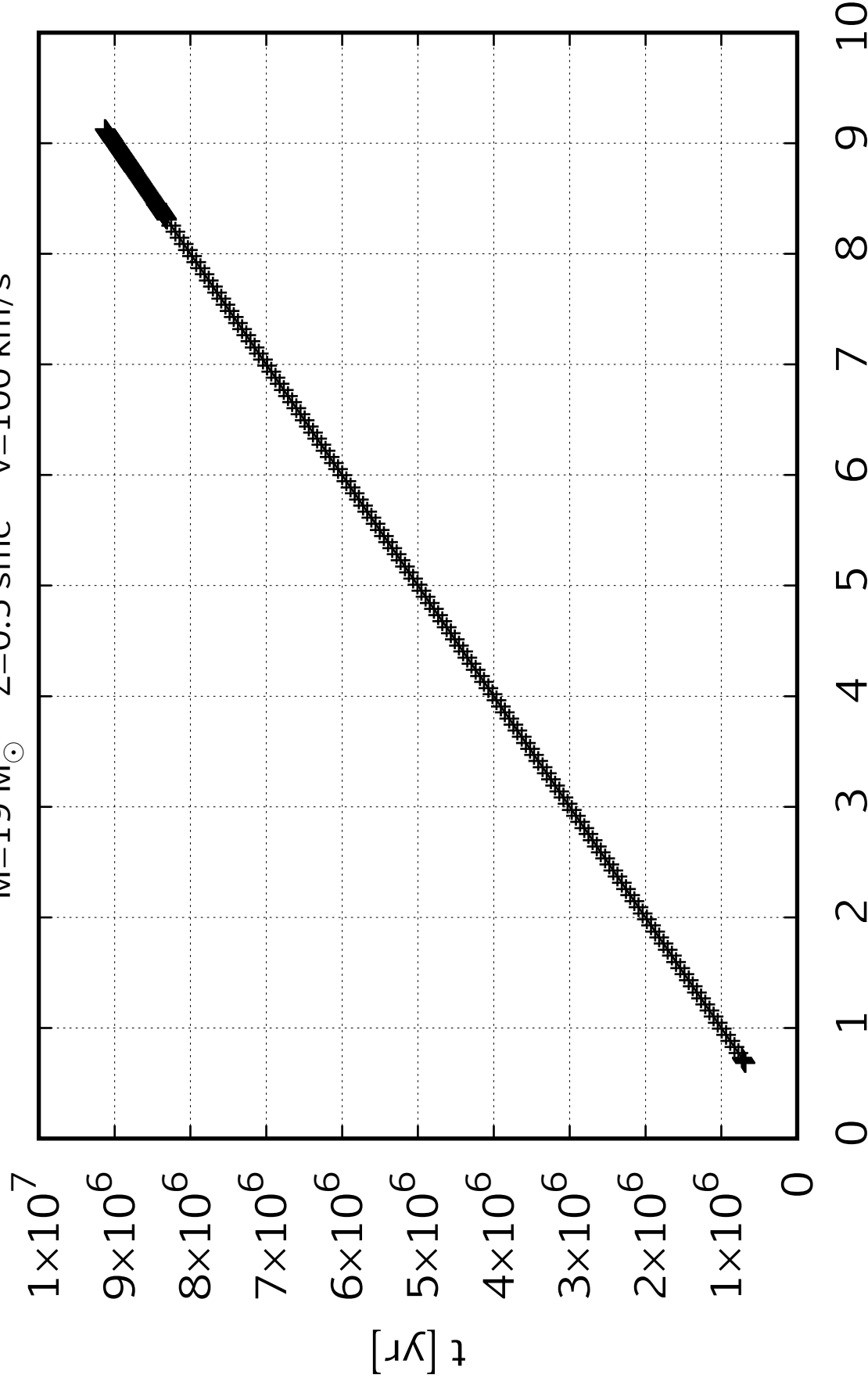
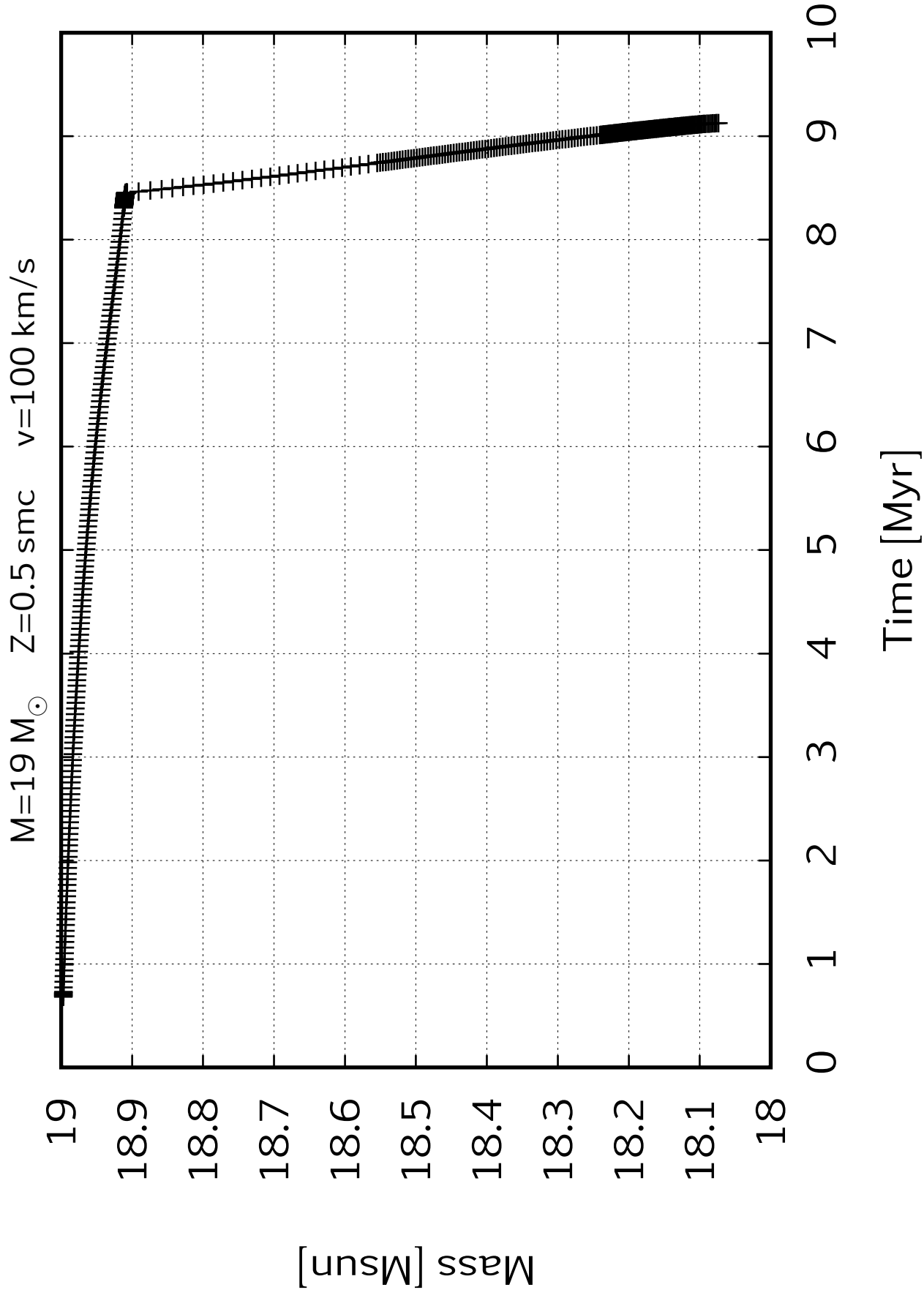
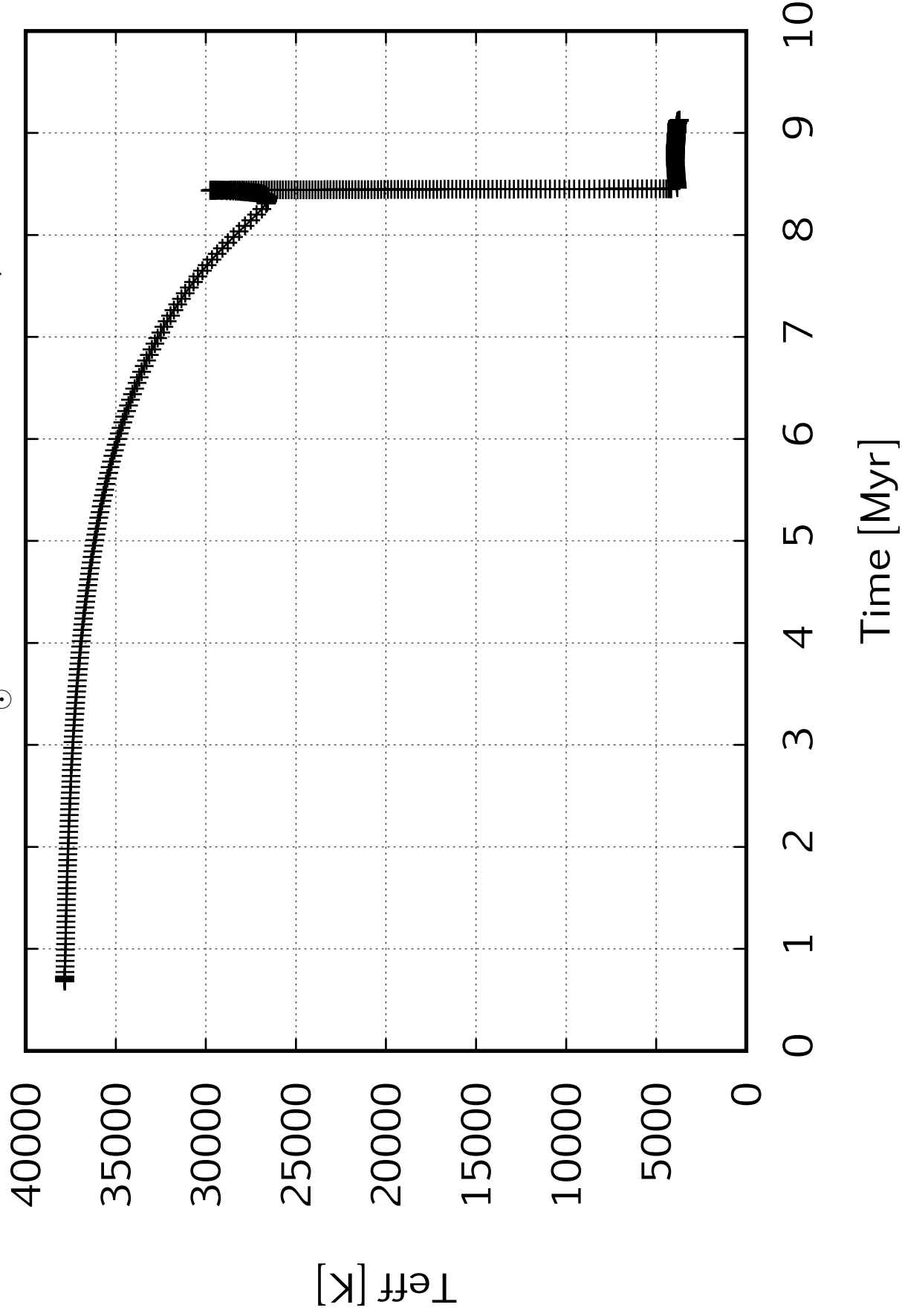


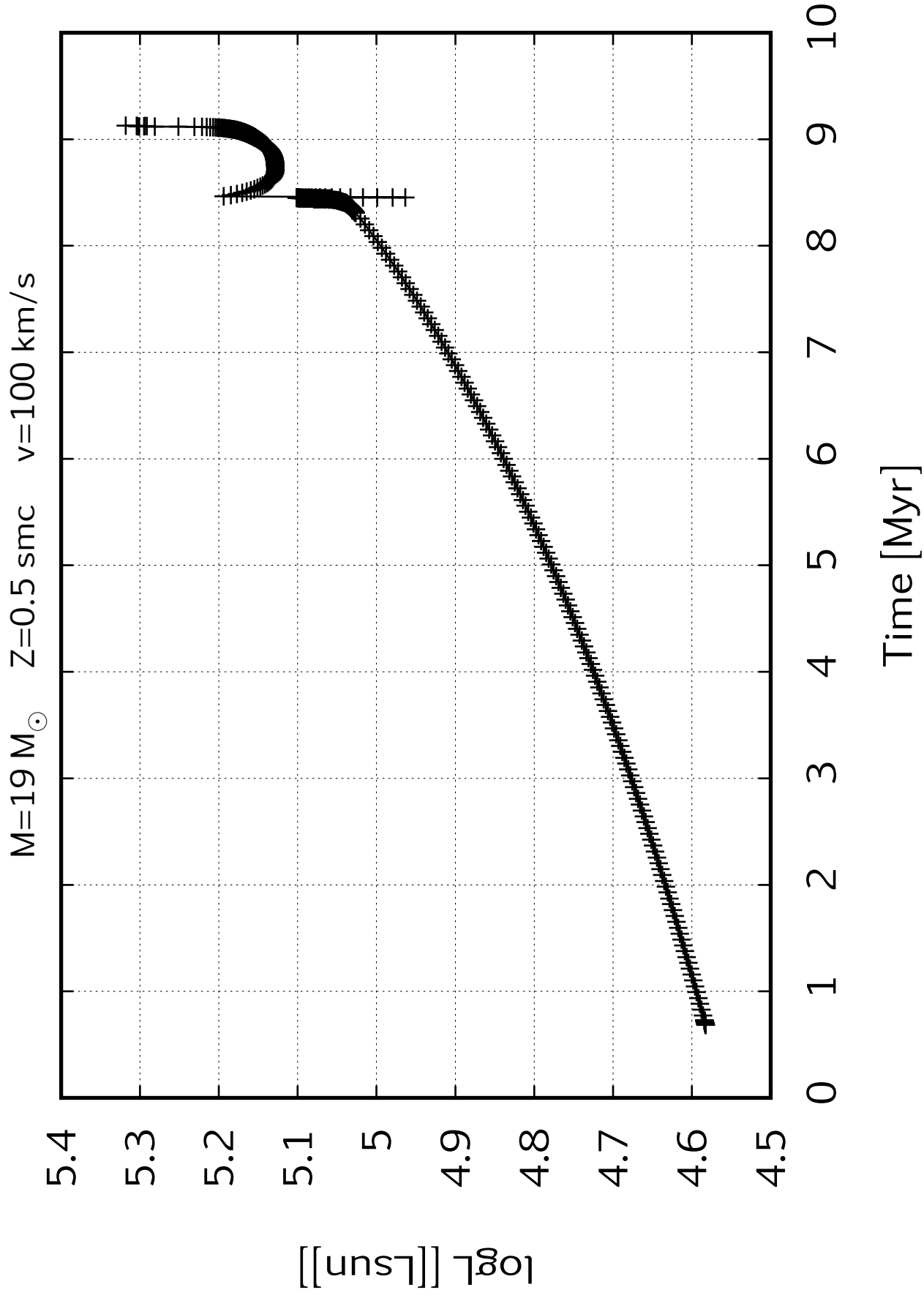
$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$

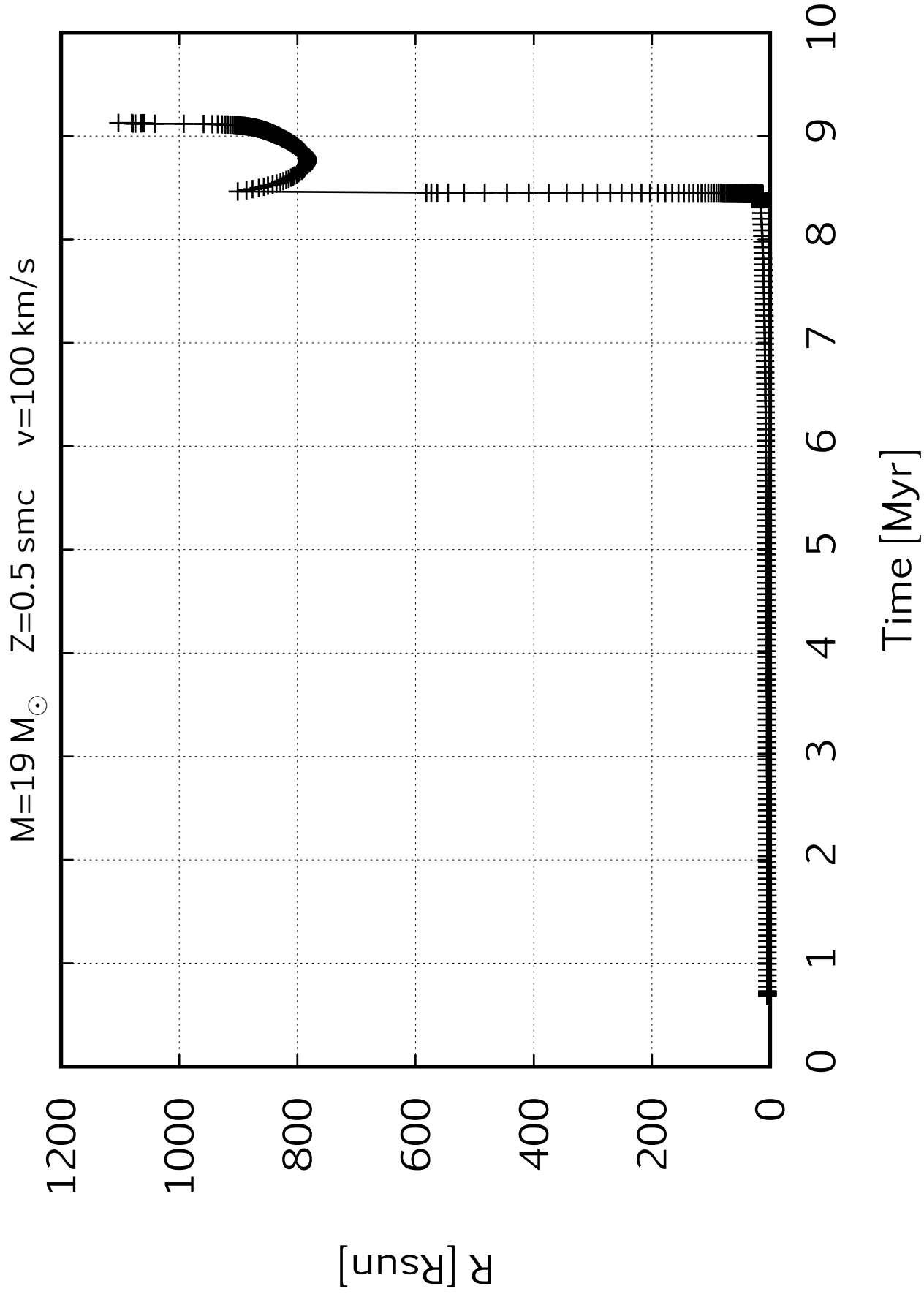


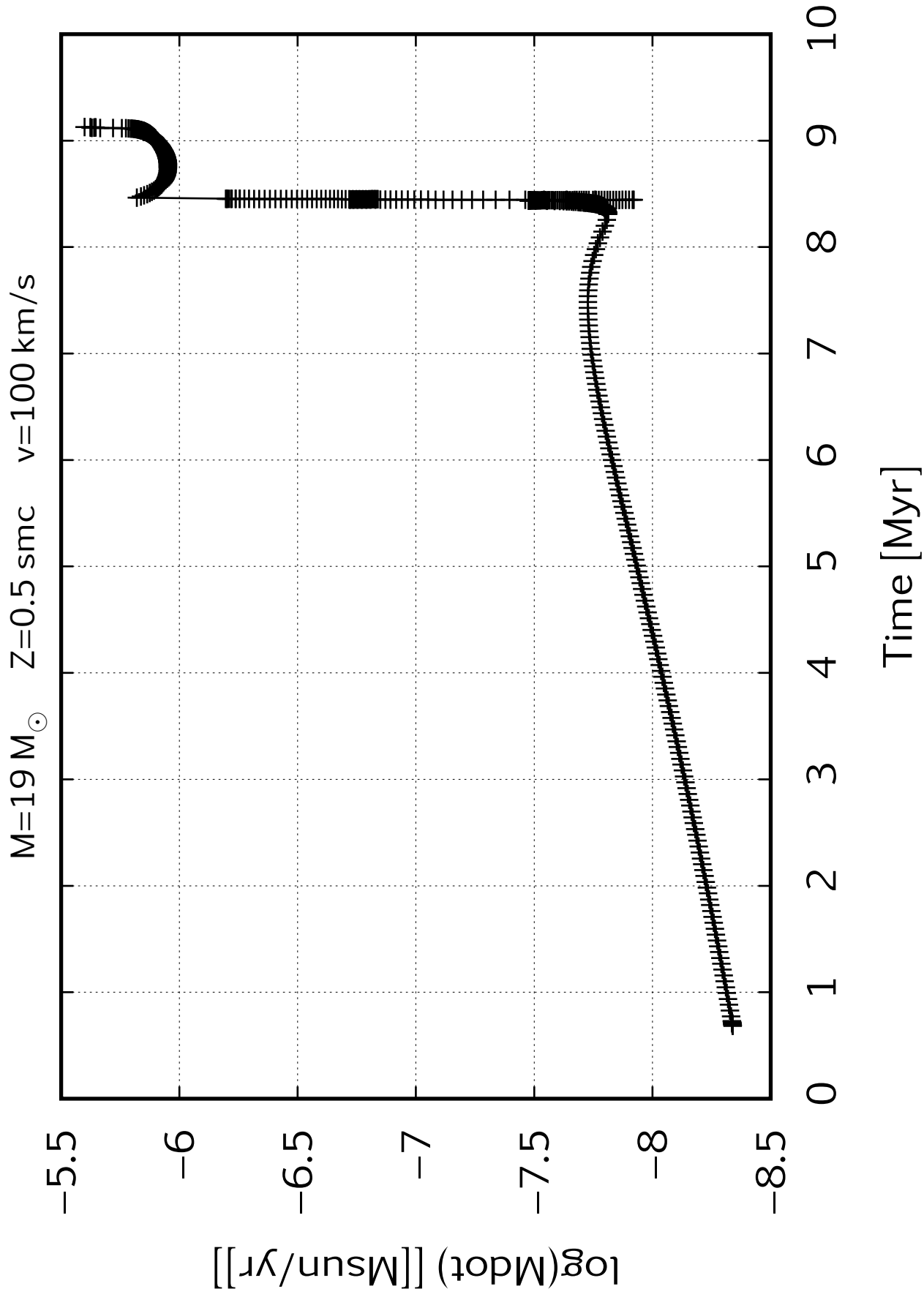


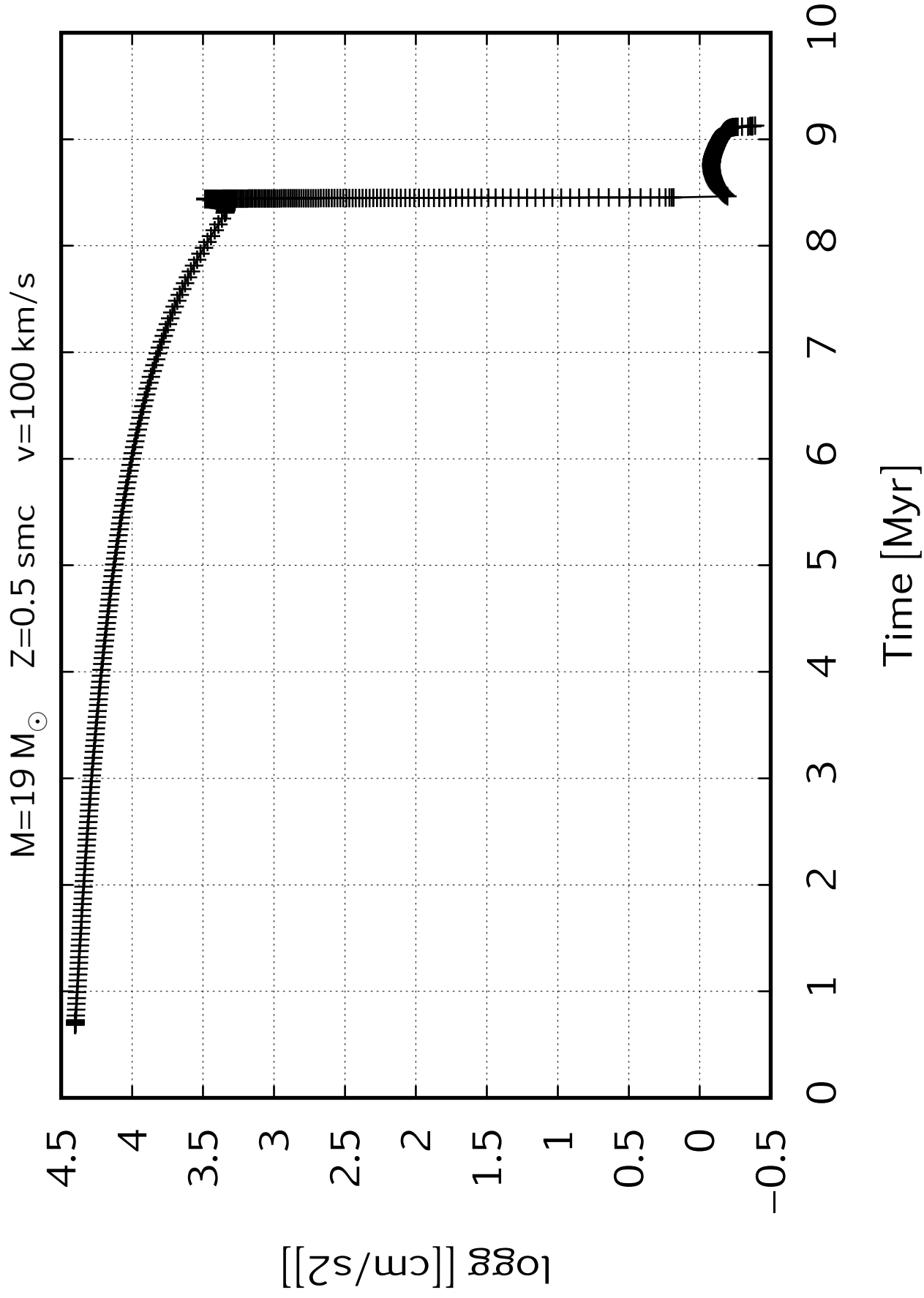
$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$



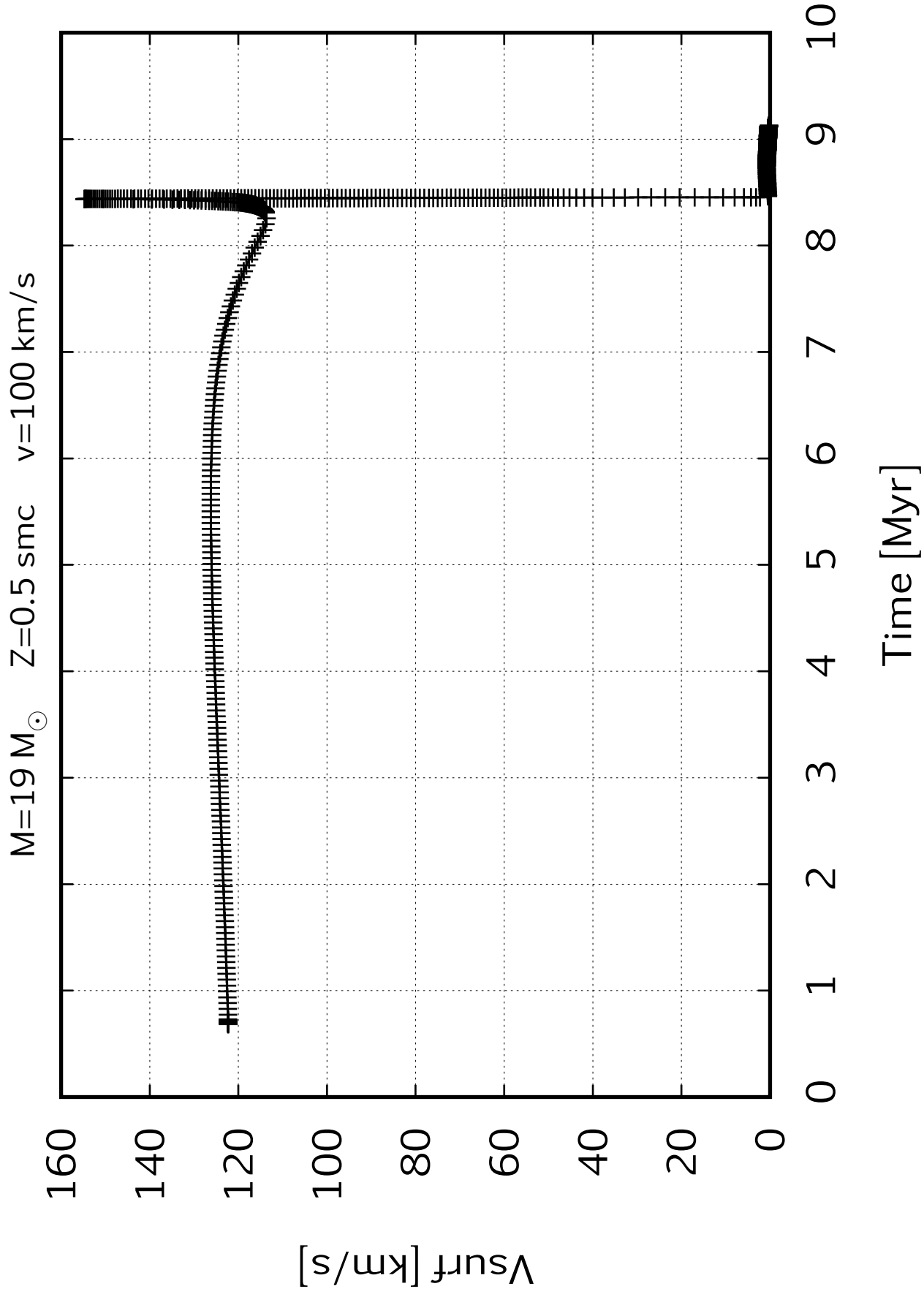


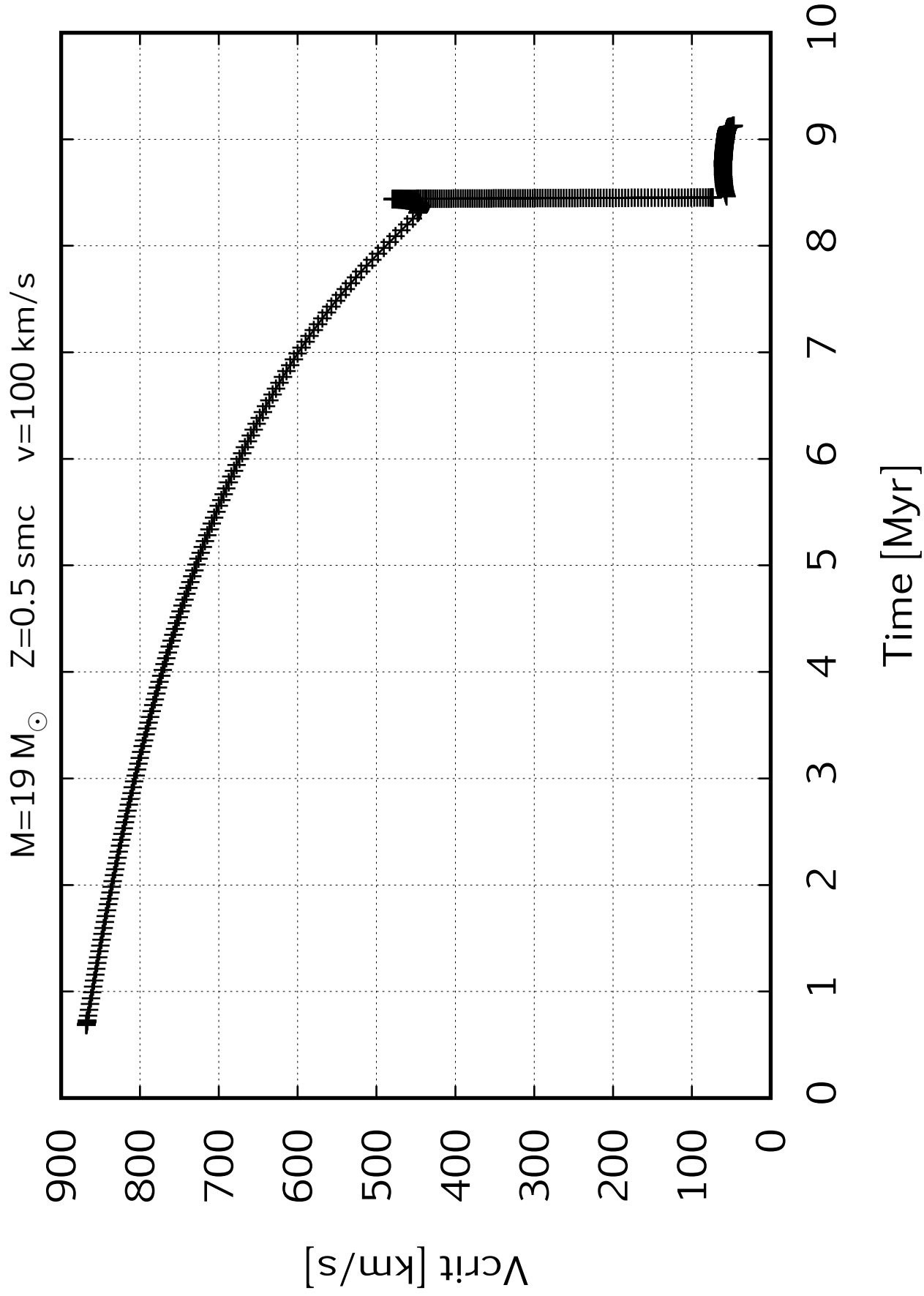




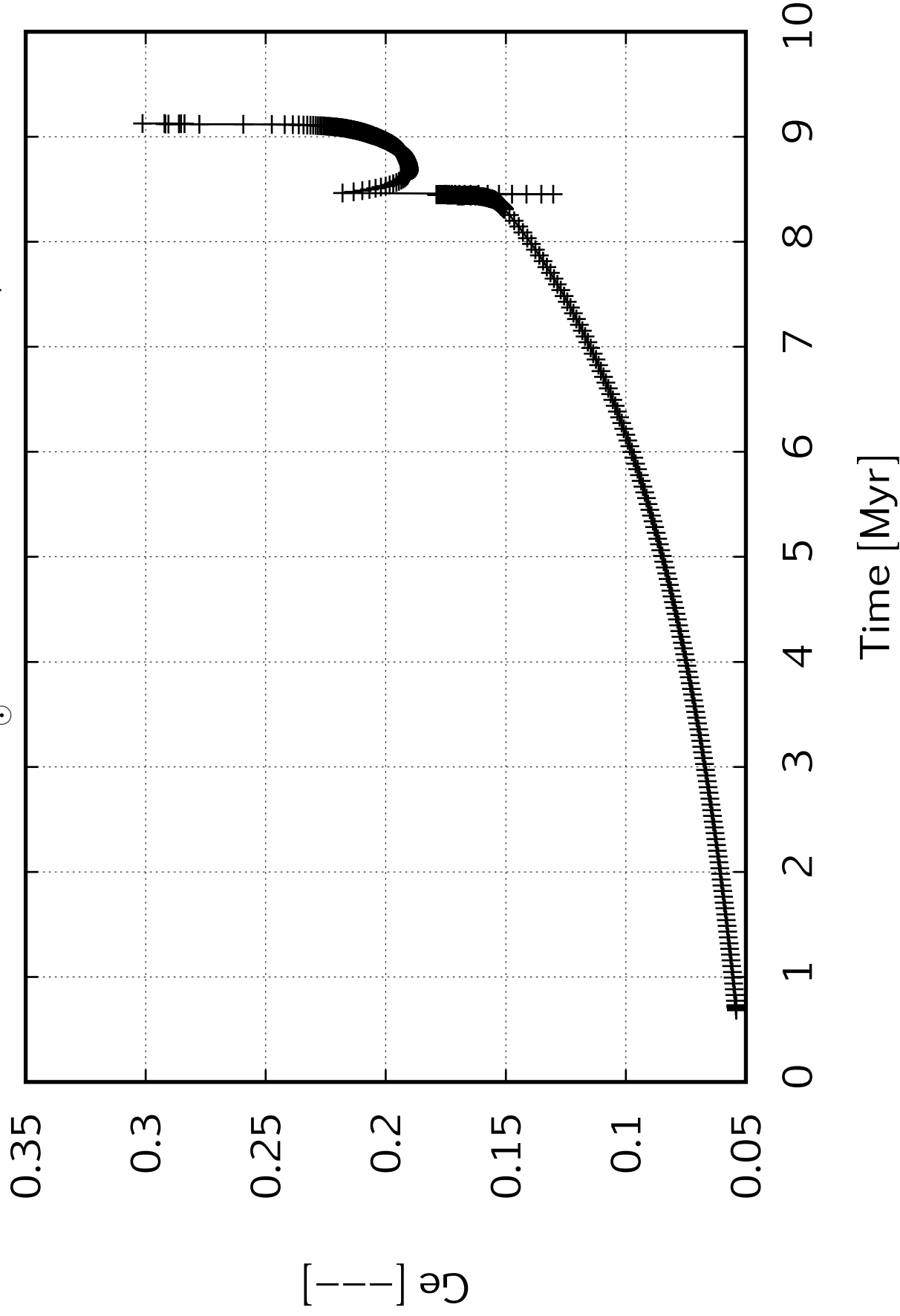




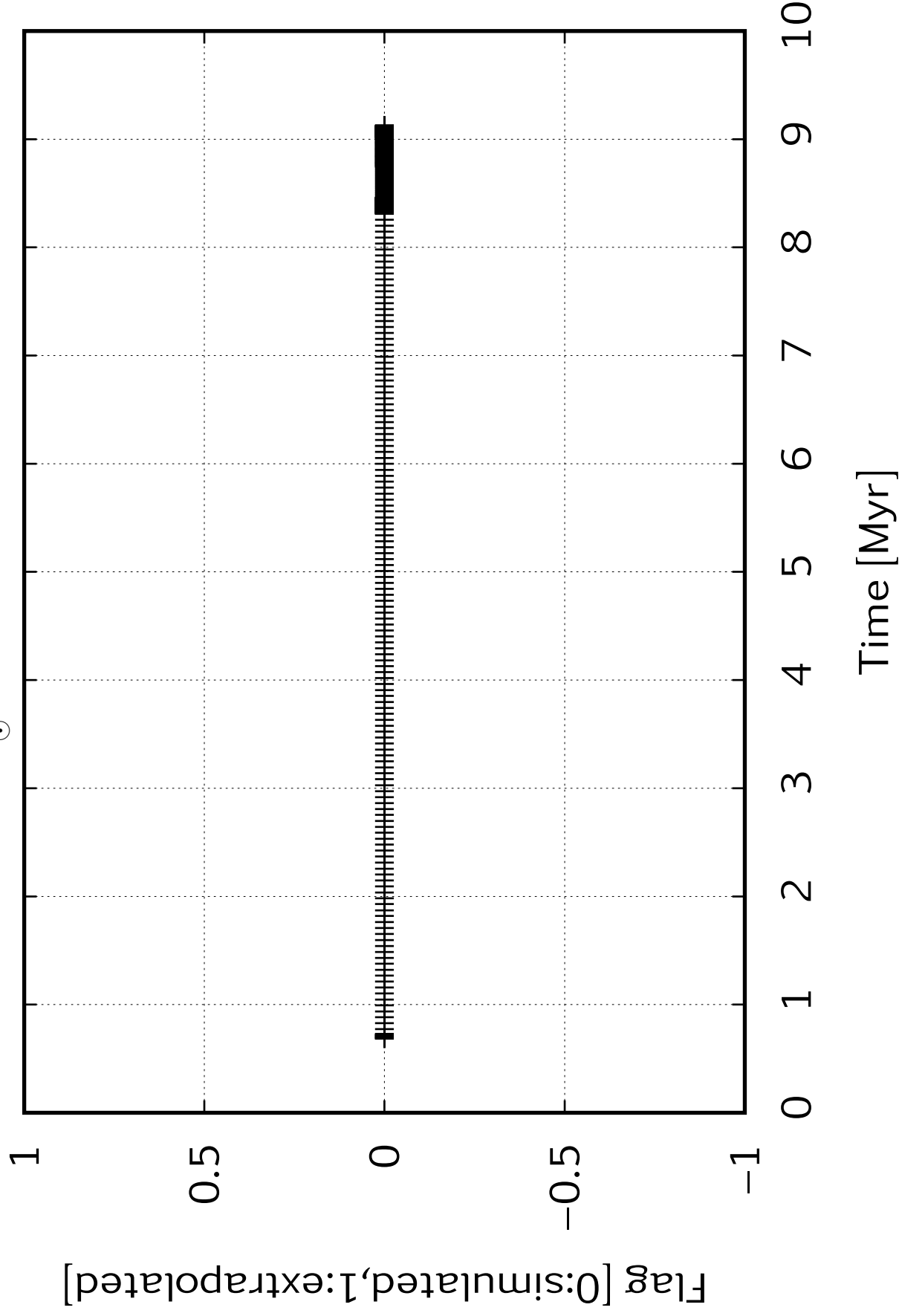




$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$



$M=19 M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s



$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$

12.15

12.1

12.05

12

11.95

11.9

11.85

$[\text{Fe}/\text{H}]$

0

1

2

3

4

5

6

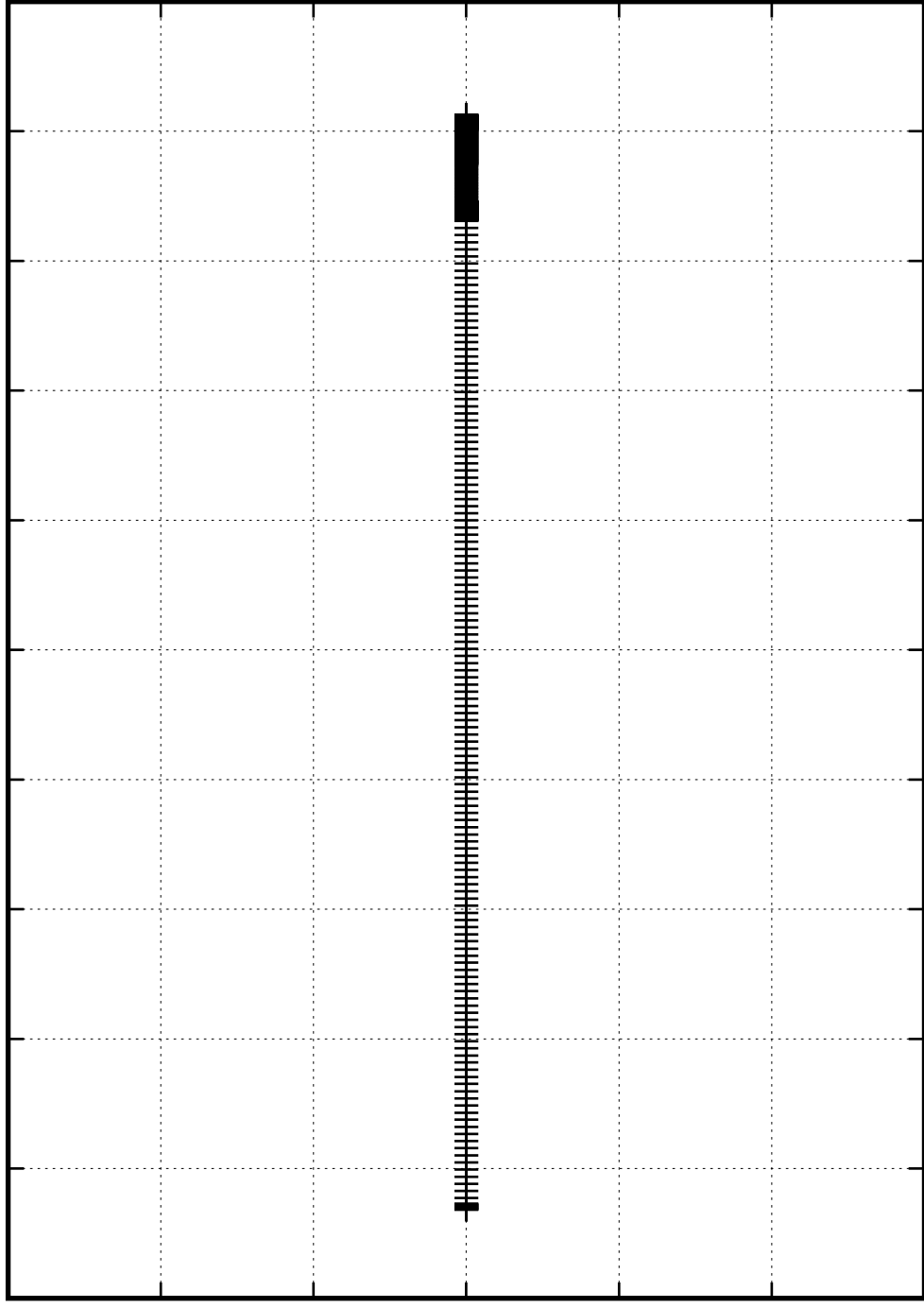
7

8

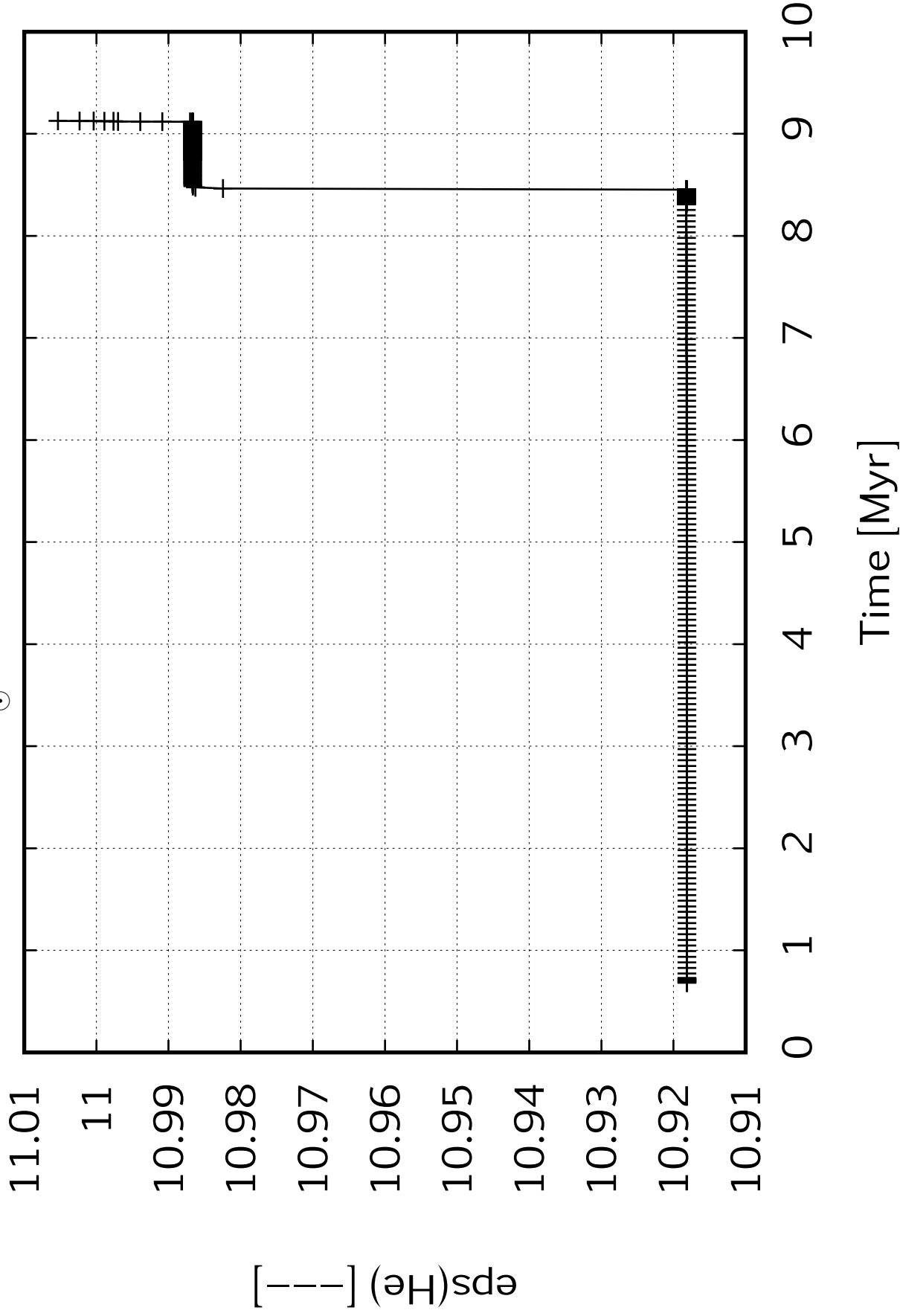
9

10

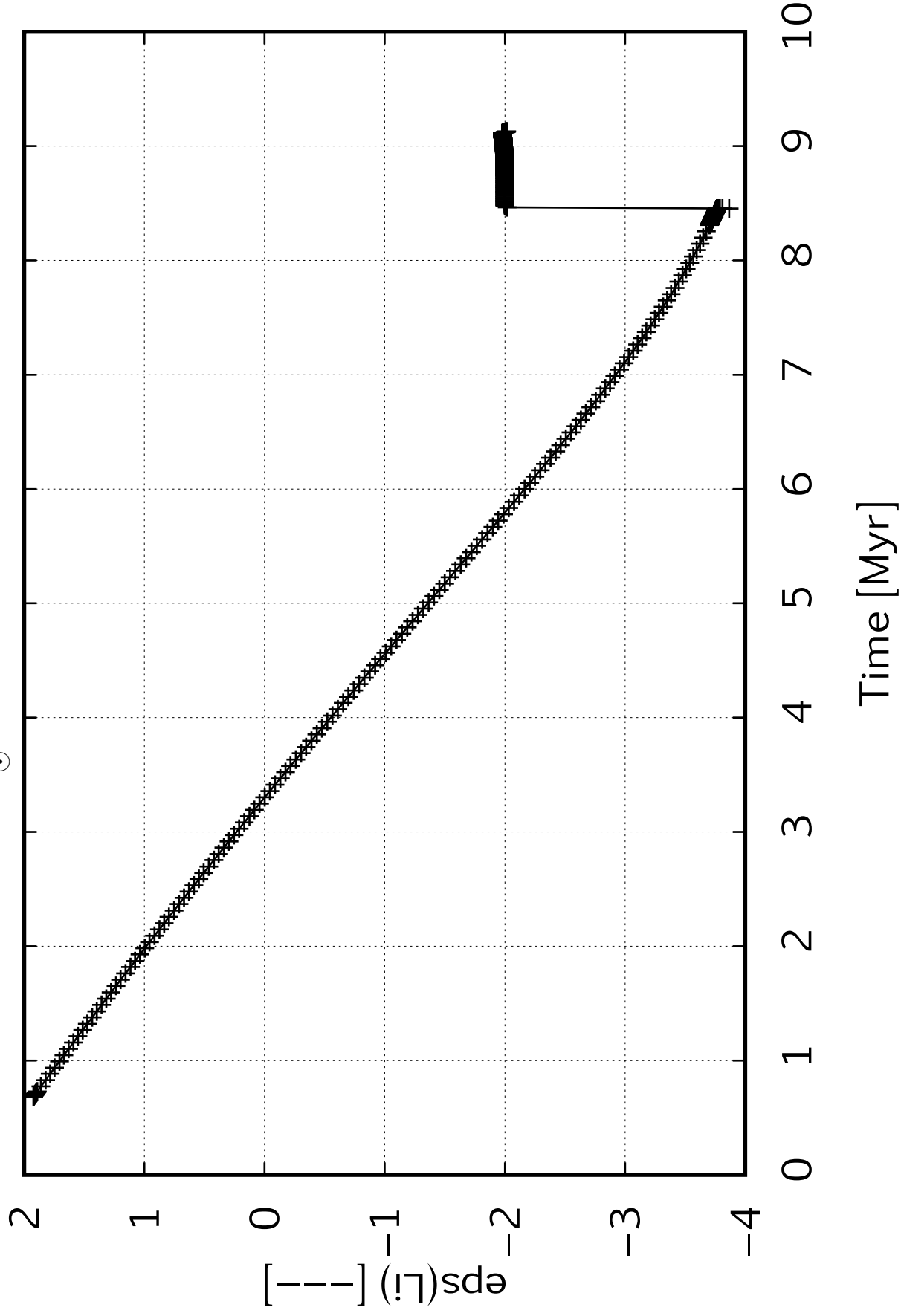
Time [Myr]



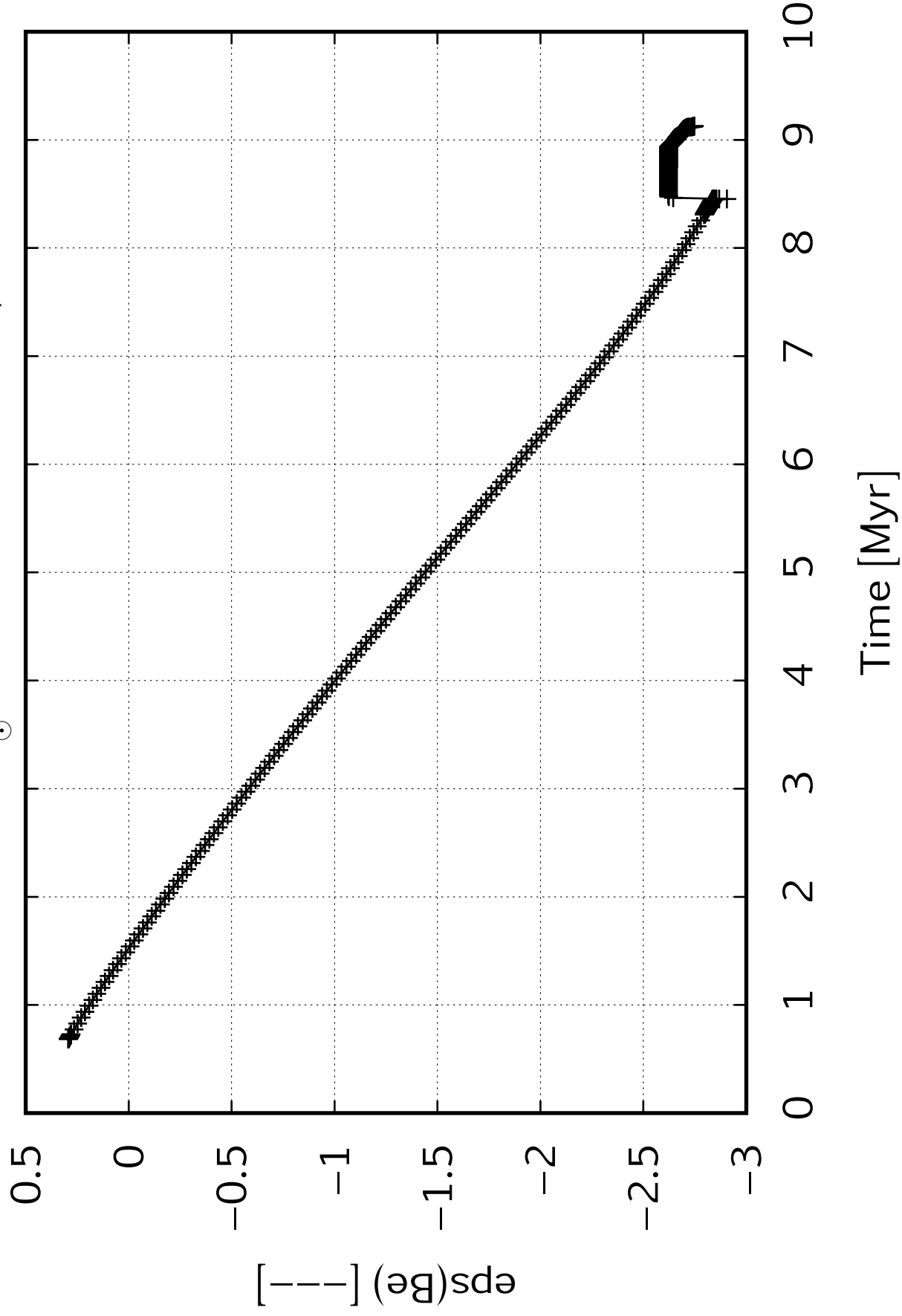
$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$



$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$

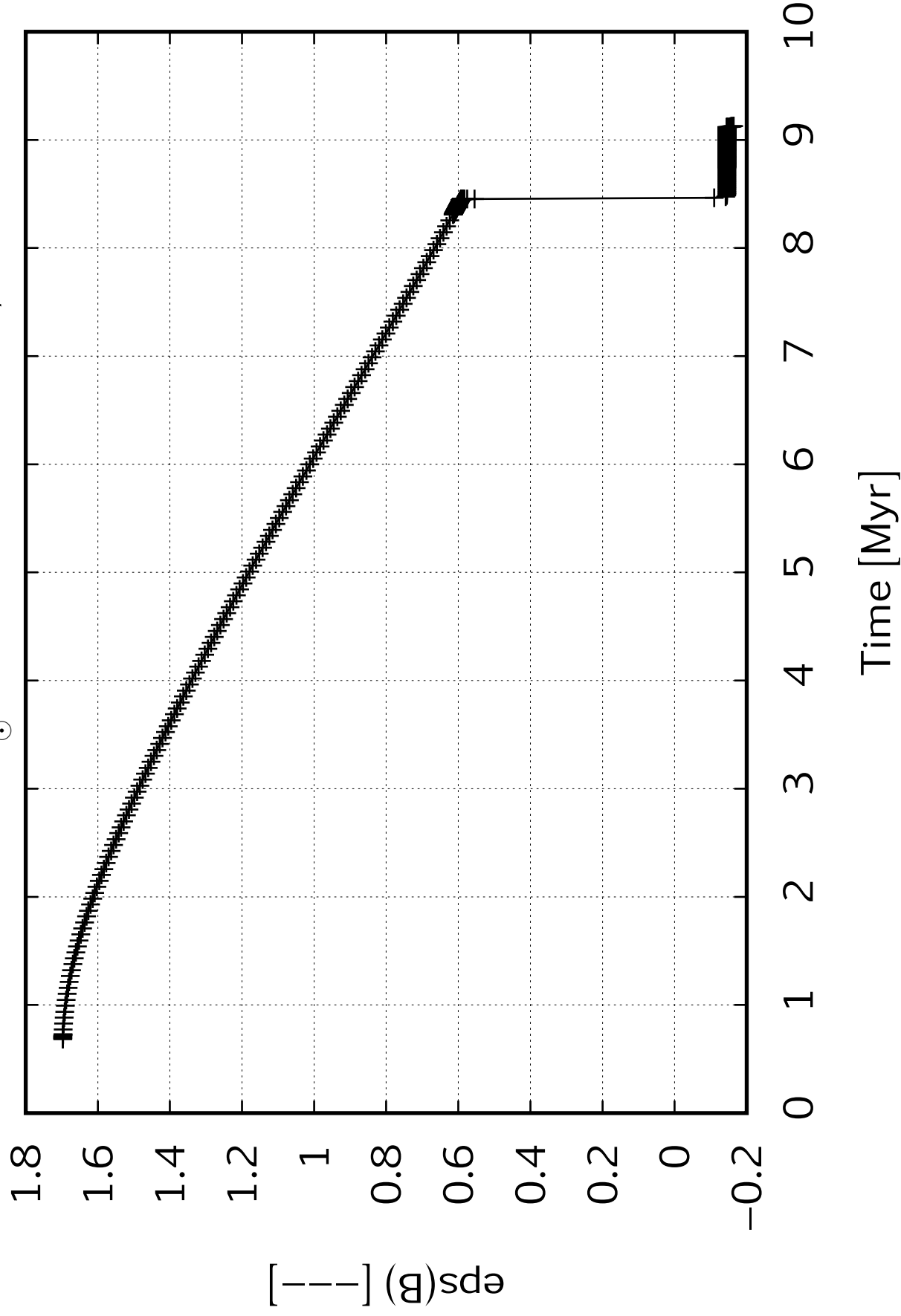


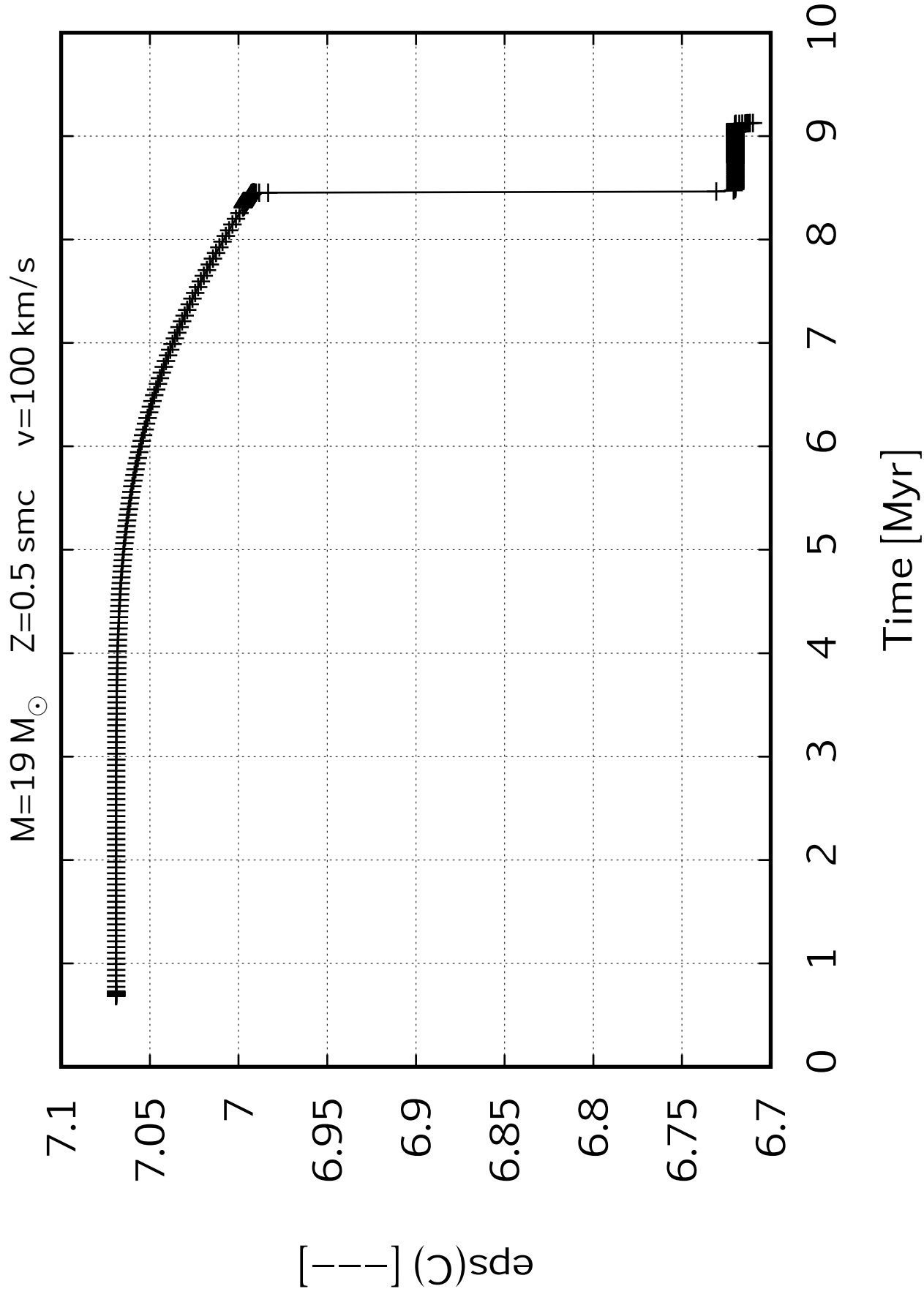
$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

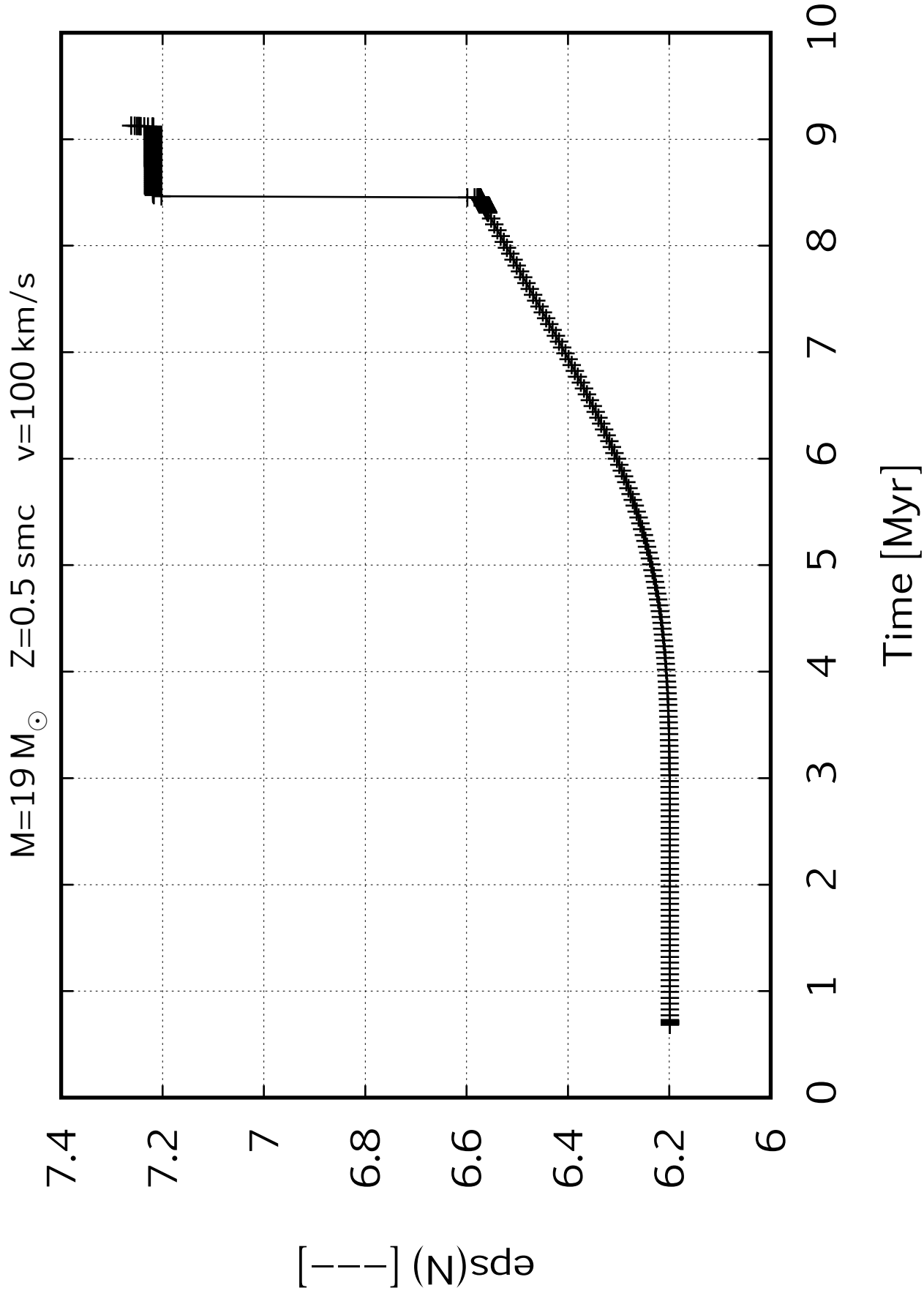


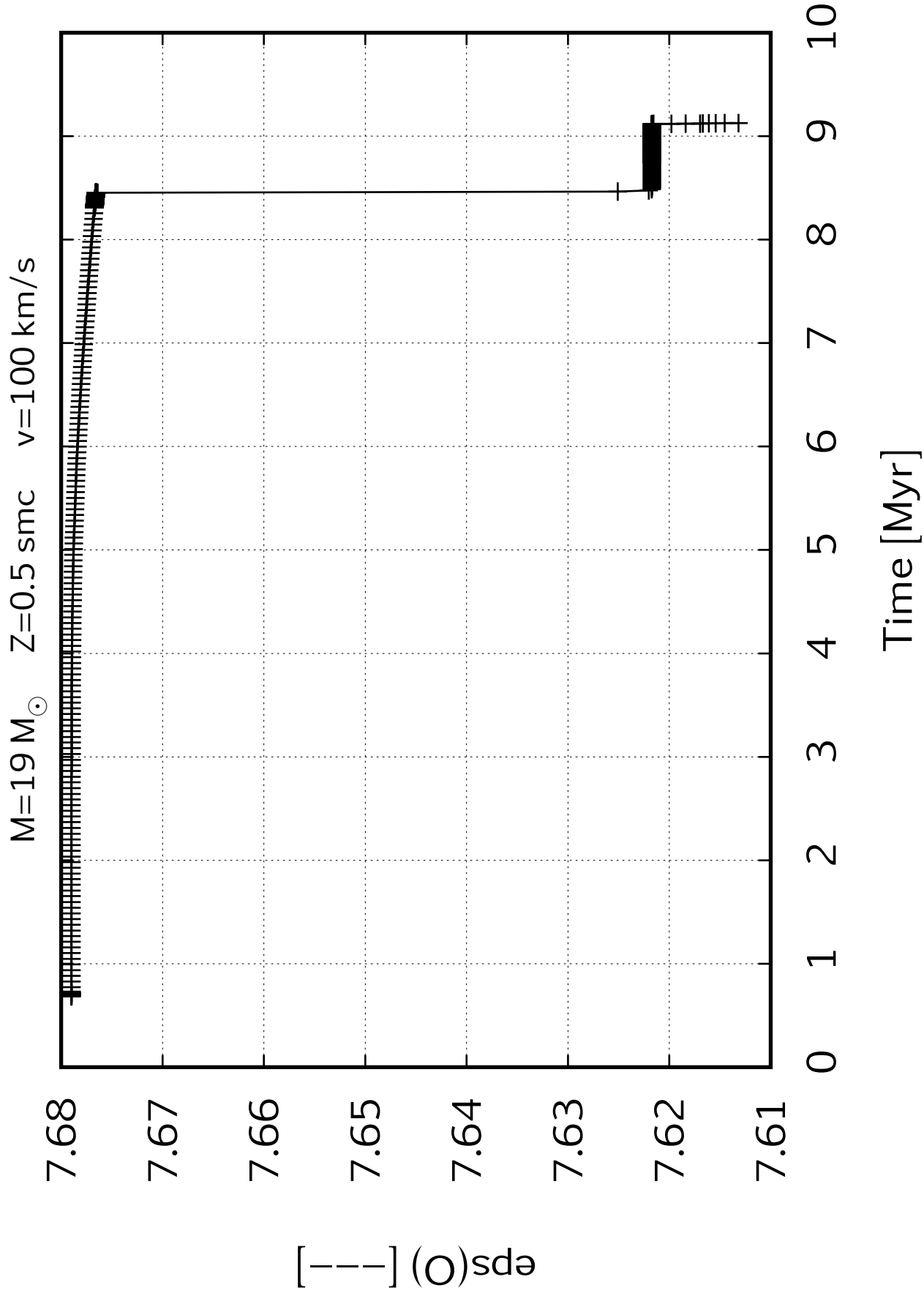


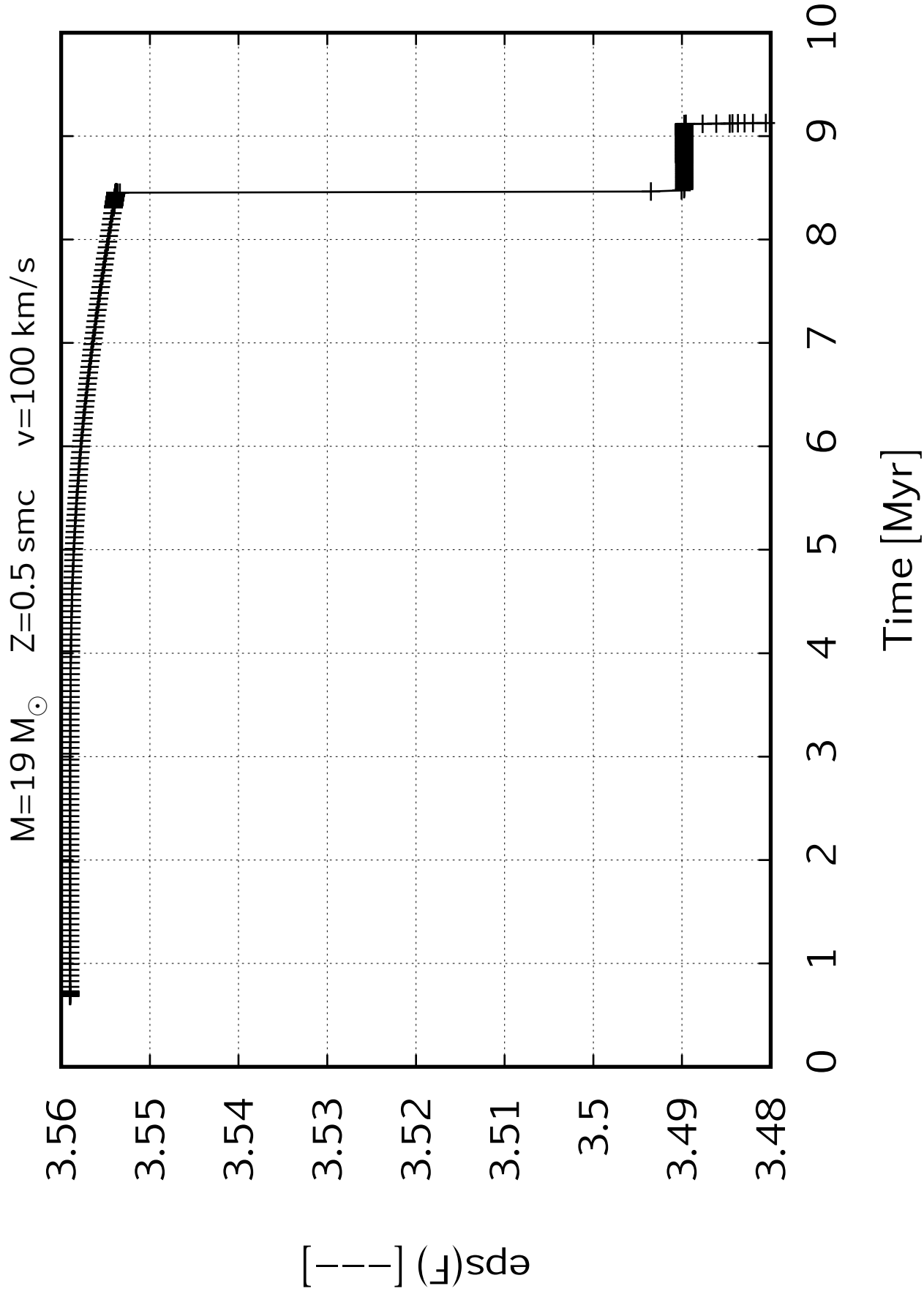
$M=19 M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s



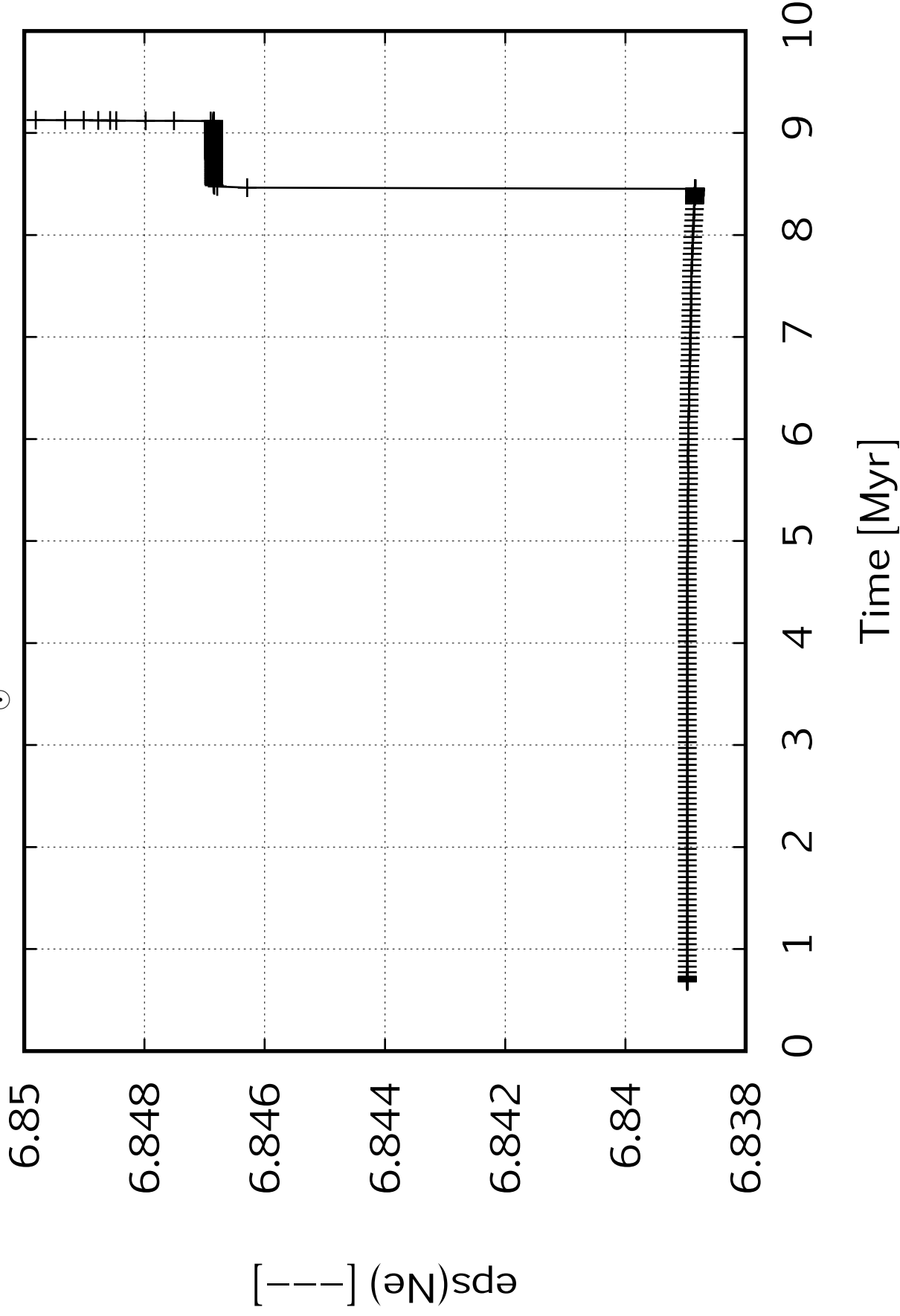




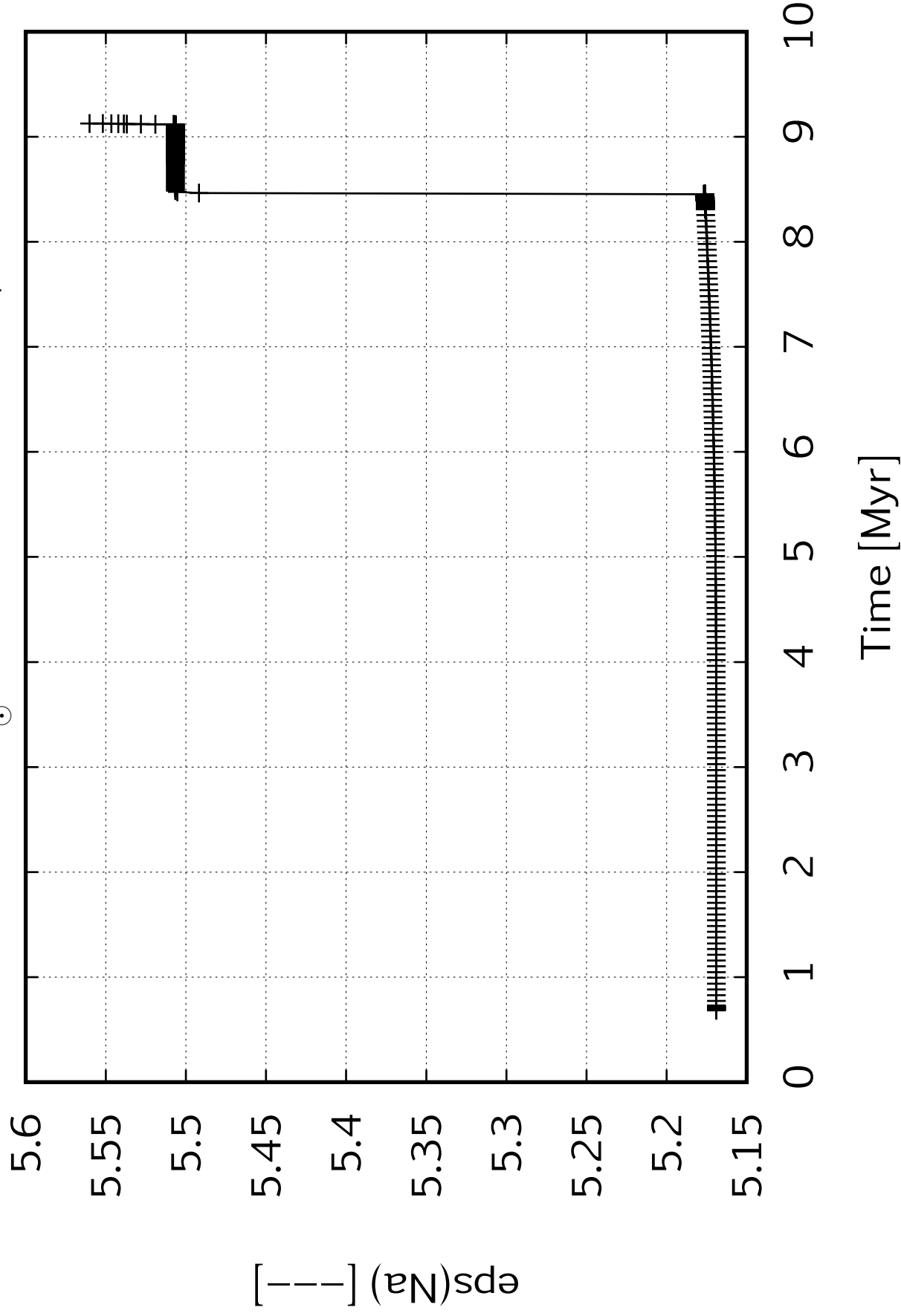




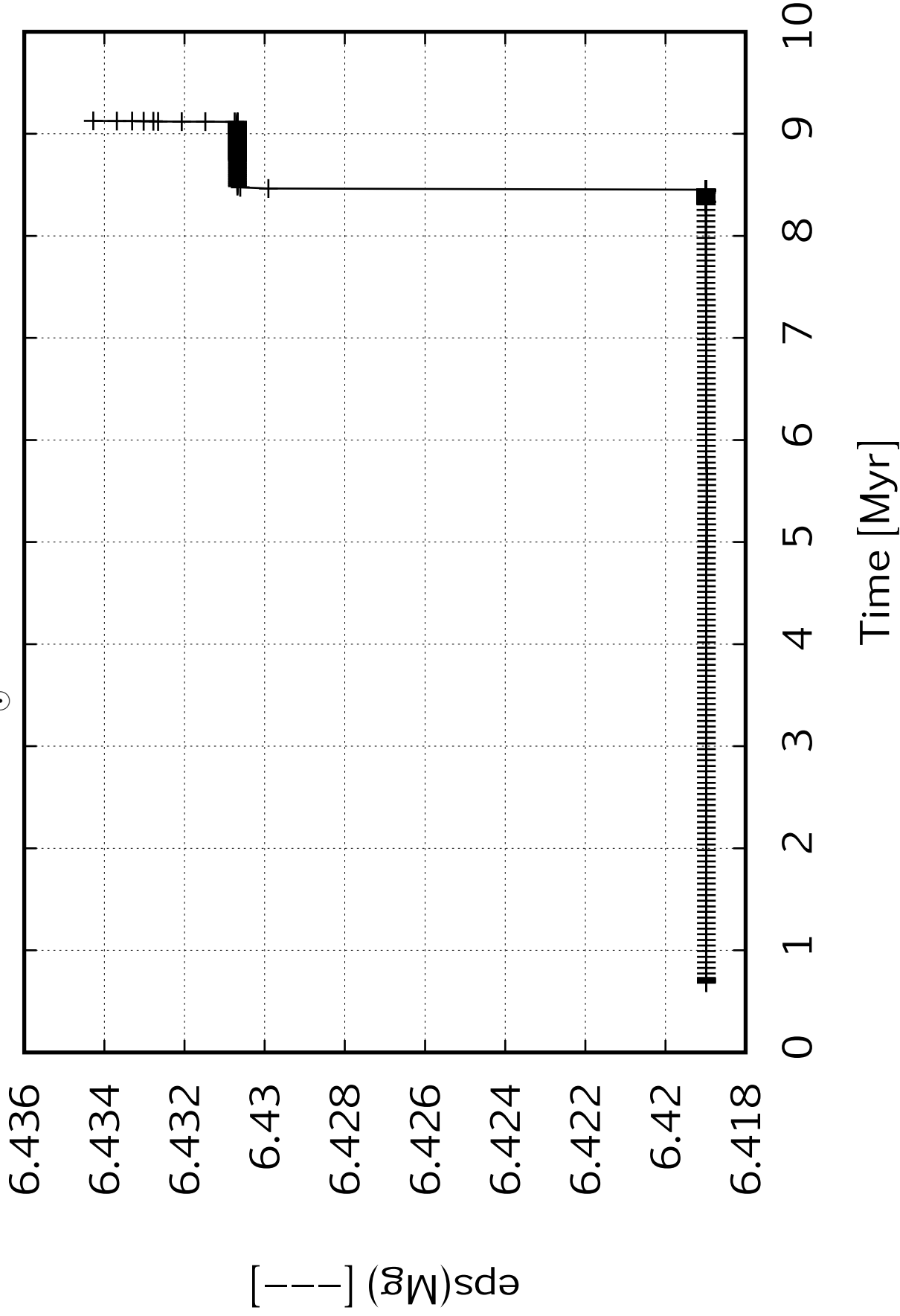
$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$



$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$

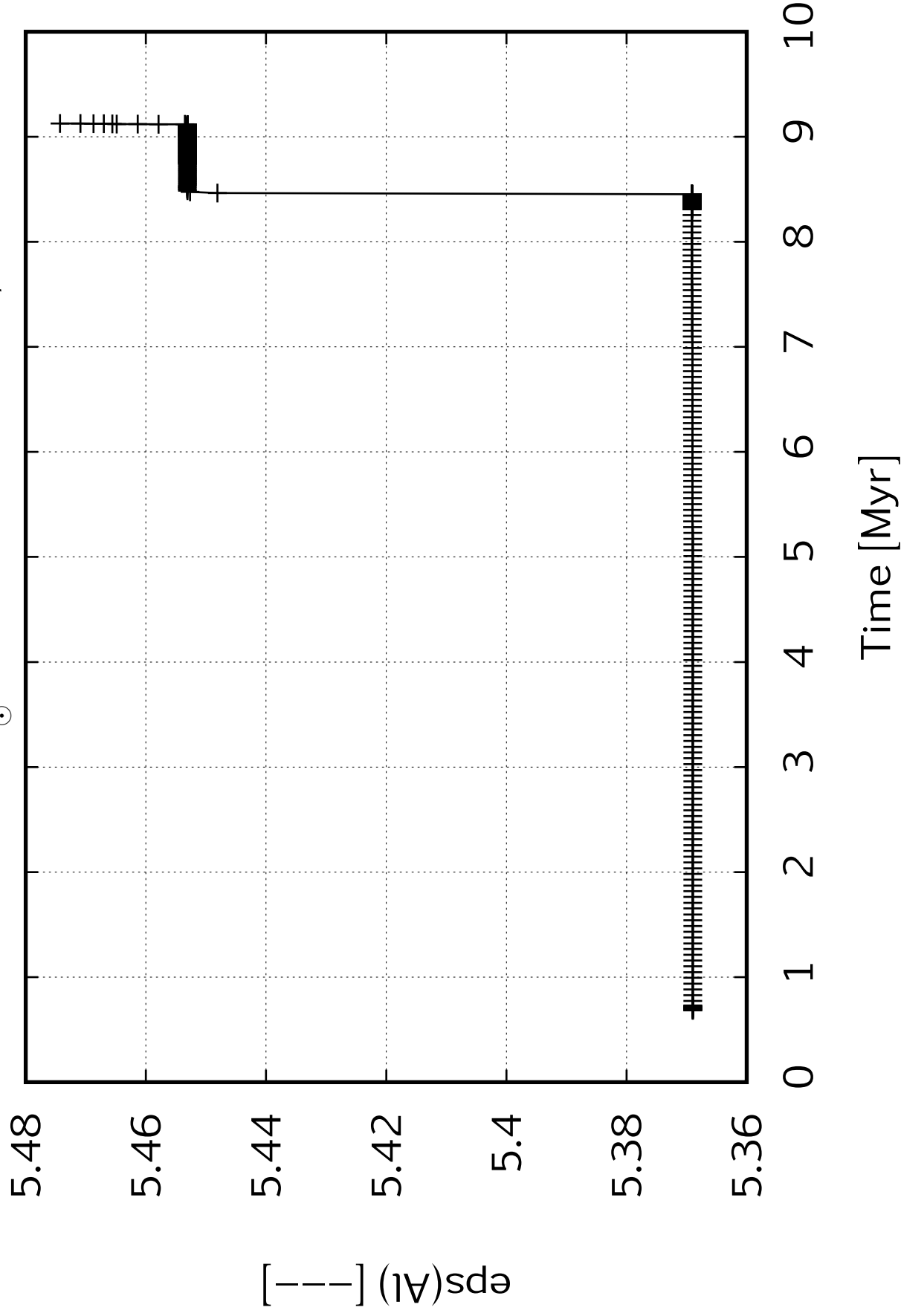


$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$





$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$



$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$

7.94

7.92

7.9

7.88

7.86

7.84

7.82

7.8

7.78

7.76

He-core-size [ $M_{\text{sun}}$ ]

0

1

2

3

4

5

6

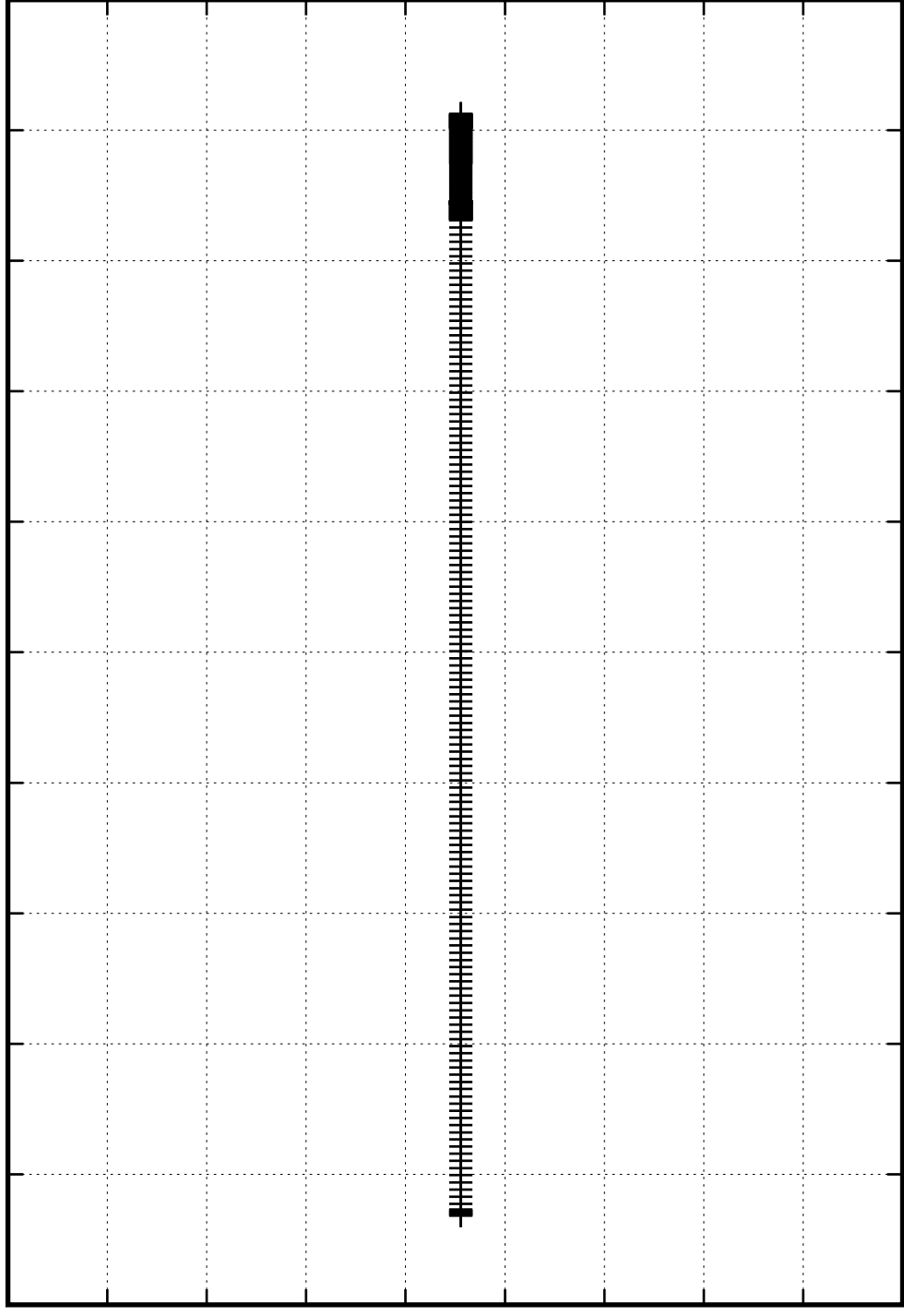
7

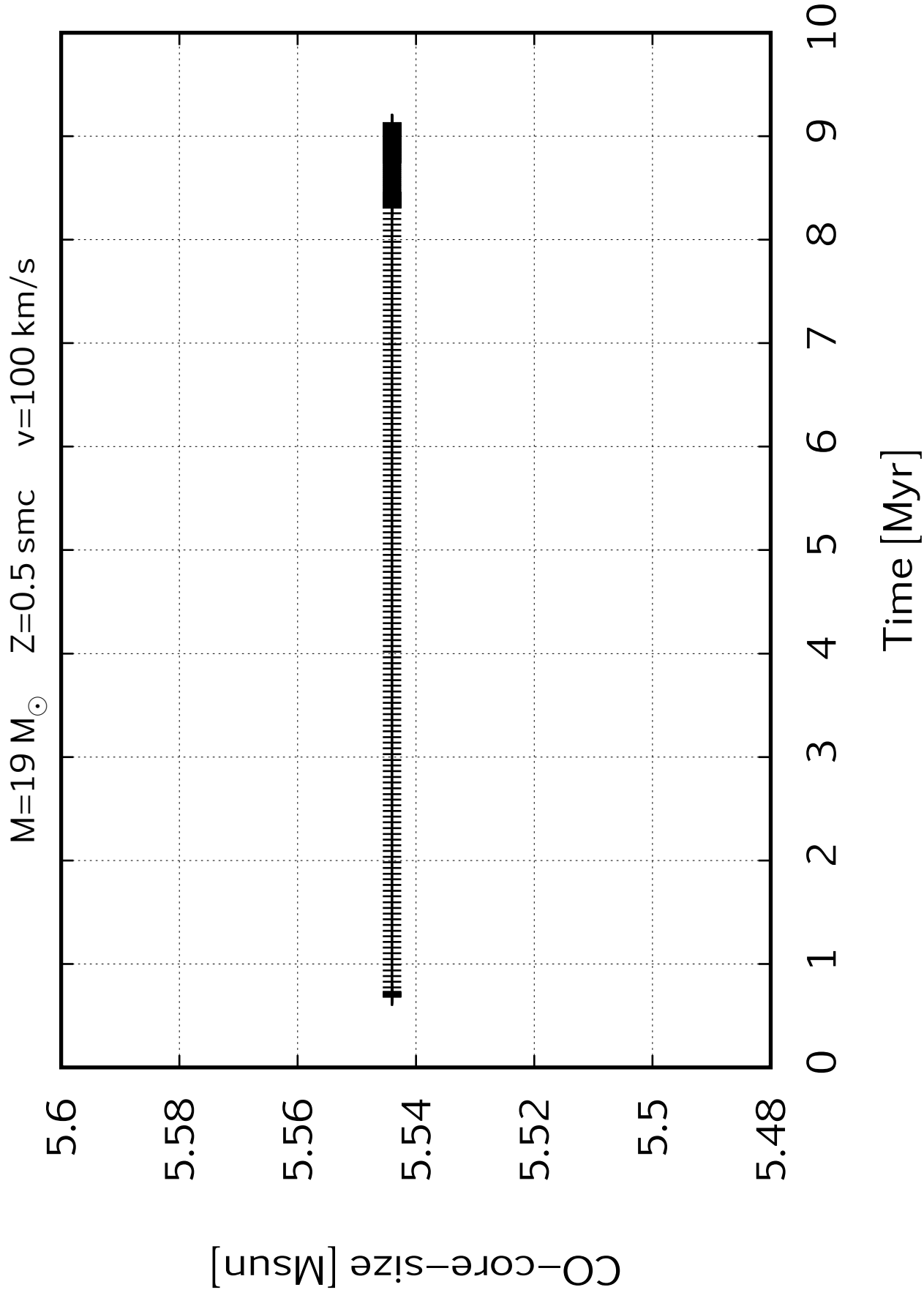
8

9

10

Time [Myr]





$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$

0.755

0.75

0.745

0.74

0.735

0.73

0.725

0.72

0.715

0.71

$[\text{I} - \text{I}]_{\text{H}\beta}$

0

1

2

3

4

5

6

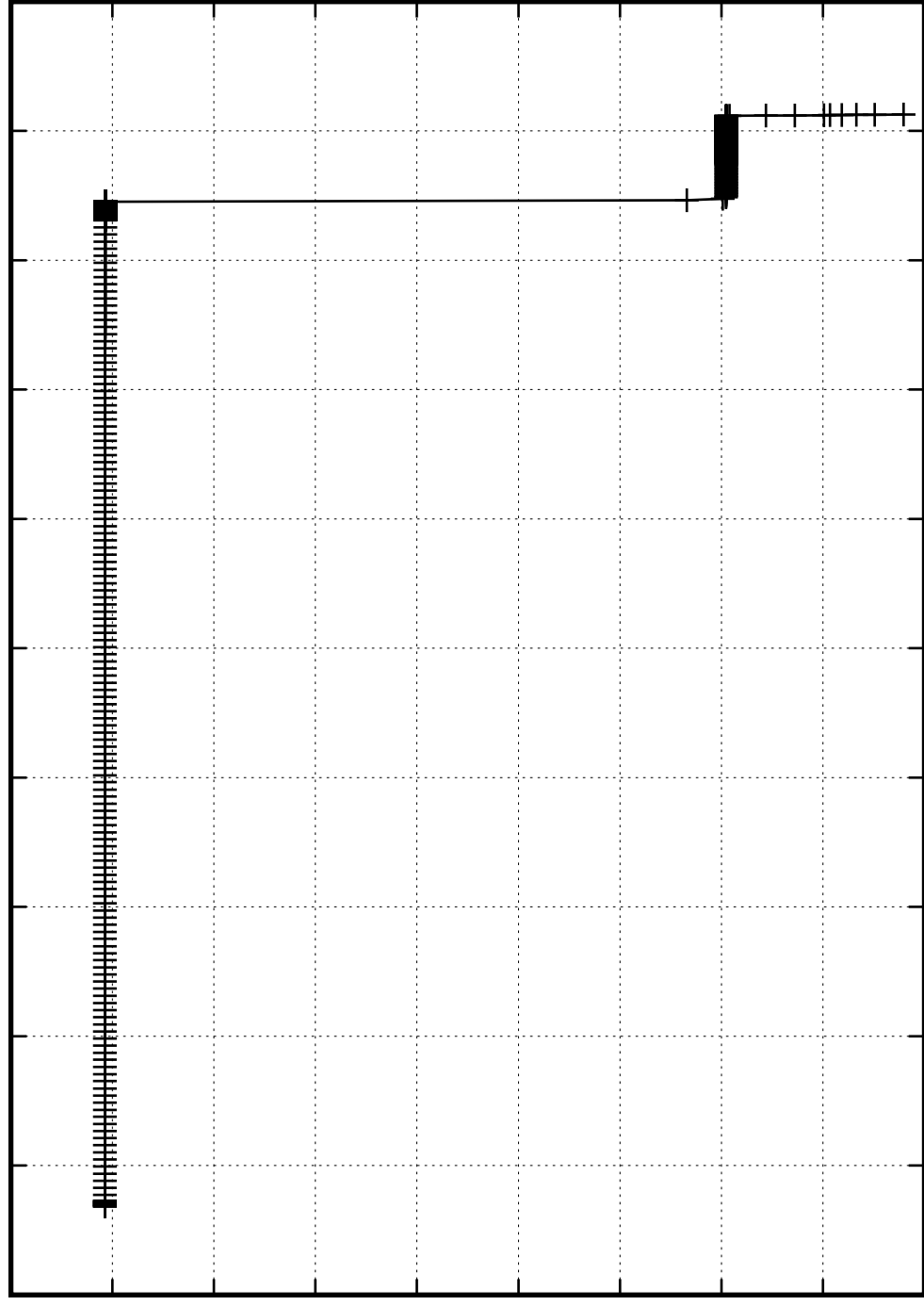
7

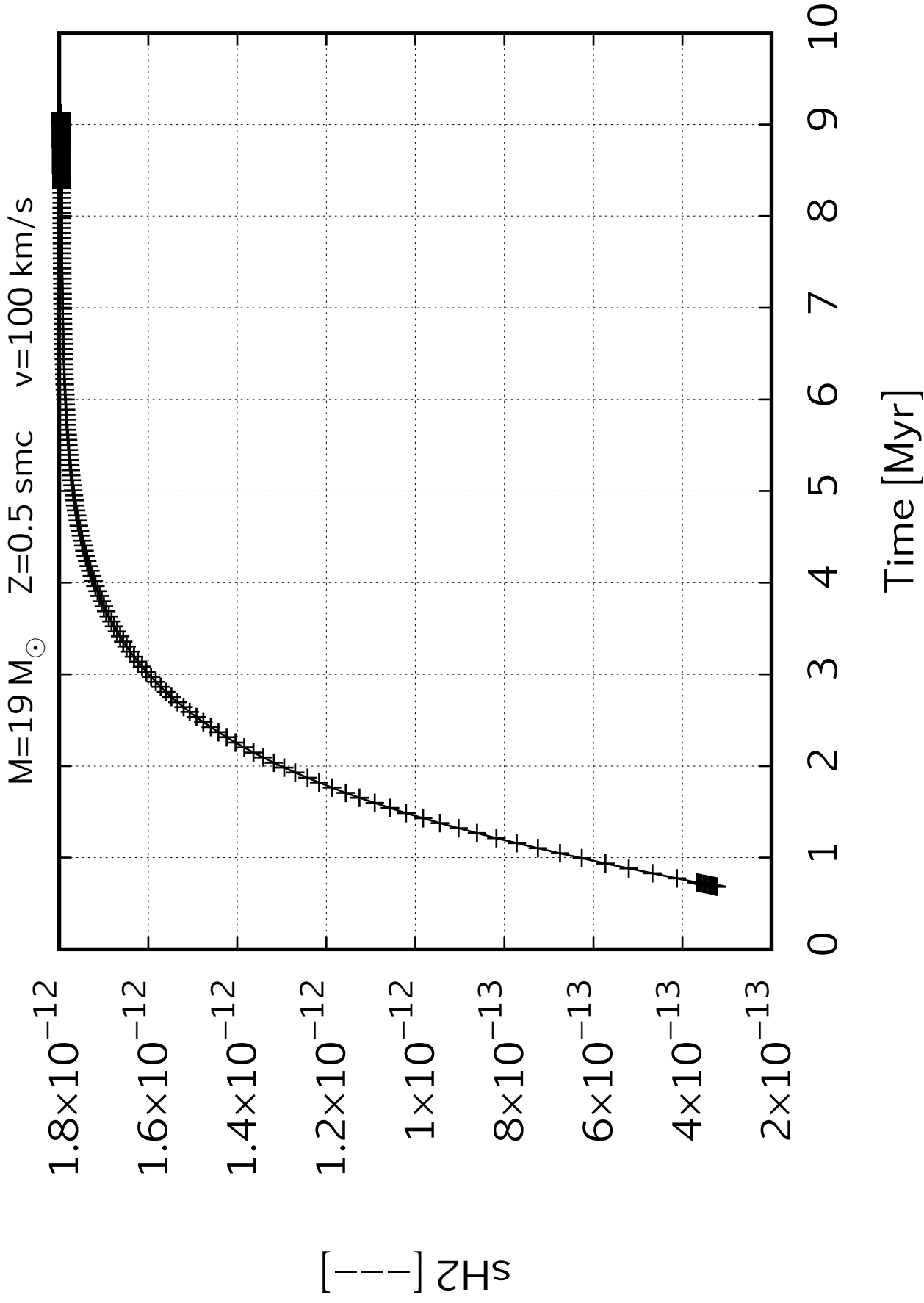
8

9

10

Time [Myr]





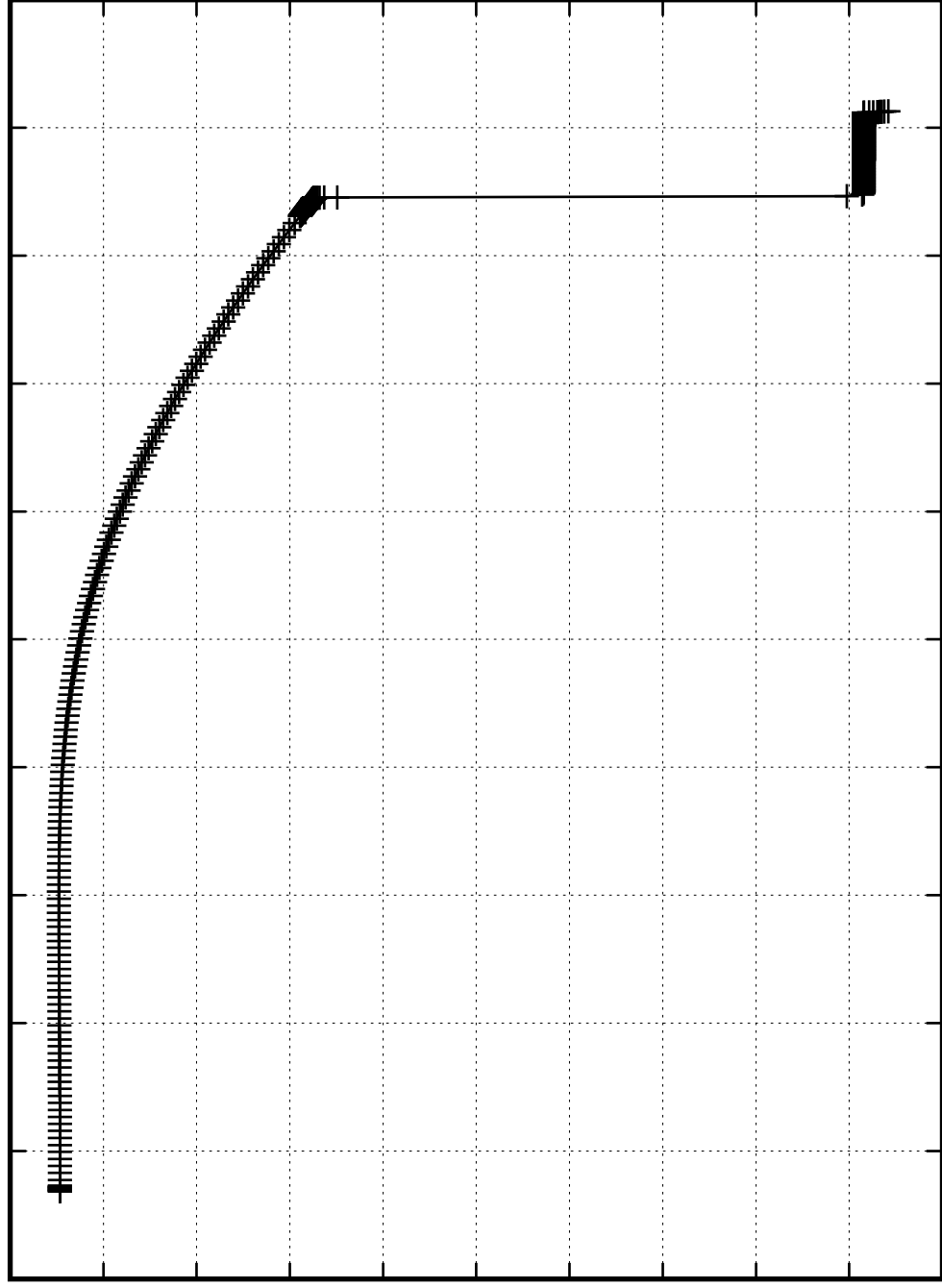
$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

$[\text{He3}]$

0.00003  
0.00003  
0.00003  
0.00003  
0.00002  
0.00002  
0.00002  
0.00002  
0.00002  
0.00001  
0.00001

0 1 2 3 4 5 6 7 8 9 10

Time [Myr]



$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$

0.29

0.285

0.28

0.275

0.27

0.265

0.26

0.255

0.25

0.245

$[\text{He4}]$

0

1

2

3

4

5

6

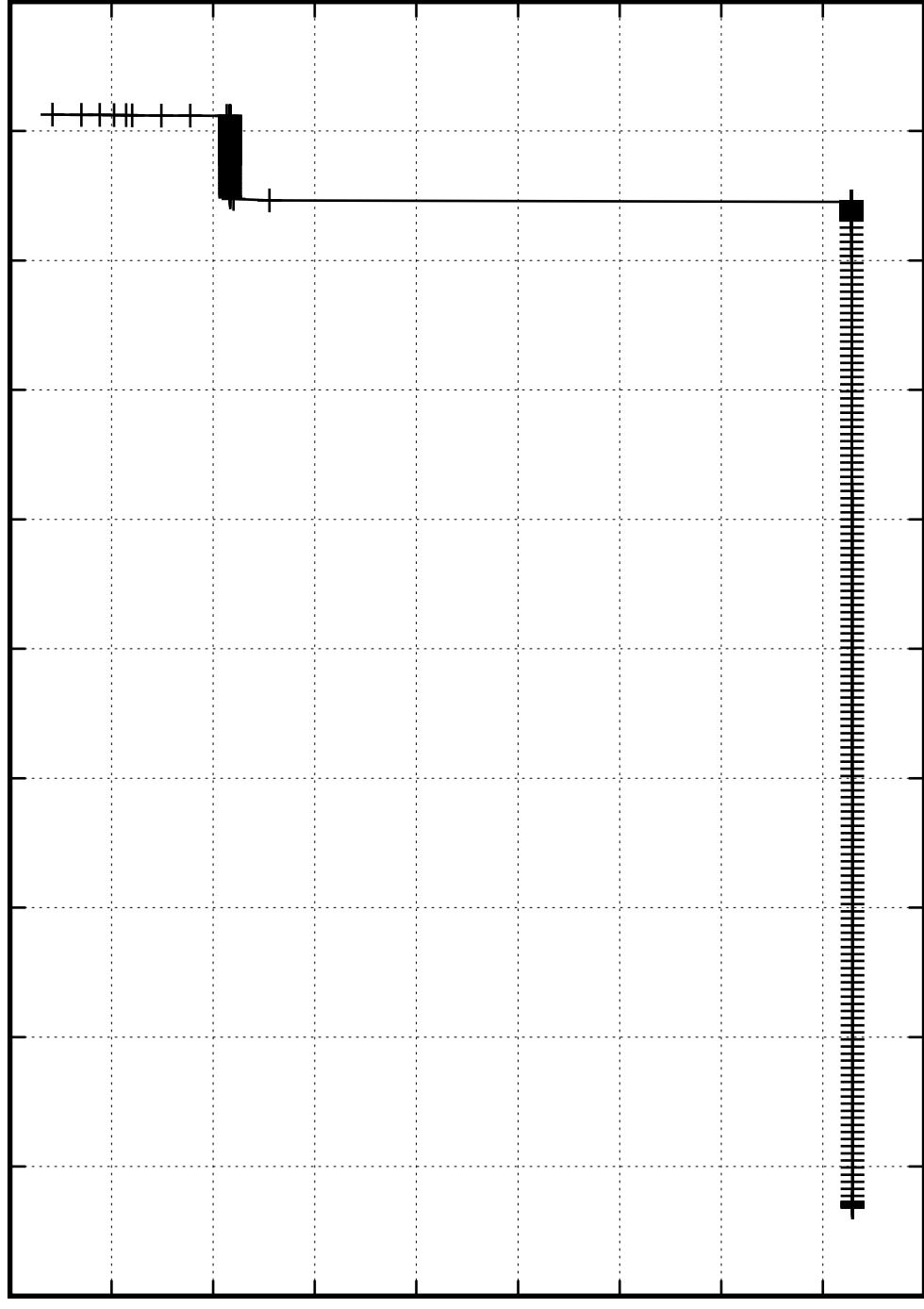
7

8

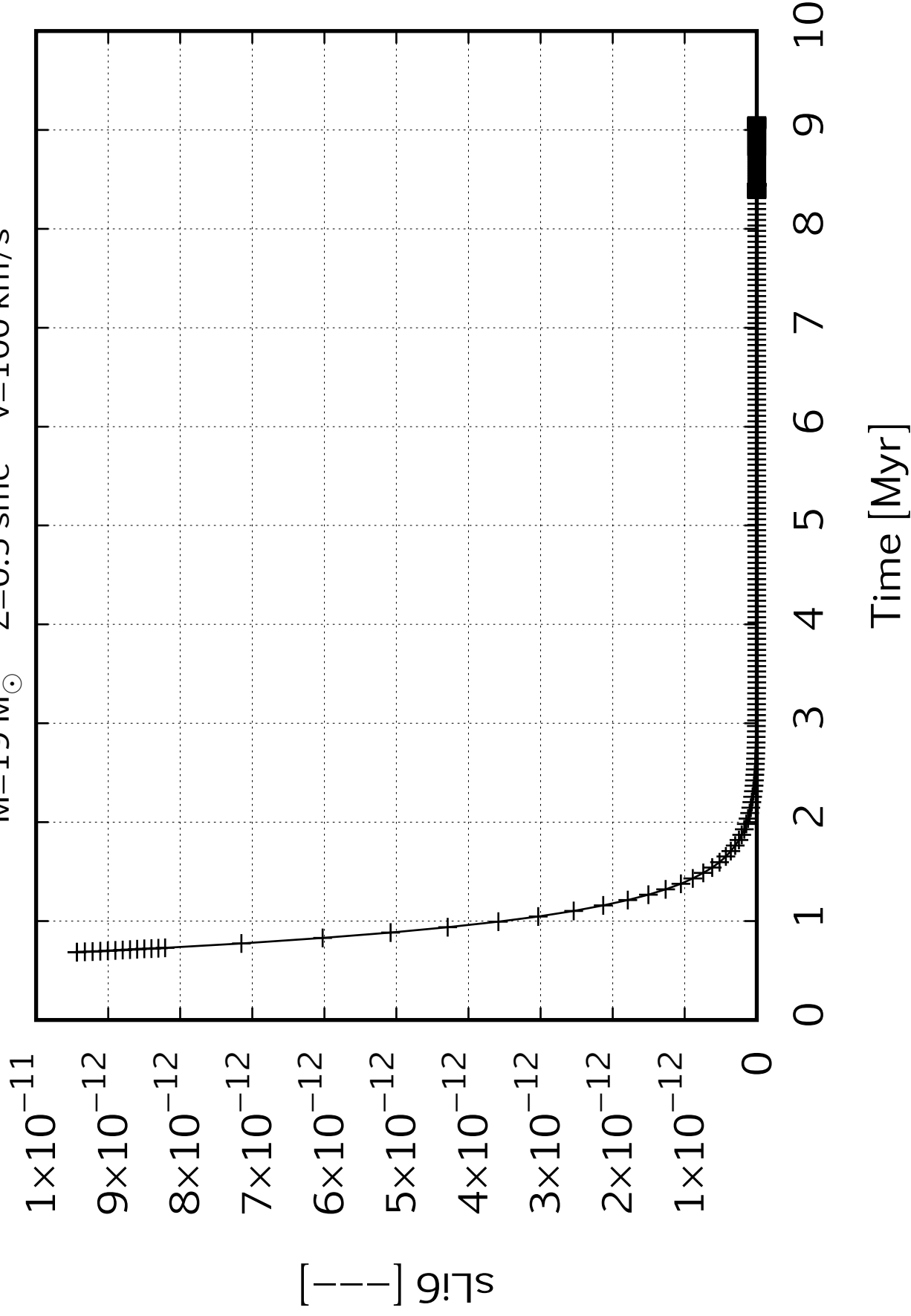
9

10

Time [Myr]

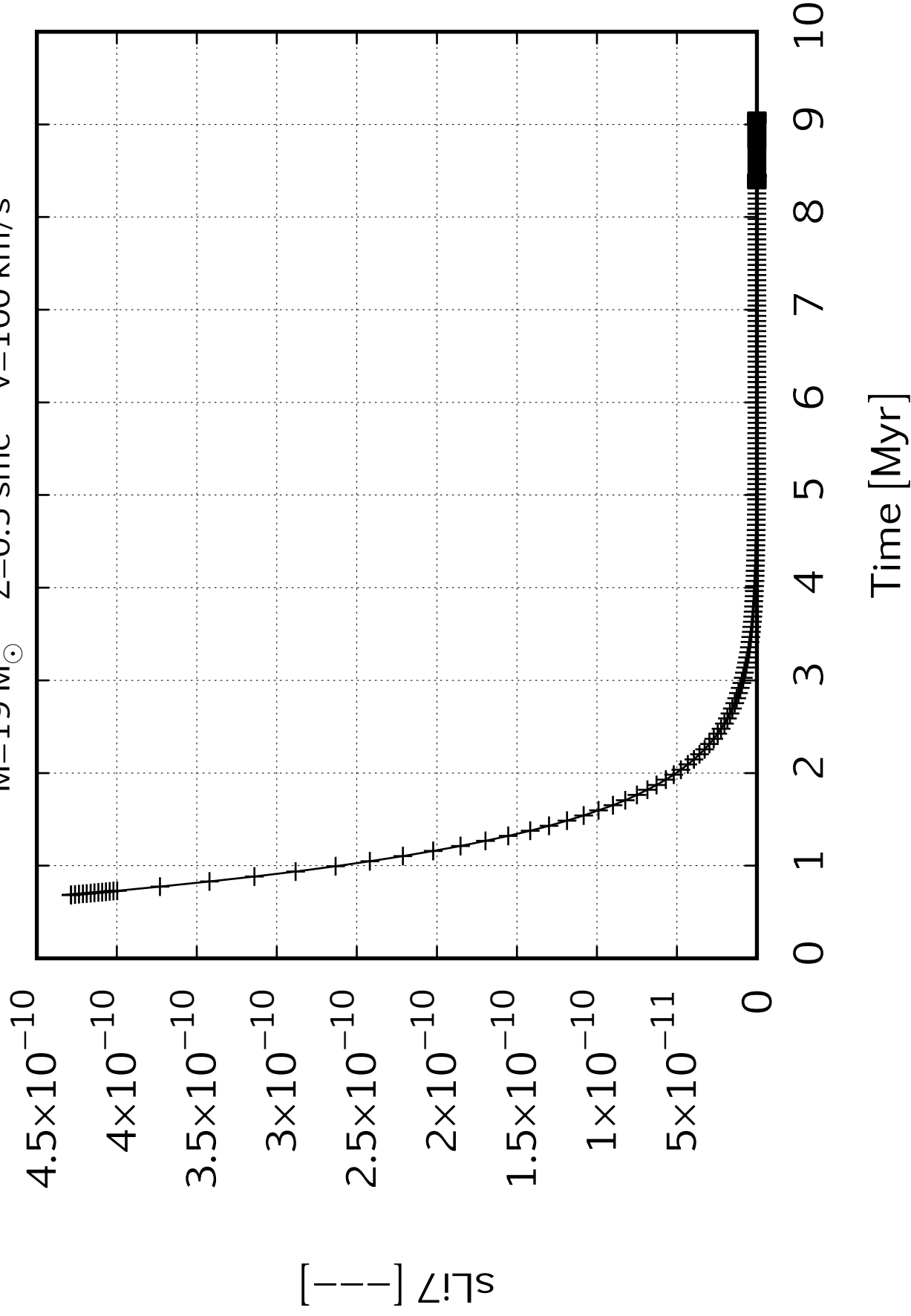


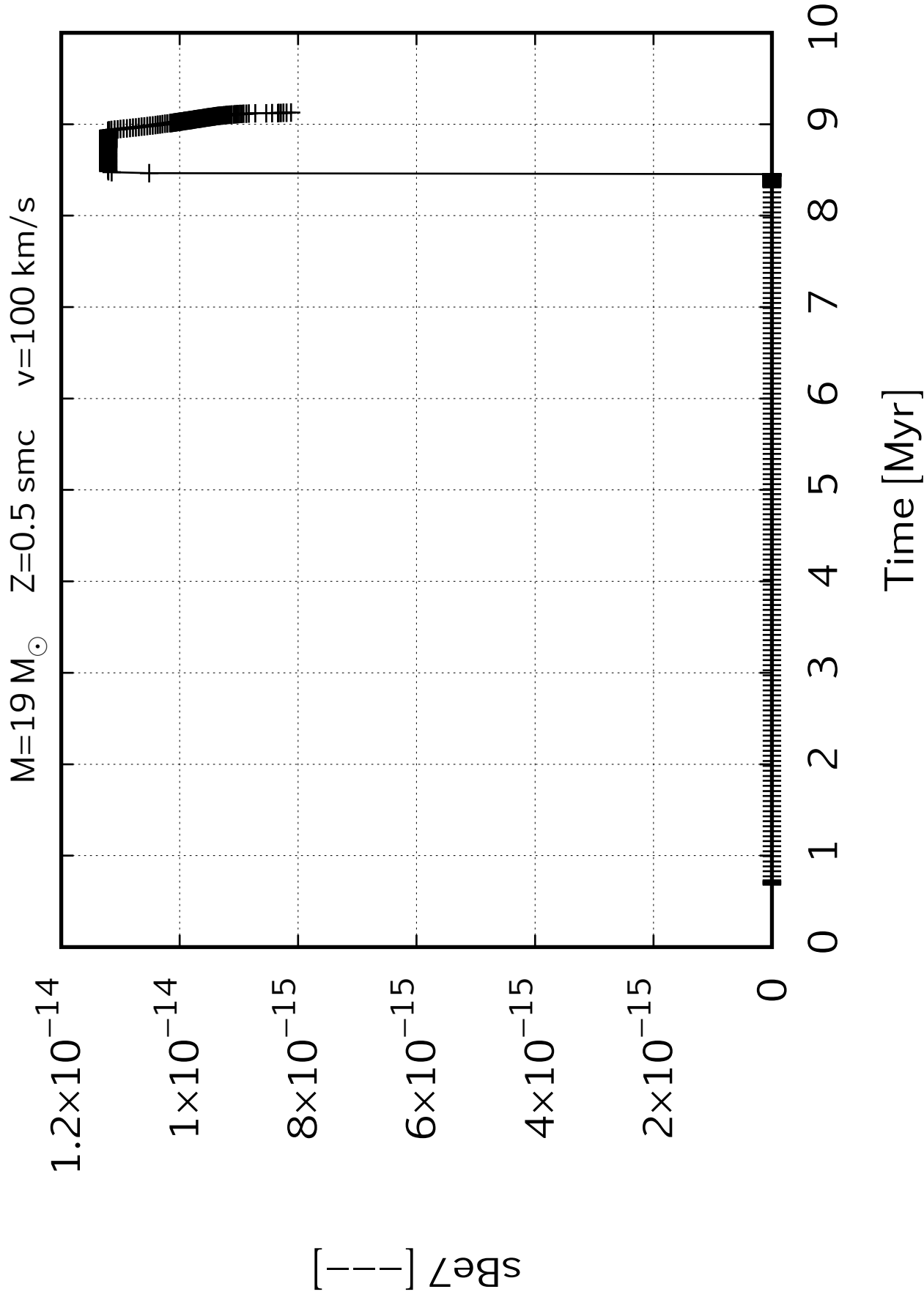
$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

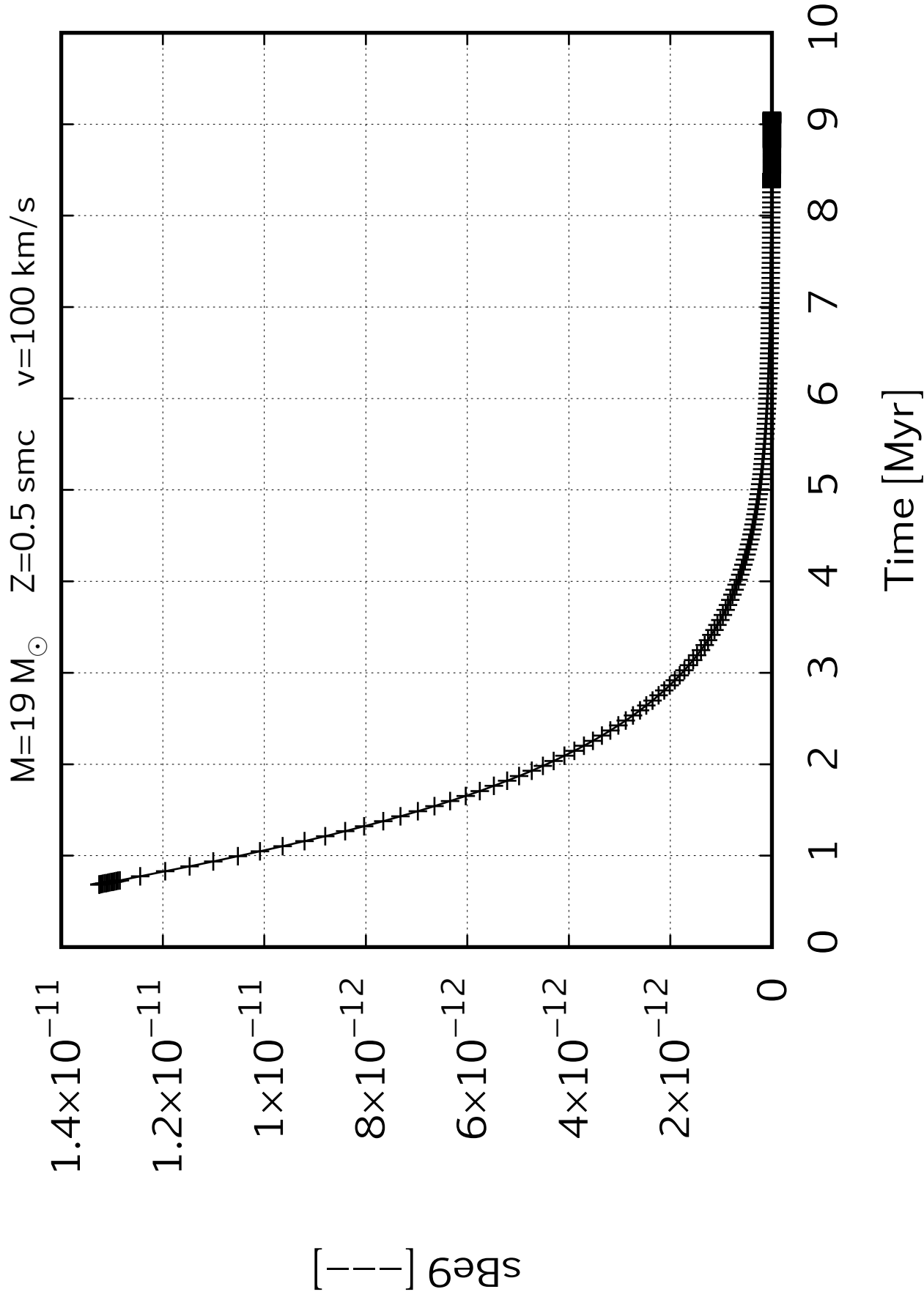




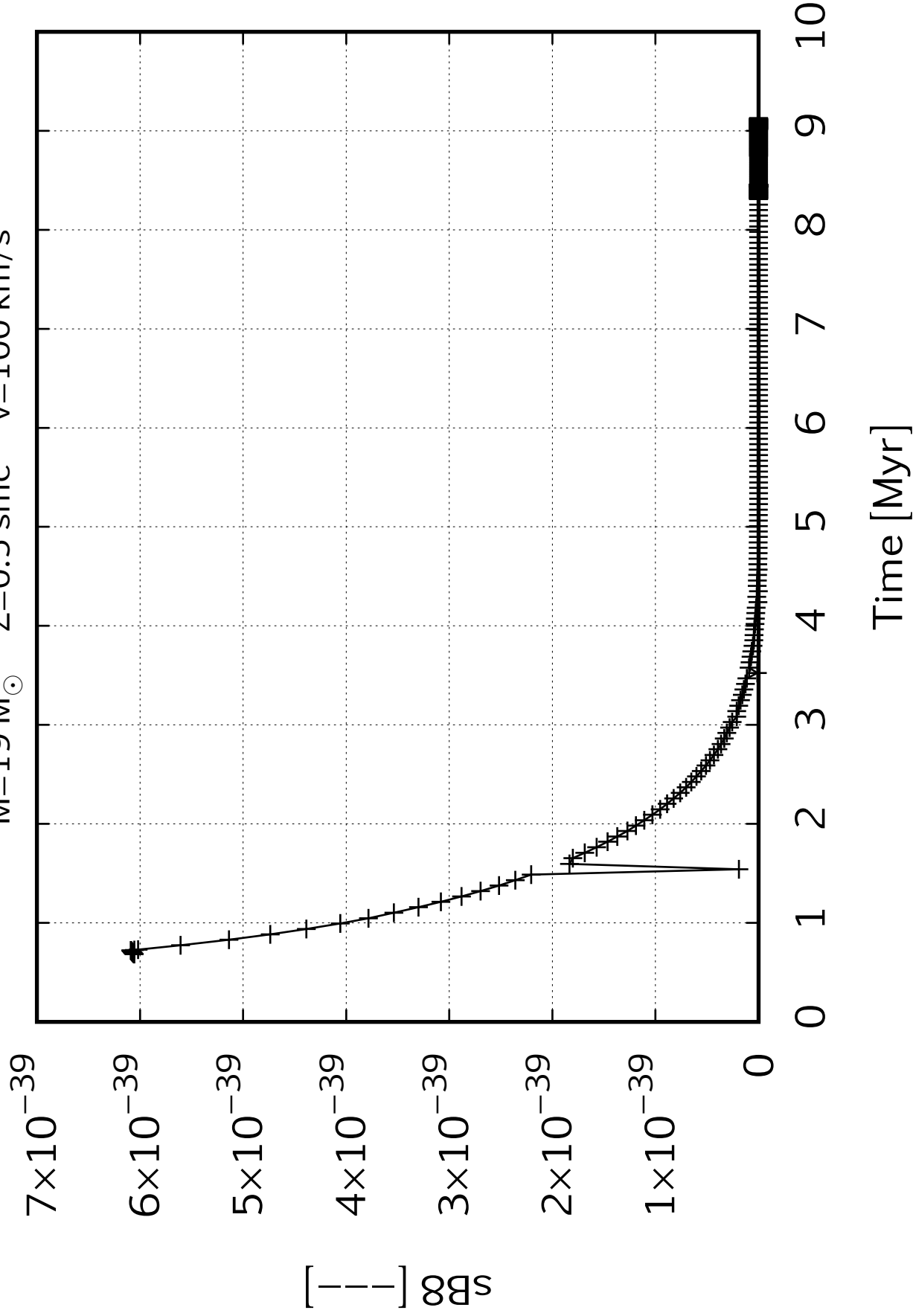
$M=19\,M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s



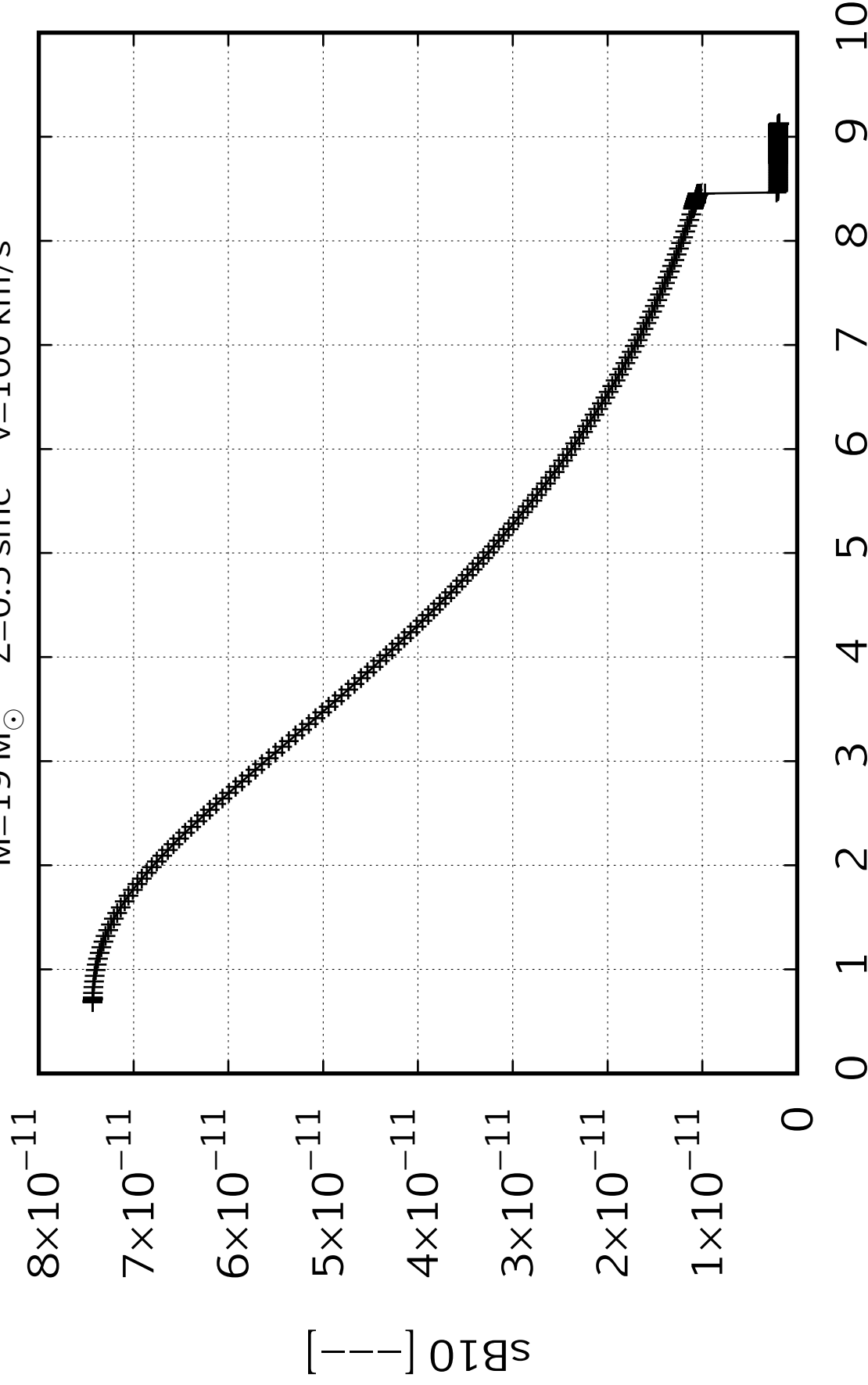


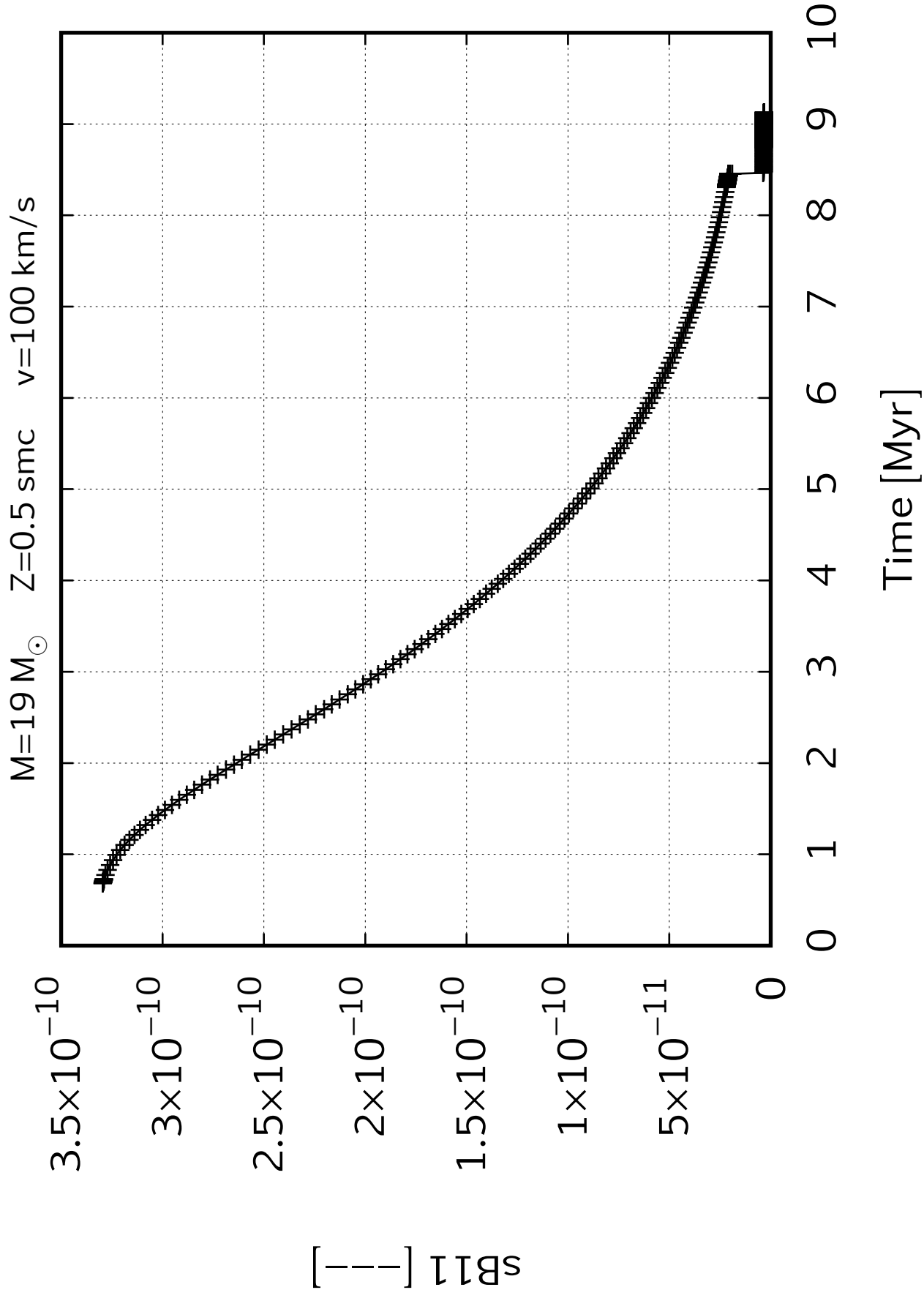


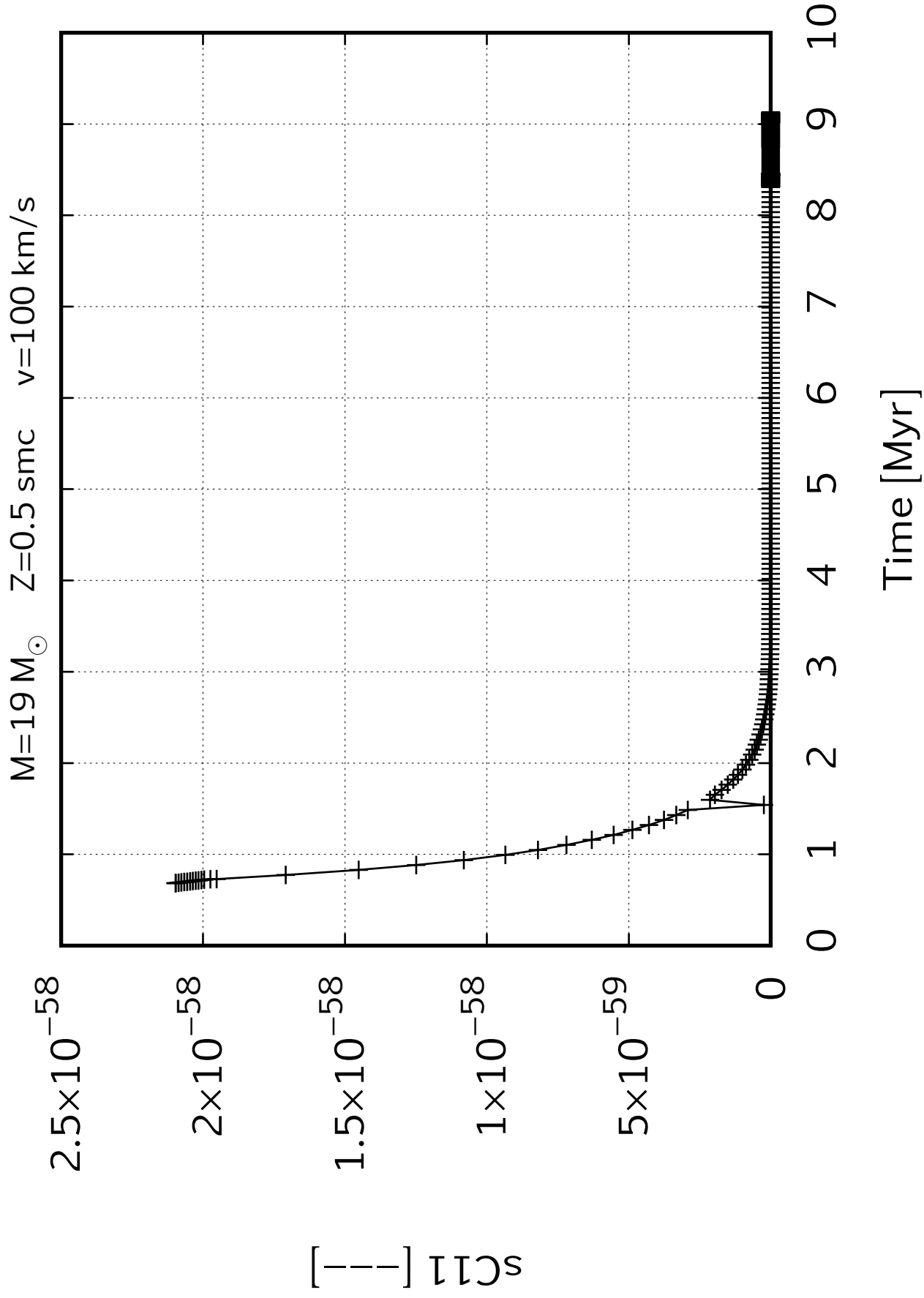
$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s



$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s







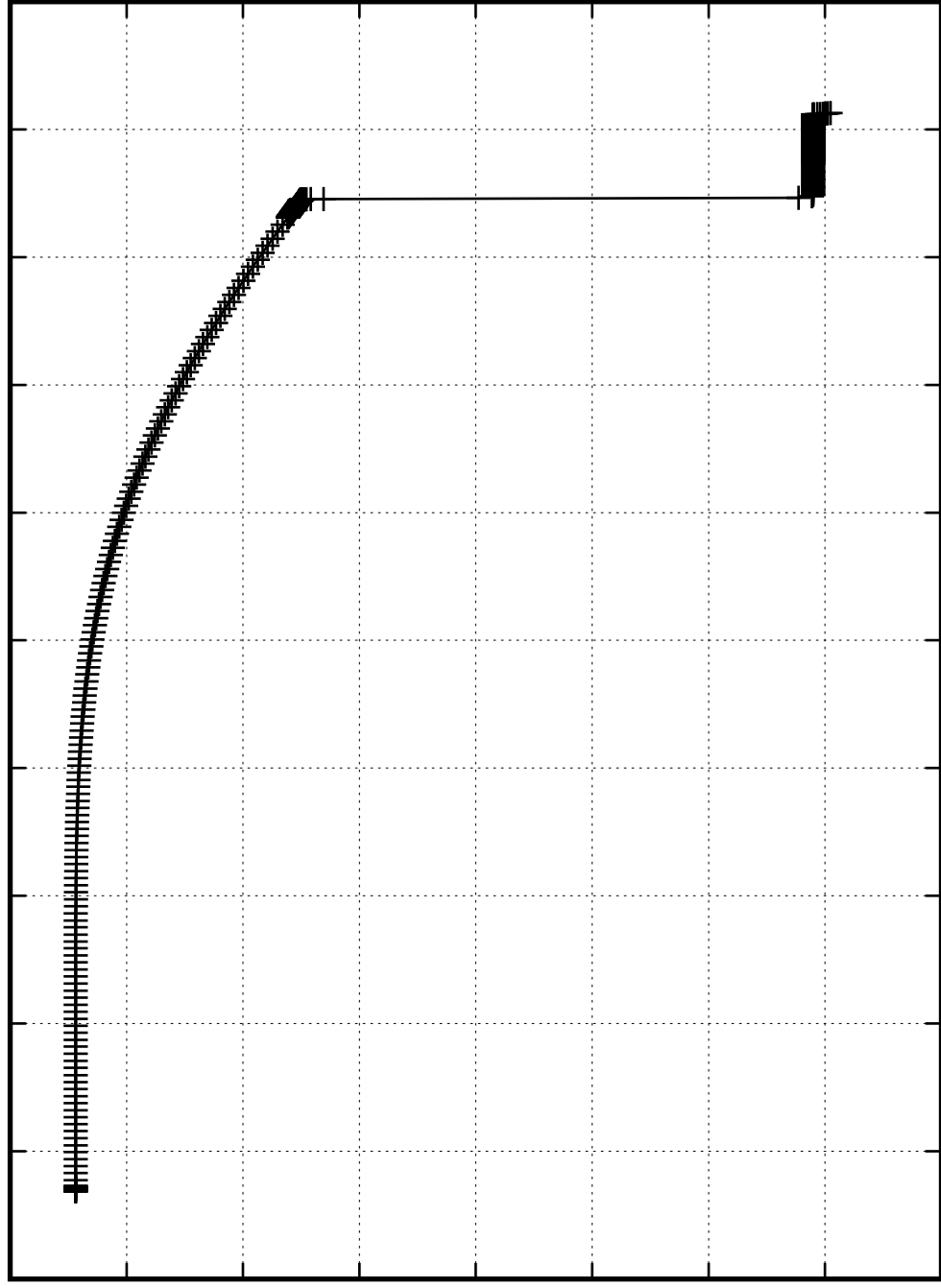
$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

$sC12[-]$

0.00011  
0.00010  
0.00009  
0.00008  
0.00007  
0.00006  
0.00005  
0.00004  
0.00003

0 1 2 3 4 5 6 7 8 9 10

Time [Myr]





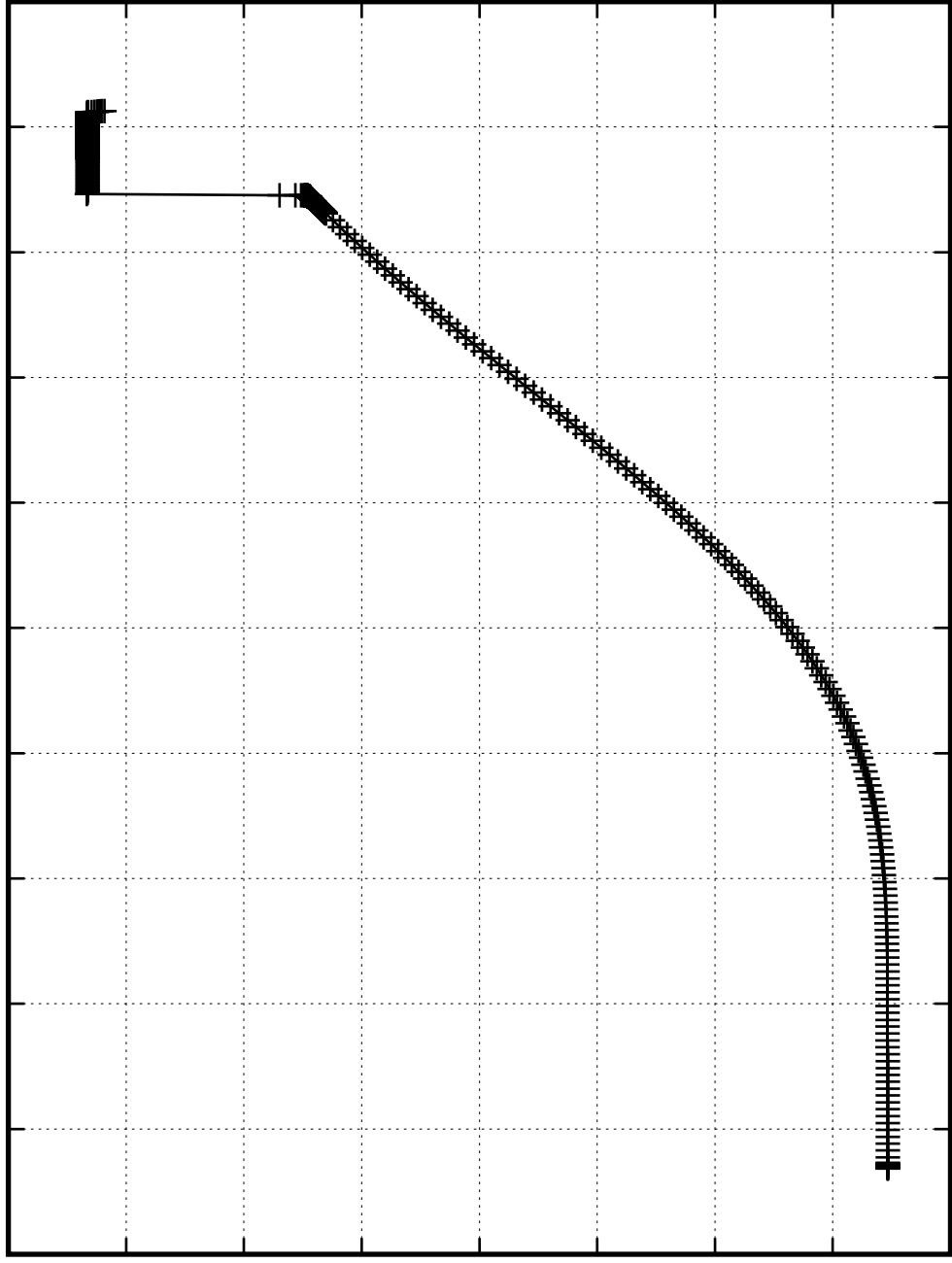
$M=19 M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

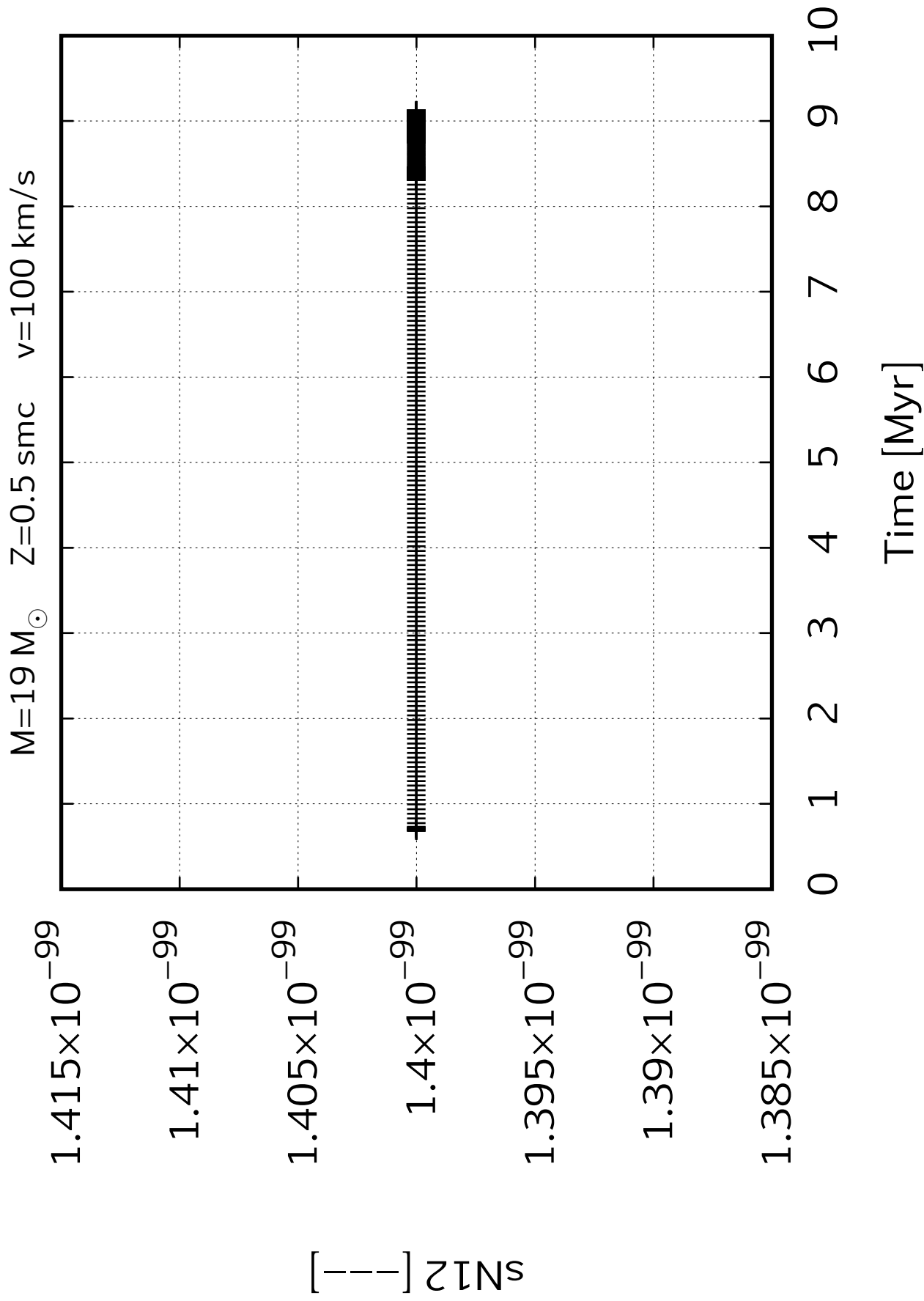
$^{13}\text{C}$  [I-]

0.000005  
0.000005  
0.000004  
0.000003  
0.000003  
0.000002  
0.000002  
0.000002  
0.000001

0 1 2 3 4 5 6 7 8 9 10

Time [Myr]





$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$

0.0002

0.00018

0.00016

0.00014

0.00012

0.0001

$8 \times 10^{-5}$

$6 \times 10^{-5}$

$4 \times 10^{-5}$

$2 \times 10^{-5}$

0

$S_{N14} [ ]$

0

1

2

3

4

5

6

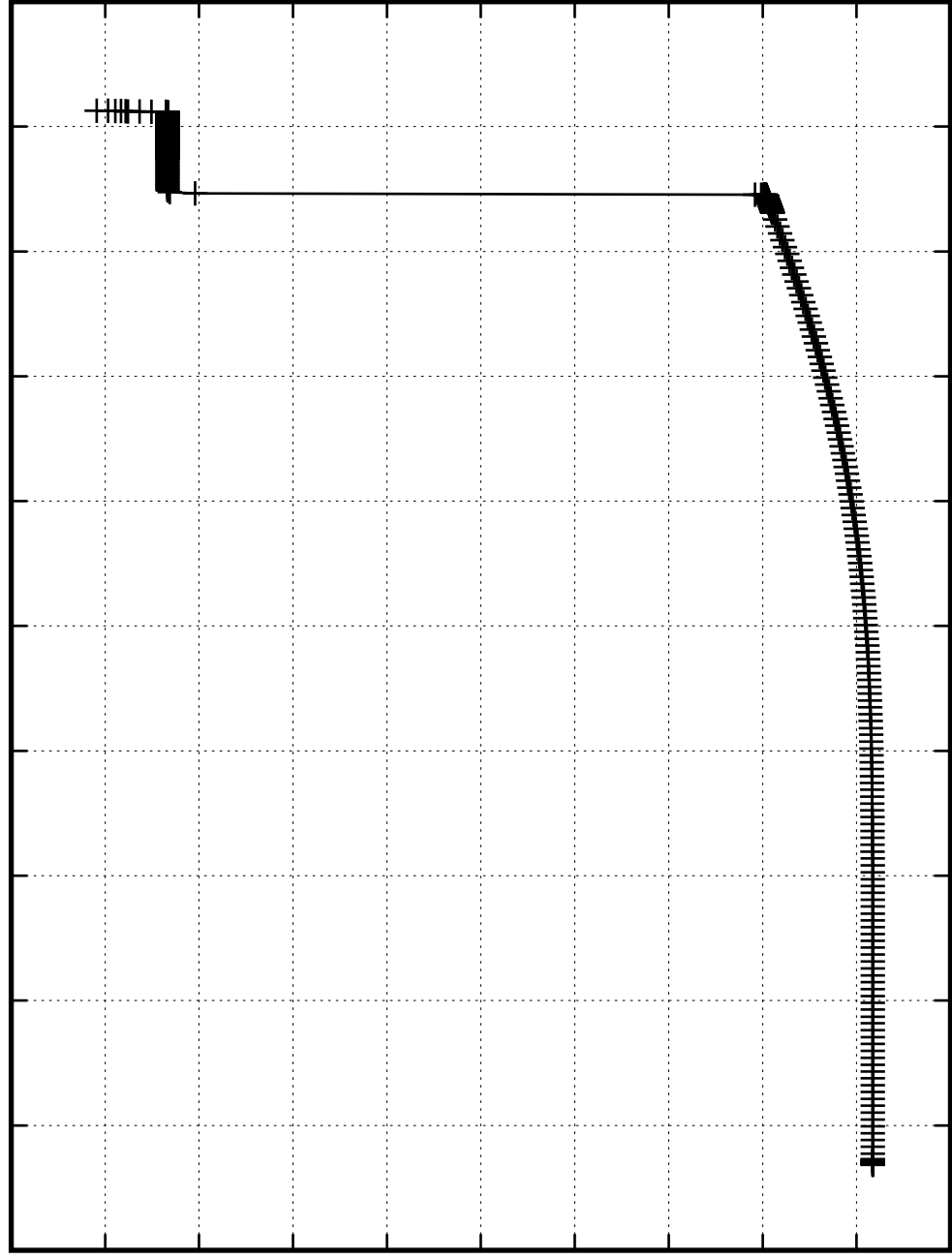
7

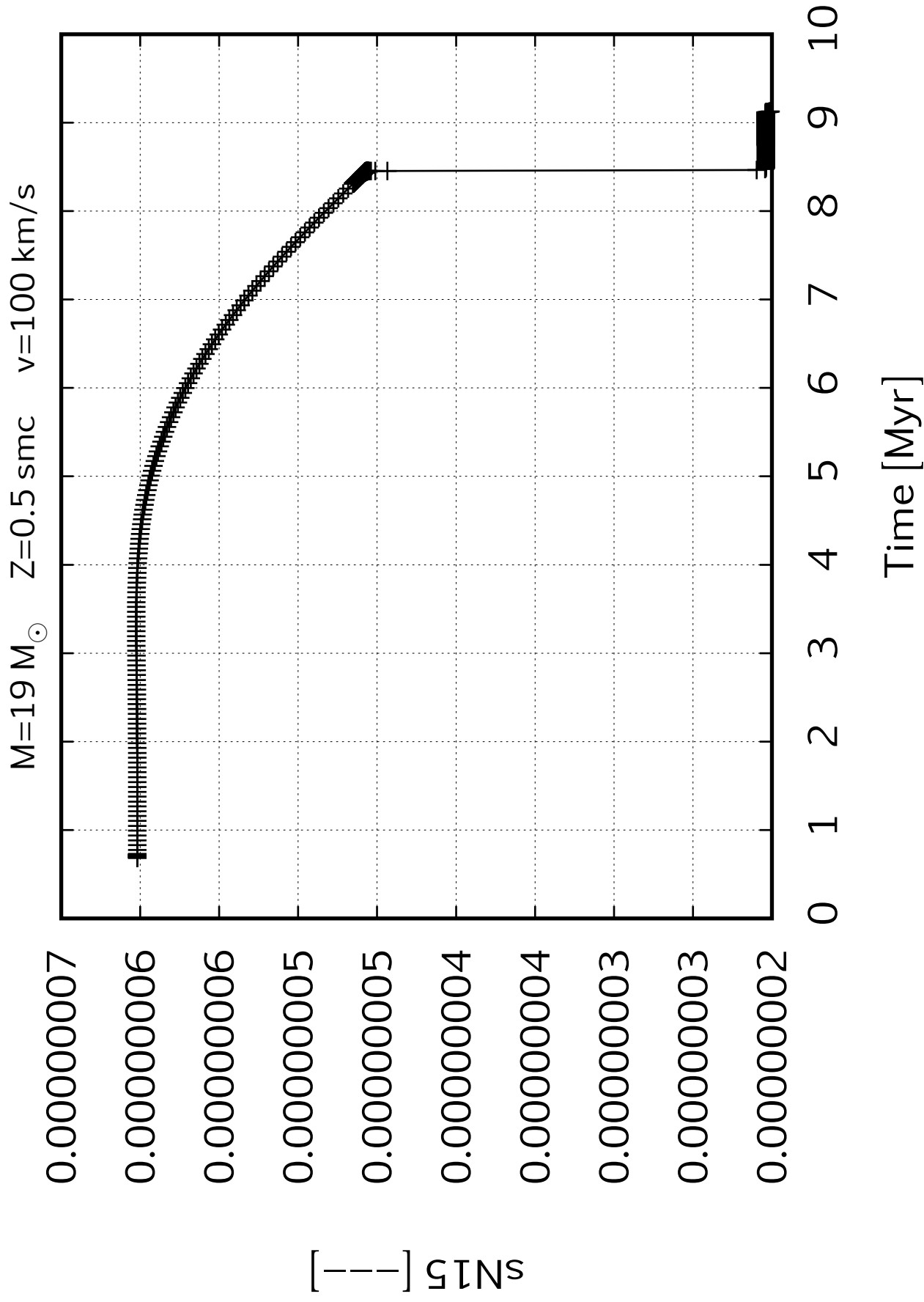
8

9

10

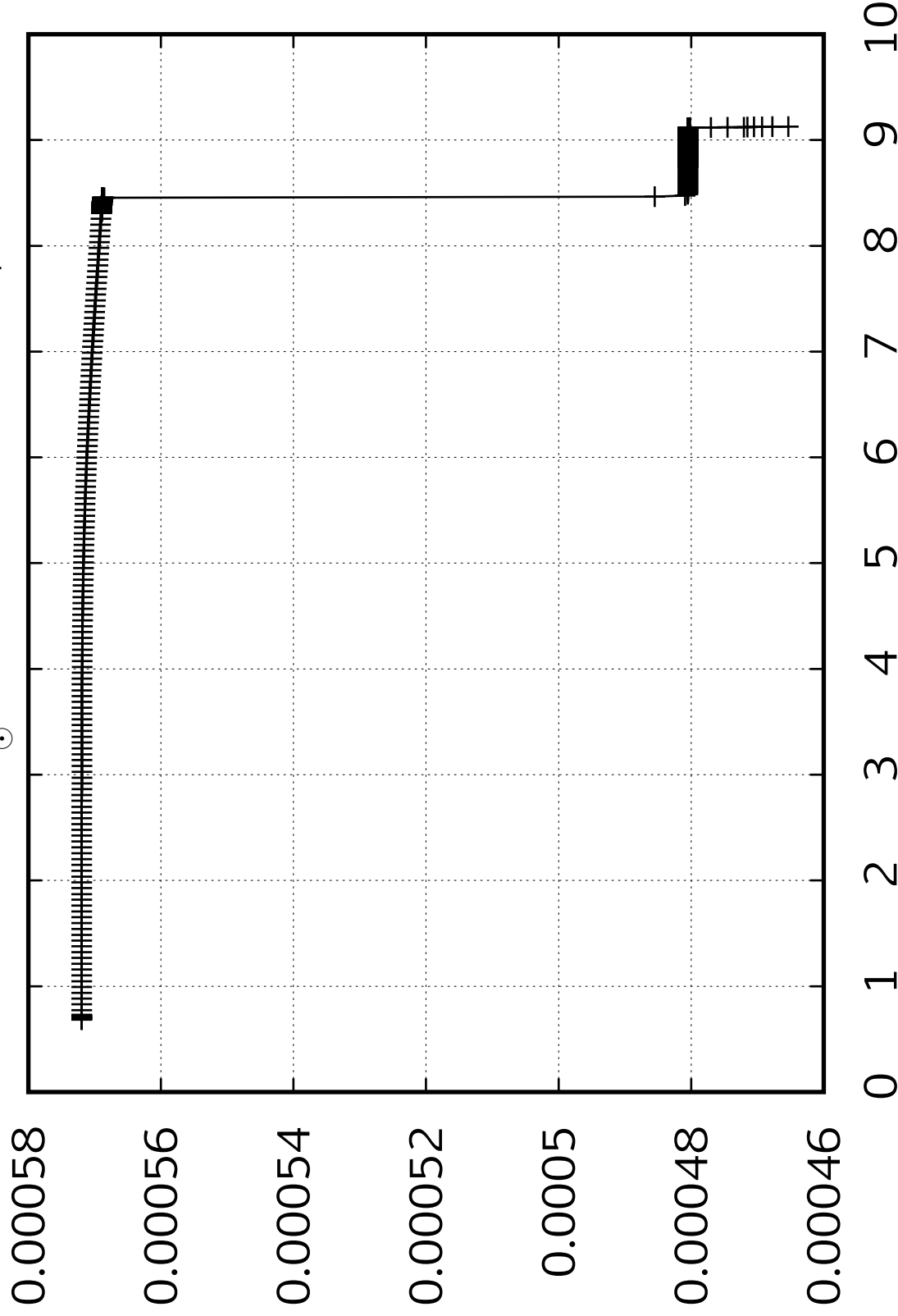
Time [Myr]

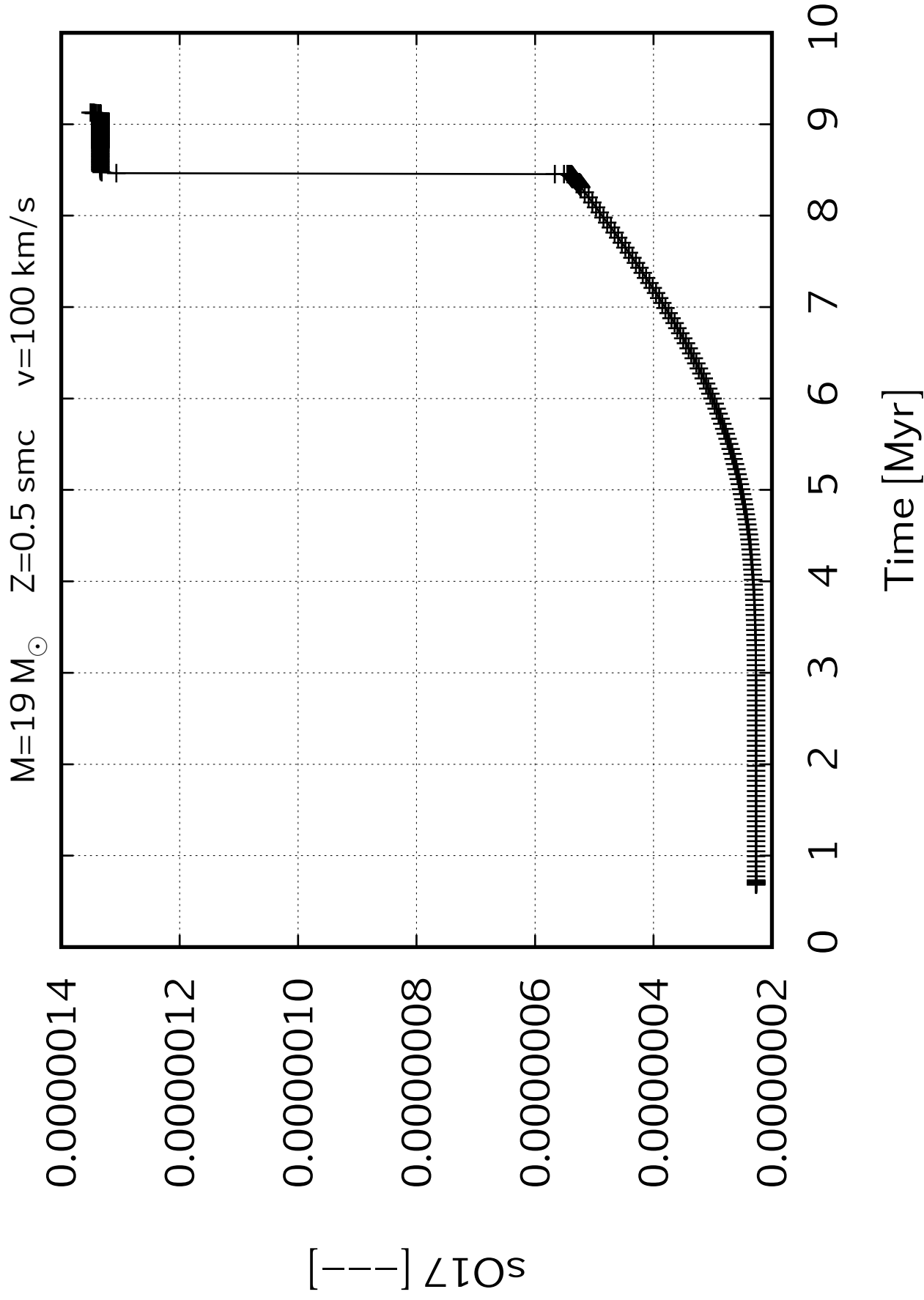


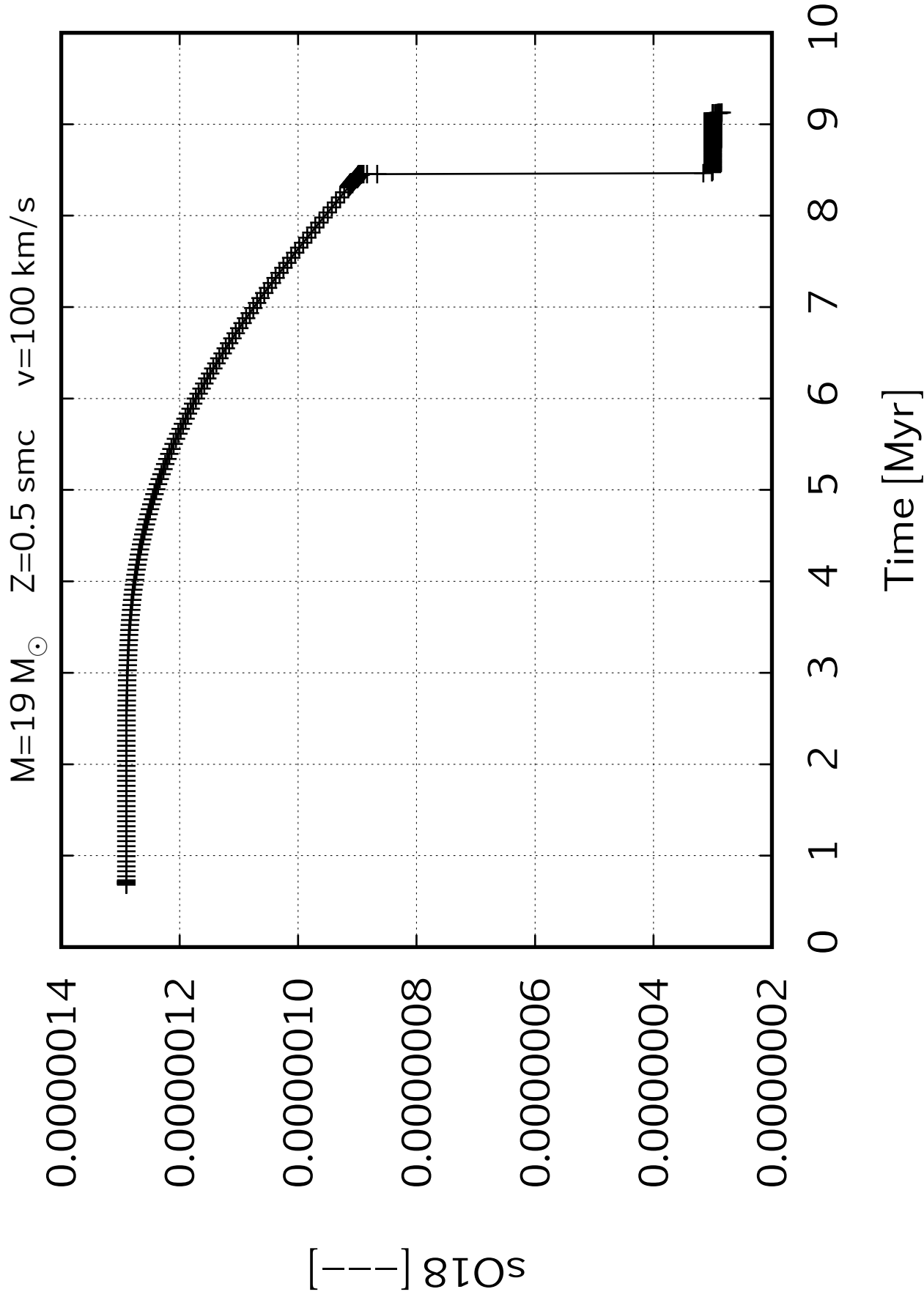


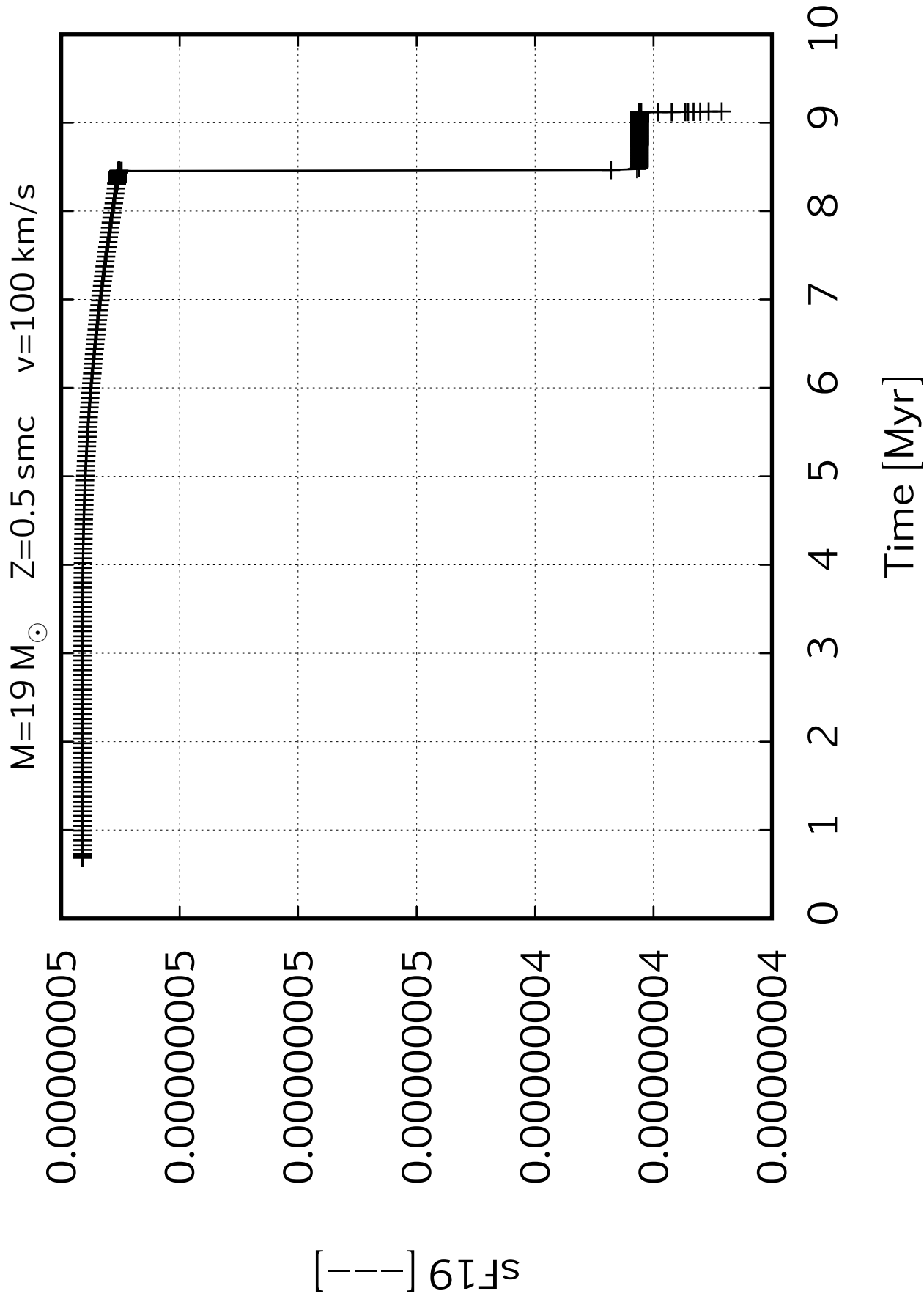
$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$

$^{16}\text{O}$  [—]











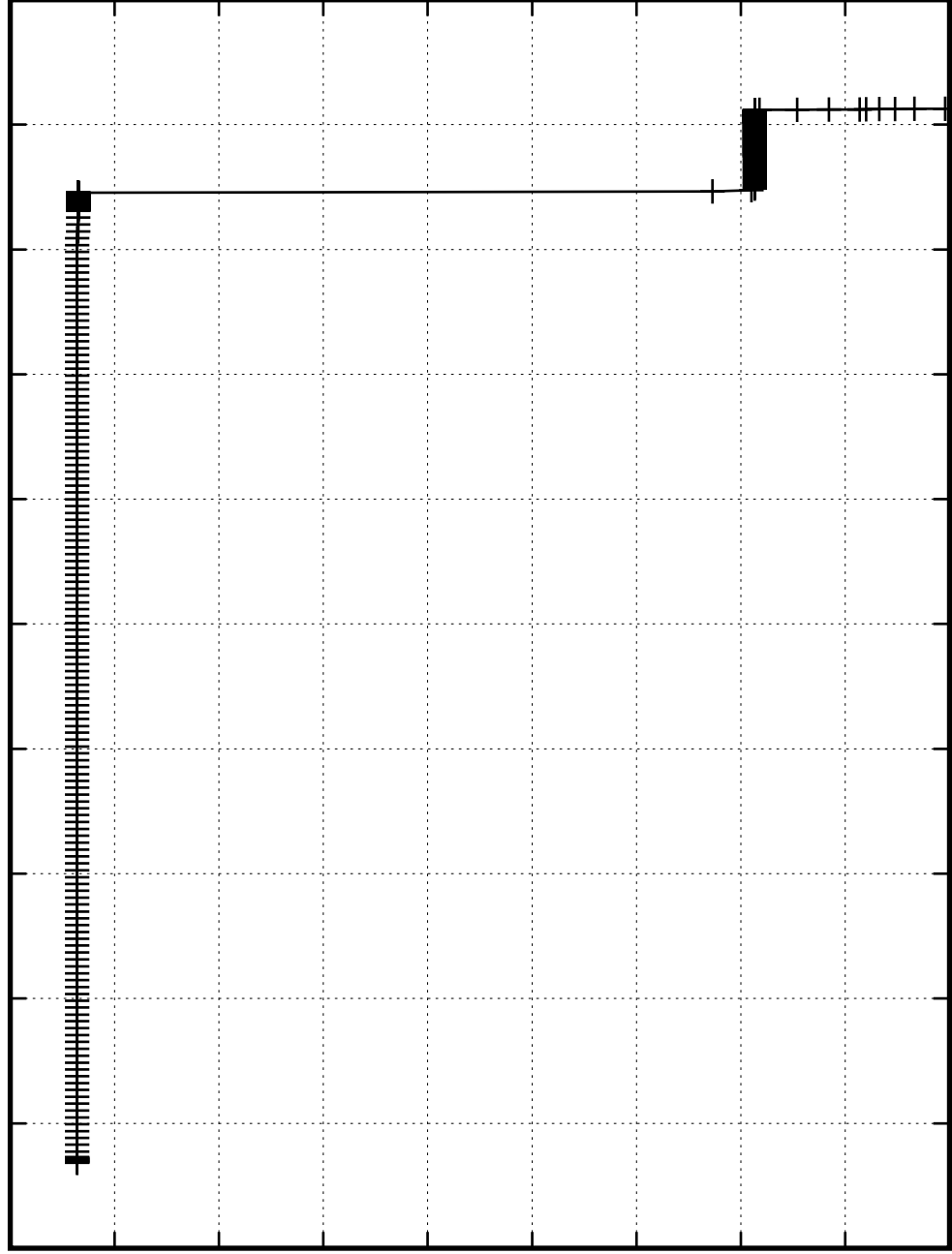
$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$

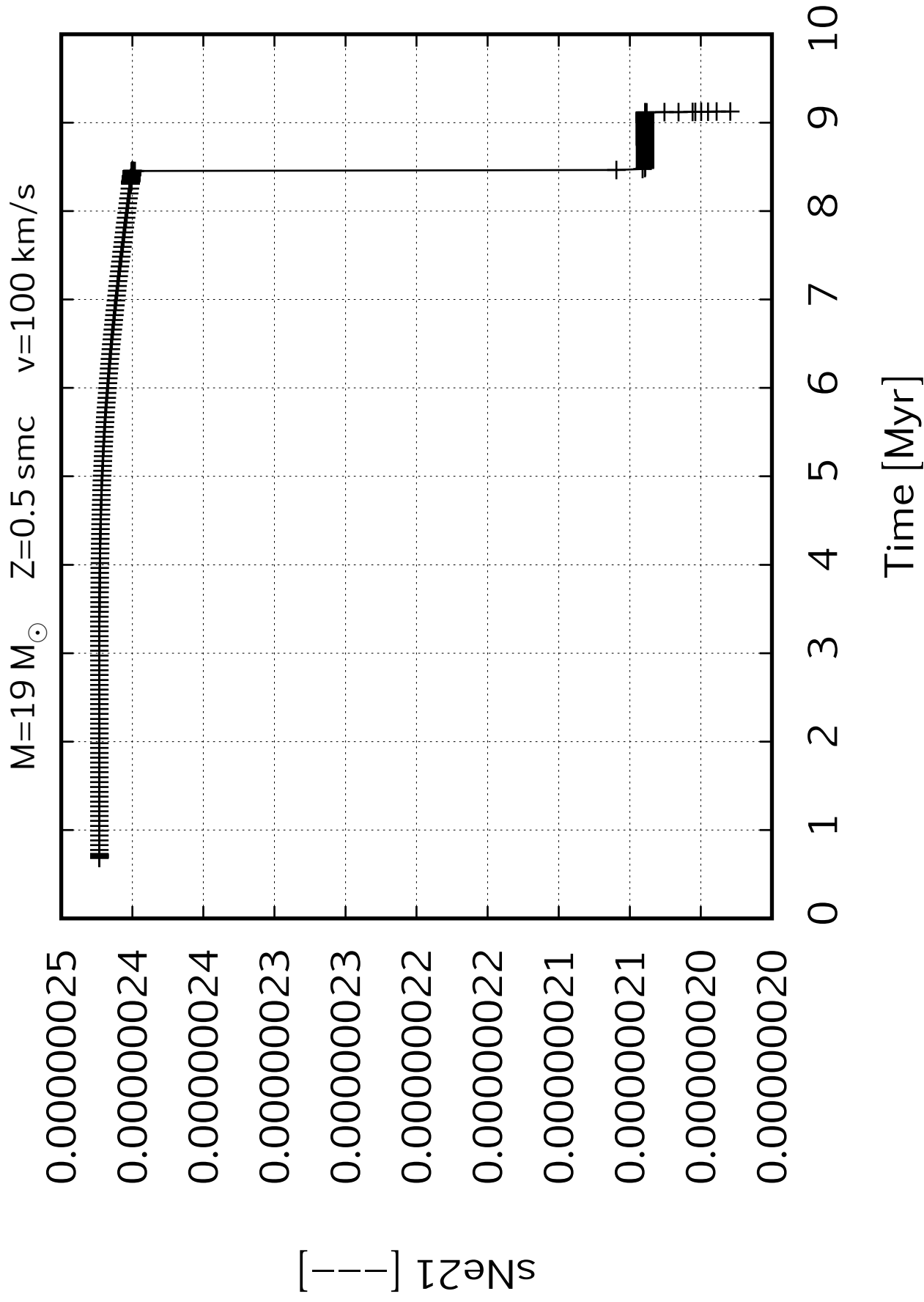
$s_{\text{Ne}20} [ - ]$

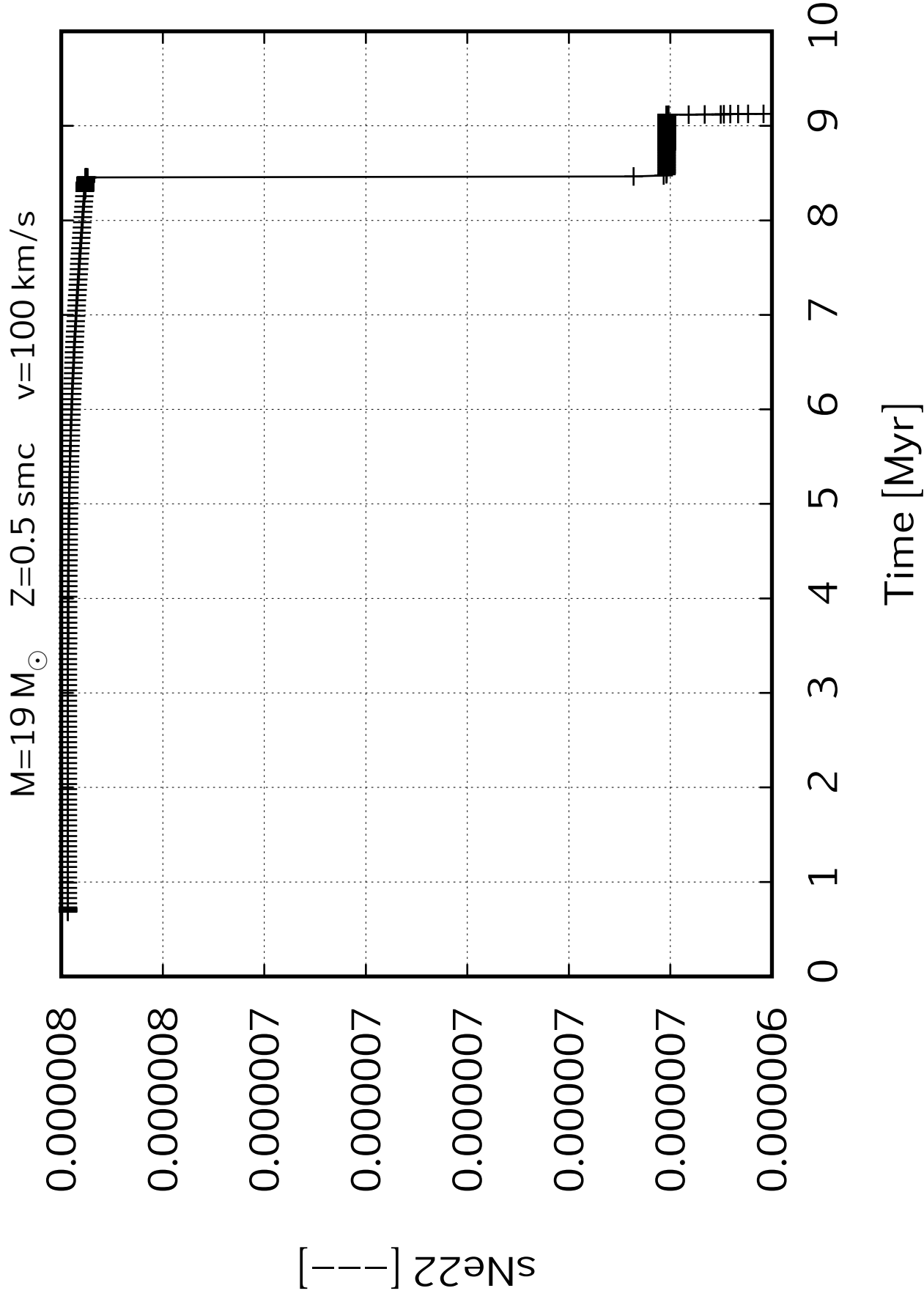
0.000096  
0.000096  
0.000096  
0.000096  
0.000095  
0.000095  
0.000095  
0.000095  
0.000095

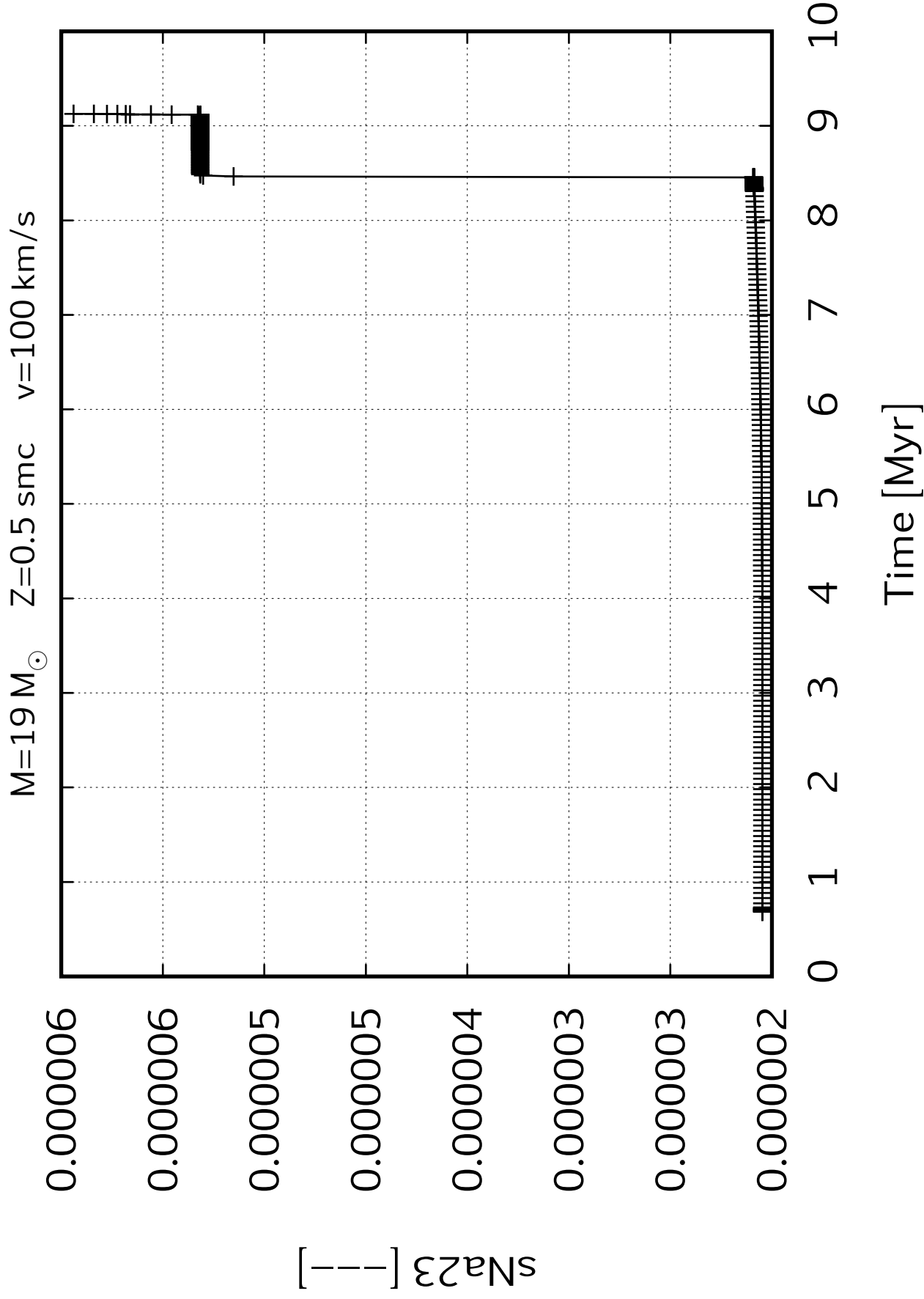
0 1 2 3 4 5 6 7 8 9 10

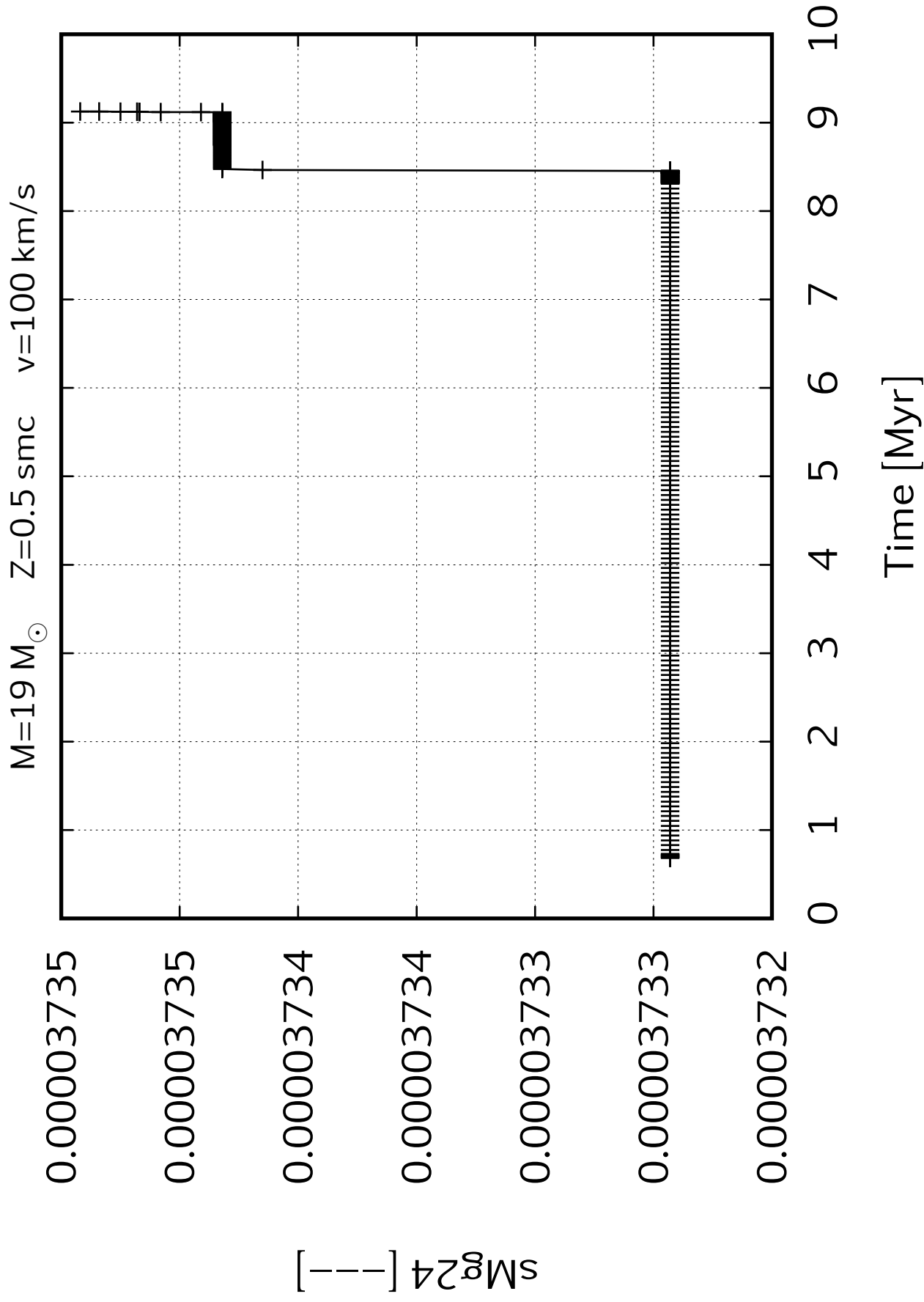
Time [Myr]











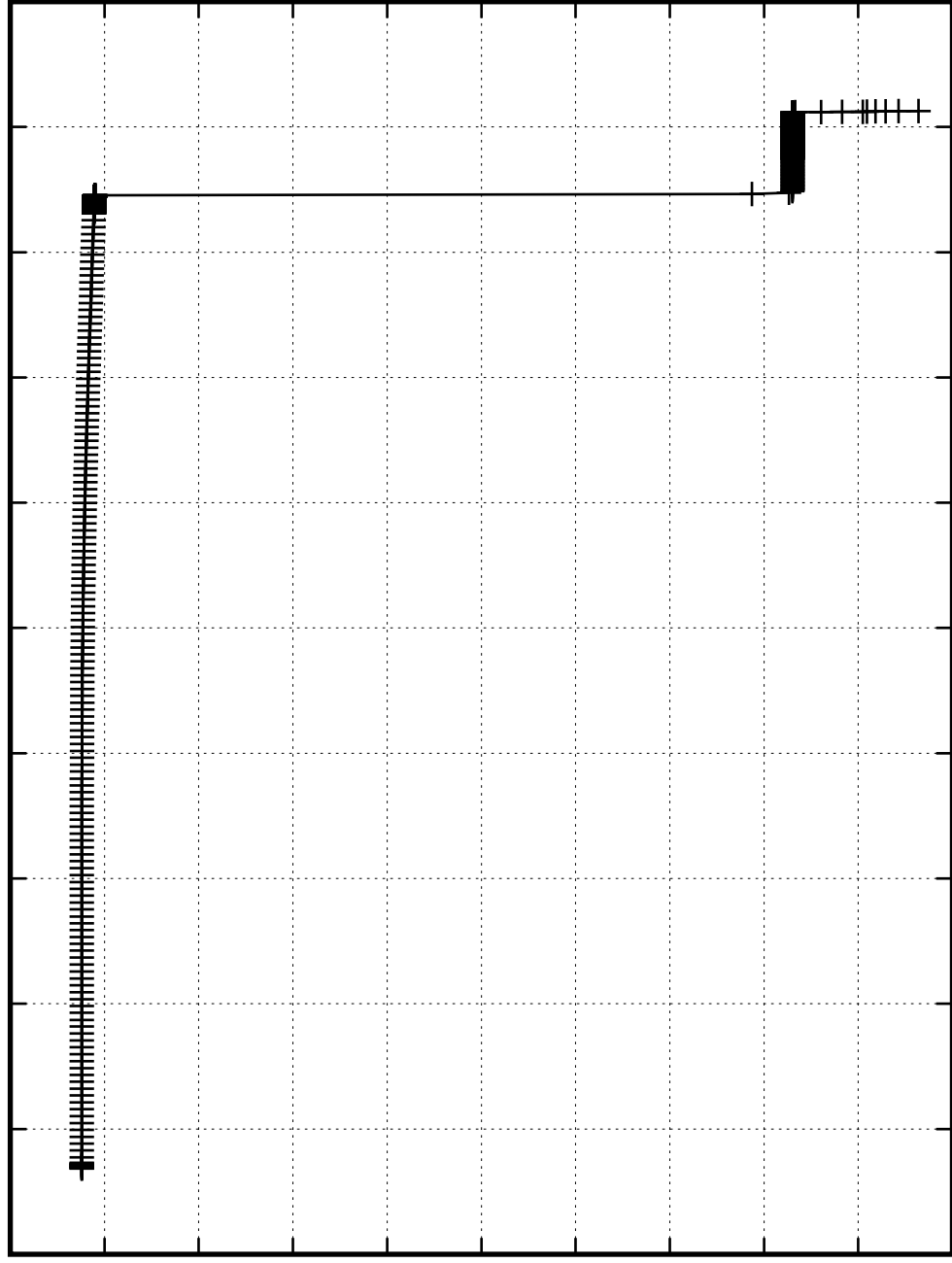
$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$

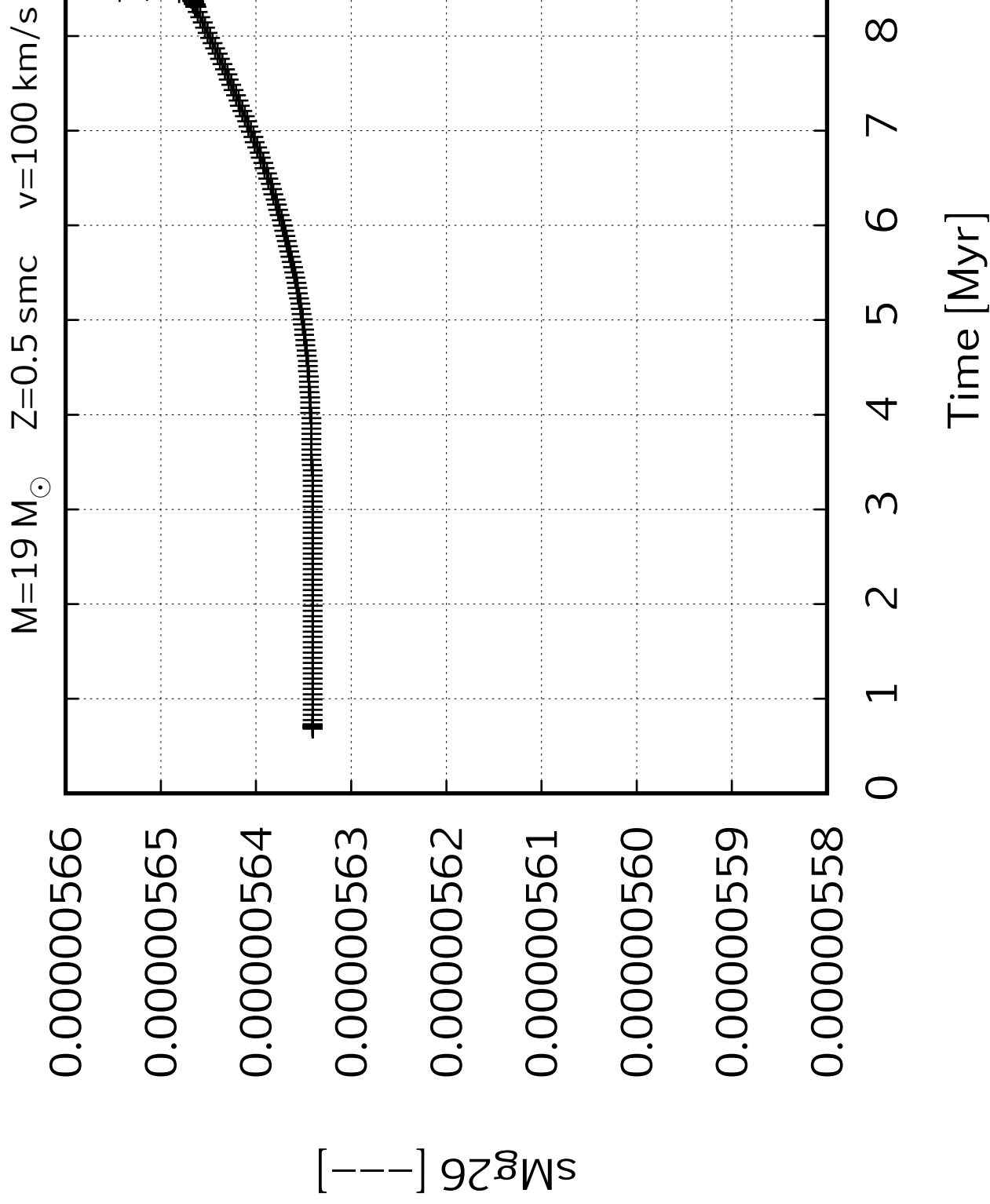
0.000005  
0.000005  
0.000005  
0.000005  
0.000005  
0.000004  
0.000004  
0.000004  
0.000004  
0.000004  
0.000004  
0.000004  
0.000004

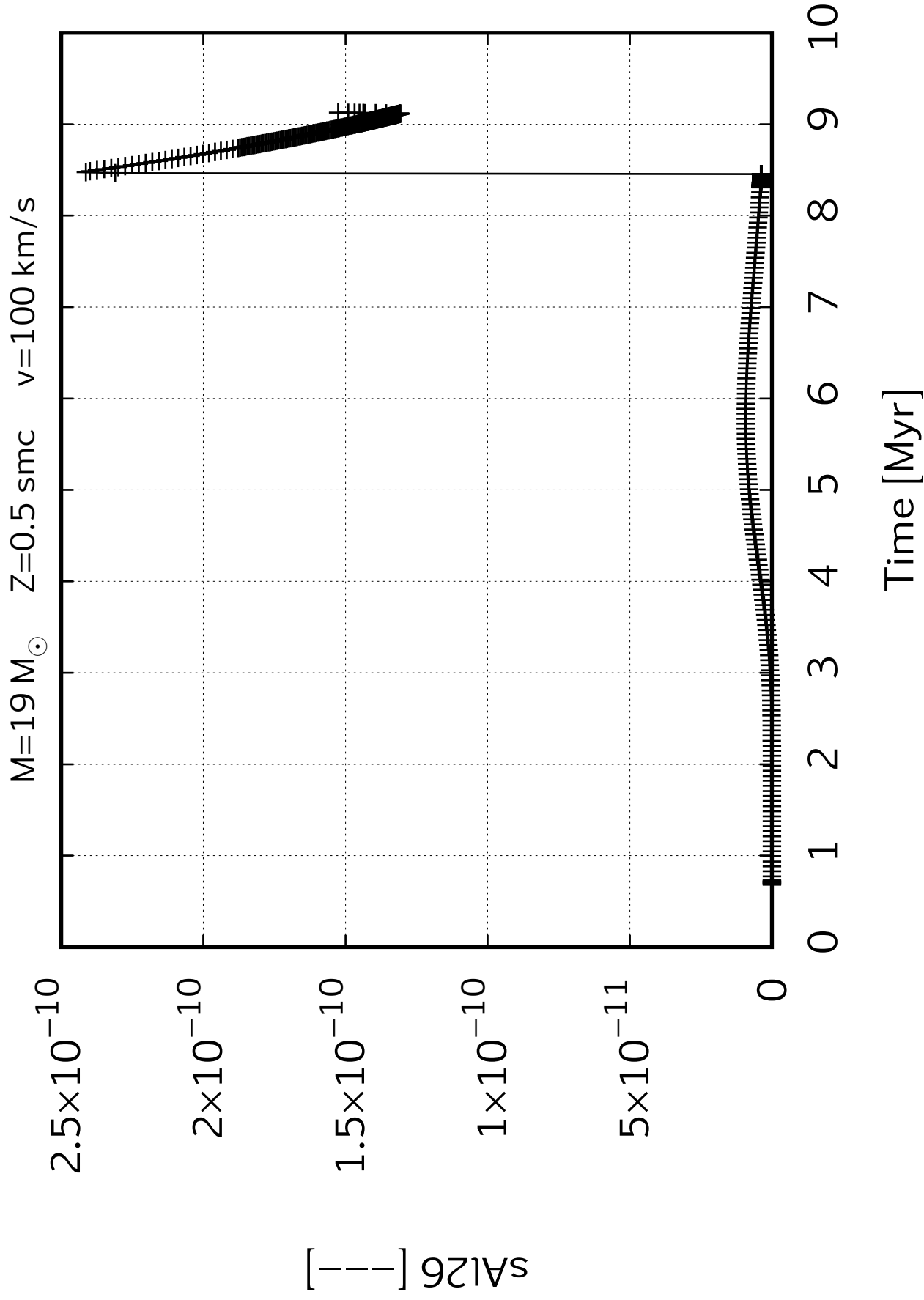
$[\text{--}] M_{\text{g}25}^{\text{s}}$

0 1 2 3 4 5 6 7 8 9 10

Time [Myr]









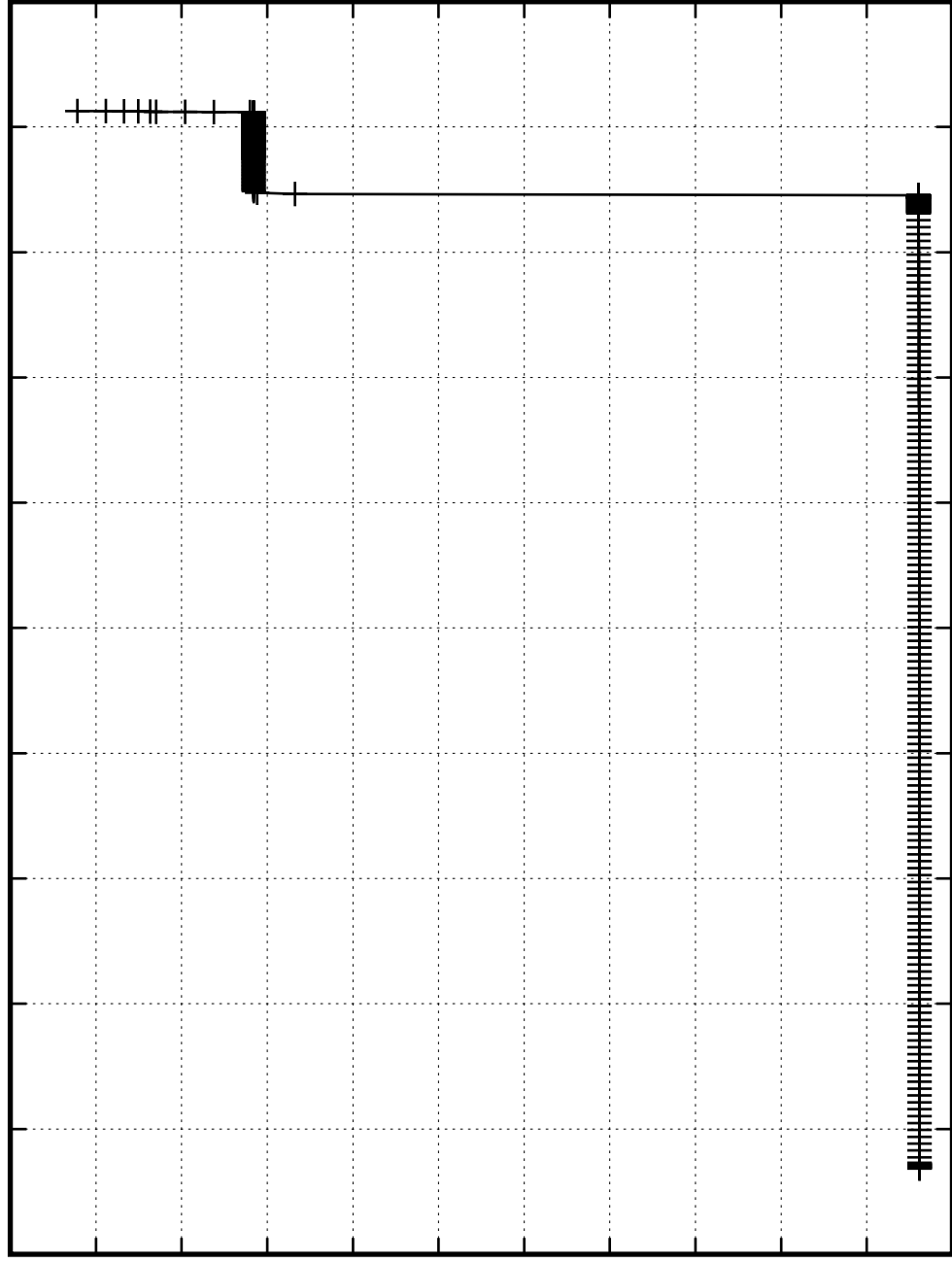
$M=19 M_{\odot}$     $Z=0.5 \text{ snc}$     $v=100 \text{ km/s}$

0.000006  
0.000006  
0.000006  
0.000005  
0.000005  
0.000005  
0.000005  
0.000005  
0.000005  
0.000005  
0.000005  
0.000005

$s_{\text{Al}27} [ - ]$

0   1   2   3   4   5   6   7   8   9   10

Time [Myr]



$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$

0.000062

0.000062

0.000061

0.000061

0.000061

0.000061

0.000061

0.000060

$[\text{---}] \text{S:28}$

0

1

2

3

4

5

6

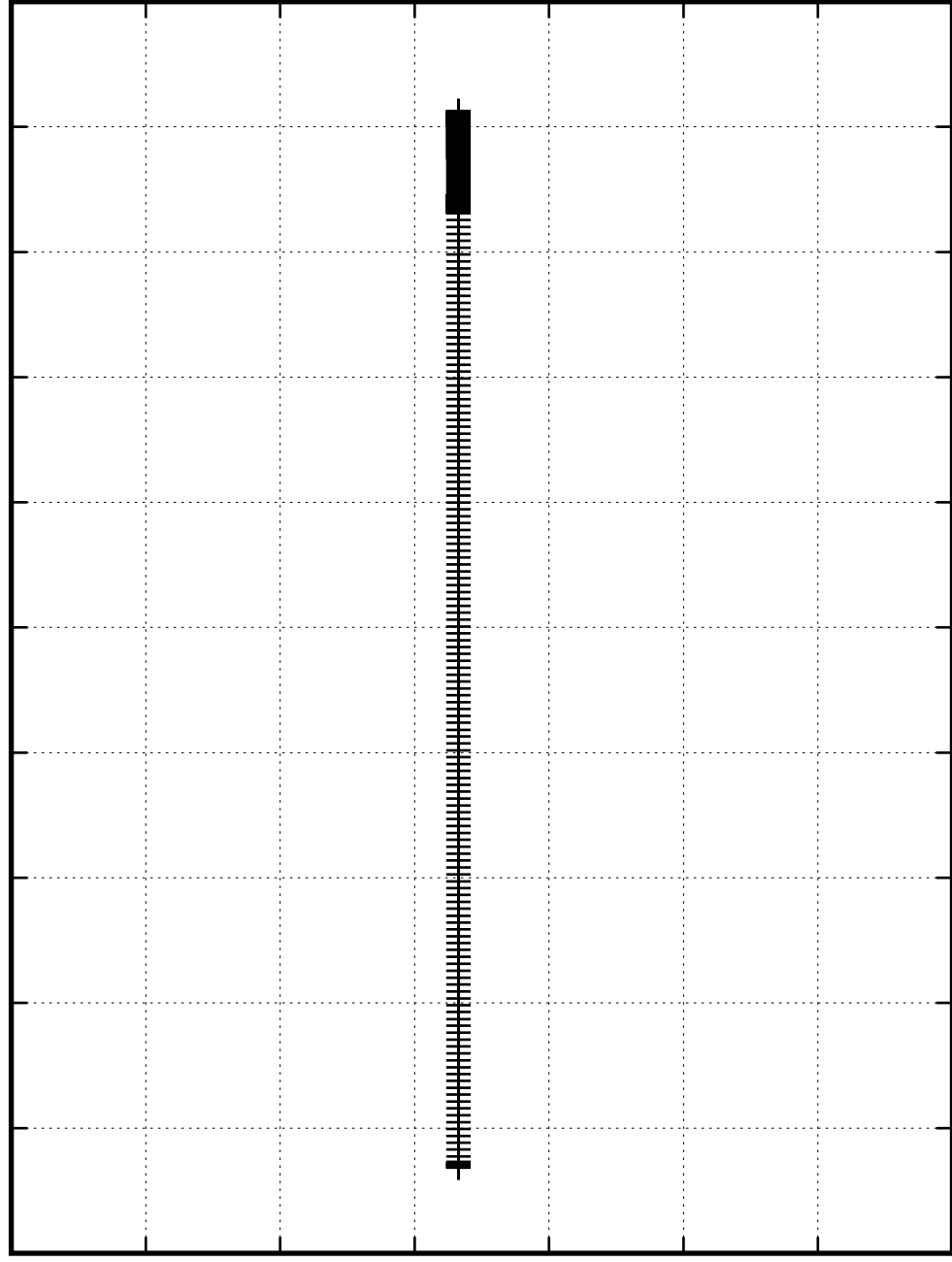
7

8

9

10

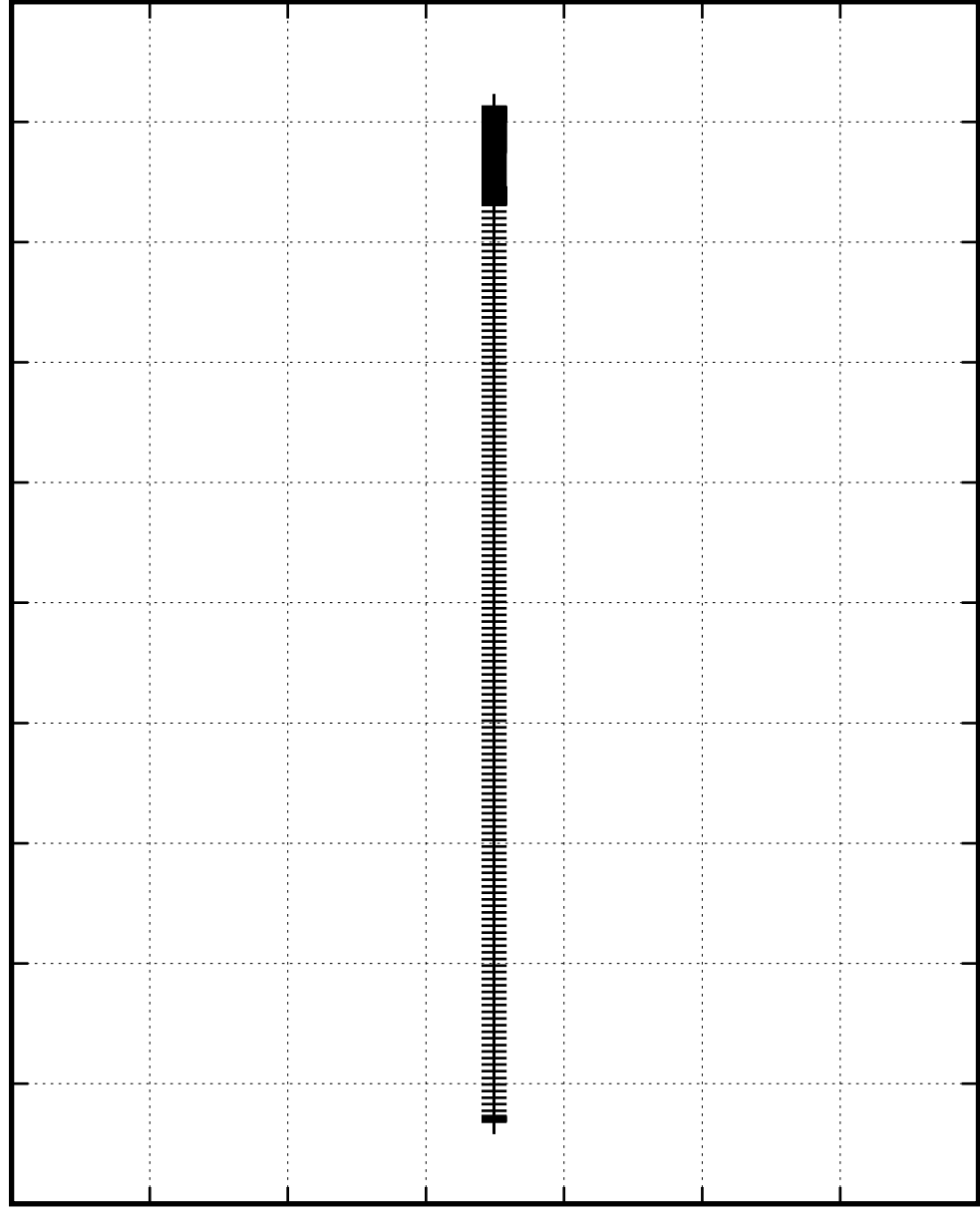
Time [Myr]



$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$

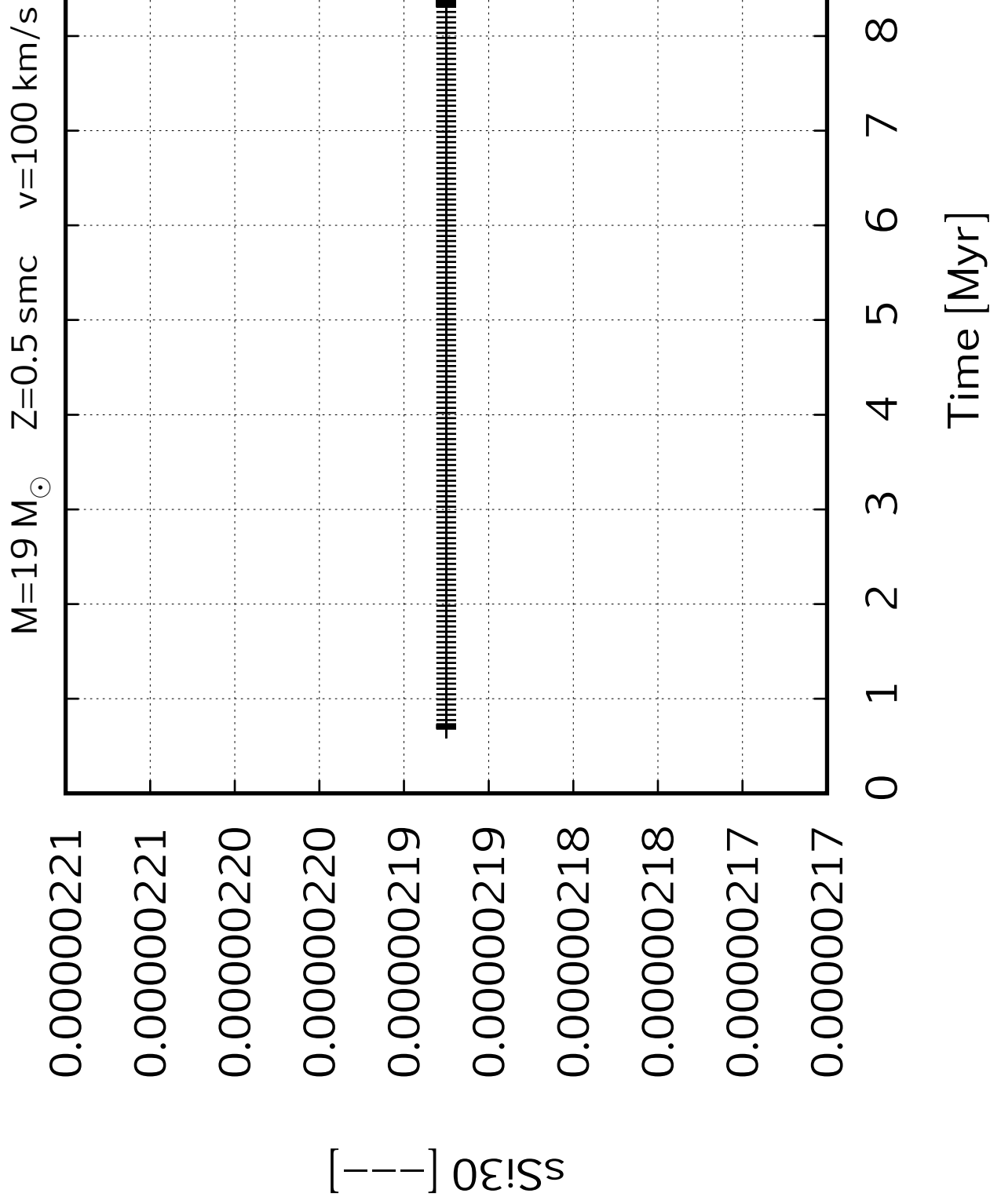
$[\text{--}]_{\text{S:29}}$

0.00000325  
0.00000324  
0.00000323  
0.00000322  
0.00000321  
0.00000320  
0.00000319  
0.00000318



0 1 2 3 4 5 6 7 8 9 10

Time [Myr]



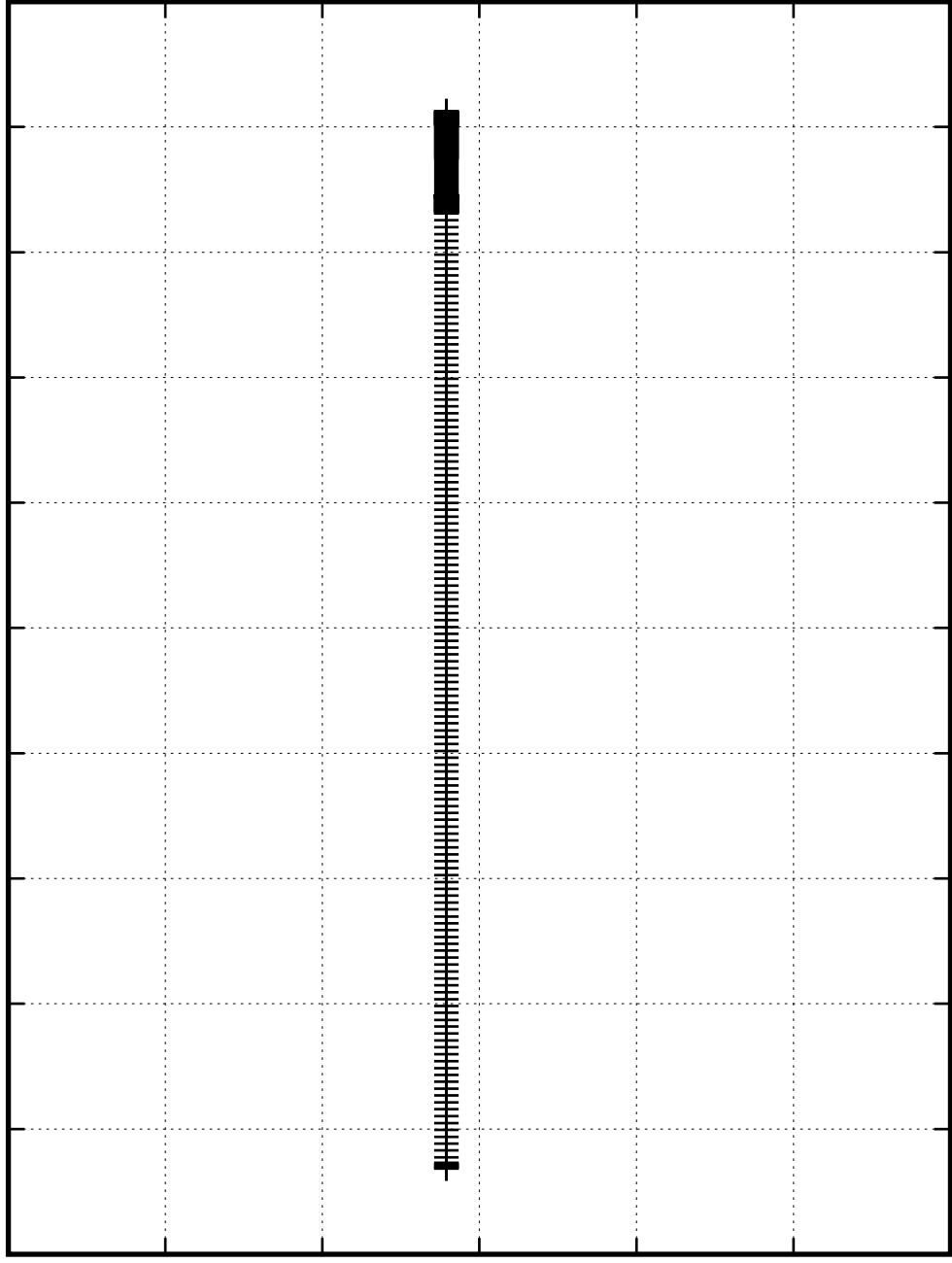
$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$

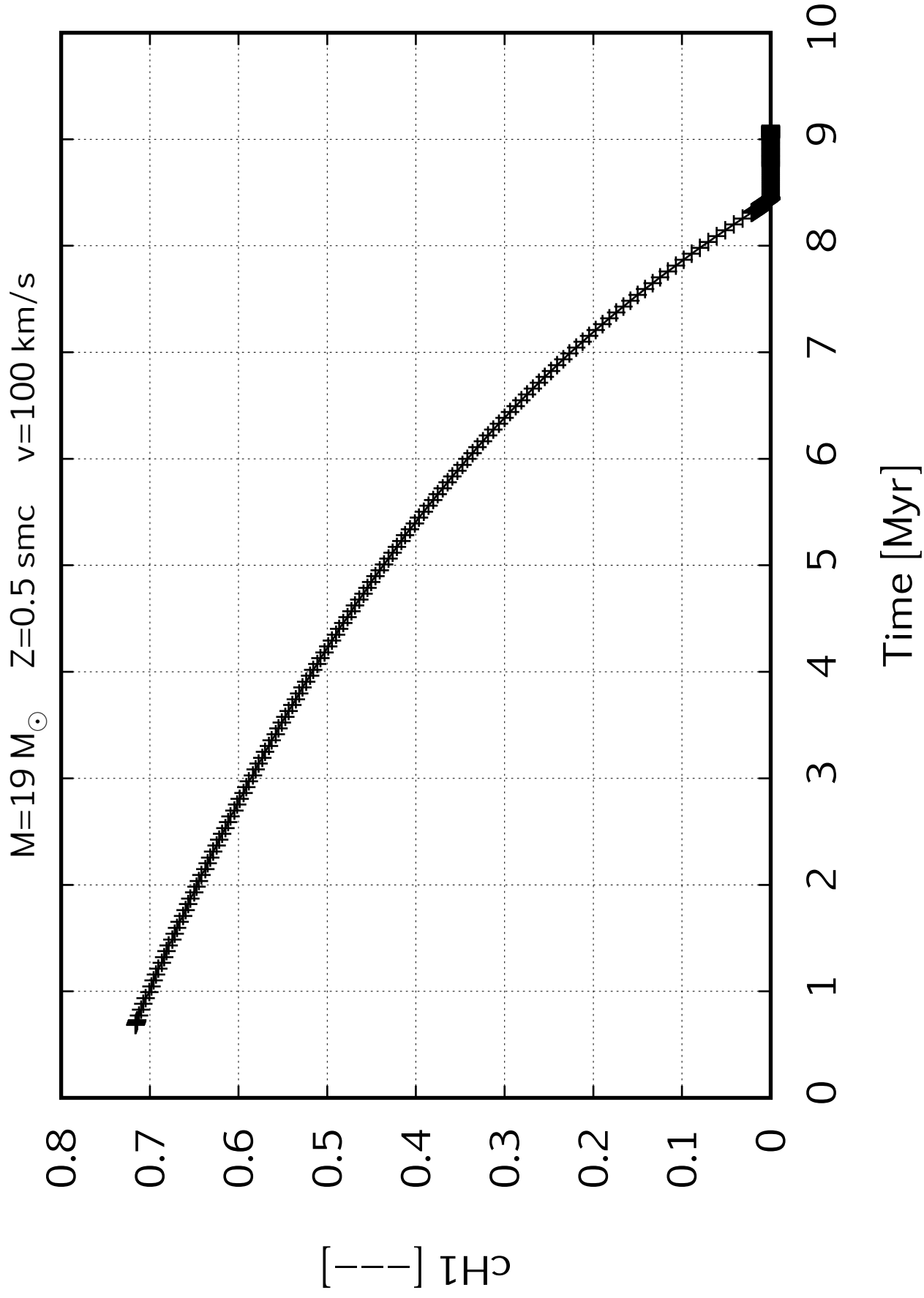
0.000128  
0.000128  
0.000127  
0.000127  
0.000126  
0.000126  
0.000125

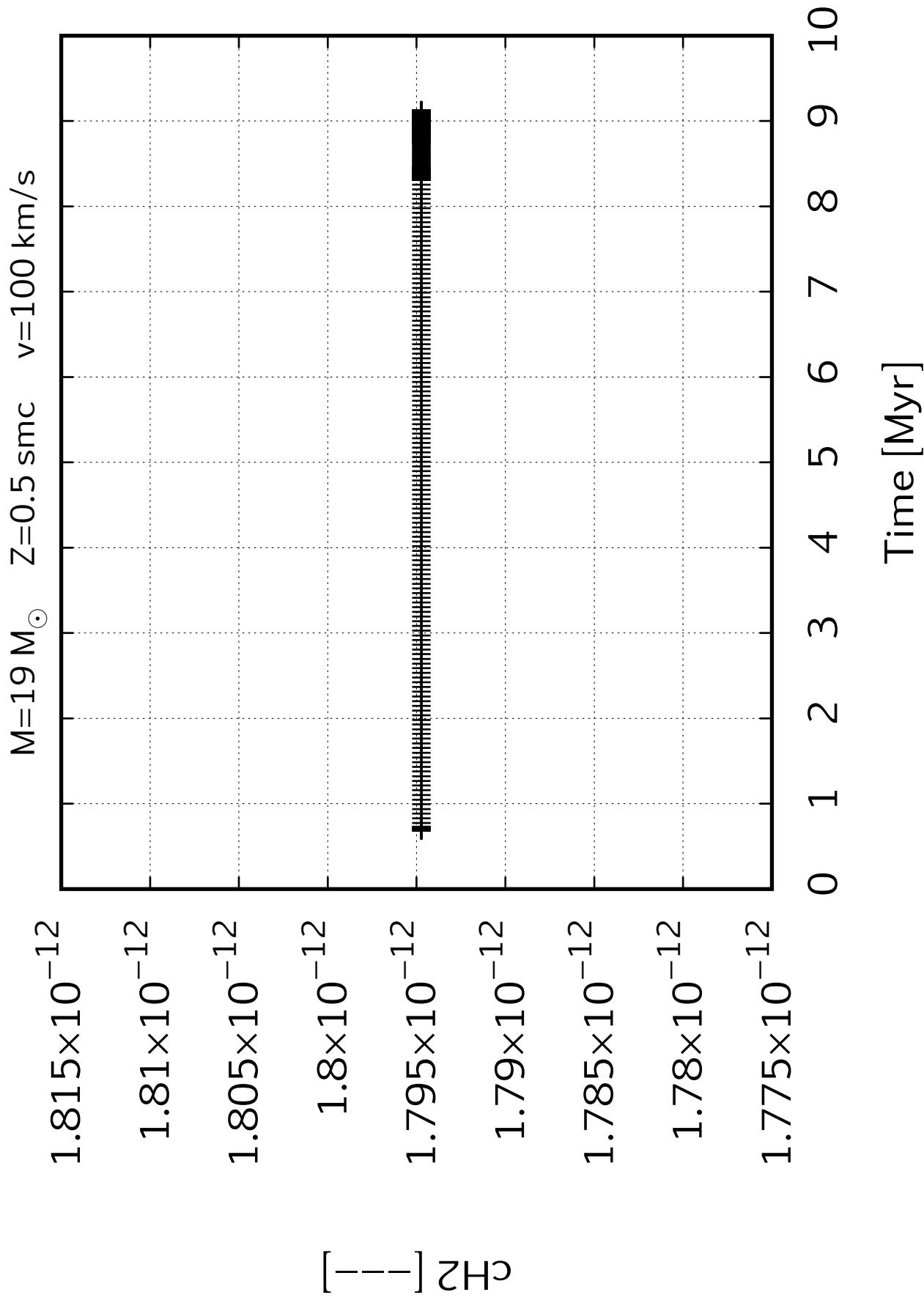
—  
[ — ]  
 $s\text{Fe56}$

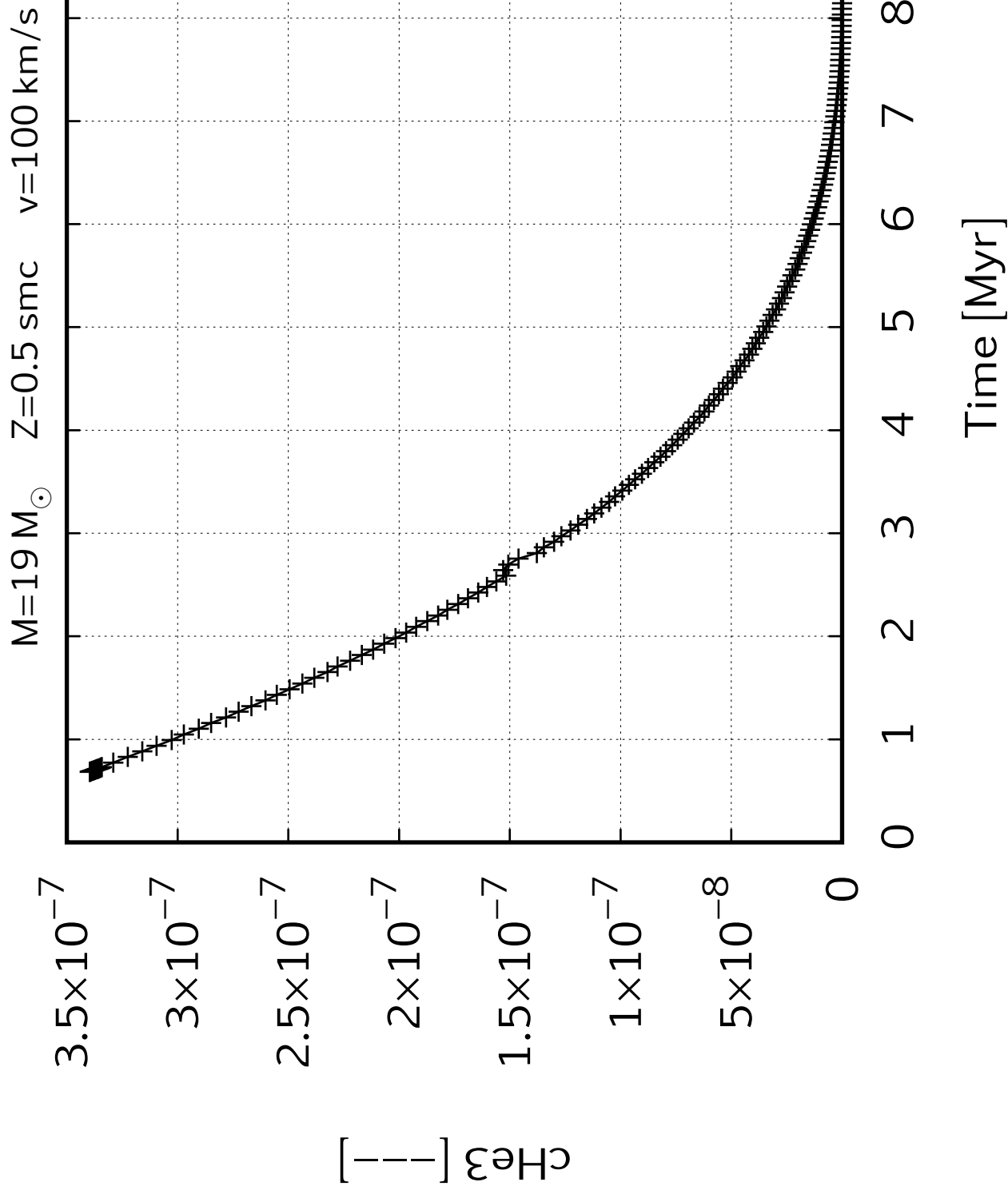
0 1 2 3 4 5 6 7 8 9 10

Time [Myr]

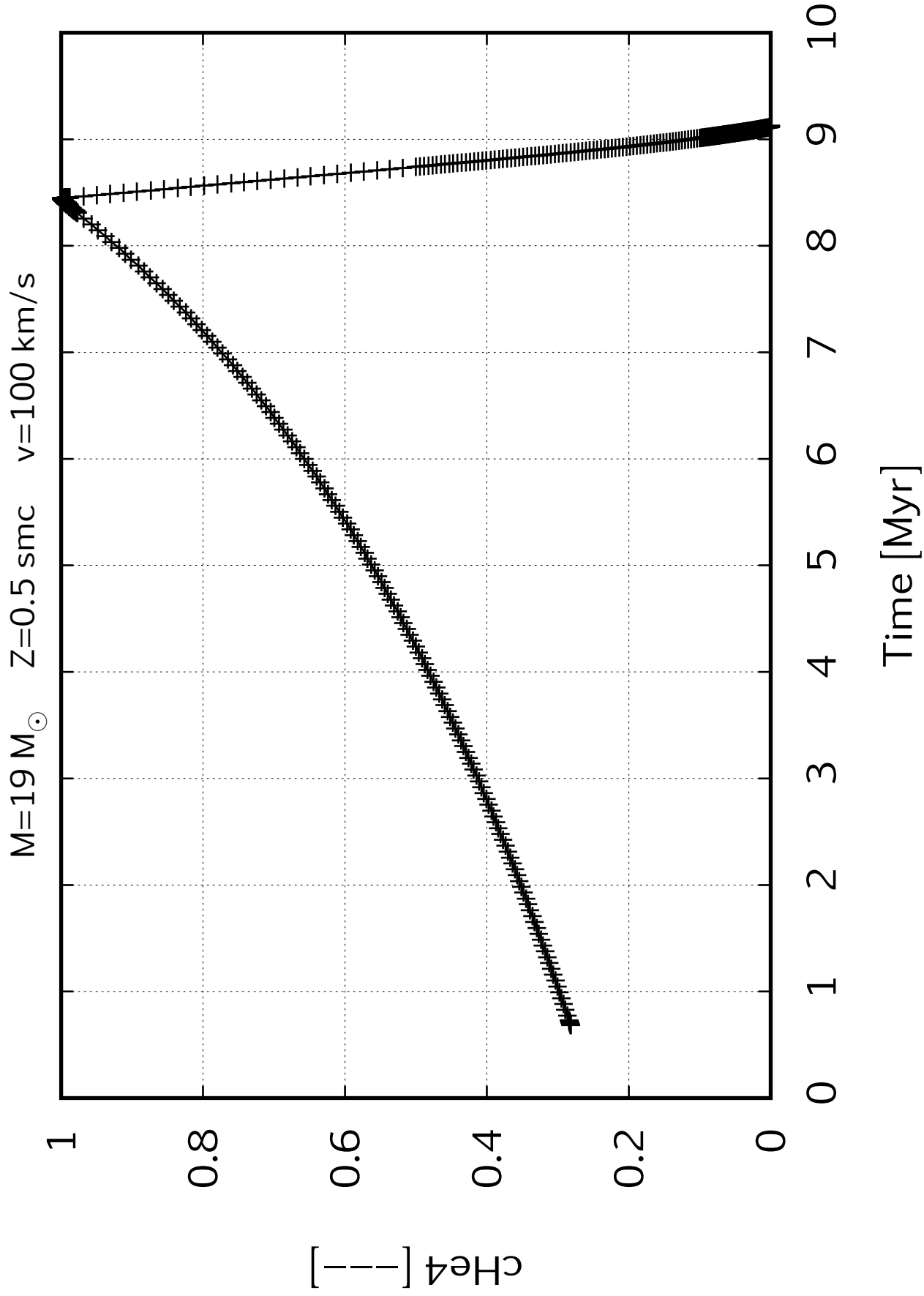




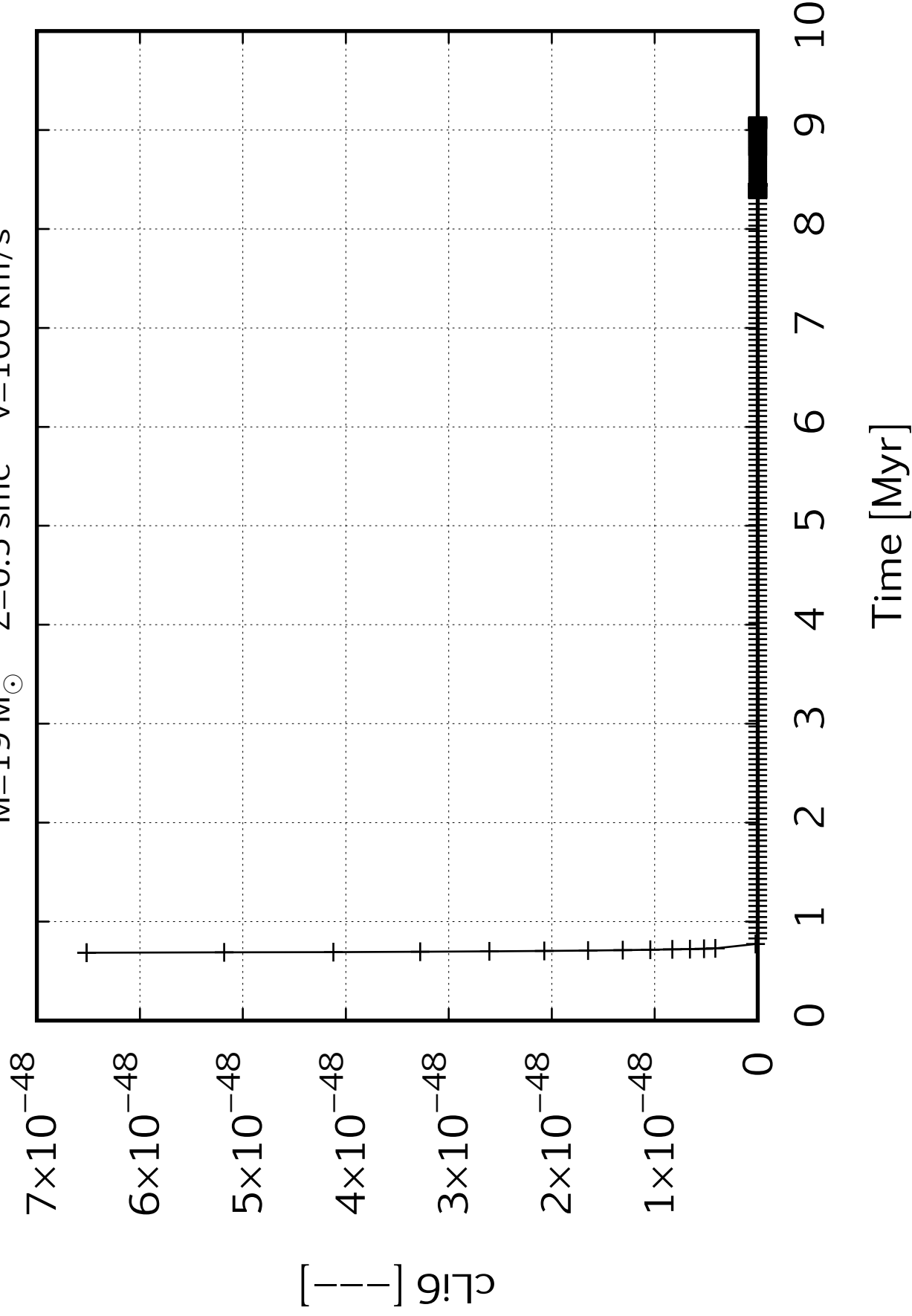




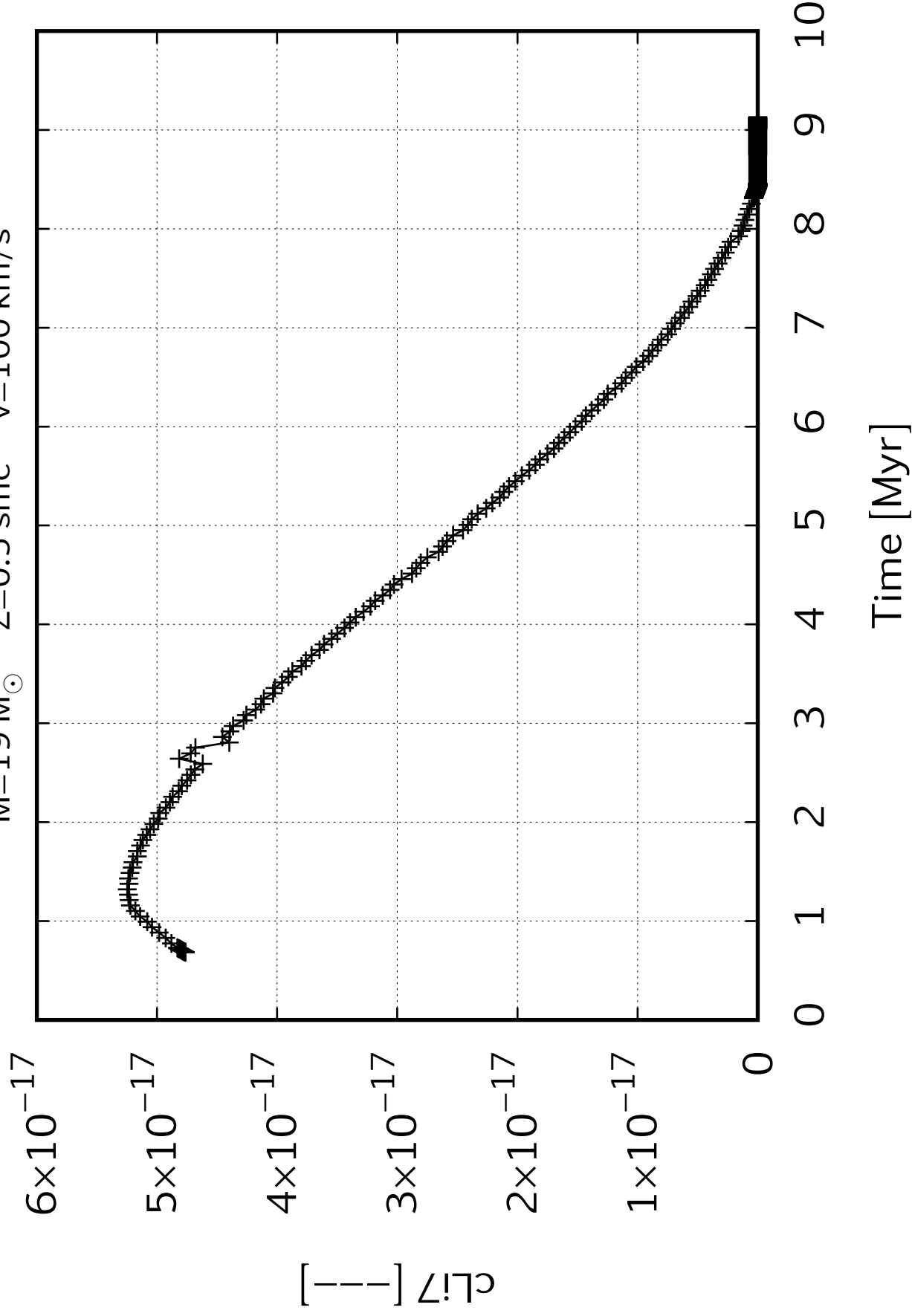


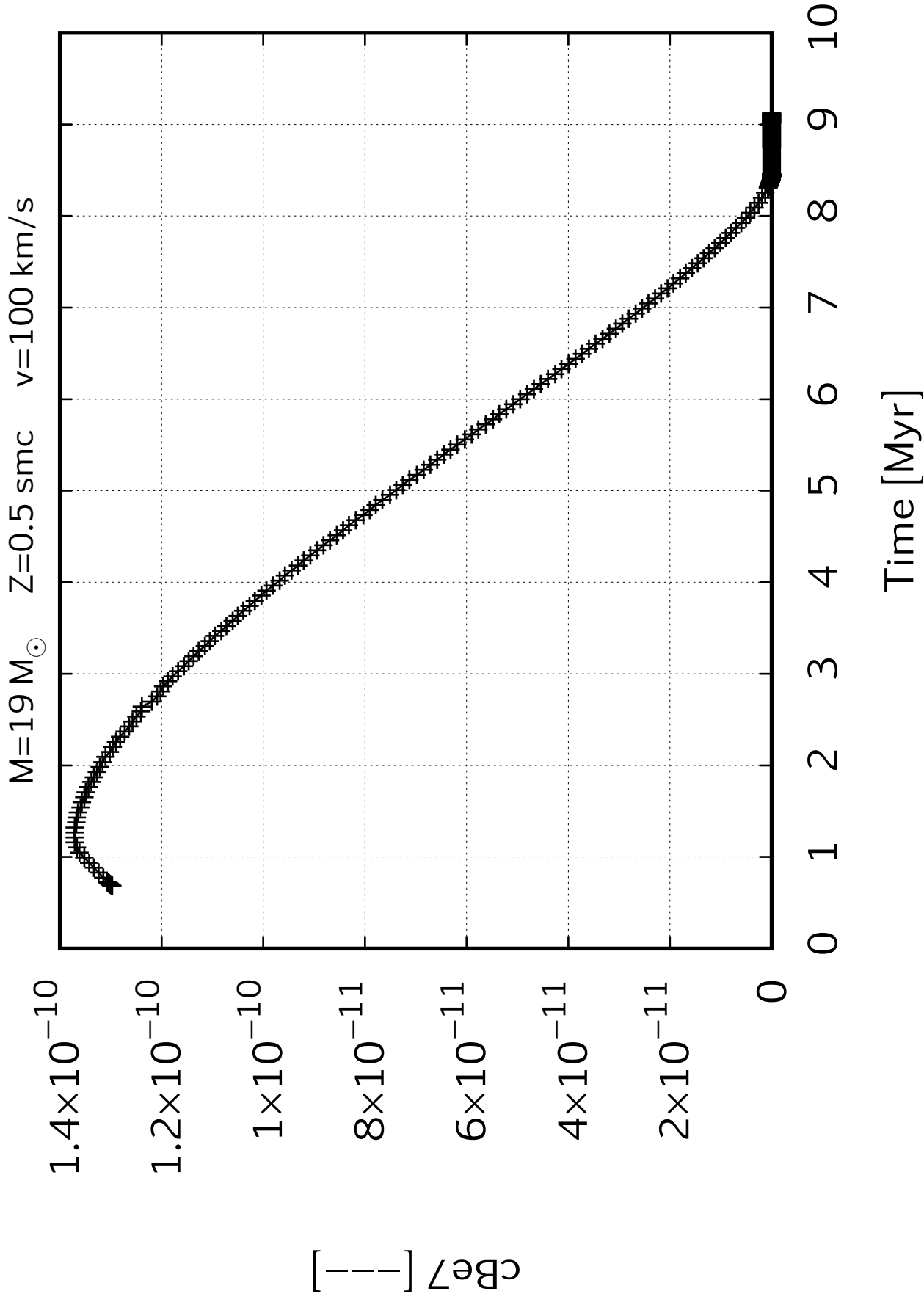


$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

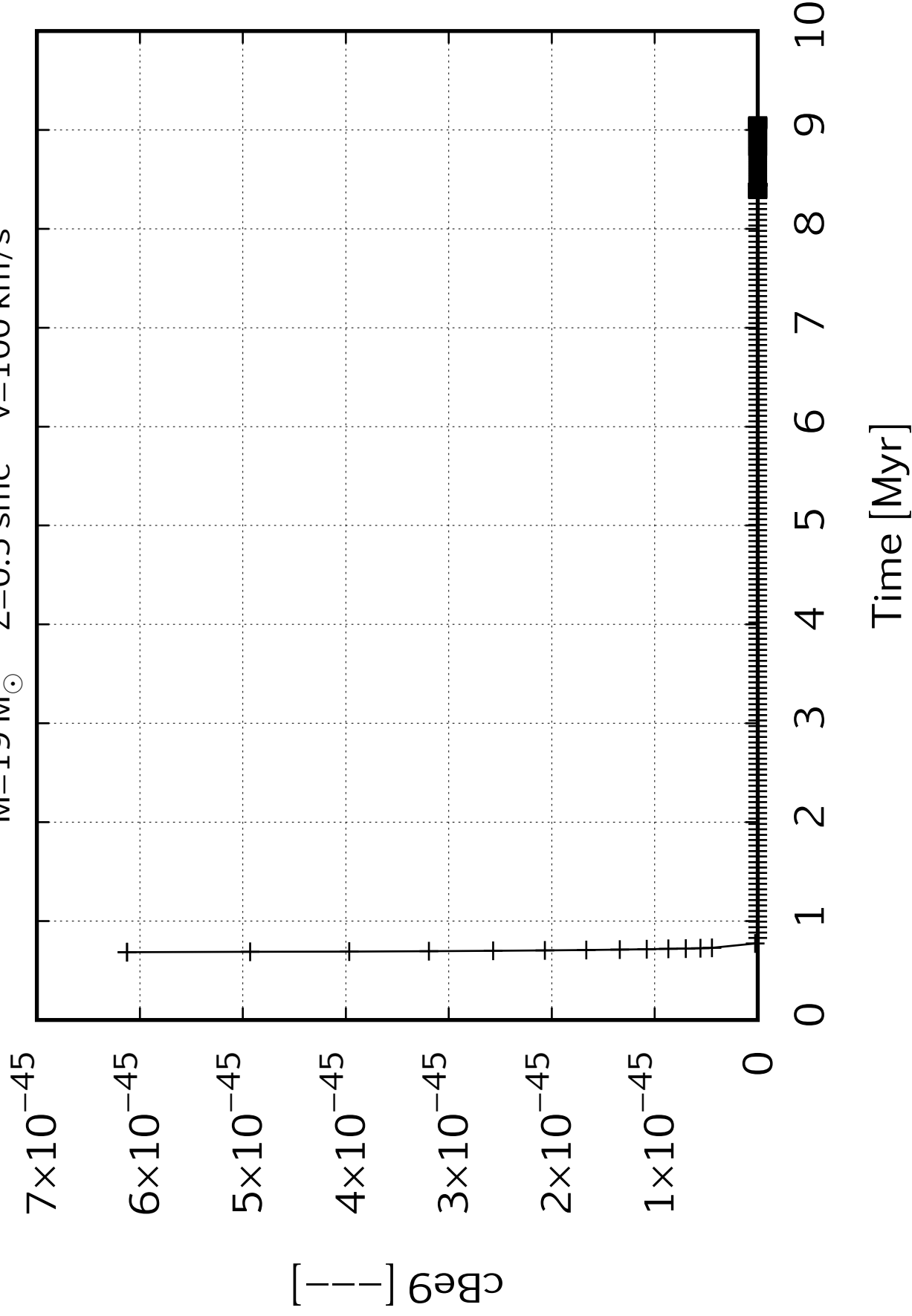


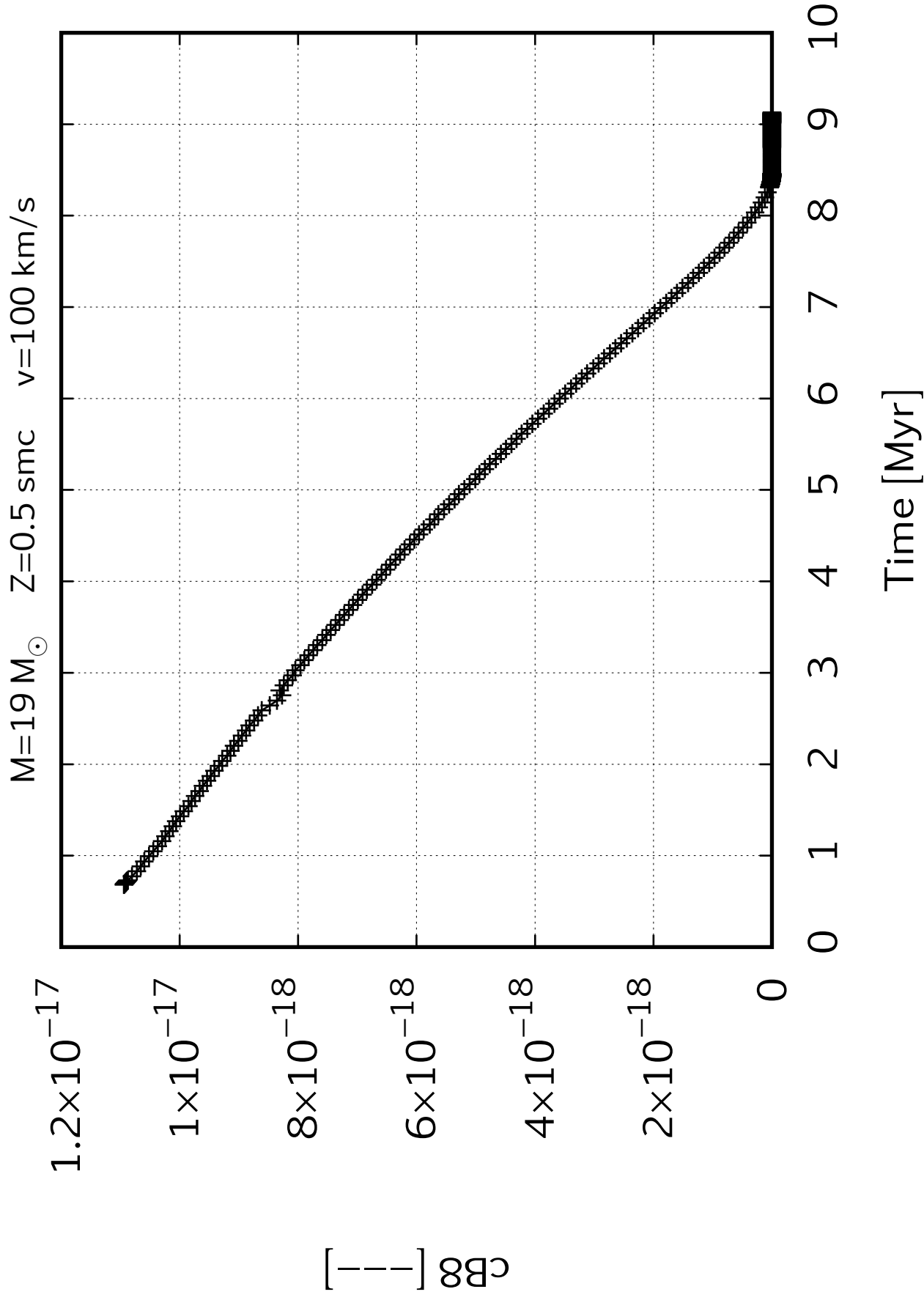
$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s





$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s





$M=19\,M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

$1.8 \times 10^{-37}$

$1.6 \times 10^{-37}$

$1.4 \times 10^{-37}$

$1.2 \times 10^{-37}$

$1 \times 10^{-37}$

$8 \times 10^{-38}$

$6 \times 10^{-38}$

$4 \times 10^{-38}$

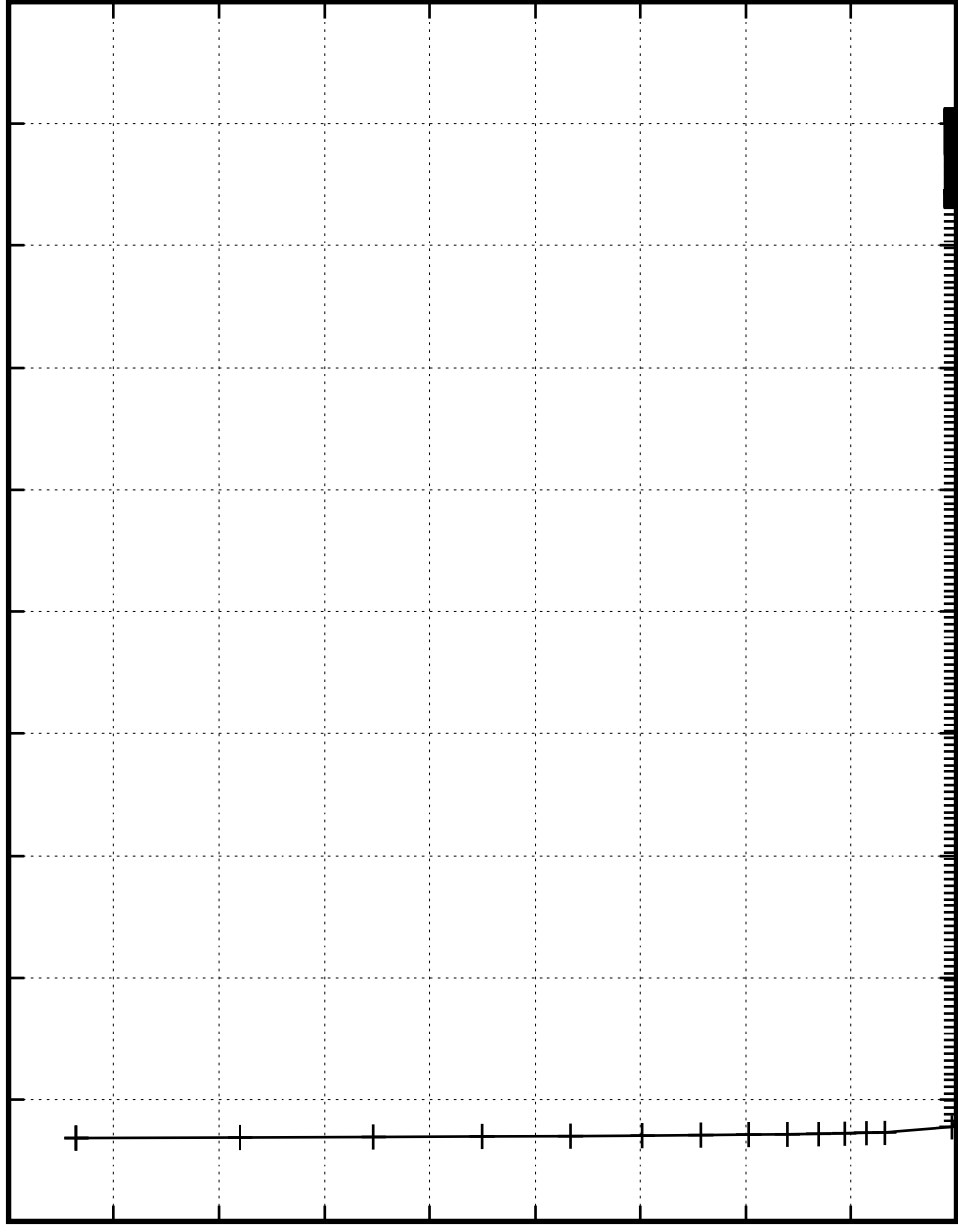
$2 \times 10^{-38}$

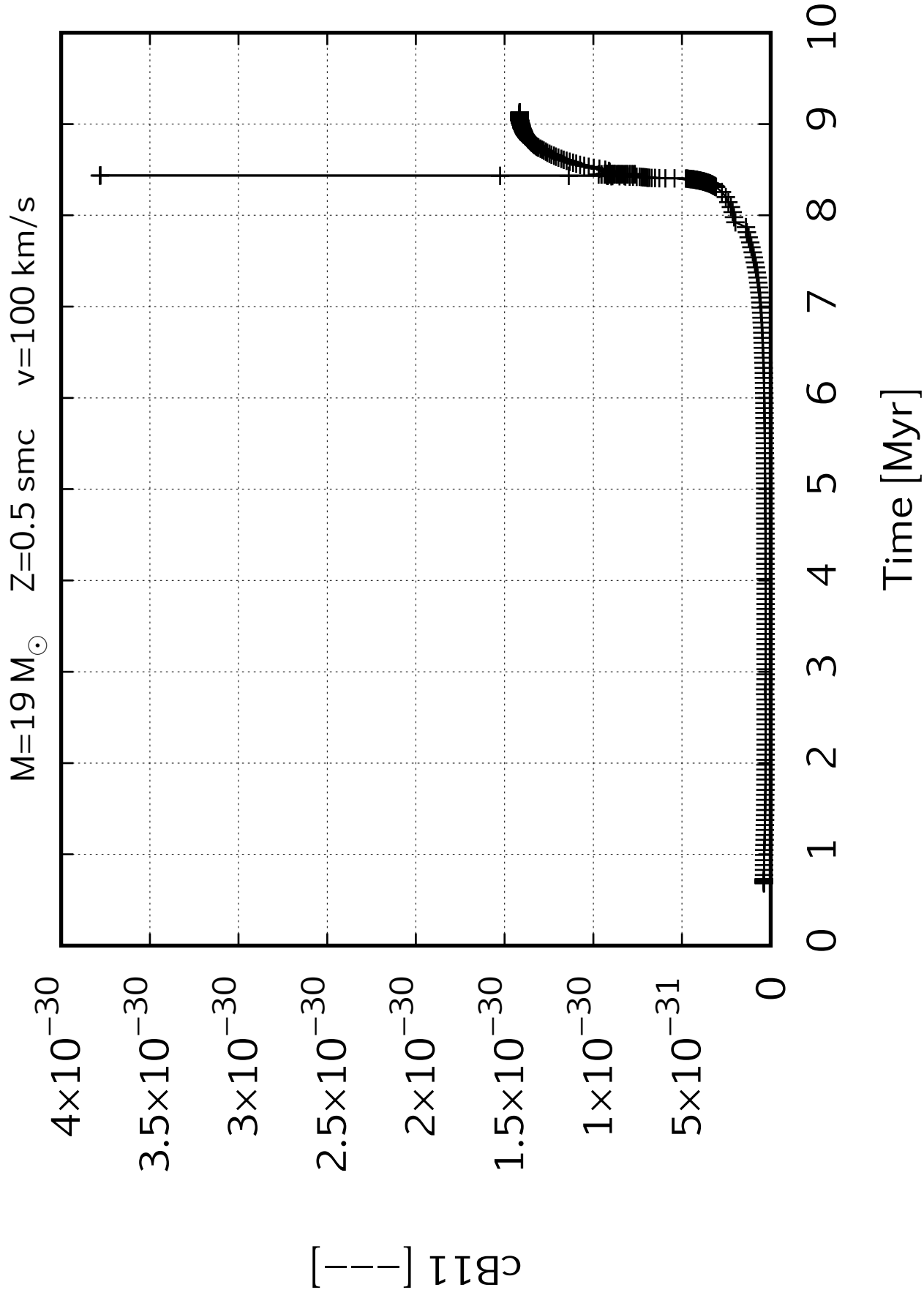
0

$c_{B10}$  [ ]

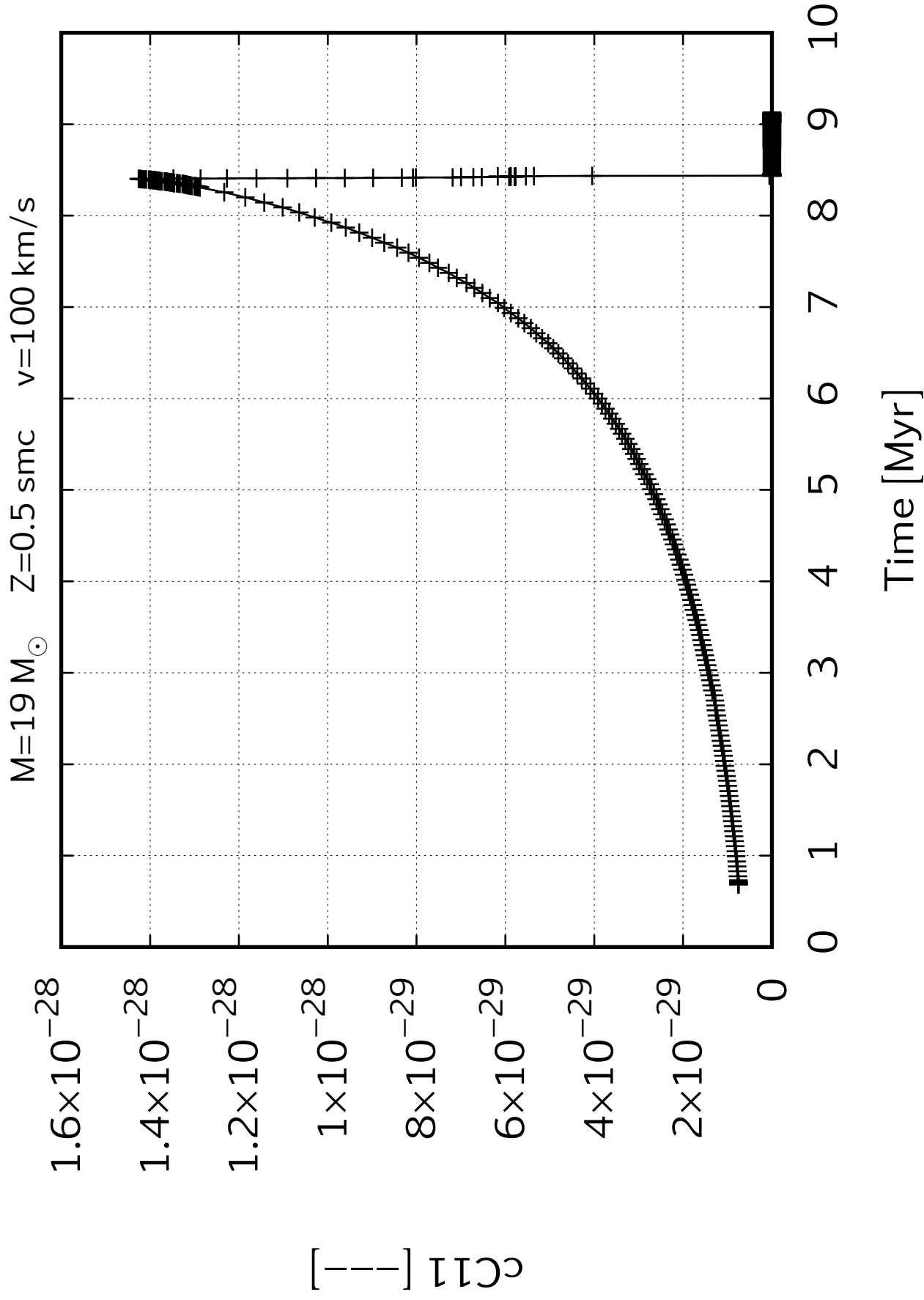
0 1 2 3 4 5 6 7 8 9 10

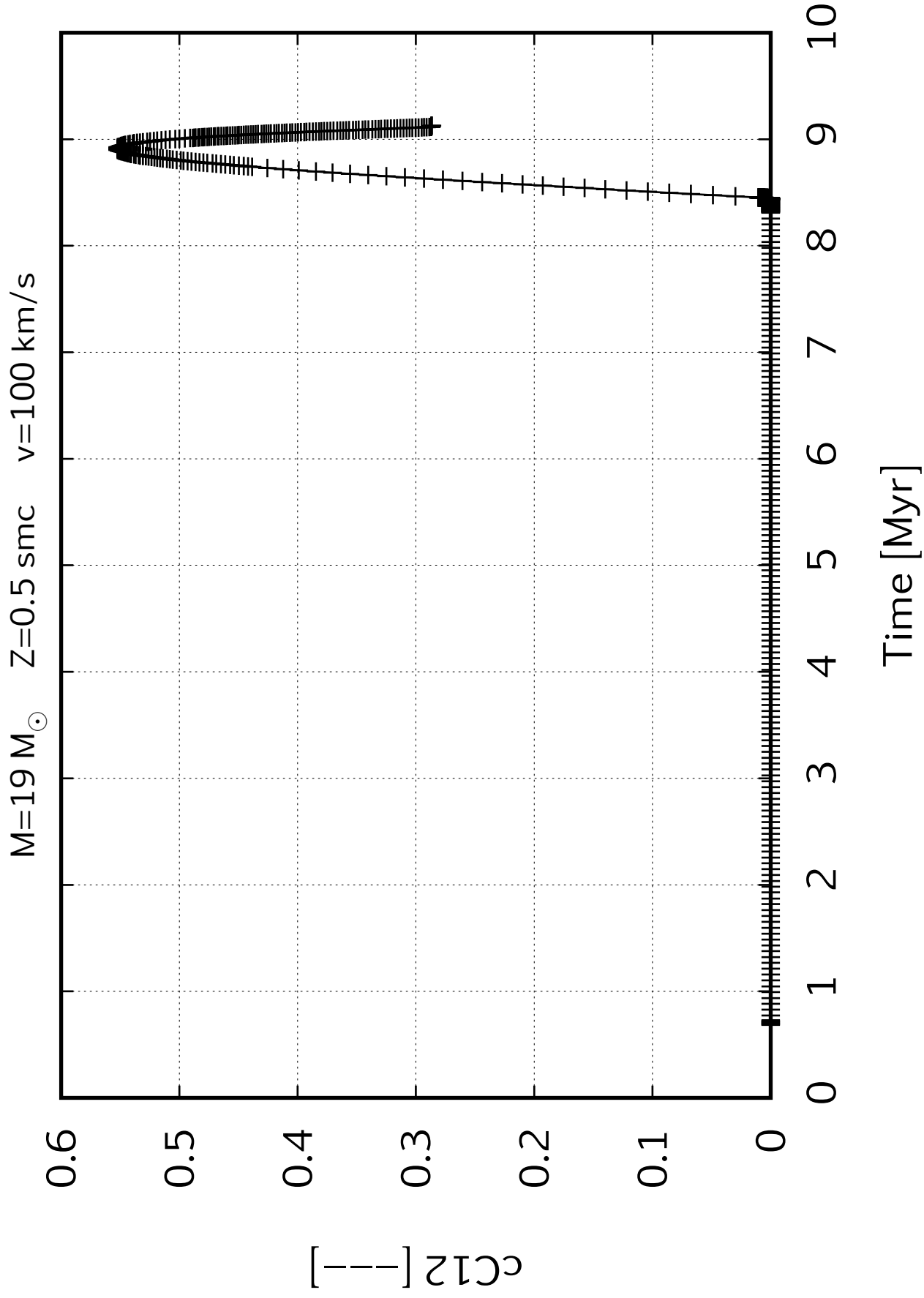
Time [Myr]



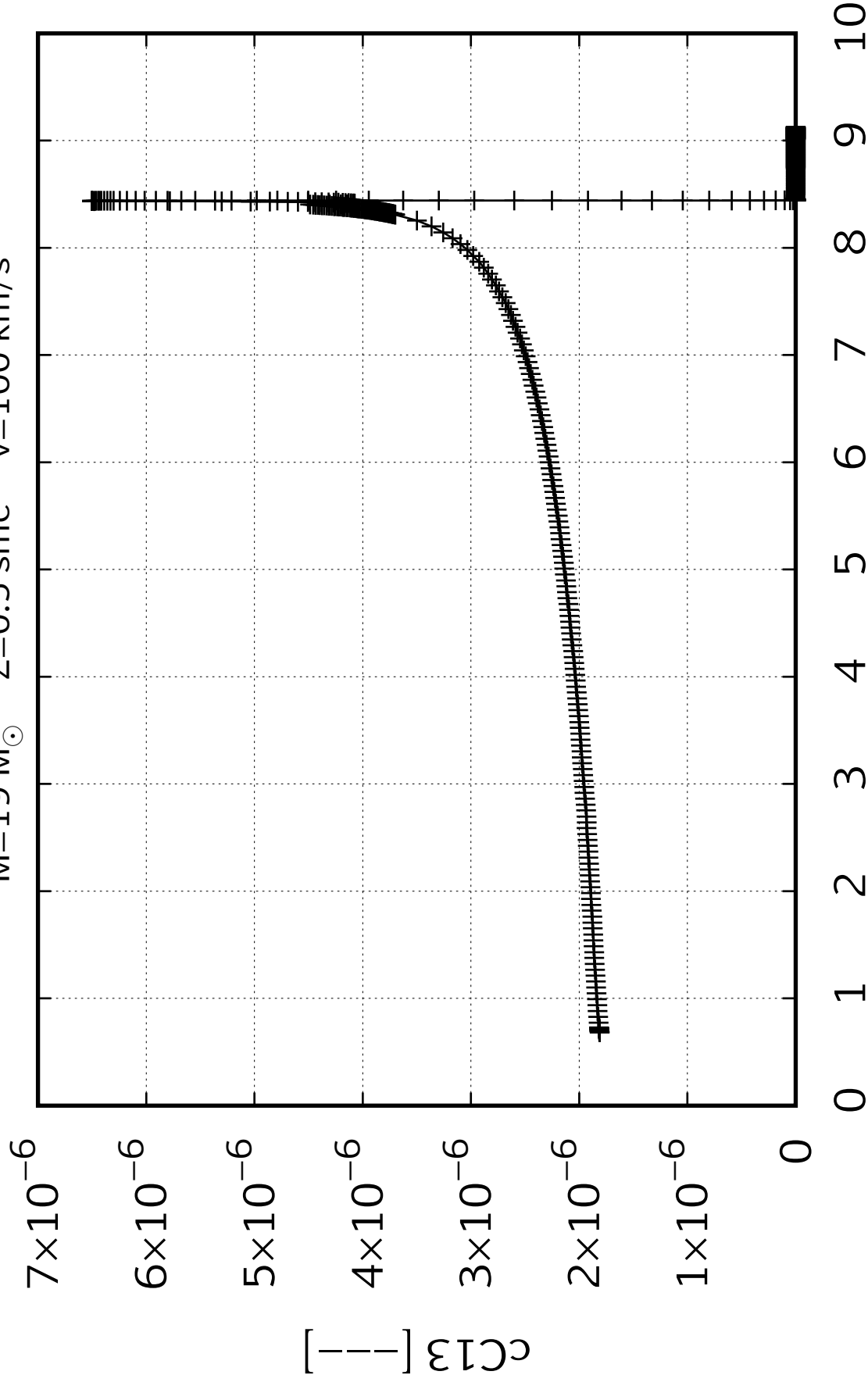


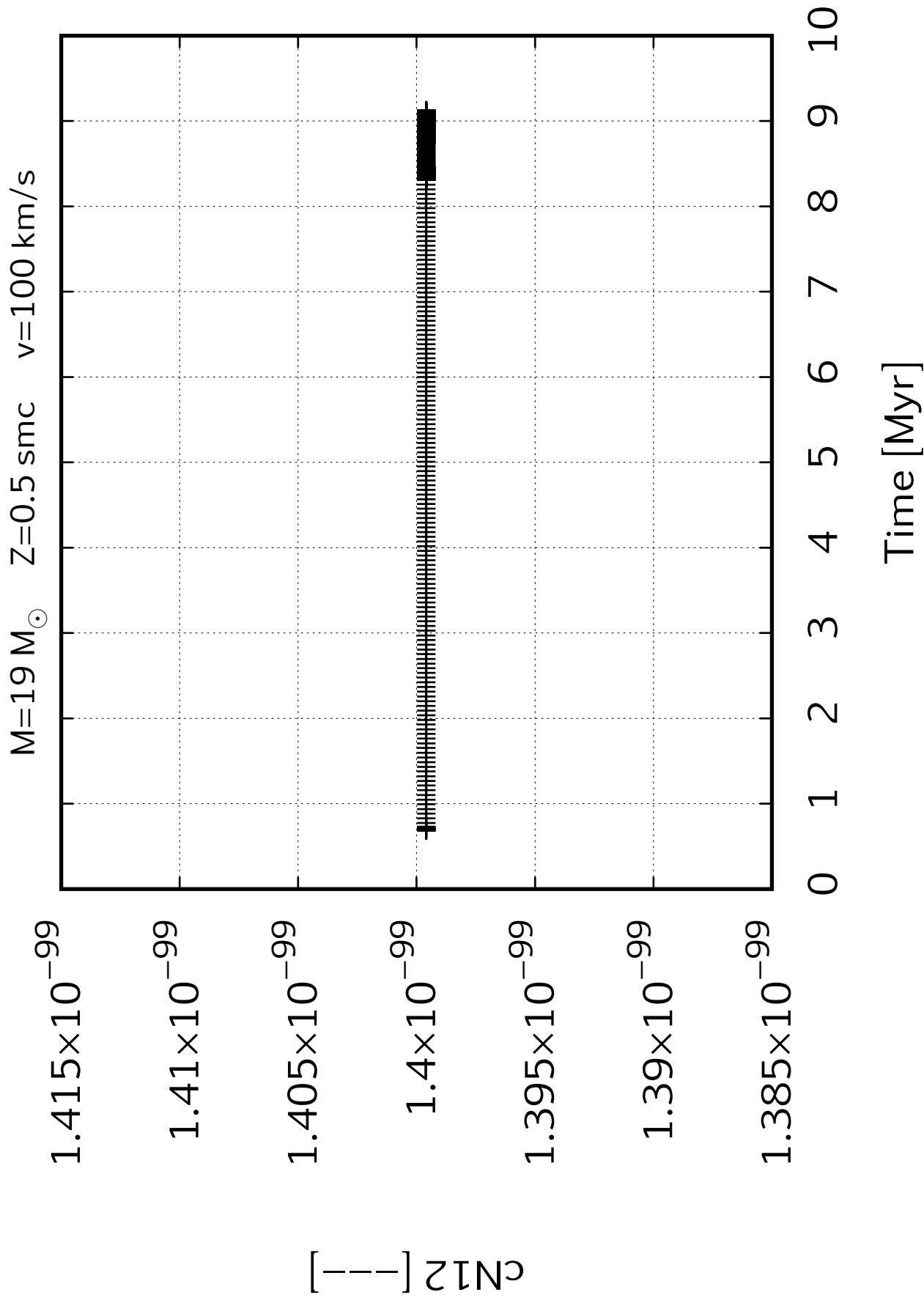






$M=19\,M_{\odot}$     $Z=0.5\,\text{smc}$     $v=100\,\text{km/s}$





$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

0.0007

0.0006

0.0005

0.0004

0.0003

0.0002

0.0001

0

$cN_{14} [ - ]$

0

1

2

3

4

5

6

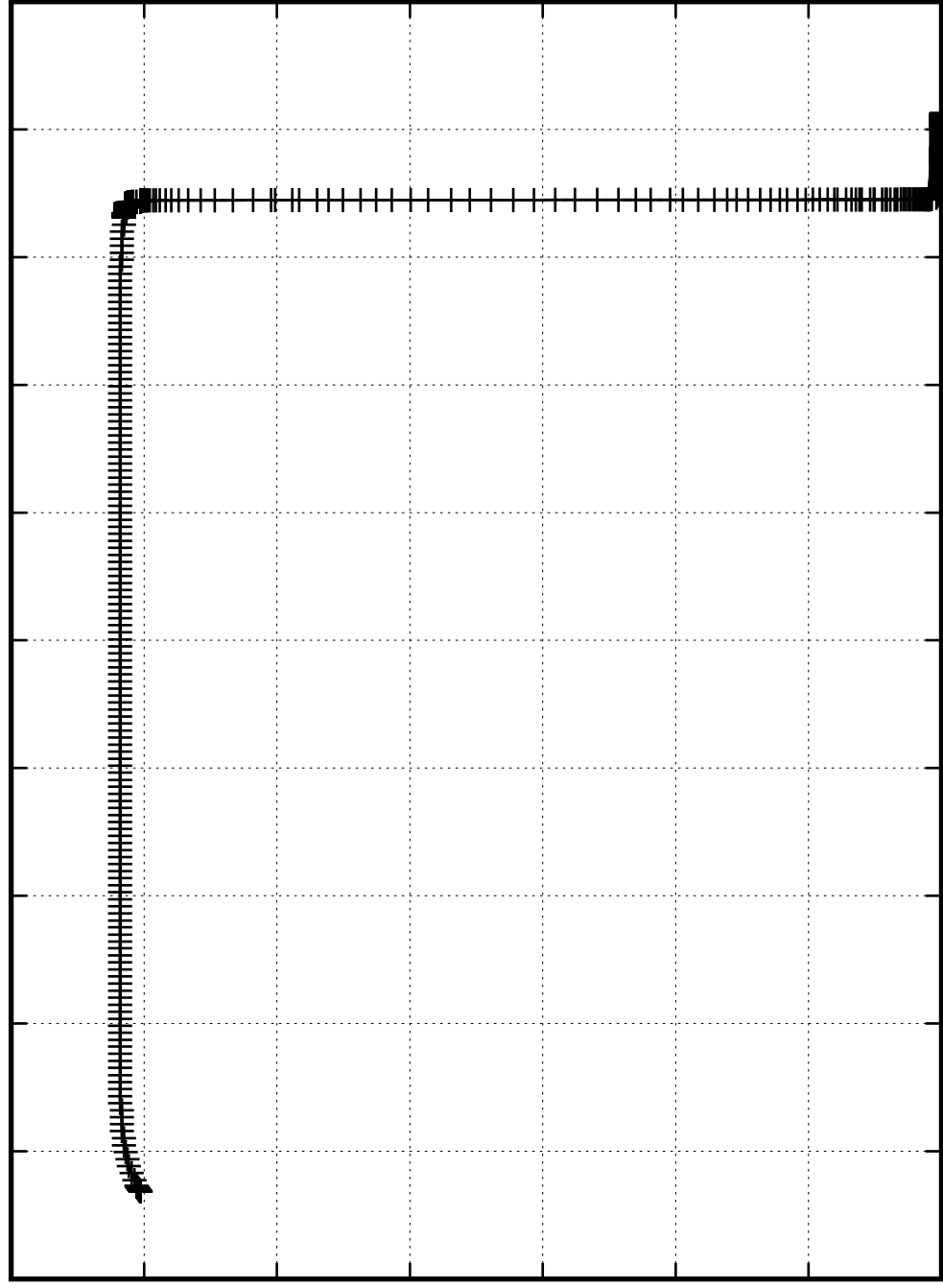
7

8

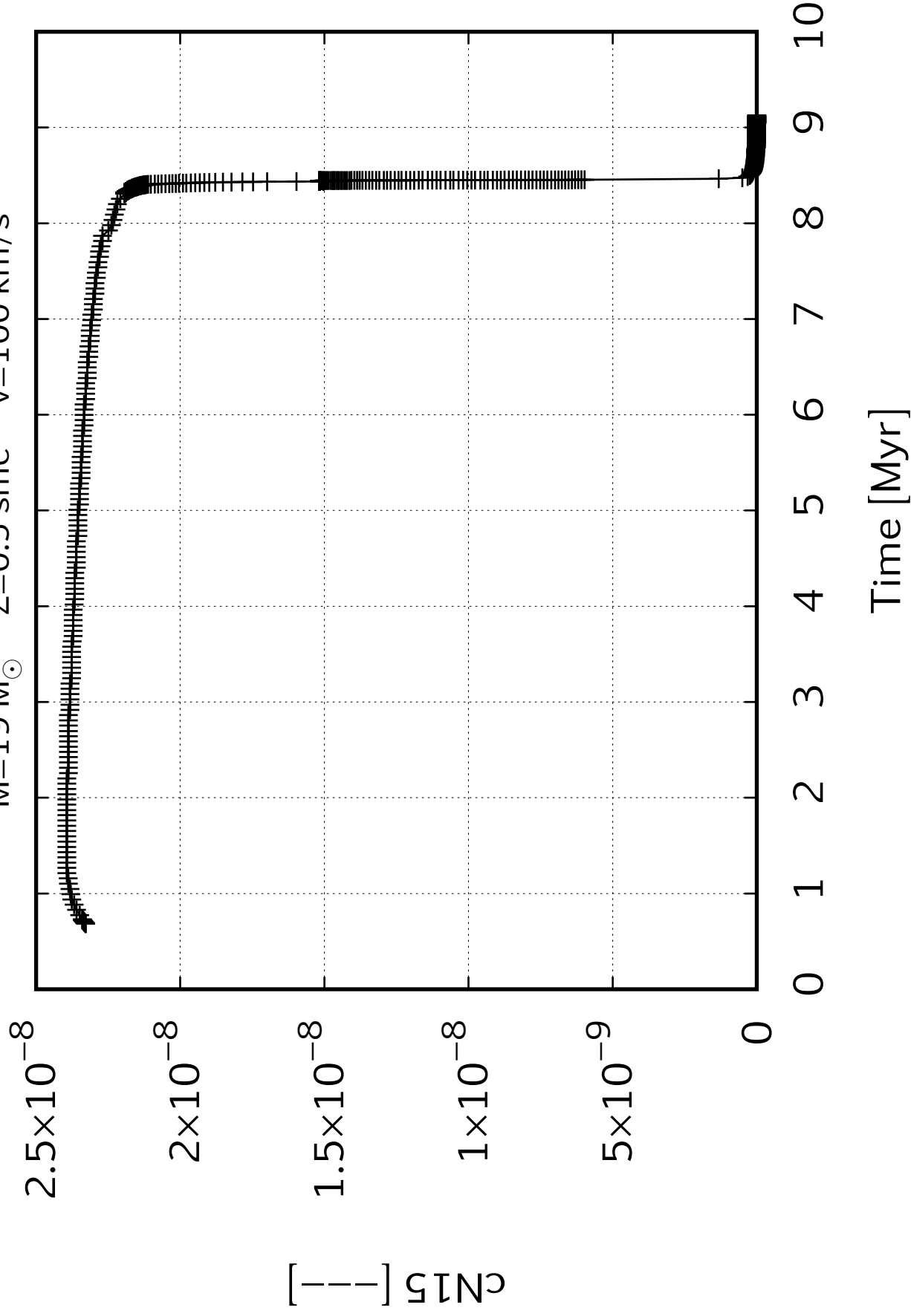
9

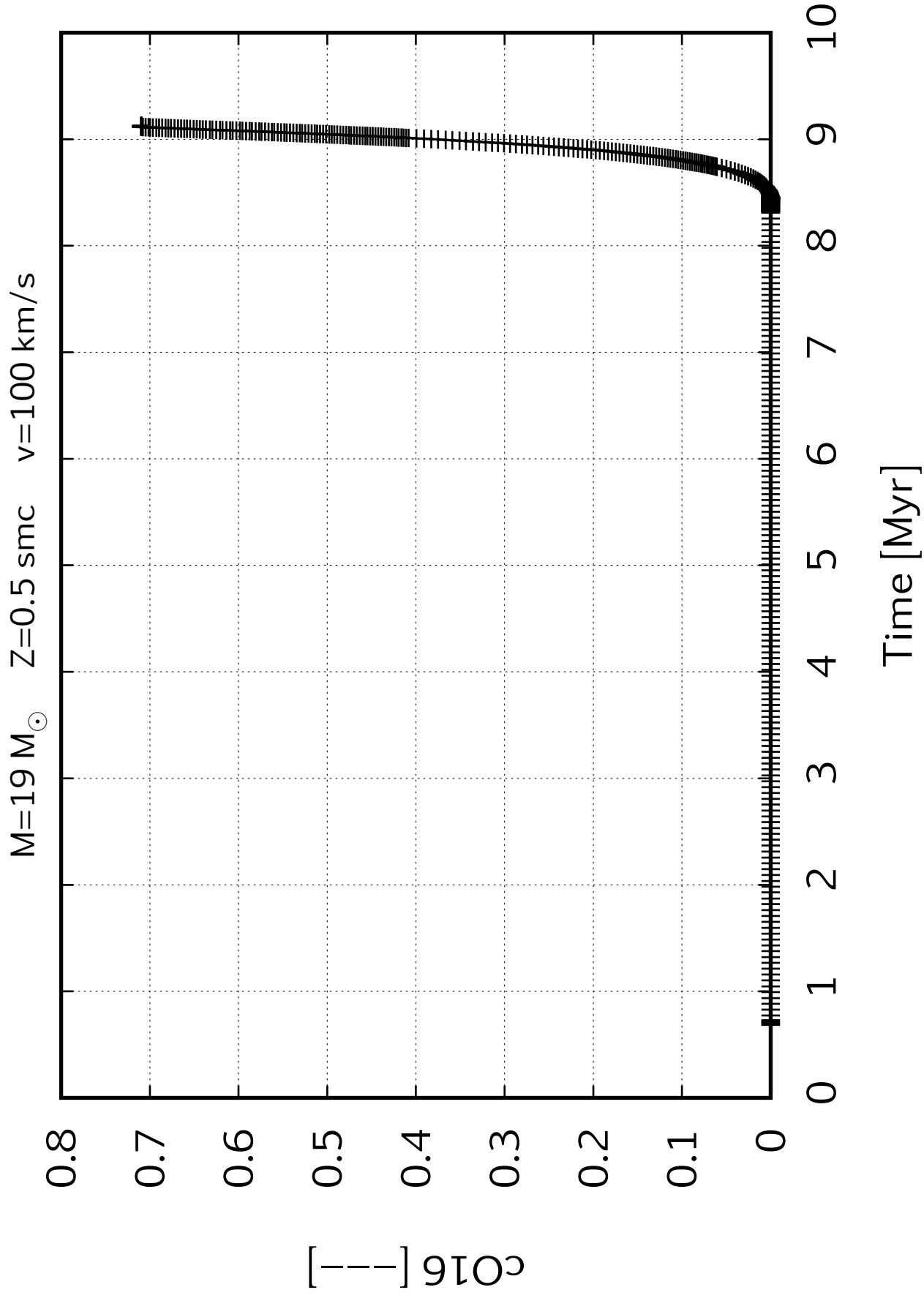
10

Time [Myr]

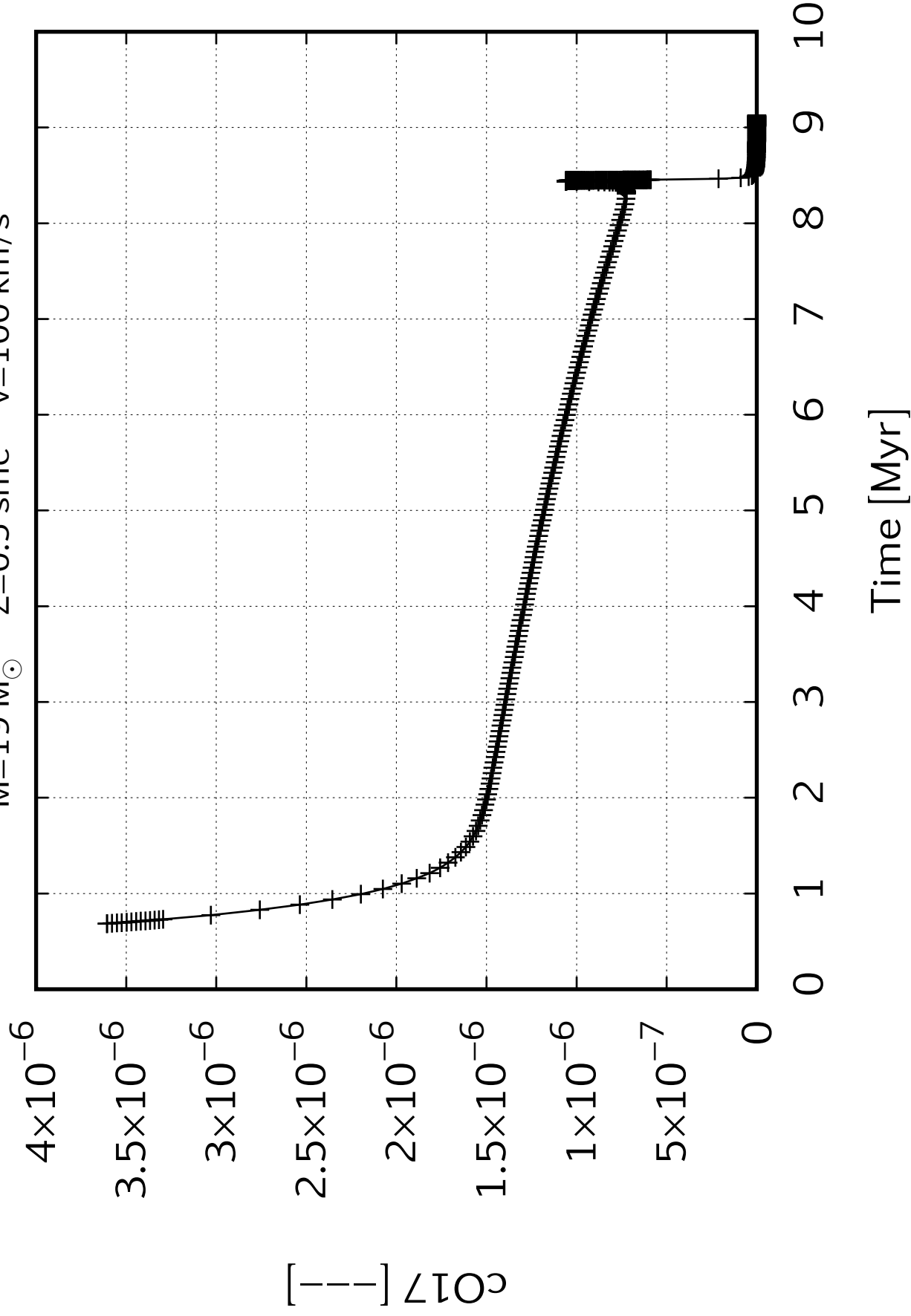


$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$



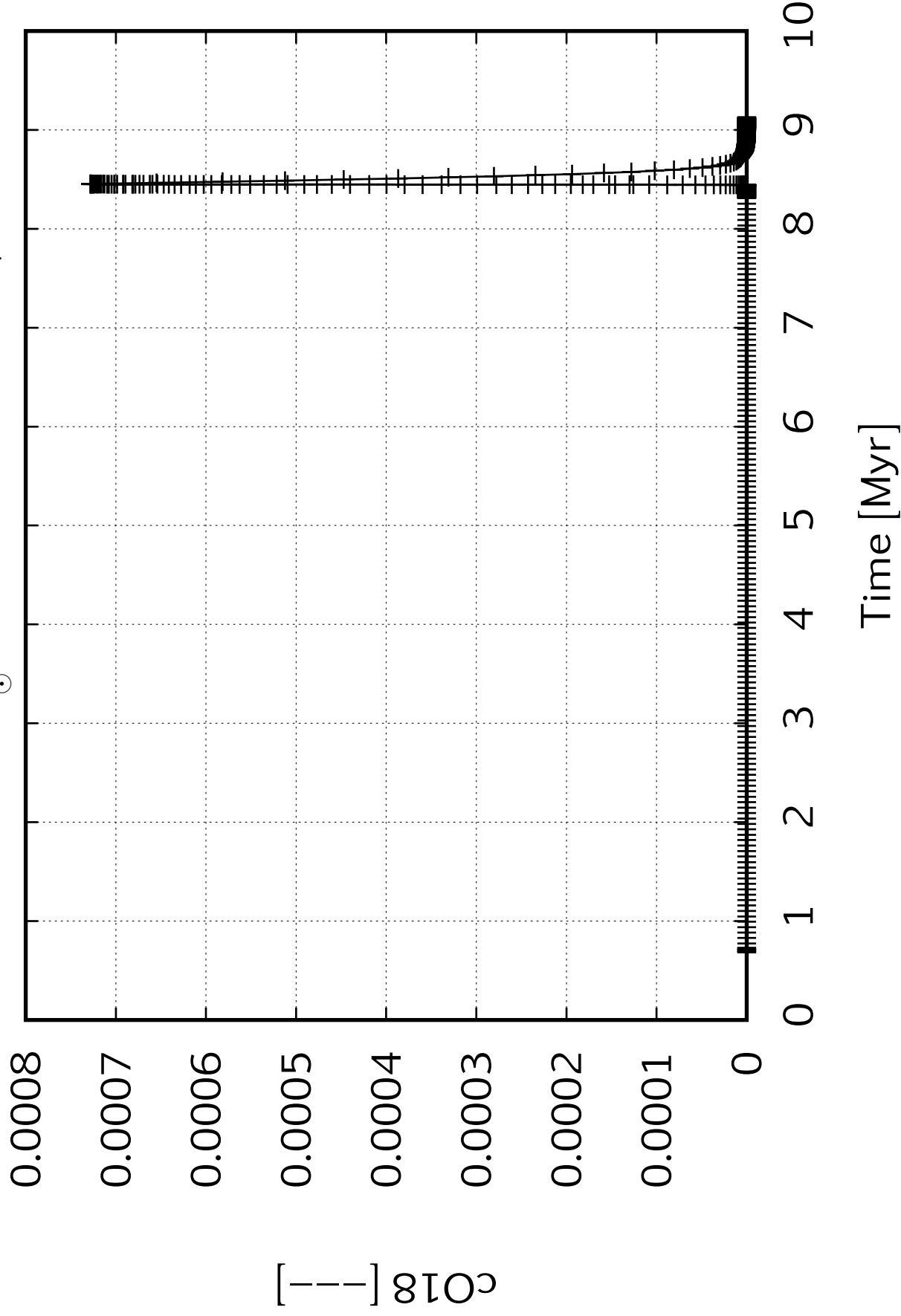


$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

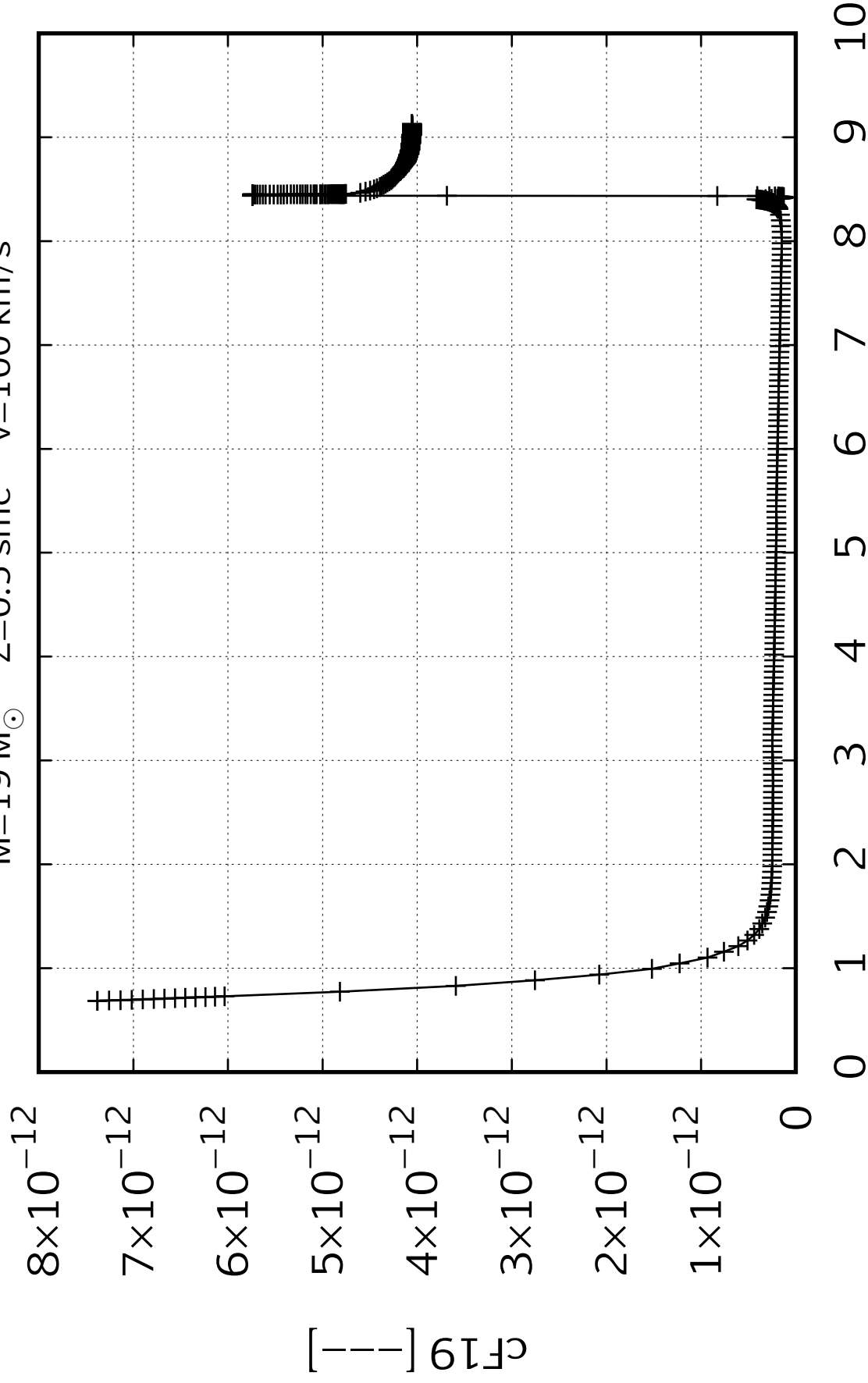




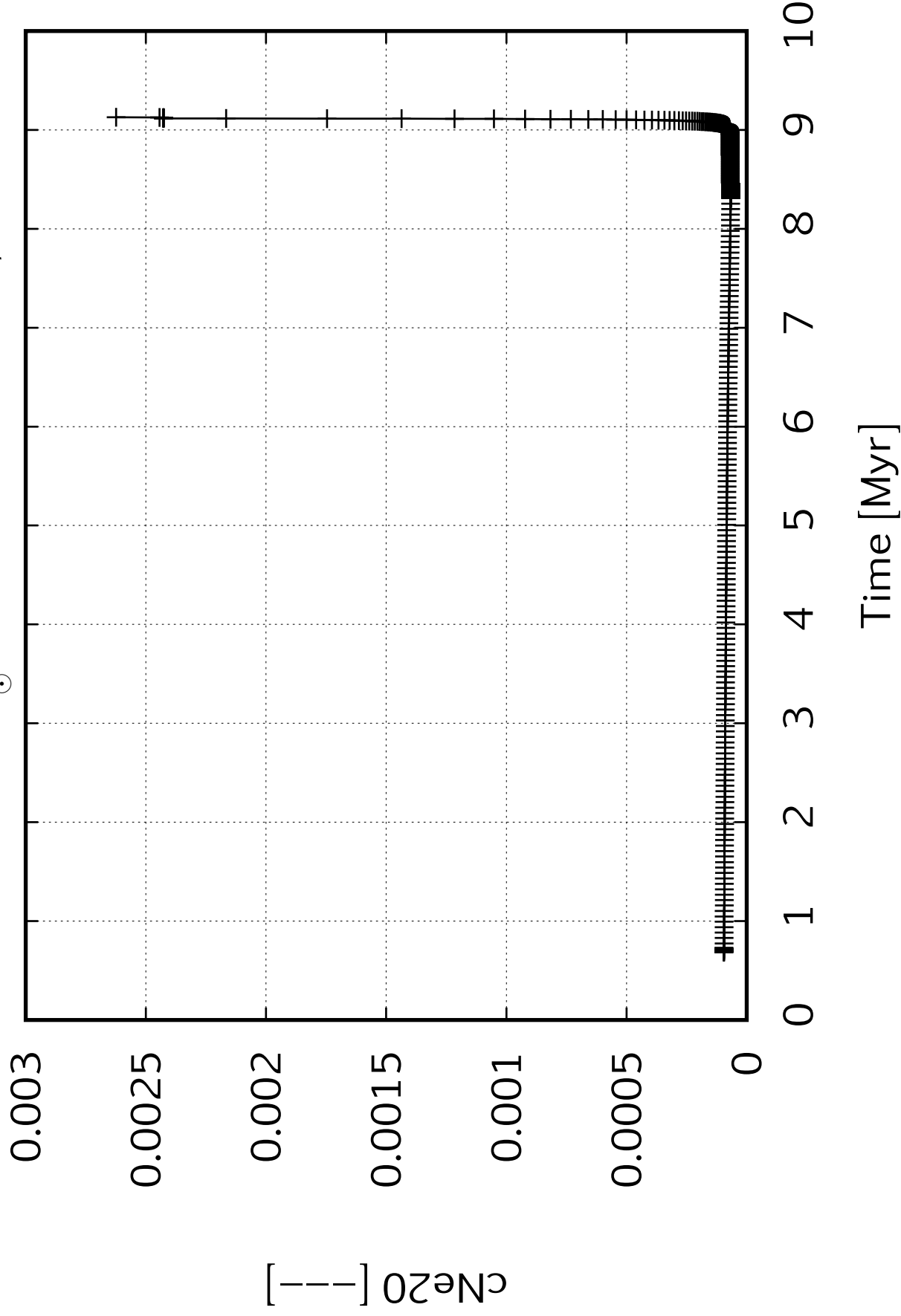
$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s



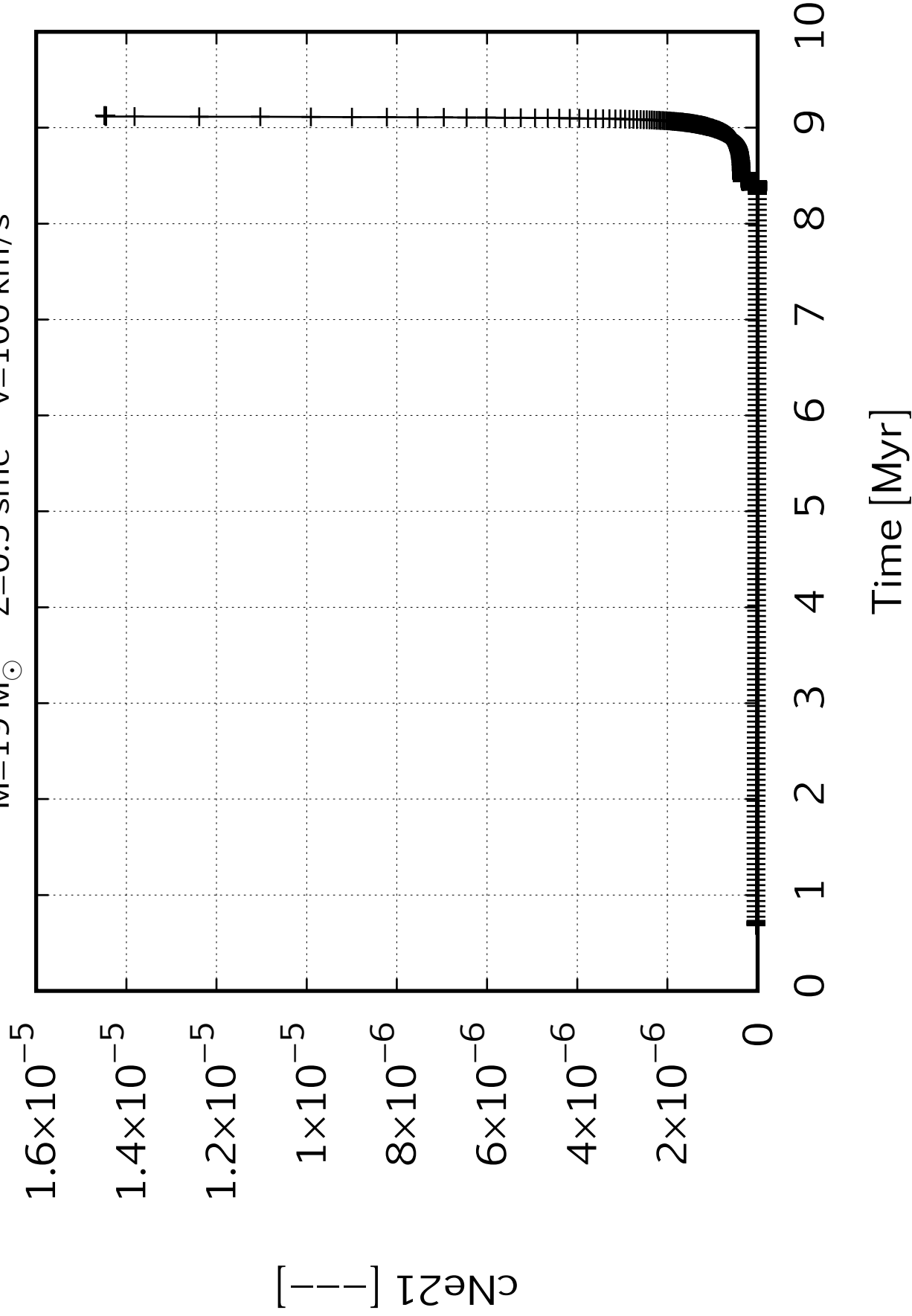
$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s



$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s



$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$



$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

0.001

0.0009

0.0008

0.0007

0.0006

0.0005

0.0004

0.0003

0.0002

0.0001

0

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

0

1

2

3

4

5

6

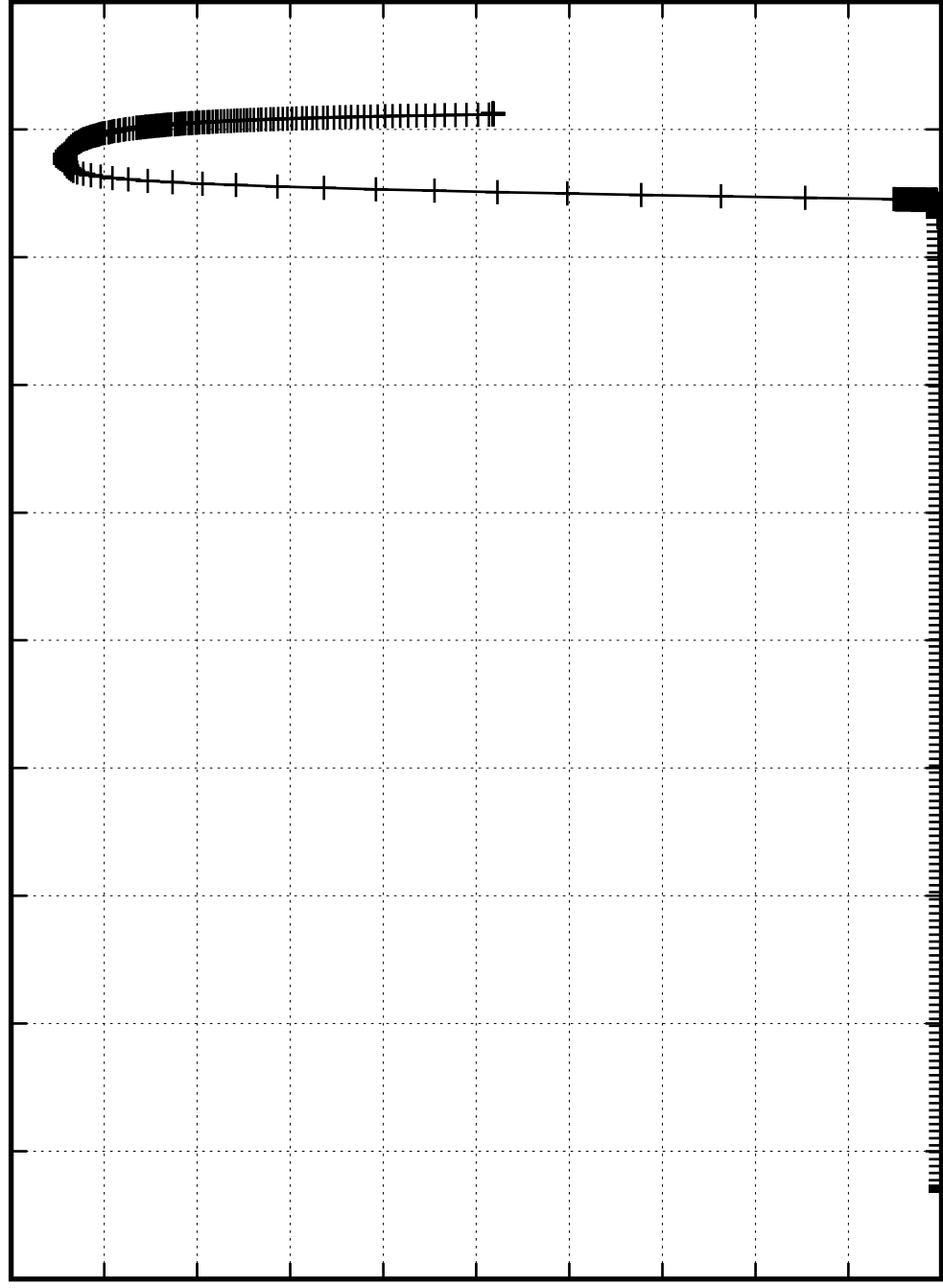
7

8

9

10

Time [Myr]



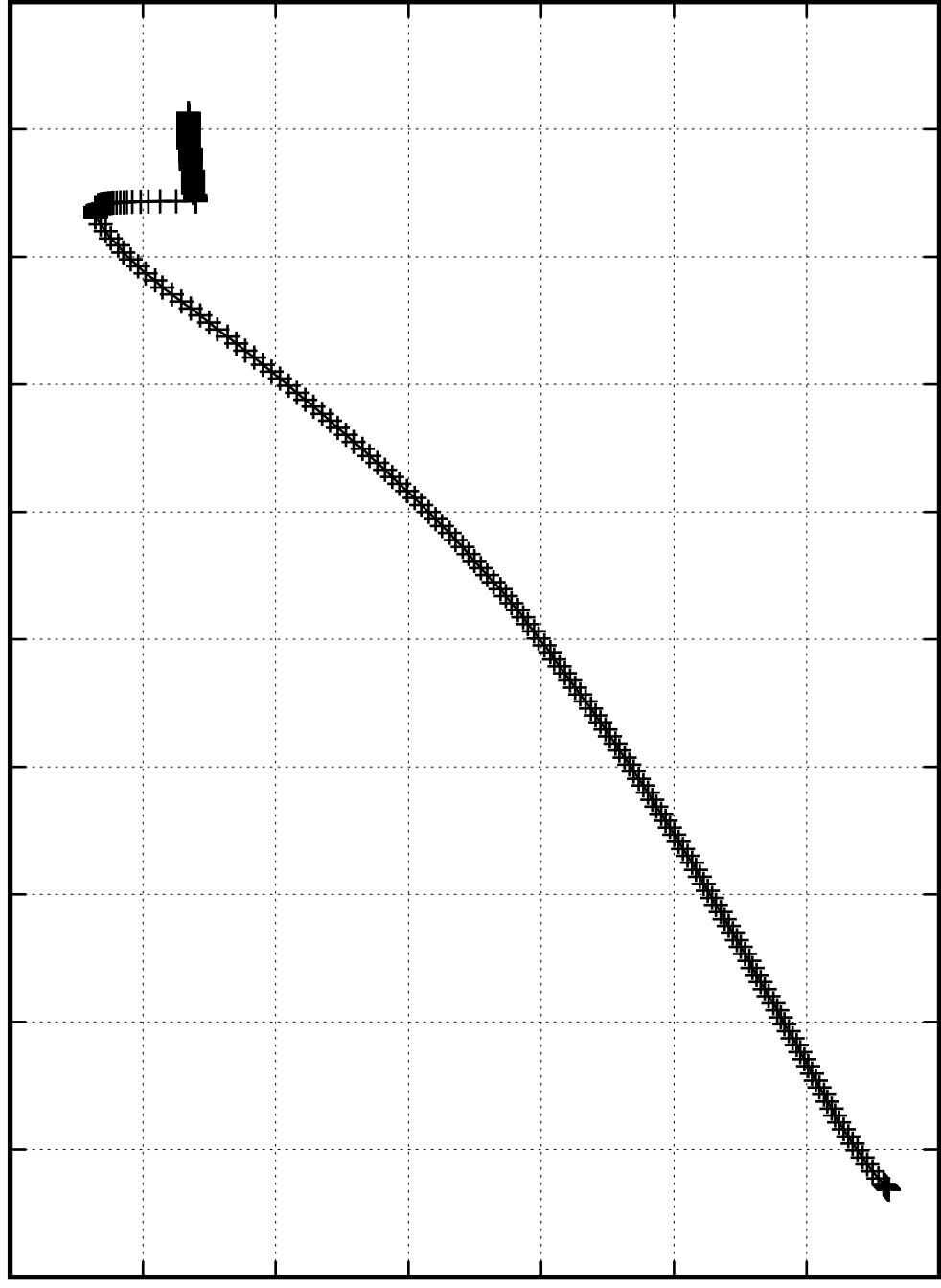
$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

$c_{\text{Na}23}$  [—]

0.00005  
0.00004  
0.00004  
0.00003  
0.00003  
0.00002  
0.00002  
0.00001

0 1 2 3 4 5 6 7 8 9 10

Time [Myr]



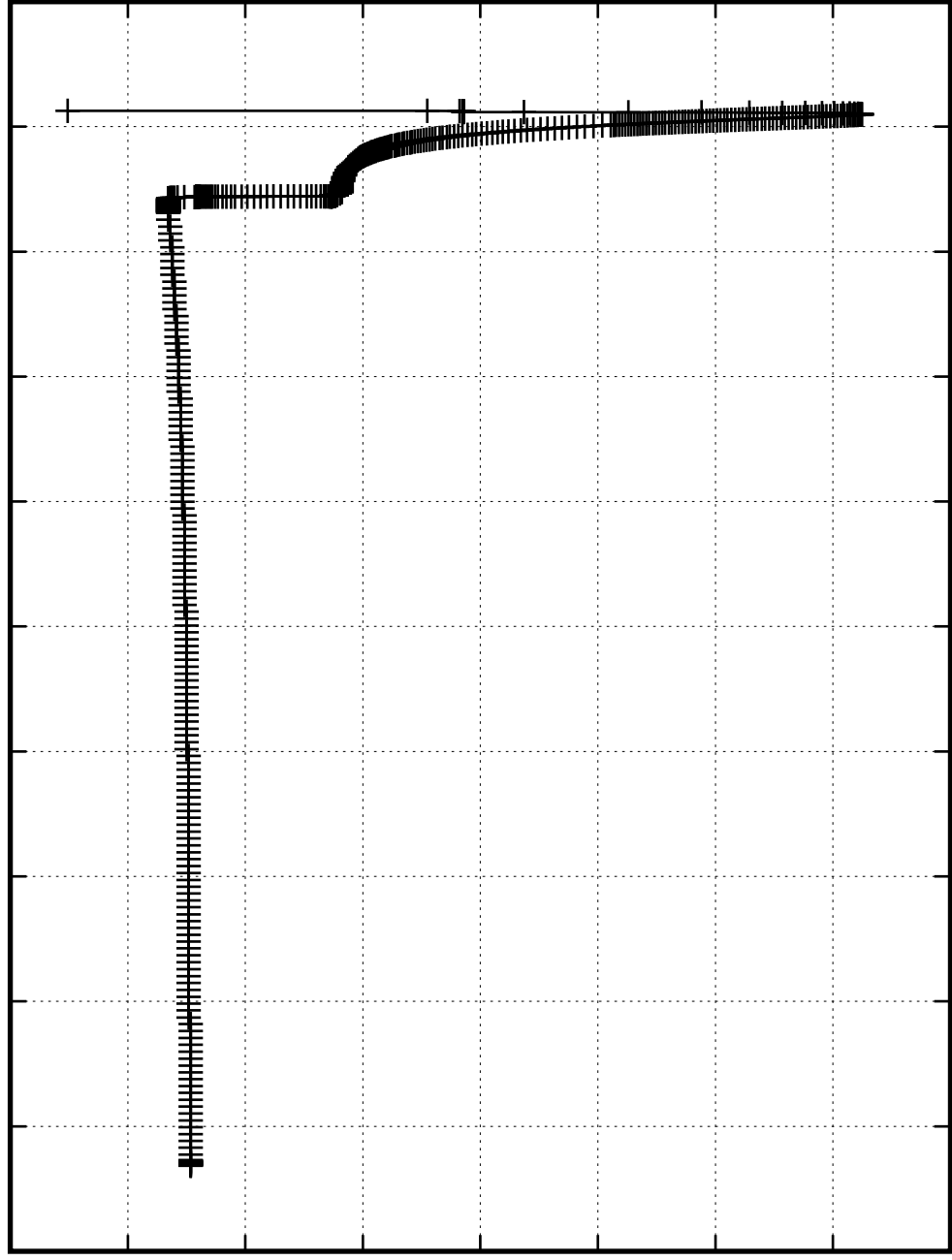
$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$

$cM_{24}^{g24} [ - ]$

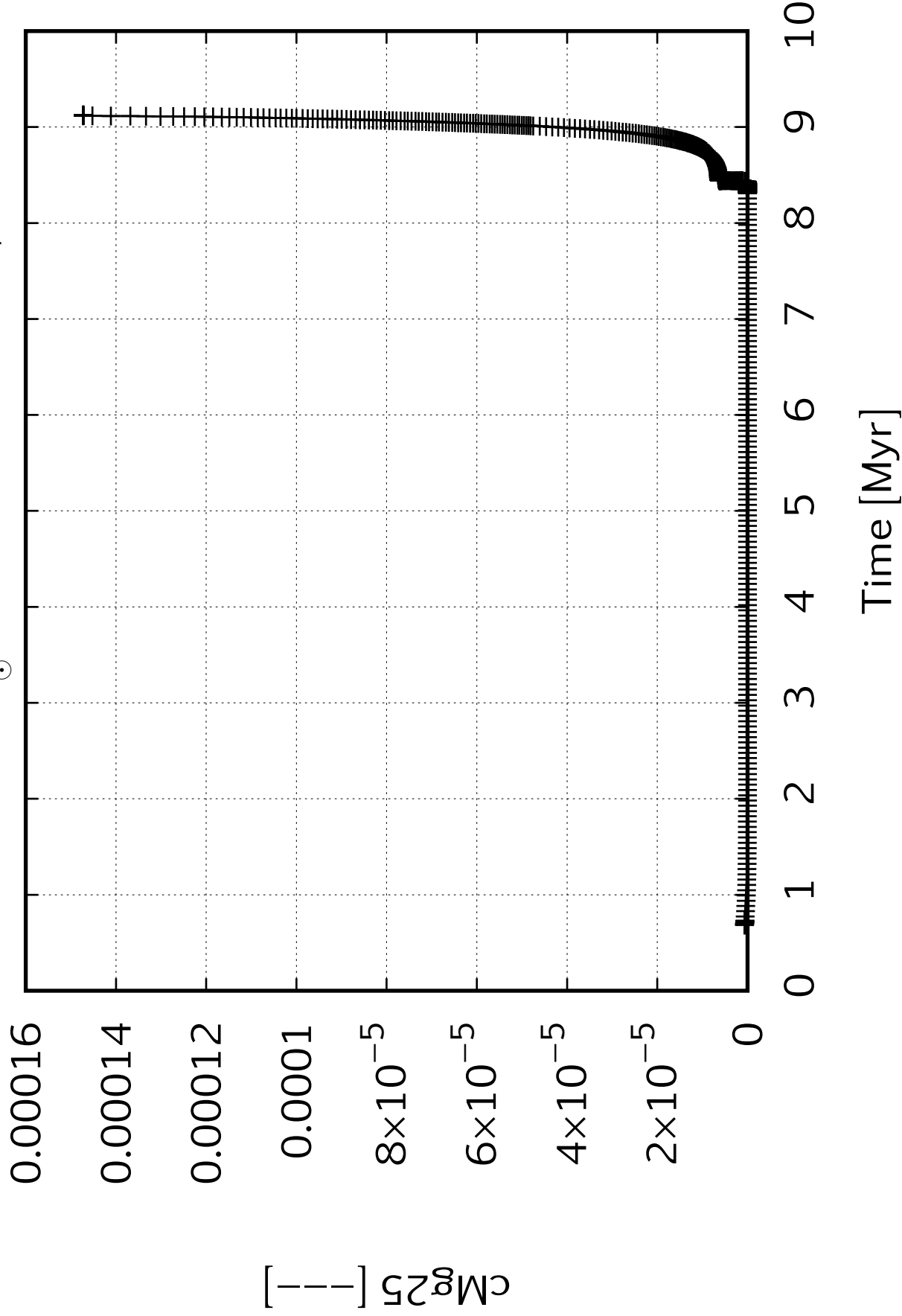
0.000045  
0.000040  
0.000035  
0.000030  
0.000025  
0.000020  
0.000015  
0.000010  
0.000005

0 1 2 3 4 5 6 7 8 9 10

Time [Myr]



$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$



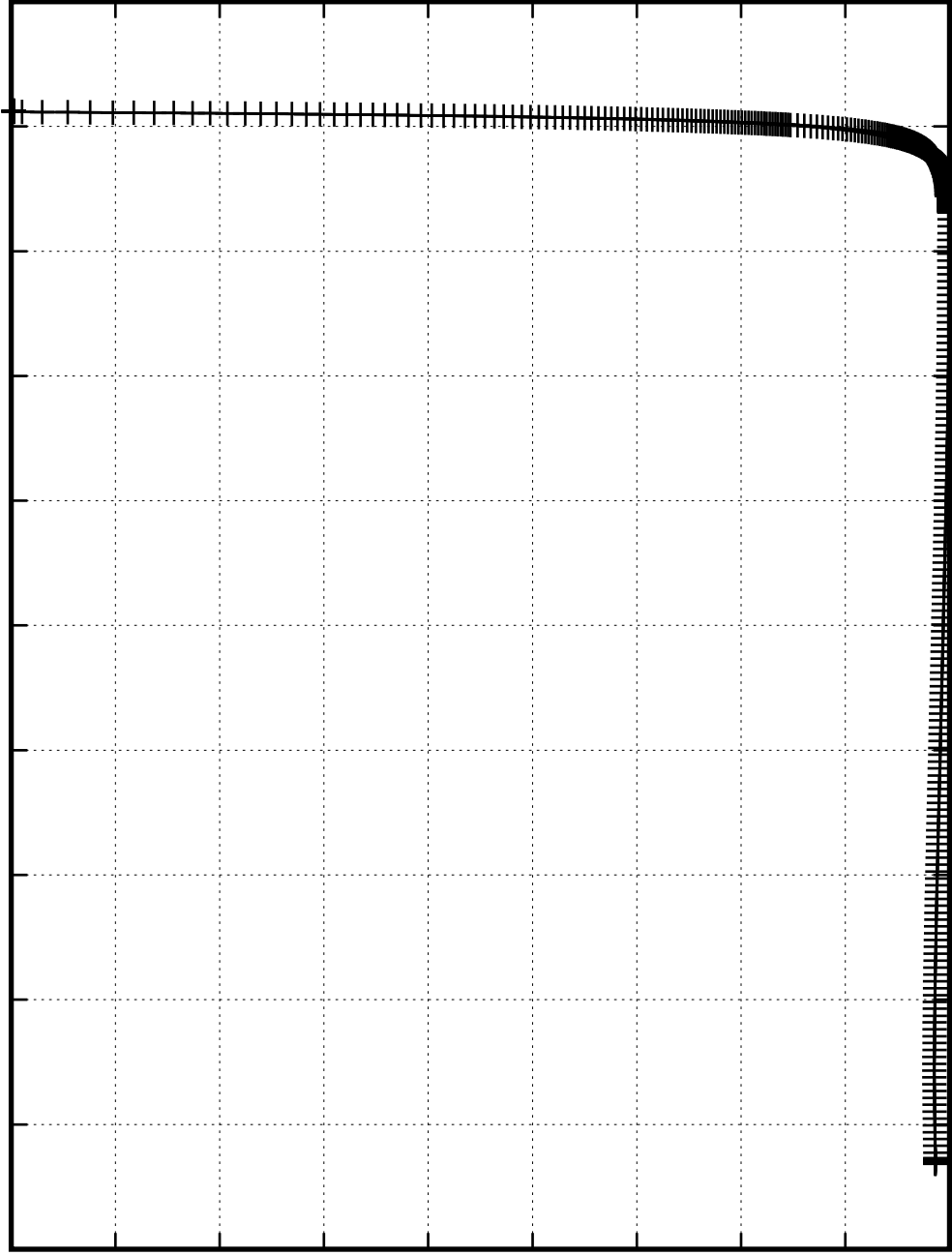


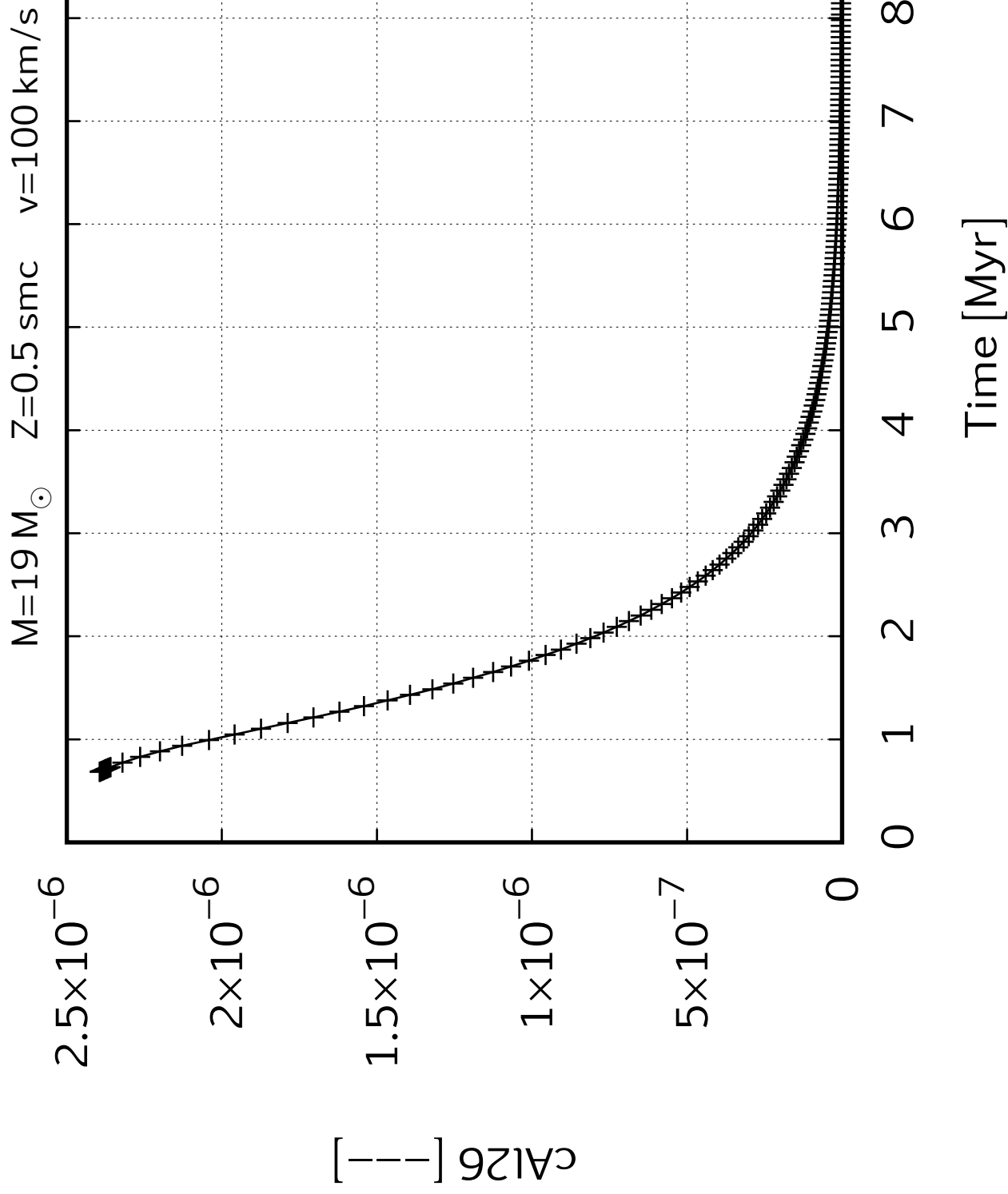
$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$

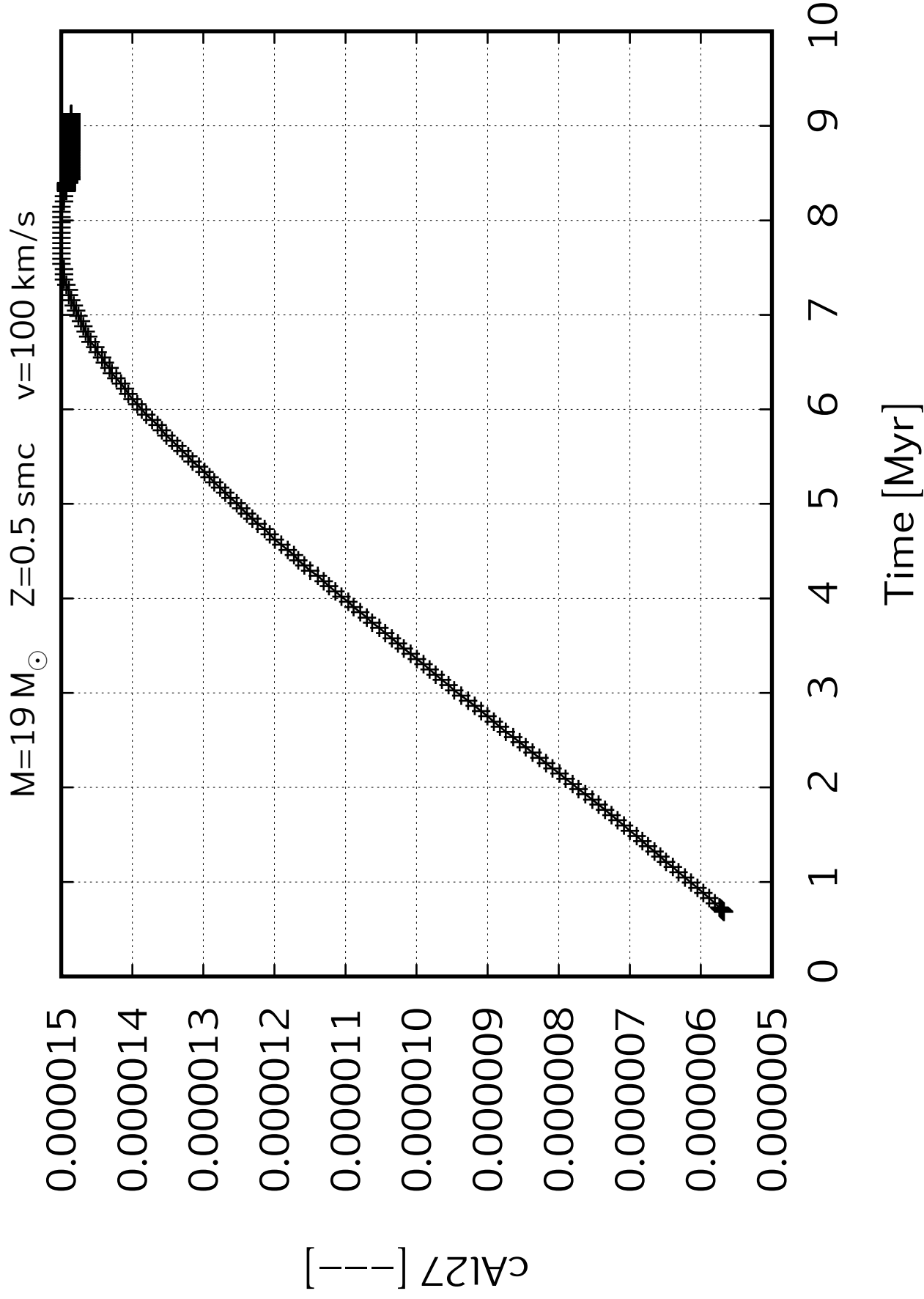
$cM_{26}$   
[ $-\quad-\quad-$ ]  
0.00045  
0.0004  
0.00035  
0.0003  
0.00025  
0.0002  
0.00015  
0.0001  
 $5 \times 10^{-5}$   
0

0 1 2 3 4 5 6 7 8 9 10

Time [Myr]







$M=19M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s

0.00007

0.00006

0.00006

0.00005

0.00005

0.00004

0.00004

0.00003

0.00003

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

0

1

2

3

4

5

6

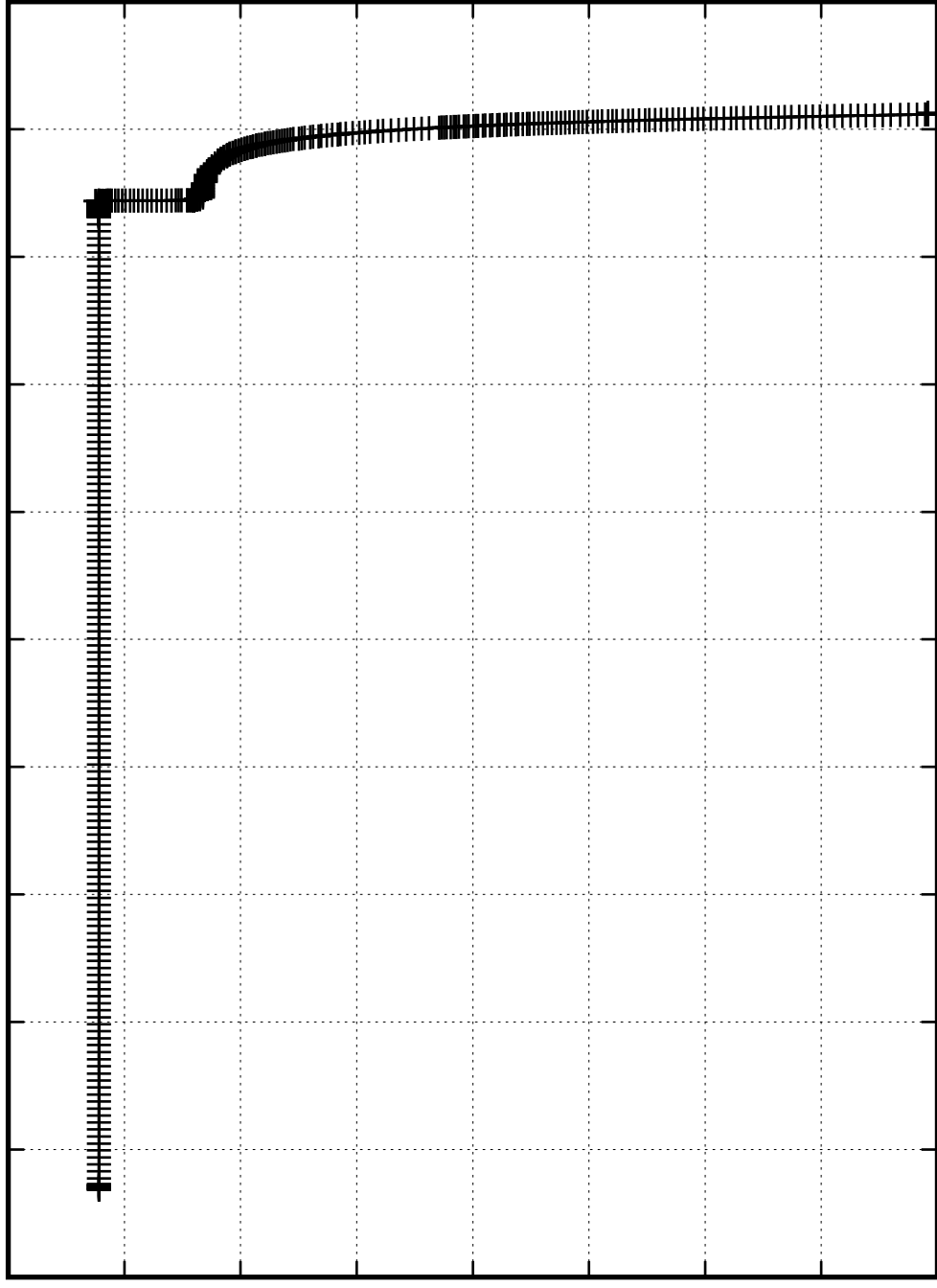
7

8

9

10

Time [Myr]



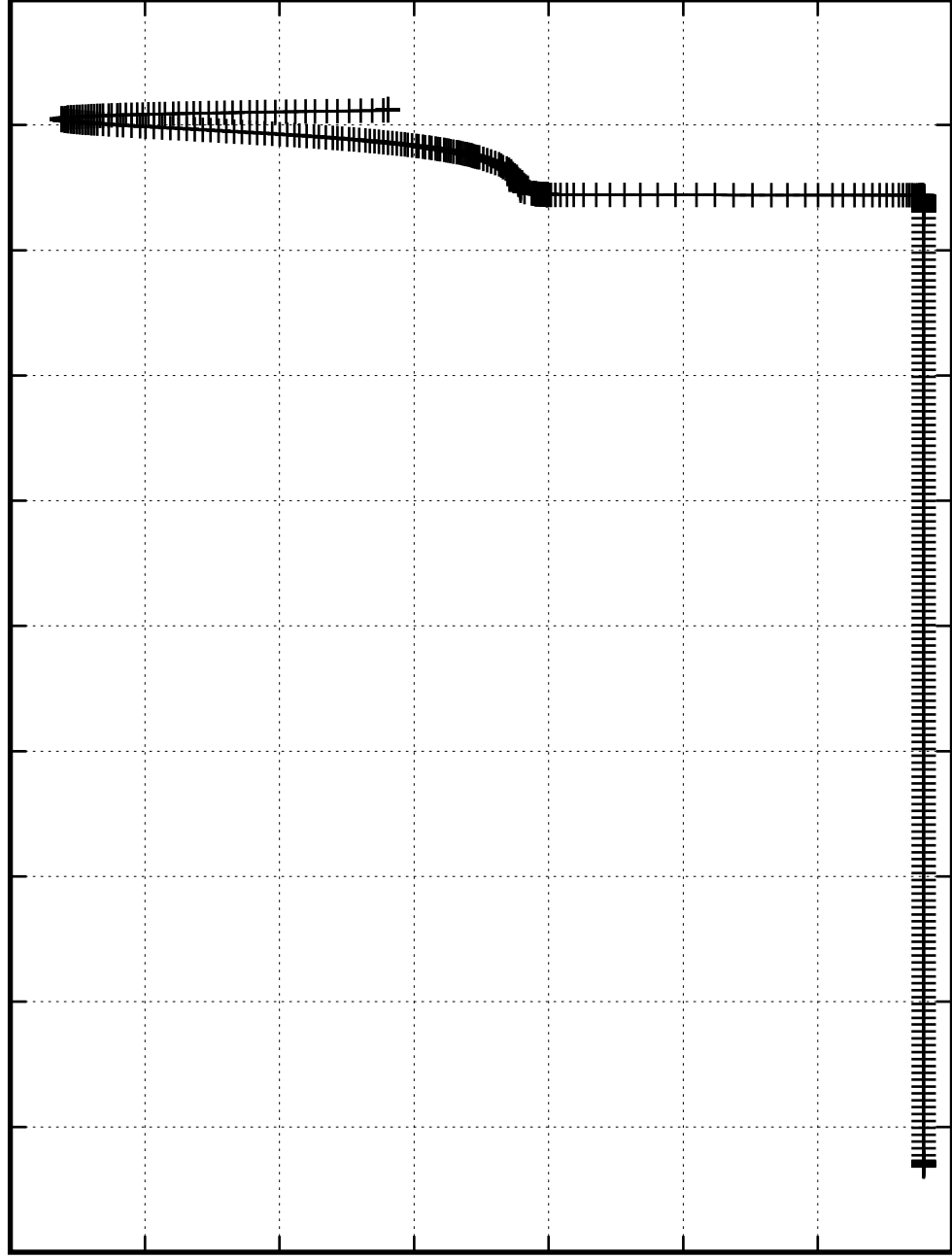
$M=19 M_{\odot}$     $Z=0.5 \text{ snc}$     $v=100 \text{ km/s}$

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

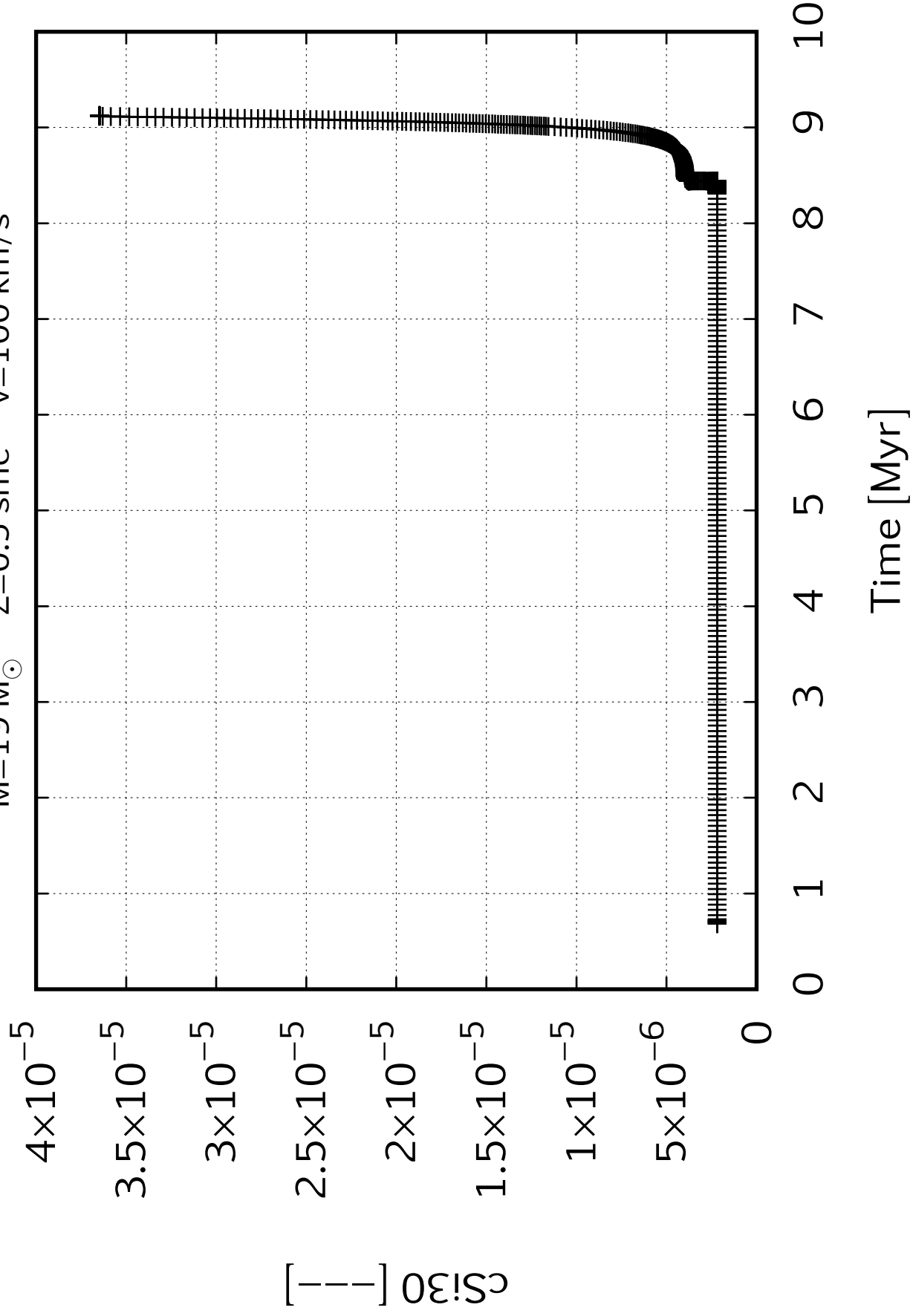
0.000010  
0.000009  
0.000008  
0.000007  
0.000006  
0.000005  
0.000004  
0.000003

0 1 2 3 4 5 6 7 8 9 10

Time [Myr]



$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$



$M=19 M_{\odot}$     $Z=0.5 \text{ smc}$     $v=100 \text{ km/s}$

0.000128

0.000128

0.000127

0.000127

0.000126

0.000126

0.000125

$[\text{Fe56}]$

0

1

2

3

4

5

6

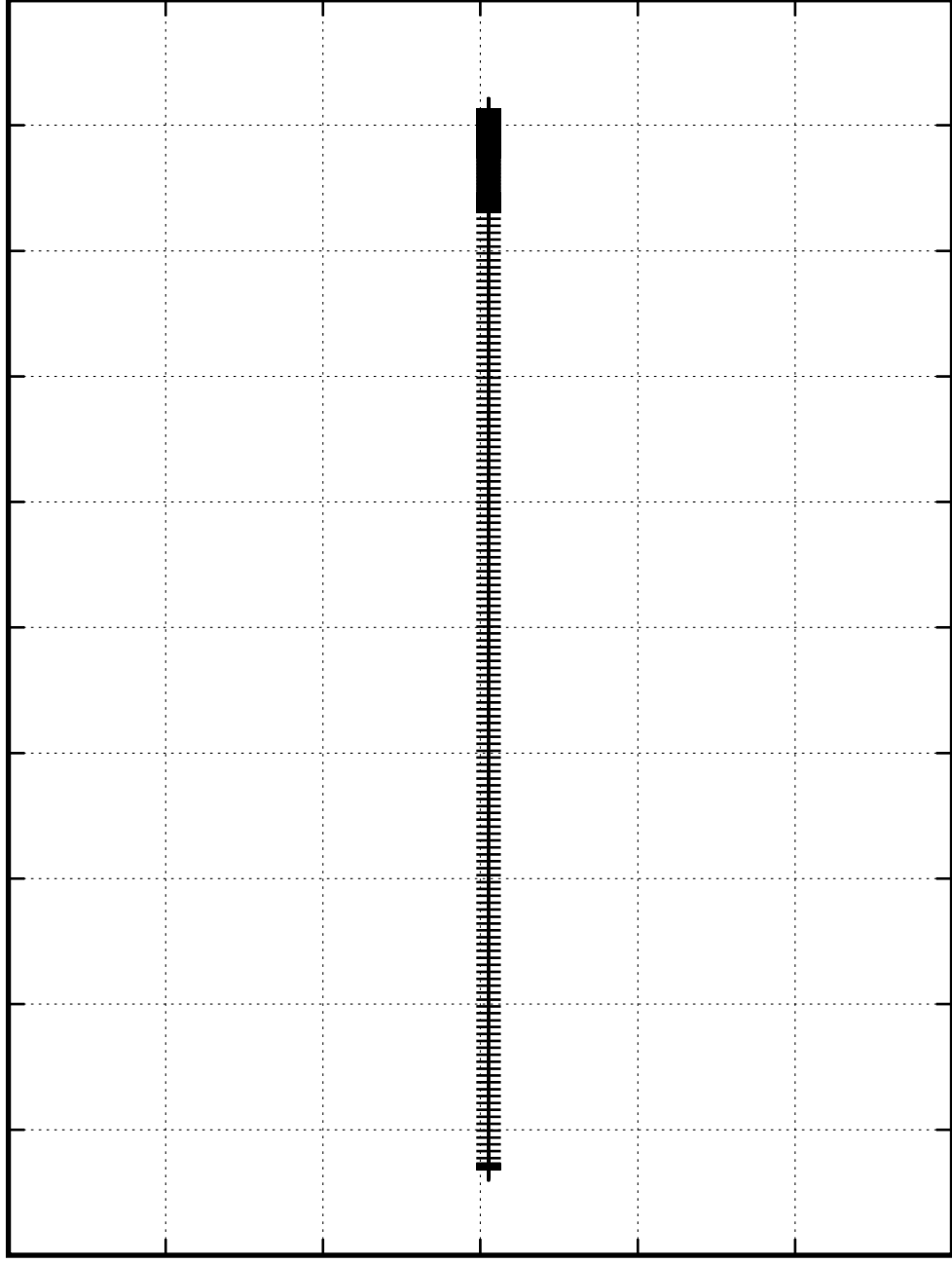
7

8

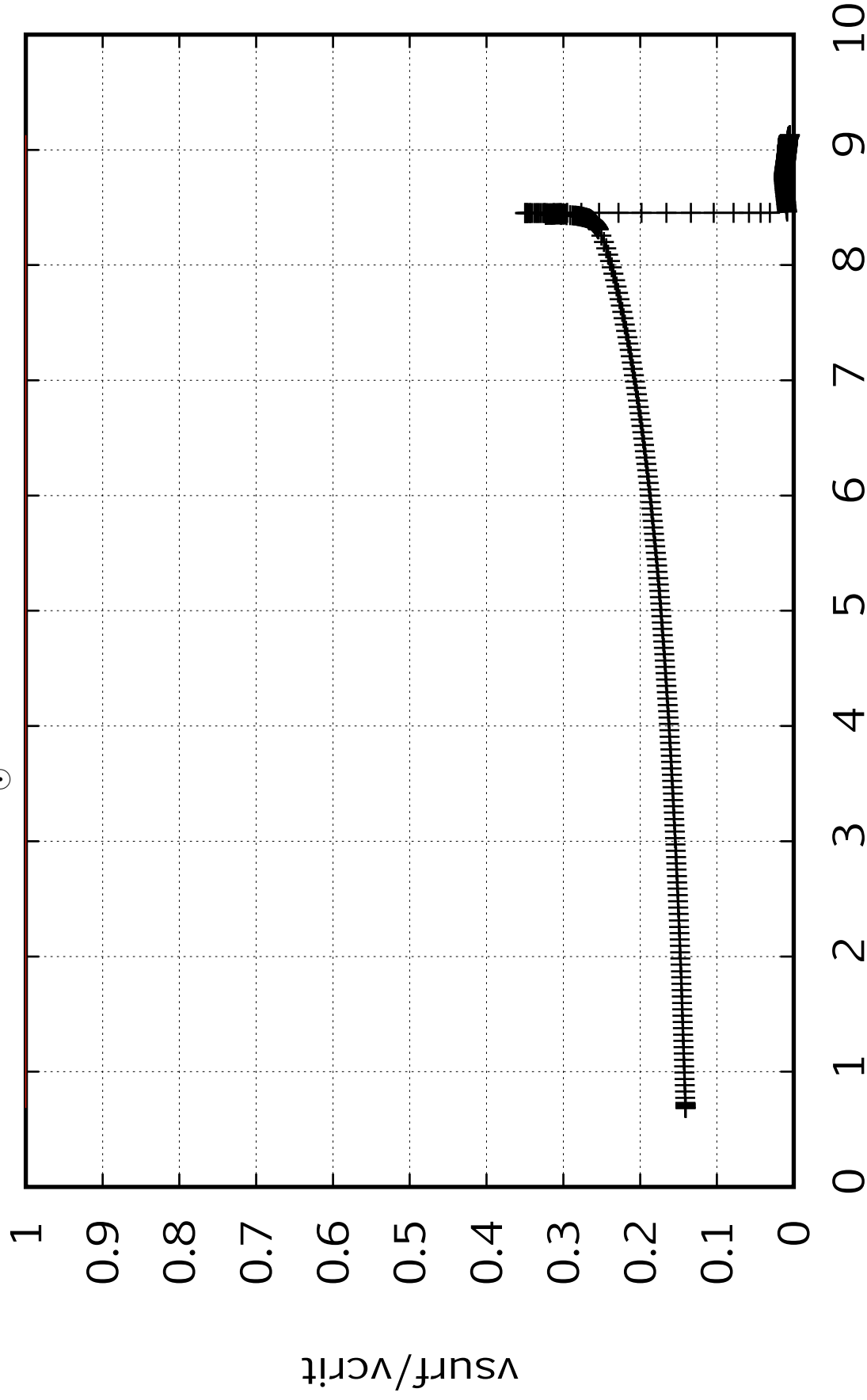
9

10

Time [Myr]



$M=19 M_{\odot}$     $Z=0.5$  smc    $v=100$  km/s





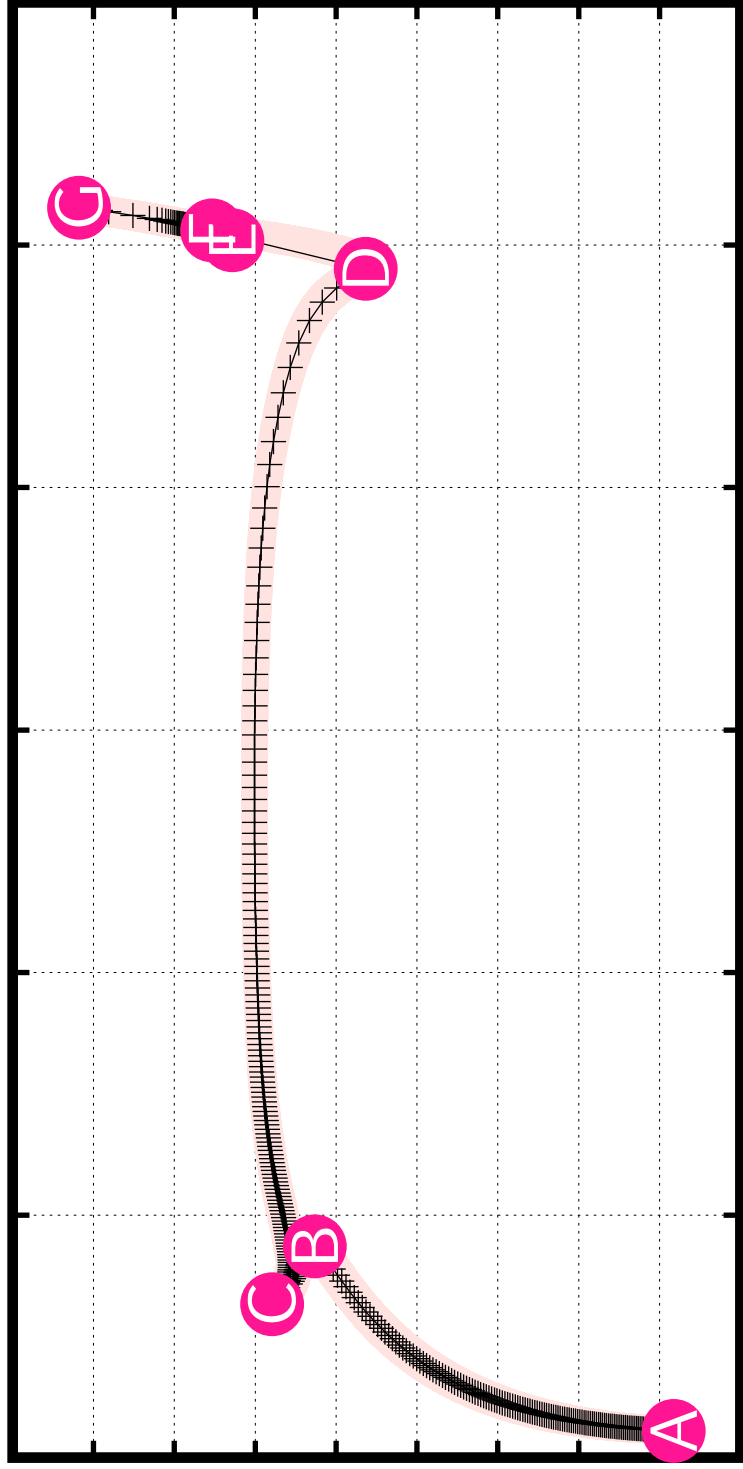
19 M<sub>⊙</sub> dwarfA

$\log L / L_{\odot}$

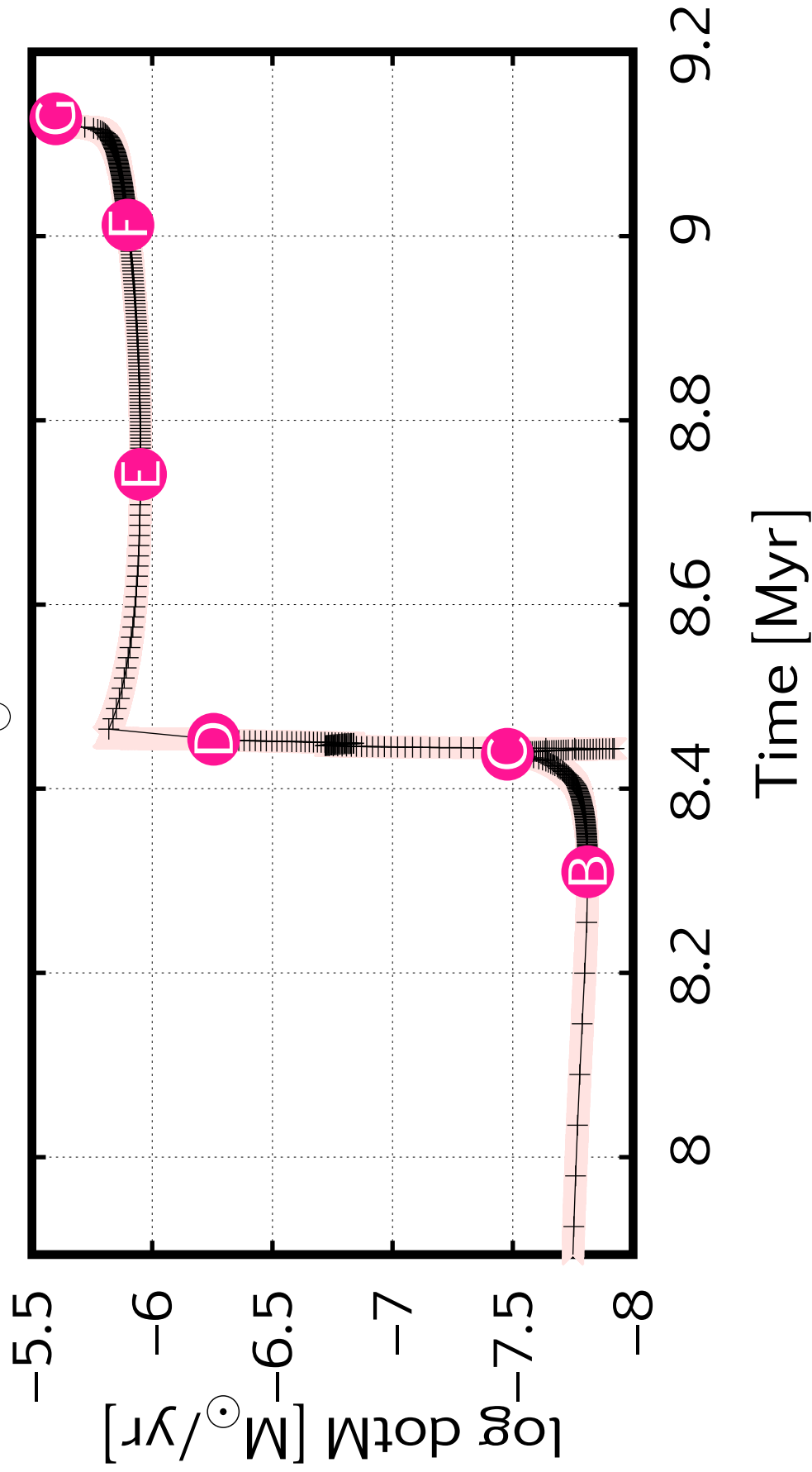
5.4  
5.3  
5.2  
5.1  
5  
4.9  
4.8  
4.7  
4.6  
4.5

$\log T_{\text{eff}} [\text{K}]$

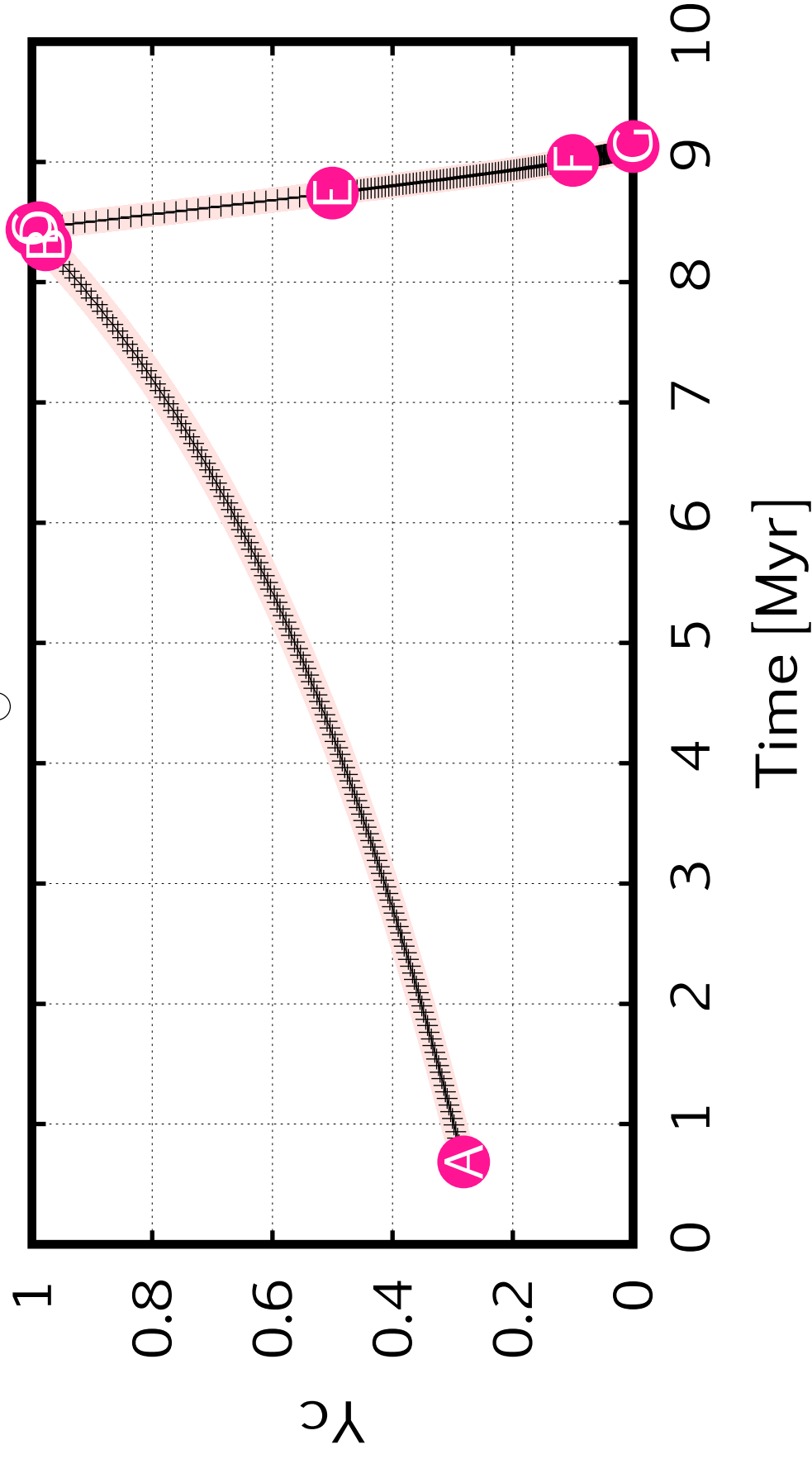
4.6 4.4 4.2 4 3.8 3.6 3.4



19 M<sub>⊙</sub> dwarfA



19 M<sub>⊙</sub> dwarfA



# 19 M<sub>⊙</sub> dwarfA

