

Appendix E Combustion Properties of Mixtures

For reference, we have computed the properties of selected H₂-NH₃-N₂-air mixtures as a function of the concentration of the fuel blend in air. Properties computed include:

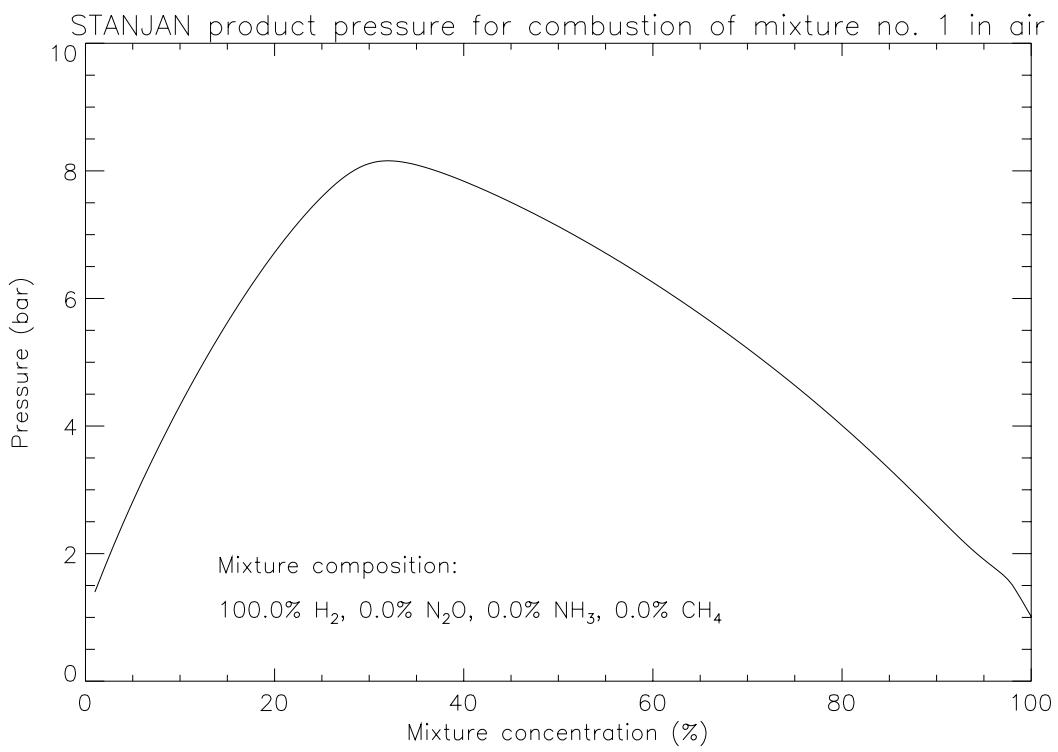
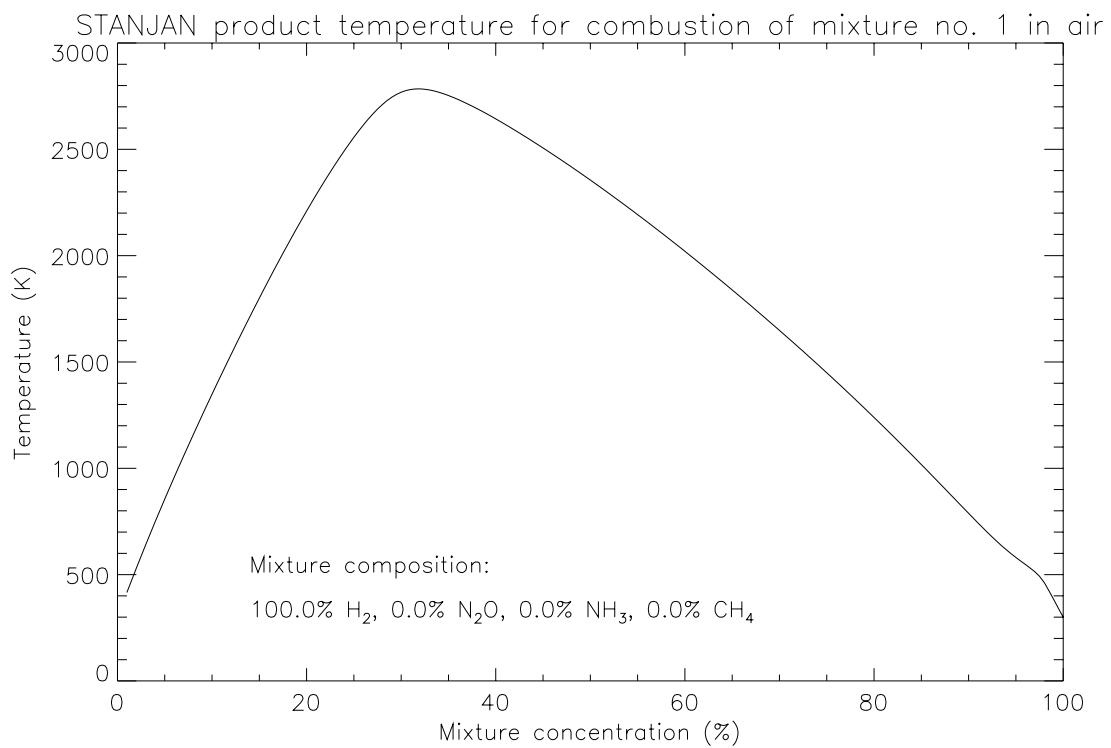
1. Constant-volume pressure and temperature.
2. Detonation Chapman-Jouguet (CJ) velocity
3. Detonation CJ pressure and temperature
4. Pressure behind reflected CJ detonations
5. Detonation reaction zone lengths (ZND model)

The thermochemical properties were computed using the STANJAN thermochemical equilibrium code, a full set of atomic and molecular species and realistic thermodynamic properties. The reaction zone length were computed using the ZND code, which is based on the CHEMKIN subroutines, and a detailed chemical reaction model. The initial conditions for all of these computations was a temperature of 300 K and a pressure of 1 atm.

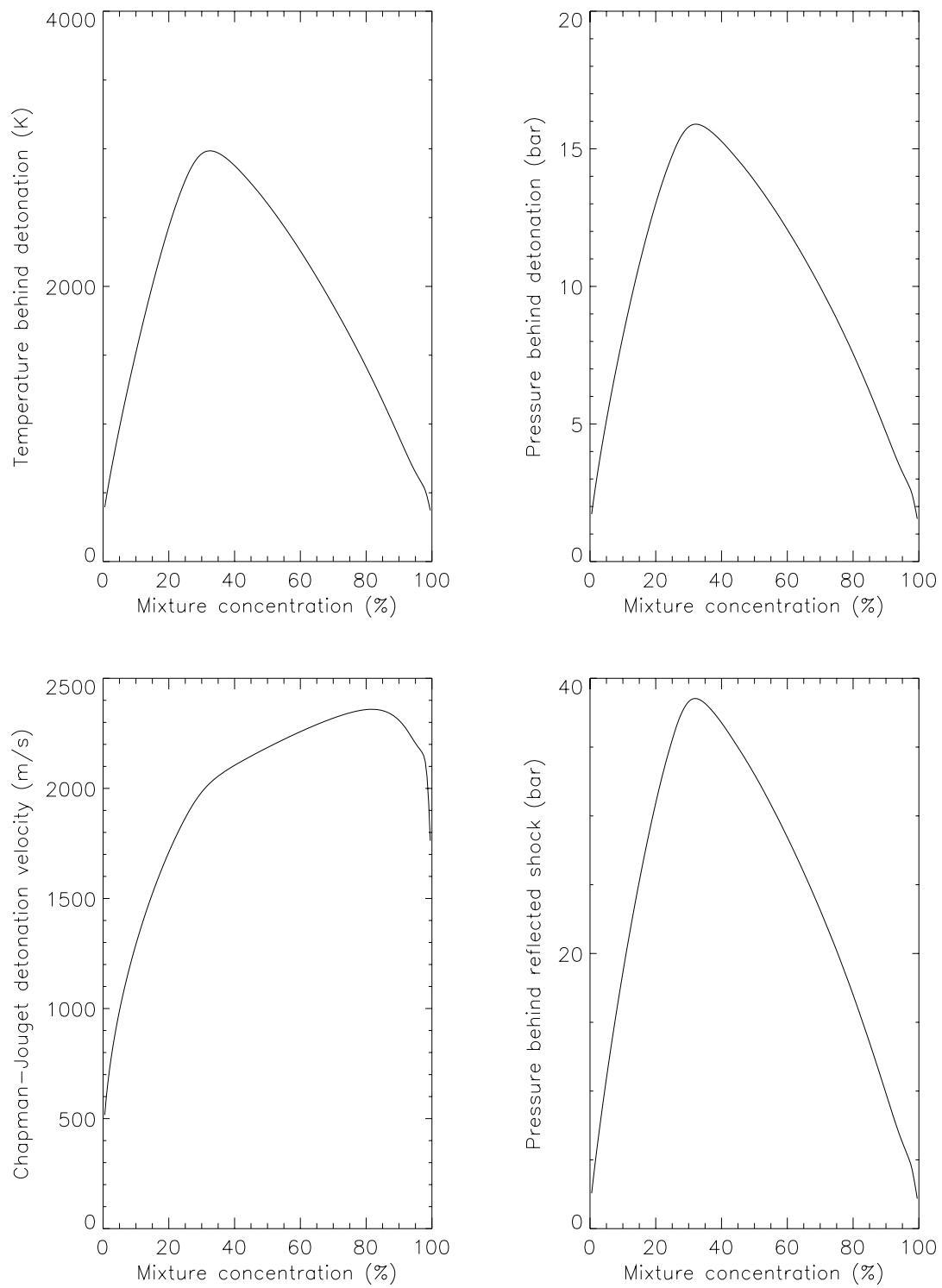
The mixtures used in these computations are given in Table E.1.

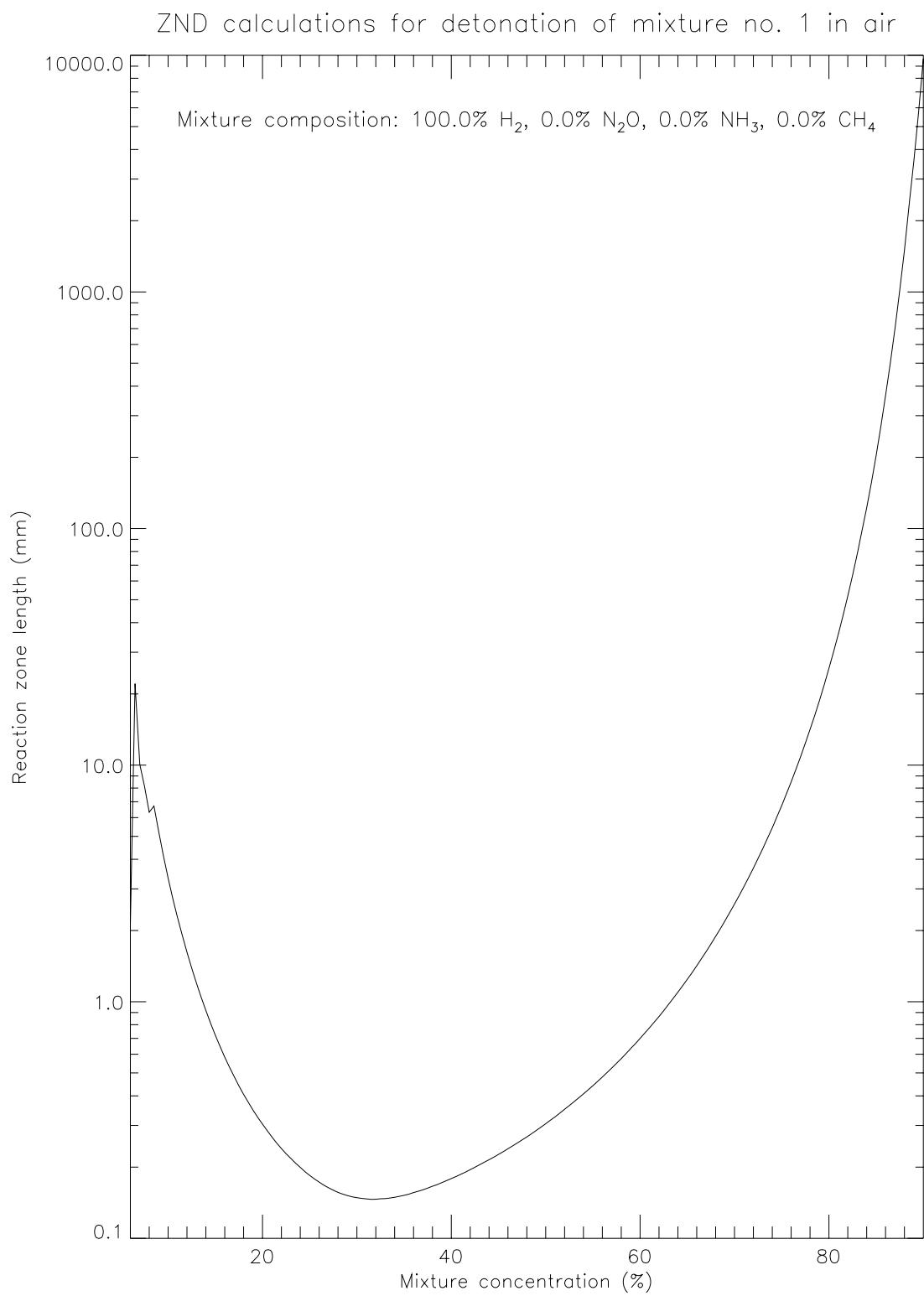
Table E.1: Gas mixtures of interest to the flammable gas project at the Hanford site.

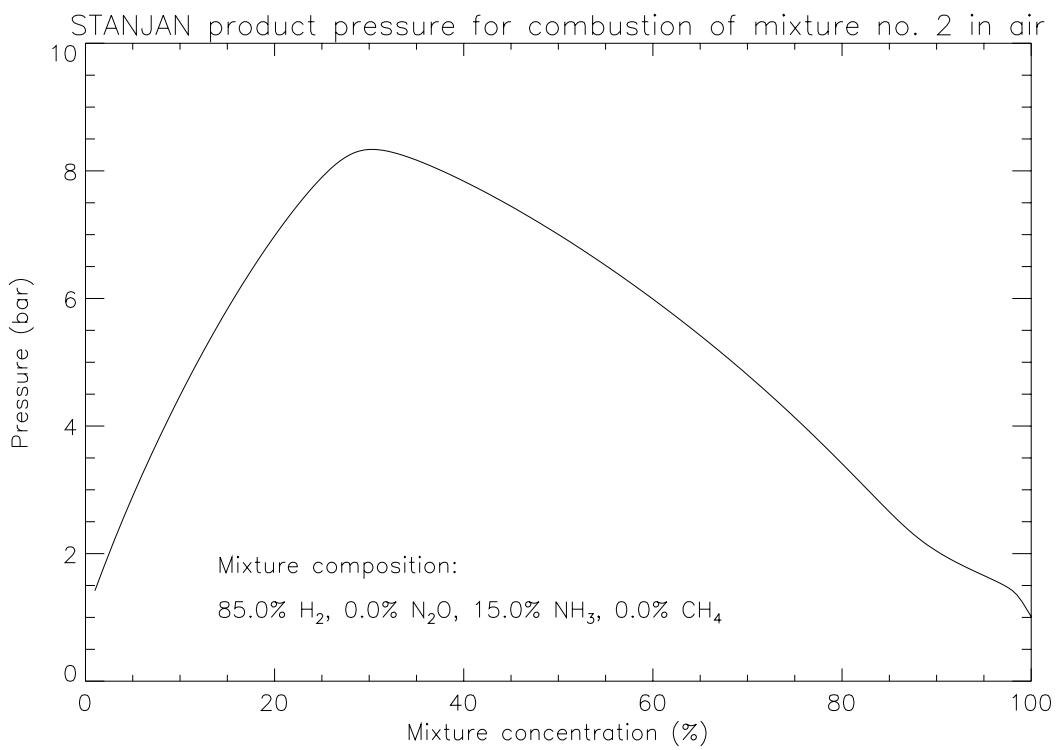
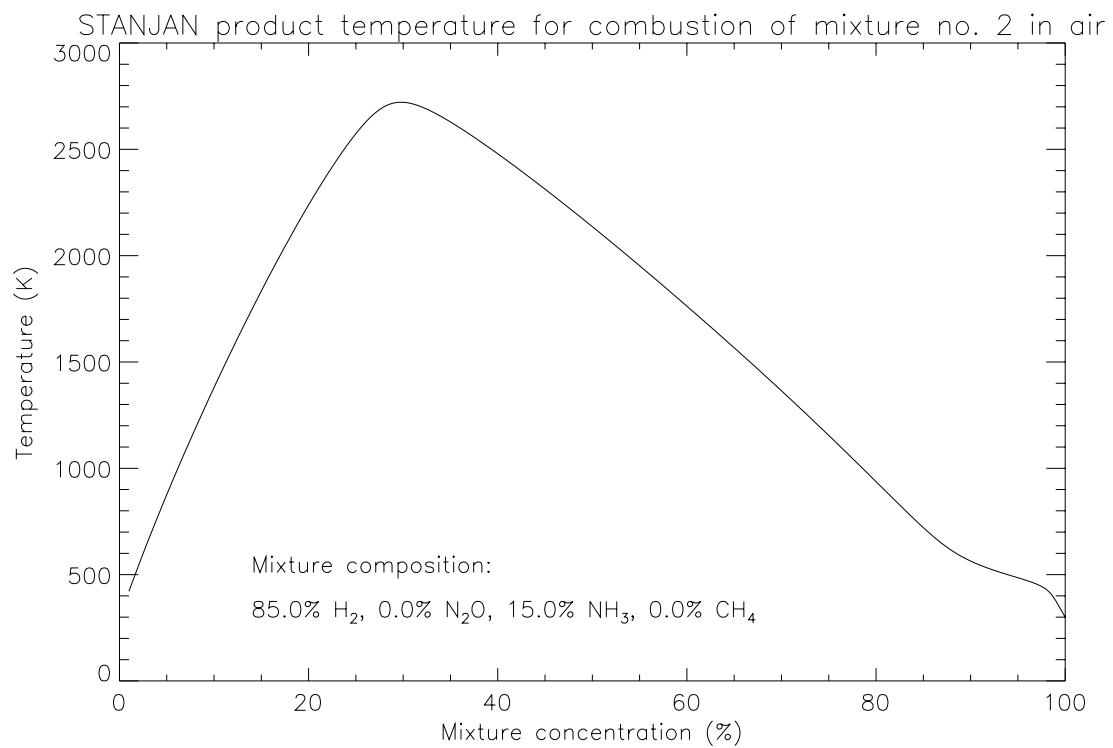
No.	H ₂ (%)	N ₂ O (%)	NH ₃ (%)	CH ₄ (%)
1	100	0	0	0
2	85	0	15	0
3	70	0	30	0
4	50	0	50	0
5	95	0	0	5
6	80	0	15	5
7	65	0	30	5
8	45	0	50	5
9	50	50	0	0
10	42.5	42.5	15	0
11	35	35	30	0
12	25	25	50	0
13	47.5	47.5	0	0
14	40	40	15	5
15	32.5	32.5	30	5
16	22.5	22.5	50	5
17	33.3	66.7	0	0
18	28.3	56.7	15	0
19	23.3	46.7	30	0
20	16.7	33.3	50	0
21	31.7	63.3	0	5
22	26.7	53.3	15	5
23	21.7	43.3	30	5
24	15	30	50	5
25	33	53	14	0
26	42	36	21	1



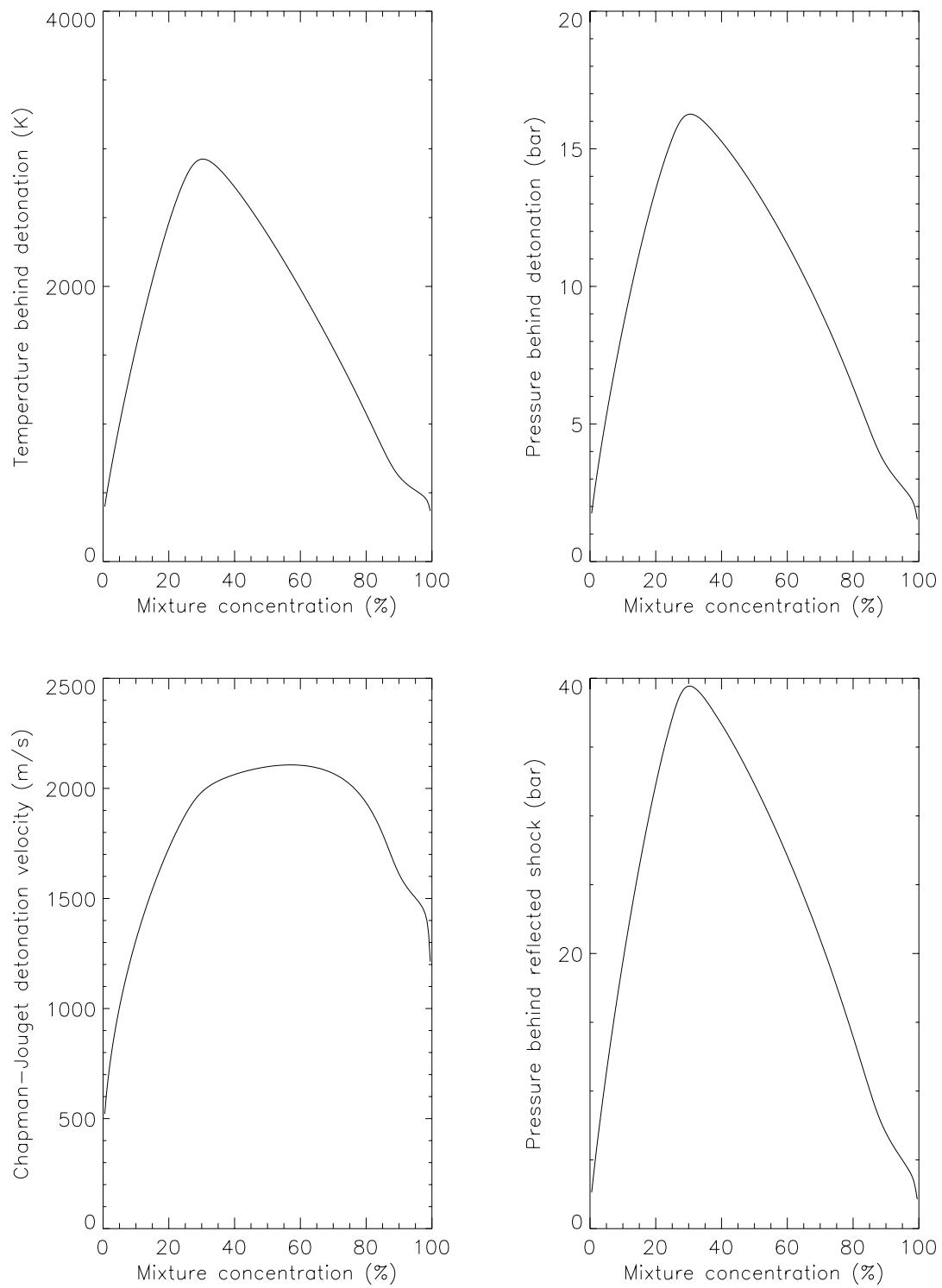
STANJAN calculations for detonation of mixture no. 1 in air
Mixture composition: 100.0% H₂, 0.0% N₂O, 0.0% NH₃, 0.0% CH₄

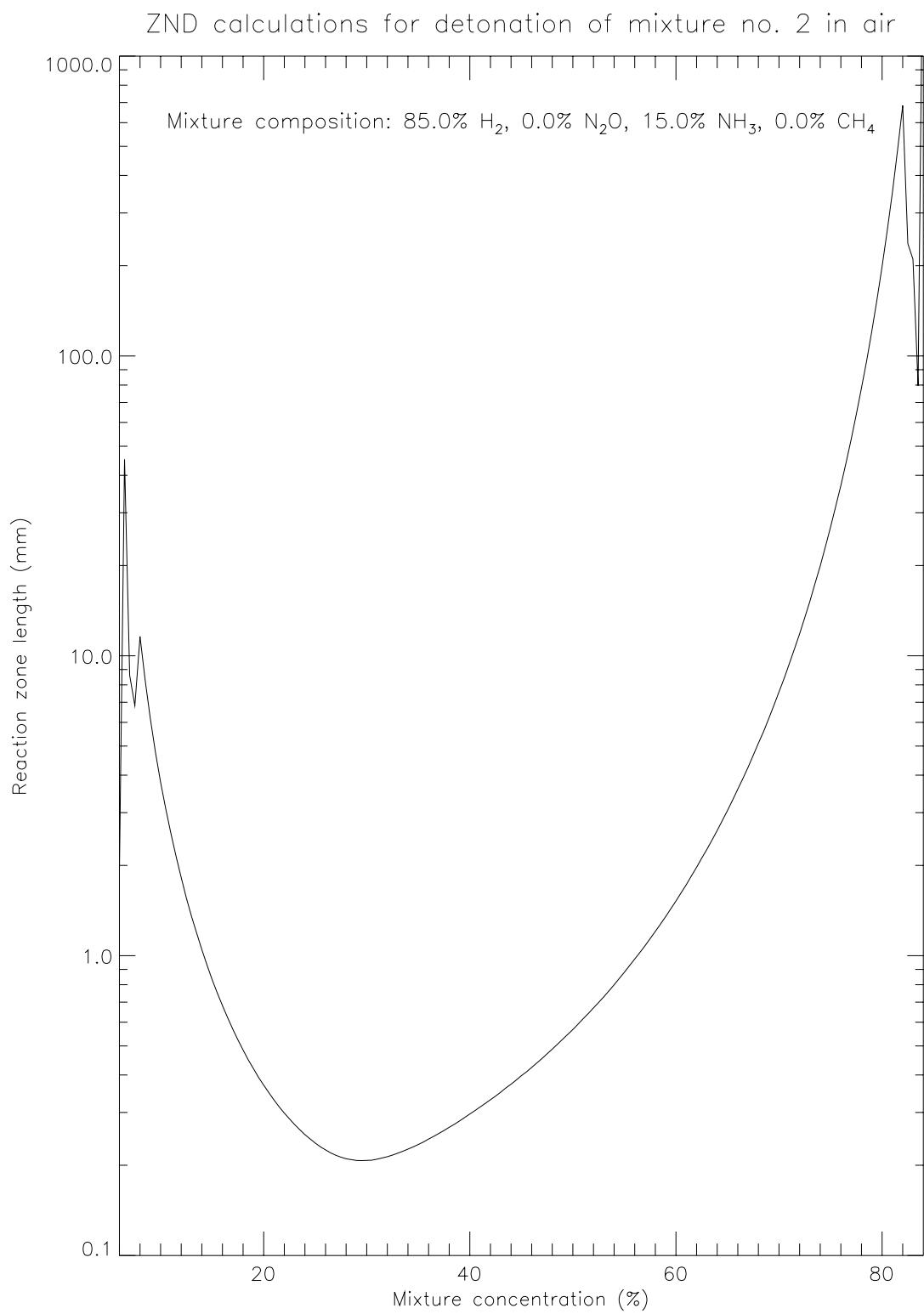


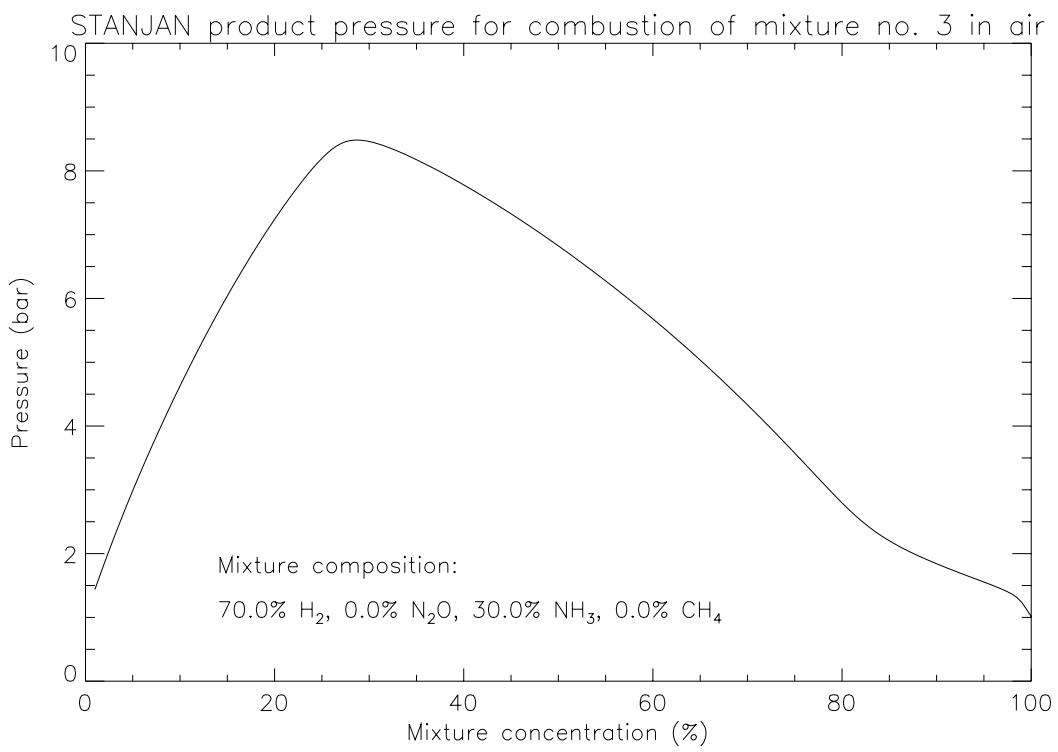
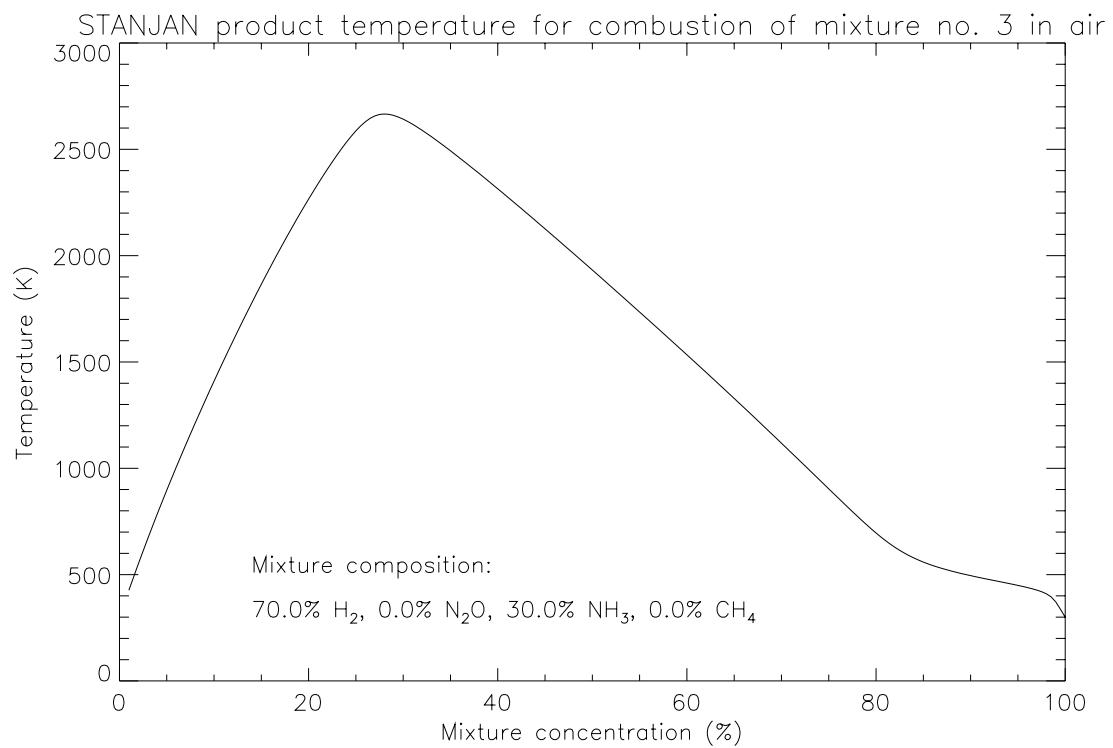




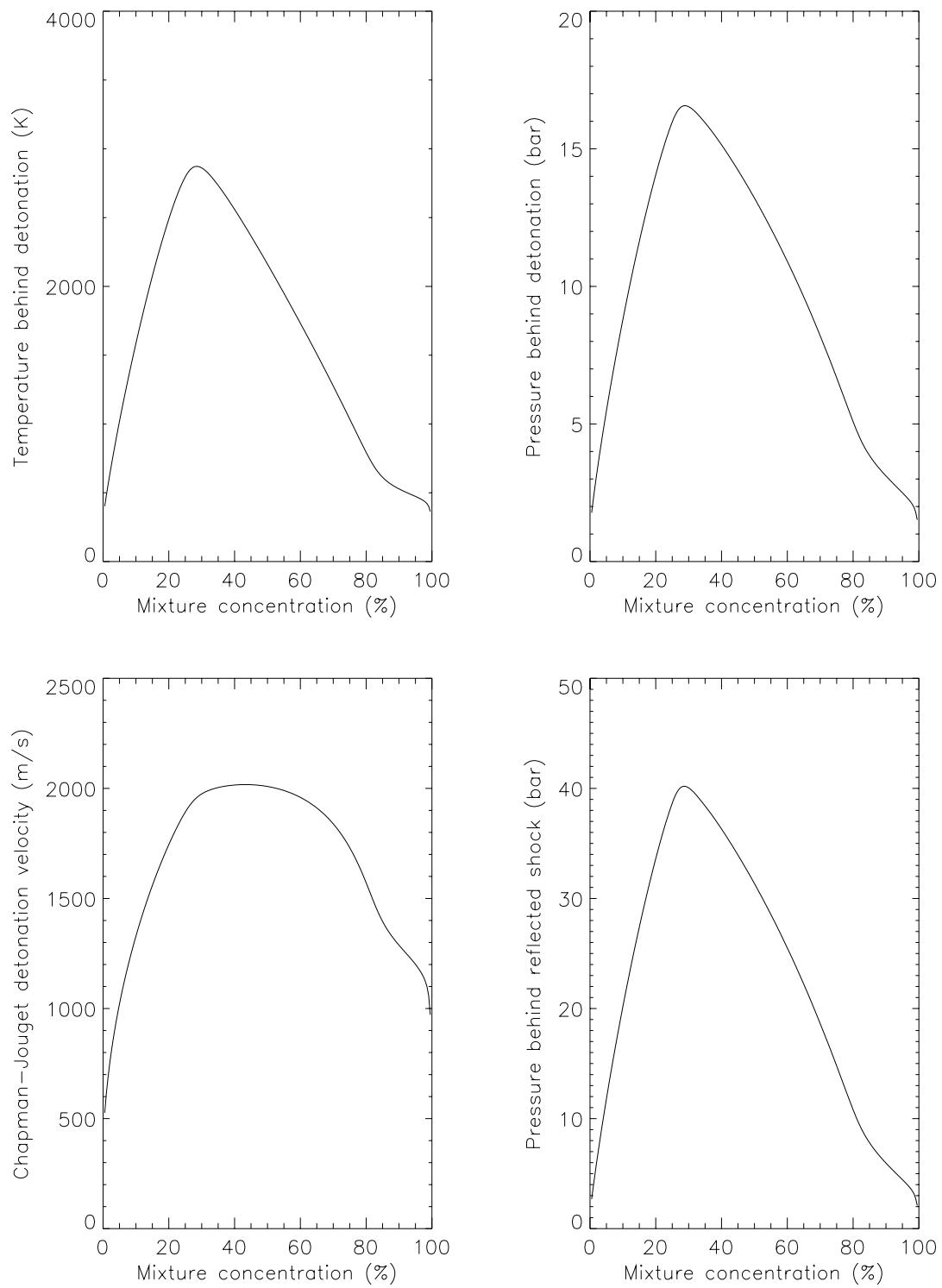
STANJAN calculations for detonation of mixture no. 2 in air
Mixture composition: 85.0% H₂, 0.0% N₂O, 15.0% NH₃, 0.0% CH₄

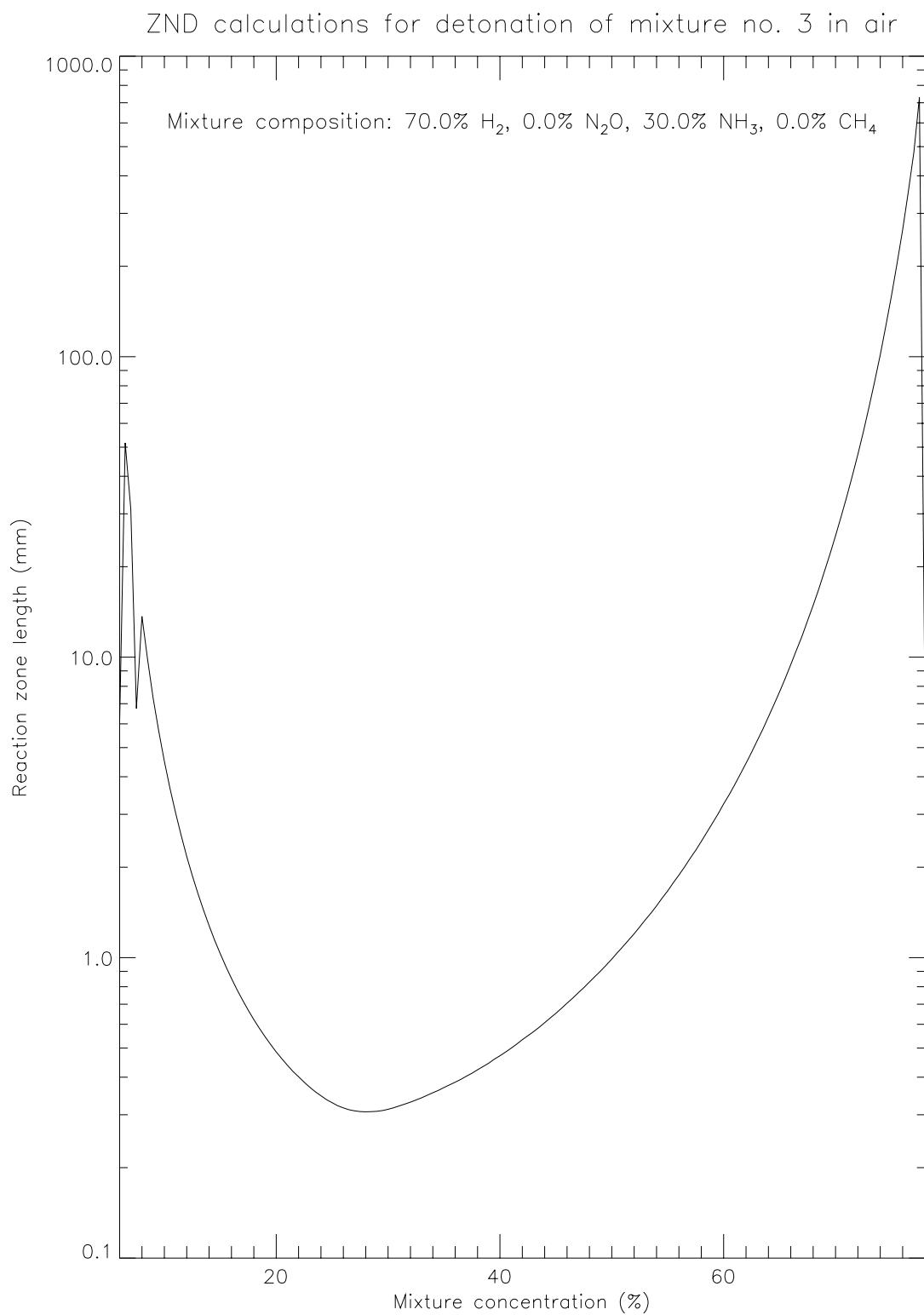


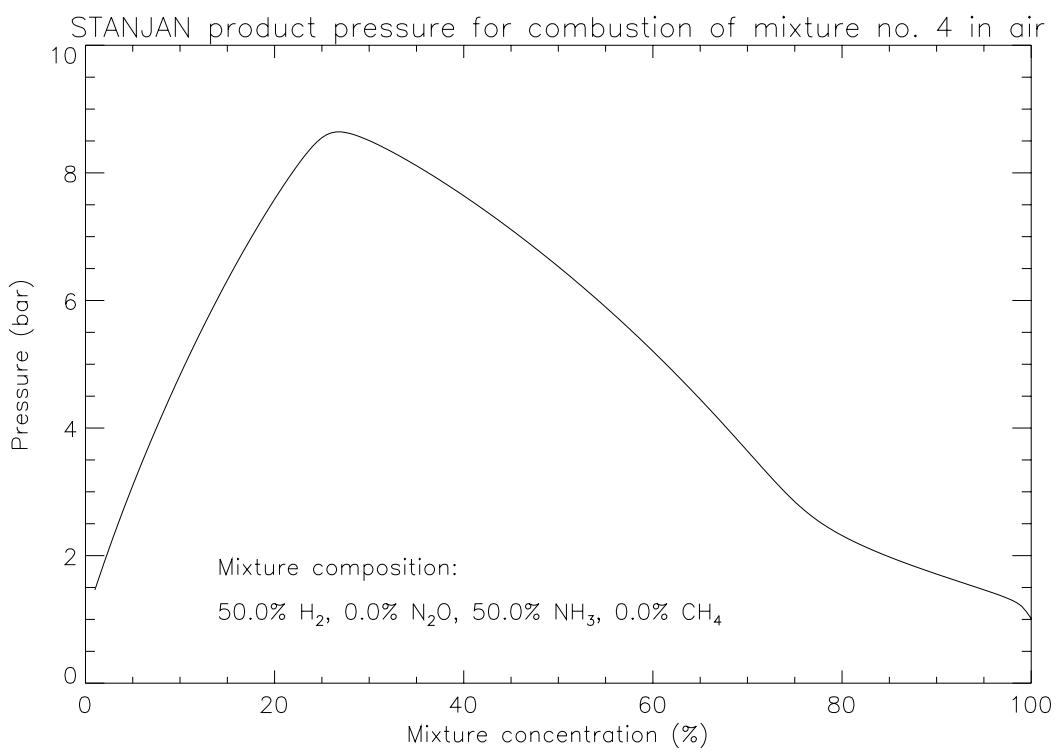
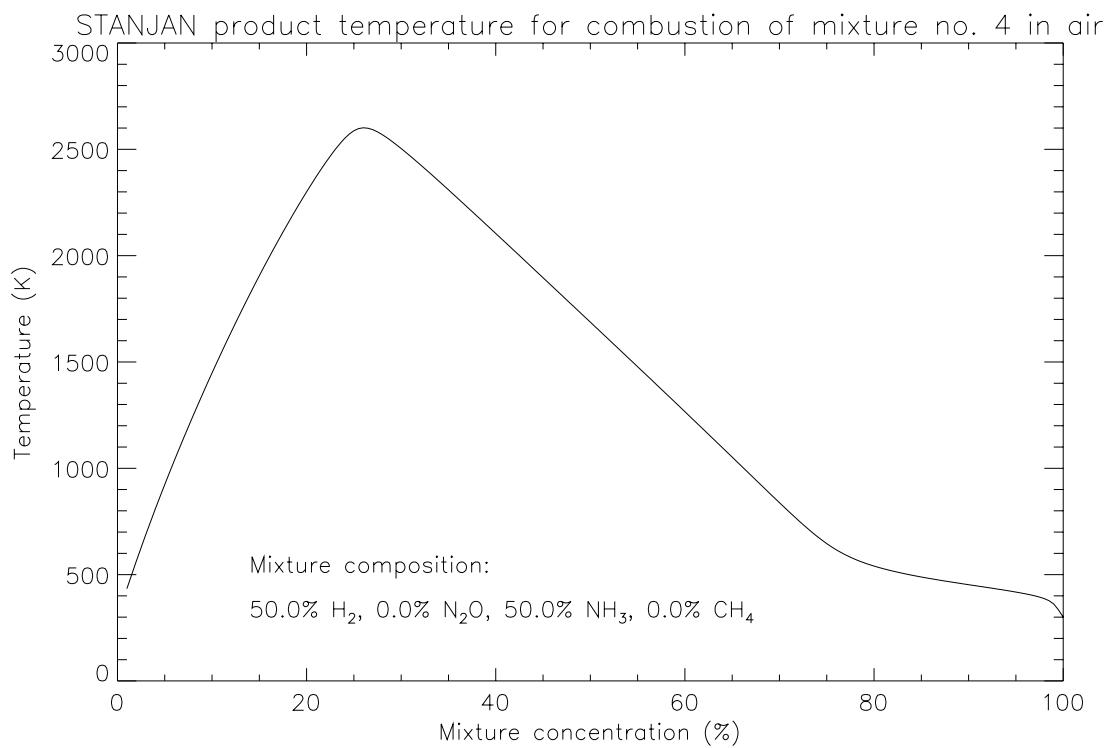




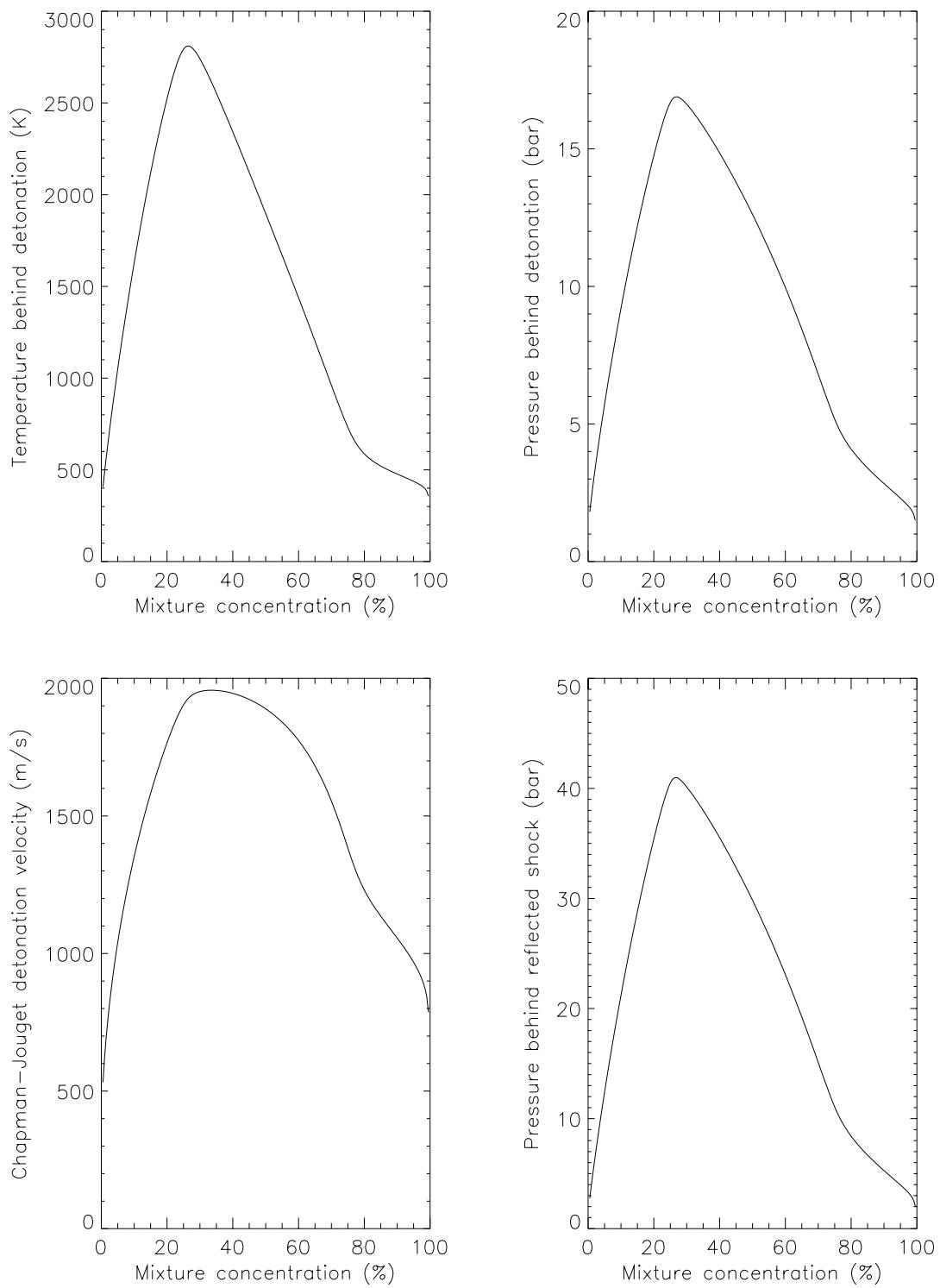
STANJAN calculations for detonation of mixture no. 3 in air
 Mixture composition: 70.0% H₂, 0.0% N₂O, 30.0% NH₃, 0.0% CH₄

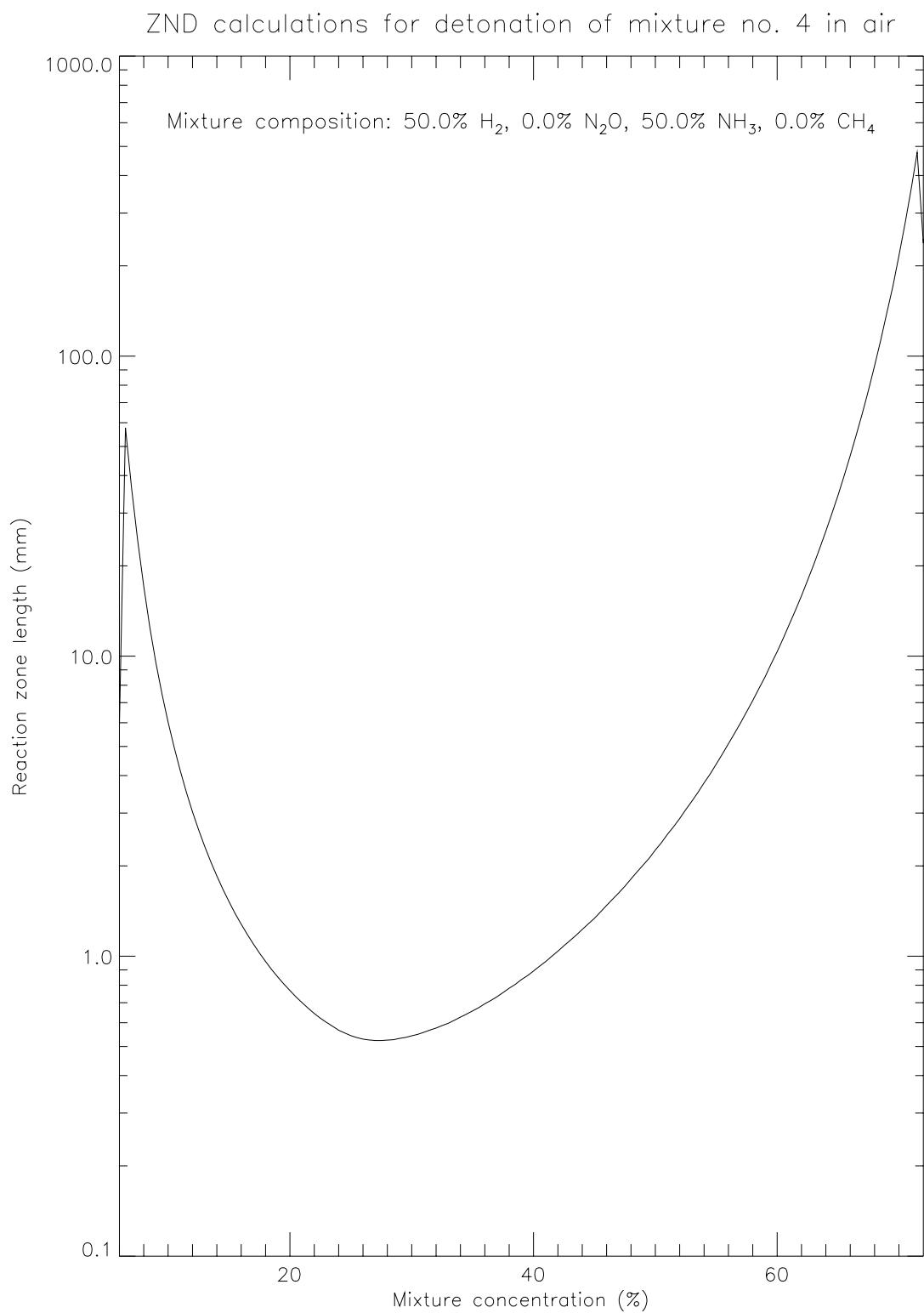


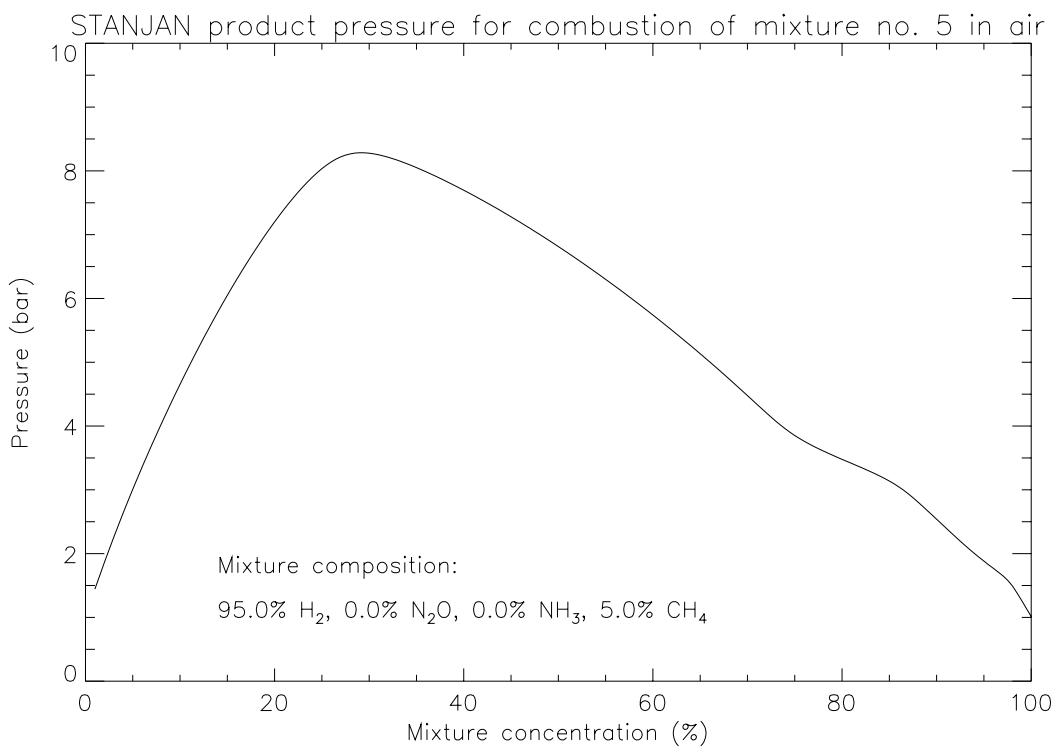
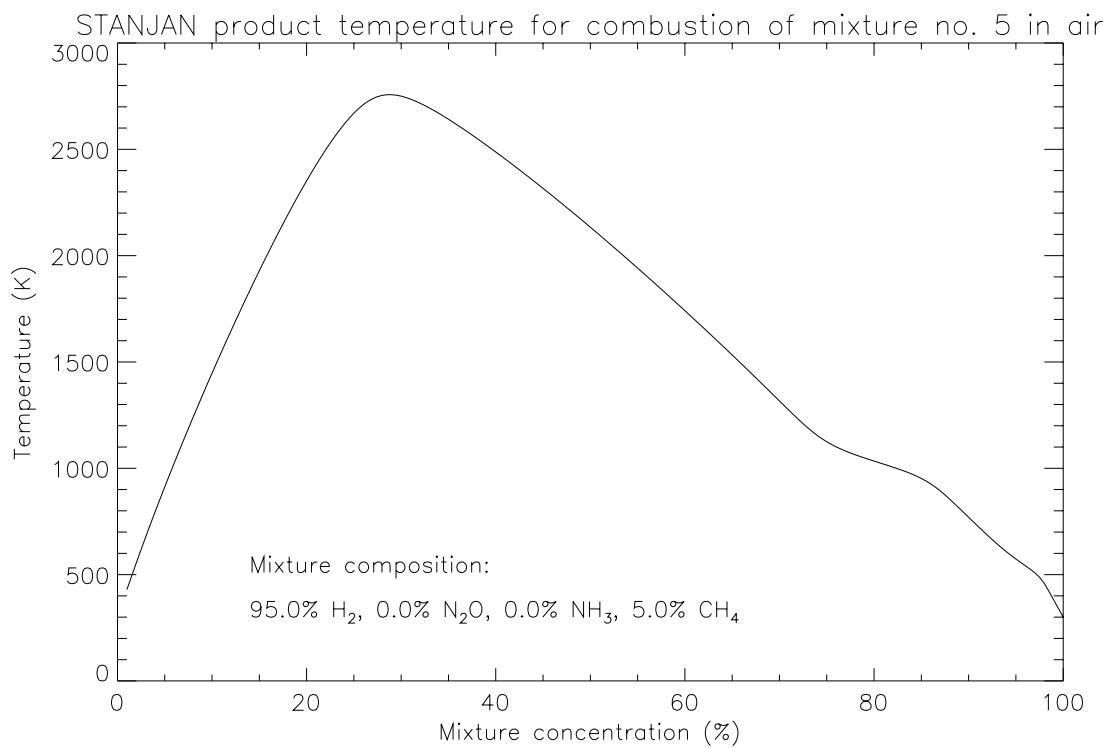




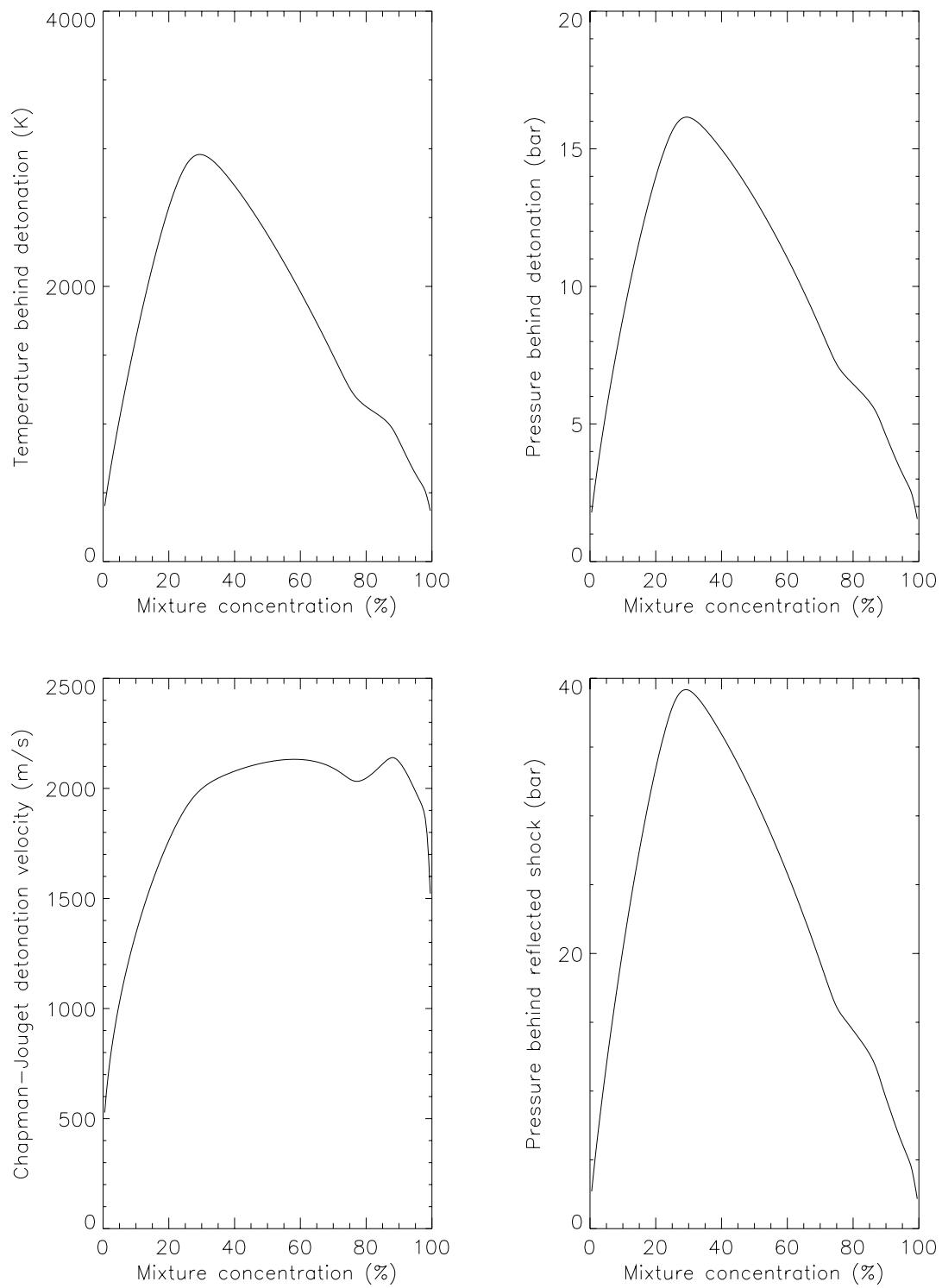
STANJAN calculations for detonation of mixture no. 4 in air
 Mixture composition: 50.0% H₂, 0.0% N₂O, 50.0% NH₃, 0.0% CH₄

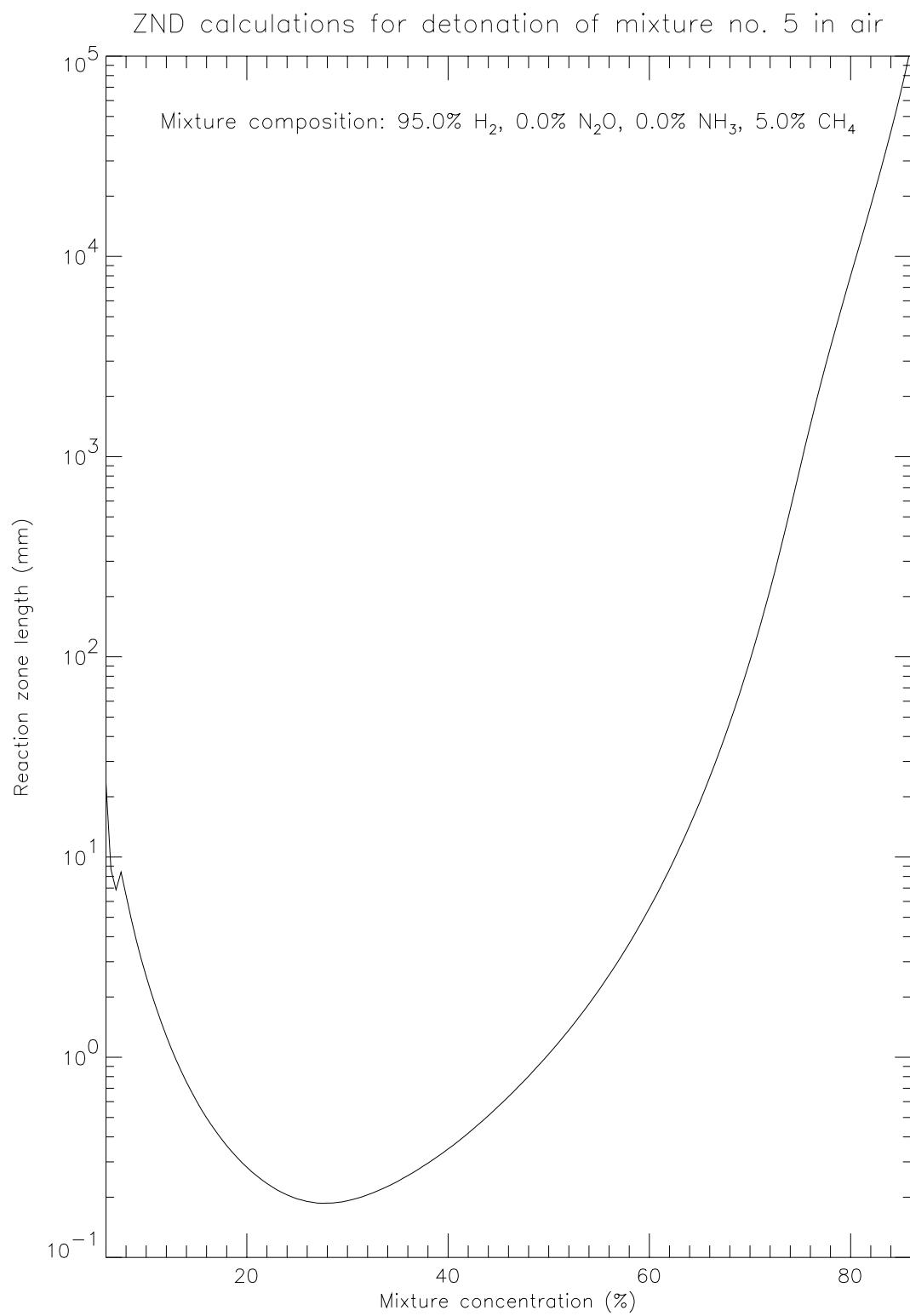


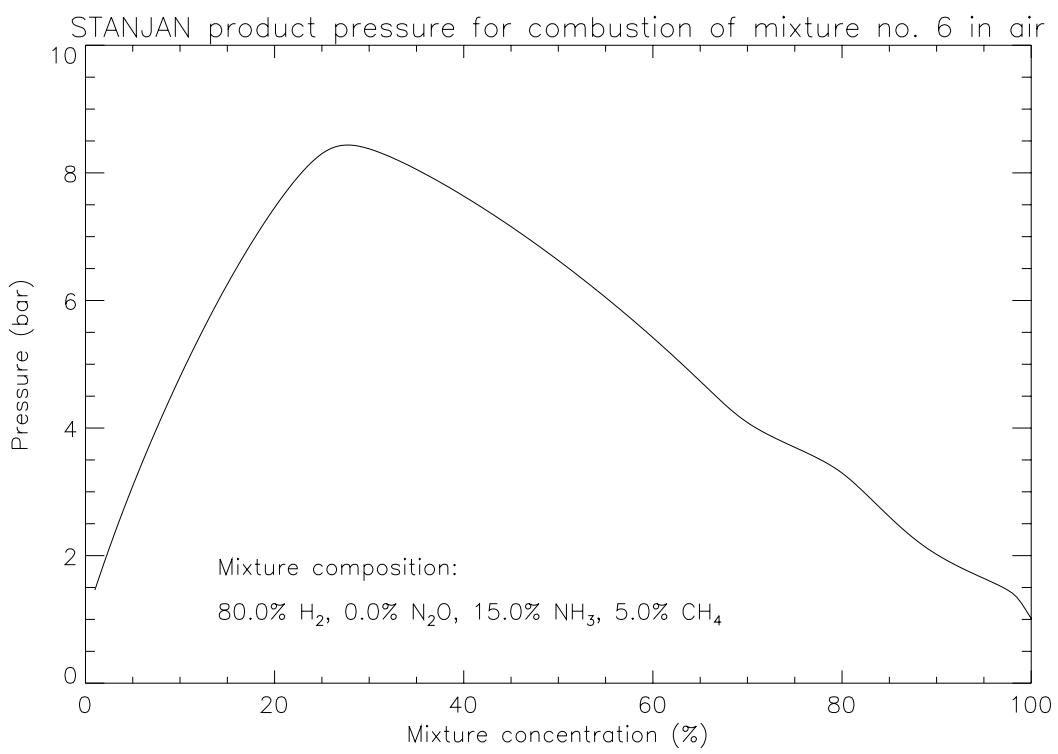
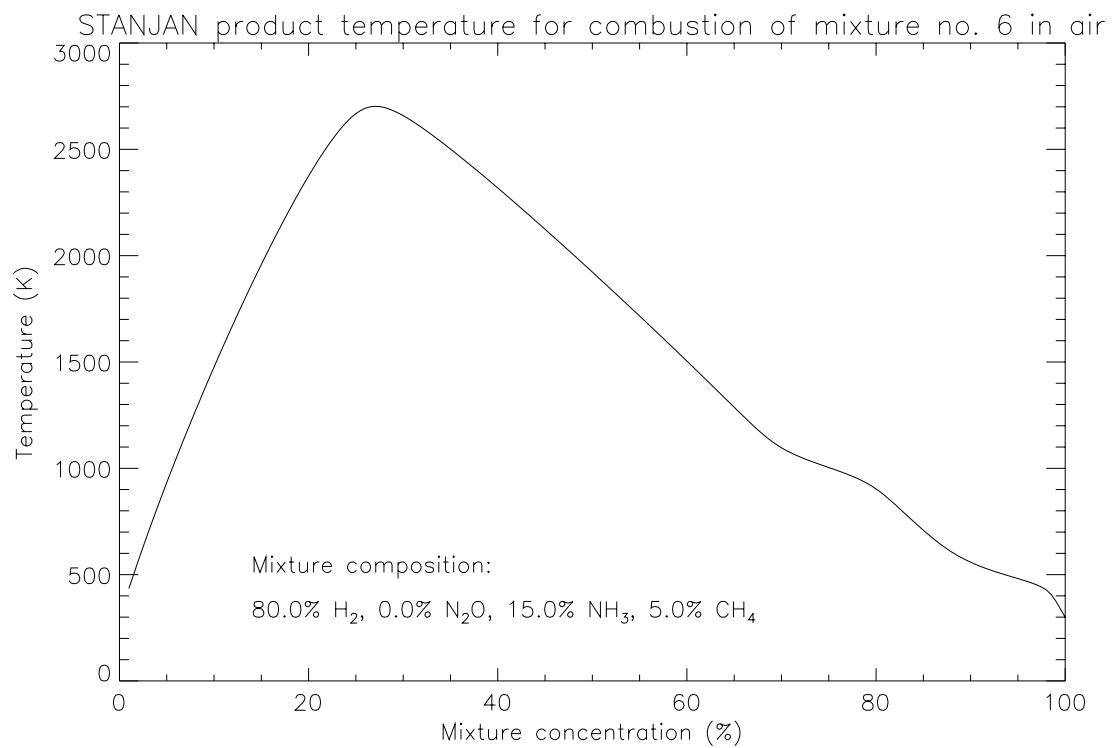




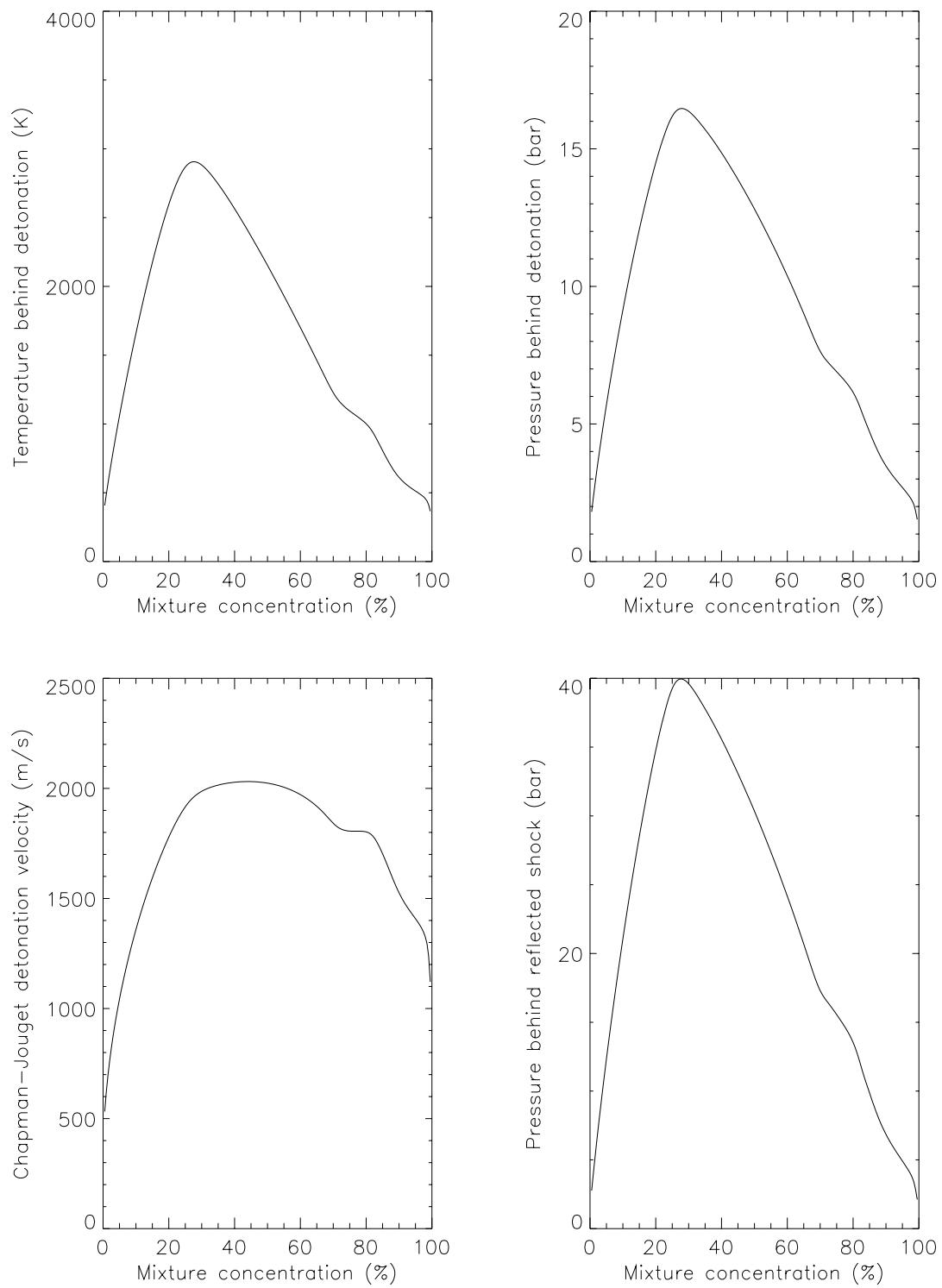
STANJAN calculations for detonation of mixture no. 5 in air
Mixture composition: 95.0% H₂, 0.0% N₂O, 0.0% NH₃, 5.0% CH₄

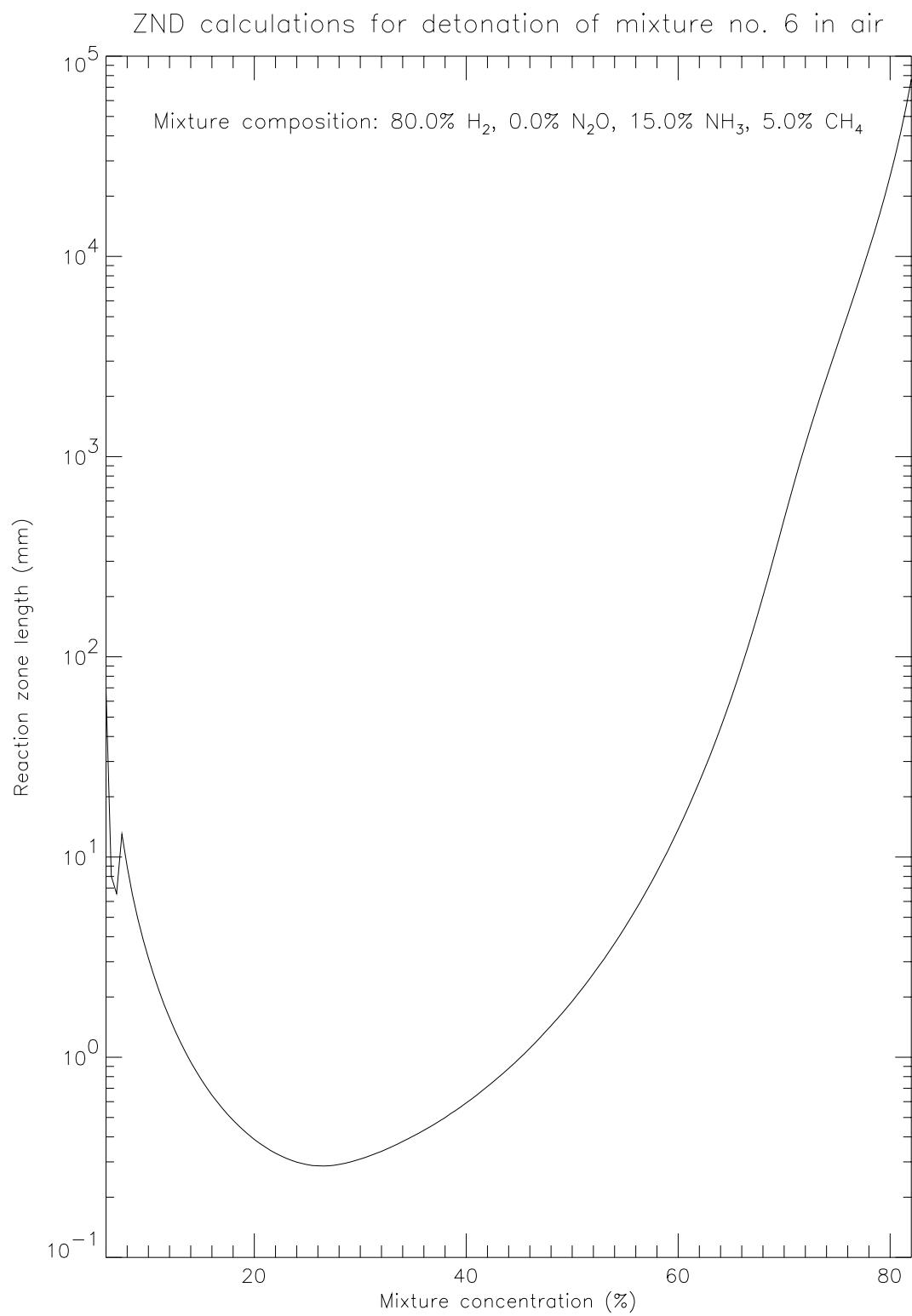


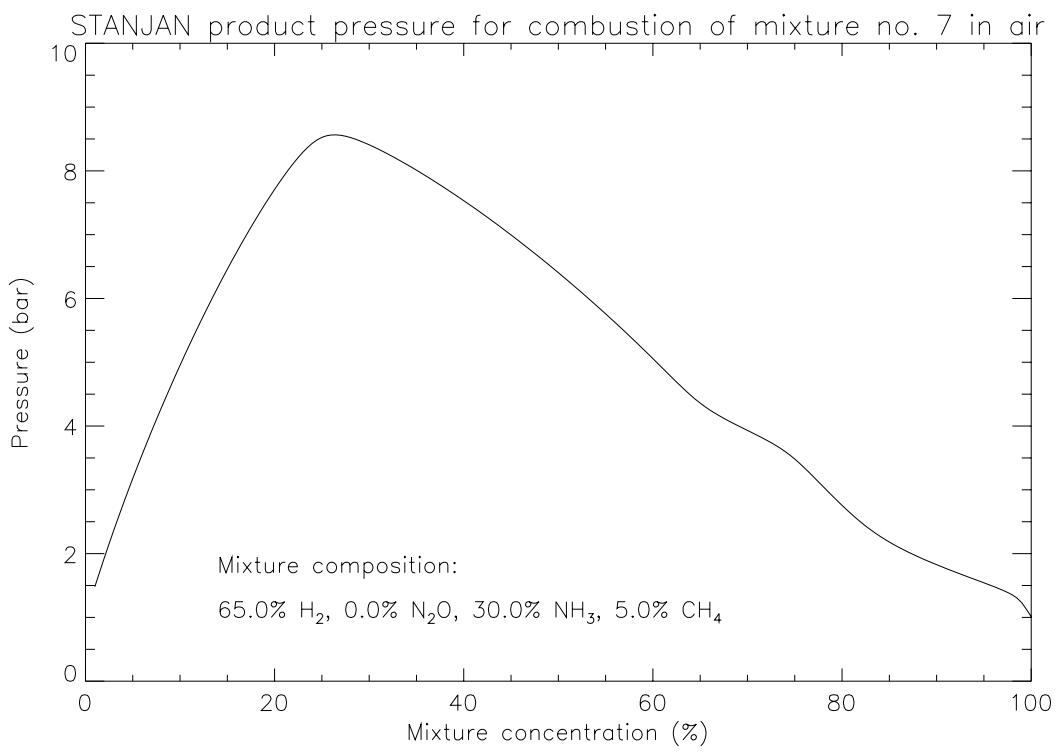
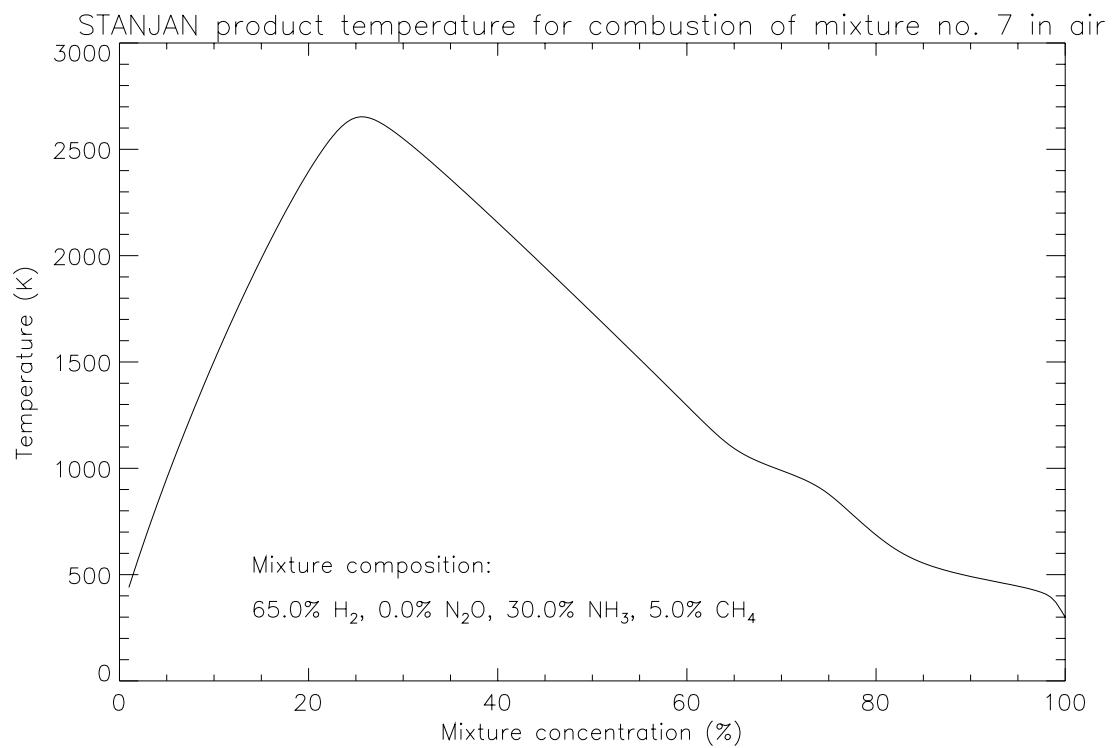




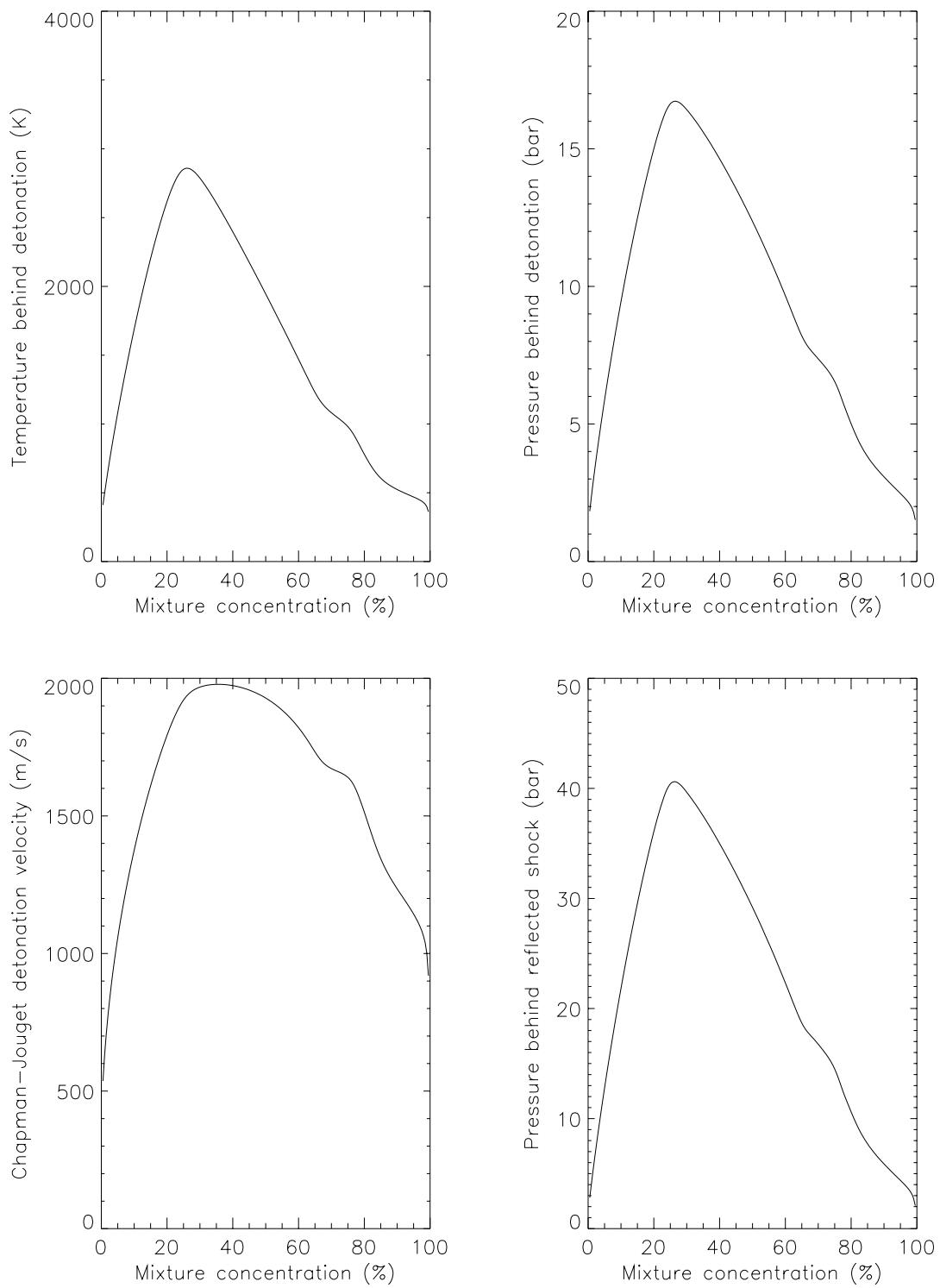
STANJAN calculations for detonation of mixture no. 6 in air
Mixture composition: 80.0% H₂, 0.0% N₂O, 15.0% NH₃, 5.0% CH₄

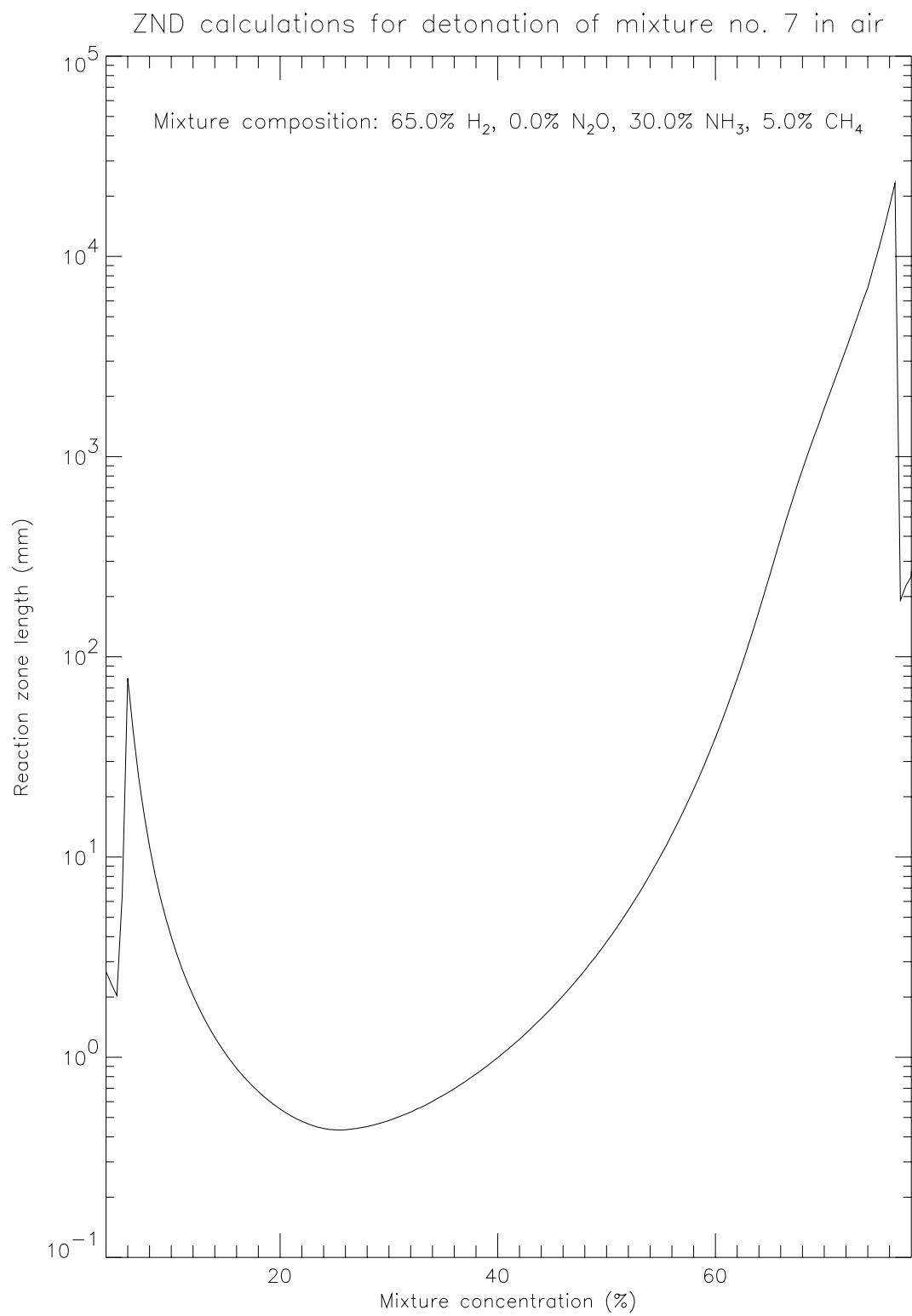


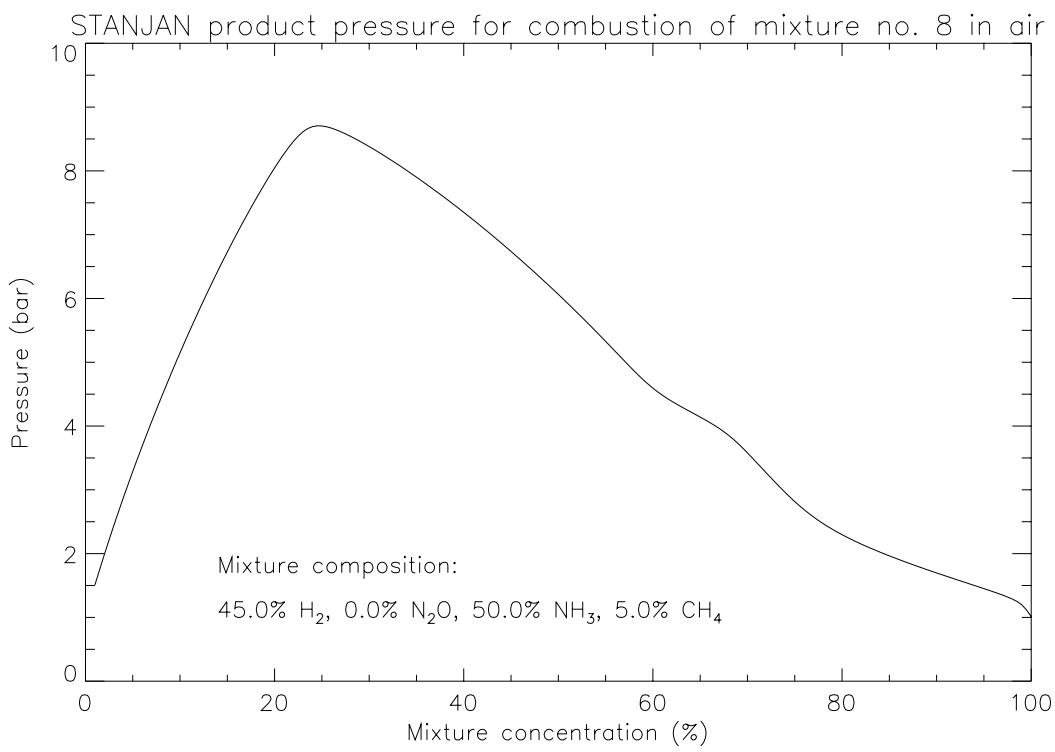
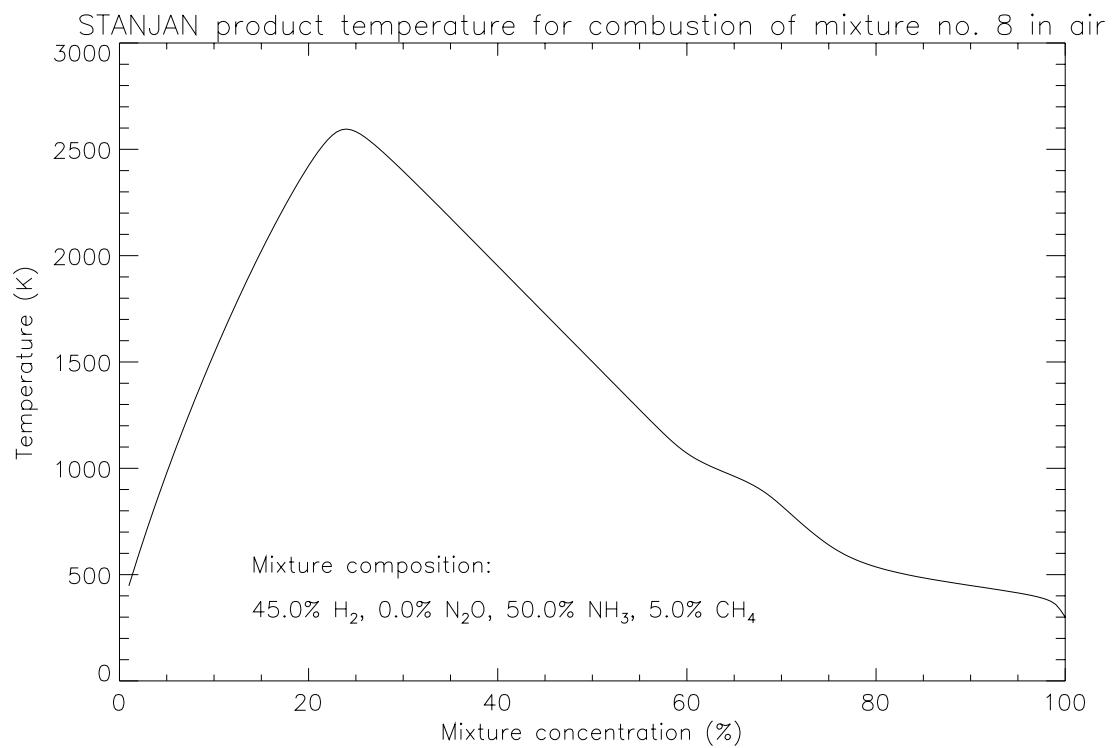




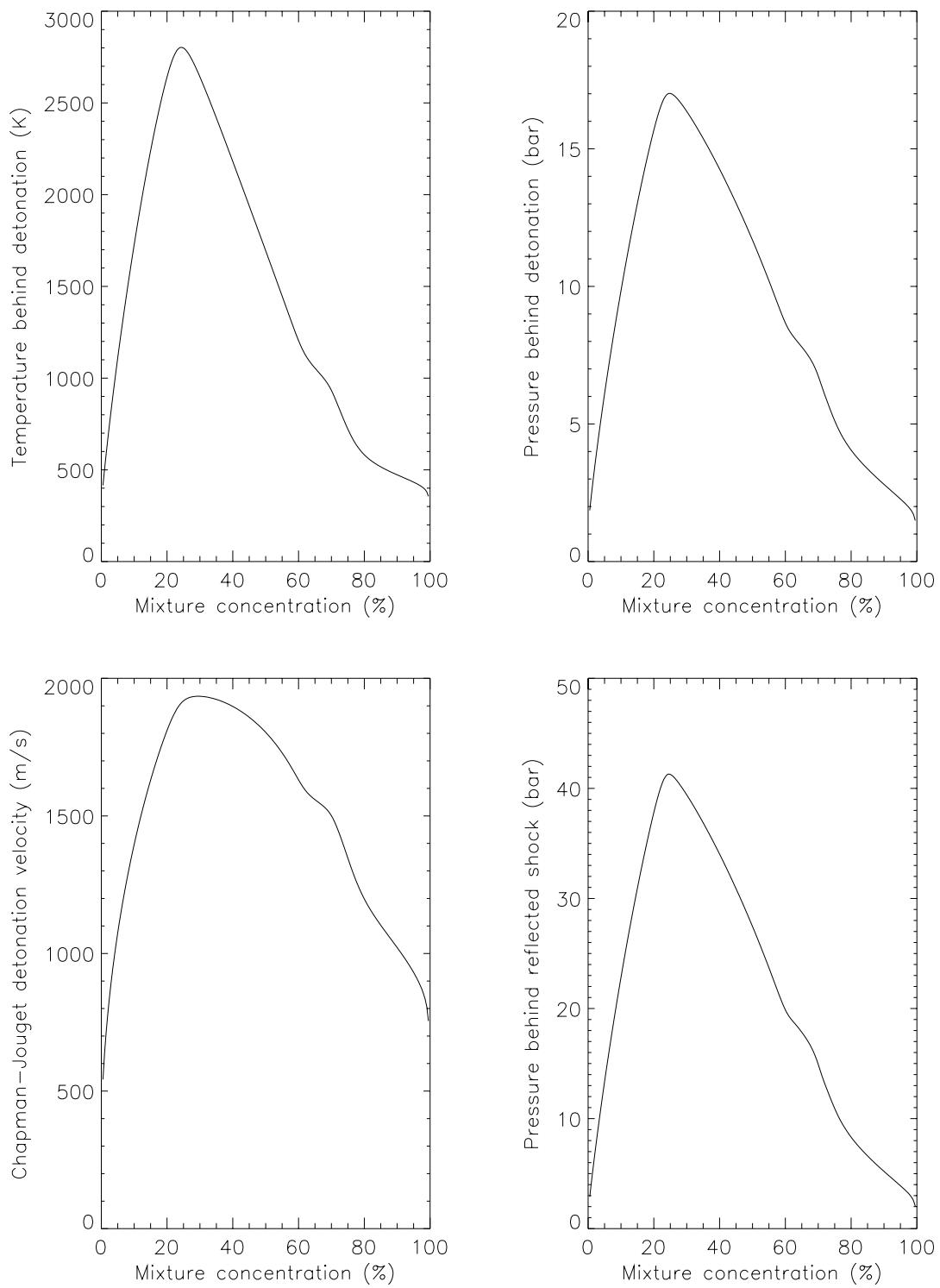
STANJAN calculations for detonation of mixture no. 7 in air
 Mixture composition: 65.0% H₂, 0.0% N₂O, 30.0% NH₃, 5.0% CH₄

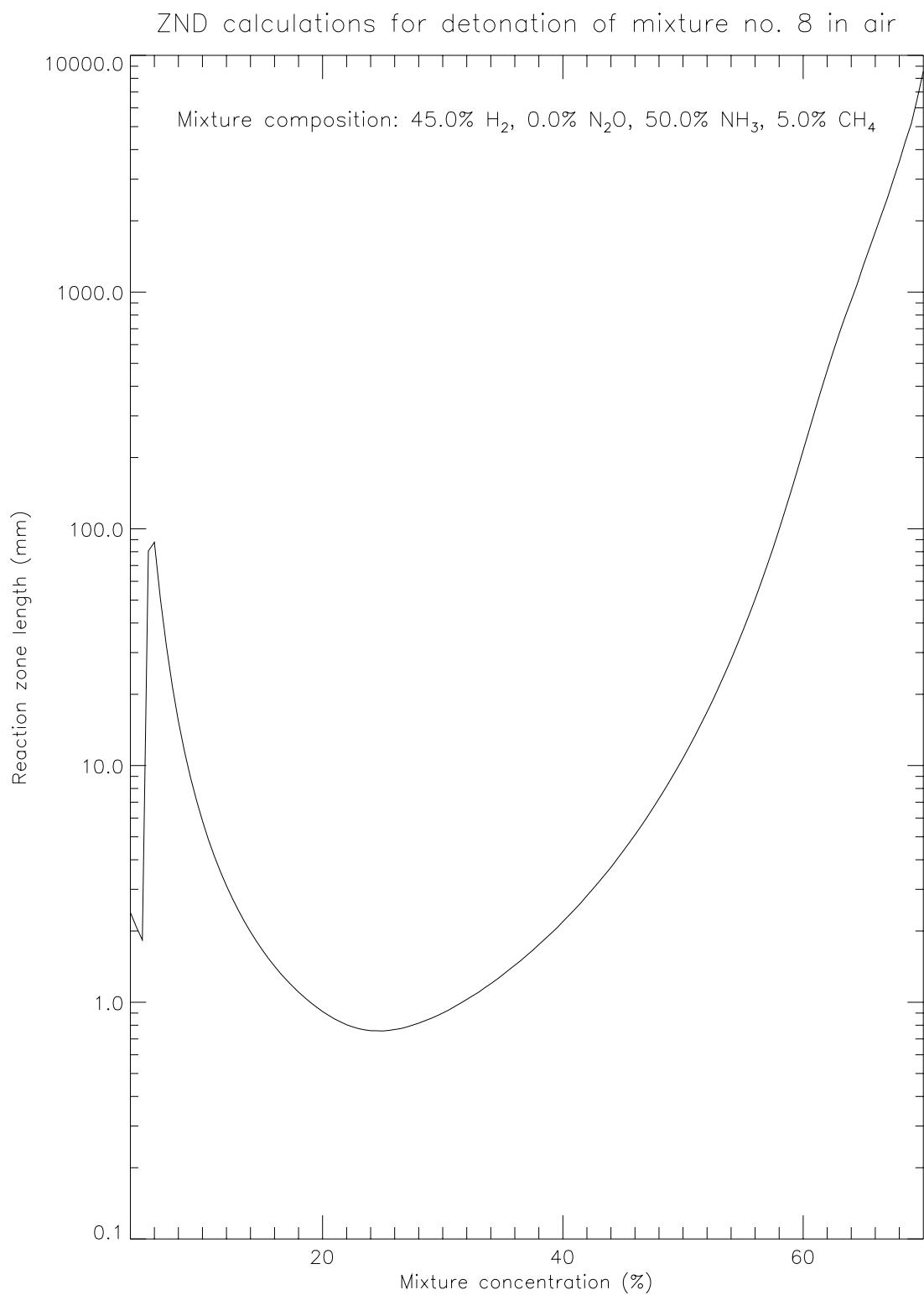


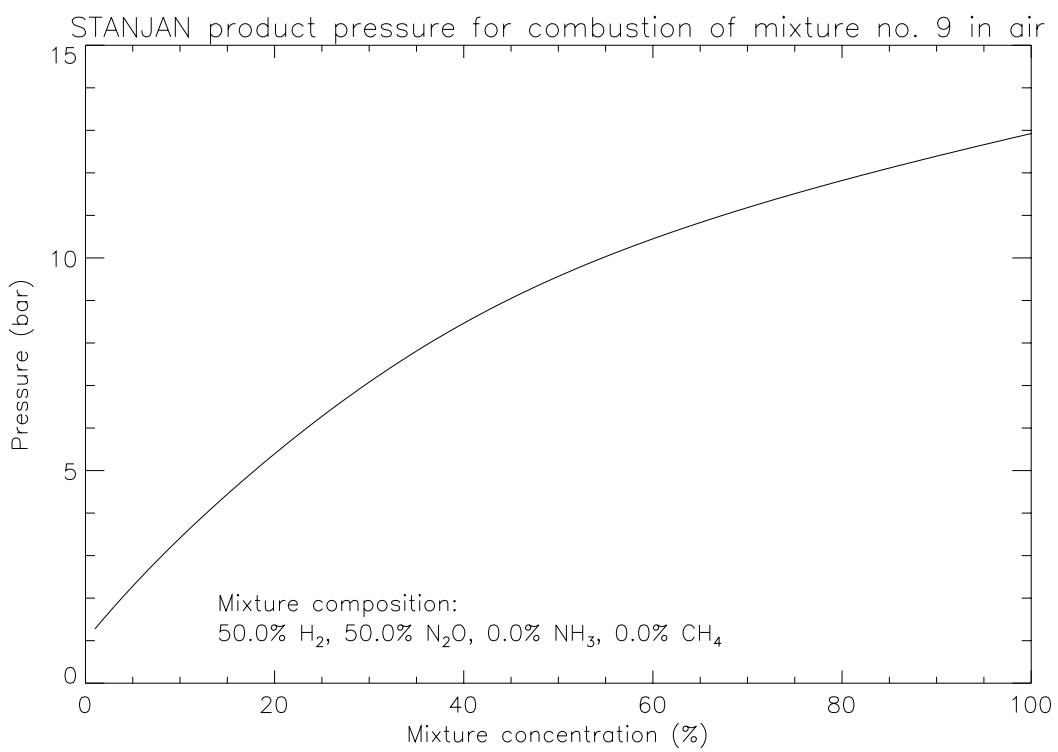
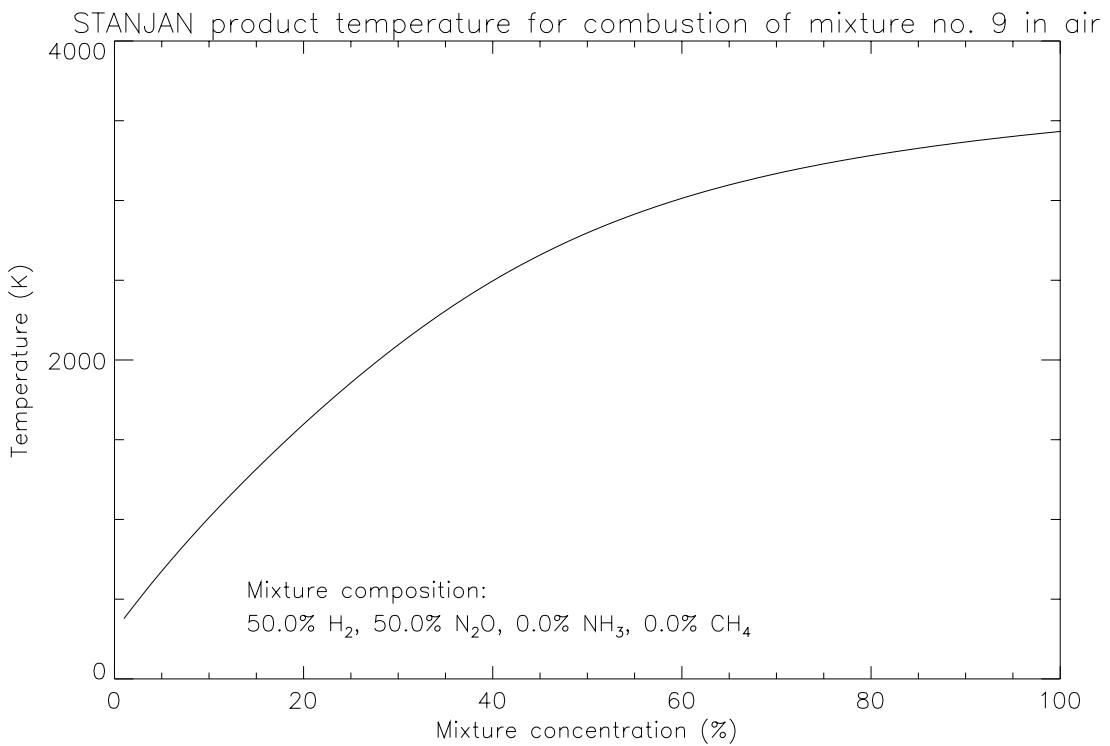




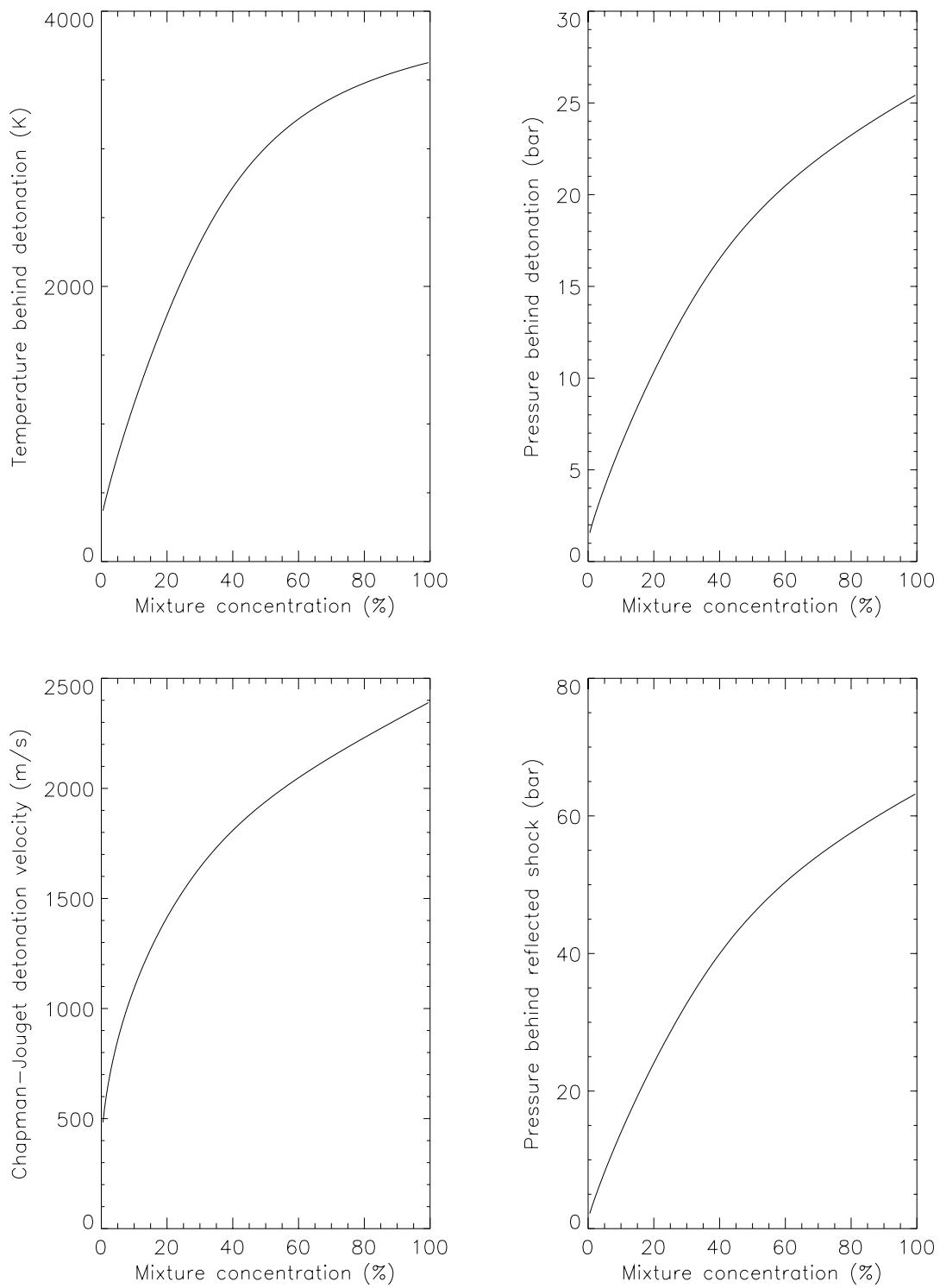
STANJAN calculations for detonation of mixture no. 8 in air
Mixture composition: 45.0% H₂, 0.0% N₂O, 50.0% NH₃, 5.0% CH₄

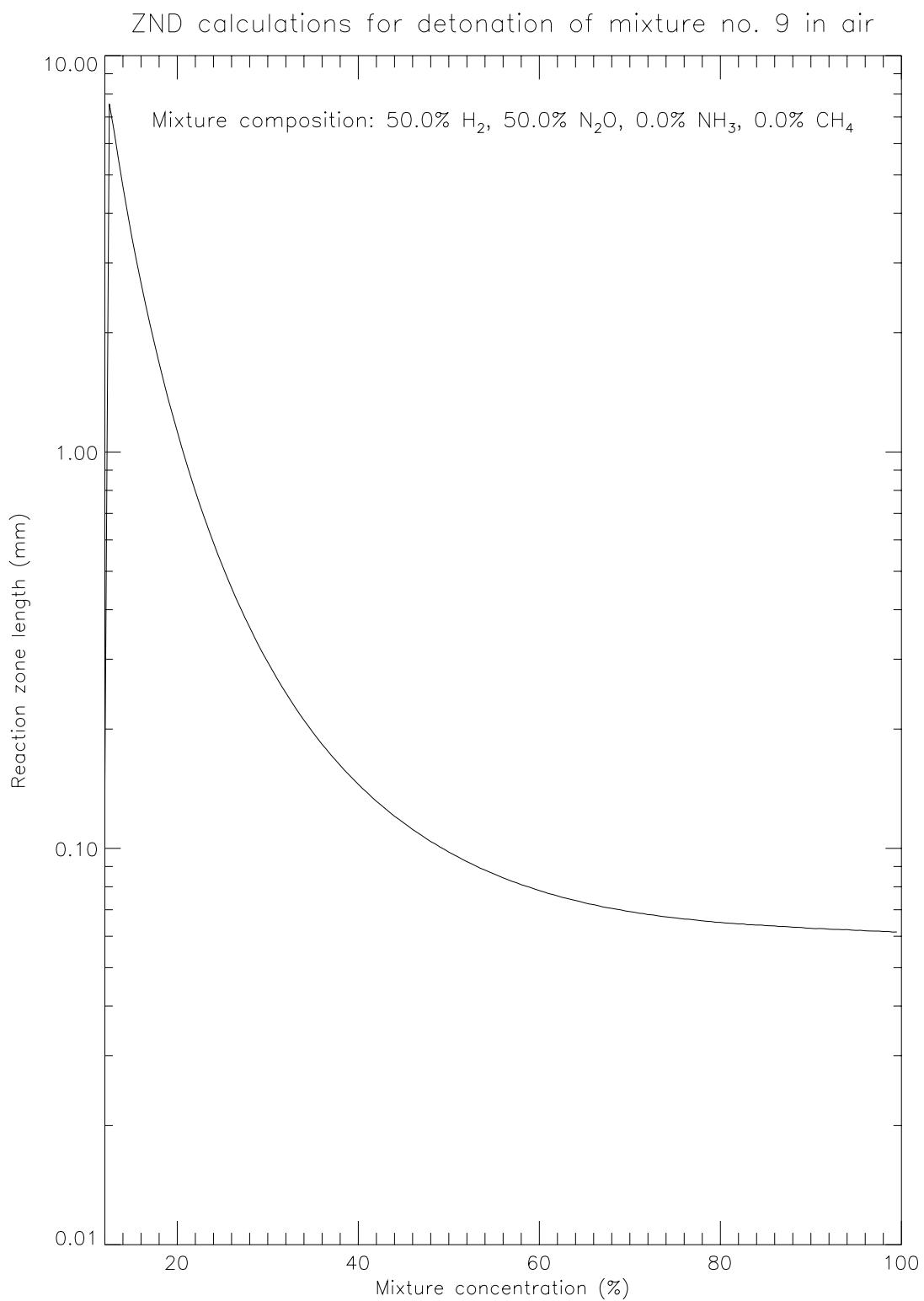


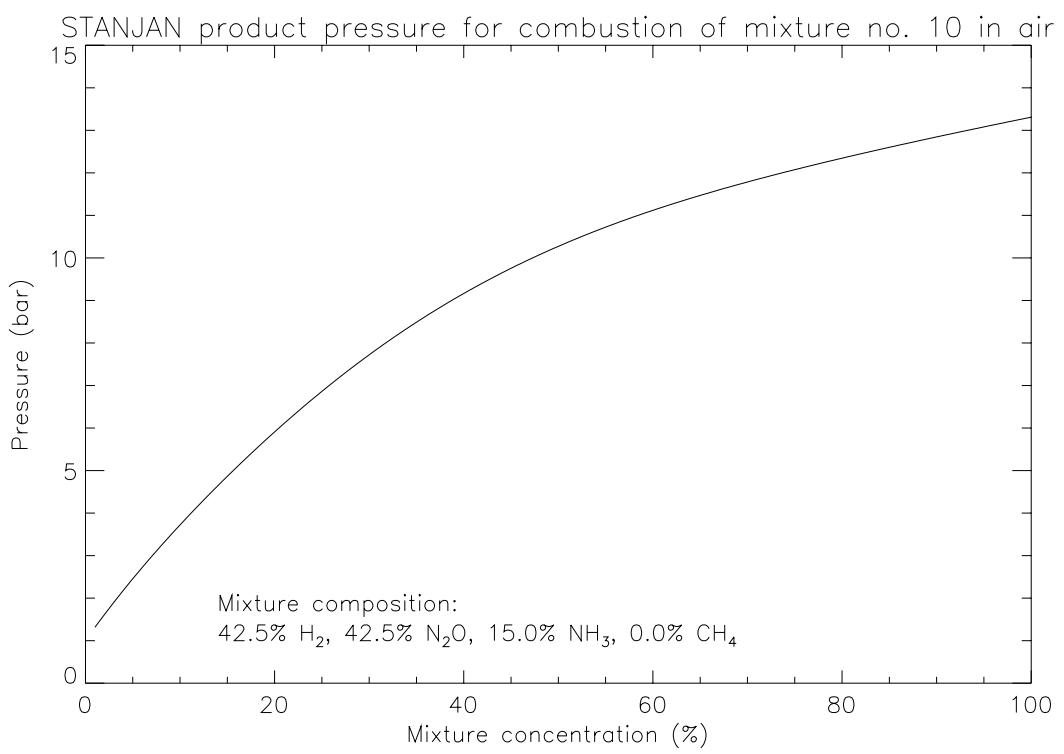
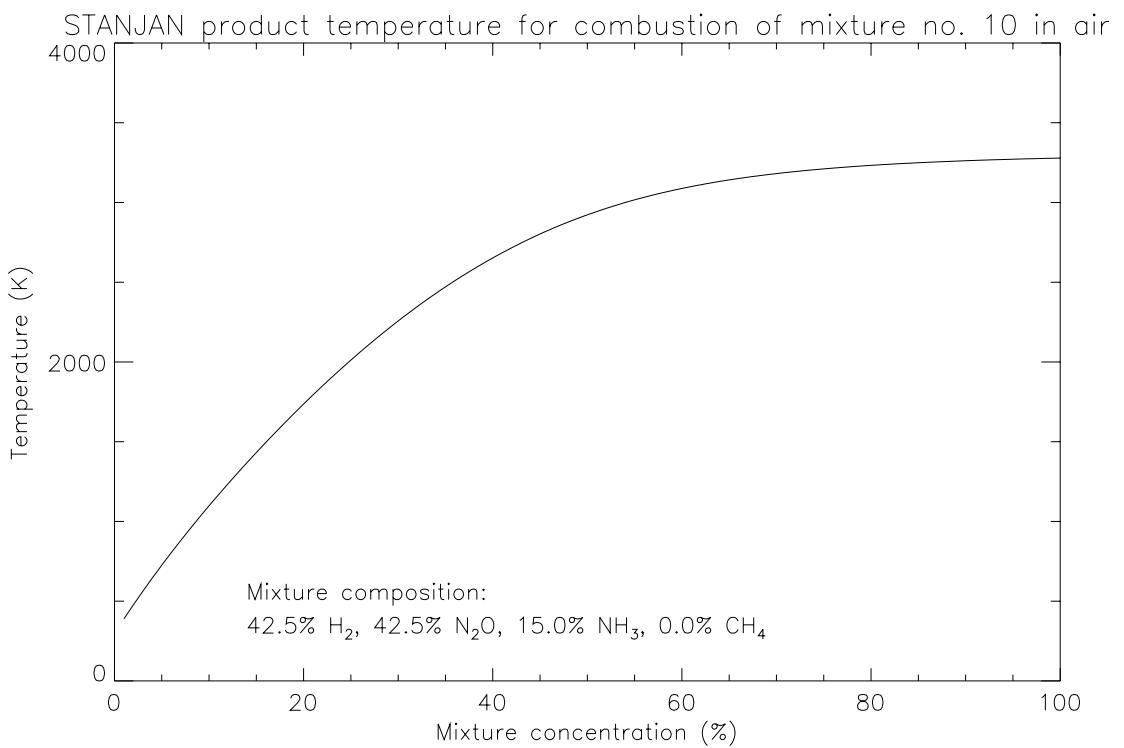




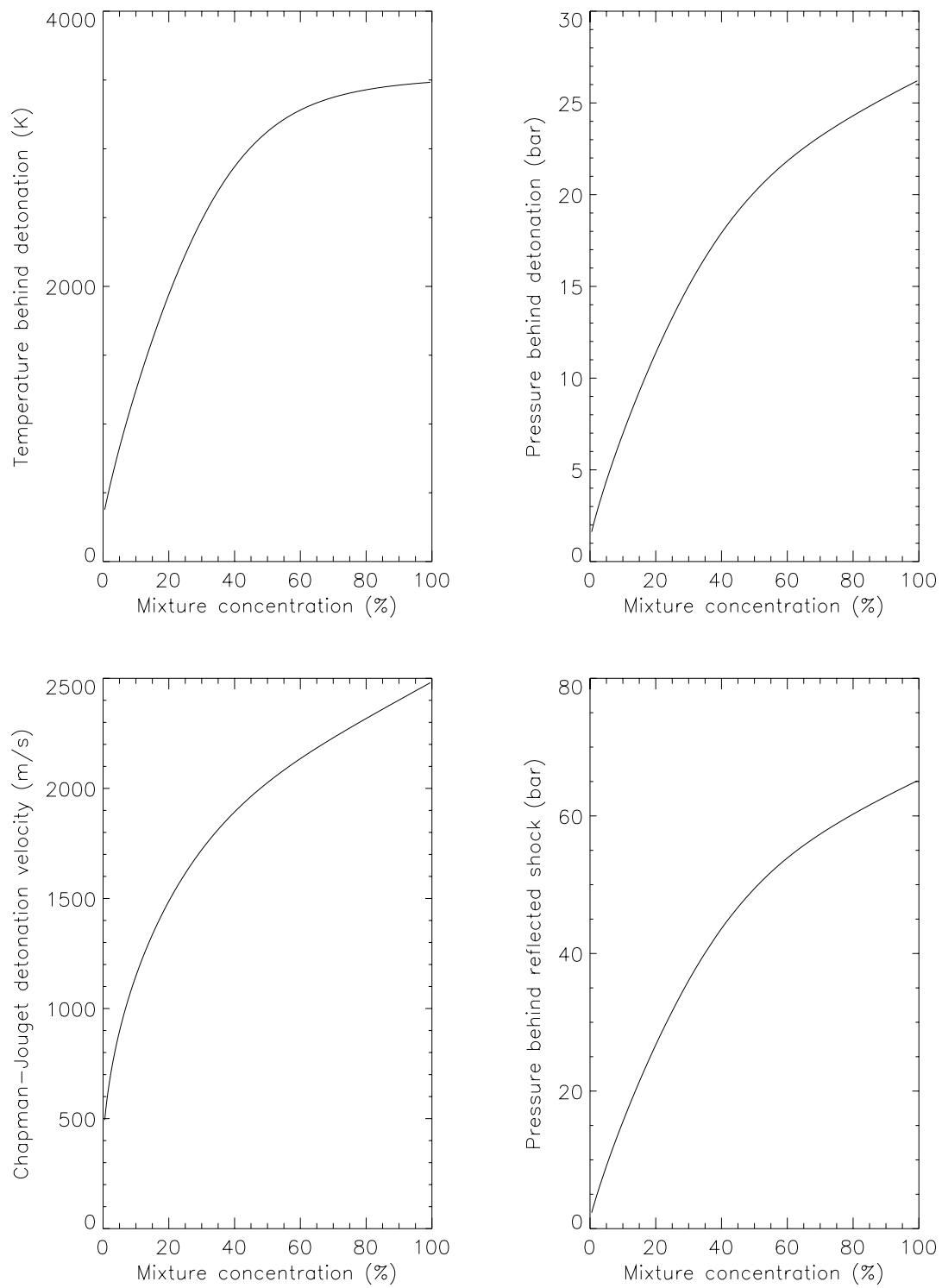
STANJAN calculations for detonation of mixture no. 9 in air
Mixture composition: 50.0% H₂, 50.0% N₂O, 0.0% NH₃, 0.0% CH₄

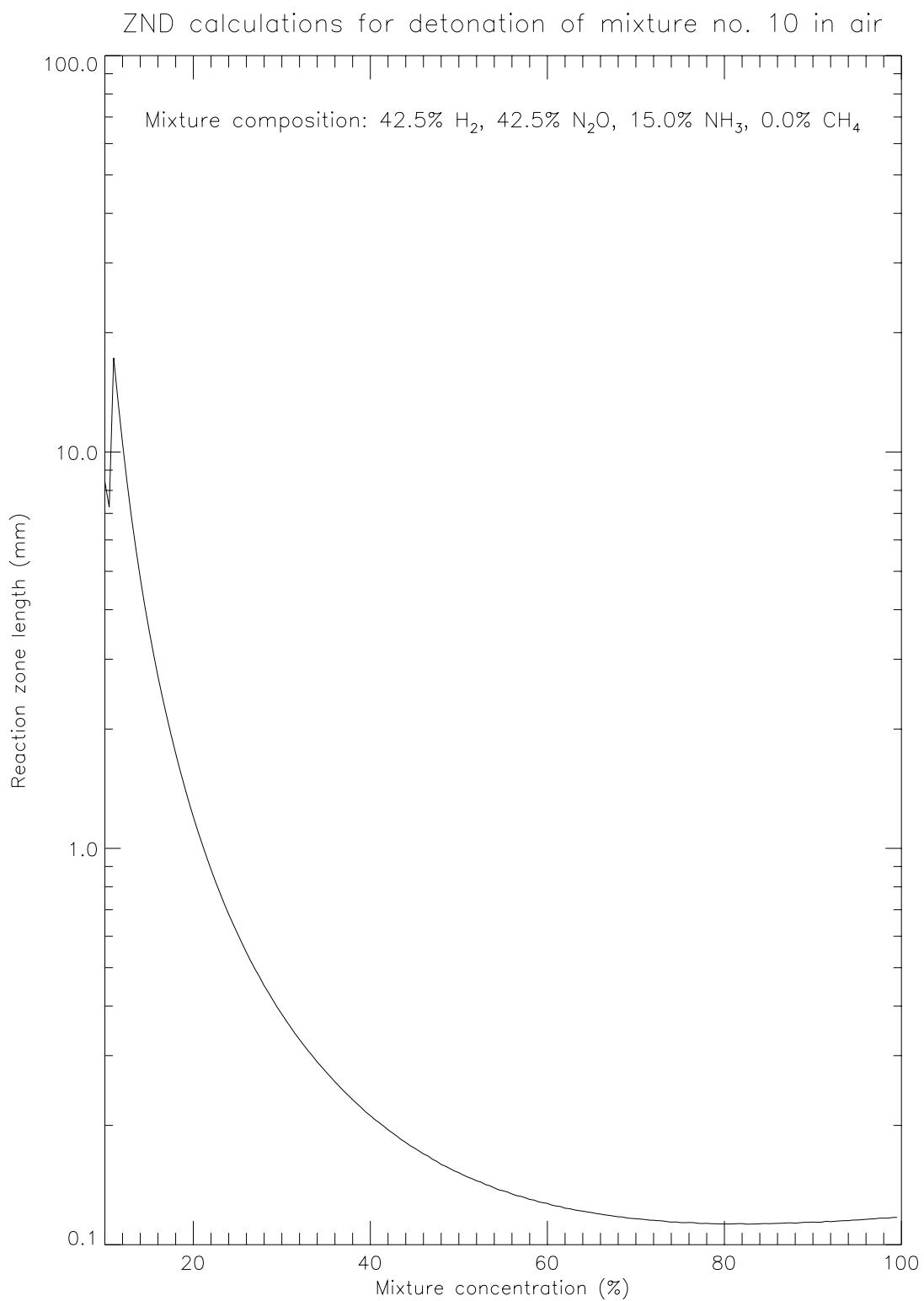


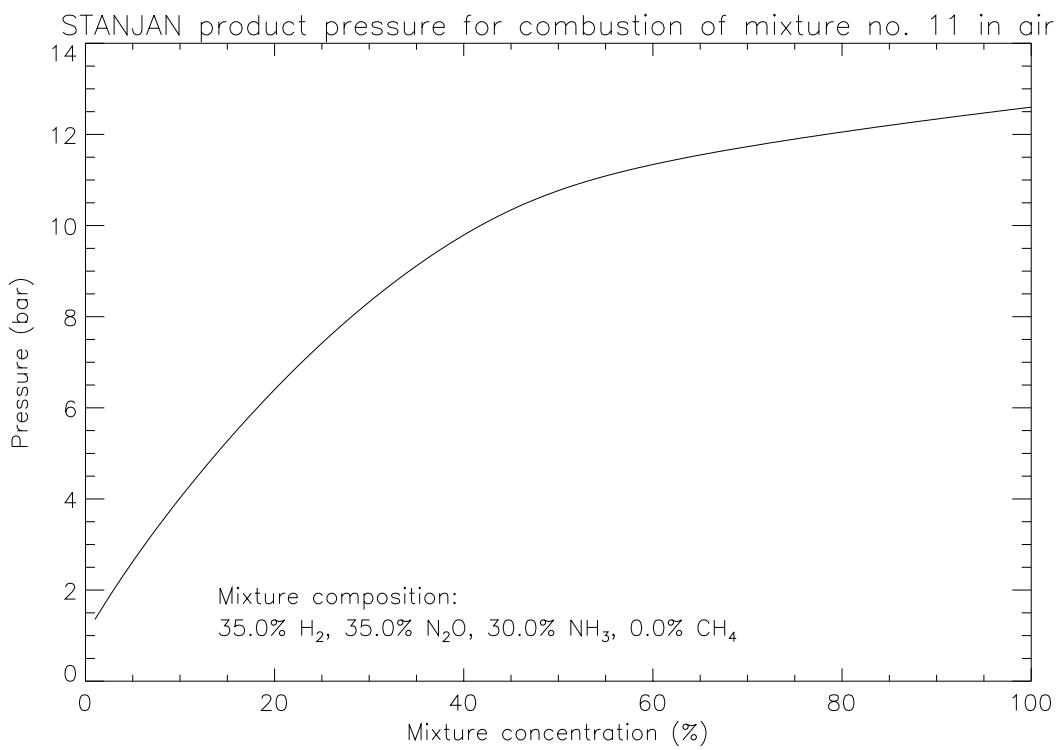
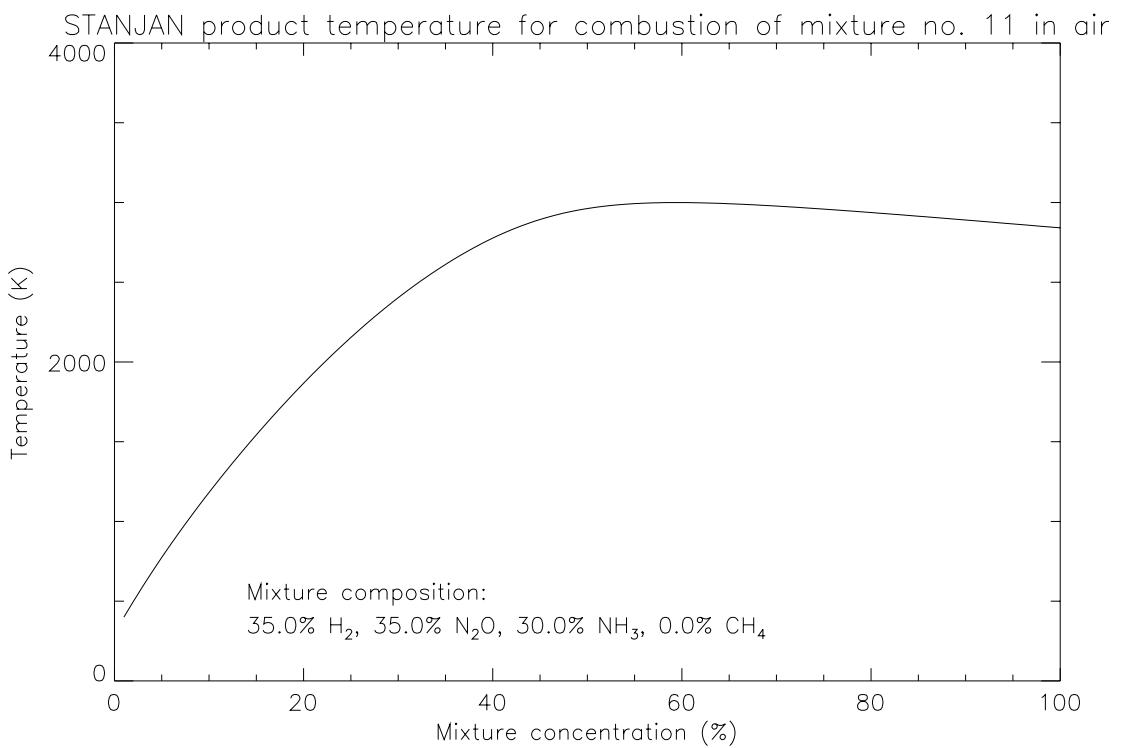




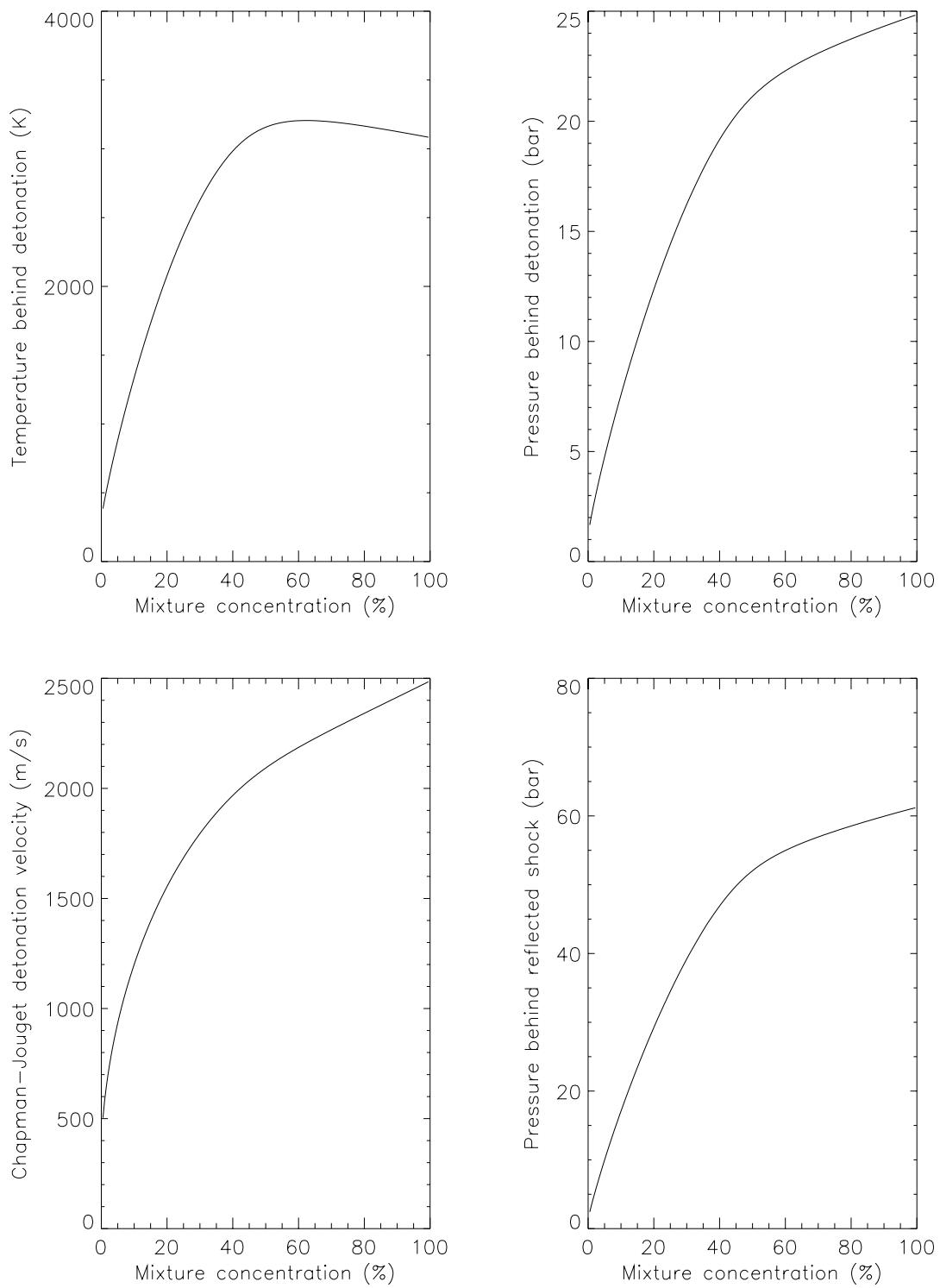
STANJAN calculations for detonation of mixture no. 10 in air
Mixture composition: 42.5% H₂, 42.5% N₂O, 15.0% NH₃, 0.0% CH₄

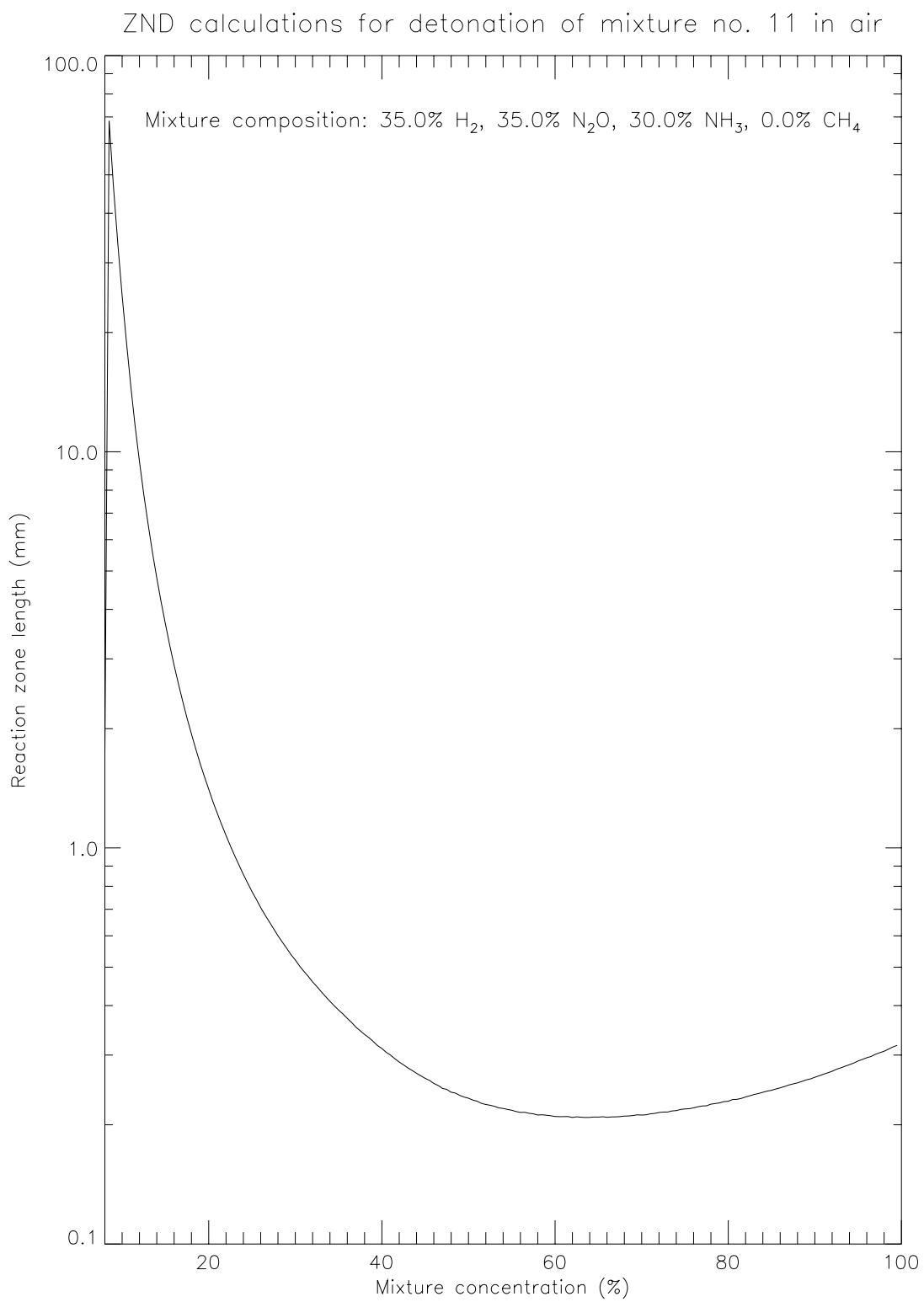


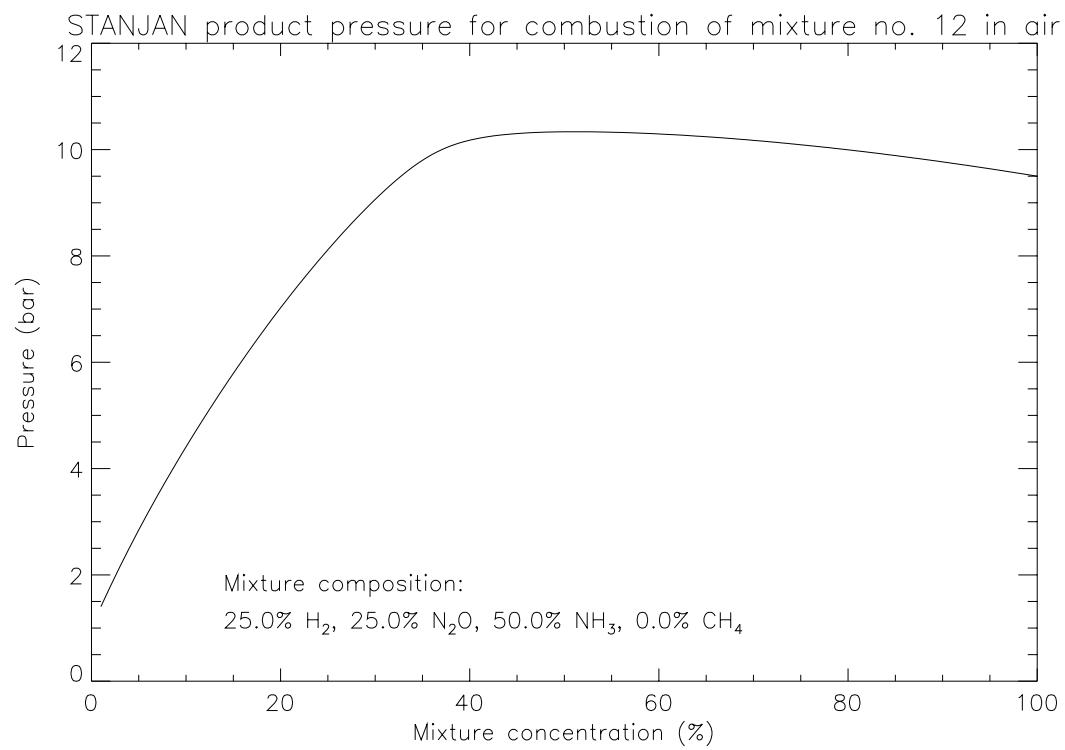
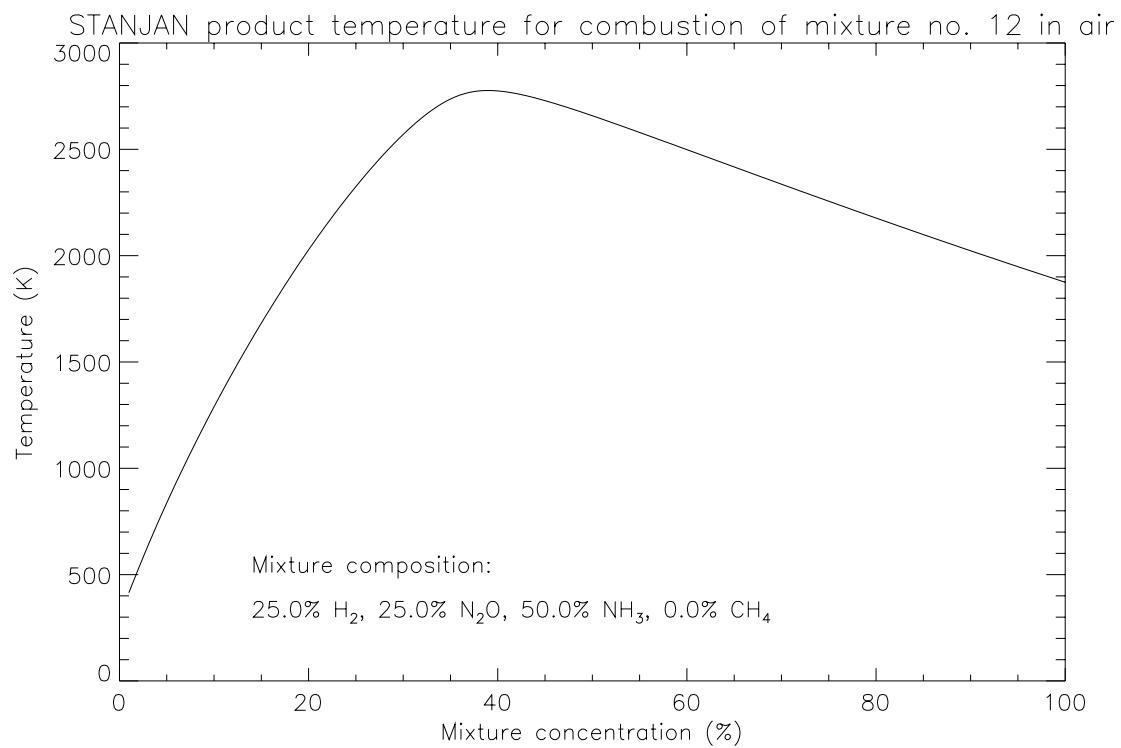




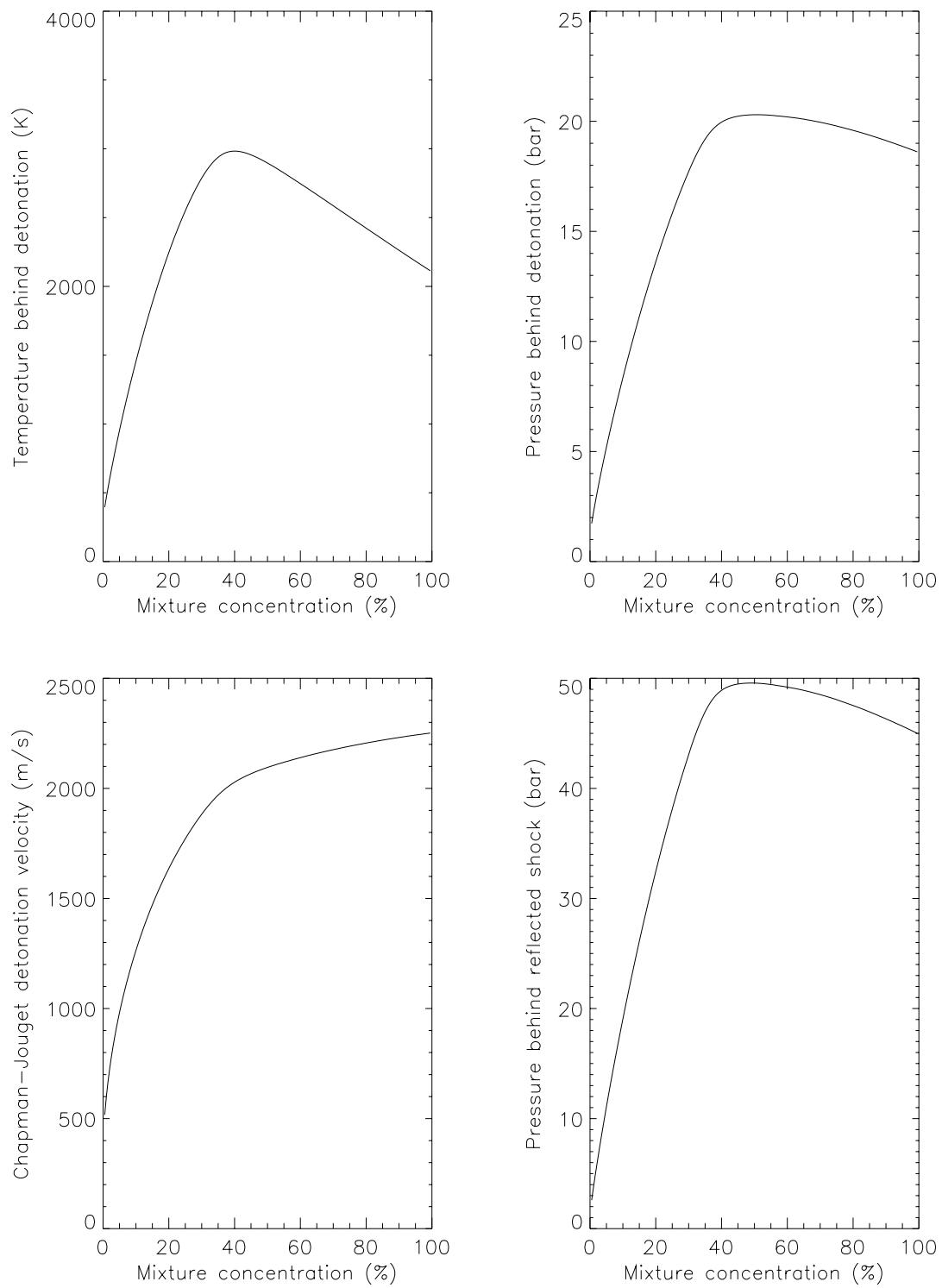
STANJAN calculations for detonation of mixture no. 11 in air
Mixture composition: 35.0% H₂, 35.0% N₂O, 30.0% NH₃, 0.0% CH₄

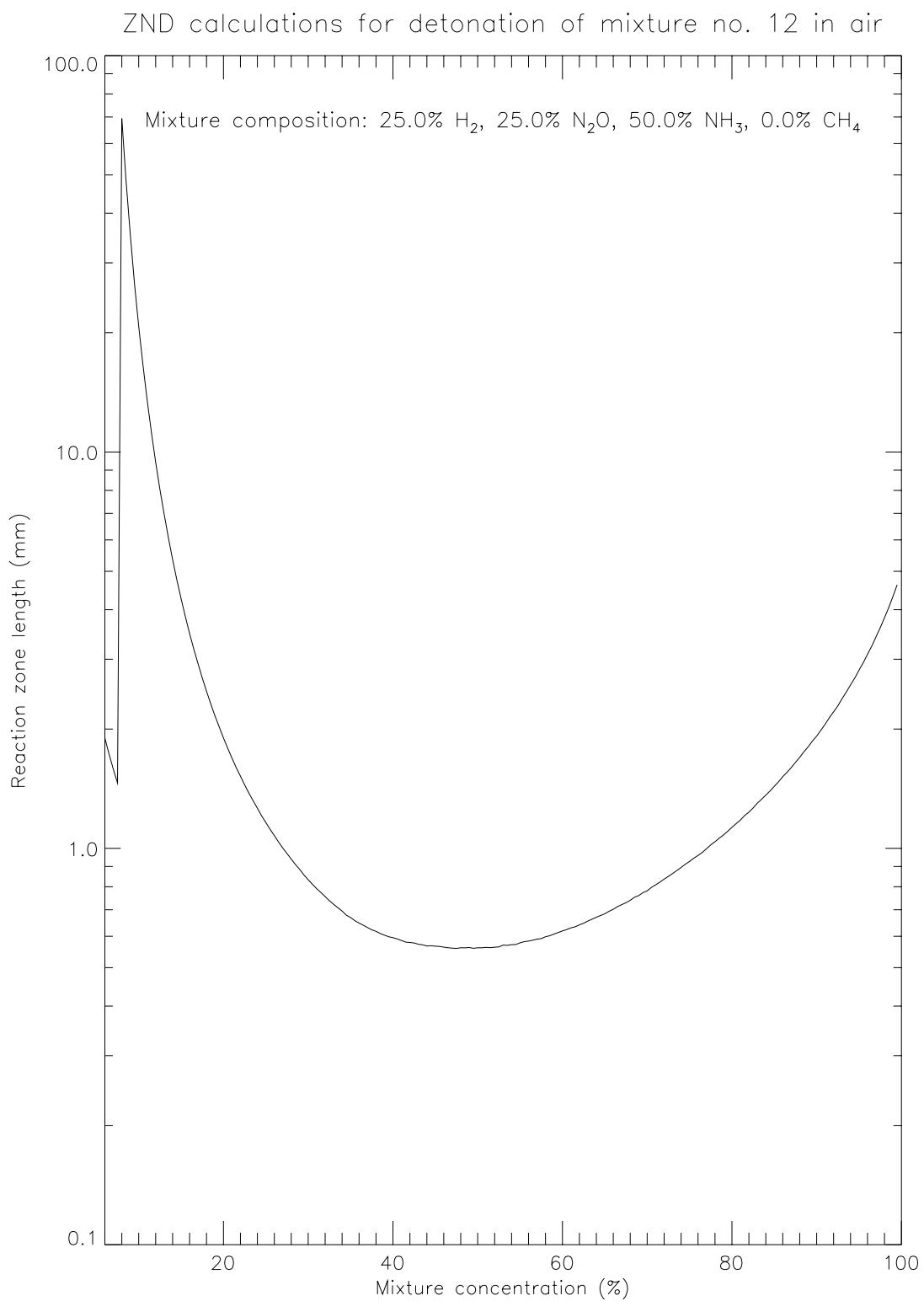


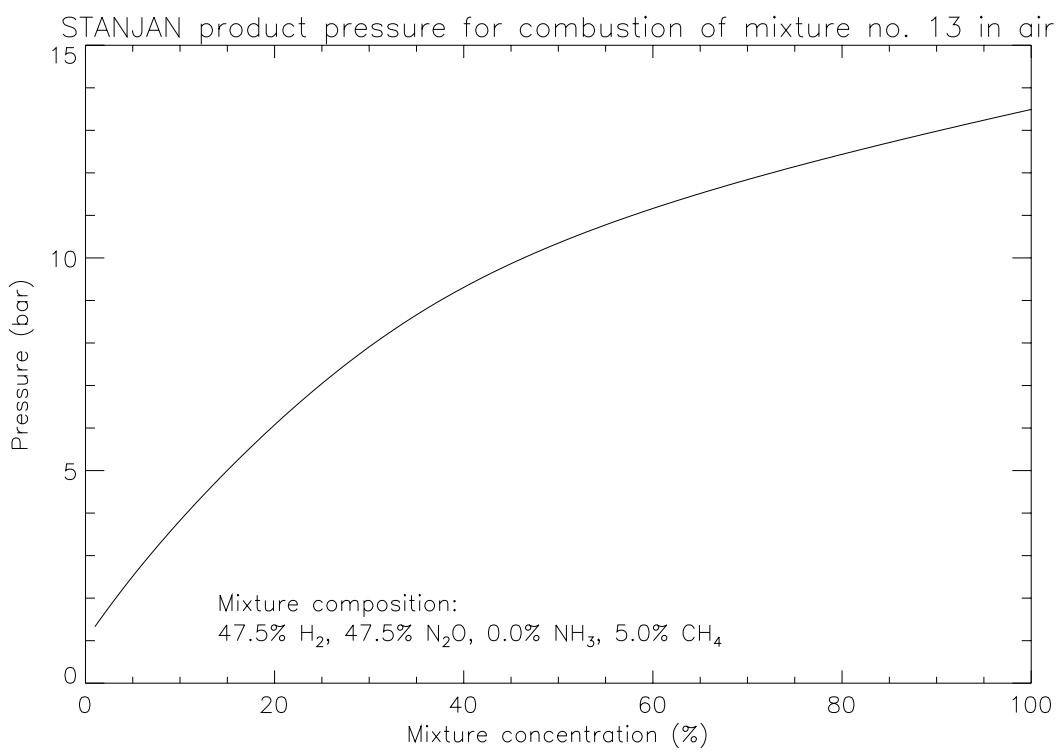
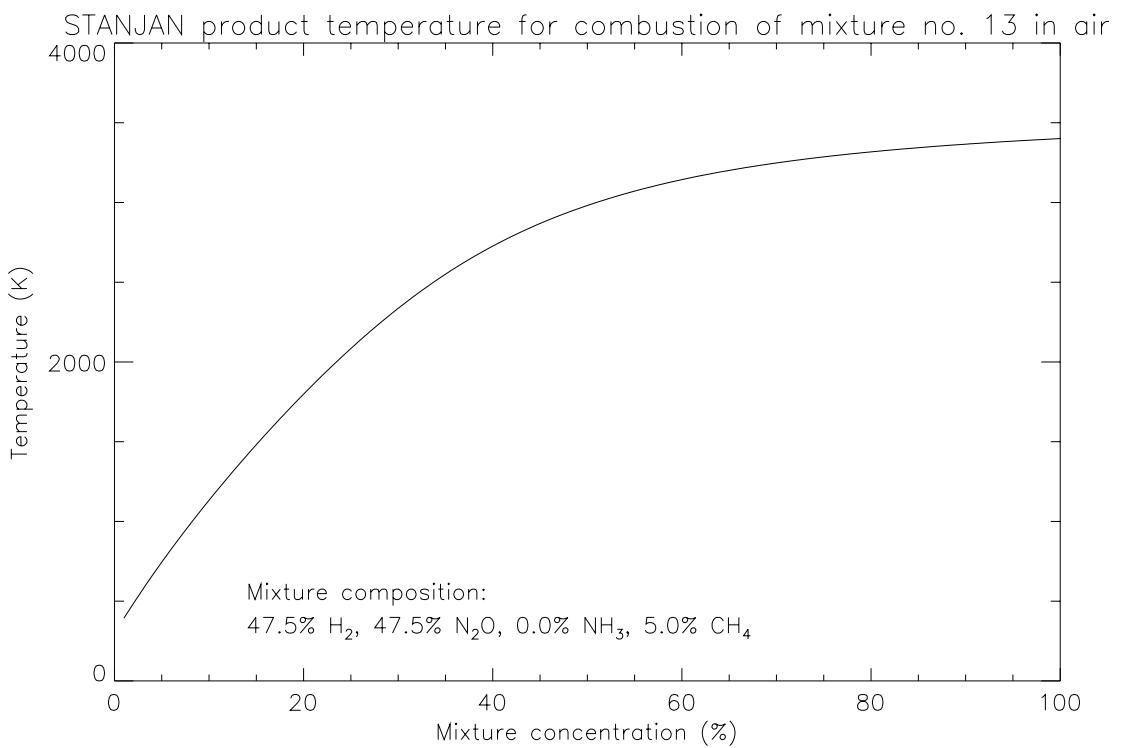




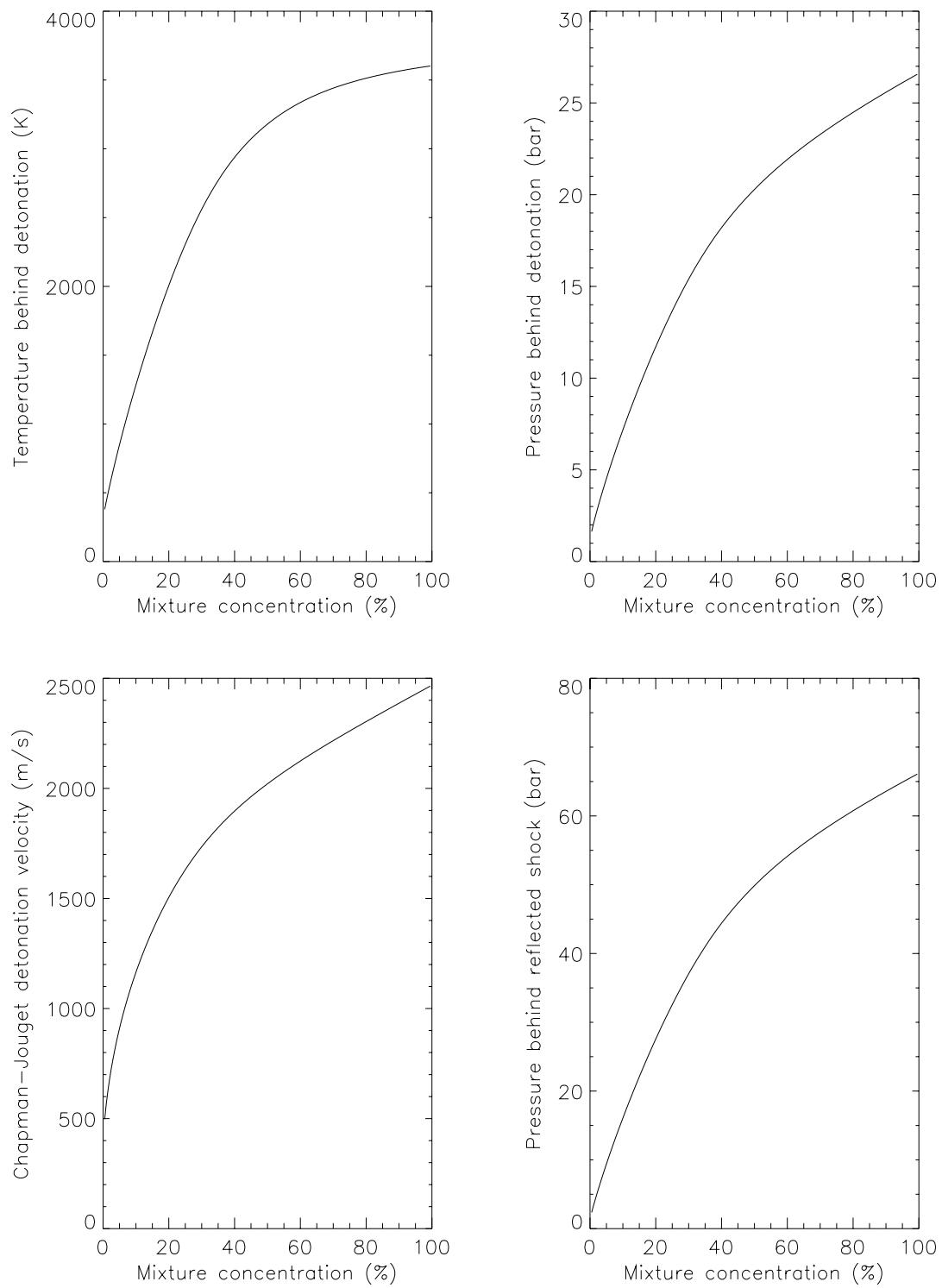
STANJAN calculations for detonation of mixture no. 12 in air
Mixture composition: 25.0% H₂, 25.0% N₂O, 50.0% NH₃, 0.0% CH₄

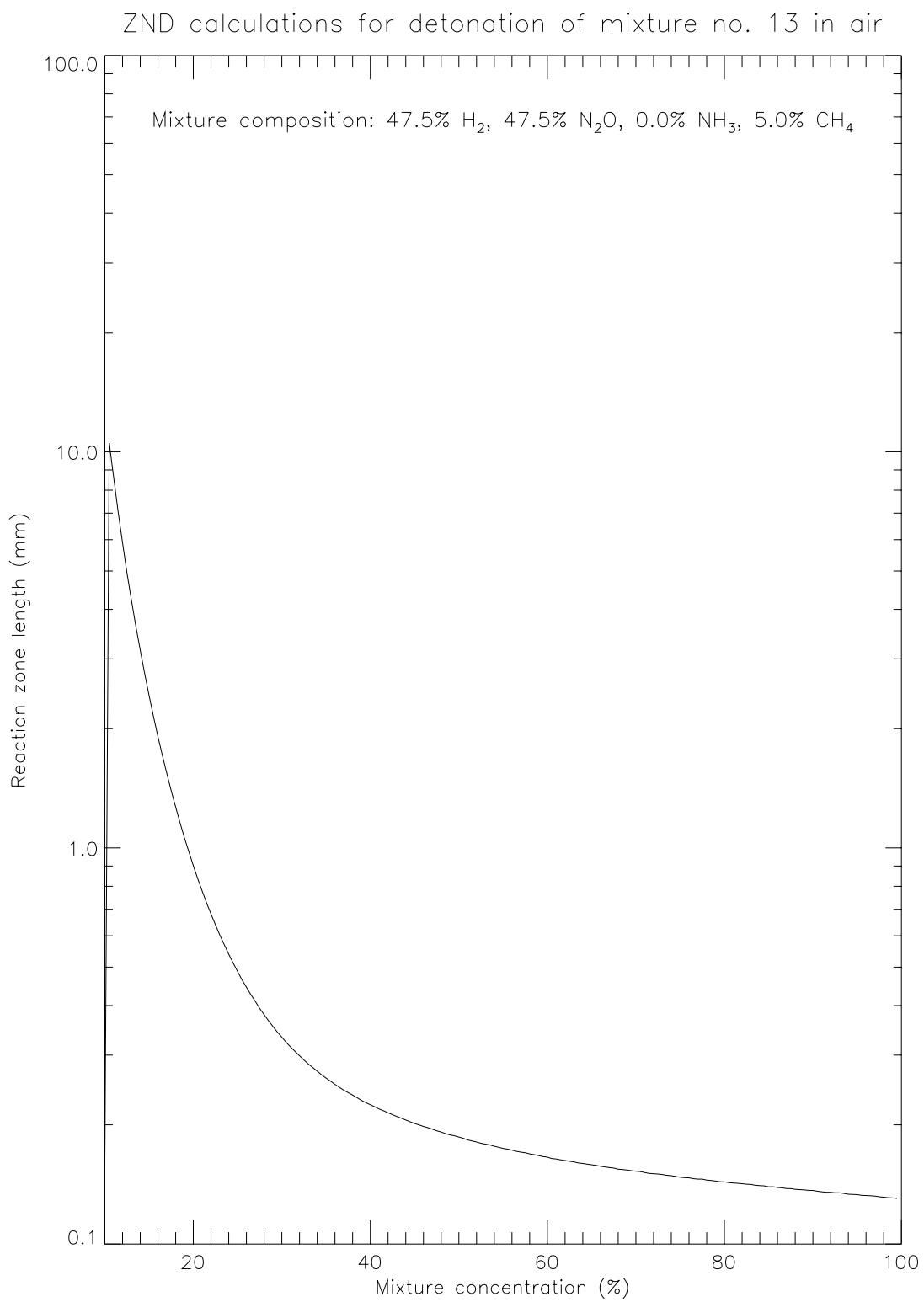


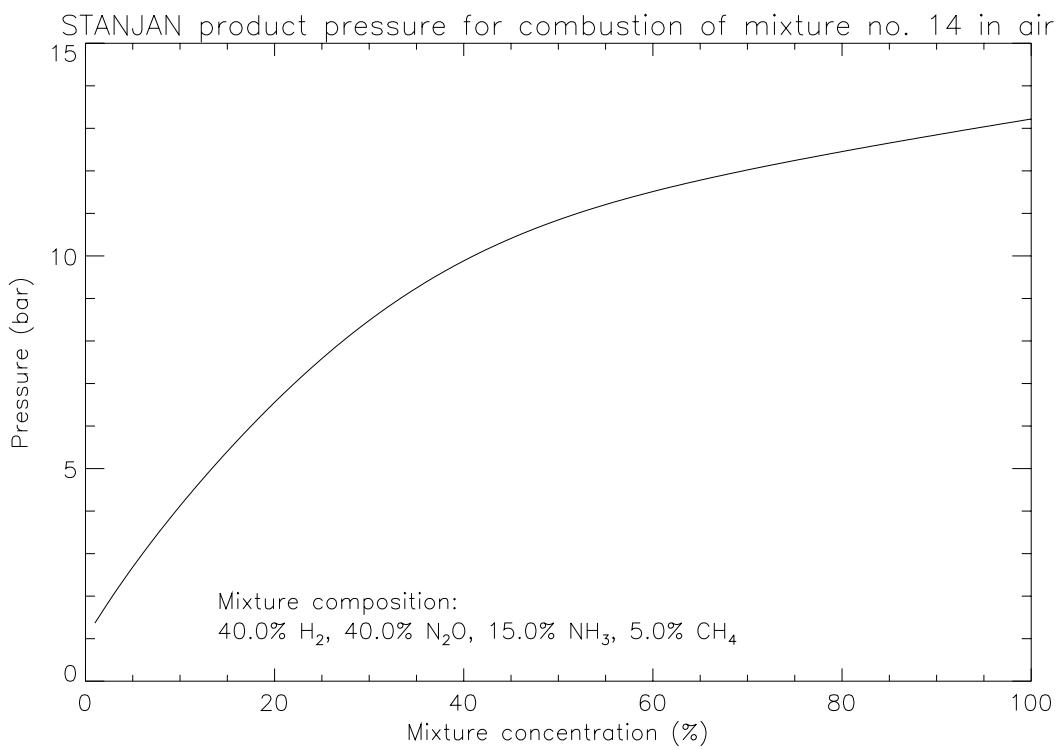
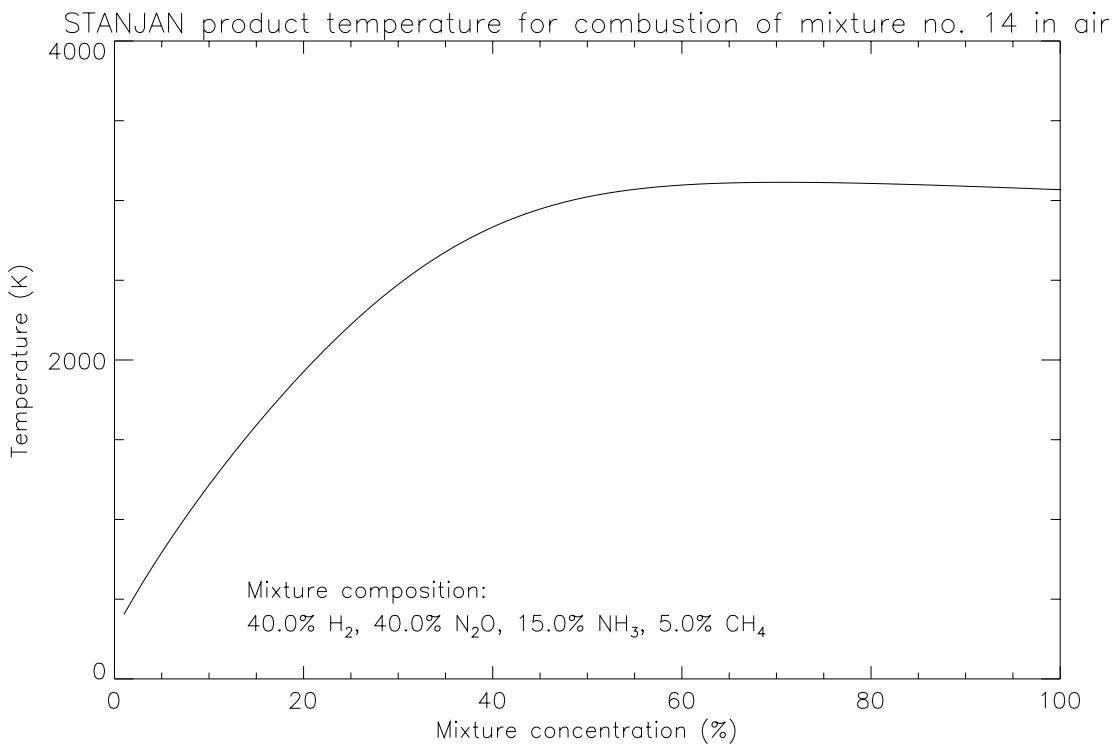




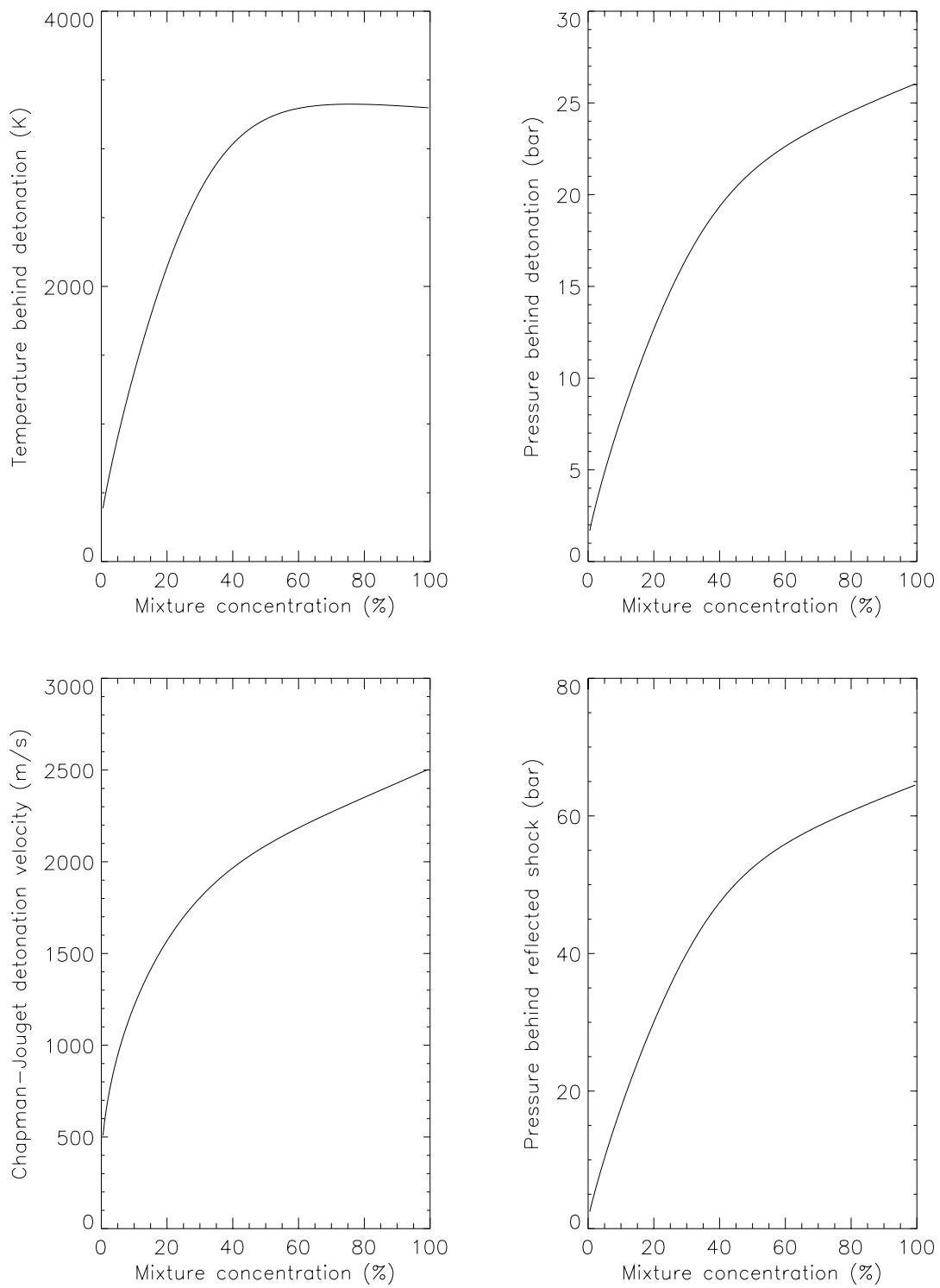
STANJAN calculations for detonation of mixture no. 13 in air
Mixture composition: 47.5% H₂, 47.5% N₂O, 0.0% NH₃, 5.0% CH₄

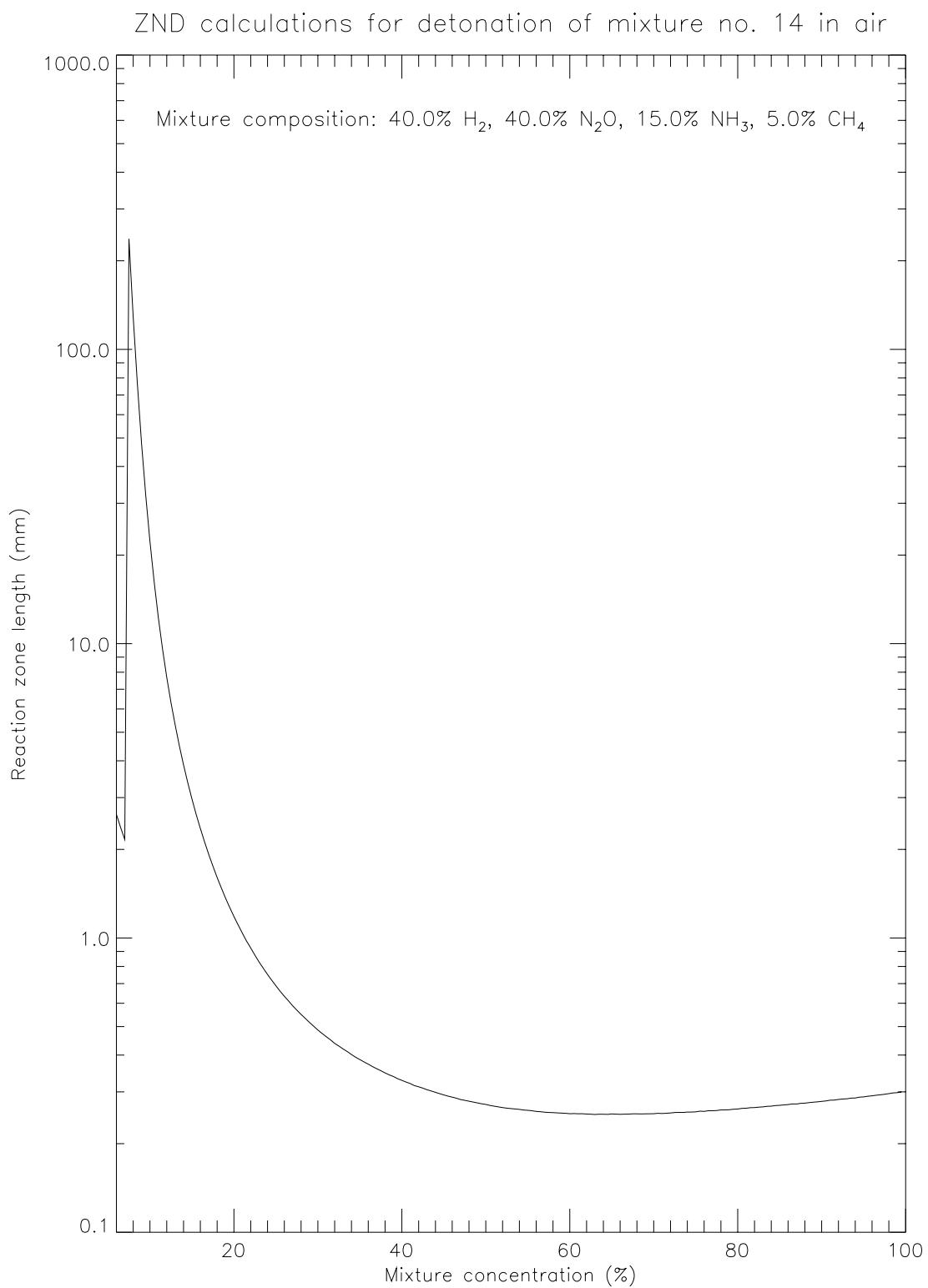


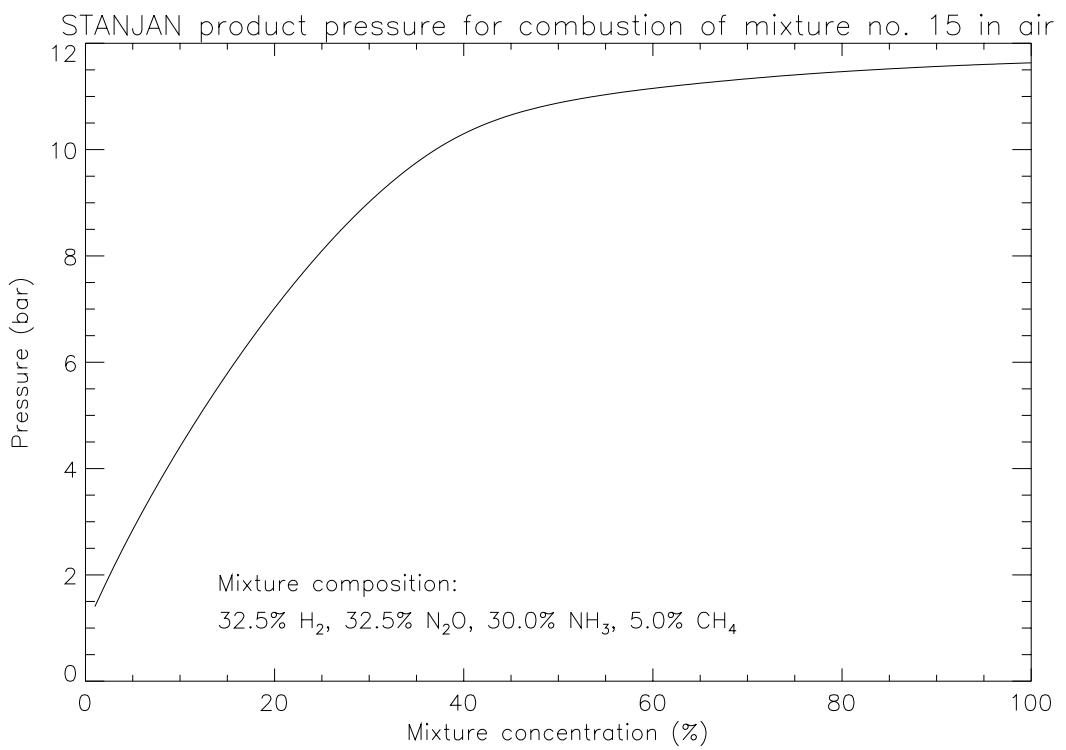
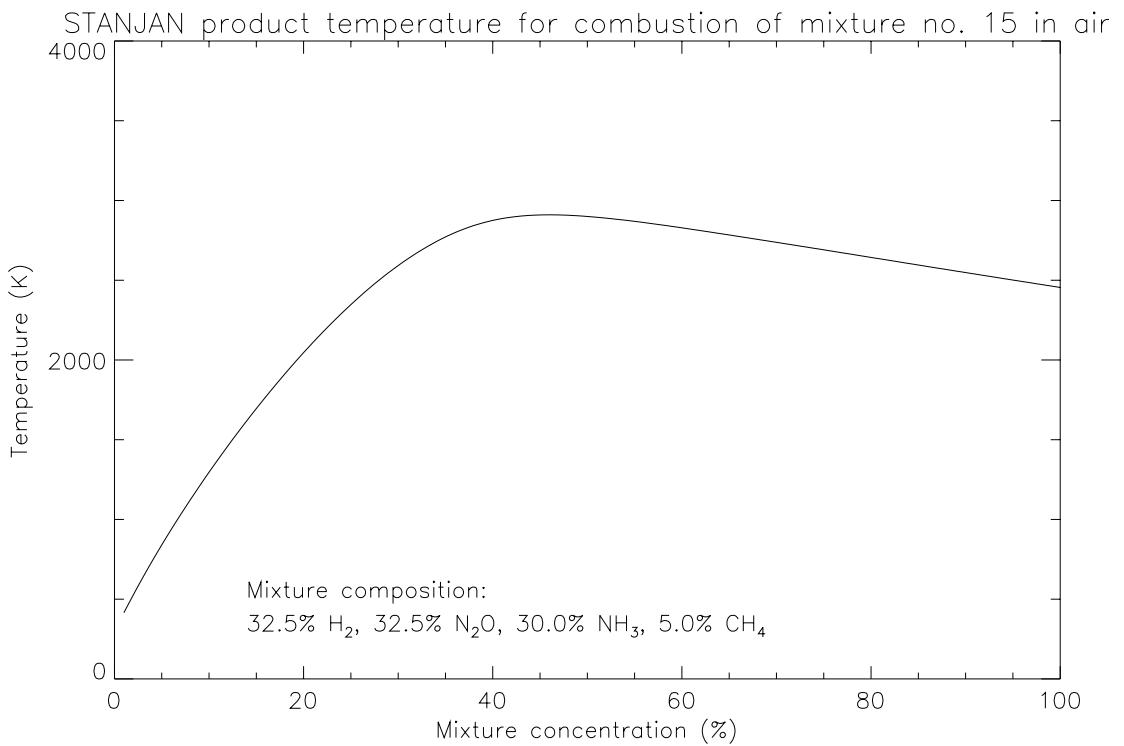




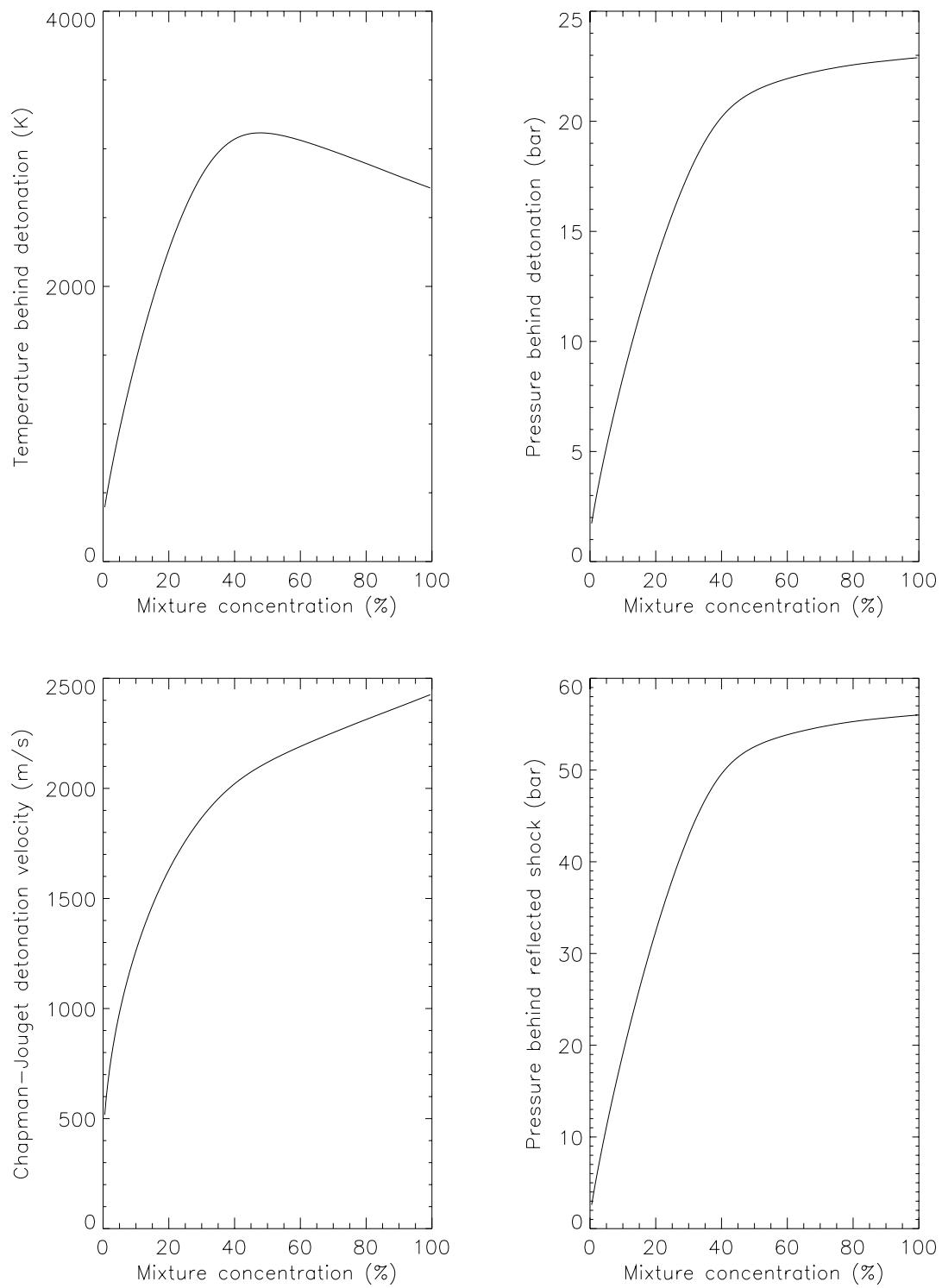
STANJAN calculations for detonation of mixture no. 14 in air
Mixture composition: 40.0% H₂, 40.0% N₂O, 15.0% NH₃, 5.0% CH₄

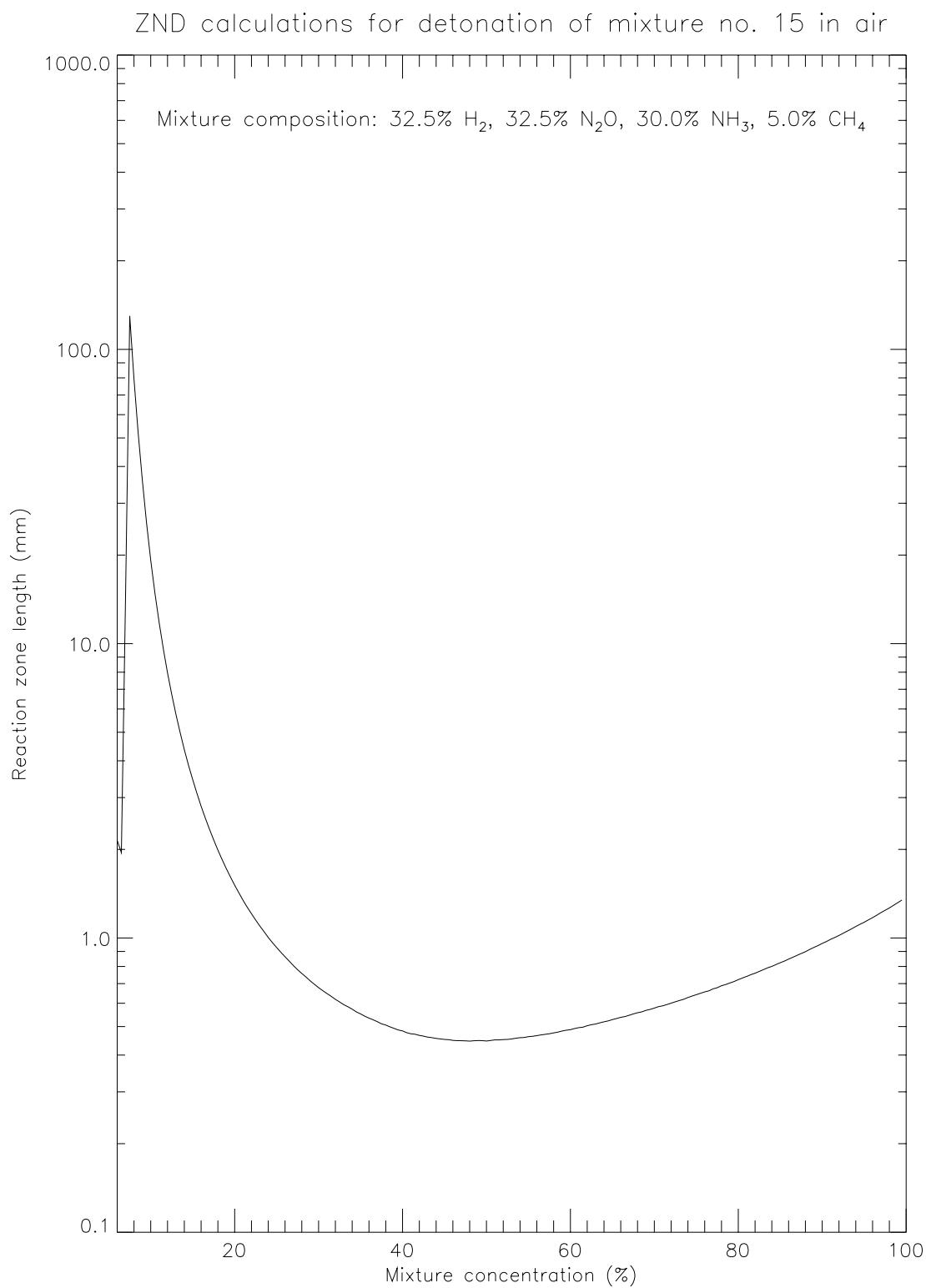


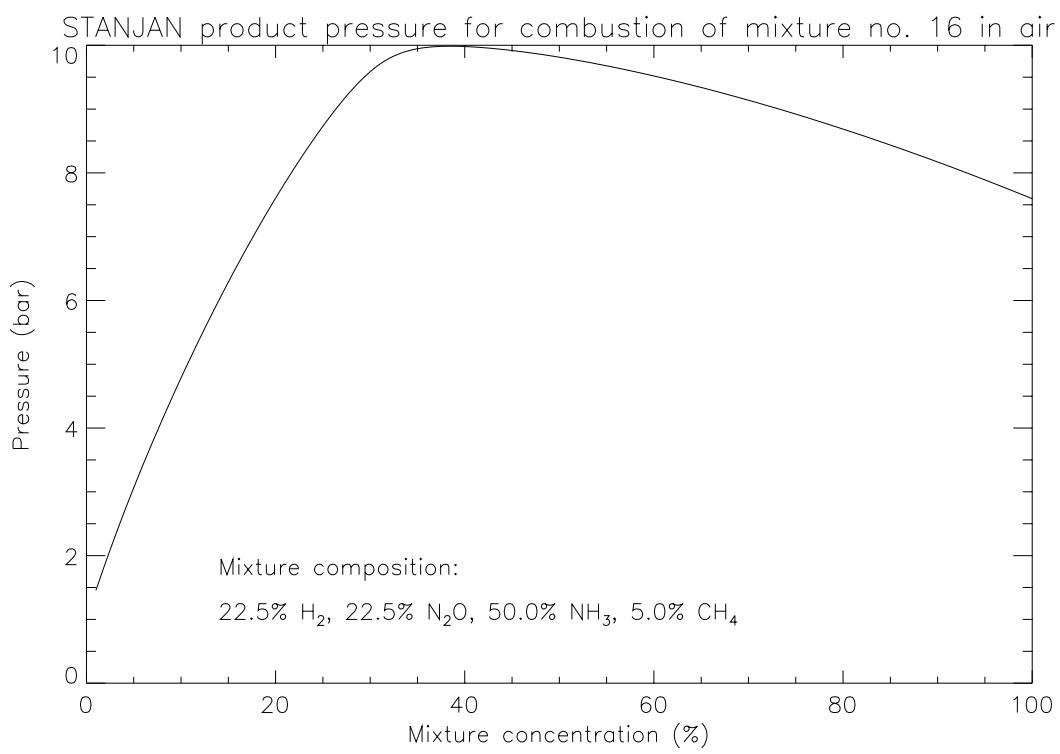
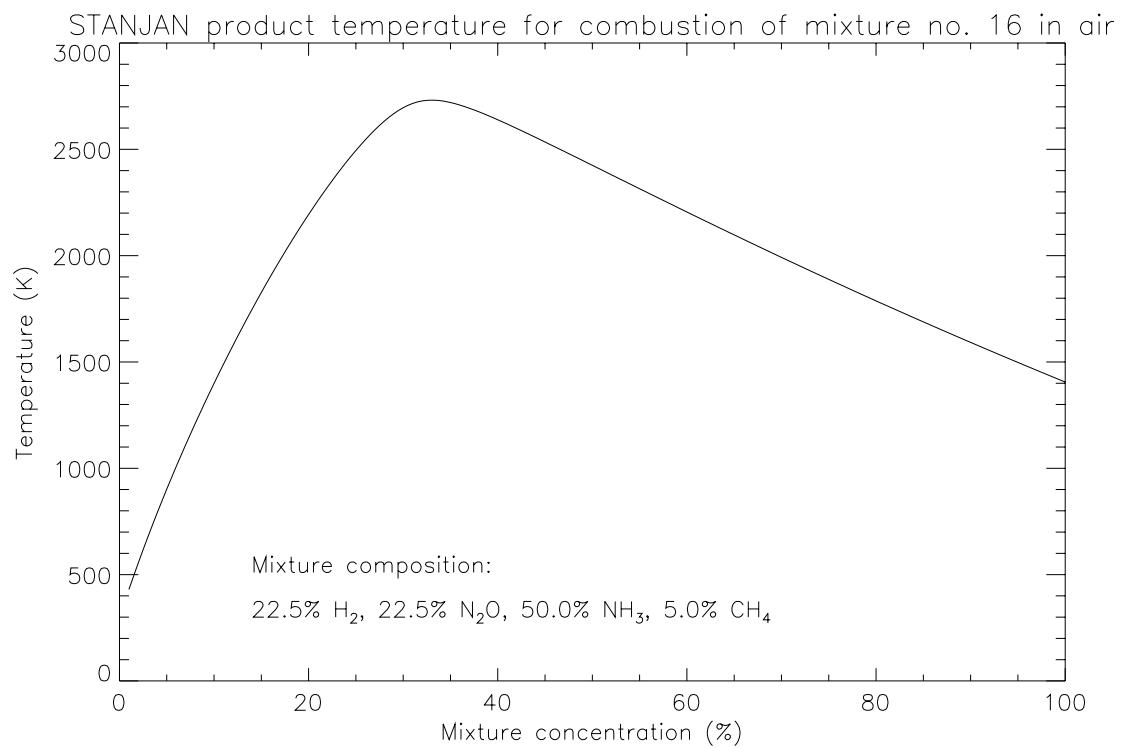




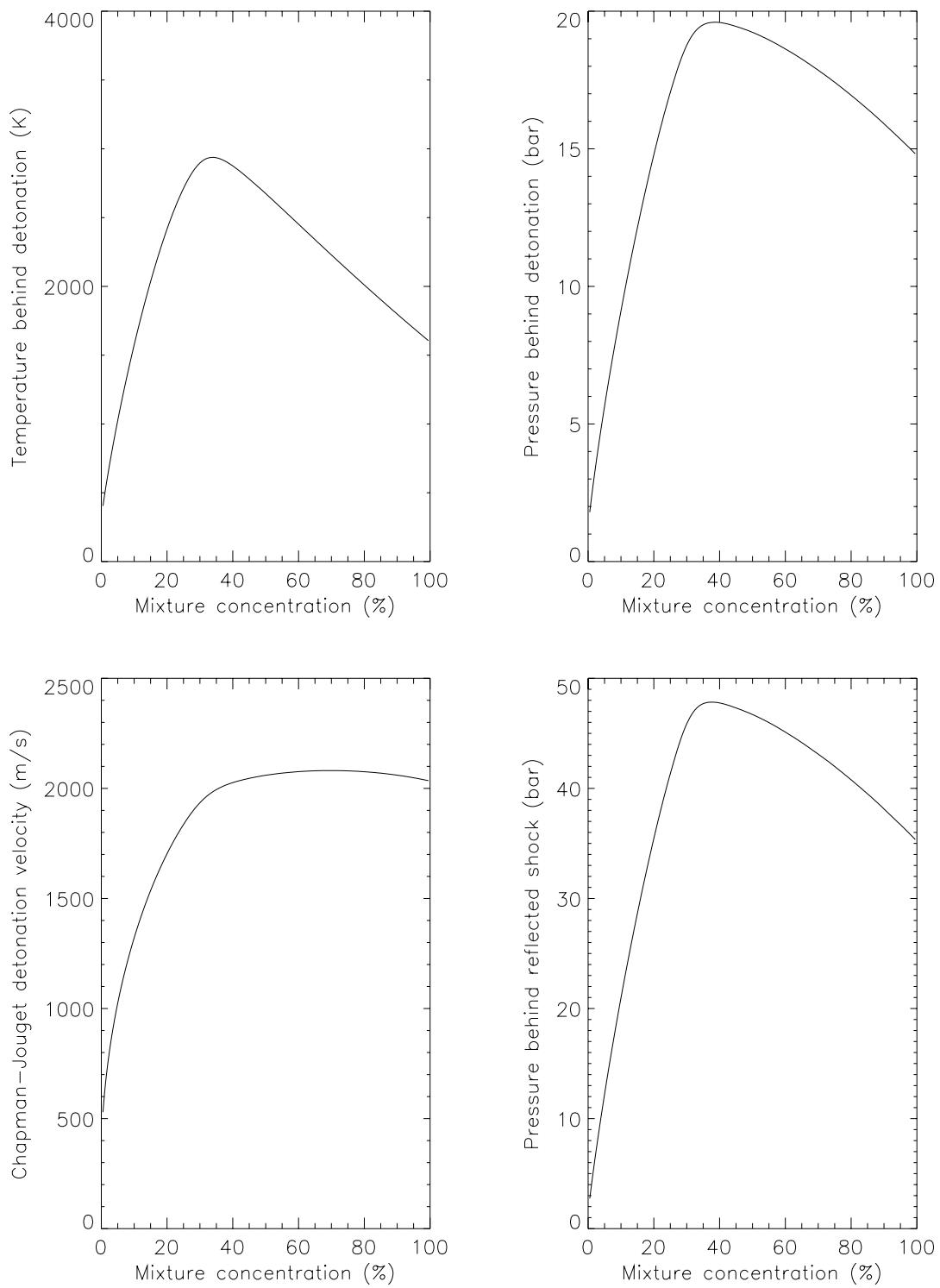
STANJAN calculations for detonation of mixture no. 15 in air
Mixture composition: 32.5% H₂, 32.5% N₂O, 30.0% NH₃, 5.0% CH₄

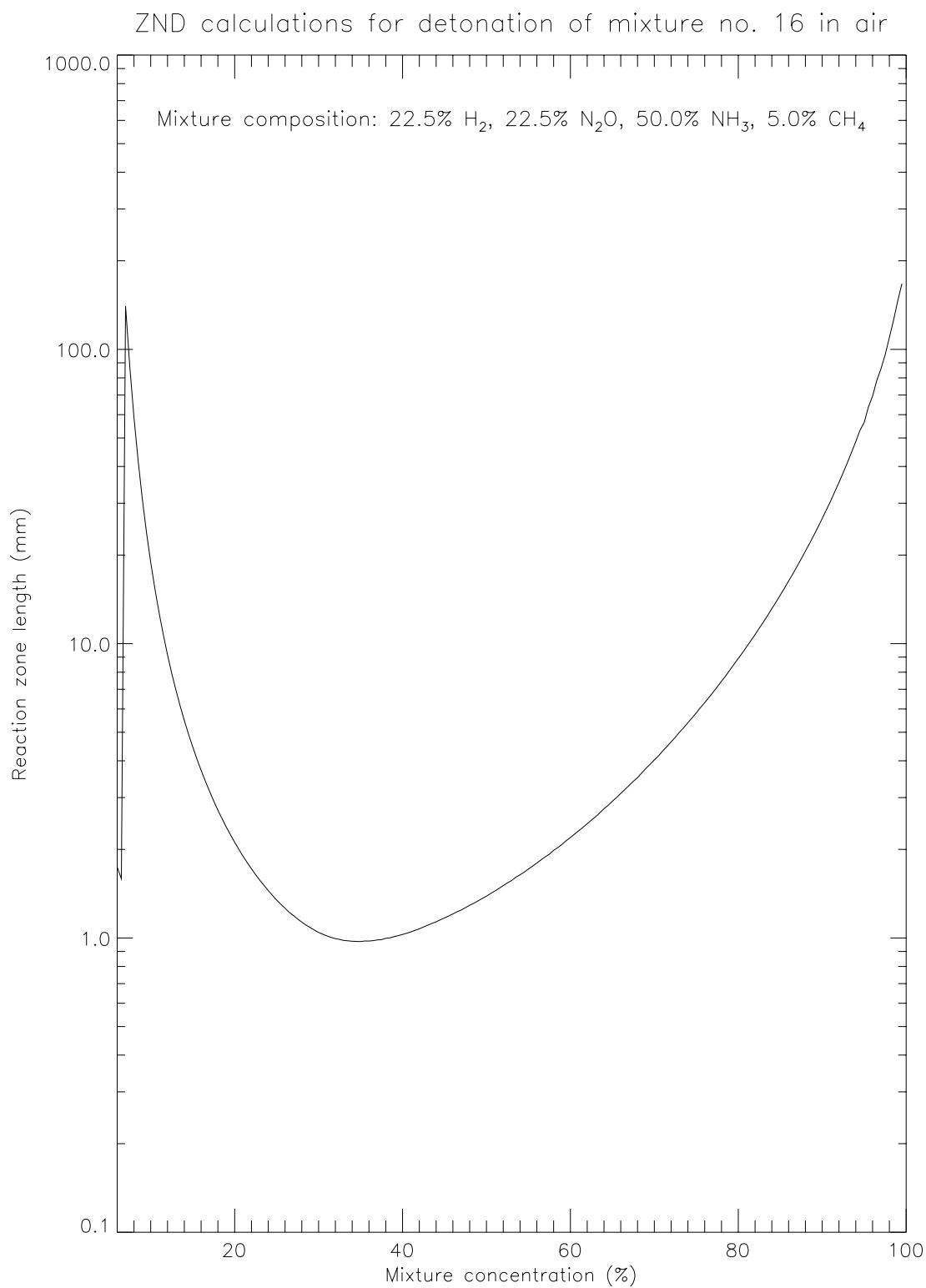


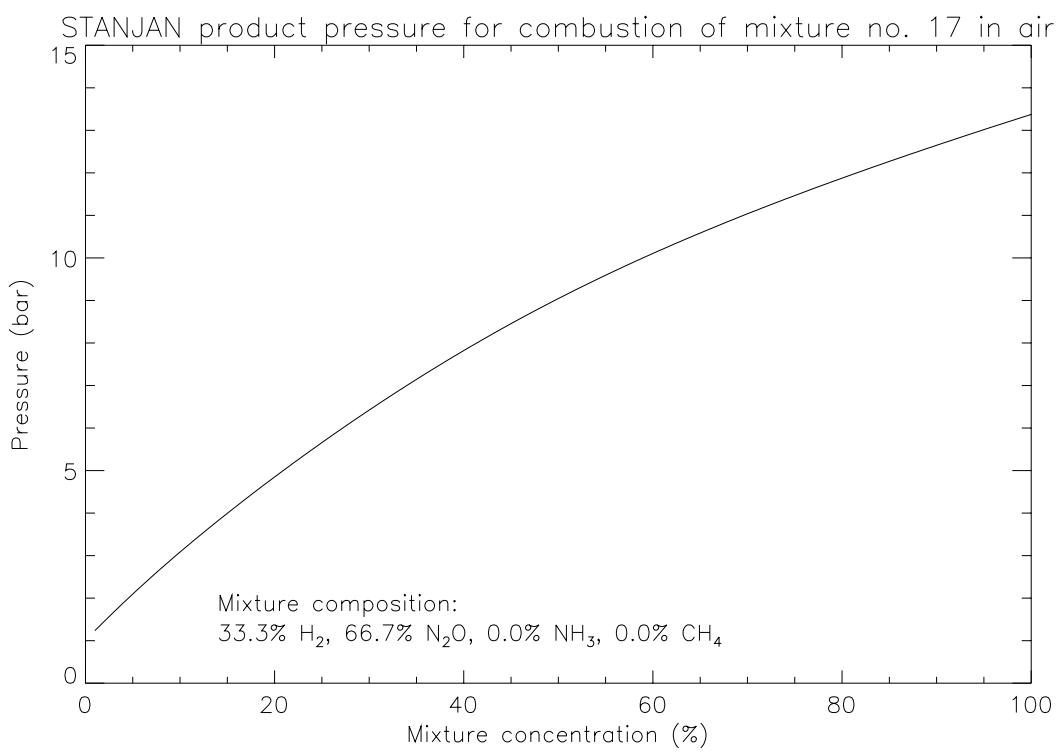
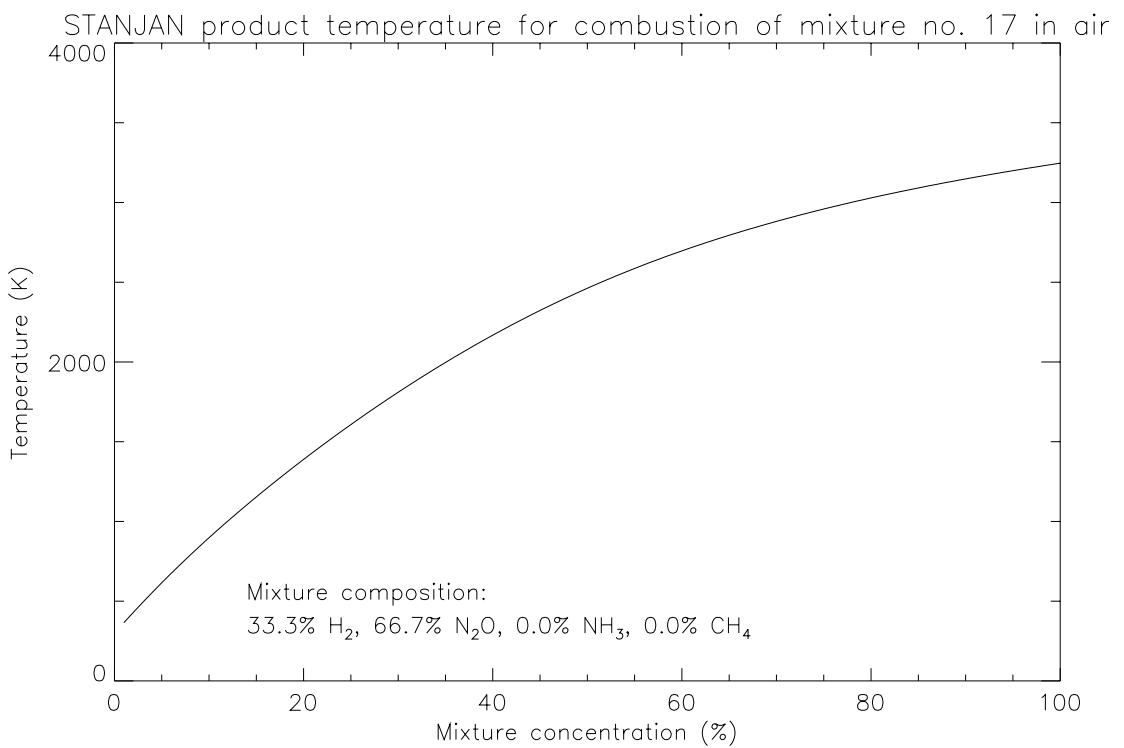




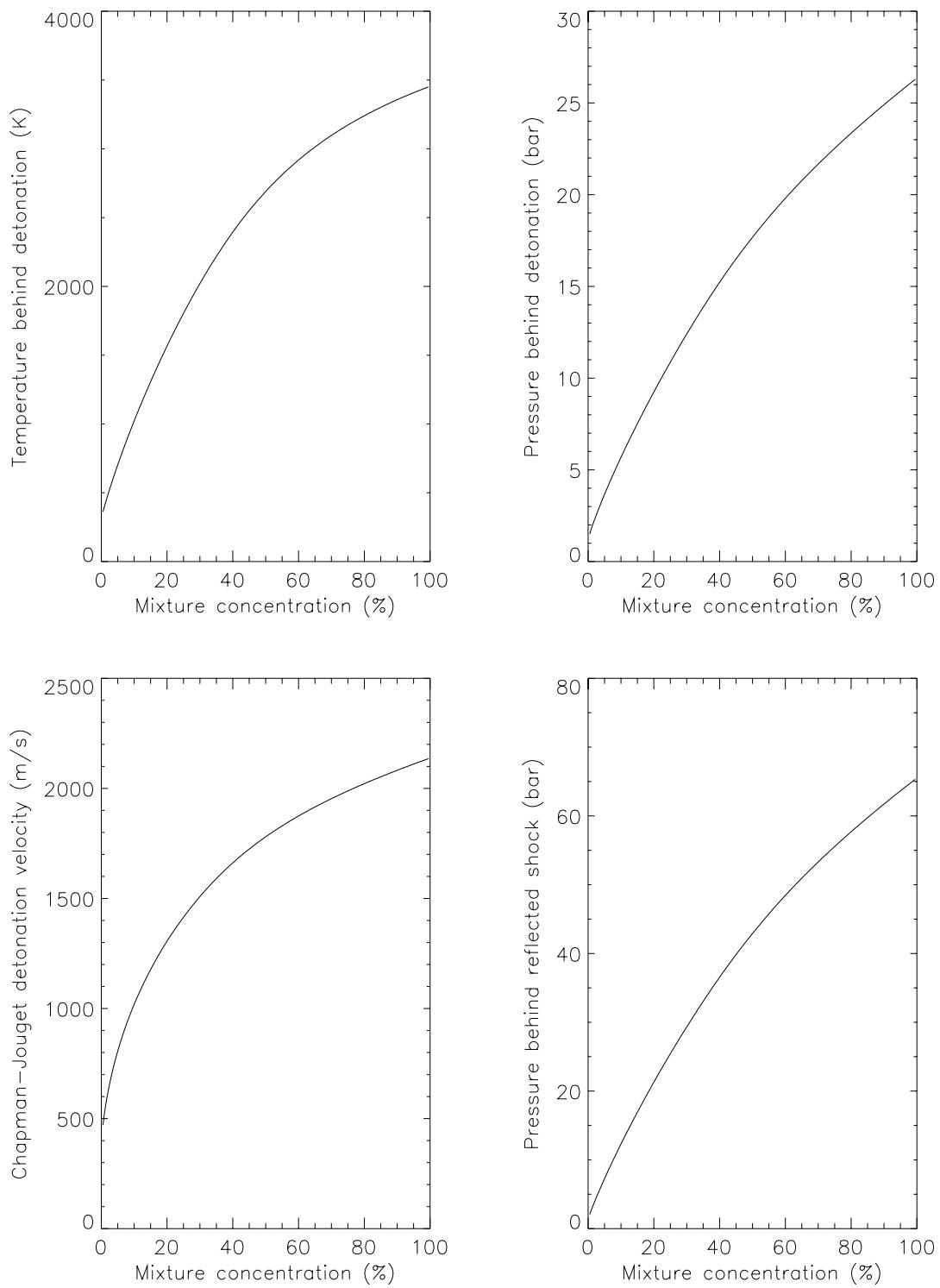
STANJAN calculations for detonation of mixture no. 16 in air
 Mixture composition: 22.5% H₂, 22.5% N₂O, 50.0% NH₃, 5.0% CH₄

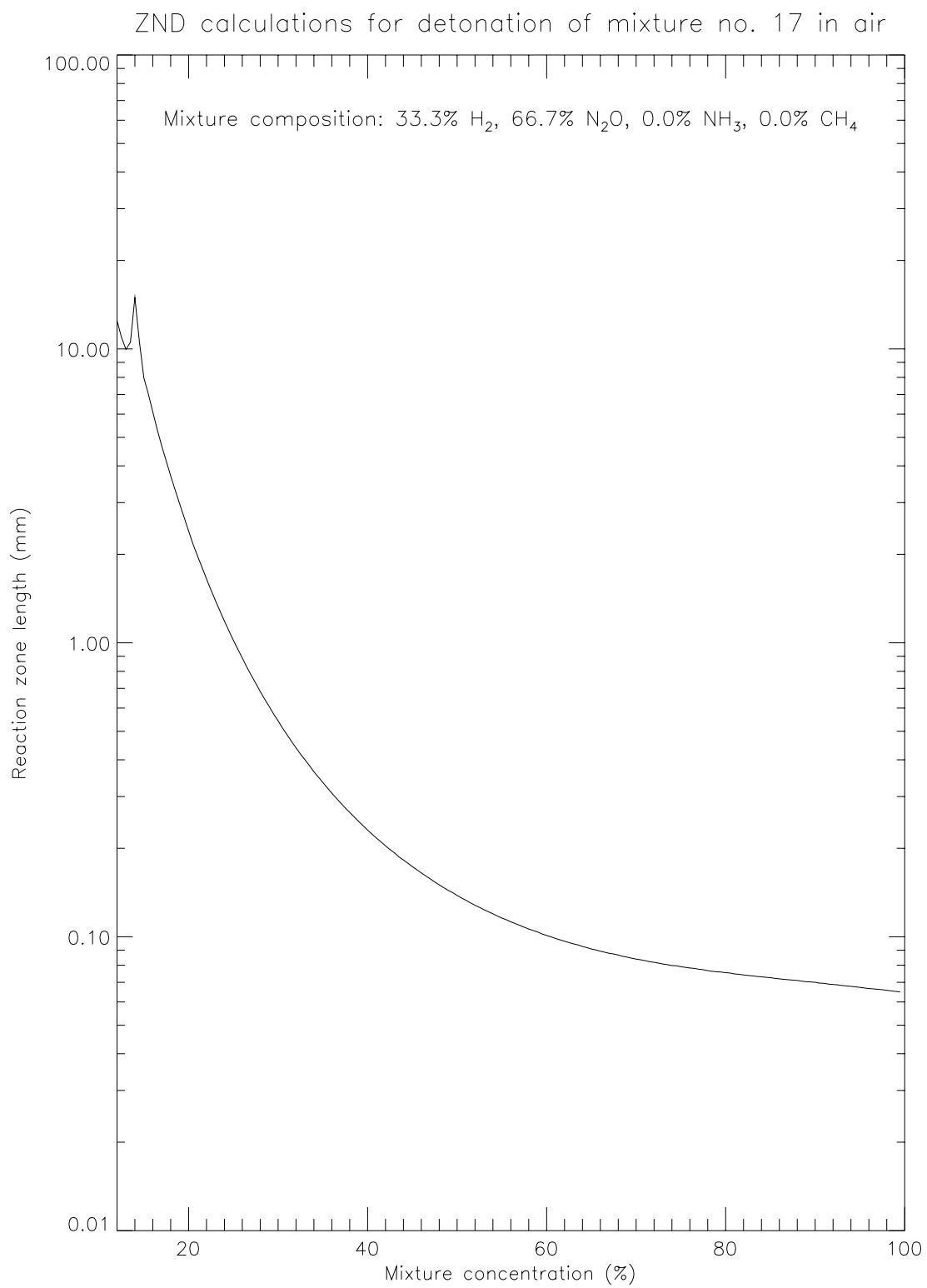


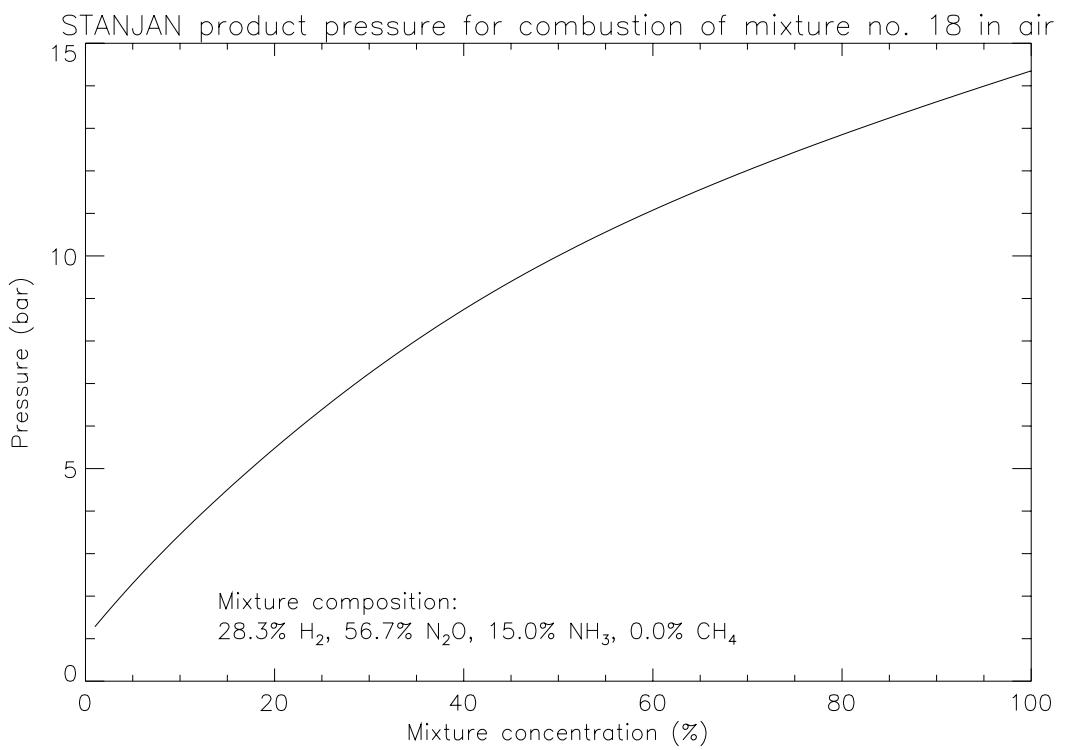
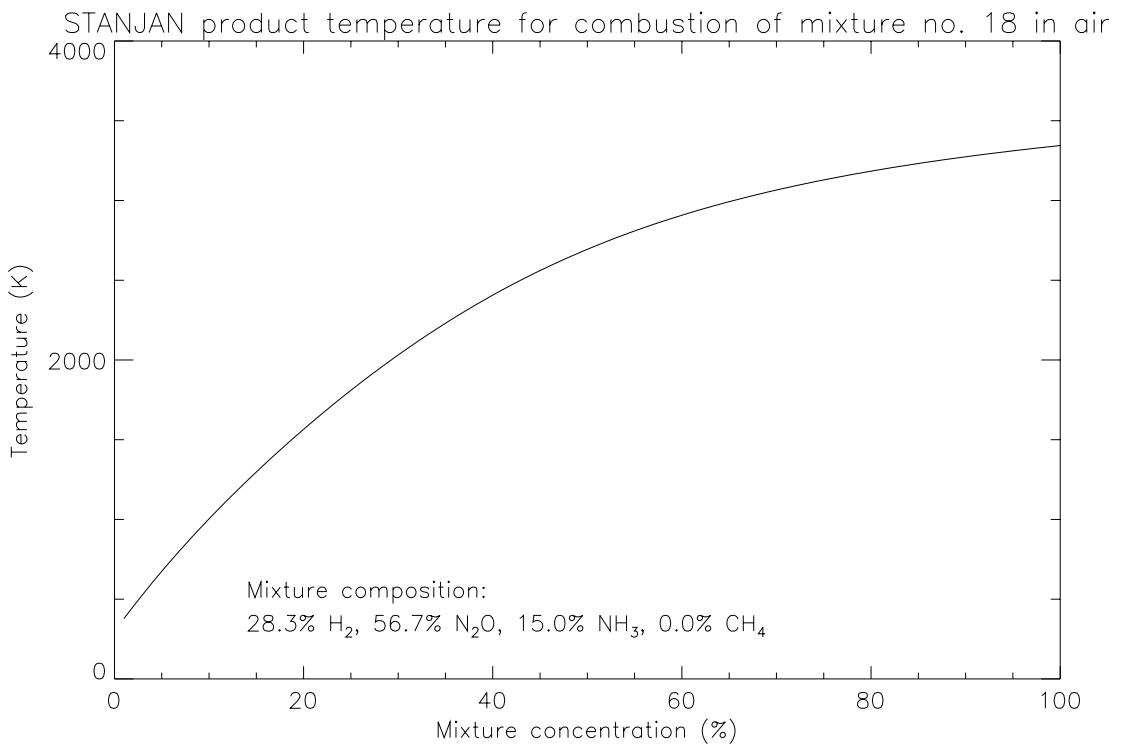




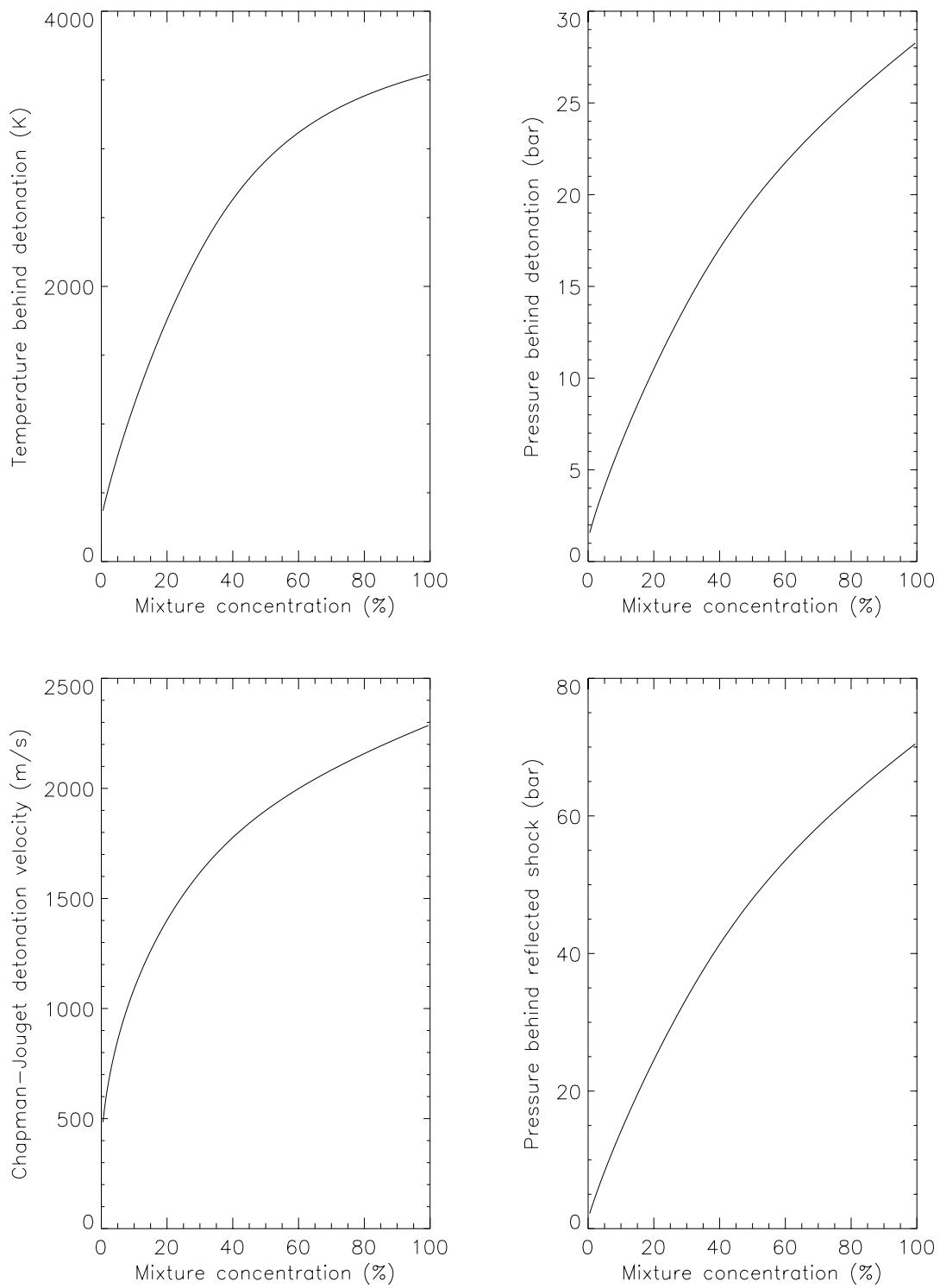
STANJAN calculations for detonation of mixture no. 17 in air
Mixture composition: 33.3% H₂, 66.7% N₂O, 0.0% NH₃, 0.0% CH₄

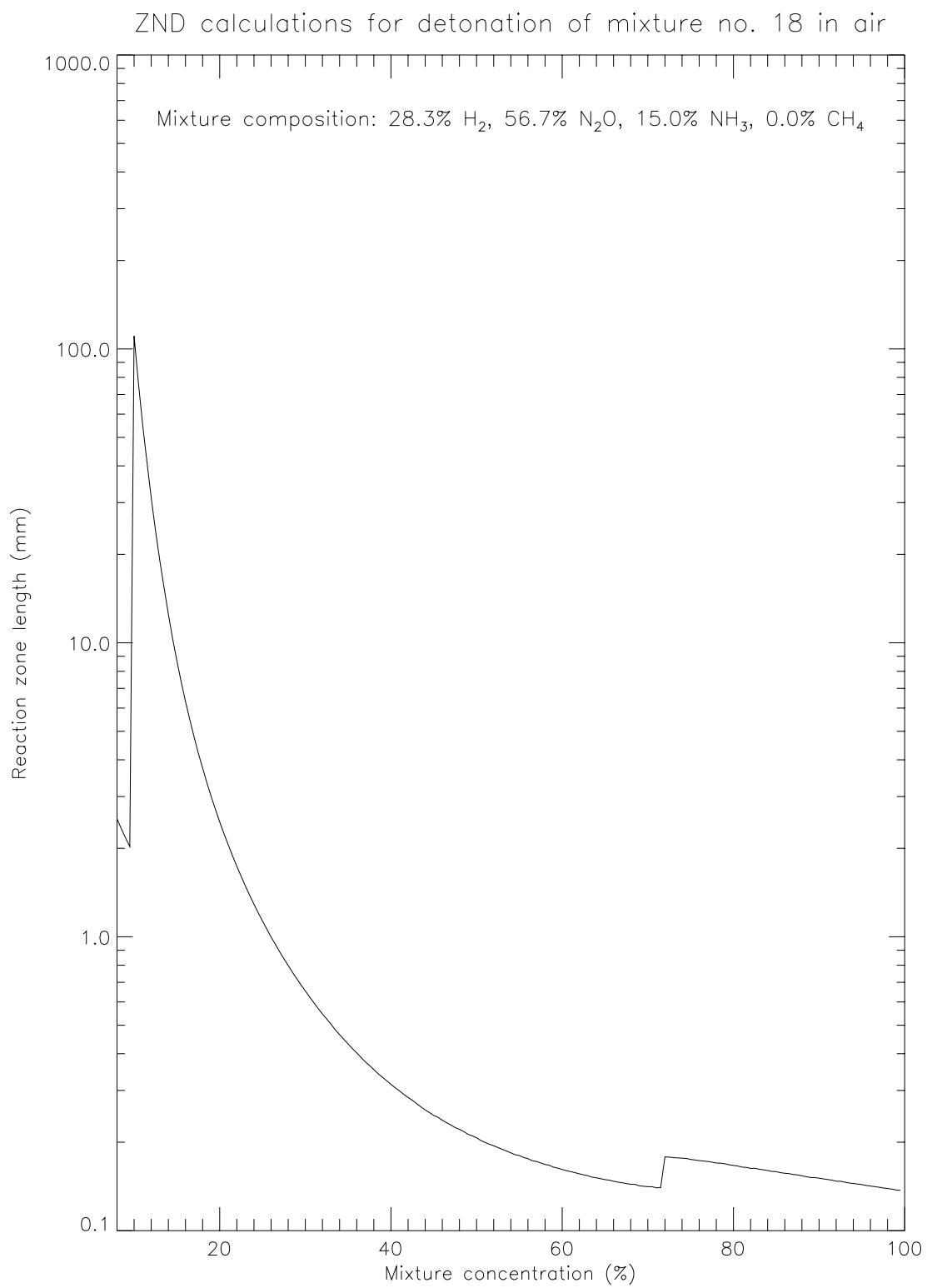


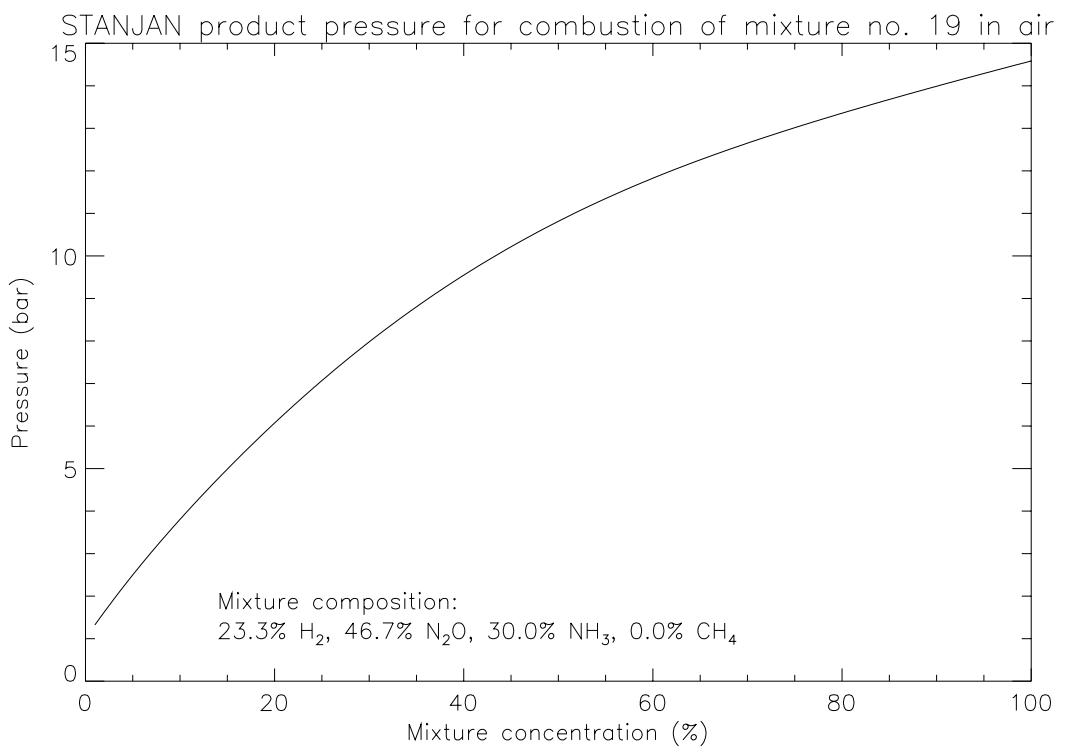
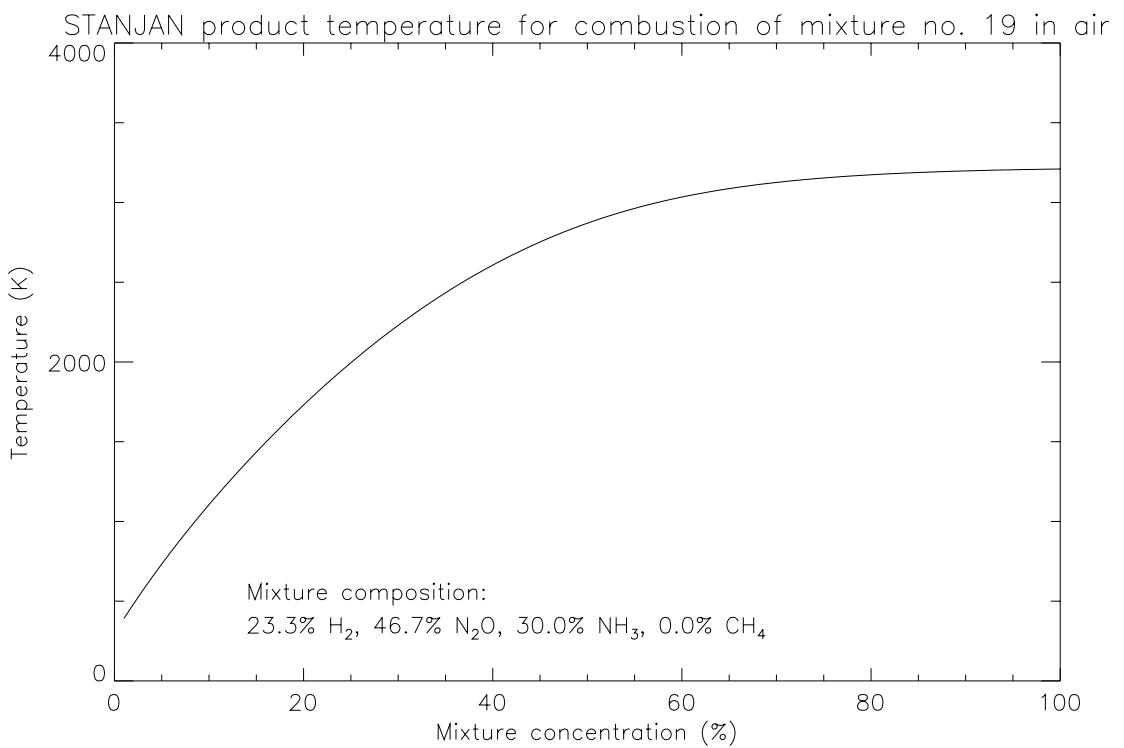




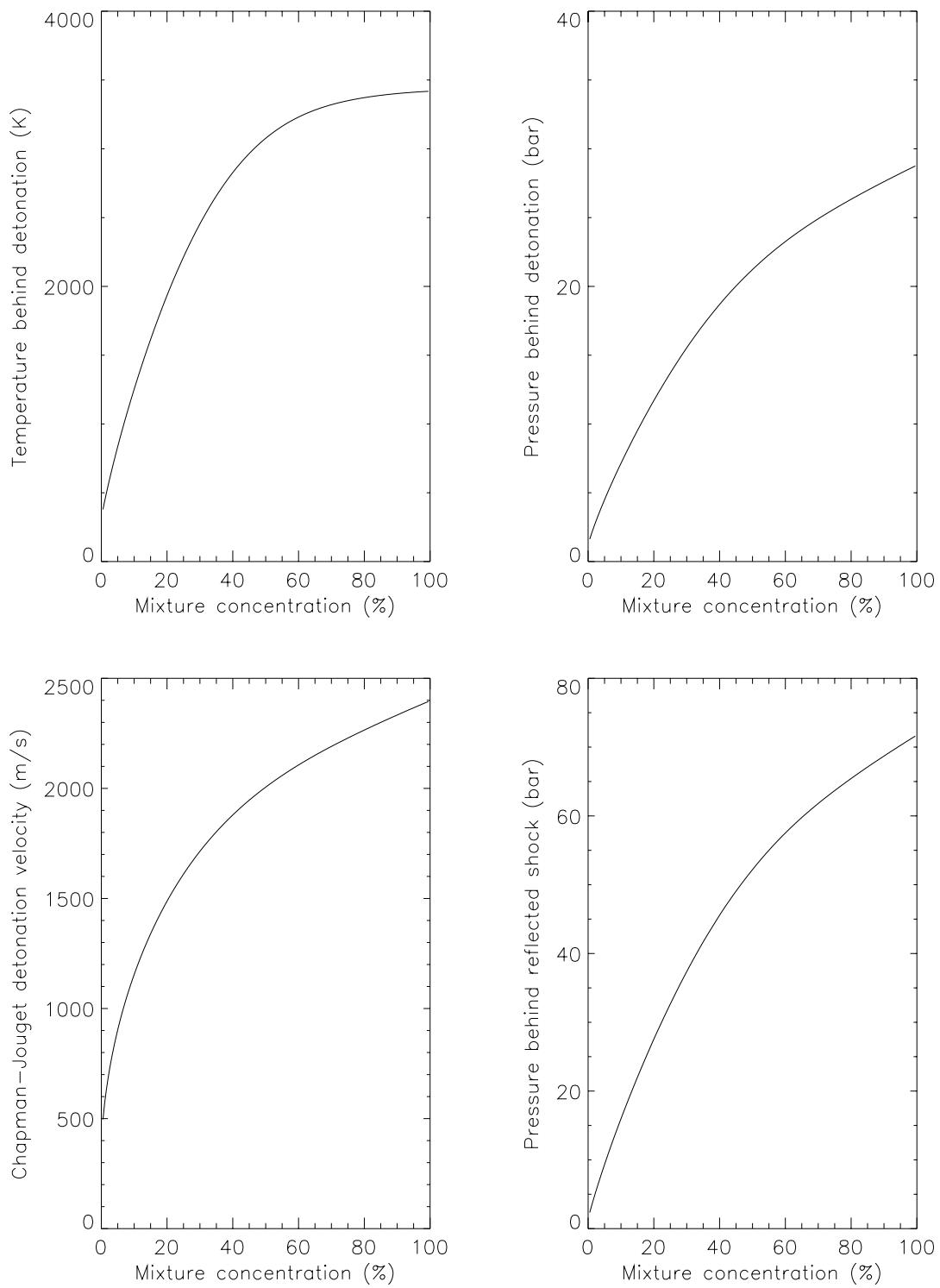
STANJAN calculations for detonation of mixture no. 18 in air
Mixture composition: 28.3% H₂, 56.7% N₂O, 15.0% NH₃, 0.0% CH₄

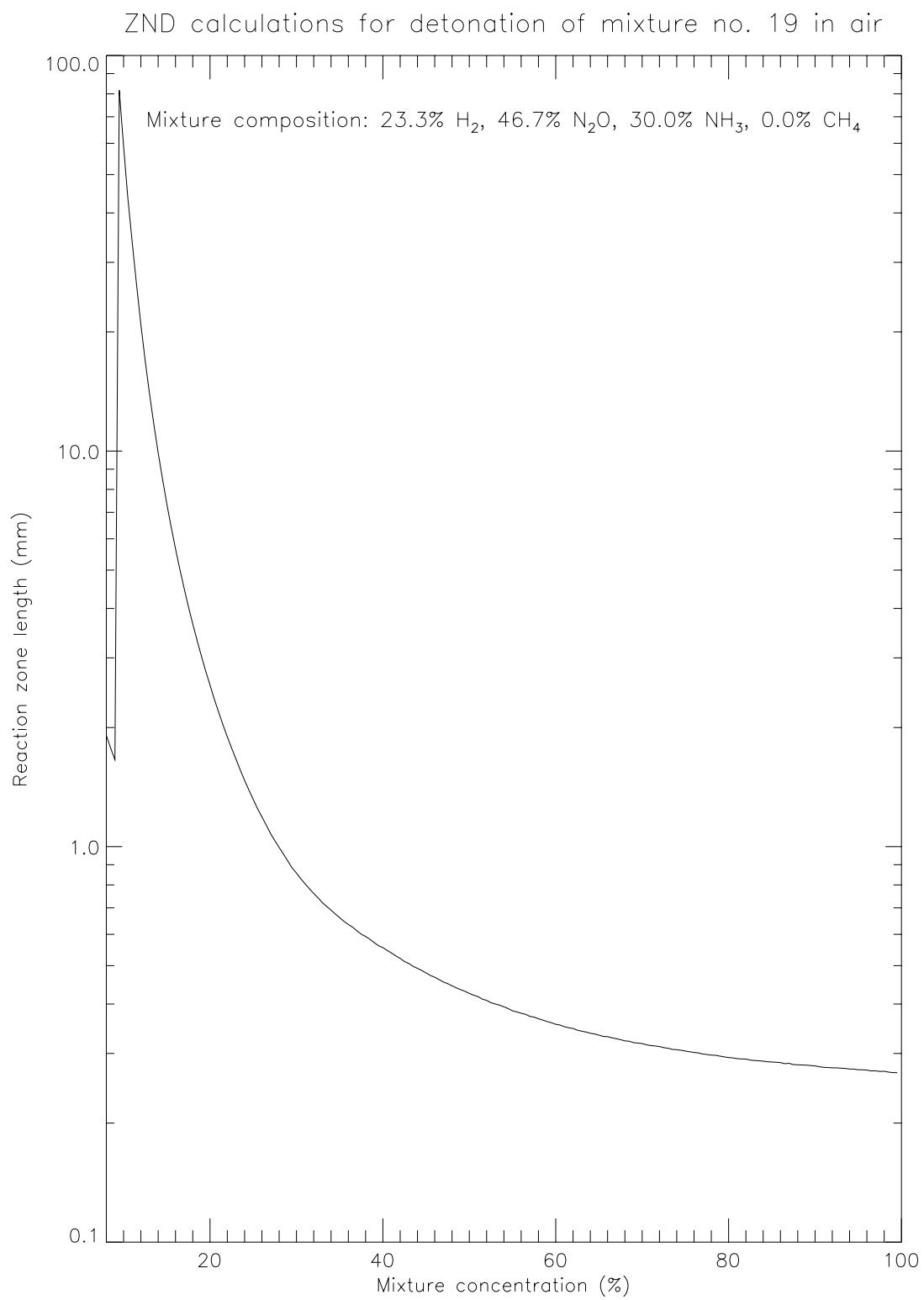


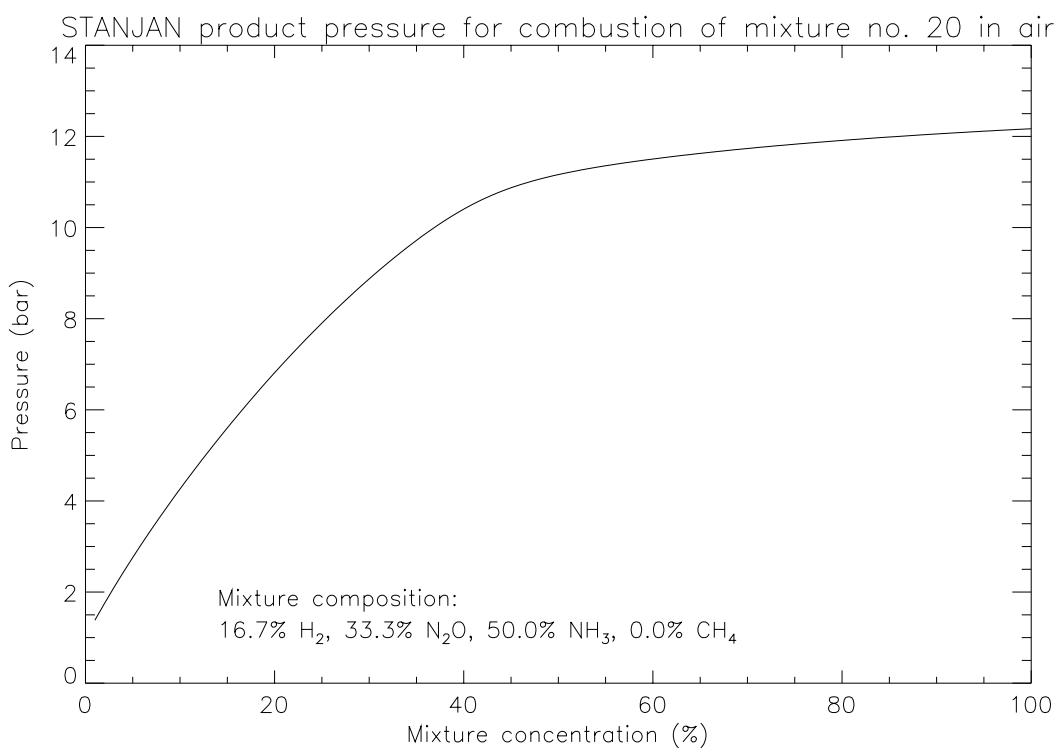
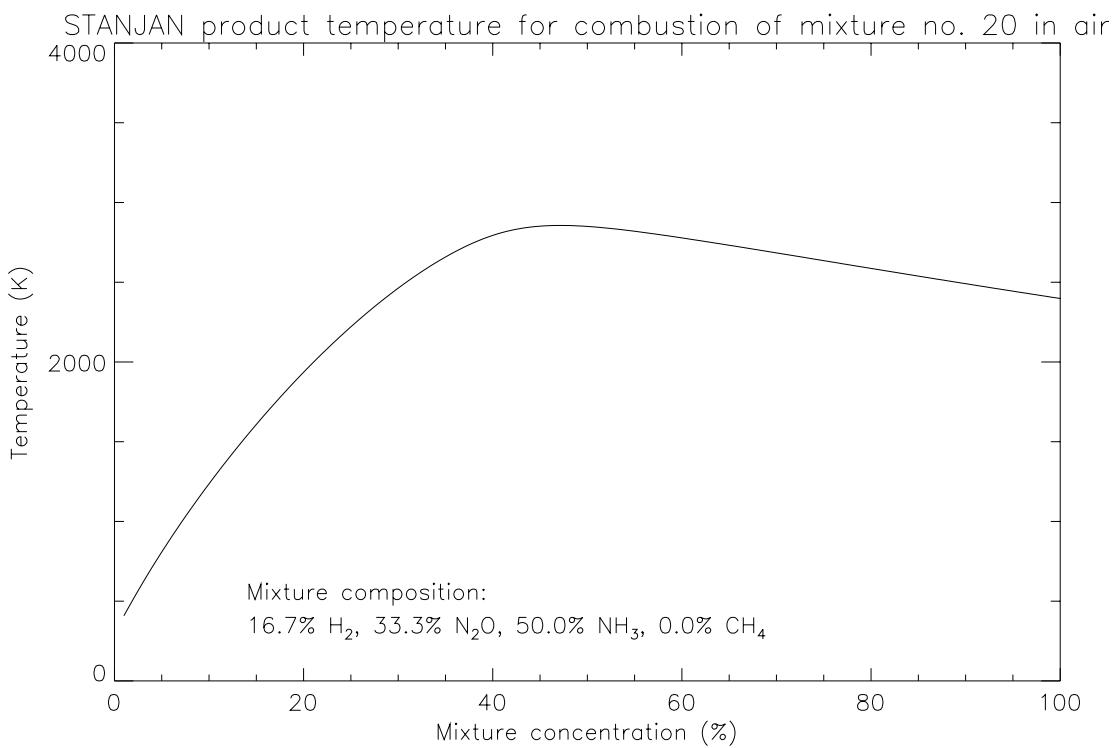




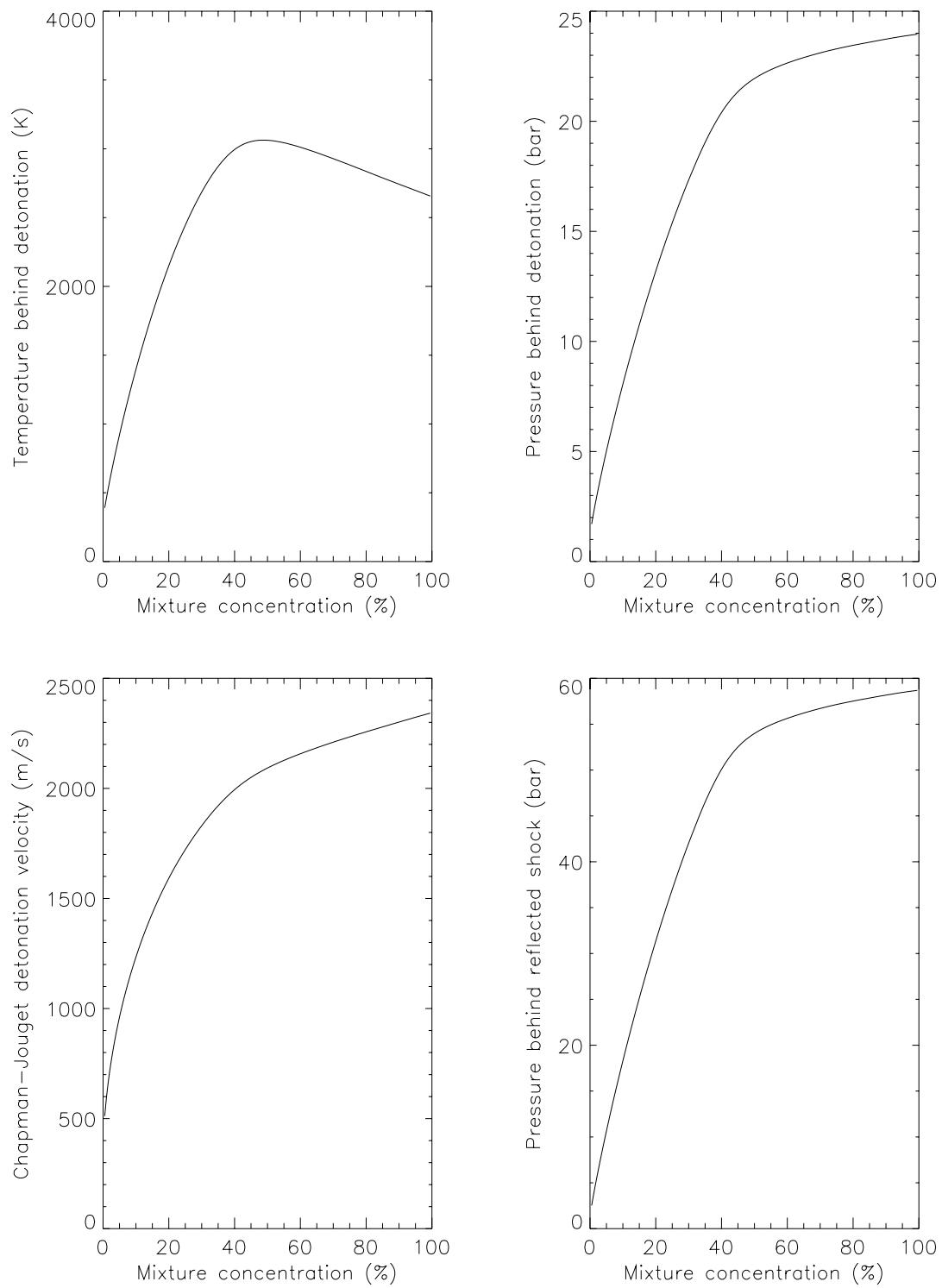
STANJAN calculations for detonation of mixture no. 19 in air
Mixture composition: 23.3% H₂, 46.7% N₂O, 30.0% NH₃, 0.0% CH₄

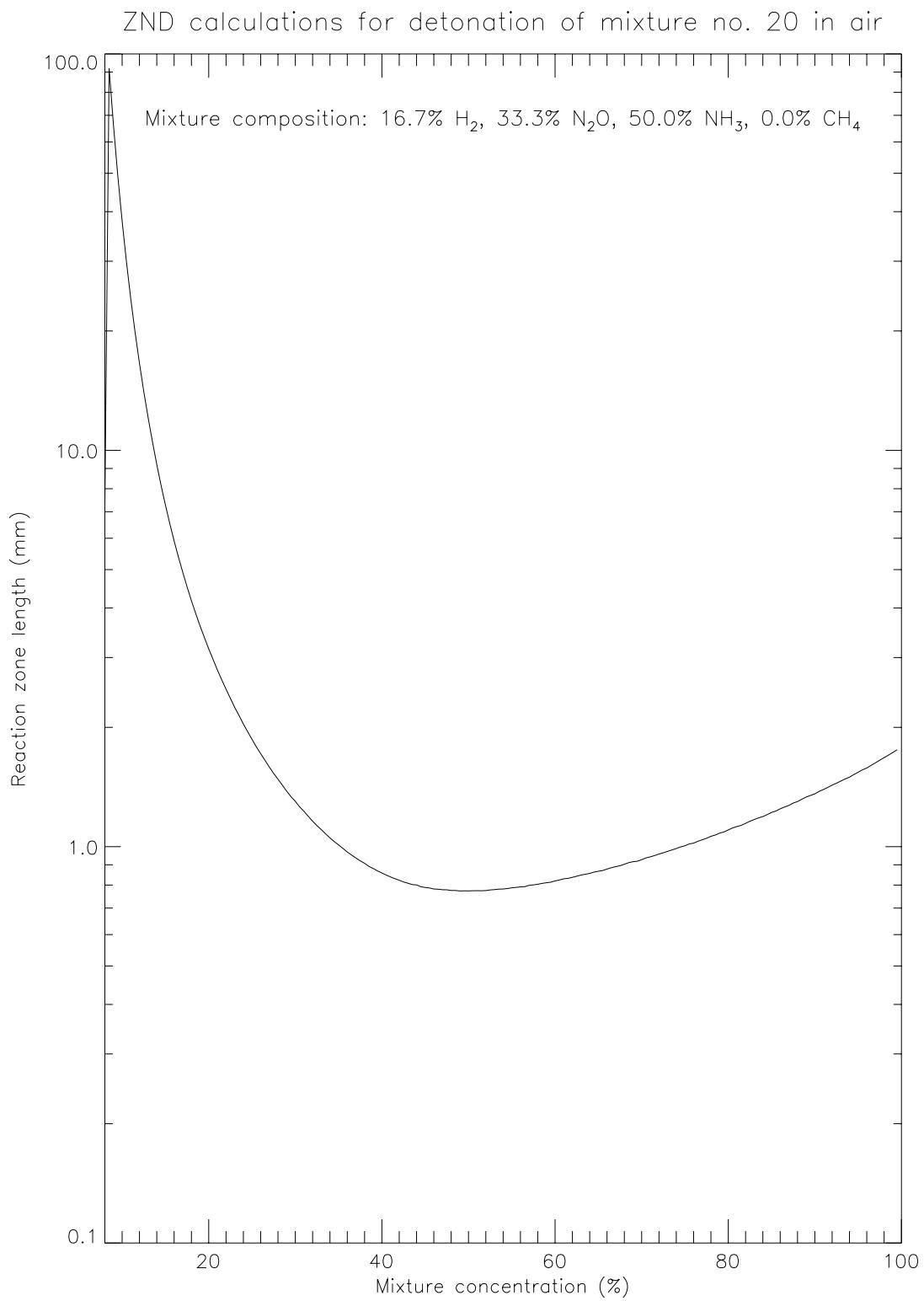


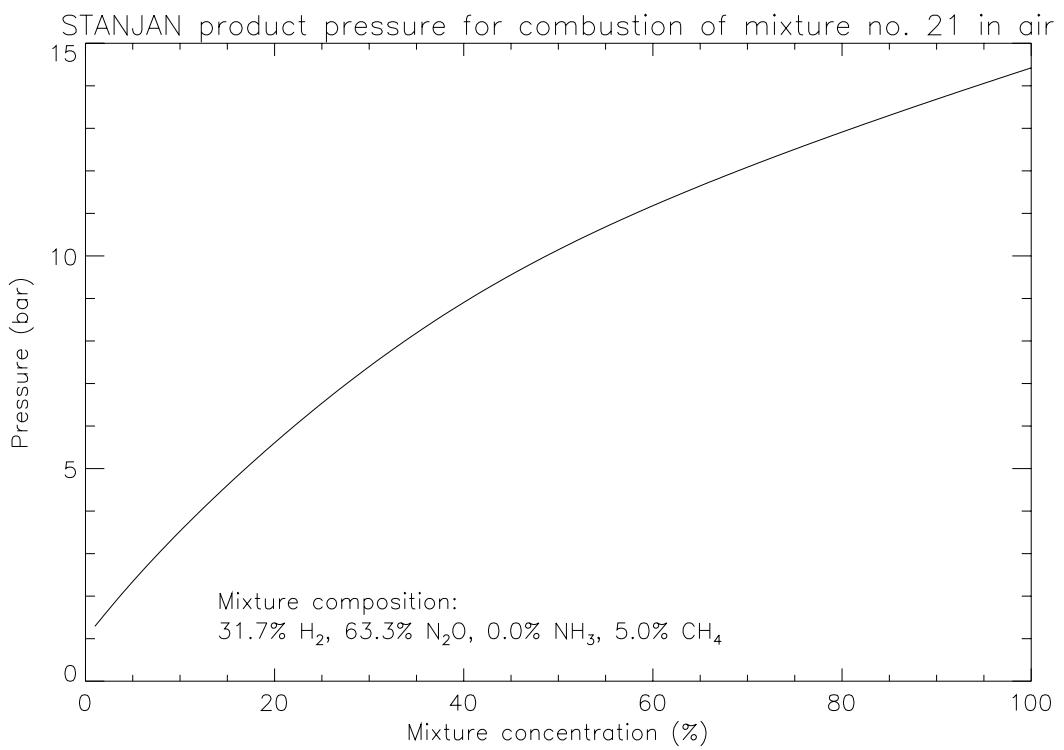
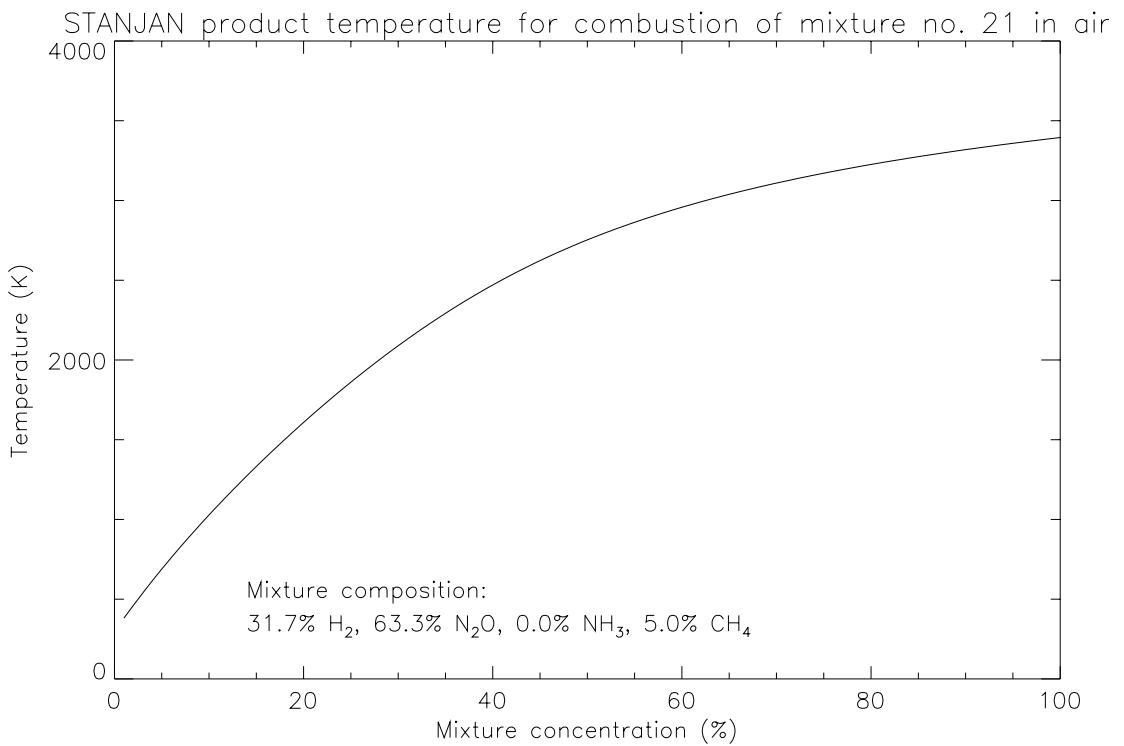




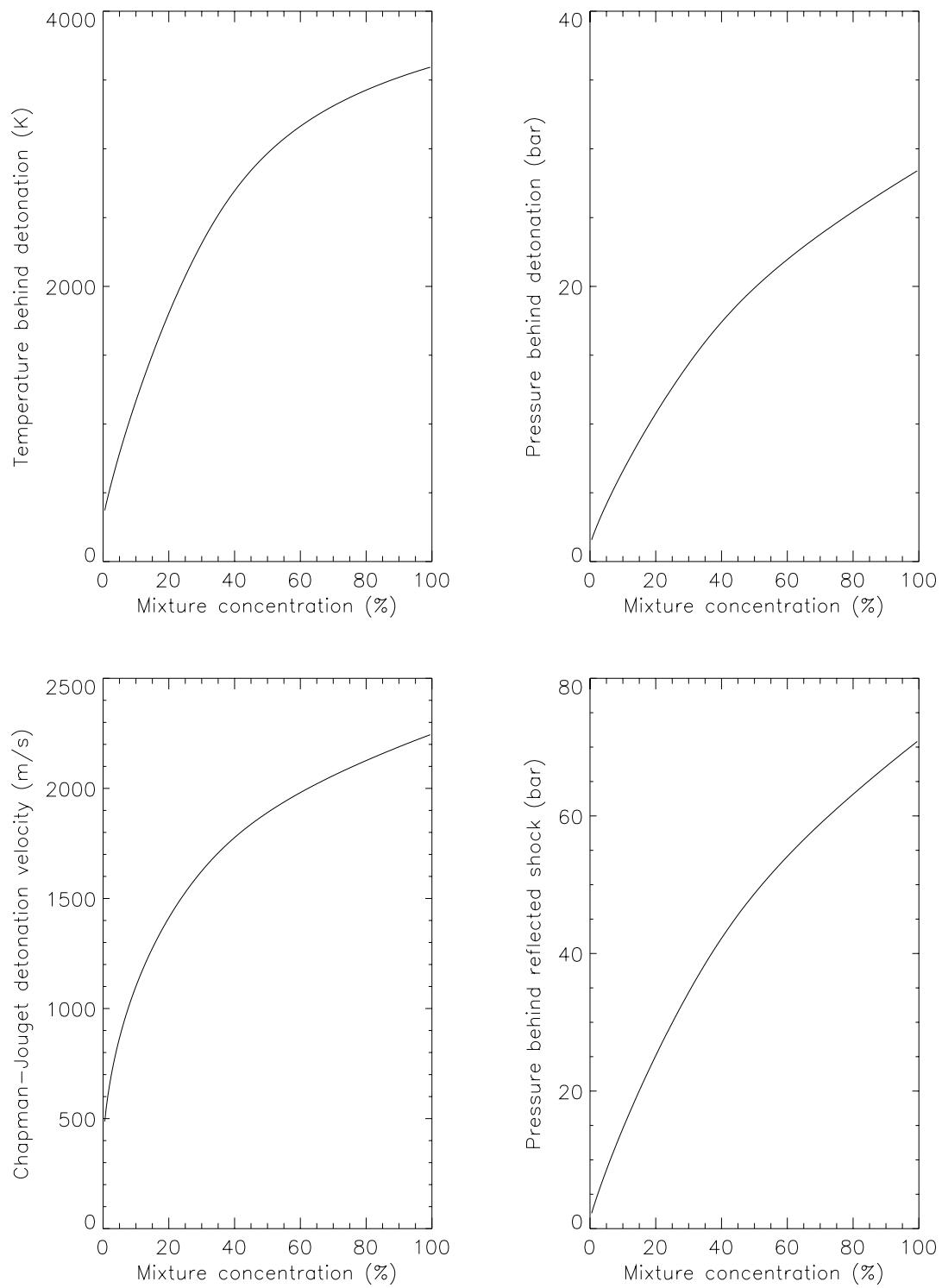
STANJAN calculations for detonation of mixture no. 20 in air
 Mixture composition: 16.7% H₂, 33.3% N₂O, 50.0% NH₃, 0.0% CH₄



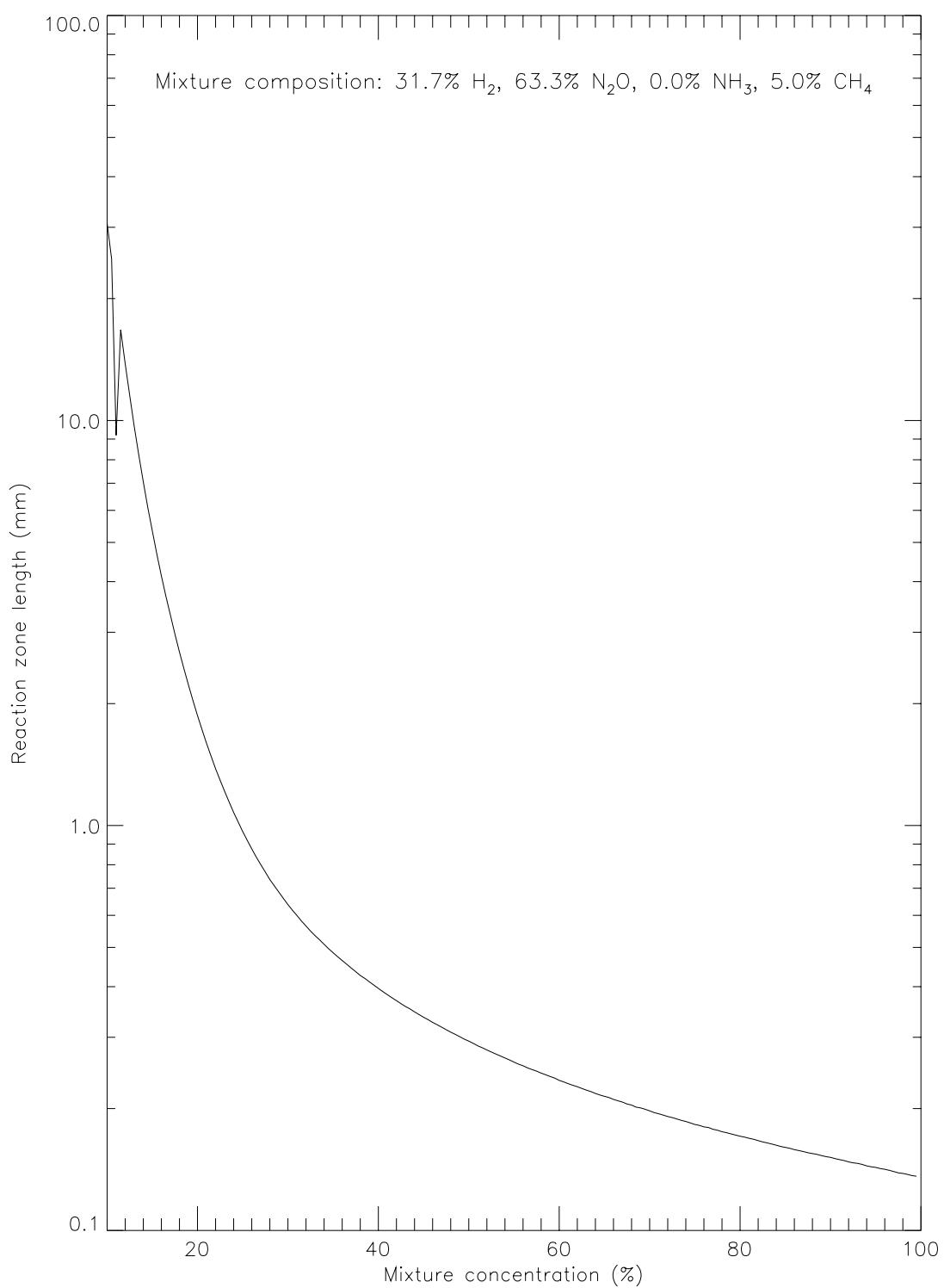


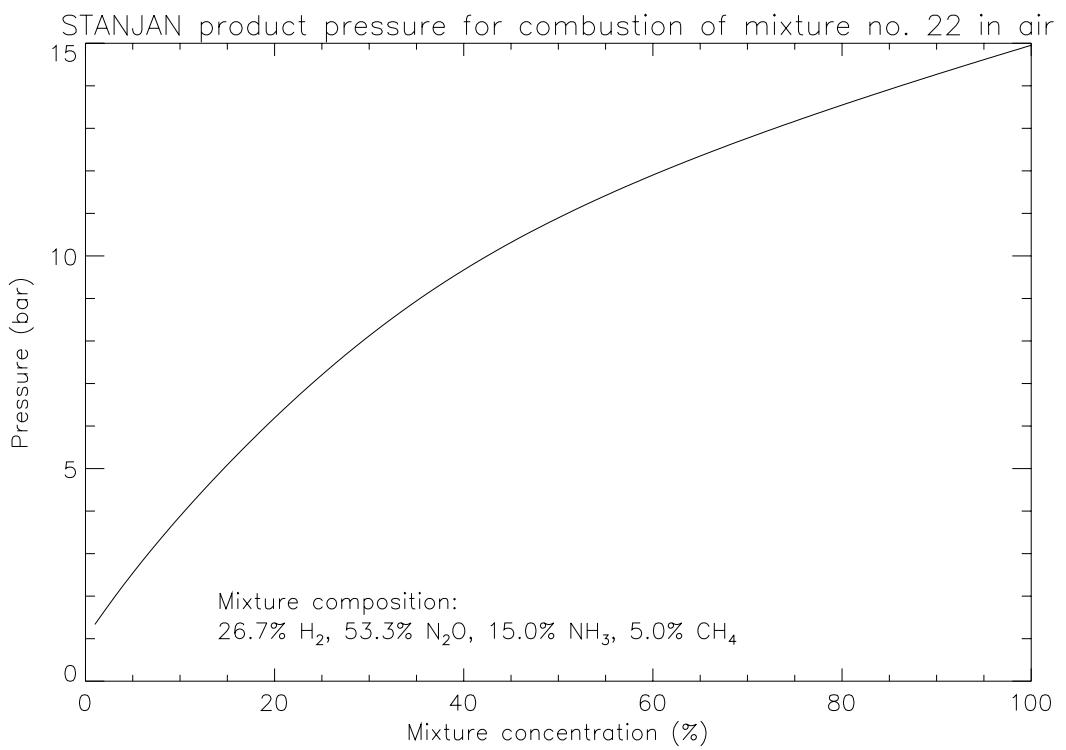
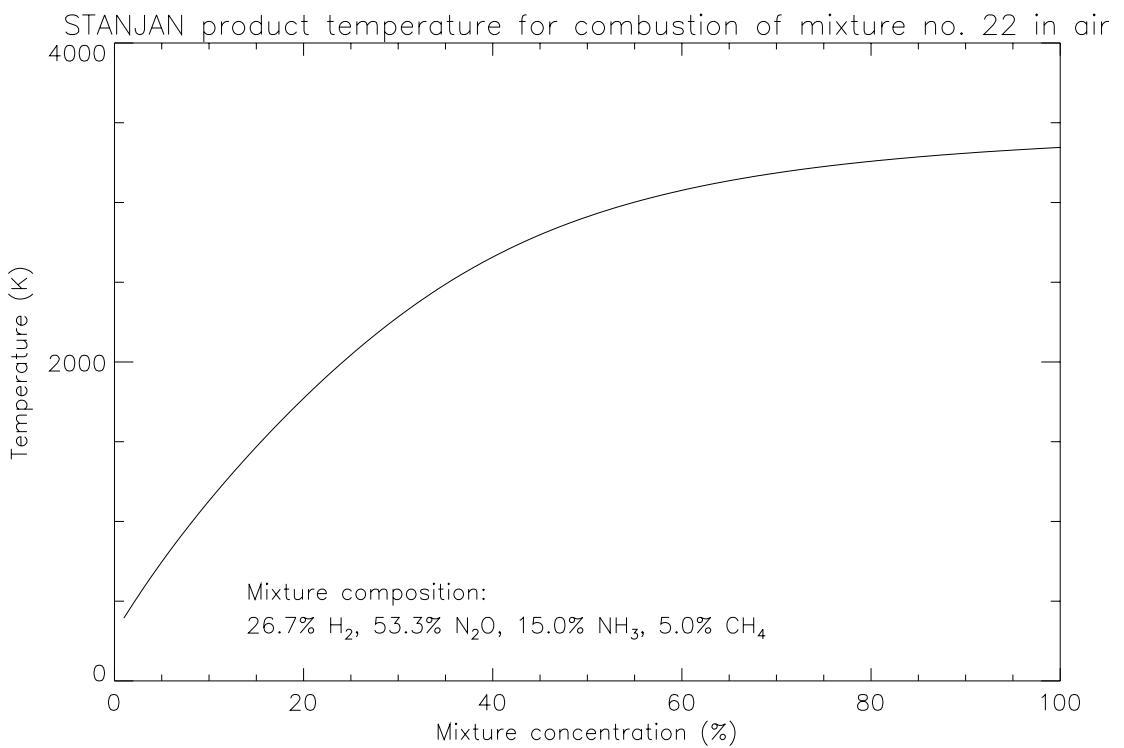


STANJAN calculations for detonation of mixture no. 21 in air
Mixture composition: 31.7% H₂, 63.3% N₂O, 0.0% NH₃, 5.0% CH₄

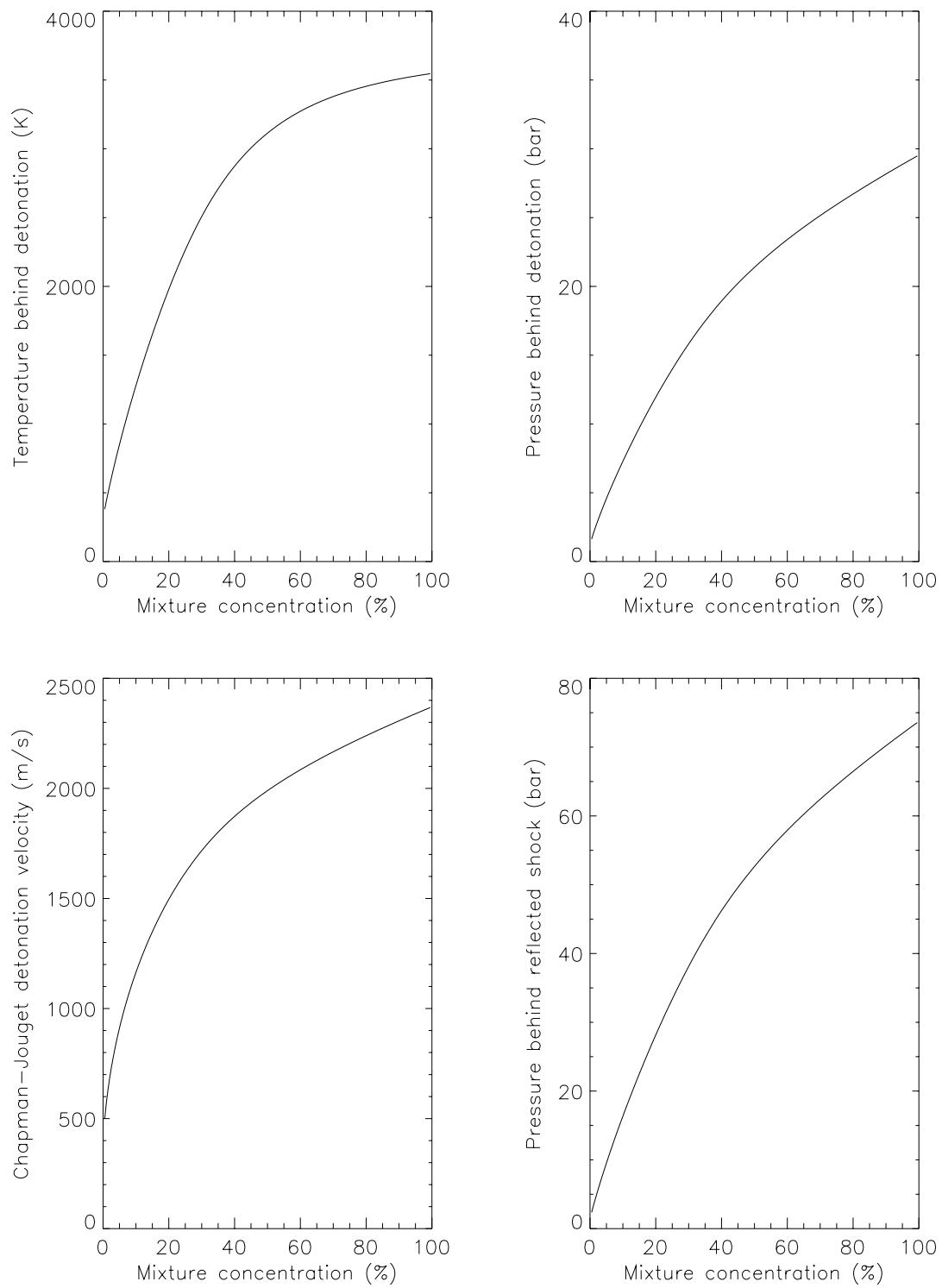


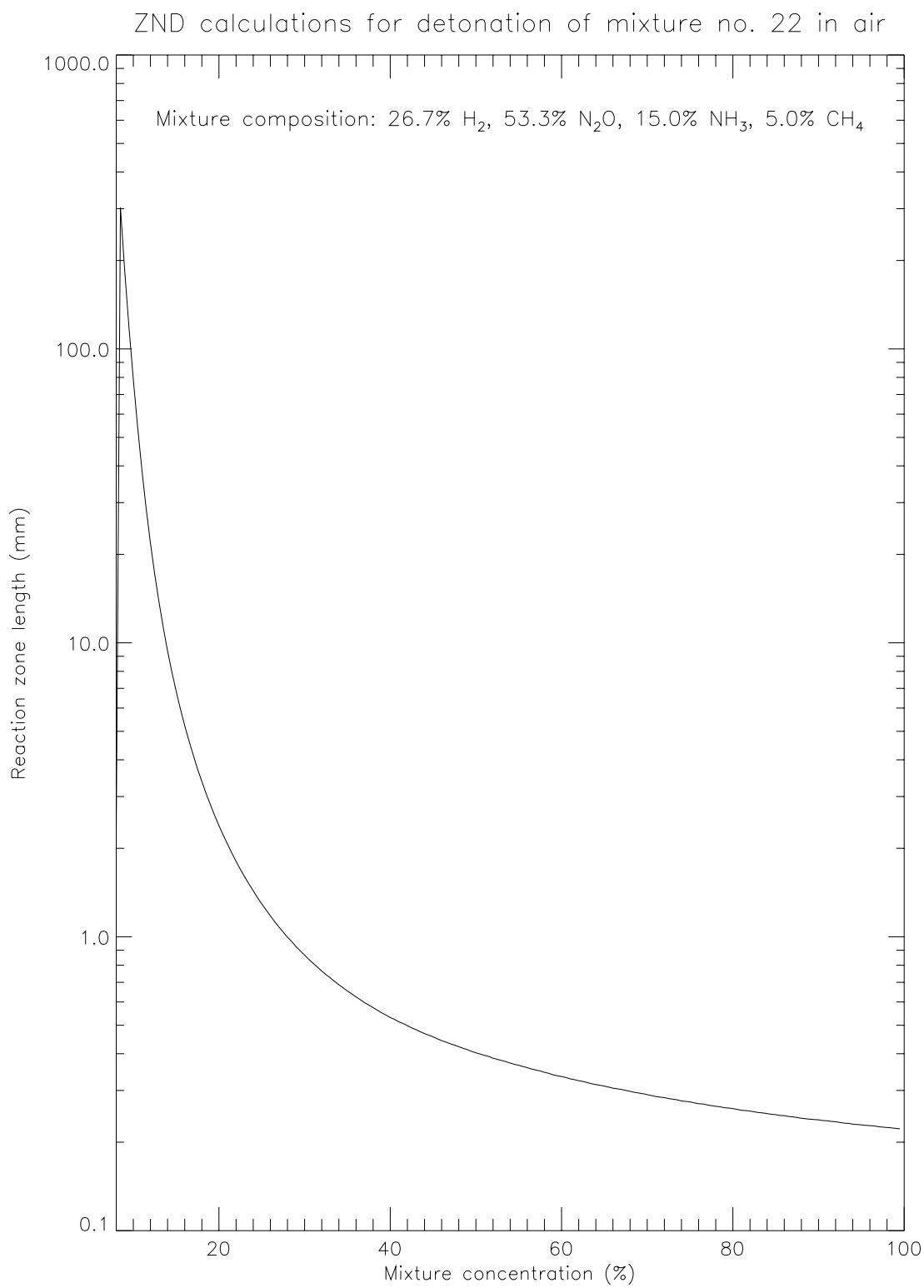
ZND calculations for detonation of mixture no. 21 in air

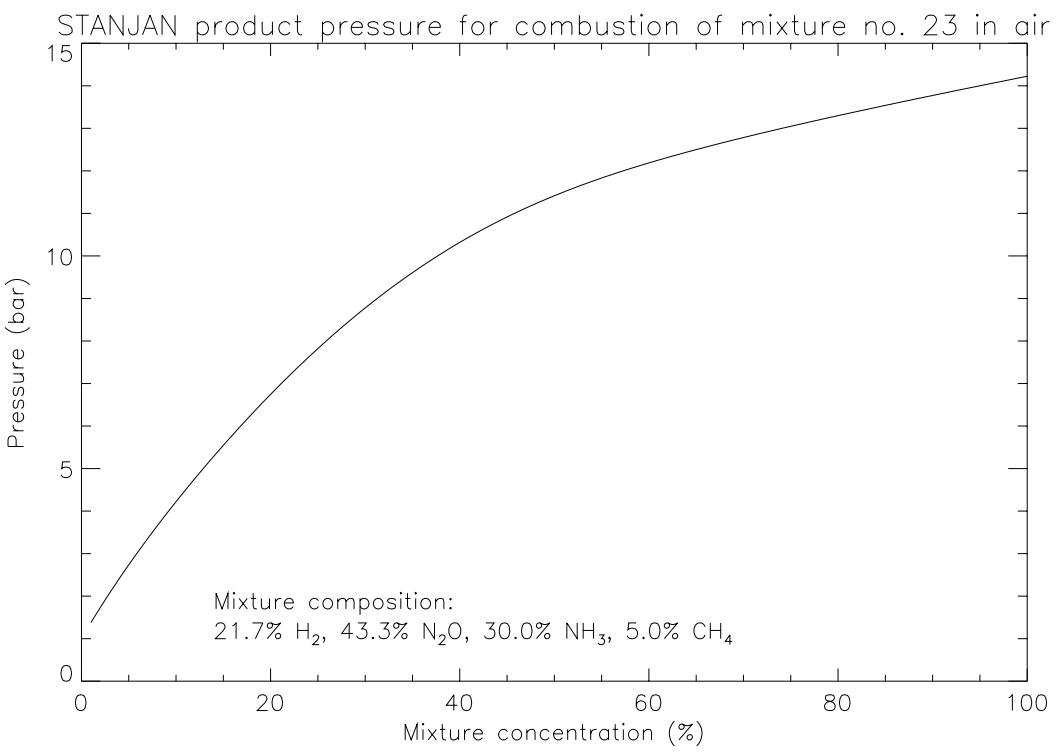
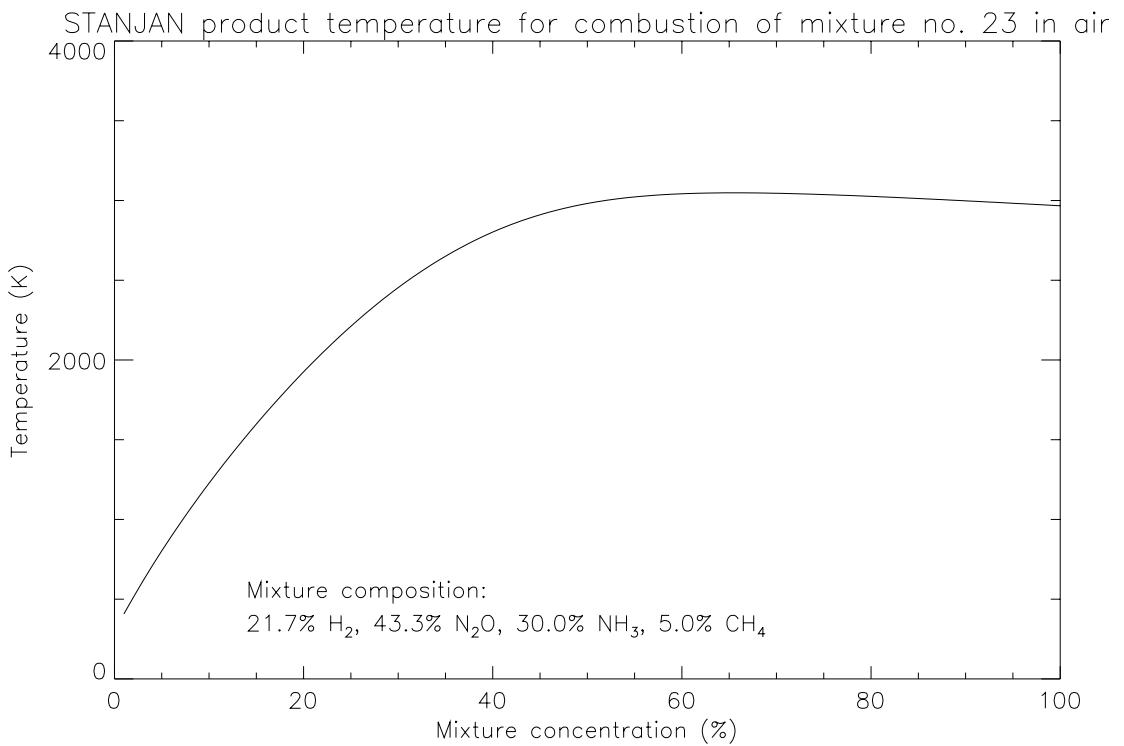




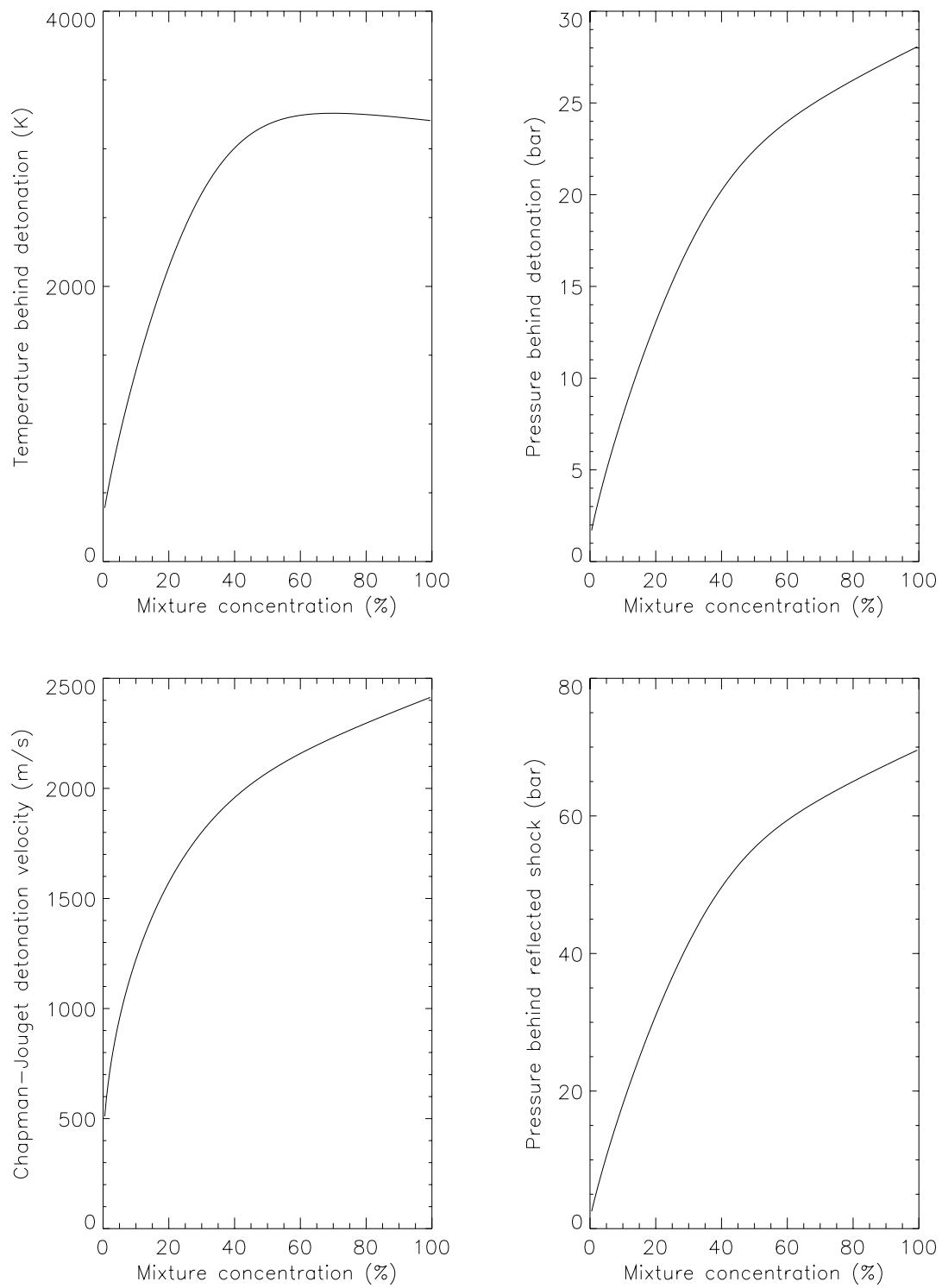
STANJAN calculations for detonation of mixture no. 22 in air
Mixture composition: 26.7% H₂, 53.3% N₂O, 15.0% NH₃, 5.0% CH₄

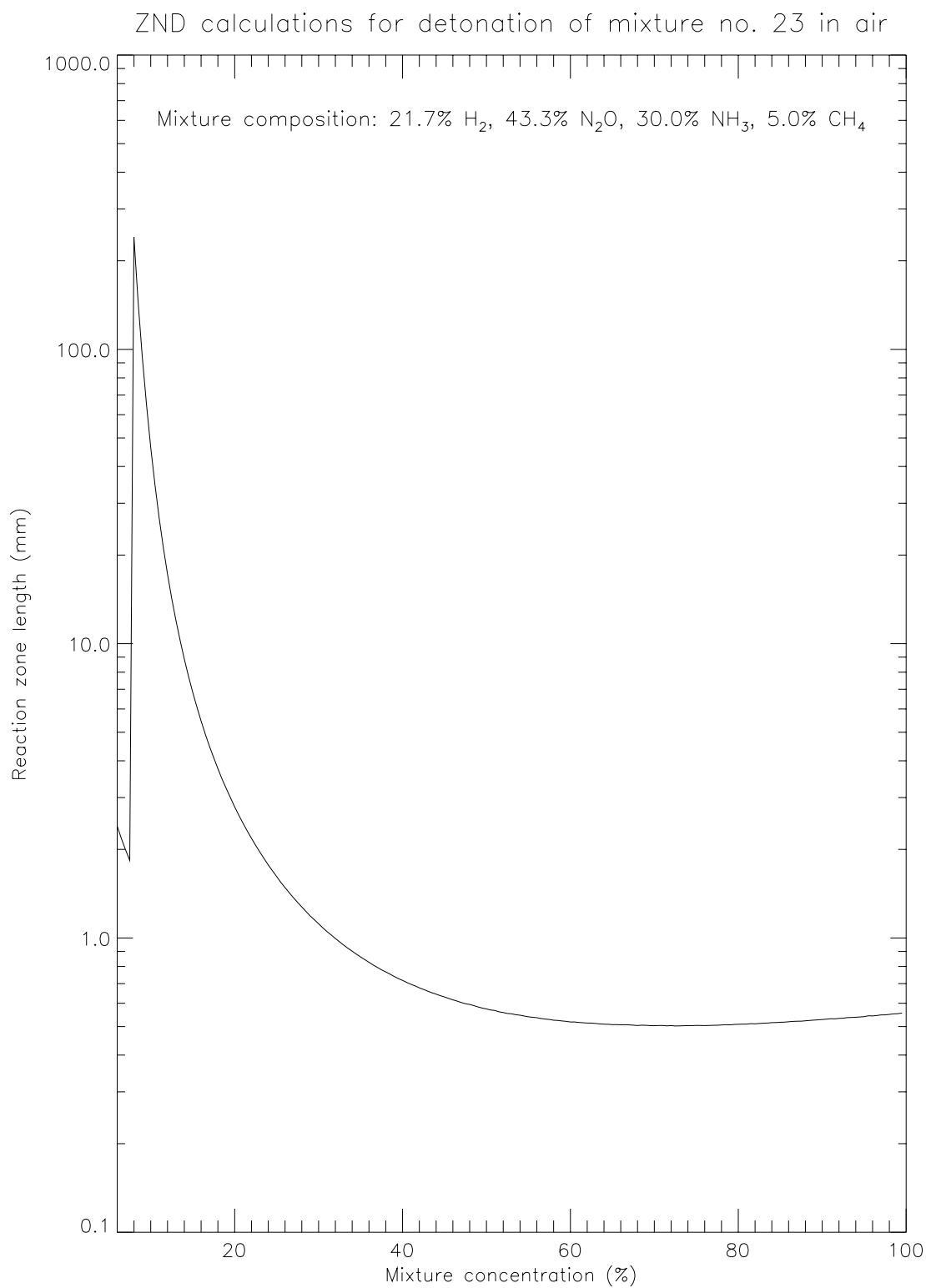


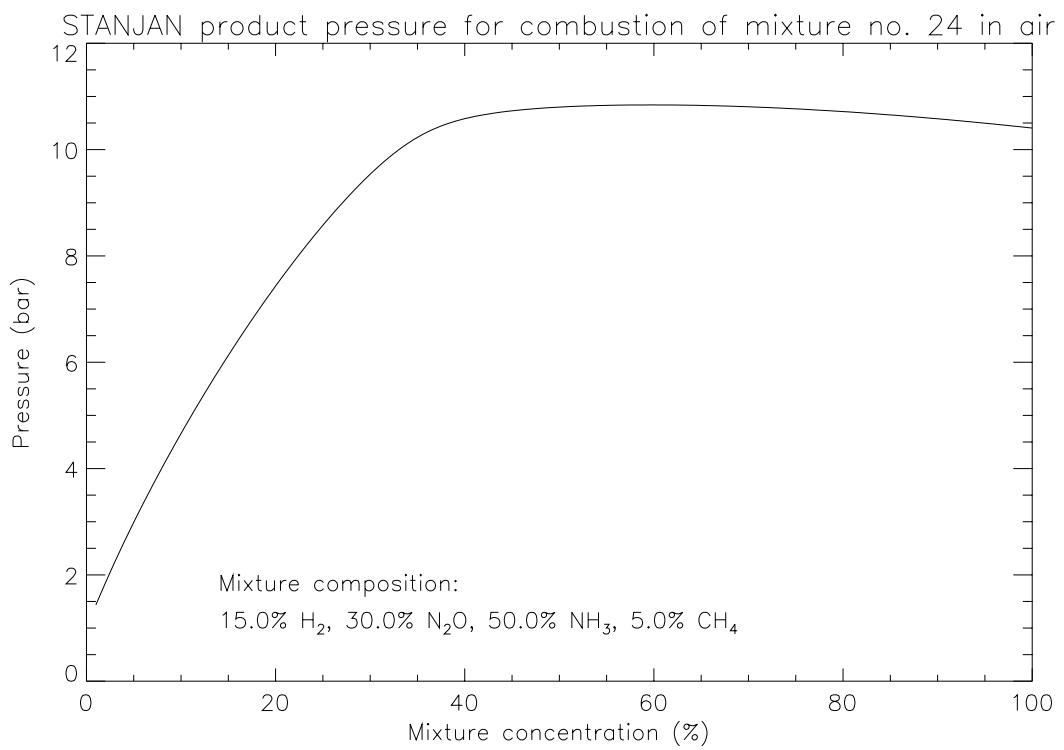
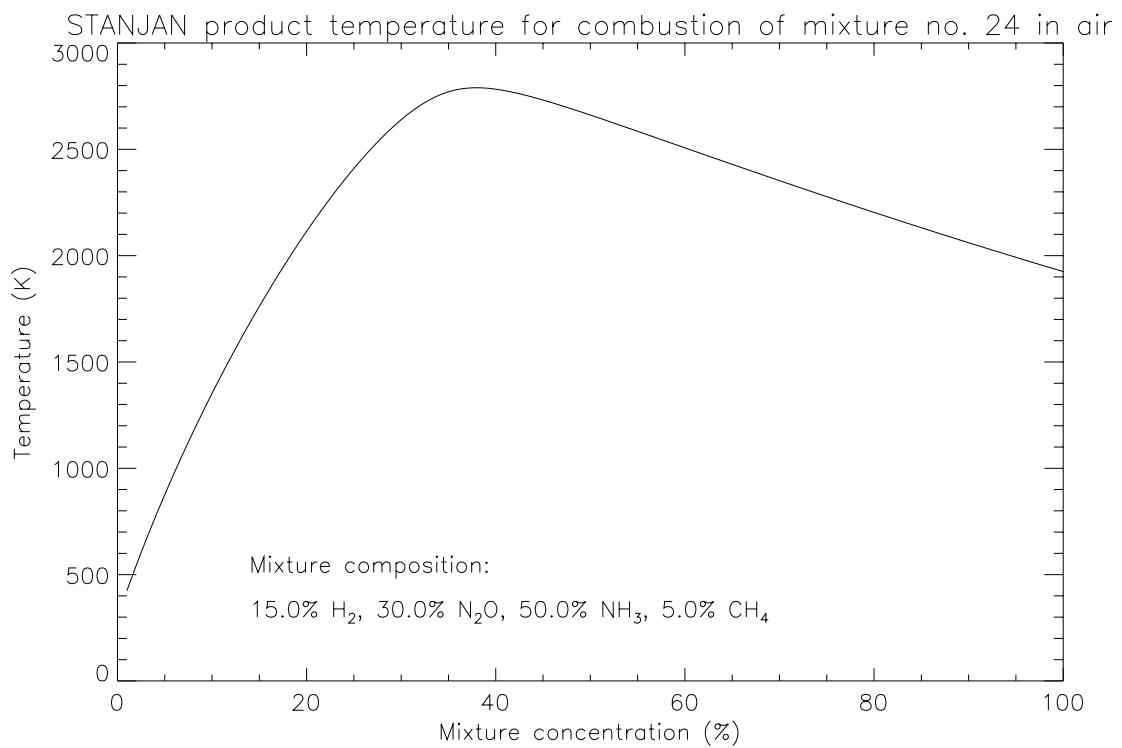




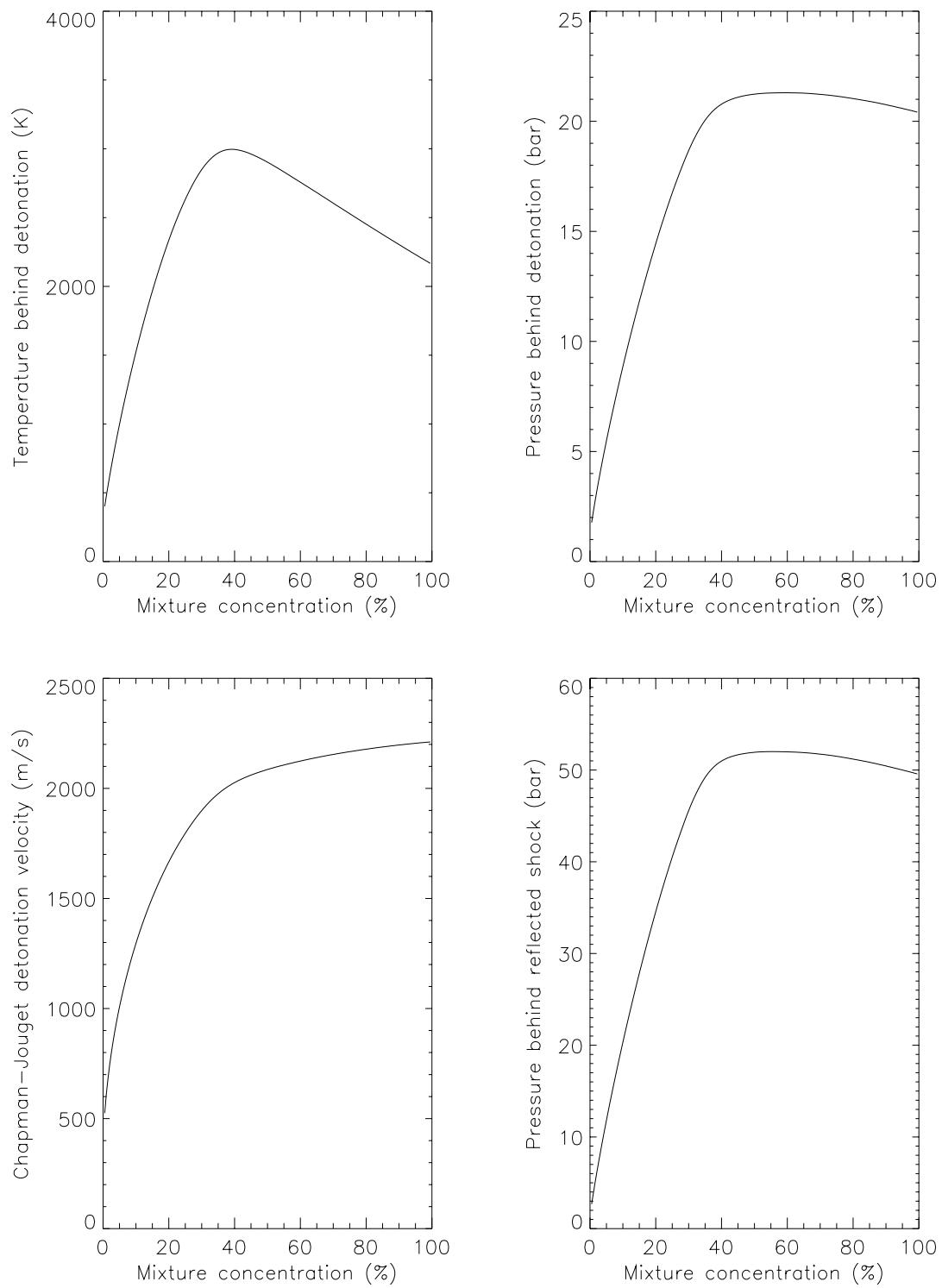
STANJAN calculations for detonation of mixture no. 23 in air
Mixture composition: 21.7% H₂, 43.3% N₂O, 30.0% NH₃, 5.0% CH₄

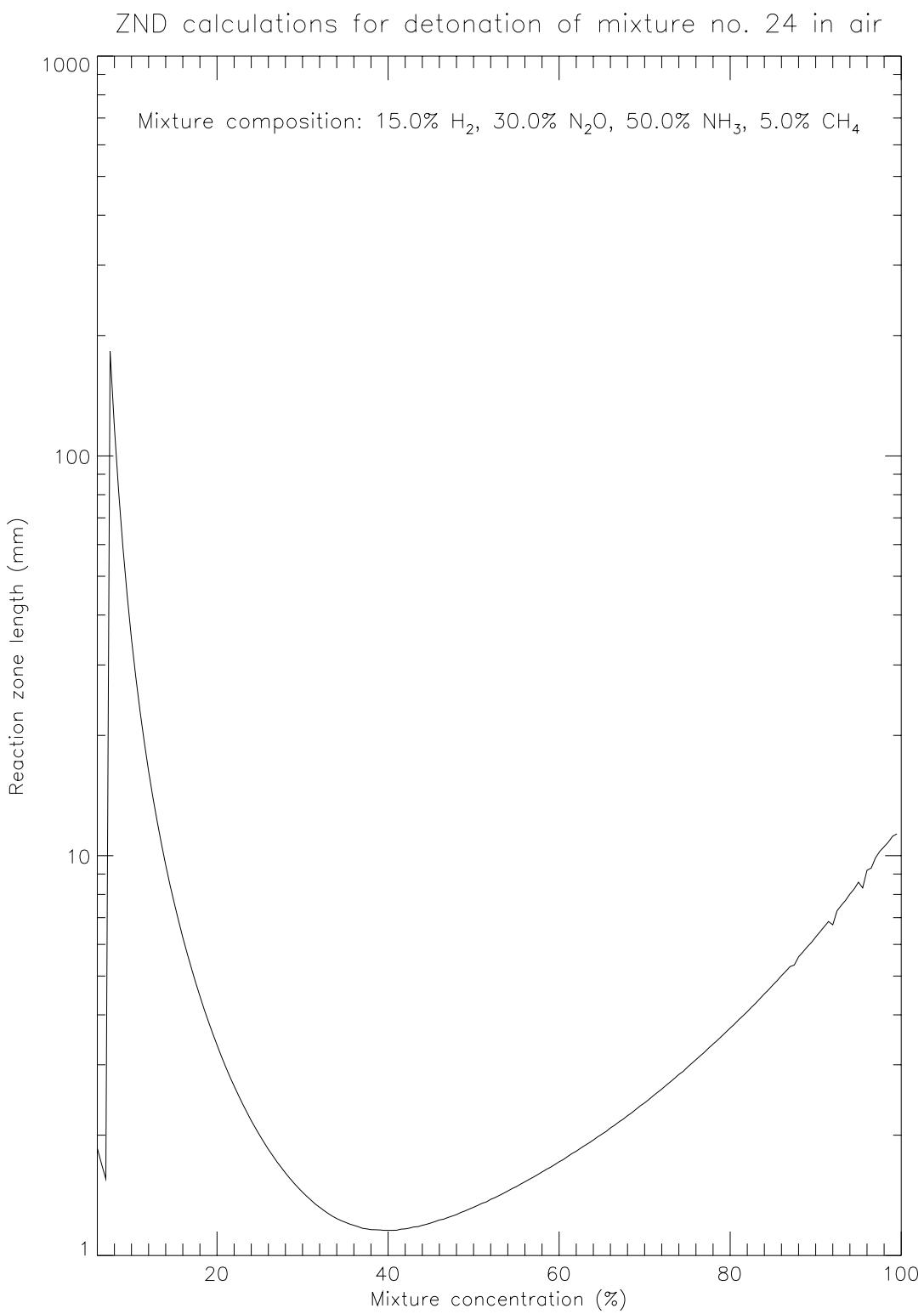


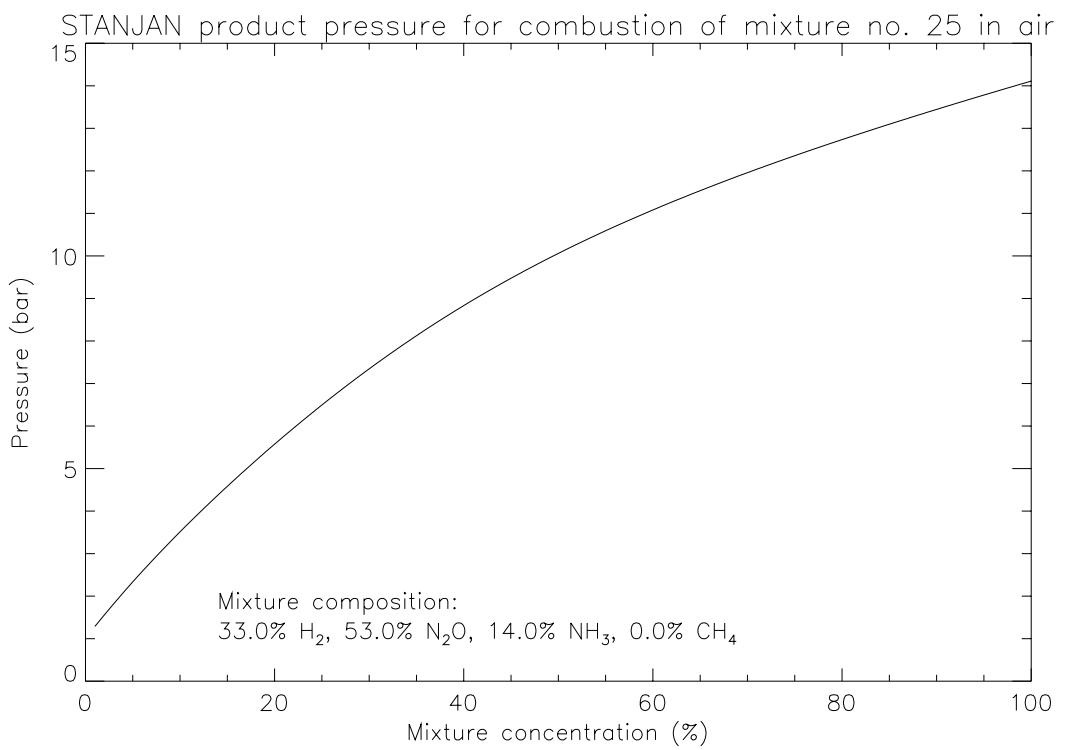
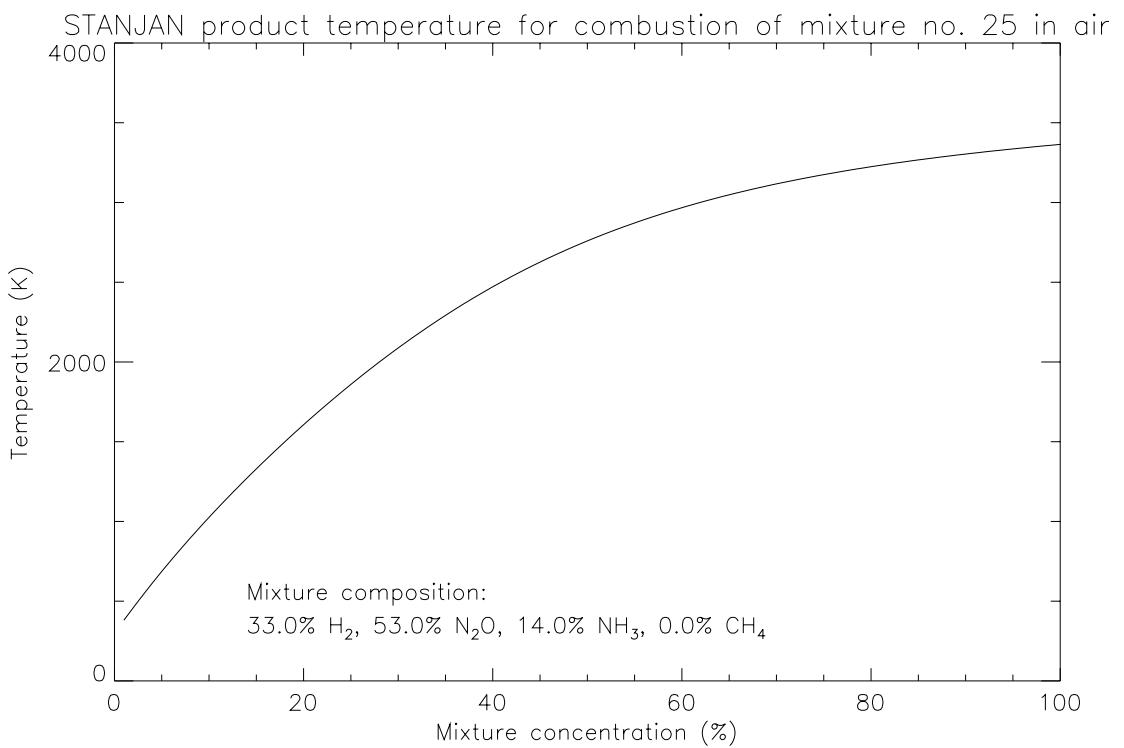




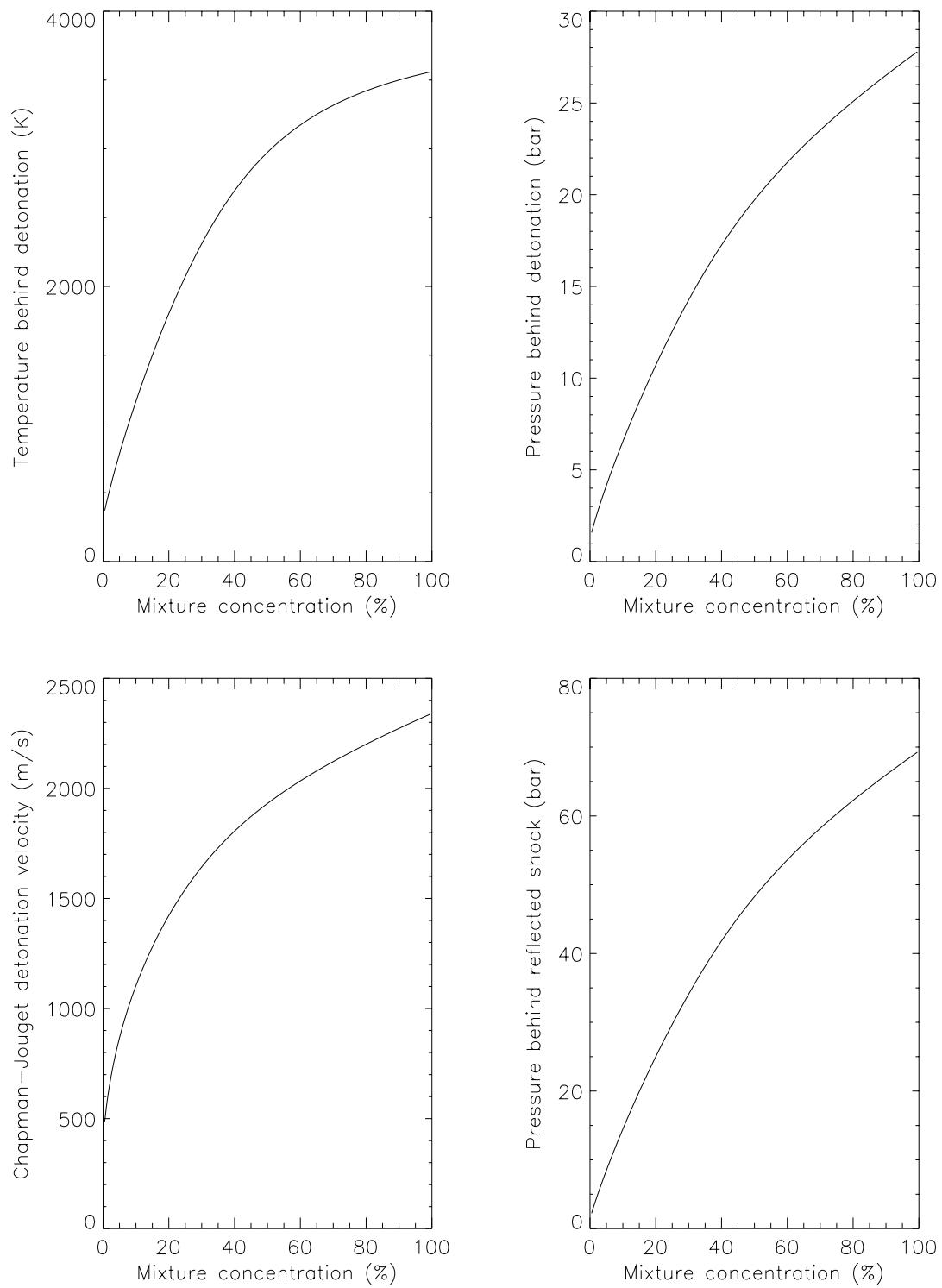
STANJAN calculations for detonation of mixture no. 24 in air
 Mixture composition: 15.0% H₂, 30.0% N₂O, 50.0% NH₃, 5.0% CH₄

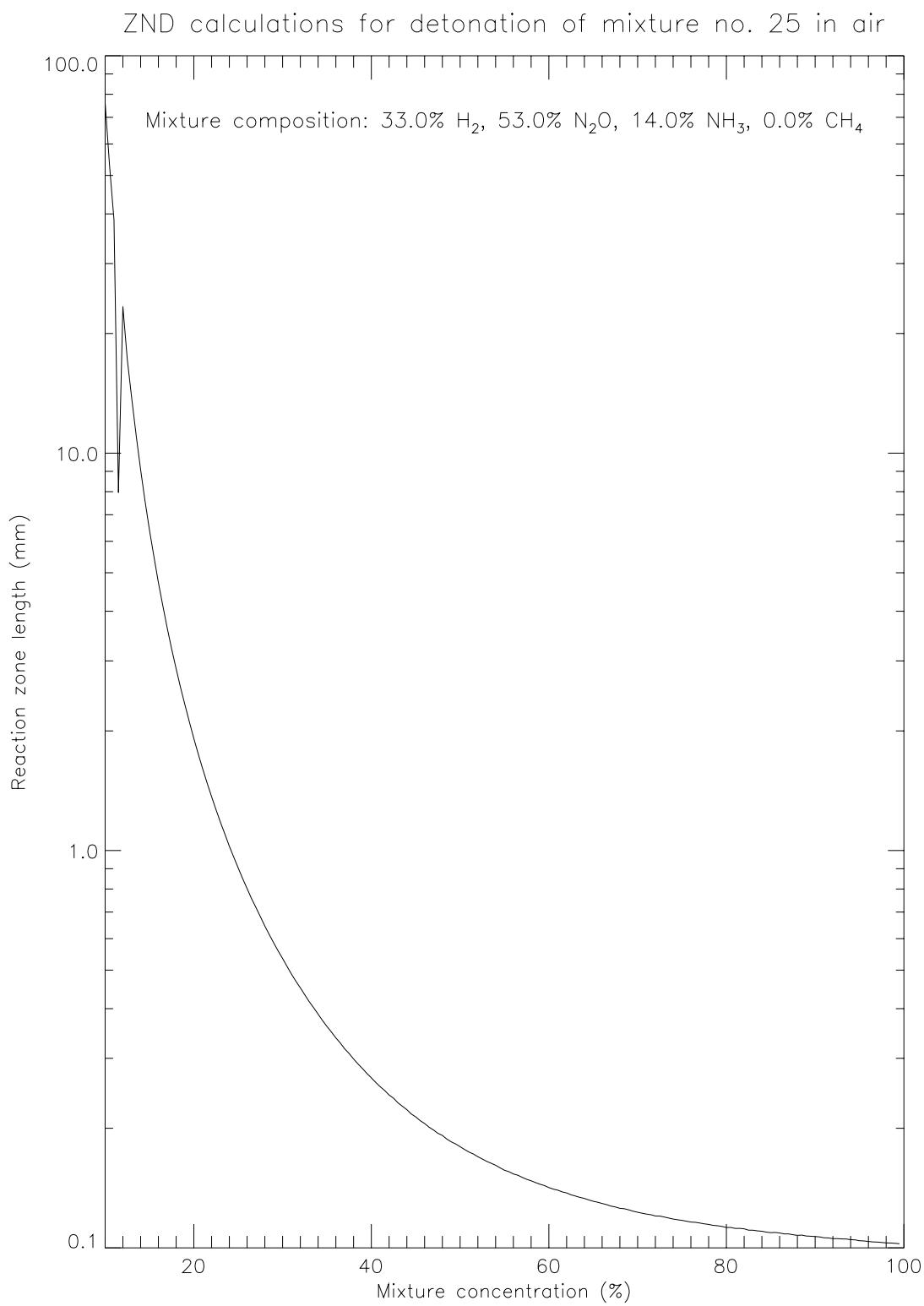


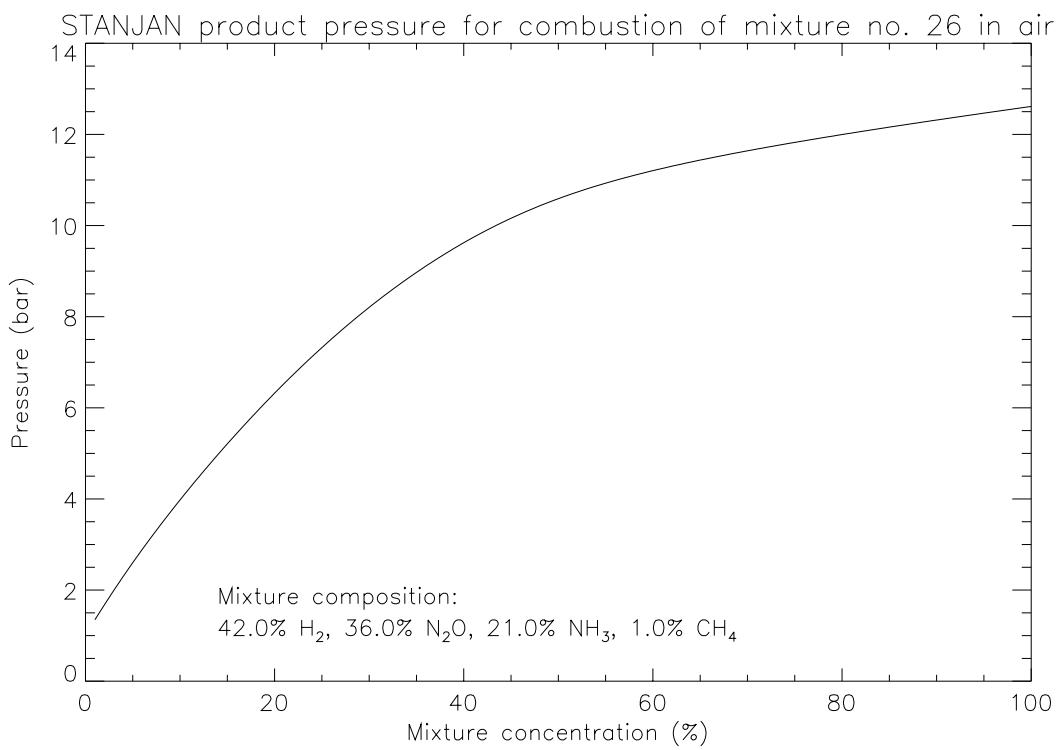
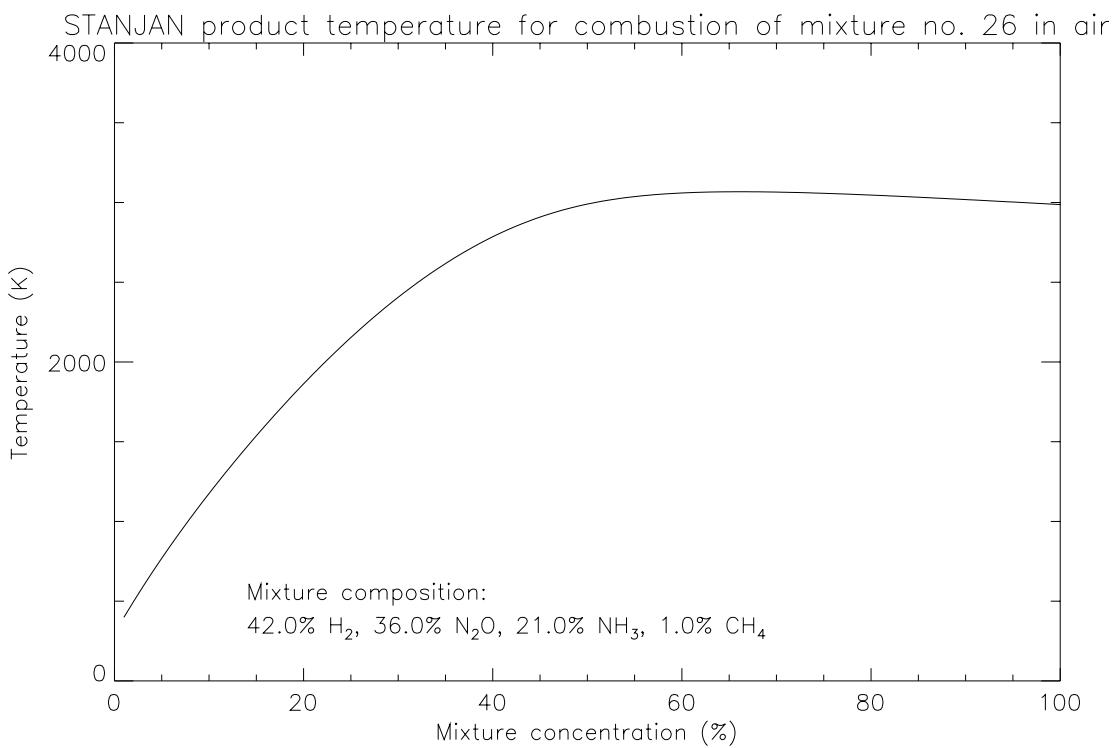




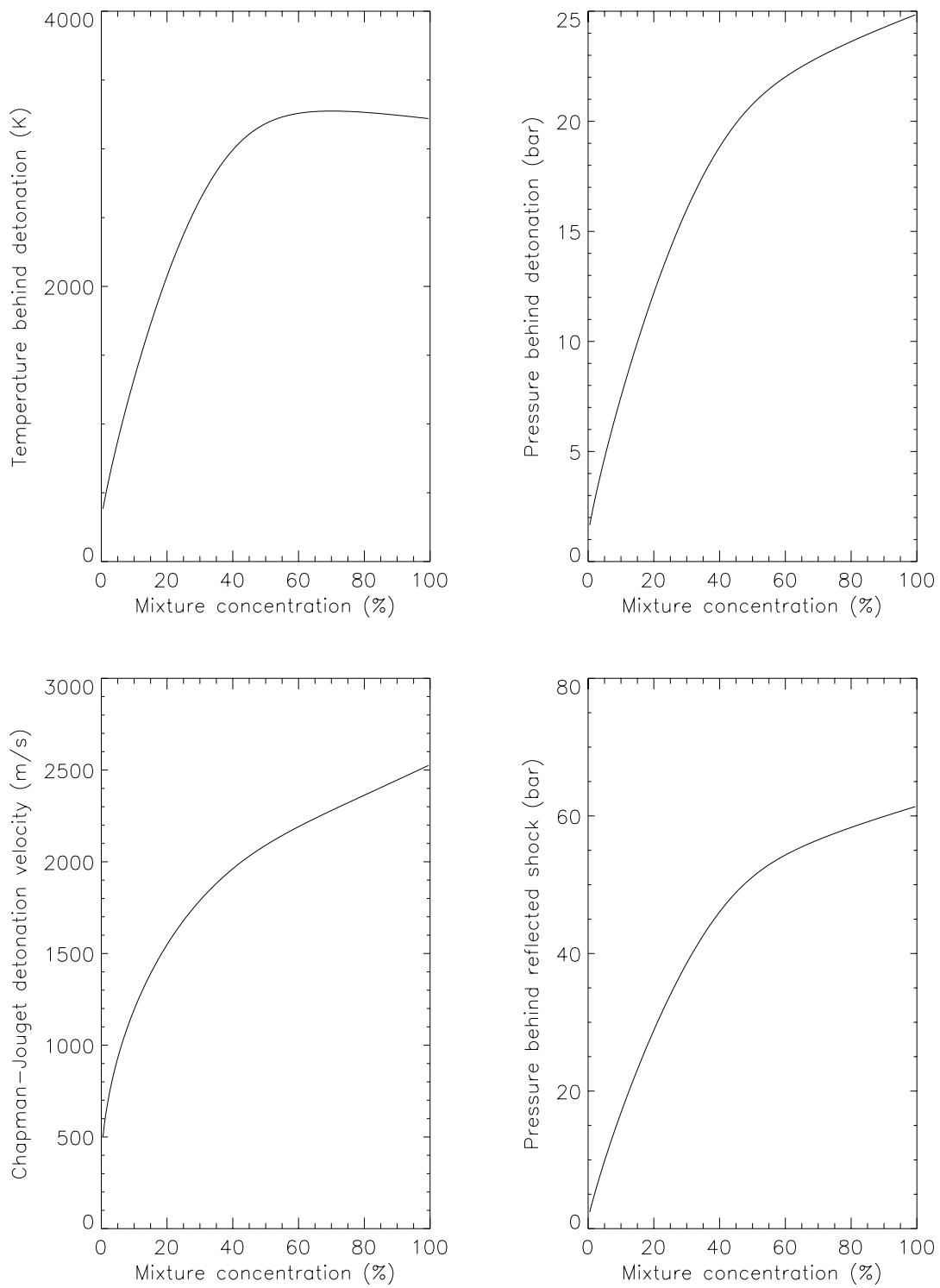
STANJAN calculations for detonation of mixture no. 25 in air
Mixture composition: 33.0% H₂, 53.0% N₂O, 14.0% NH₃, 0.0% CH₄

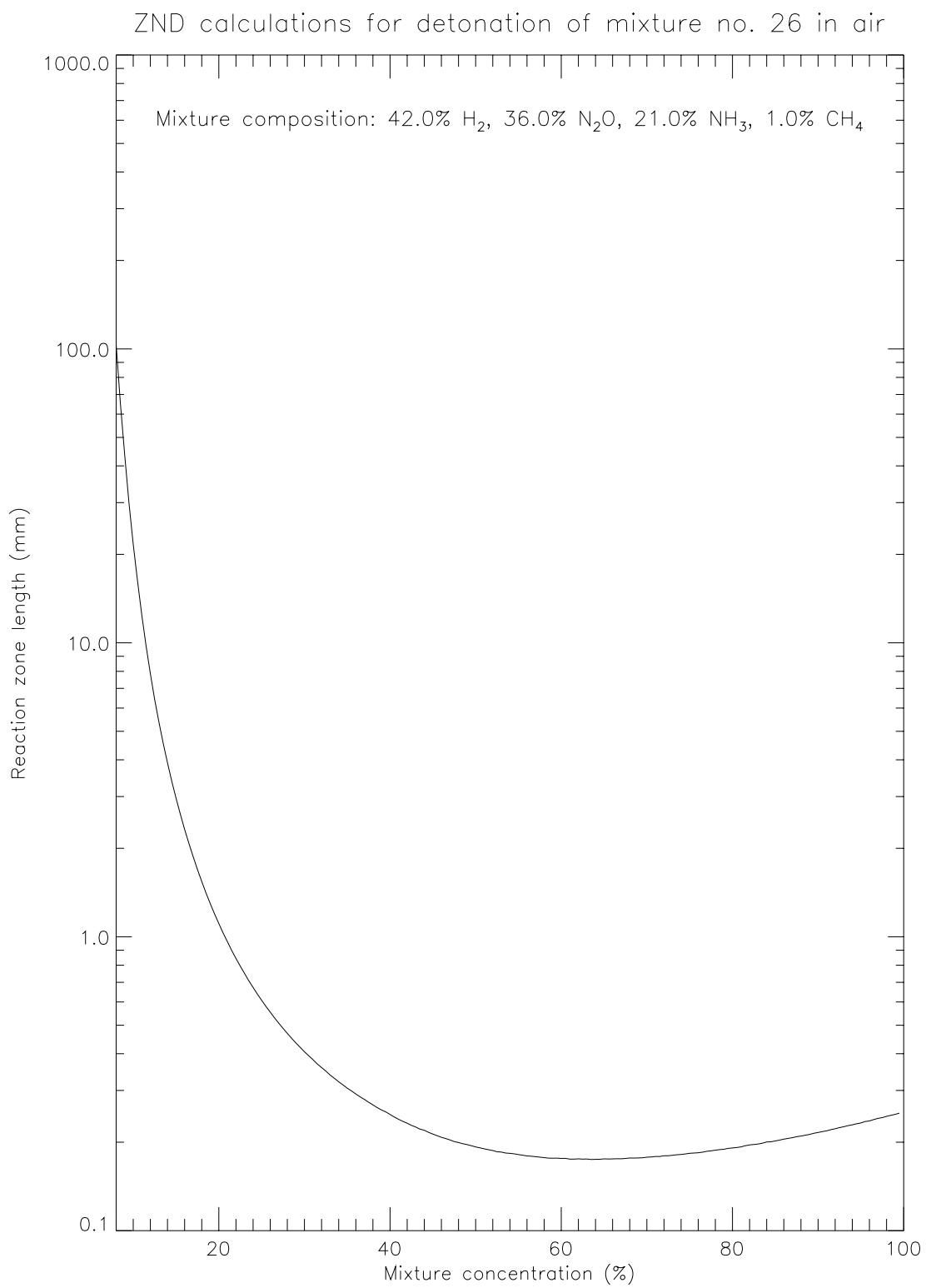




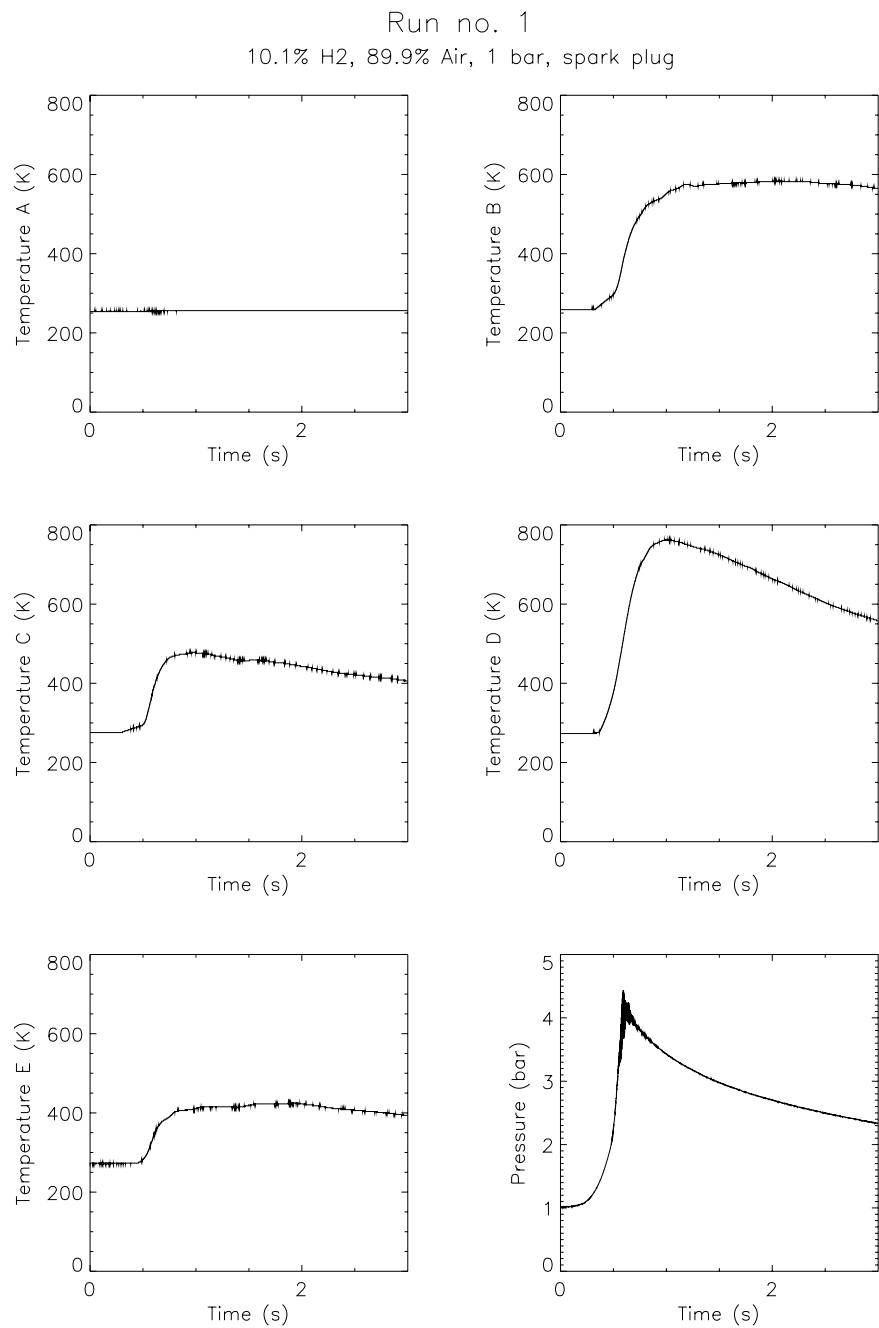


STANJAN calculations for detonation of mixture no. 26 in air
 Mixture composition: 42.0% H₂, 36.0% N₂O, 21.0% NH₃, 1.0% CH₄

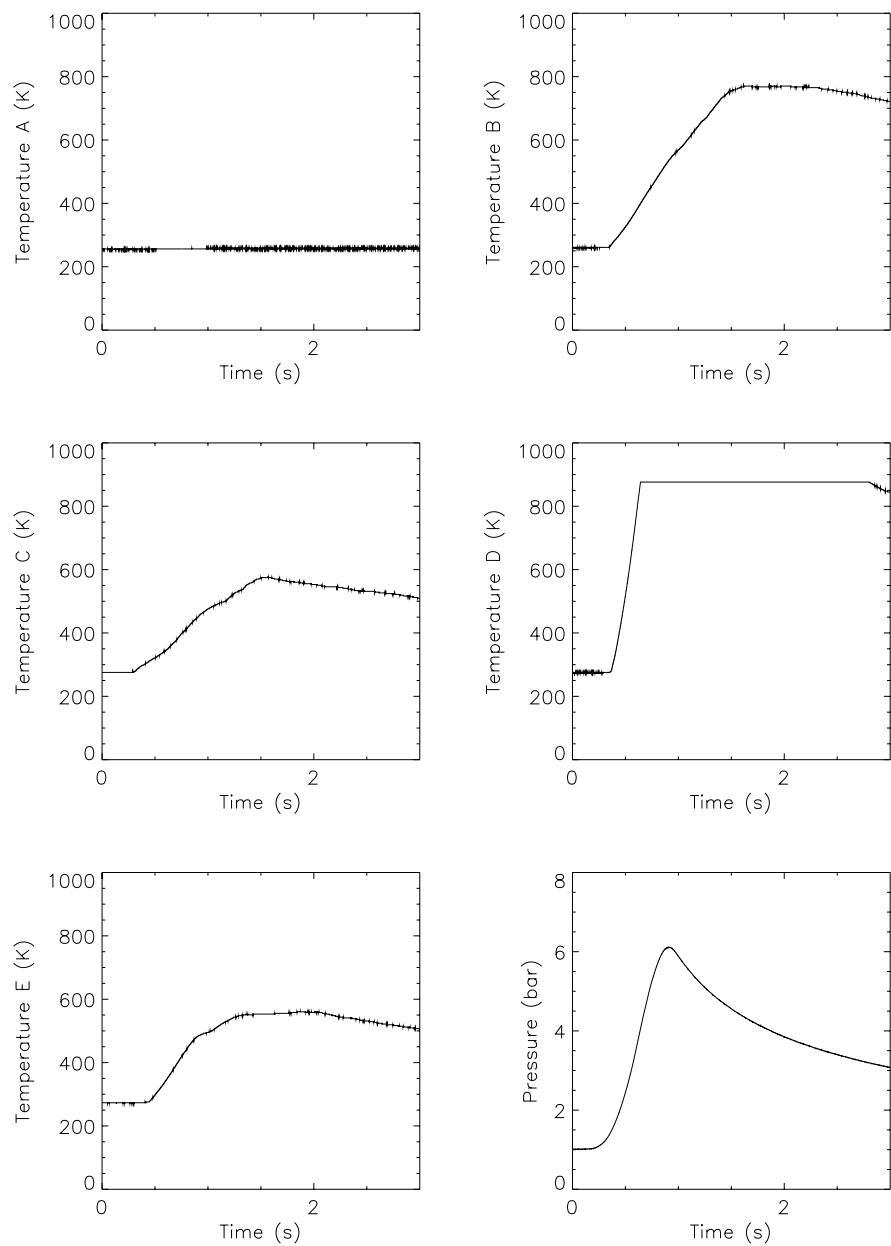




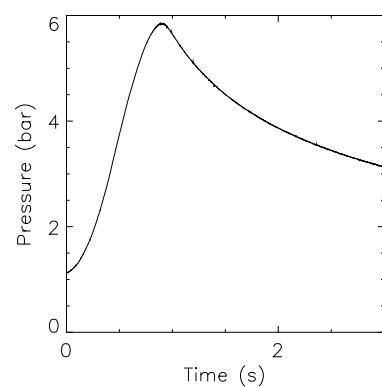
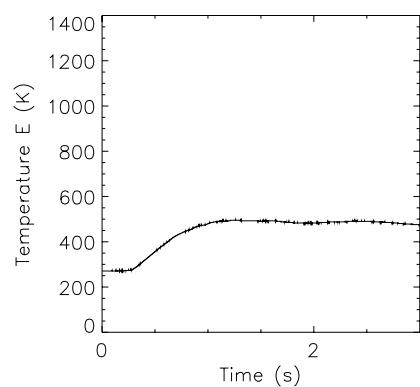
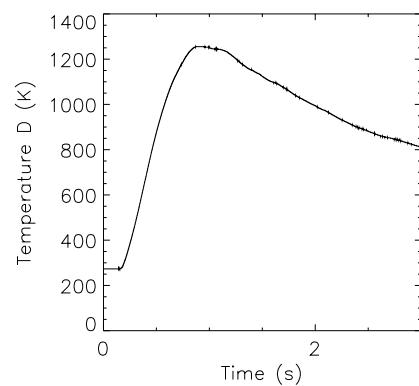
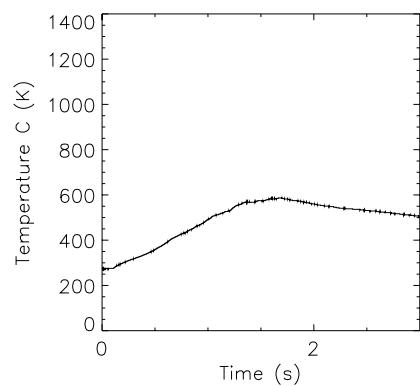
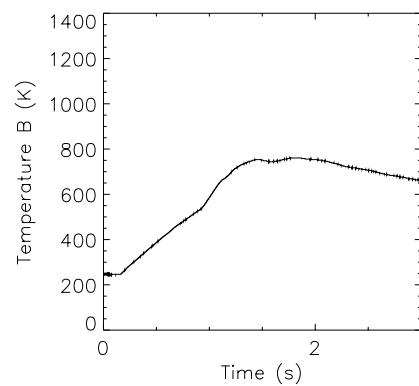
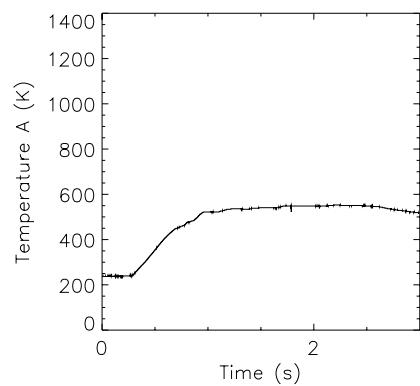
Appendix F Data Plots



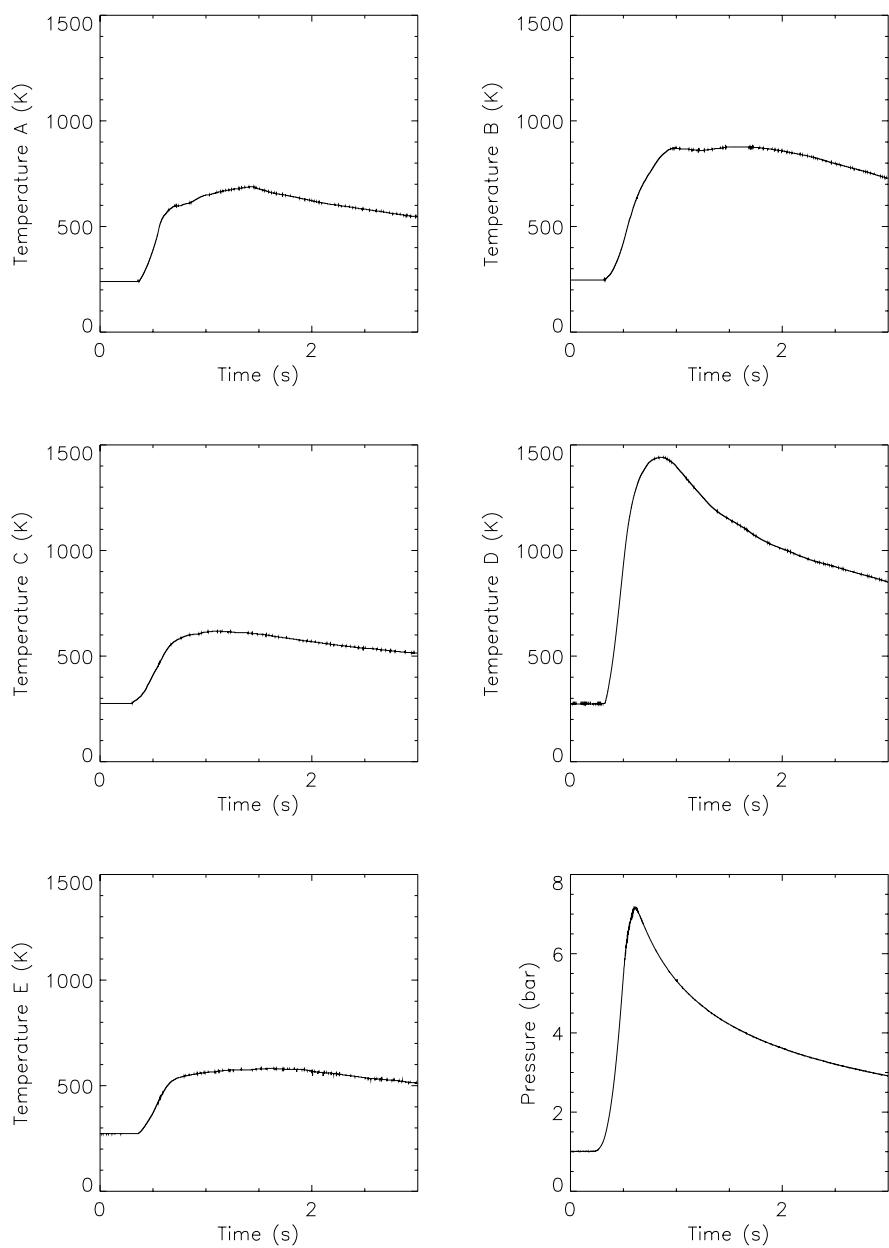
Run no. 2
7% CH₄, 93% air, 1bar, spark plug



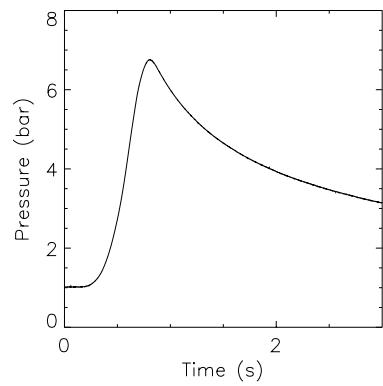
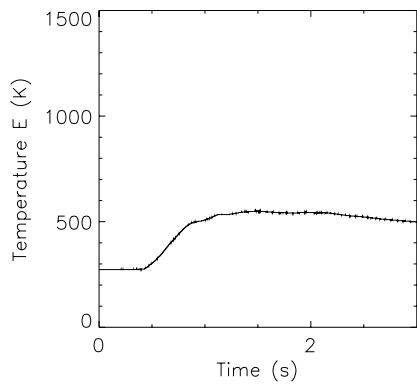
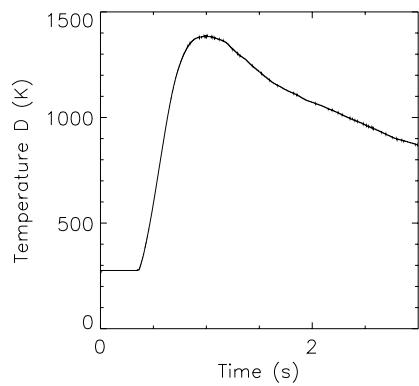
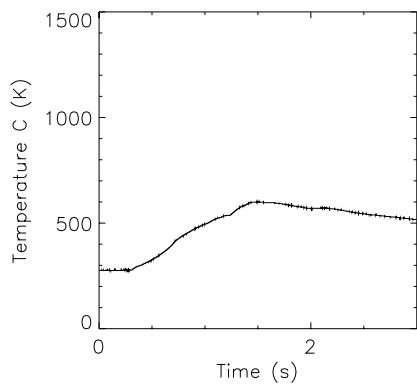
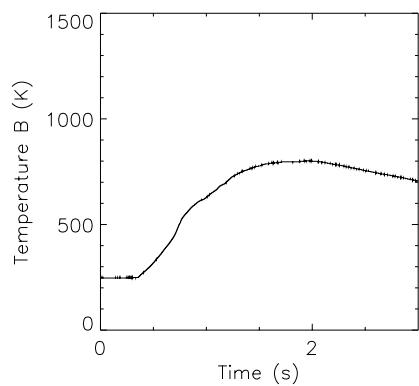
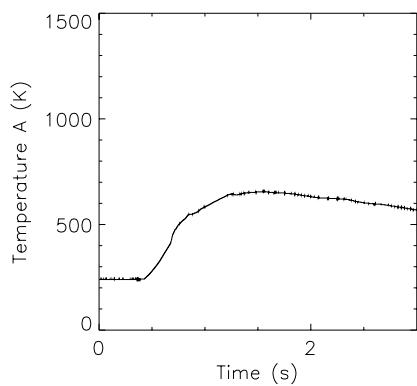
Run no. 3

7% CH₄, 93% air, 1.01075 bar, spark plug

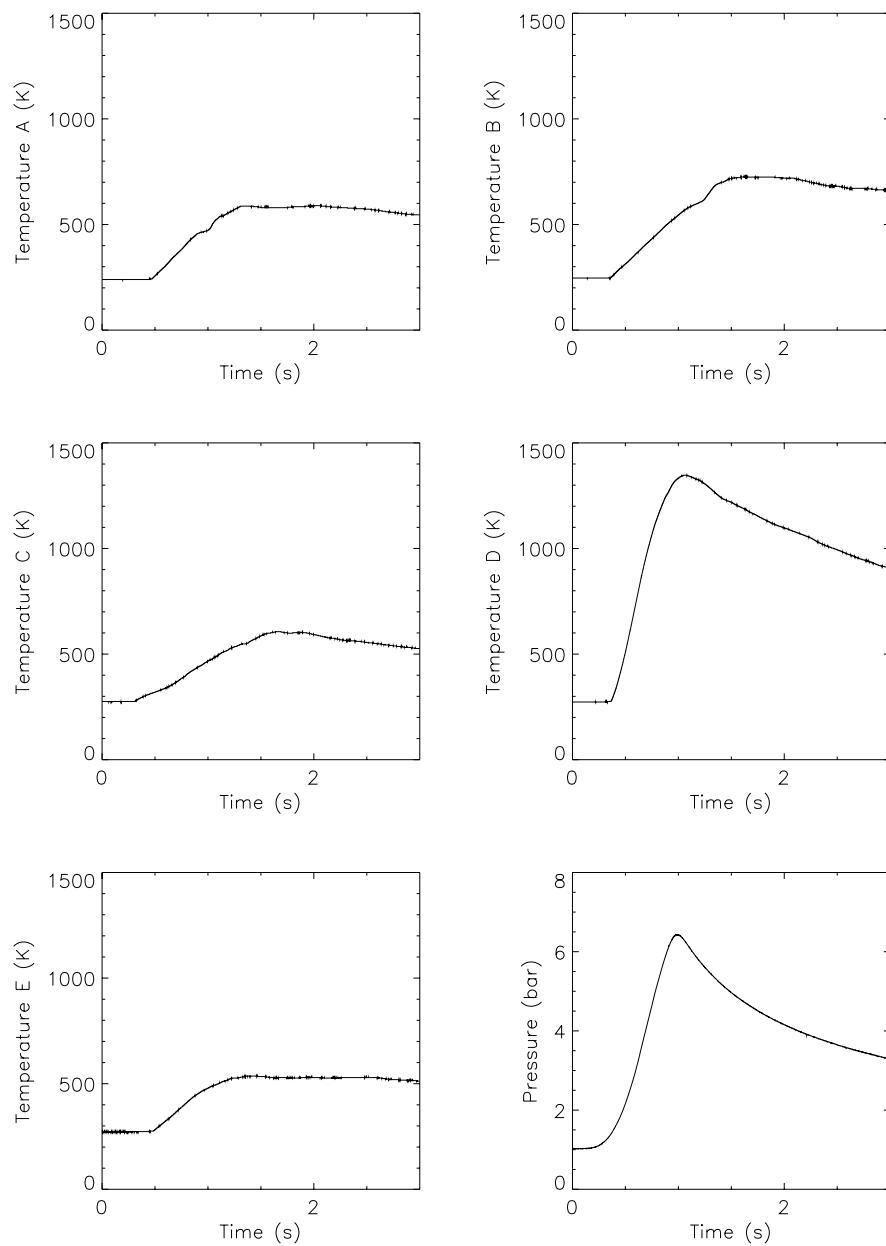
Run no. 4
8% CH₄, 92% air, 1 bar, spark plug



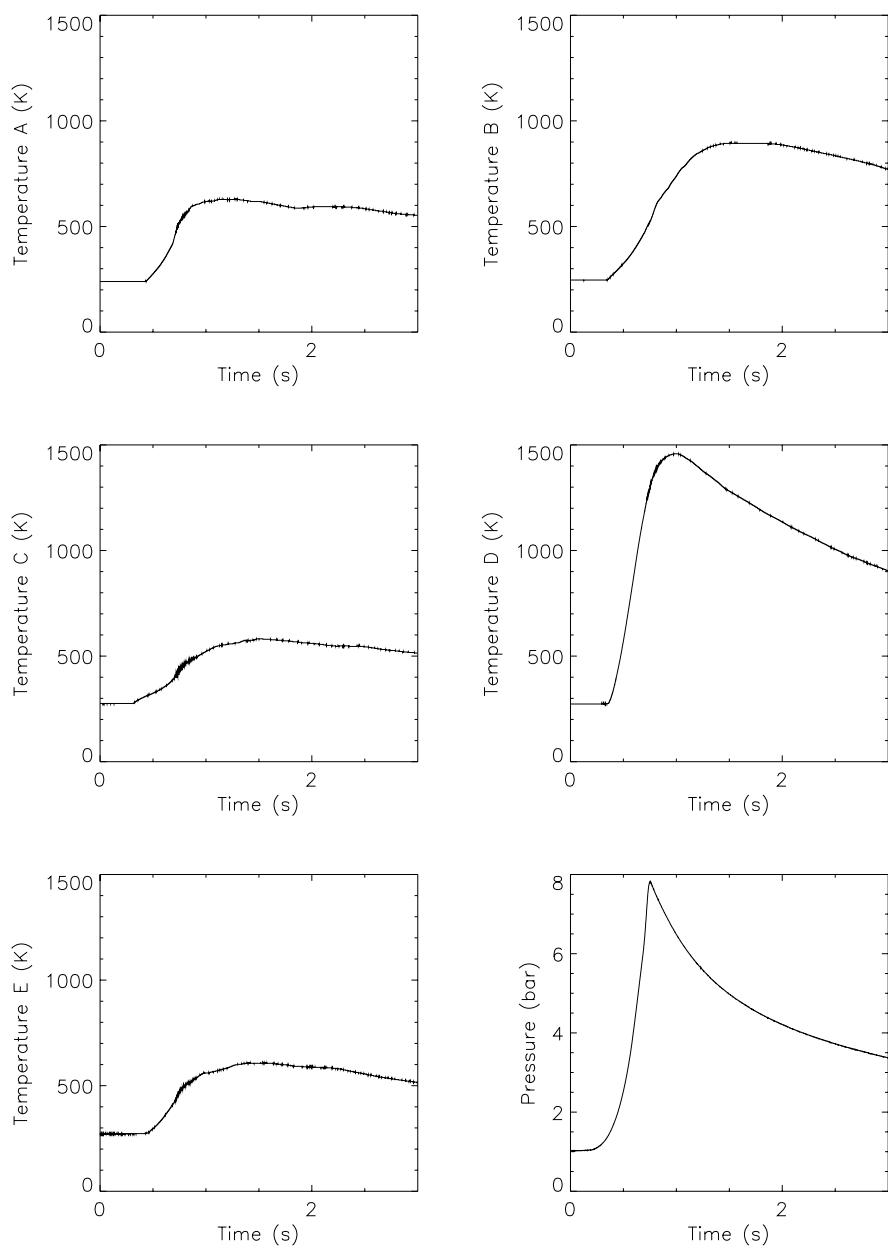
Run no. 5

5% N₂O, 6.5% CH₄, 88.5% air, 1 bar, spark plug

Run no. 6

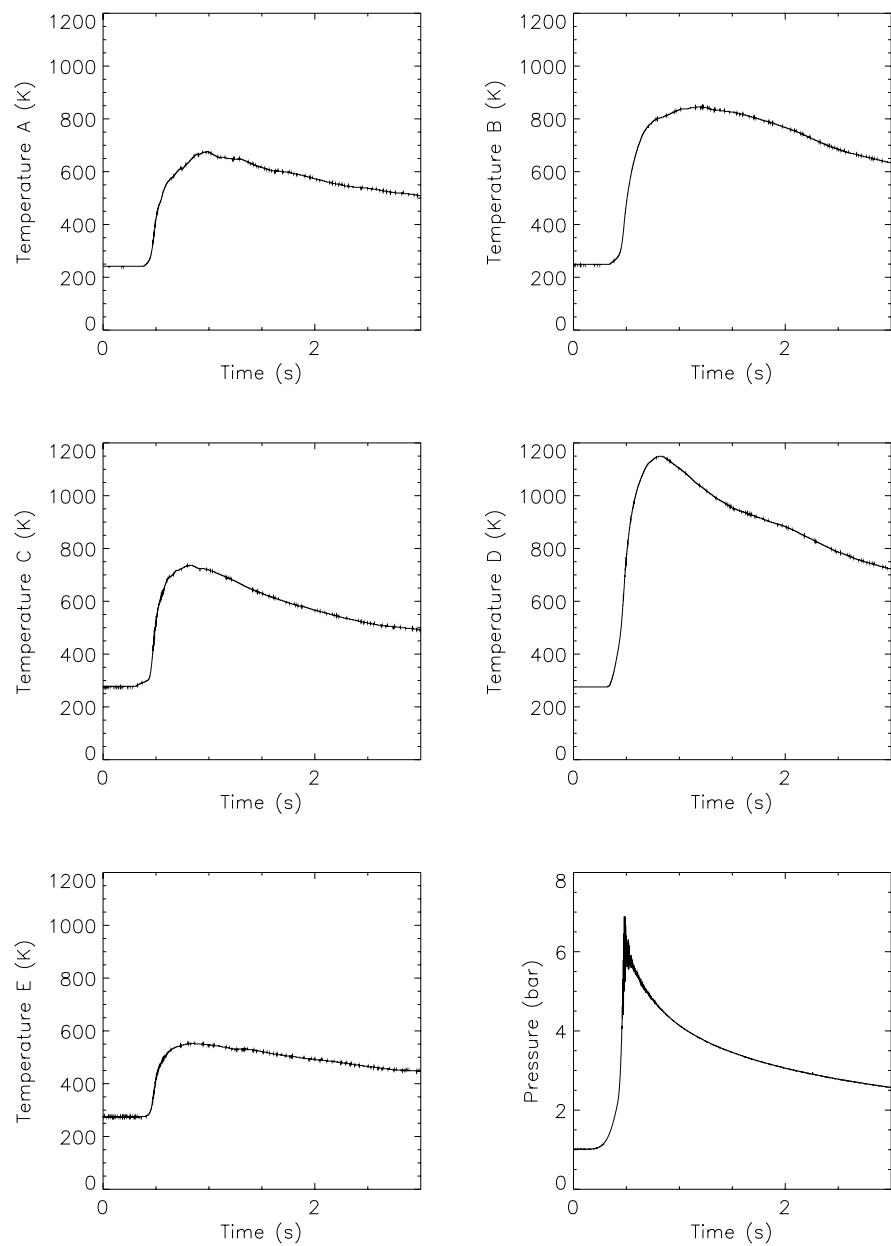
4.95% N₂O, 6.88% CH₄, 88.16% air, 1.01 bar, spark plug

Run no. 7

14.84% N₂O, 6.98% CH₄, 78.18% air, 1.0105 bar, spark plug

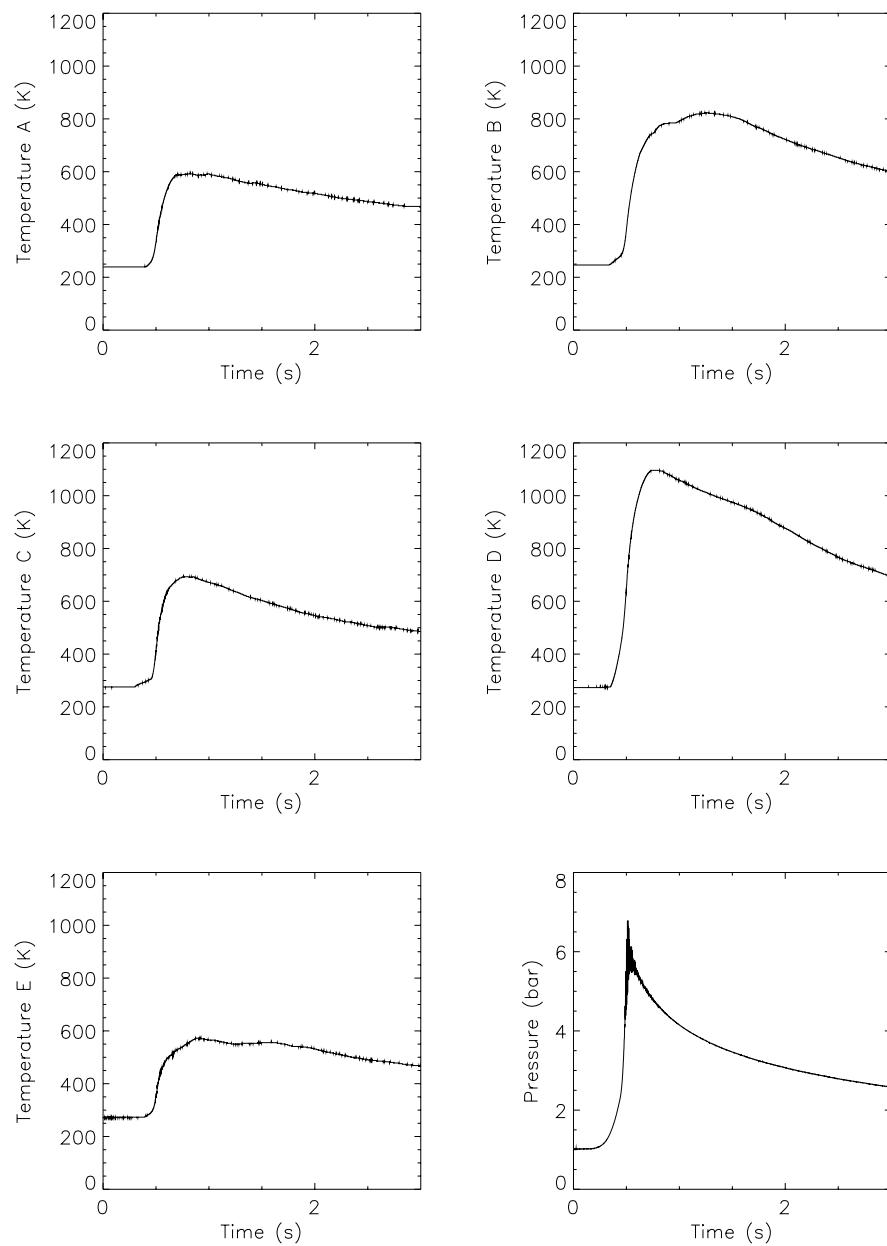
Run no. 8

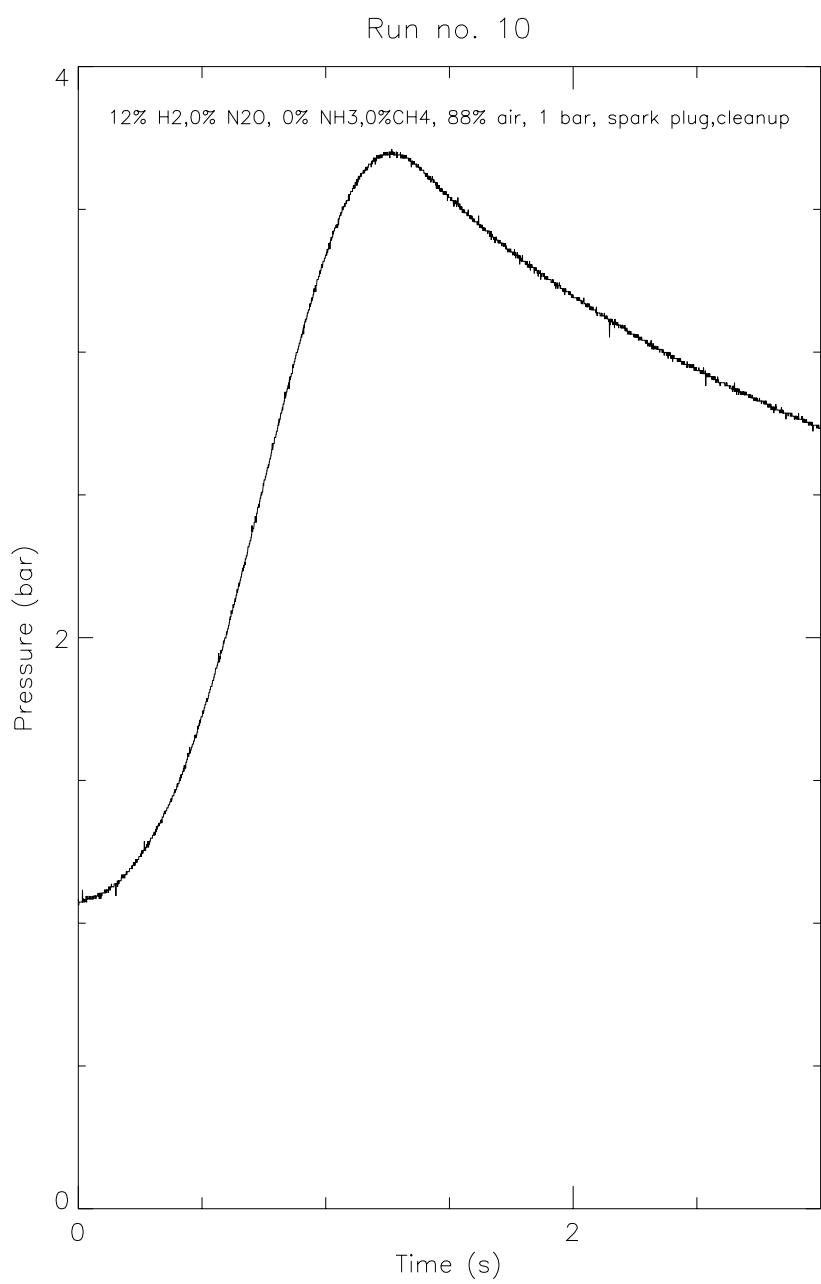
6.4% H₂, 5.5% N₂O, 3.0% CH₄, 5.4% N₂, 79.7% air, 1 bar, spark plug

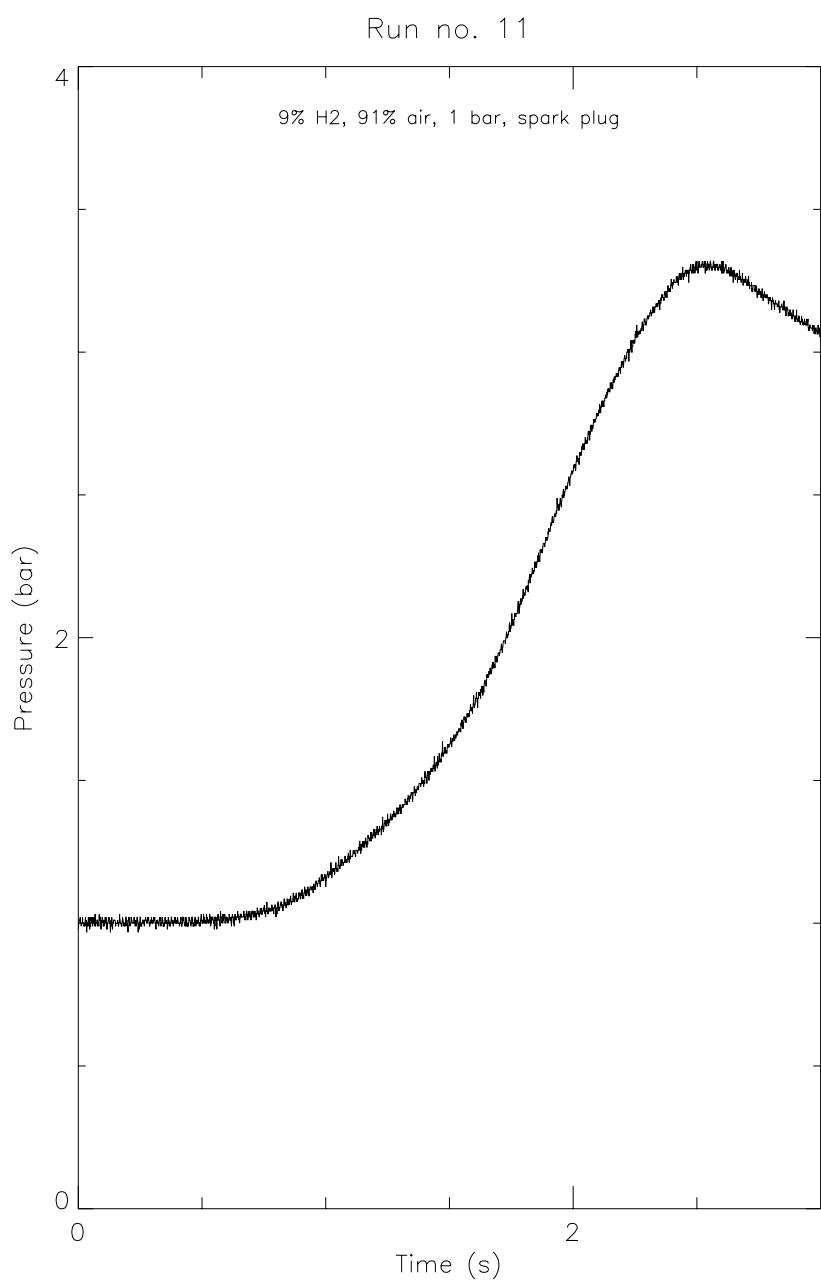


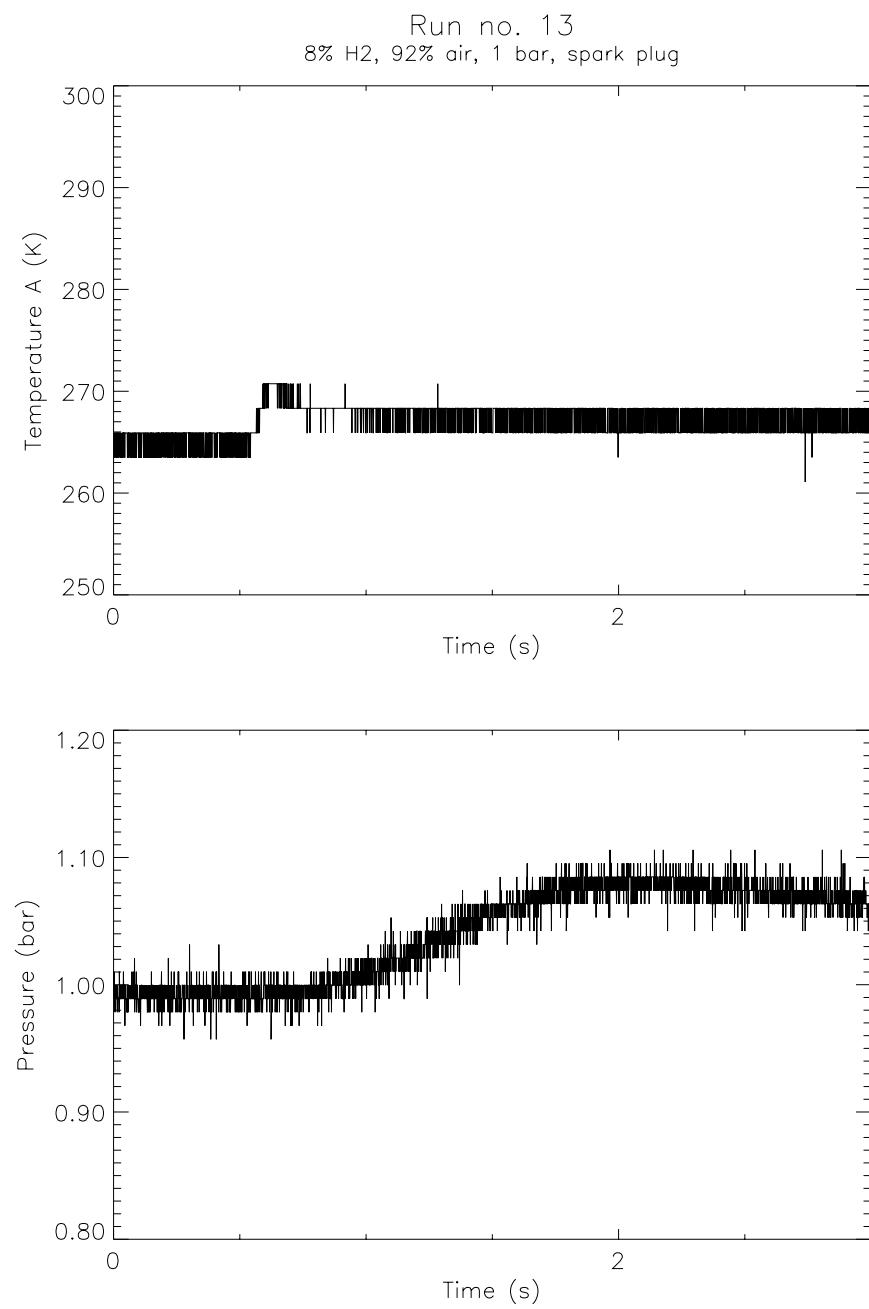
Run no. 9

6.4% H₂, 5.5% N₂O, 3.0% CH₄, 5.4% N₂, 79.7% air, 1 bar, spark plug

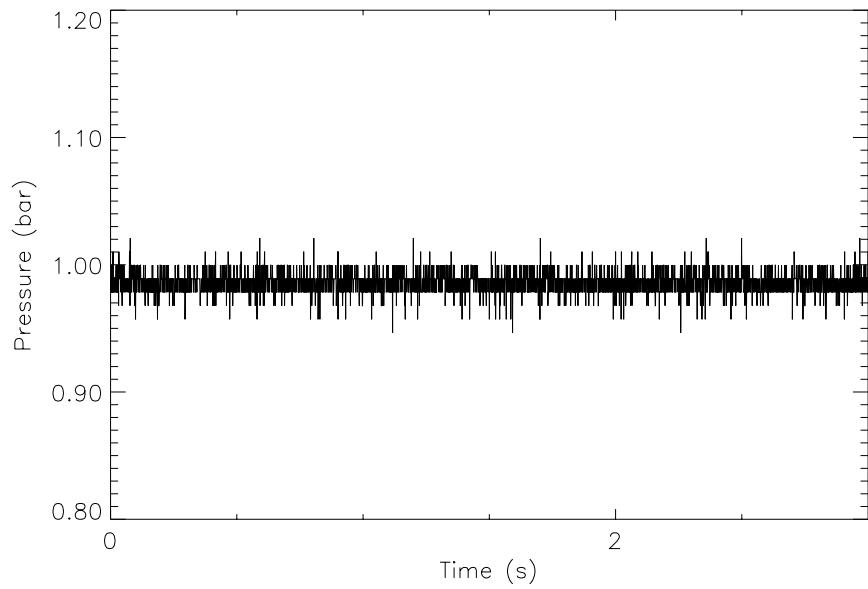
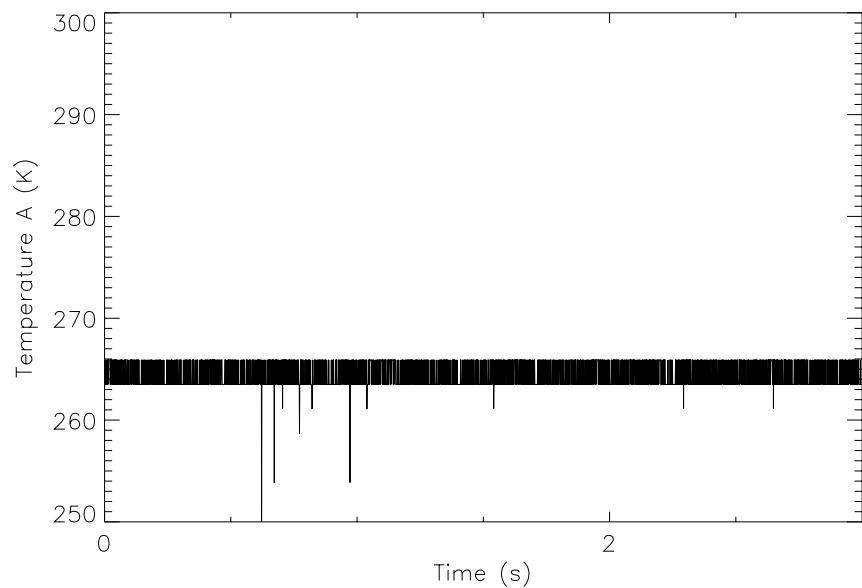


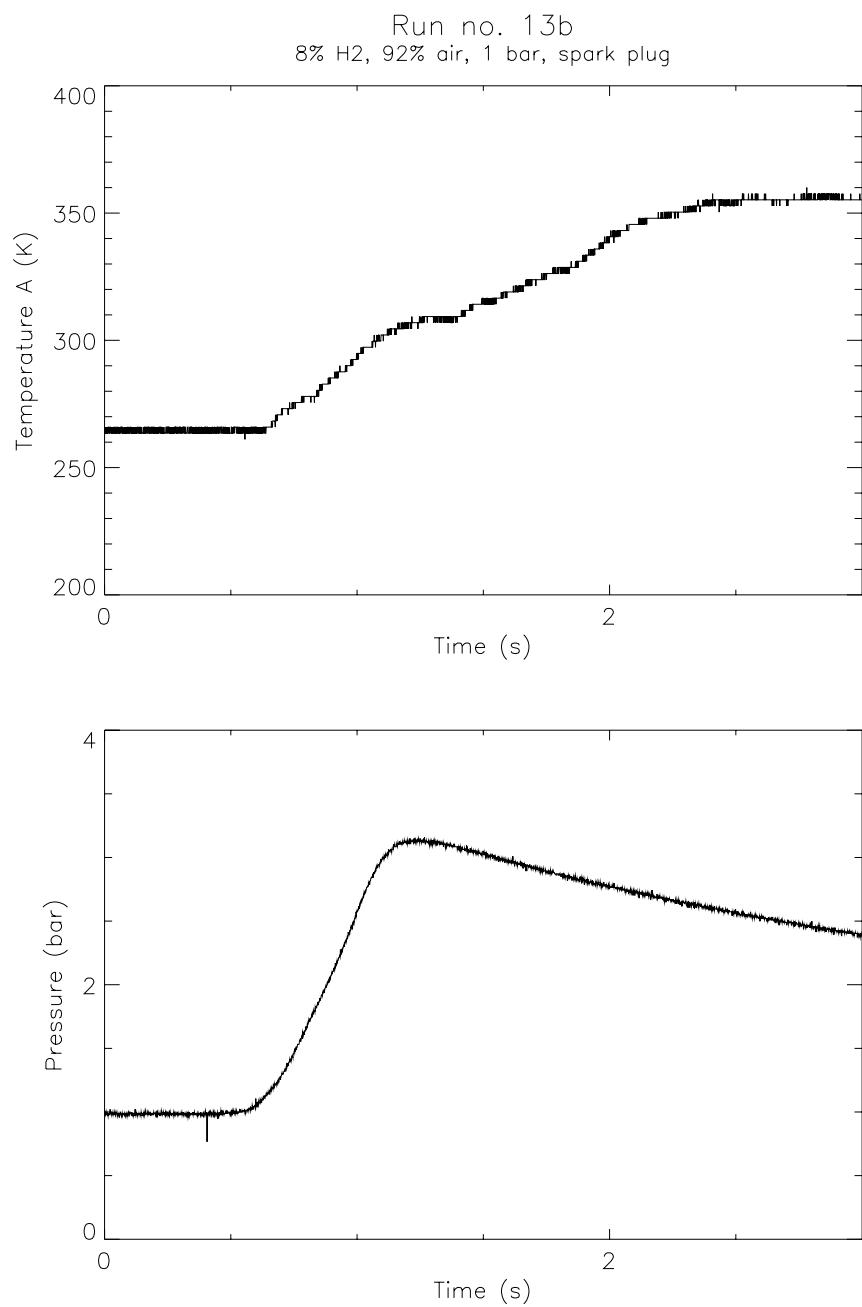


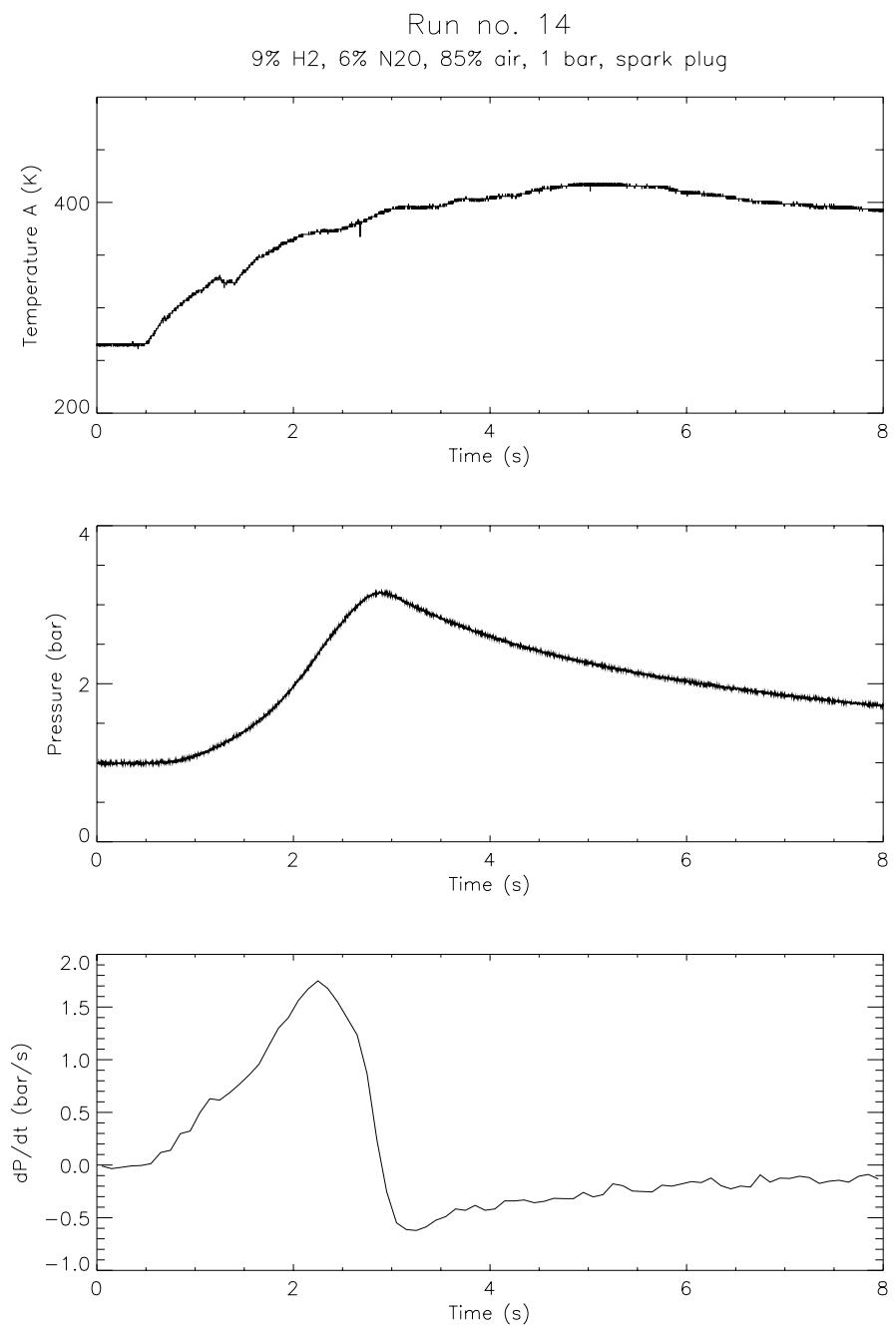




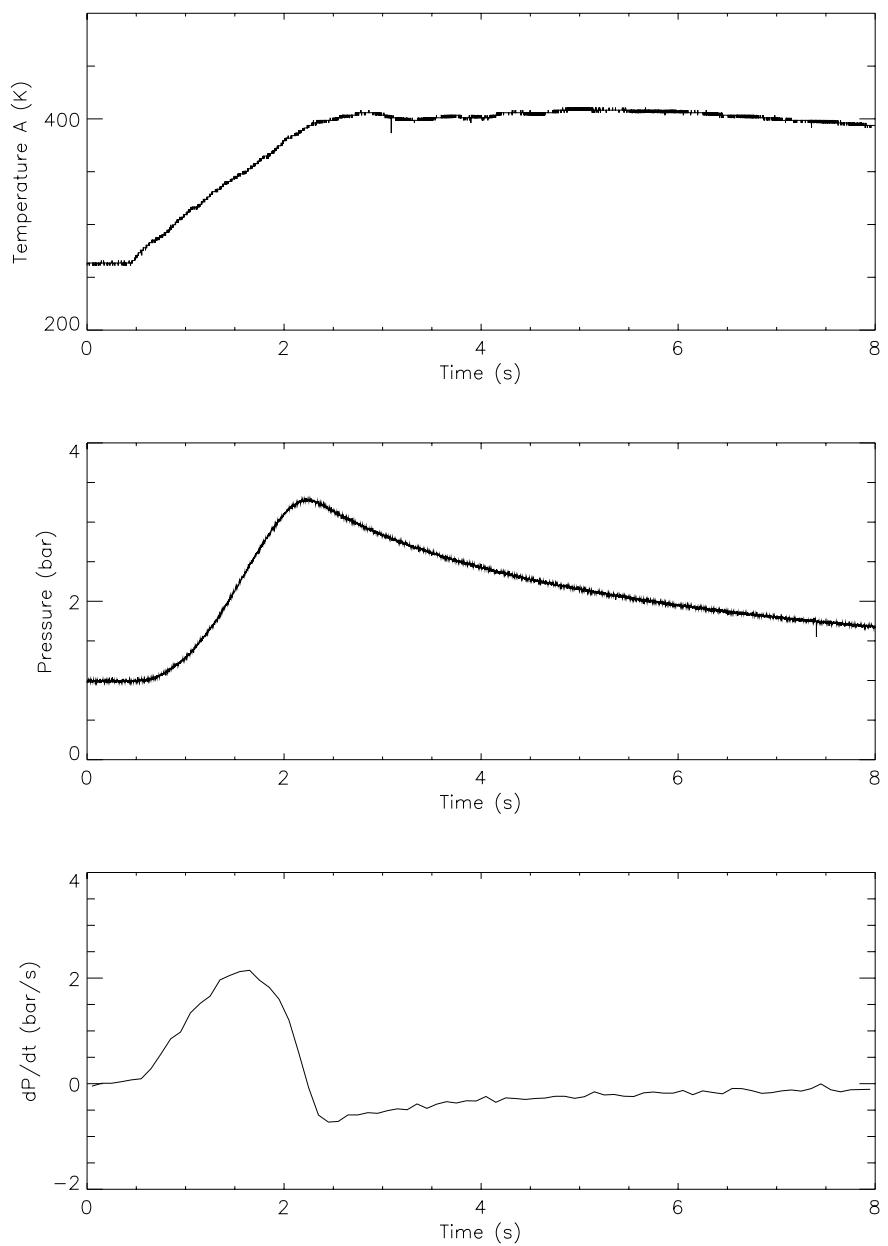
Run no. 13a
8% H₂, 92% air, 1 bar, spark plug

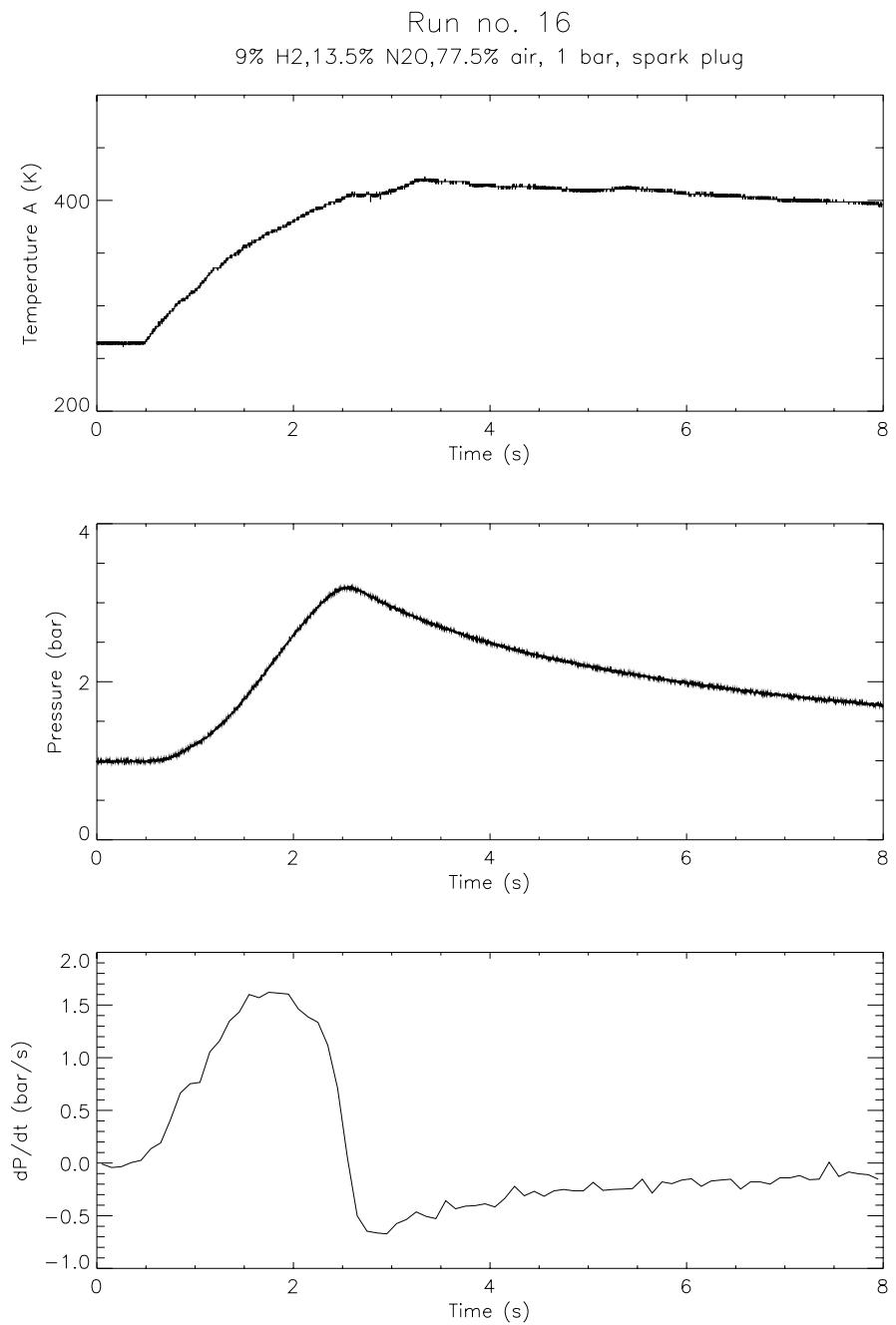


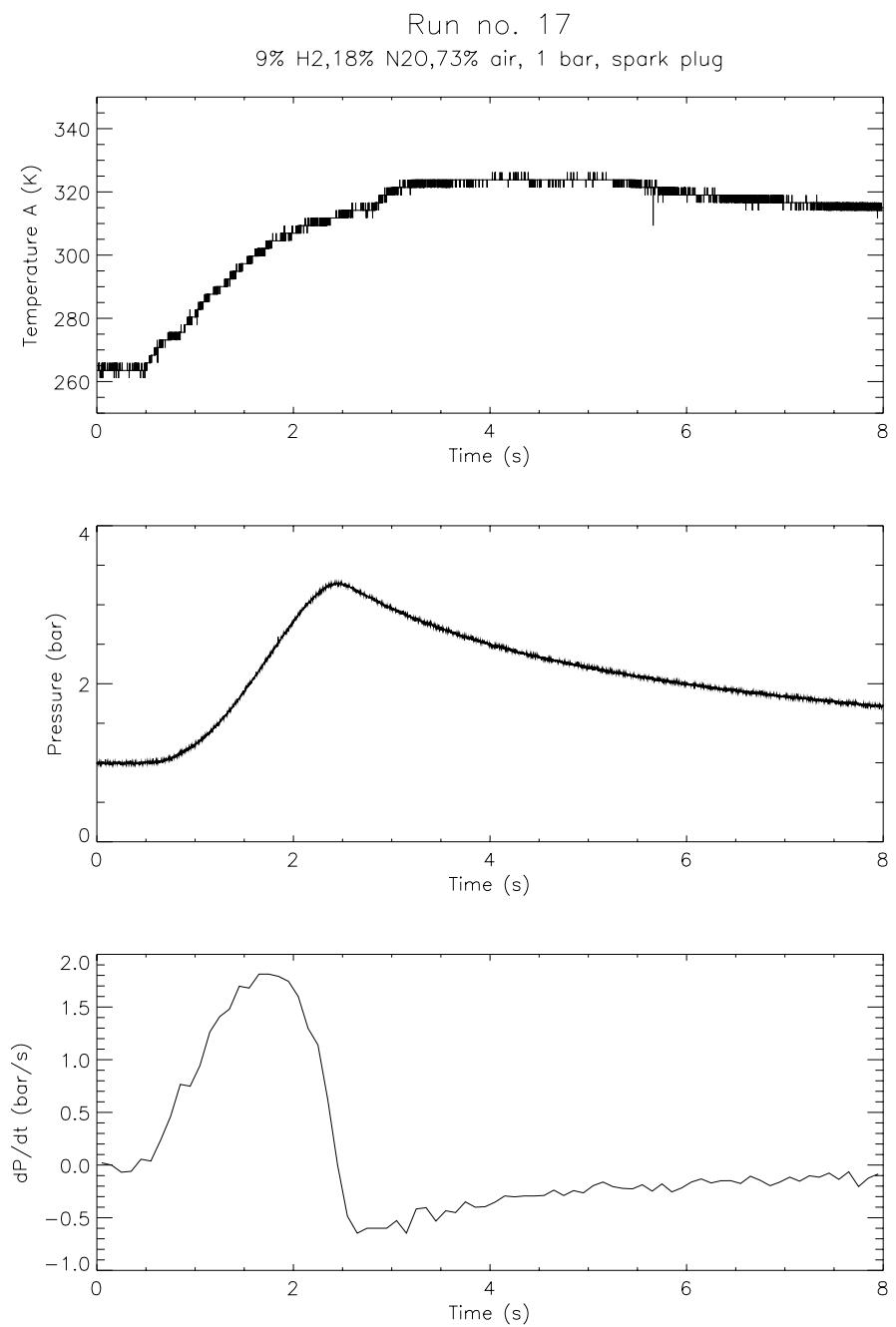




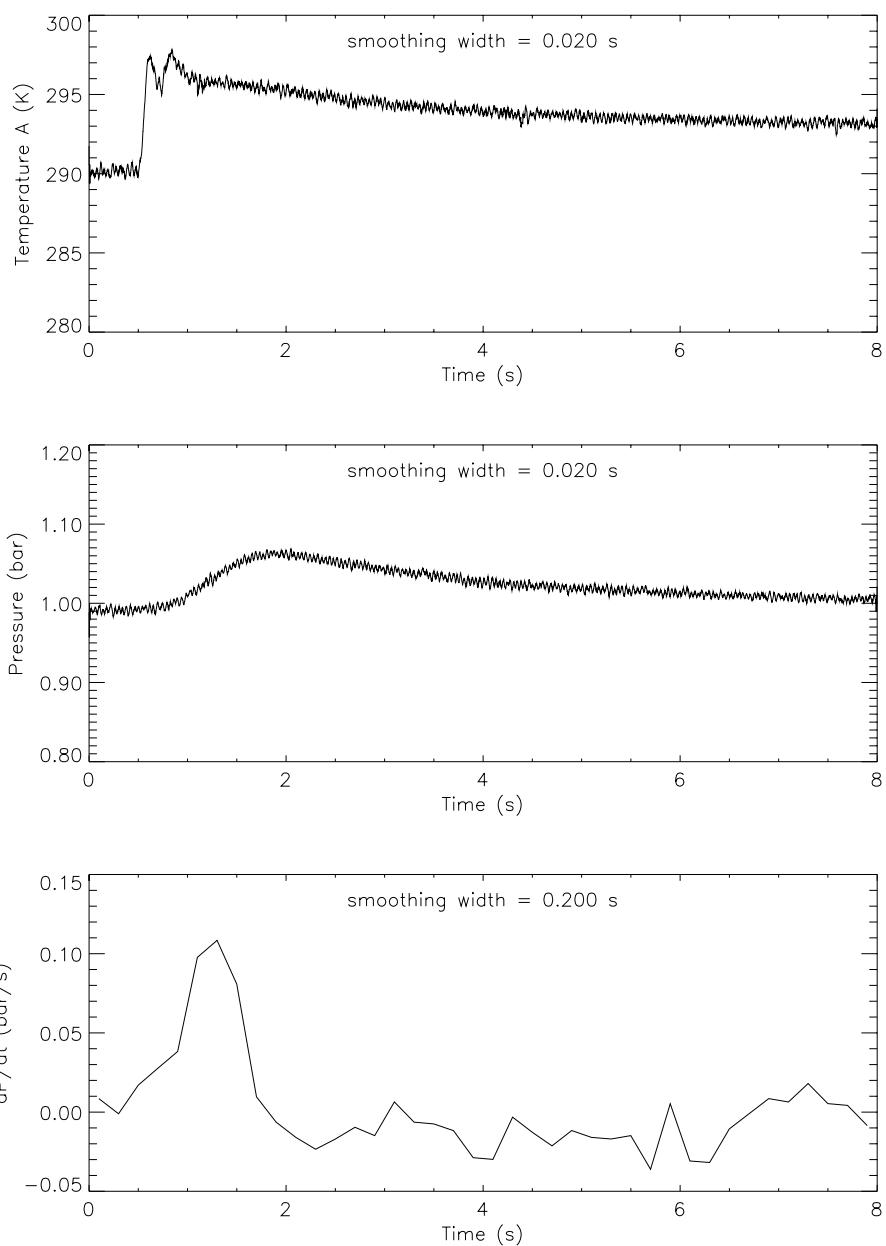
Run no. 15
9% H₂, 9% N₂O, 82% air, 1 bar, spark plug



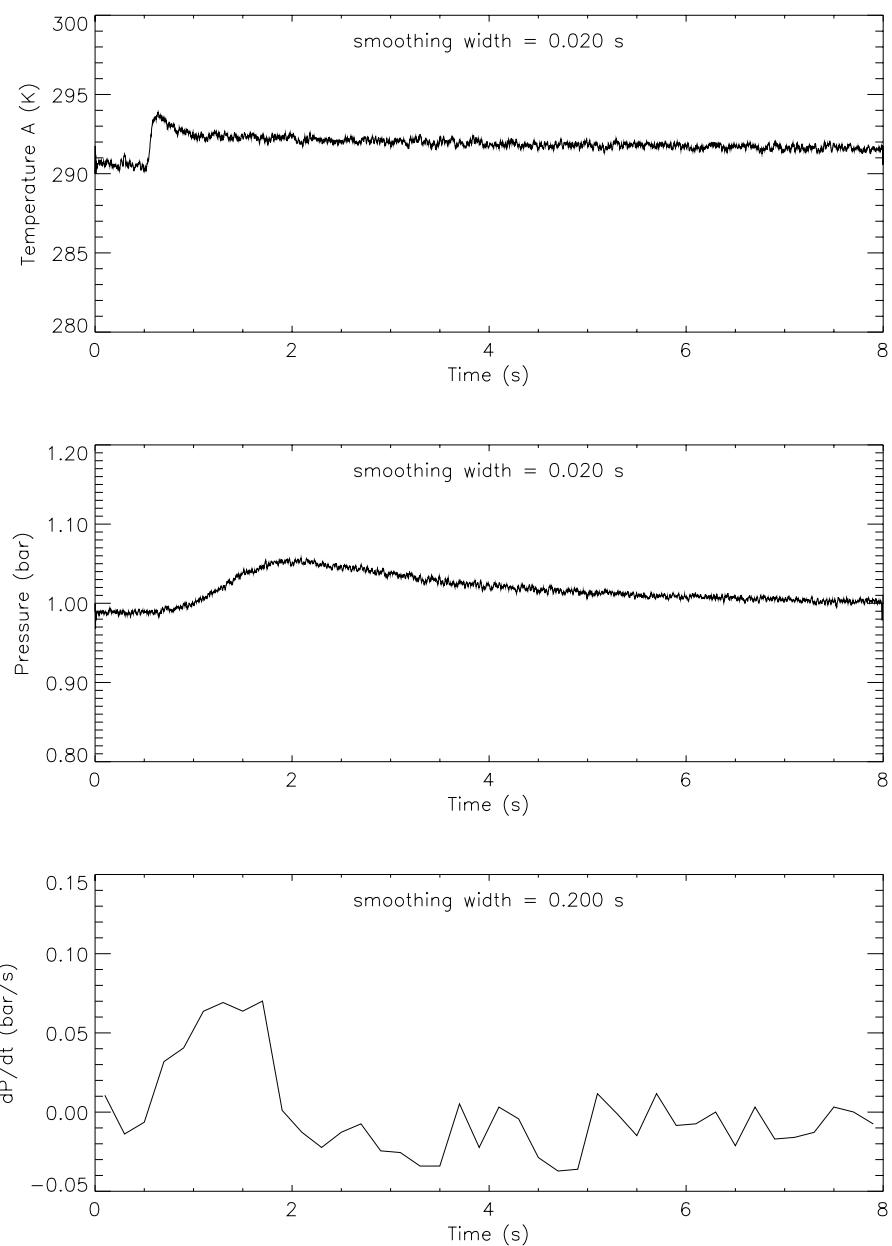




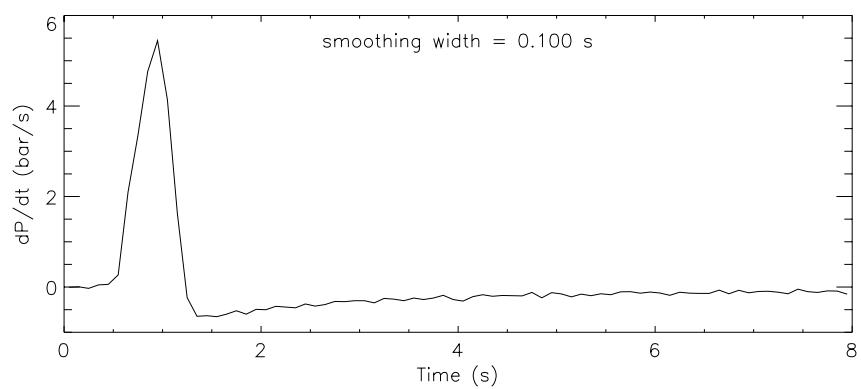
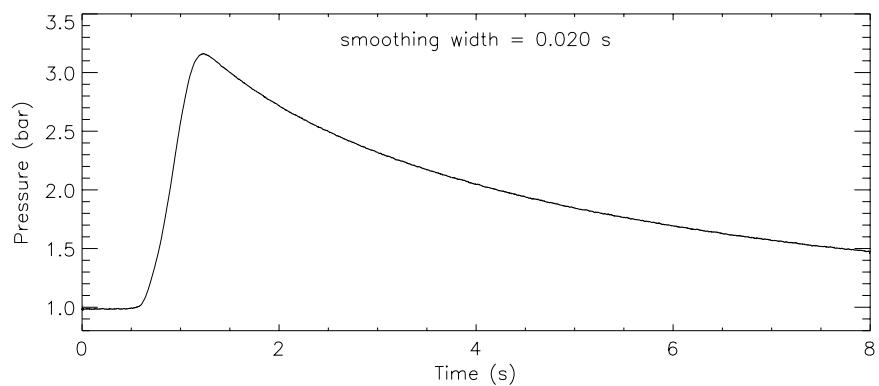
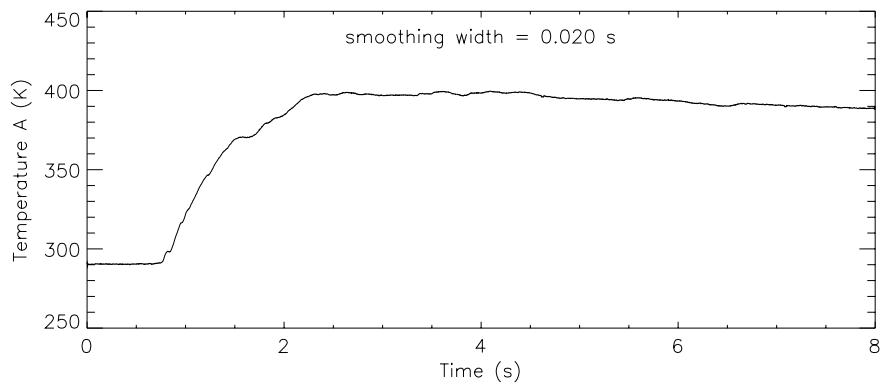
Run no. 18
8% H₂, 8% N₂O, 84% air, 1 bar, spark plug

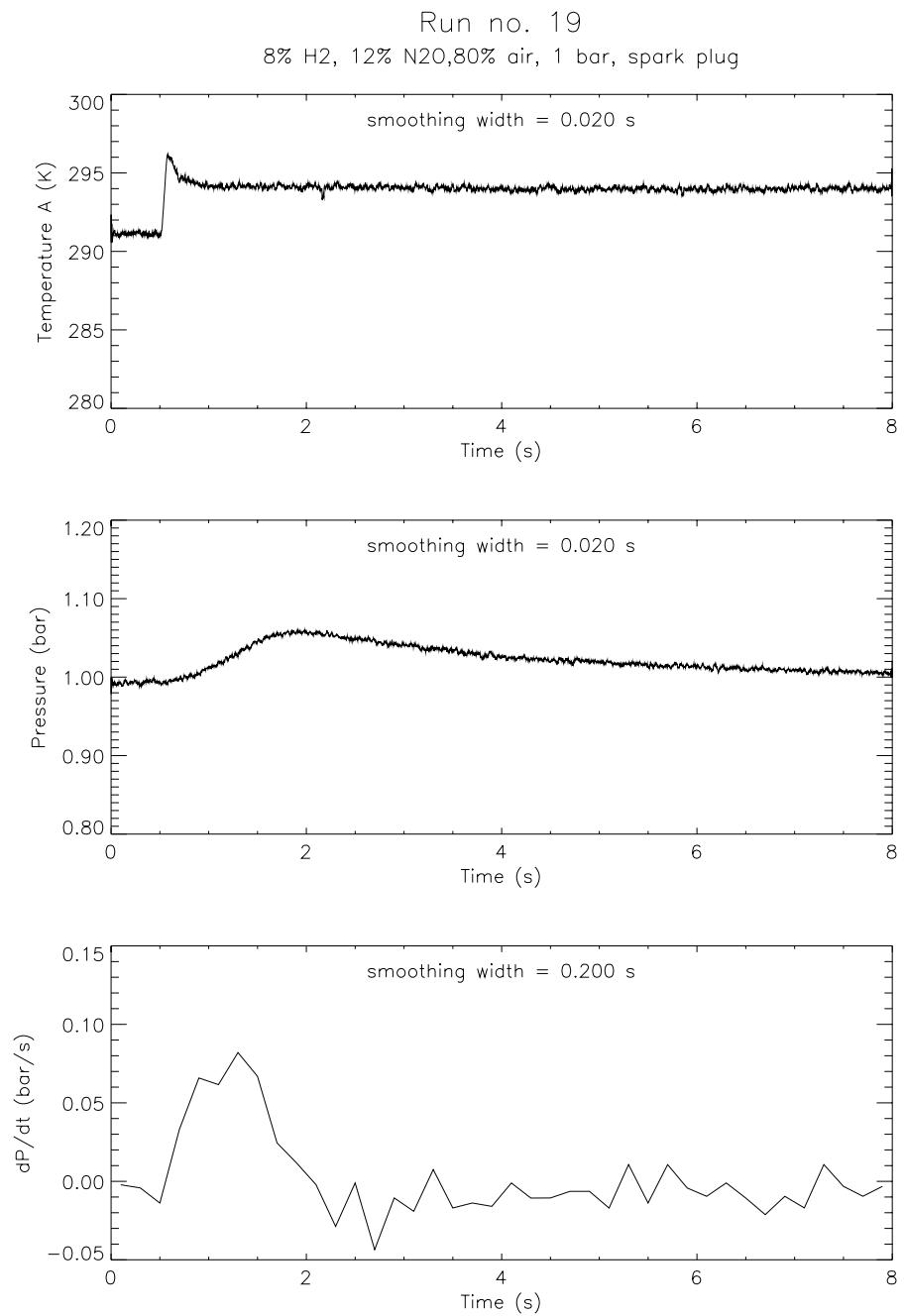


Run no. 18a

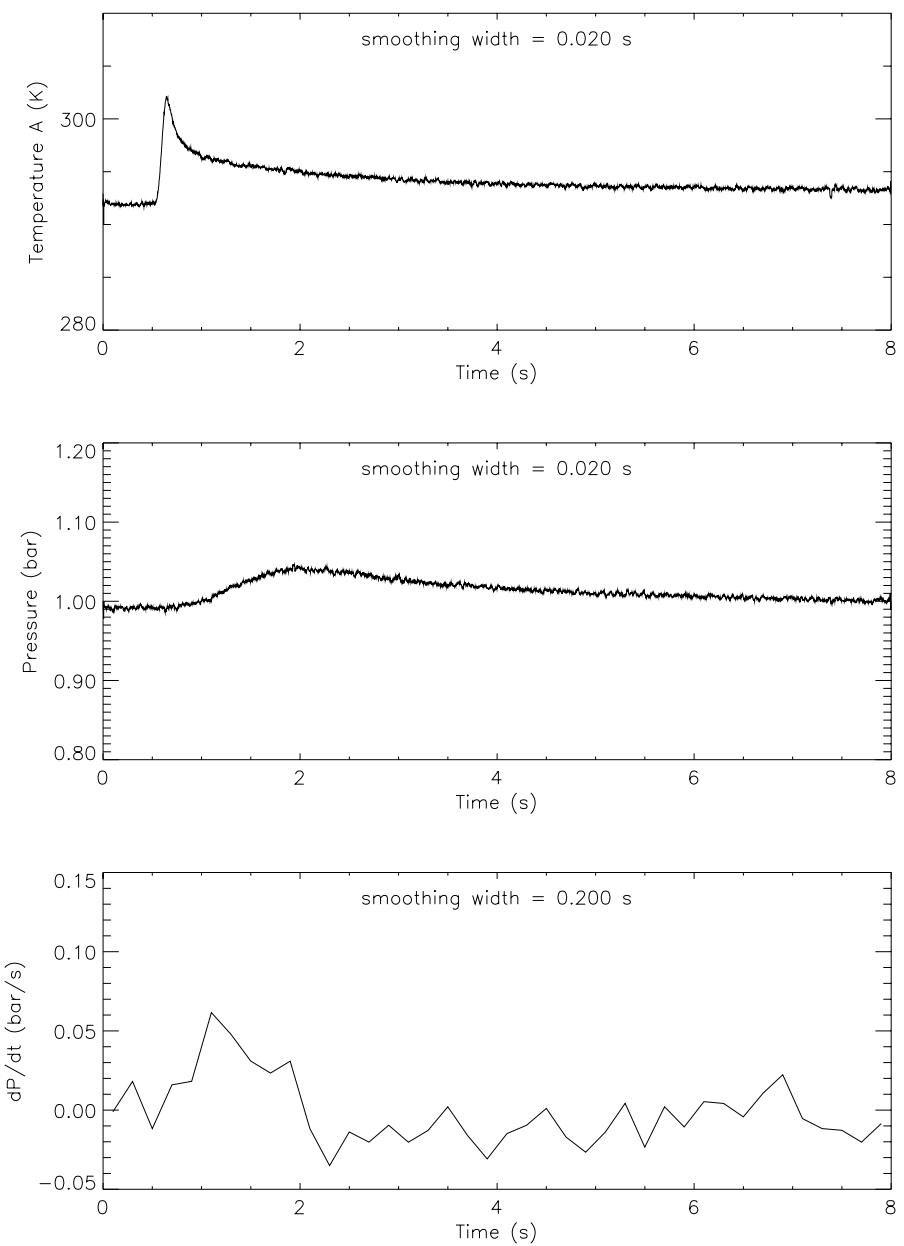
8% H₂, 8% N₂O, 84% air, 1 bar, spark plug, 2nd burn, no fan

Run no. 18b
8% H₂, 8% N₂O, 84% air, 1 bar, spark plug, 3rd burn, fan on

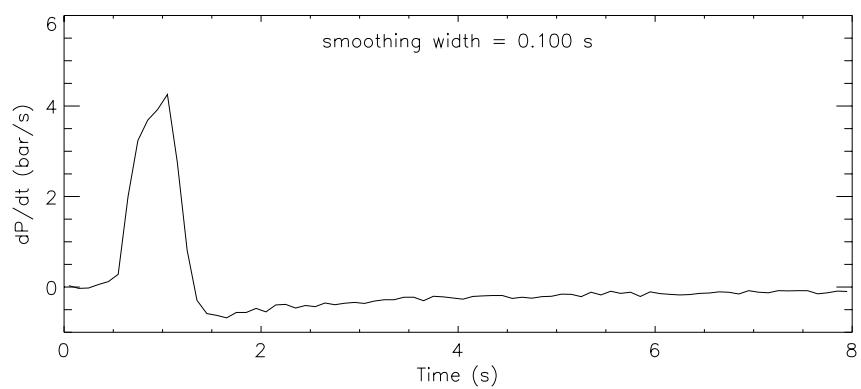
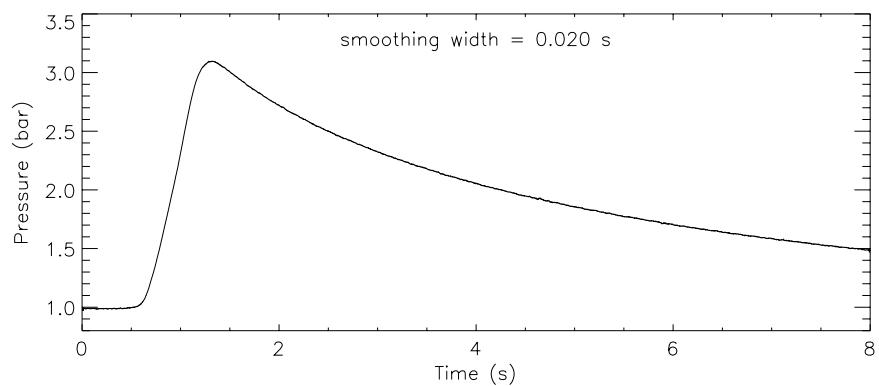
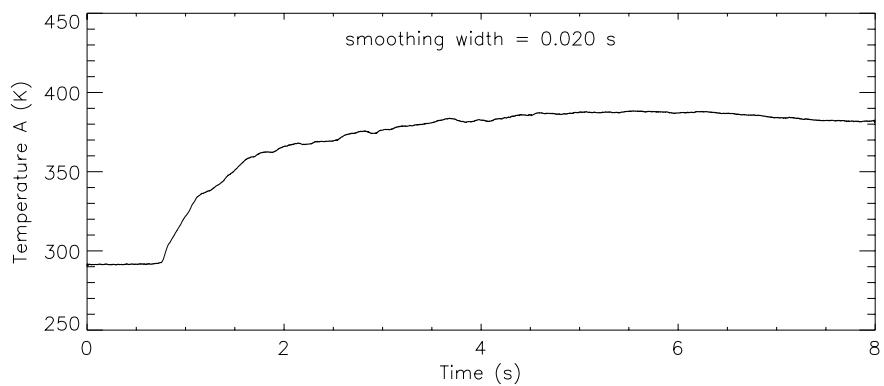


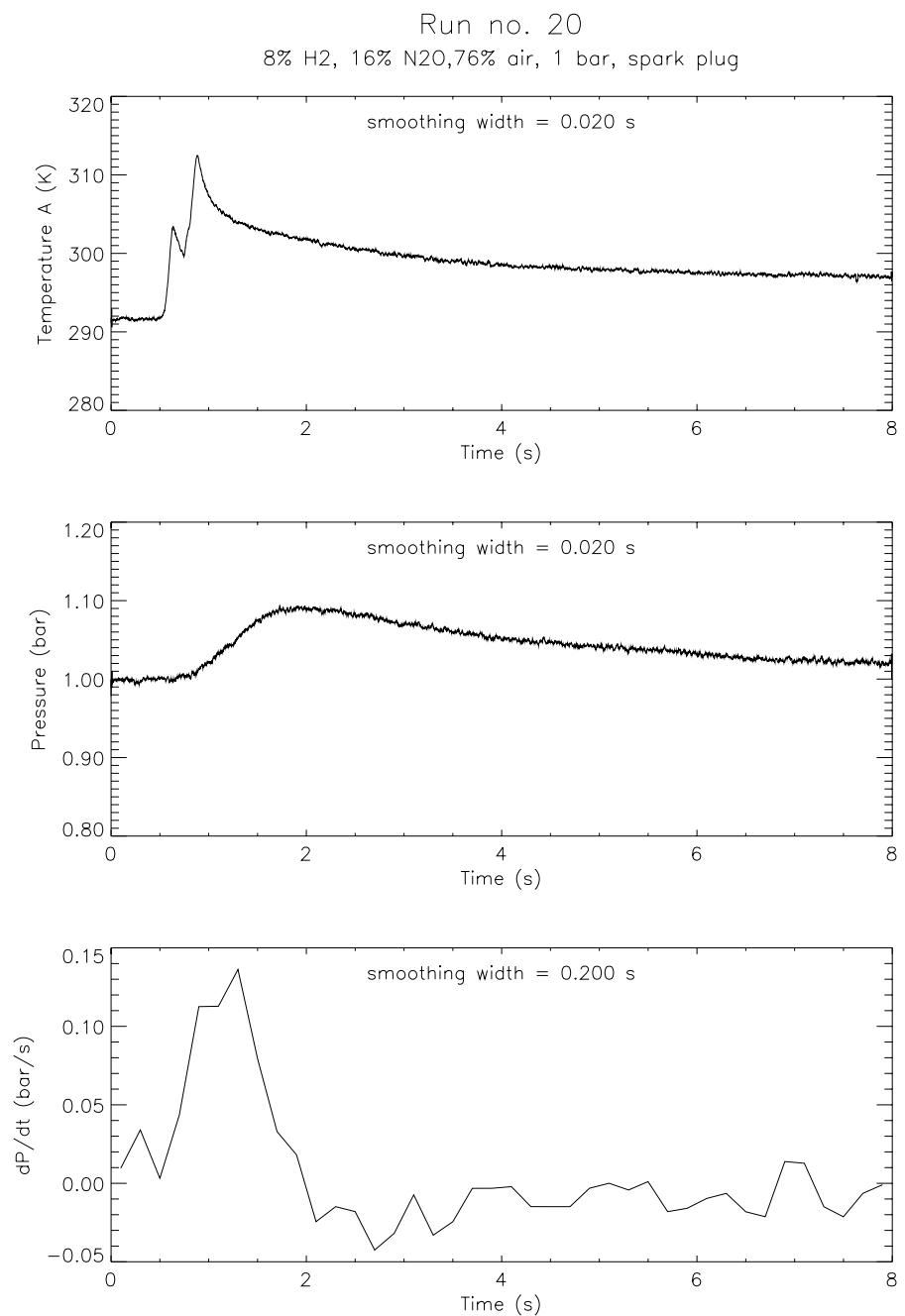


Run no. 19a
8% H₂, 12% N₂O, 80% air, 1 bar, spark plug, 2nd burn

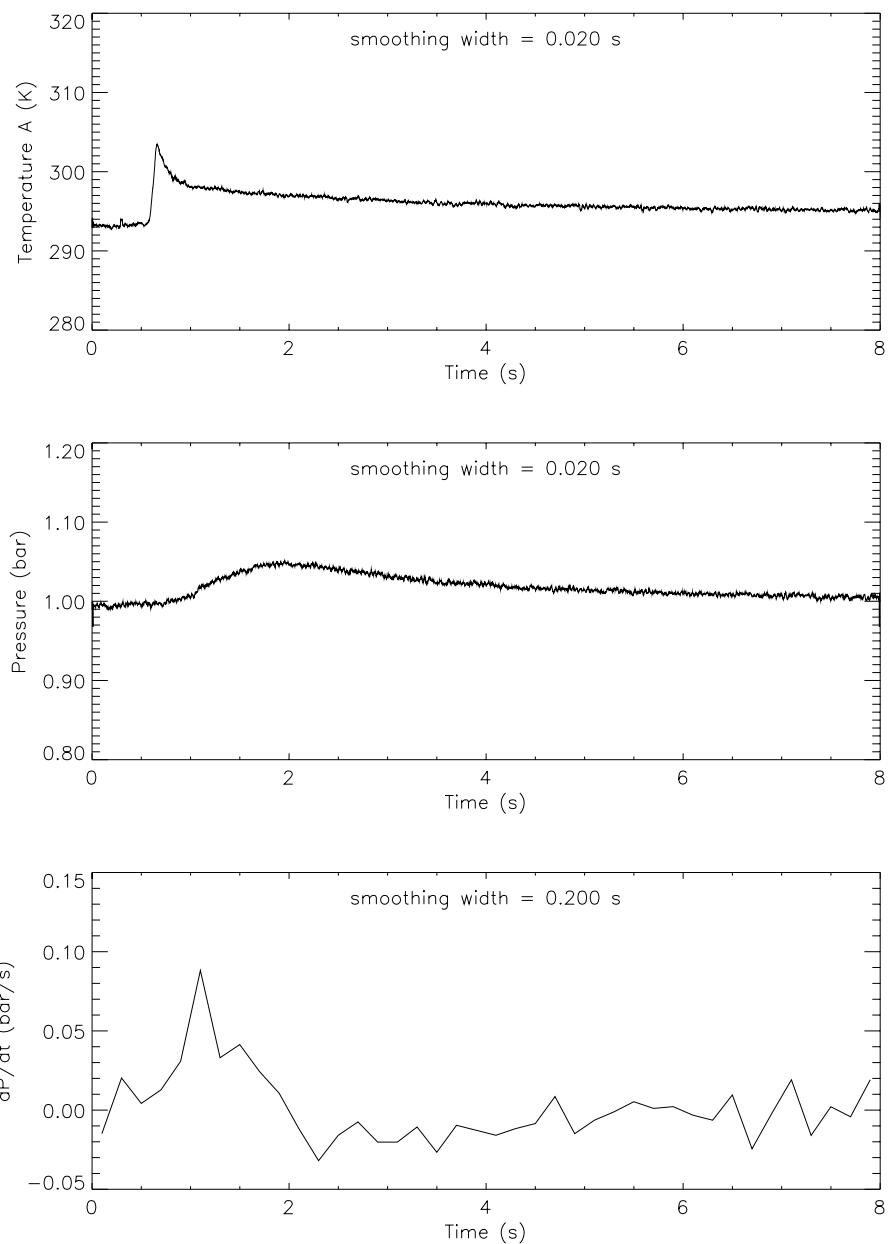


Run no. 19b
8% H₂, 12% N₂O, 80% air, 1 bar, spark plug, 3rd burn, fan on

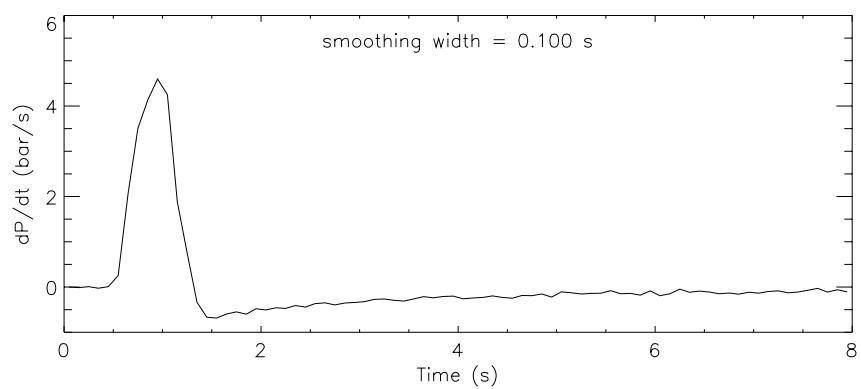
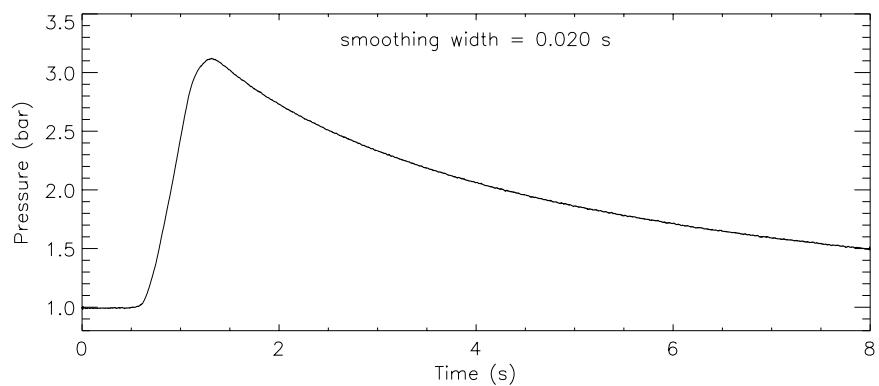
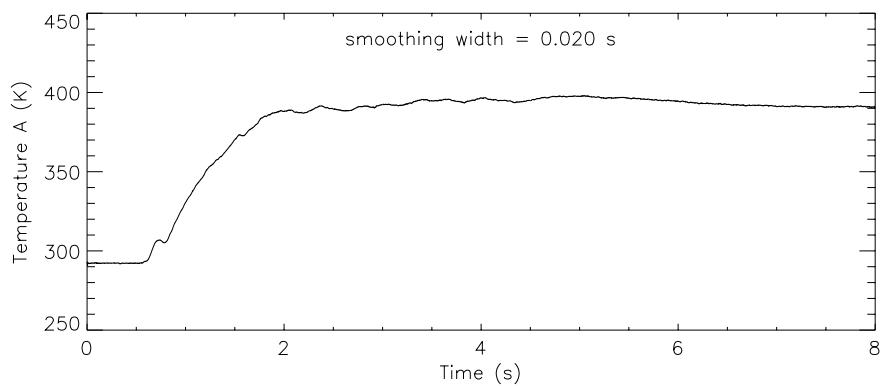




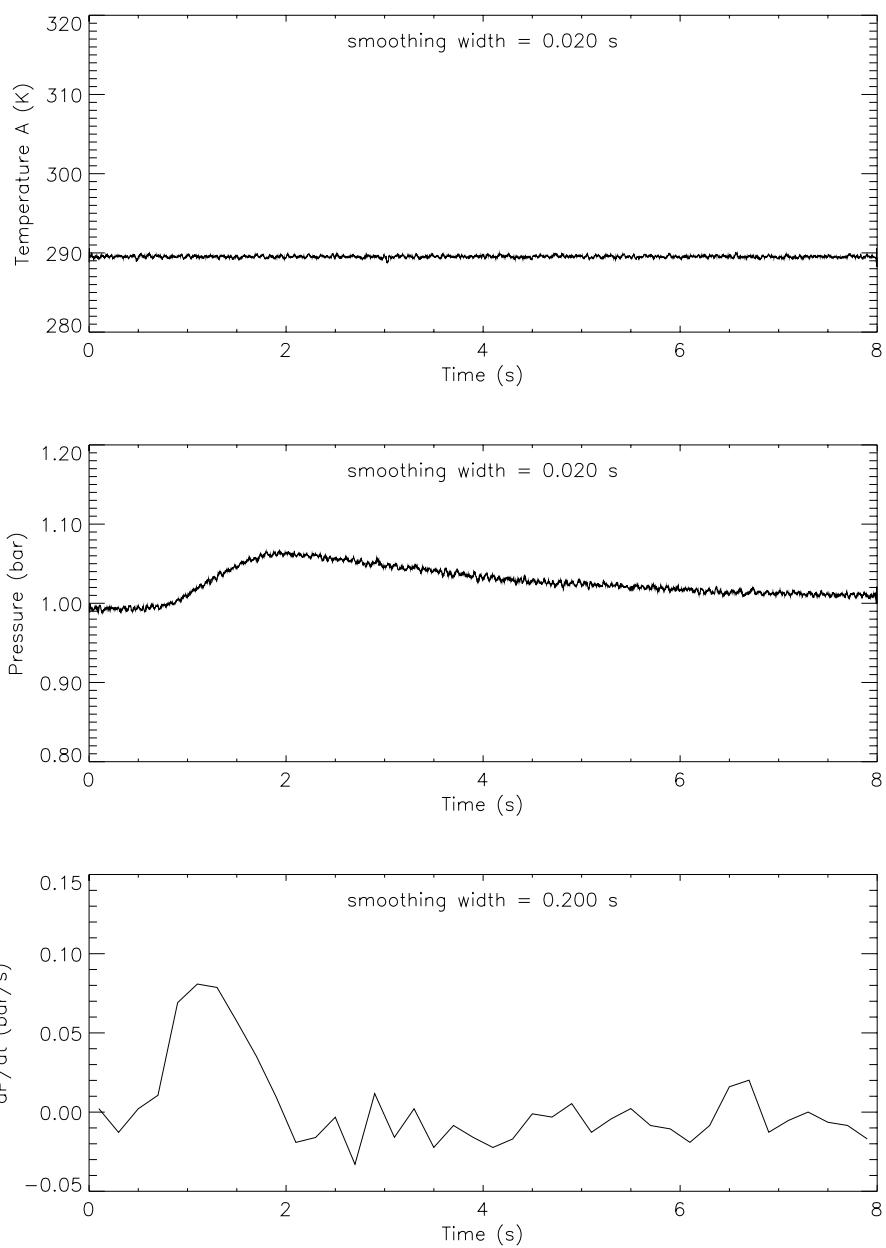
Run no. 20a
8% H₂, 16% N₂O, 76% air, 1 bar, spark plug, 2nd burn



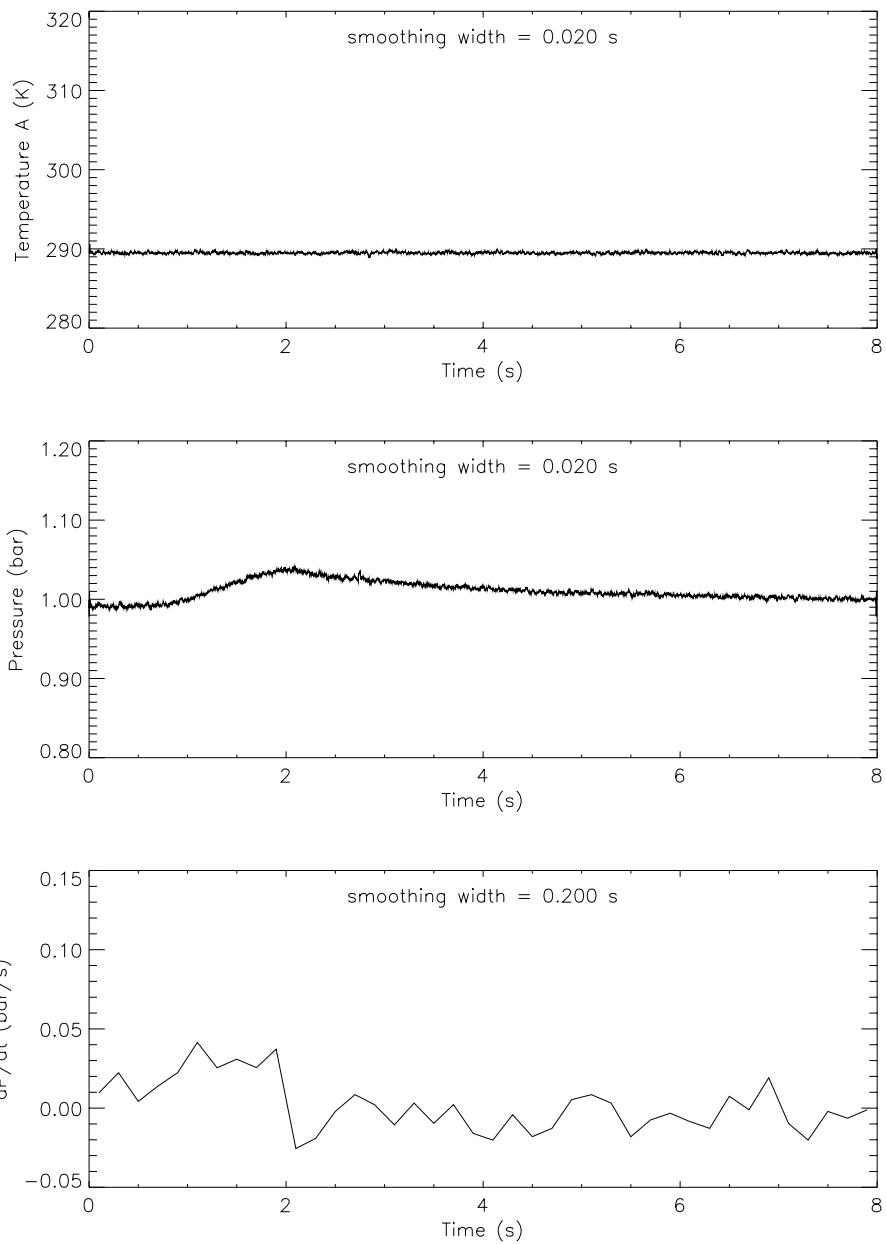
Run no. 20b
8% H₂, 16% N₂O, 76% air, 1 bar, spark plug, 3rd burn, fan



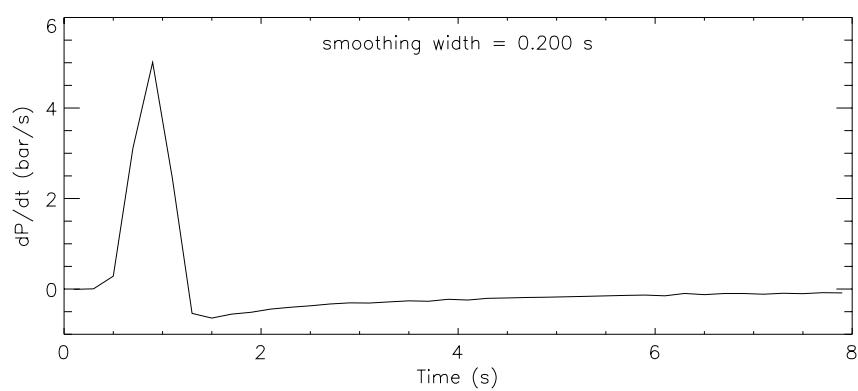
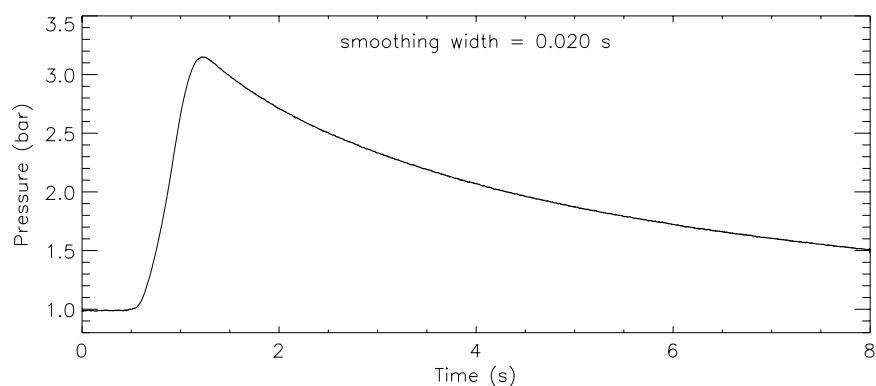
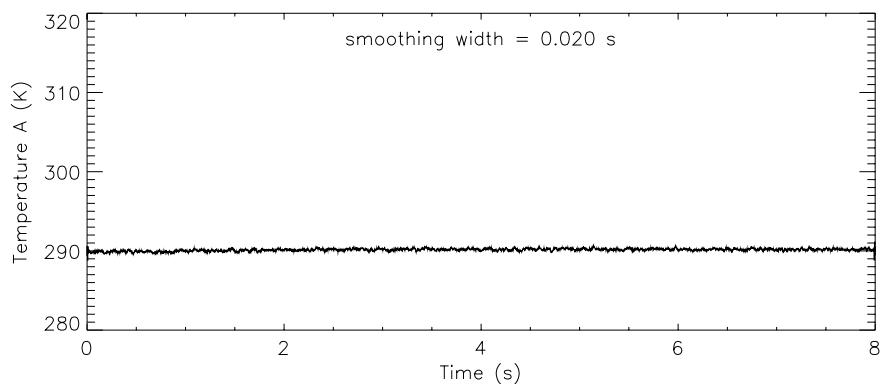
Run no. 21
8% H₂, 24% N₂O, 68% air, 1 bar, spark plug

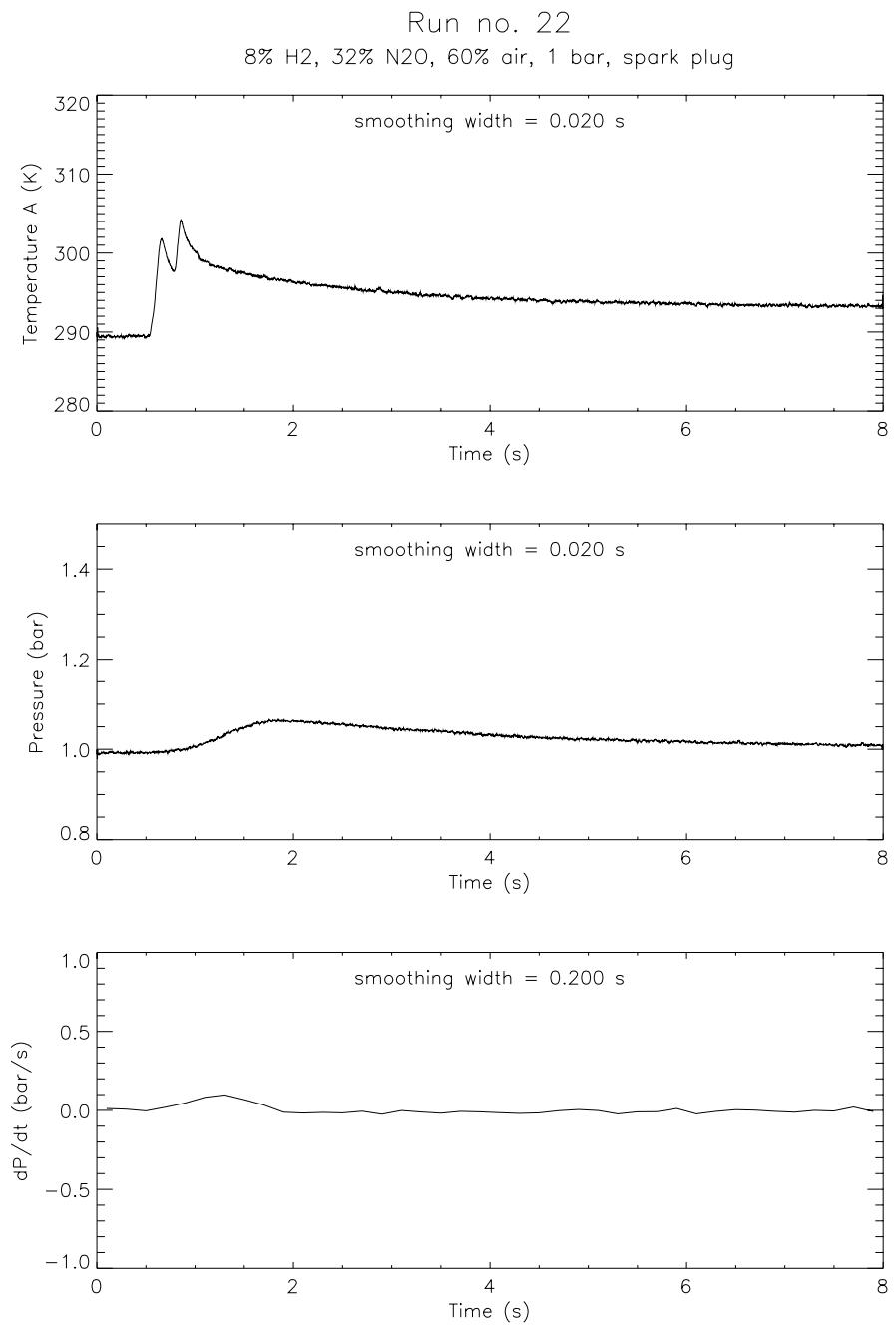


Run no. 21a
8% H₂, 24% N₂O, 68% air, 1 bar, spark plug, 2nd attempt, no fan

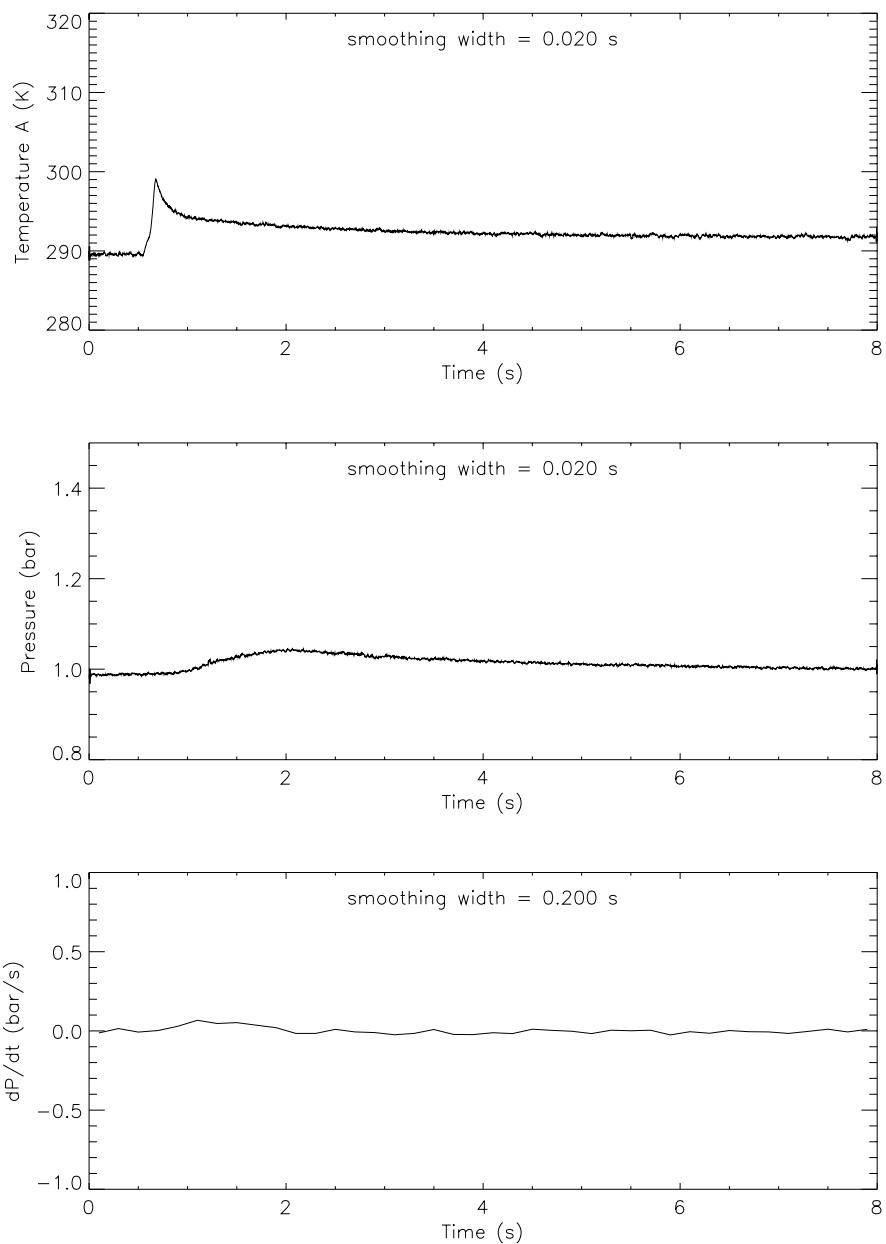


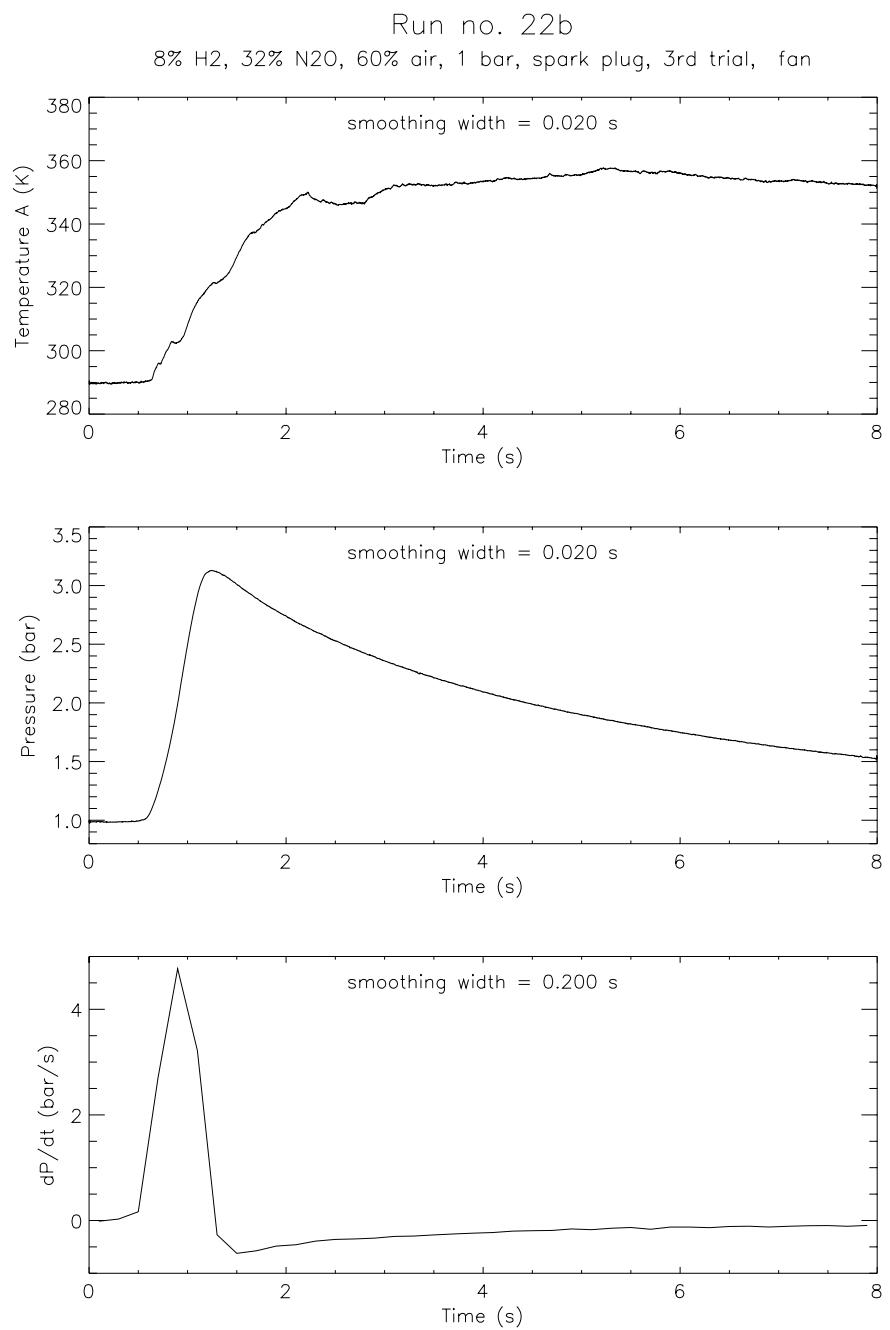
Run no. 21b
8% H₂, 24% N₂O, 68% air, 1 bar, spark plug, 3rd attempt, fan on



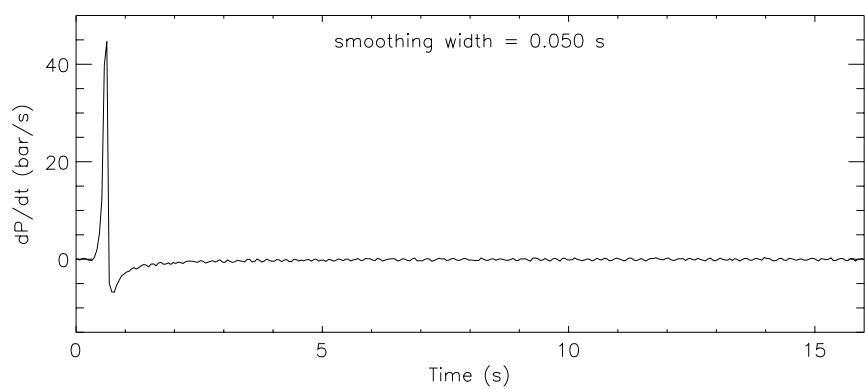
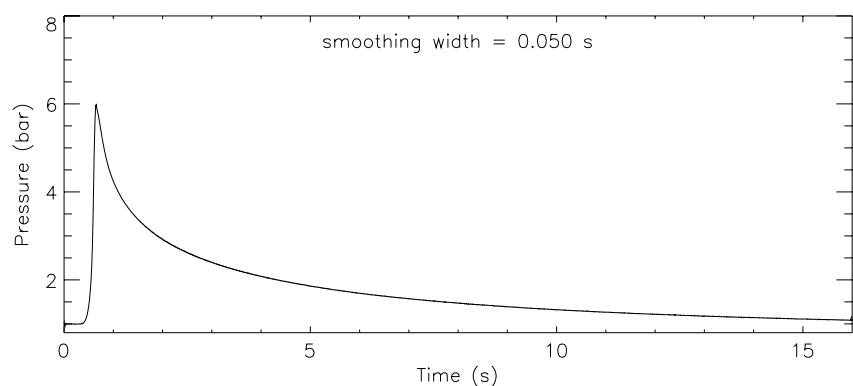
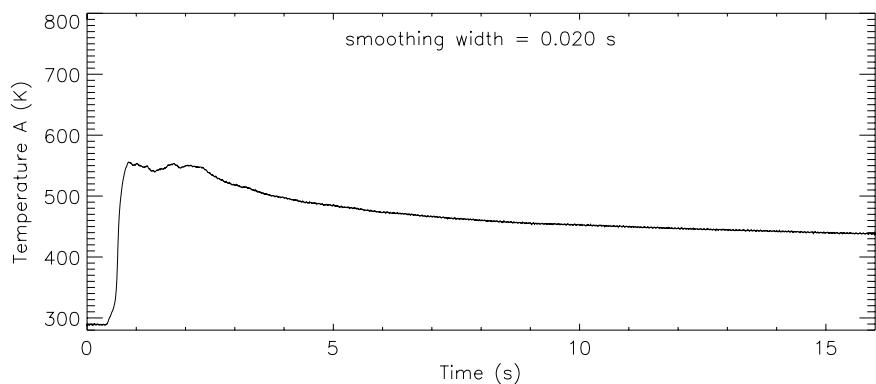


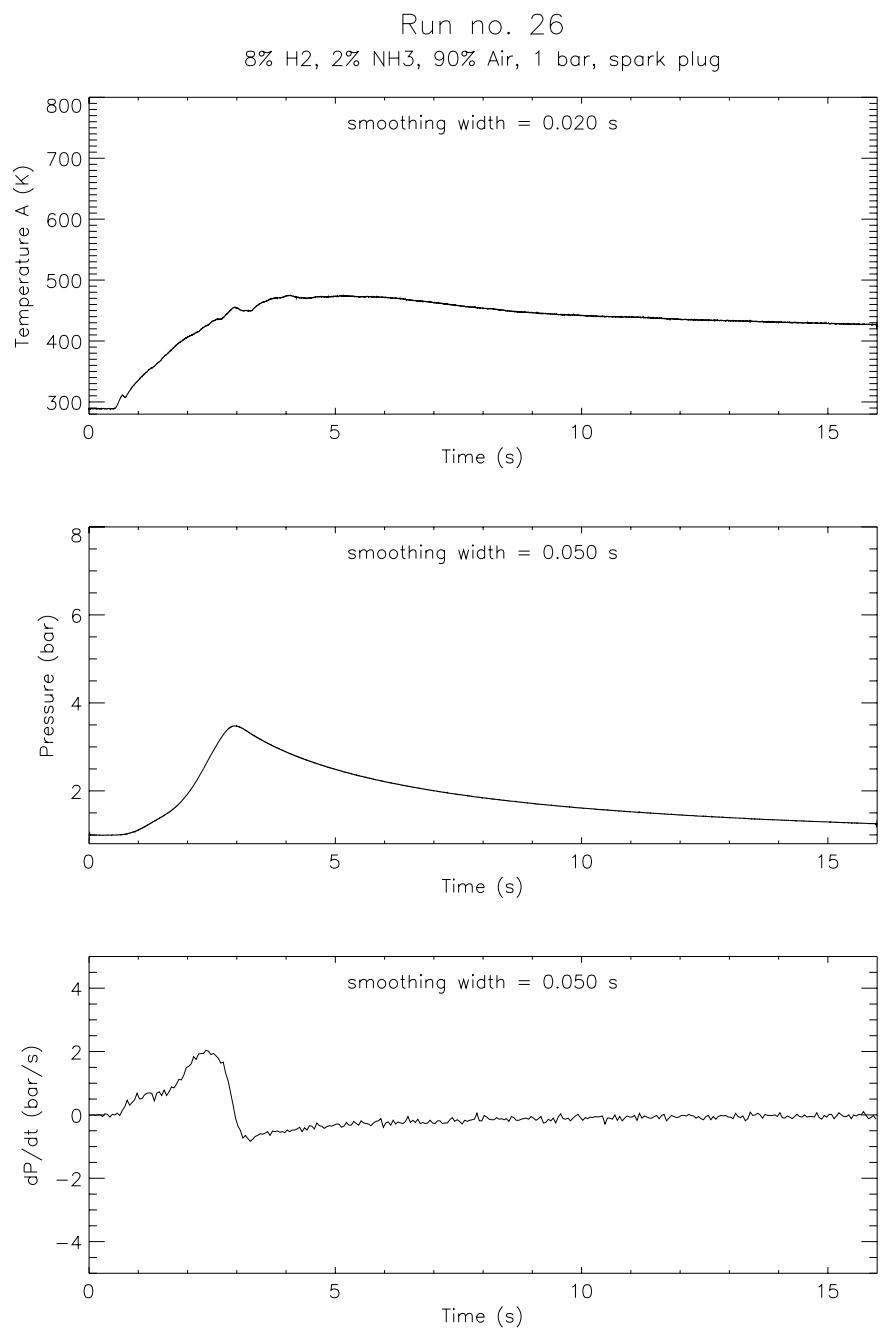
Run no. 22a
8% H₂, 32% N₂O, 60% air, 1 bar, spark plug, 2nd trial, no fan

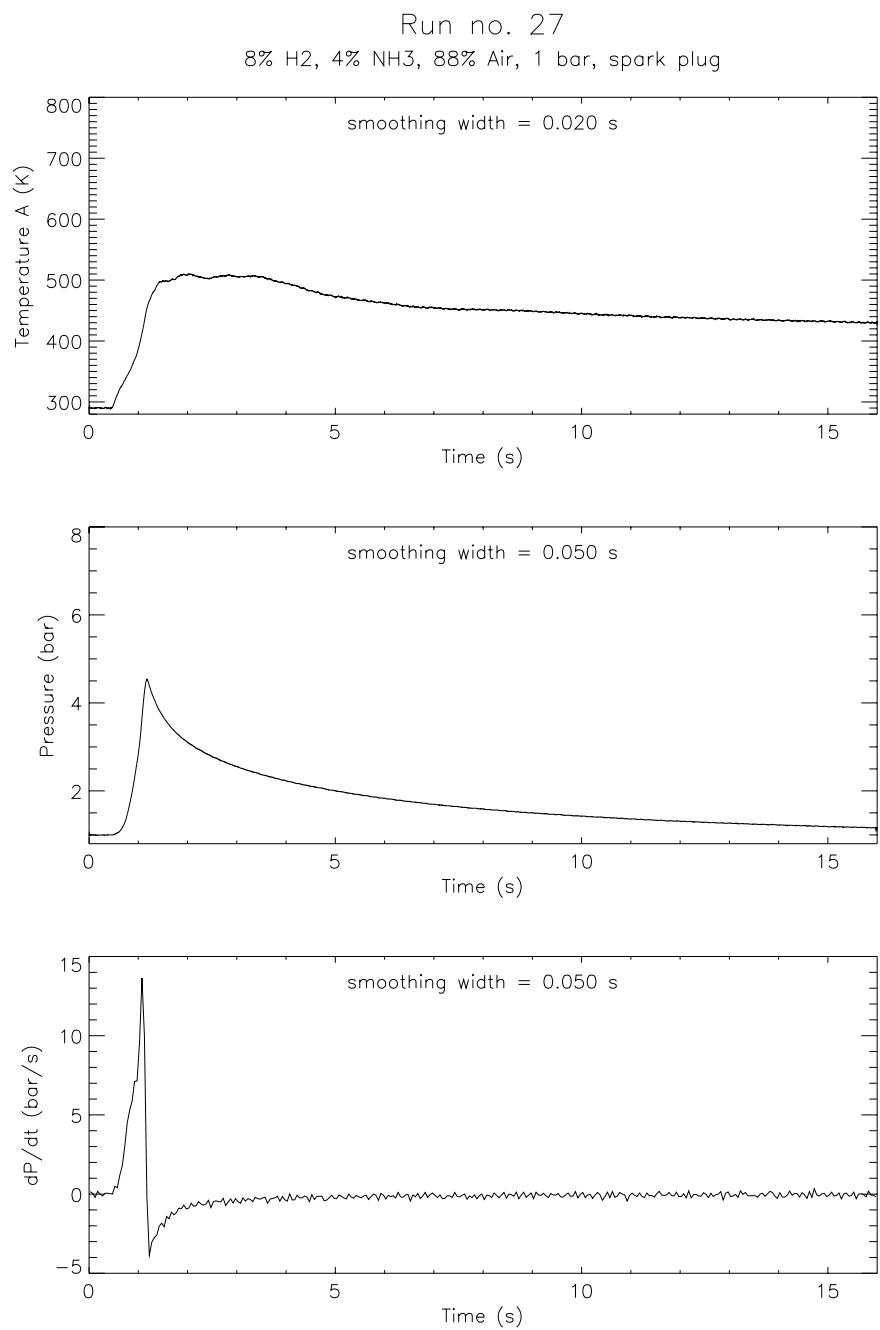




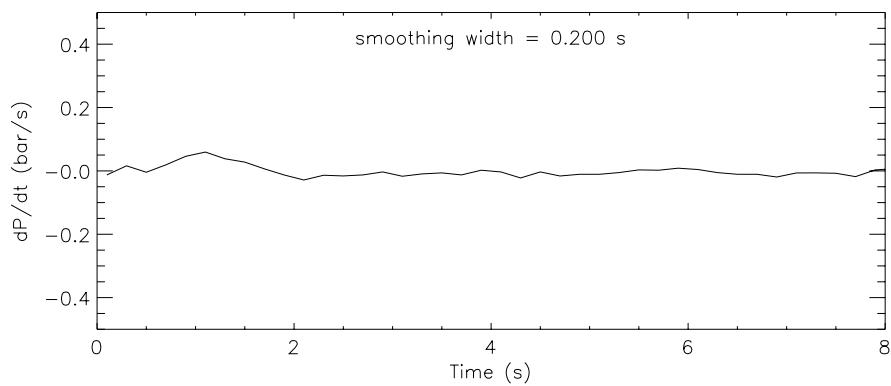
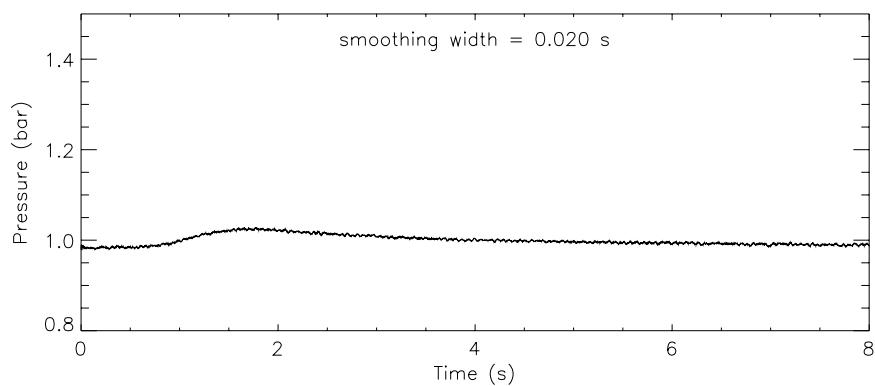
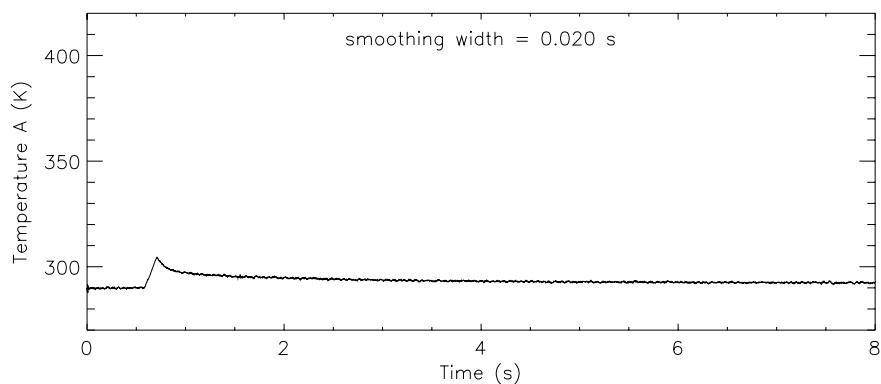
Run no. 25
8% H₂, 8% NH₃, 84% Air, 1 bar, spark plug

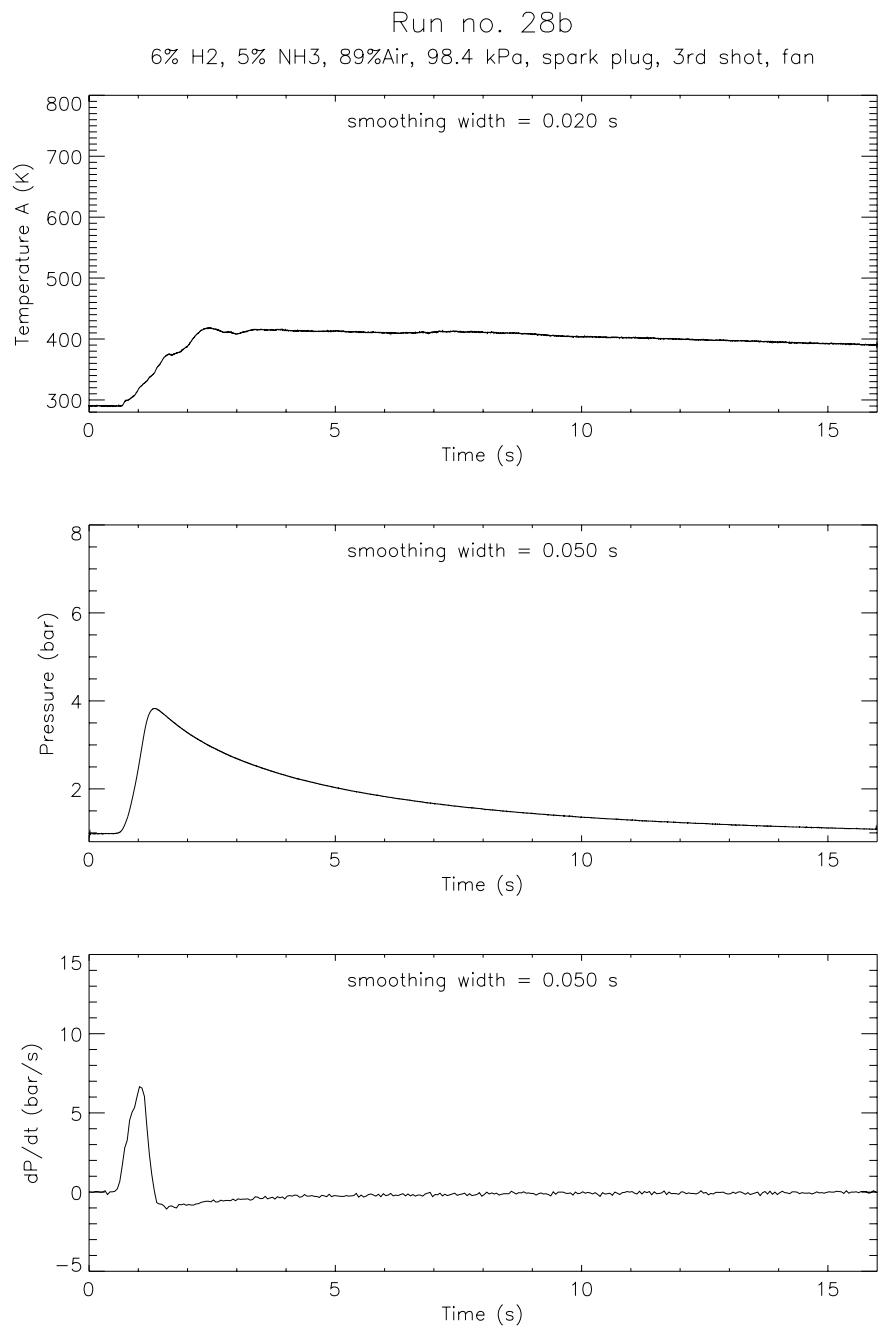


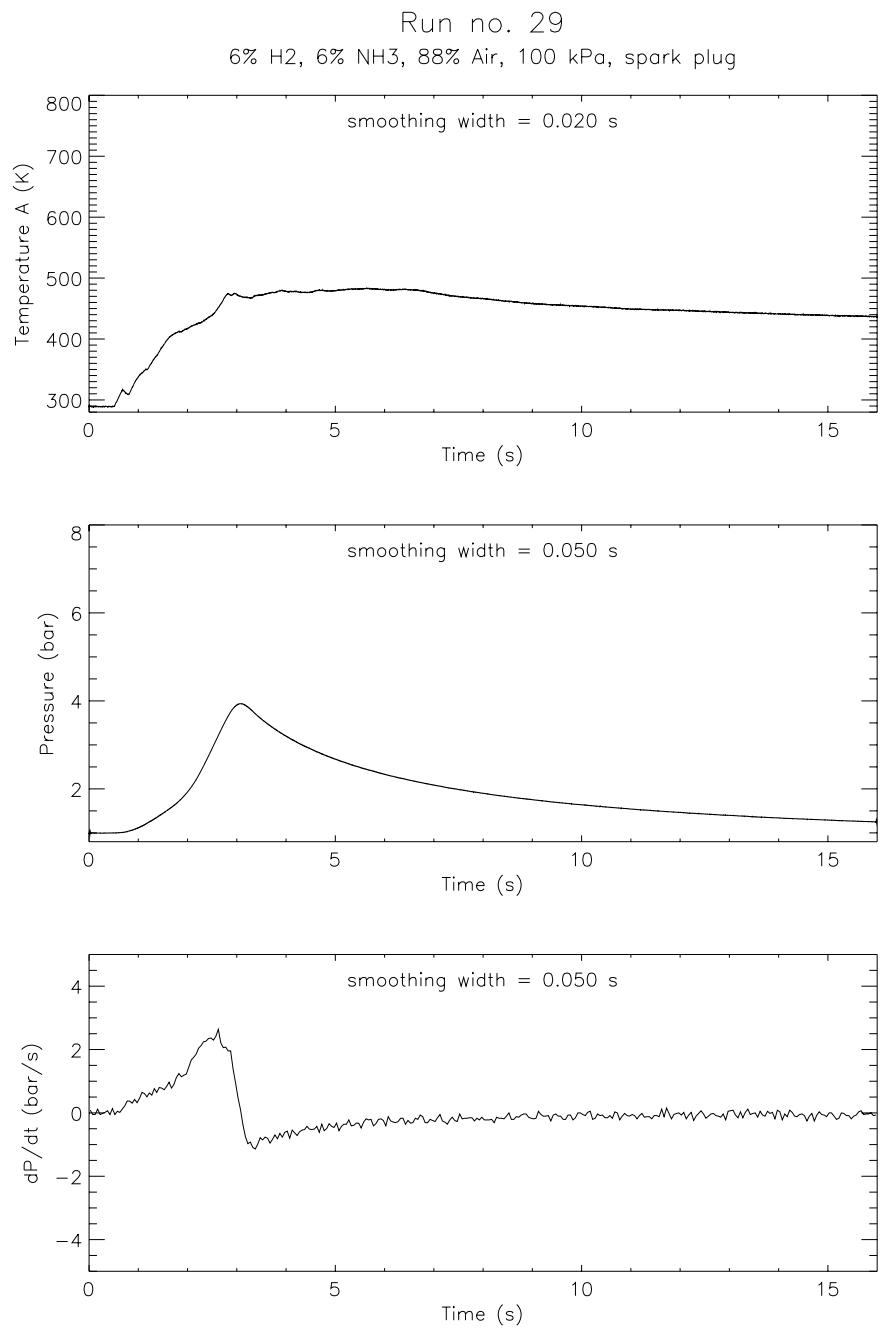


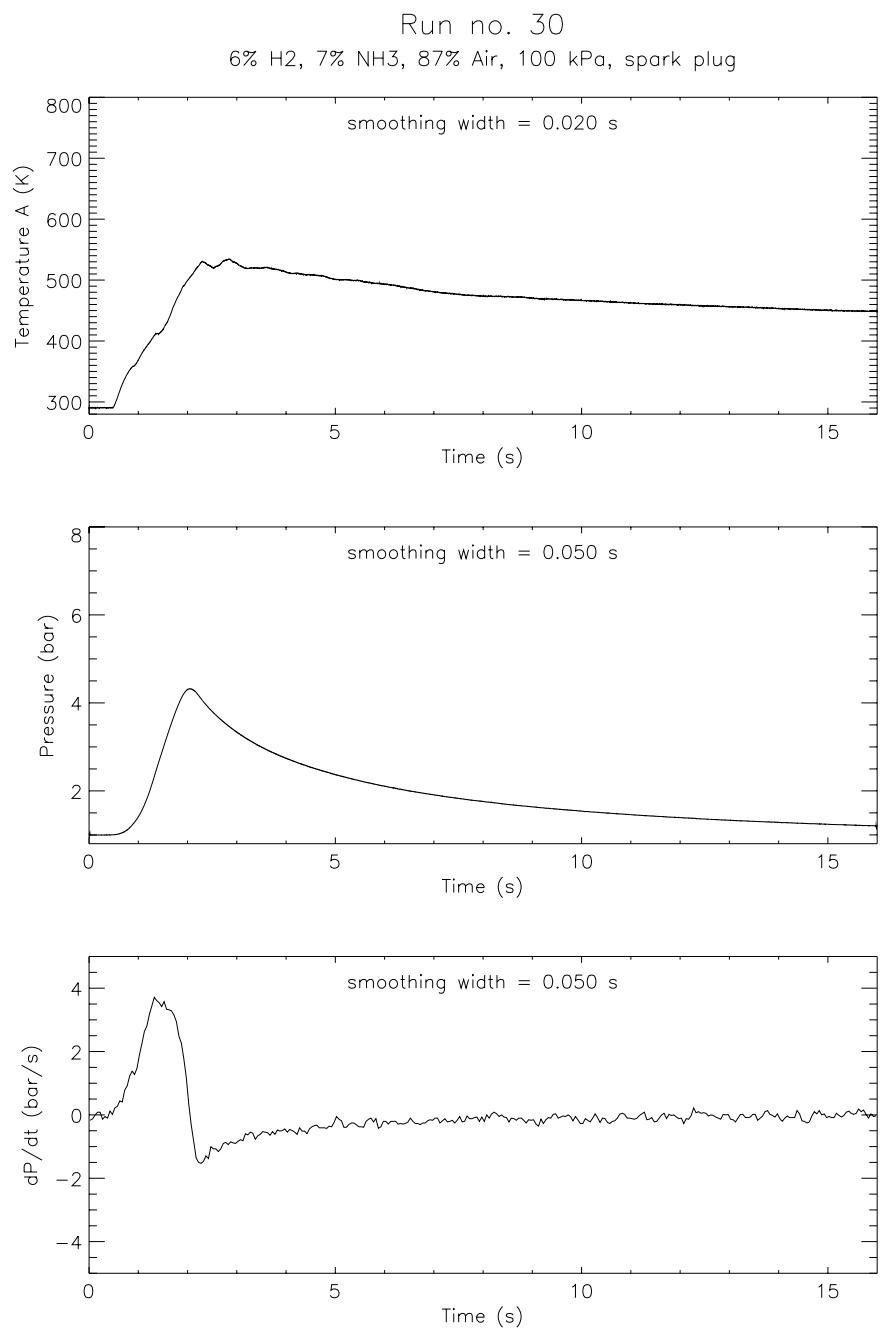


Run no. 28a
6% H₂, 5% NH₃, 89% Air, 98.2 kPa, spark plug, 2nd shot

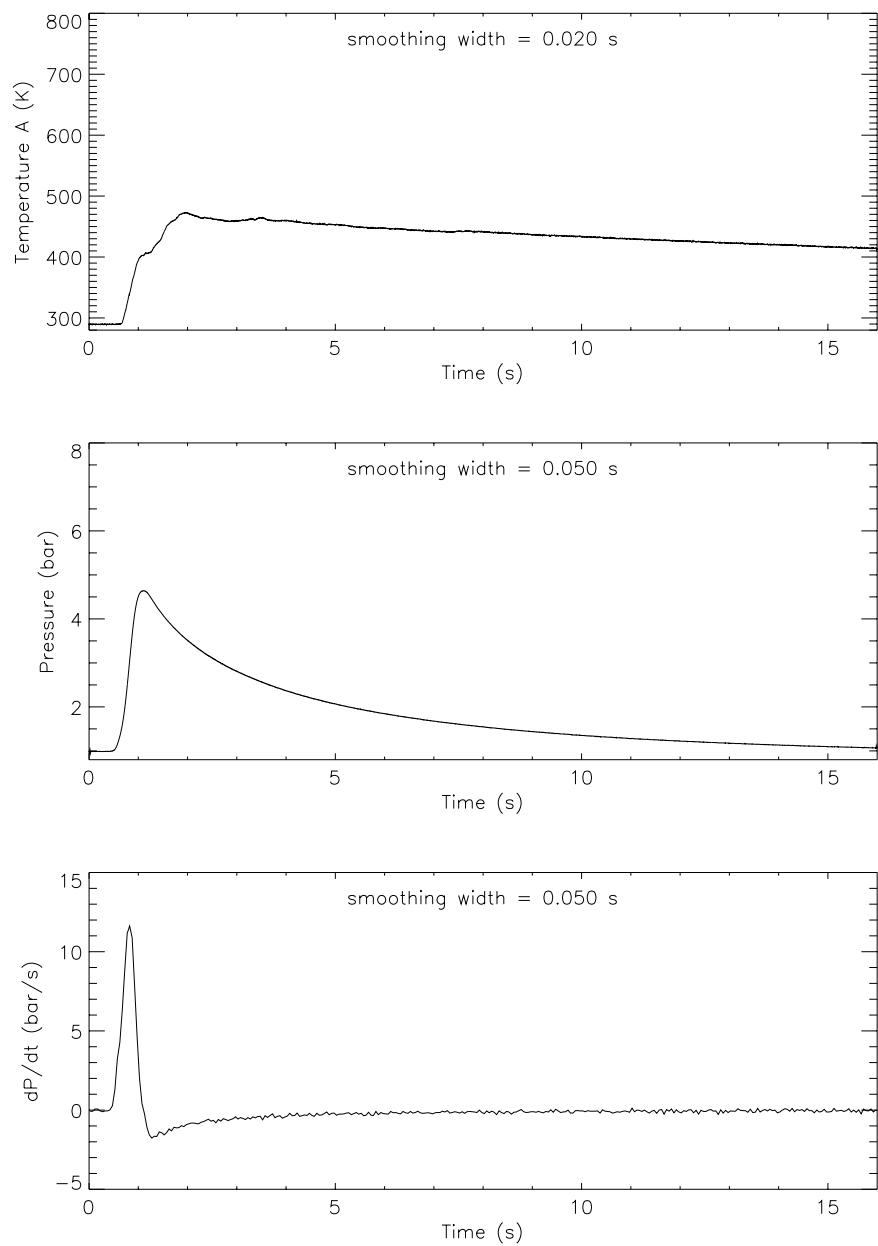


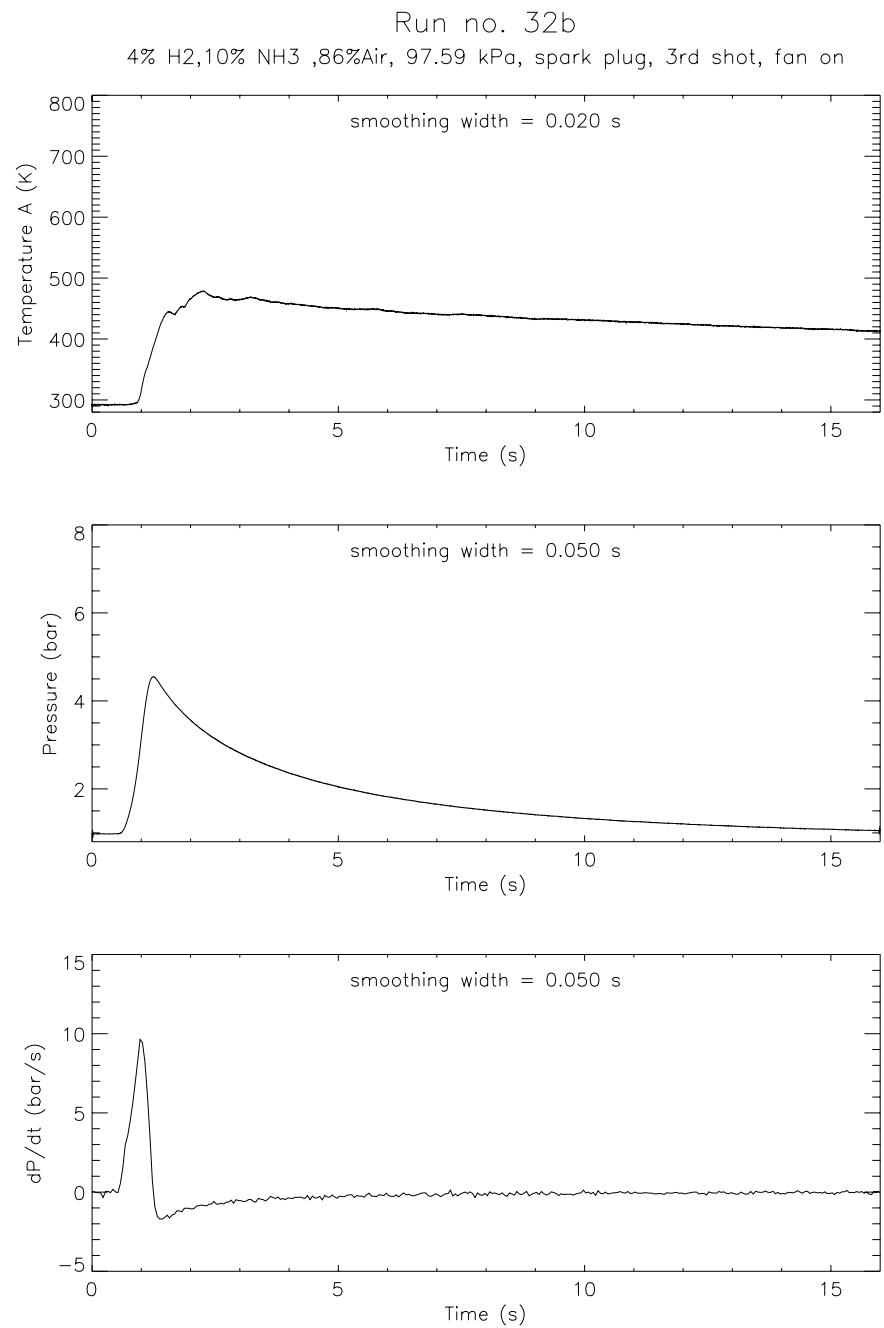


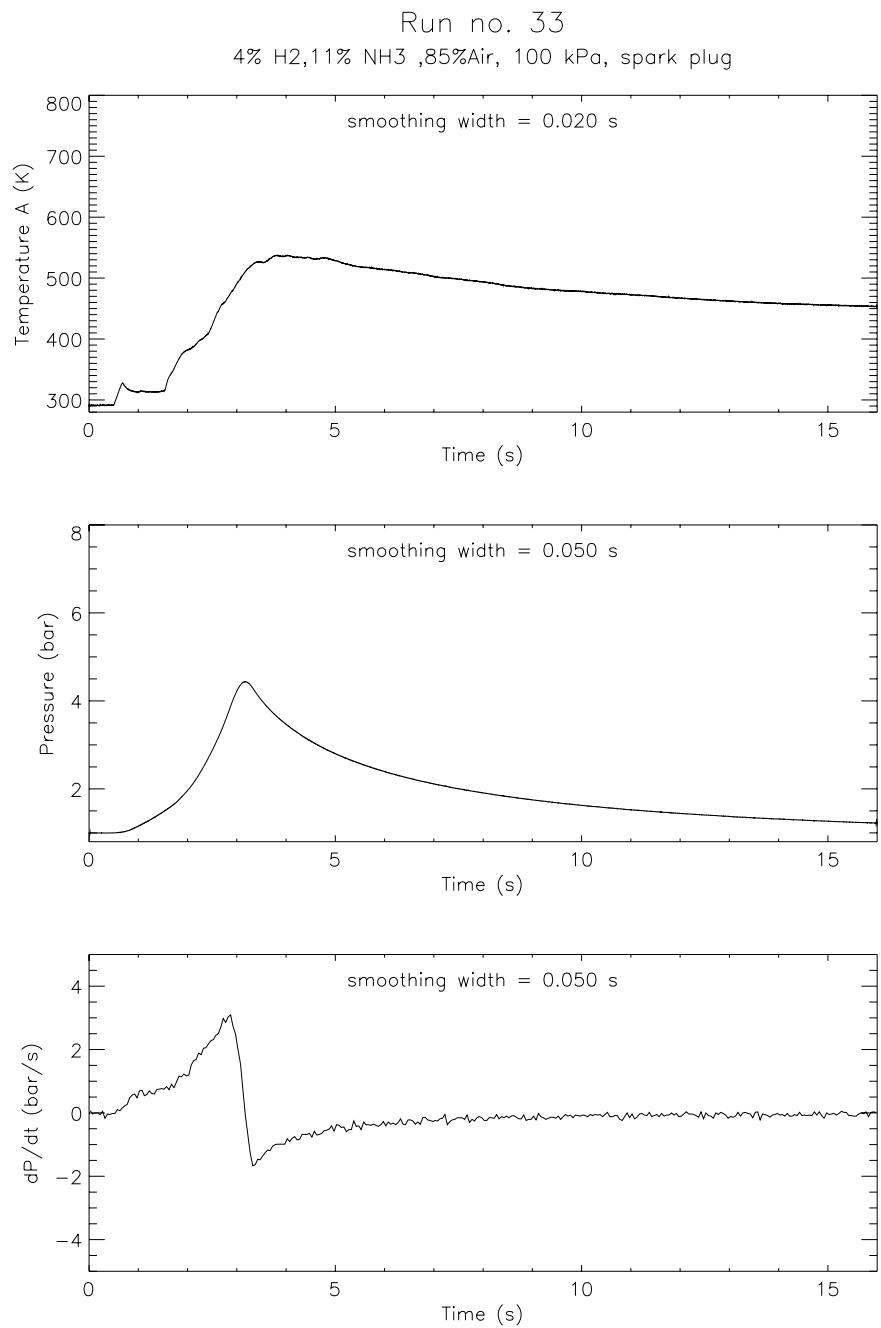


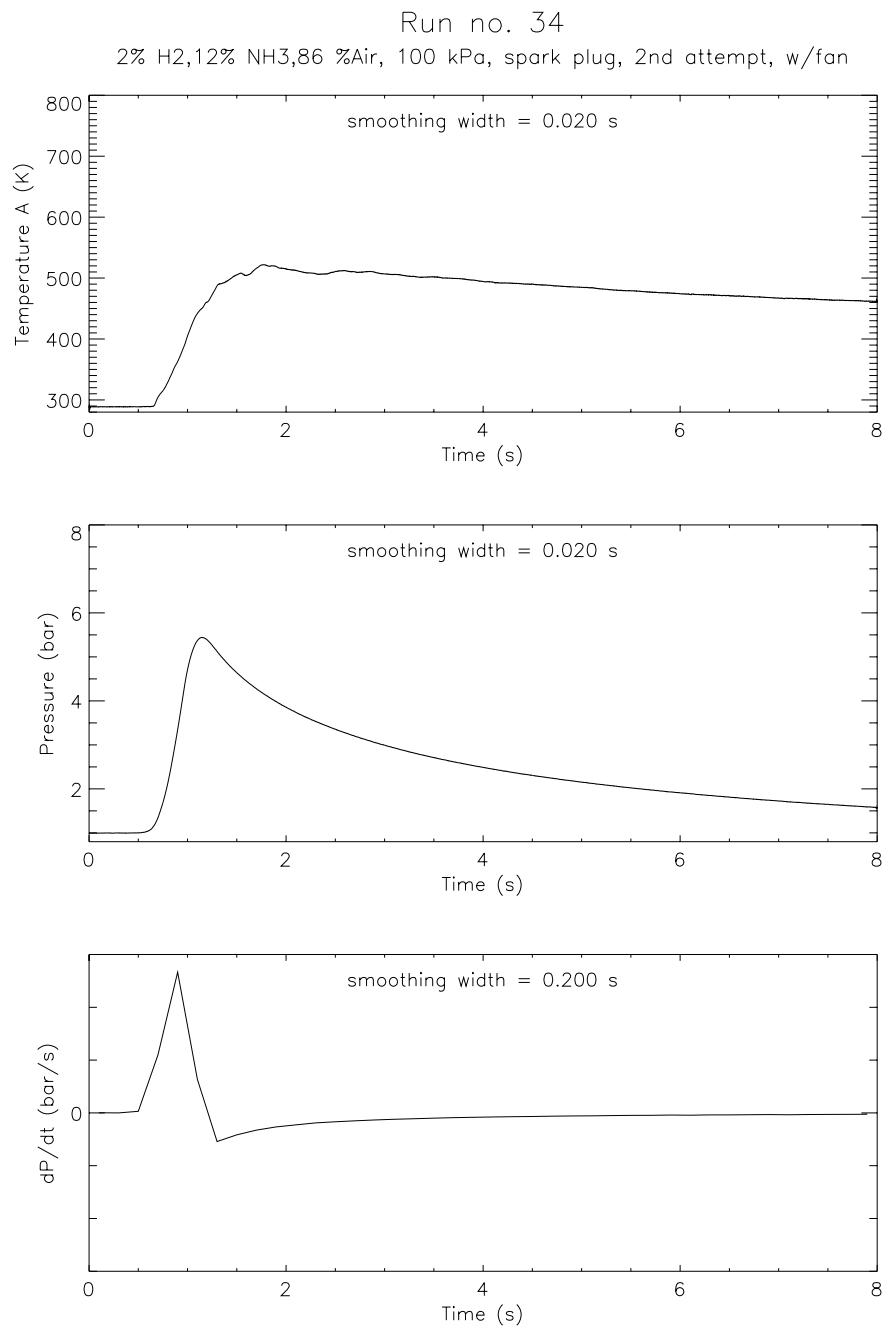


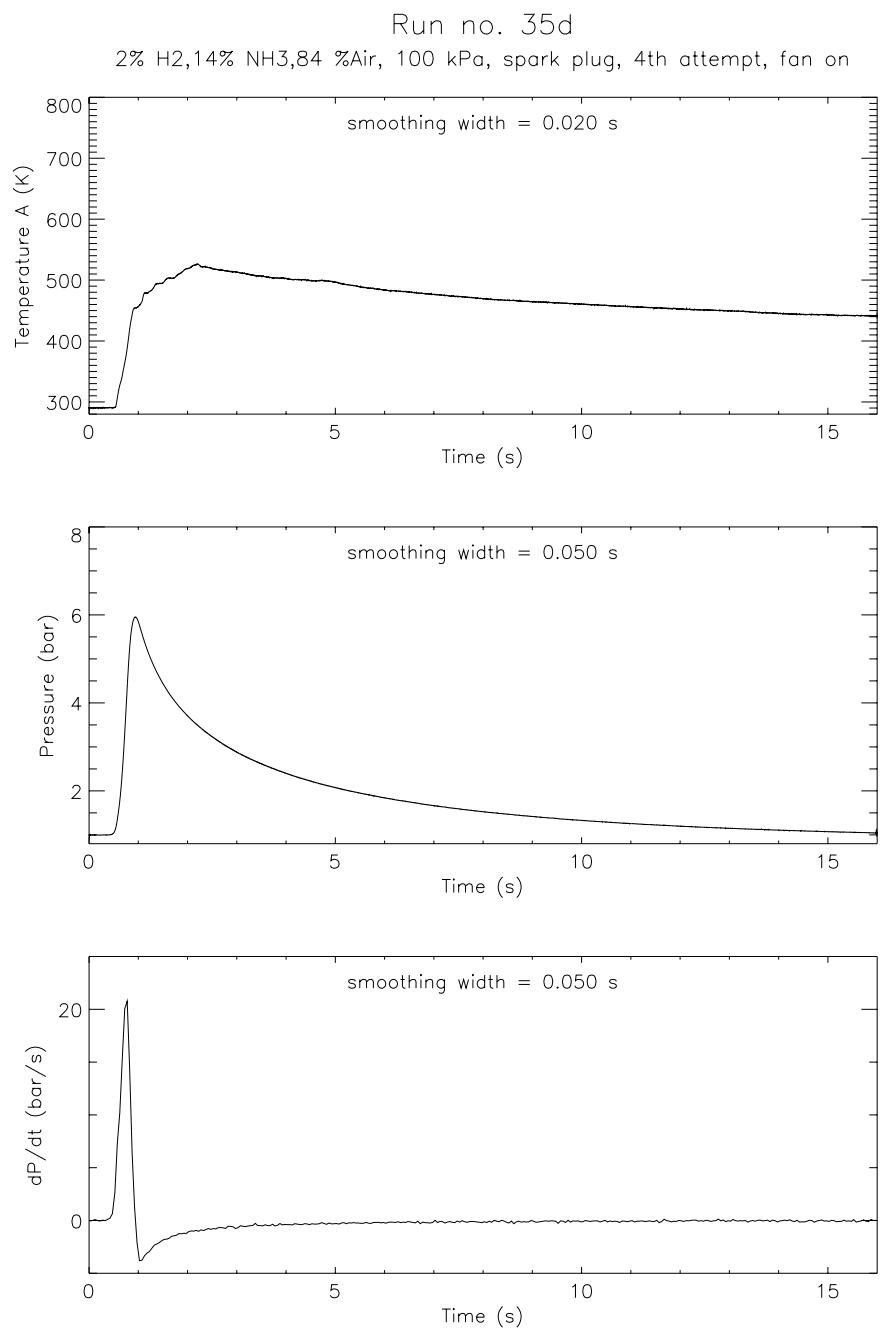
Run no. 31b
4% H₂, 9% NH₃, 87% Air, 98.77 kPa, spark plug, 3rd shot

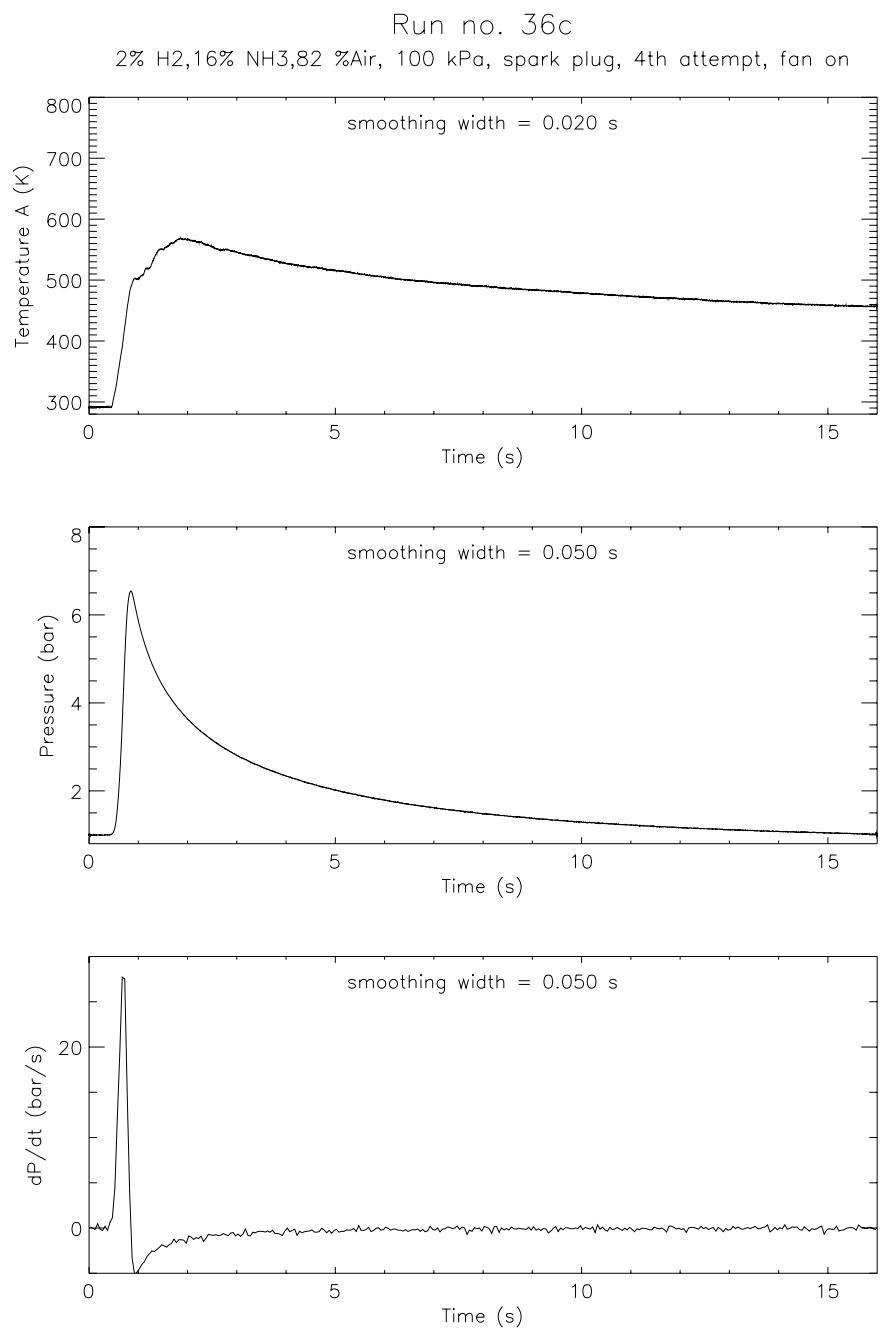


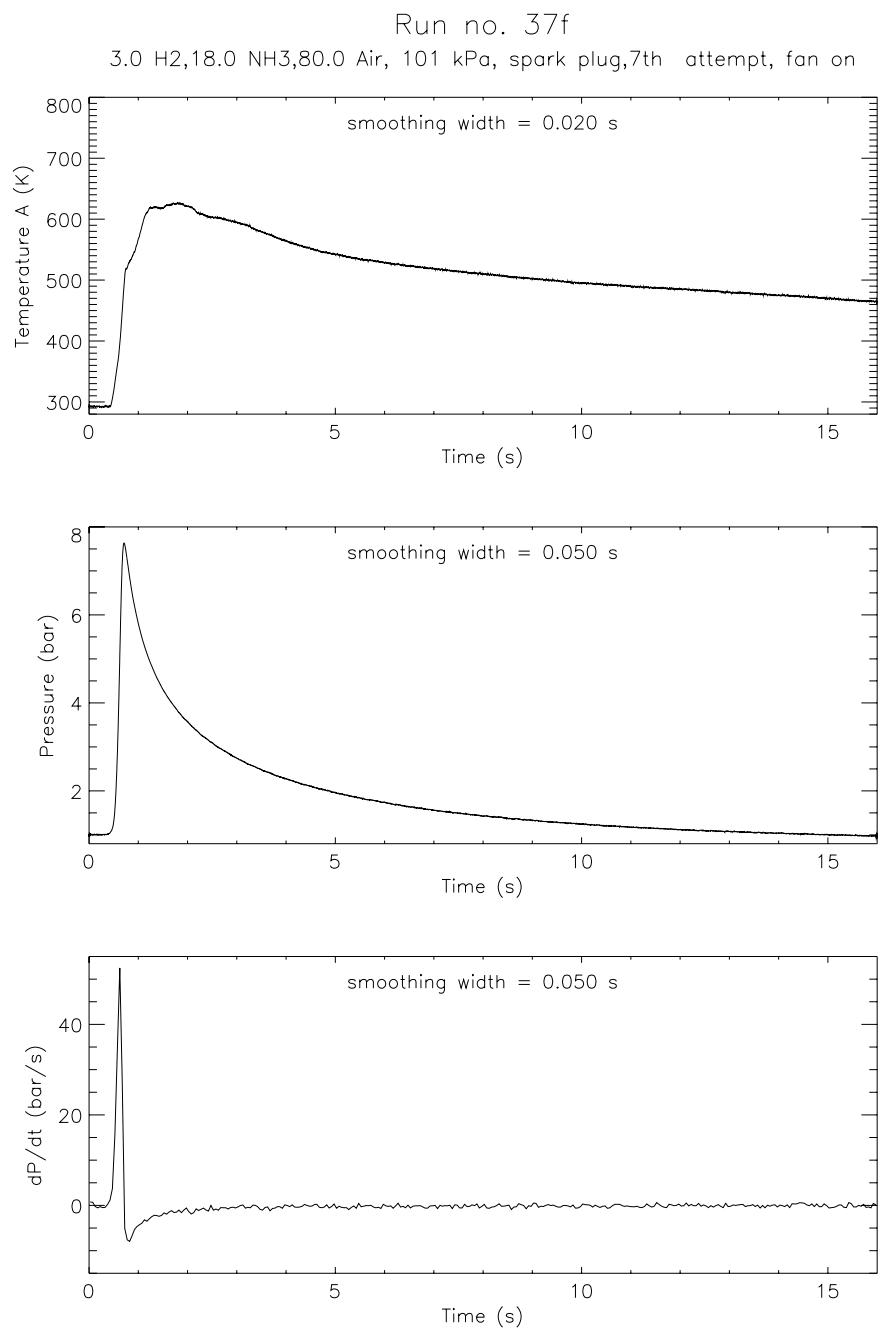




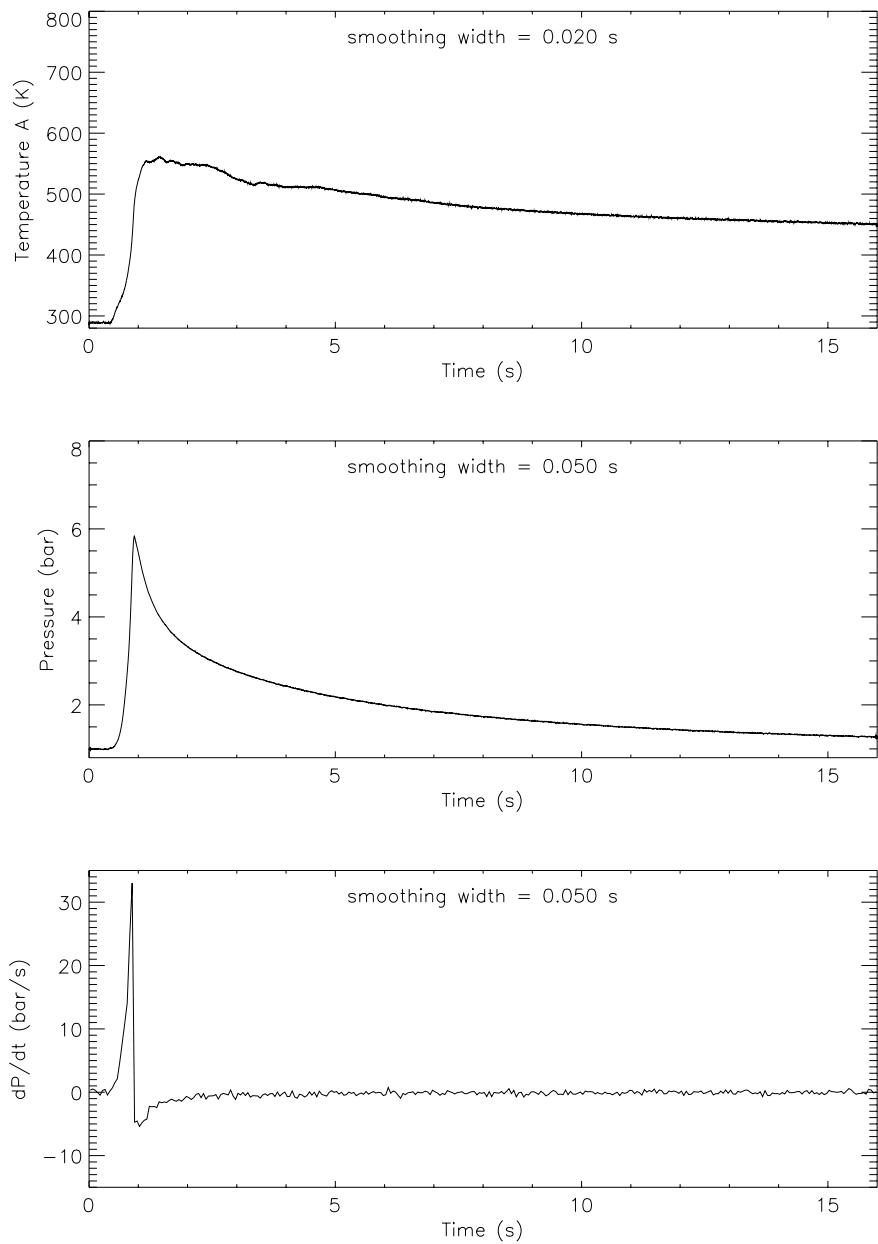




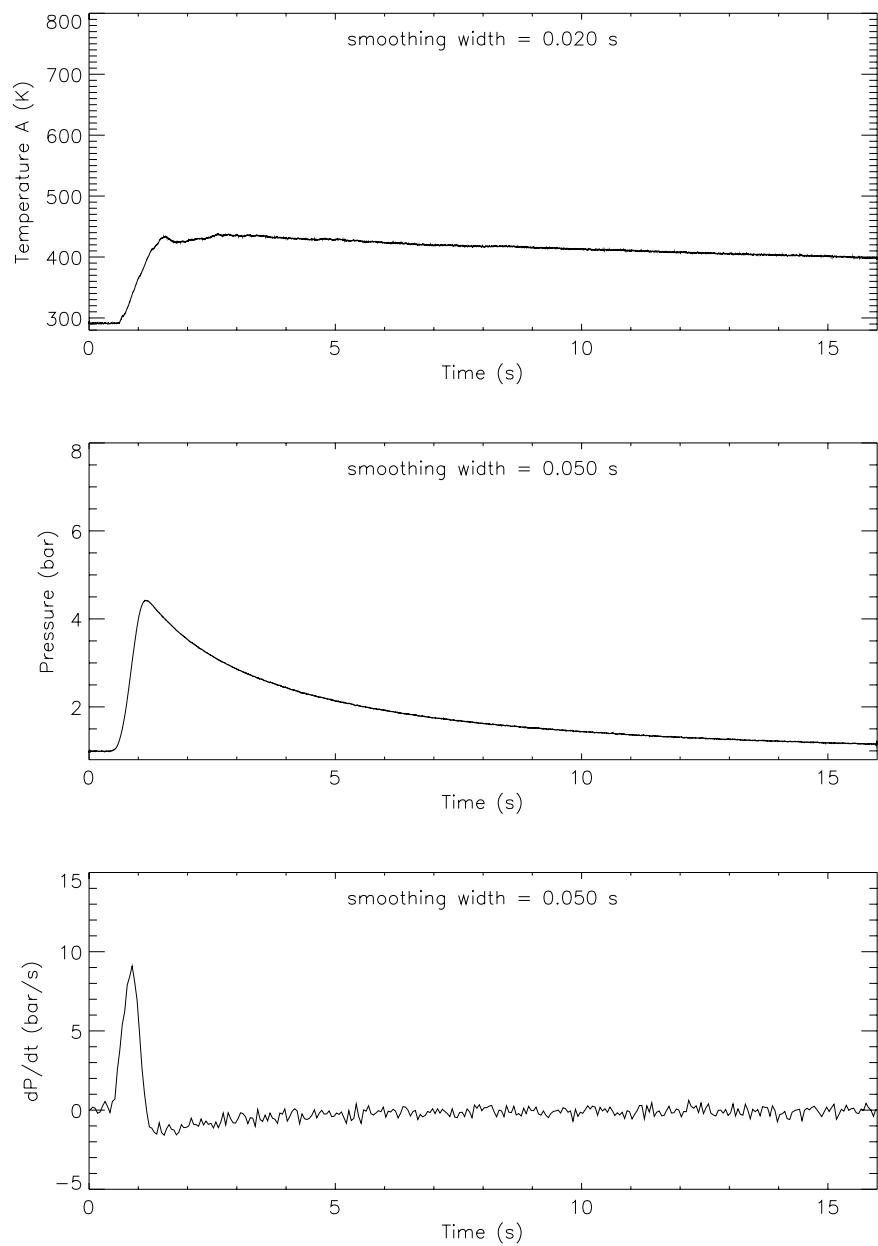


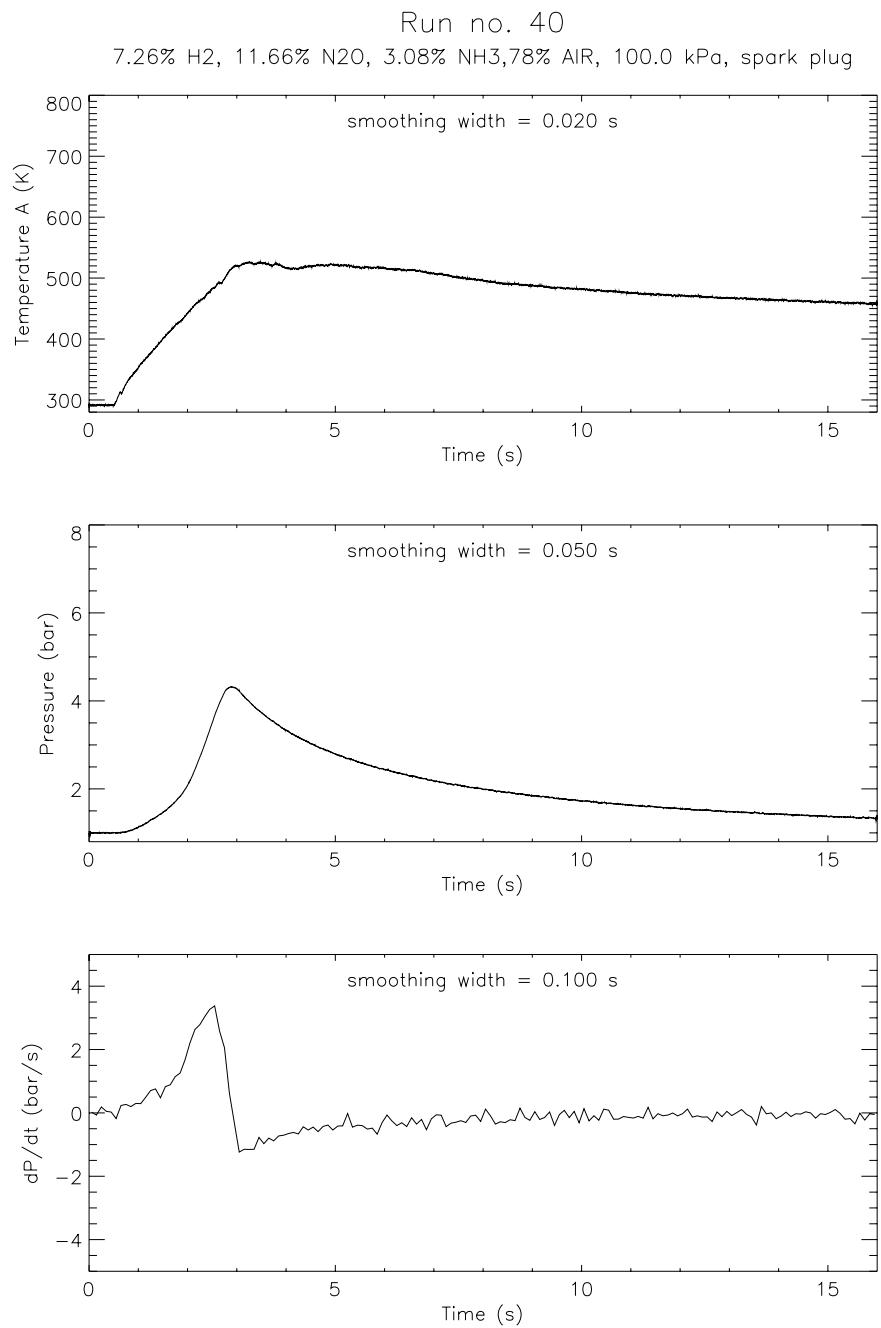


Run no. 38
8.25% H₂, 13.25% N₂O, 3.5% NH₃, 75% N₂, 100 kPa, spark plug

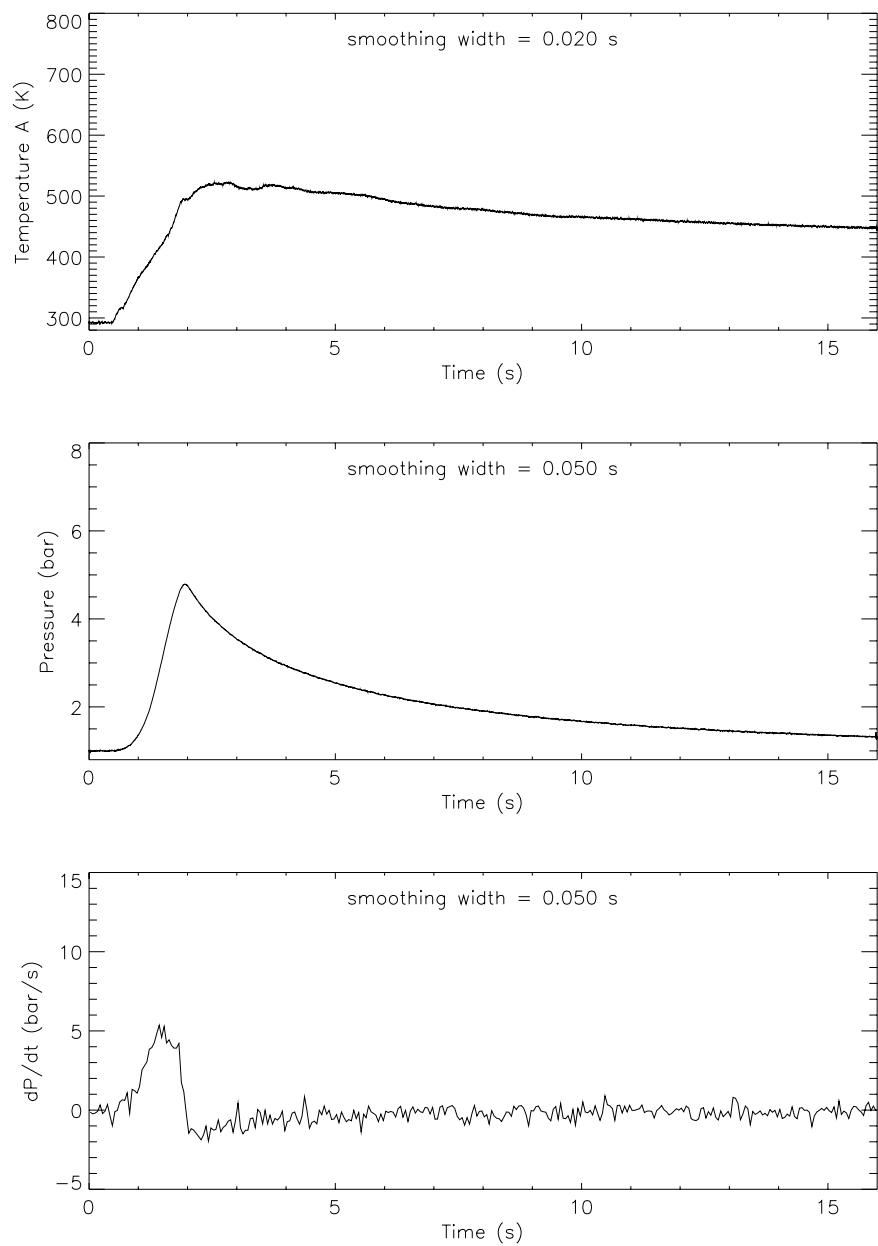


Run no. 39b

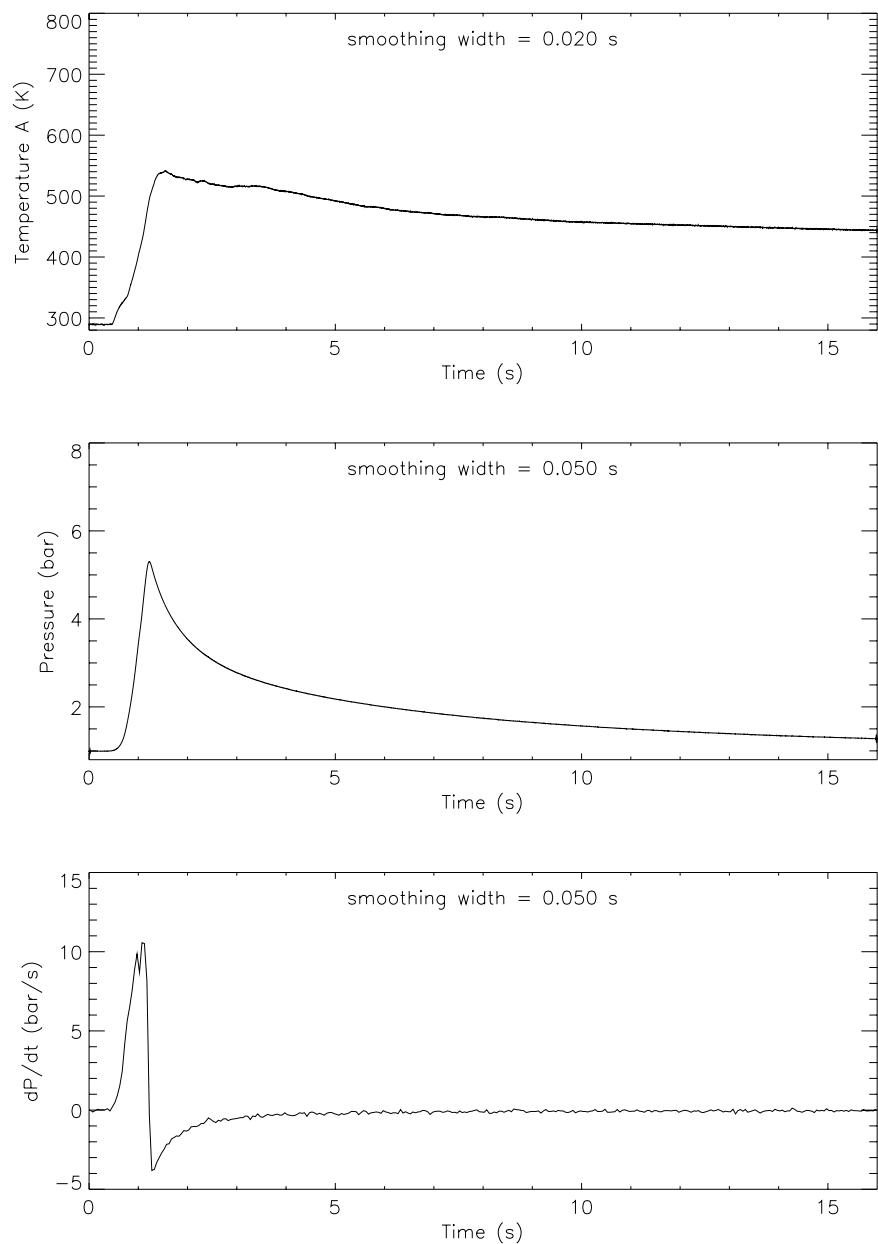
6.6% H₂, 10.6% N₂O, 2.8% NH₃, 80% AIR, 99.45 kPa, spark plug

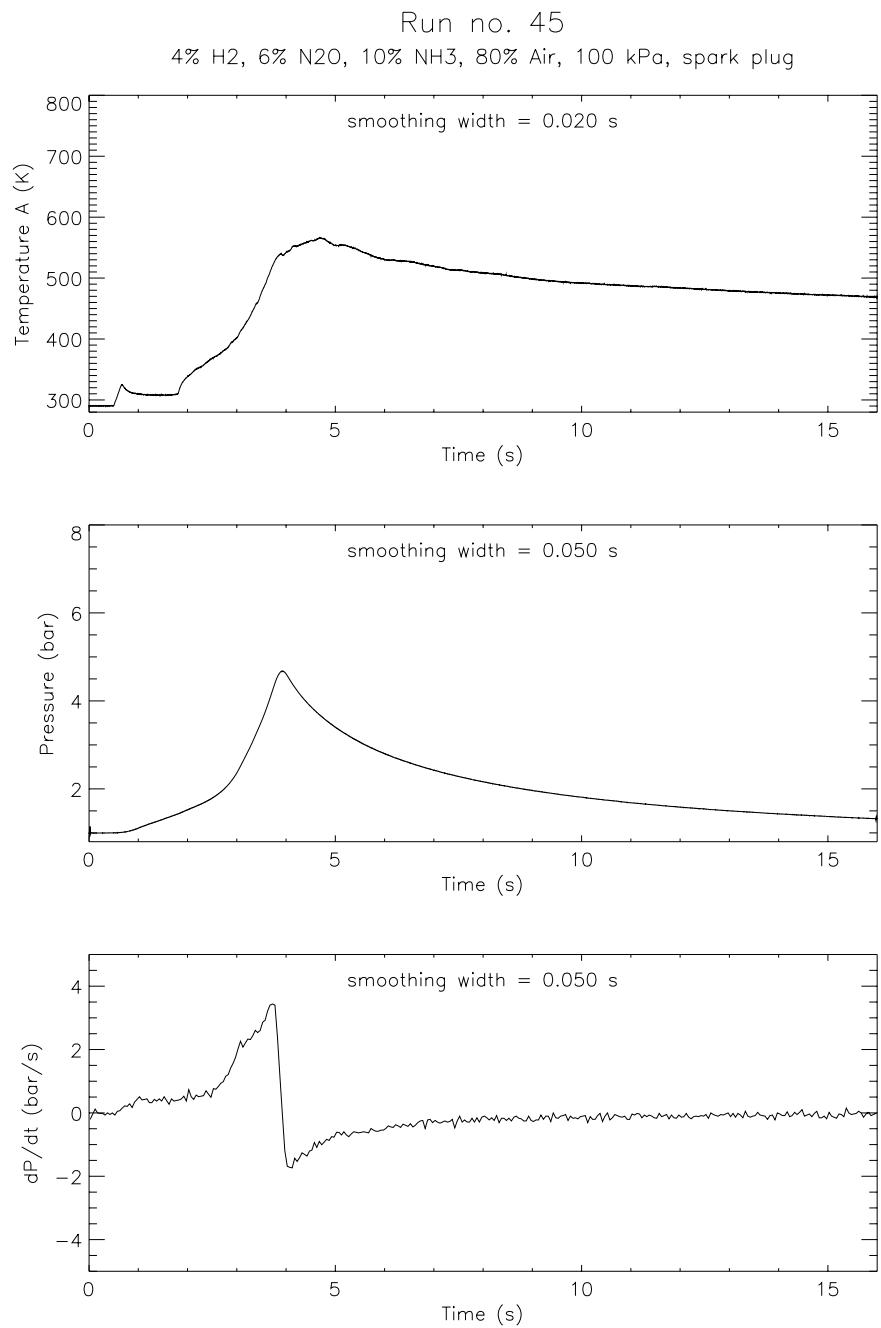


Run no. 41
7.59% H₂, 12.19% N₂O, 3.22% NH₃, 77% AIR, 100 kPa, spark plug

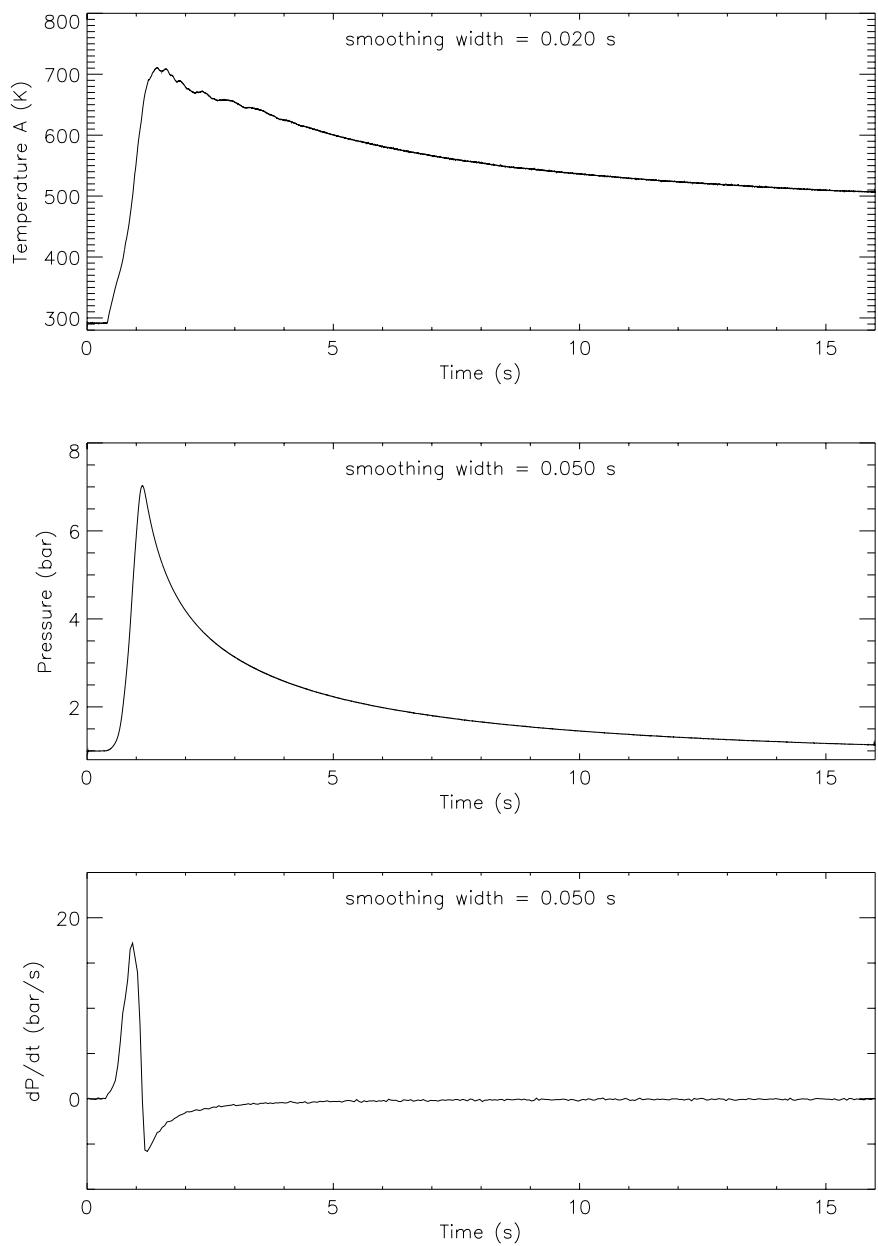


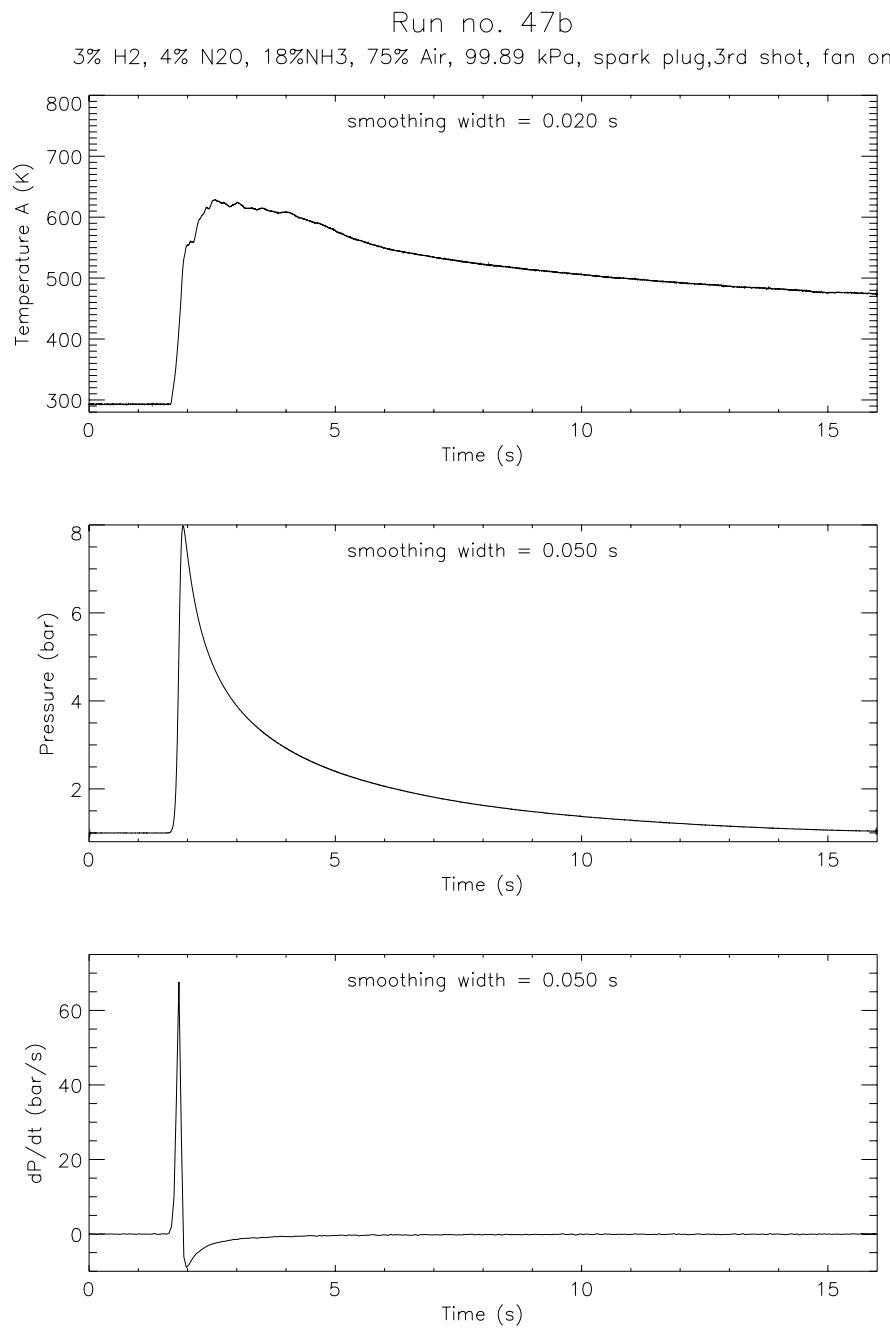
Run no. 42
7.92% H₂, 12.72% N₂O, 3.36% NH₃, 76% Air, 100kPa, , spark plug

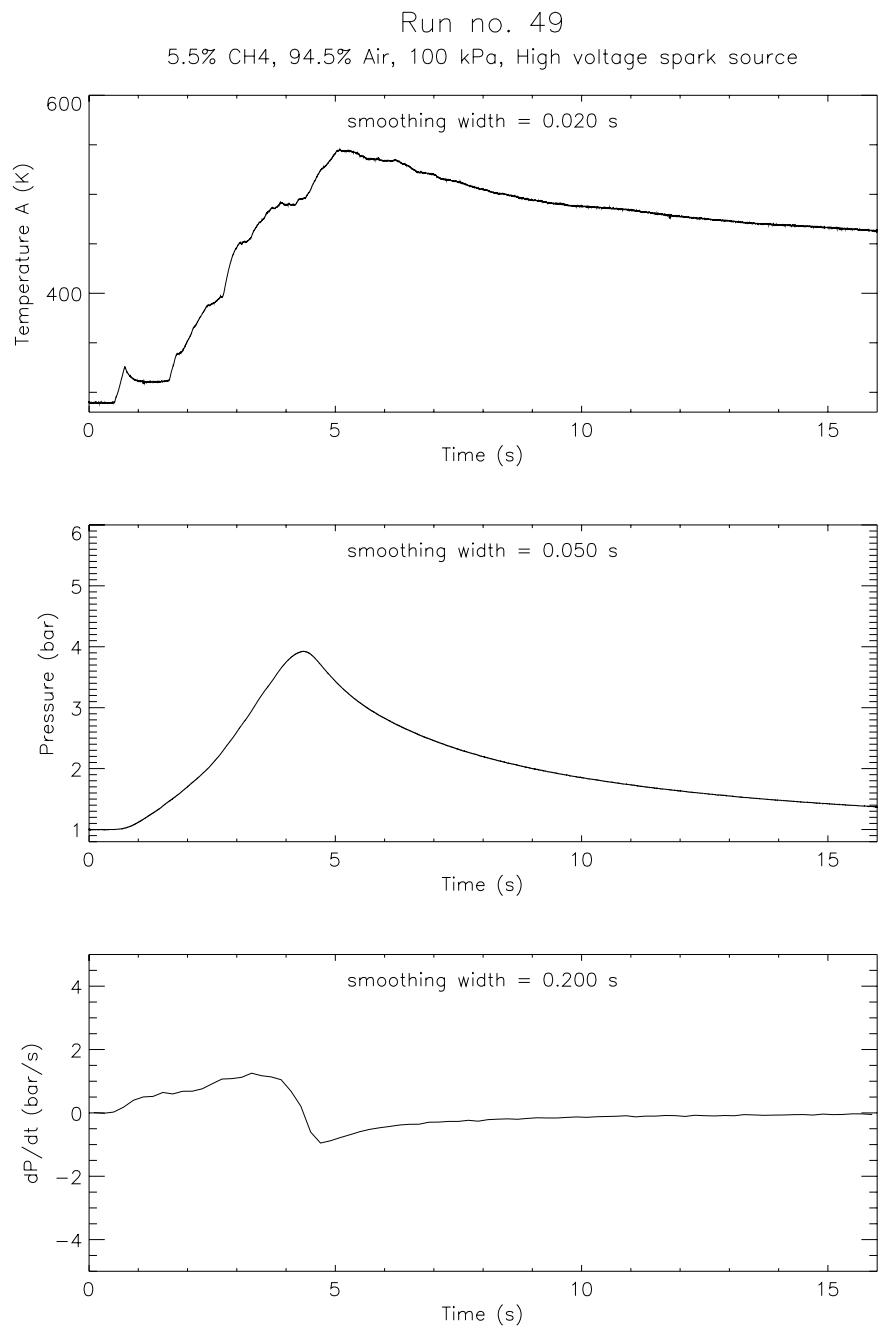




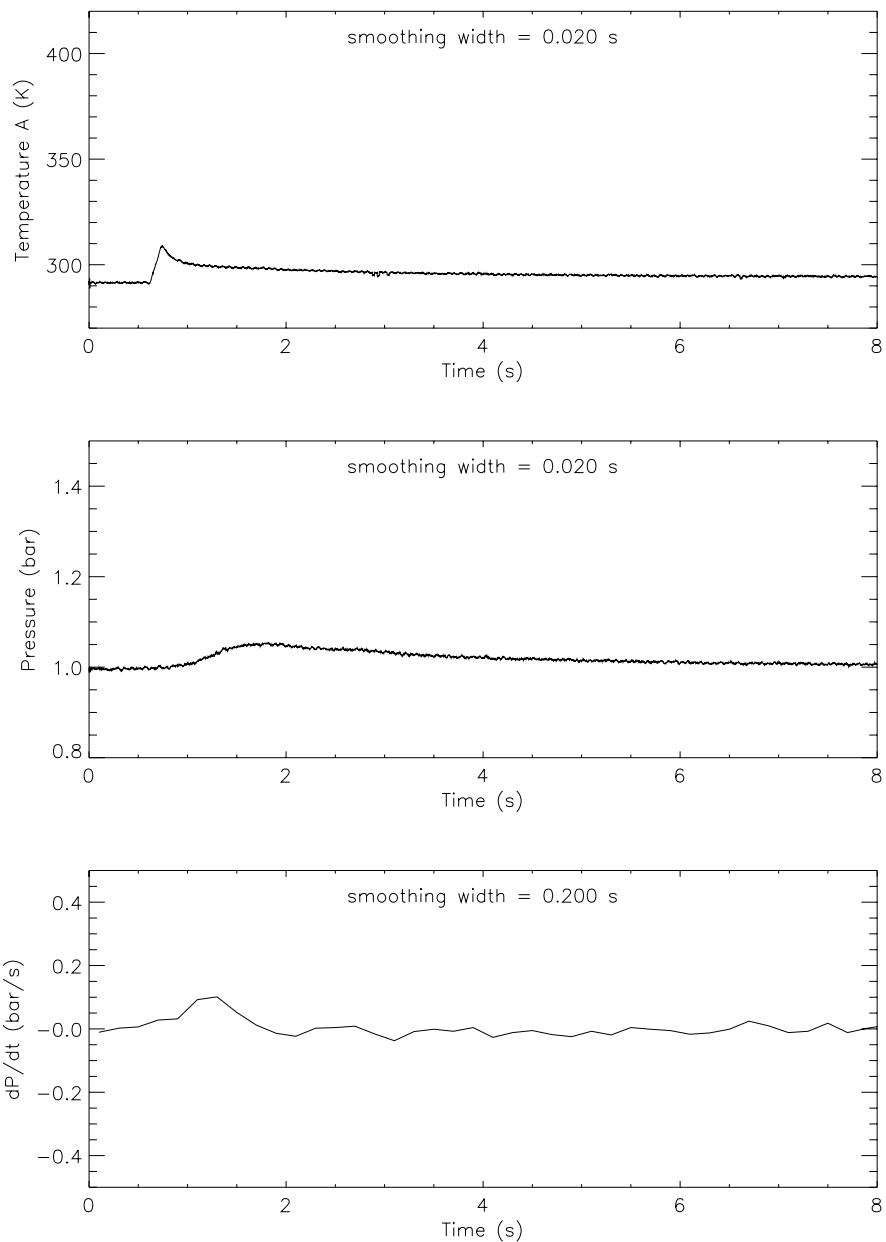
Run no. 46
3% H₂, 6% N₂O, 18%NH₃, 73% Air, 100 kPa, spark plug

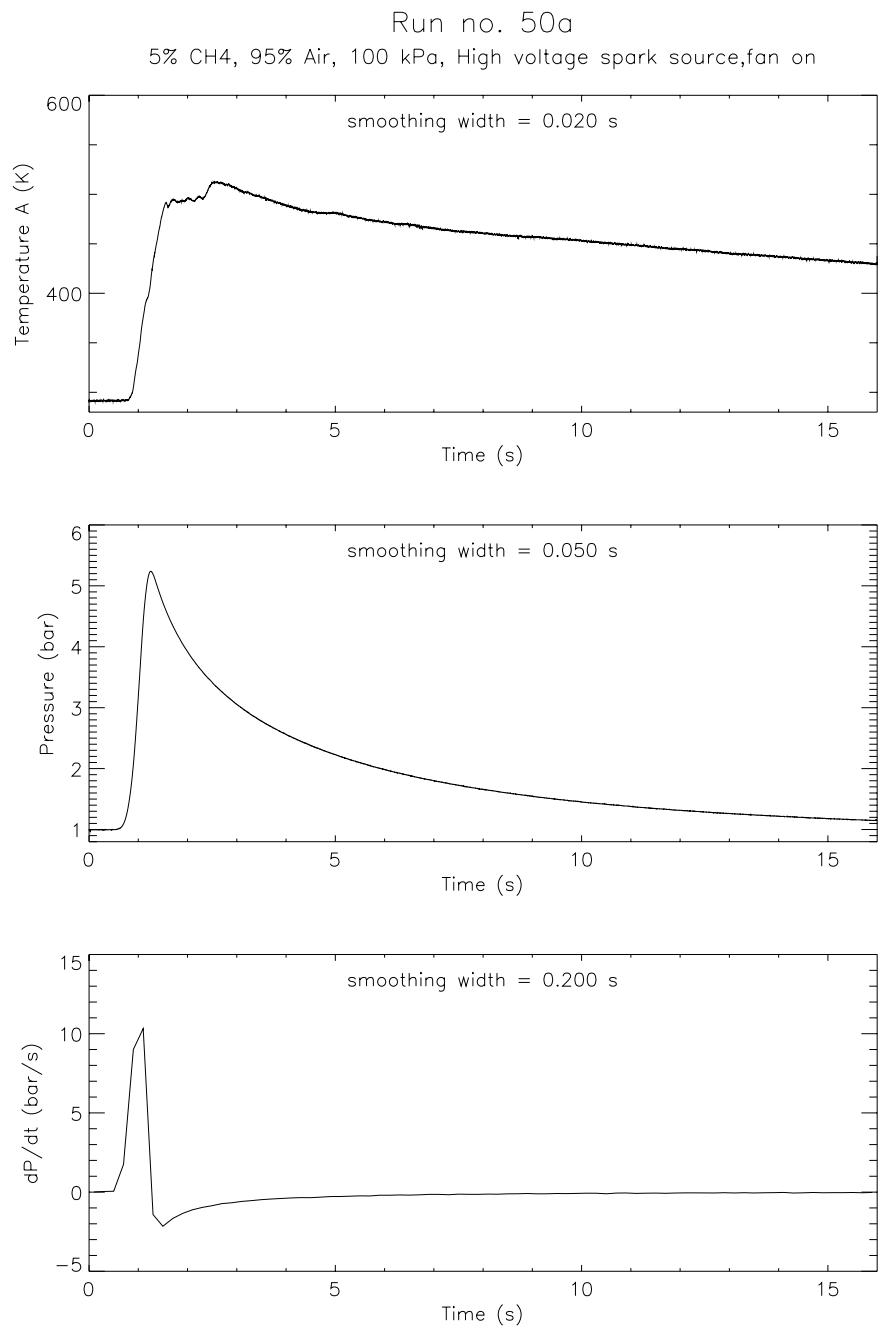






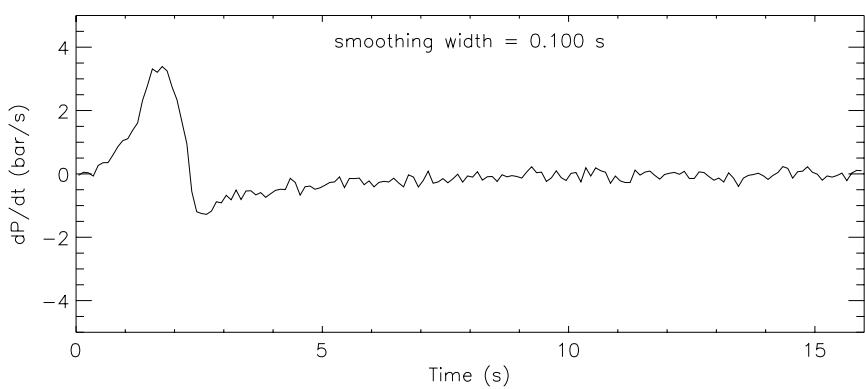
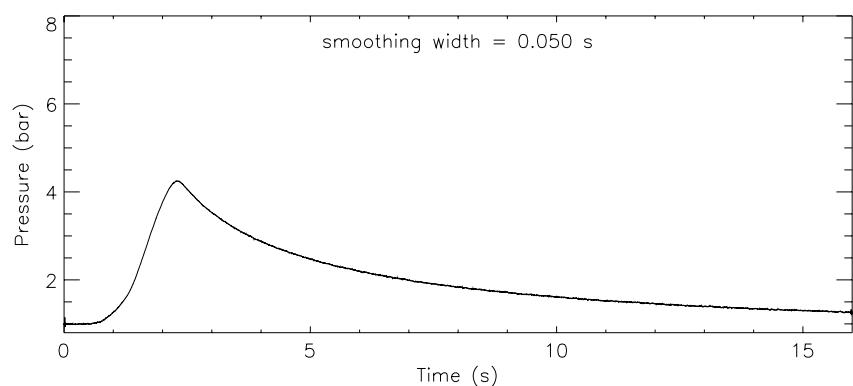
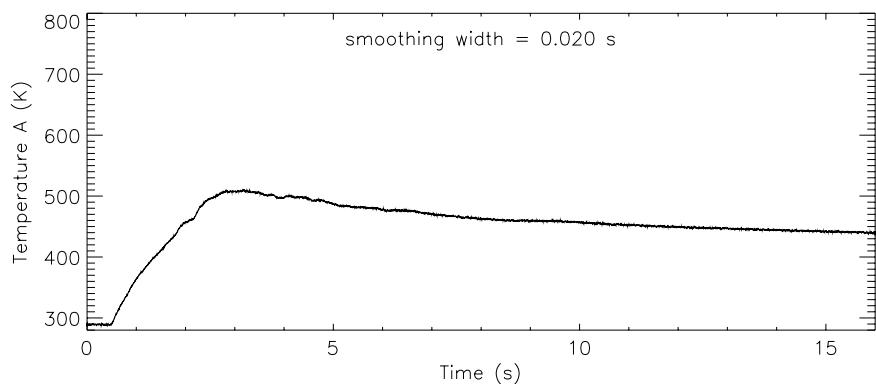
Run no. 50
5% CH₄, 95% Air, 100 kPa, High voltage spark source

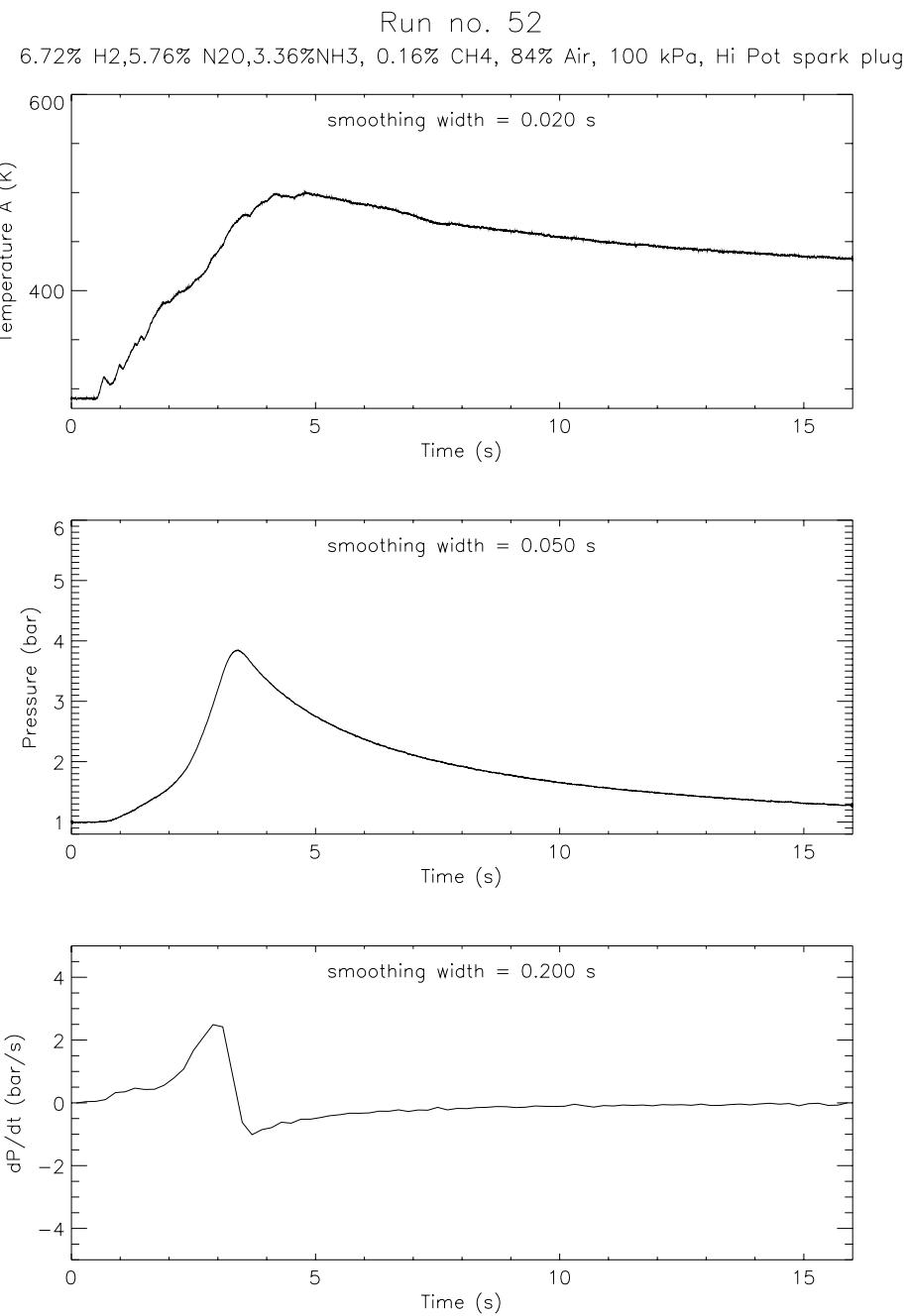




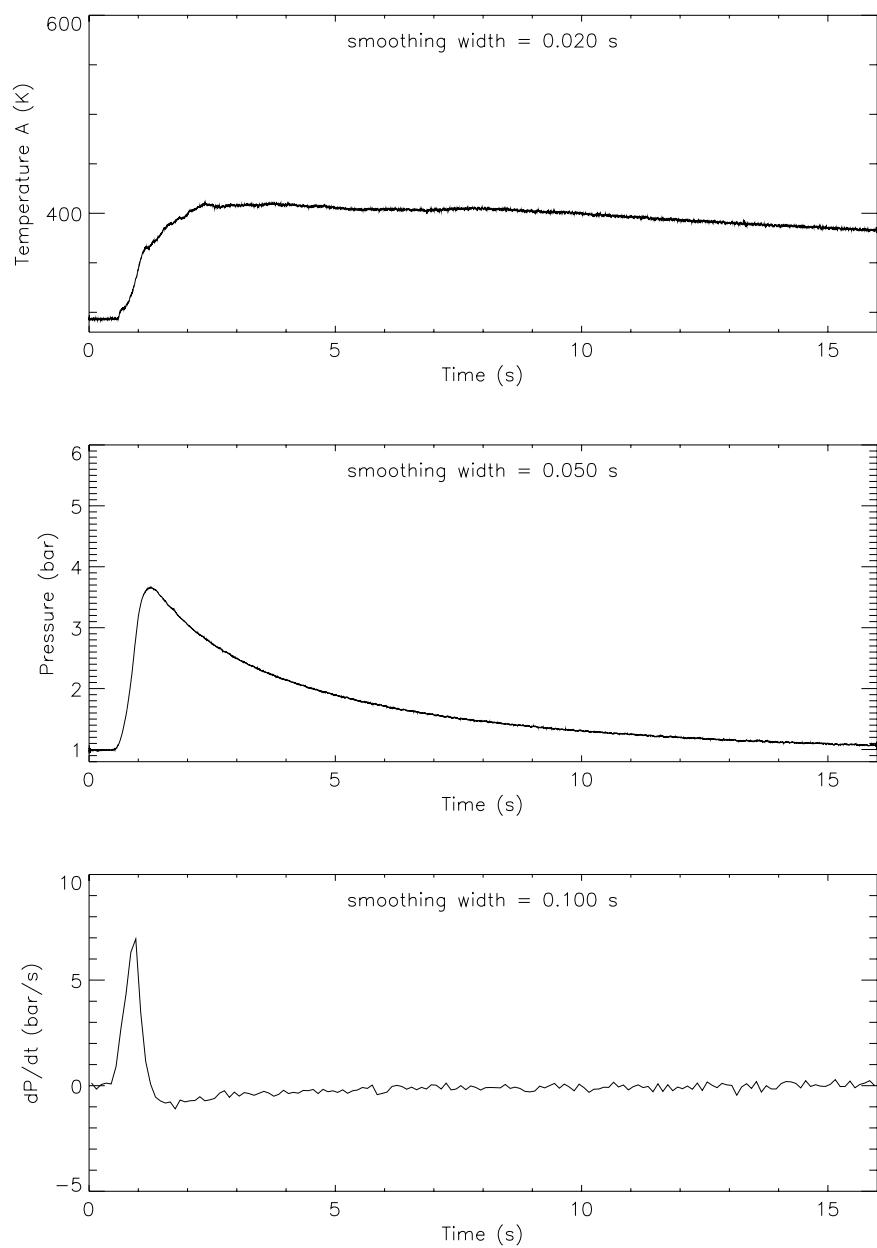
Run no. 51

7.14% H₂, 6.12% N₂O, 3.57% NH₃, 0.17% CH₄, 83% Air, 100 kPa, Hi Pot spark plug



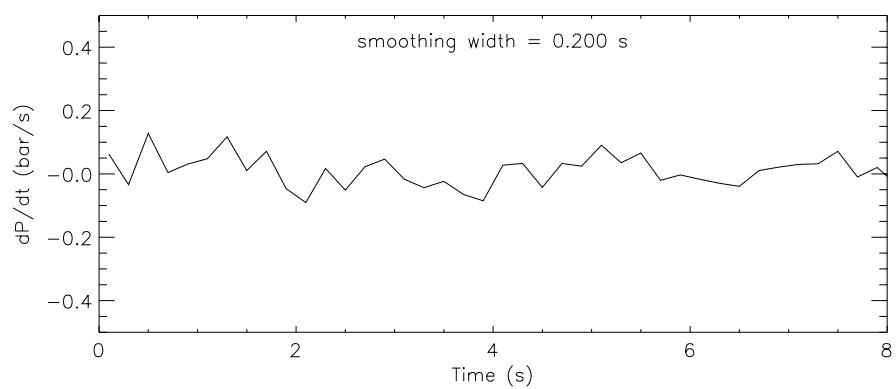
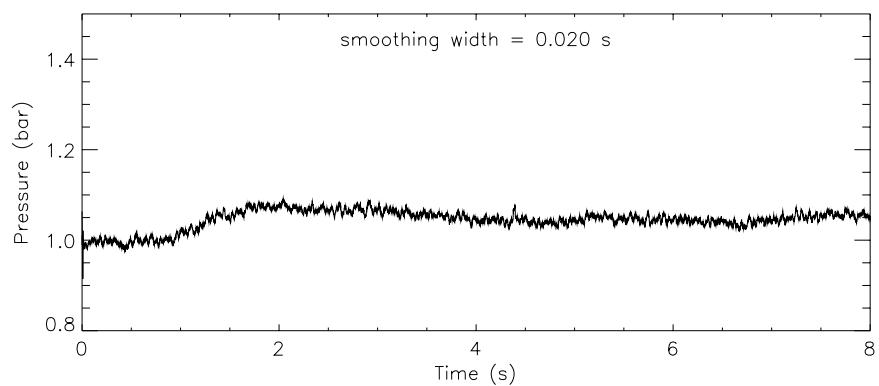
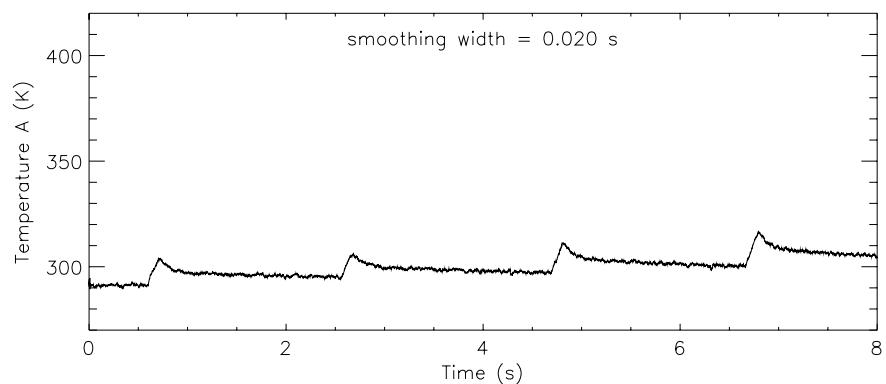


Run no. 53b

6.3% H₂, 5.4% N₂O, 3.15% NH₃, 0.15% CH₄, 85% Air, 98.65 kPa, Hi Pot spark plug, fan on

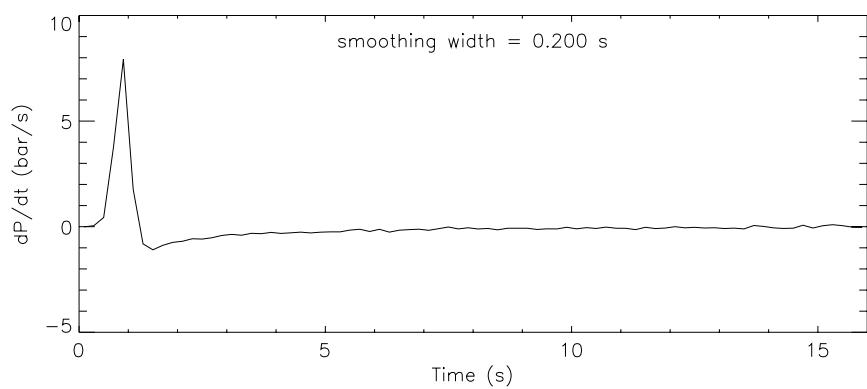
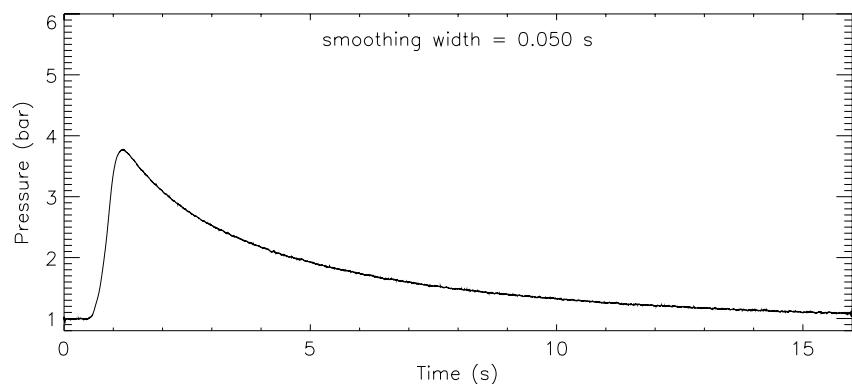
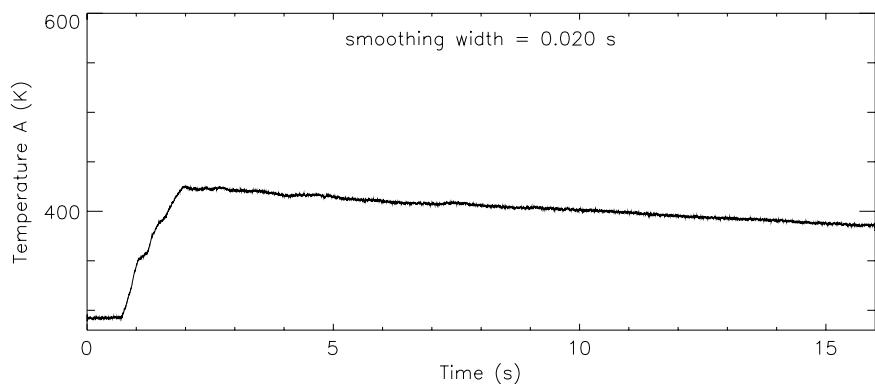
Run no. 54

5.88% H₂, 5.04% N₂O, 2.94% NH₃, 0.14% CH₄, 86% Air, 100 kPa, Hi Pot spark plug

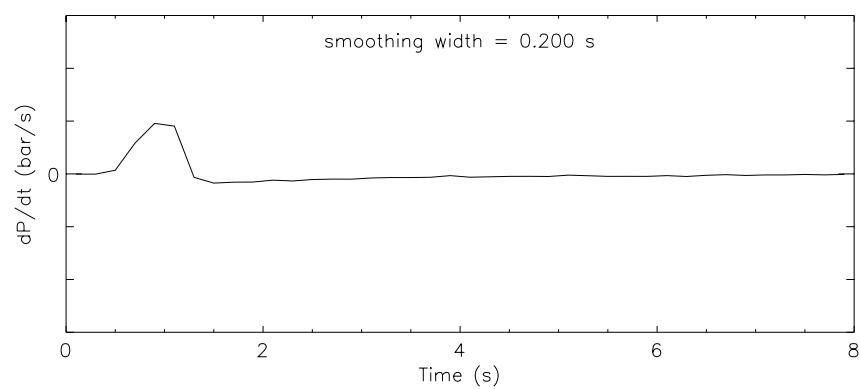
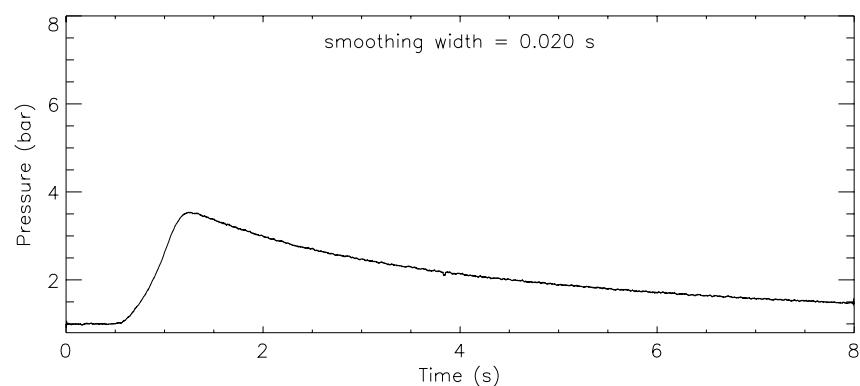
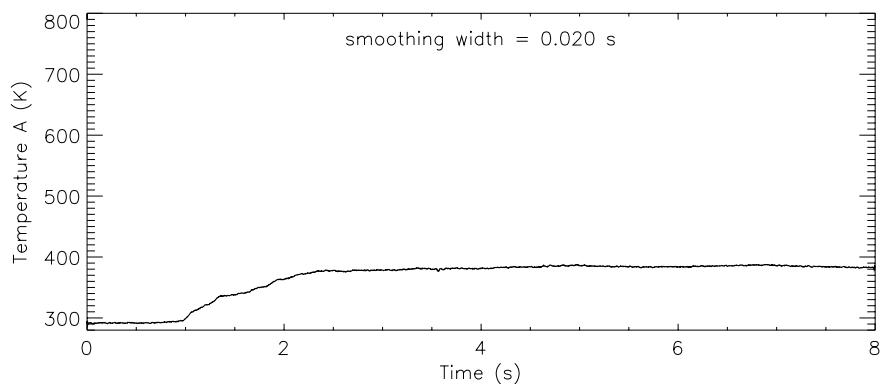


Run no. 54a

5.88% H₂, 5.04% N₂O, 2.94% NH₃, 0.14% CH₄, 86% Air, 99.17 kPa, Hi Pot spark plug, fan on

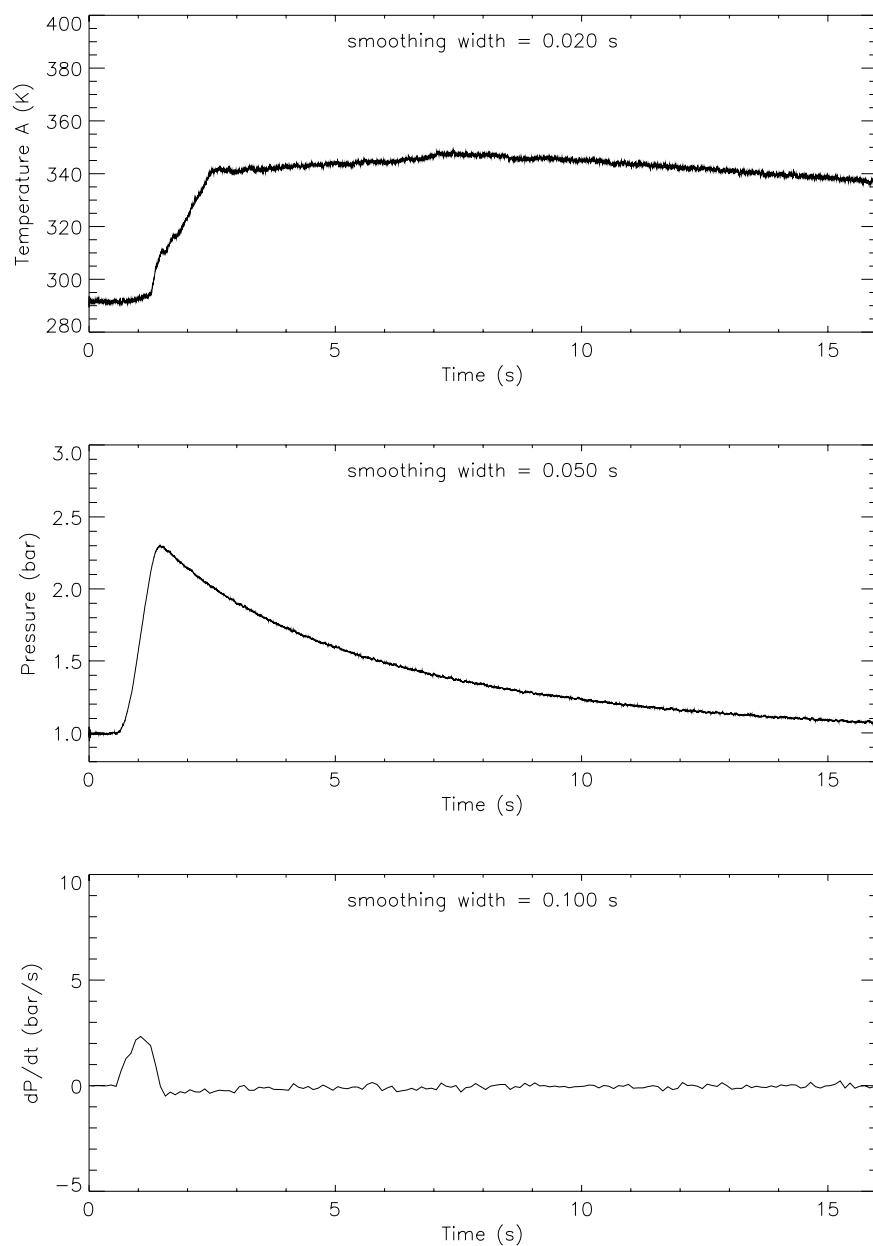


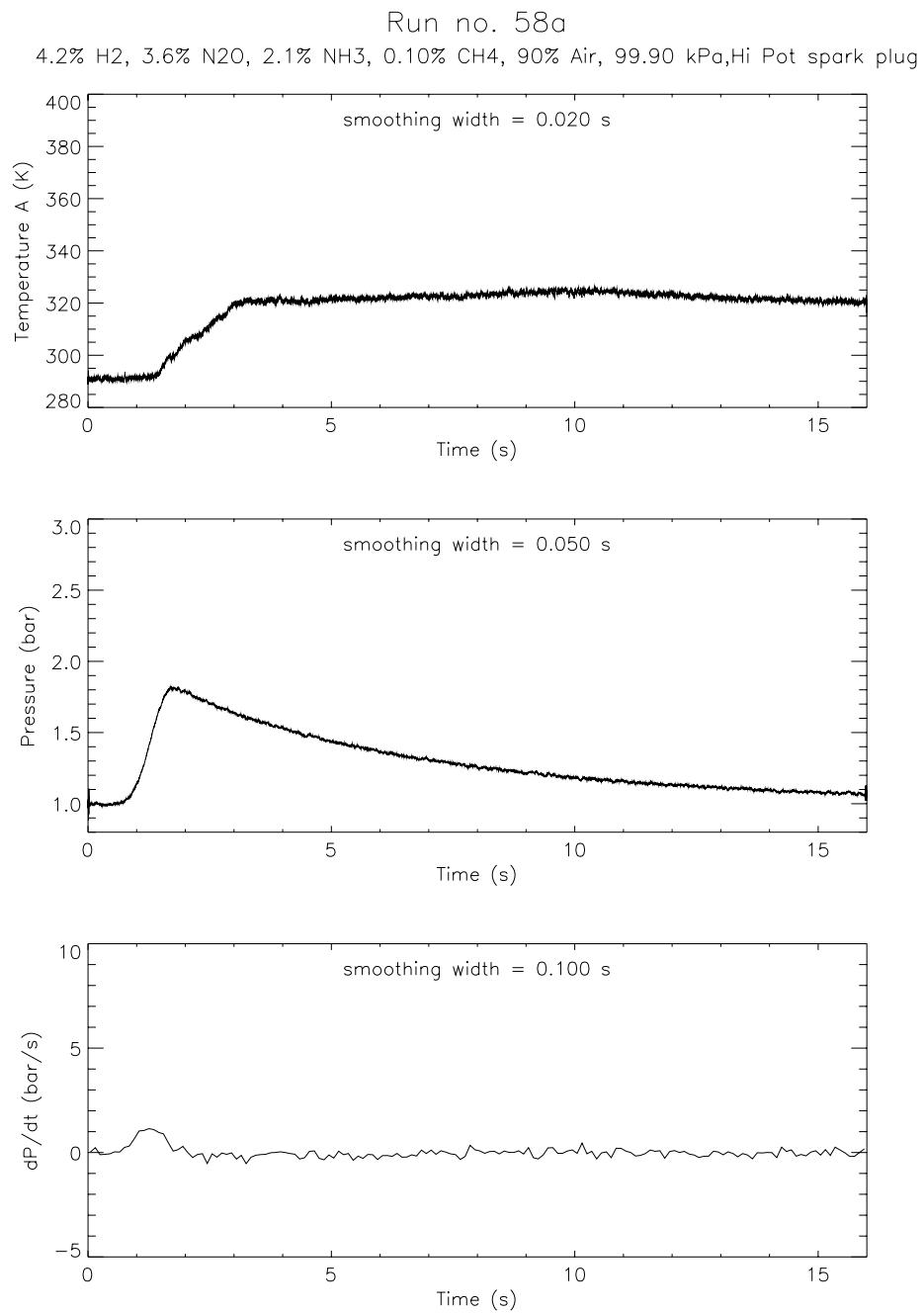
Run no. 55a

5.46% H₂, 4.68% N₂O, 2.73% NH₃, 0.13% CH₄, 87% Air, 99.69 kPa, Hi Pot spark plug

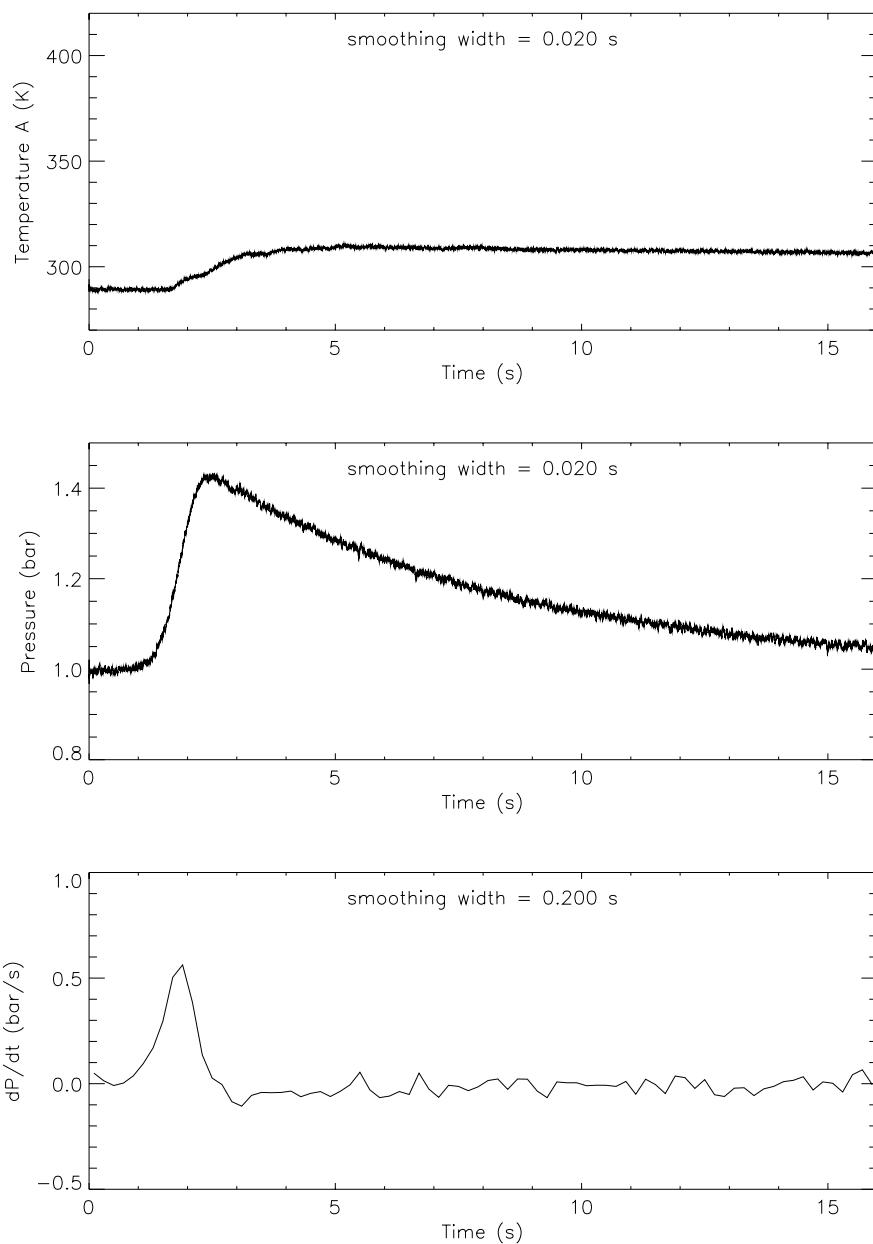
Run no. 57a

4.62% H₂, 3.96% N₂O, 2.31% NH₃, 0.11% CH₄, 89% Air, 99.80 kPa, Hi Pot spark plug, fan on

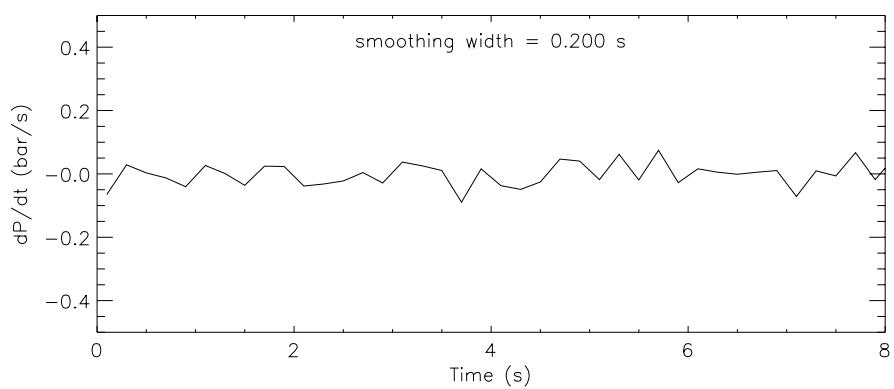
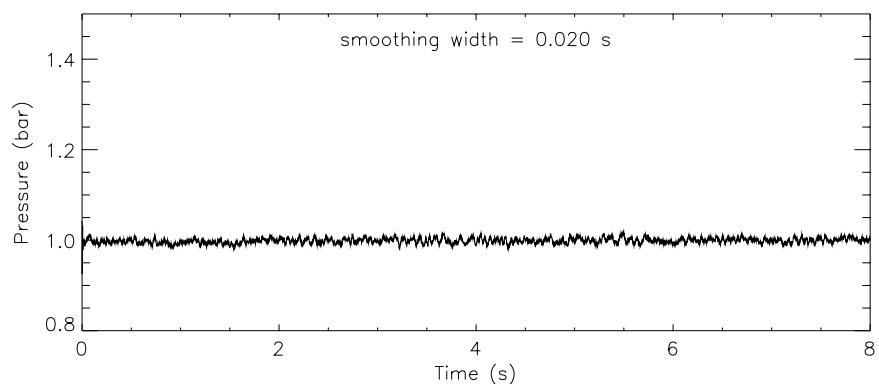
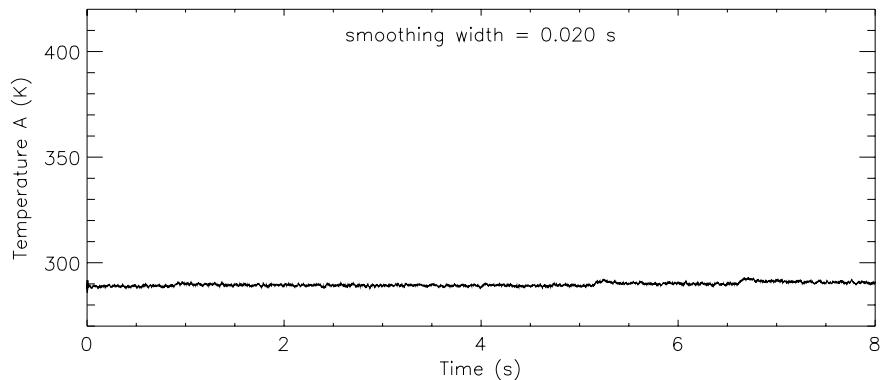




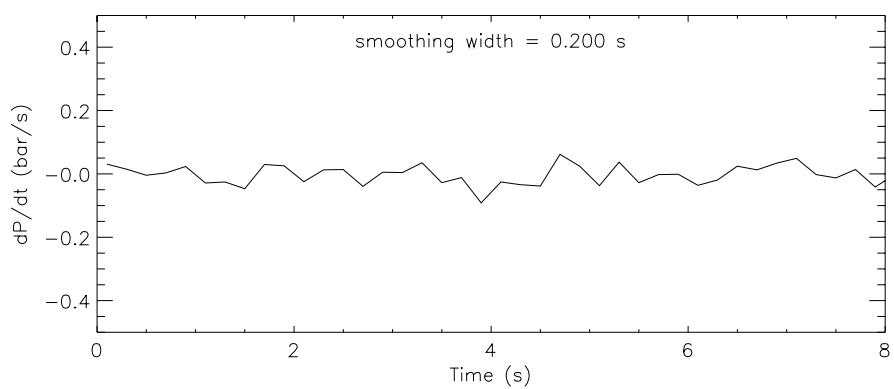
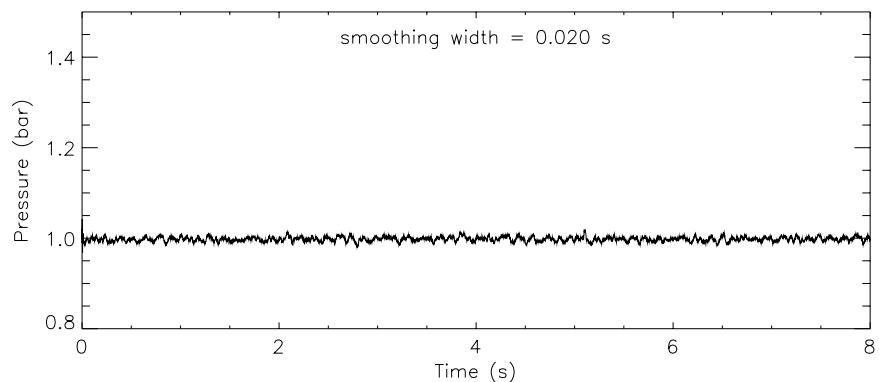
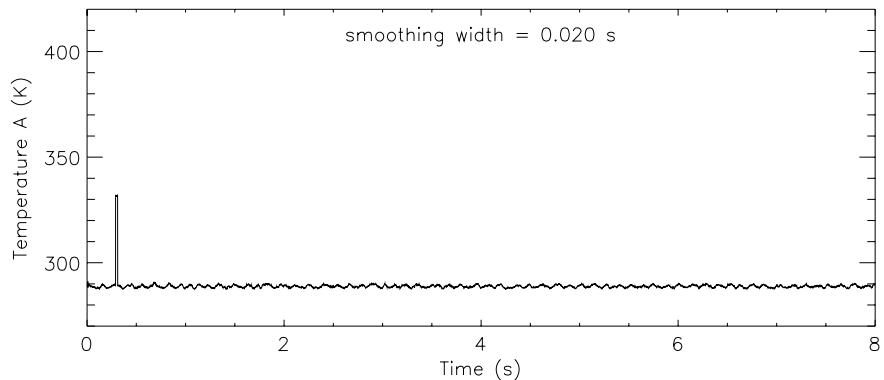
Run no. 59a

3.78% H₂, 3.24% N₂O, 1.89% NH₃, 0.09% CH₄, 91% Air, 100.02 kPa, Hi Pot spark plug, fan on

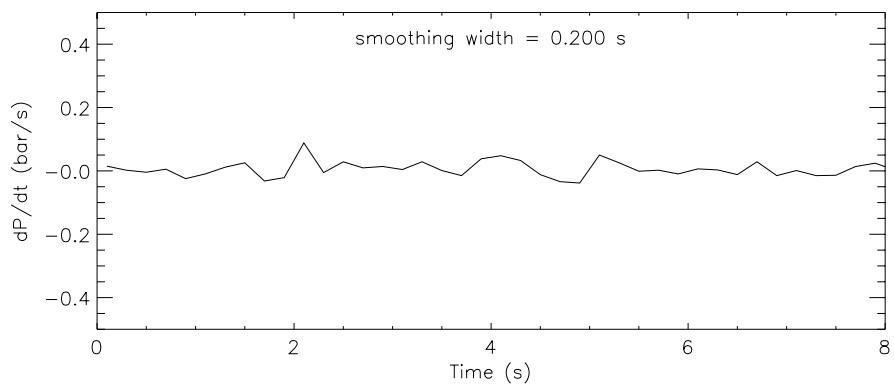
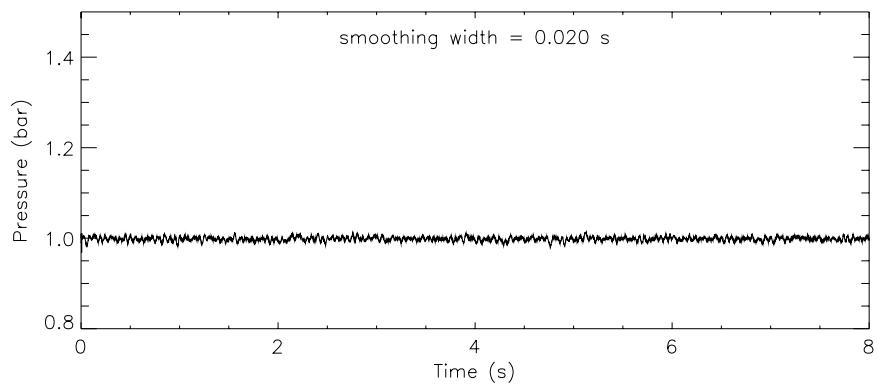
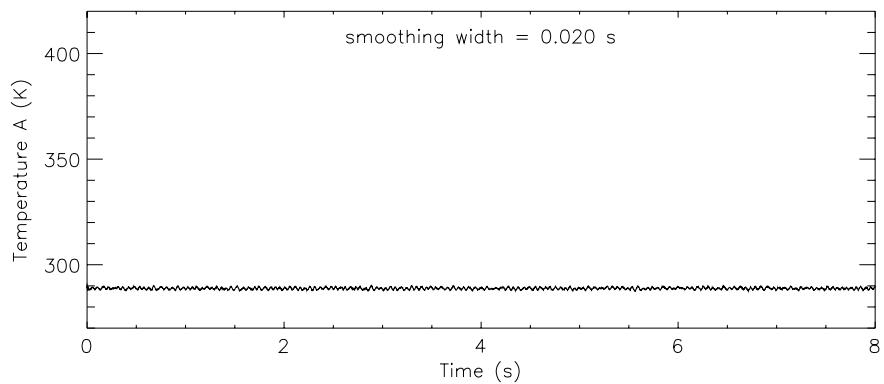
Run no. 60
3.36% H₂, 2.88% N₂O, 1.68 %NH₃, 0.08% CH₄, 92% Air, 100 kPa, Hi Pot spark plug

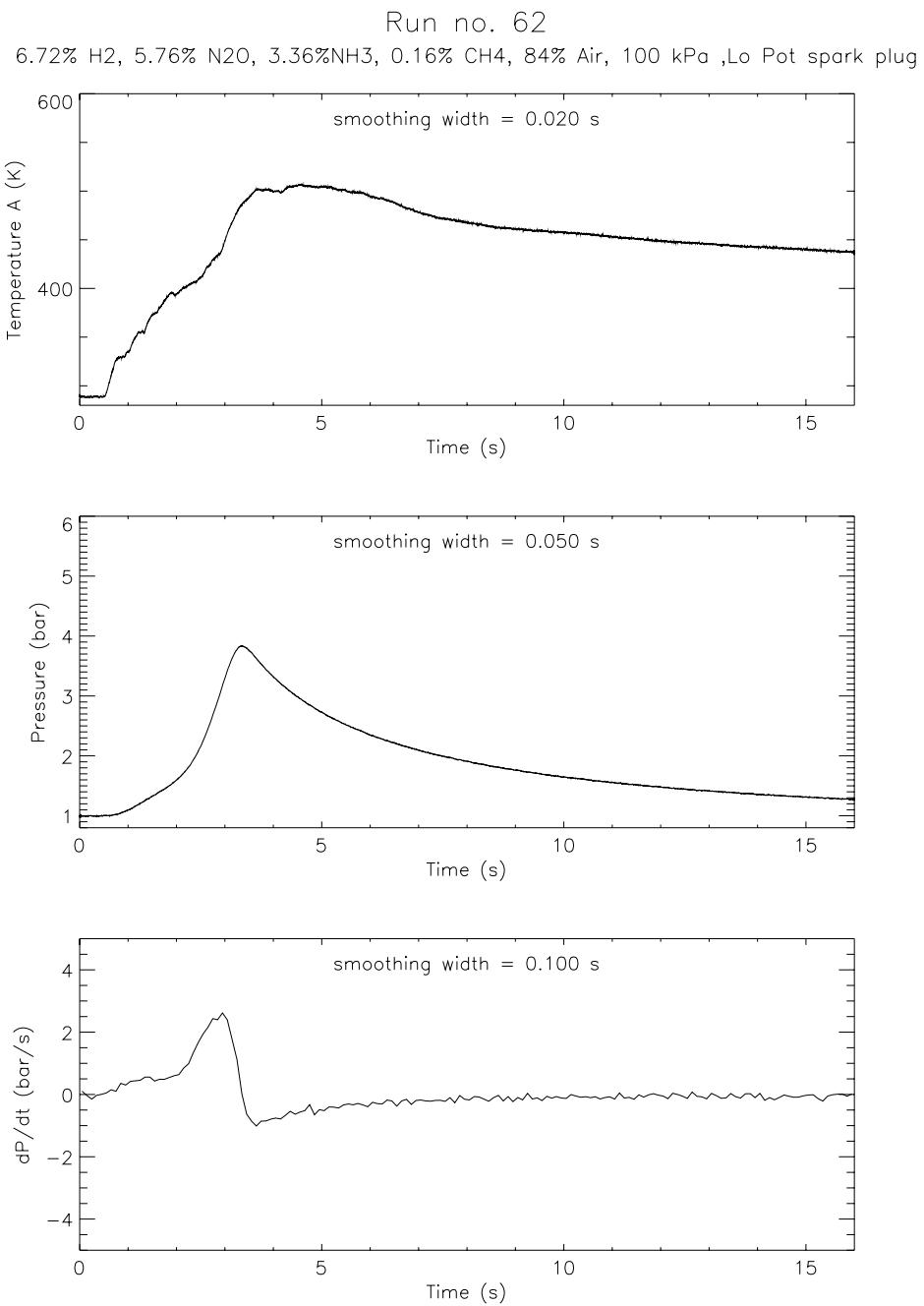


Run no. 61
2.94% H₂, 2.52% N₂O, 1.47 %NH₃, 0.07% CH₄, 93% Air, 100 kPa, Hi Pot spark plug

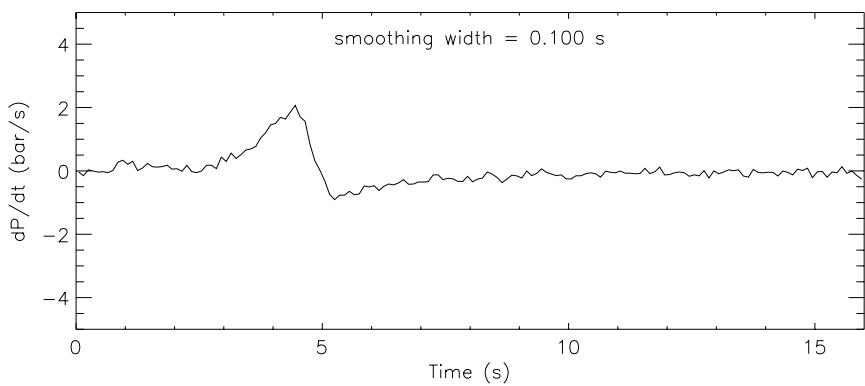
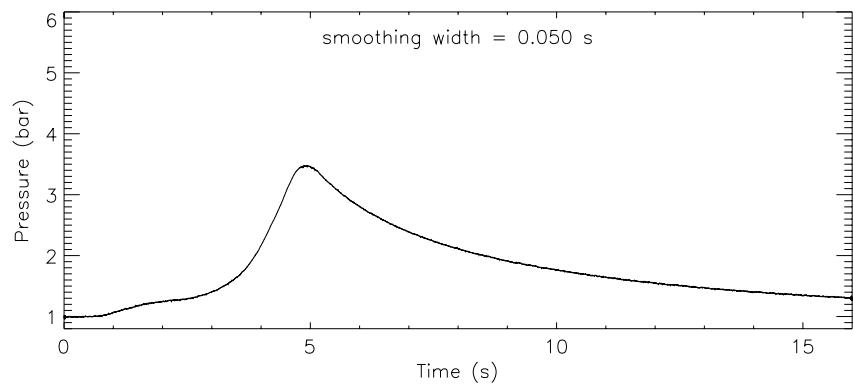
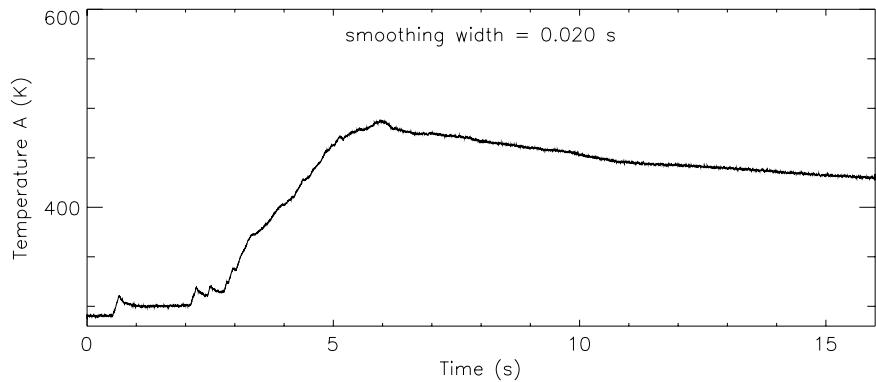


Run no. 61a

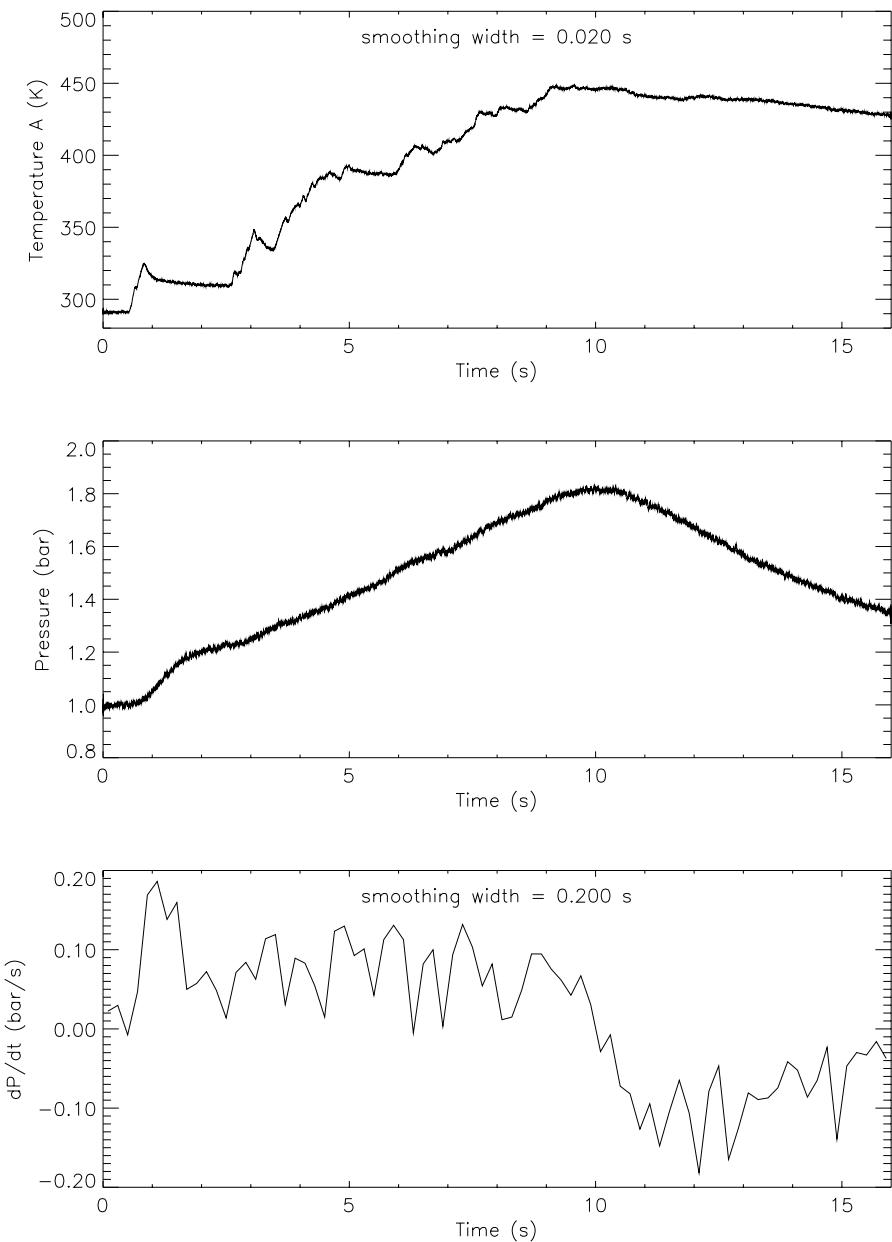
2.94% H₂, 2.52% N₂O, 1.47 %NH₃, 0.07% CH₄, 93% Air, 100 kPa, Hi Pot spark plug, fan on

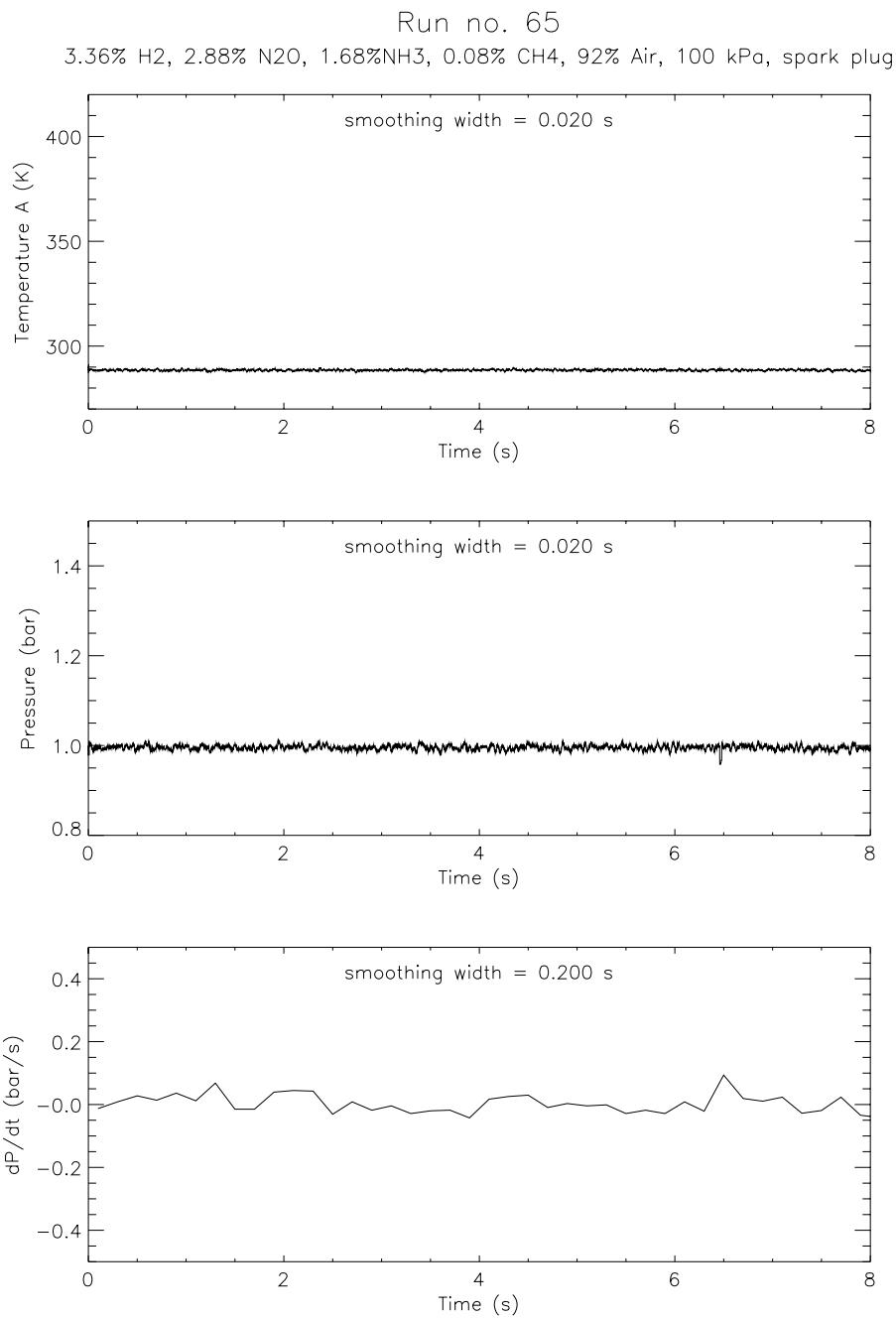


Run no. 63
6.51% H₂, 5.58% N₂O, 3.255% NH₃, 0.155% CH₄, 84.5% Air, 100 kPa ,Lo Pot spark plug

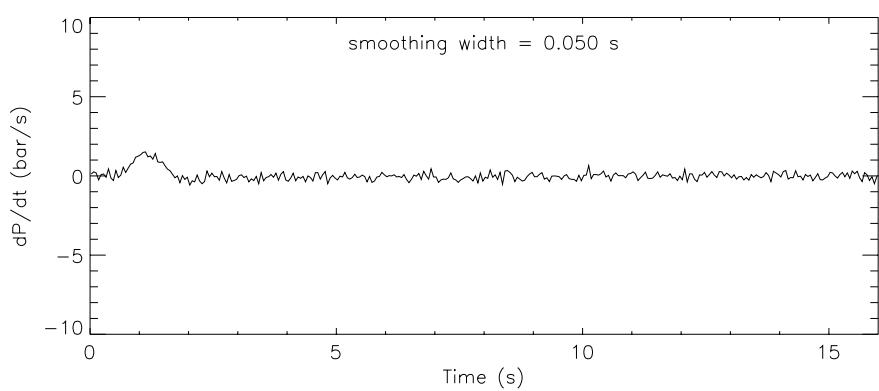
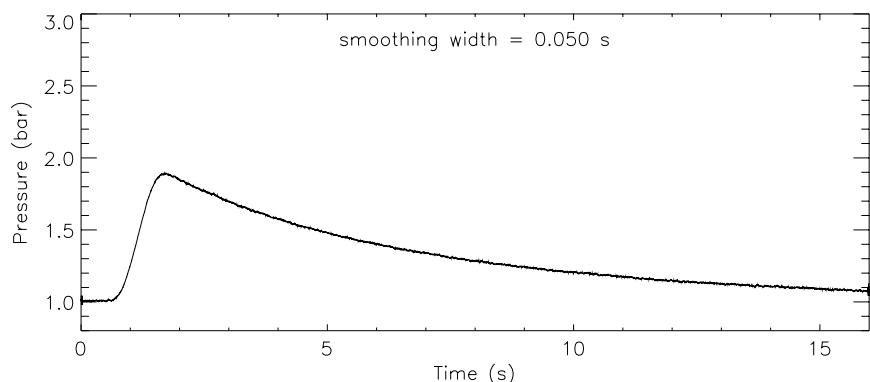
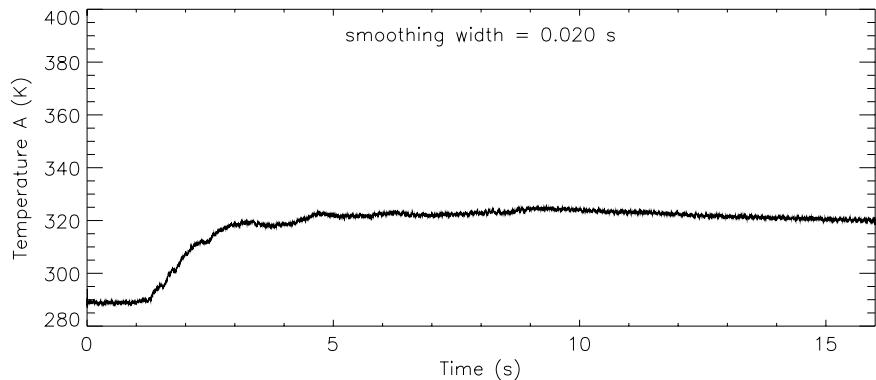


Run no. 64
6.405% H₂, 5.49% N₂O, 3.2025% NH₃, 0.1525% CH₄, 84.75% Air, 100 kPa ,Lo Pot spark plug



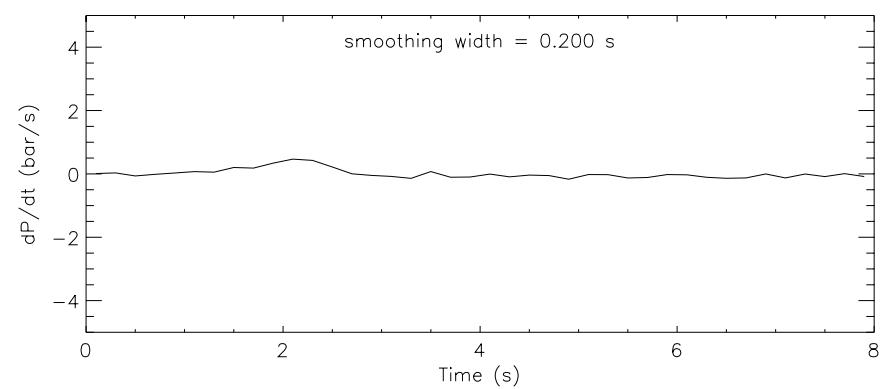
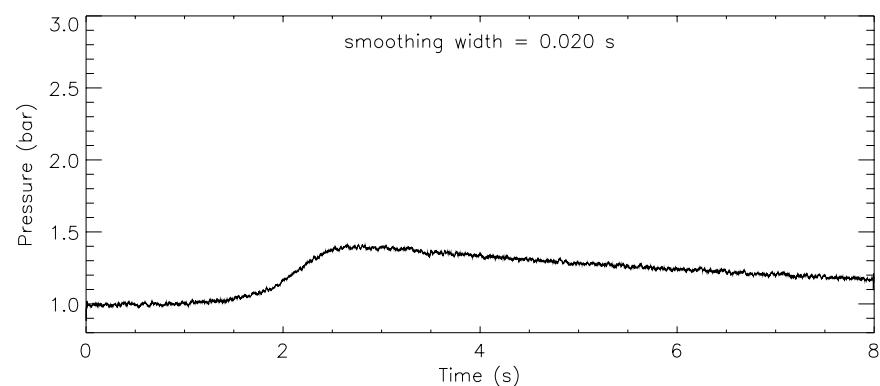
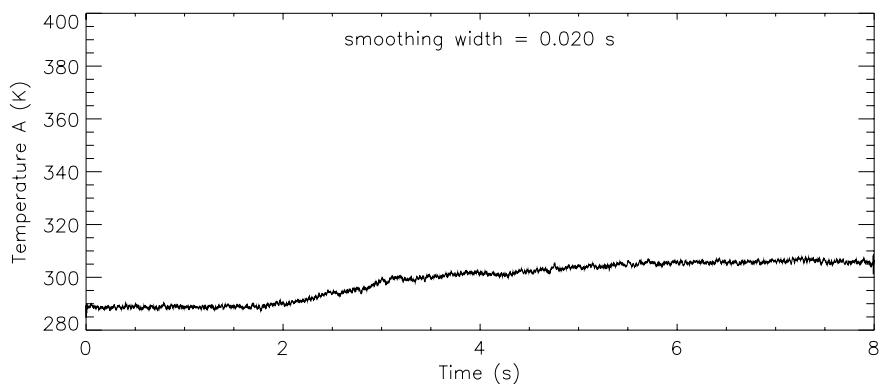


Run no. 65d
4.36% H₂, 2.88% N₂O, 1.68% NH₃, 0.08% CH₄, 92% Air, 101 kPa, spark plug, fan on



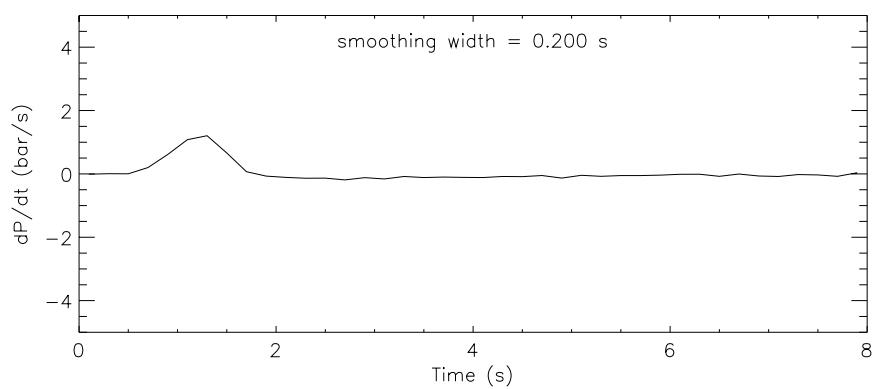
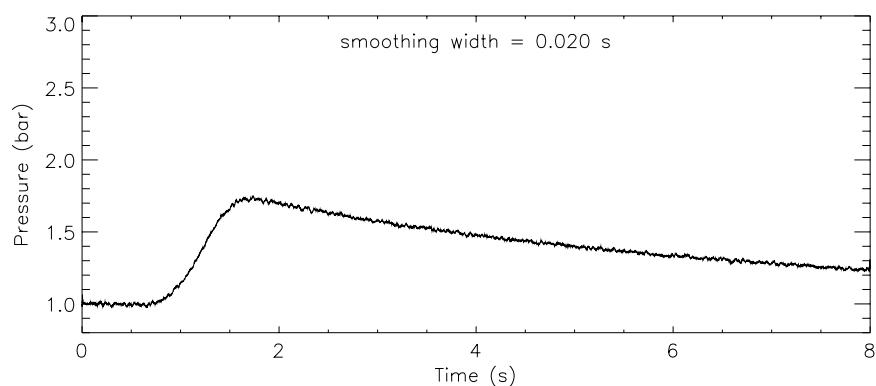
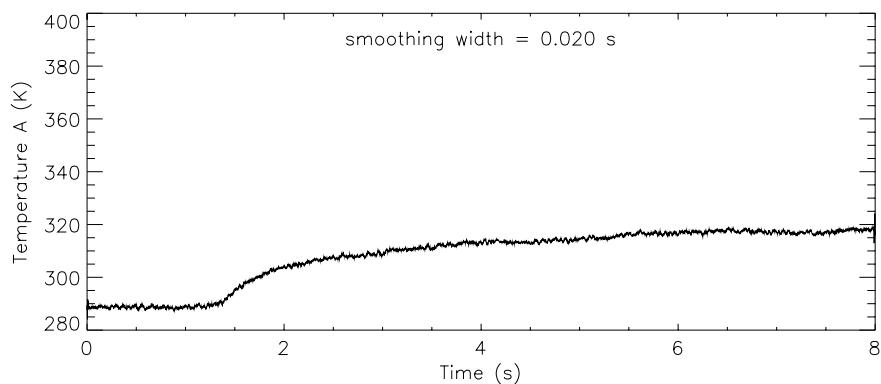
Run no. 66b

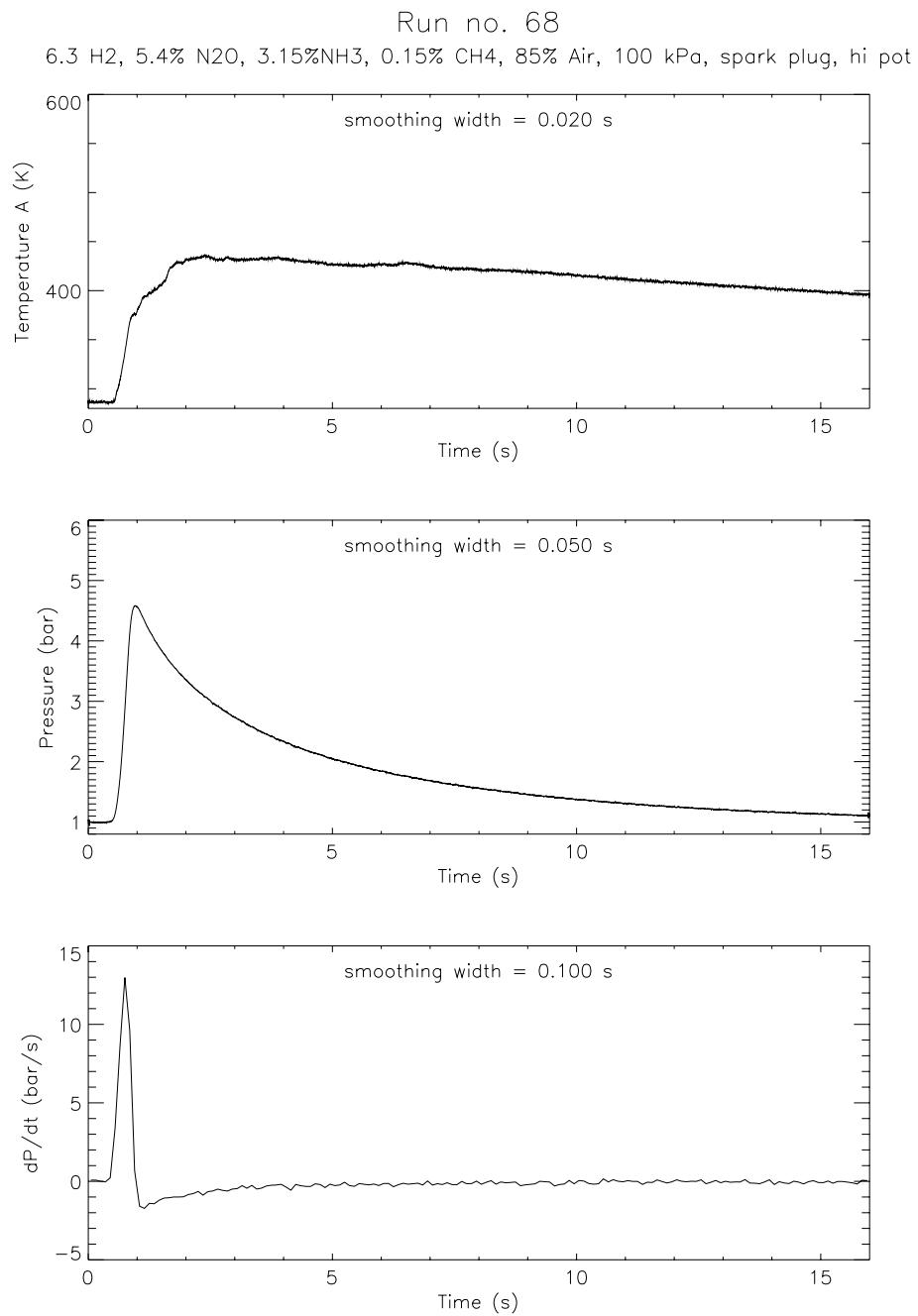
3.78% H₂, 3.24% N₂O, 1.89%NH₃, 0.09% CH₄, 91% Air, 99.82 kPa, spark plug, hi pot

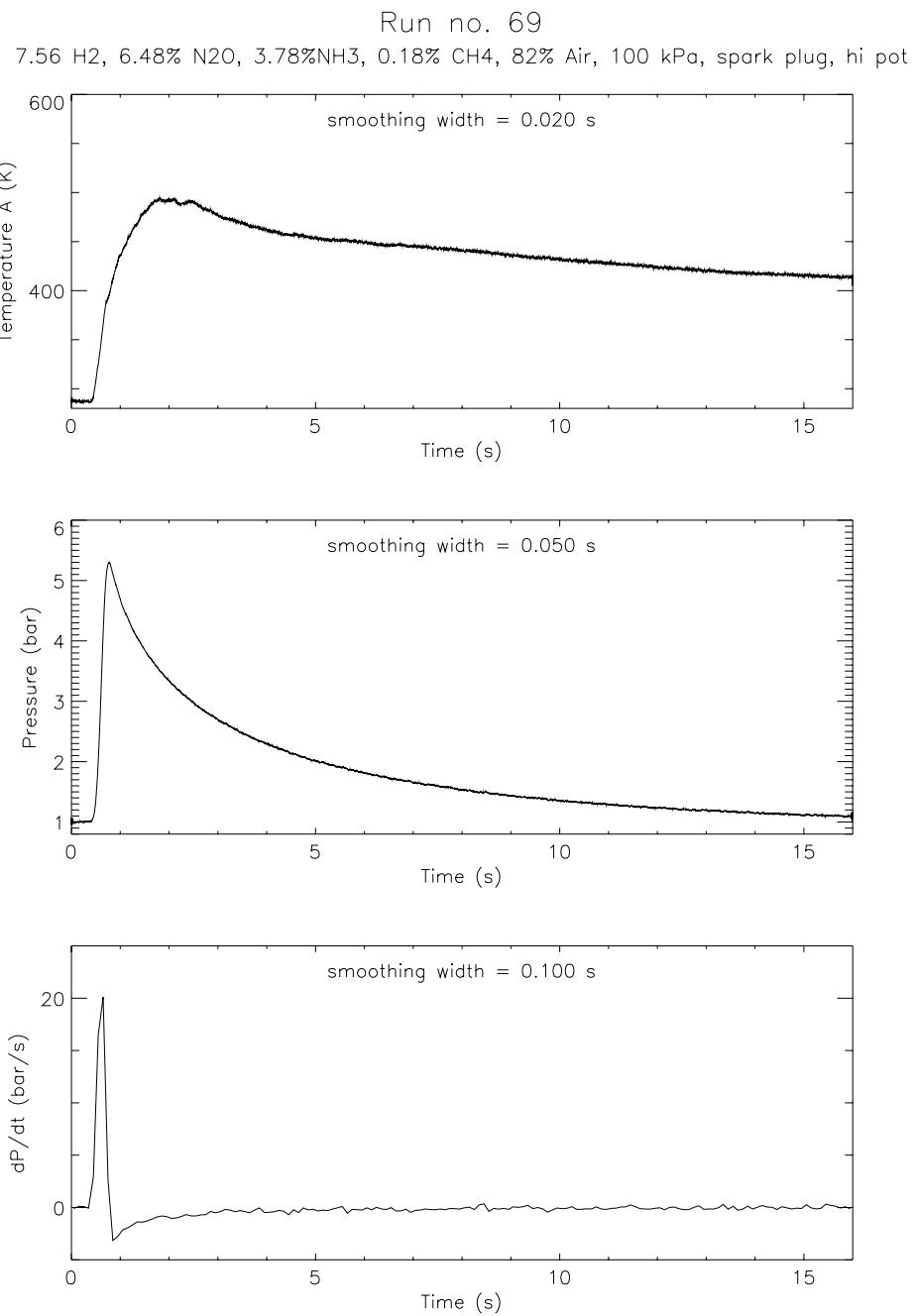


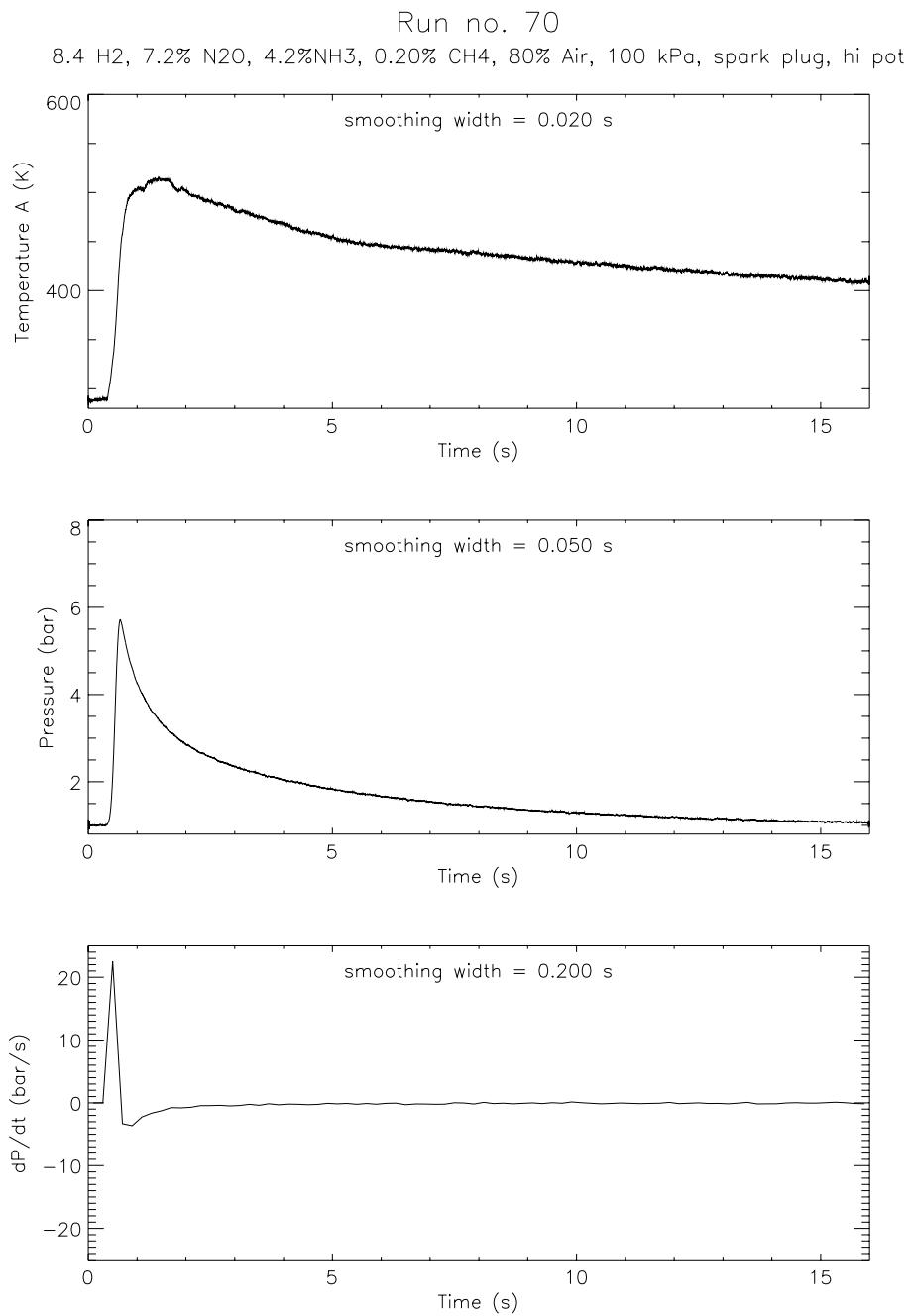
Run no. 67b

4.2% H₂, 3.6% N₂O, 2.1% NH₃, 0.10% CH₄, 90% Air, 99.82 kPa, spark plug, lo pot

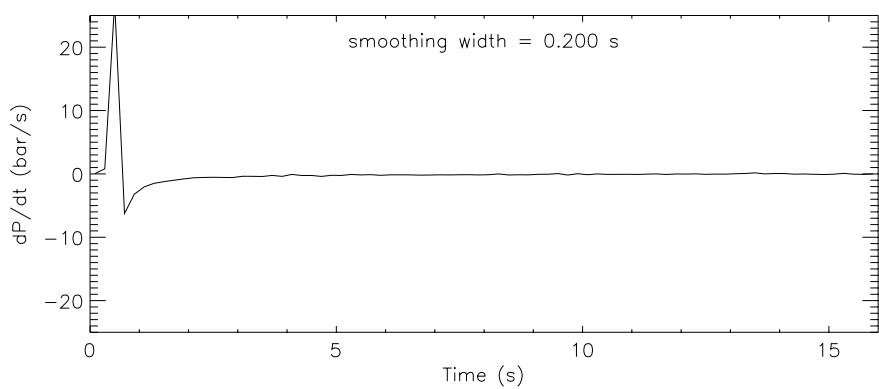
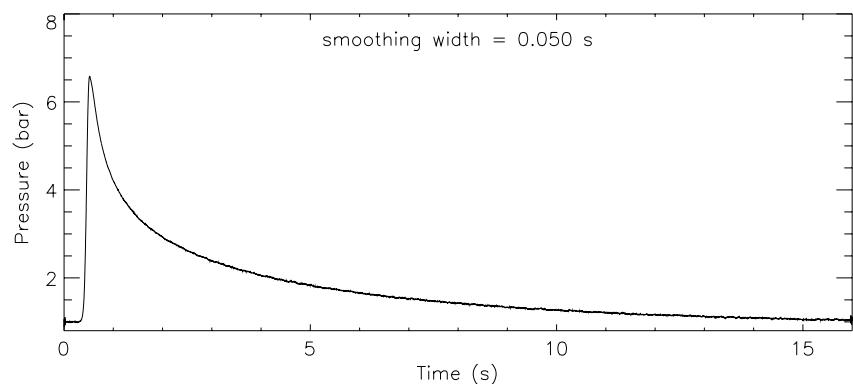
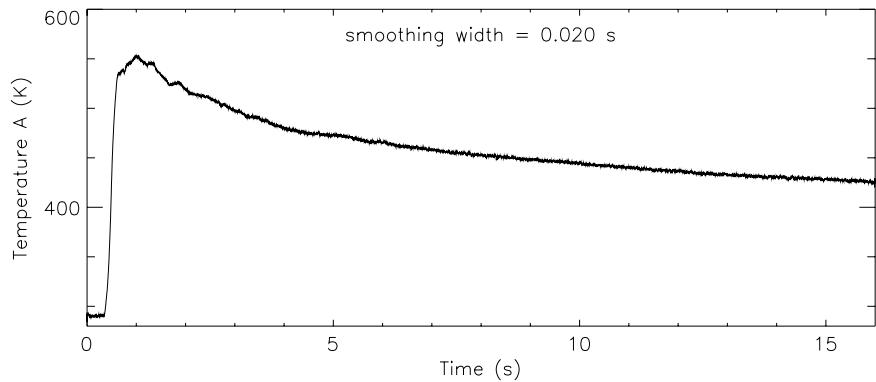




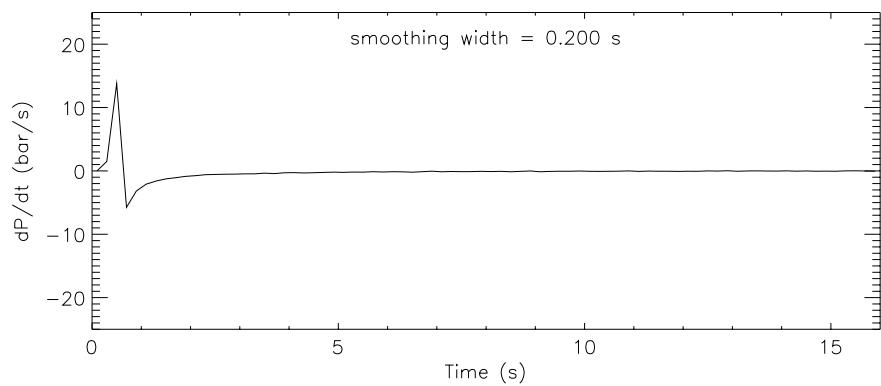
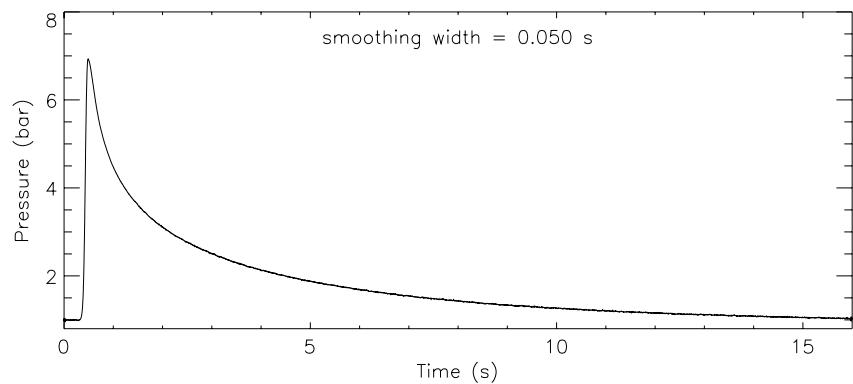
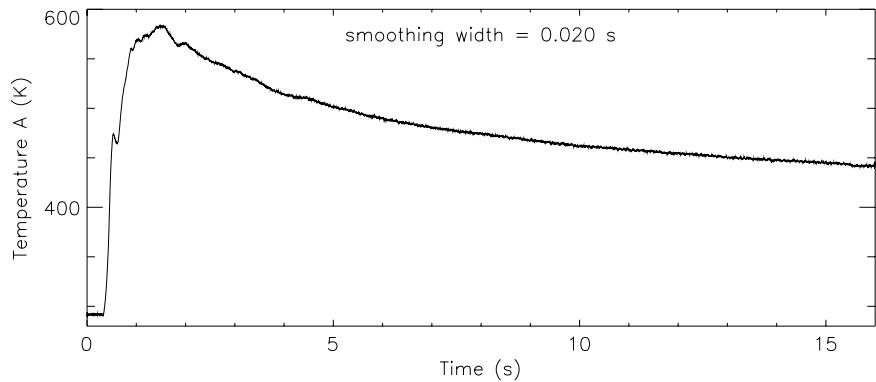




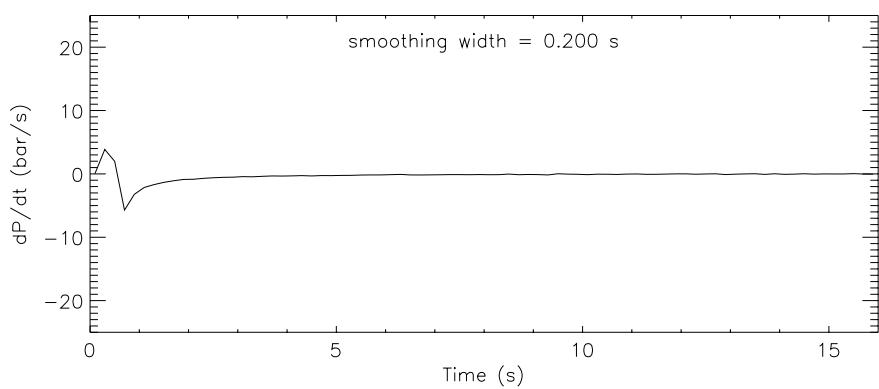
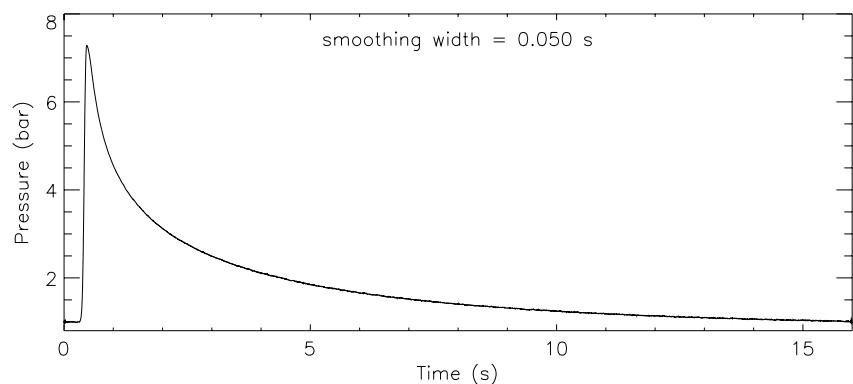
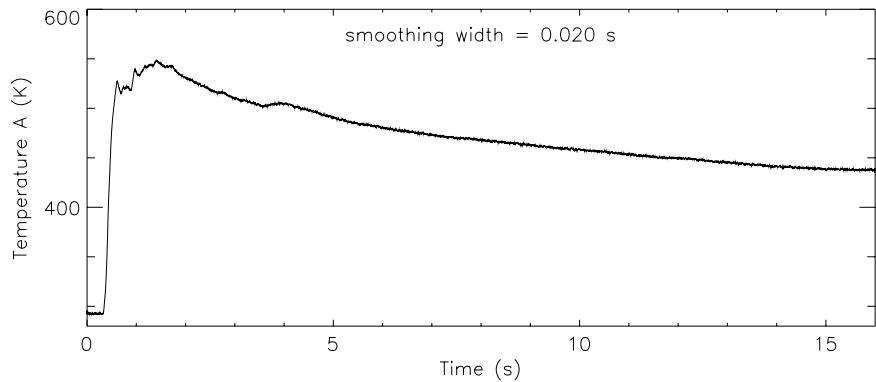
Run no. 71
10.08 H₂, 8.64% N₂O, 5.04%NH₃, 0.24% CH₄, 76% Air, 100 kPa, spark plug, hi pot

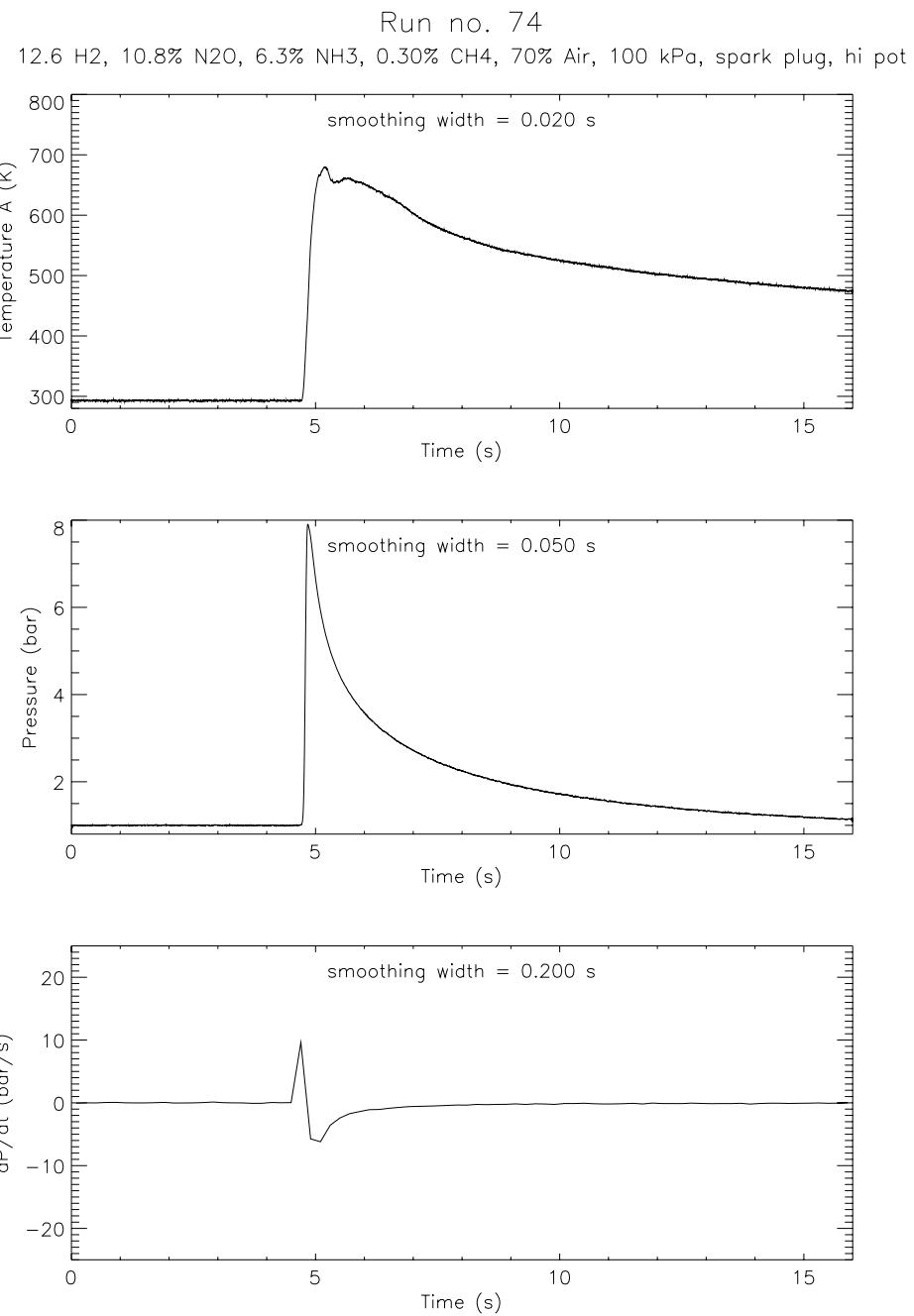


Run no. 72
10.92 H₂, 9.36% N₂O, 5.46% NH₃, 0.26% CH₄, 74% Air, 100 kPa, spark plug, hi pot



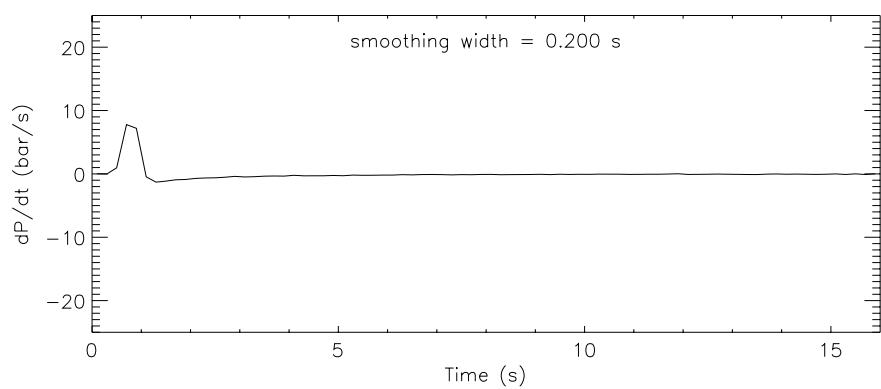
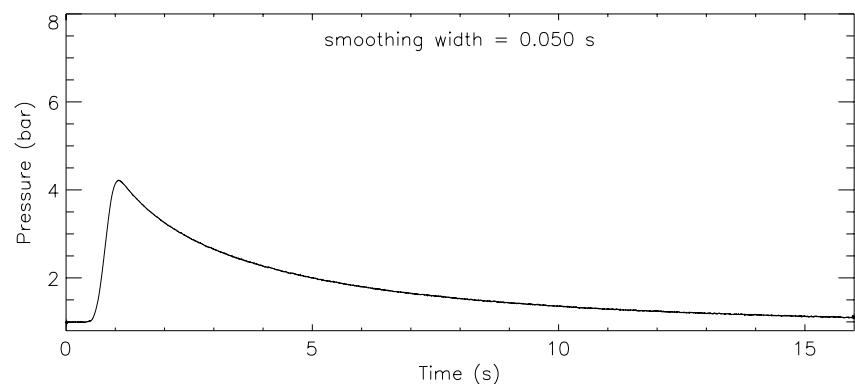
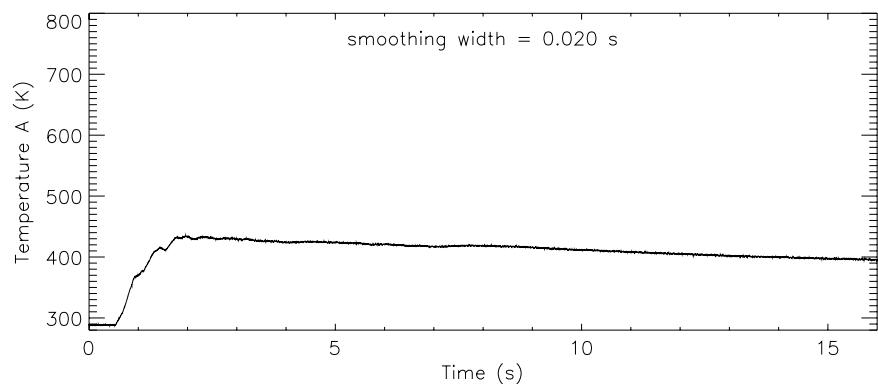
Run no. 73
11.76 H₂, 10.08% N₂O, 5.88% NH₃, 0.28% CH₄, 72% Air, 100 kPa, spark plug, hi pot





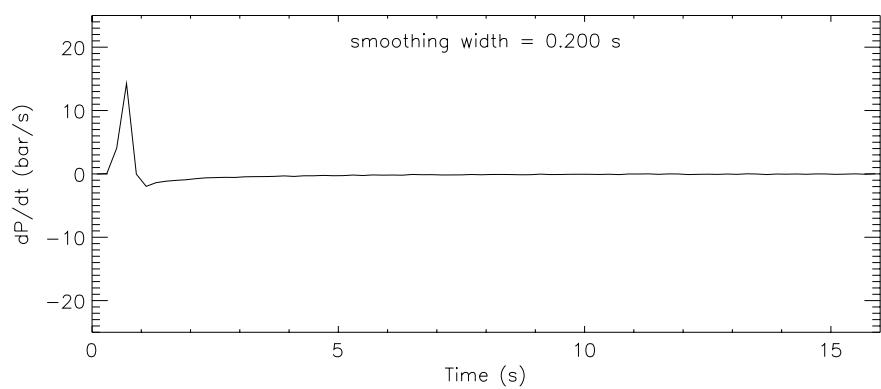
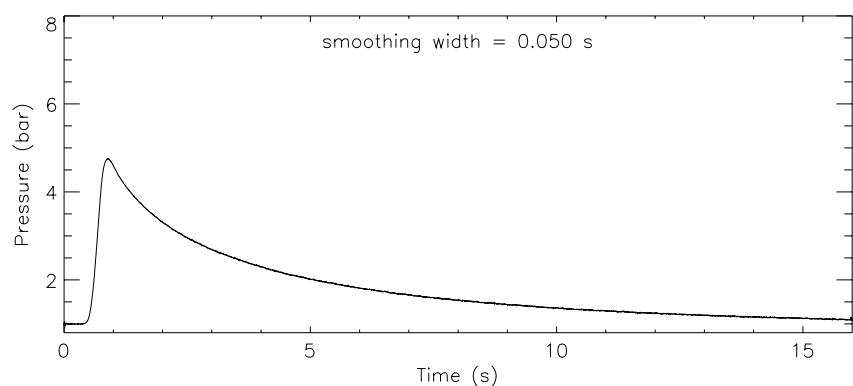
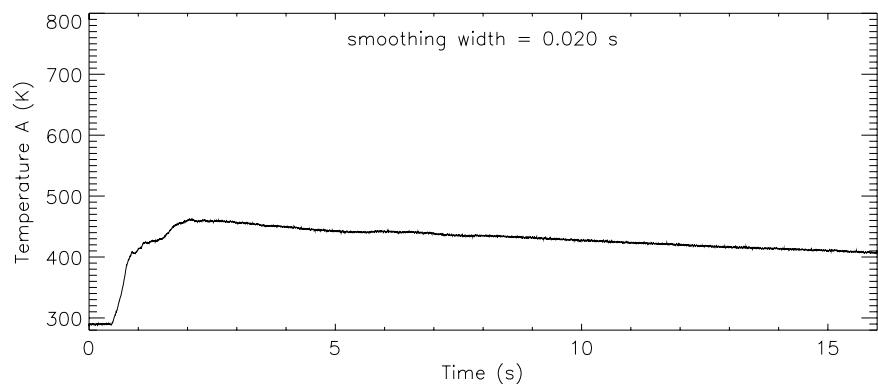
Run no. 75

5.88 H₂, 5.04% N₂O, 2.94 % NH₃, 0.14% CH₄, 86% Air, 100 kPa, spark plug, hi pot



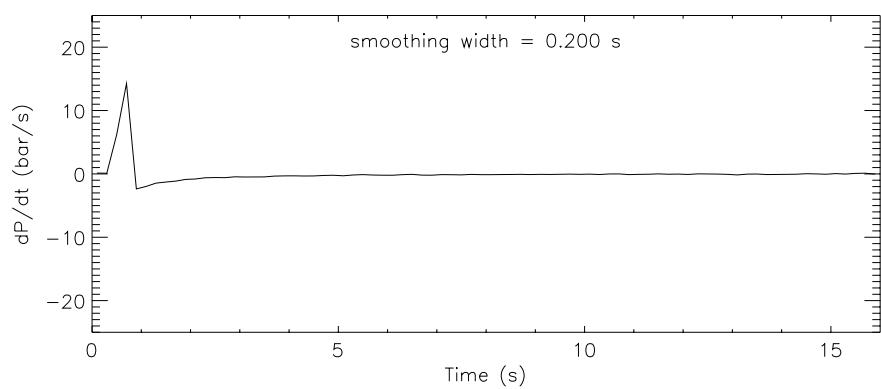
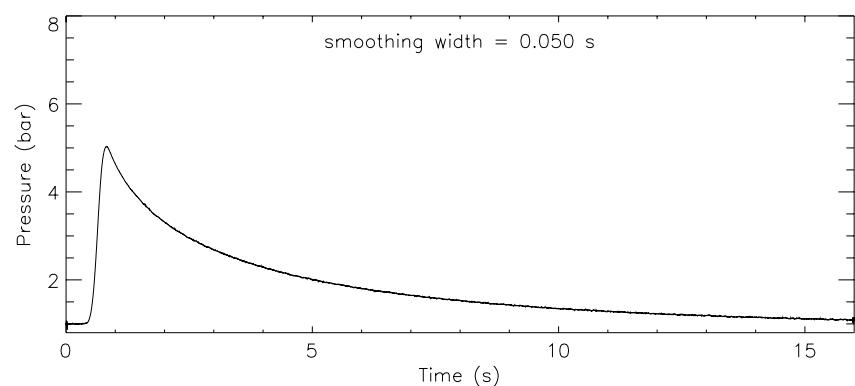
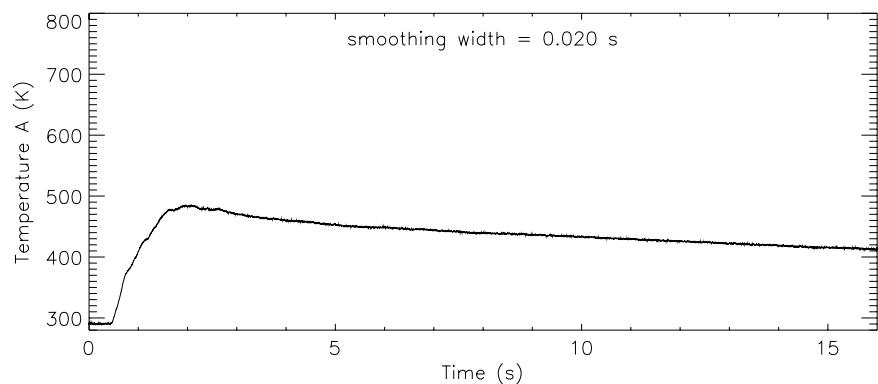
Run no. 76

6.72 H₂, 5.76% N₂O, 3.36 % NH₃, 0.16% CH₄, 84% Air, 100 kPa, spark plug, hi pot



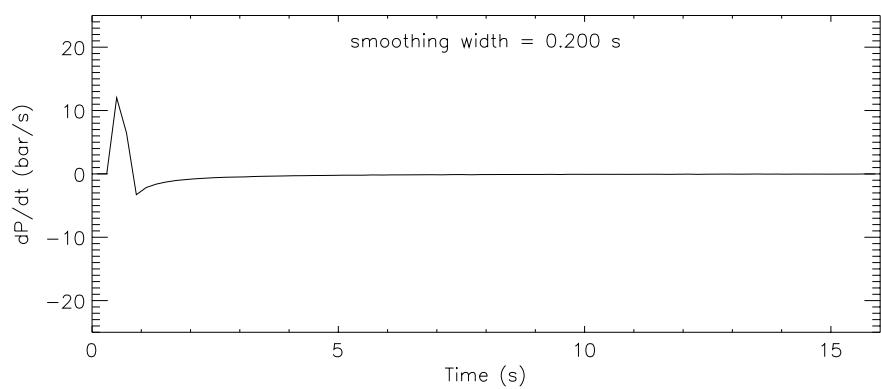
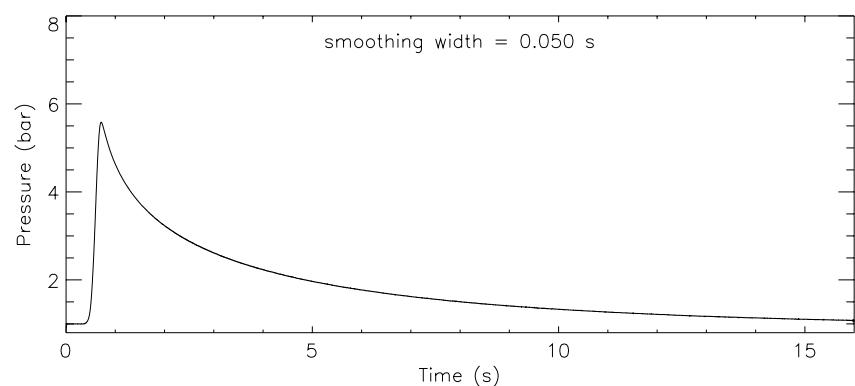
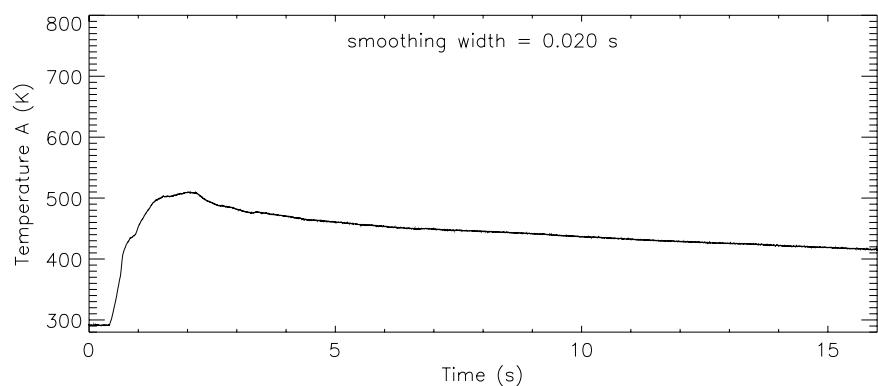
Run no. 77

7.14 H₂, 6.12% N₂O, 3.57 % NH₃, 0.17% CH₄, 83% Air, 100 kPa, spark plug, hi pot

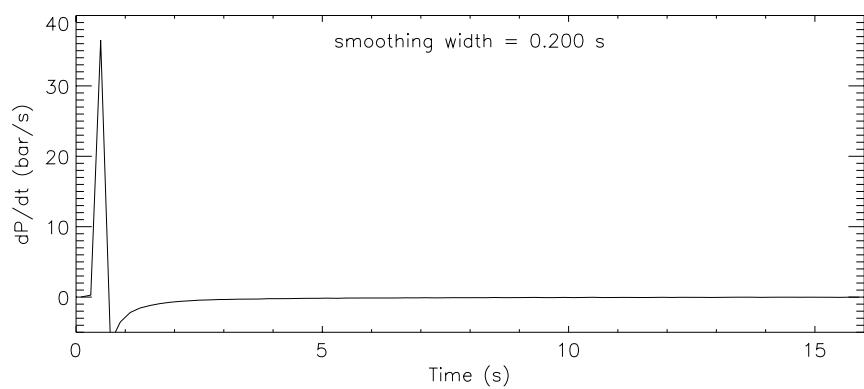
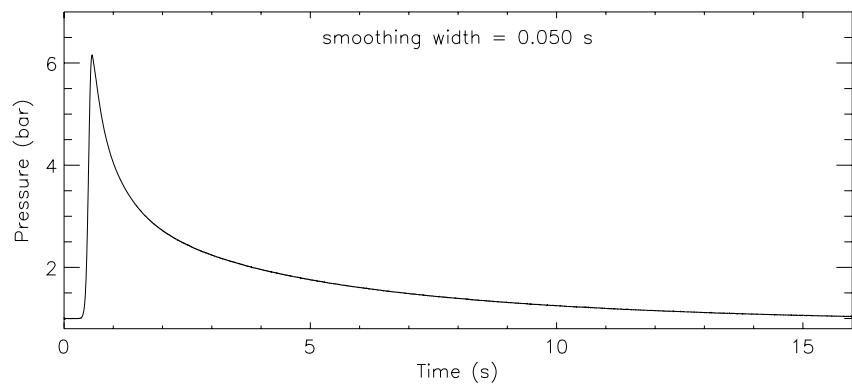
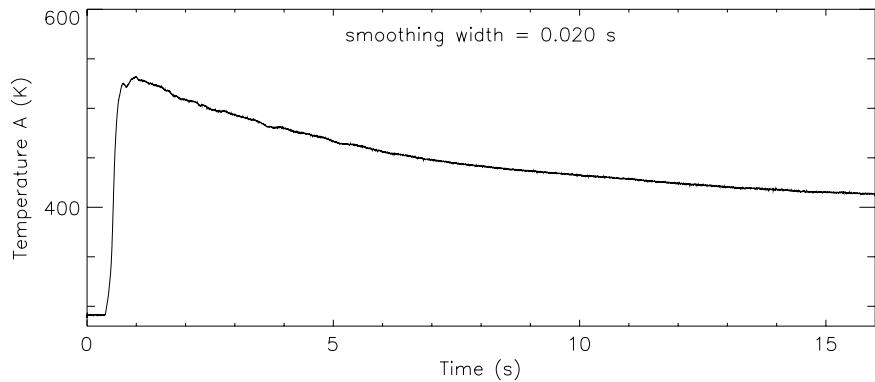


Run no. 78

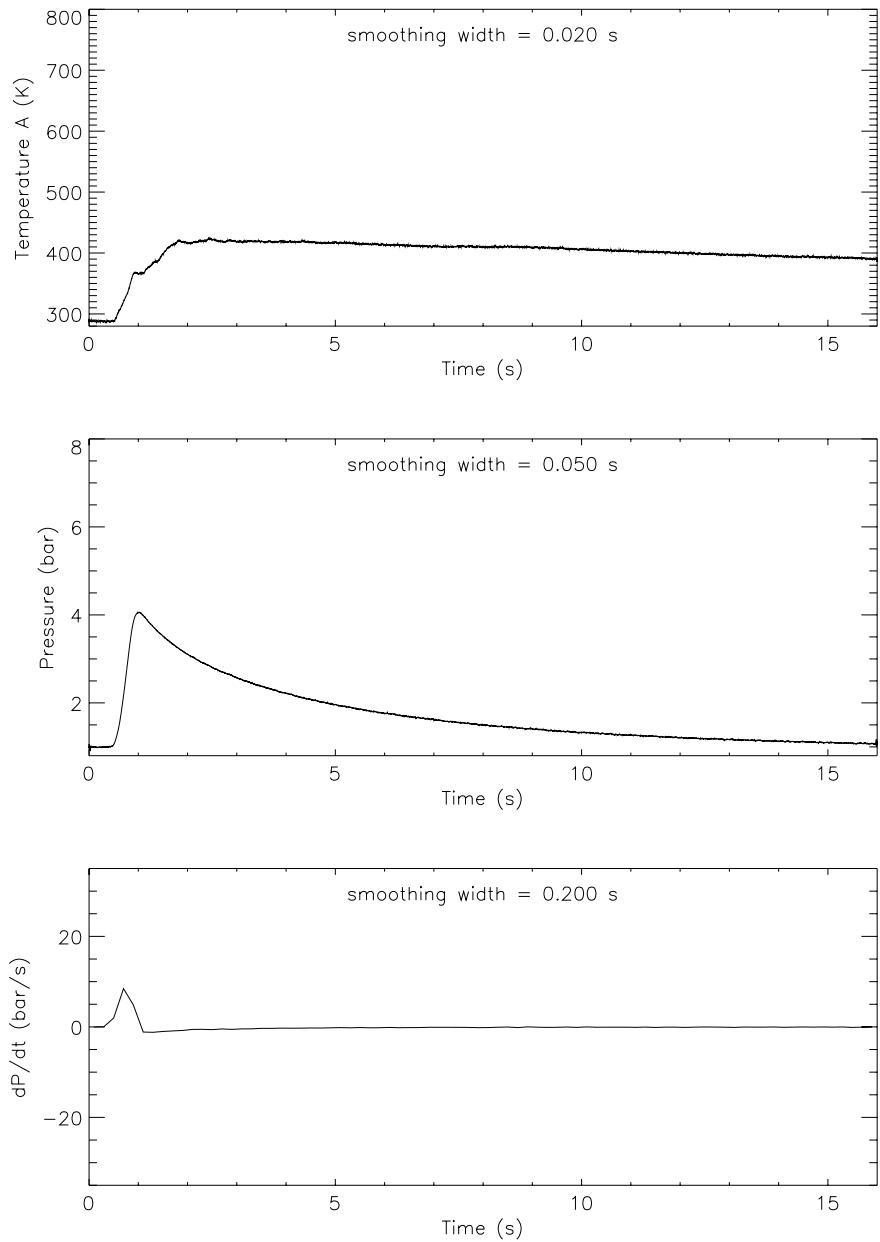
7.98 H₂, 6.84% N₂O, 3.99 % NH₃, 0.19% CH₄, 81% Air, 100 kPa, spark plug, hi pot



Run no. 79
9.24 H₂, 7.92% N₂O, 4.62 % NH₃, 0.22% CH₄, 78% Air, 100 kPa, spark plug, hi pot

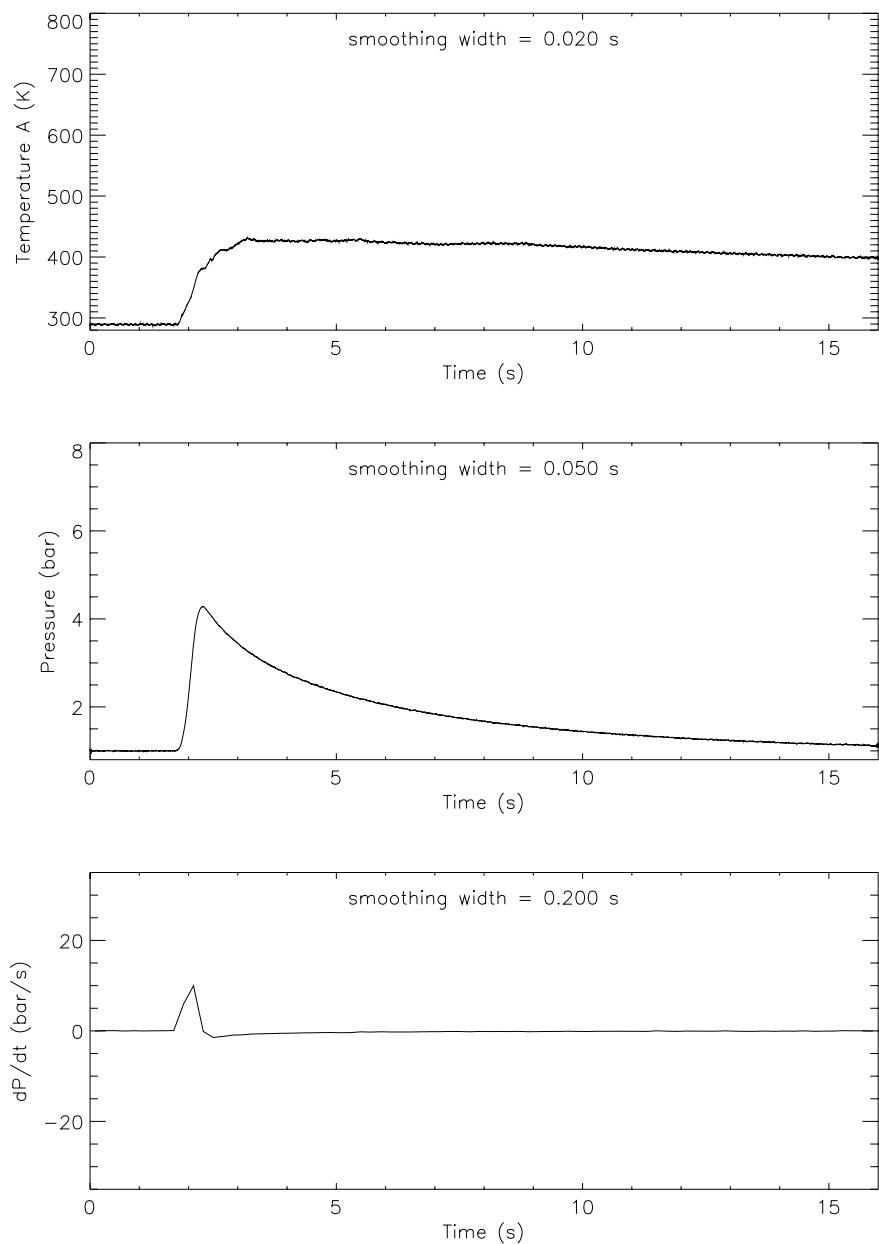


Run no. 80
6.3 H₂, 0% N₂O, 3.15 % NH₃, 0.15% CH₄, 85% Air, 5.4% N₂, 100 kPa, spark plug, hi pot



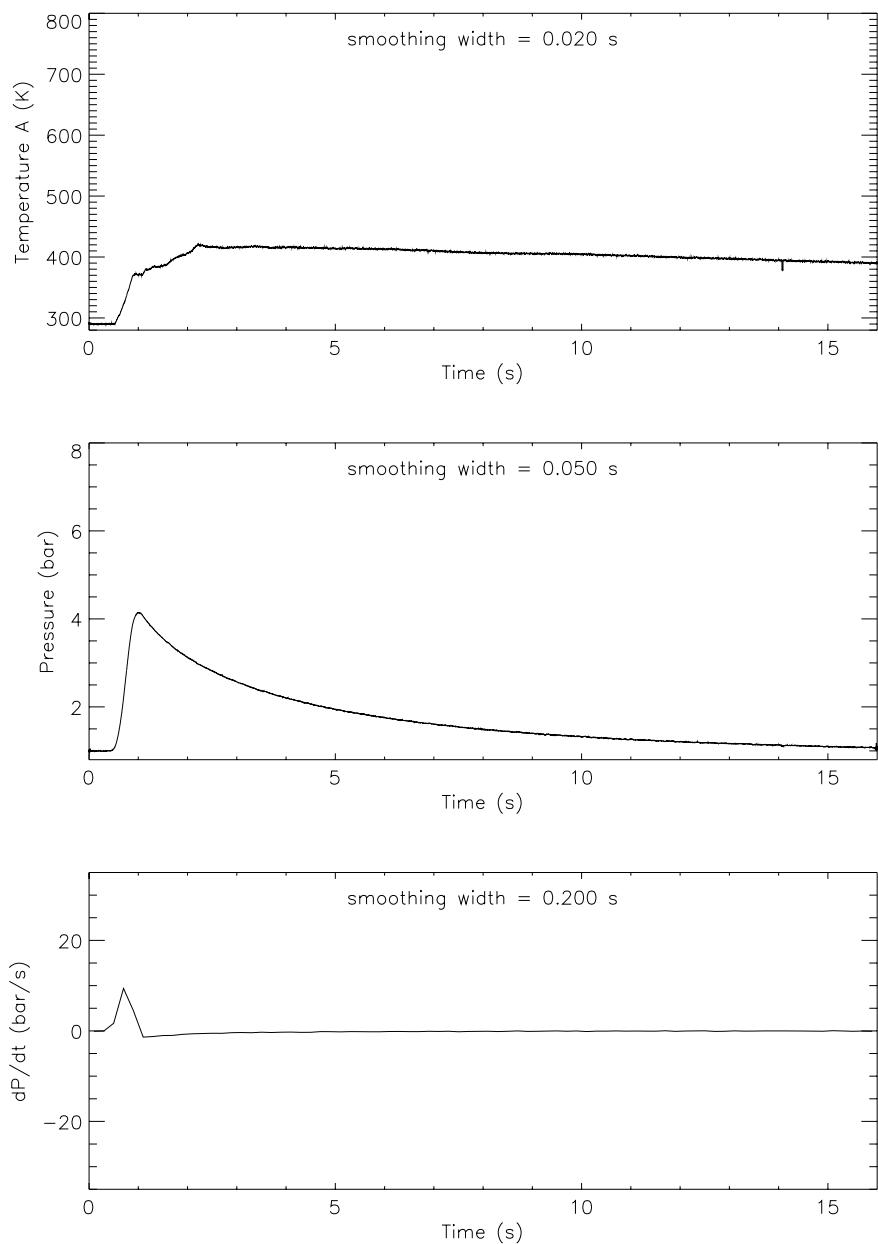
Run no. 81

6.3 H₂, 2.7% N₂O, 3.15 % NH₃, 0.15% CH₄, 85% Air, 2.7% N₂, 100 kPa, spark plug, hi pot



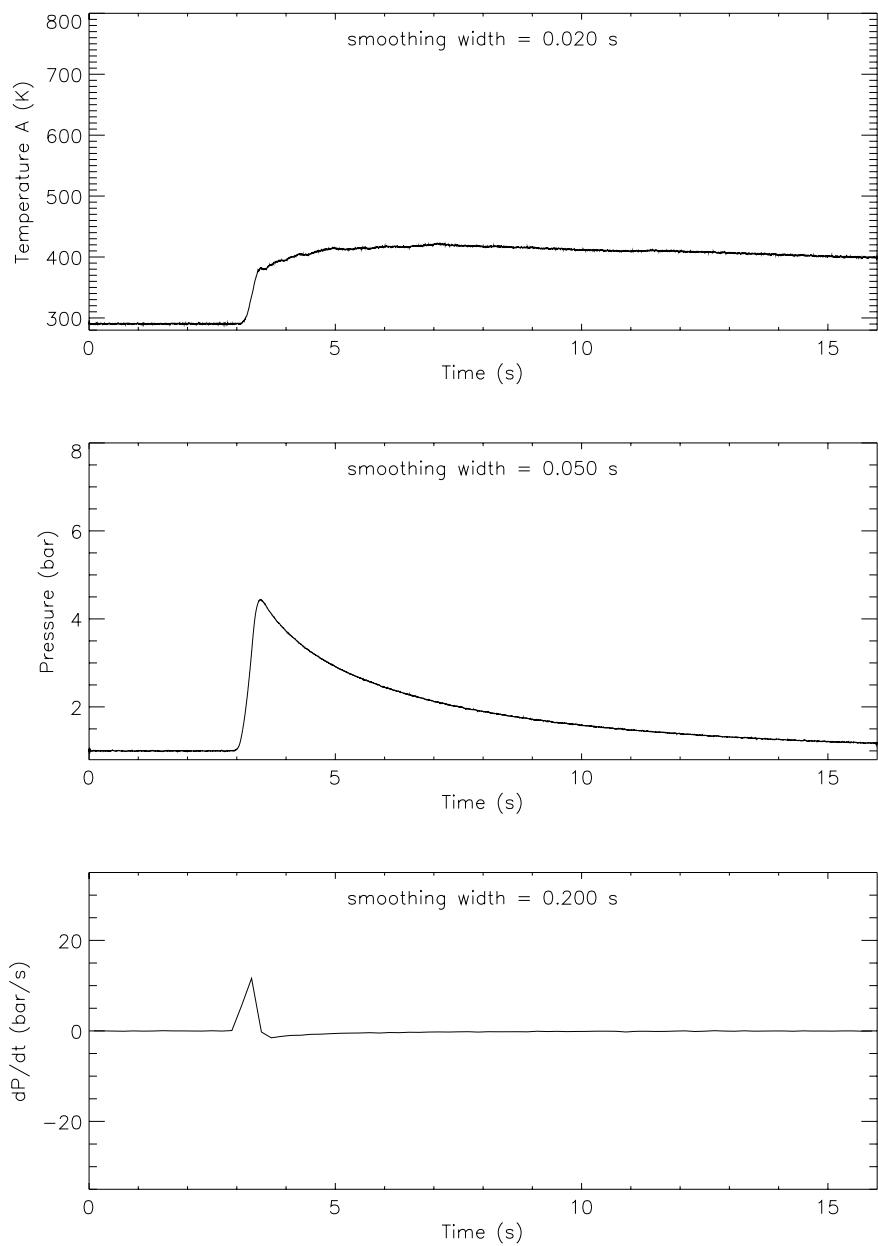
Run no. 82

6.3 H₂, 1.35% N₂O, 3.15 % NH₃, 0.15% CH₄, 85% Air, 4.05% N₂, 100 kPa, spark plug, hi pot

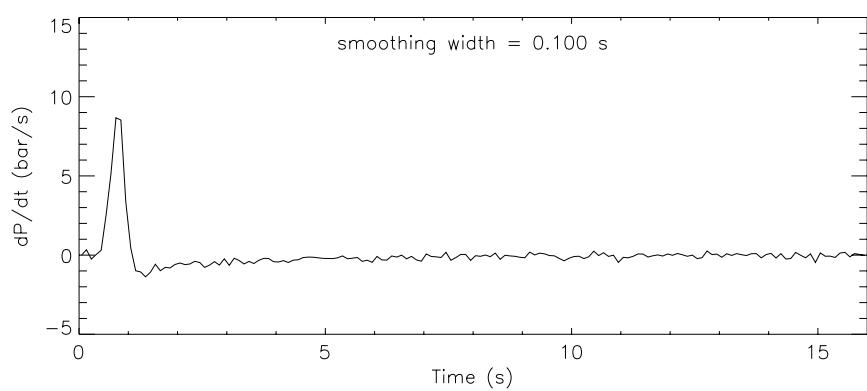
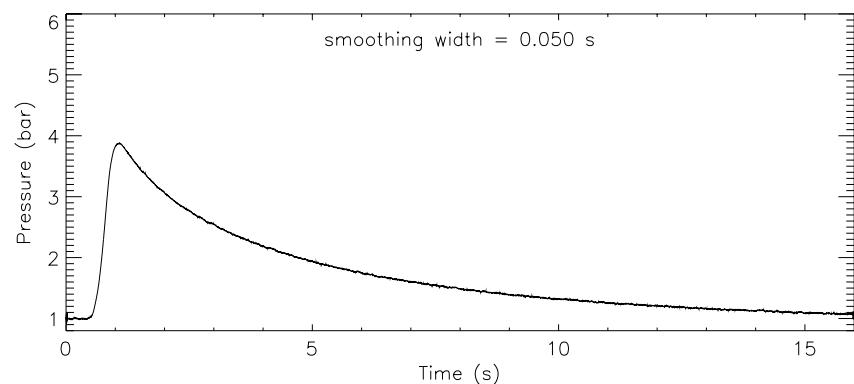
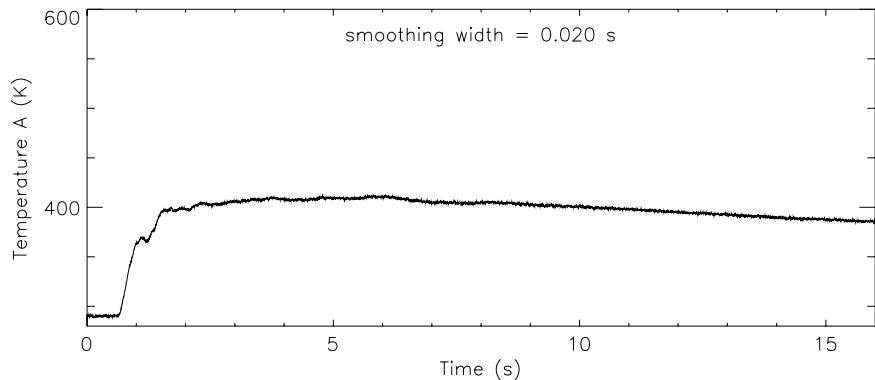


Run no. 83

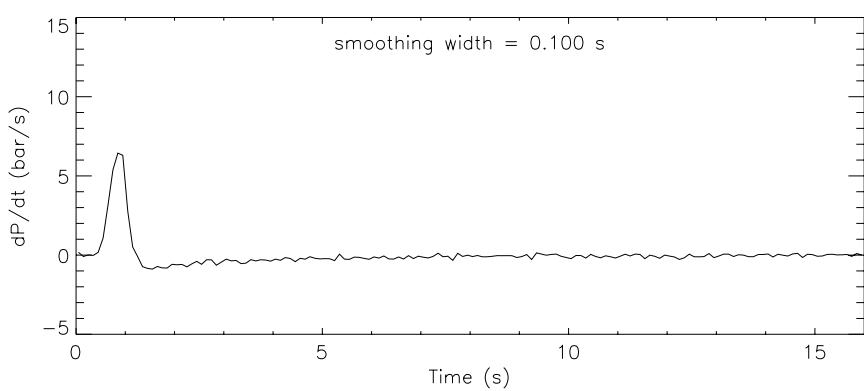
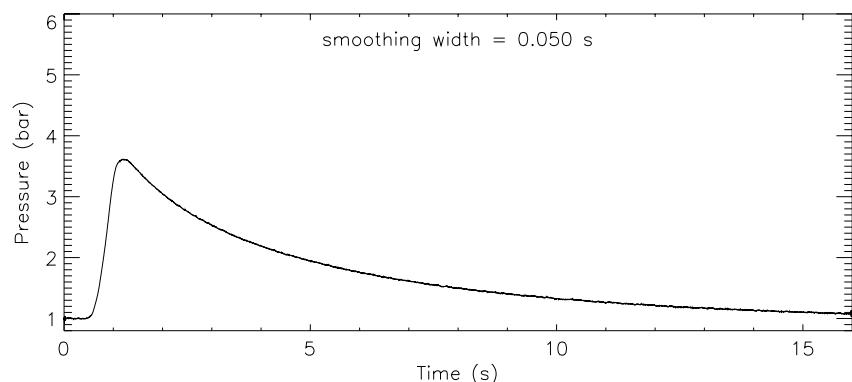
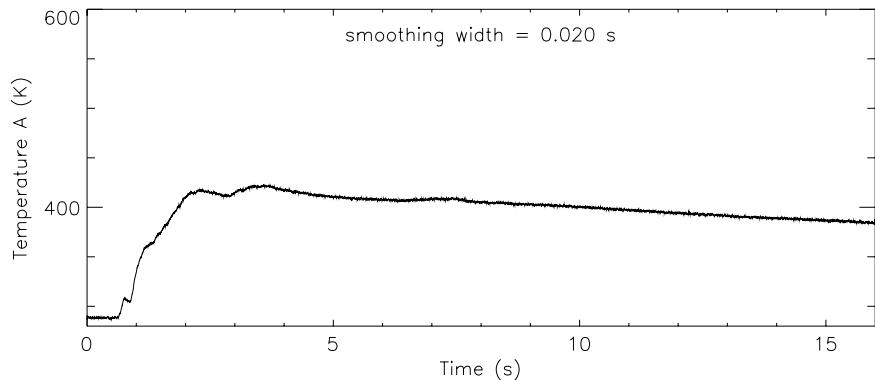
6.3 H₂, 4.05% N₂O, 3.15 % NH₃, 0.15% CH₄, 85% Air, 1.35% N₂, 100 kPa, spark plug, hi pot



Run no. 84
5.88 H₂, 0% N₂O, 2.94 % NH₃, 0.14% CH₄, 86% Air, 5.04% N₂, 100 kPa, spark plug, hi pot

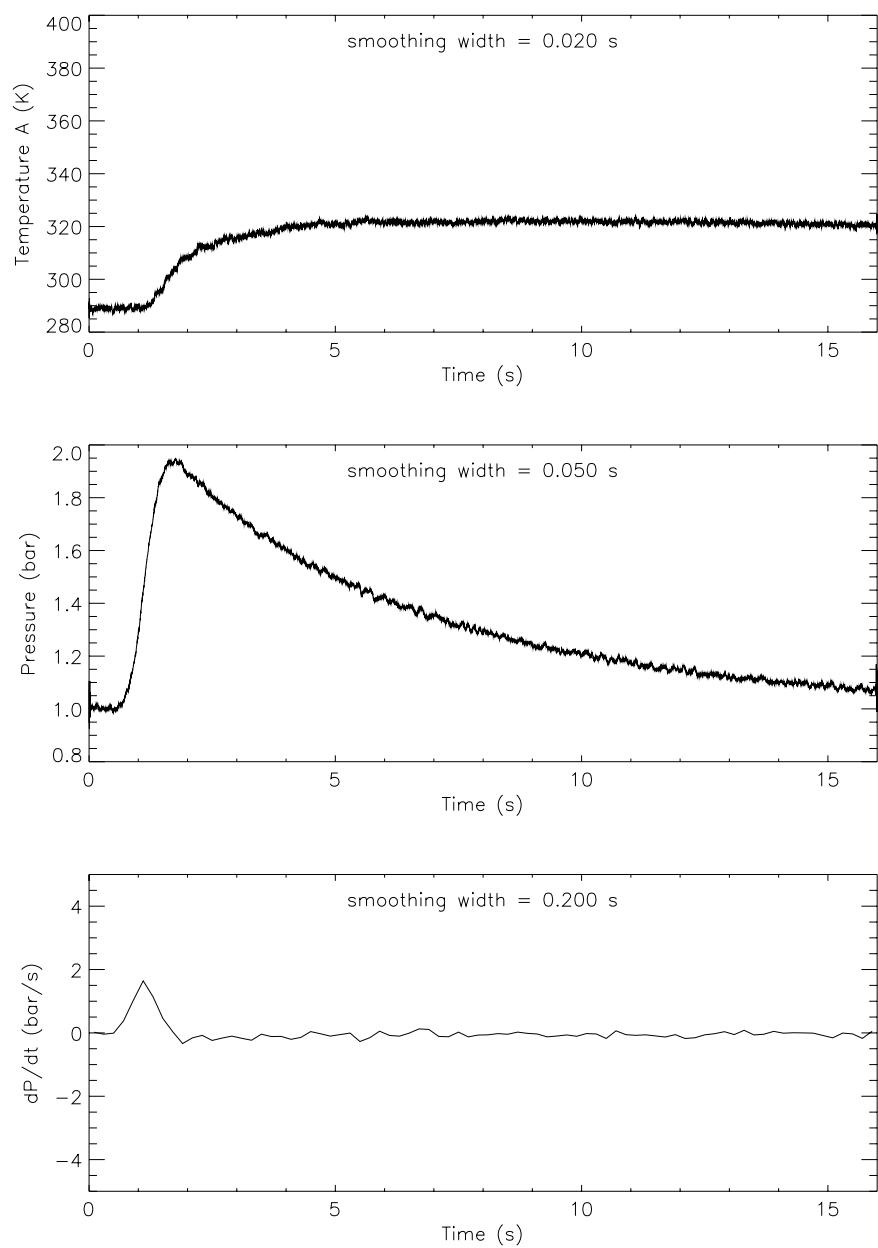


Run no. 85
5.46 H₂, 0% N₂O, 2.73 % NH₃, 0.13% CH₄, 87% Air, 4.68% N₂, 100 kPa, spark plug, hi pot



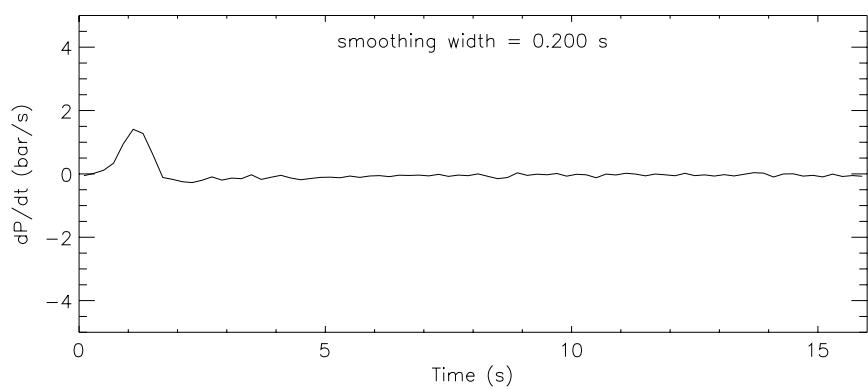
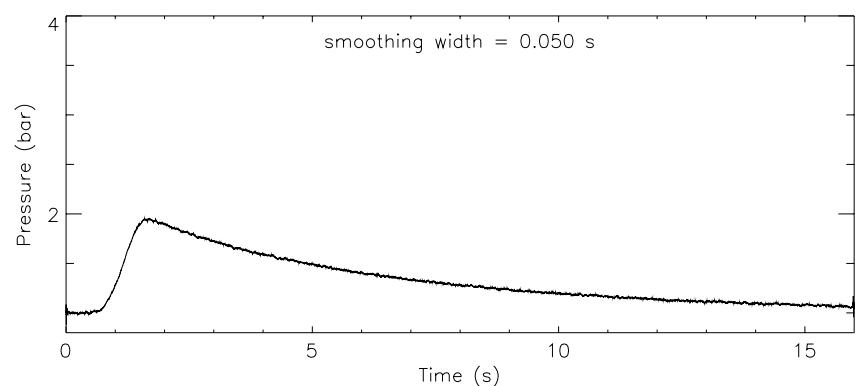
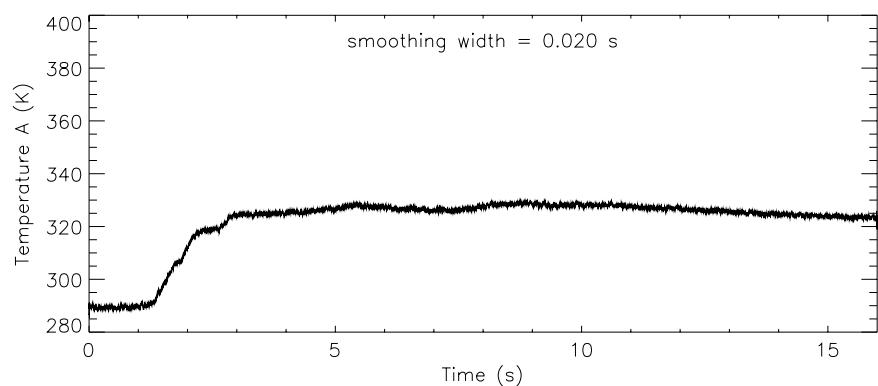
Run no. 87

4.2 H₂, 0% N₂O, 2.1 % NH₃, 0.10% CH₄, 90% Air, 3.6 % N₂, 100 kPa, spark plug, hi pot

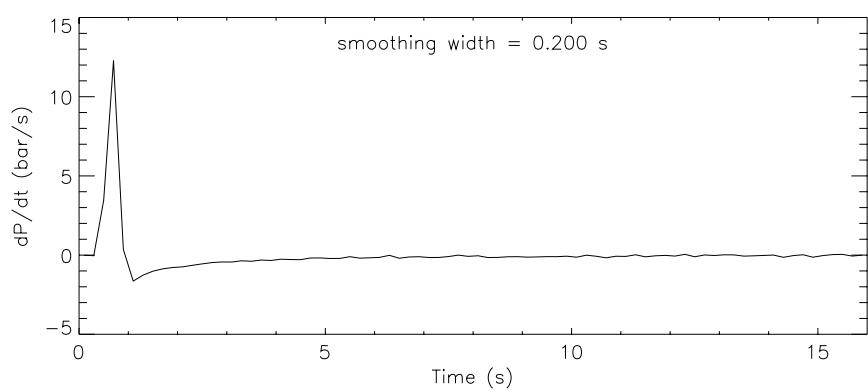
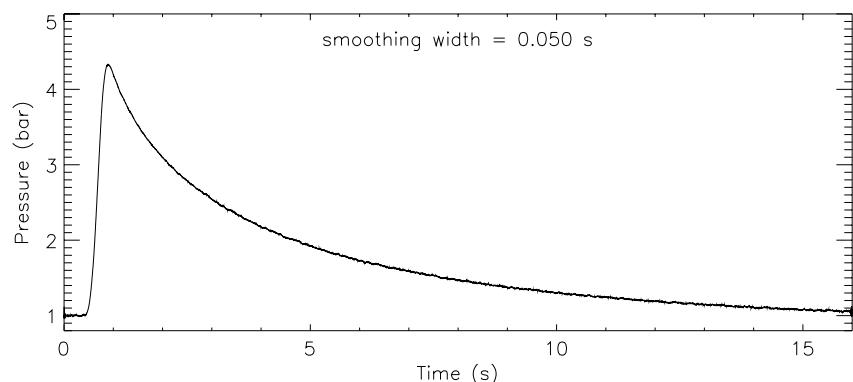
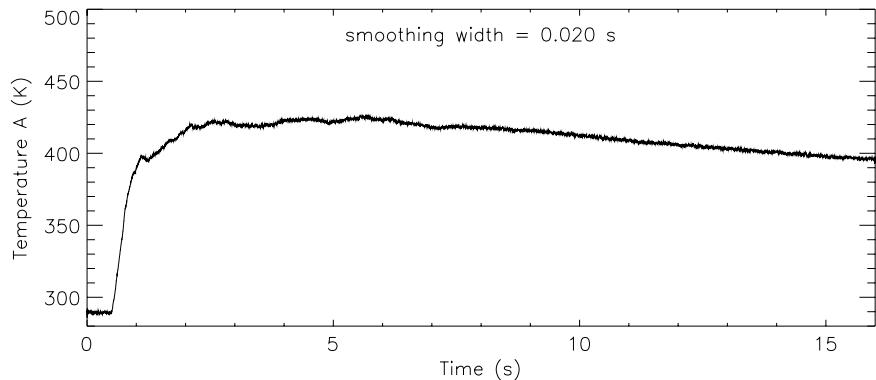


Run no. 88

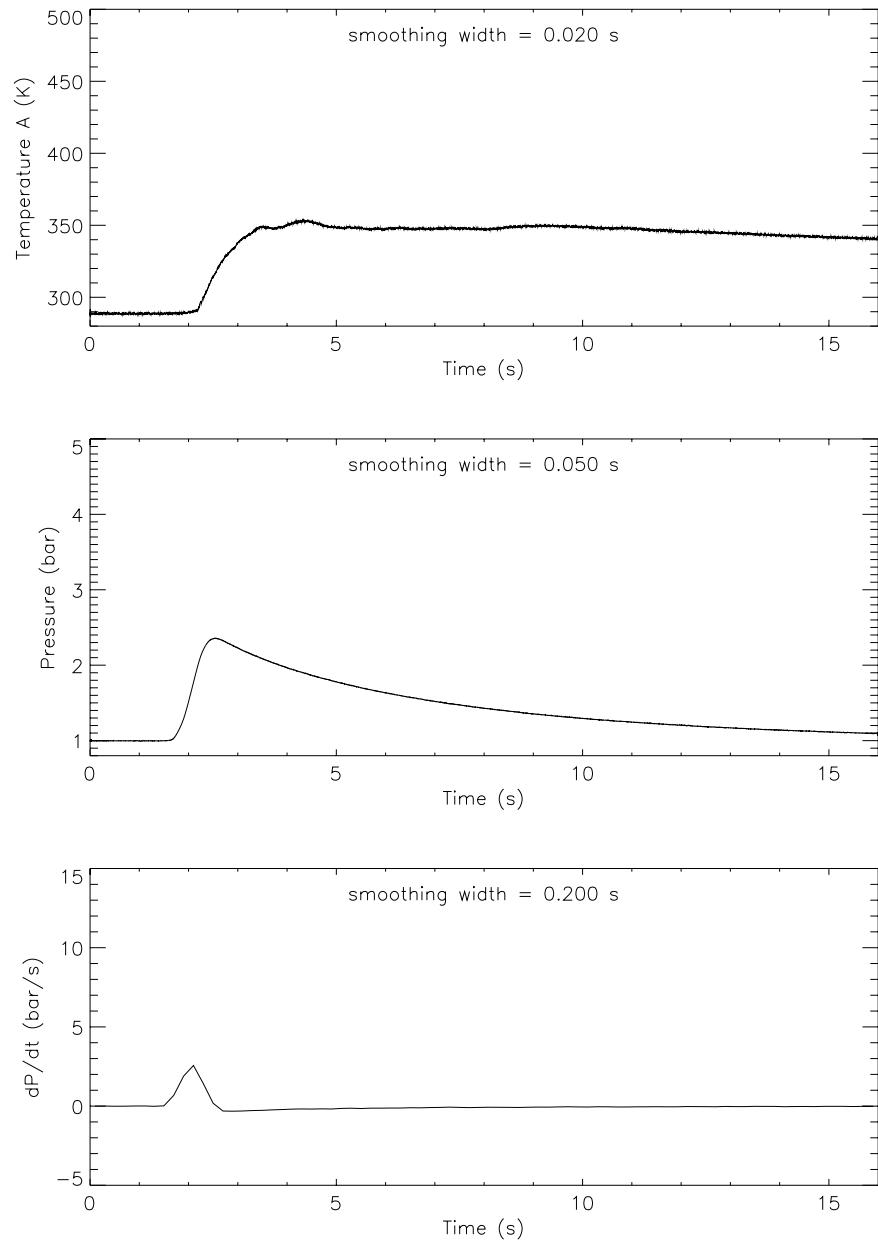
4.2 H₂, 3.6% N₂O, 2.1 % NH₃, 0.10% CH₄, 90% Air, 0% N₂, 100 kPa, spark plug, hi pot



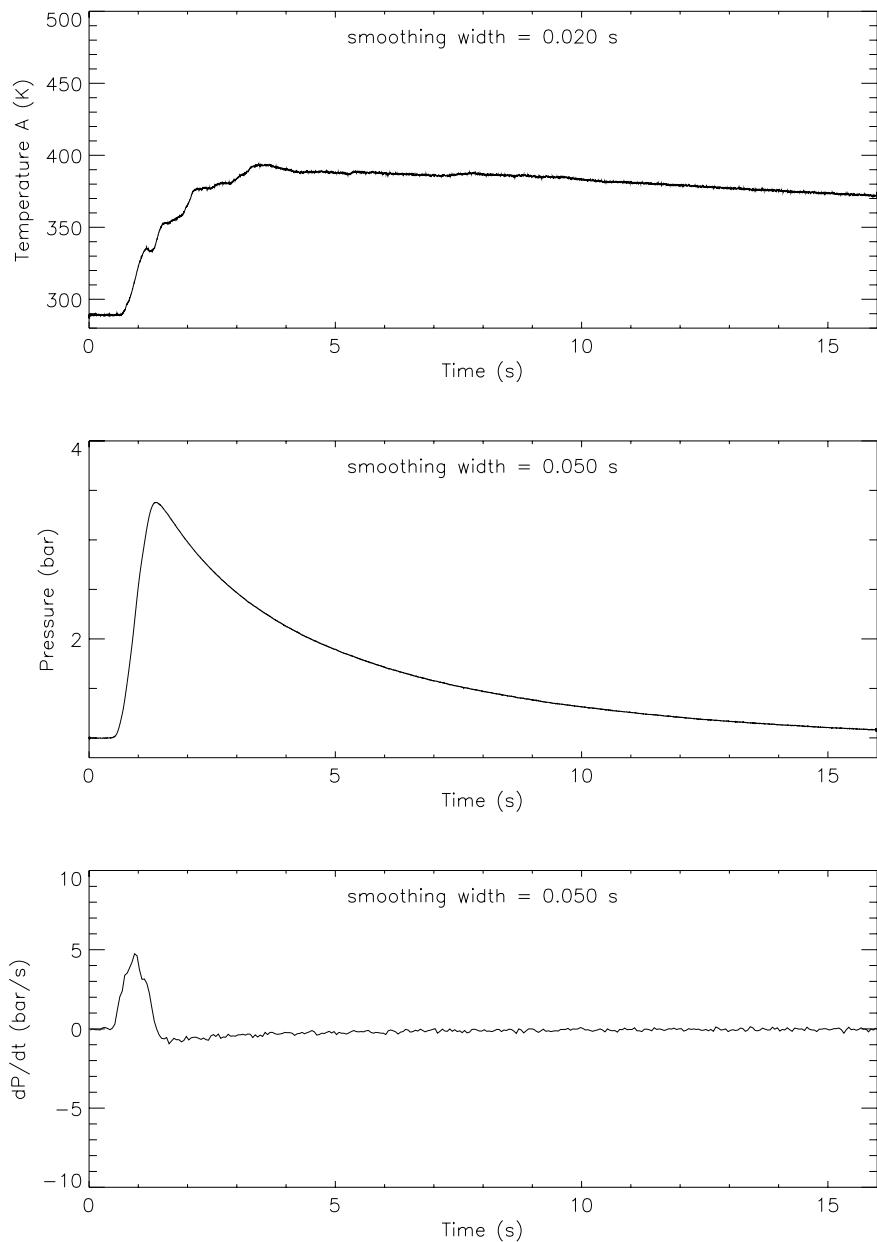
Run no. 89
6.72 H₂, 0% N₂O, 3.36 % NH₃, 0.16% CH₄, 84% Air, 5.76% N₂, 100 kPa, spark plug, hi pot



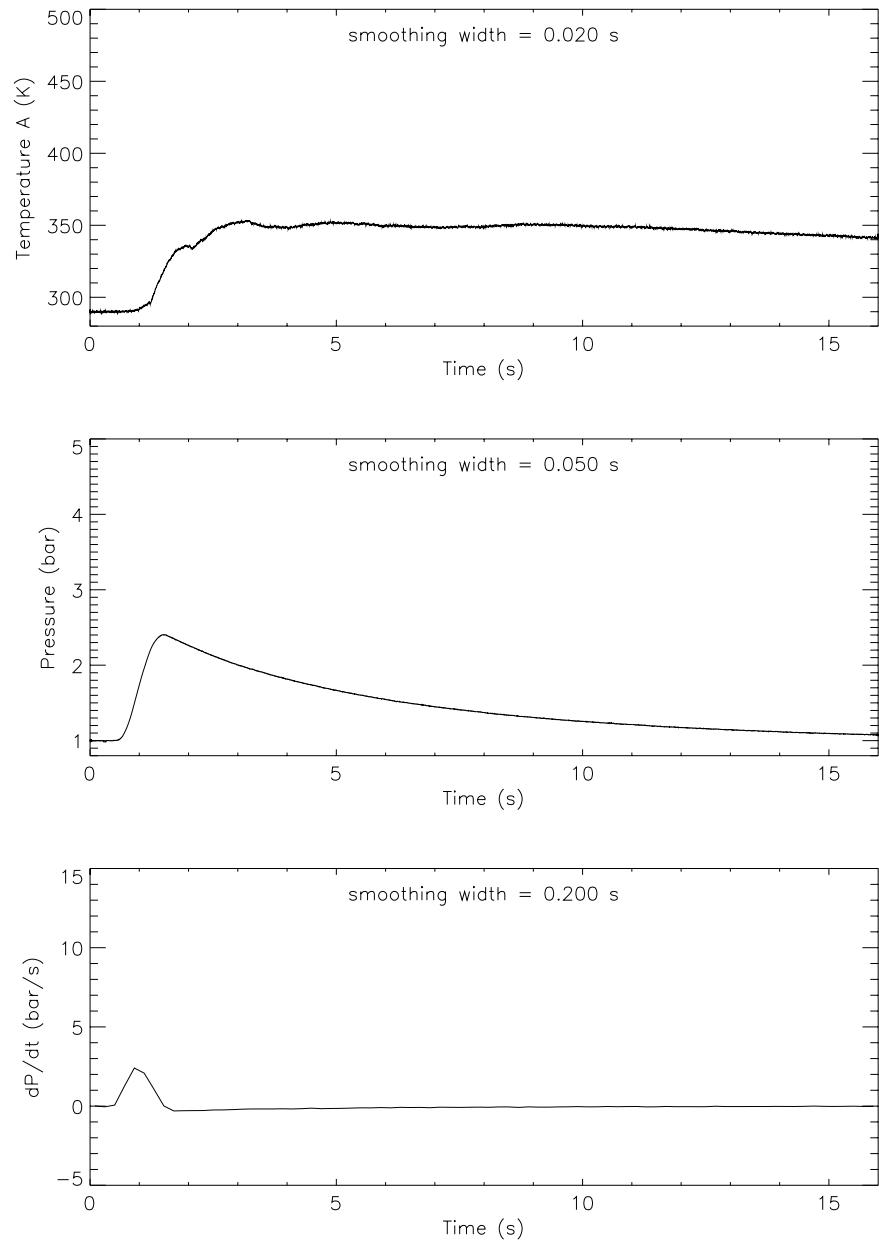
Run no. 90
4.62 H₂, 3.96% N₂O, 2.31 % NH₃, 0.11% CH₄, 89% Air, 0% N₂, 100 kPa, spark plug, hi pot



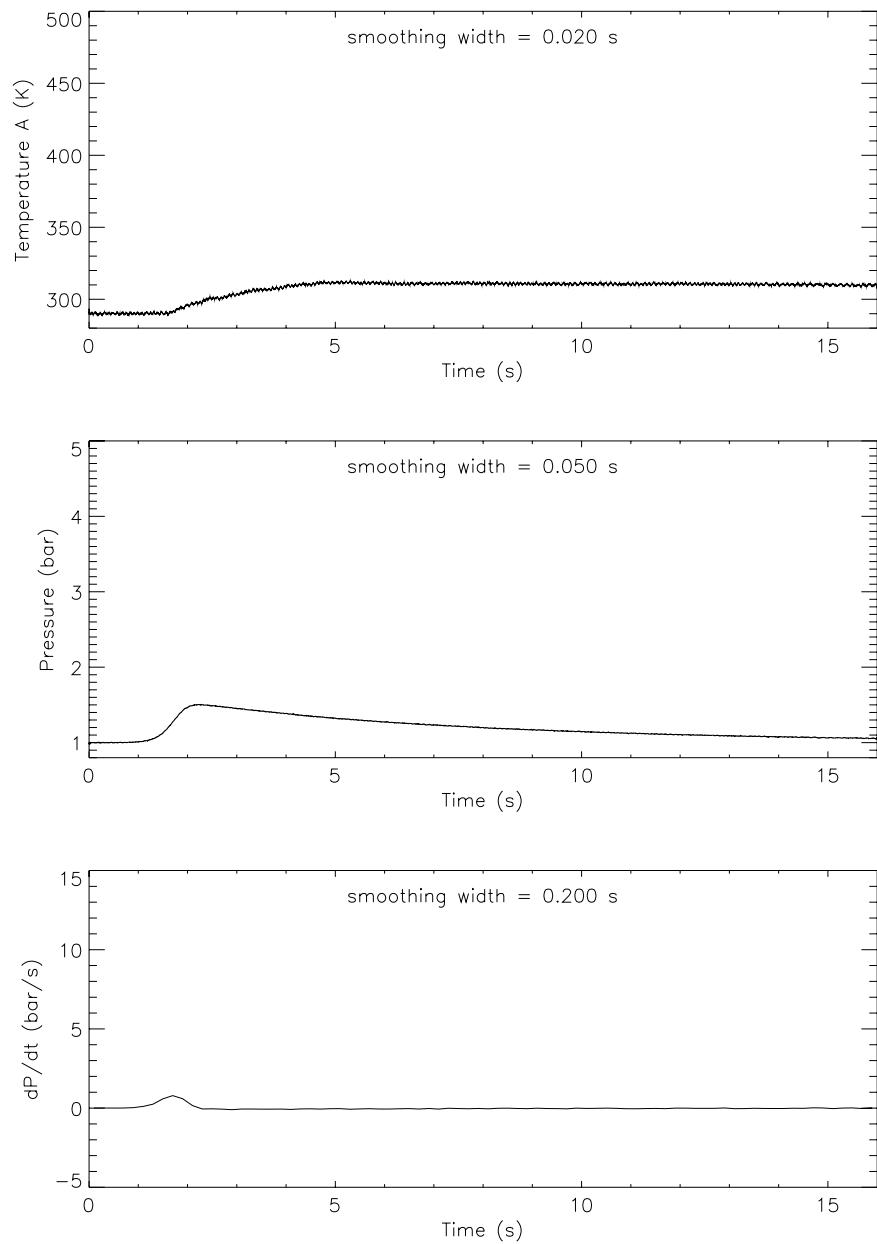
Run no. 91
5.04 H₂, 4.32 N₂O, 2.52 NH₃, 0.12 CH₄, 88 Air, 0 N₂, 100 kPa, spark plug, hi pot



Run no. 92
4.62 H₂, 0% N₂O, 2.31 % NH₃, 0.11% CH₄, 89% Air, 3.96% N₂, 100 kPa, spark plug, hi pot

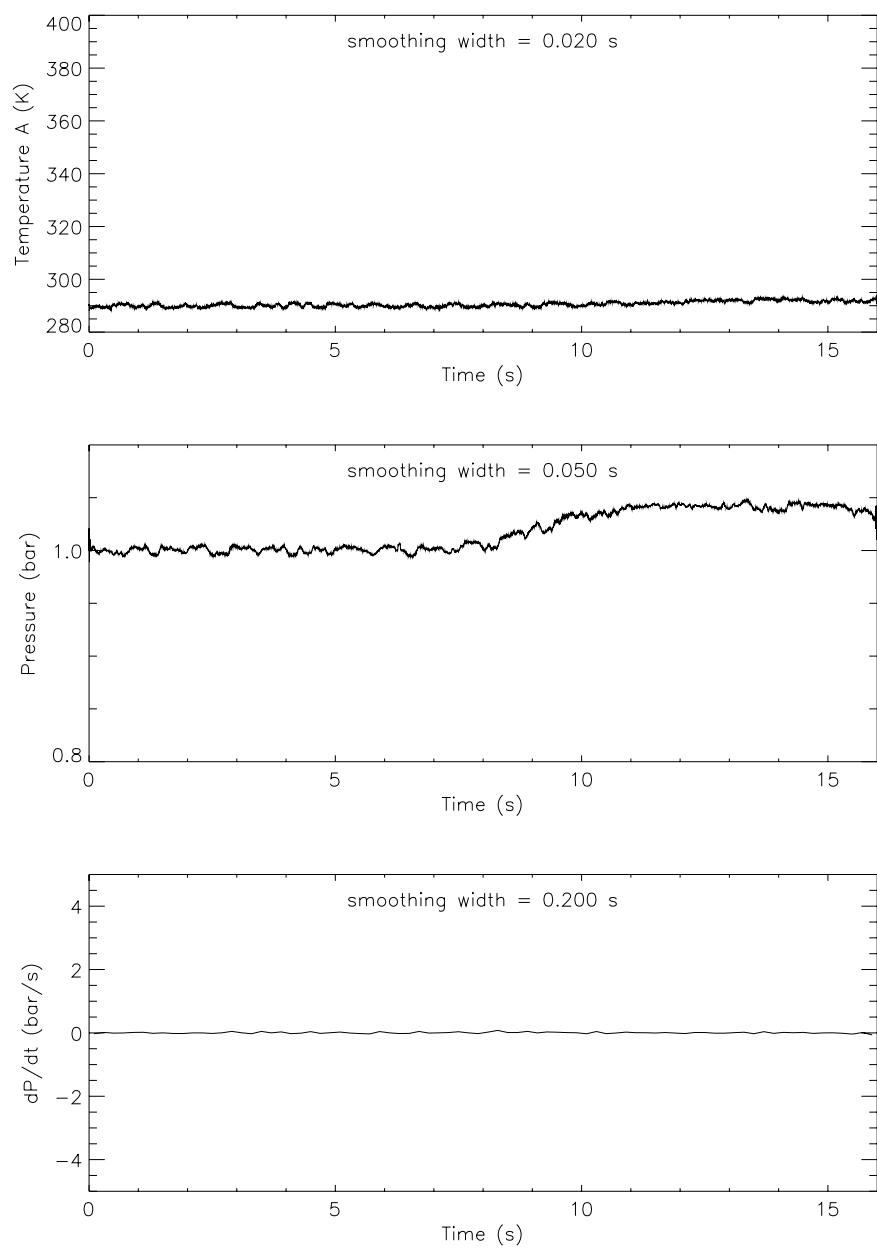


Run no. 93
3.78 H₂, 0% N₂O, 1.89 % NH₃, 0.09% CH₄, 91% Air, 3.24% N₂, 100 kPa, spark plug, hi pot

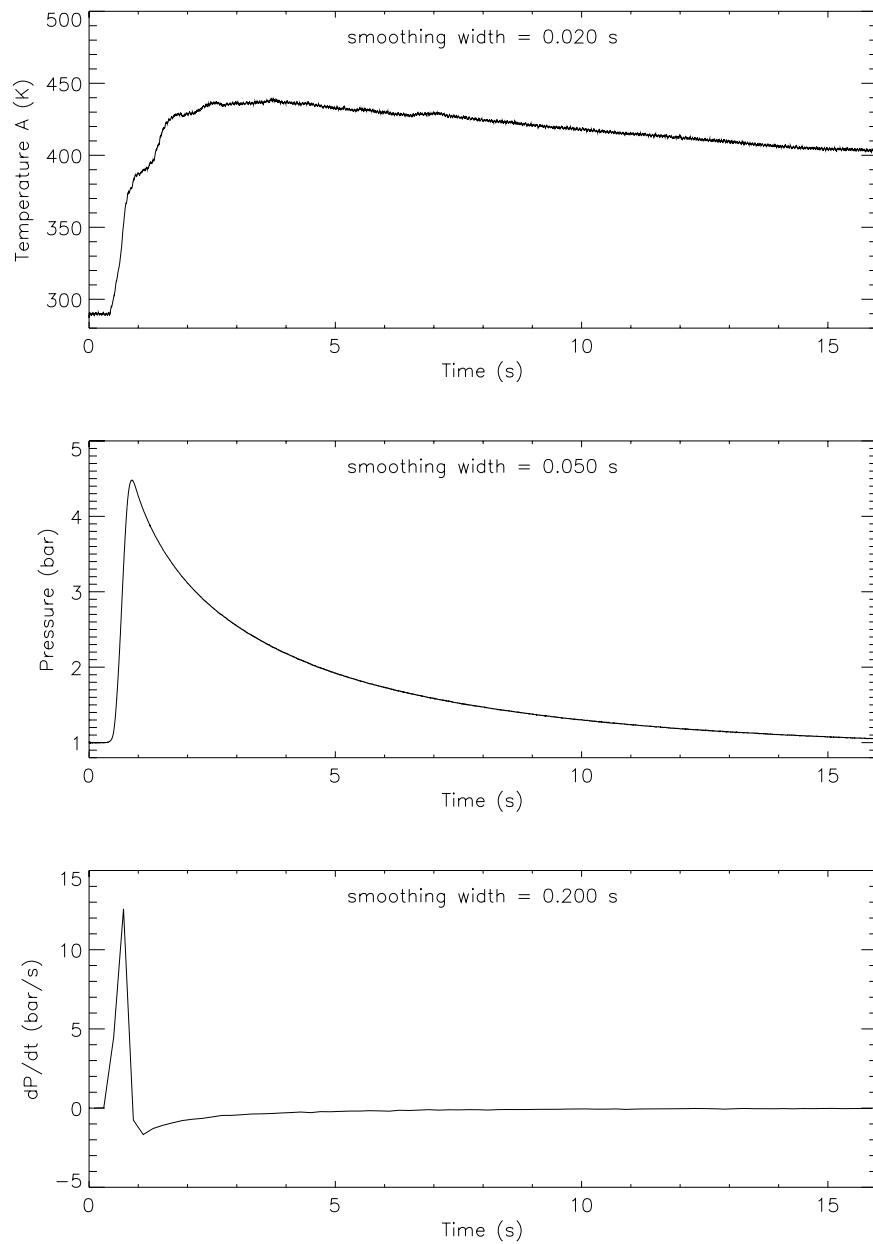


Run no. 94

3.36 H₂, 0% N₂O, 1.68 % NH₃, 0.08% CH₄, 92% Air, 2.88% N₂, 100 kPa, spark plug, hi pot

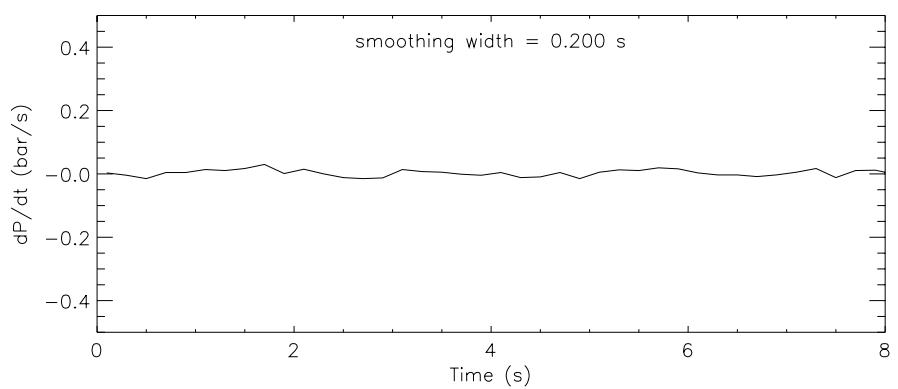
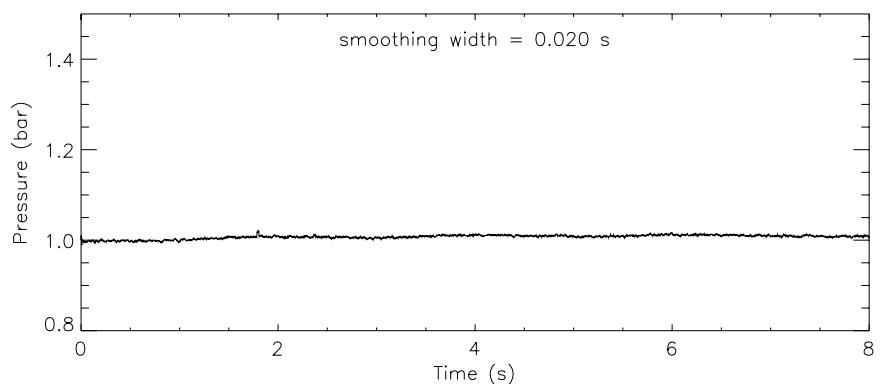
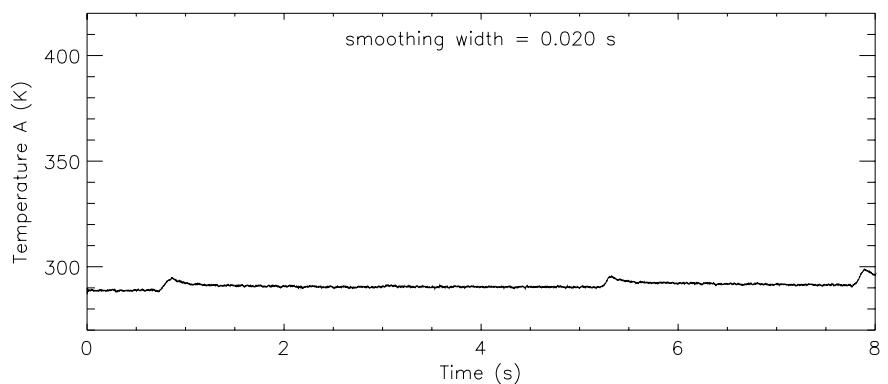


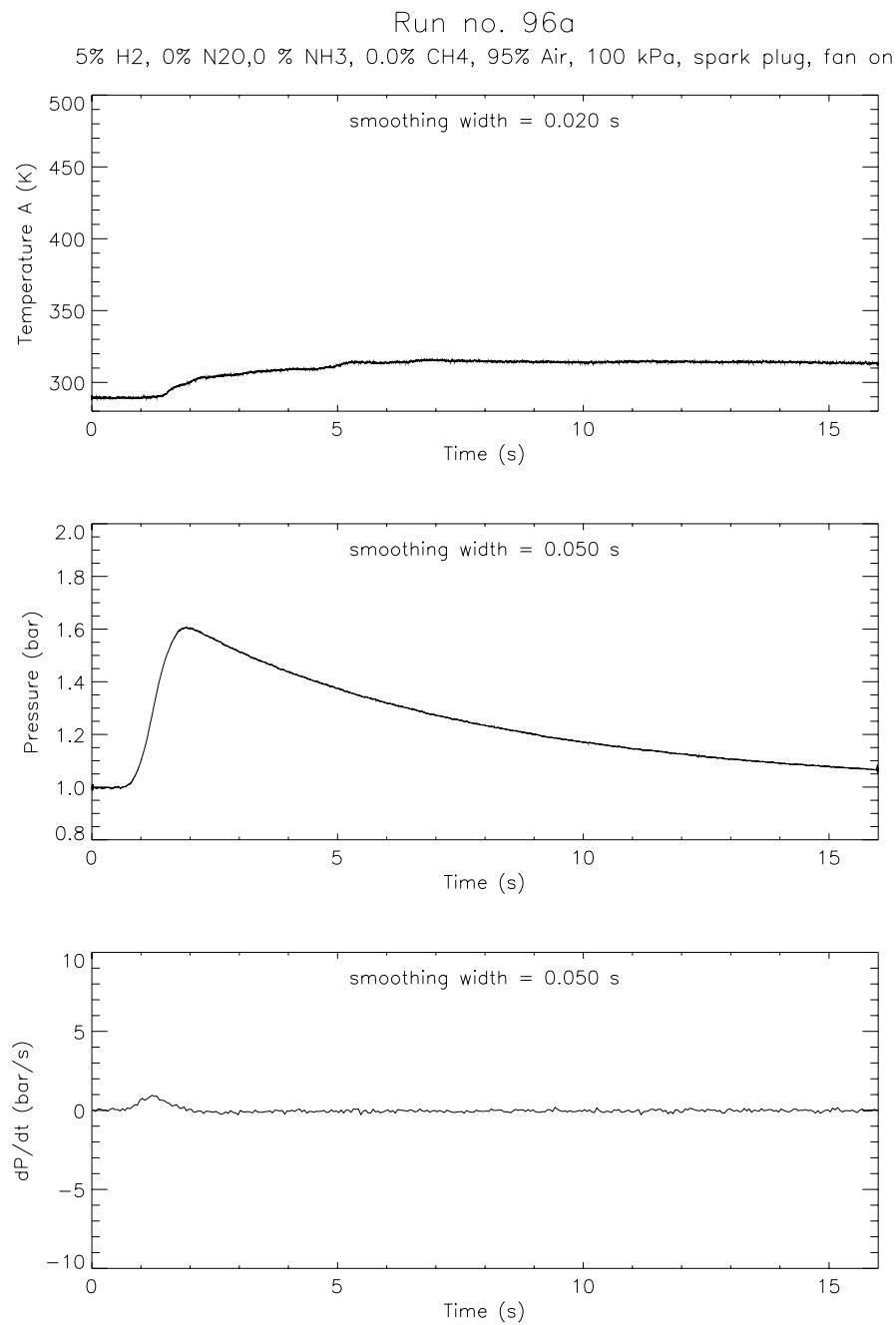
Run no. 95
 7.14 H₂, 0% N₂O, 3.57 % NH₃, 0.17% CH₄, 83% Air, 6.12% N₂, 100 kPa, spark plug, hi pot



Run no. 96

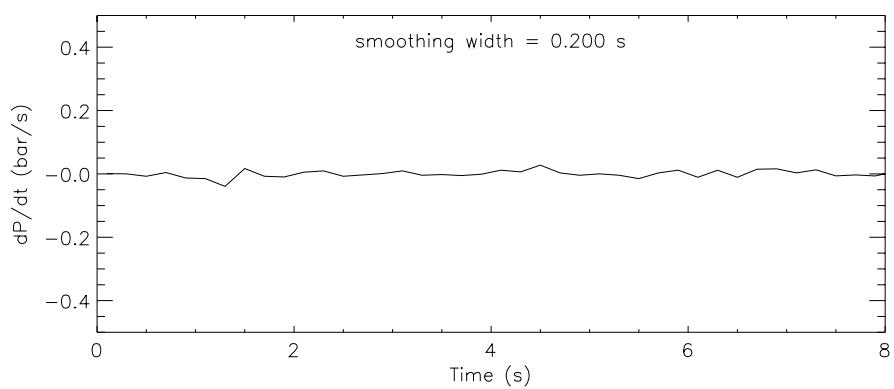
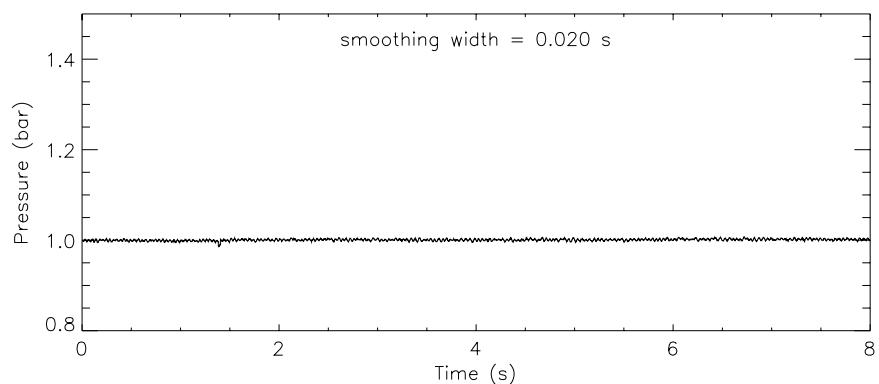
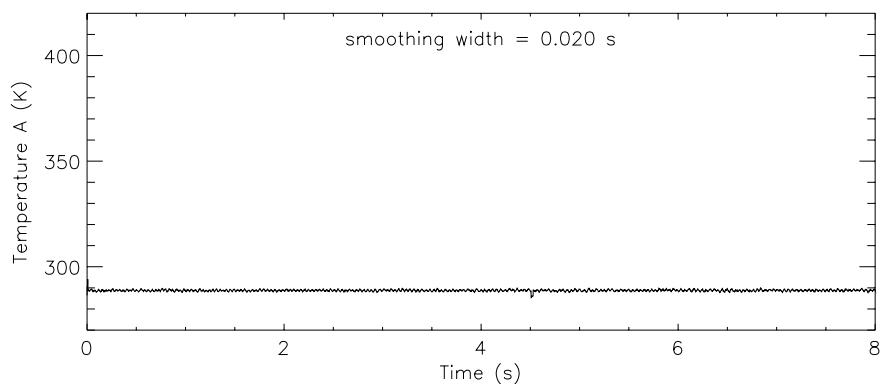
5% H₂, 0% N₂O, 0 % NH₃, 0.0% CH₄, 95% Air, 100 kPa, spark plug, hi pot



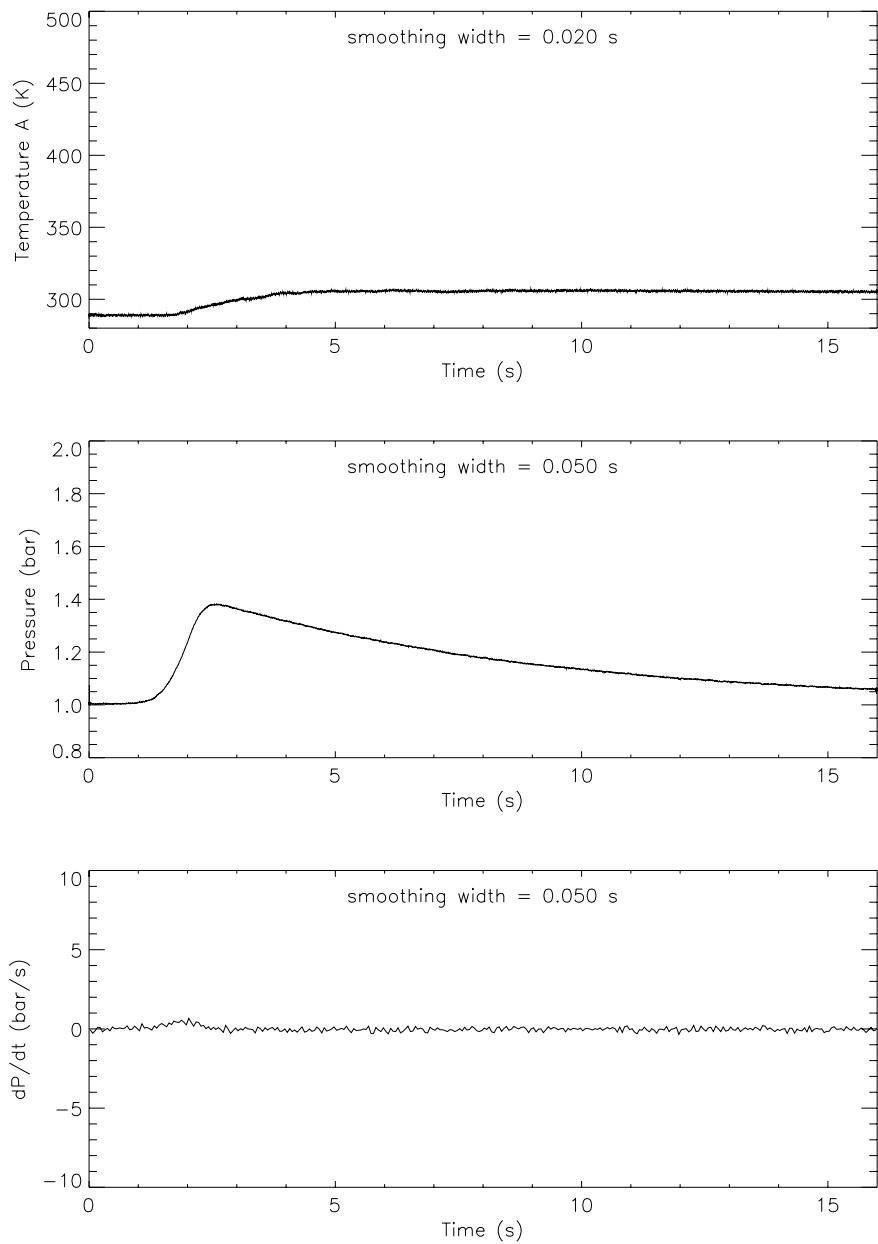


Run no. 97

4% H₂, 0% N₂O, 0 % NH₃, 0.0% CH₄, 96% Air, 100 kPa, spark plug, hi pot

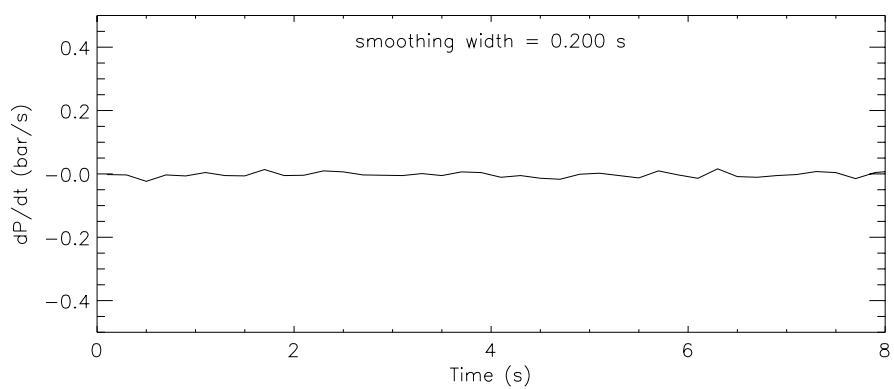
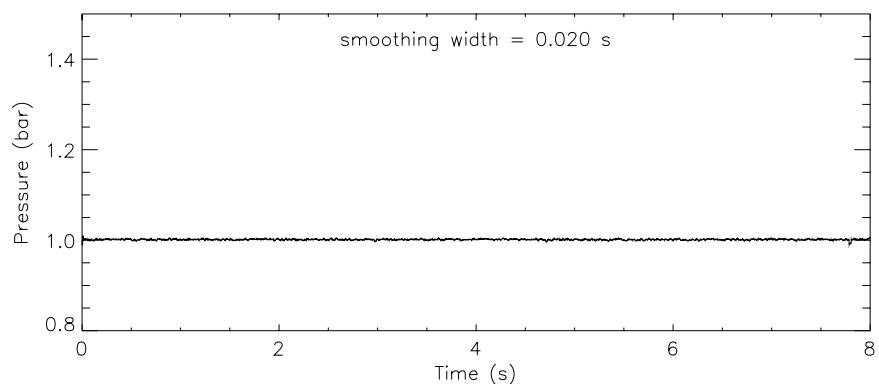
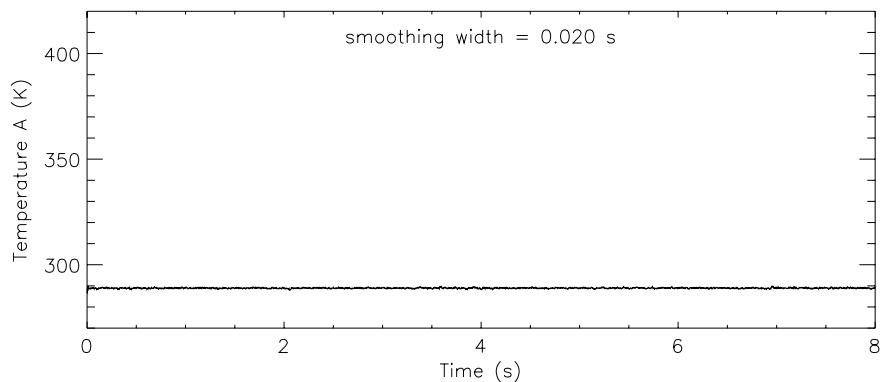


Run no. 97c

4.58% H₂, 0% N₂O, 0 % NH₃, 0.0% CH₄, 96% Air, 100 kPa, spark plug, hi pot

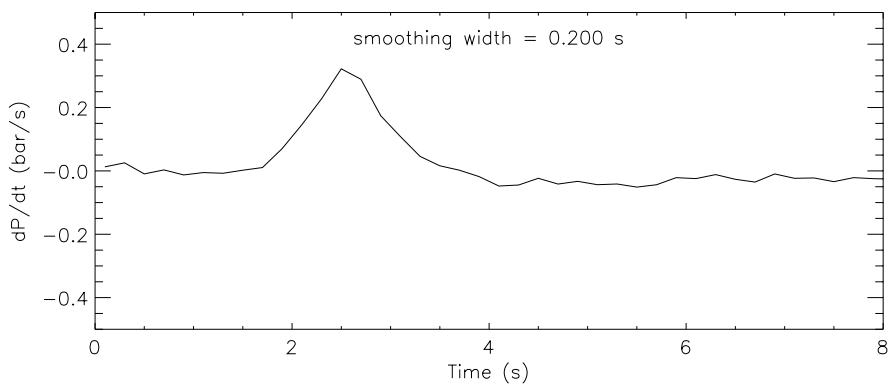
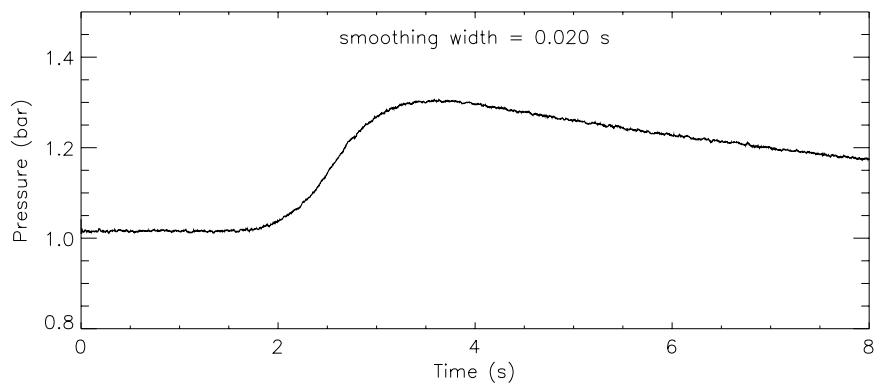
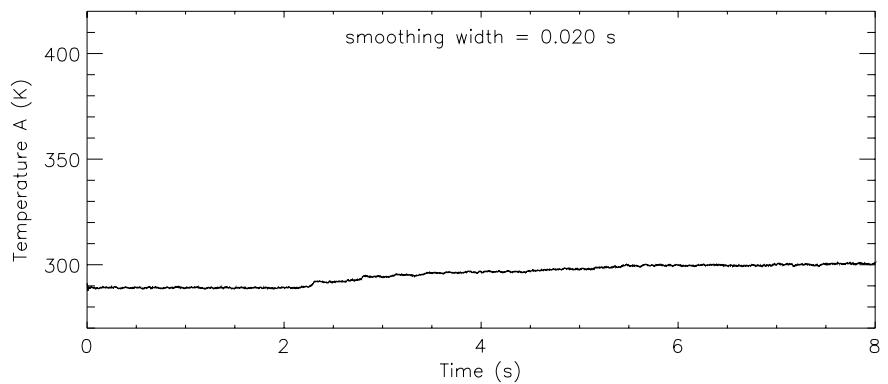
Run no. 98

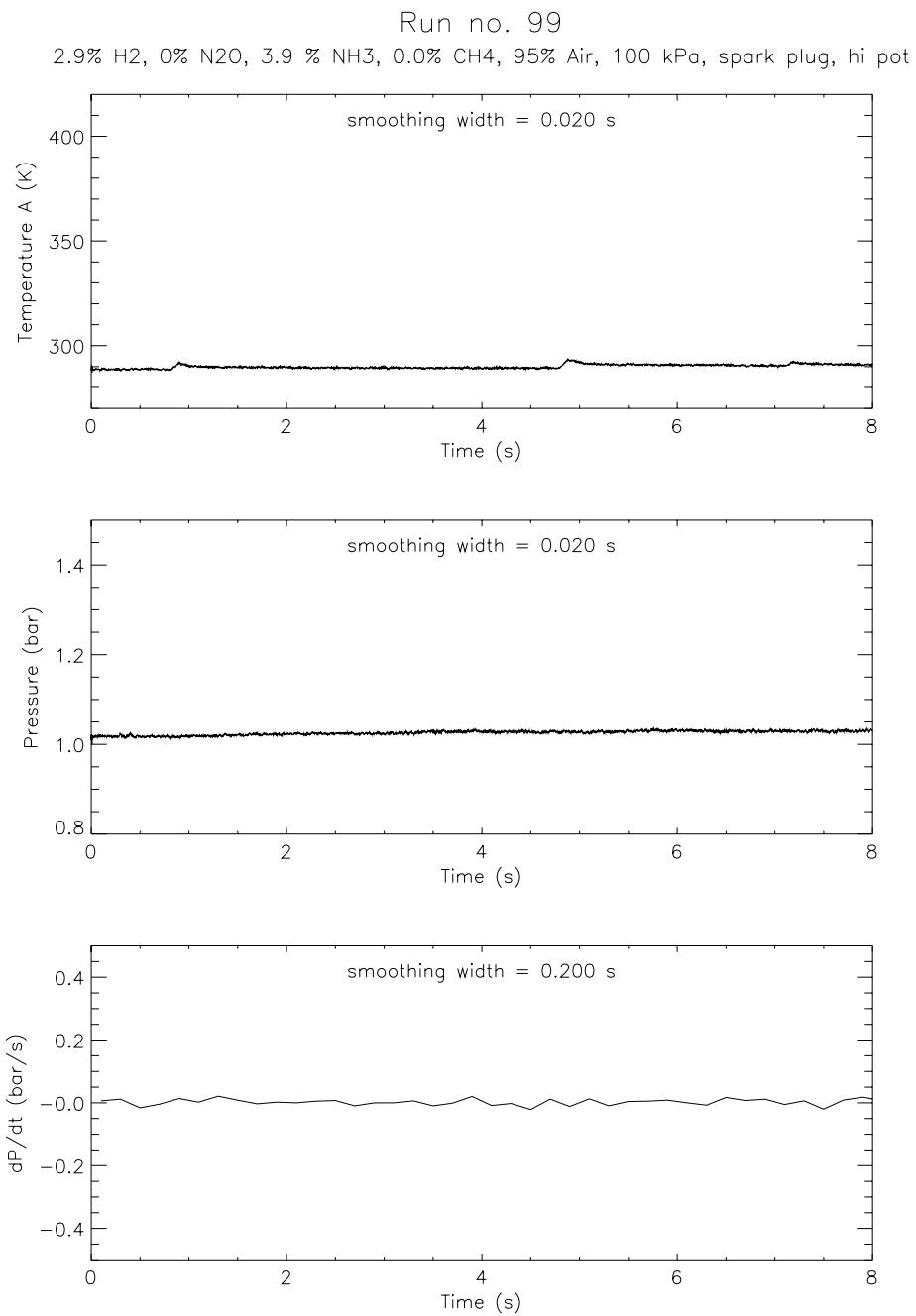
3% H₂, 0% N₂O, 0 % NH₃, 0.0% CH₄, 97% Air, 100 kPa, spark plug, hi pot



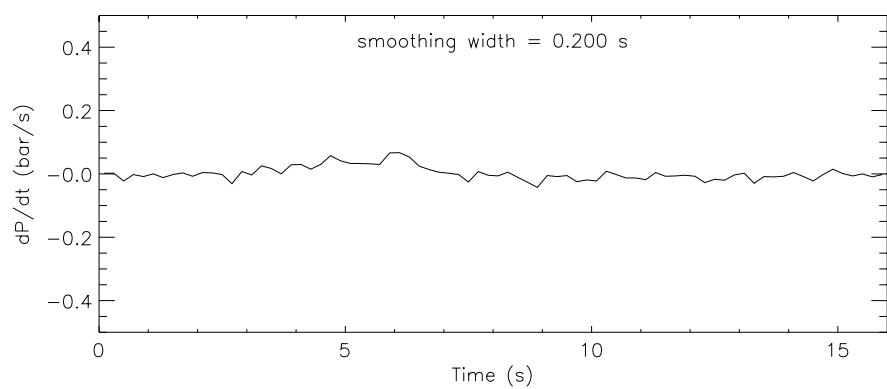
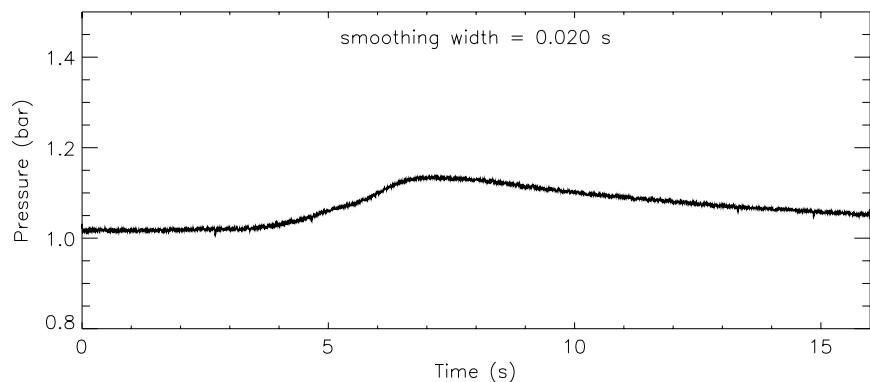
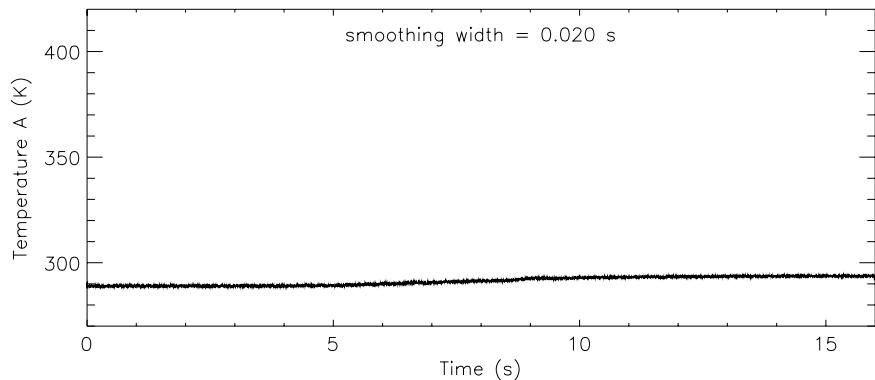
Run no. 98c

4.5% H₂, 0% N₂O, 0 % NH₃, 0.0% CH₄, 95.5% Air, 101.5 kPa, spark plug, hi pot



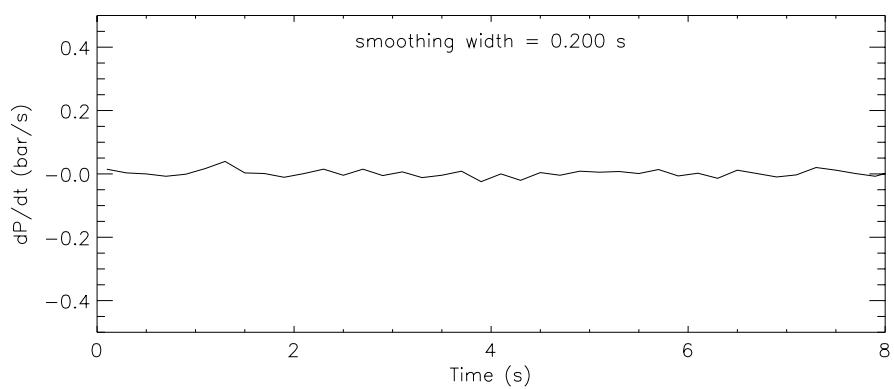
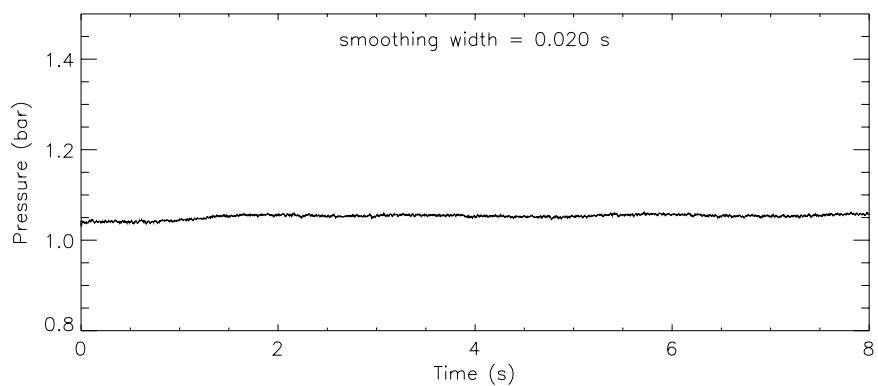
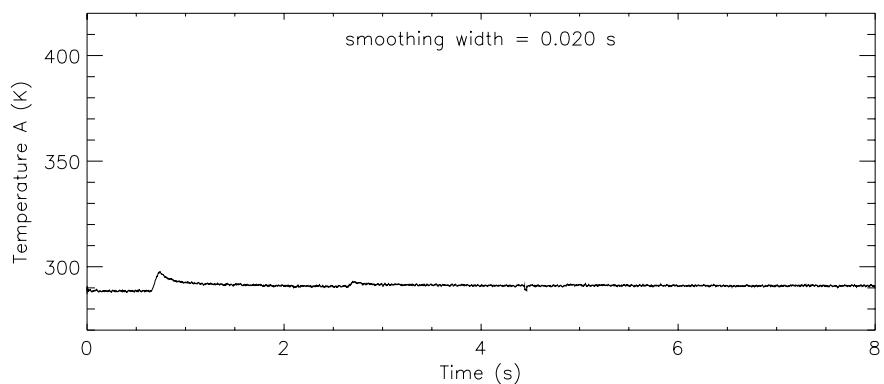


Run no. 99c
2.9% H₂, 0% N₂O, 3.9 % NH₃, 0.0% CH₄, 95% Air, 100 kPa, spark plug, hi pot, FAN ON

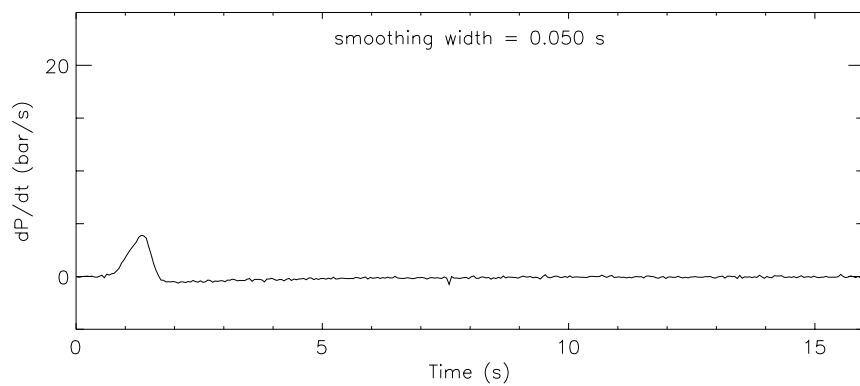
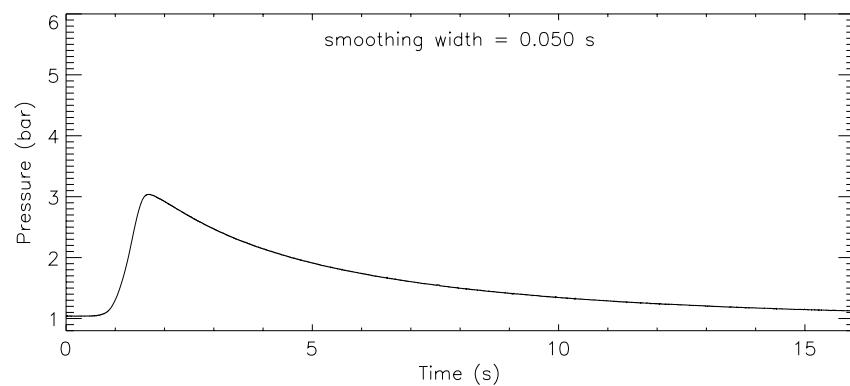
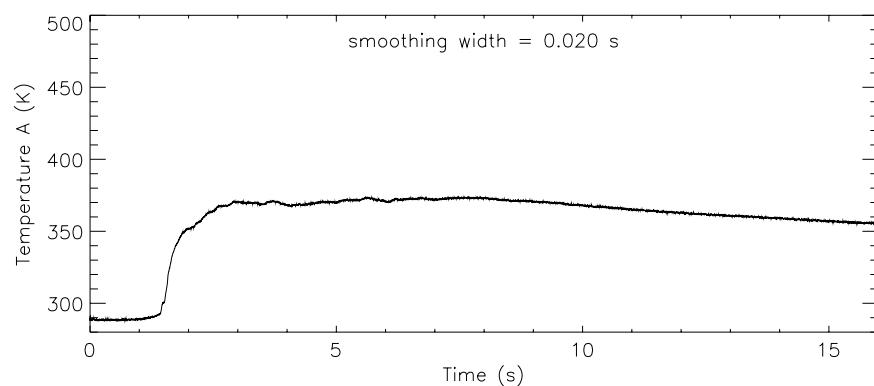


Run no. 100

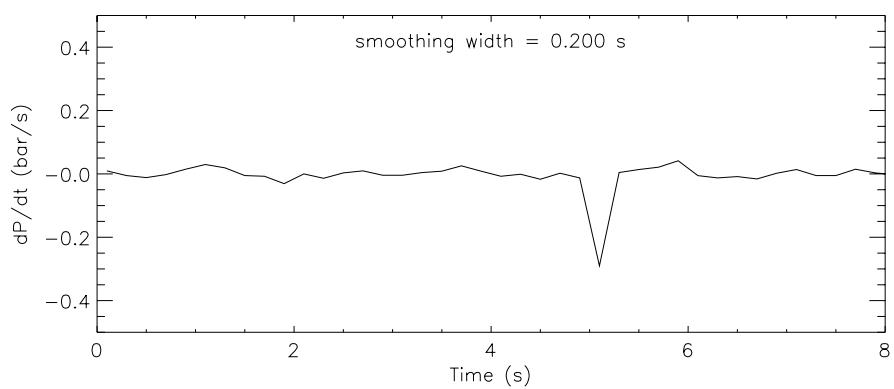
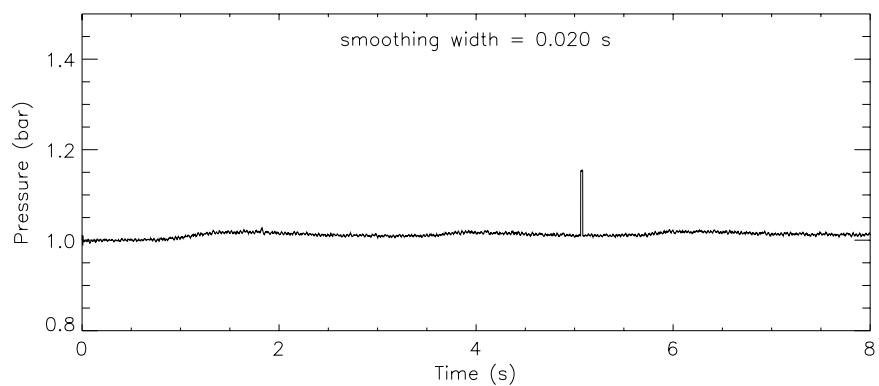
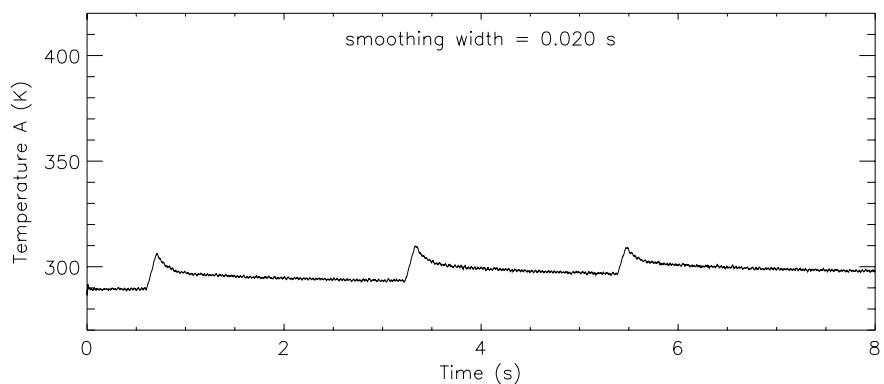
1.9% H₂, 0% N₂O, 9.6 % NH₃, 0.0% CH₄, 88.4% Air, 100 kPa, spark plug, hi pot



Run no. 100a

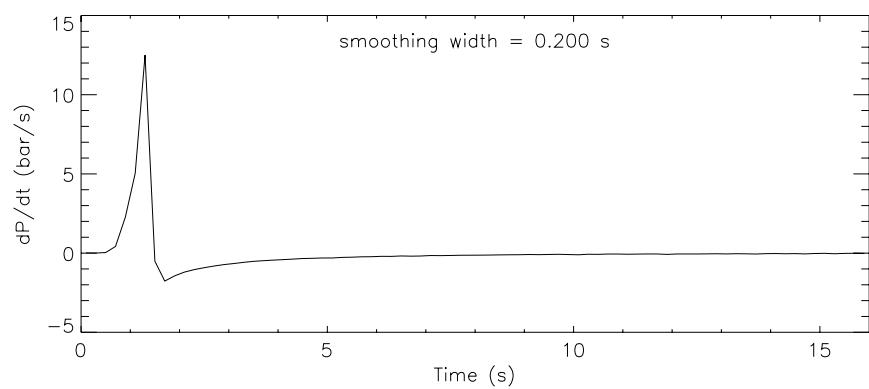
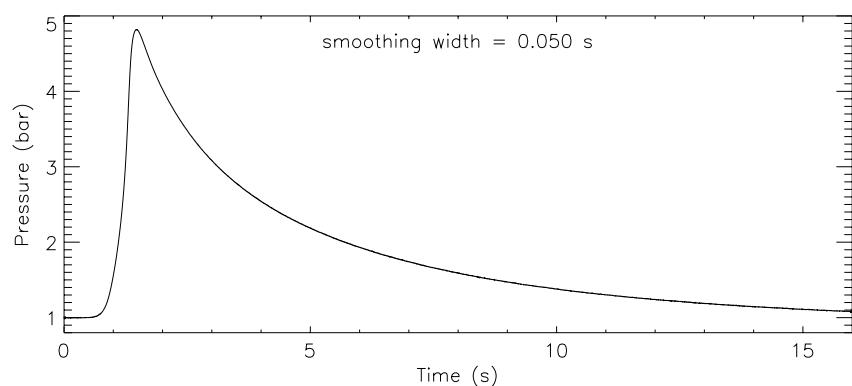
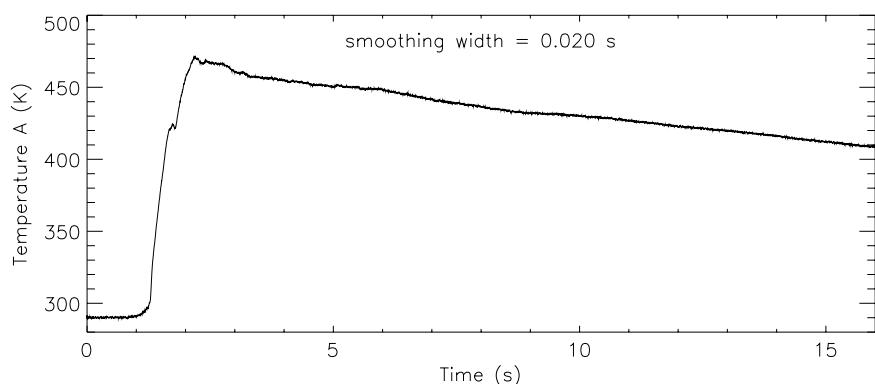
2.0 H₂, 0 N₂O, 10.0 NH₃, 0.0% CH₄, 92 Air, 103.98 kPa, spark plug, hi pot, FAN ON

Run no. 101

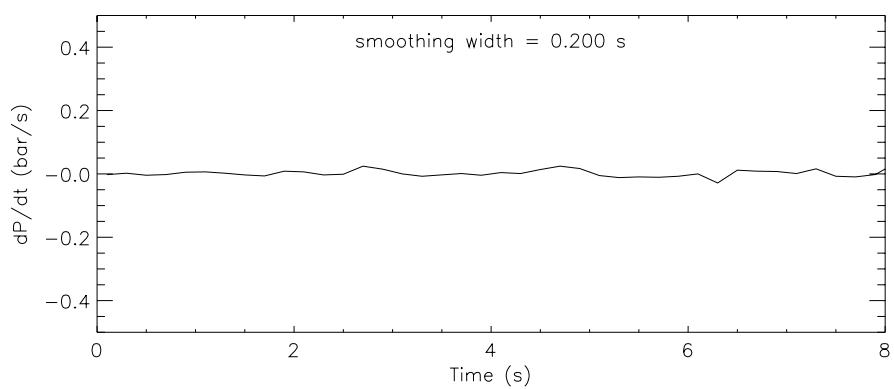
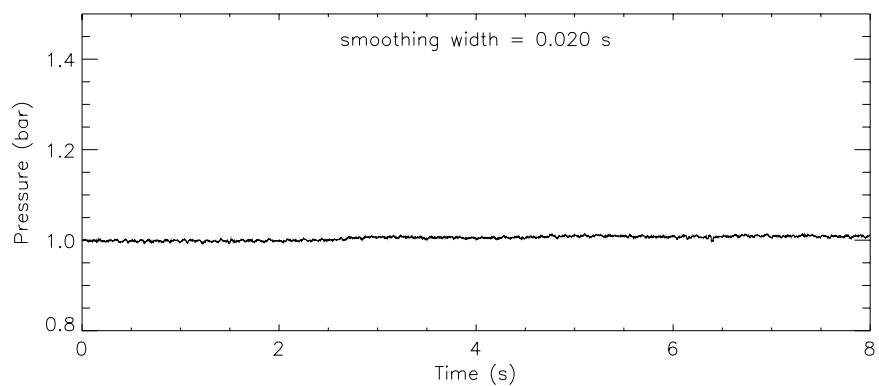
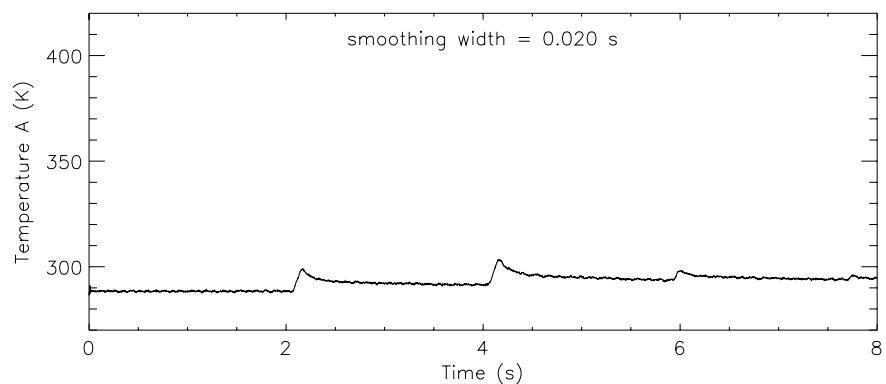
2% H₂, 0% N₂O, 10 % NH₃, 0.0% CH₄, 88% Air, 100 kPa, spark plug, hi pot

Run no. 101a

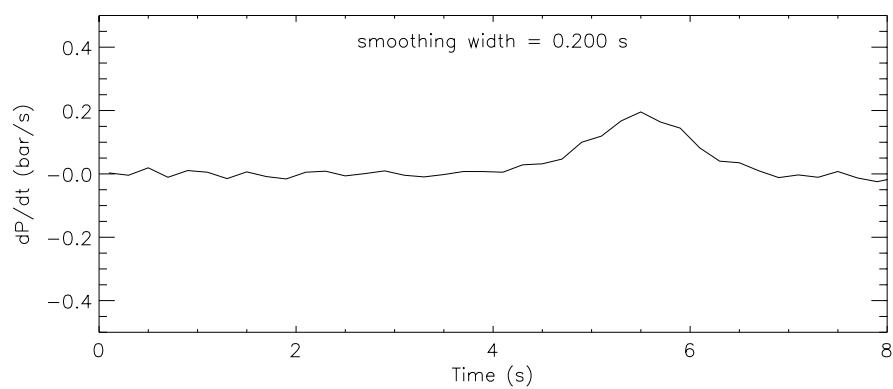
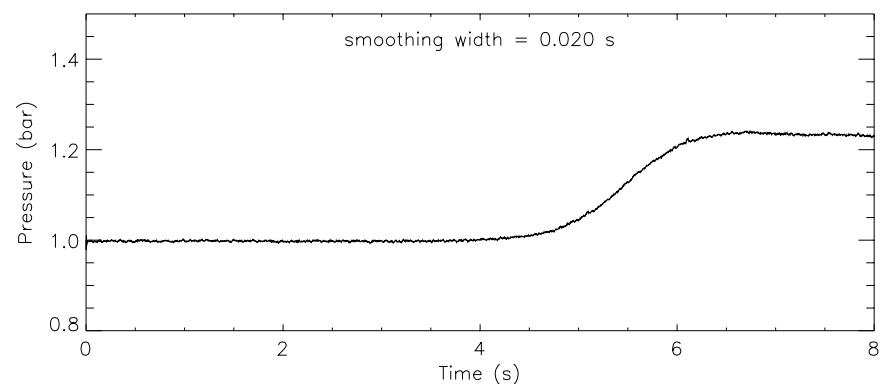
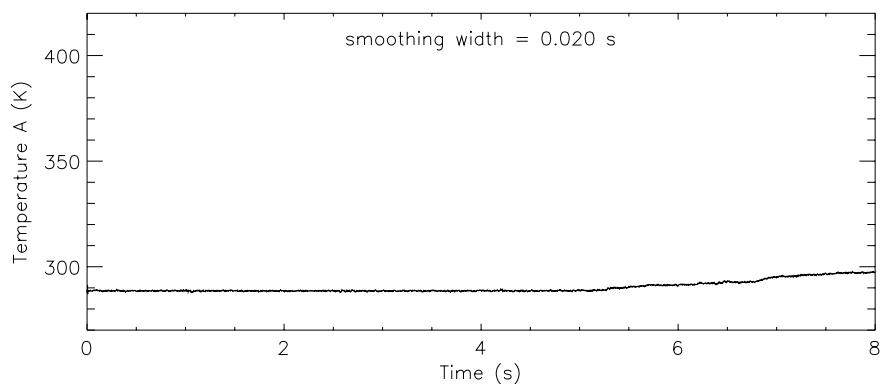
2% H₂, 0% N₂O, 10 % NH₃, 0.0% CH₄, 88% Air, 100 kPa, spark plug, hi pot, fan on

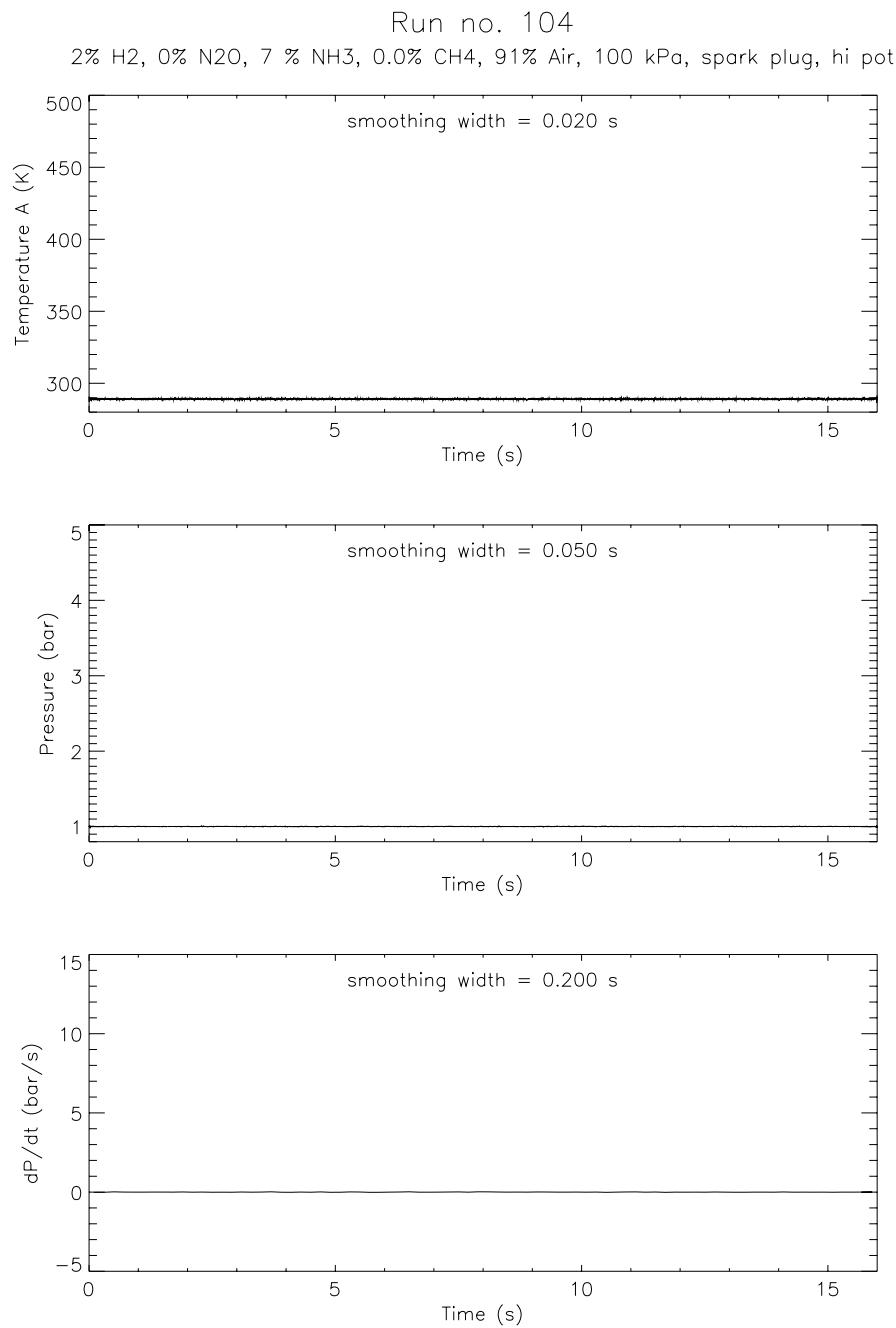


Run no. 102

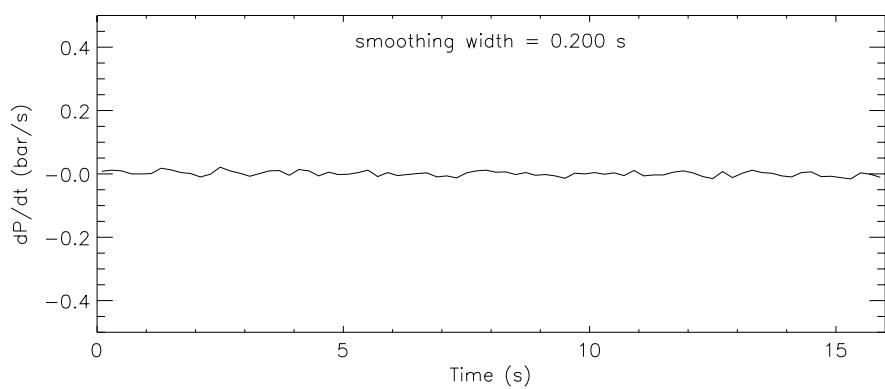
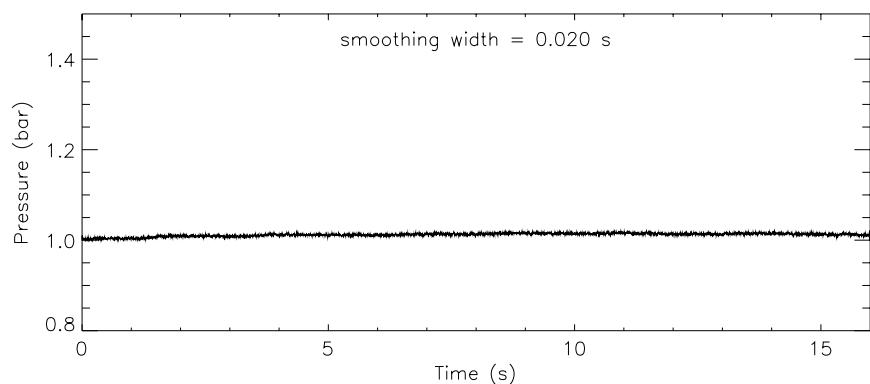
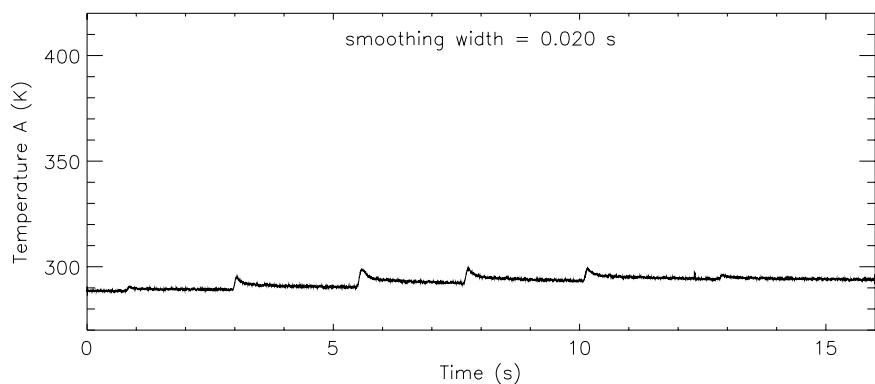
2% H₂, 0% N₂O, 10 % NH₃, 0.0% CH₄, 88% Air, 100 kPa, spark plug, hi pot

Run no. 102a

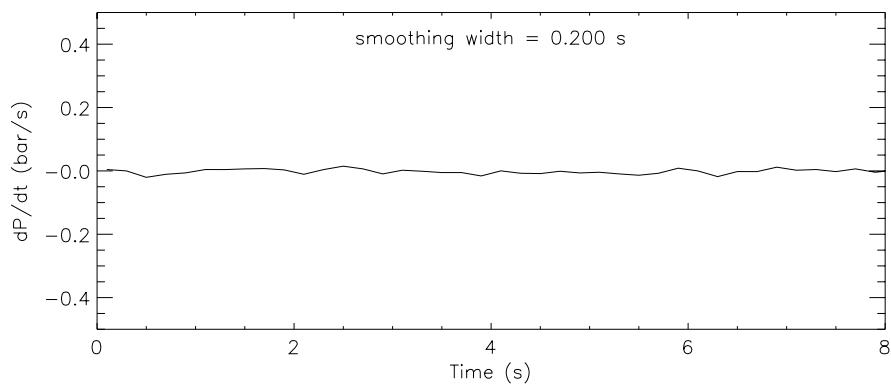
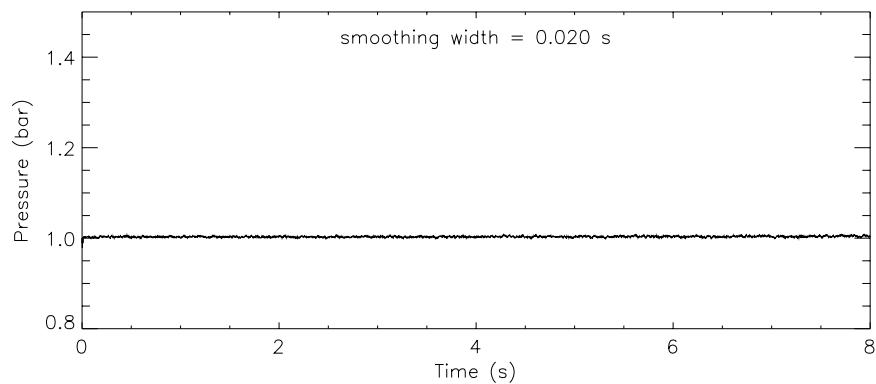
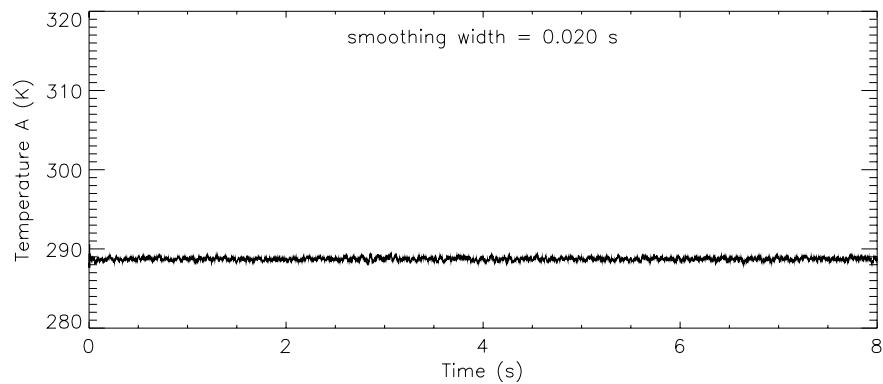
2% H₂, 0% N₂O, 10 % NH₃, 0.0% CH₄, 88% Air, 100 kPa, spark plug, hi pot, FAN ON

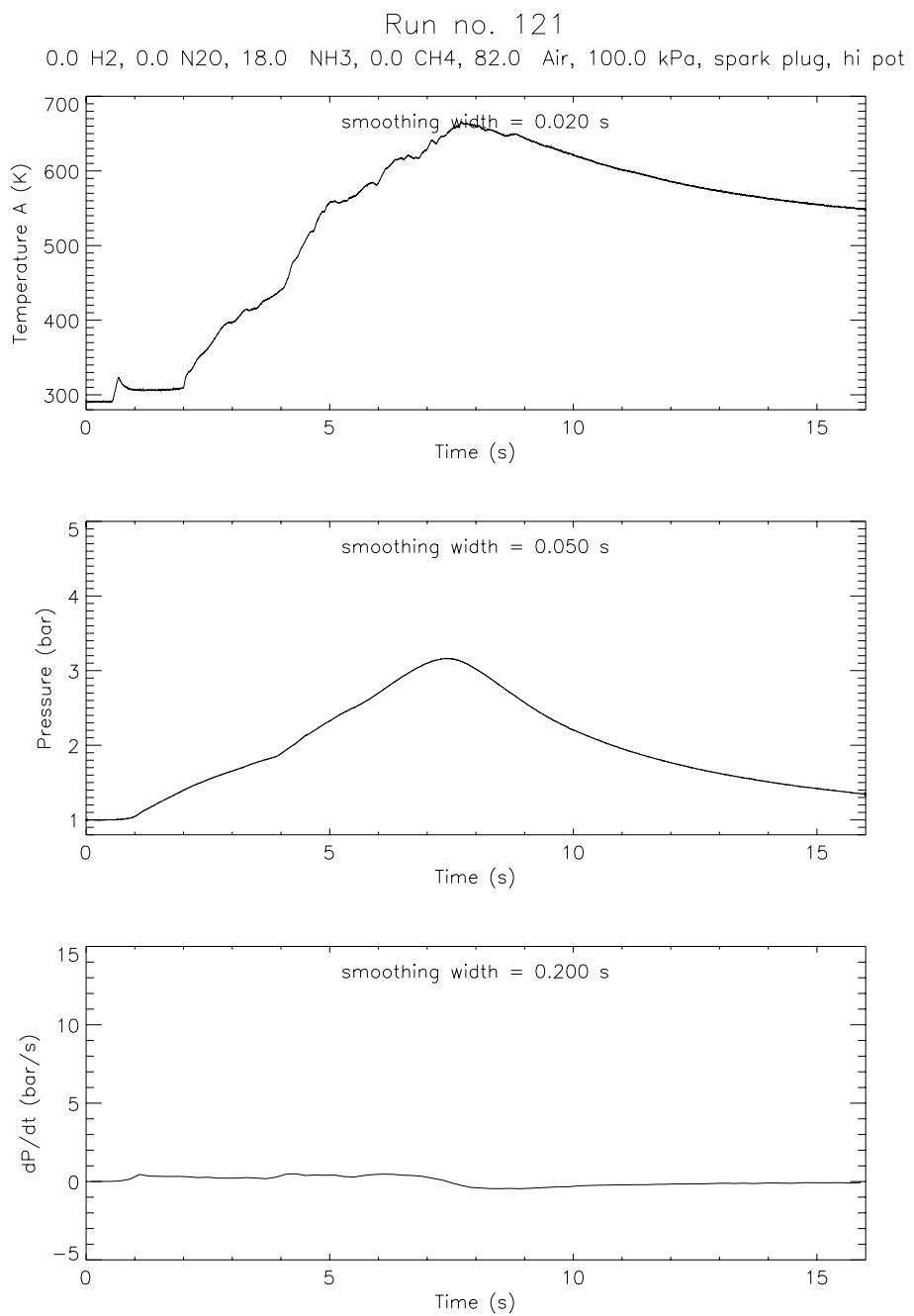


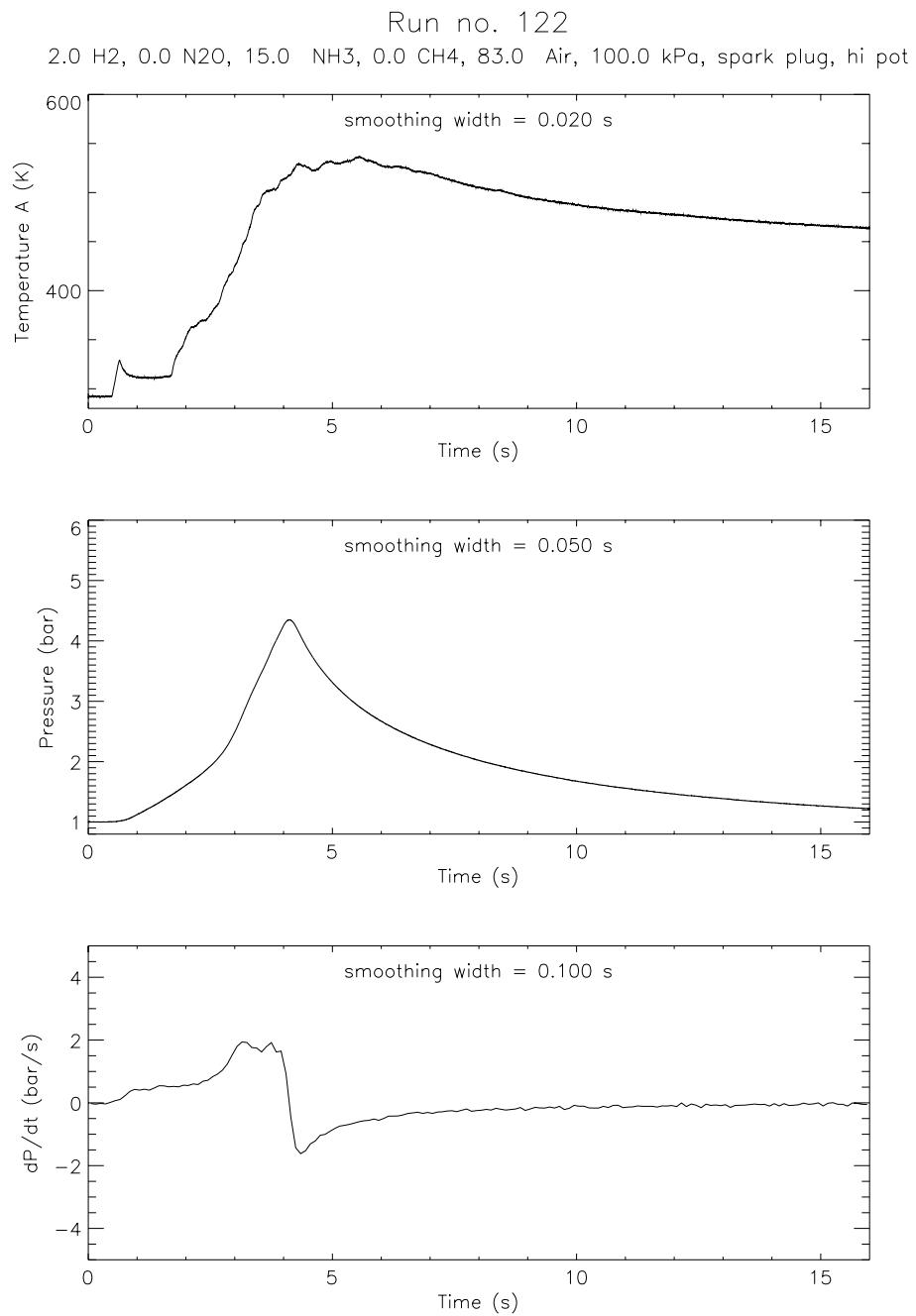
Run no. 105

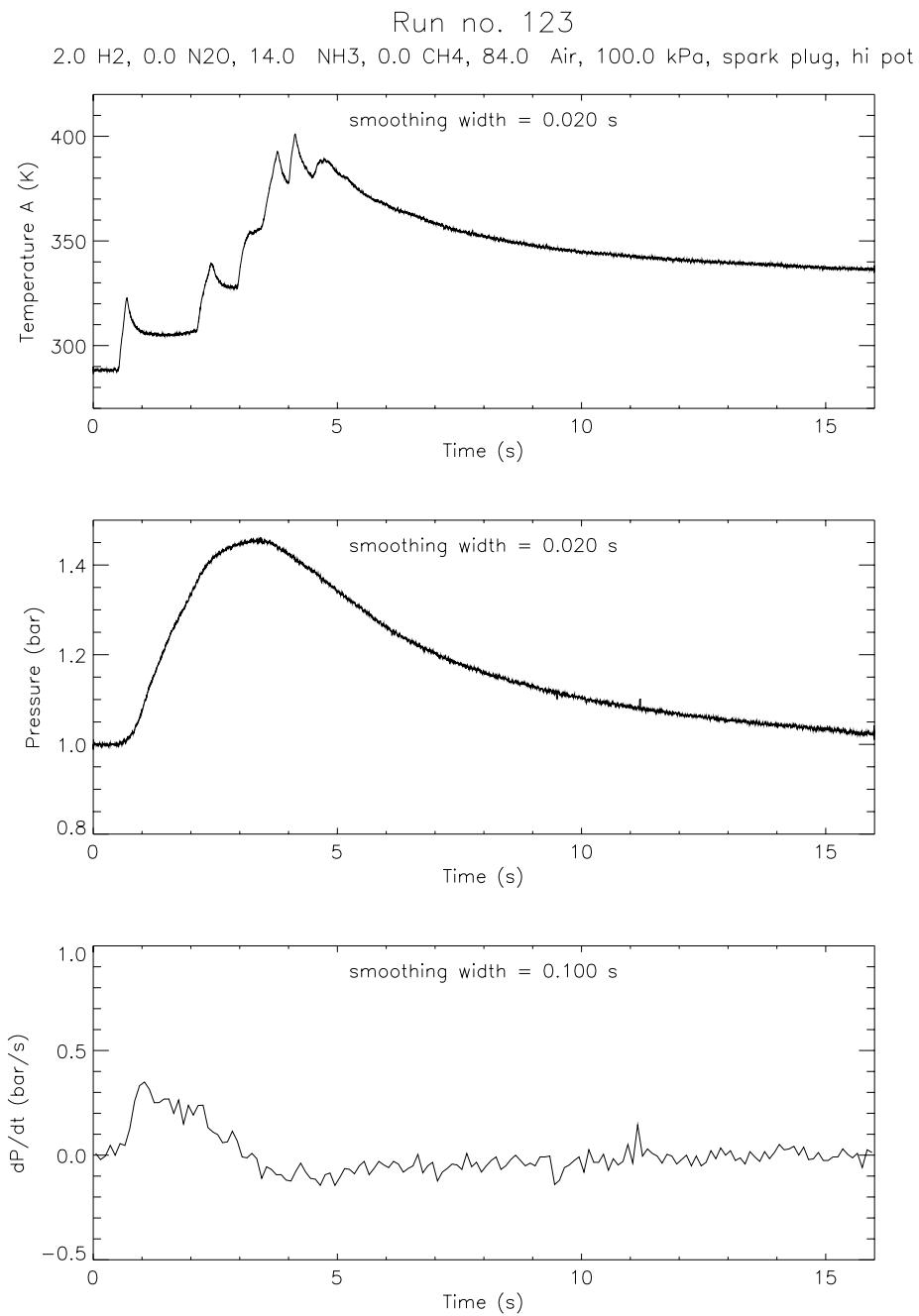
2% H₂, 0% N₂O, 7.0 % NH₃, 0.0% CH₄, 91% Air, 100.0 kPa, spark plug, hi pot

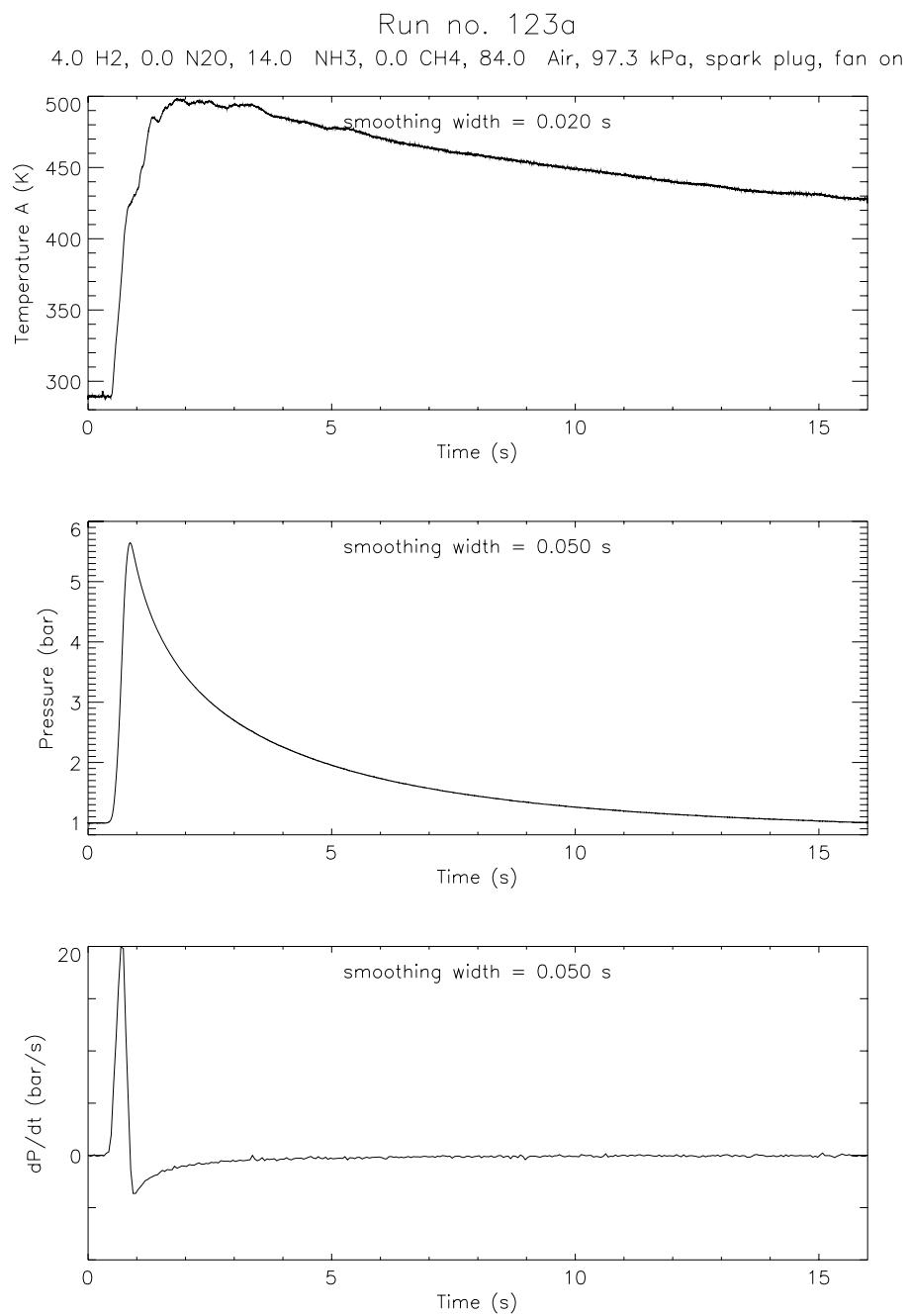
Run no. 105a

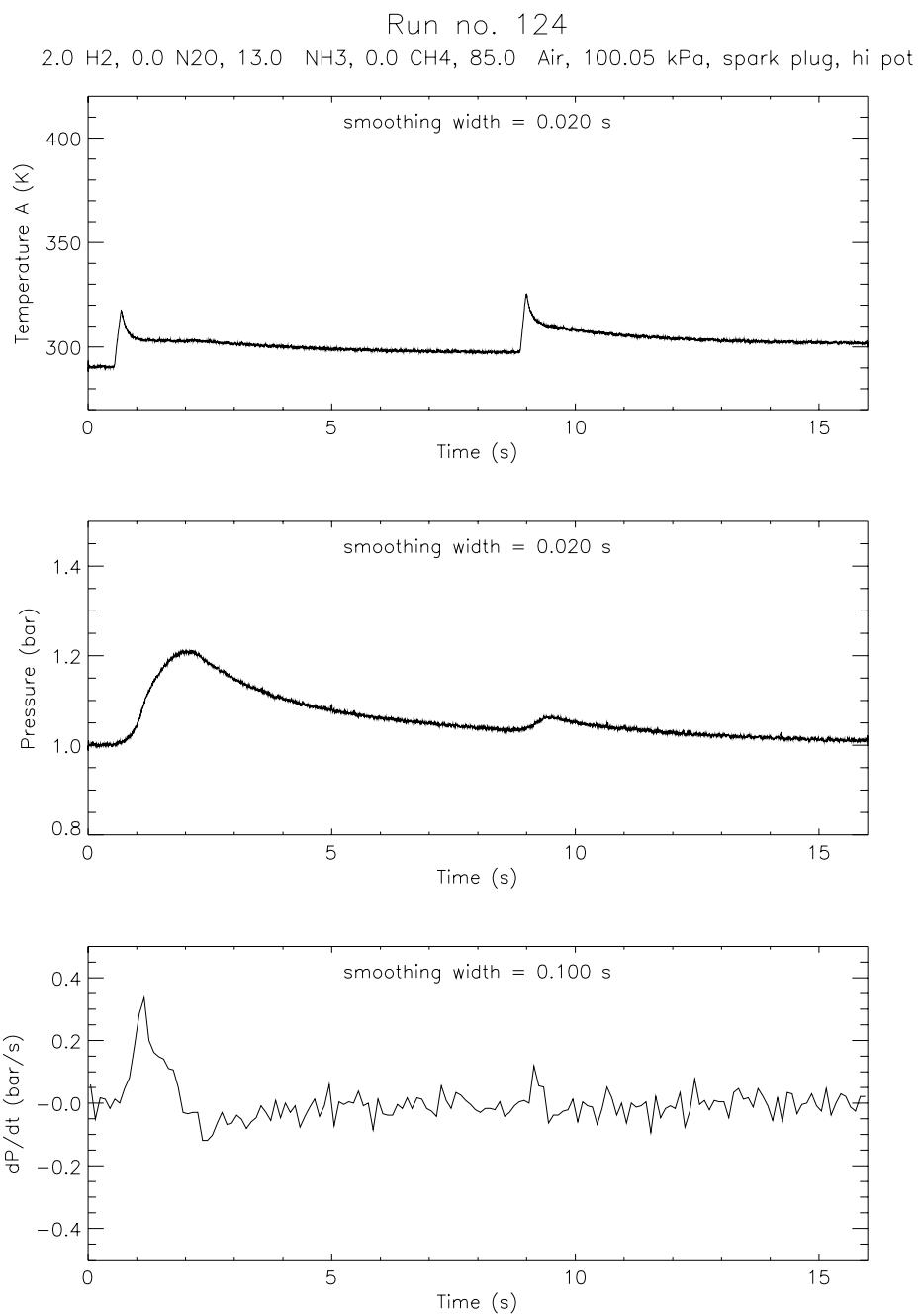
2% H₂, 0% N₂O, 7.5 % NH₃, 0.0% CH₄, 91% Air, 100.5 kPa, spark plug, hi pot, fan on

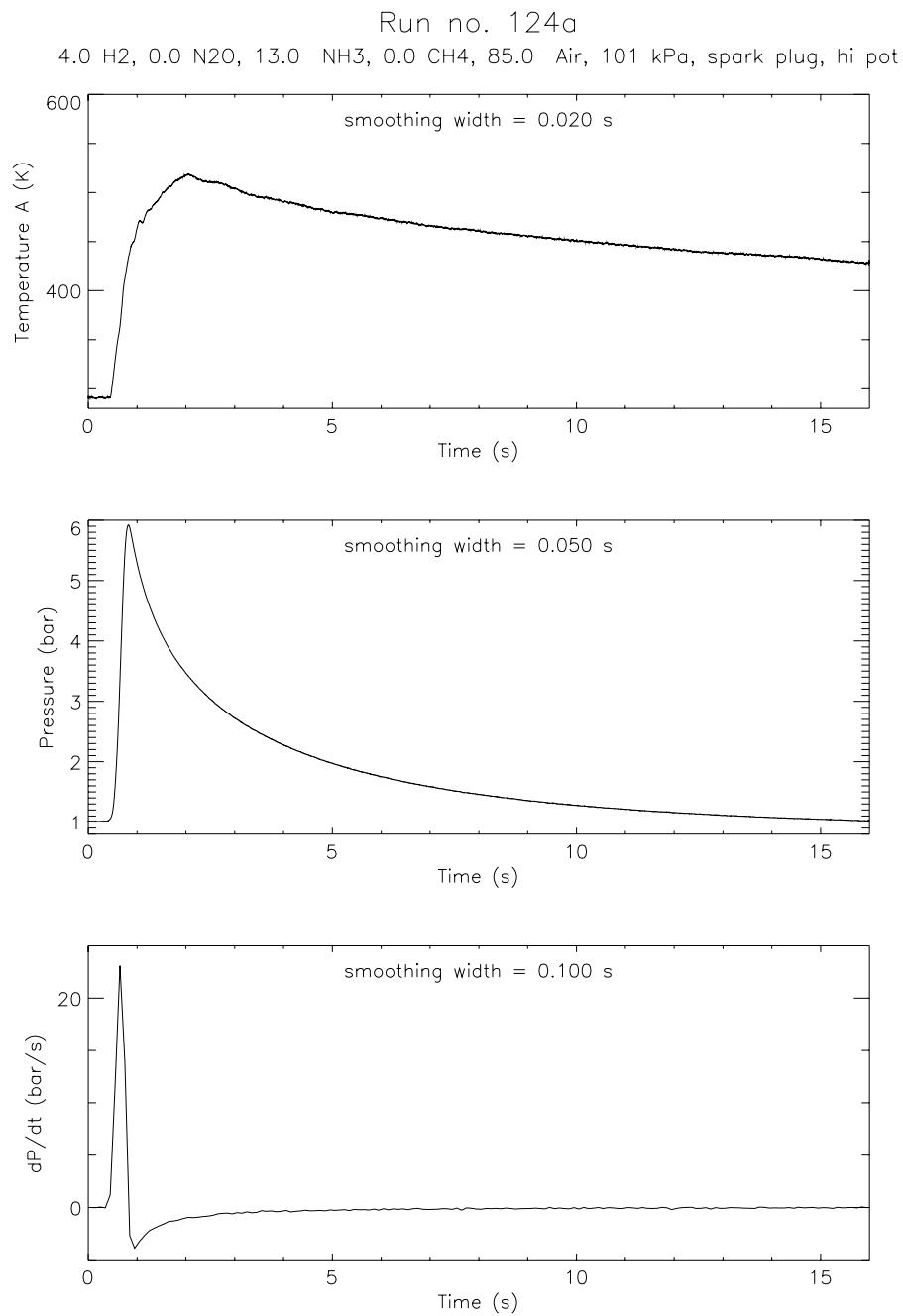




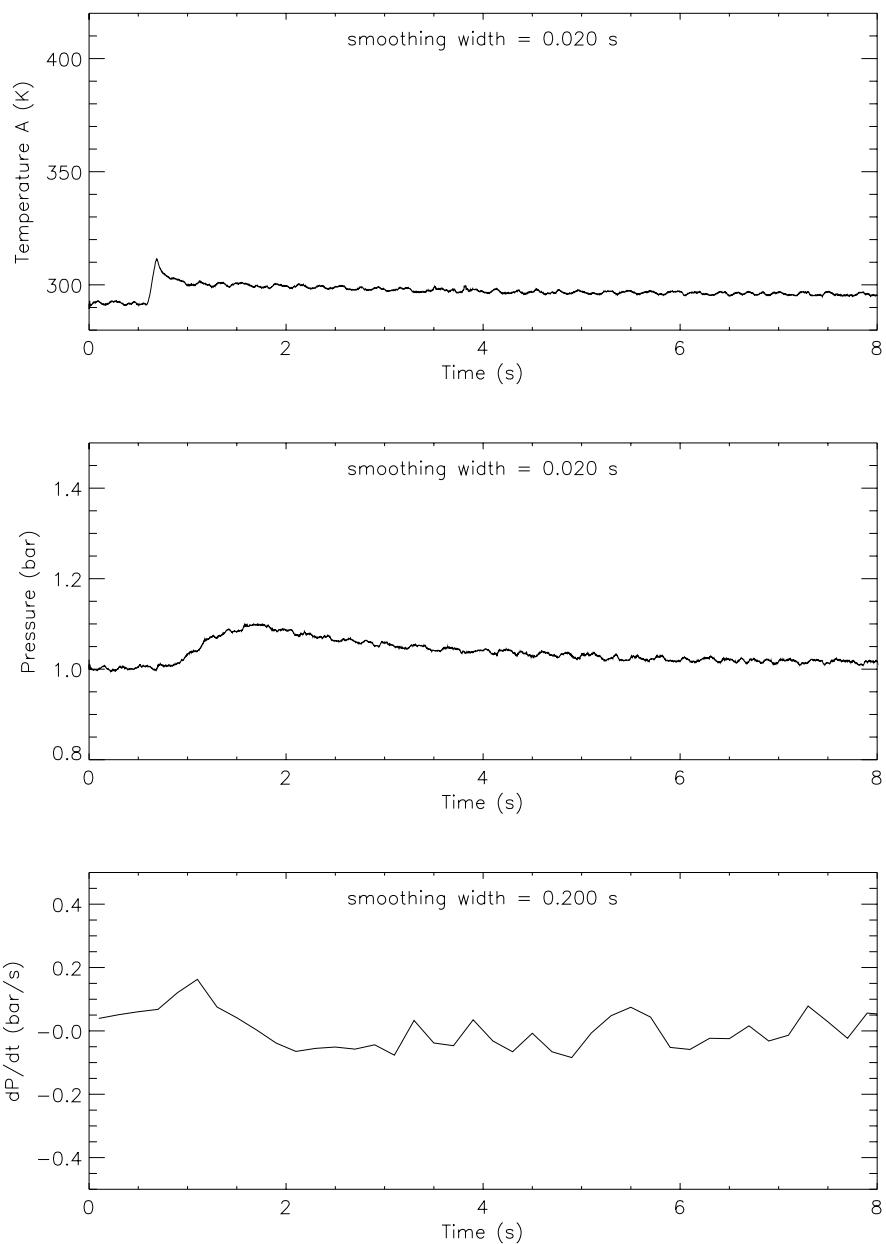






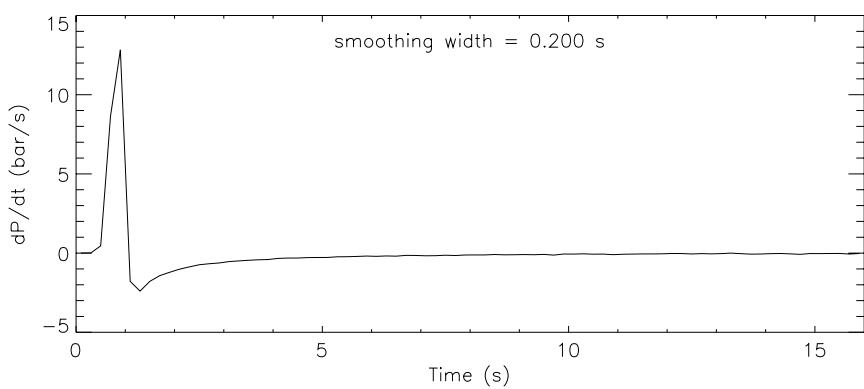
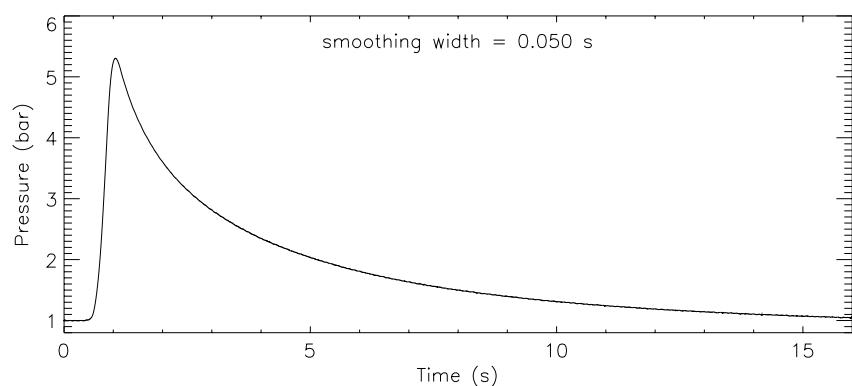
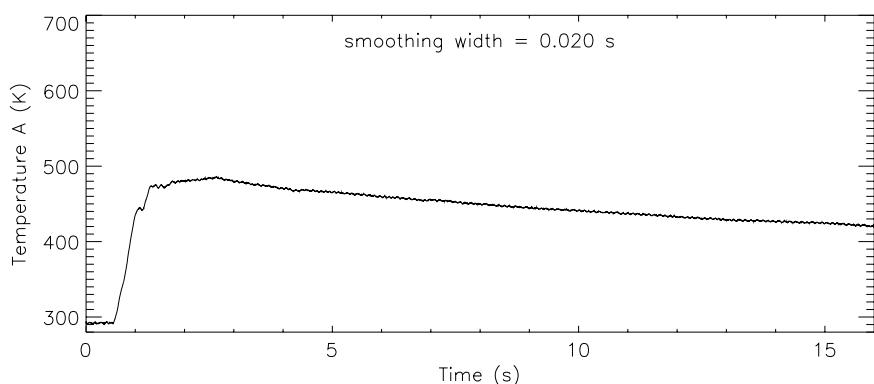


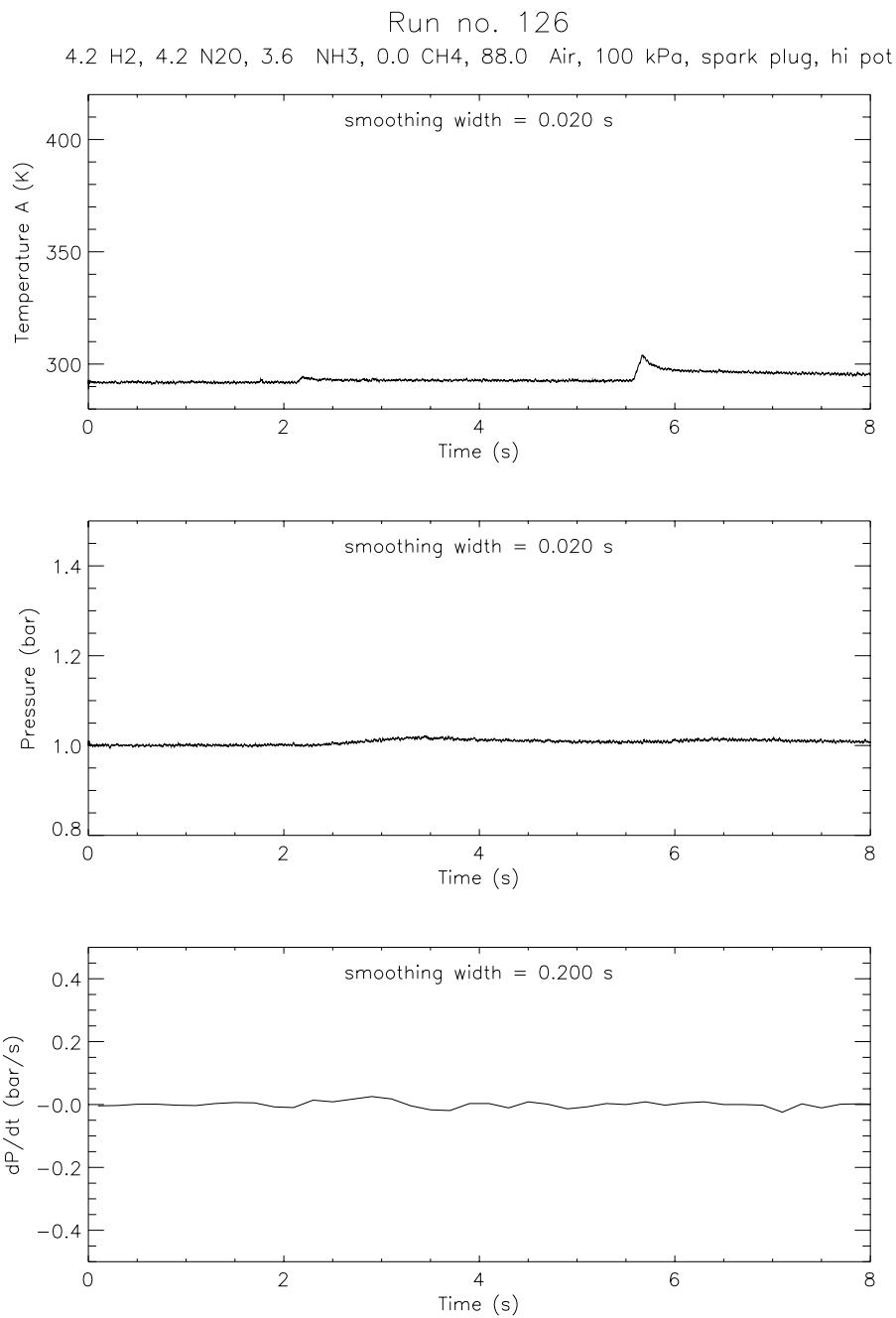
Run no. 125

2.0 H₂, 0.0 N₂O, 12.0 NH₃, 0.0 CH₄, 86.0 Air, 100 kPa, spark plug, hi pot

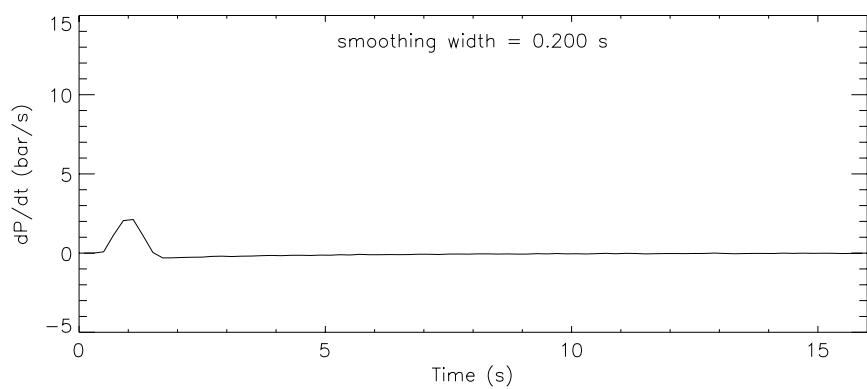
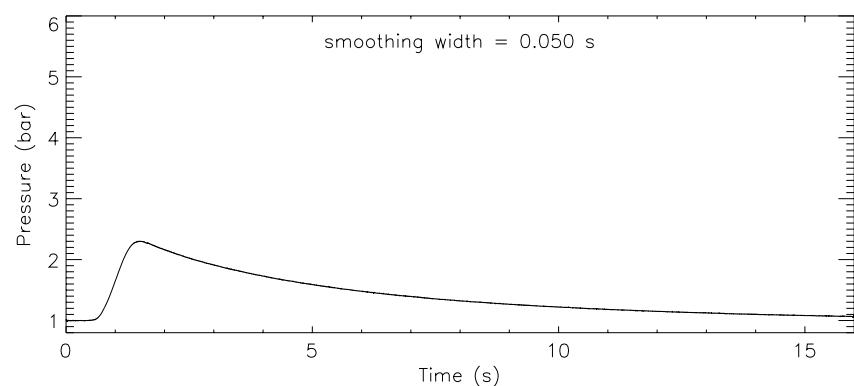
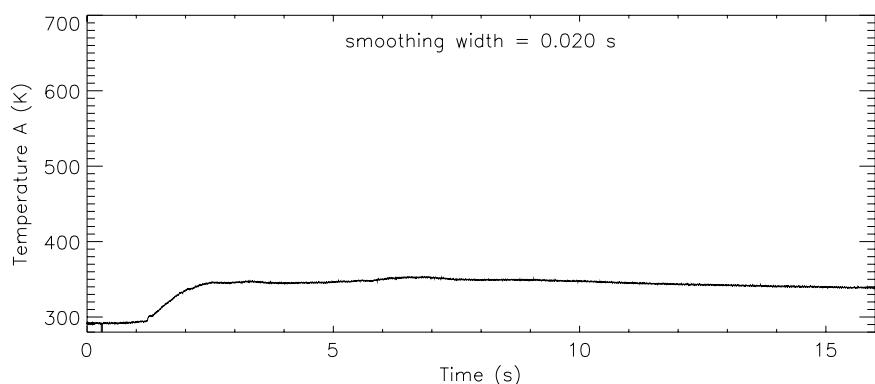
Run no. 125a

2.0 H₂, 0.0 N₂O, 12.0 NH₃, 0.0 CH₄, 86.0 Air, 101 kPa, spark plug, hi pot, fan on

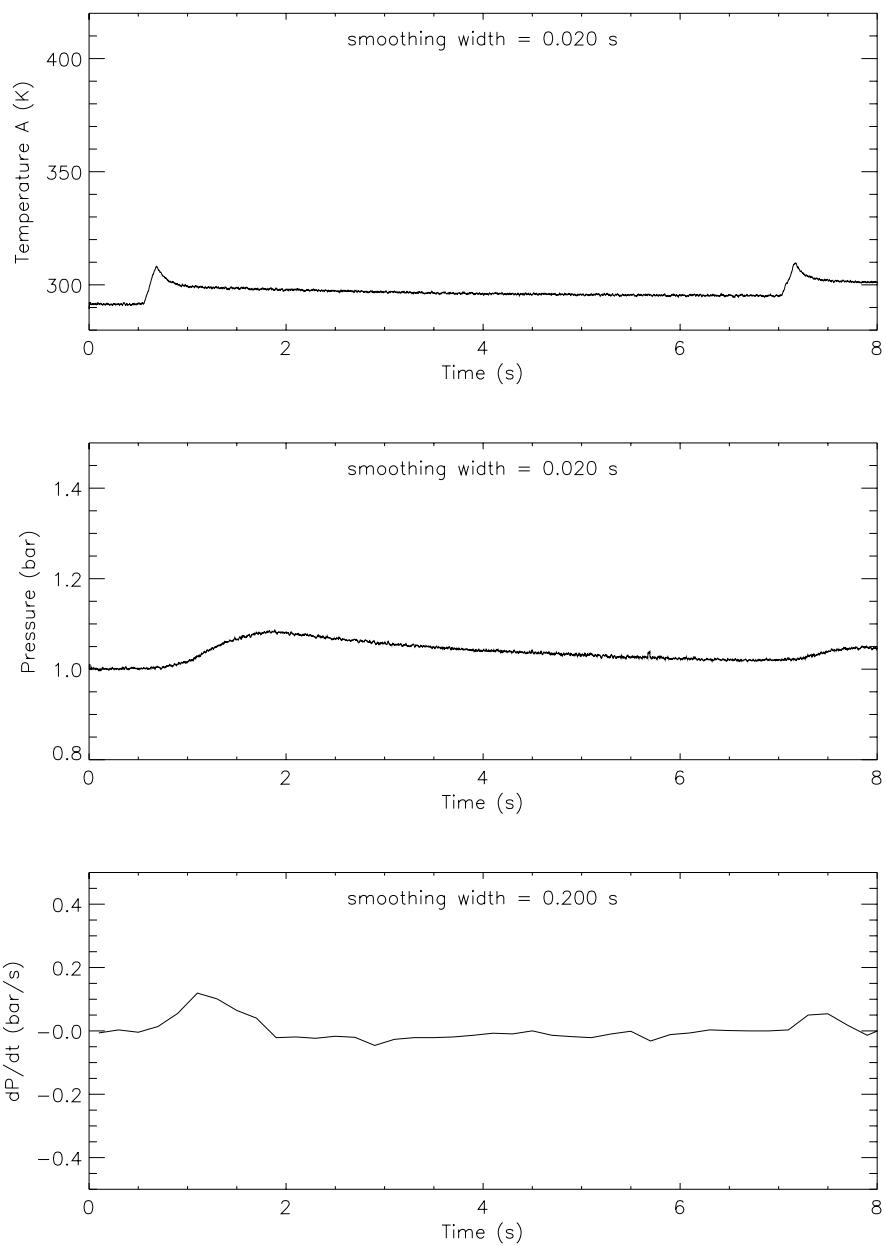




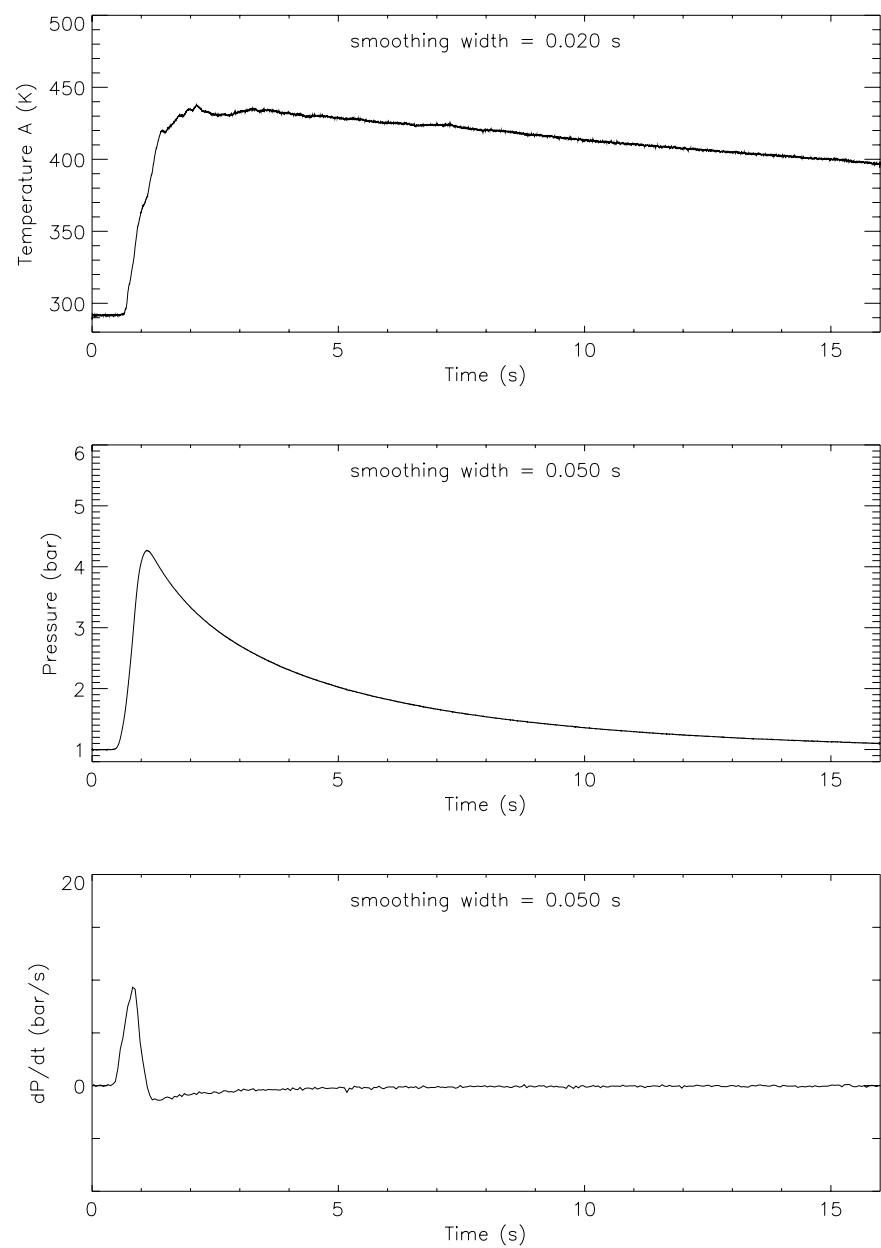
Run no. 126a

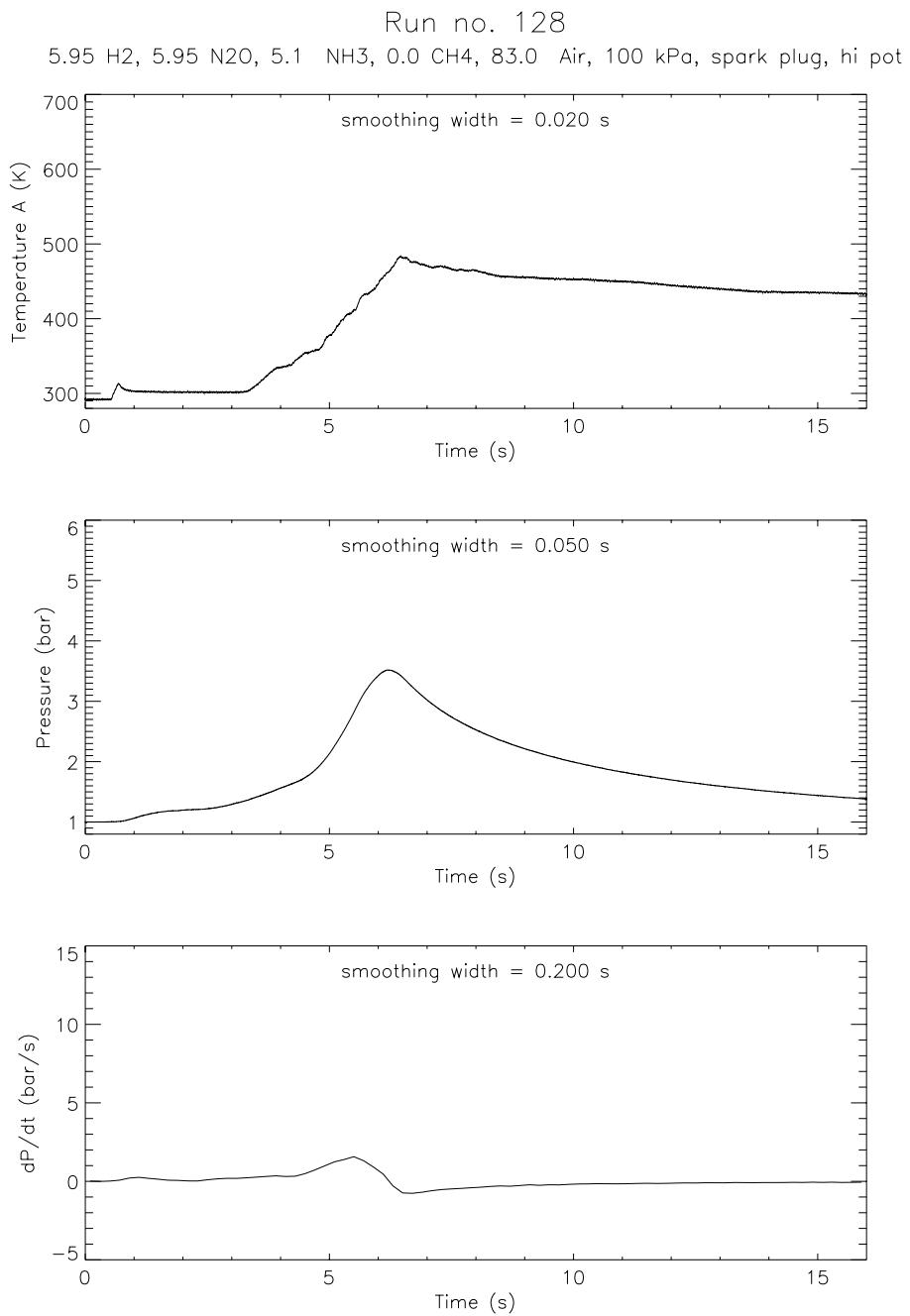
4.2 H₂, 4.2 N₂O, 3.6 NH₃, 0.0 CH₄, 88.0 Air, 100 kPa, spark plug, hi pot, fan on

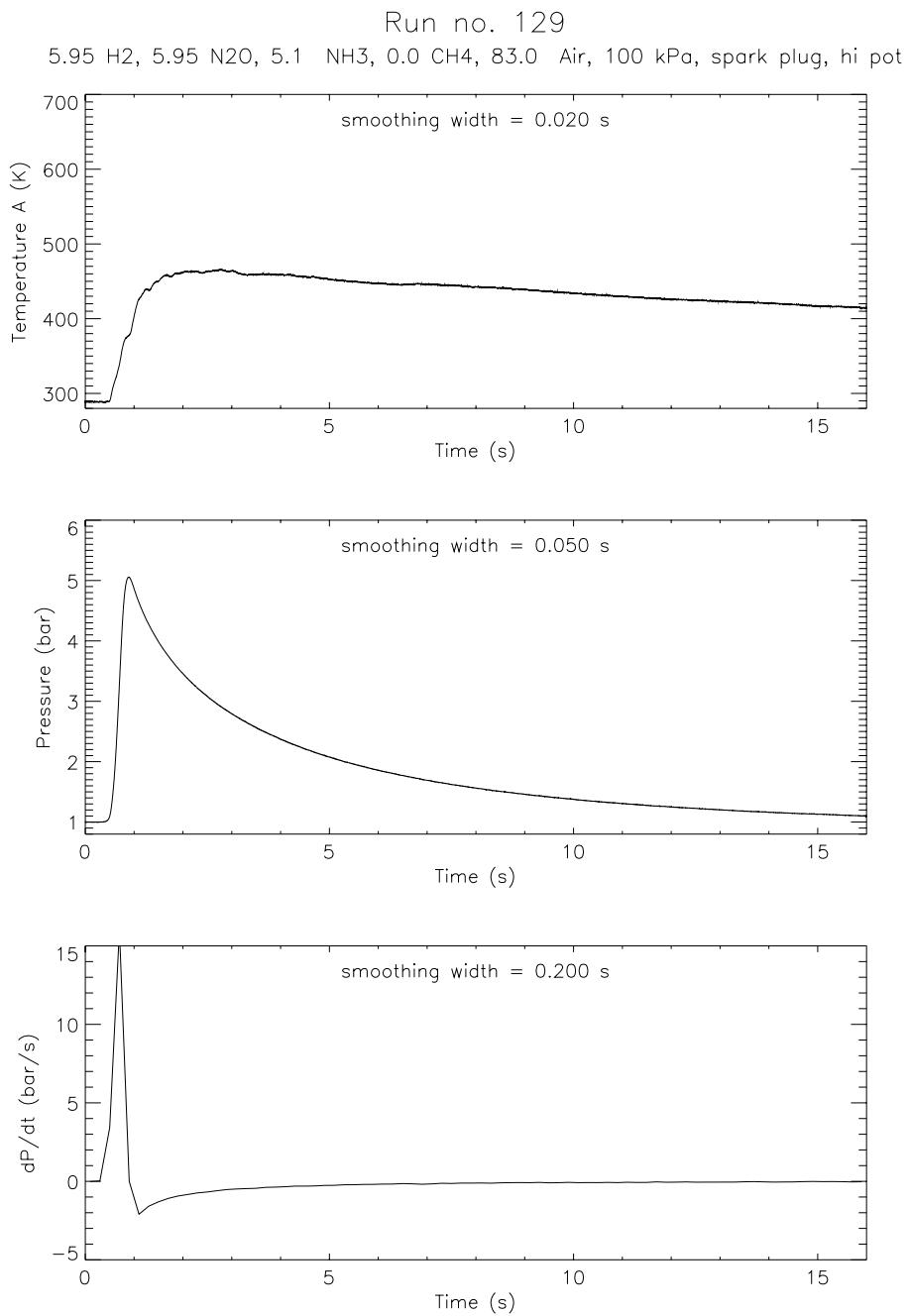
Run no. 127

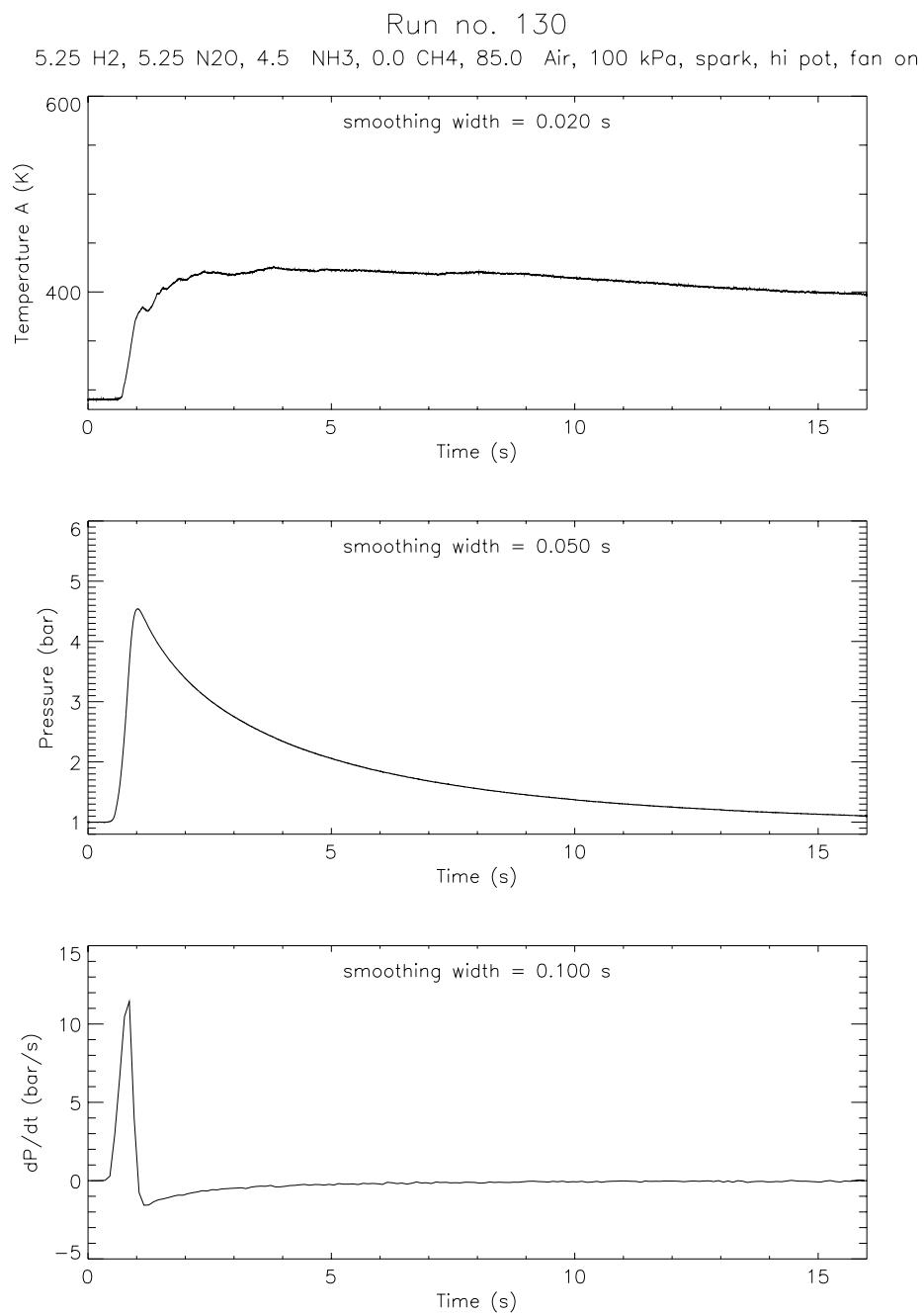
5.25 H₂, 5.25 N₂O, 4.5 NH₃, 0.0 CH₄, 85.0 Air, 100 kPa, spark plug, hi pot

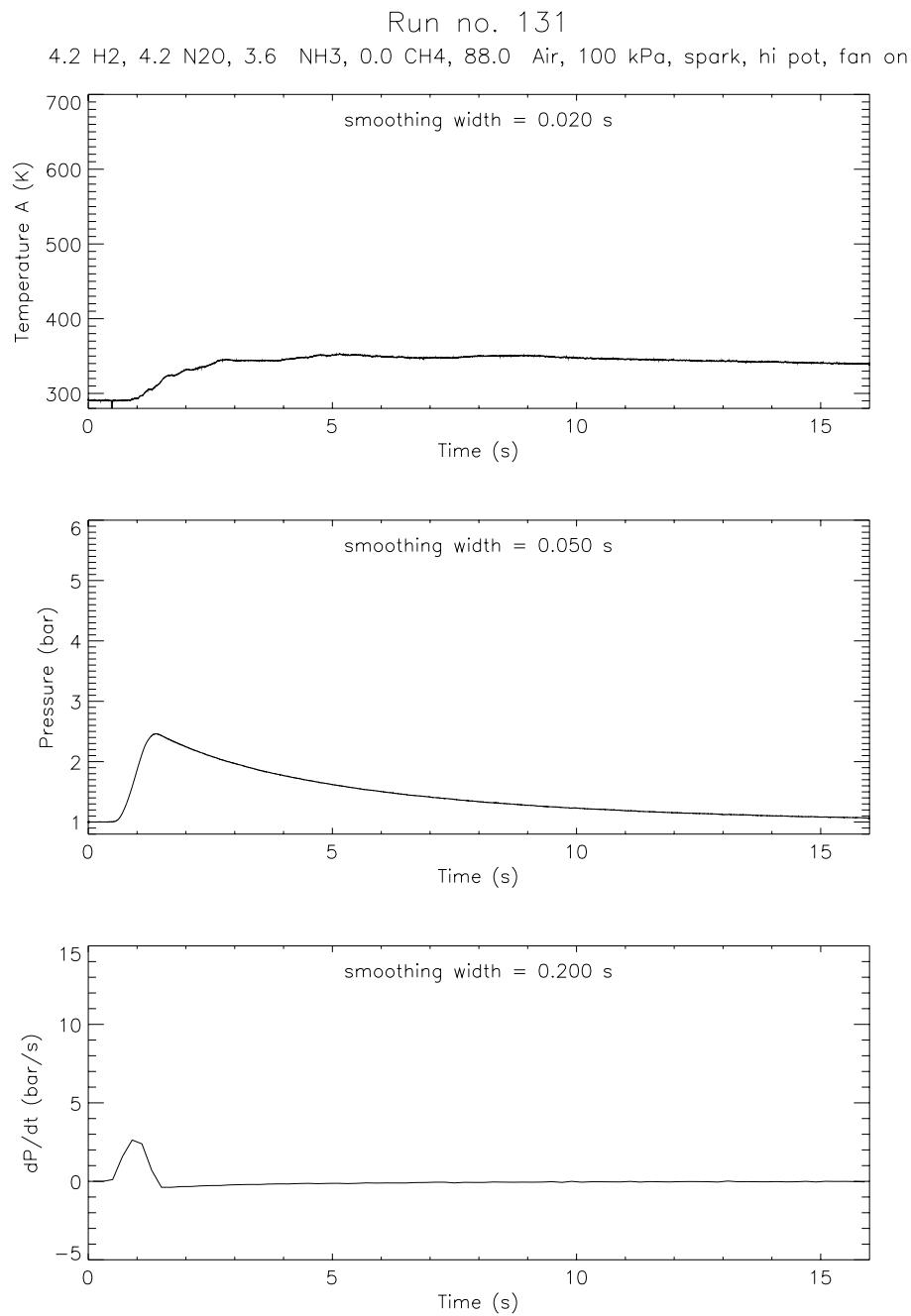
Run no. 127a

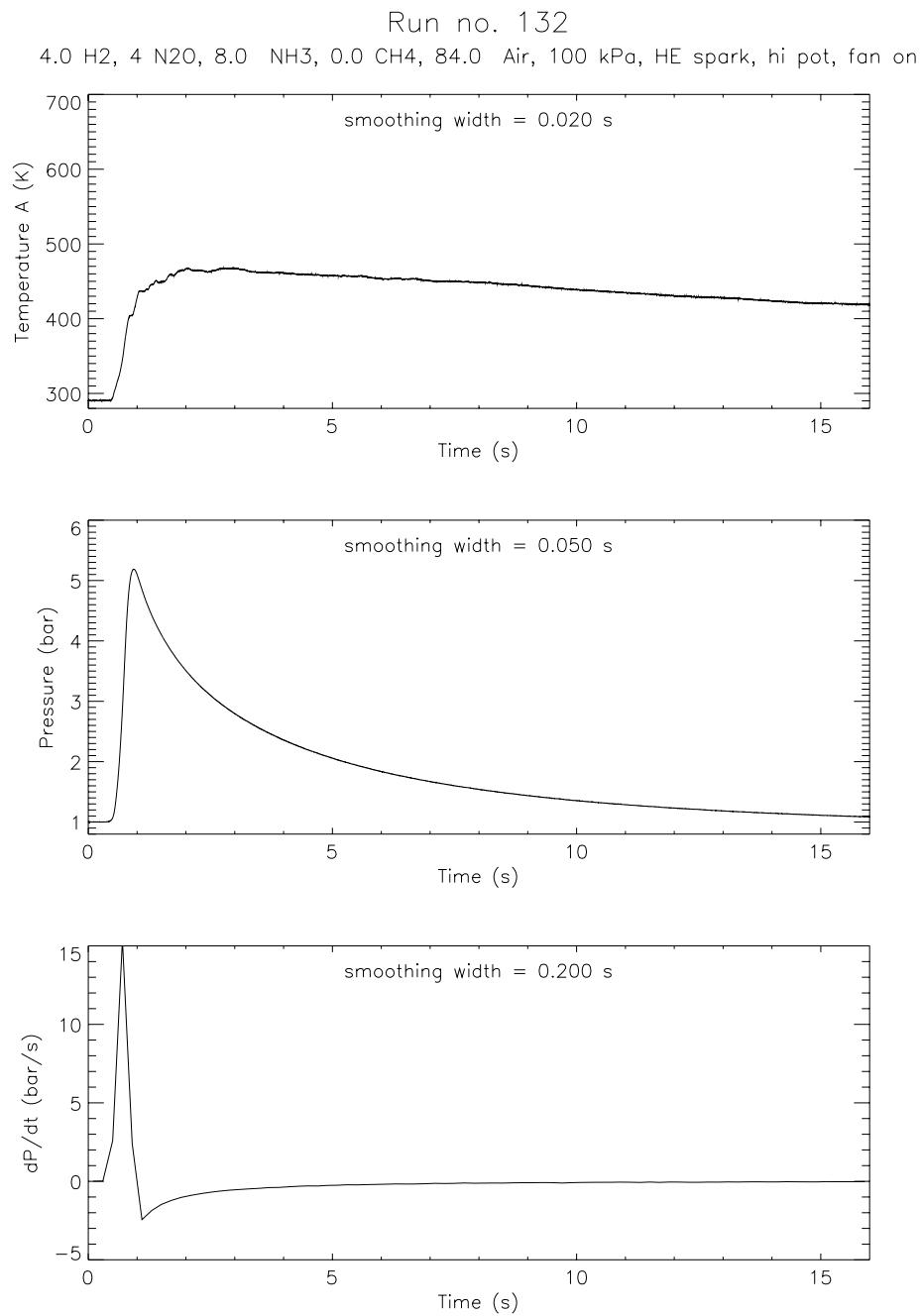
5.25 H₂, 5.25 N₂O, 4.5 NH₃, 0.0 CH₄, 85.0 Air, 100 kPa, spark plug, hi pot, fan on





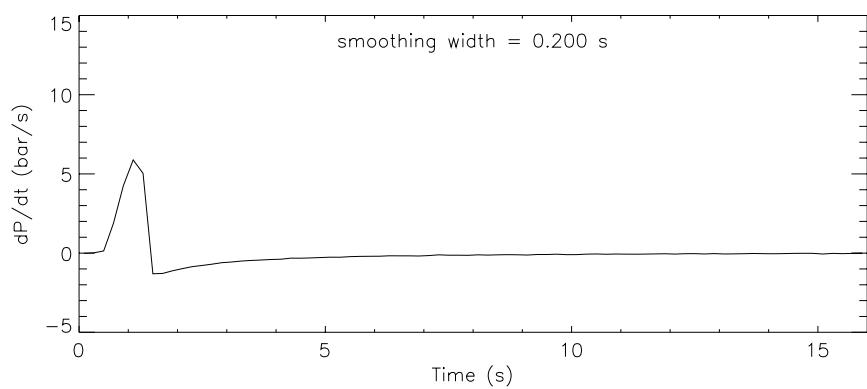
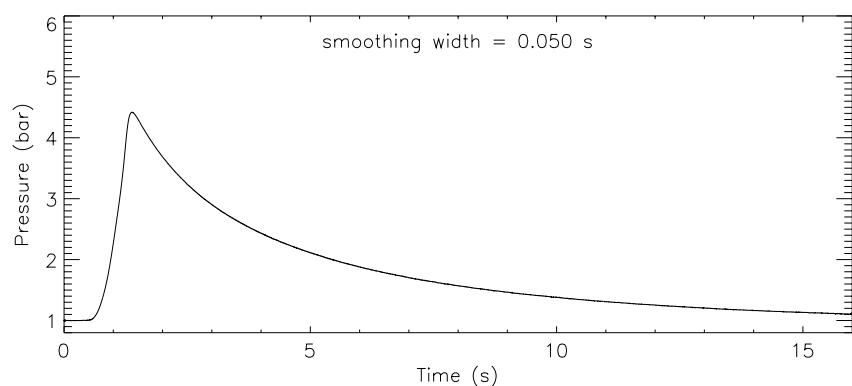
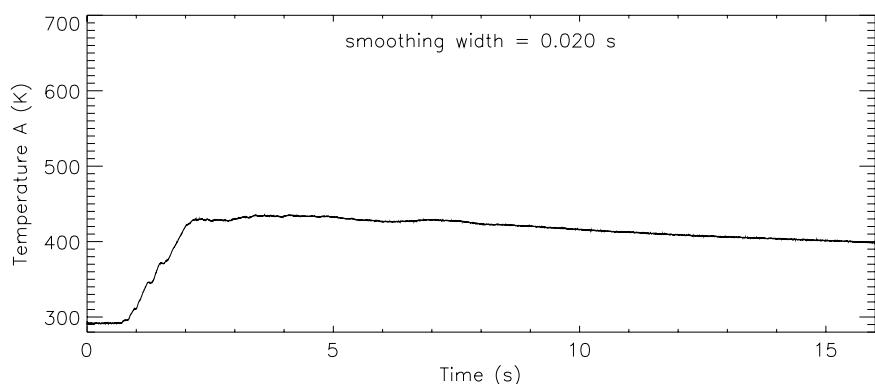




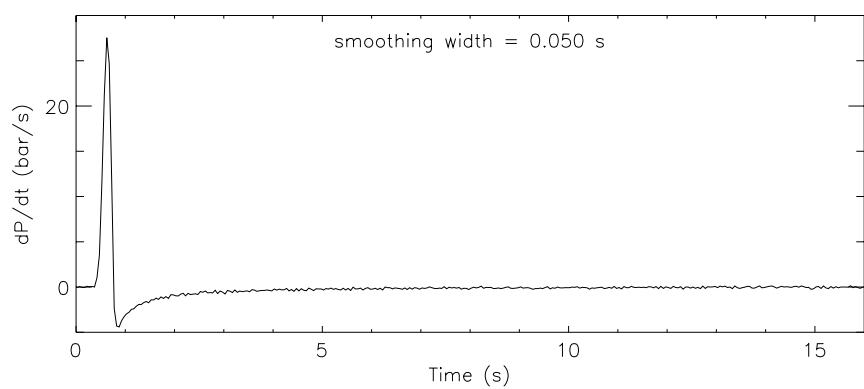
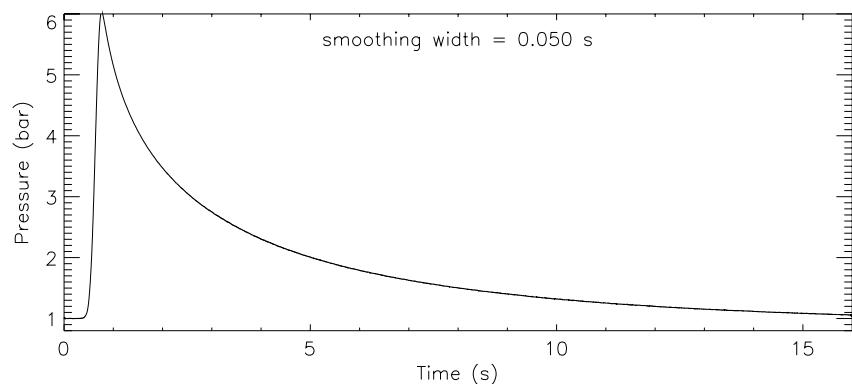
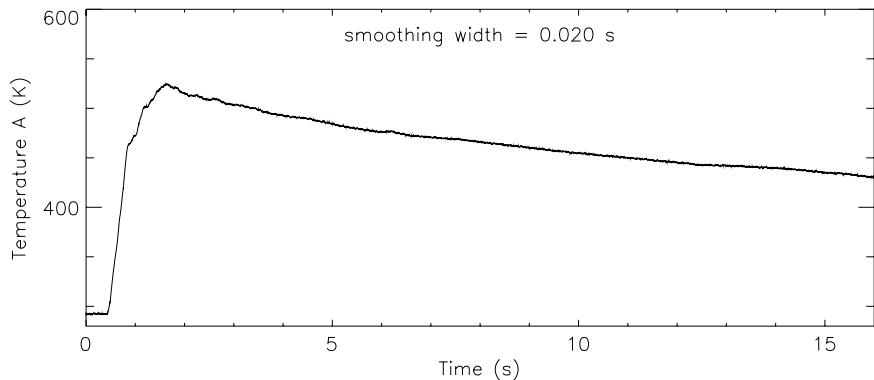


Run no. 133

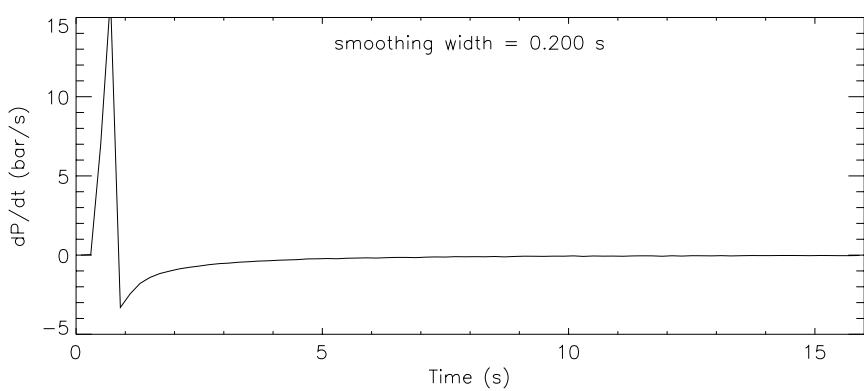
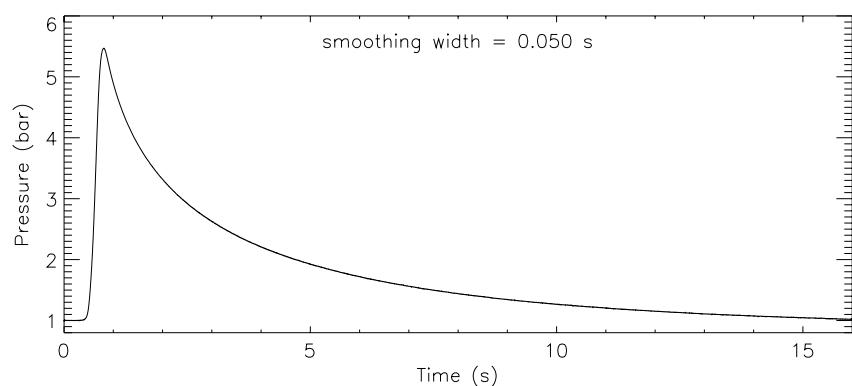
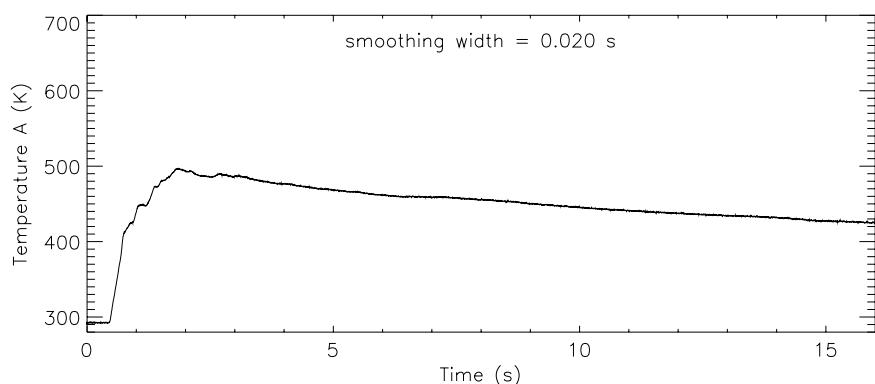
3.25 H₂, 3.25 N₂O, 6.5 NH₃, 0.0 CH₄, 87.0 Air, 100 kPa, HE spark, hi pot,fan on

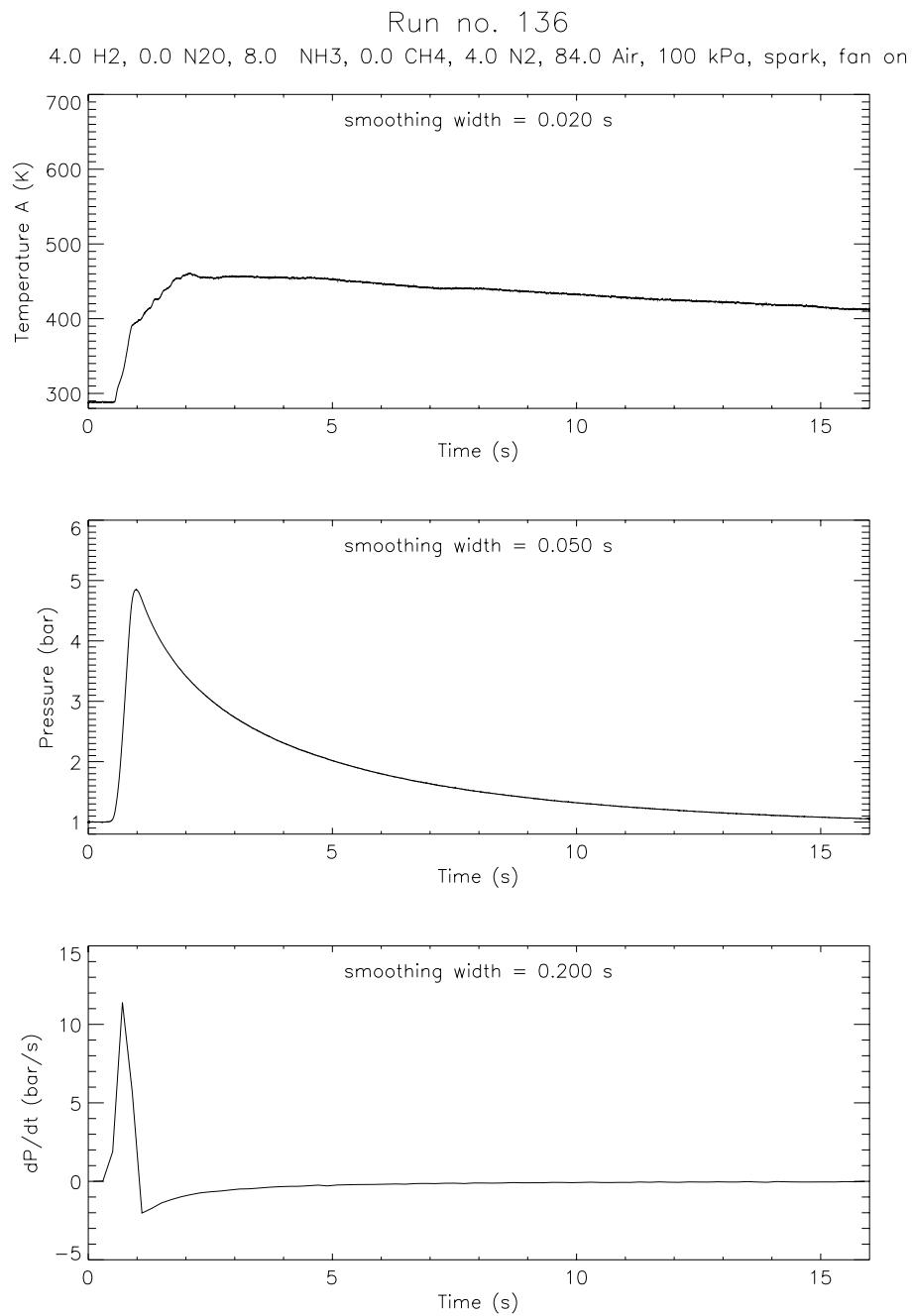


Run no. 134
4.75 H₂, 4.75 N₂O, 9.5 NH₃, 0.0 CH₄, 81.0 Air, 100 kPa, HE spark, hi pot,fan on



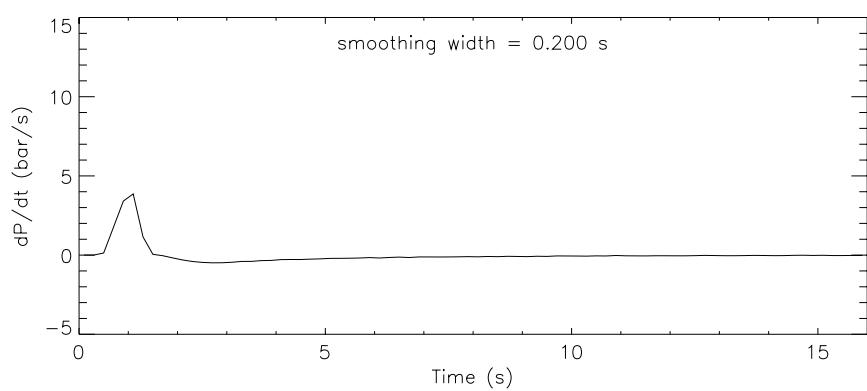
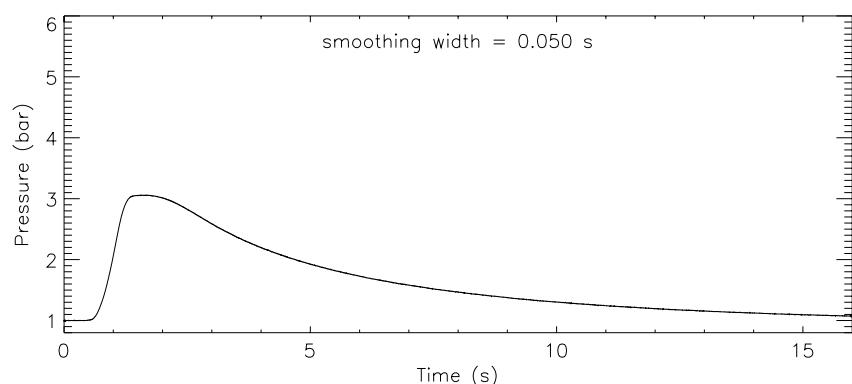
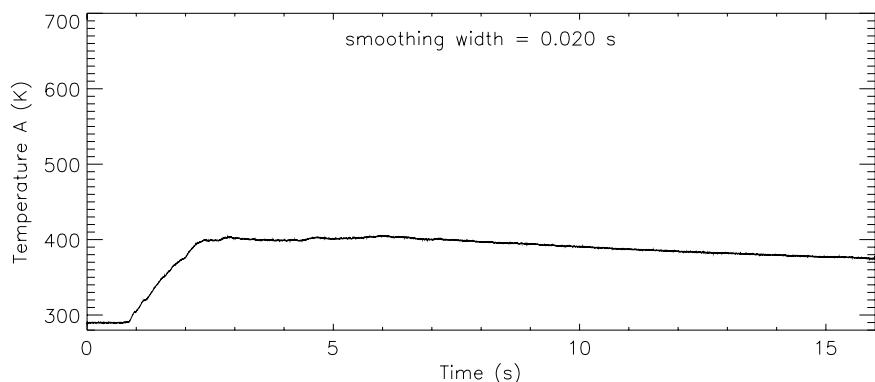
Run no. 135

4.75 H₂, 0.0 N₂O, 9.5 NH₃, 0.0 CH₄, 4.75 N₂, 81.0 Air, 100 kPa, spark, fan on

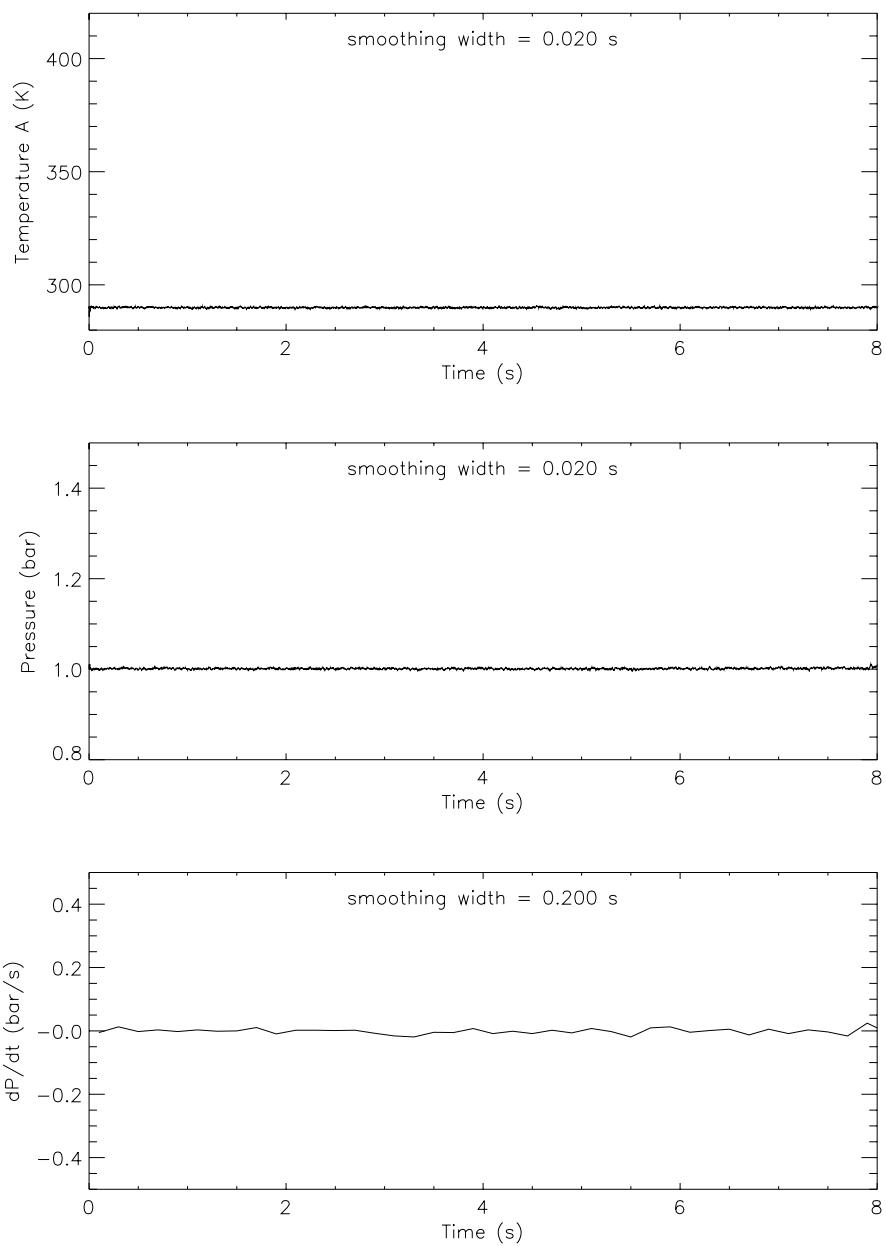


Run no. 137

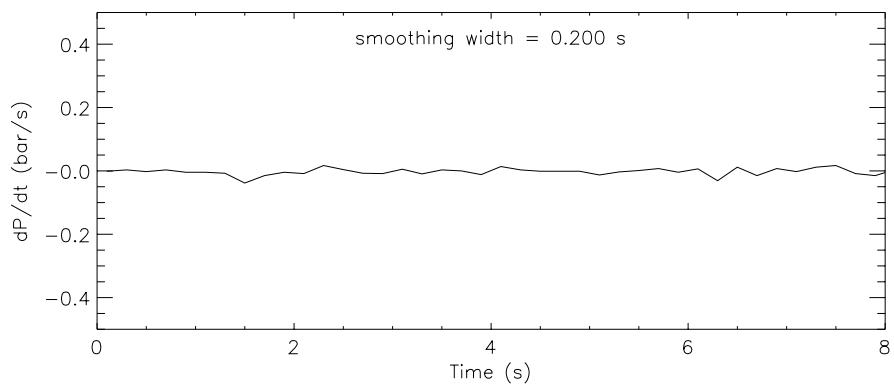
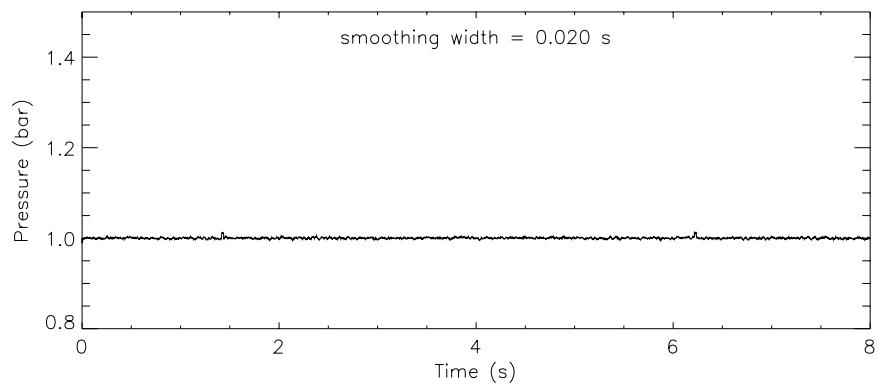
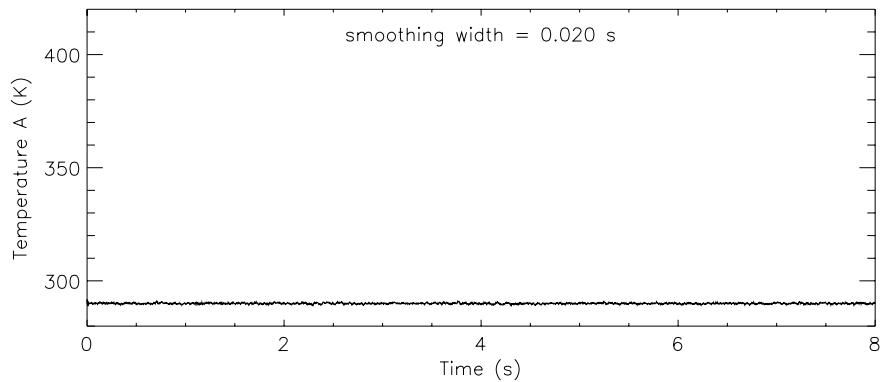
3.25 H₂, 0.0 N₂O, 6.5 NH₃, 0.0 CH₄, 3.25 N₂, 87.0 Air, 100 kPa, spark, fan on

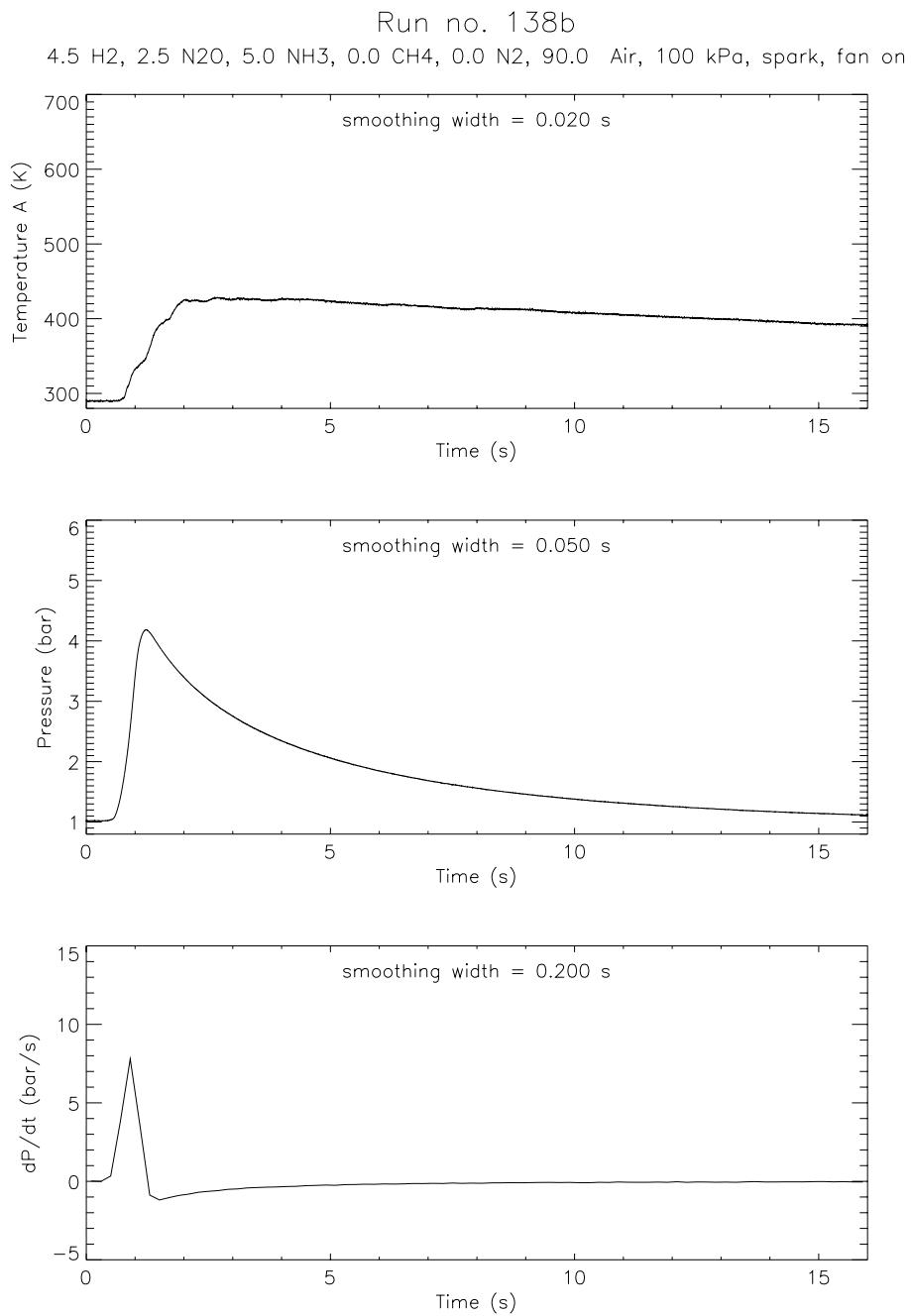


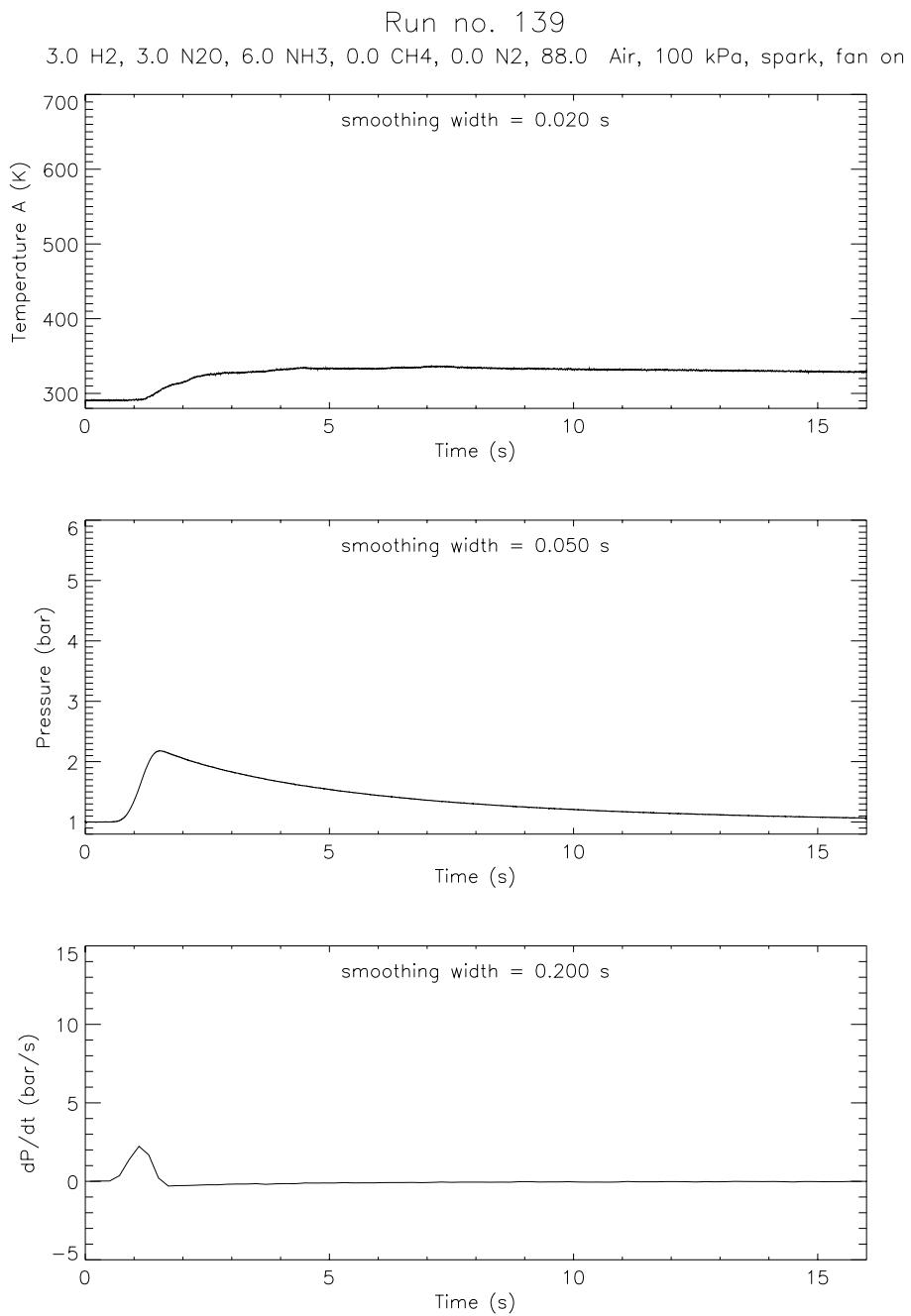
Run no. 138

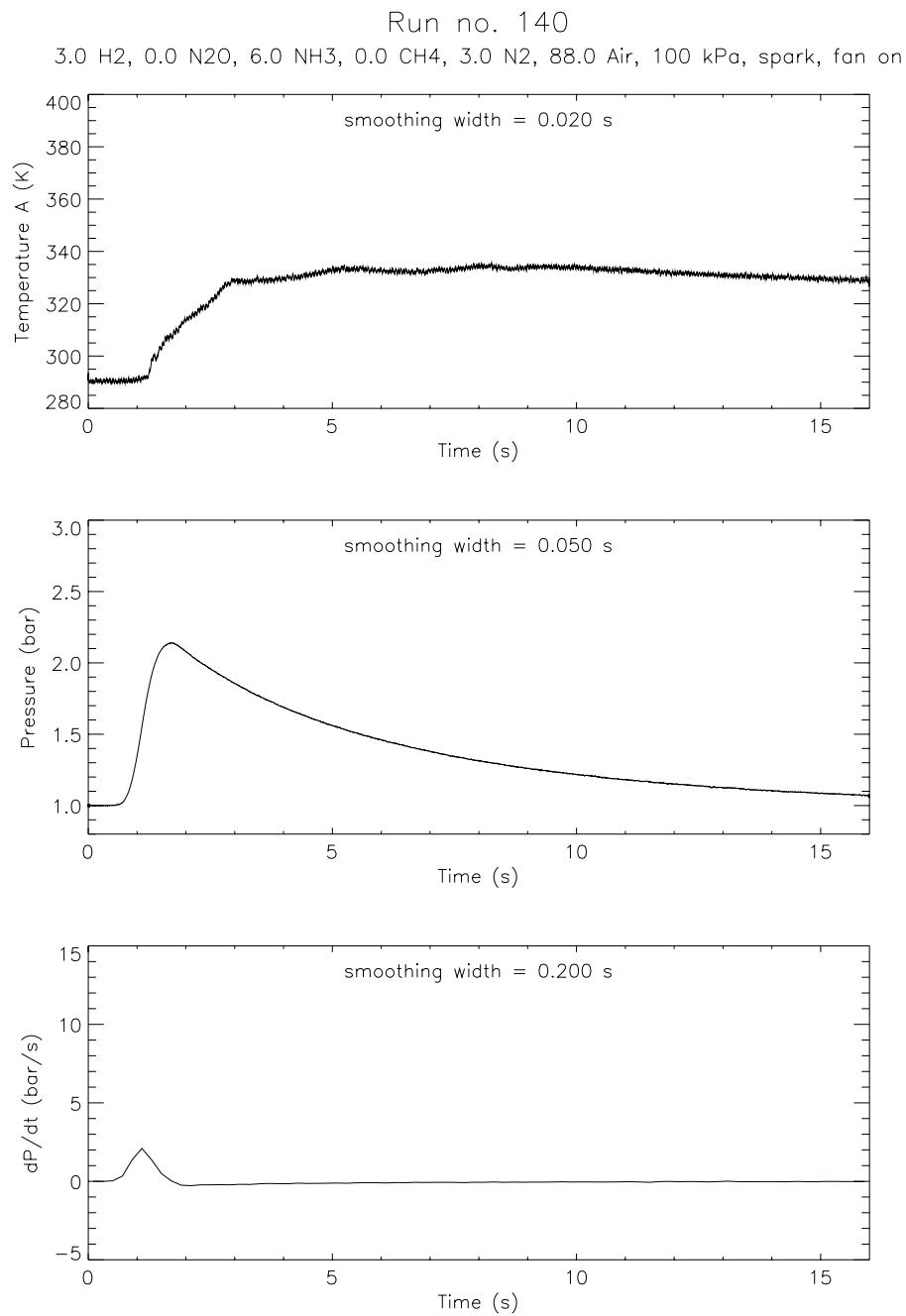
2.5 H₂, 2.5 N₂O, 5.0 NH₃, 0.0 CH₄, 0.0 N₂, 90.0 Air, 100 kPa, spark, fan on

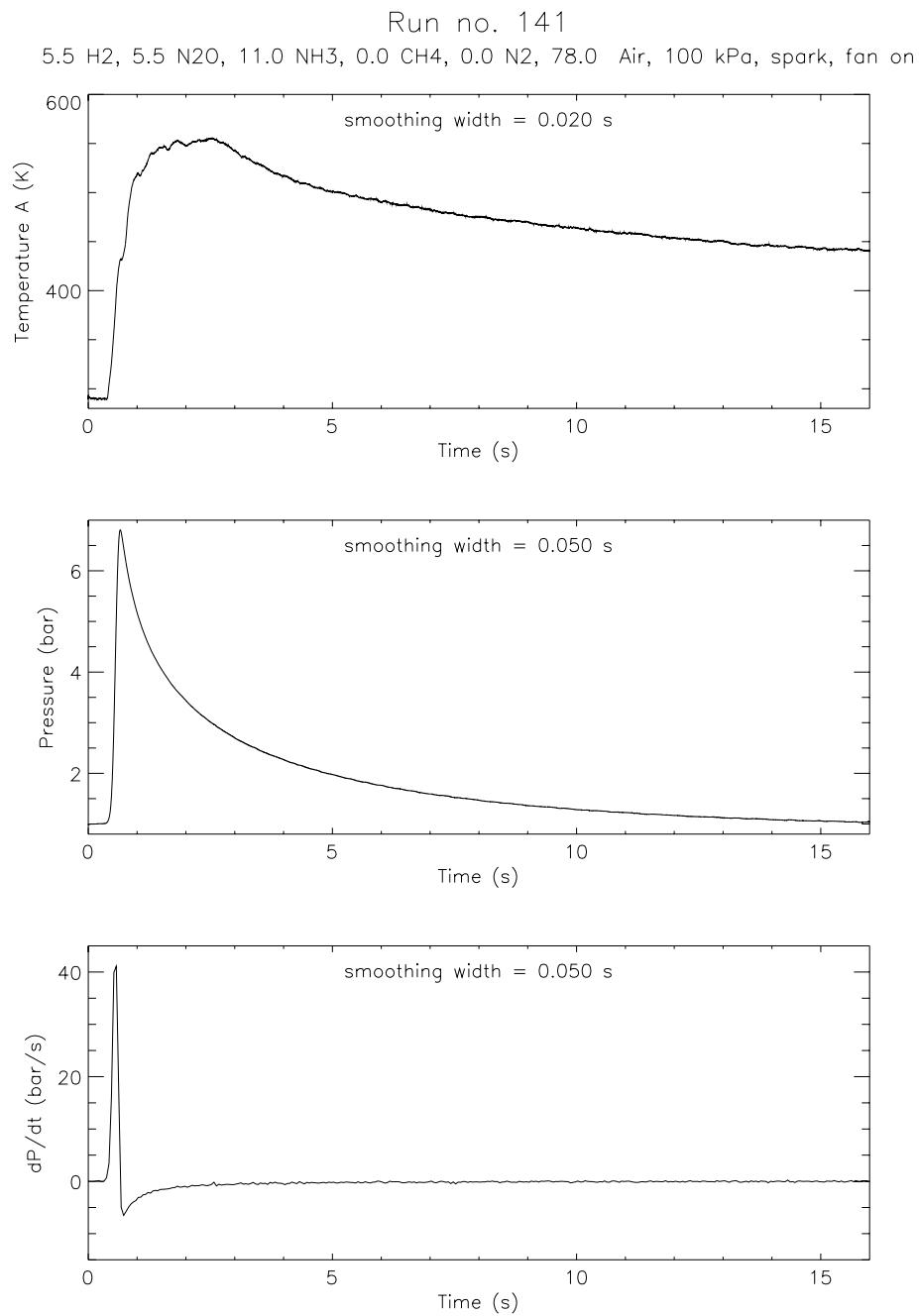
Run no. 138a

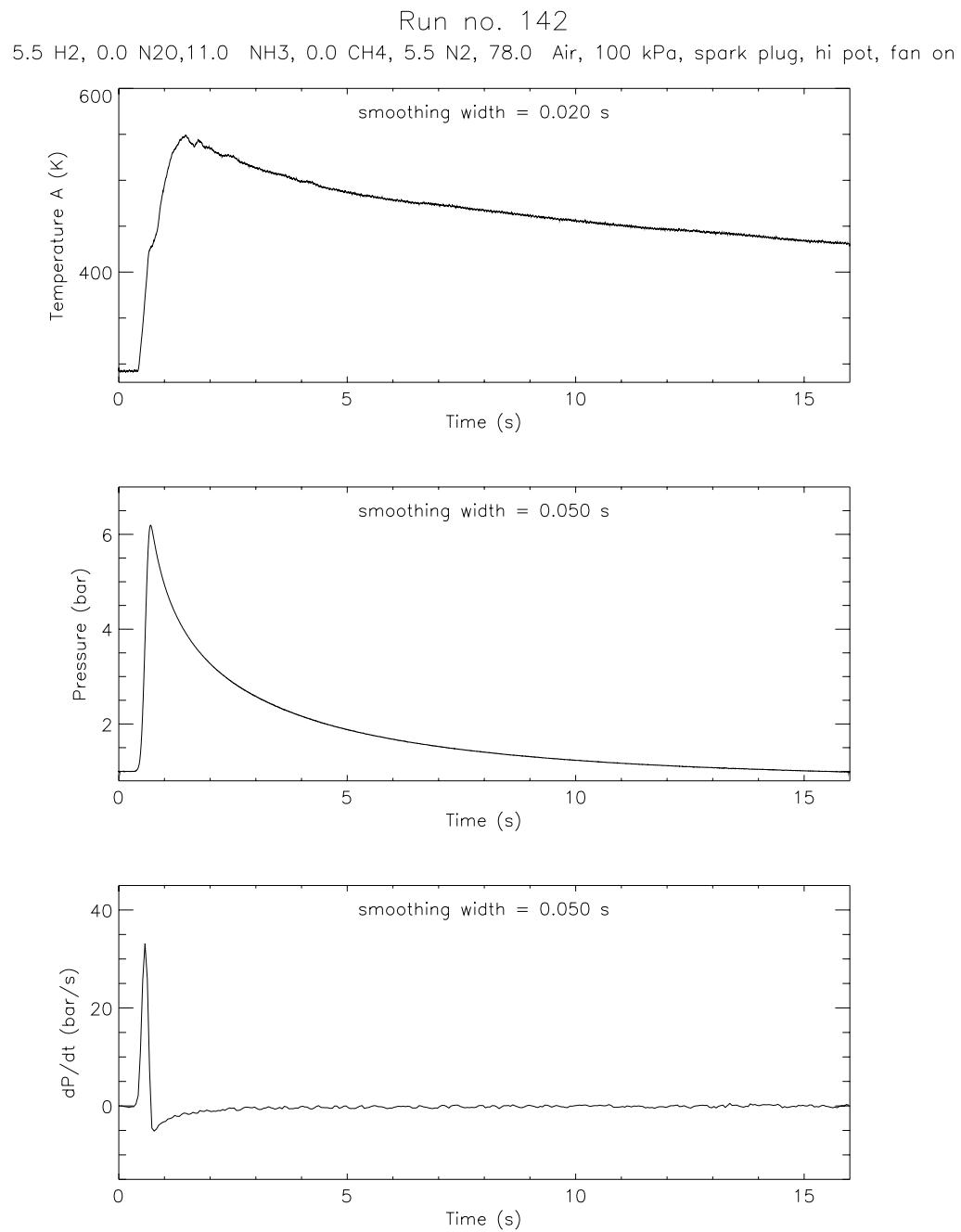
2.5 H₂, 2.5 N₂O, 5.0 NH₃, 0.0 CH₄, 0.0 N₂, 90.0 Air, 100 kPa, spark, fan on



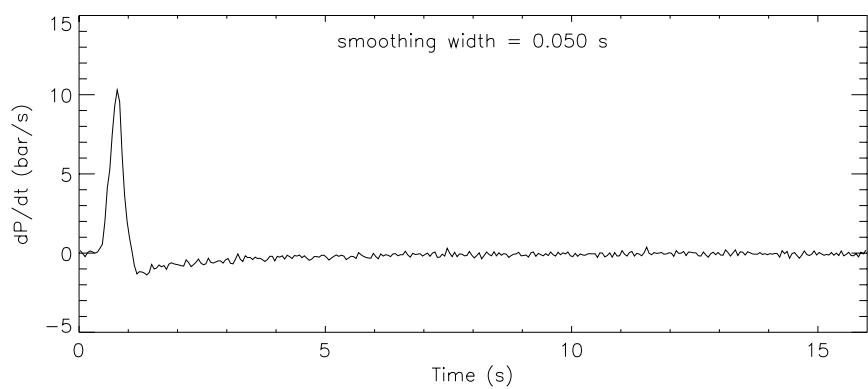
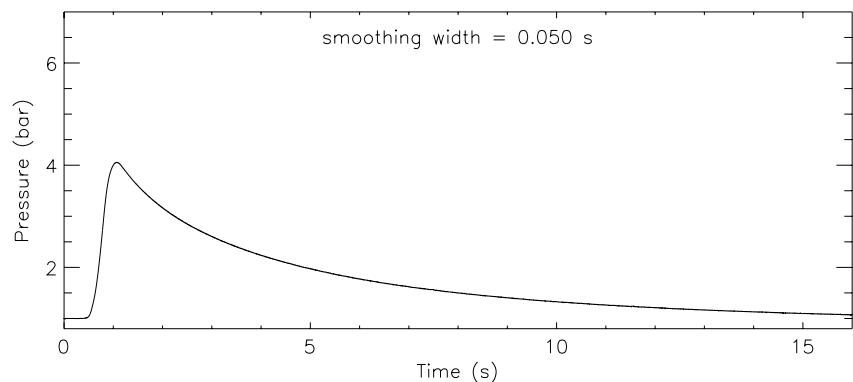
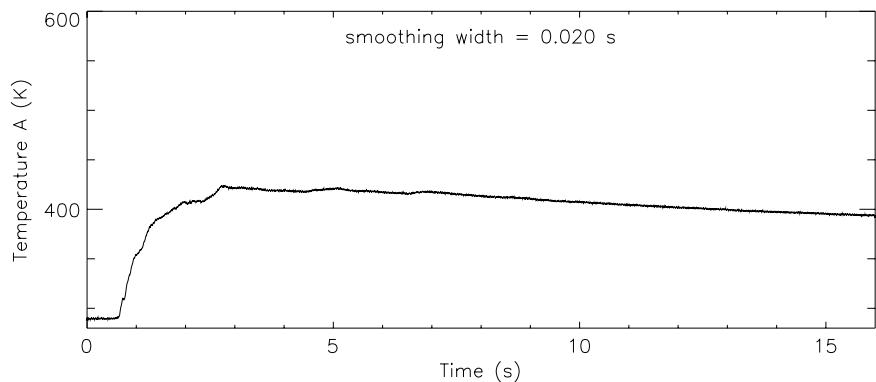




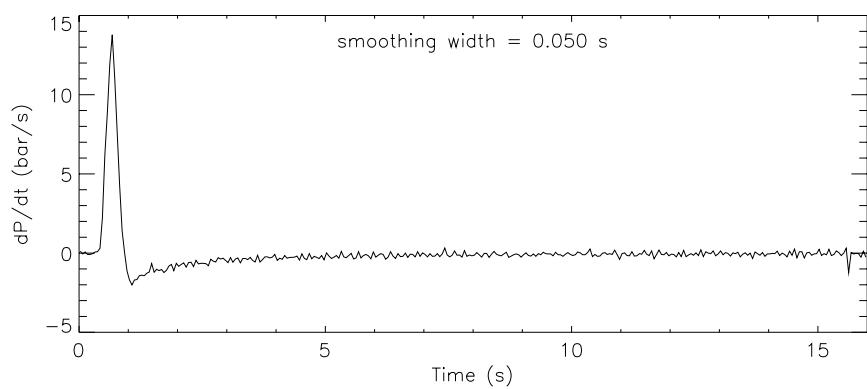
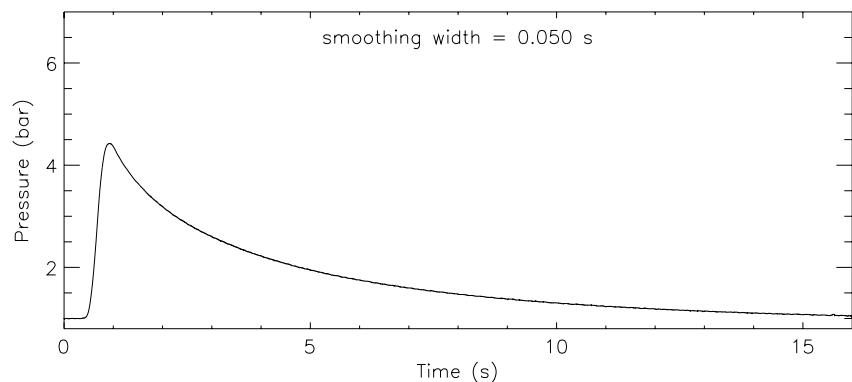
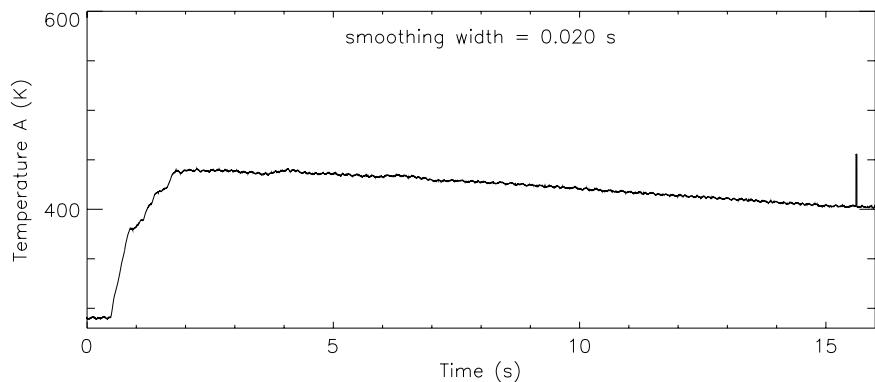


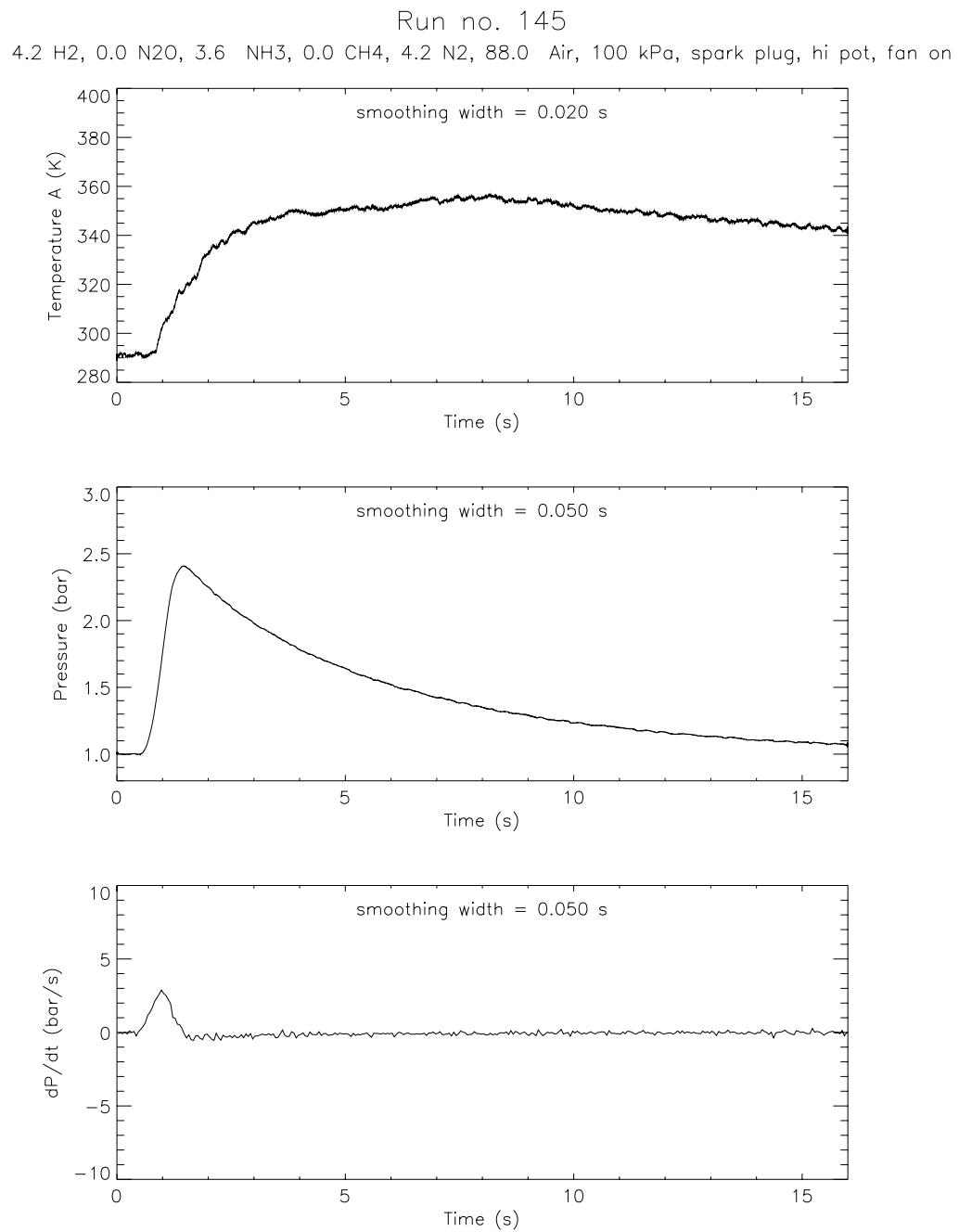


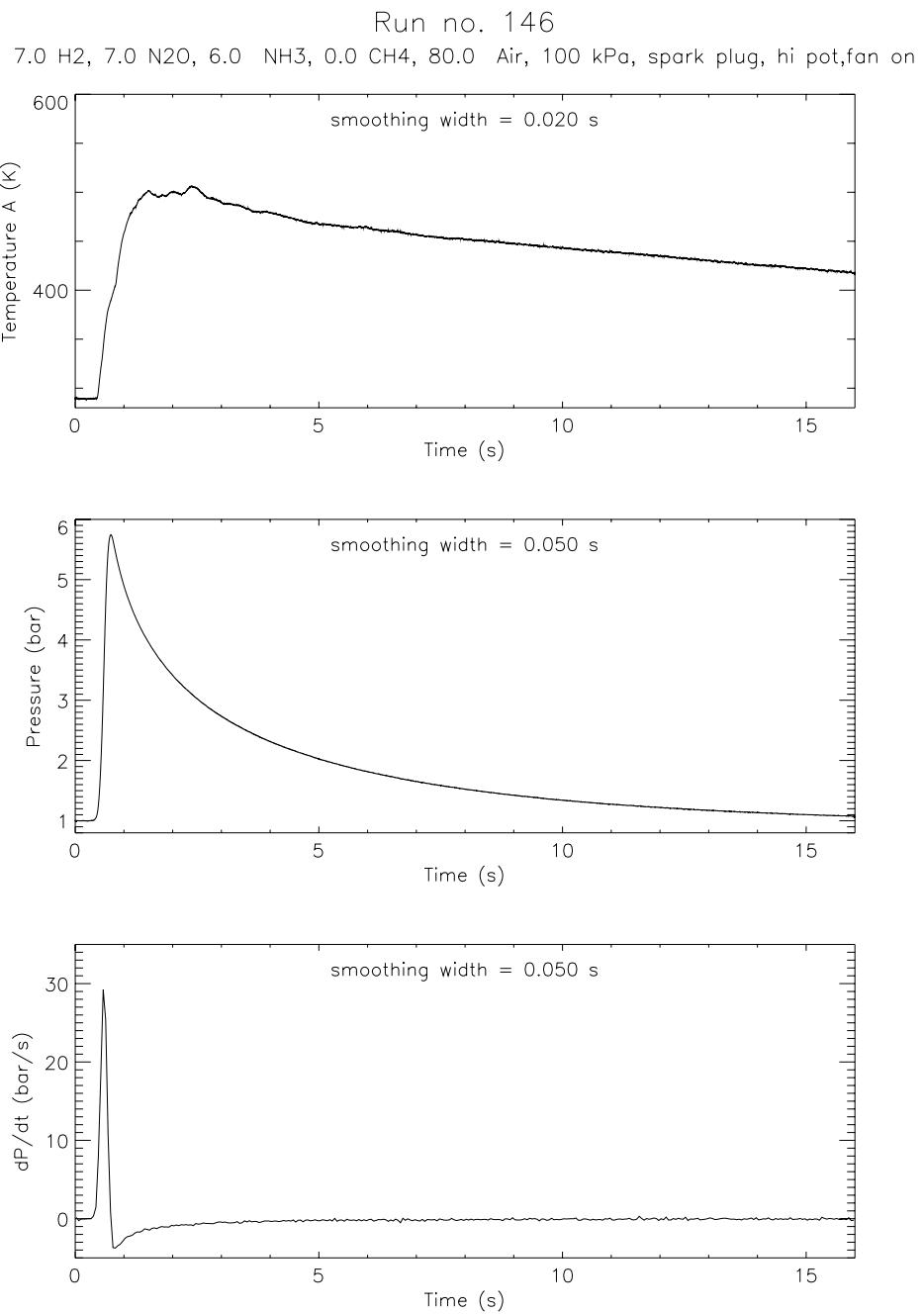
Run no. 143
5.25 H₂, 0.0 N₂O, 4.5 NH₃, 0.0 CH₄, 5.25 N₂, 85.0 Air, 100 kPa, spark plug, hi pot,fan on

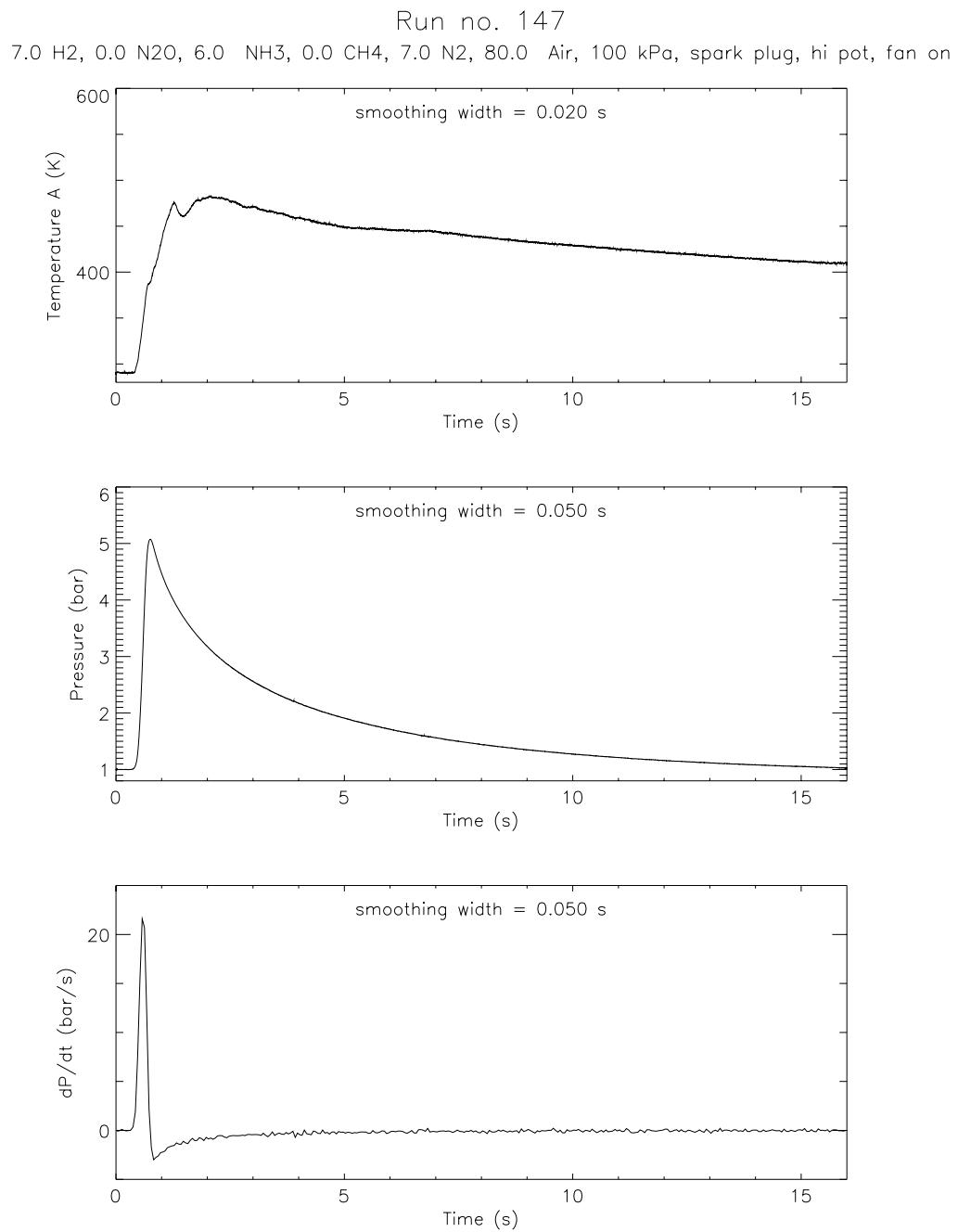


Run no. 144
5.95 H₂, 0.0 N₂₀, 5.1 NH₃, 0.0 CH₄, 5.95 N₂, 83.0 Air, 100 kPa, spark plug, hi pot, fan on

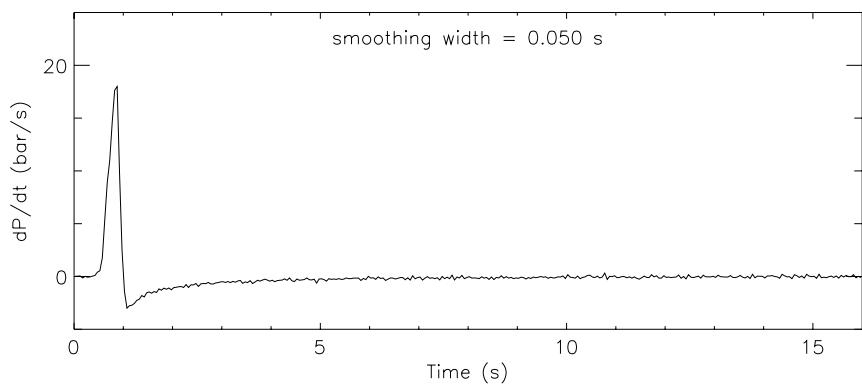
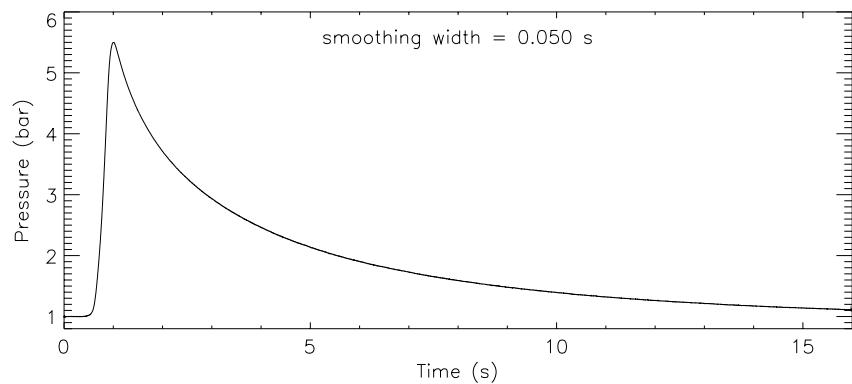
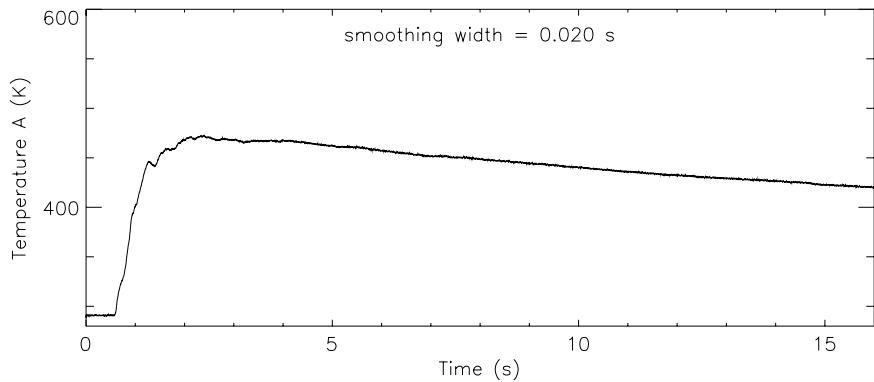




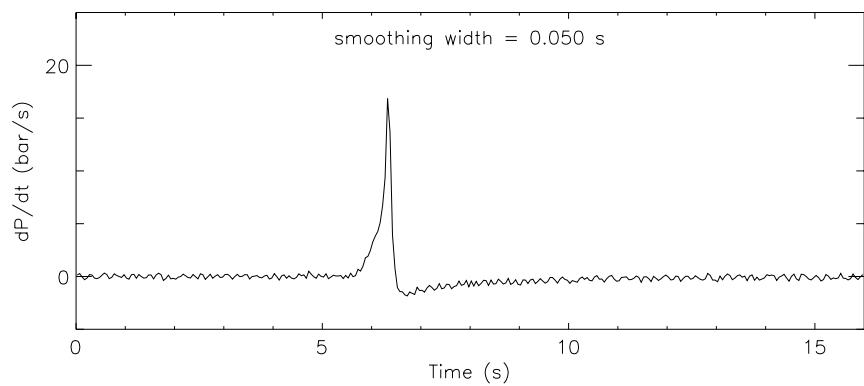
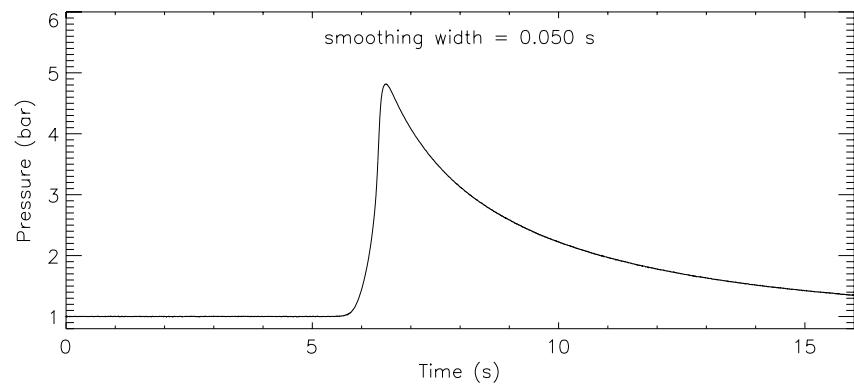
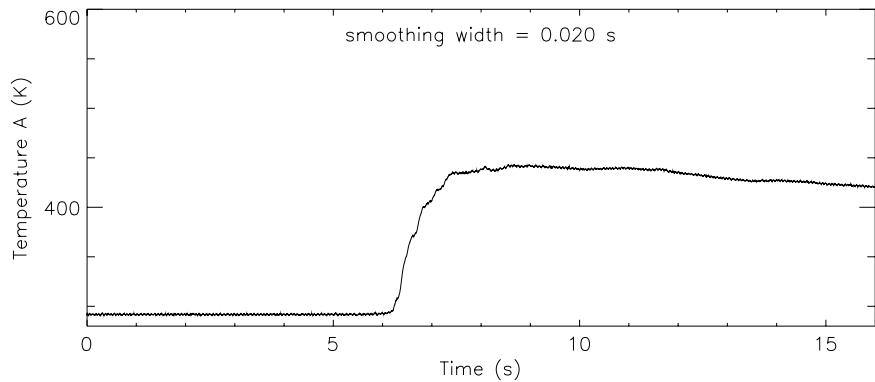


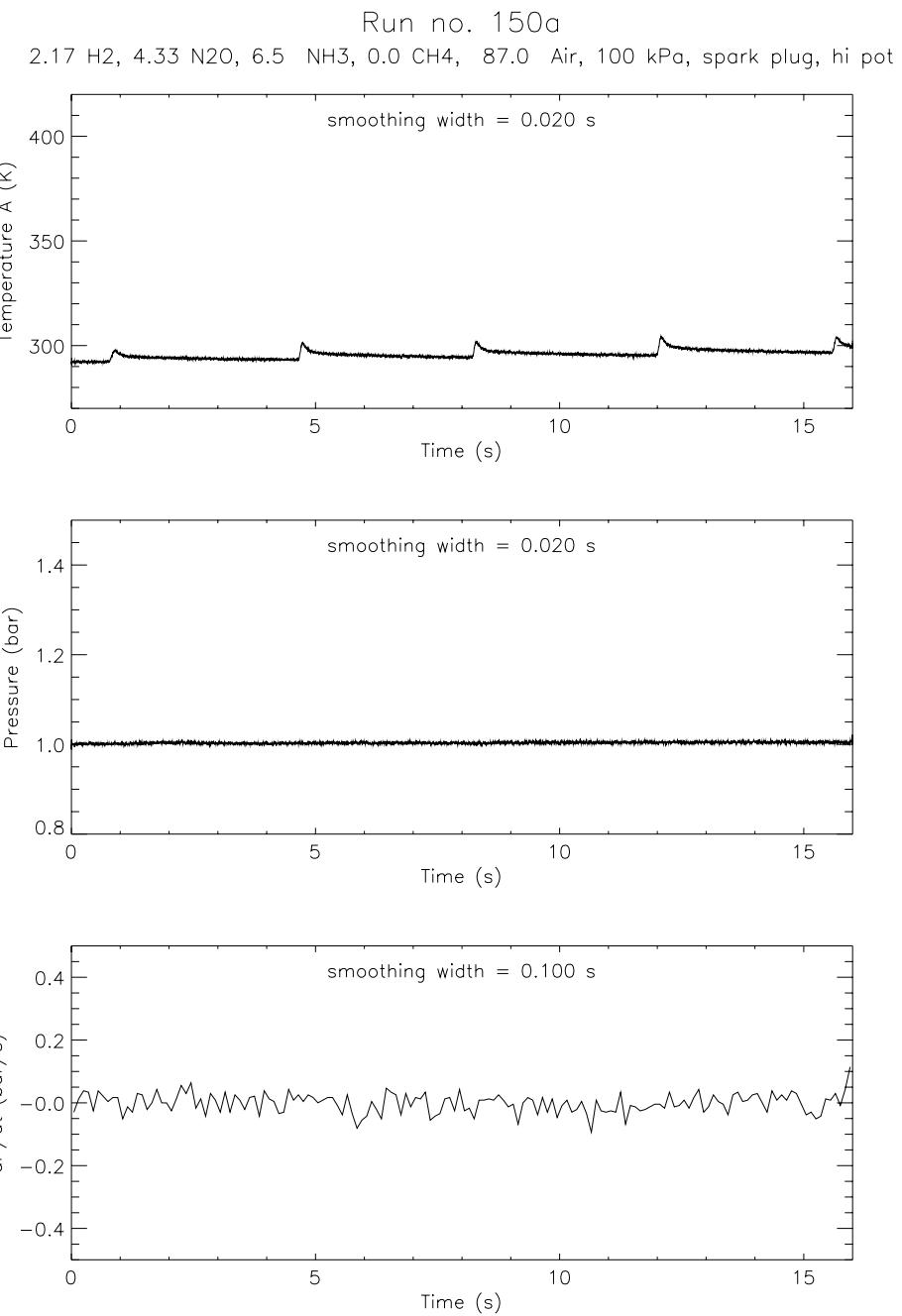


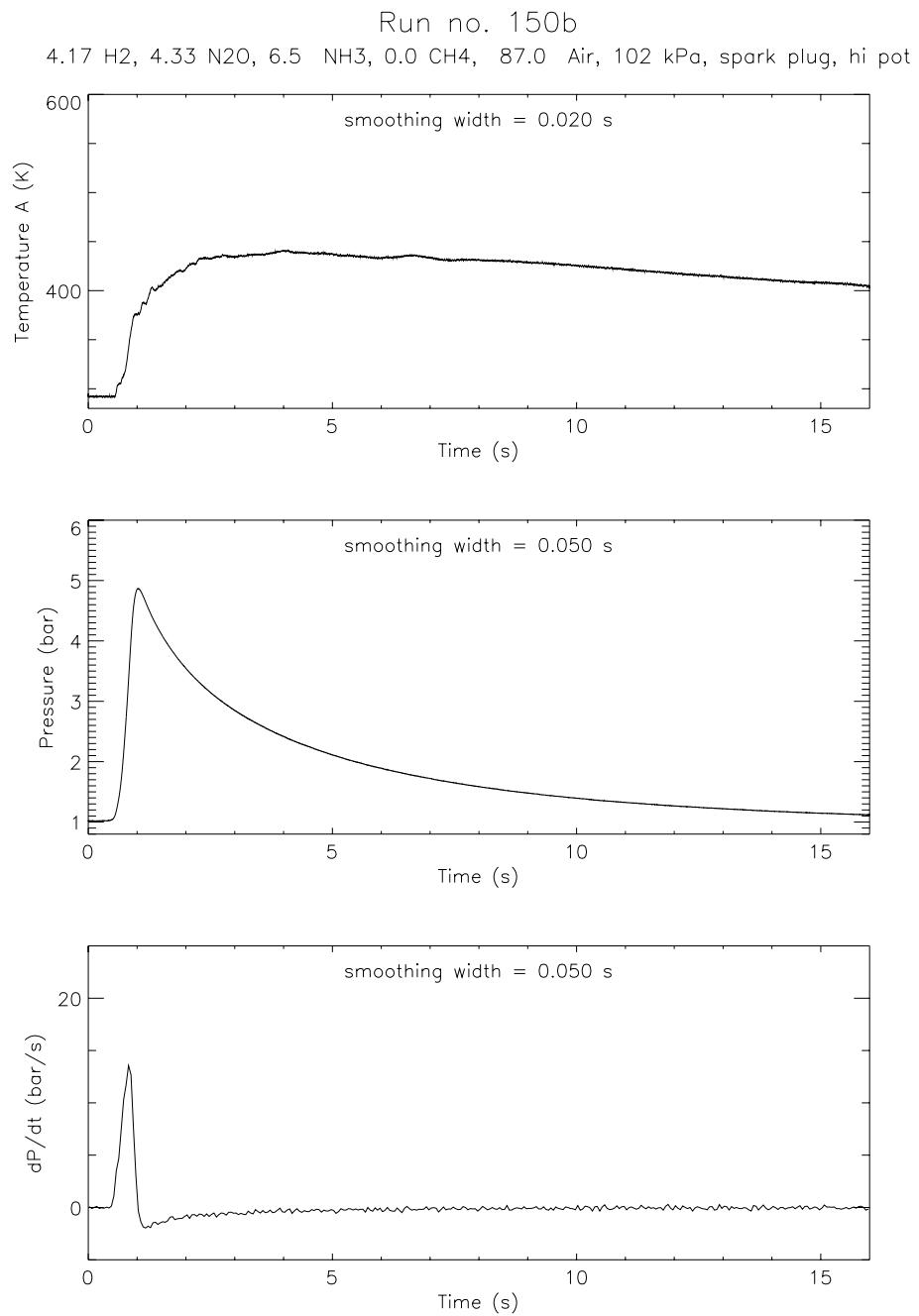
Run no. 148
3.0 H₂, 6.0 N₂O, 9.0 NH₃, 0.0 CH₄, 82.0 Air, 100 kPa, spark plug, hi pot, fan on



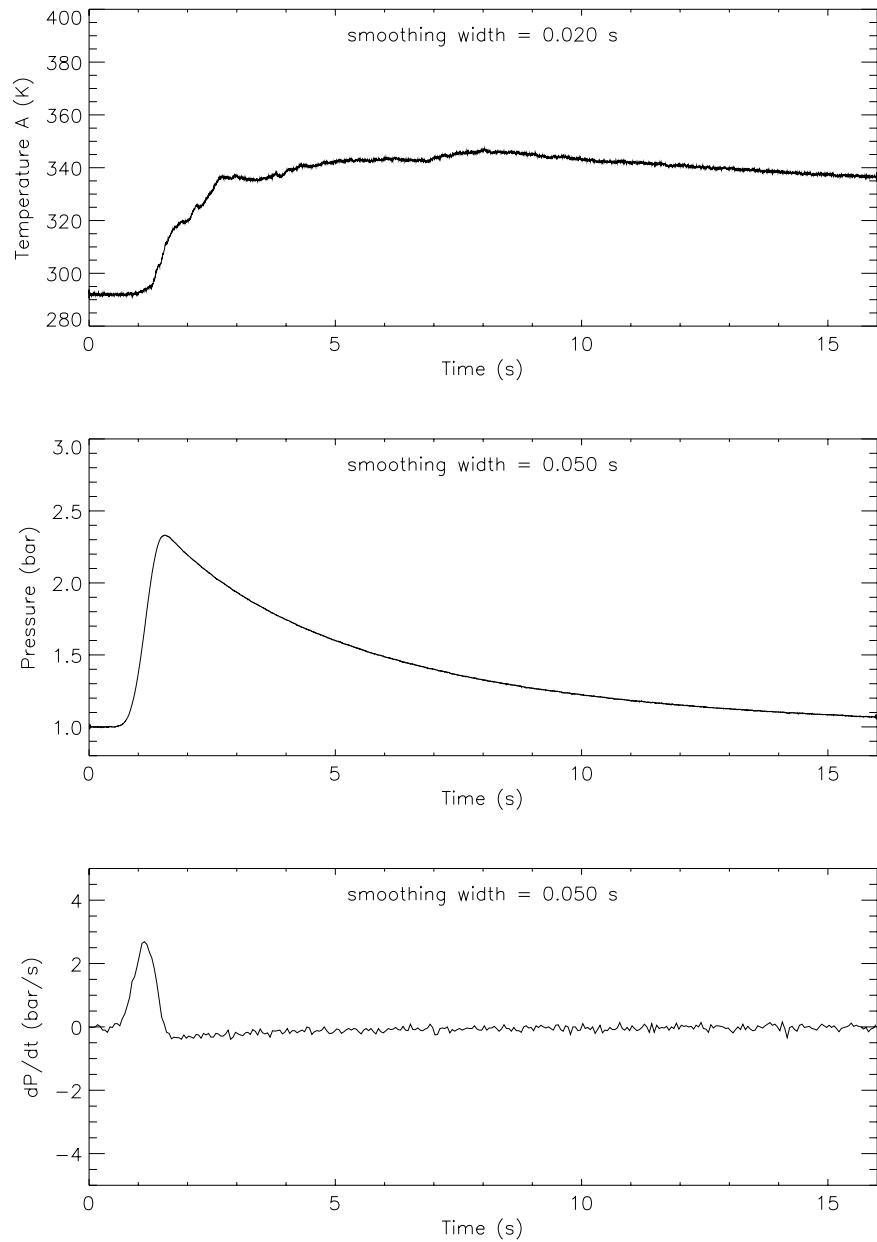
Run no. 149
2.5 H₂, 5.0 N₂O, 7.5 NH₃, 0.0 CH₄, 85.0 Air, 100 kPa, spark plug, hi pot, fan on





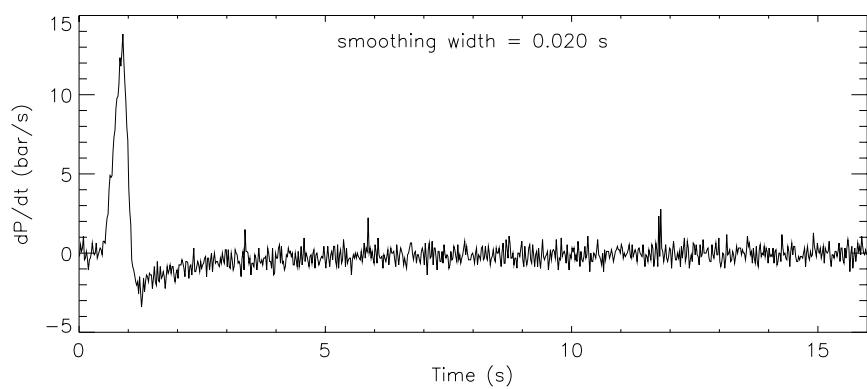
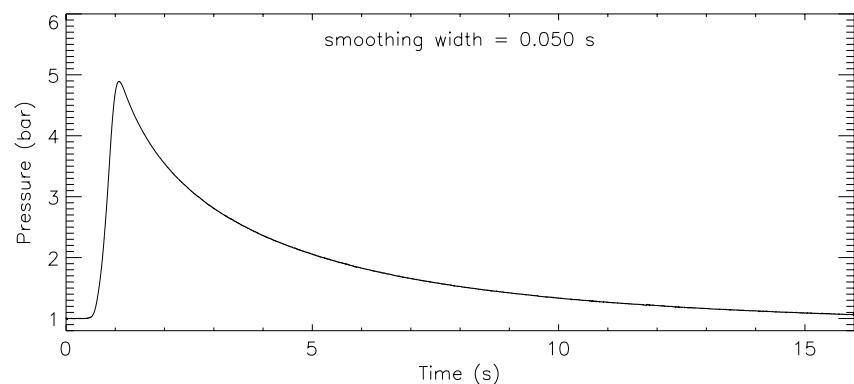
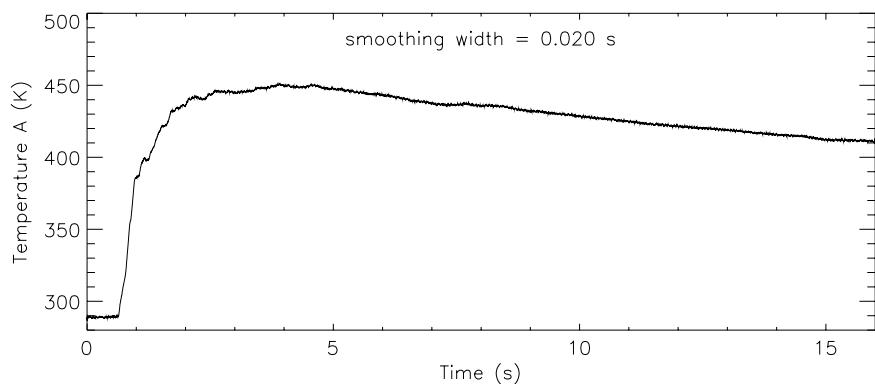


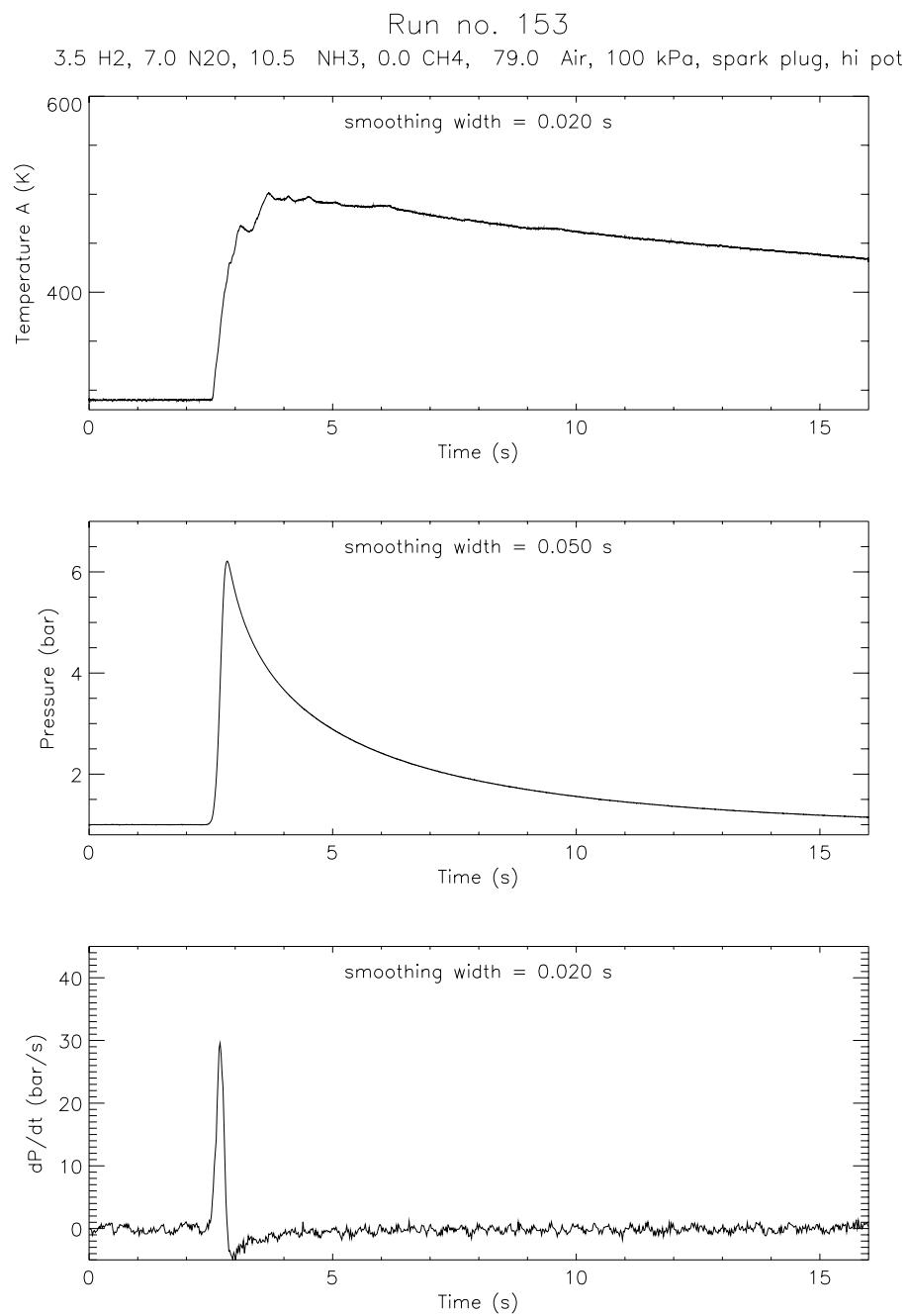
Run no. 151
2.5 H₂, 0.0 N₂O, 7.5 NH₃, 0.0 CH₄, 5.0 N₂, 85.0 Air, 100 kPa, spark plug, hi pot,

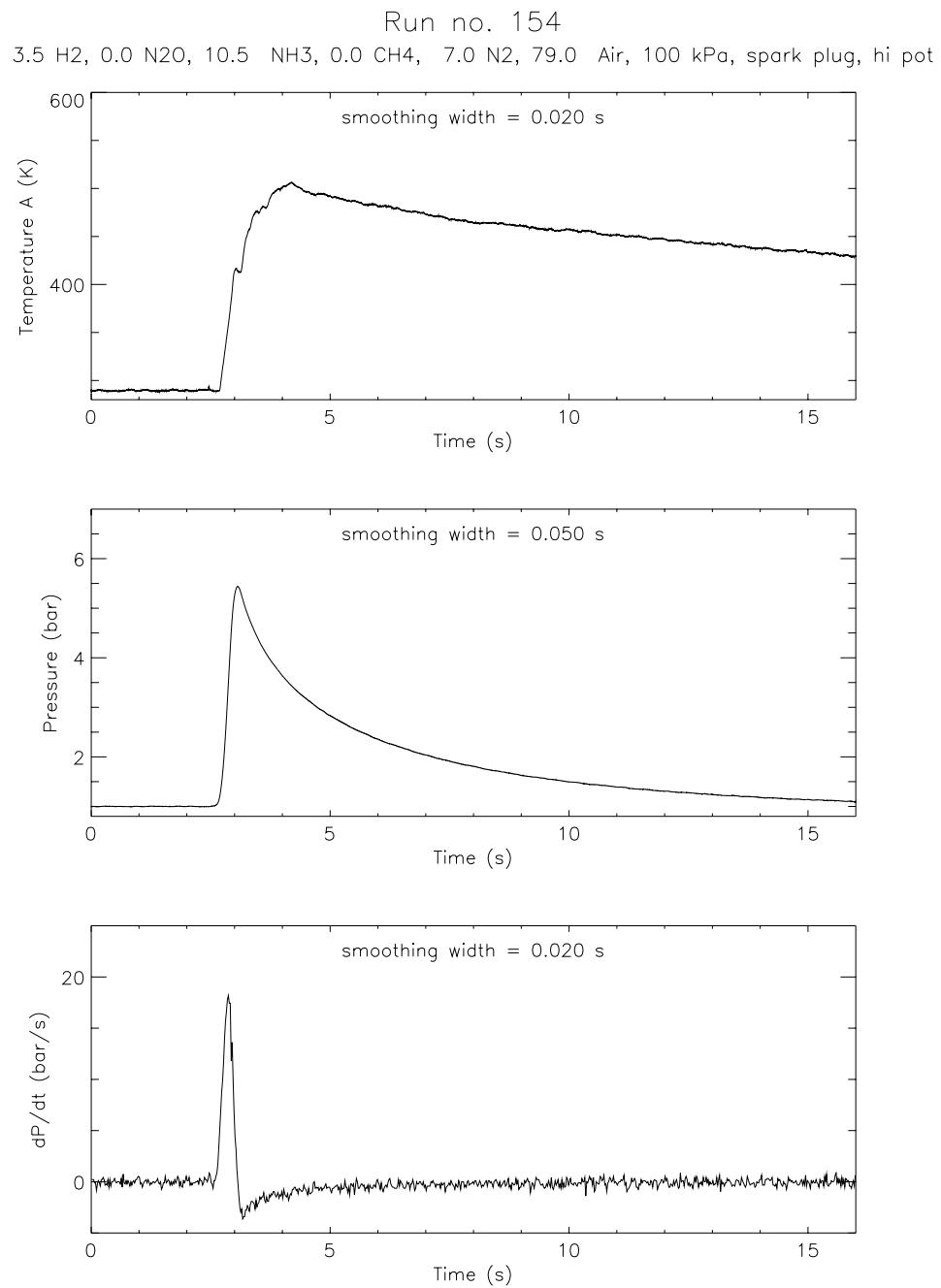


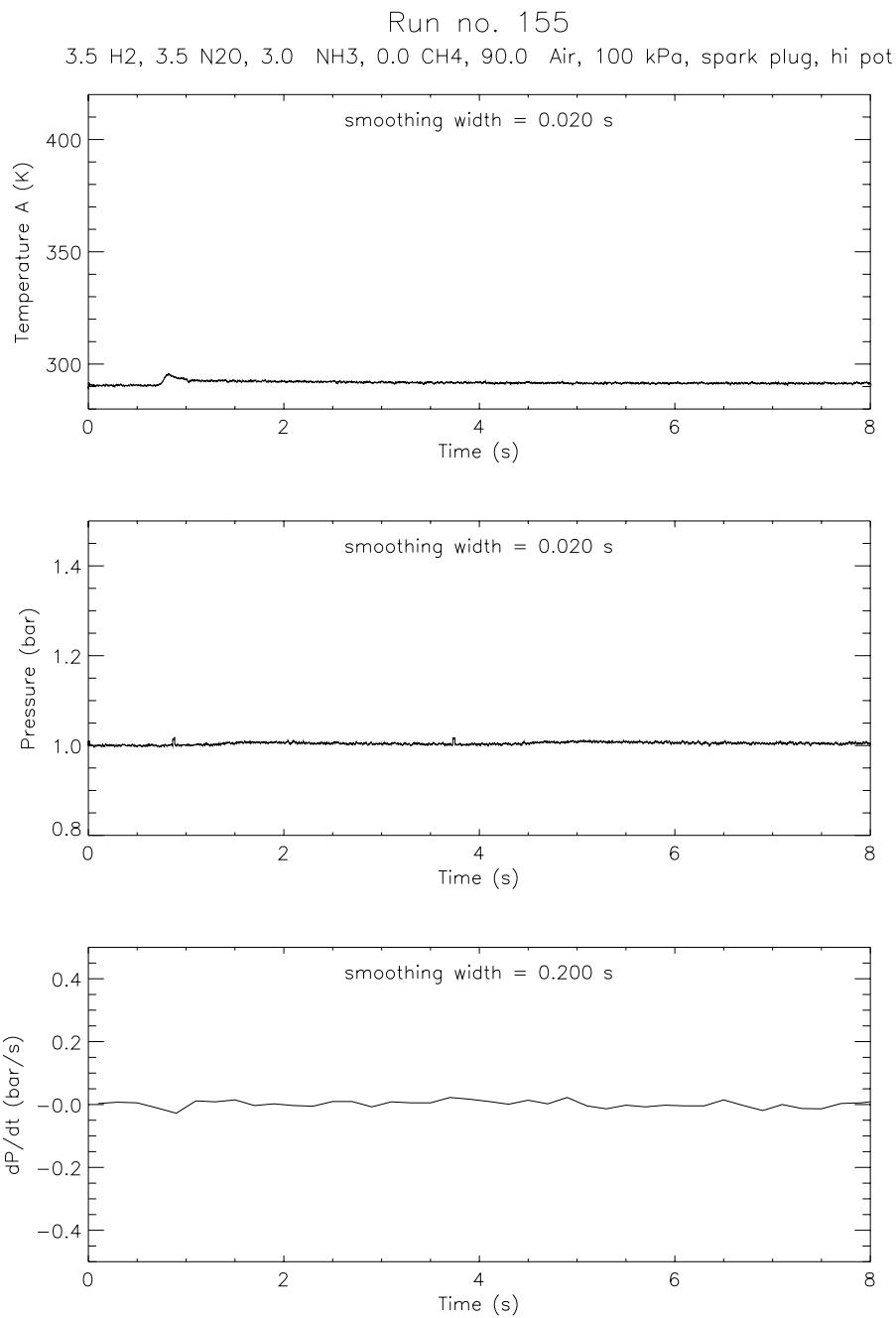
Run no. 152

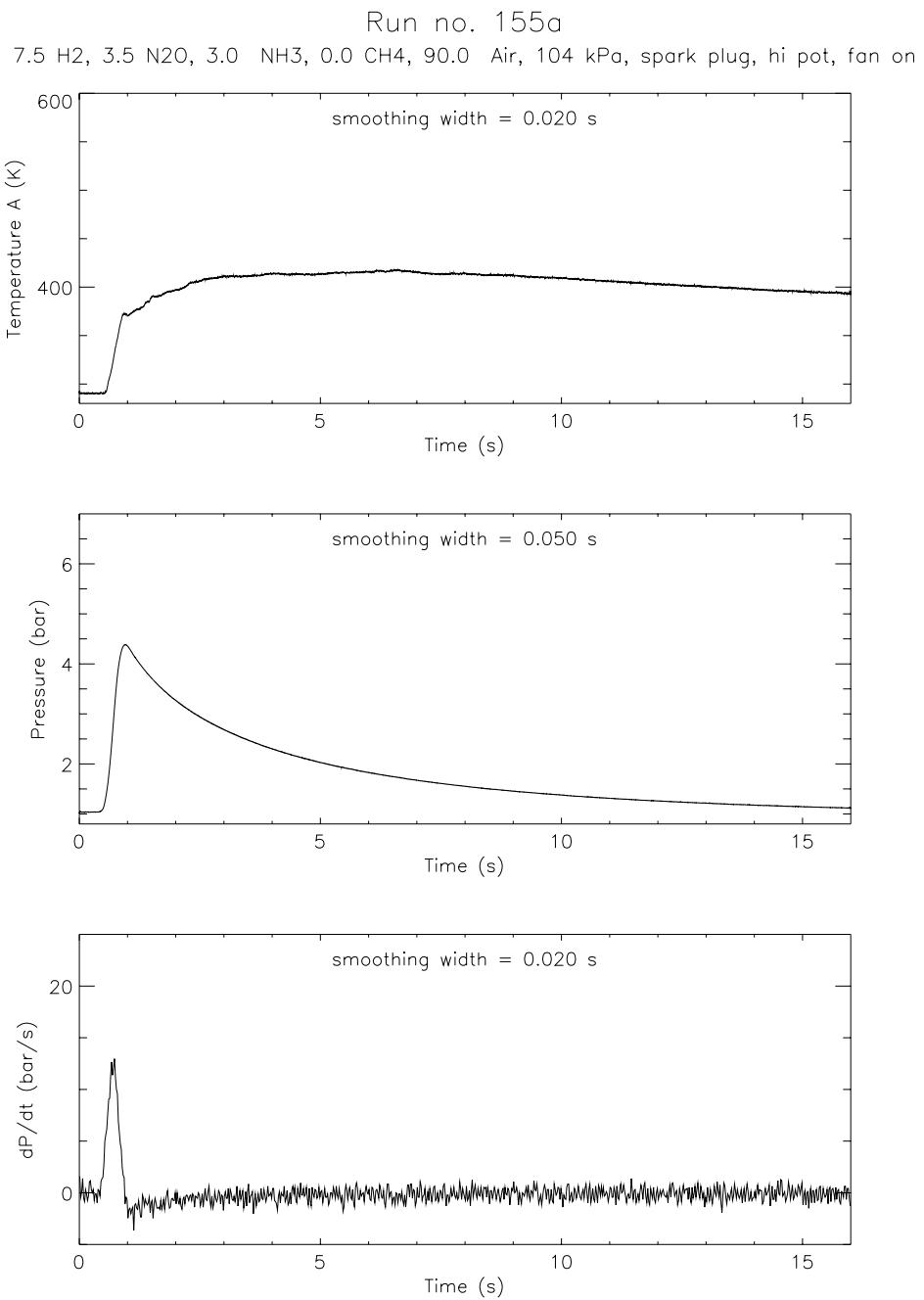
3.0 H₂, 0.0 N₂O, 9.0 NH₃, 0.0 CH₄, 6.0 N₂, 82.0 Air, 100 kPa, spark plug, hi pot

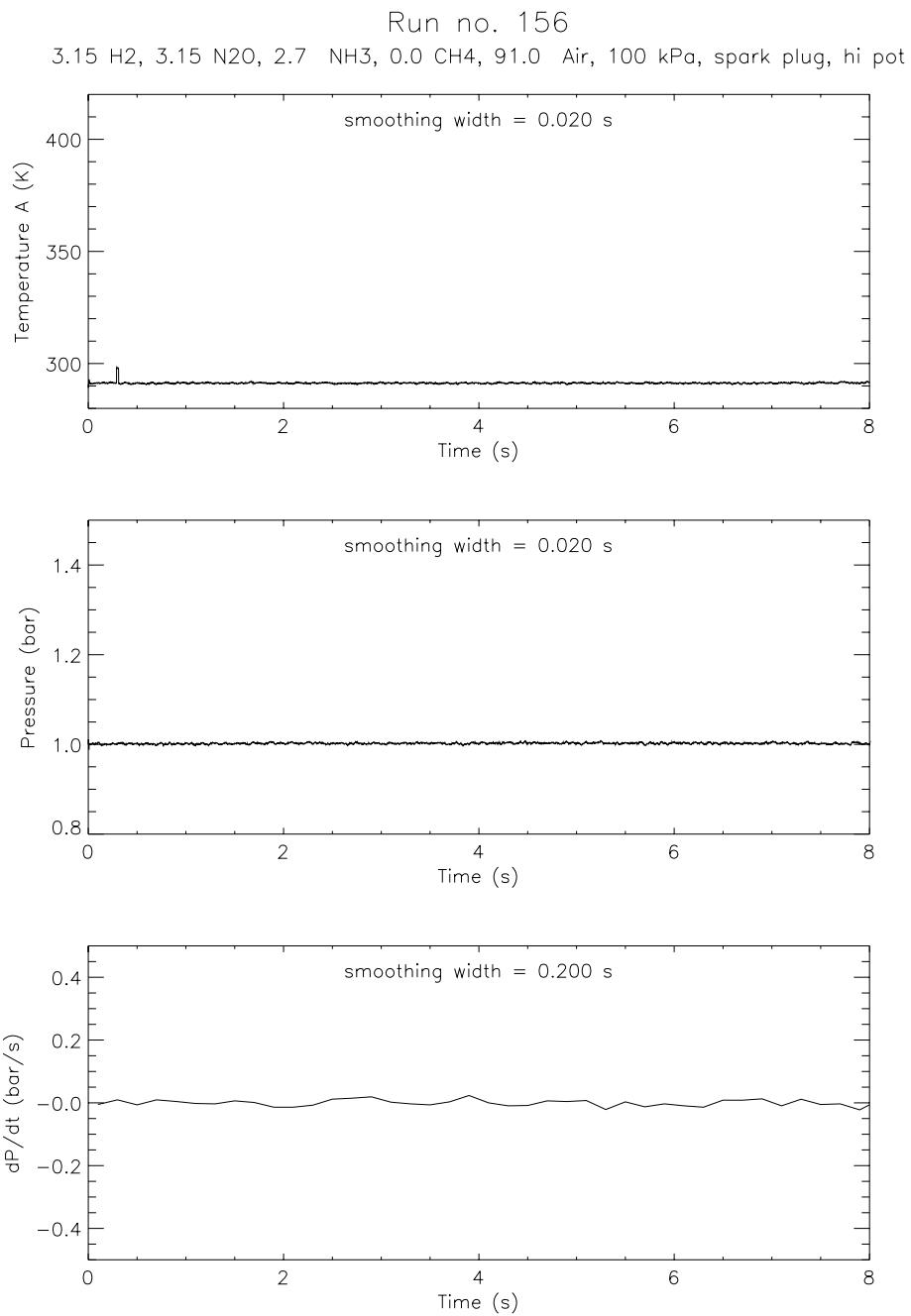




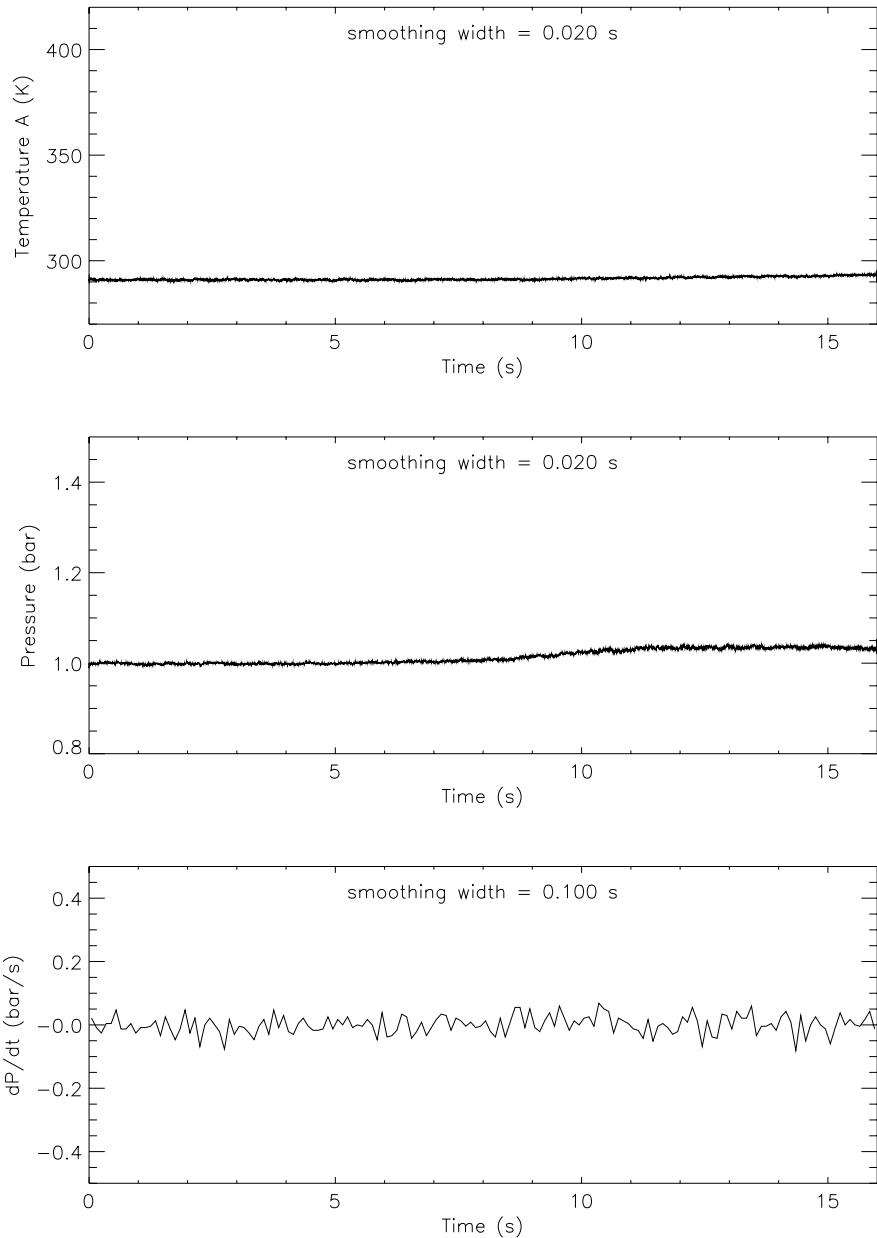


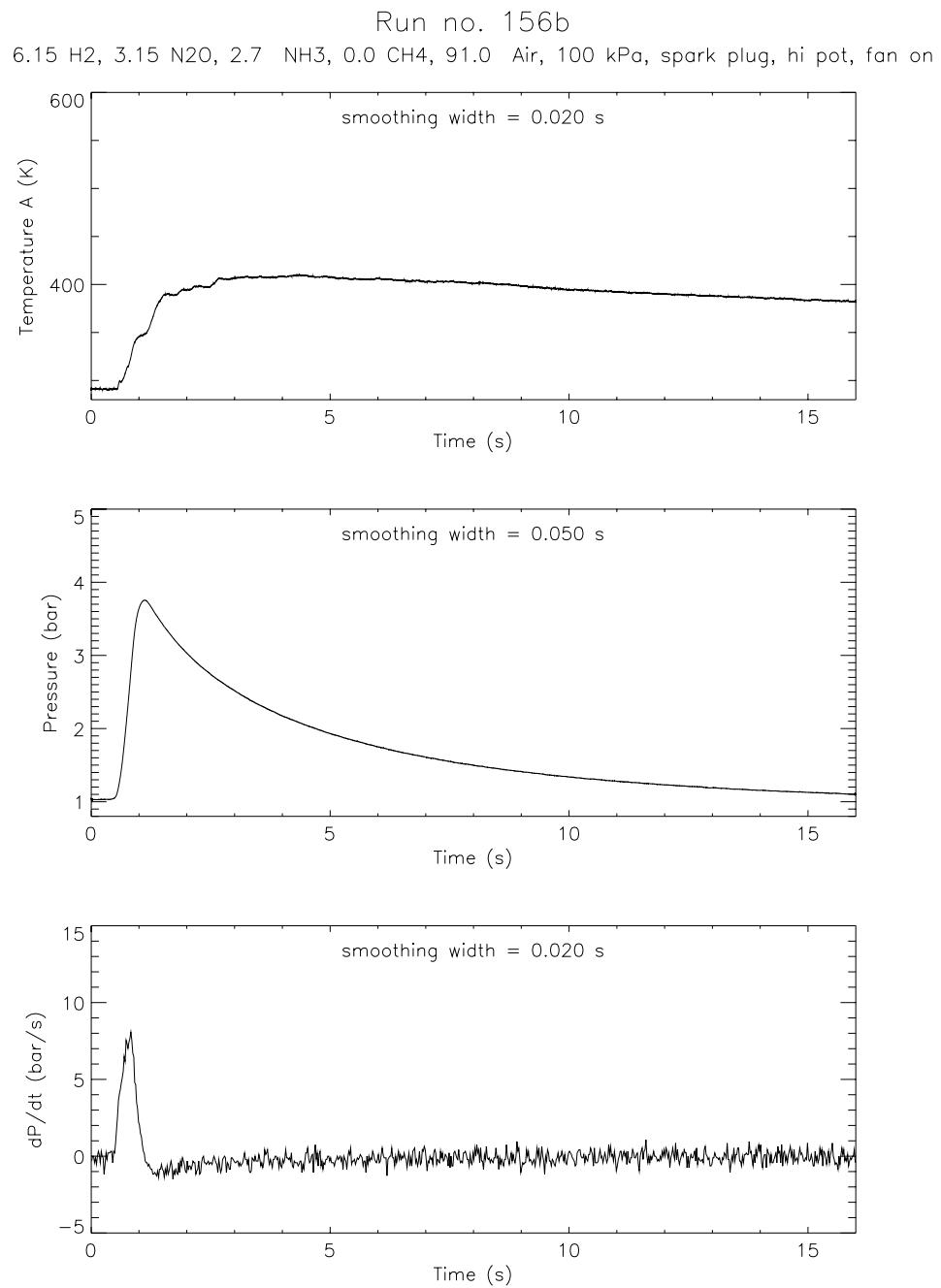




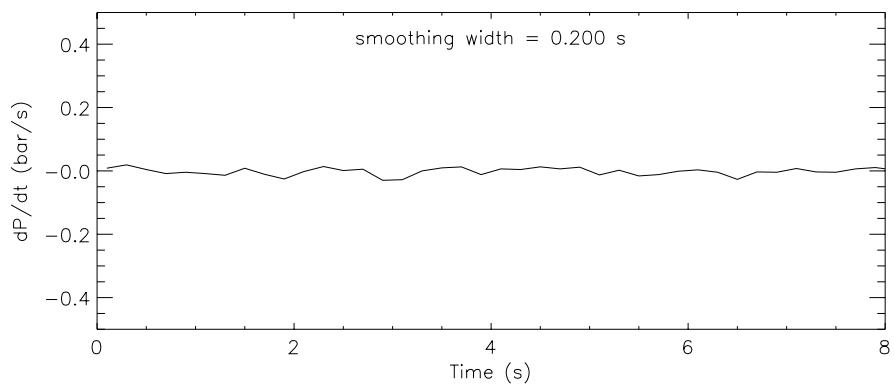
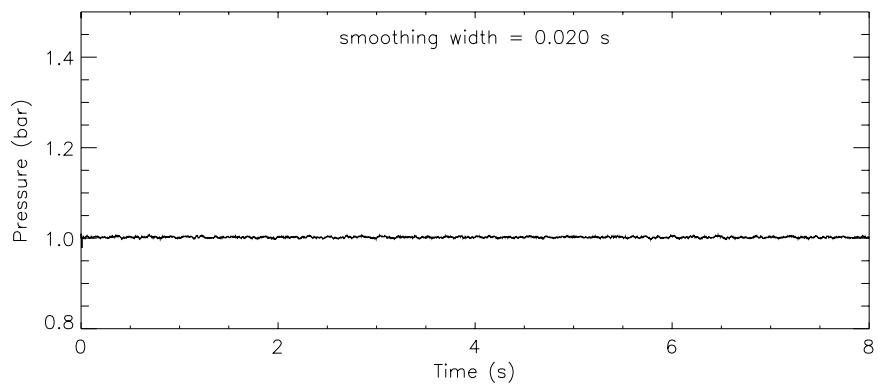
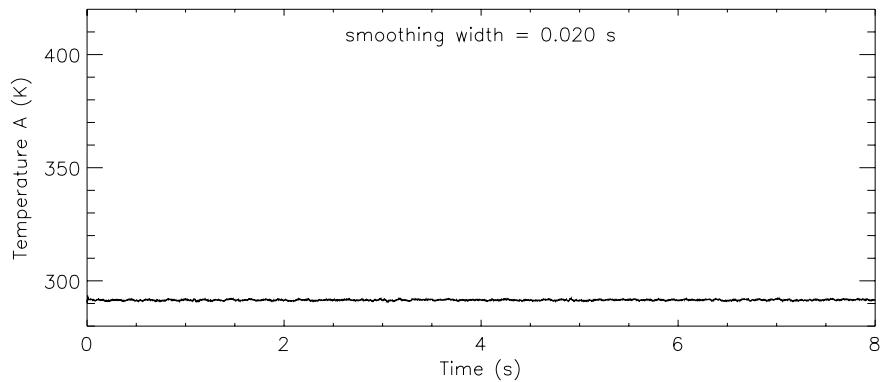


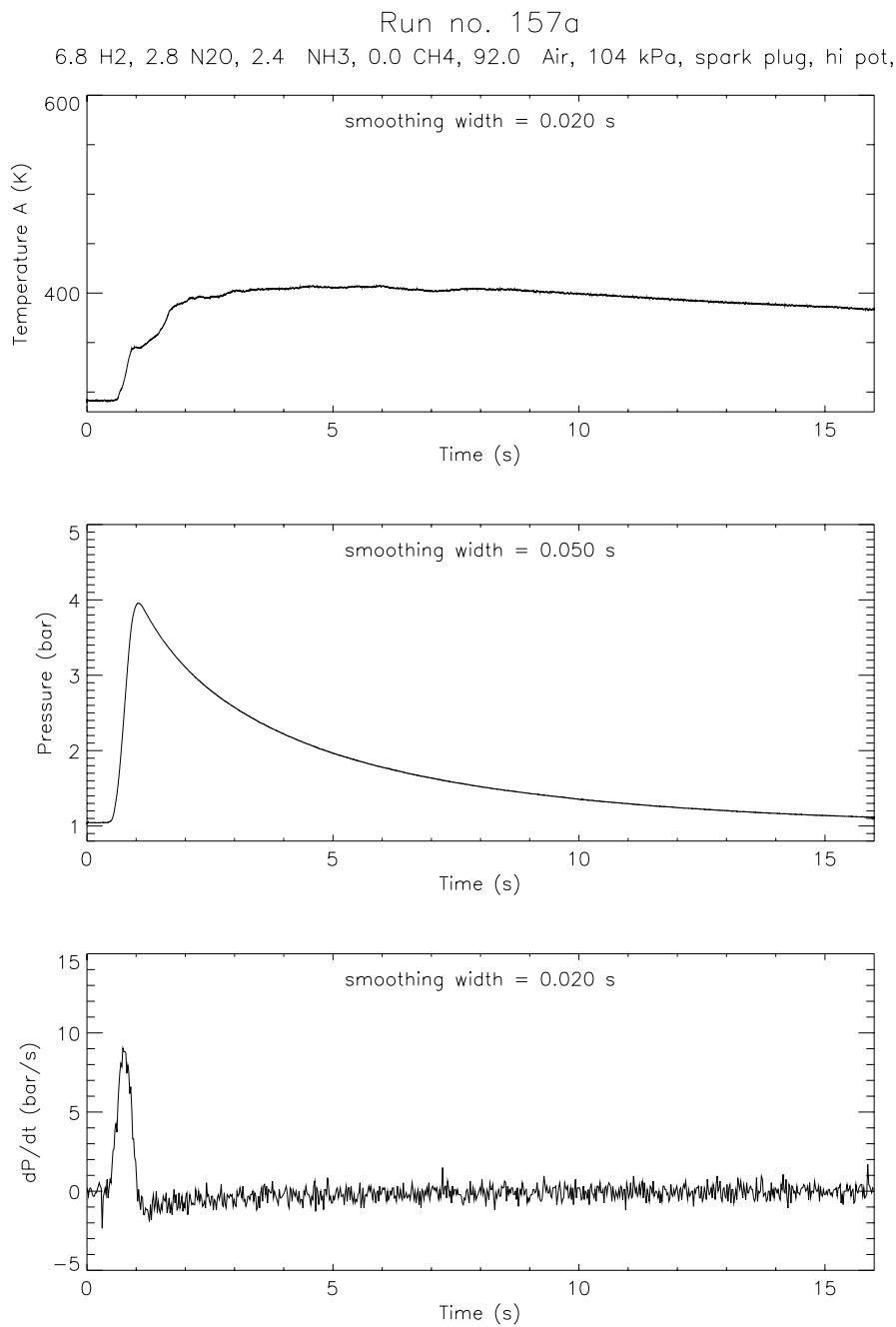
Run no. 156a
3.15 H₂, 3.15 N₂O, 2.7 NH₃, 0.0 CH₄, 91.0 Air, 99.9 kPa, spark plug, hi pot, fan on



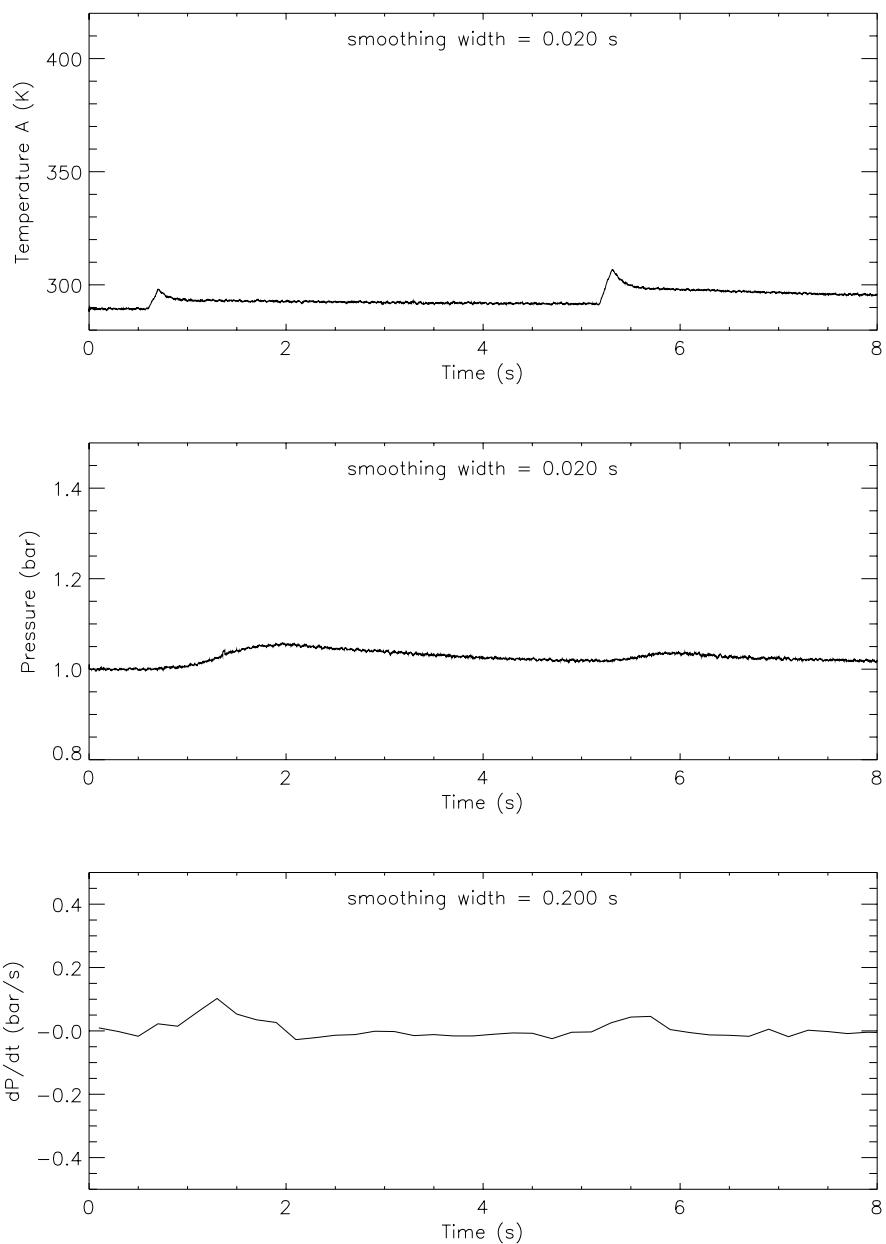


Run no. 157

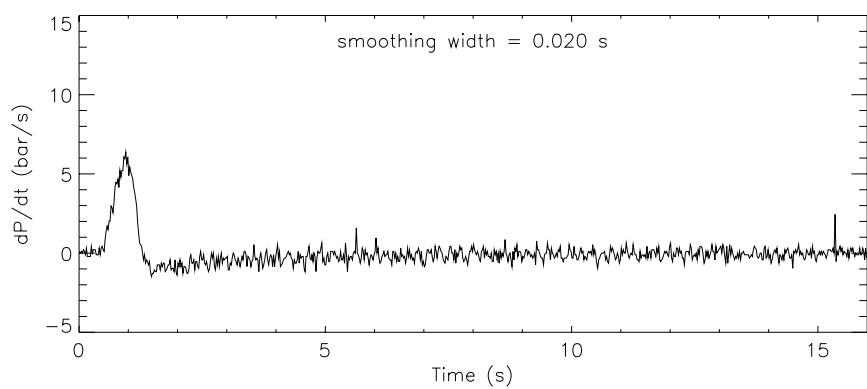
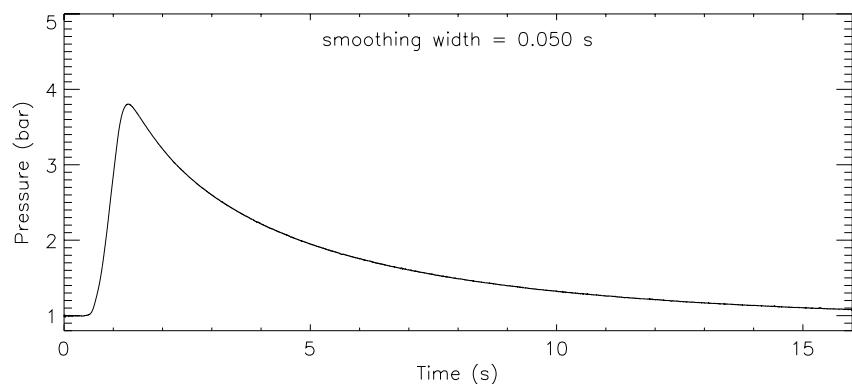
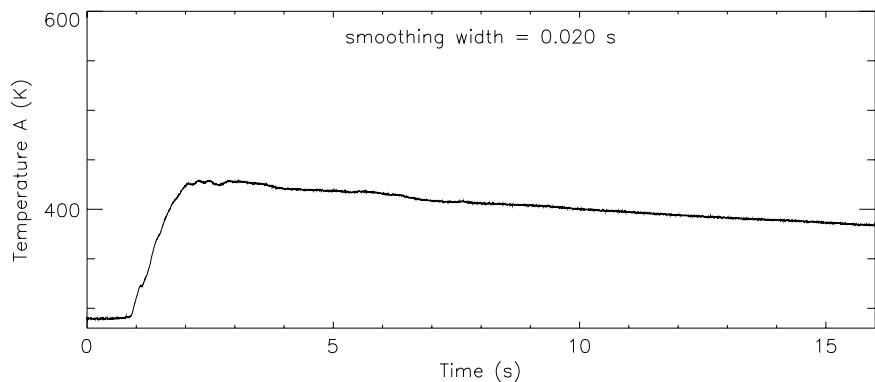
2.8 H₂, 2.8 N₂O, 2.4 NH₃, 0.0 CH₄, 92.0 Air, 100 kPa, spark plug, hi pot,

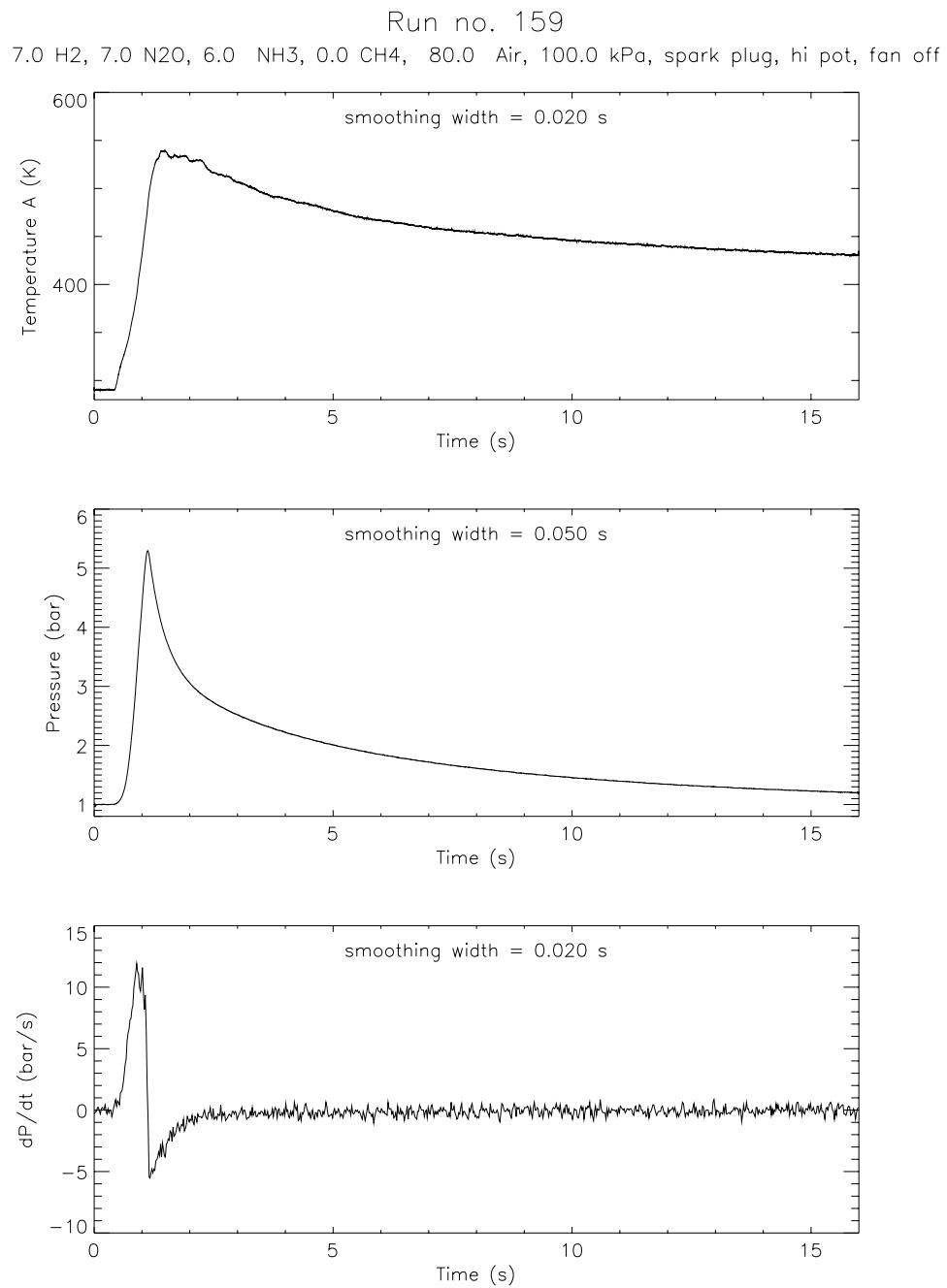


Run no. 158

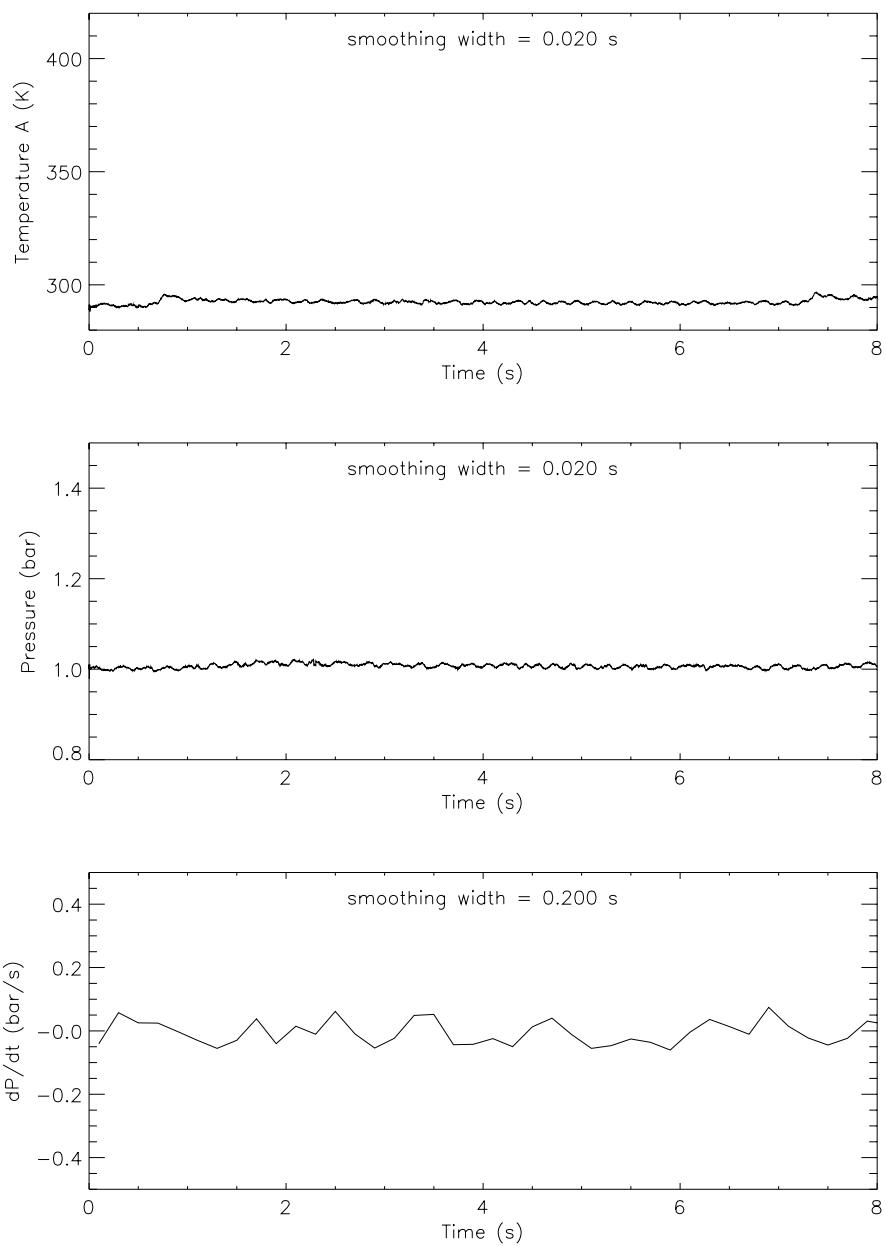
4.9 H₂, 4.9 N₂O, 4.2 NH₃, 0.0 CH₄, 86.0 Air, 100 kPa, spark plug, hi pot

Run no. 158a
4.9 H₂, 4.9 N₂O, 4.2 NH₃, 0.0 CH₄, 86.0 Air, 99.80 kPa, spark plug, hi pot, FAN ON

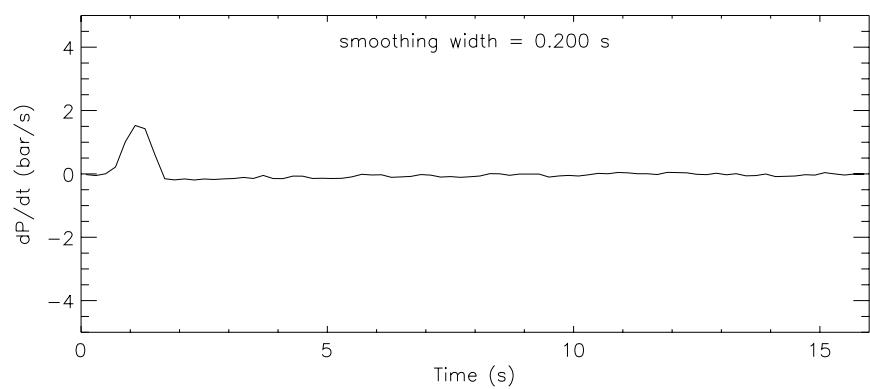
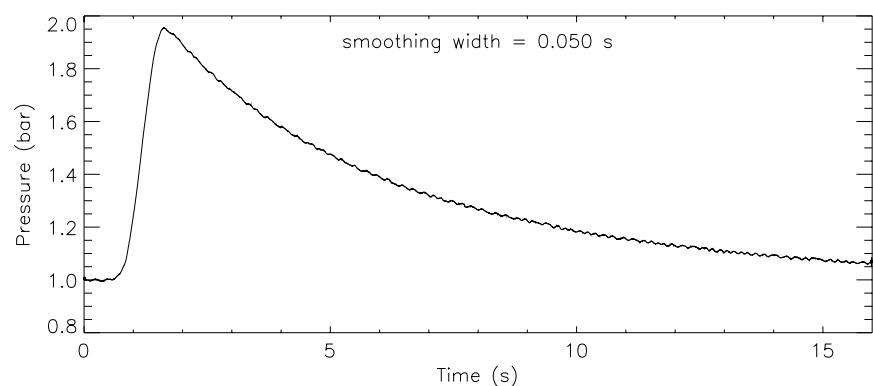
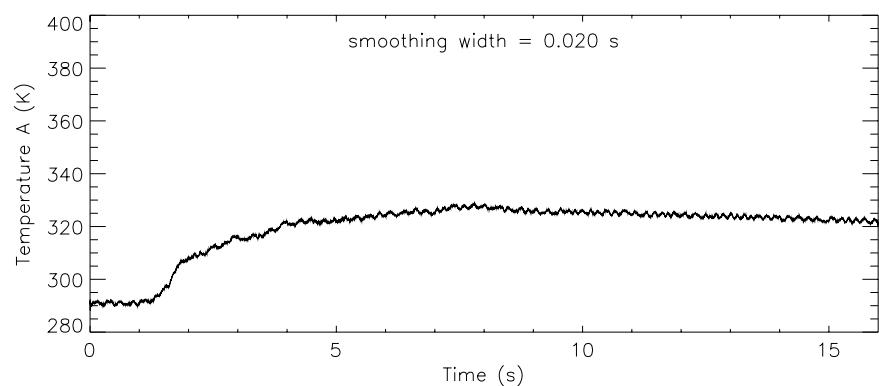


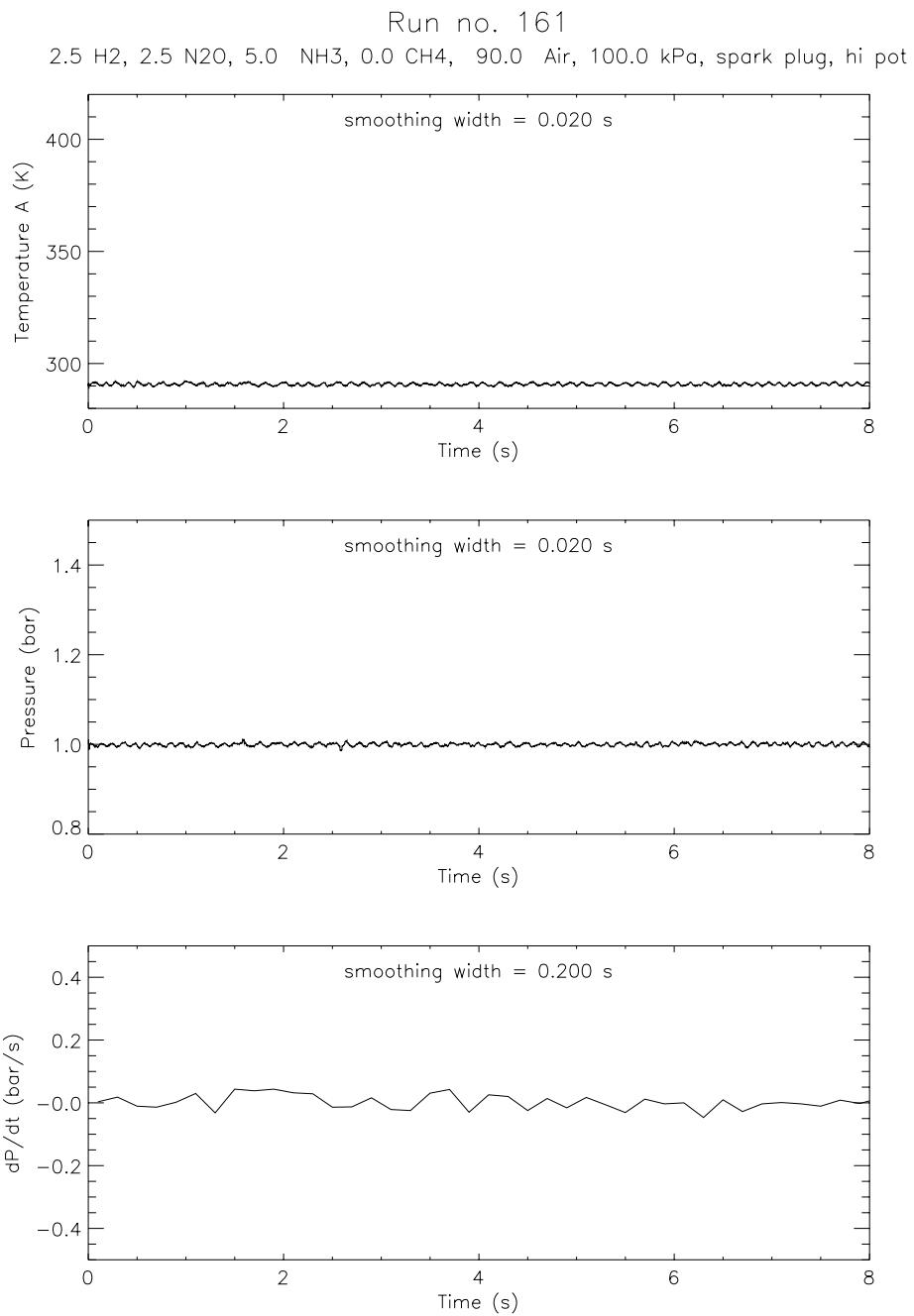


Run no. 160

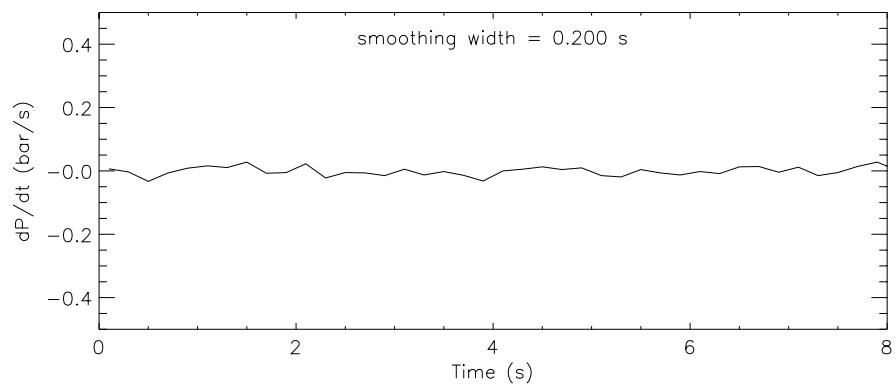
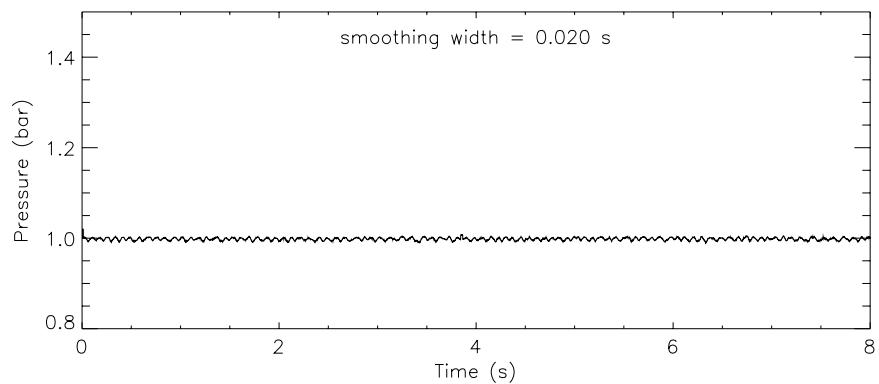
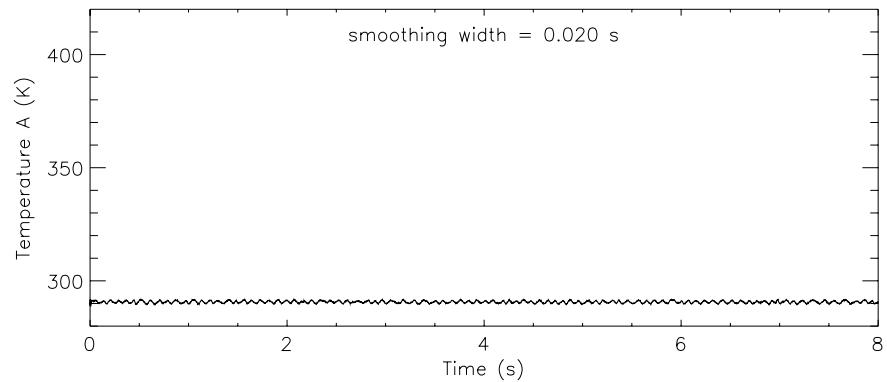
3.0 H₂, 3.0 N₂O, 6.0 NH₃, 0.0 CH₄, 88.0 Air, 100.0 kPa, spark plug, hi pot, fan off

Run no. 160a

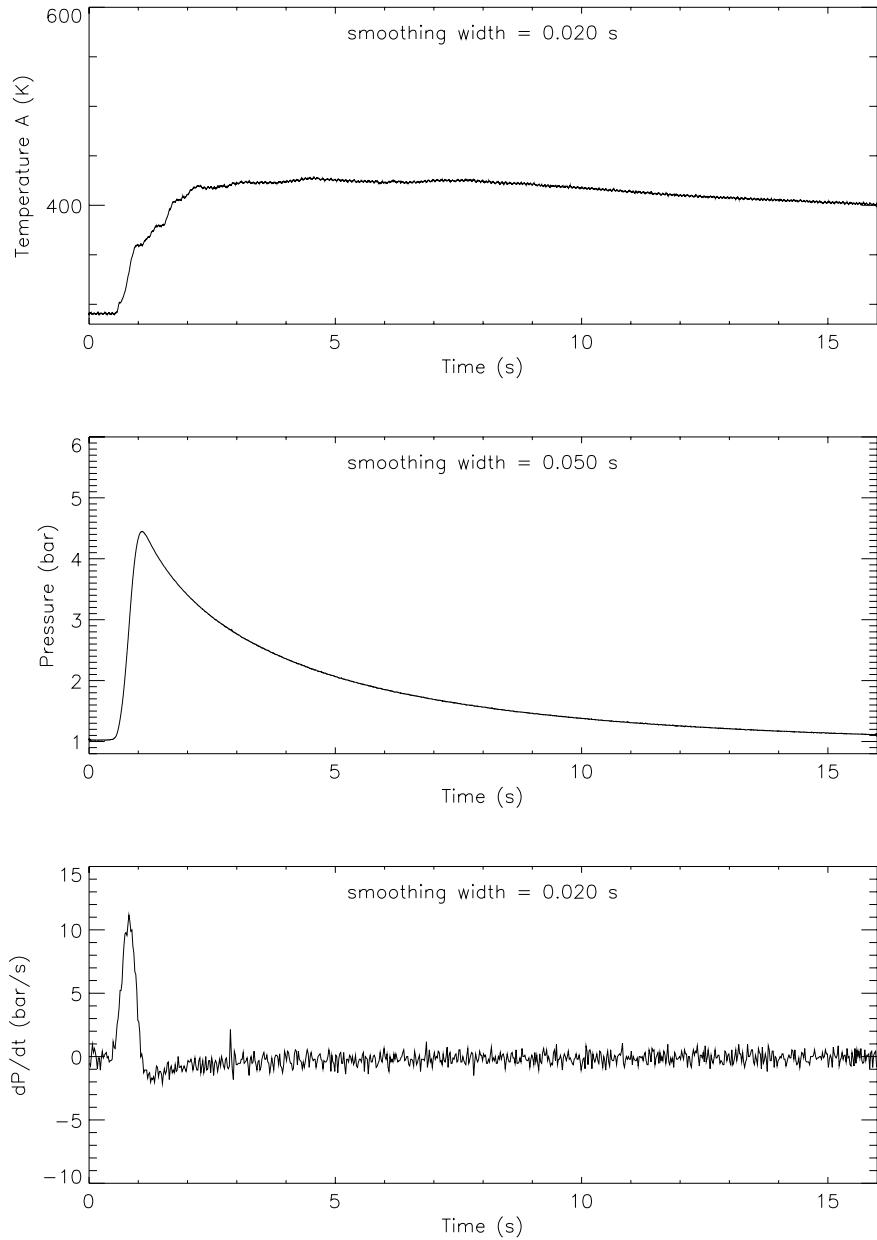
3.0 H₂, 3.0 N₂O, 6.0 NH₃, 0.0 CH₄, 88.0 Air, 100.0 kPa, spark plug, hi pot, fan ON



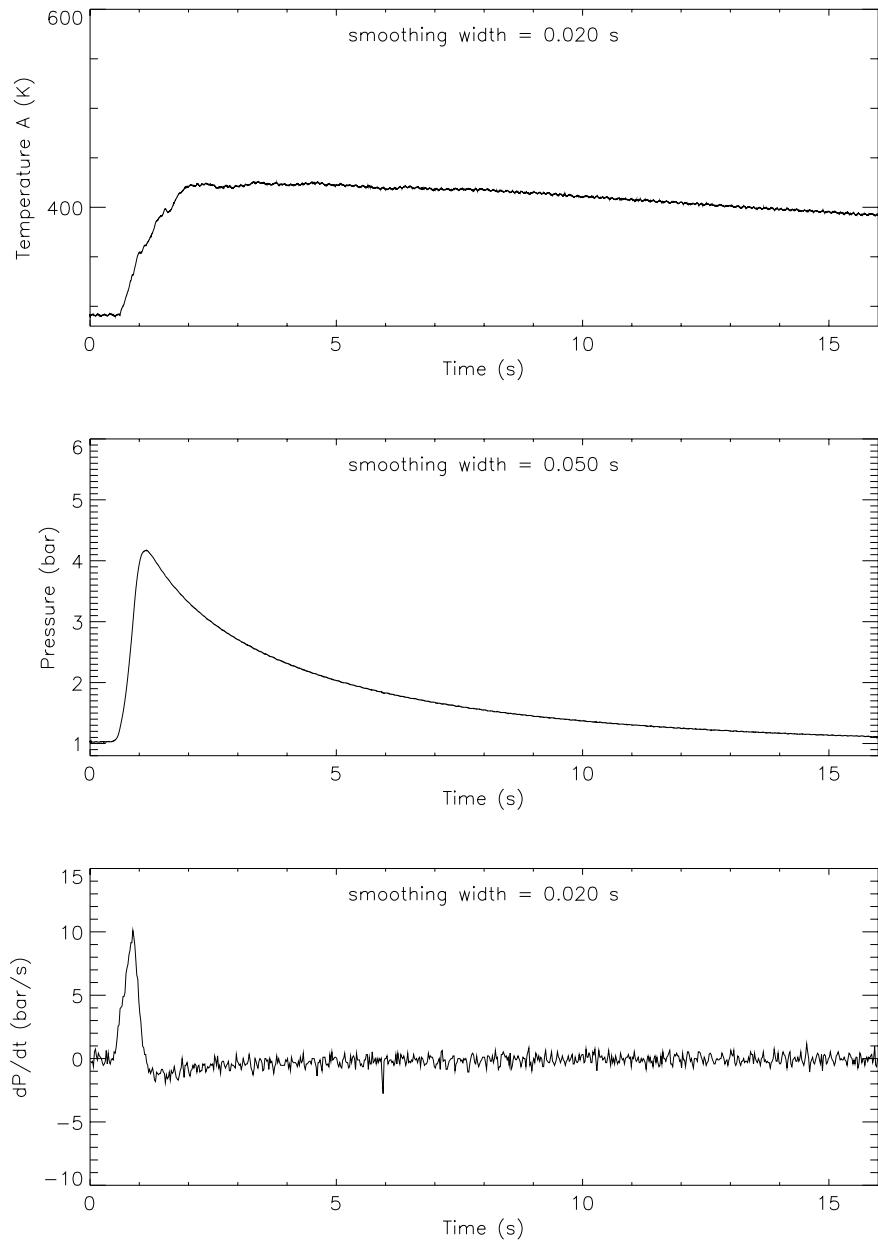
Run no. 161a

2.5 H₂, 2.5 N₂O, 5.0 NH₃, 0.0 CH₄, 90.0 Air, 100.0 kPa, spark plug, hi pot, fan on

Run no. 161b
5.0 H₂, 2.5 N₂O, 5.0 NH₃, 0.0 CH₄, 90.0 Air, 102.5 kPa, spark plug, hi pot, fan on

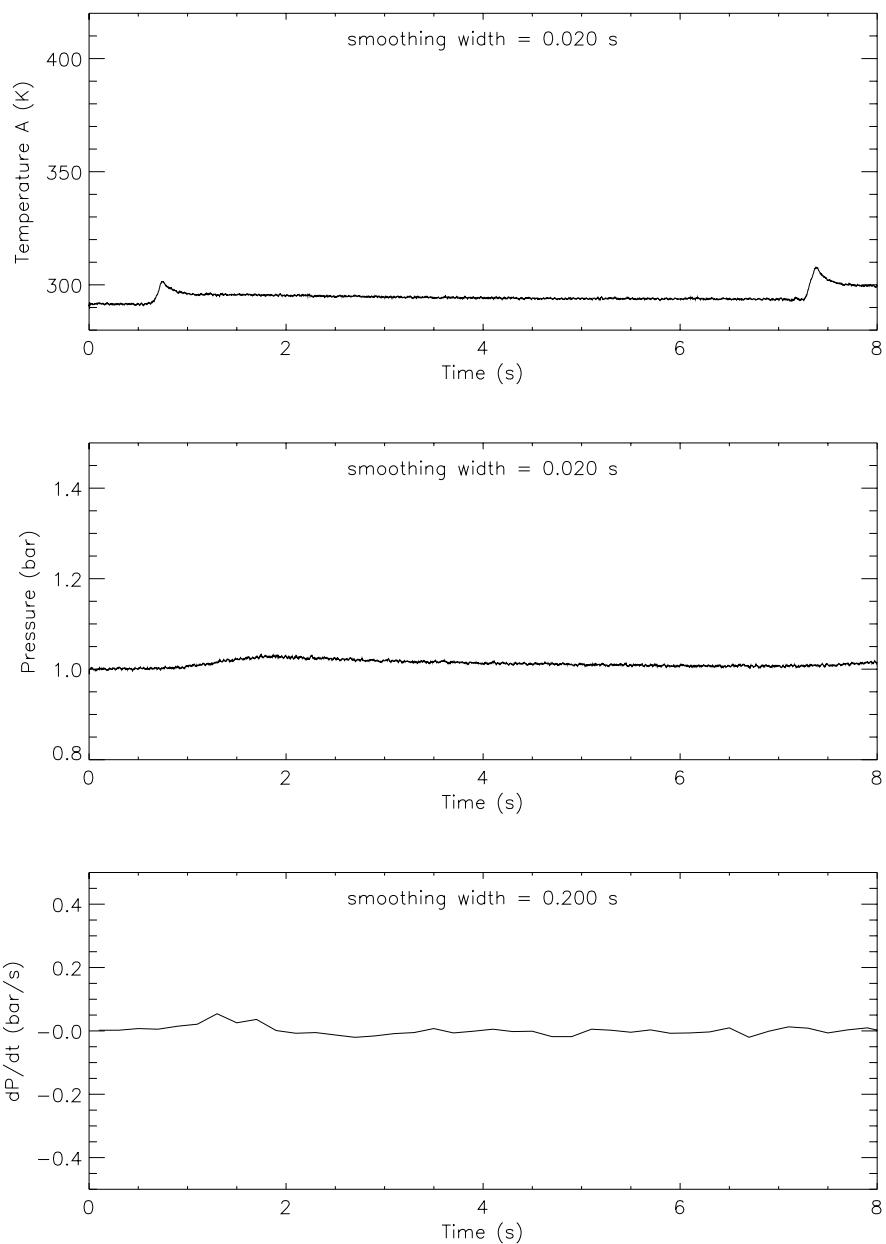


Run no. 162a
5.25 H₂, 2.25 N₂O, 4.5 NH₃, 0.0 CH₄, 91.0 Air, 102.95 kPa, spark plug, hi pot, fan on



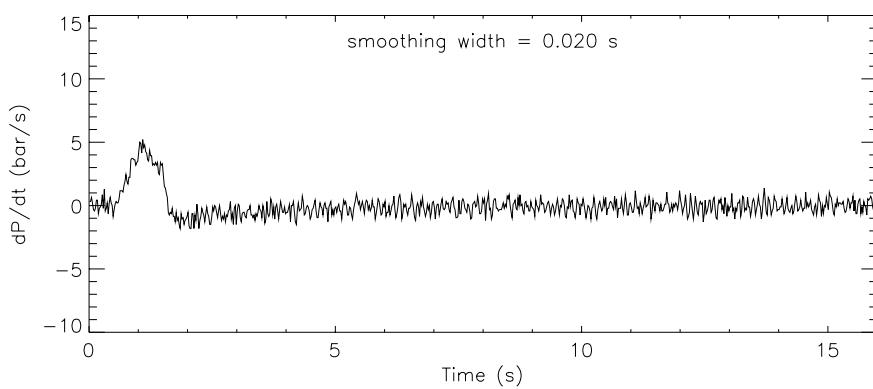
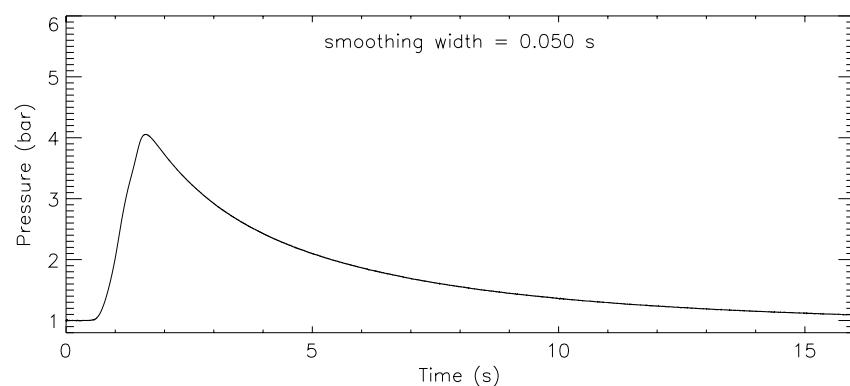
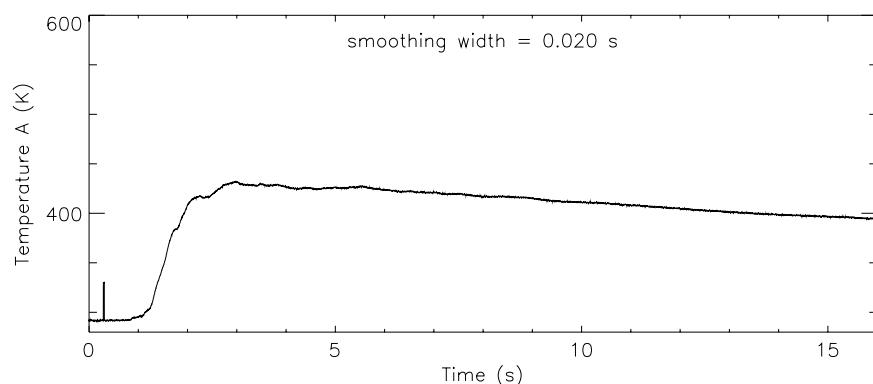
Run no. 163

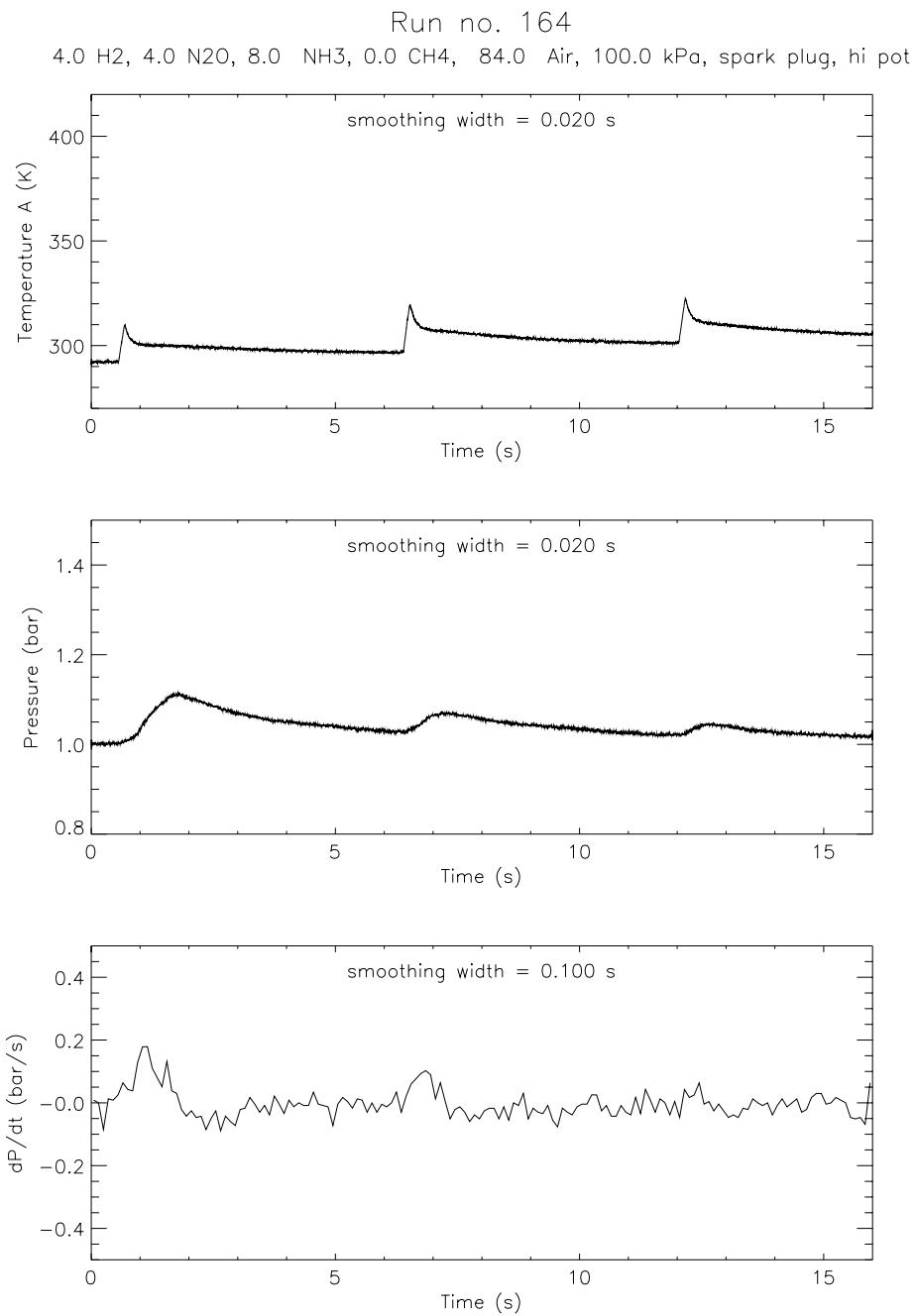
3.35 H₂, 3.25 N₂O, 6.5 NH₃, 0.0 CH₄, 87.0 Air, 100.10 kPa, spark plug, hi pot



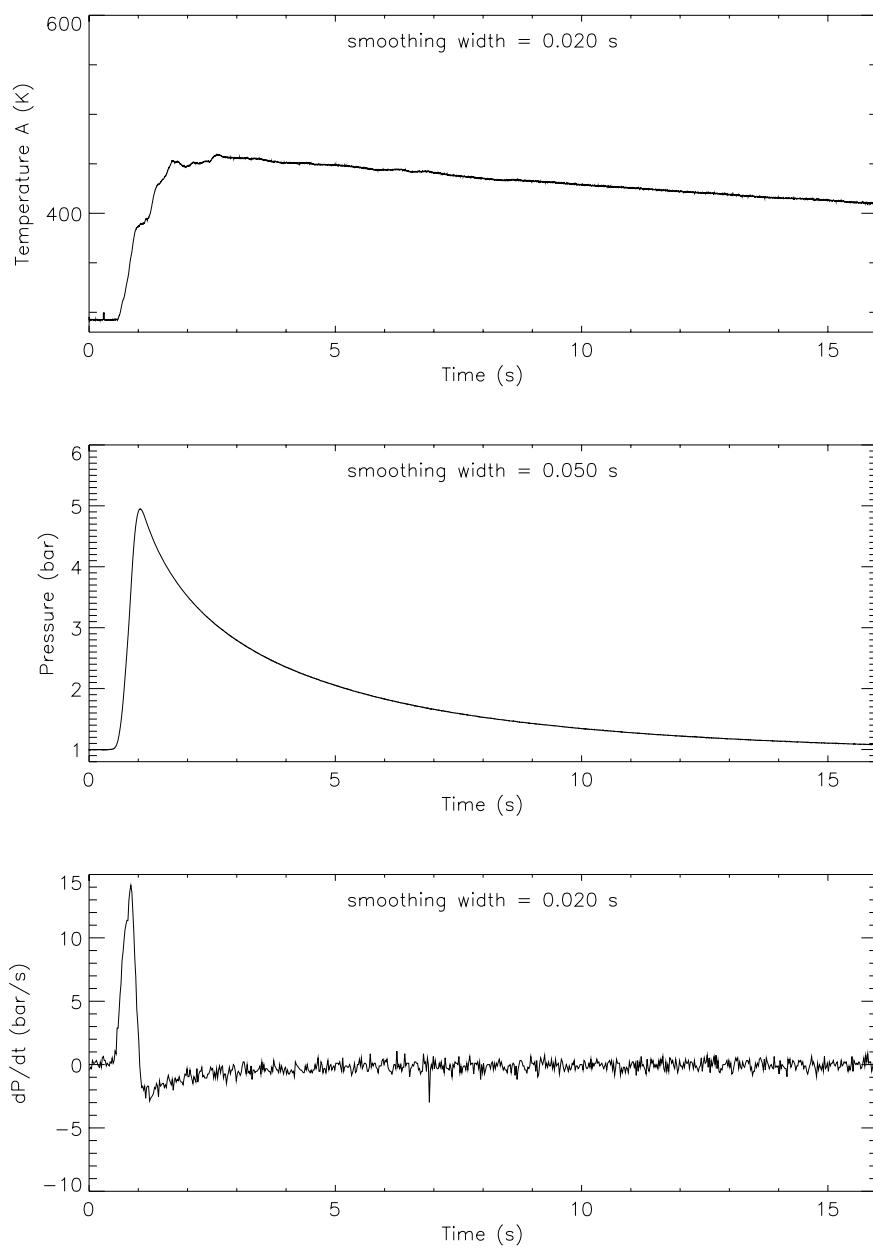
Run no. 163a

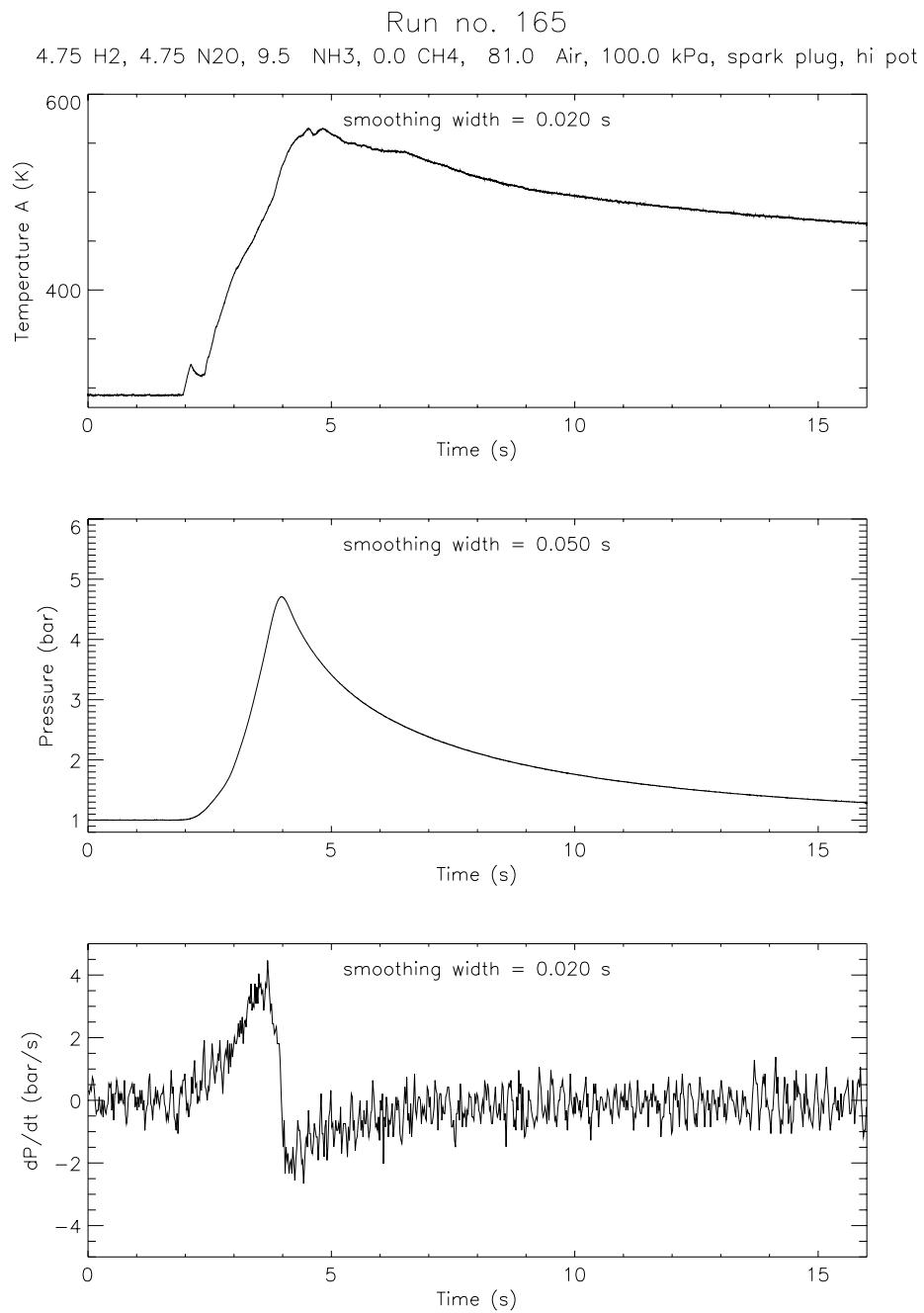
3.35 H₂, 3.25 N₂O, 6.5 NH₃, 0.0 CH₄, 87.0 Air, 99.42 kPa, spark plug, hi pot, fan on

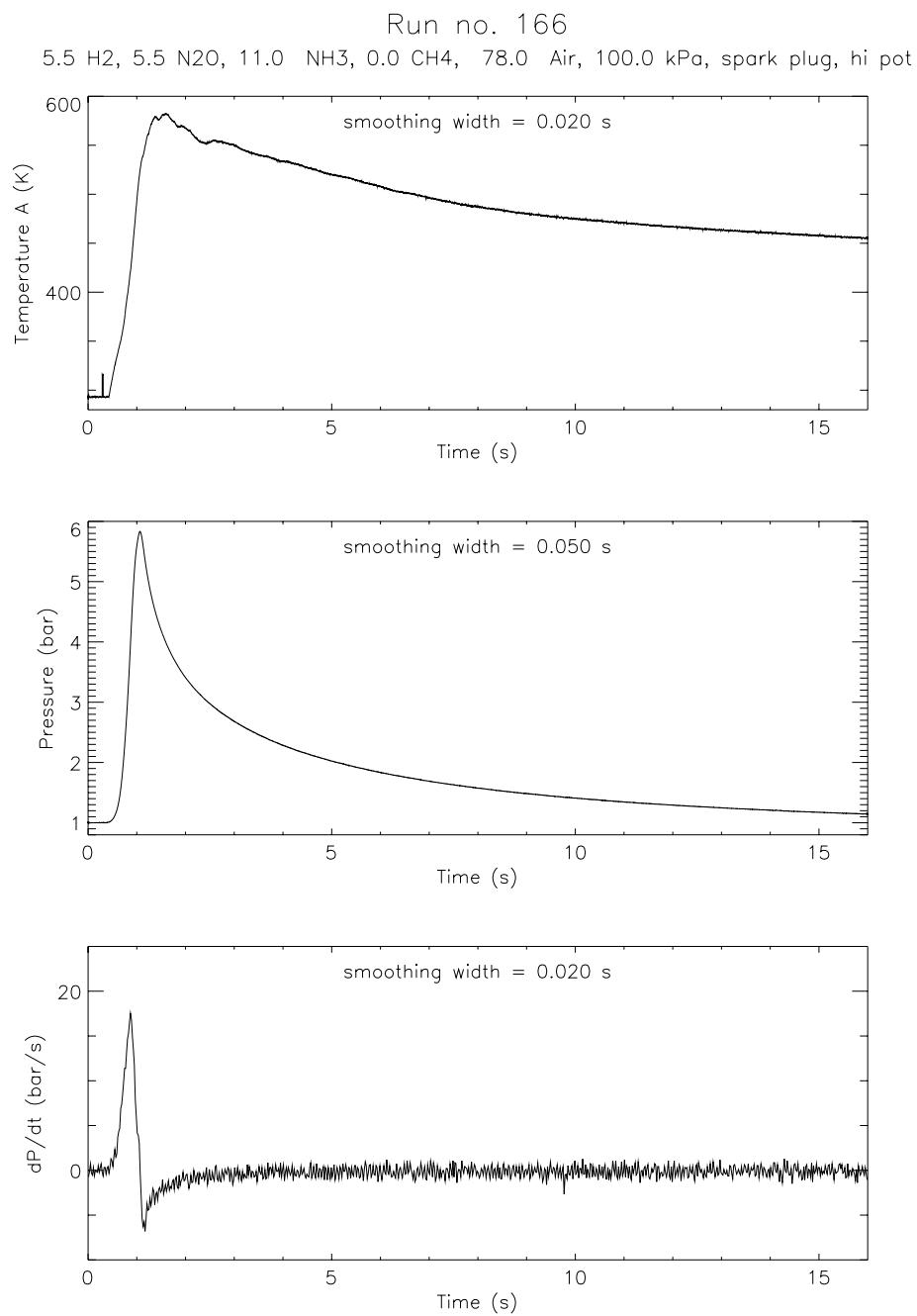




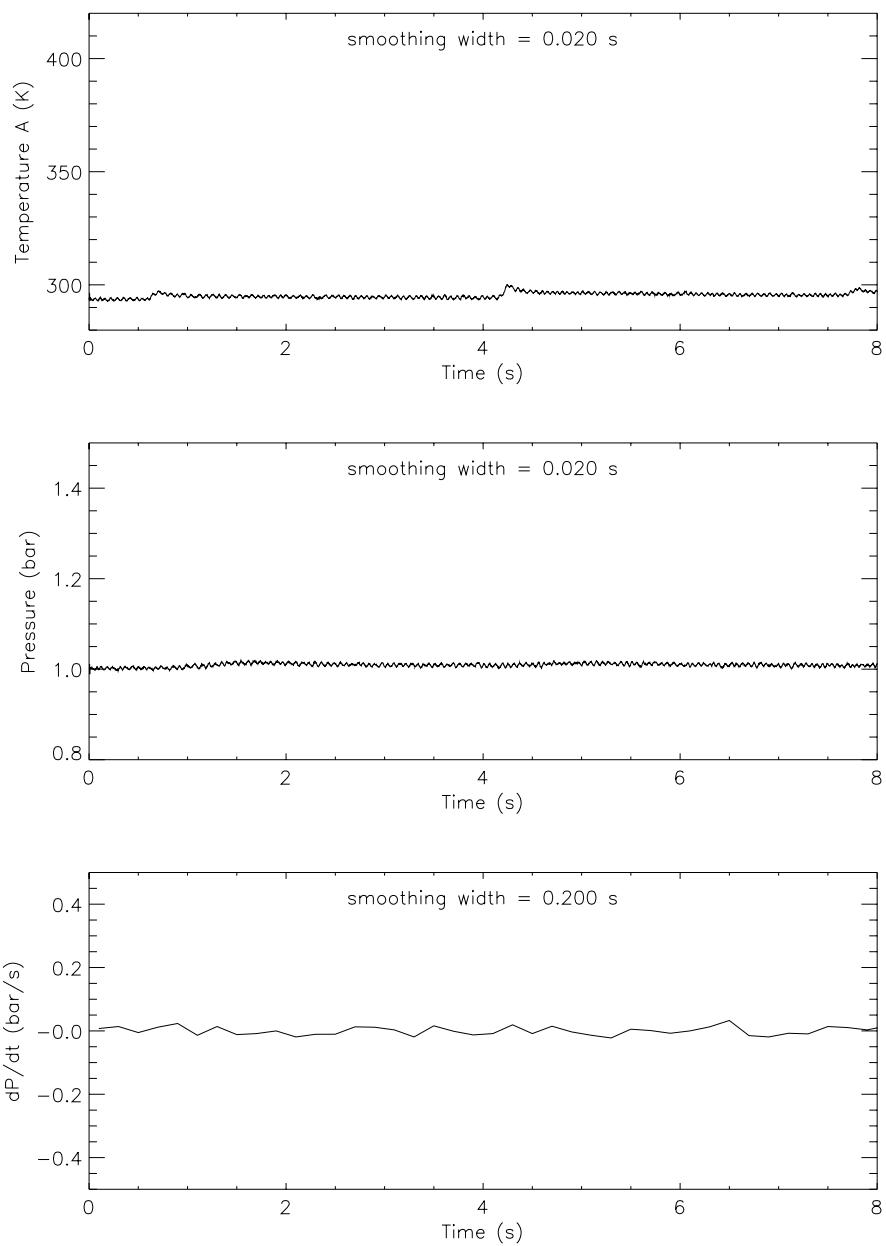
Run no. 164a

4.0 H₂, 4.0 N₂O, 8.0 NH₃, 0.0 CH₄, 84.0 Air, 100.0 kPa, spark plug, hi pot, fan on



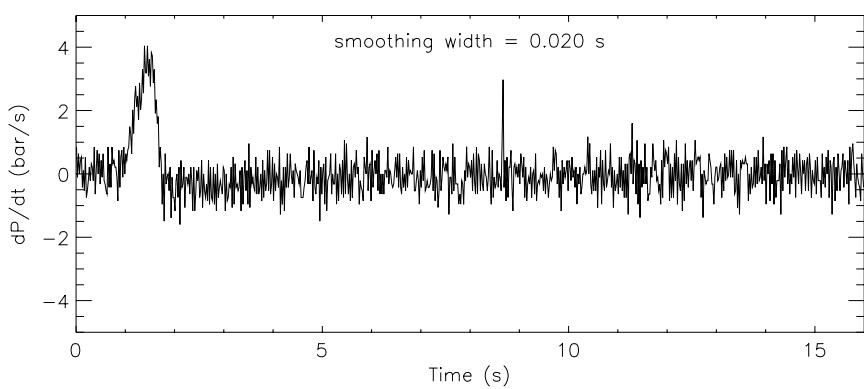
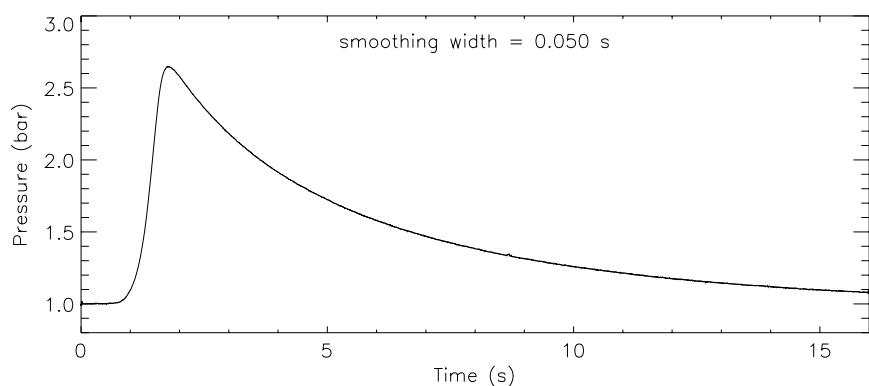
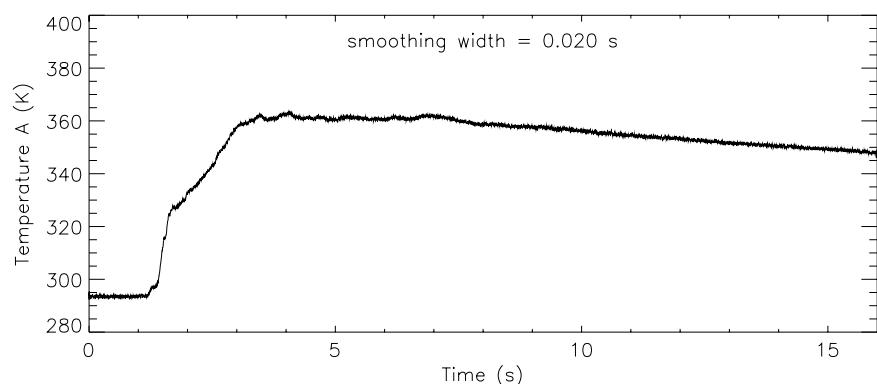


Run no. 167

2.5 H₂, 5.0 N₂O, 7.5 NH₃, 0.0 CH₄, 85.0 Air, 100.0 kPa, spark plug, hi pot

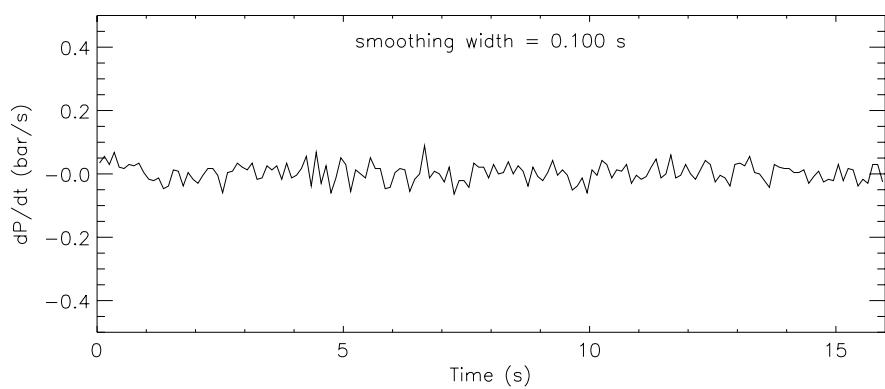
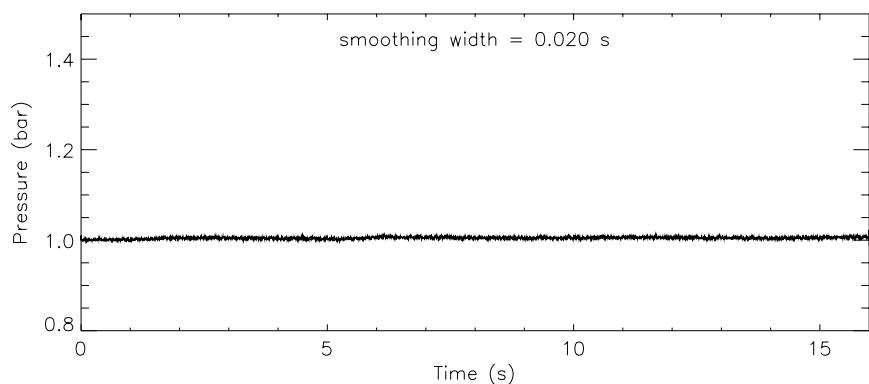
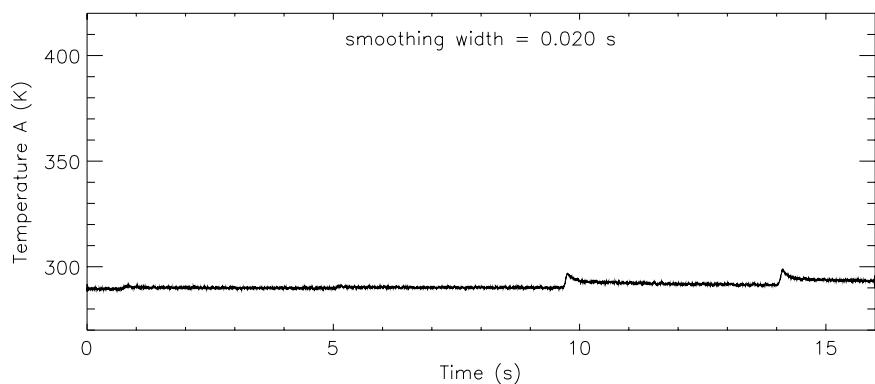
Run no. 167a

2.5 H₂, 5.0 N₂O, 7.5 NH₃, 0.0 CH₄, 85.0 Air, 99.97 kPa, spark plug, hi pot, fan on



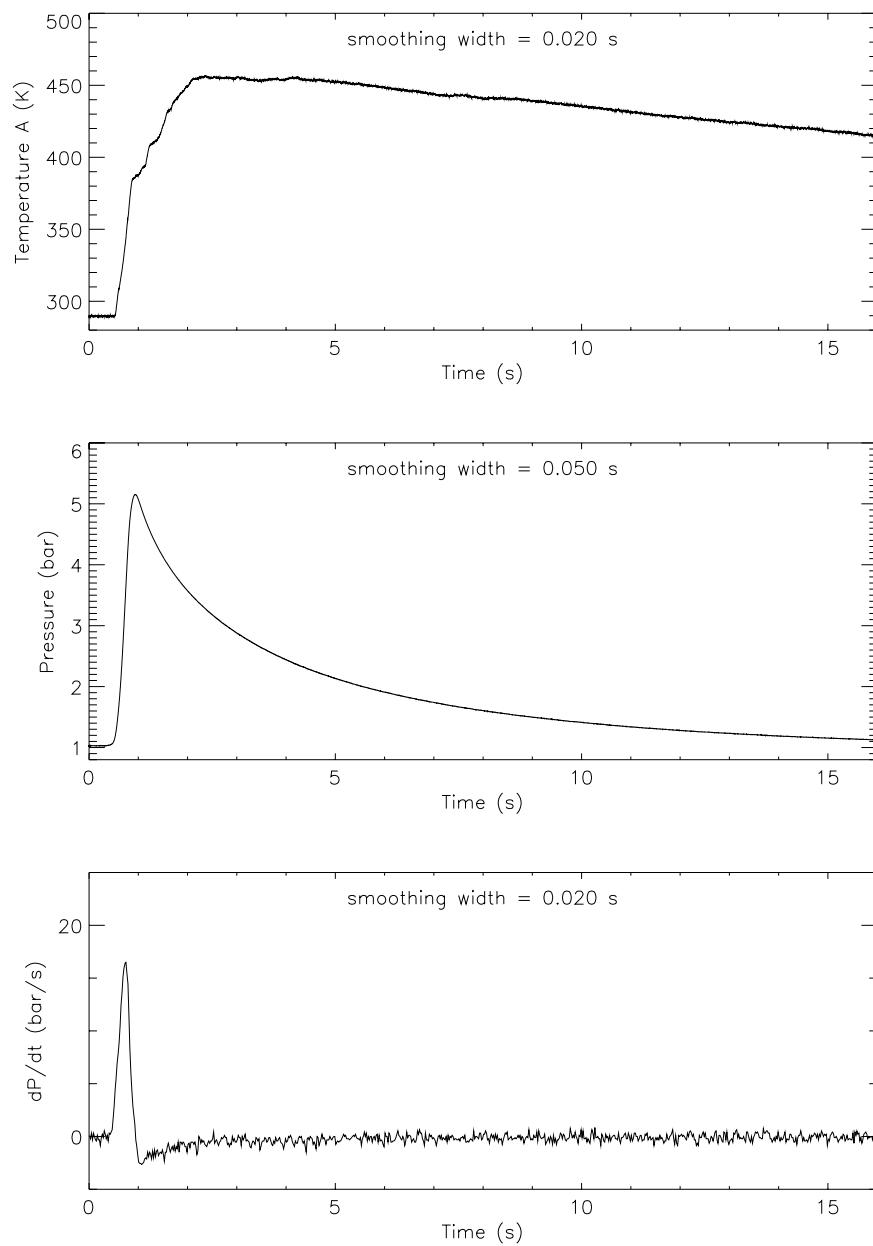
Run no. 168

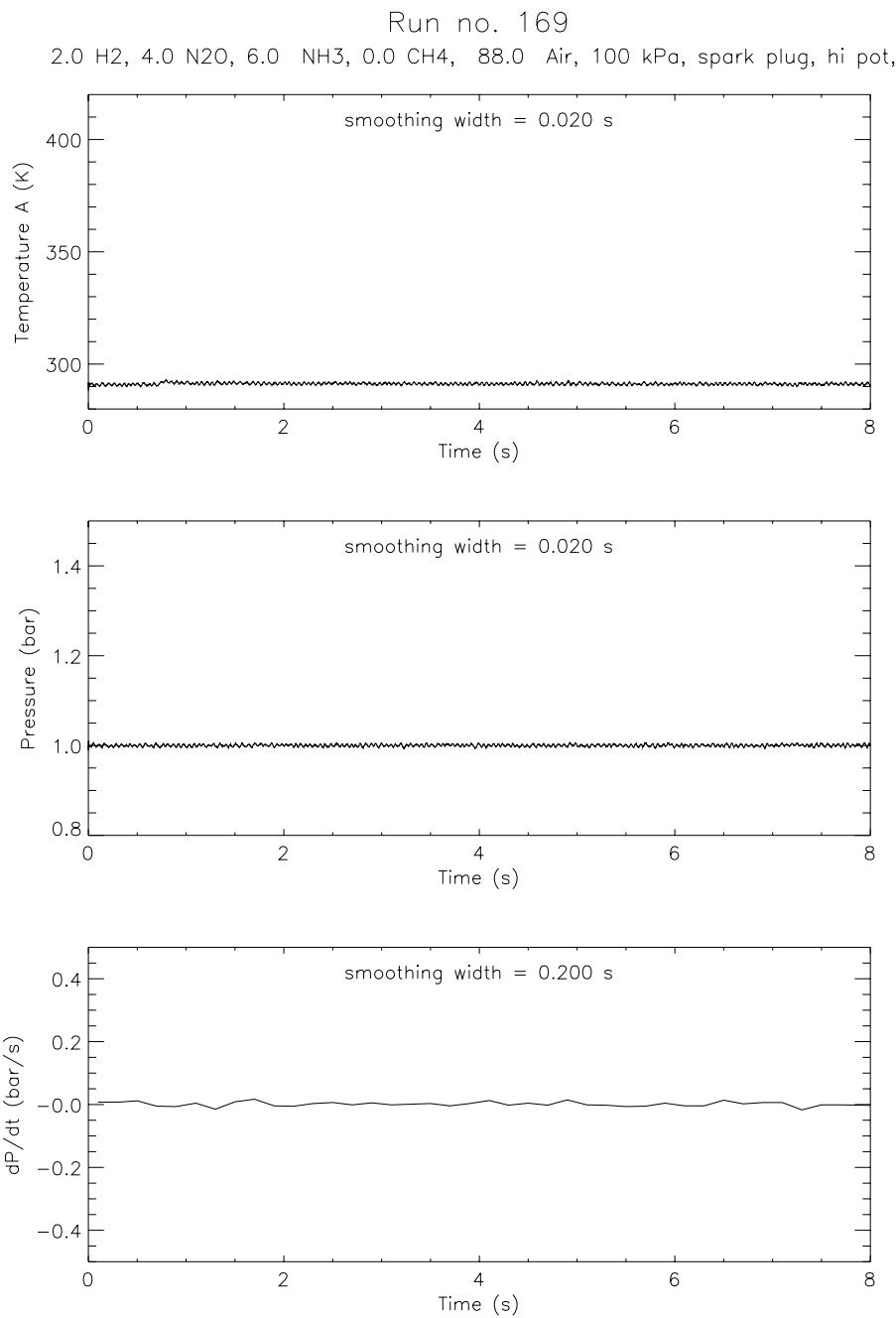
2.17 H₂, 4.33 N₂O, 6.5 NH₃, 0.0 CH₄, 87.0 Air, 100.16 kPa, spark plug, hi pot,

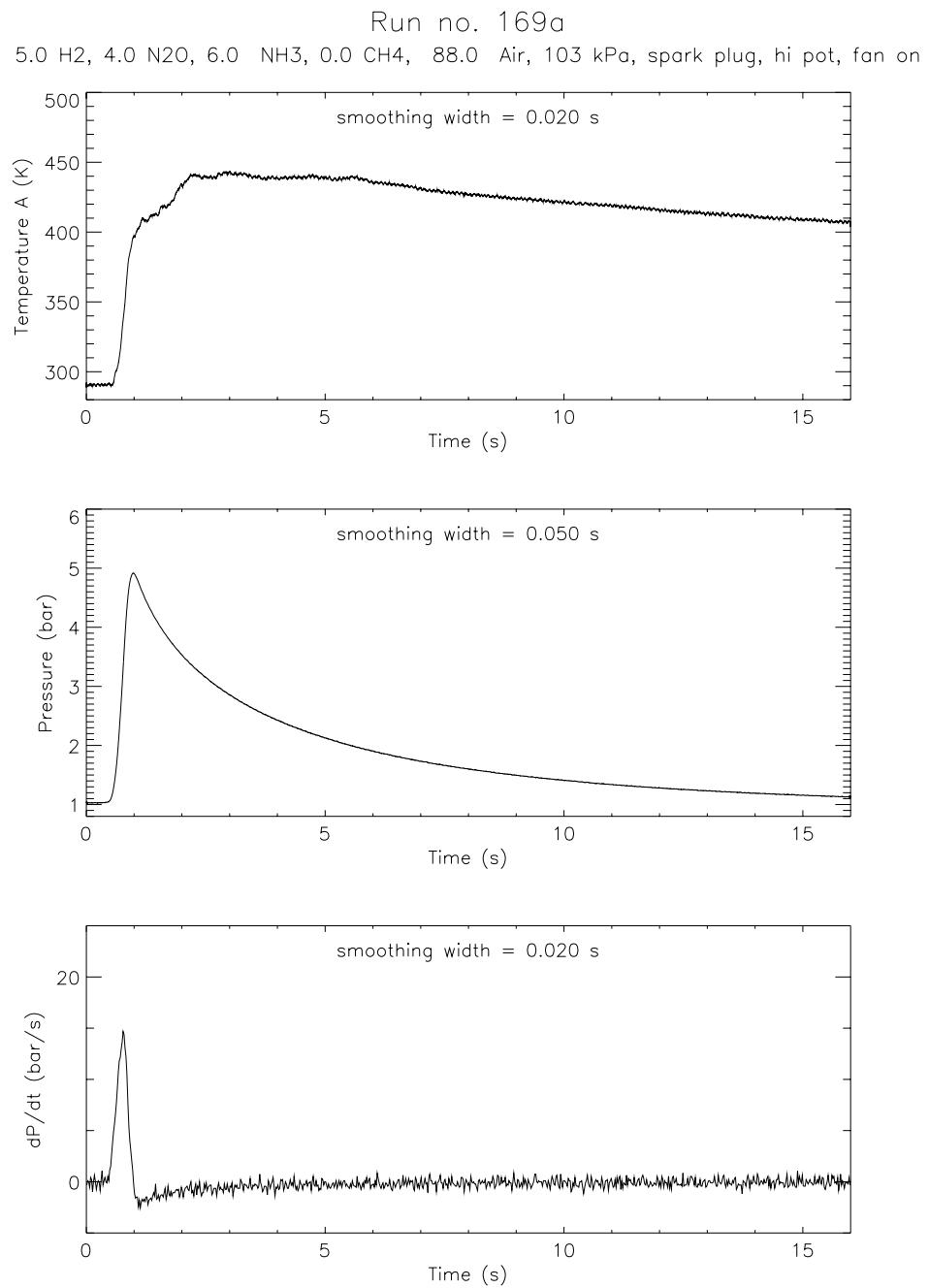


Run no. 168a

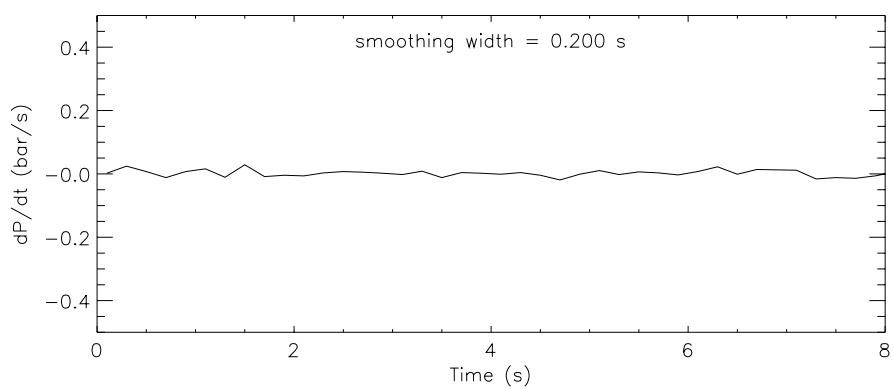
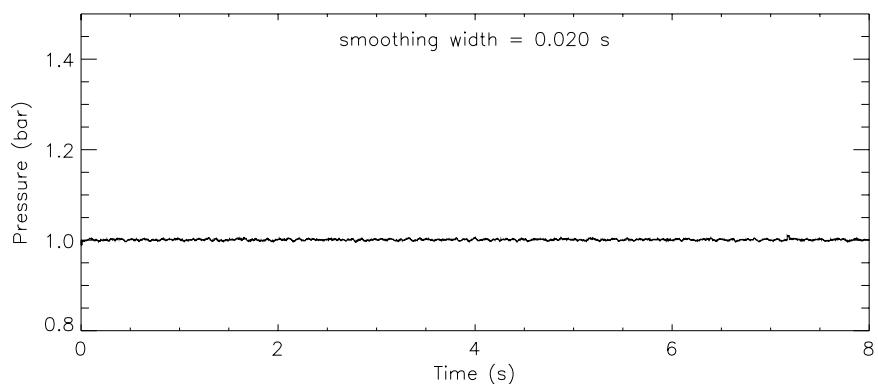
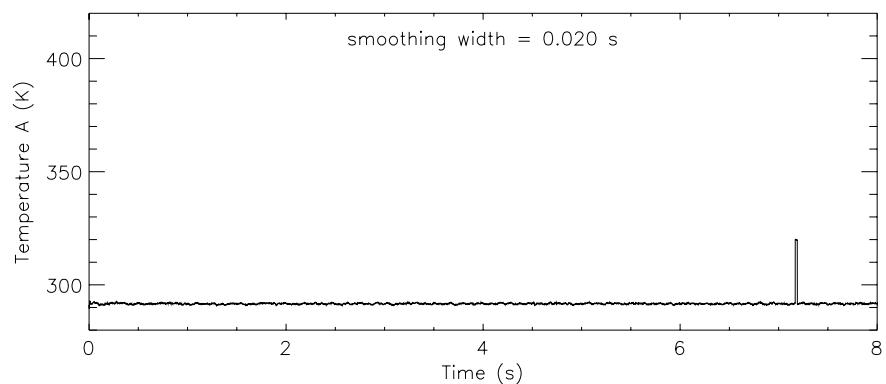
5.17 H₂, 4.33 N₂O, 6.5 NH₃, 0.0 CH₄, 87.0 Air, 100.13 kPa, spark plug, hi pot, fan on



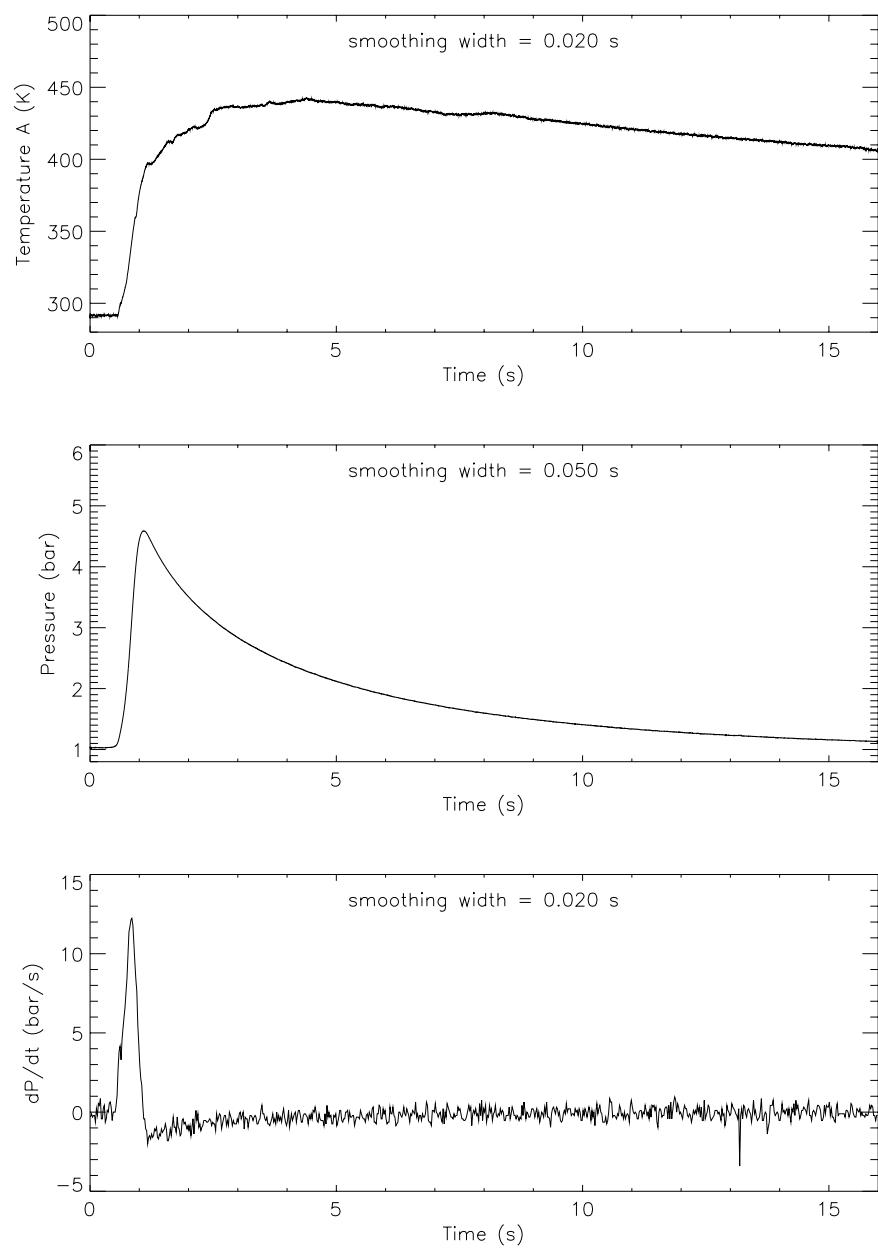




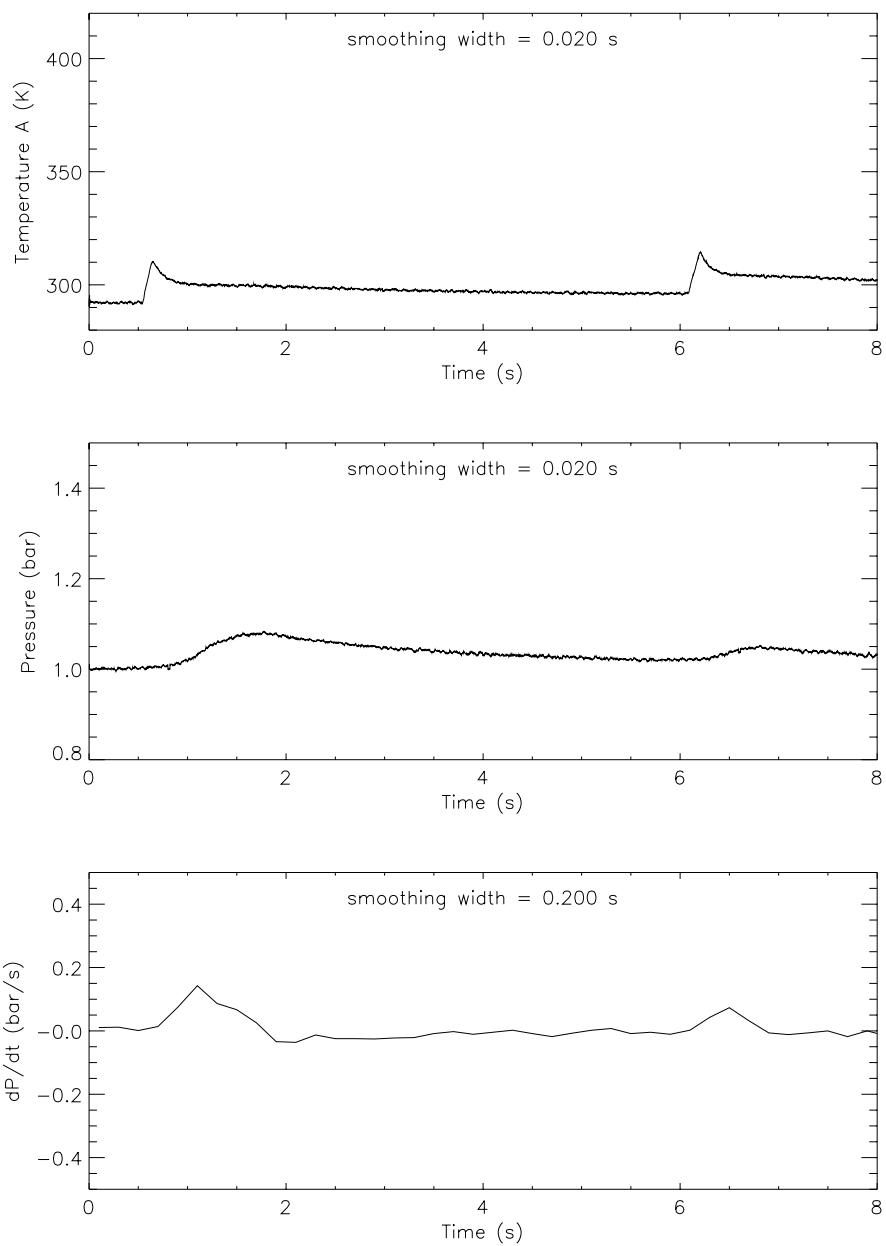
Run no. 170

1.83 H₂, 3.67 N₂O, 5.5 NH₃, 0.0 CH₄, 89.0 Air, 100 kPa, spark plug, hi pot

Run no. 170a

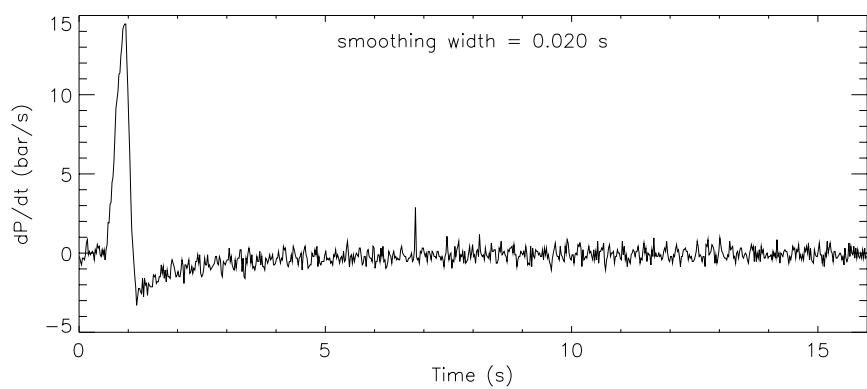
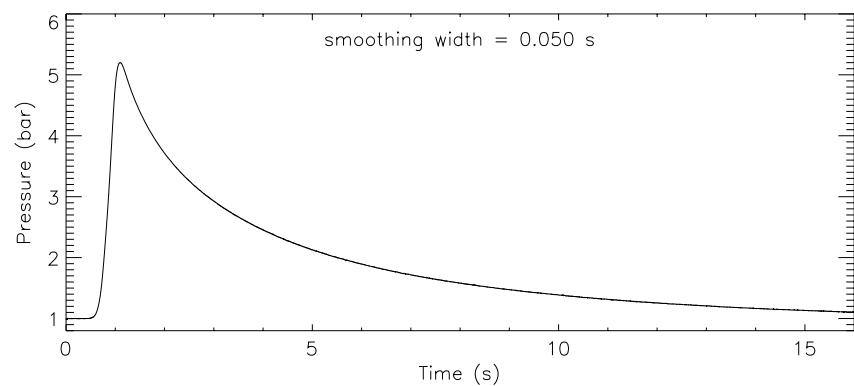
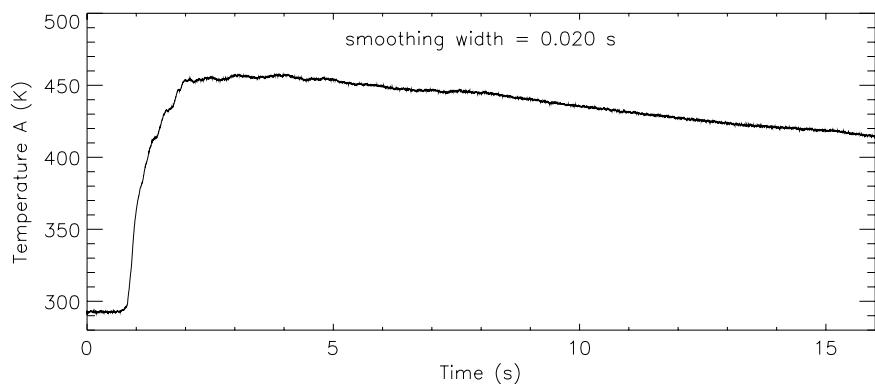
4.83 H₂, 3.67 N₂O, 5.5 NH₃, 0.0 CH₄, 89.0 Air, 102.92 kPa, spark plug, hi pot, fan on

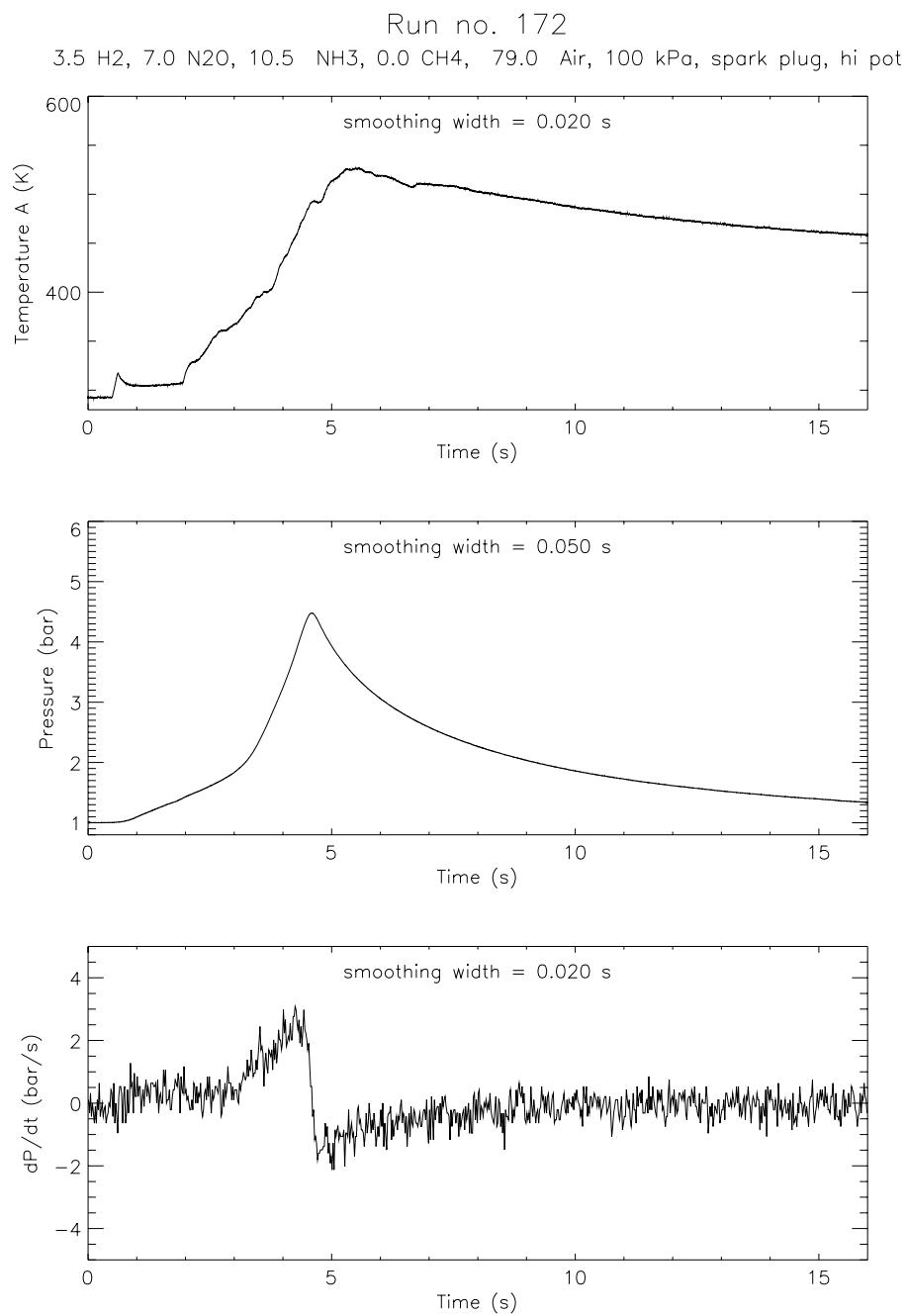
Run no. 171

3.0 H₂, 6.0 N₂O, 9.0 NH₃, 0.0 CH₄, 82.0 Air, 100 kPa, spark plug, hi pot

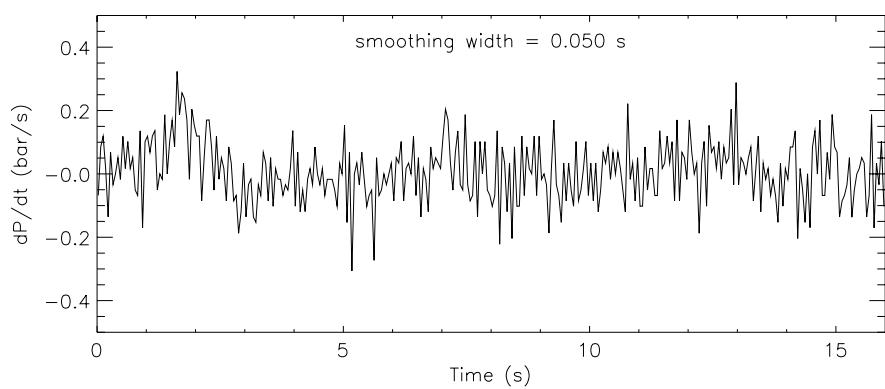
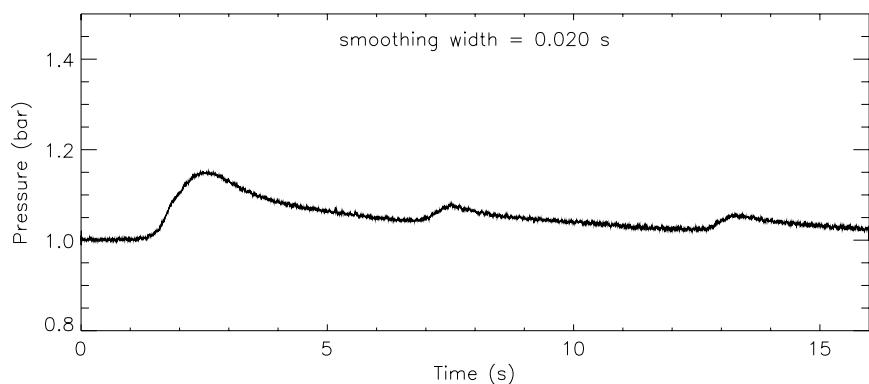
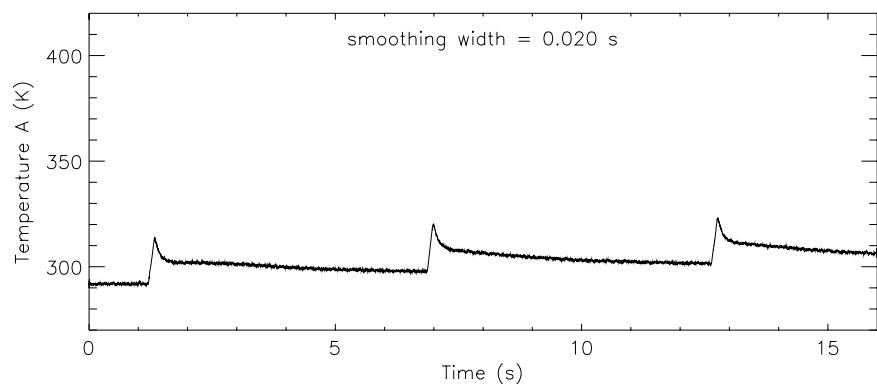
Run no. 171a

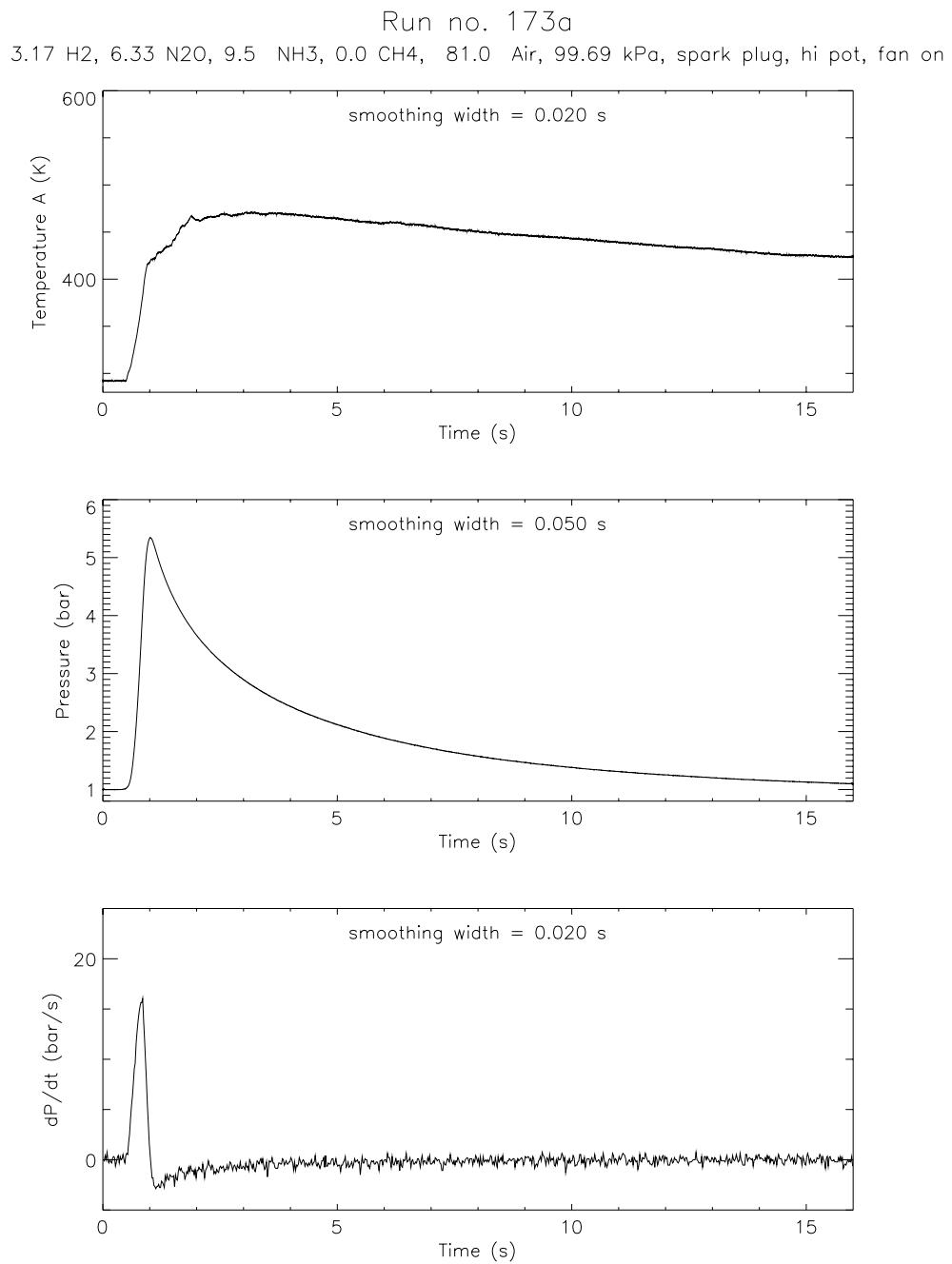
3.0 H₂, 6.0 N₂O, 9.0 NH₃, 0.0 CH₄, 82.0 Air, 100 kPa, spark plug, hi pot, fan on

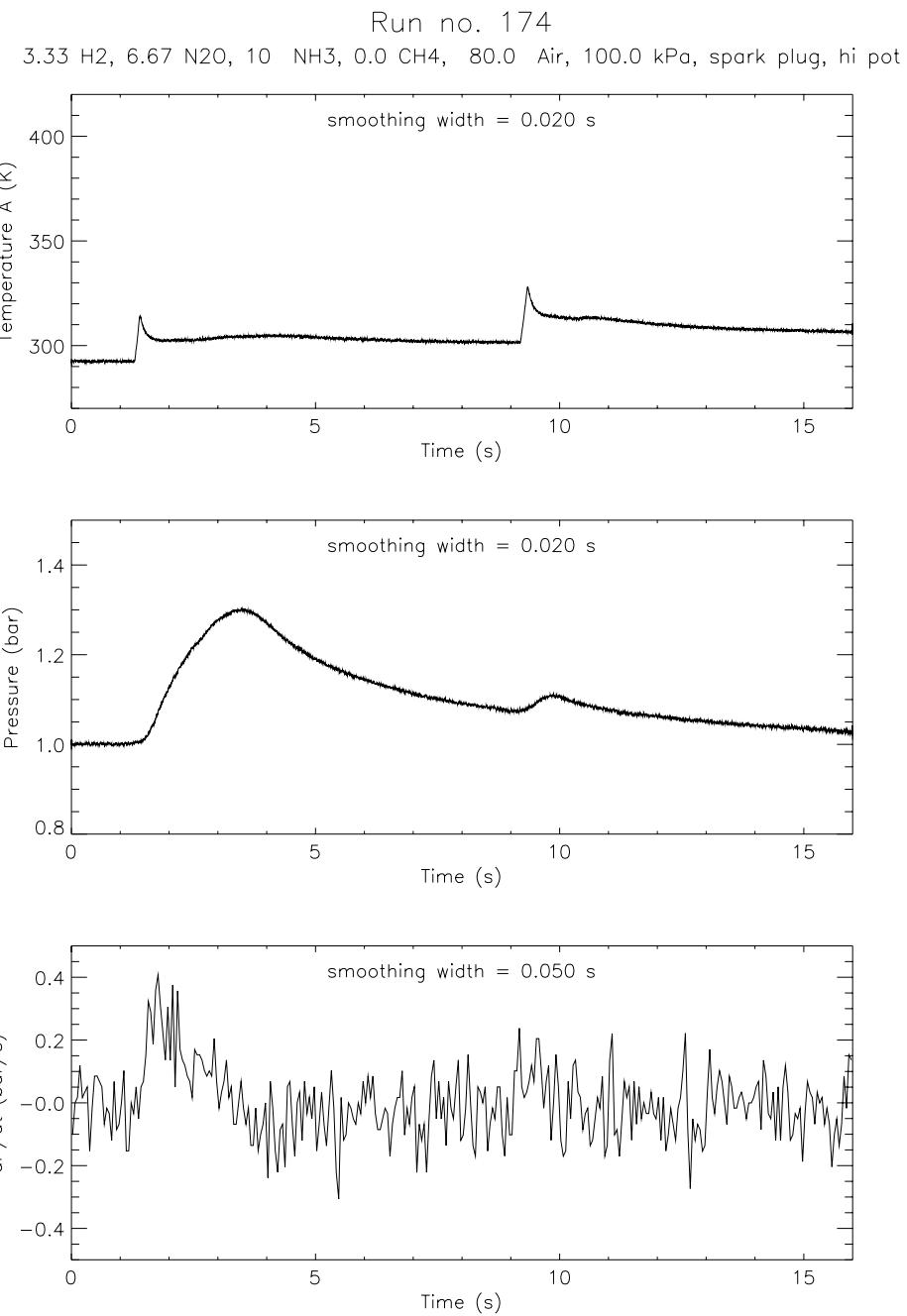


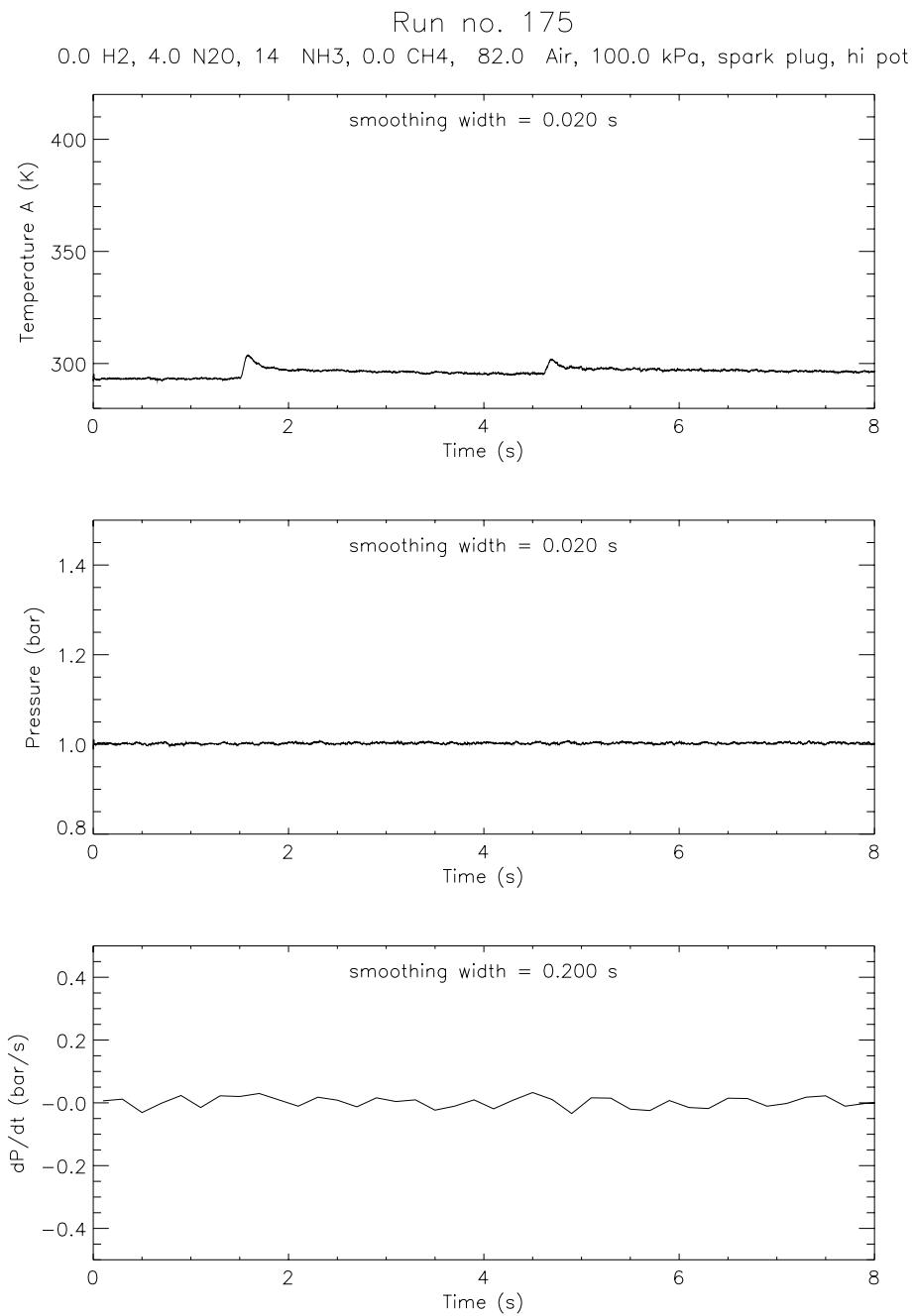


Run no. 173

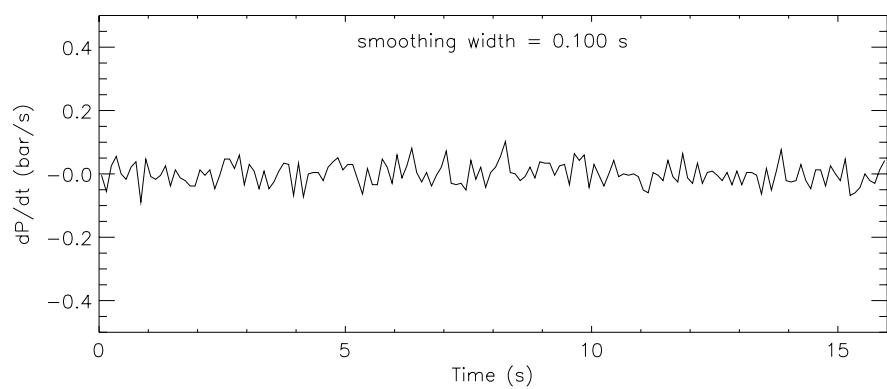
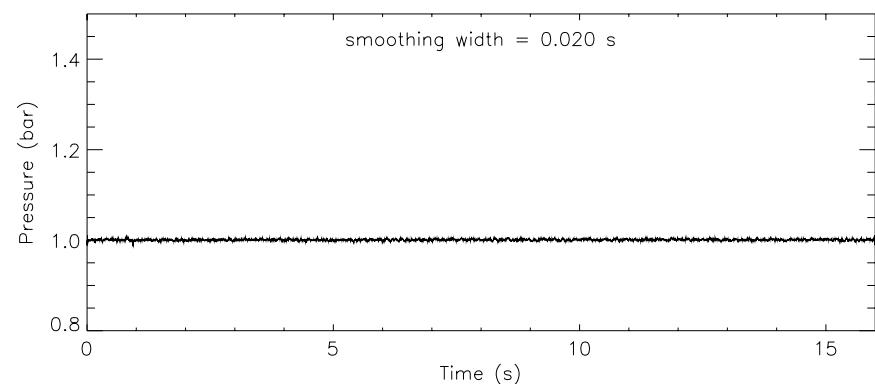
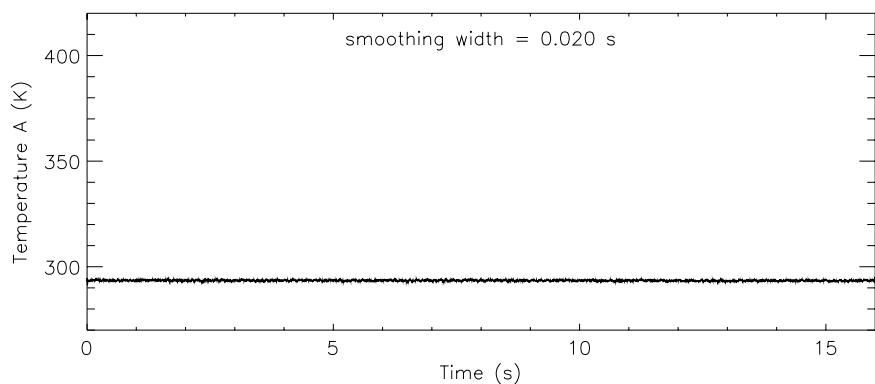
3.17 H₂, 6.33 N₂O, 9.5 NH₃, 0.0 CH₄, 81.0 Air, 100 kPa, spark plug, hi pot





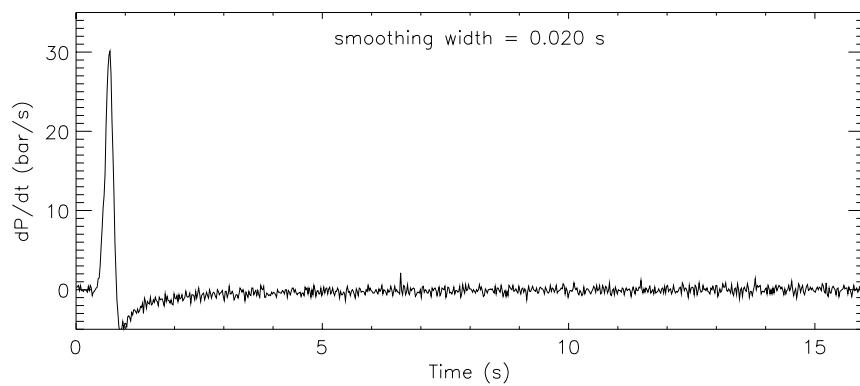
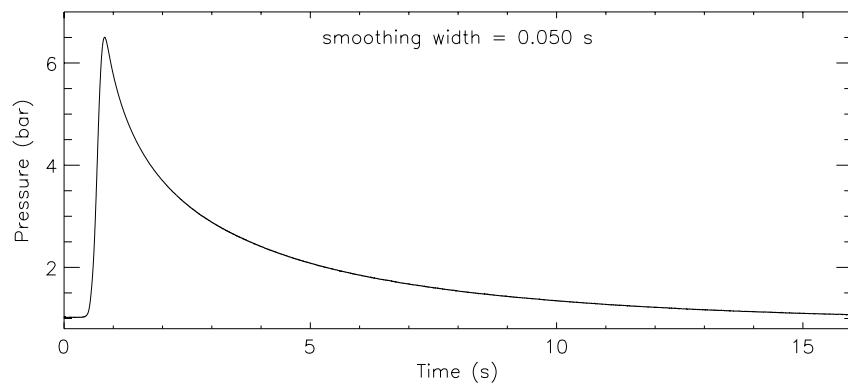
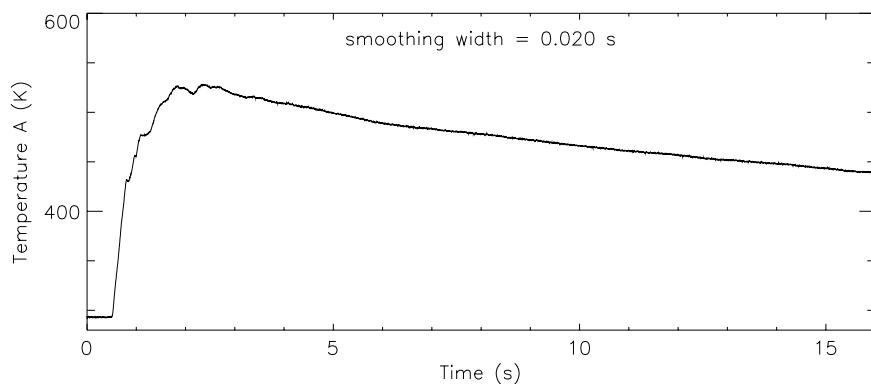


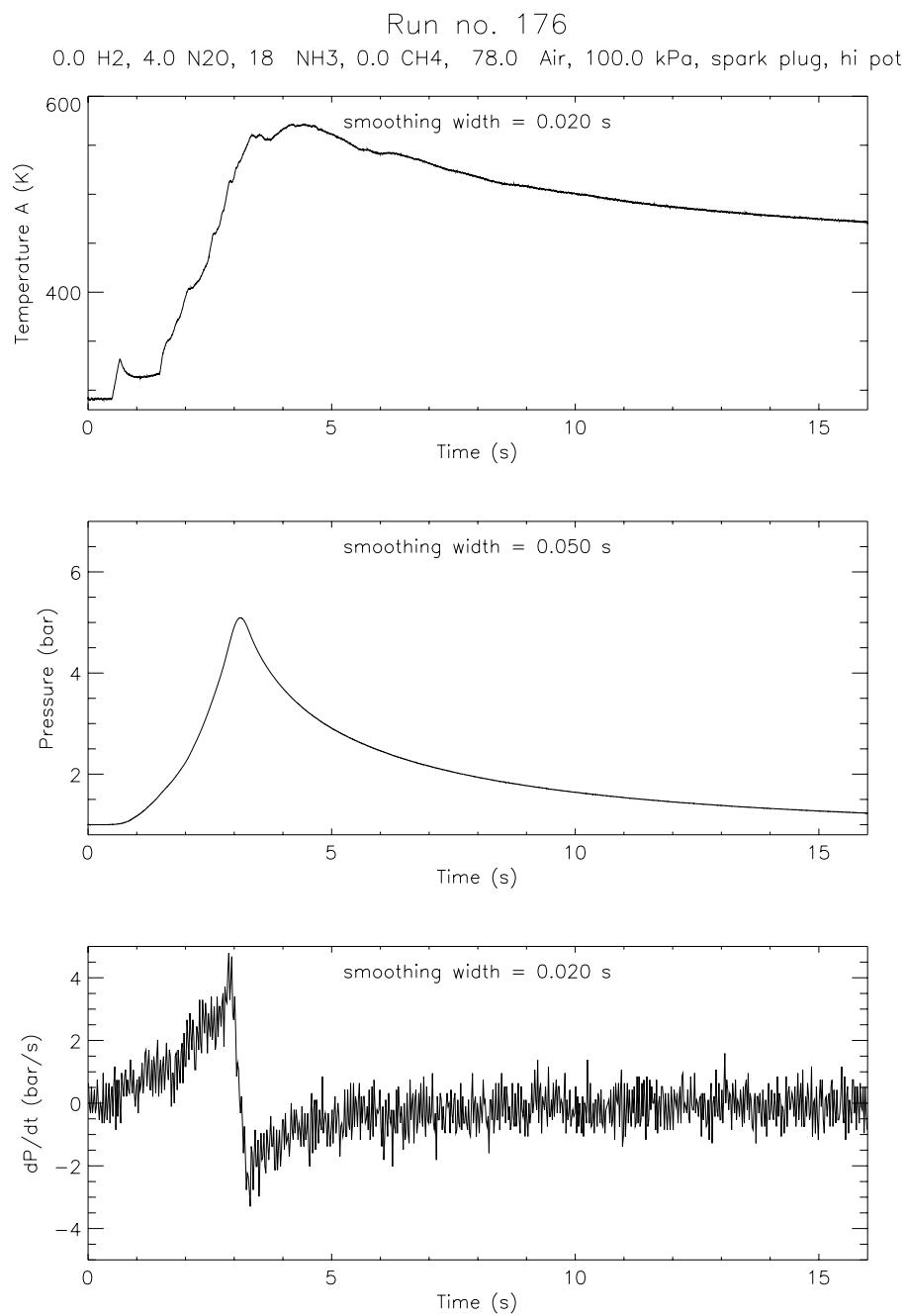
Run no. 175a

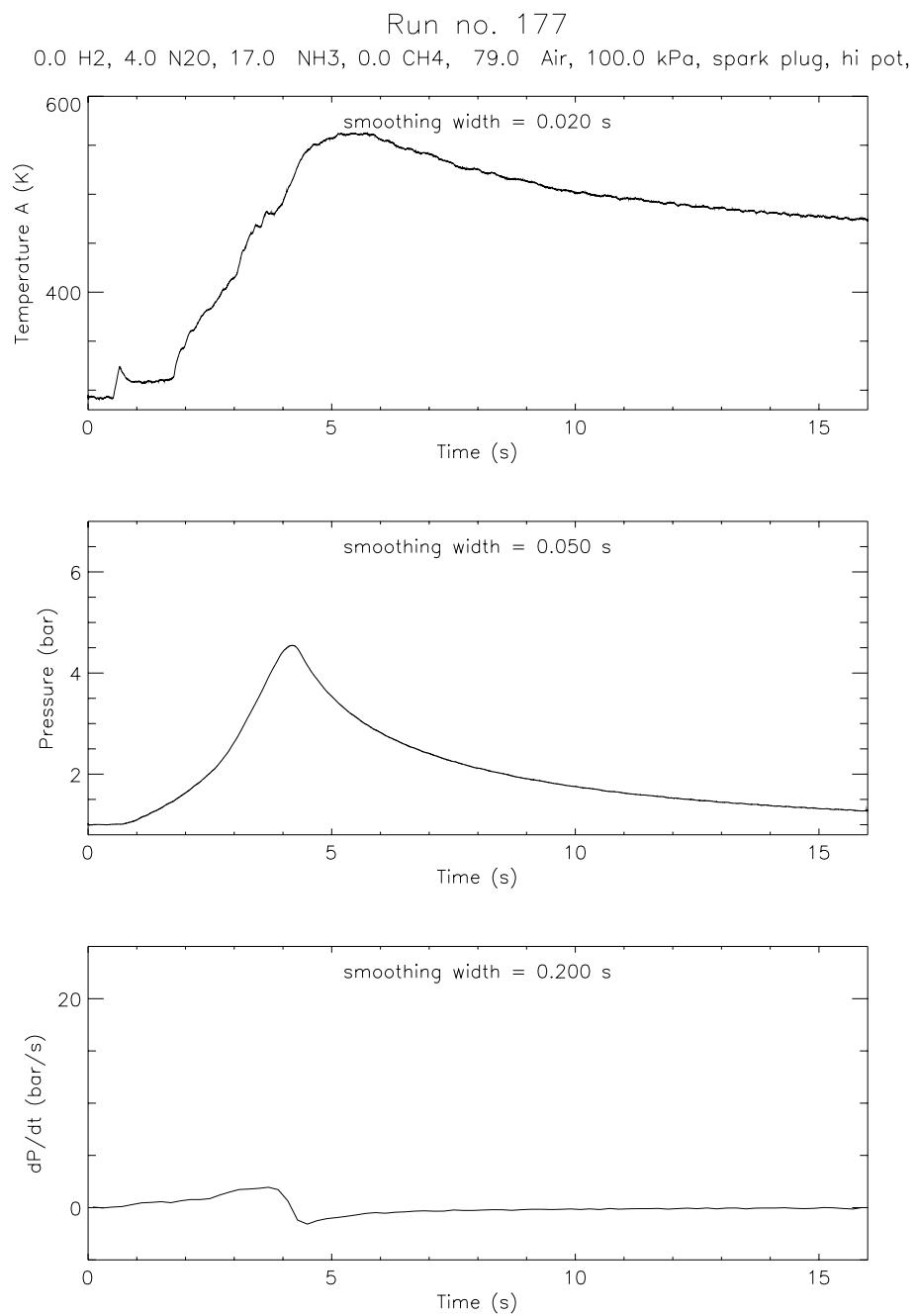
0.0 H₂, 4.0 N₂O, 14 NH₃, 0.0 CH₄, 82.0 Air, 99.97 kPa, spark plug, hi pot, fan on

Run no. 175b

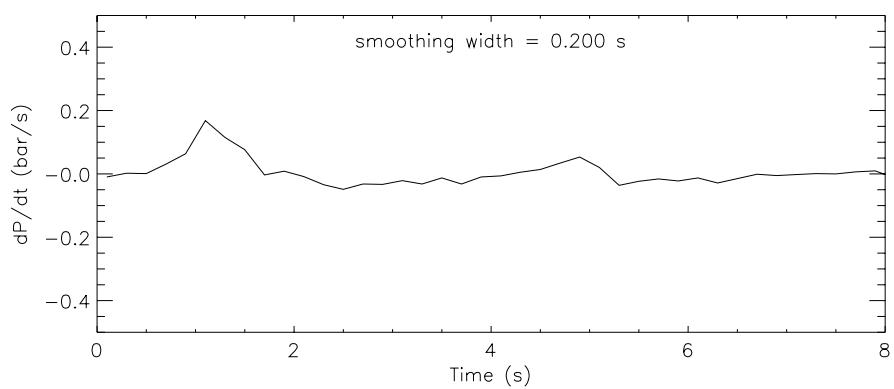
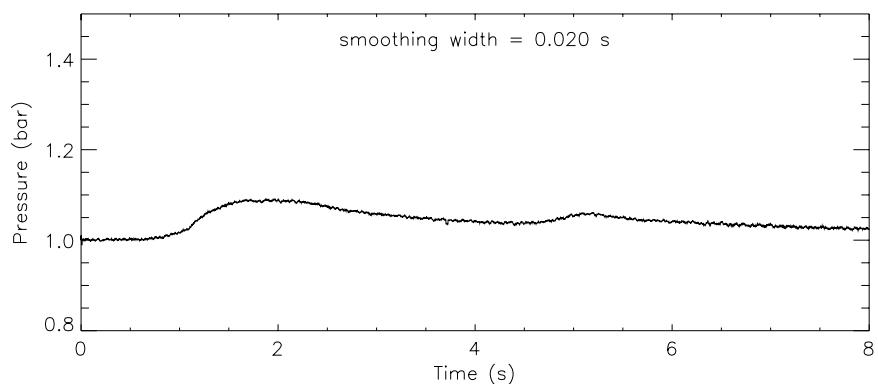
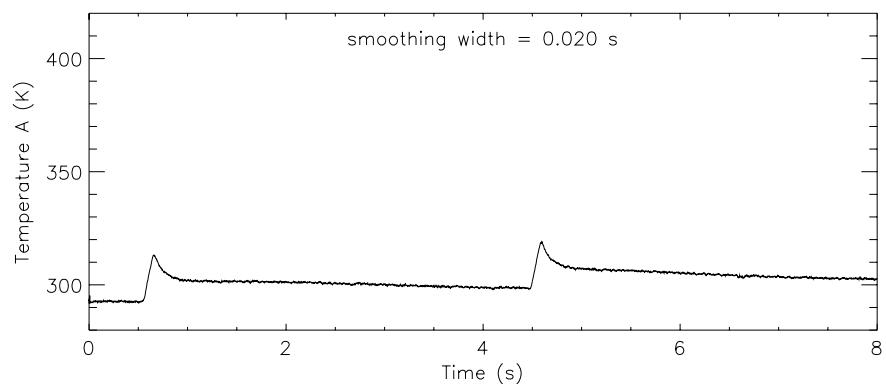
2.0 H₂, 4.0 N₂O, 14 NH₃, 0.0 CH₄, 82.0 Air, 101.93 kPa, spark plug, hi pot, fan on



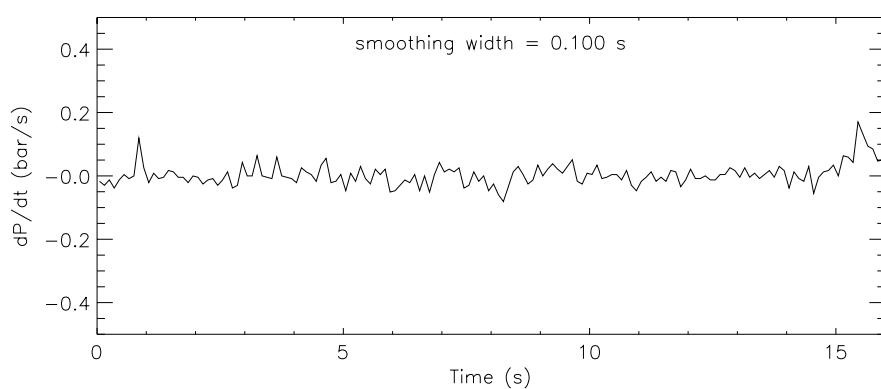
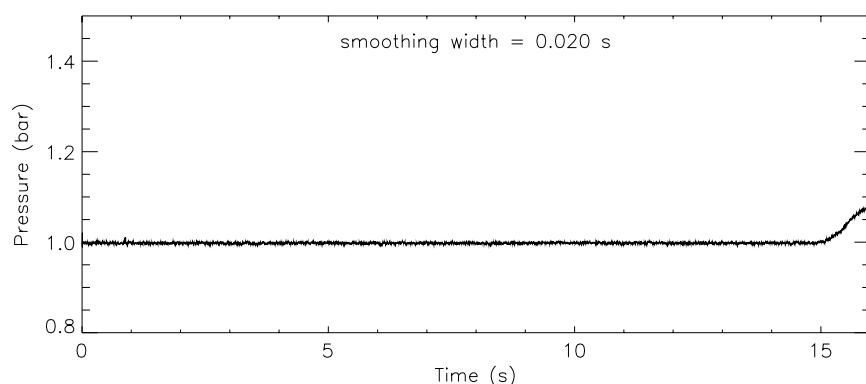
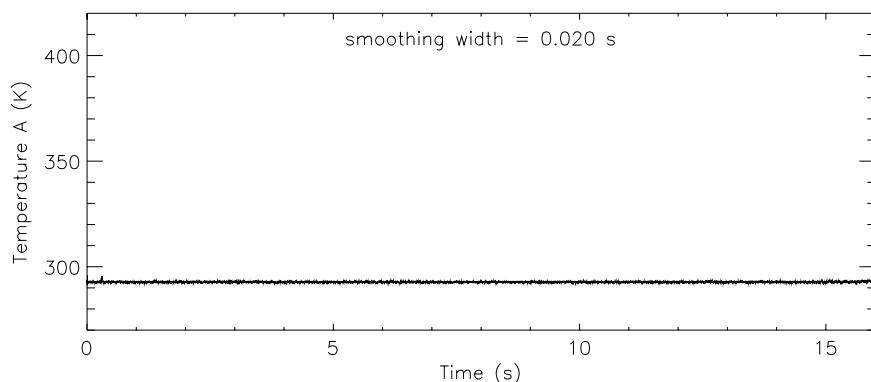




Run no. 178

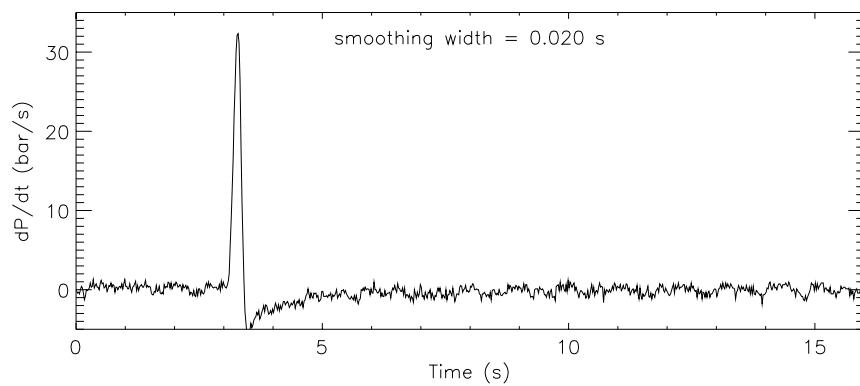
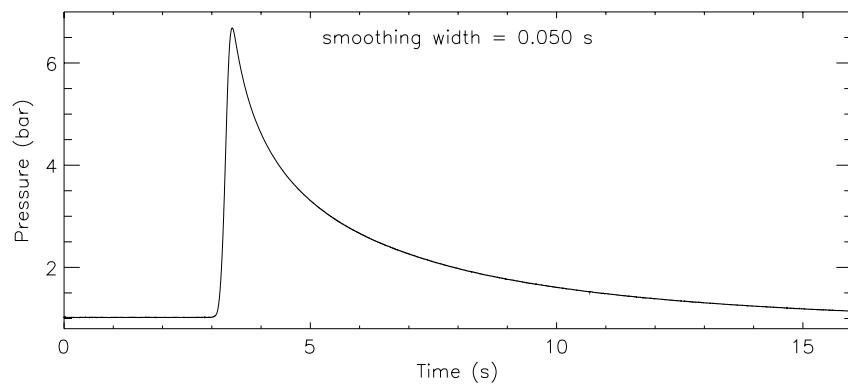
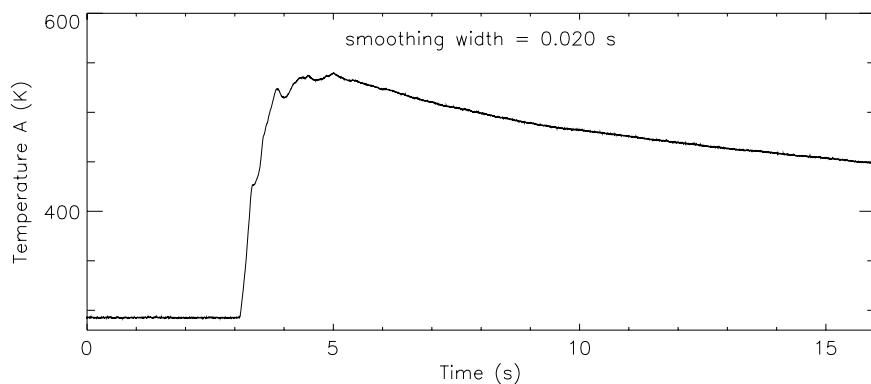
0.0 H₂, 5.0 N₂O, 15.0 NH₃, 0.0 CH₄, 80.0 Air, 100.0 kPa, spark plug, hi pot,

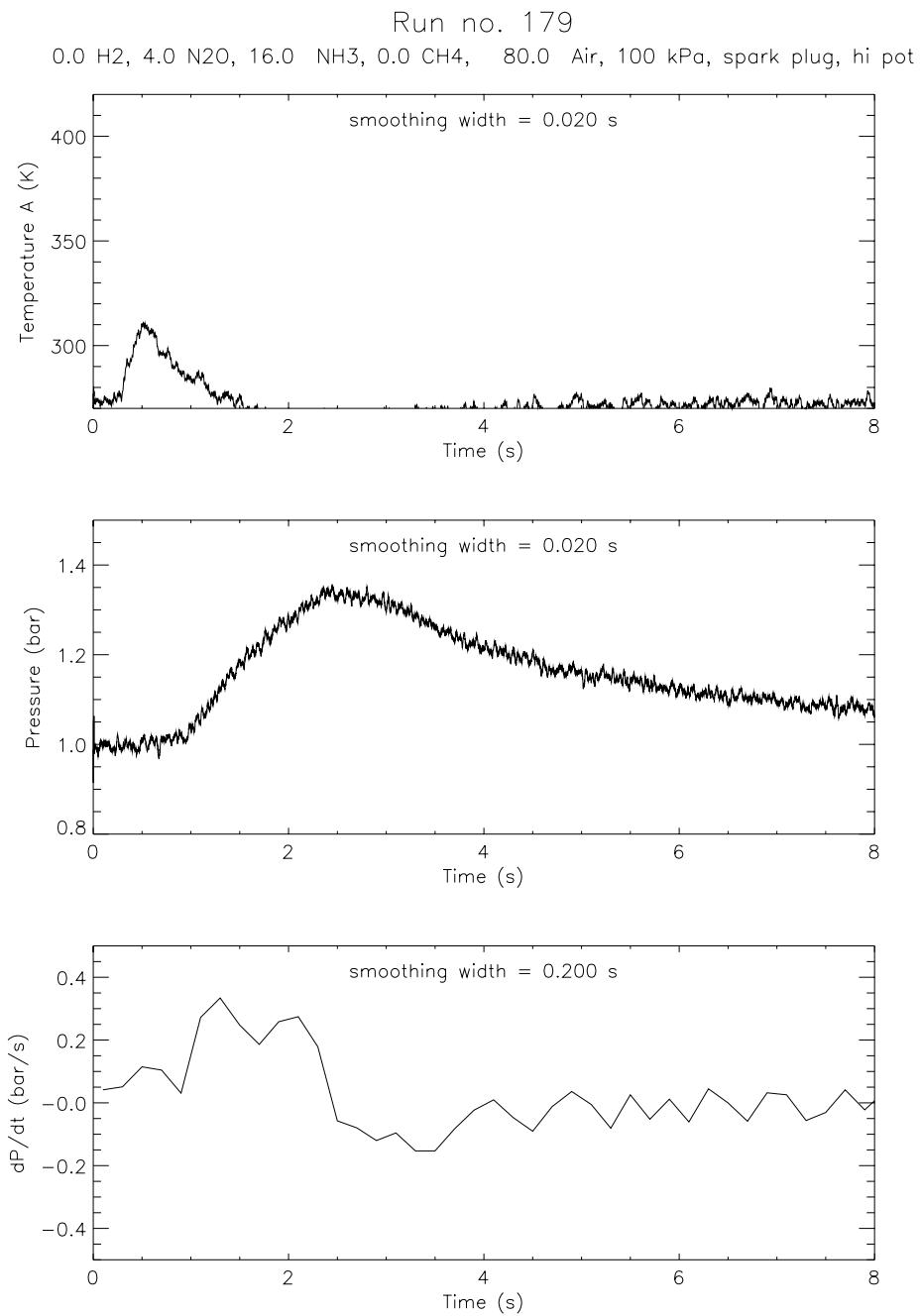
Run no. 178a

0.0 H₂, 5.0 N₂O, 15.0 NH₃, 0.0 CH₄, 80.0 Air, 99.66 kPa, spark plug, hi pot, fan on

Run no. 178b

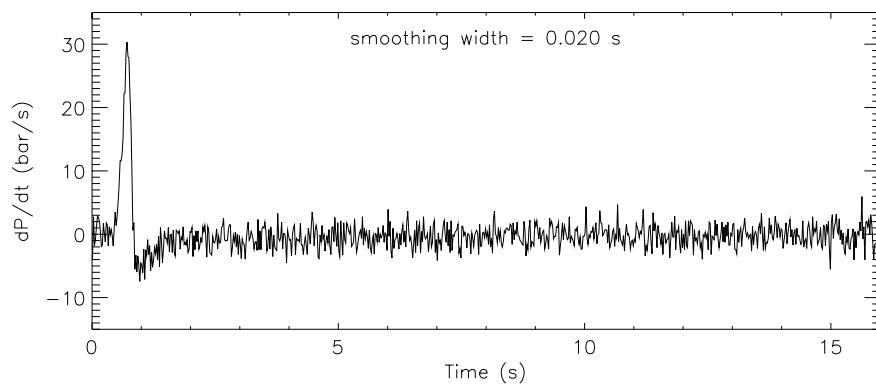
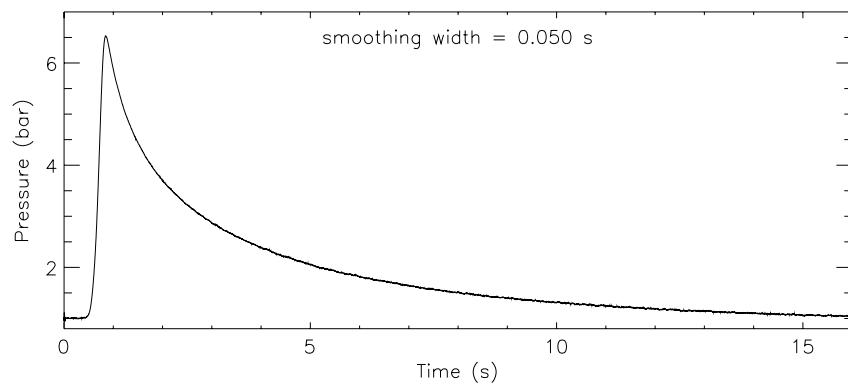
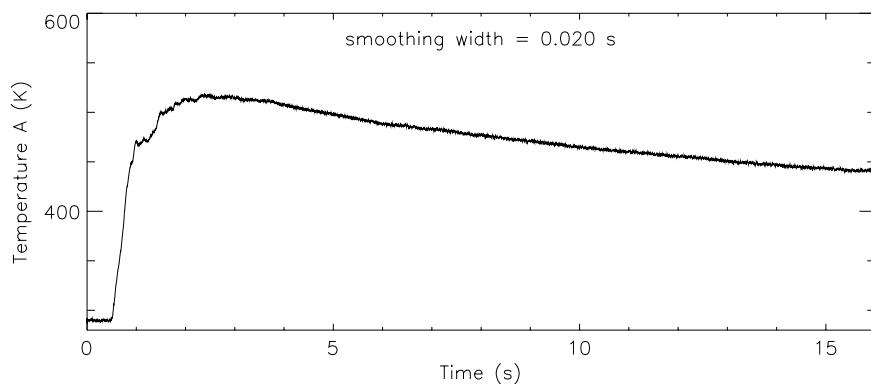
2.0 H₂, 5.0 N₂O, 15.0 NH₃, 0.0 CH₄, 80.0 Air, 101.53 kPa, spark plug, hi pot, fan on

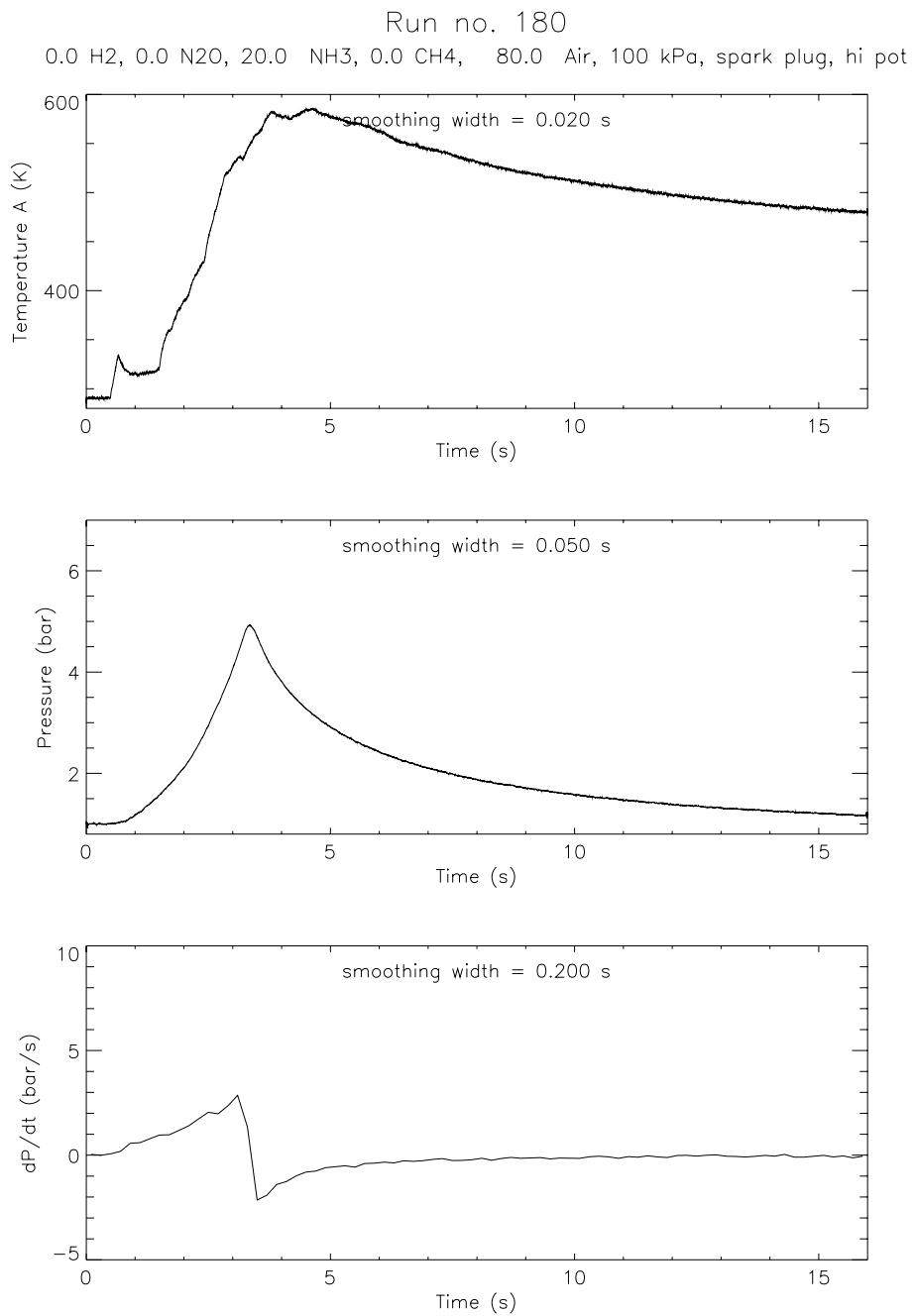


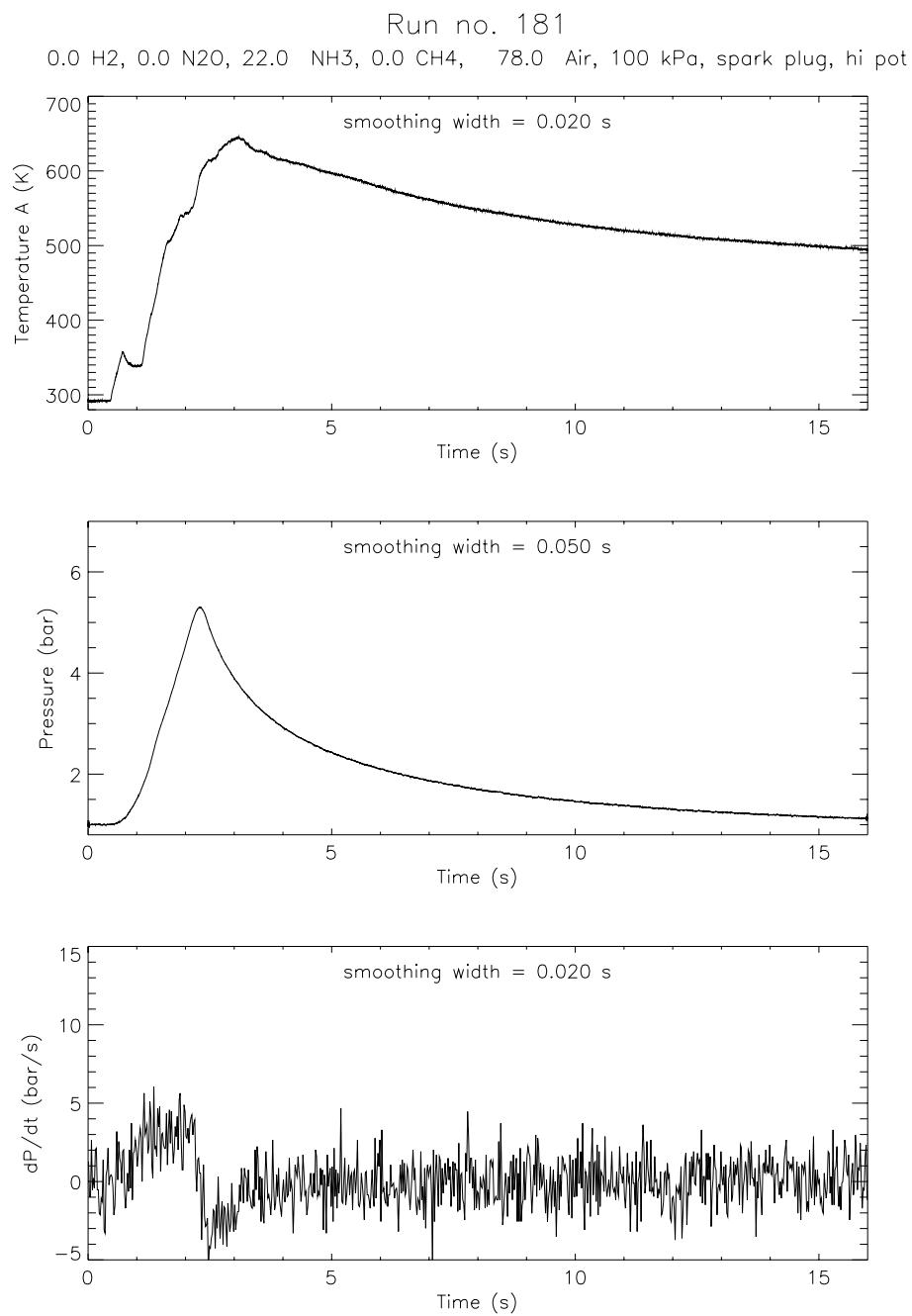


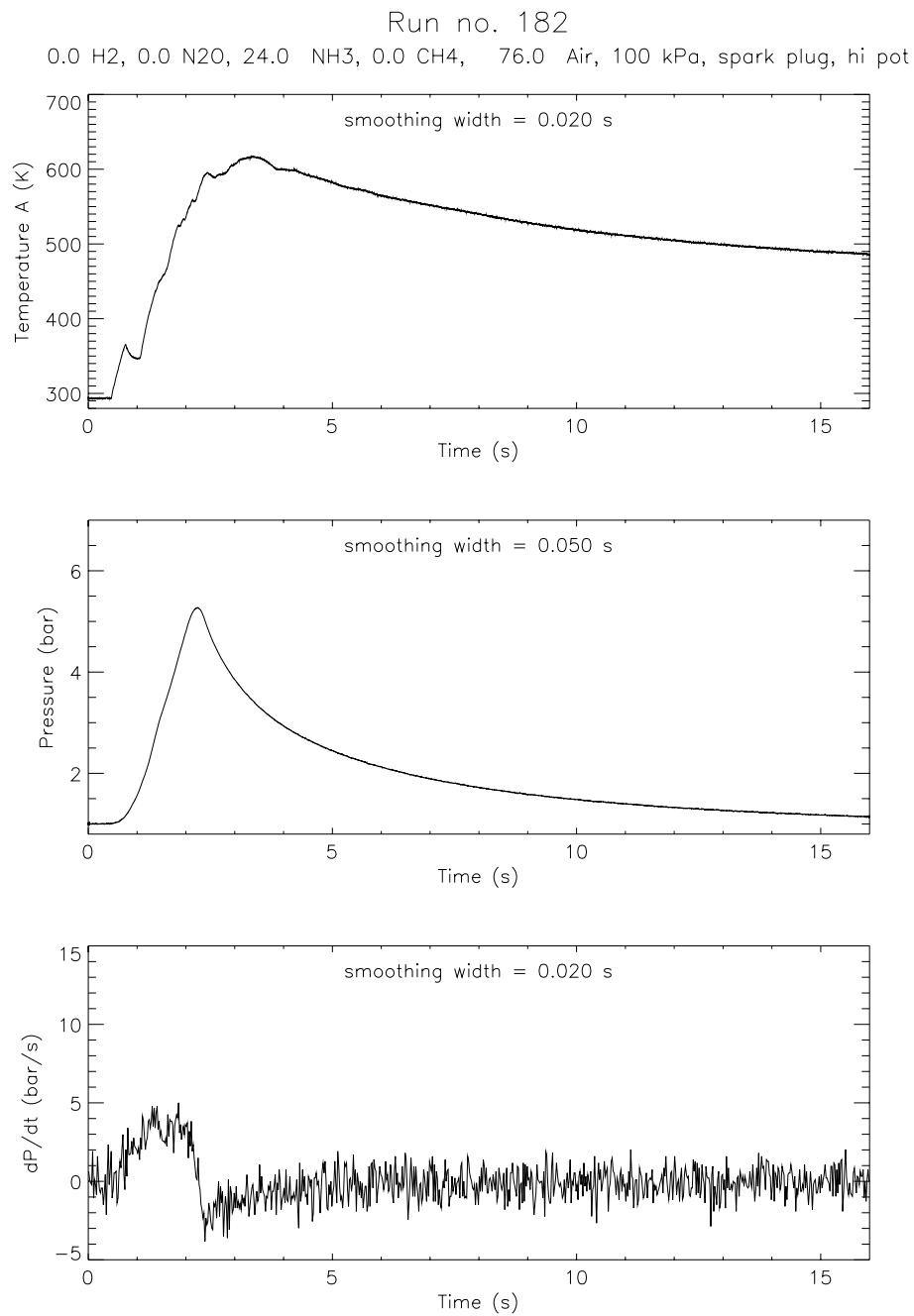
Run no. 179b

2.0 H₂, 4.0 N₂O, 16.0 NH₃, 0.0 CH₄, 80.0 Air, 101.72 kPa, spark plug, hi pot, fan on

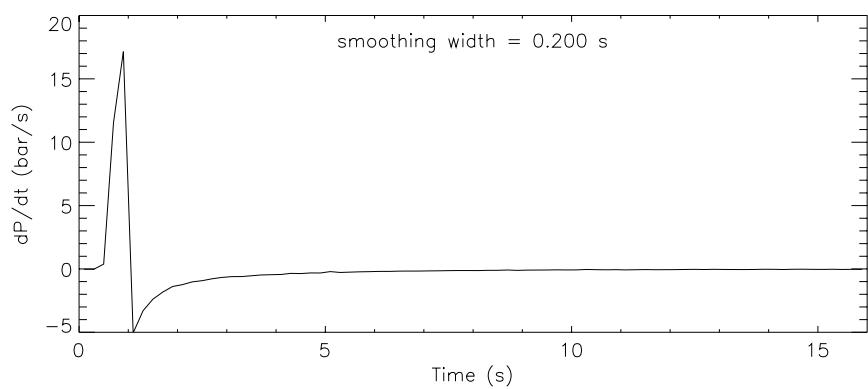
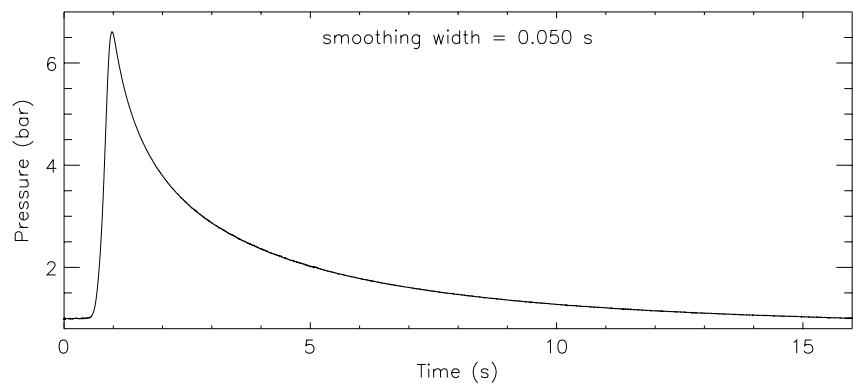
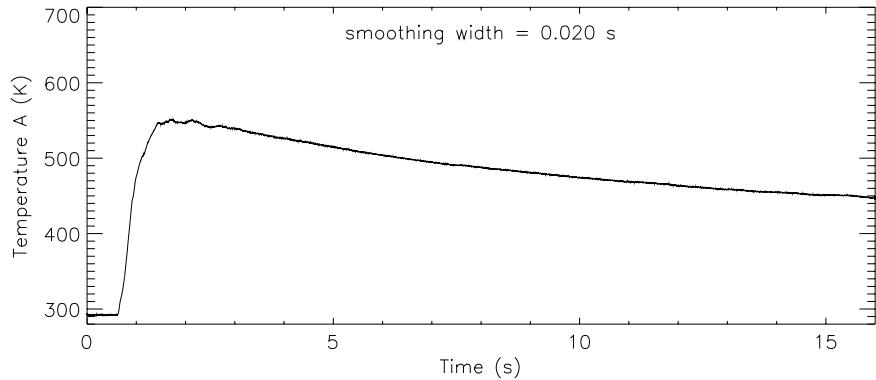




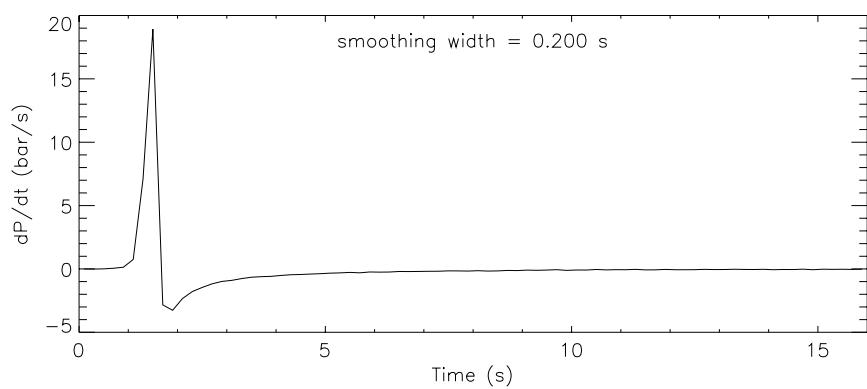
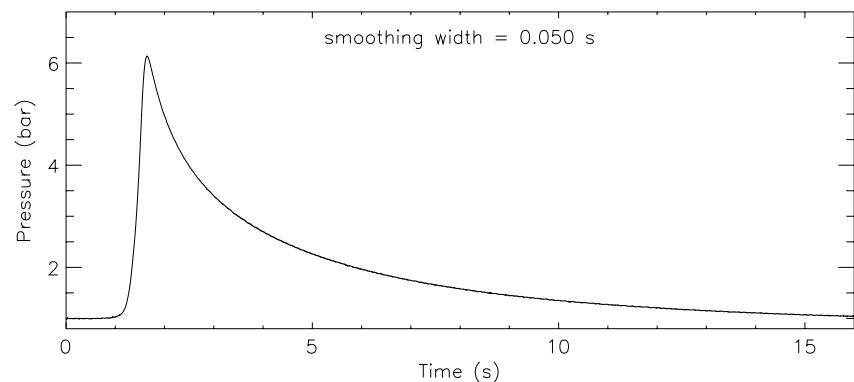
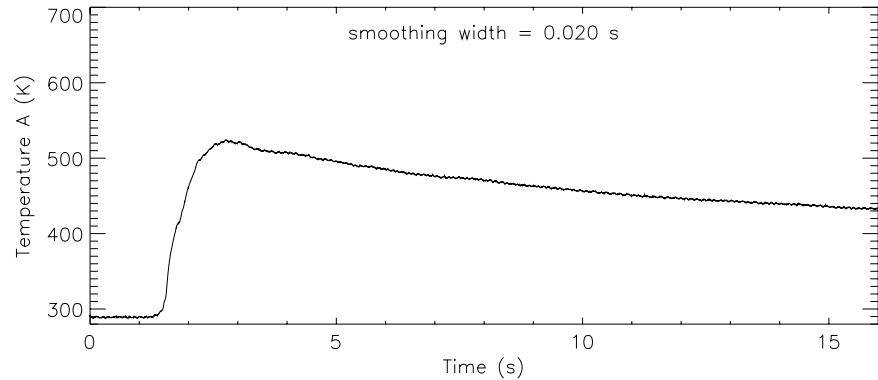




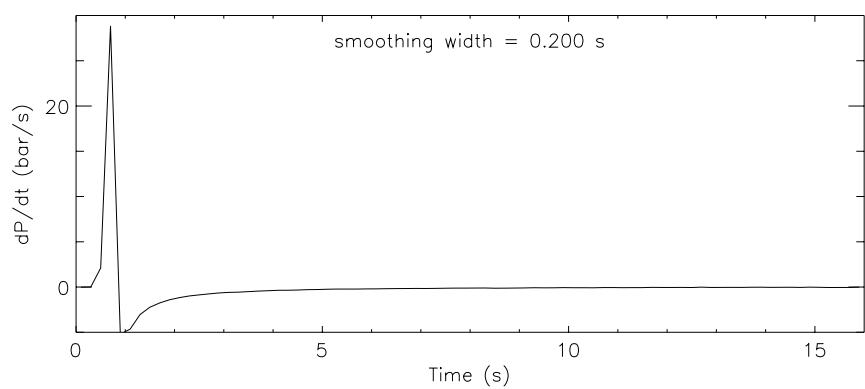
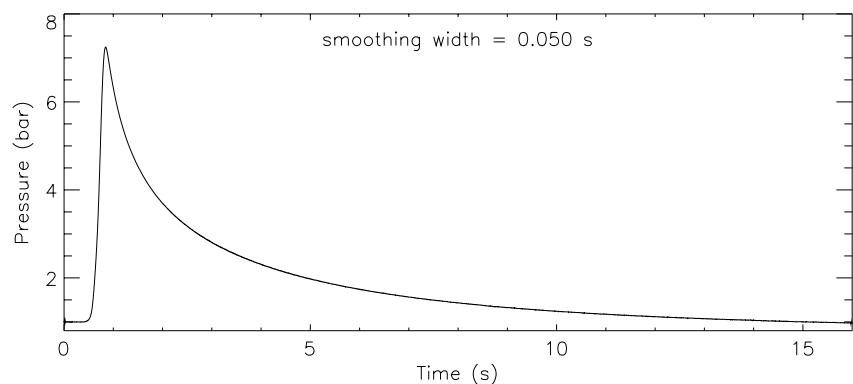
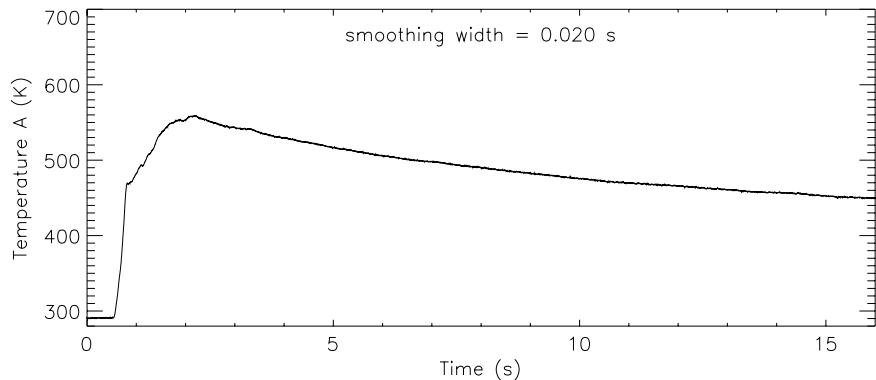
Run no. 183
0.0 H₂, 0.0 N₂O, 18.0 NH₃, 0.0 CH₄, 82.0 Air, 100 kPa, spark plug, hi pot, fan on



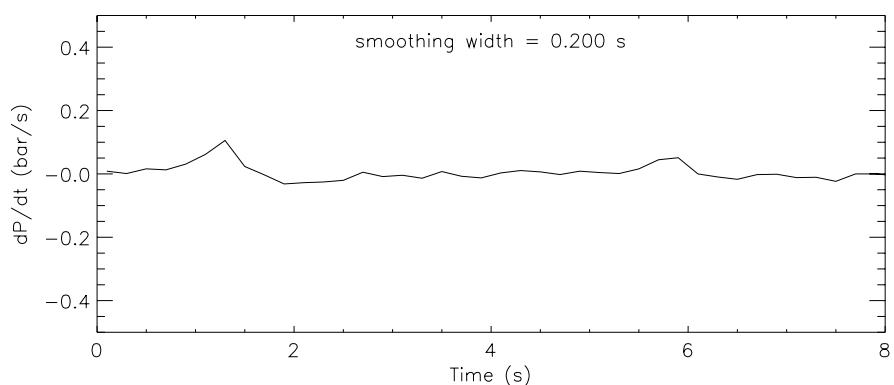
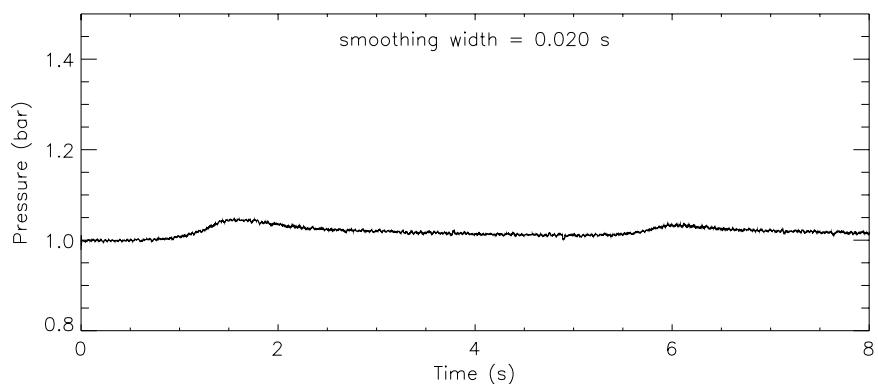
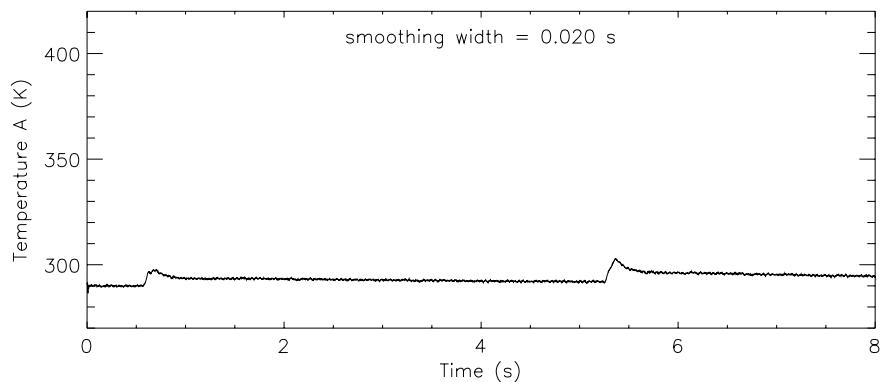
Run no. 184
0.0 H₂, 0.0 N₂O, 16.0 NH₃, 0.0 CH₄, 84.0 Air, 100 kPa, spark plug, hi pot, fan on



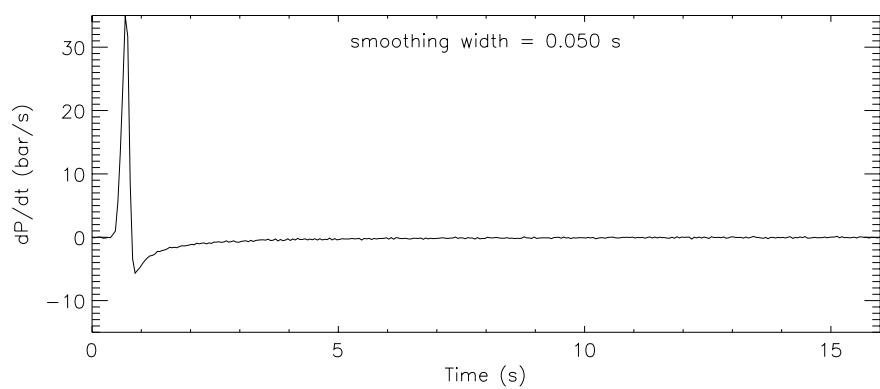
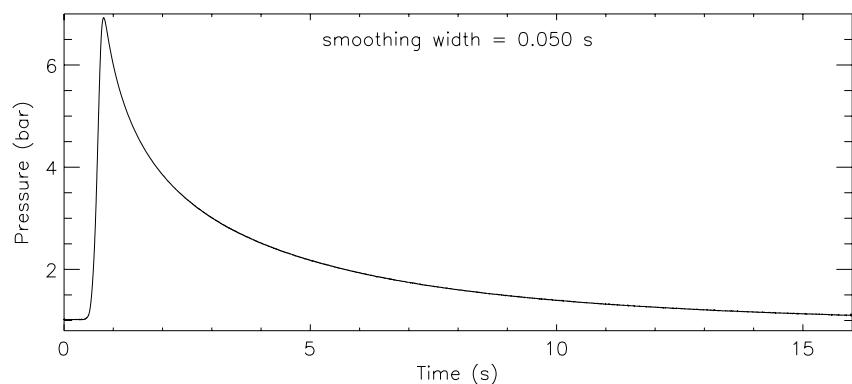
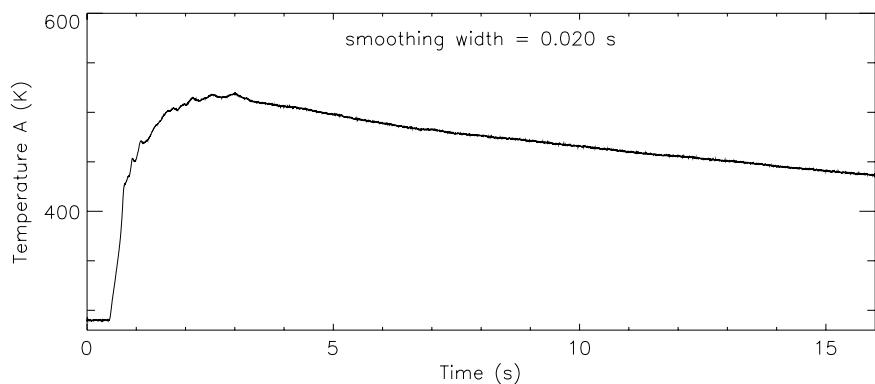
Run no. 185
0.0 H₂, 0.0 N₂O, 20.0 NH₃, 0.0 CH₄, 80.0 Air, 100 kPa, spark plug, hi pot, fan on



Run no. 186

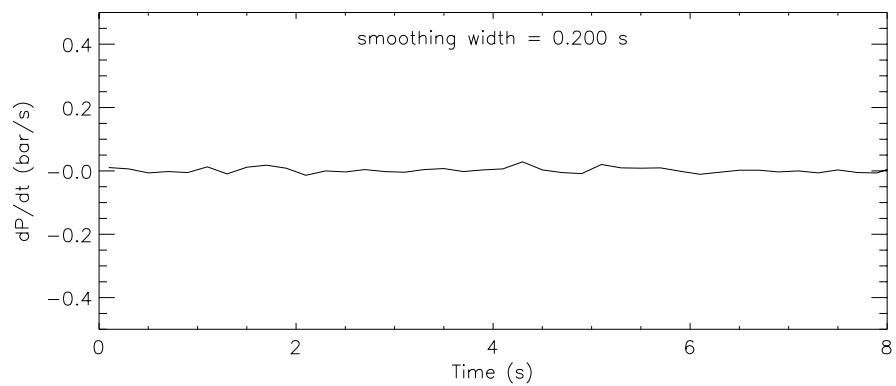
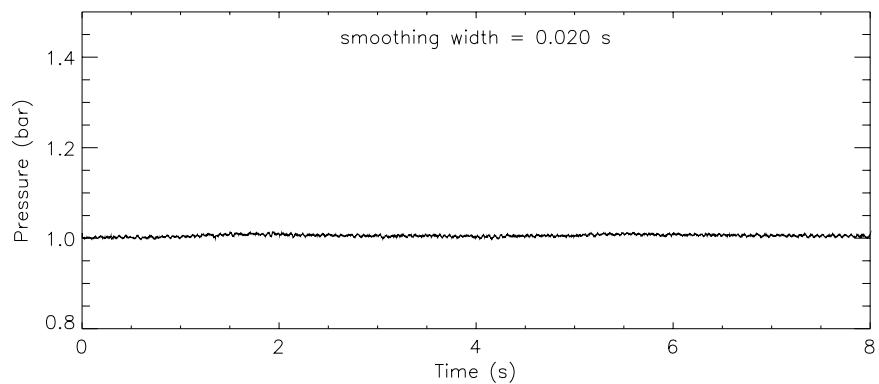
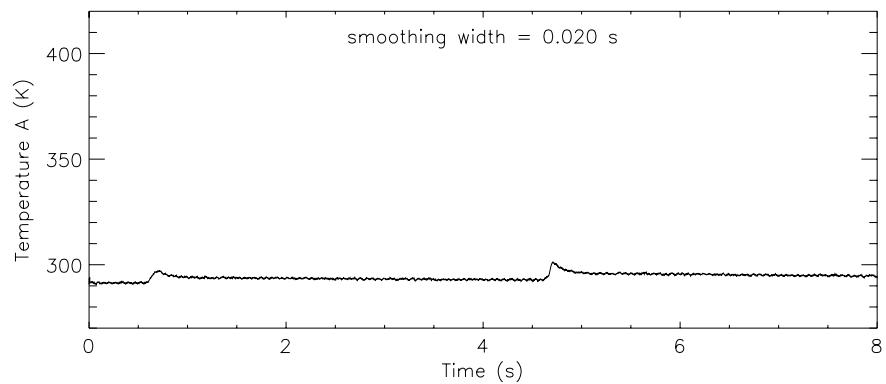
0.0 H₂, 8.0 N₂O, 14.0 NH₃, 0.0 CH₄, 78.0 Air, 100 kPa, spark plug, hi pot,

Run no. 186b

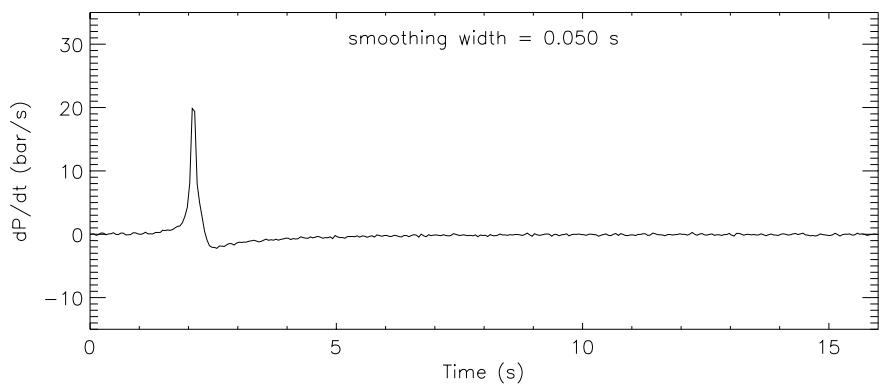
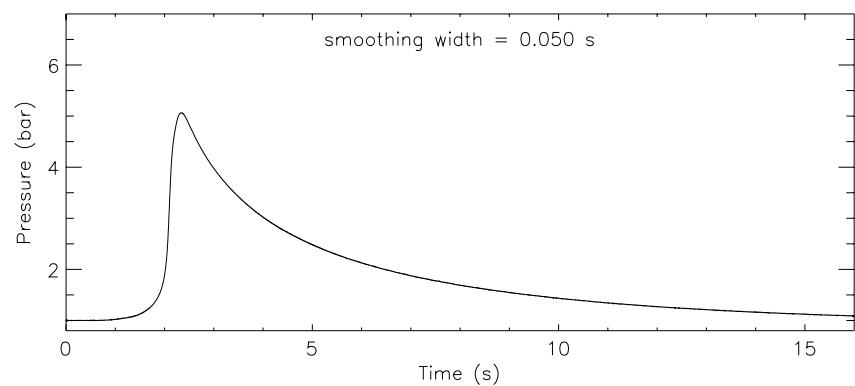
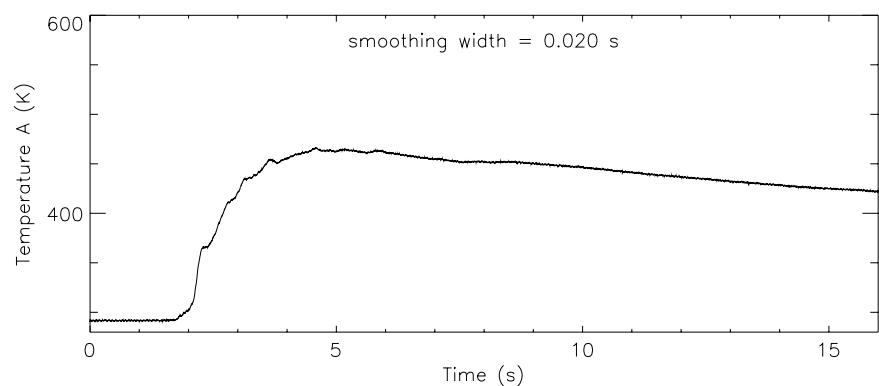
0.0 H₂, 8.0 N₂O, 14.0 NH₃, 0.0 CH₄, 78.0 Air, 101.81 kPa, spark plug, hi pot, fan on

Run no. 187

1.0 H₂, 0.0 N₂O, 12.0 NH₃, 0.0 CH₄, 87.0 Air, 100 kPa, spark plug, hi pot, fan on

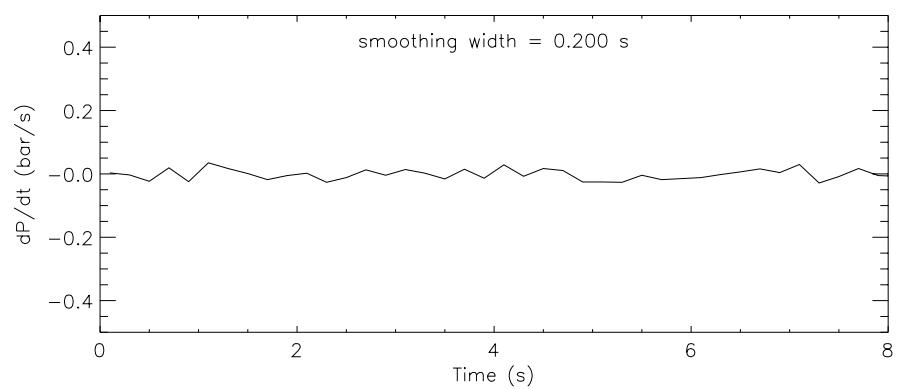
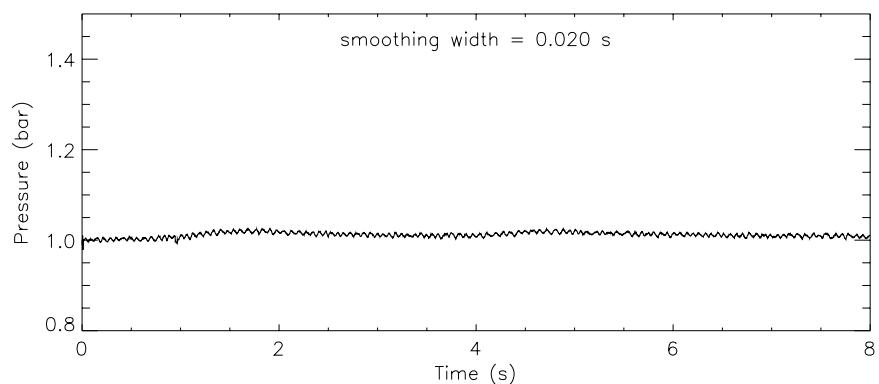
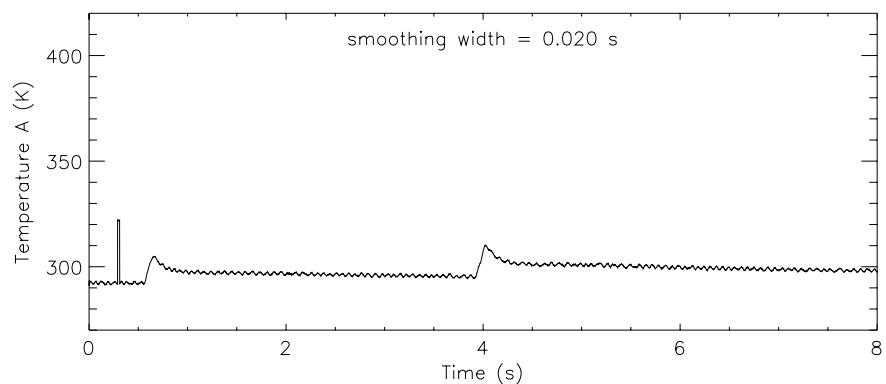


Run no. 187a

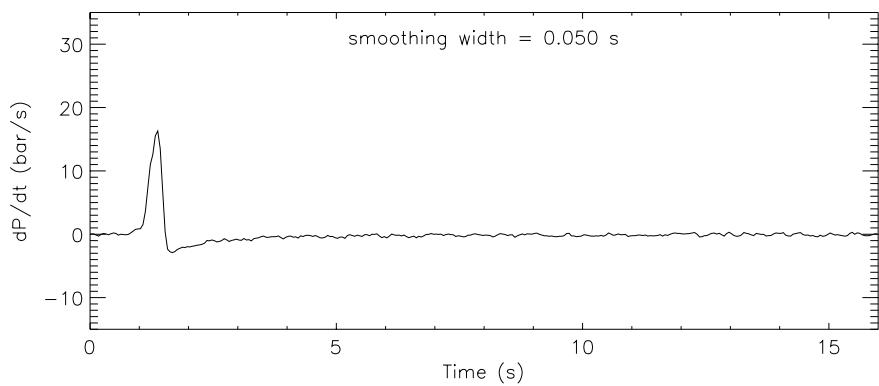
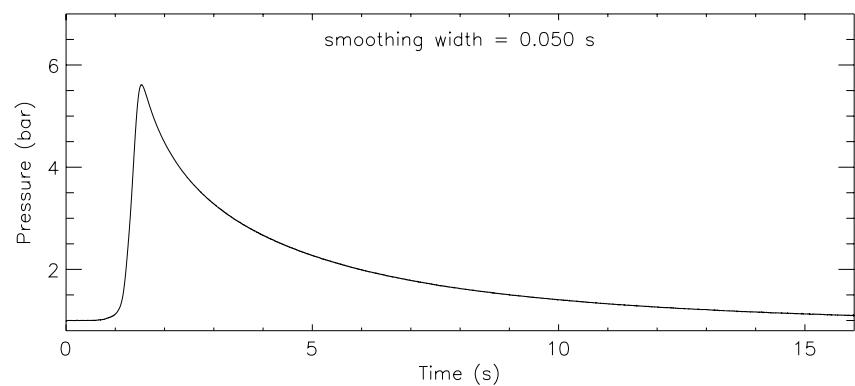
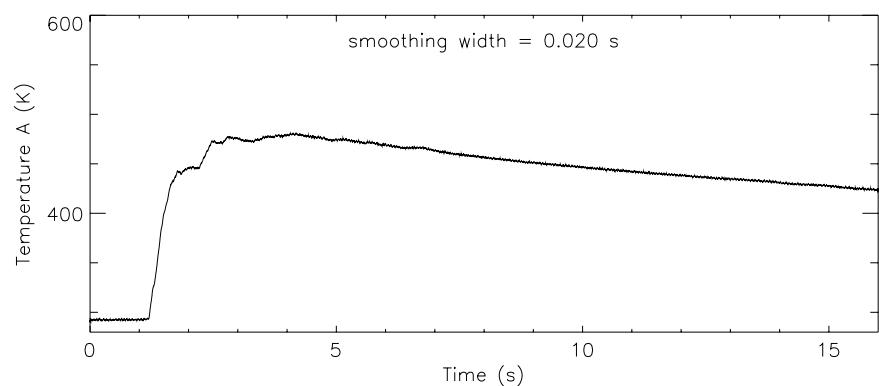
1.0 H₂, 0.0 N₂O, 12.0 NH₃, 0.0 CH₄, 87.0 Air, 99.83 kPa, spark plug, hi pot , fan on

Run no. 188

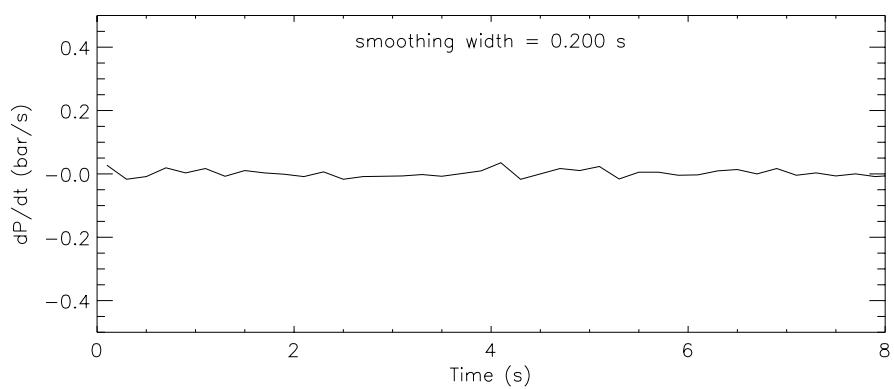
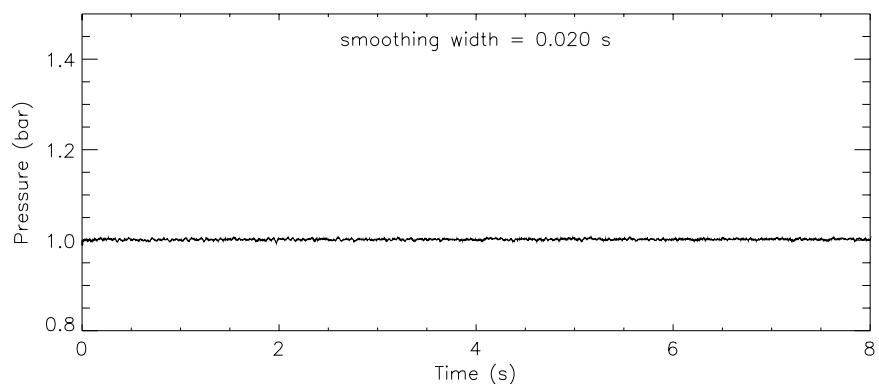
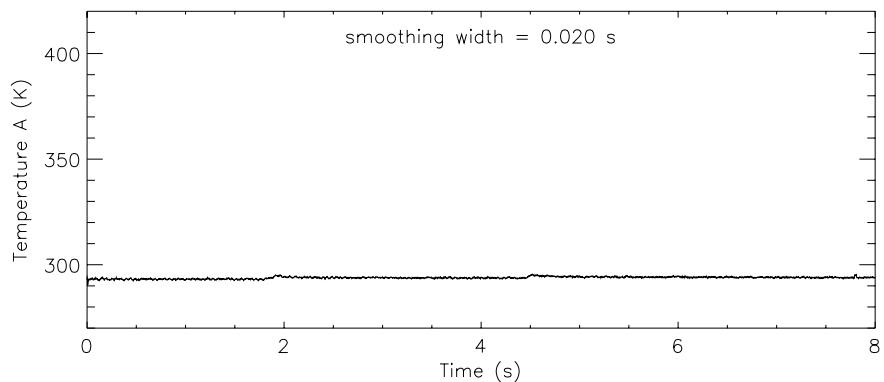
1.0 H₂, 4.0 N₂O, 12.0 NH₃, 0.0 CH₄, 83.0 Air, 100 kPa, spark plug, hi pot, fan on



Run no. 188a

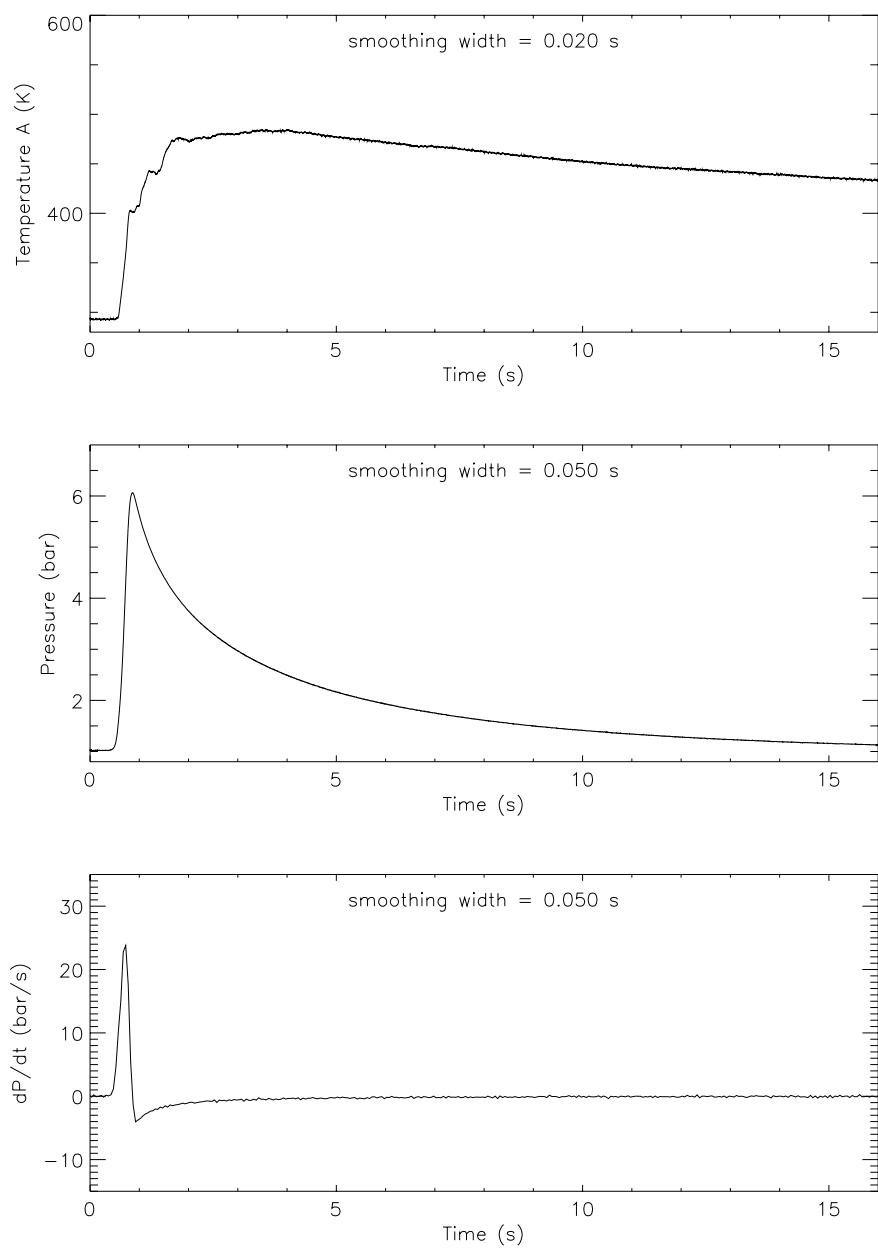
1.0 H₂, 4.0 N₂O, 12.0 NH₃, 0.0 CH₄, 83.0 Air, 99.94 kPa, spark plug, hi pot , fan on

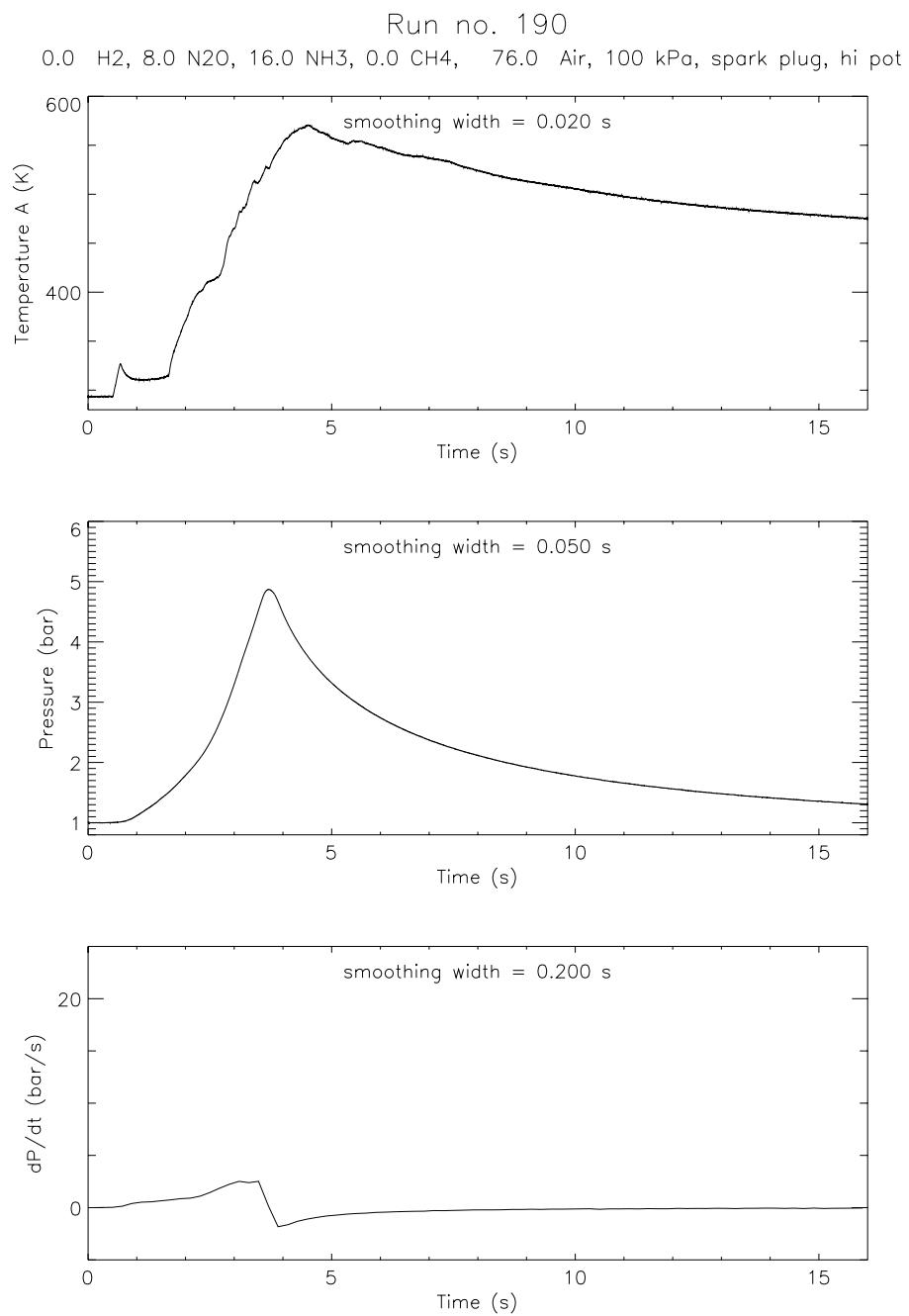
Run no. 189

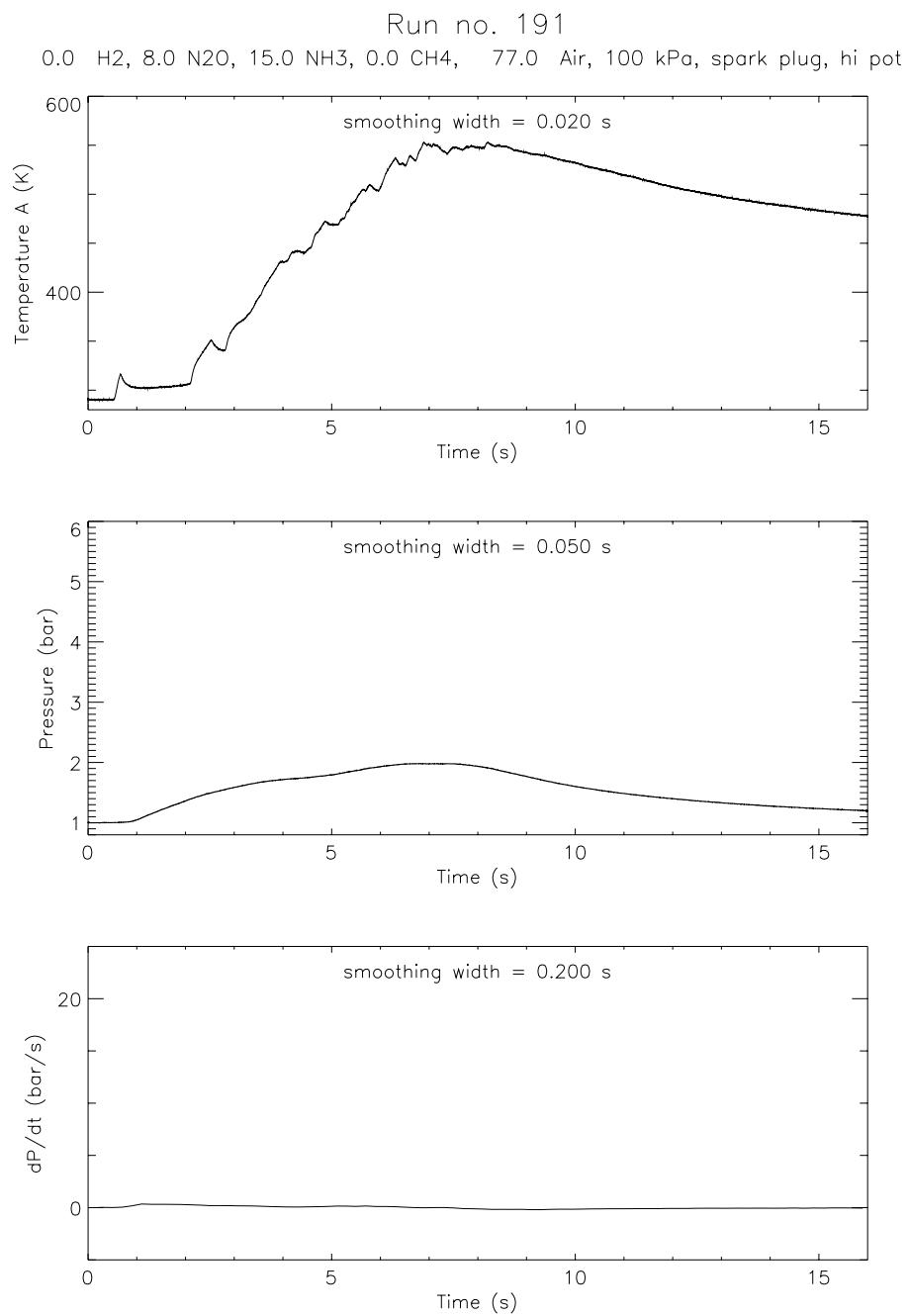
1.0 H₂, 8.0 N₂O, 10.0 NH₃, 0.0 CH₄, 81.0 Air, 100 kPa, spark plug, hi pot ,

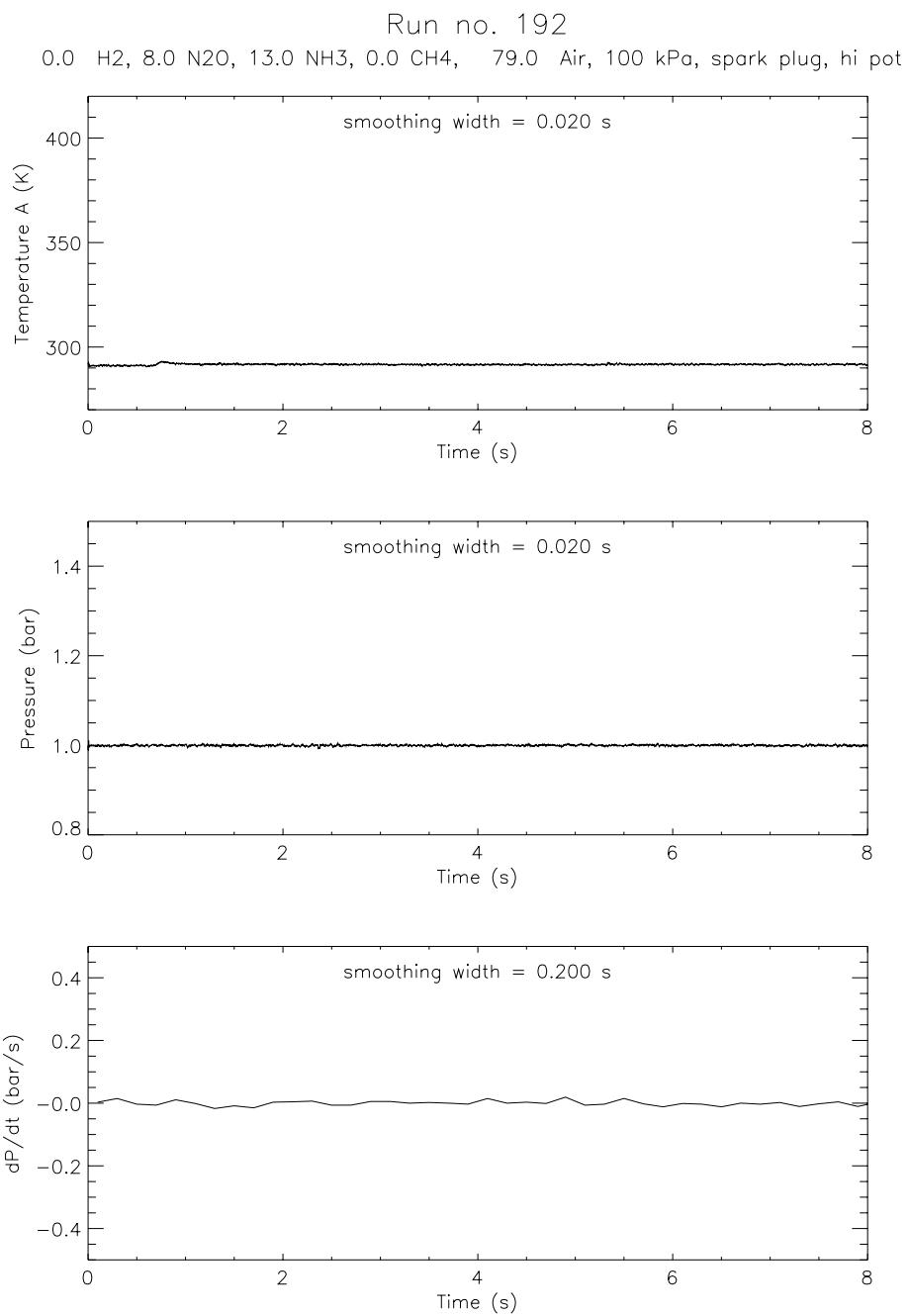
Run no. 189b

3.0 H₂, 8.0 N₂O, 10.0 NH₃, 0.0 CH₄, 81.0 Air, 101.94 kPa, spark plug, hi pot , fan on

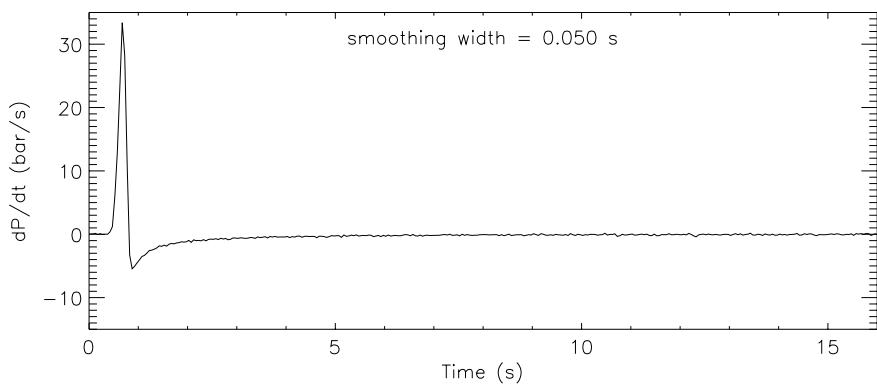
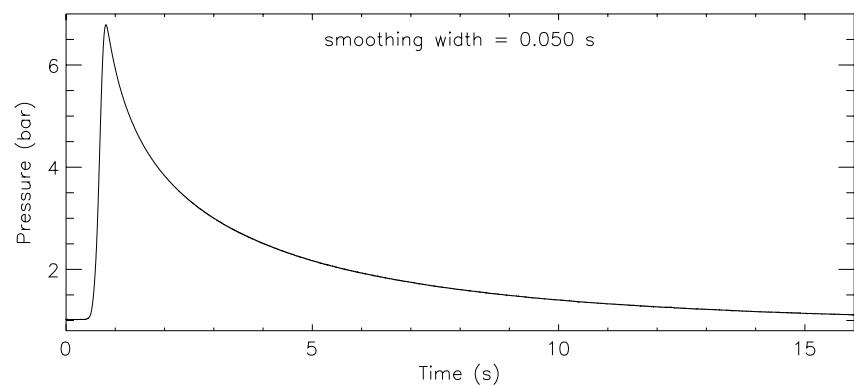
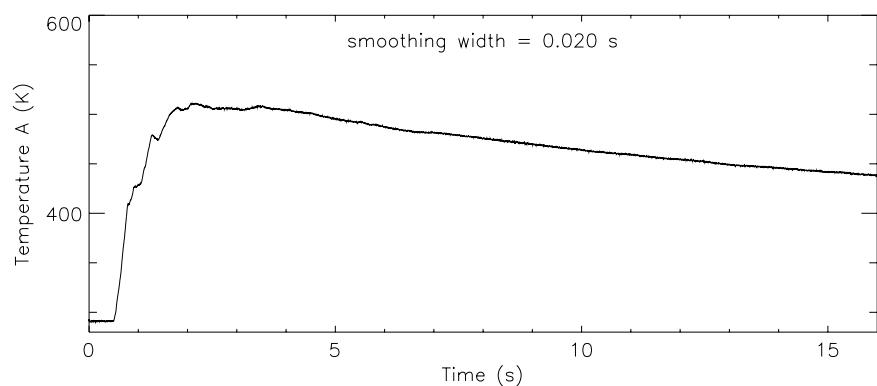


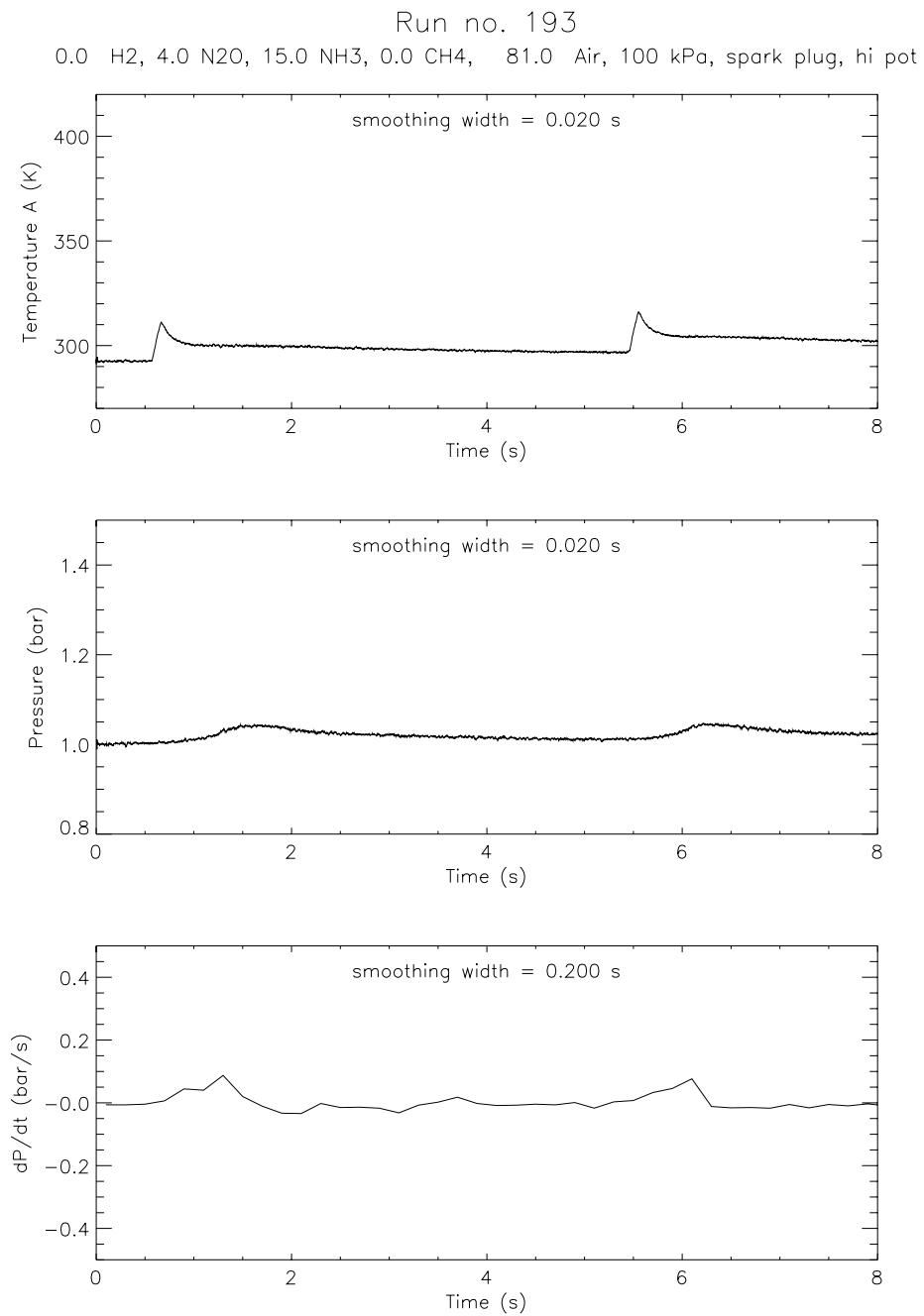


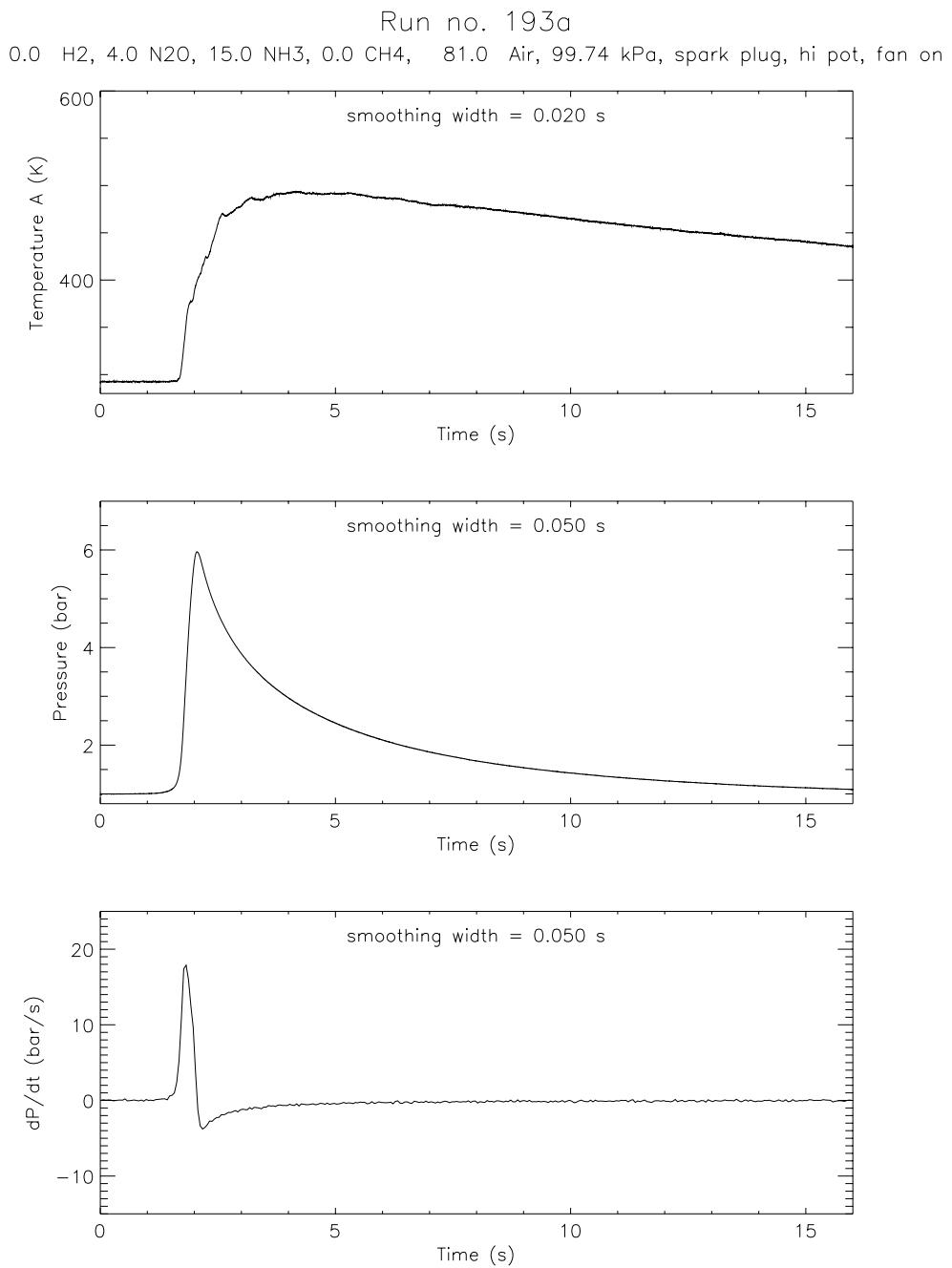




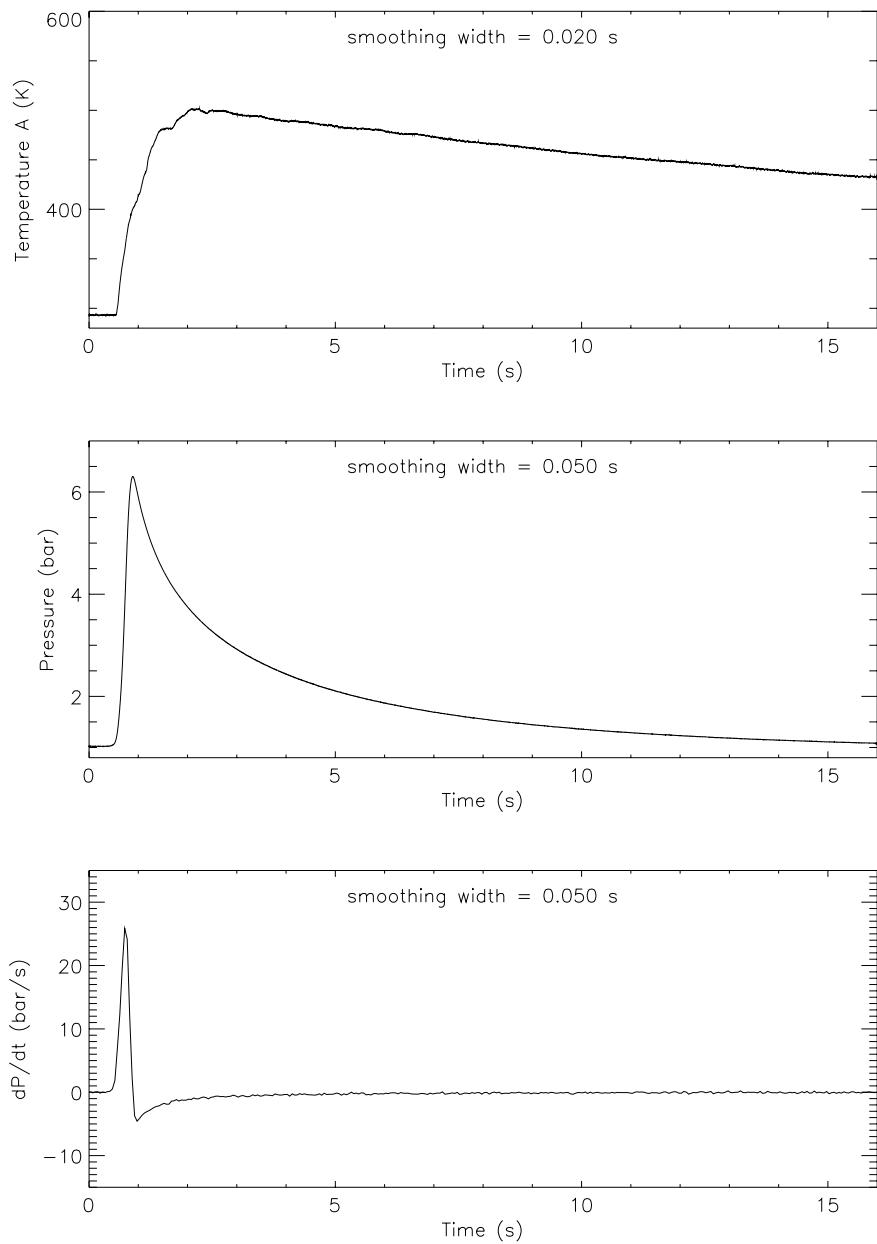
Run no. 192a

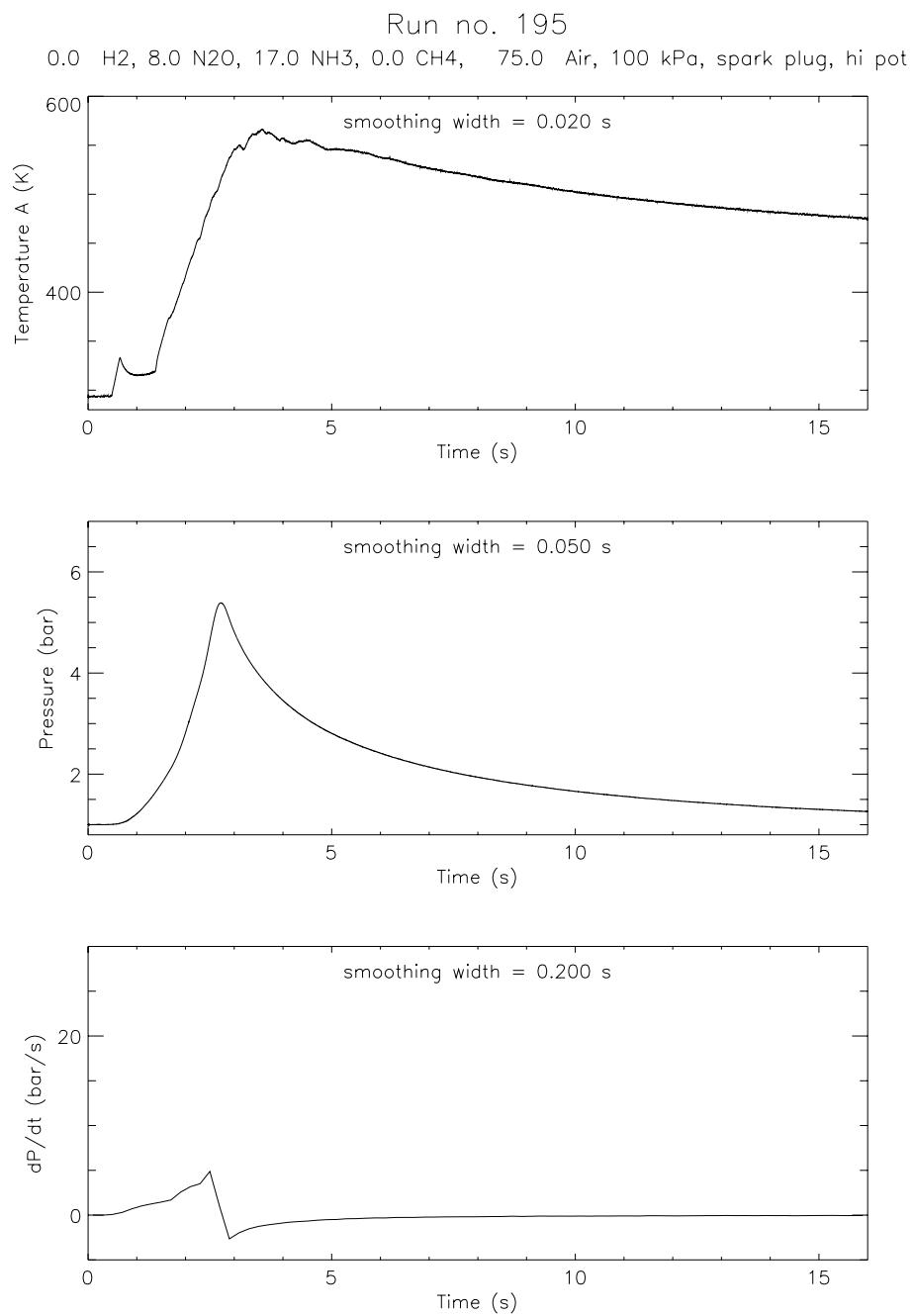
2.0 H₂, 8.0 N₂O, 13.0 NH₃, 0.0 CH₄, 79.0 Air, 101.9 kPa, spark plug, hi pot, fan on

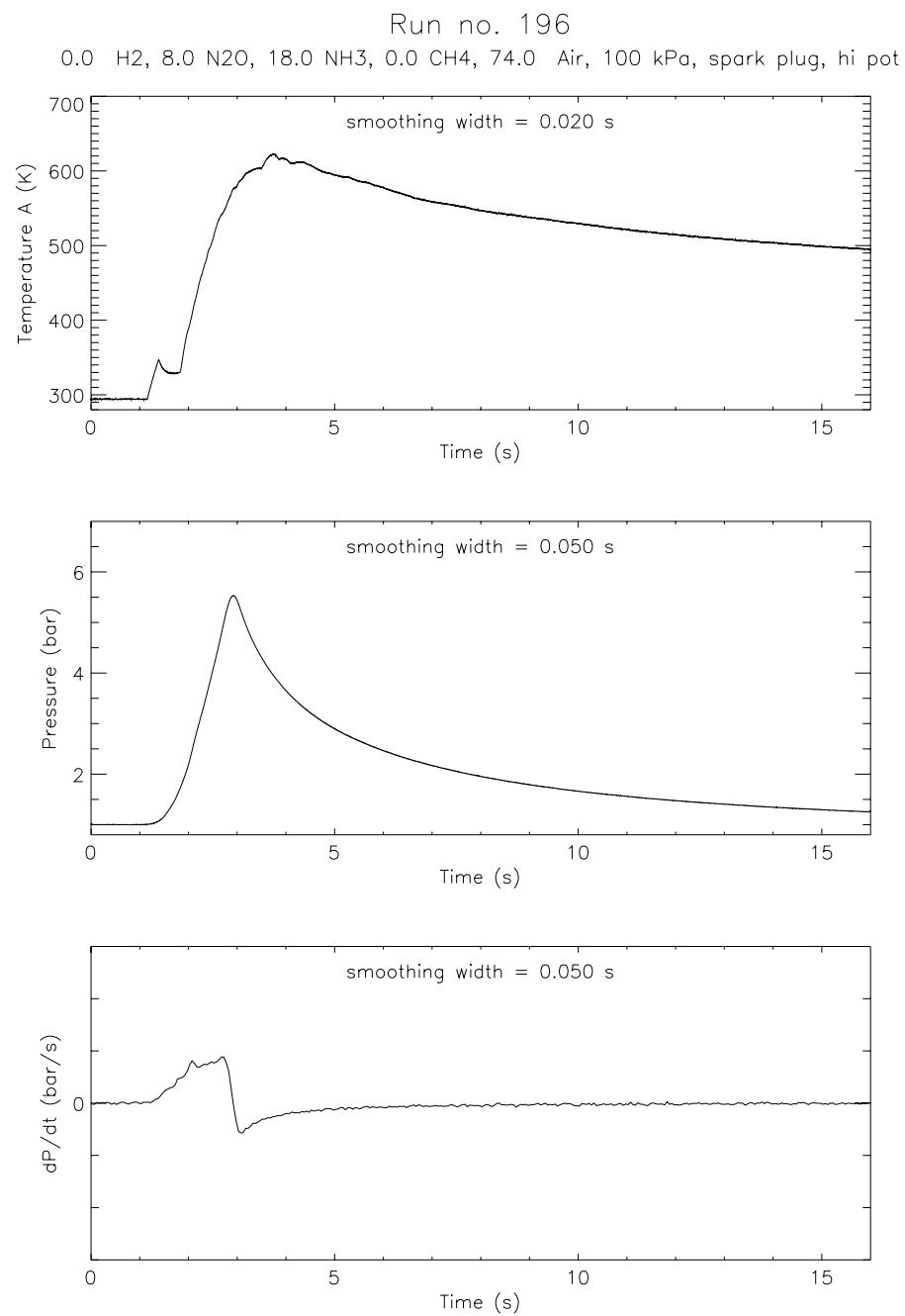




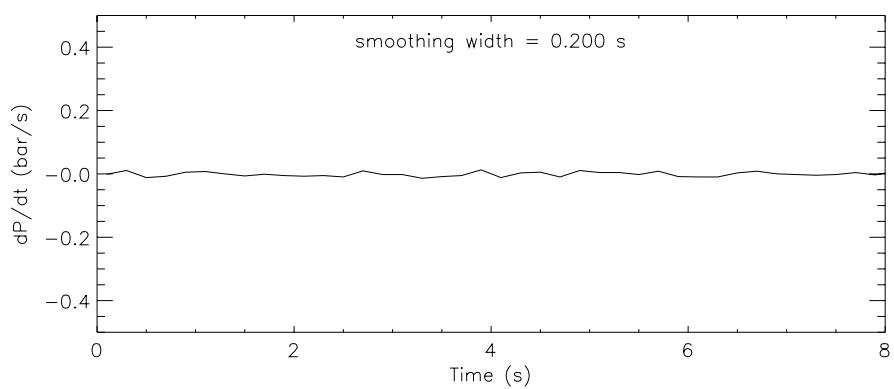
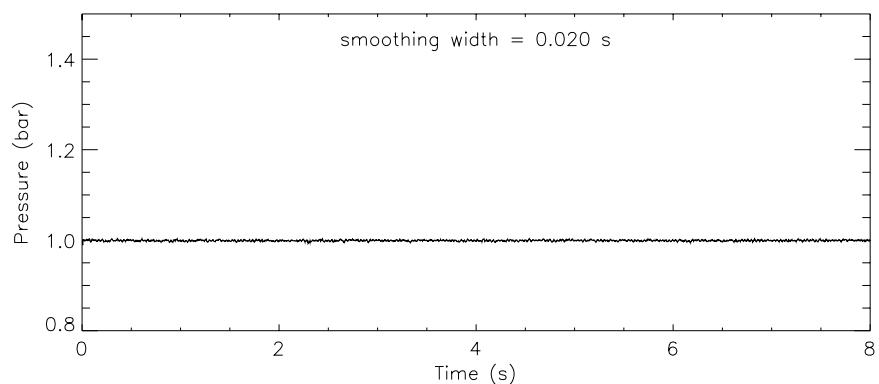
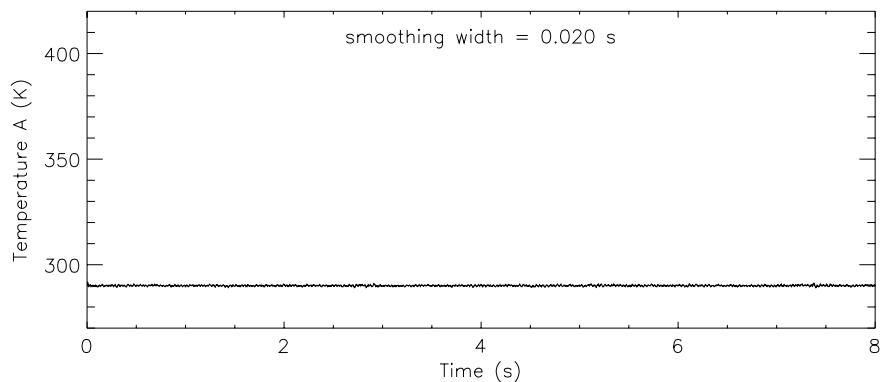
Run no. 194a

2.0 H₂, 4.0 N₂O, 13.0 NH₃, 0.0 CH₄, 83.0 Air, 101.88 kPa, spark plug, hi pot, fan on



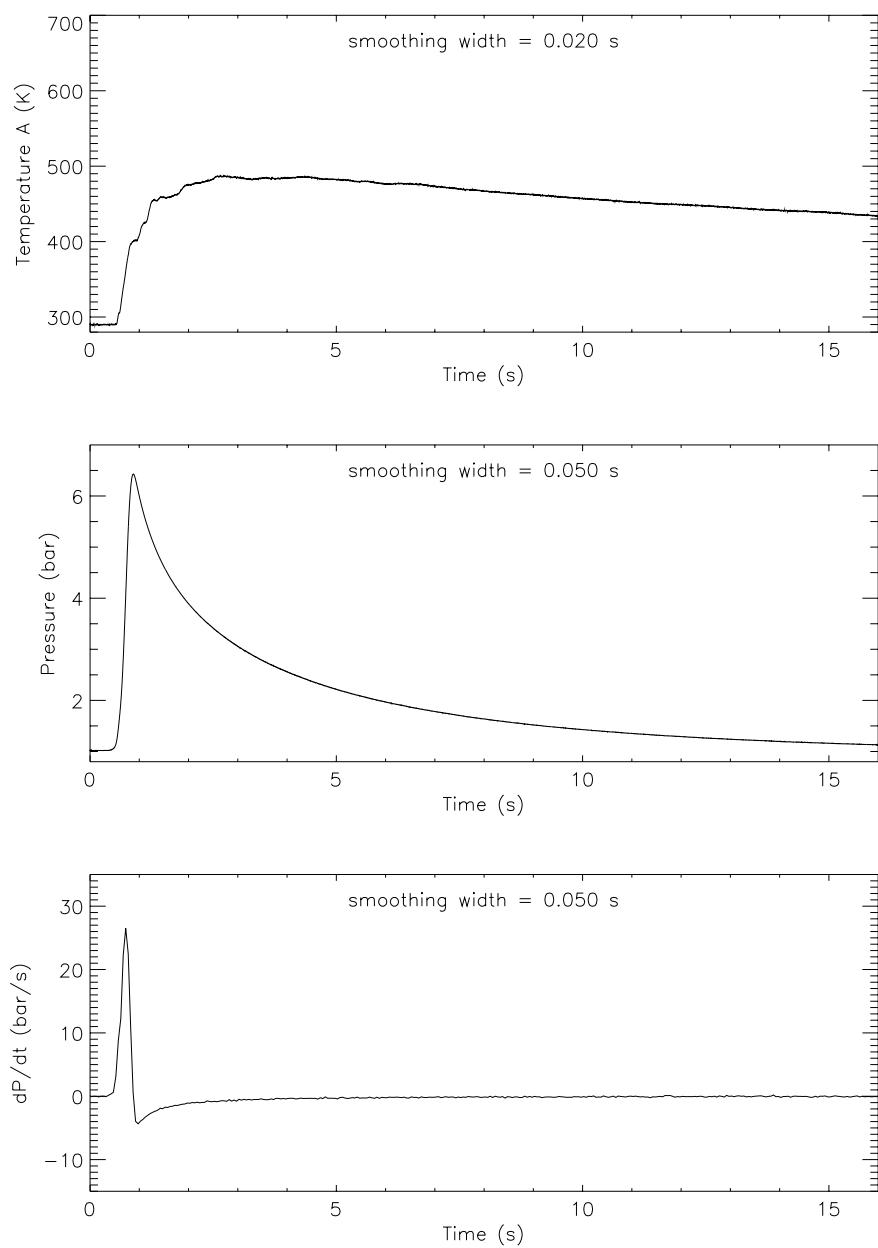


Run no. 197

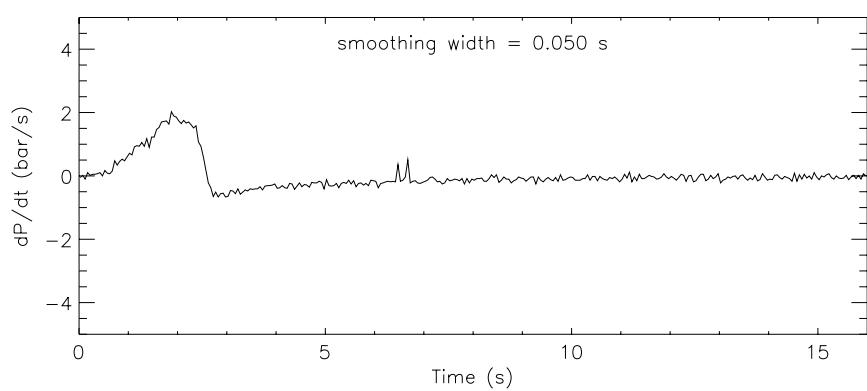
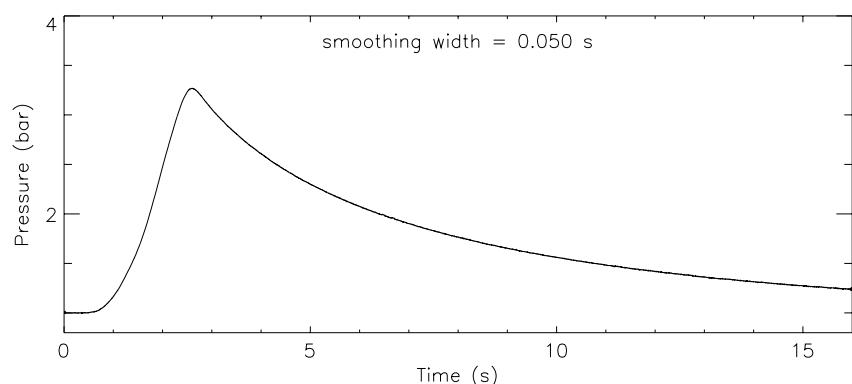
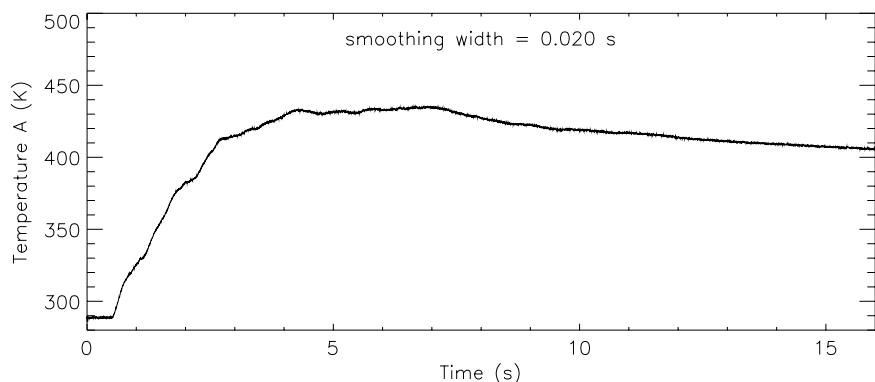
0.0 H₂, 8.0 N₂O, 12.0 NH₃, 0.0 CH₄, 80.0 Air, 100 kPa, spark plug, hi pot

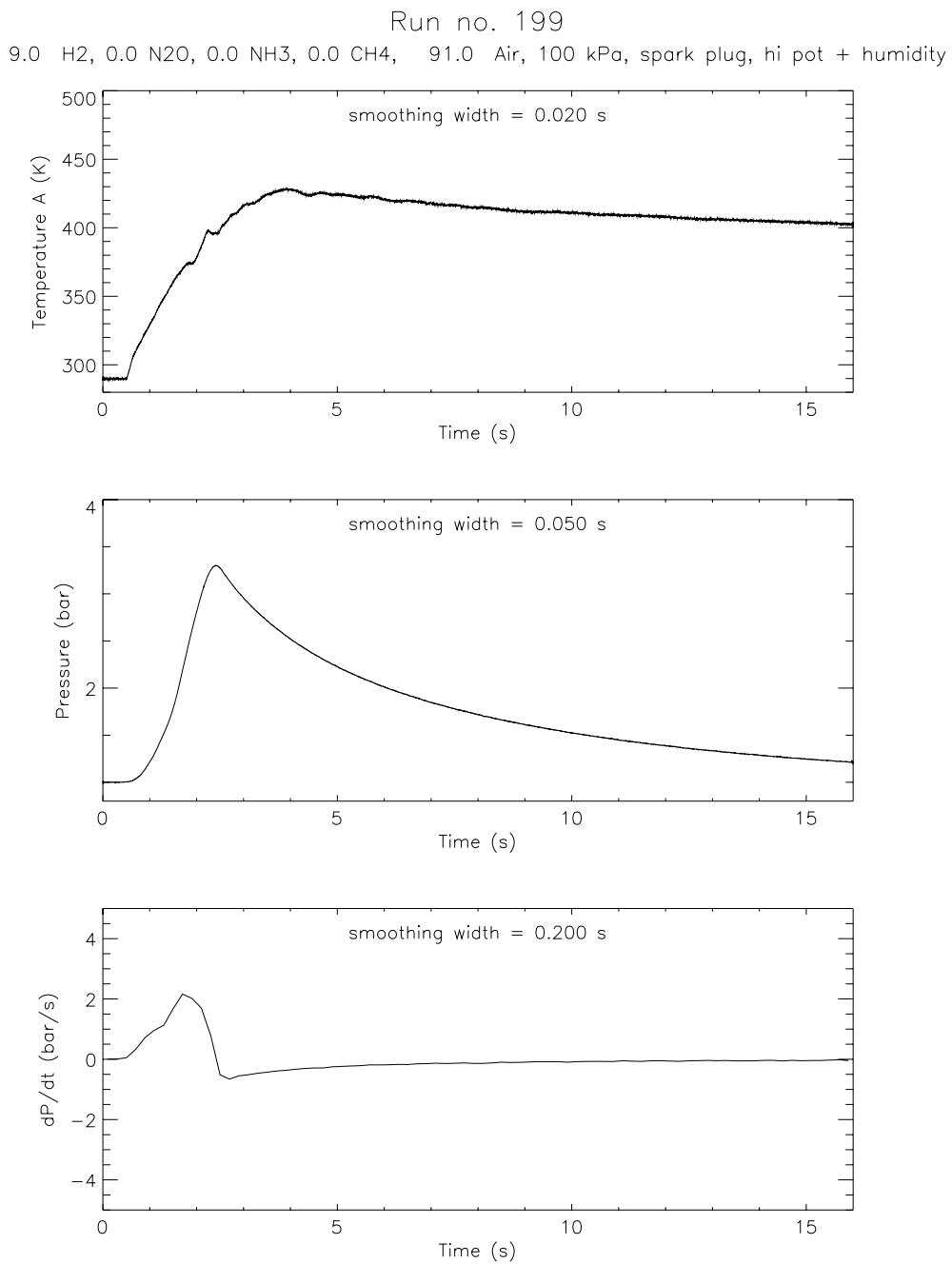
Run no. 197a

2.1 H₂, 8.0 N₂O, 12.0 NH₃, 0.0 CH₄, 80.0 Air, 102.88 kPa, spark plug, hi pot, fan on

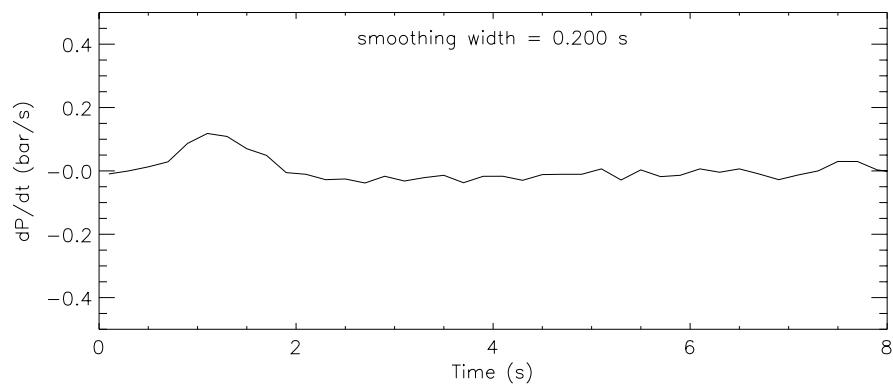
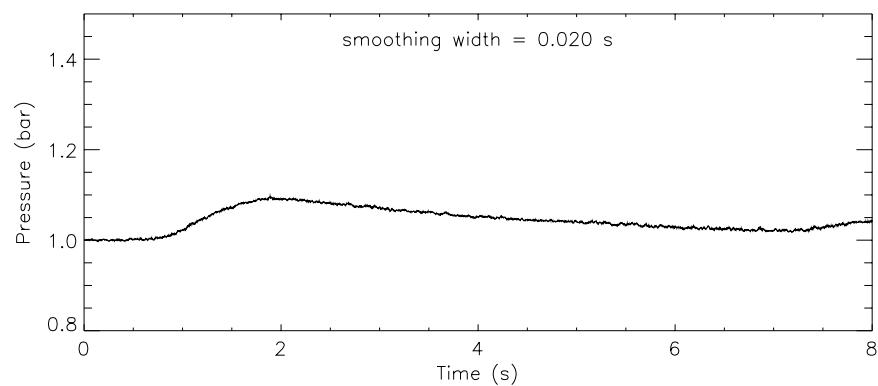
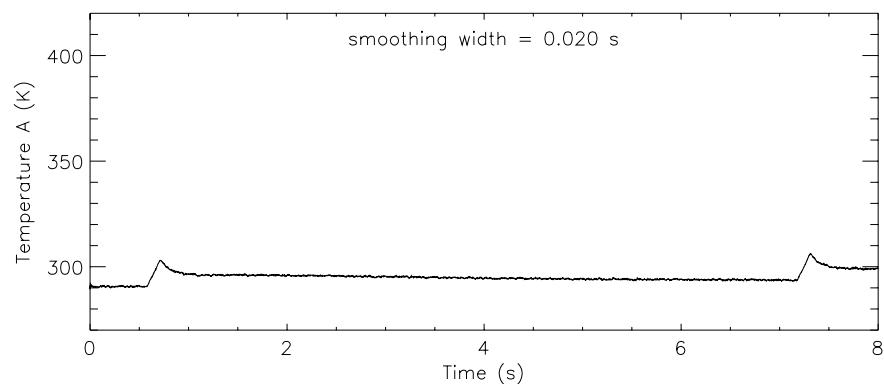


Run no. 198

9.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 91.0 Air, 100.15 kPa, spark plug, hi pot

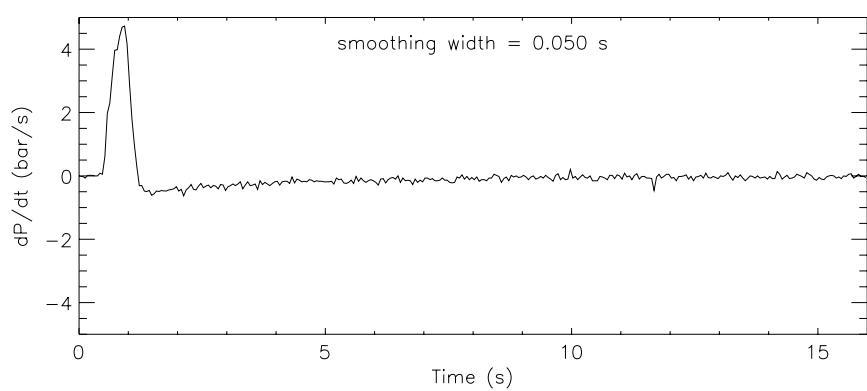
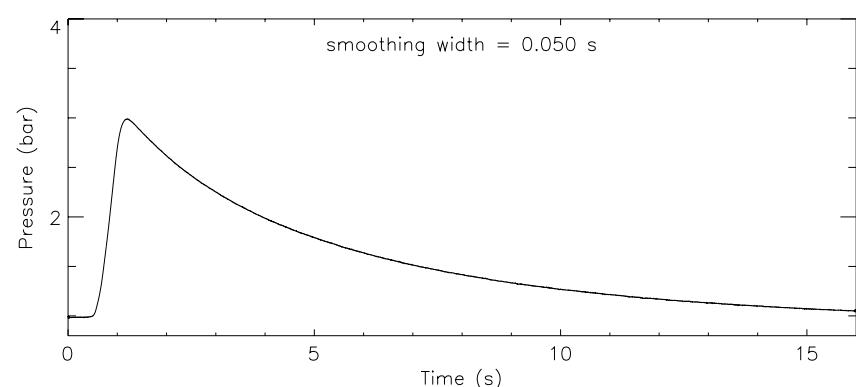
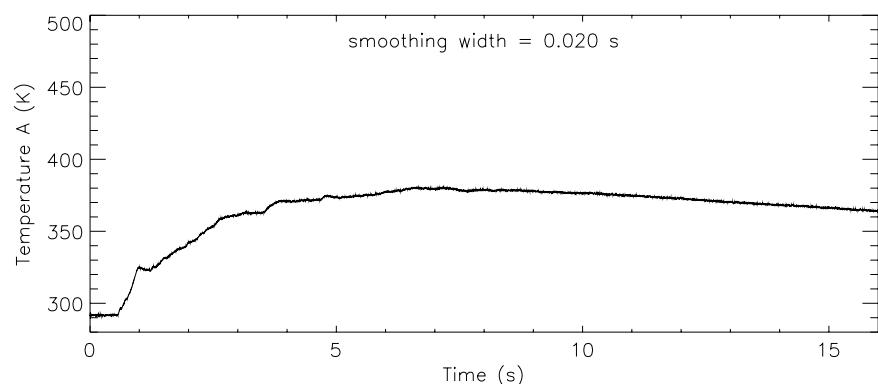


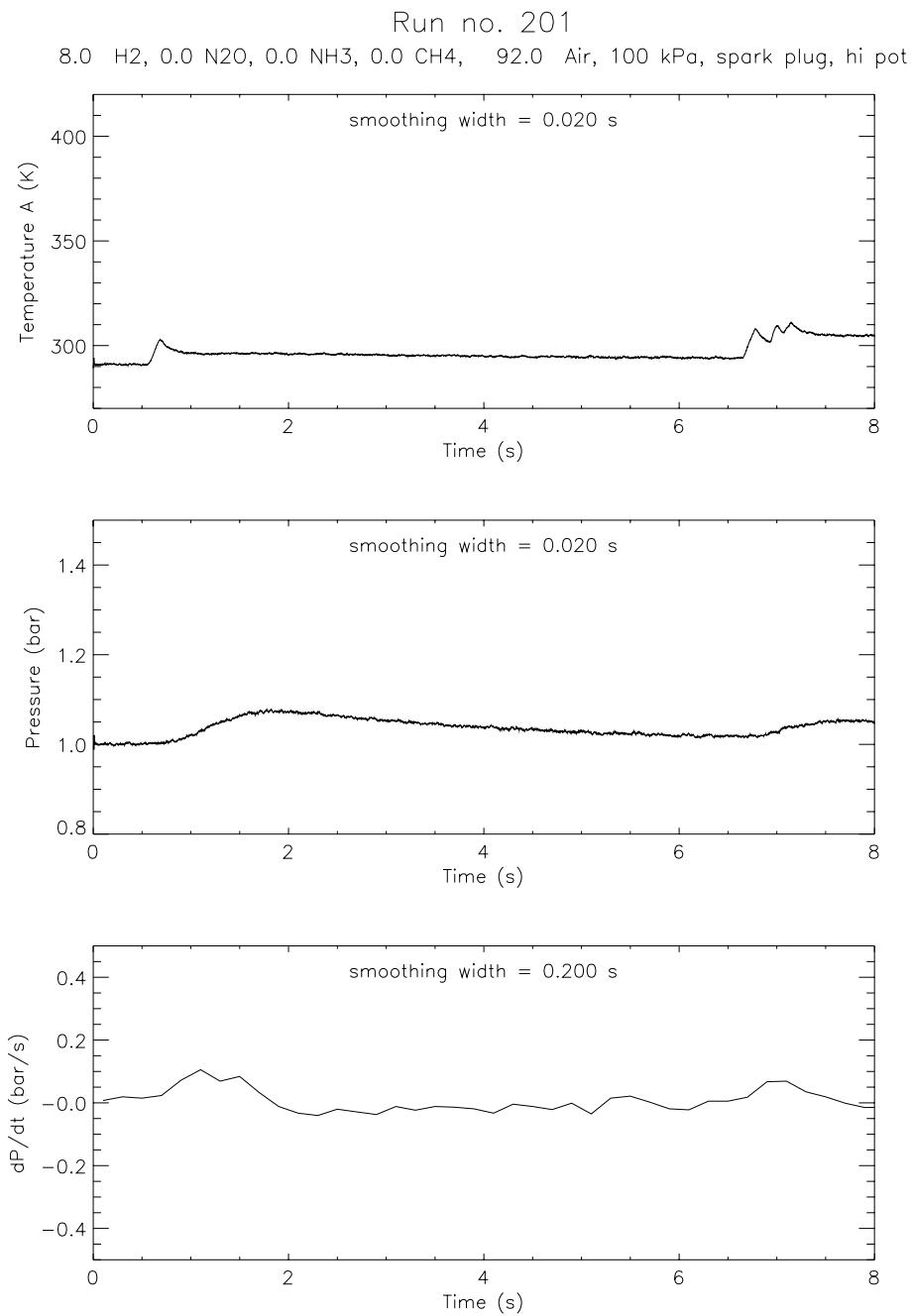
Run no. 200

8.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 92.0 Air, 100 kPa, spark plug, hi pot + humidity

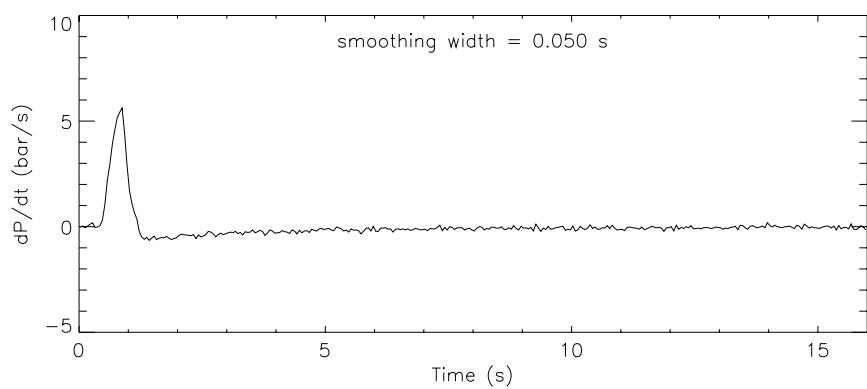
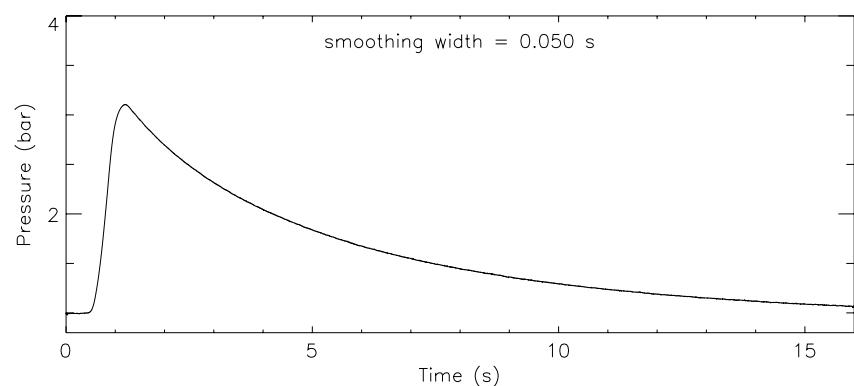
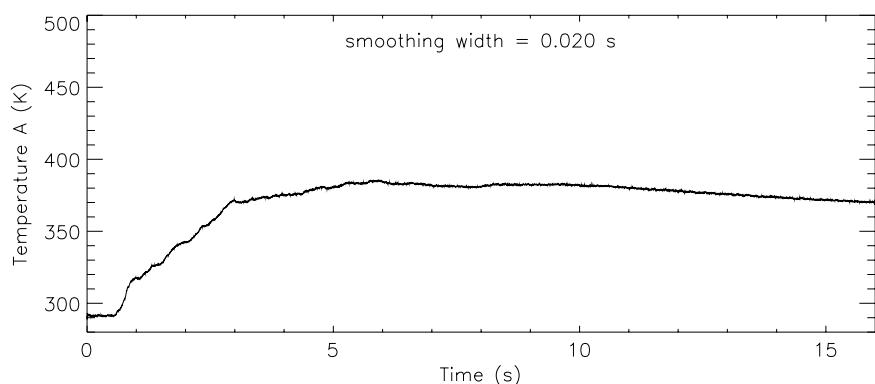
Run no. 200a

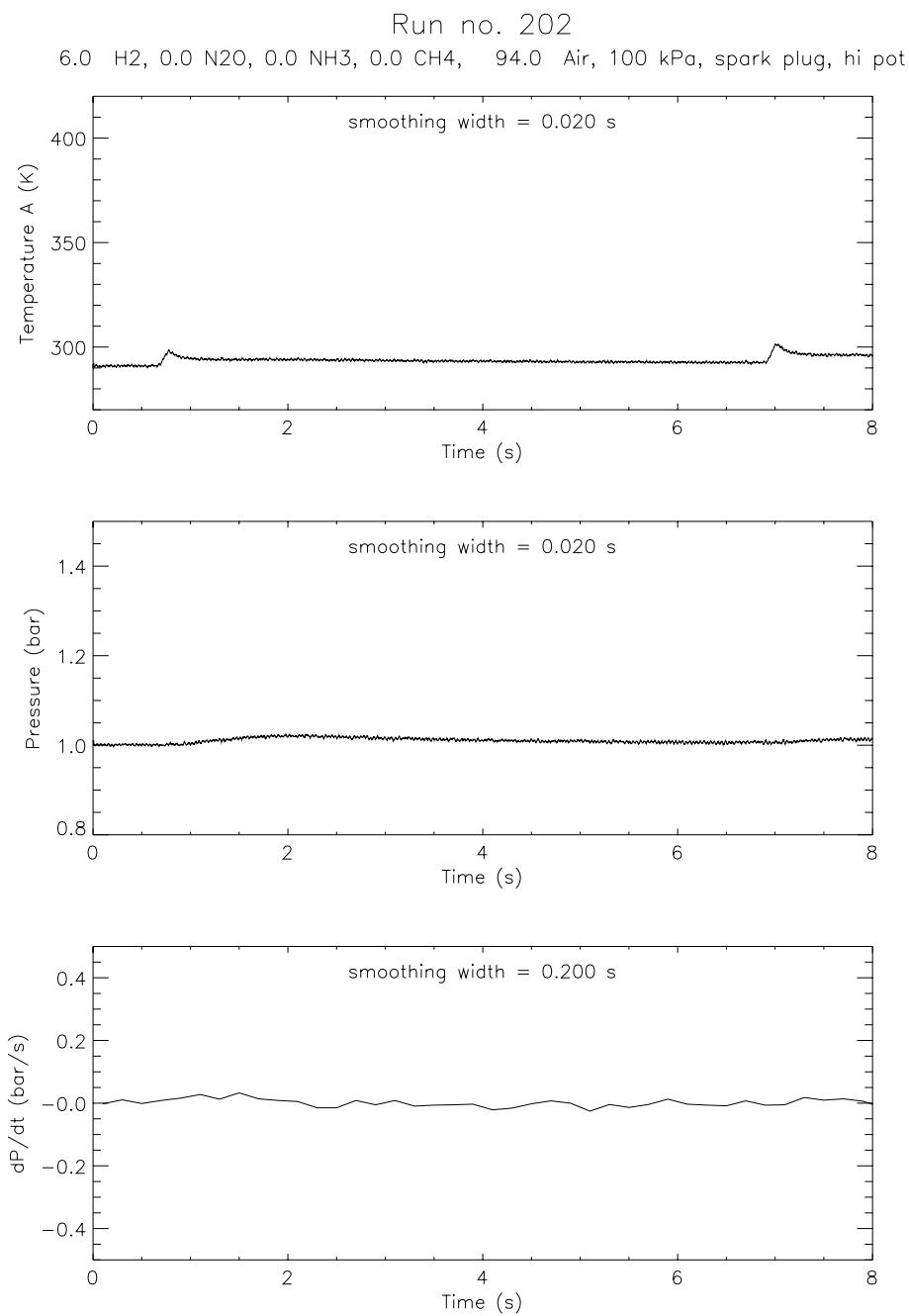
8.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 92.0 Air, 98.45 kPa, spark plug, hi pot + humidity, fan on



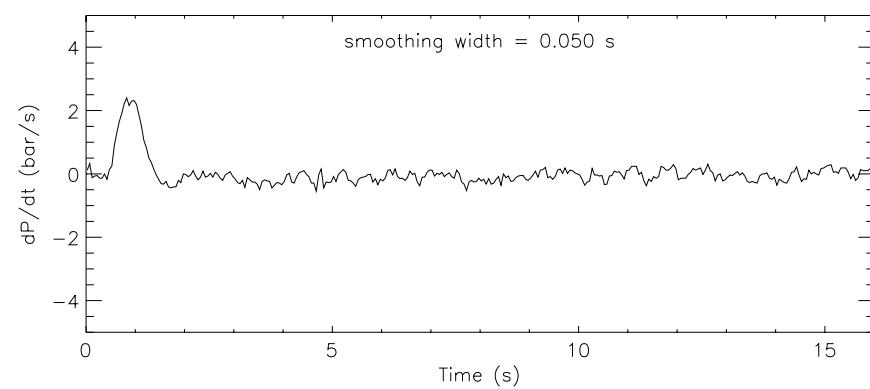
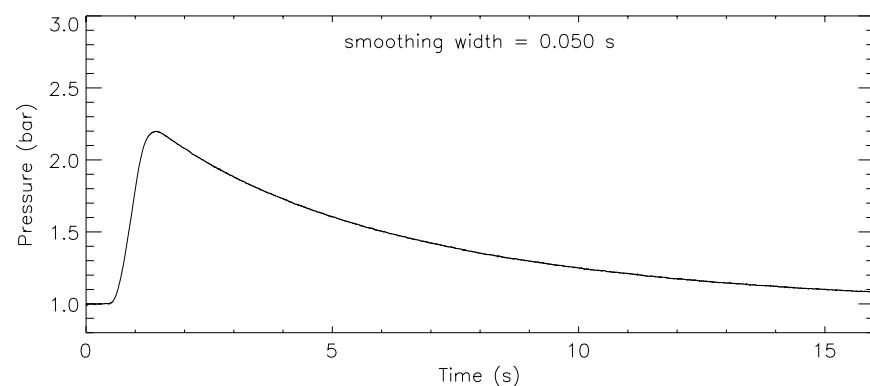
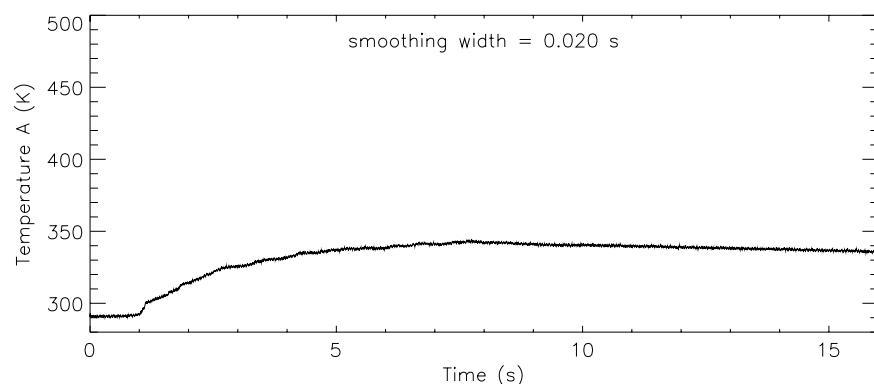


Run no. 201a

8.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 92.0 Air, 99.61 kPa, spark plug, hi pot, fan on

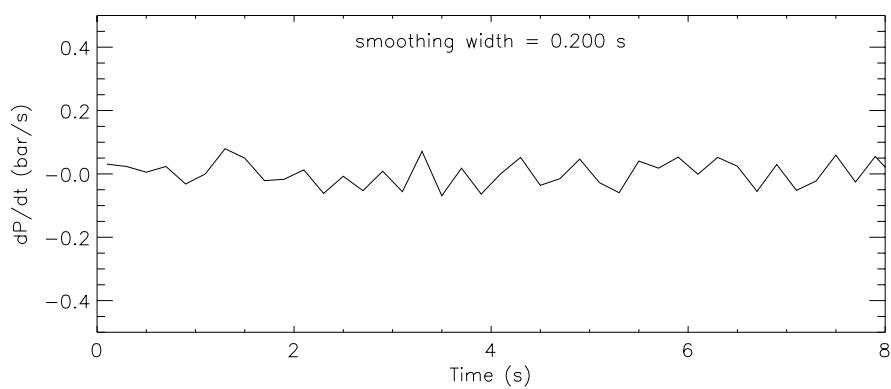
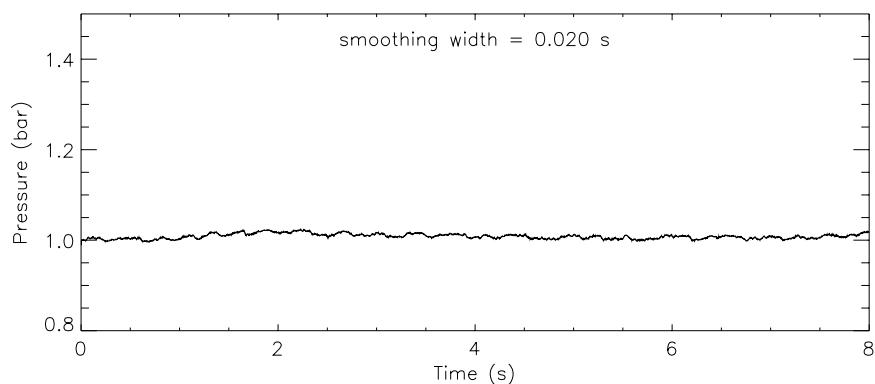
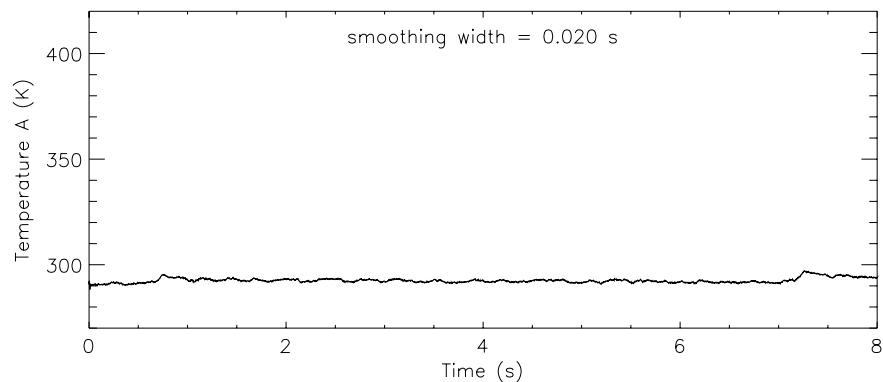


Run no. 202a

6.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 94.0 Air, 99.93 kPa, spark plug, hi pot, fan on

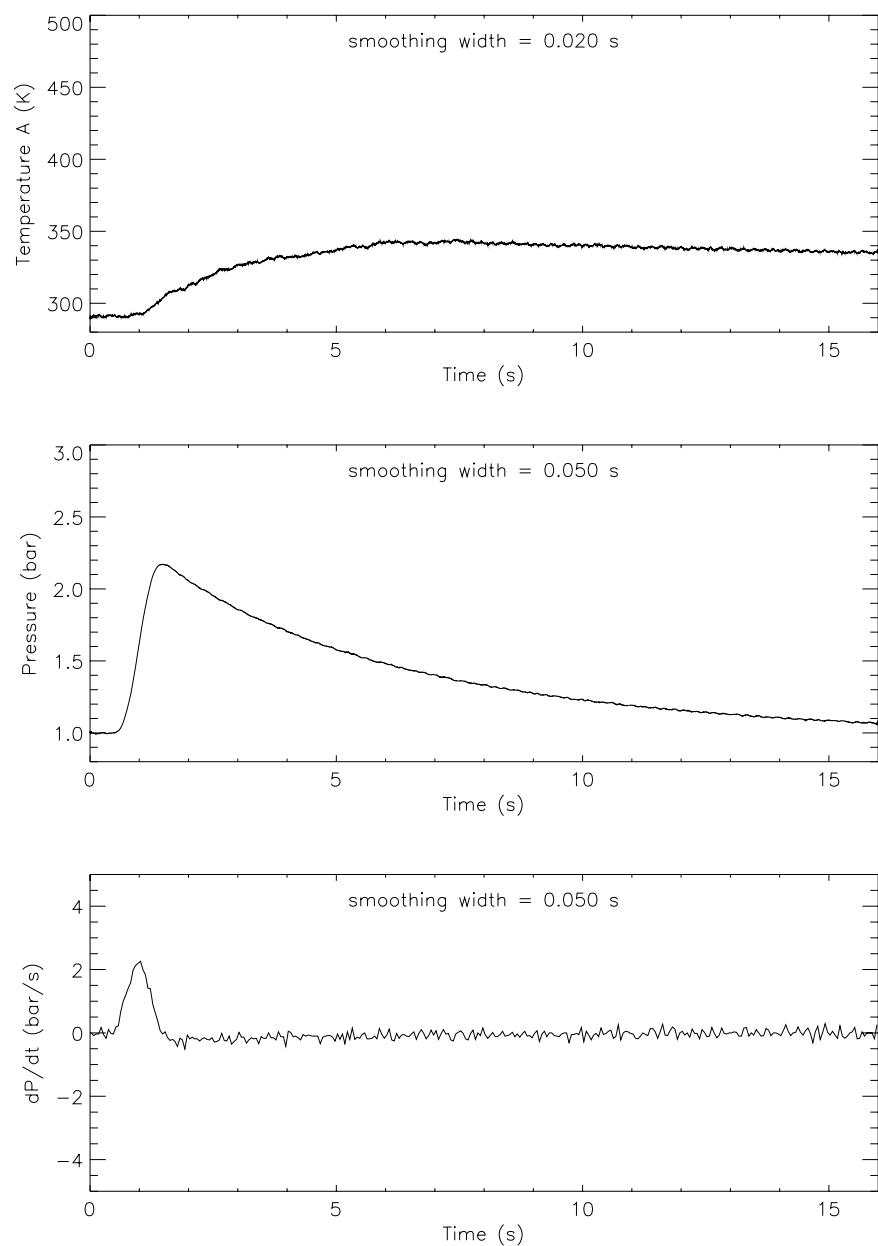
Run no. 203

6.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 94.0 Air, 100 kPa, spark plug, hi pot, + humidity

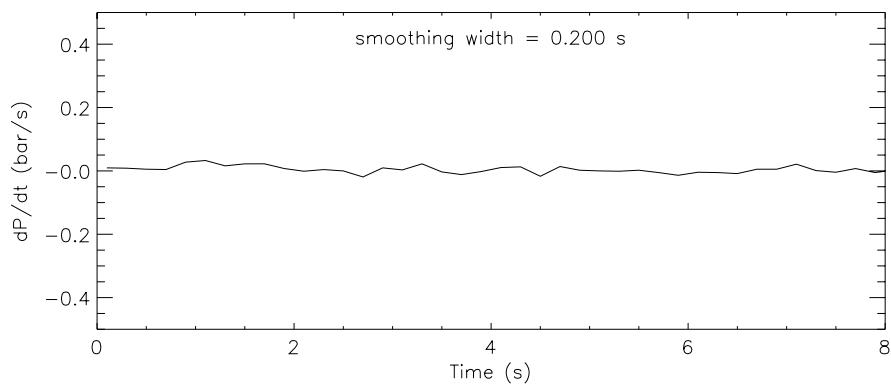
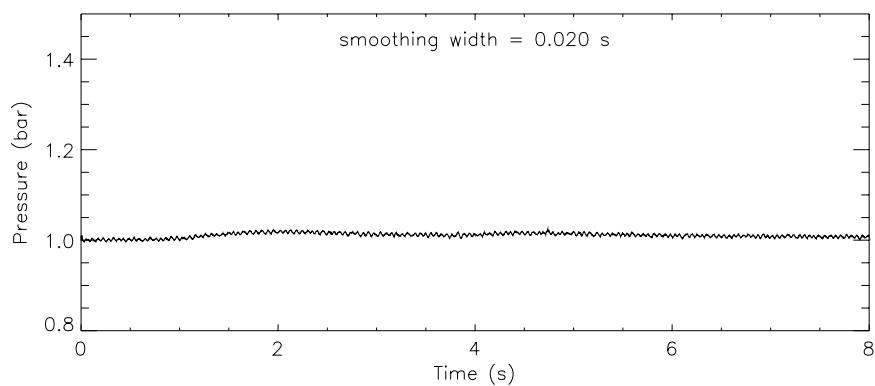
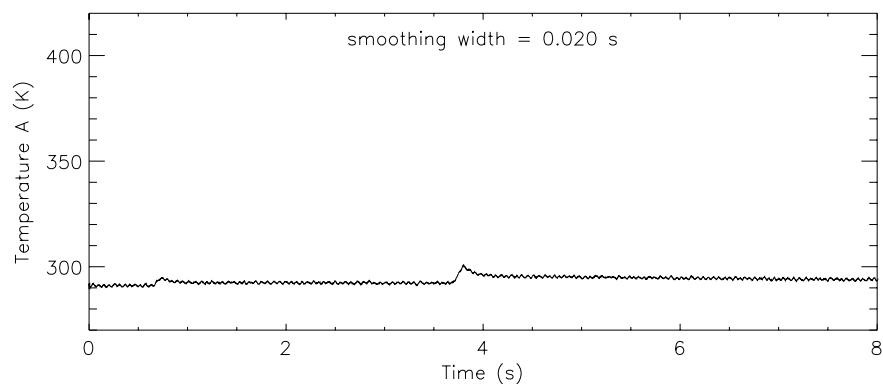


Run no. 203a

6.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 94.0 Air, 99.73 kPa, spark plug, hi pot, + humidity, fan on

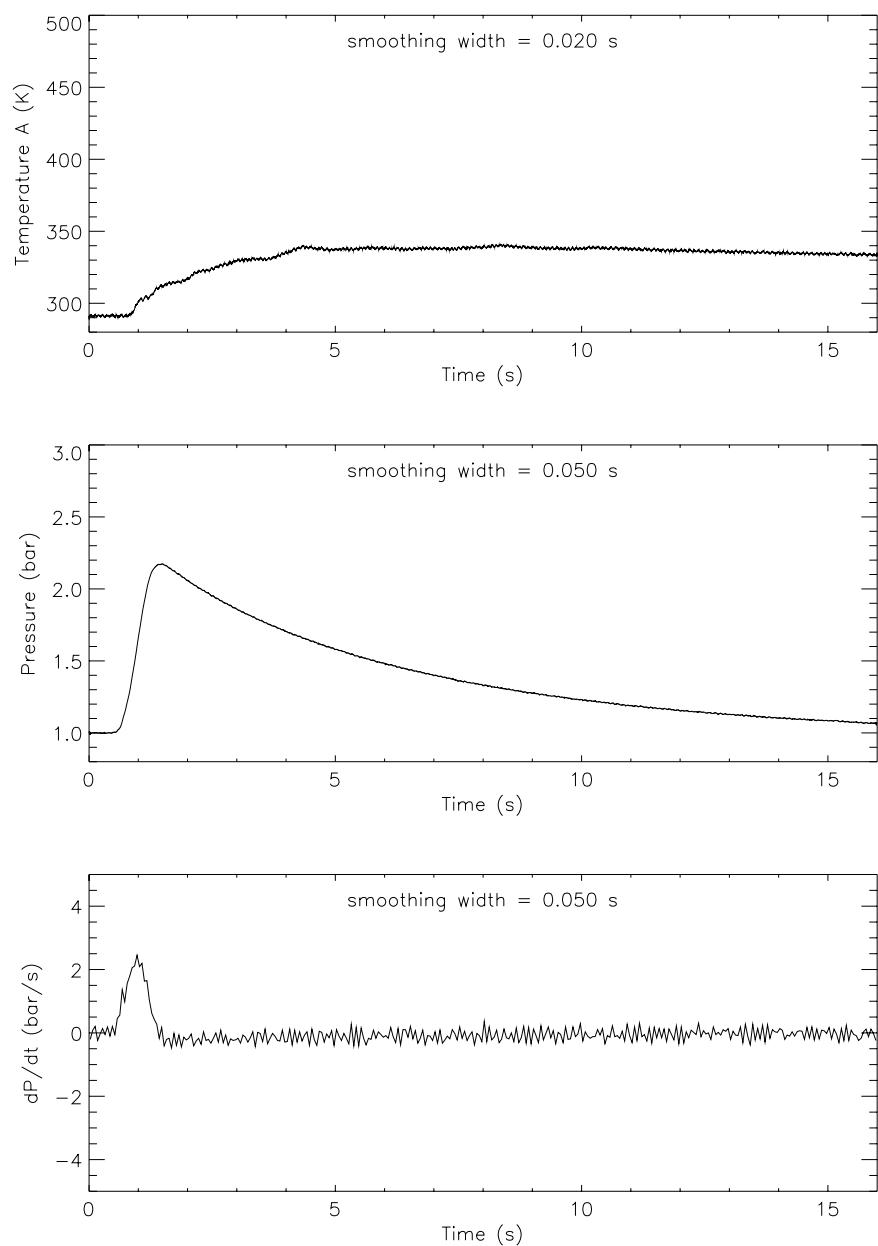


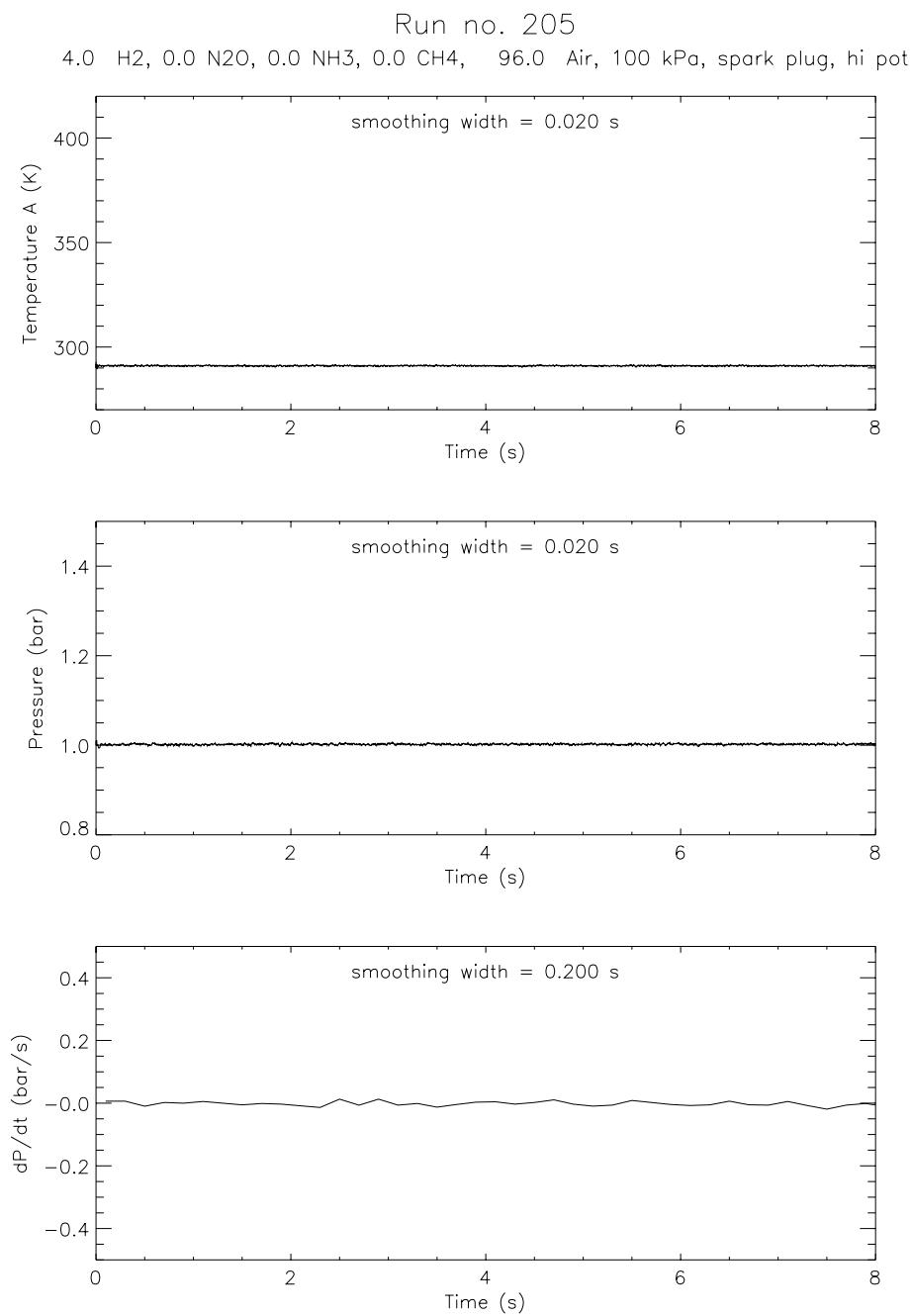
Run no. 204

4.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 96.0 Air, 100 kPa, spark plug, hi pot, + humidity

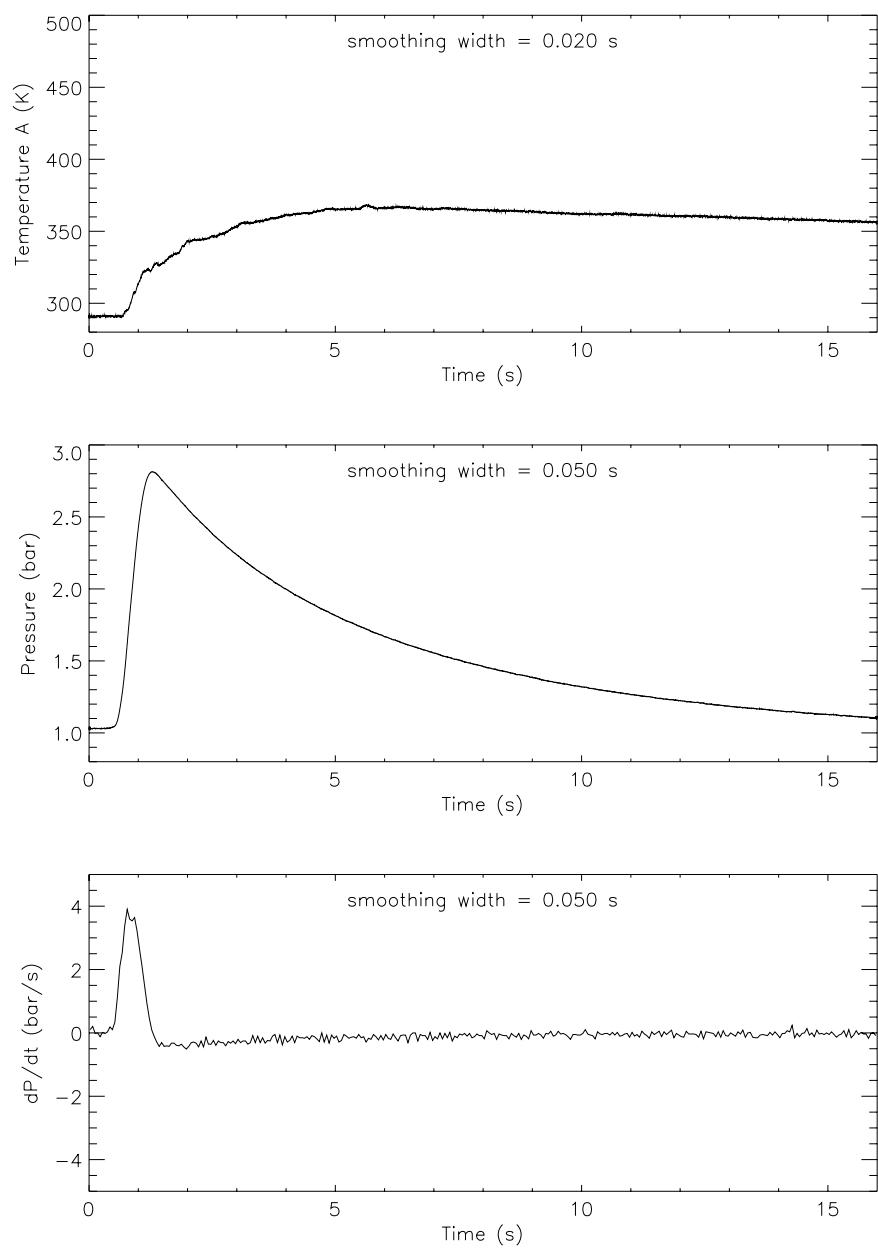
Run no. 204a

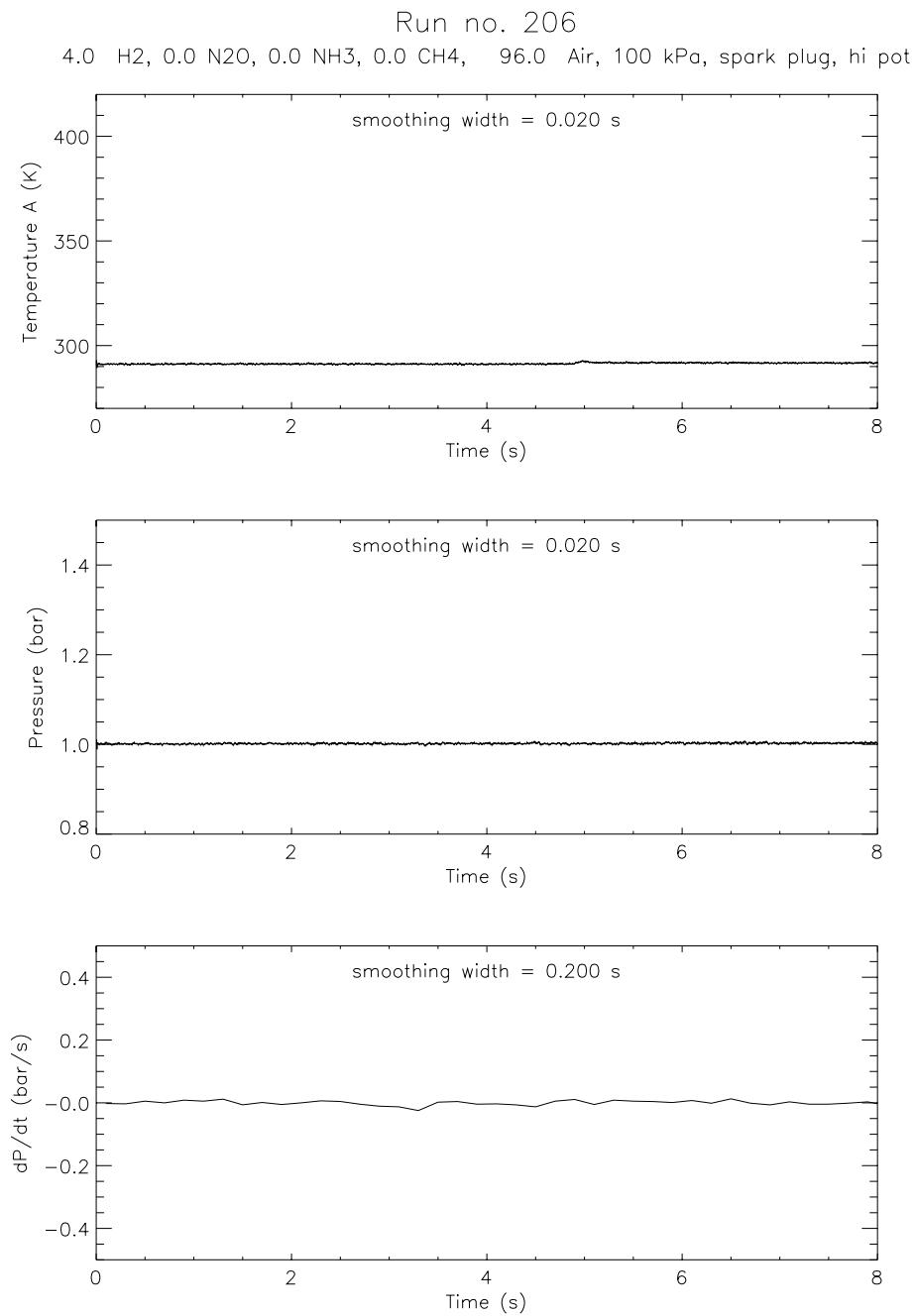
6.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 96.0 Air, 99.75 kPa, spark plug, hi pot, + humidity, fan on





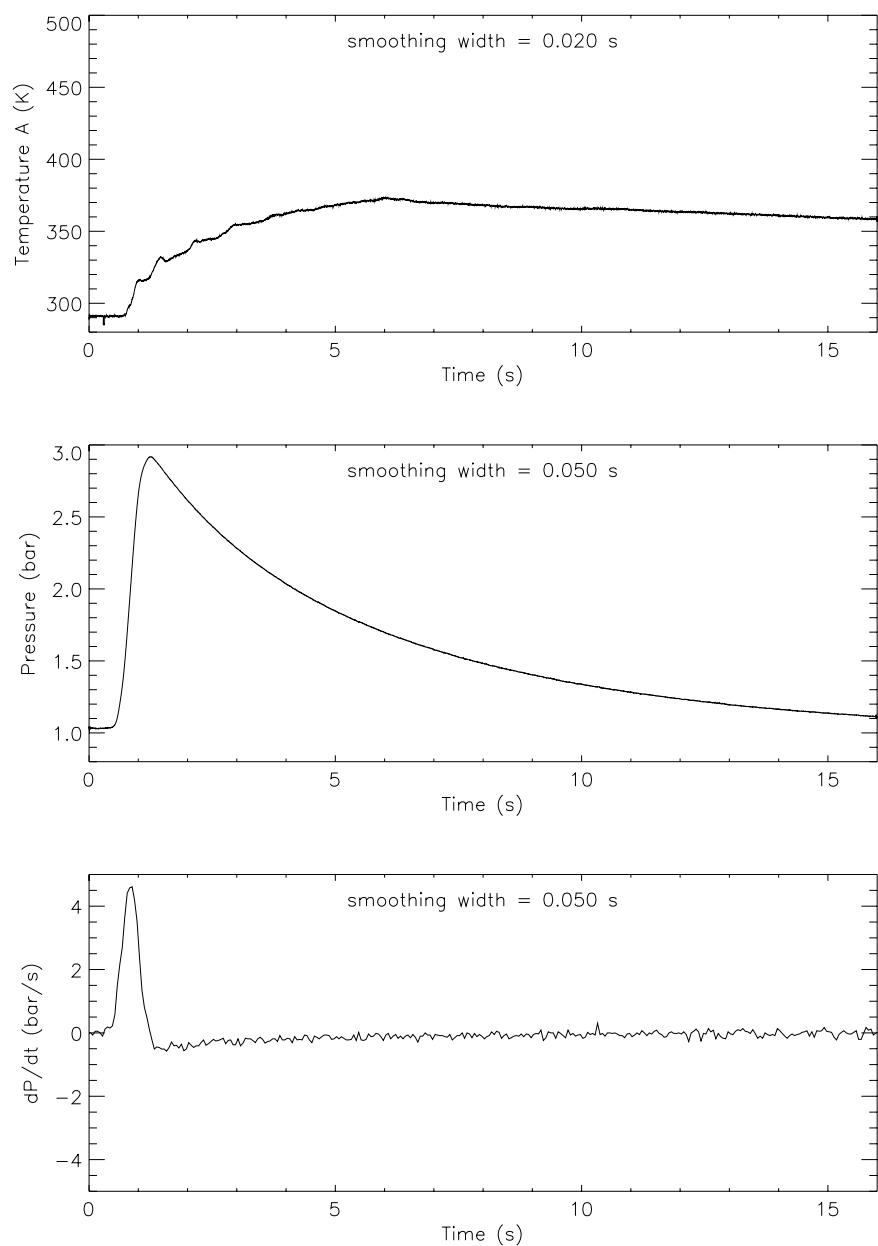
Run no. 205a

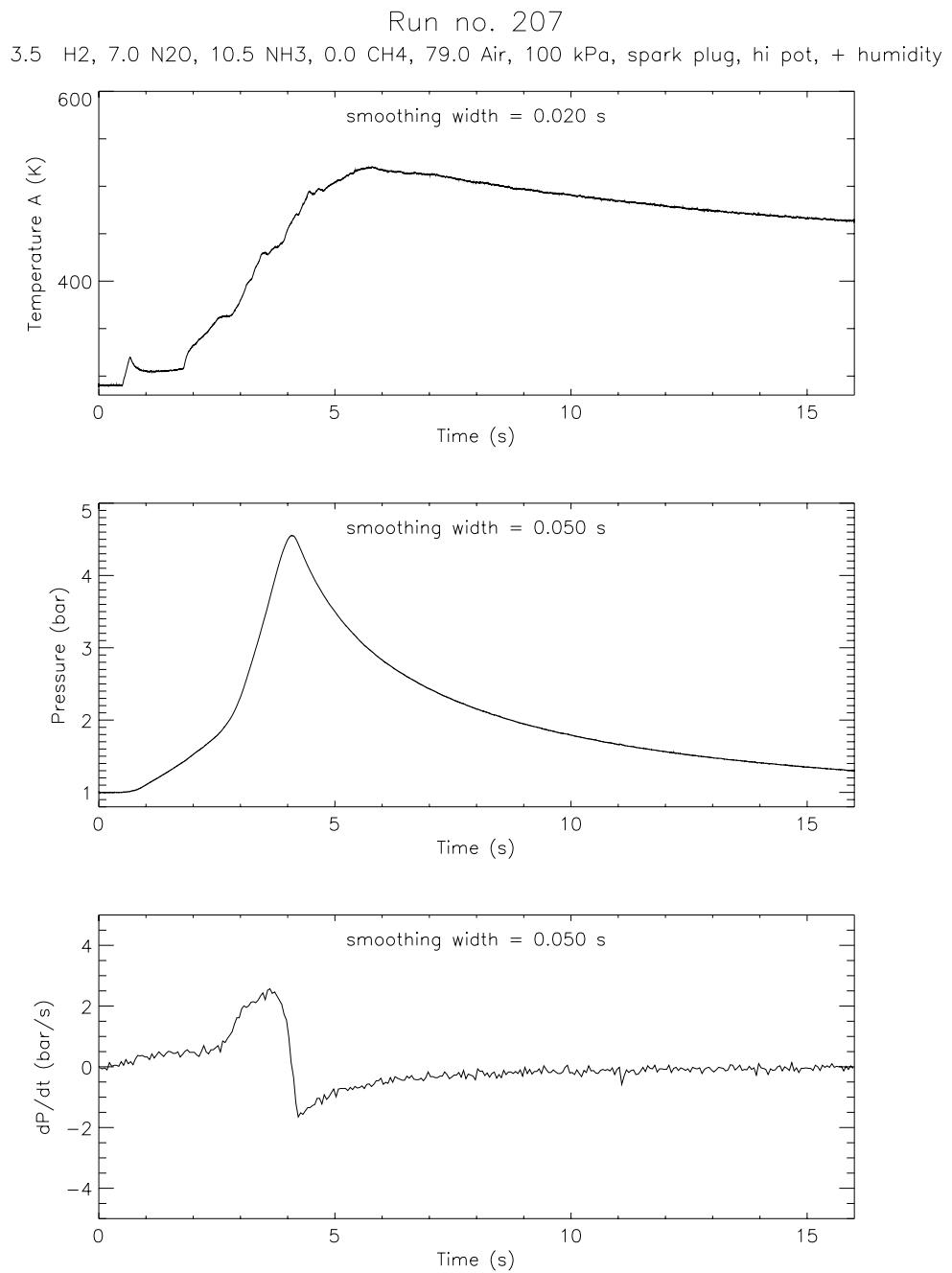
7.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 96.0 Air, 103.0 kPa, spark plug, hi pot, humidity



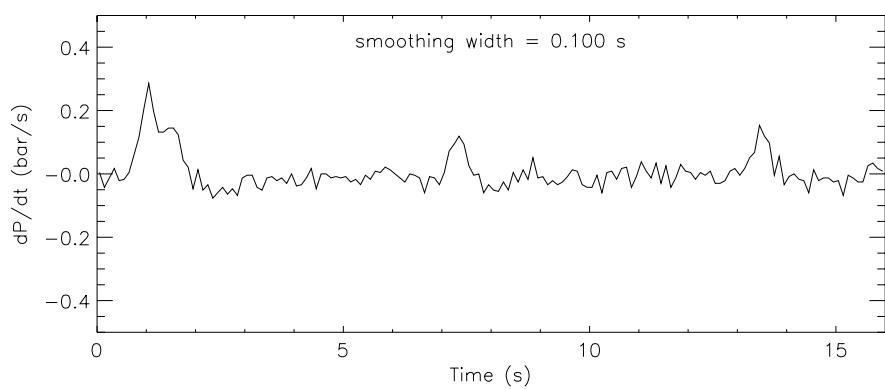
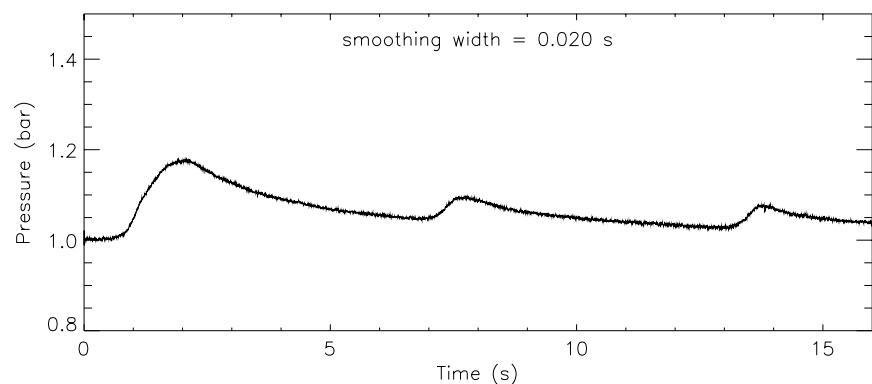
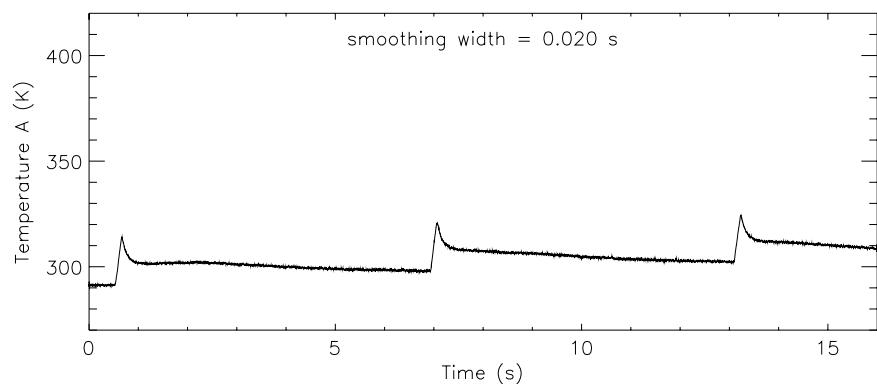
Run no. 206a

7.0 H₂, 0.0 N₂O, 0.0 NH₃, 0.0 CH₄, 96.0 Air, 102.96 kPa, spark plug, hi pot, fan on, humid





Run no. 208

3.5 H₂, 6.33 N₂O, 9.50 NH₃, 0.0 CH₄, 81.0 Air, 100 kPa, spark plug, hi pot, humidity

Run no. 208a

3.17 H₂, 6.33 N₂O, 9.5 NH₃, 0.0 CH₄, 81.0 Air, 99.03 kPa, spark plug, hi pot, fan on