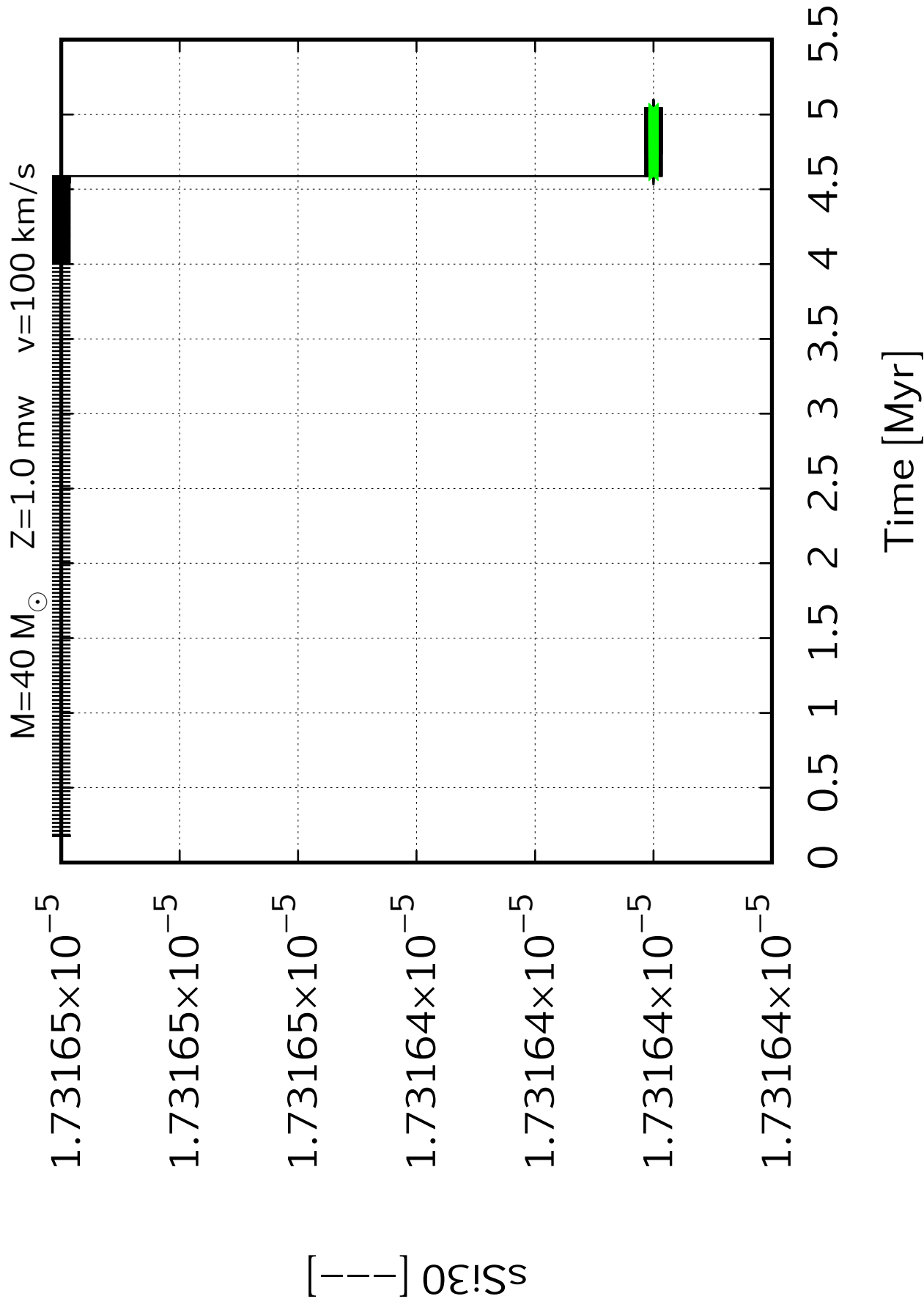
Time [Myr]

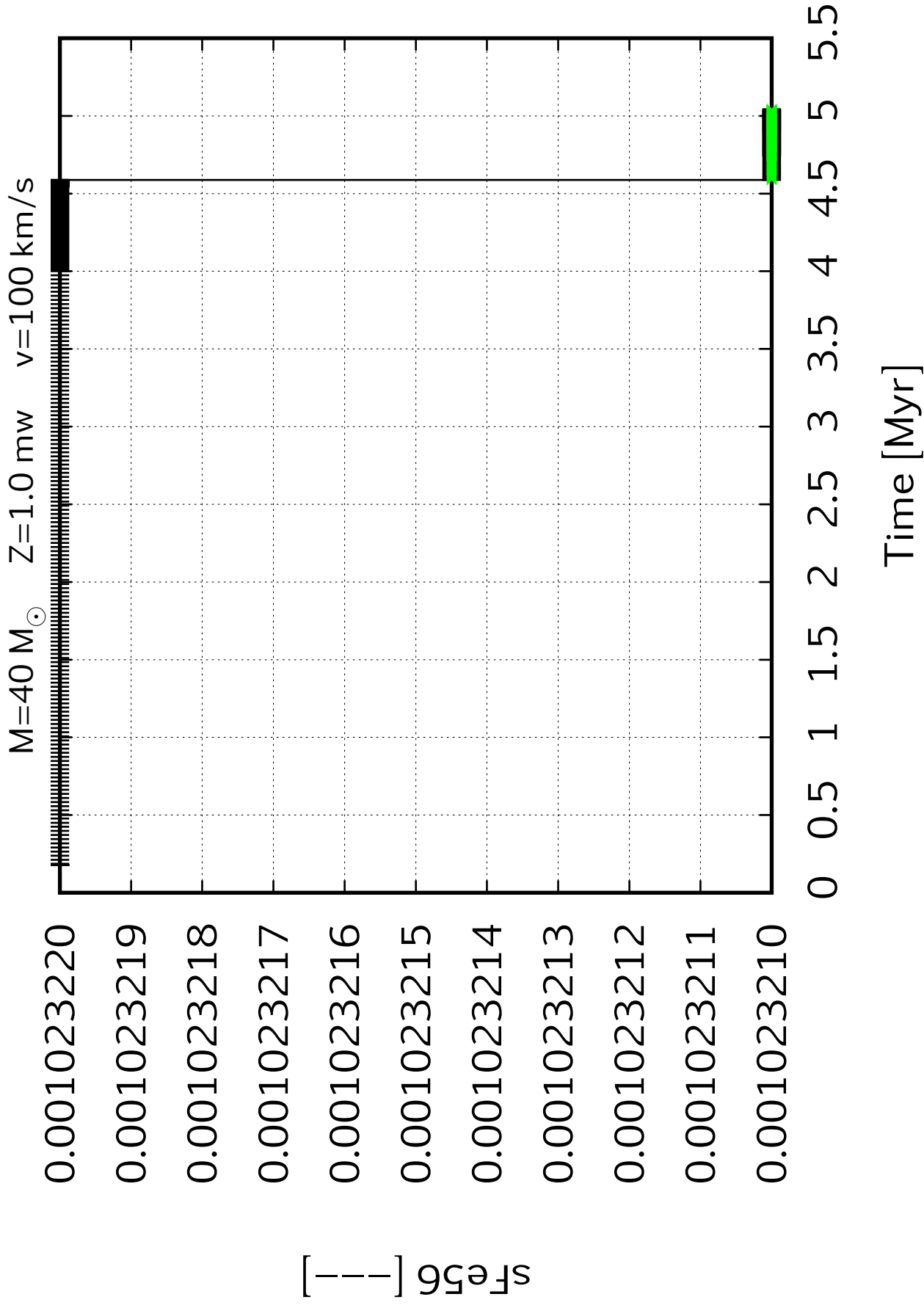




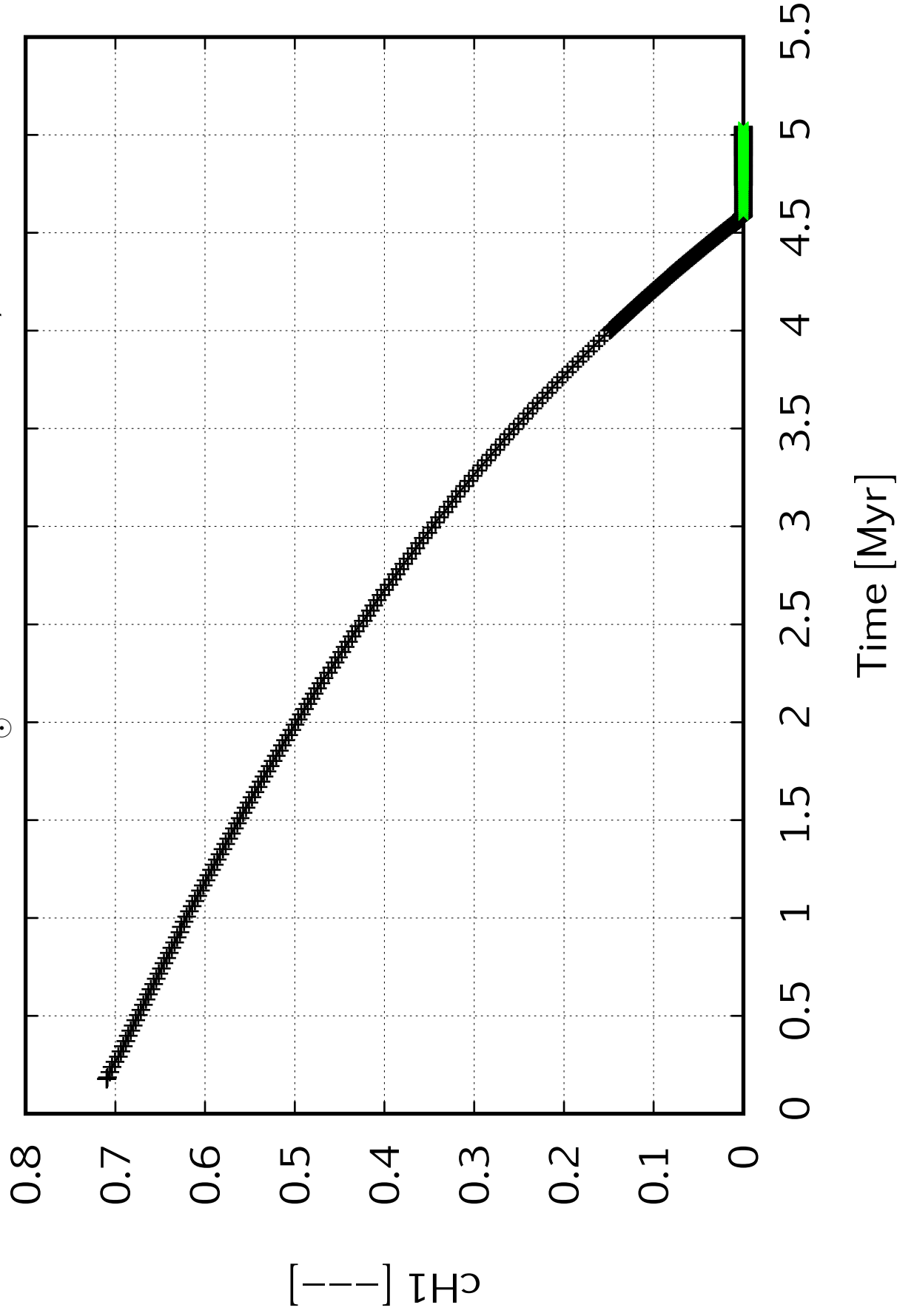








$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\,\text{km/s}$



$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$

1.765×10^{-11}

1.76×10^{-11}

1.755×10^{-11}

1.75×10^{-11}

1.745×10^{-11}

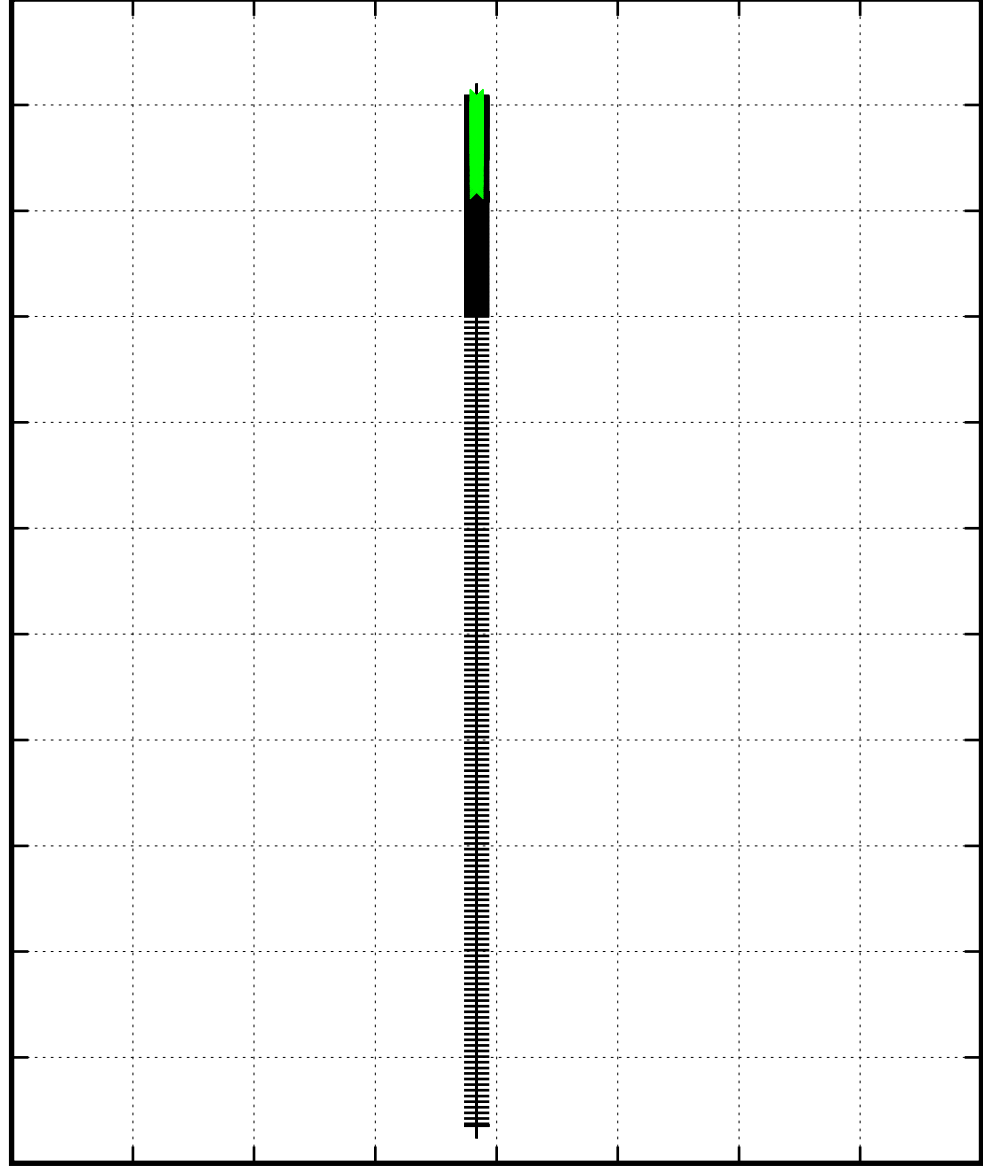
1.74×10^{-11}

1.735×10^{-11}

1.73×10^{-11}

1.725×10^{-11}

$[\text{--}]_{\text{CH}_2}$



0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]

$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$

2.5×10^{-7}

2×10^{-7}

1.5×10^{-7}

1×10^{-7}

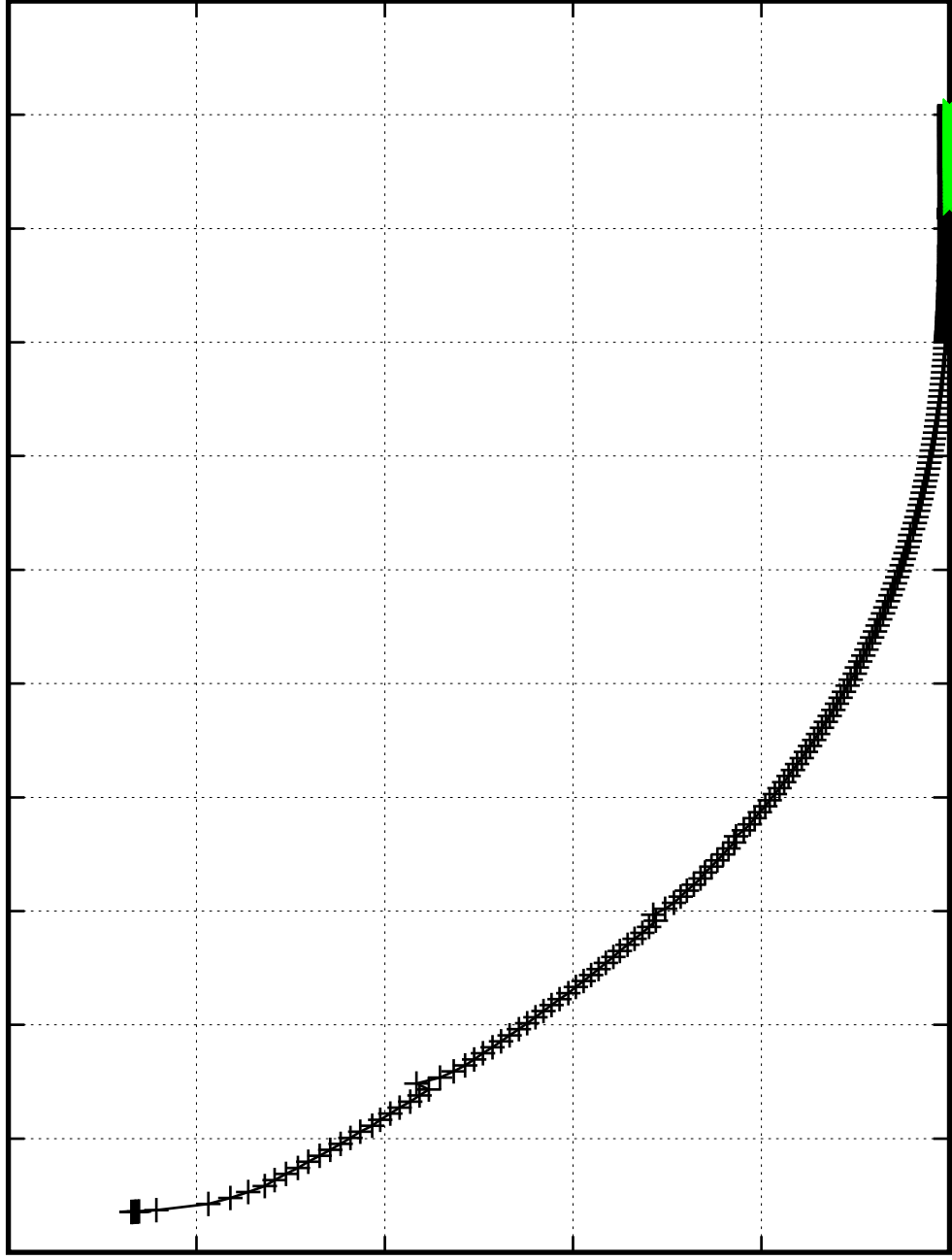
5×10^{-8}

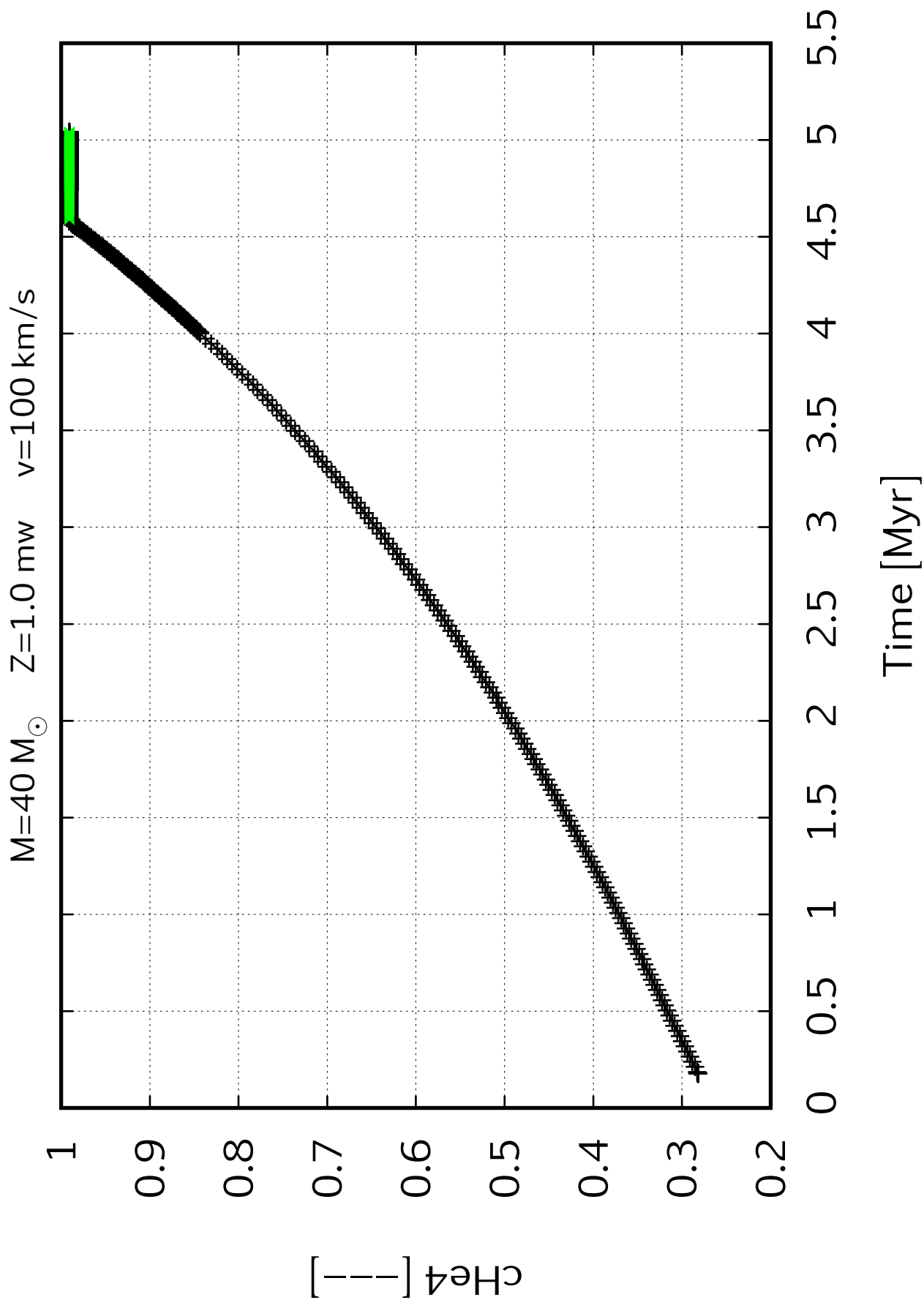
0

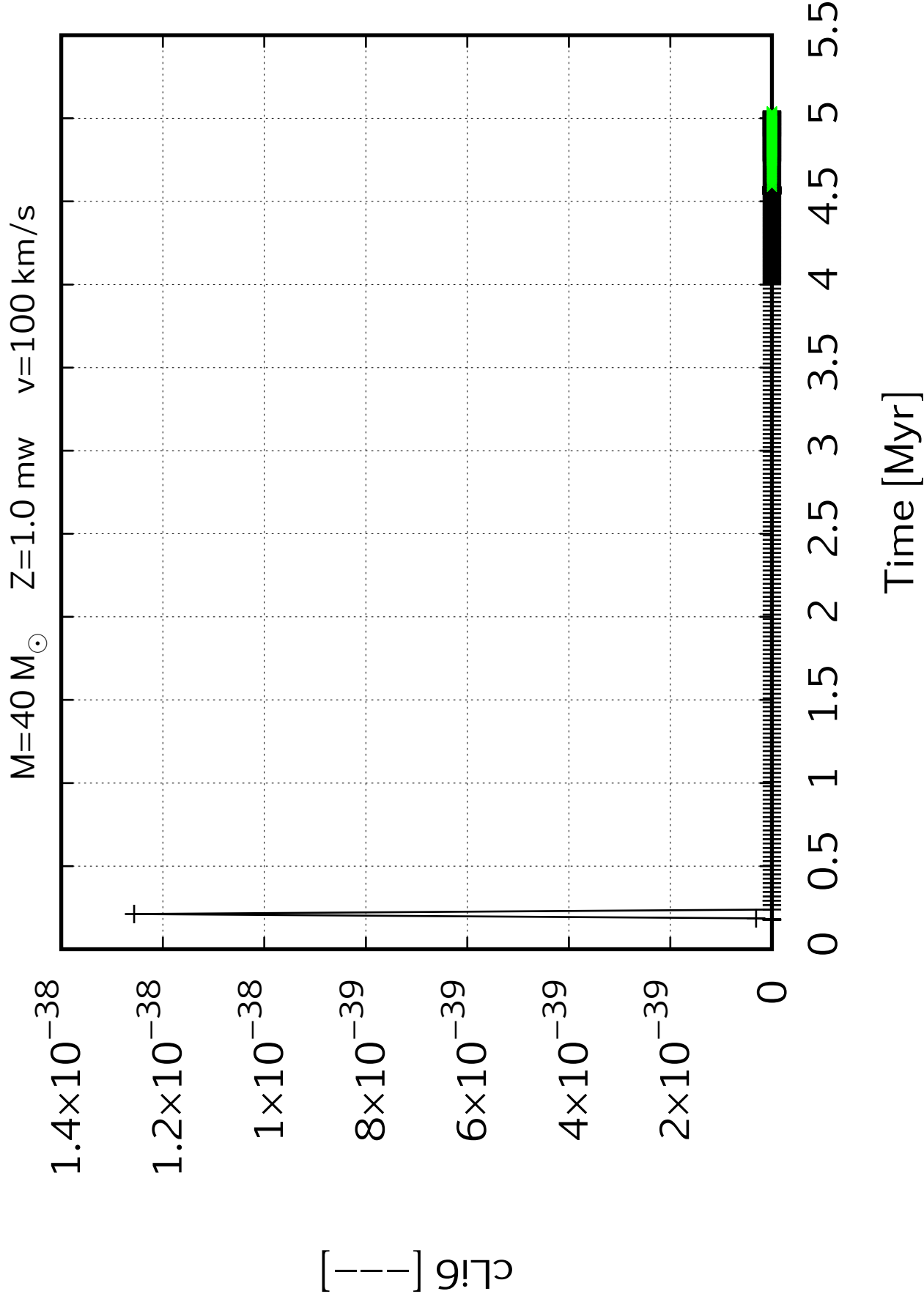
$[\text{He III}]$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

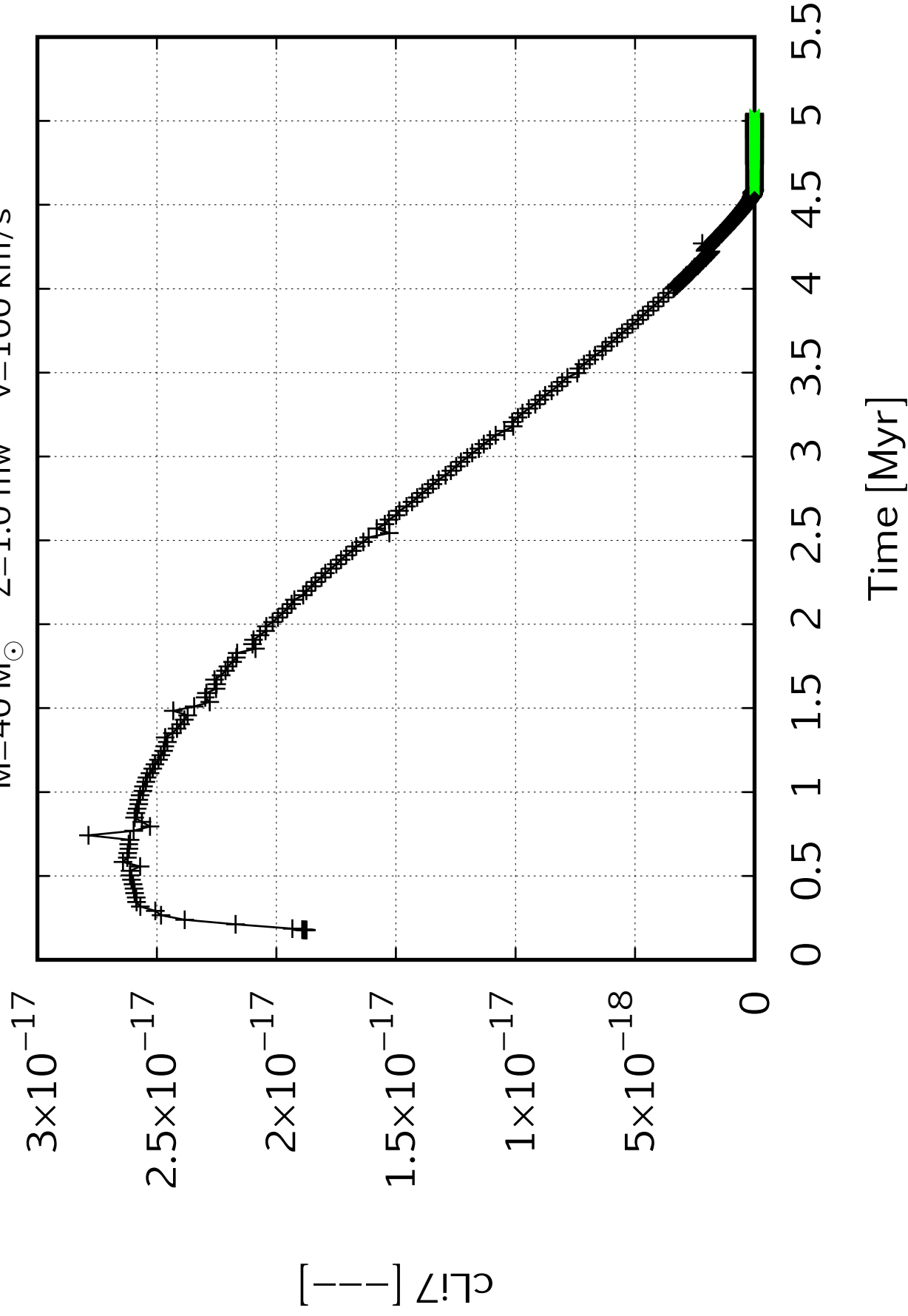
Time [Myr]



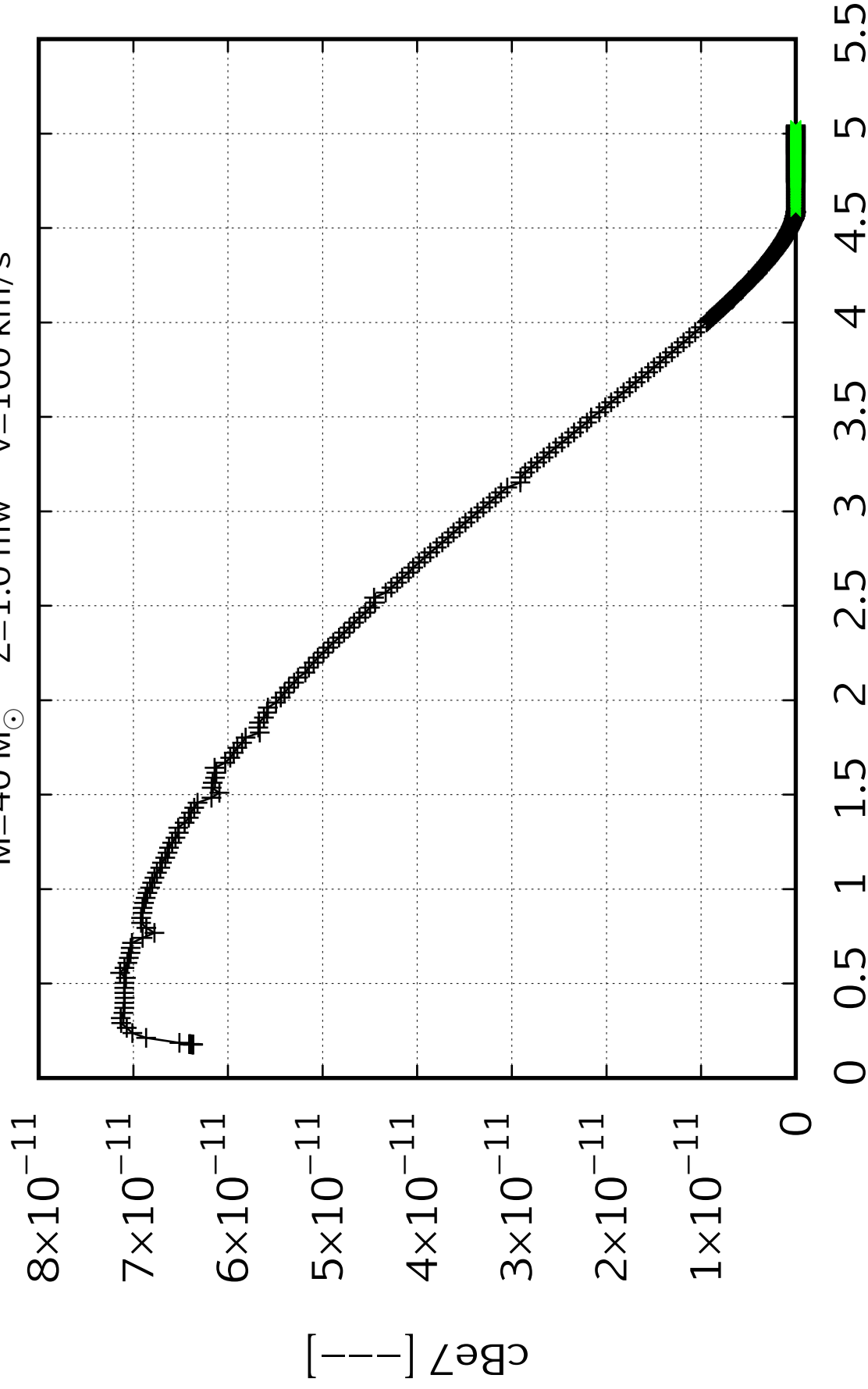




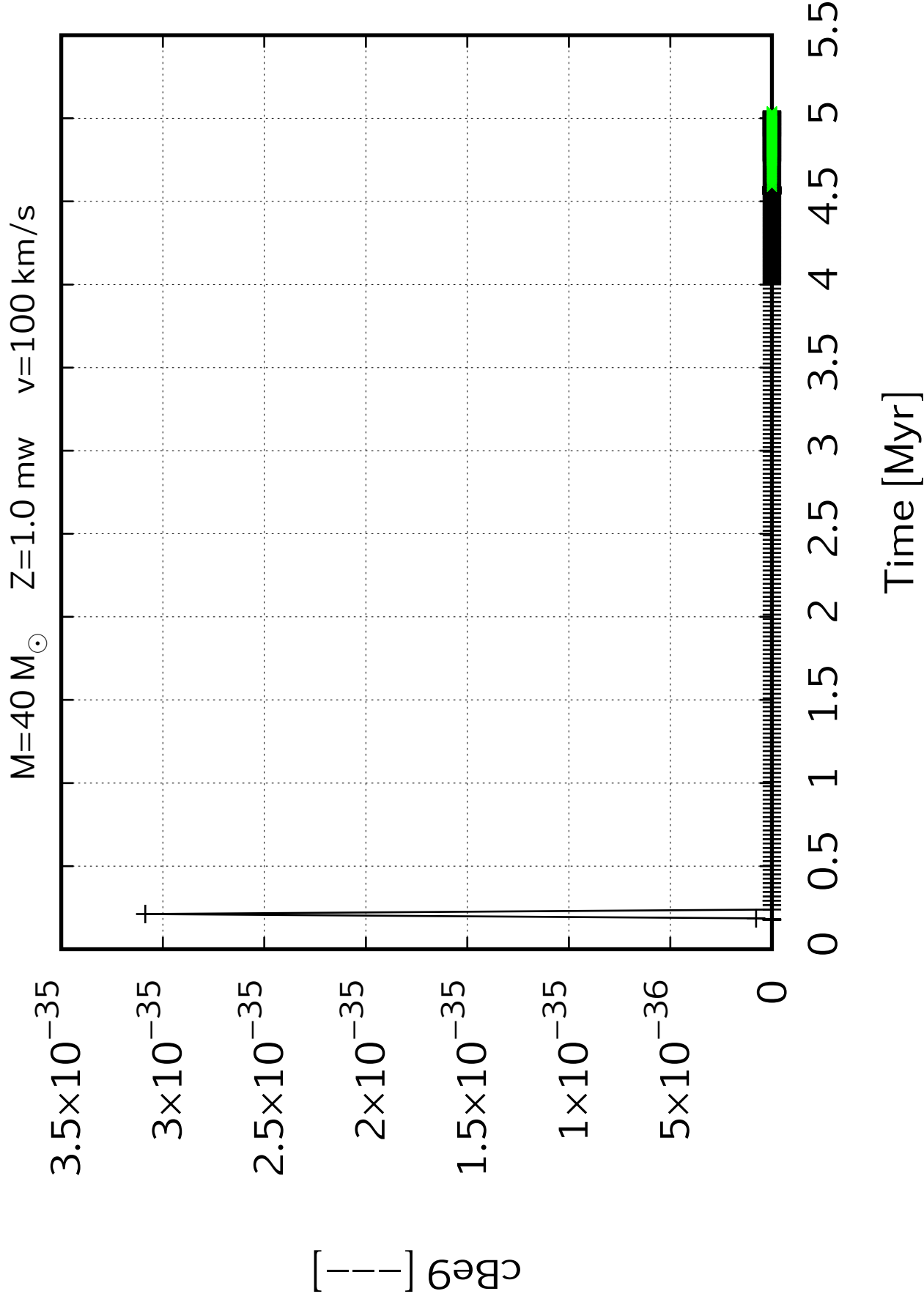
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$



$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$



Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

4×10^{-18}

3.5×10^{-18}

3×10^{-18}

2.5×10^{-18}

2×10^{-18}

1.5×10^{-18}

1×10^{-18}

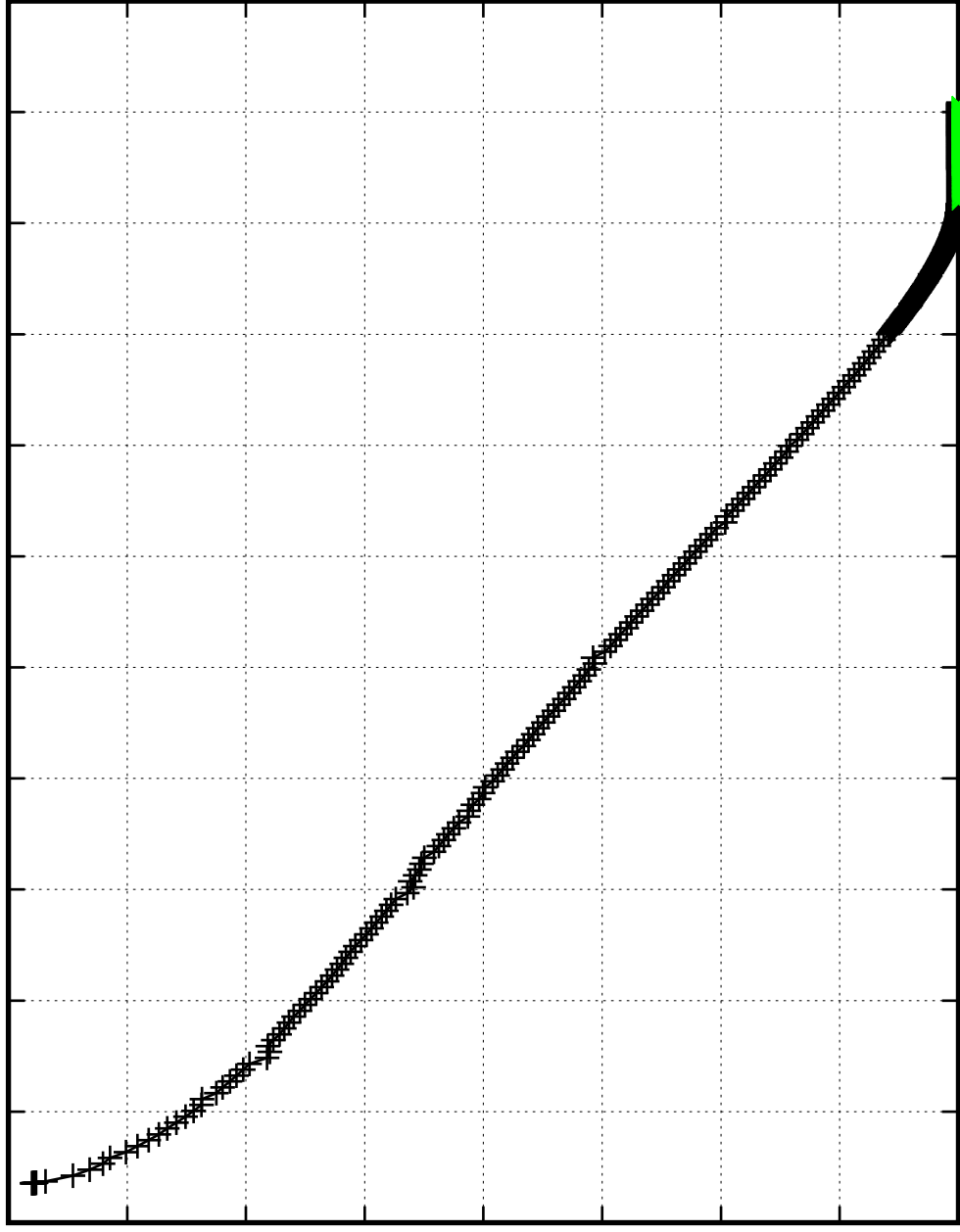
5×10^{-19}

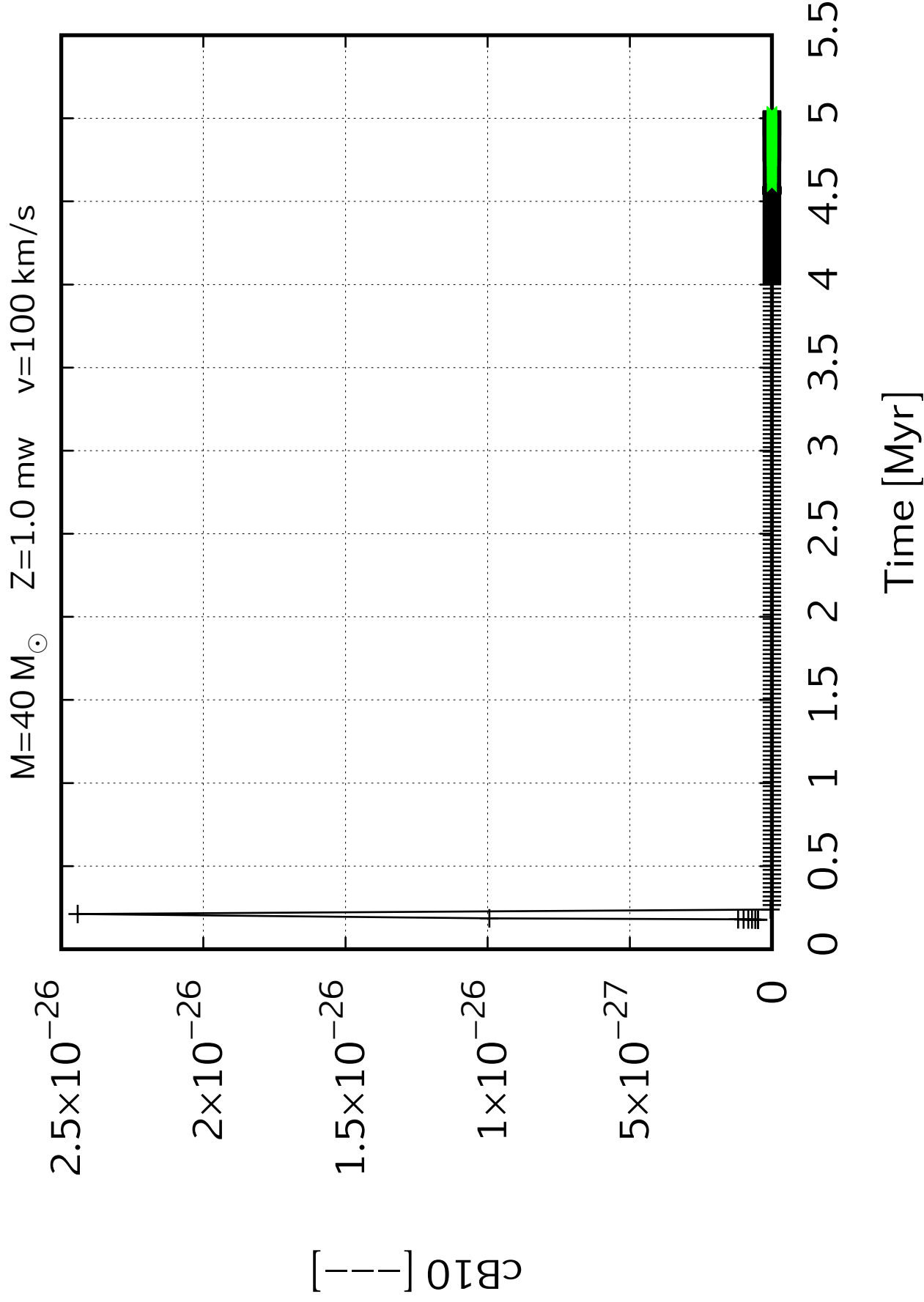
0

$\left[\frac{\text{C}}{\text{H}}\right]$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]





$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

4×10^{-28}

3.5×10^{-28}

3×10^{-28}

2.5×10^{-28}

2×10^{-28}

1.5×10^{-28}

1×10^{-28}

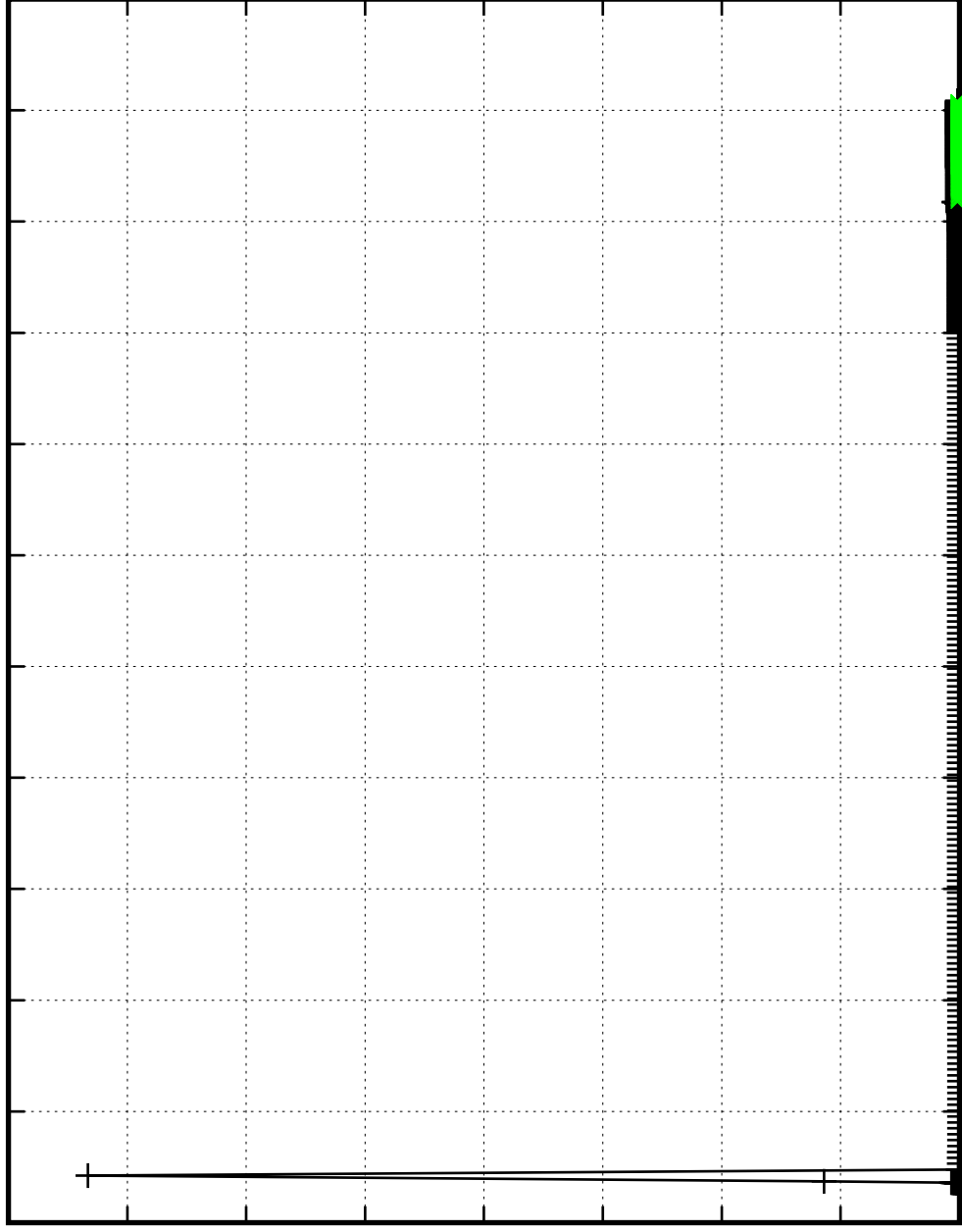
5×10^{-29}

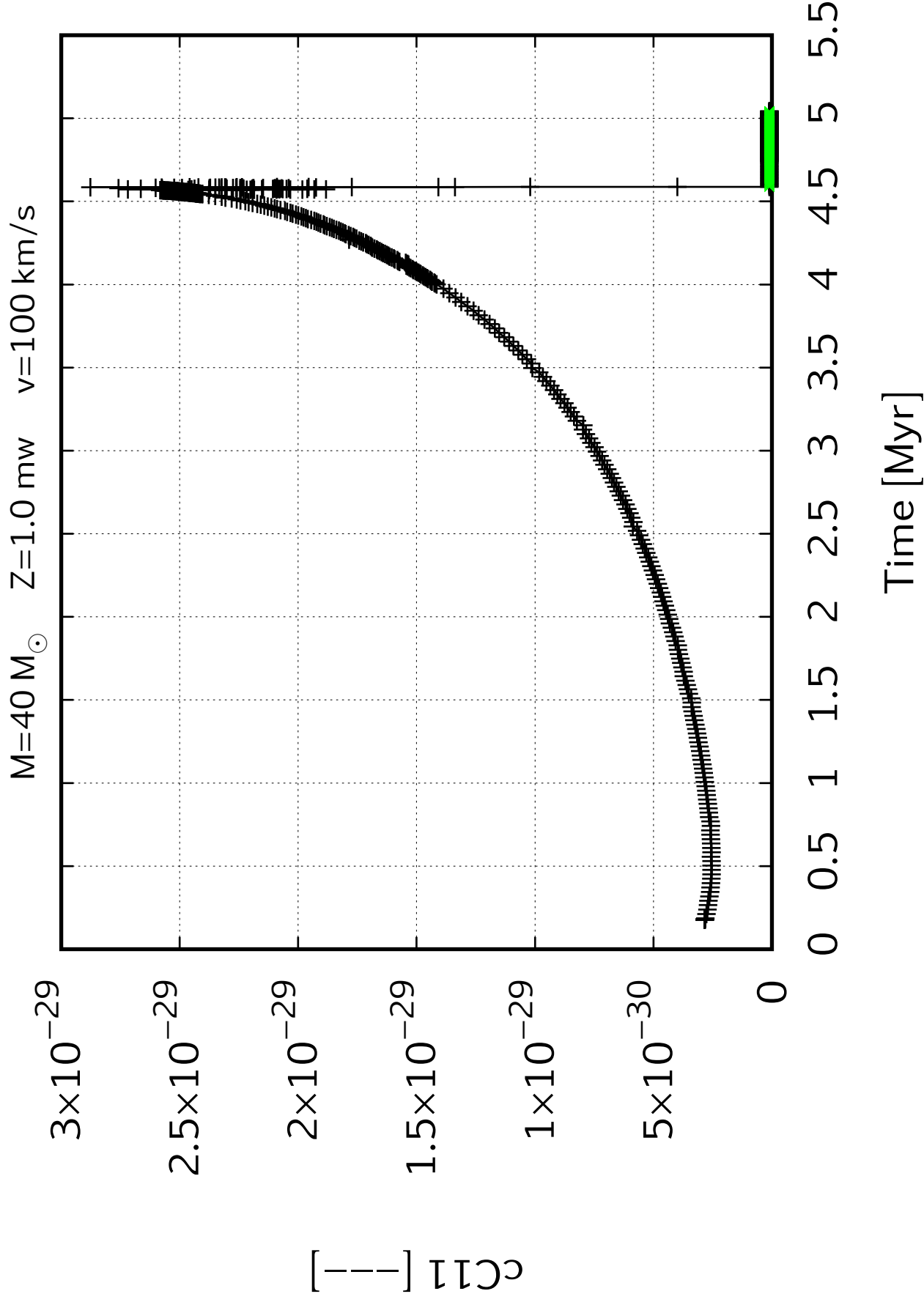
0

$[I_{11}]_{\text{CB}}$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]





$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\,\text{km/s}$

0.00018

0.00016

0.00014

0.00012

0.00010

0.00008

0.00006

0.00004

$c_{\text{C12}}[-]$

0

0.5

1

1.5

2

2.5

3

3.5

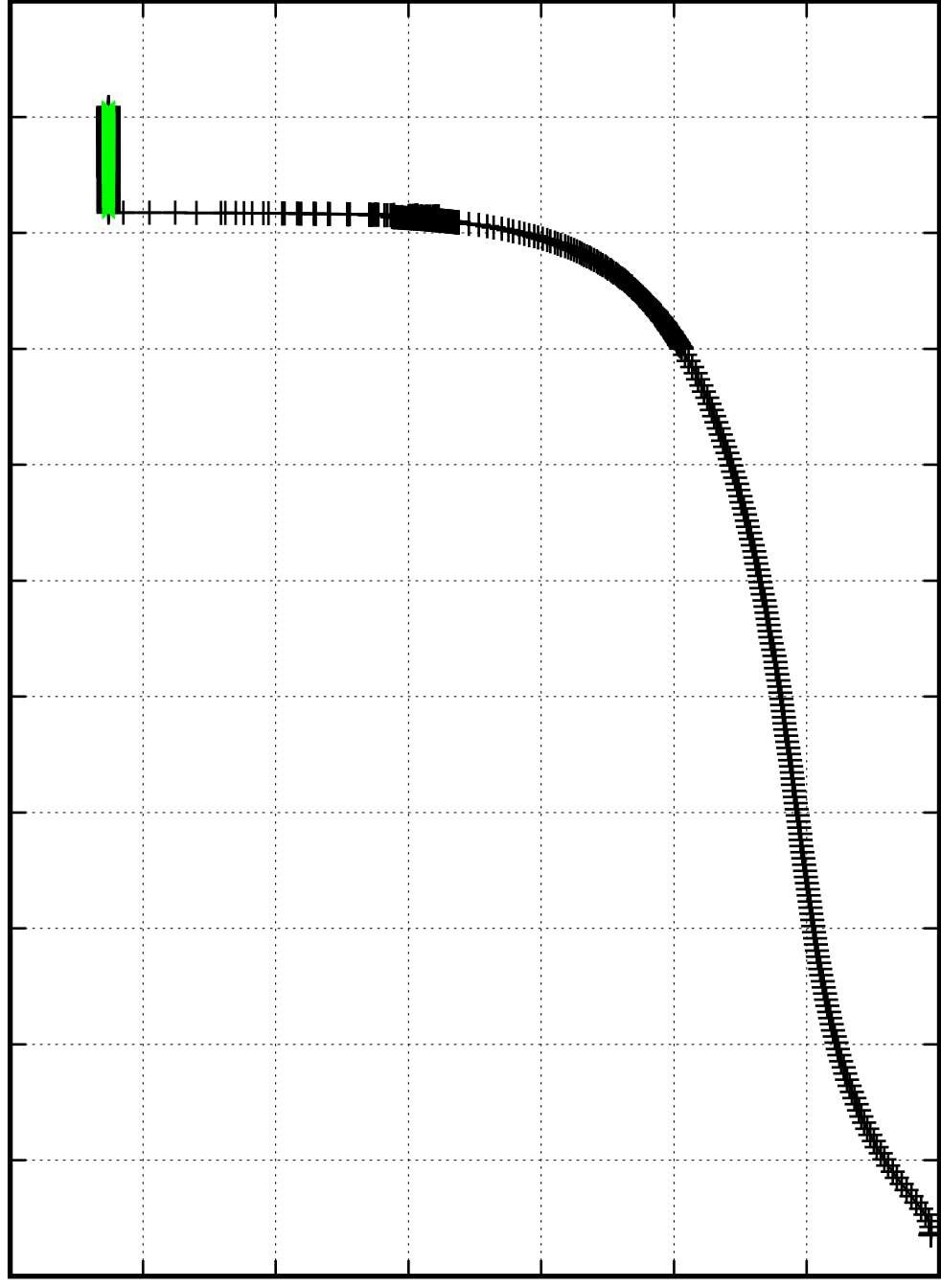
4

4.5

5

5.5

Time [Myr]



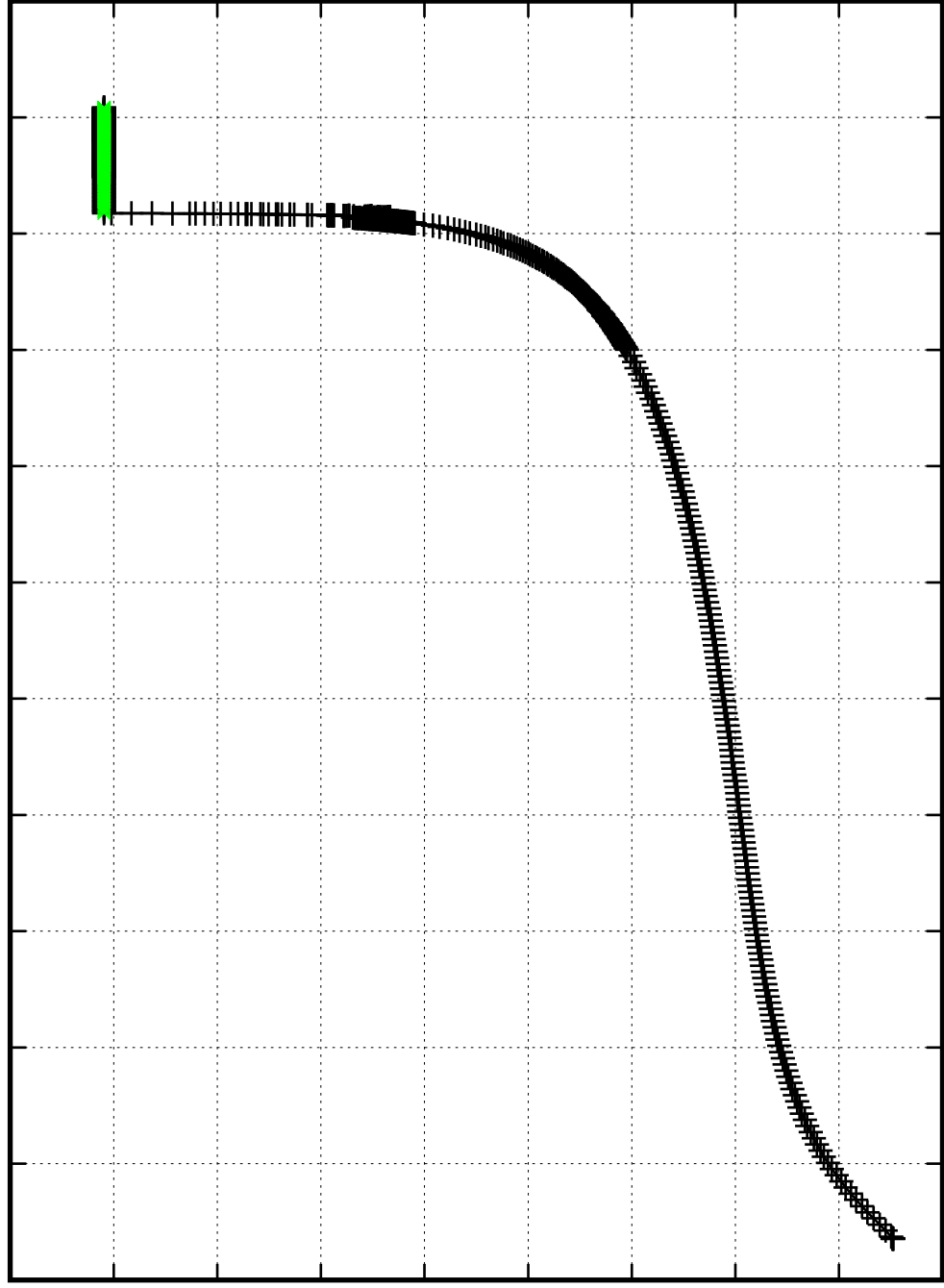
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\,\text{km/s}$

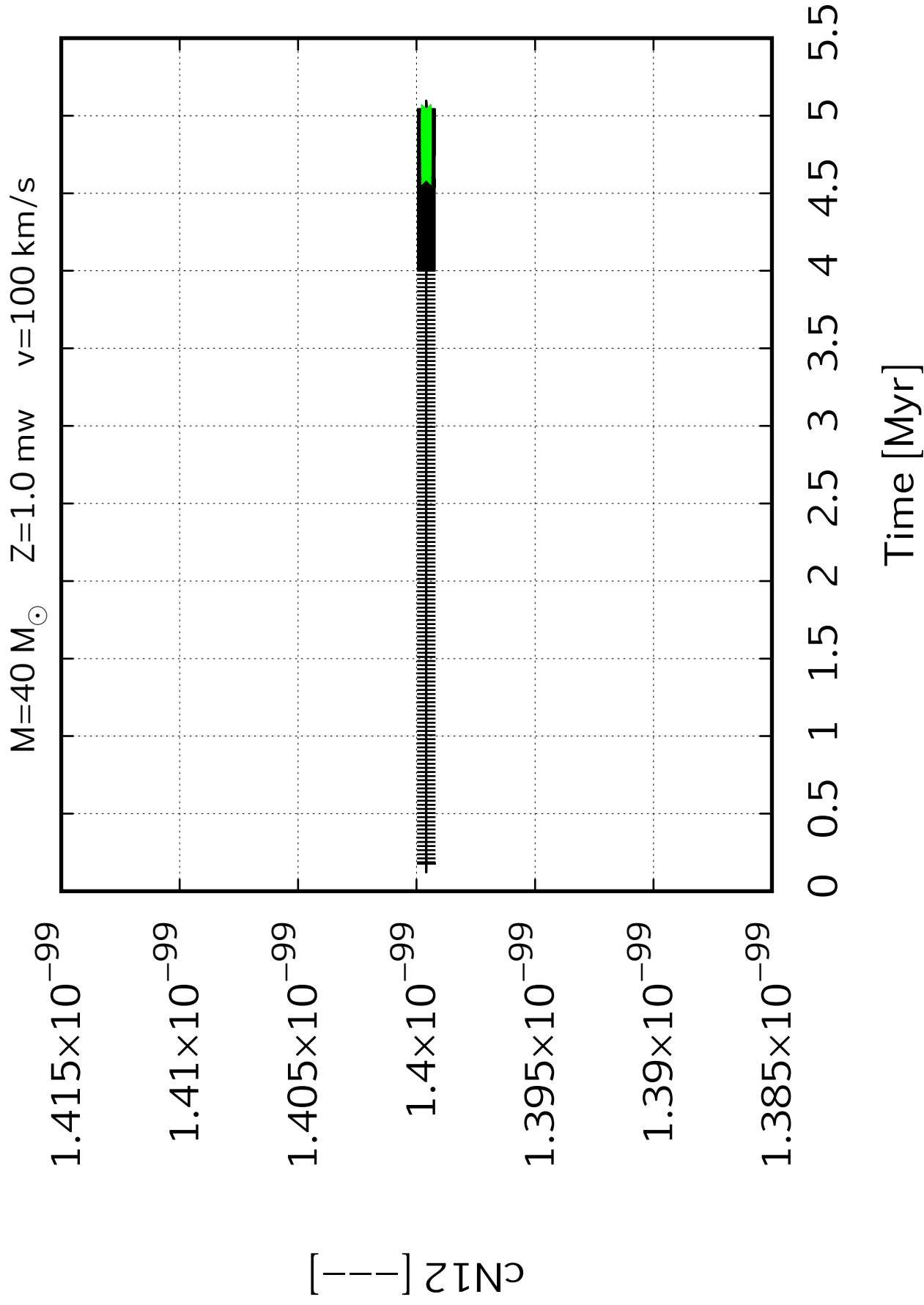
0.00006
0.00005
0.00005
0.00004
0.00004
0.00003
0.00003
0.00002
0.00002
0.00001

$[\text{C}\,\text{I}]$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]





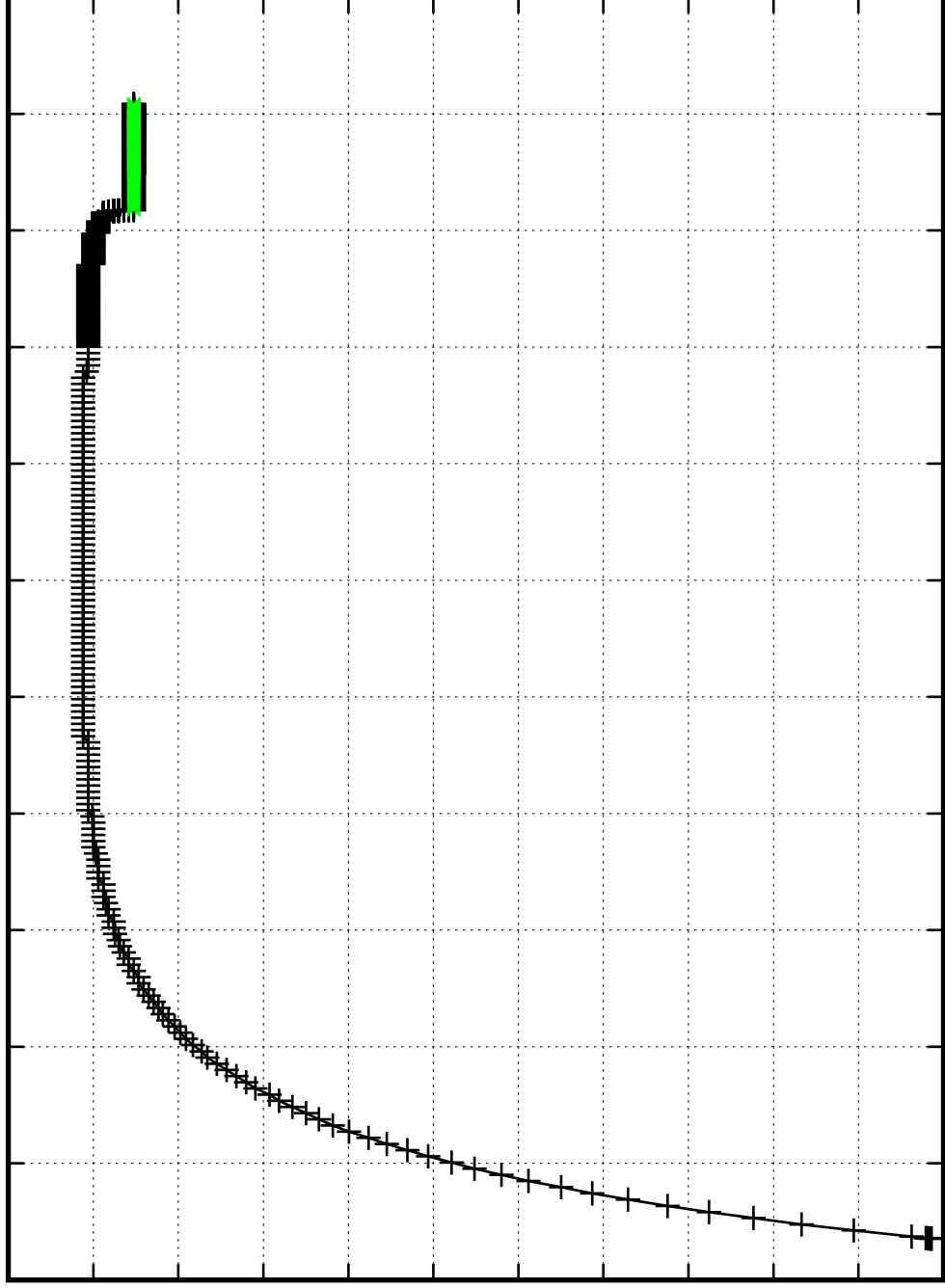
$M=40\,M_{\odot}$ $Z=1.0\,m_{\odot}$ $v=100\,\text{km/s}$

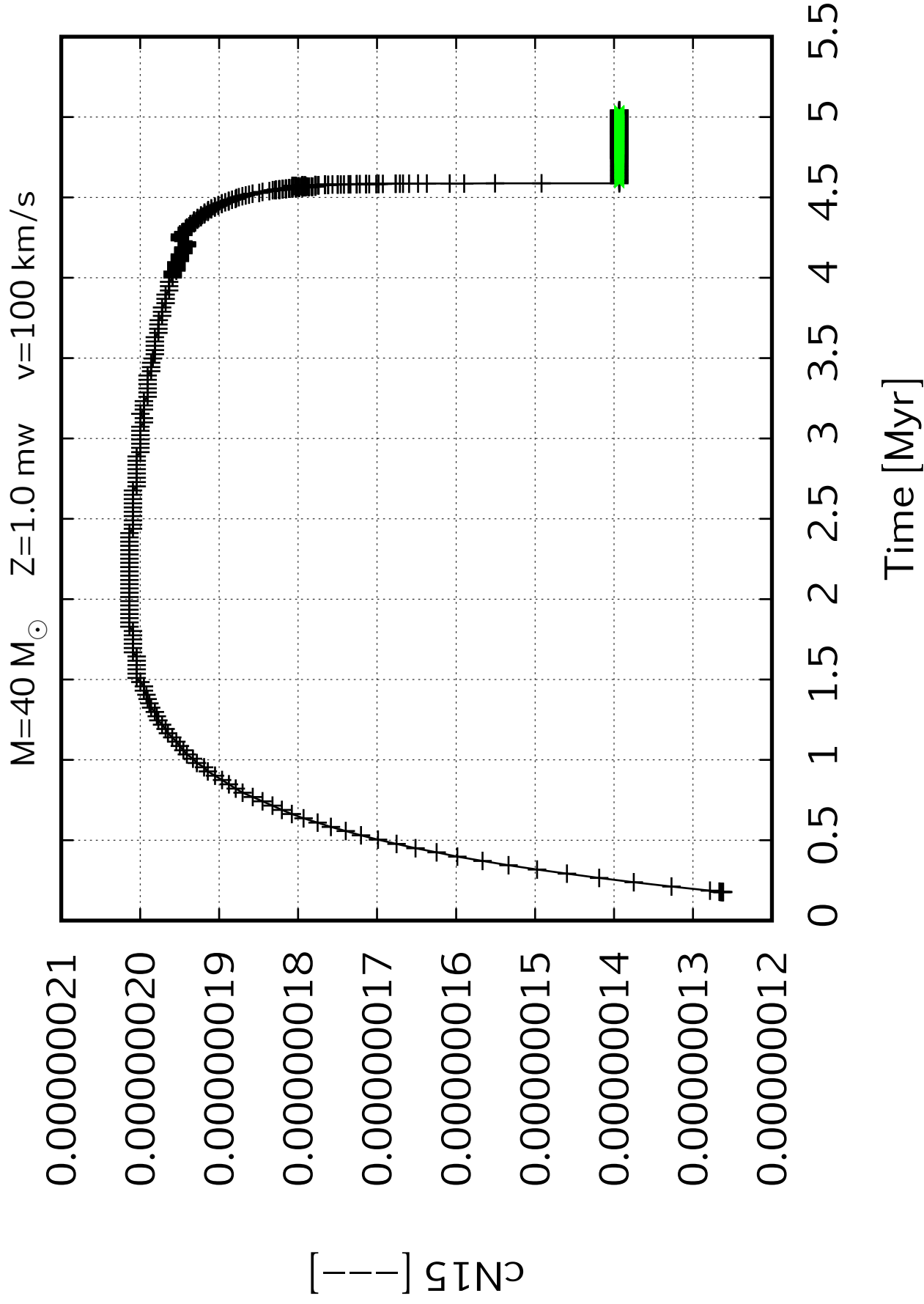
0.0054
0.0052
0.005
0.0048
0.0046
0.0044
0.0042
0.004
0.0038
0.0036
0.0034
0.0032

$cN_{14} []$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]





$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$

0.0025

0.002

0.0015

0.001

0.0005

0

$[\text{C}\,\text{II}]$

0

0.5

1

1.5

2

2.5

3

3.5

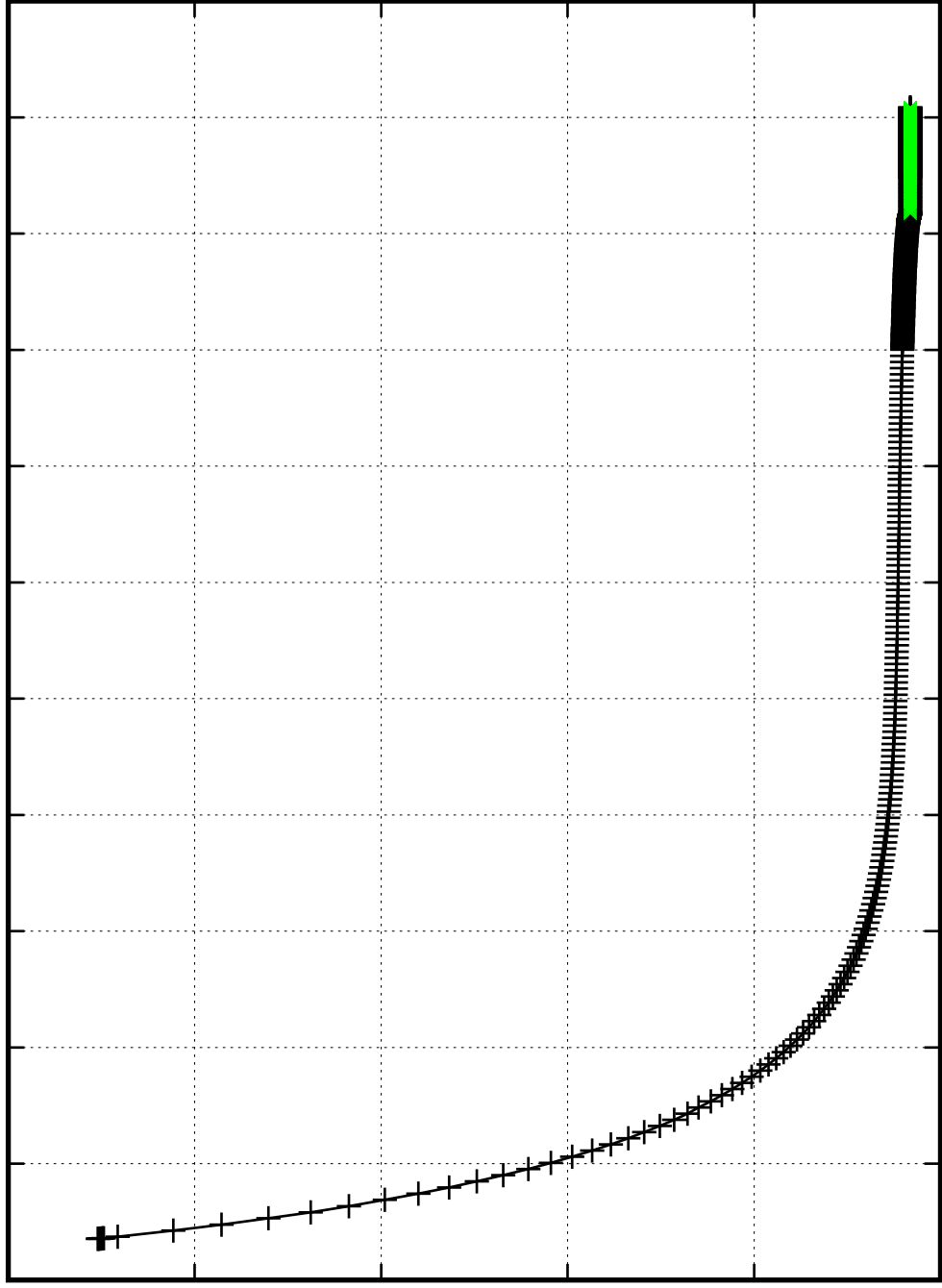
4

4.5

5

5.5

Time [Myr]



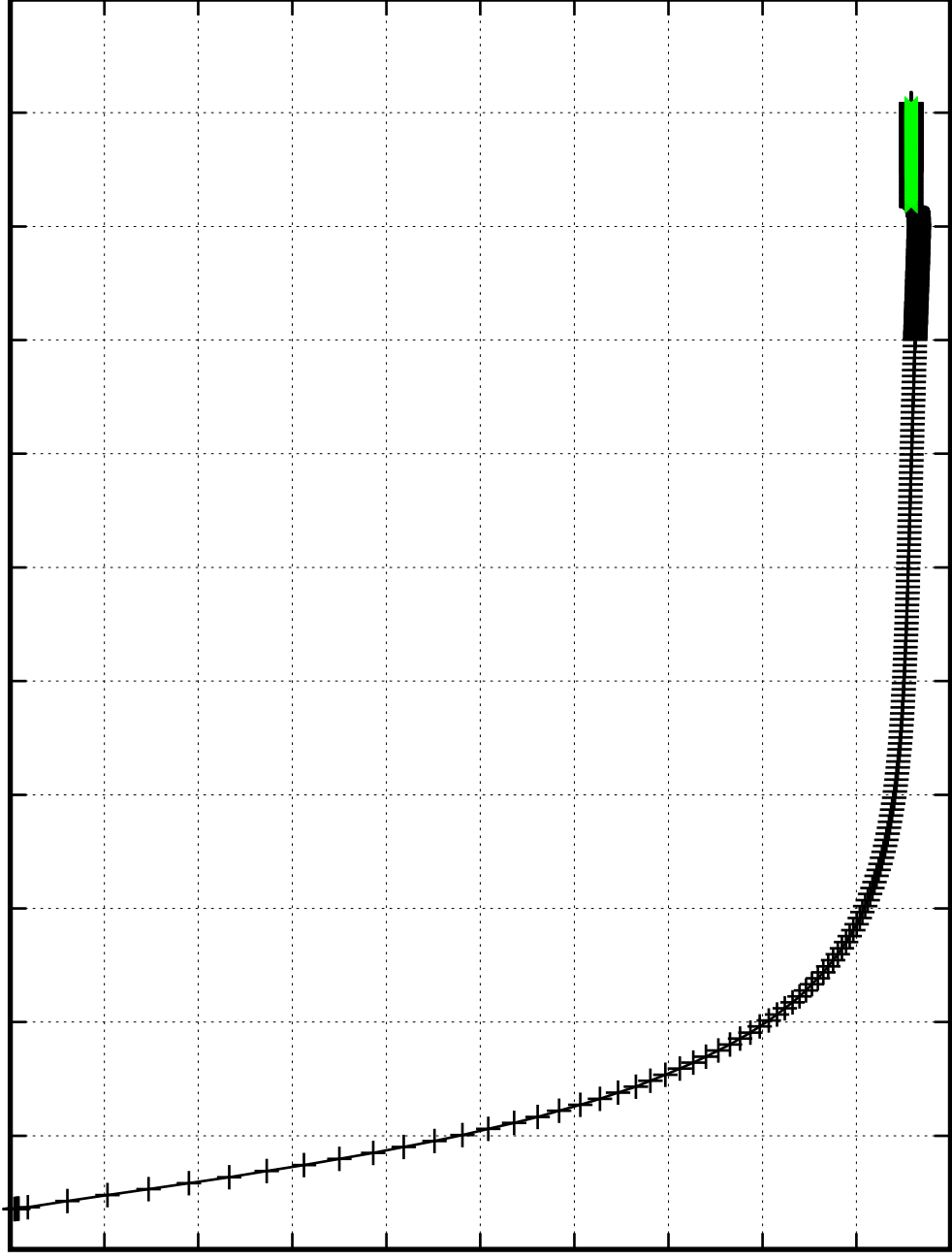
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

$[\text{O}17]$

0.0002
0.00018
0.00016
0.00014
0.00012
0.0001
 8×10^{-5}
 6×10^{-5}
 4×10^{-5}
 2×10^{-5}
0

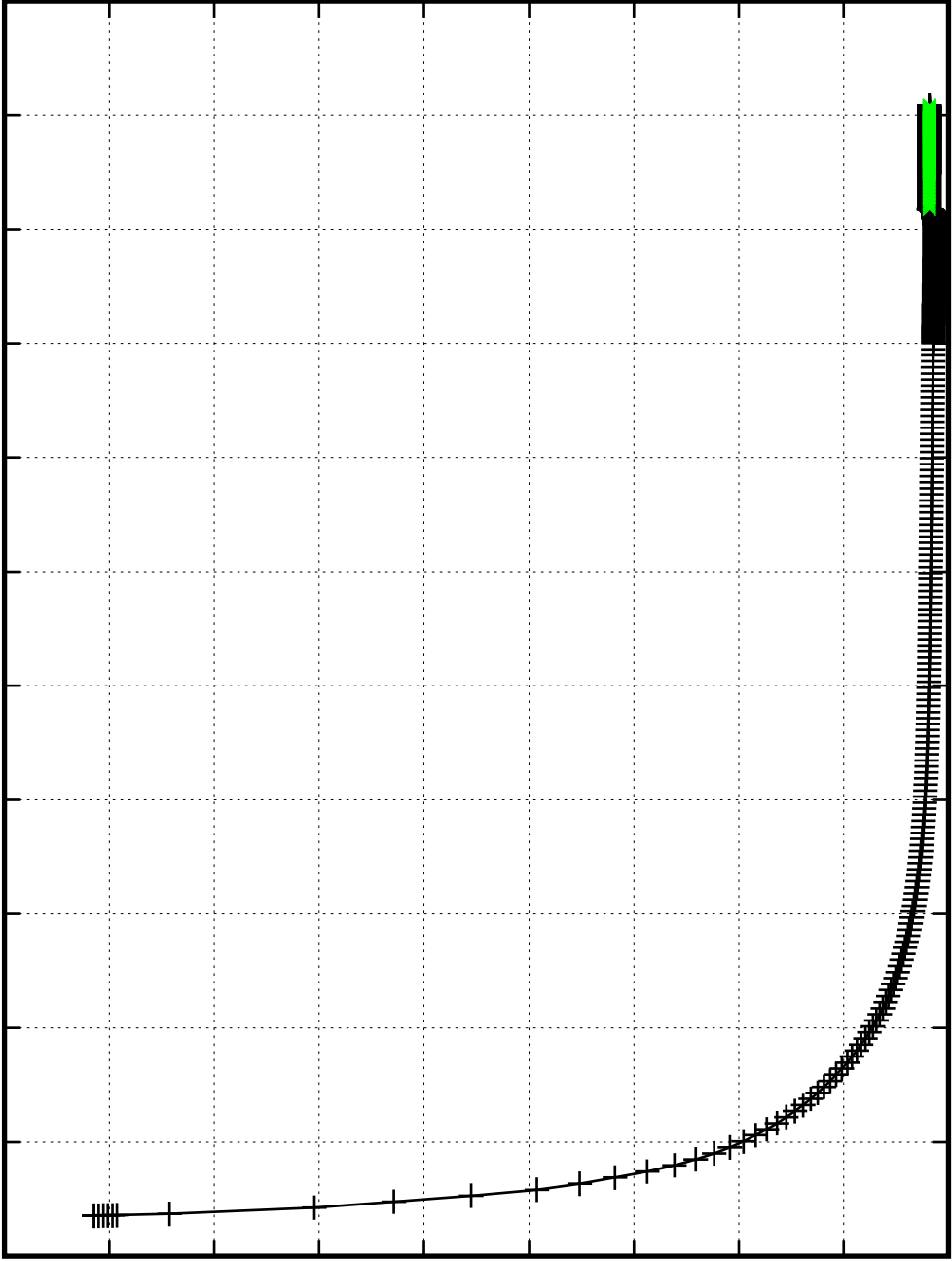
0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

$[\text{O II}]\lambda 4450$



Time [Myr]	$[\text{O II}]\lambda 4450$
0.0	1.65×10^{-9}
0.5	1.60×10^{-9}
1.0	1.55×10^{-9}
1.5	1.50×10^{-9}
2.0	1.45×10^{-9}
2.5	1.40×10^{-9}
3.0	1.35×10^{-9}
3.5	1.30×10^{-9}
4.0	1.25×10^{-9}
4.5	1.20×10^{-9}
5.0	1.15×10^{-9}
5.5	1.10×10^{-9}

Time [Myr]

$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

3×10^{-9}

2.5×10^{-9}

2×10^{-9}

1.5×10^{-9}

1×10^{-9}

5×10^{-10}

0

τ_{F19} [s]

0

0.5

1

1.5

2

2.5

3

3.5

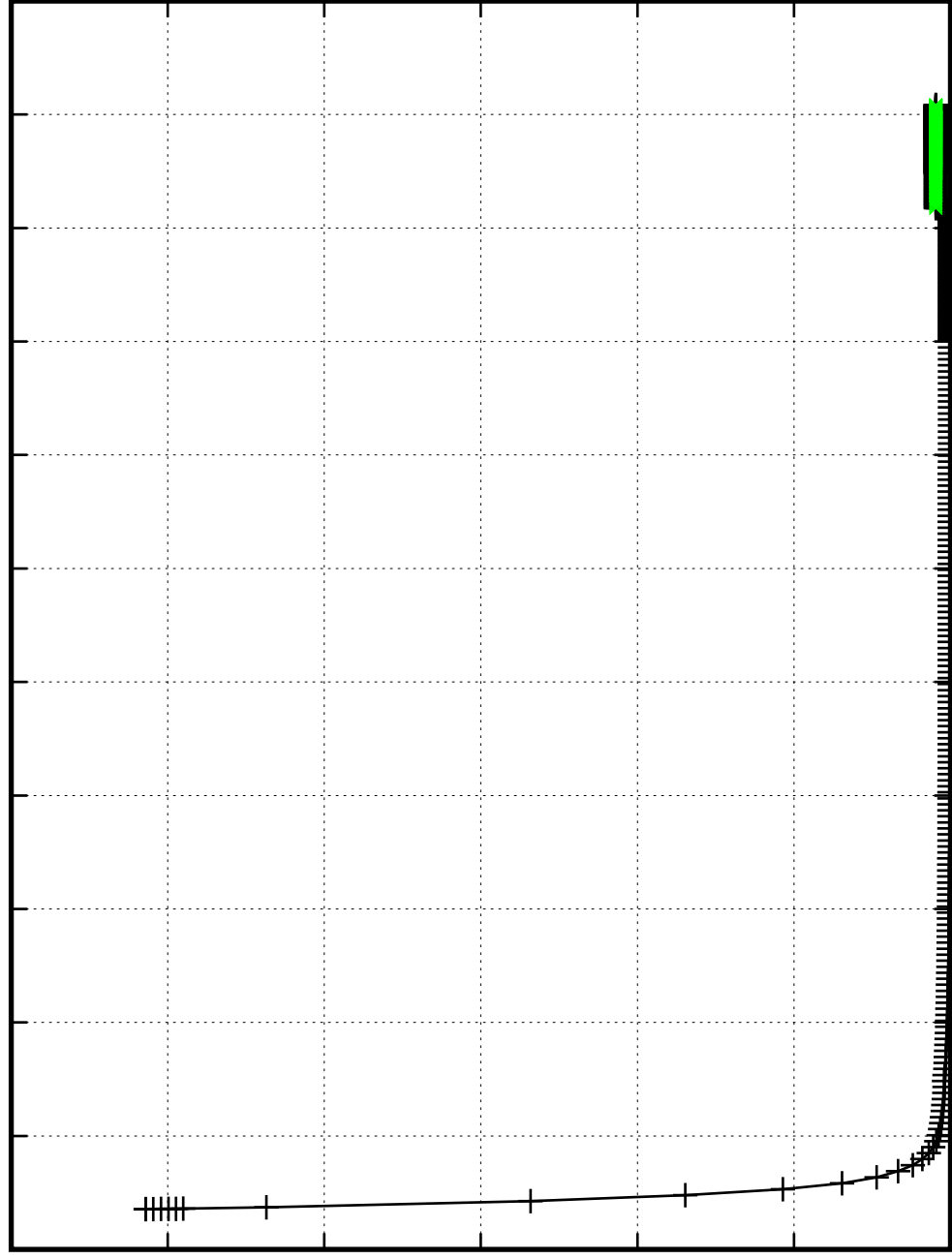
4

4.5

5

5.5

Time [Myr]



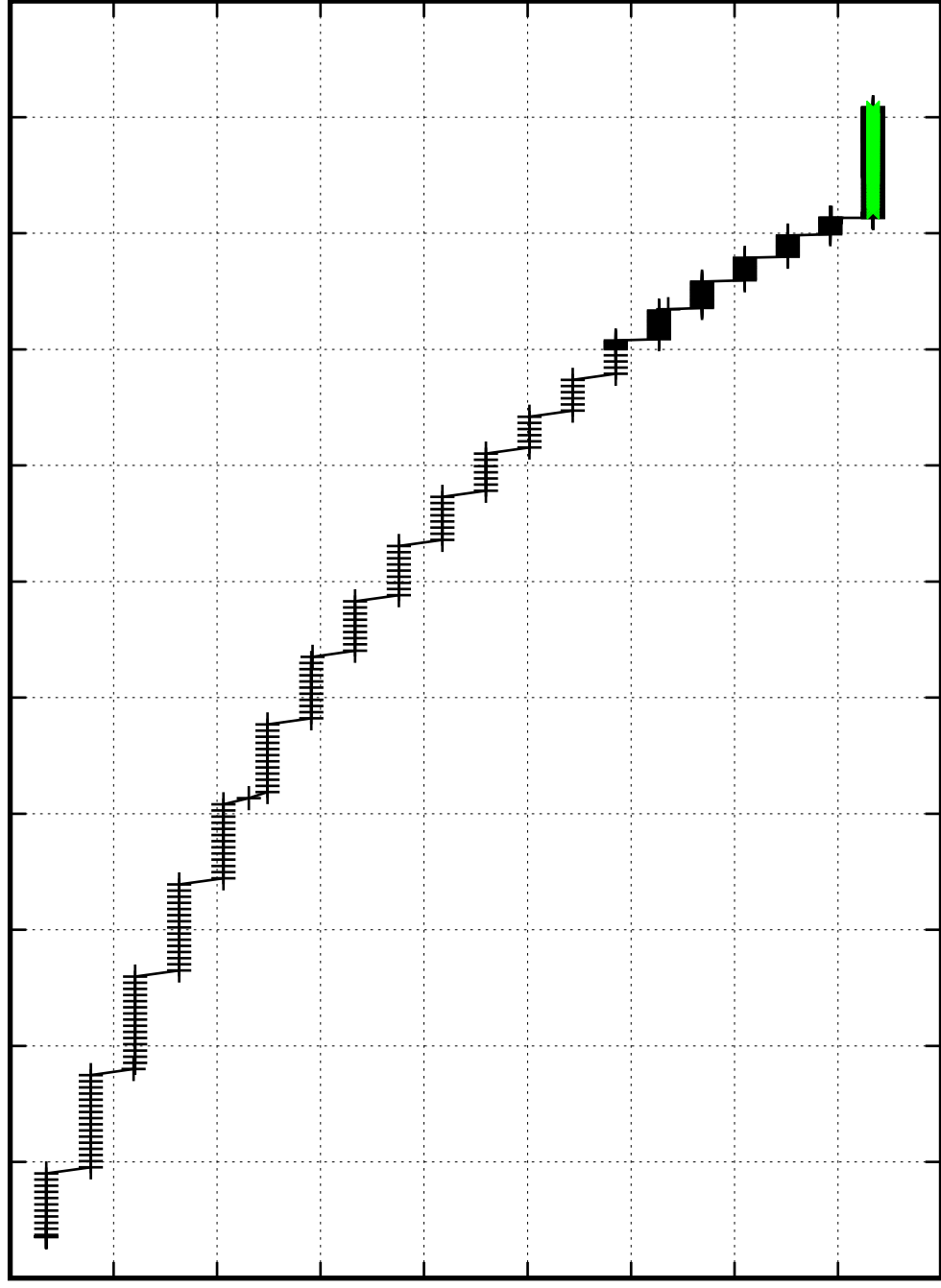
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\,\text{km/s}$

0.00094
0.00093
0.00093
0.00092
0.00092
0.00091
0.00091
0.00090
0.00090
0.00089

$c_{\text{Ne20}} [-]$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

3.5×10^{-7}

3×10^{-7}

2.5×10^{-7}

2×10^{-7}

1.5×10^{-7}

1×10^{-7}

5×10^{-8}

0

$c_{\text{Ne21}} [-]$

0

0.5

1

1.5

2

2.5

3

3.5

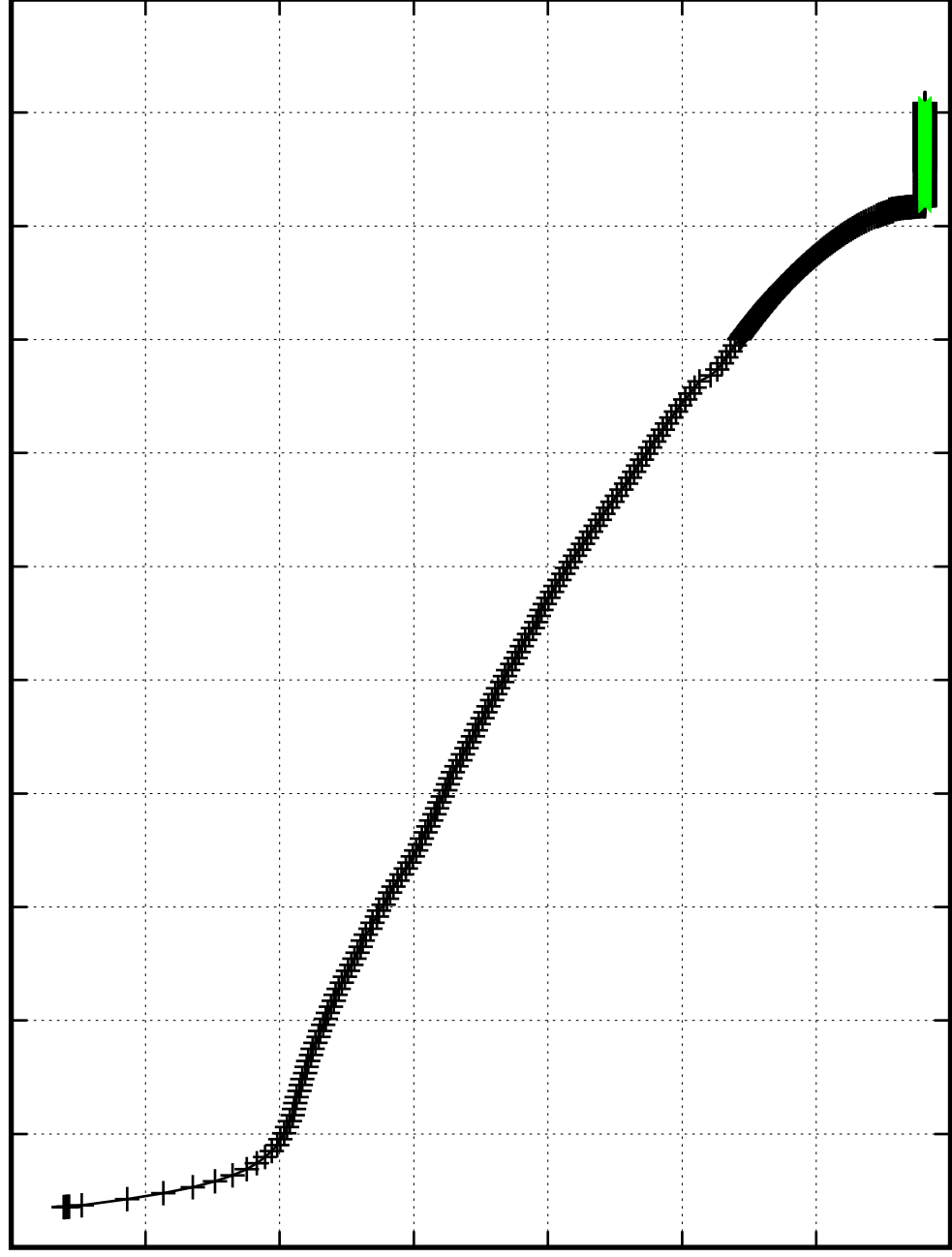
4

4.5

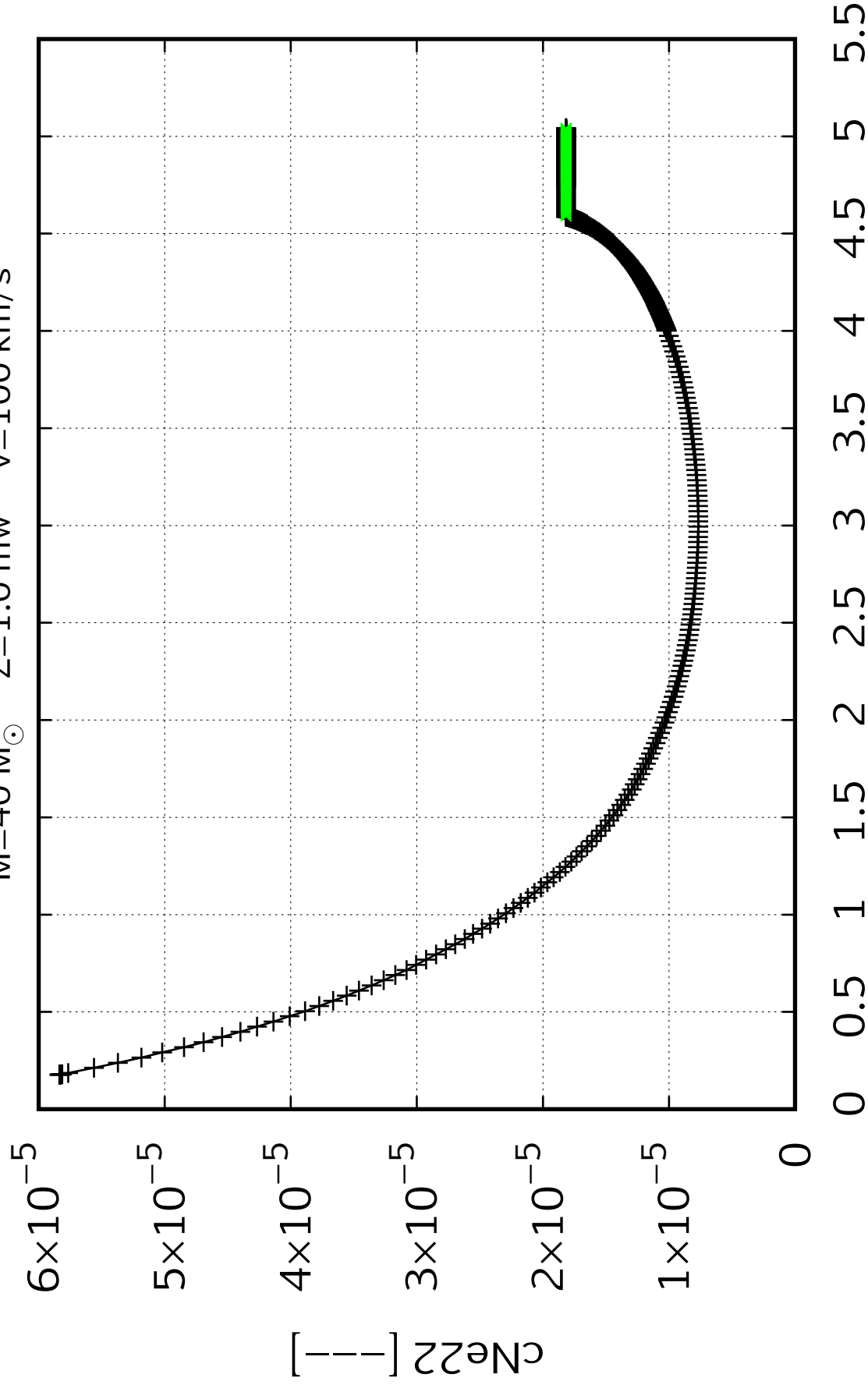
5

5.5

Time [Myr]



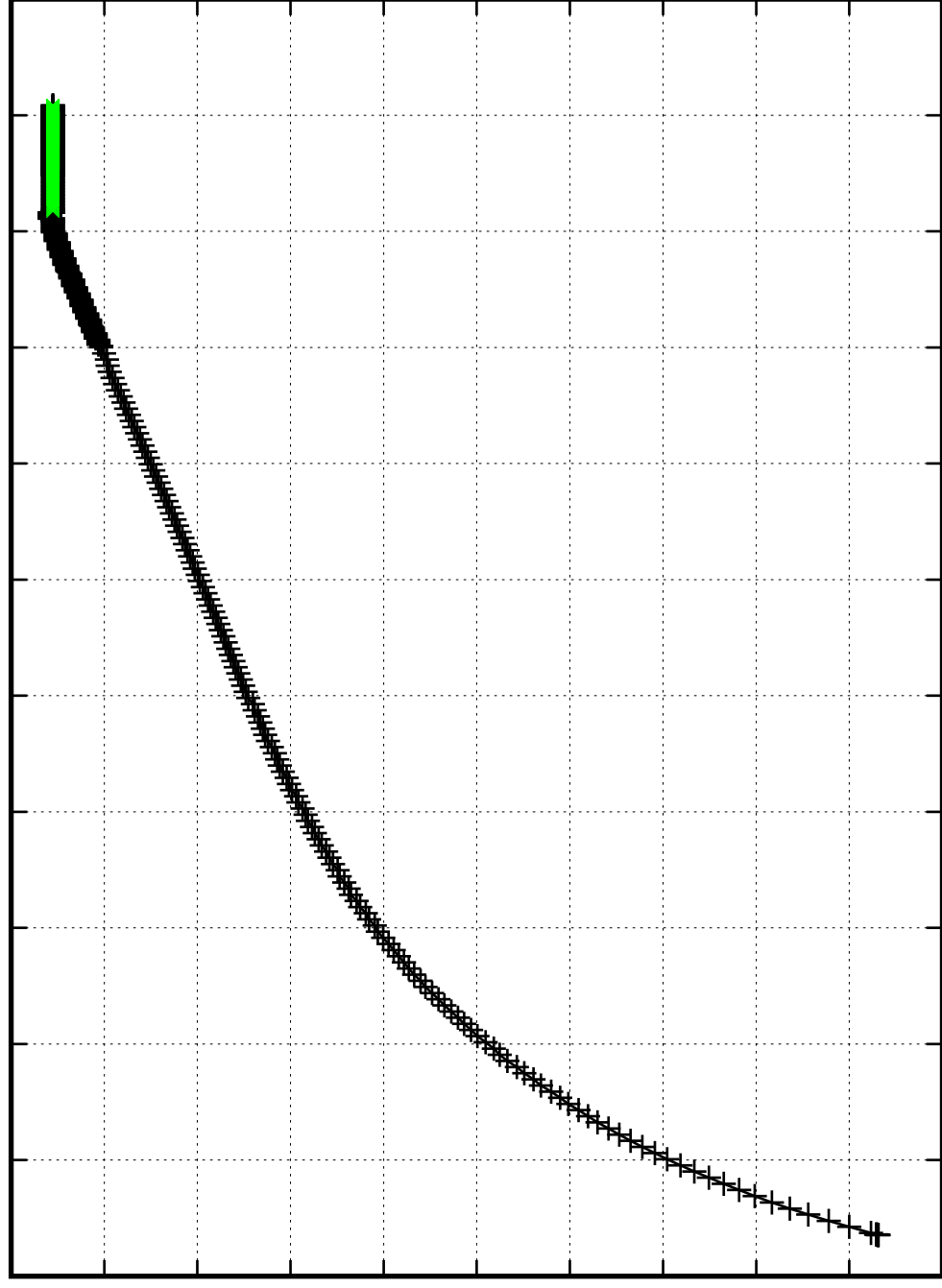
$M=40\,M_{\odot}$ $Z=1.0\,\text{mw}$ $v=100\,\text{km/s}$



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

0.00014
0.00013
0.00012
0.00011
0.00010
0.00009
0.00008
0.00007
0.00006
0.00005
0.00004

$c_{\text{Na}23}$ [—]

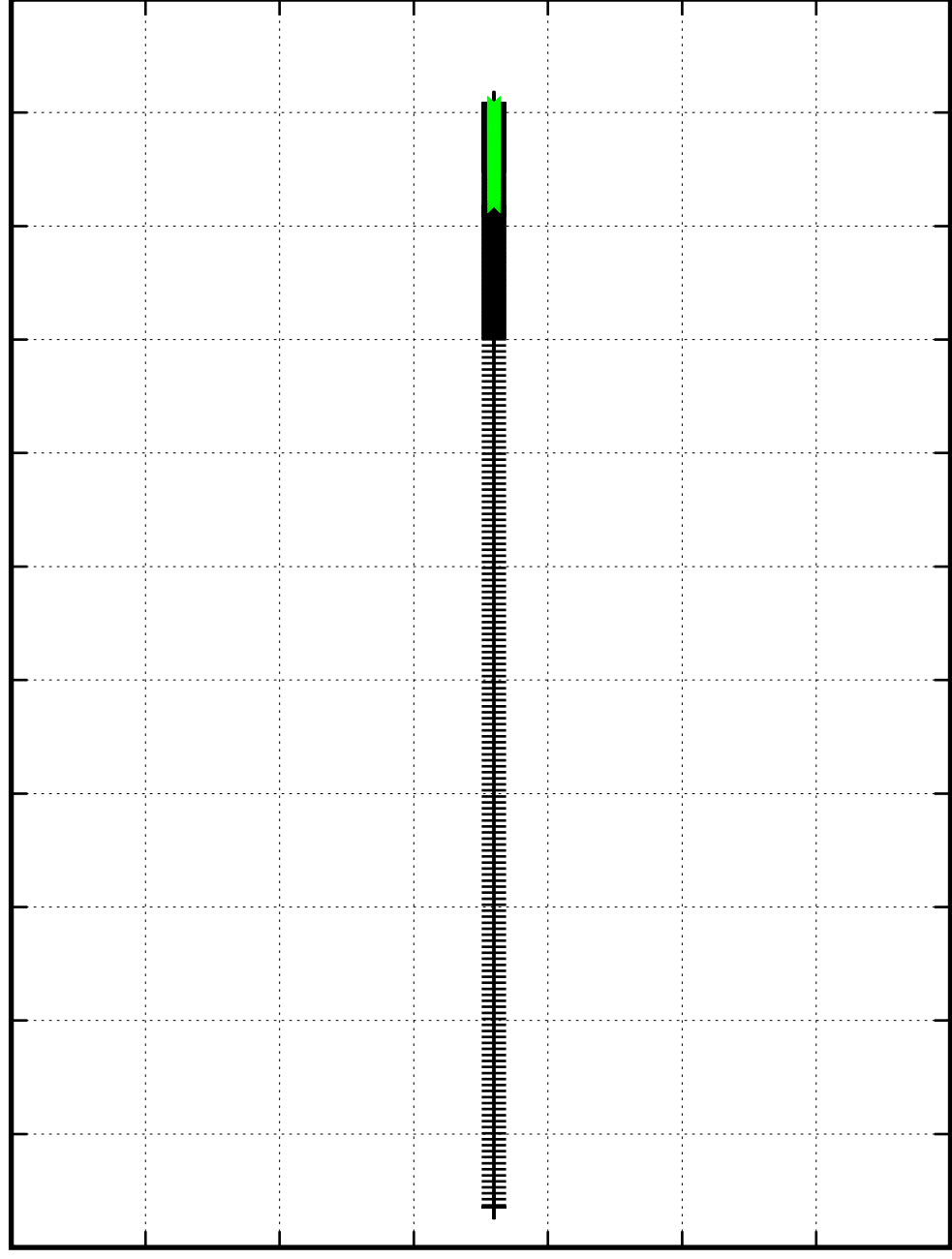


Time [Myr]

$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$

0.000292
0.000291
0.000290
0.000289
0.000288
0.000287
0.000286
0.000285

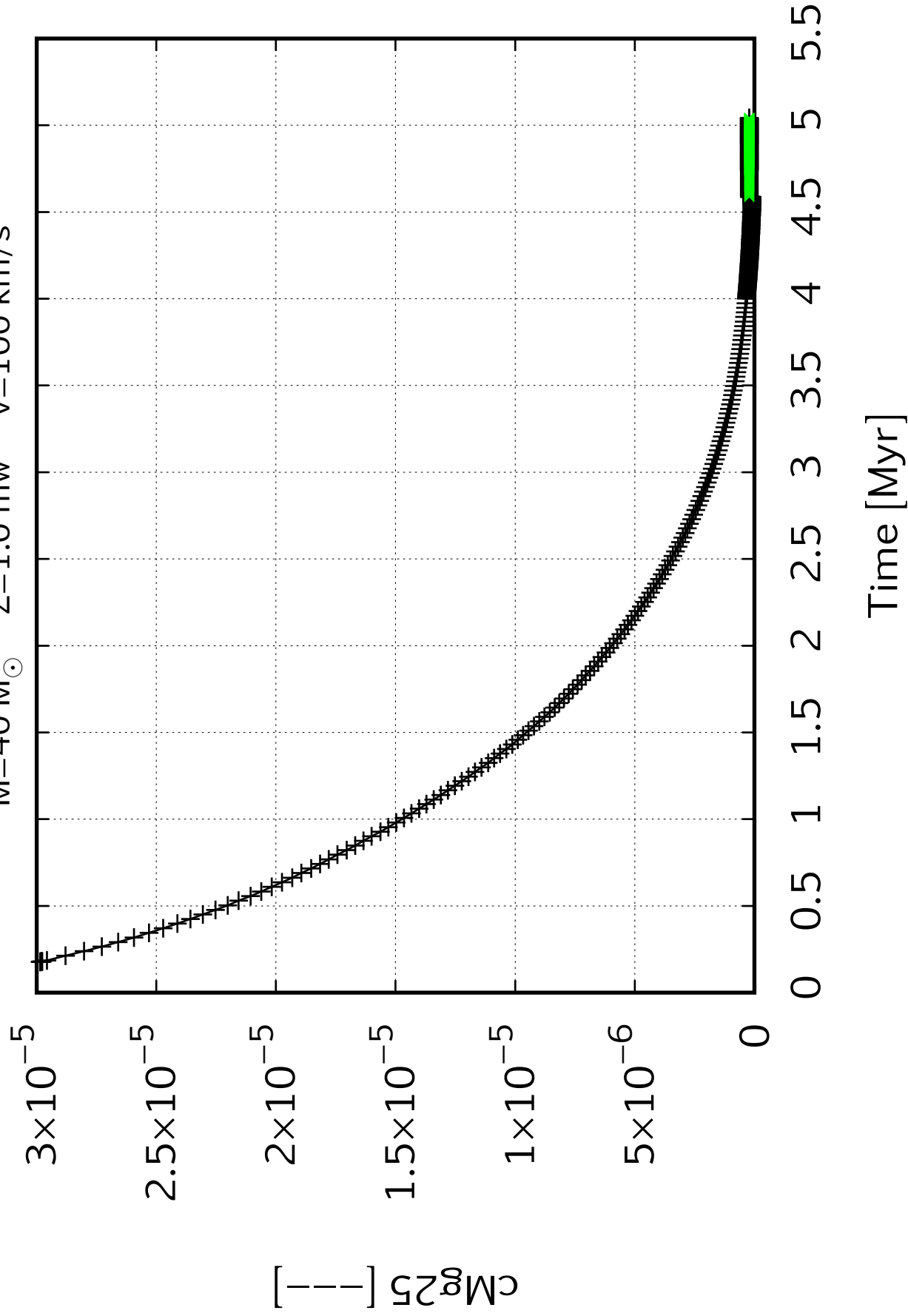
$cM_{24} [-]$



0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]

$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$



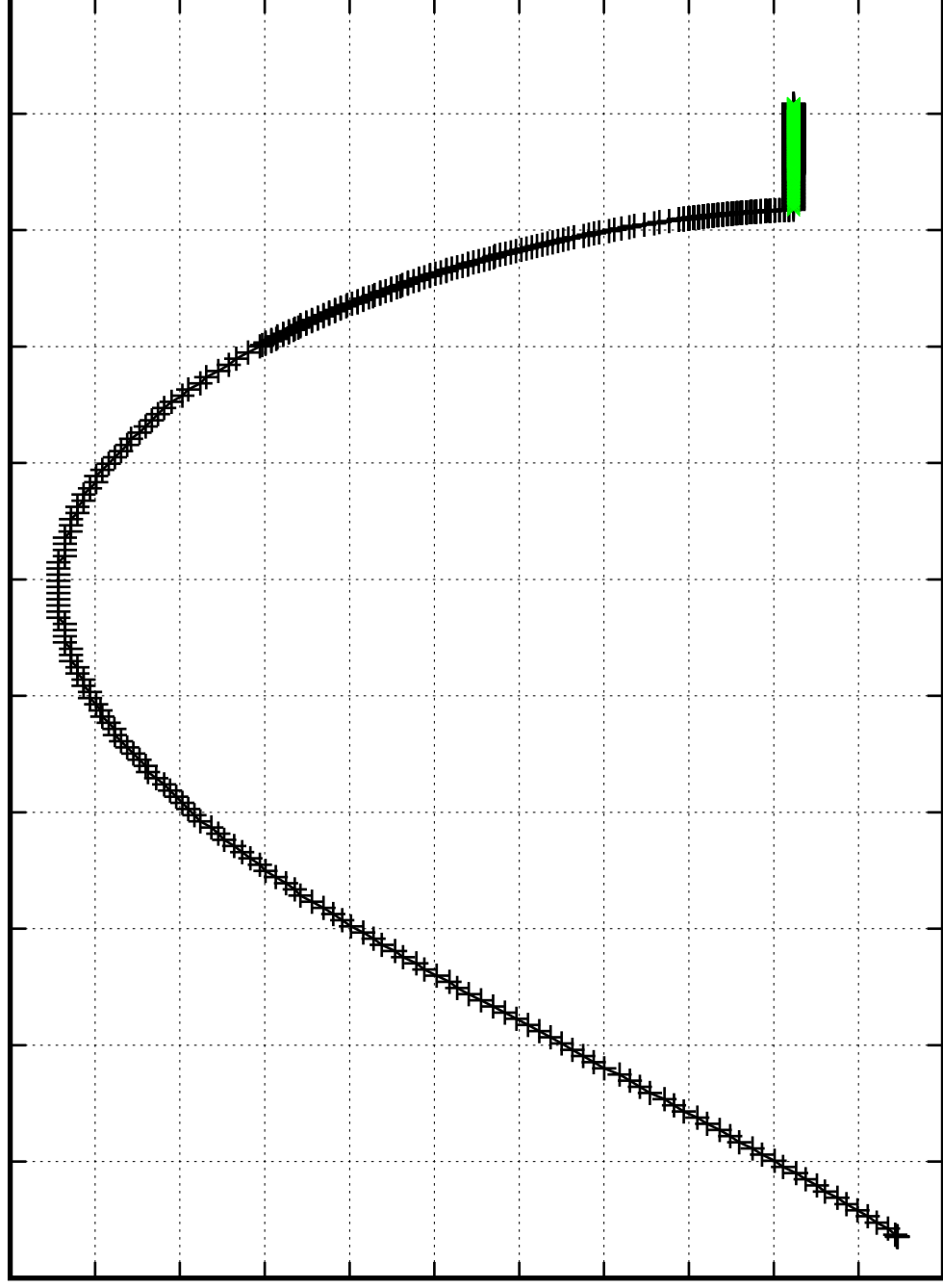
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\,\text{km/s}$

0.00007
0.00006
0.00006
0.00006
0.00006
0.00006
0.00005
0.00005
0.00005
0.00005
0.00005
0.00004

$cM_{\text{g}26} [--]$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

1.4×10^{-5}

1.2×10^{-5}

1×10^{-5}

8×10^{-6}

6×10^{-6}

4×10^{-6}

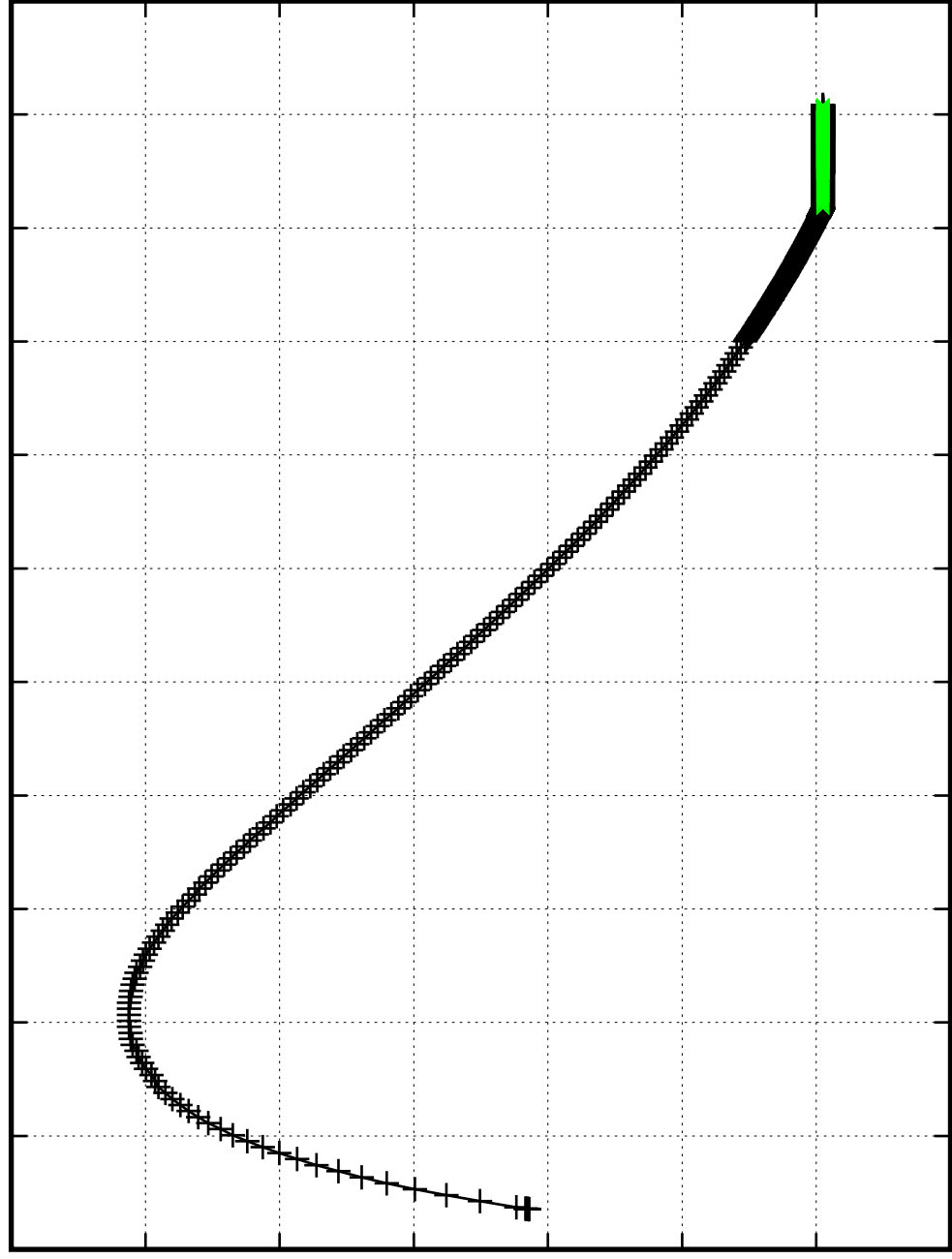
2×10^{-6}

0

$[\text{C II}]$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



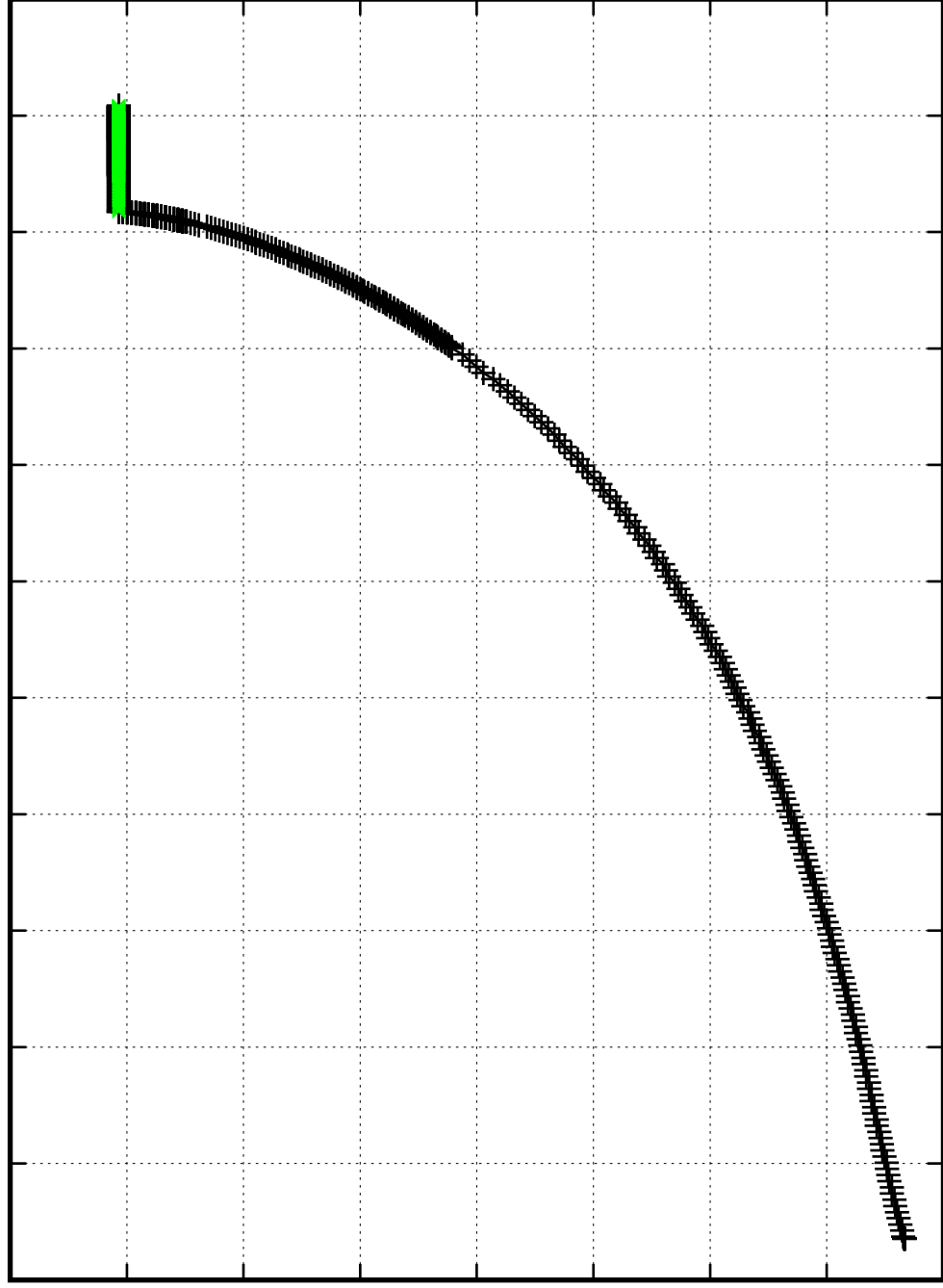
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

$c_{\text{Al27}} [--]$

0.00009
0.00008
0.00008
0.00007
0.00007
0.00006
0.00006
0.00005
0.00005

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



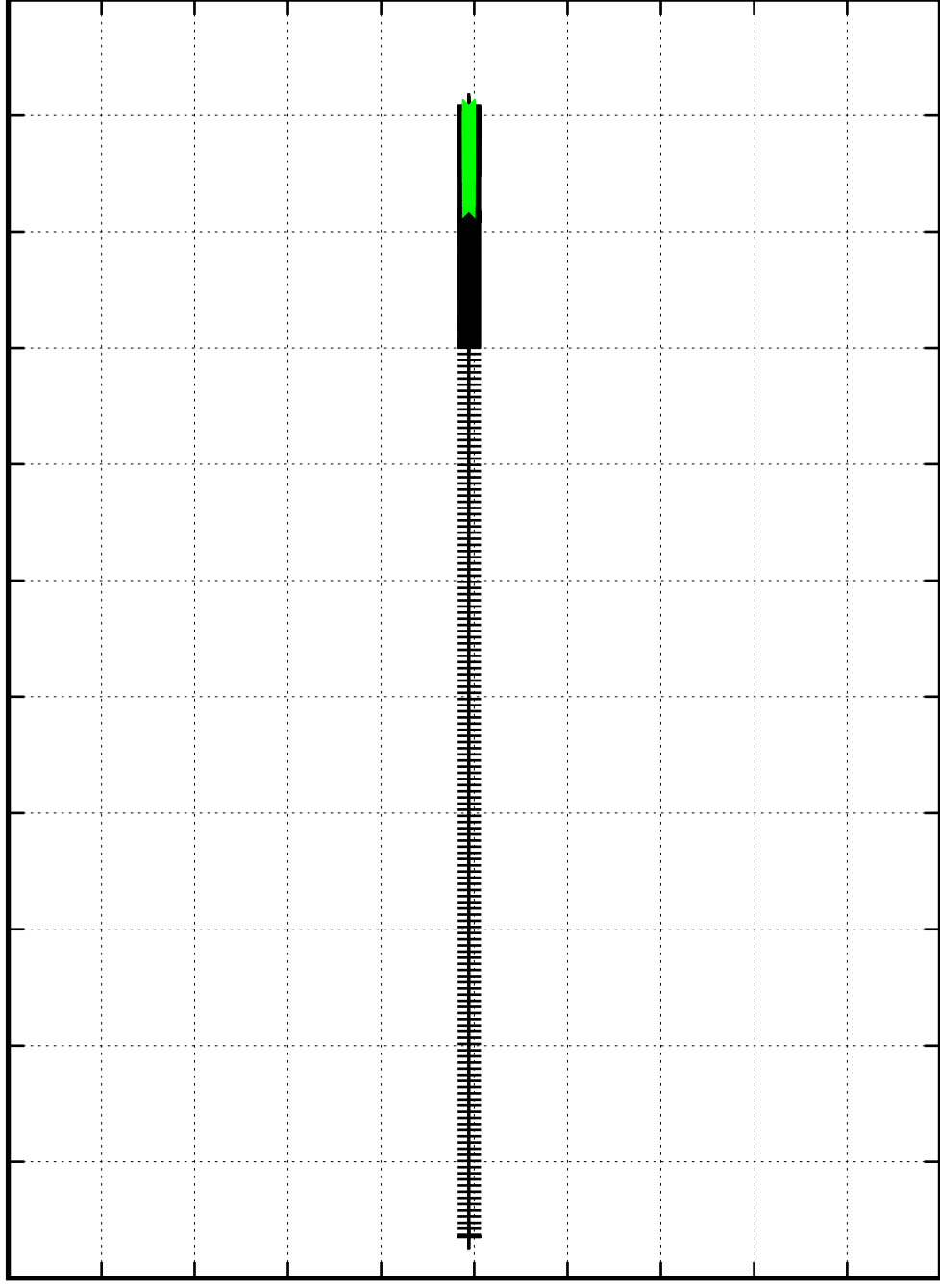
$M=40\ M_{\odot}$ $Z=1.0\ \text{mw}$ $v=100\ \text{km/s}$

0.00049
0.00049
0.00049
0.00049
0.00048
0.00048
0.00048
0.00048
0.00048
0.00048
0.00048

$[\text{--}]_{\text{Si28}}$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



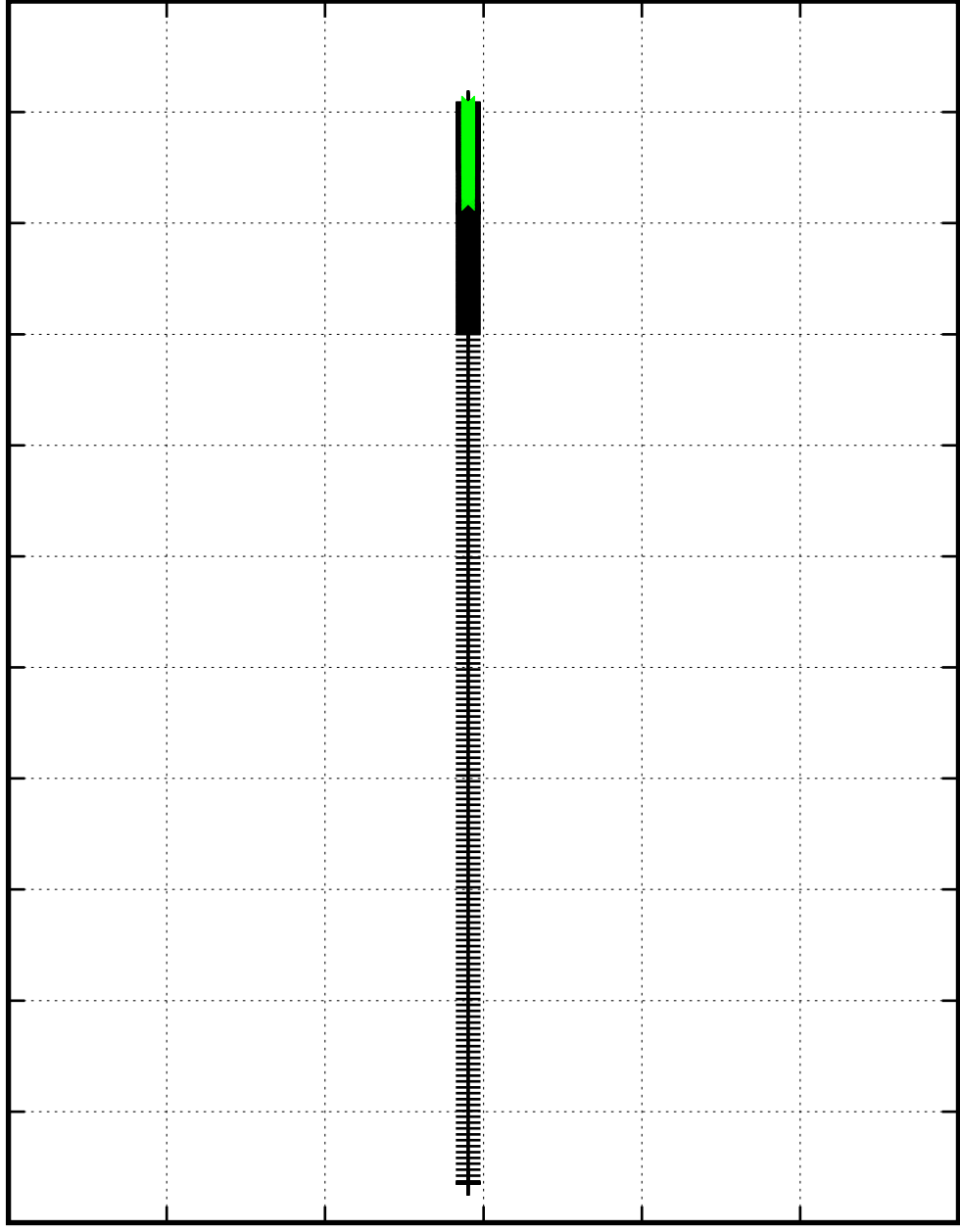
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

0.0000257
0.0000256
0.0000255
0.0000254
0.0000253
0.0000252
0.0000251

$[\text{--}]_{\text{CS}29}$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



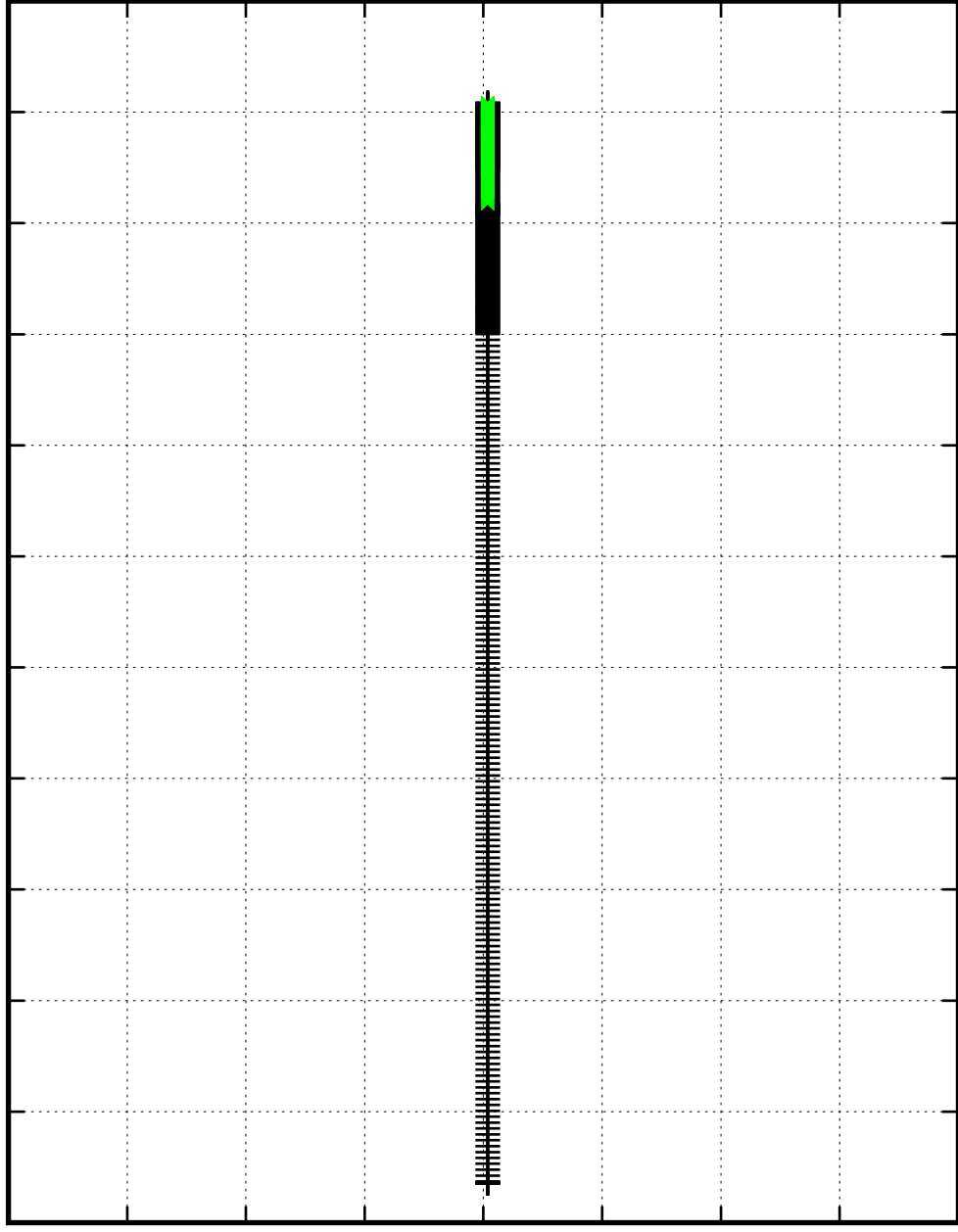
$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100$ km/s

$[\text{--}]_{\text{CS}30}$

0.00000175
0.00000175
0.00000174
0.00000174
0.00000173
0.00000173
0.00000172
0.00000172
0.00000171

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0\,m_{\odot}$ $v=100\,km/s$

0.00104

0.00103

0.00103

0.00102

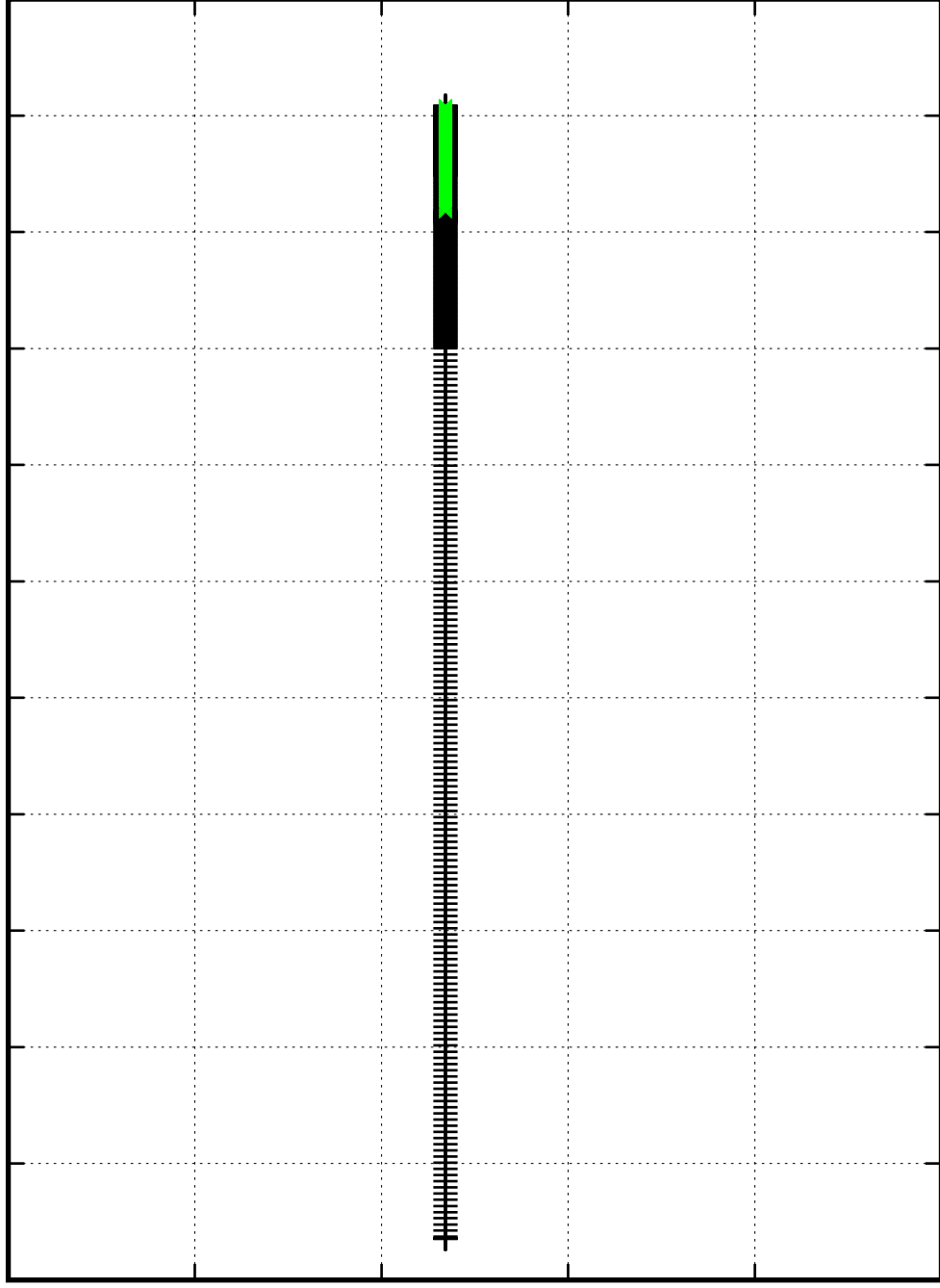
0.00102

0.00101

$[Fe56]$

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Time [Myr]



$M=40\,M_{\odot}$ $Z=1.0$ mw $v=100\text{ km/s}$

