



Supplement of

Study of different Carbon Bond 6 (CB6) mechanisms by using a concentration sensitivity analysis

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Table S1. Complete listings of the values of the sensitivity coefficients belonging to the CB6r3 mechanism under two different emission conditions in the present study.

CB6r3	Weak Emission			Strong Emission			CB6r3	Weak Emission			Strong Emission		
	Ozone	NO _x	HCHO	Ozone	NO _x	HCHO		Ozone	NO _x	HCHO	Ozone	NO _x	HCHO
(R1)	2.64E-01	-4.15E-01	4.15E-02	4.50E-01	-5.03E-01	6.16E-02	(R51)	-2.04E-06	-3.65E-06	1.89E-05	5.54E-04	9.03E-03	4.34E-03
(R2)	2.45E-04	-4.48E-05	1.05E-04	3.92E-05	1.06E-02	6.63E-03	(R52)	1.07E-05	1.31E-05	2.06E-06	1.82E-03	-5.78E-03	-4.06E-03
(R3)	-1.59E-01	2.52E-01	-1.64E-02	-2.78E-01	2.97E-01	-4.30E-02	(R53)	5.13E-02	-3.35E-02	6.85E-03	9.62E-02	-3.53E-02	2.54E-03
(R4)	-1.40E-05	-3.10E-05	1.33E-05	-1.36E-03	-3.86E-03	-2.34E-03	(R54)	1.81E-02	3.98E-02	2.27E-03	-6.48E-02	4.87E-03	1.02E-03
(R5)	-1.32E-05	6.71E-06	1.20E-05	6.64E-04	-8.55E-03	-6.95E-03	(R55)	-2.74E-02	-3.74E-02	-1.08E-03	6.04E-02	4.03E-03	3.52E-03
(R6)	-1.60E-05	-1.91E-05	-6.63E-06	-1.22E-03	1.02E-02	5.44E-03	(R56)	-4.08E-04	-7.16E-04	-1.71E-04	-5.44E-04	6.51E-03	5.79E-03
(R7)	5.75E-06	1.34E-05	-4.97E-06	1.96E-03	4.40E-03	1.85E-03	(R57)	-6.82E-04	-2.97E-03	-7.81E-03	1.08E-02	-8.92E-03	-1.01E-02
(R8)	-2.02E-04	6.13E-05	-1.02E-04	-2.05E-03	-1.32E-02	-5.77E-03	(R58)	2.07E-03	-2.60E-03	9.67E-04	1.64E-03	-1.13E-02	-8.89E-04
(R9)	-1.70E-01	-7.85E-02	-3.23E-02	-4.58E-02	-1.01E-02	7.16E-03	(R59)	-1.21E-02	-8.69E-03	1.03E-03	5.08E-03	5.98E-03	1.02E-03
(R10)	1.36E-01	6.31E-02	2.61E-02	3.76E-02	6.92E-03	-4.64E-03	(R60)	-4.29E-03	-1.21E-03	1.18E-03	-7.54E-04	-1.62E-03	2.68E-03
(R11)	-1.39E-01	-6.43E-02	-2.65E-02	-3.76E-02	-5.21E-03	9.28E-03	(R61)	1.27E-02	-4.52E-03	4.41E-03	3.31E-02	-8.05E-03	6.56E-03
(R12)	-1.56E-03	3.16E-03	1.18E-03	2.28E-03	-6.66E-03	-8.72E-03	(R62)	1.97E-02	7.60E-03	1.19E-03	-5.79E-03	-1.46E-02	-7.38E-03
(R13)	-9.91E-02	1.24E-02	-3.42E-04	-8.57E-02	1.93E-02	1.45E-02	(R63)	-2.08E-02	-8.82E-03	-1.06E-03	9.47E-03	5.41E-03	2.49E-03
(R14)	-9.23E-06	-1.51E-05	9.26E-07	-1.69E-04	-2.09E-03	1.89E-03	(R64)	-1.03E-04	-1.65E-04	-2.54E-05	-2.97E-04	1.05E-02	3.64E-03
(R15)	-1.75E-05	-7.77E-06	-5.75E-06	-1.80E-03	7.67E-03	3.77E-03	(R65)	-2.47E-03	-7.83E-04	-1.45E-03	1.92E-03	-3.29E-03	-1.33E-03
(R16)	2.36E-06	6.76E-06	5.51E-06	-3.78E-04	-1.27E-03	-4.71E-03	(R66)	-1.88E-02	-9.53E-04	-4.45E-03	-2.33E-02	1.91E-02	-1.03E-03
(R17)	-1.69E-07	-4.37E-07	1.42E-06	1.24E-03	1.66E-03	-3.79E-03	(R67)	-1.57E-03	6.17E-05	6.12E-04	-4.95E-04	1.60E-03	-1.21E-03
(R18)	9.60E-04	2.19E-03	2.16E-04	1.91E-03	6.00E-03	1.47E-03	(R68)	-3.81E-03	-7.12E-03	-2.60E-04	-7.62E-03	6.12E-04	3.87E-03
(R19)	-8.40E-03	-5.29E-03	-1.31E-03	-3.17E-03	8.31E-03	6.83E-03	(R69)	1.10E-03	-7.05E-03	2.70E-03	-2.29E-03	-9.03E-03	2.07E-03
(R20)	-1.04E-02	-6.54E-03	-1.48E-03	-6.27E-03	6.67E-03	1.10E-02	(R70)	2.98E-03	-3.09E-03	5.46E-04	3.02E-03	-4.67E-03	9.00E-04
(R21)	-2.17E-02	-4.32E-02	-7.09E-03	-1.45E-02	-2.87E-02	7.46E-04	(R71)	3.14E-02	-2.13E-02	-7.59E-03	2.68E-02	-1.78E-02	2.49E-02
(R22)	6.25E-03	1.14E-02	1.75E-03	3.92E-03	1.40E-02	-2.36E-04	(R72)	2.24E-03	2.91E-02	3.41E-02	-1.29E-02	1.66E-02	-3.38E-02
(R23)	-1.35E-06	-4.77E-06	-4.62E-06	-1.58E-03	-1.03E-02	-2.05E-03	(R73)	-3.23E-02	-9.97E-03	-1.54E-02	-1.59E-02	6.23E-03	9.99E-03
(R24)	2.08E-06	8.19E-06	1.54E-05	4.11E-04	4.45E-03	-1.64E-05	(R74)	2.02E-03	5.14E-04	-1.12E-02	5.54E-03	-1.21E-02	-4.61E-03
(R25)	8.19E-02	-1.46E-01	-5.38E-04	8.01E-02	-1.37E-01	8.13E-03	(R75)	3.76E-02	1.02E-02	7.83E-03	4.22E-02	-2.96E-02	7.68E-04
(R26)	-3.20E-01	-3.88E-01	-2.16E-02	-4.20E-01	-4.29E-01	-8.37E-02	(R76)	-3.17E-02	-1.84E-02	-8.22E-03	-3.98E-02	1.16E-02	3.39E-03
(R27)	3.35E-02	3.20E-02	4.05E-03	3.12E-02	1.34E-02	3.27E-03	(R77)	-1.26E-02	2.23E-03	-6.96E-04	-1.89E-02	1.75E-02	-4.38E-03
(R28)	3.54E-03	4.54E-03	7.11E-04	3.92E-03	-5.29E-03	-3.48E-03	(R78)	4.10E-03	1.97E-03	-1.04E-04	1.12E-02	-3.88E-04	5.74E-03
(R29)	5.85E-03	6.51E-03	-4.53E-04	1.33E-02	3.30E-03	-2.57E-03	(R79)	1.44E-02	4.16E-03	2.29E-03	1.17E-02	-2.85E-03	-2.46E-03
(R30)	3.54E-05	2.32E-05	-2.17E-05	5.59E-04	3.48E-03	-2.27E-03	(R80)	-1.03E-02	-9.81E-03	-2.59E-03	-4.63E-03	-1.32E-02	5.51E-03
(R31)	1.72E-06	7.23E-06	6.76E-06	9.61E-04	-7.27E-03	-4.14E-03	(R81)	-6.73E-03	3.26E-03	-2.40E-04	-8.17E-03	4.41E-03	-1.43E-03
(R32)	5.56E-07	-1.02E-05	-5.04E-06	-1.48E-04	1.20E-02	3.50E-03	(R82)	2.08E-03	7.50E-05	8.03E-05	3.85E-03	-6.67E-03	-2.43E-03
(R33)	1.55E-03	1.55E-03	-4.41E-04	4.31E-03	-4.86E-03	-1.65E-03	(R83)	-6.15E-02	-9.09E-02	-2.75E-02	-3.67E-02	-3.04E-02	-6.85E-03
(R34)	7.57E-05	3.99E-05	-4.71E-05	5.71E-04	9.20E-03	2.86E-03	(R84)	5.92E-02	8.90E-02	2.79E-02	3.45E-02	2.85E-02	5.81E-03
(R35)	1.25E-06	-2.68E-06	-2.70E-05	4.17E-05	3.64E-04	-3.81E-03	(R85)	6.90E-03	9.93E-03	2.39E-03	4.43E-03	6.96E-03	8.97E-04
(R36)	-1.38E-04	-1.33E-04	1.27E-04	8.93E-05	8.22E-04	-3.04E-03	(R86)	3.07E-03	3.89E-03	1.15E-03	4.59E-03	-3.75E-03	-2.58E-03
(R37)	1.60E-04	1.65E-04	-1.47E-04	-5.28E-04	1.95E-03	2.85E-04	(R87)	1.01E-02	2.68E-02	1.79E-02	4.28E-03	3.97E-03	1.66E-02
(R38)	6.58E-06	1.56E-05	-4.31E-06	-2.05E-04	-6.03E-03	9.95E-04	(R88)	-4.42E-03	-3.09E-02	4.15E-03	5.87E-04	-5.46E-03	1.30E-02
(R39)	-1.62E-04	-1.30E-04	1.20E-04	1.11E-03	-1.13E-02	-6.45E-03	(R89)	3.06E-03	1.43E-02	-2.88E-03	-2.25E-03	2.26E-02	-1.47E-02
(R40)	-3.34E-04	-4.74E-04	-1.74E-04	-6.98E-04	-1.25E-02	-7.55E-03	(R90)	-9.90E-03	-2.00E-02	7.88E-03	-7.57E-03	-2.33E-02	1.18E-02
(R41)	5.71E-06	1.12E-05	-2.28E-05	9.61E-04	2.75E-03	-2.25E-03	(R91)	-3.75E-03	-6.38E-03	-2.73E-03	-3.17E-04	-1.86E-03	-1.56E-03
(R42)	-3.50E-06	-1.00E-05	6.80E-06	-8.15E-05	-7.63E-04	-3.73E-03	(R92)	1.78E-02	2.71E-02	9.76E-03	7.27E-03	6.23E-03	3.88E-03
(R43)	1.79E-03	2.37E-03	1.24E-03	-1.03E-03	-1.25E-04	-2.23E-04	(R93)	4.81E-04	9.94E-04	-5.27E-05	4.00E-04	1.62E-03	-1.84E-03
(R44)	1.11E-05	1.62E-05	-3.05E-05	-1.14E-03	1.04E-02	7.13E-03	(R94)	3.45E-03	3.66E-03	1.32E-02	6.44E-04	2.56E-03	6.06E-03
(R45)	-4.37E-02	-5.55E-02	3.50E-04	-2.27E-02	-9.43E-03	5.11E-03	(R95)	8.54E-03	8.22E-03	2.02E-02	3.63E-03	6.84E-03	1.40E-02
(R46)	1.06E-03	1.06E-03	-4.51E-05	2.11E-03	-8.39E-03	-6.04E-03	(R96)	3.64E-03	4.63E-03	-3.30E-02	2.39E-03	1.18E-02	-2.65E-02
(R47)	3.21E-03	3.39E-03	2.55E-04	3.19E-03	1.35E-02	4.86E-03	(R97)	-2.60E-03	-9.63E-03	-1.14E-01	-2.53E-03	-4.76E-03	-9.74E-02
(R48)	-8.48E-05	2.51E-04	-2.98E-04	-1.24E-03	-8.98E-03	2.49E-03	(R98)	5.91E-04	2.54E-03	-1.42E-01	1.27E-03	-1.78E-03	-1.20E-01
(R49)	1.99E-04	-1.68E-04	5.27E-04	1.62E-05	-1.08E-02	1.16E-03	(R99)	-4.55E-07	-2.76E-06	2.59E-05	1.11E-03	-2.62E-04	-3.31E-03
(R50)	-1.68E-05	-2.38E-05	-4.03E-06	2.89E-04	1.29E-02	5.60E-03	(R100)	-5.24E-05	-4.03E-05	4.87E-05	-8.86E-04	9.45E-03	4.43E-03

Table S1. (continued).

CB6r3	Weak Emission			Strong Emission		
	Ozone	NO _x	HCHO	Ozone	NO _x	HCHO
(R101)	2.79E-06	-1.42E-06	-2.88E-06	2.22E-03	-9.58E-03	-9.45E-03
(R102)	-2.02E-05	-1.70E-05	3.67E-05	1.27E-04	1.00E-03	2.01E-03
(R103)	8.98E-06	1.81E-05	-1.78E-05	1.05E-03	5.13E-03	-1.08E-03
(R104)	-5.44E-06	-1.94E-05	5.96E-06	-7.81E-04	-1.01E-02	-6.53E-03
(R105)	-4.21E-05	-3.56E-05	-1.31E-05	1.32E-03	-1.09E-02	-6.82E-03
(R106)	5.79E-03	-1.69E-02	-8.40E-02	1.87E-02	5.10E-02	4.73E-02
(R107)	-1.23E-03	-1.58E-03	-1.39E-04	-1.93E-03	-6.38E-03	1.13E-03
(R108)	-5.29E-03	-2.35E-02	-9.42E-03	9.04E-03	-2.63E-02	9.31E-03
(R109)	-2.04E-05	2.32E-06	-2.80E-05	1.10E-04	1.17E-02	4.07E-03
(R110)	7.20E-05	-1.64E-02	-1.97E-02	1.02E-02	3.00E-02	1.02E-02
(R111)	-1.28E-03	-1.56E-03	1.78E-04	-4.62E-03	9.85E-04	9.87E-03
(R112)	-2.21E-03	-1.03E-02	1.35E-03	6.32E-03	-9.85E-03	6.11E-03
(R113)	4.74E-03	7.03E-03	3.48E-03	3.03E-03	1.63E-02	6.30E-03
(R114)	-2.17E-03	-6.01E-03	3.11E-03	-1.89E-04	5.64E-03	-1.16E-03
(R115)	-1.62E-04	-2.92E-04	6.86E-06	2.93E-04	-1.51E-03	-6.97E-04
(R116)	1.11E-03	6.64E-04	1.95E-04	-1.48E-04	-6.49E-03	-2.75E-03
(R117)	-1.24E-04	9.88E-05	-6.91E-05	9.69E-04	6.98E-03	-2.90E-03
(R118)	-1.59E-04	-1.41E-04	2.16E-04	1.75E-03	-6.80E-07	1.18E-03
(R119)	-1.25E-03	-2.97E-03	-4.64E-03	-9.93E-04	-5.02E-03	-7.75E-03
(R120)	-2.32E-04	-2.13E-04	2.02E-04	3.07E-04	-7.03E-03	-8.85E-03
(R121)	1.68E-03	8.22E-04	-1.94E-04	3.76E-03	-1.67E-04	3.09E-03
(R122)	1.83E-03	3.47E-03	-8.88E-05	-9.48E-04	-9.50E-03	-9.02E-03
(R123)	2.86E-02	5.25E-02	7.16E-04	6.17E-03	8.48E-03	-1.02E-02
(R124)	1.22E-02	1.12E-02	4.60E-02	2.95E-03	-9.09E-03	-4.83E-03
(R125)	-8.27E-07	1.25E-06	8.23E-06	5.57E-04	2.16E-03	-5.86E-04
(R126)	3.29E-04	7.16E-04	3.35E-03	2.58E-04	-1.07E-02	-5.30E-03
(R127)	-8.48E-06	-8.59E-06	-1.31E-06	-1.33E-03	-3.14E-03	-2.38E-03
(R128)	1.42E-03	1.16E-03	8.58E-03	-9.98E-04	4.52E-03	4.99E-03
(R129)	1.24E-03	-1.12E-05	9.00E-03	1.69E-03	4.64E-03	7.00E-03
(R130)	5.55E-04	6.51E-04	4.29E-03	-2.72E-04	-7.86E-05	-7.81E-04
(R131)	3.91E-05	5.28E-05	6.64E-05	-1.93E-03	-1.82E-03	3.37E-03
(R132)	-8.34E-03	-3.55E-02	1.90E-02	-8.19E-03	4.64E-03	2.87E-03
(R133)	5.41E-03	5.55E-03	1.82E-02	1.30E-03	-3.91E-03	5.96E-05
(R134)	-6.13E-03	-6.33E-03	-2.05E-02	1.52E-04	6.18E-03	-9.42E-03
(R135)	4.72E-06	1.15E-05	1.29E-05	3.99E-04	1.14E-02	3.59E-03
(R136)	-4.49E-06	3.75E-06	7.26E-06	-4.02E-04	8.47E-03	3.90E-03
(R137)	5.07E-06	1.83E-05	-6.29E-05	-1.25E-03	-6.50E-04	-4.02E-04
(R138)	4.43E-03	-1.21E-02	-3.85E-02	1.04E-02	7.78E-03	8.51E-03
(R139)	-7.64E-03	-5.90E-04	-5.84E-02	-1.40E-02	4.28E-03	4.92E-03
(R140)	9.31E-05	1.12E-04	3.61E-05	9.45E-04	-2.66E-05	-2.82E-03
(R141)	-1.63E-05	-1.91E-05	-4.41E-06	-6.58E-04	-3.96E-03	1.69E-03
(R142)	2.81E-03	-1.01E-02	9.35E-04	4.84E-02	1.80E-03	2.01E-03
(R143)	-5.08E-03	2.36E-04	-8.11E-03	-4.32E-02	8.01E-04	4.19E-03
(R144)	7.56E-04	1.05E-03	4.84E-04	1.18E-03	-1.09E-02	-5.47E-03
(R145)	-3.52E-07	-1.67E-05	3.45E-05	3.72E-04	9.63E-03	4.04E-03
(R146)	3.00E-03	-2.37E-03	4.29E-03	3.50E-03	-6.72E-03	-2.07E-03
(R147)	-4.10E-03	-7.76E-04	-1.02E-02	-3.46E-03	4.92E-03	1.16E-03
(R148)	8.03E-04	1.23E-03	8.09E-04	1.29E-03	1.77E-03	1.21E-03
(R149)	1.96E-02	-7.55E-03	-4.96E-02	3.90E-02	9.78E-03	-2.98E-02
(R150)	-1.10E-04	1.07E-04	4.35E-05	-8.32E-04	1.13E-02	1.14E-03
(R151)	-6.99E-03	-2.92E-02	2.74E-02	-5.77E-03	-1.88E-02	1.53E-02
(R152)	1.01E-02	3.07E-02	-2.43E-02	8.29E-03	9.06E-03	-1.34E-02
(R153)	5.19E-04	1.37E-03	4.21E-03	-2.30E-03	6.23E-03	3.26E-03
(R154)	3.17E-04	1.33E-03	2.47E-03	-4.65E-04	-2.34E-03	-4.23E-04
(R155)	-4.28E-03	-4.00E-03	-1.44E-02	-5.79E-04	2.33E-04	-2.64E-03
(R156)	-1.43E-02	6.55E-03	5.26E-02	-1.11E-02	1.62E-03	3.16E-02
(R157)	-5.73E-03	2.88E-03	-1.26E-03	-2.99E-02	-5.08E-03	-8.61E-03
(R158)	3.92E-03	2.71E-03	-2.74E-02	6.12E-04	1.70E-03	-9.66E-03
(R159)	-1.57E-02	-2.68E-03	1.08E-02	-1.68E-02	-1.51E-04	1.25E-02
(R160)	-1.29E-04	-2.41E-04	2.32E-04	-8.93E-04	-7.91E-05	3.03E-04
(R161)	1.00E-02	-2.17E-03	2.25E-02	1.31E-03	2.27E-03	7.32E-03
(R162)	5.59E-04	3.94E-05	2.41E-03	1.38E-03	-9.61E-03	-5.39E-03
(R163)	1.65E-05	-4.65E-04	5.35E-04	-3.36E-04	1.94E-03	2.01E-03
(R164)	-2.51E-05	-1.85E-05	2.80E-05	1.31E-03	2.27E-03	-2.15E-03
(R165)	2.93E-03	1.31E-04	1.30E-02	3.37E-03	-1.50E-03	5.48E-03
(R166)	-3.48E-03	-2.86E-03	1.51E-03	-4.28E-03	-6.20E-03	3.35E-03
(R167)	3.87E-03	2.13E-03	-3.82E-04	1.69E-03	6.08E-03	6.67E-04
(R168)	-4.41E-04	3.87E-04	-9.39E-04	-1.49E-03	4.08E-03	6.82E-04
(R169)	4.72E-05	7.35E-05	5.85E-05	5.10E-04	6.76E-04	1.26E-03
(R170)	-8.02E-03	8.25E-04	5.48E-04	2.86E-03	-3.35E-03	-4.82E-04
(R171)	4.59E-06	1.23E-05	-1.09E-05	9.48E-04	-5.16E-03	-4.91E-03
(R172)	2.33E-07	2.51E-06	4.99E-07	1.67E-04	-1.22E-02	-6.84E-03
(R173)	1.15E-06	2.82E-07	-5.05E-06	1.71E-04	5.07E-04	2.75E-03
(R174)	-1.82E-06	1.27E-06	3.12E-06	-7.53E-04	9.83E-03	4.09E-03
(R175)	1.45E-05	1.23E-05	1.96E-06	-8.34E-04	-1.59E-03	-2.20E-03
(R176)	1.38E-05	1.95E-05	6.16E-05	1.69E-03	6.82E-04	-2.34E-03
(R177)	3.83E-06	9.79E-06	-1.98E-06	-4.53E-04	-1.44E-03	-2.66E-04
(R178)	4.20E-06	1.32E-05	-6.61E-06	-4.83E-05	1.51E-03	-1.17E-03
(R179)	-6.81E-06	-1.84E-05	1.08E-05	-1.93E-04	2.97E-04	-4.98E-05
(R180)	-5.70E-02	-5.43E-02	3.93E-02	-5.69E-02	-6.65E-02	-9.67E-03
(R181)	-1.21E-02	-2.22E-02	2.53E-03	-8.84E-03	-8.25E-03	3.77E-03
(R182)	4.78E-04	6.36E-04	2.86E-03	4.70E-04	6.78E-04	-3.38E-03
(R183)	7.34E-03	1.41E-02	-5.02E-03	4.79E-03	9.41E-03	-4.70E-03
(R184)	5.41E-04	4.33E-04	9.82E-04	-1.18E-03	4.42E-03	3.28E-03
(R185)	5.11E-02	1.17E-01	5.90E-02	-2.36E-02	-2.35E-02	8.59E-03
(R186)	-5.46E-03	-7.44E-03	8.22E-03	-9.07E-03	-1.11E-02	1.82E-04
(R187)	3.16E-03	4.89E-03	-7.69E-03	4.11E-03	6.13E-03	-1.88E-03
(R188)	1.98E-04	-1.86E-05	1.91E-03	-8.24E-04	-2.88E-03	-3.03E-03
(R189)	4.73E-04	2.40E-04	6.25E-04	-1.16E-03	9.87E-03	1.09E-02
(R190)	-4.91E-02	-5.70E-02	-3.38E-03	-2.91E-02	-3.22E-02	-8.70E-03
(R191)	1.68E-02	3.05E-02	1.06E-02	-3.50E-03	-1.51E-03	-3.07E-03
(R192)	-1.25E-02	-1.32E-02	-2.28E-03	-6.69E-03	-1.09E-02	-1.23E-04
(R193)	1.32E-02	1.39E-02	2.45E-03	5.84E-03	-5.46E-03	-4.59E-03
(R194)	-4.27E-03	-7.03E-03	-3.37E-03	-7.04E-04	1.14E-03	-1.16E-03
(R195)	-4.09E-02	-6.46E-02	-1.90E-02	-4.07E-03	-3.08E-03	3.32E-03
(R196)	1.90E-02	3.41E-02	1.52E-02	2.68E-03	9.99E-04	1.78E-03
(R197)	-1.63E-03	-4.05E-04	-6.48E-03	2.60E-03	2.88E-03	-8.09E-03
(R198)	1.05E-03	-6.87E-04	1.21E-03	2.32E-04	8.55E-04	-9.49E-04
(R199)	1.74E-03	2.25E-03	3.33E-03	-7.21E-04	2.59E-03	4.04E-03
(R200)	-1.38E-03	-1.12E-03	9.35E-04	-1.64E-03	2.73E-03	3.92E-04

Table S1. (continued).

CB6r3	Weak Emission			Strong Emission		
	Ozone	NO _x	HCHO	Ozone	NO _x	HCHO
(R201)	1.94E-03	3.36E-03	1.24E-03	9.59E-04	4.04E-03	-2.67E-03
(R202)	1.19E-03	1.18E-03	-1.54E-03	-5.15E-04	-8.33E-03	-6.20E-03
(R203)	1.13E-04	1.32E-03	-1.67E-03	5.69E-04	9.00E-03	4.29E-03
(R204)	-3.99E-03	-5.79E-03	1.93E-03	-6.51E-03	-1.65E-02	-3.50E-04
(R205)	1.59E-02	3.09E-02	6.82E-03	2.12E-03	1.70E-03	6.17E-04
(R206)	-1.90E-02	-2.30E-02	-4.94E-03	-3.20E-03	6.98E-03	4.18E-03
(R207)	6.98E-03	2.50E-03	-2.74E-03	8.74E-03	7.12E-03	-3.74E-03
(R208)	-1.60E-02	-2.48E-02	-1.22E-02	-1.66E-02	-8.90E-03	-3.21E-03
(R209)	1.41E-02	2.48E-02	1.23E-02	1.61E-02	7.60E-03	-4.31E-03
(R210)	4.73E-03	4.25E-03	4.34E-03	3.98E-03	-8.68E-03	-2.38E-04
(R211)	1.32E-04	1.64E-03	2.16E-03	8.11E-04	-7.28E-03	-9.42E-04
(R212)	2.26E-03	1.24E-02	5.94E-03	2.55E-03	1.06E-02	9.49E-05
(R213)	-2.49E-02	-3.08E-02	-8.72E-03	-2.02E-02	-1.19E-02	-3.53E-03
(R214)	7.34E-05	1.78E-05	2.42E-04	-2.23E-03	5.60E-03	7.67E-03
(R215)	6.85E-06	1.73E-05	-7.02E-06	1.10E-03	2.19E-03	-7.71E-04
(R216)	2.14E-06	4.10E-06	-9.11E-06	1.11E-03	-8.64E-03	-1.57E-03
(R217)	-1.38E-05	-1.89E-05	-5.84E-05	-1.72E-03	6.40E-03	4.59E-03
(R218)	7.51E-05	1.11E-04	1.71E-04	1.77E-03	-1.03E-02	-7.87E-03
(R219)	-5.86E-02	-9.19E-02	-3.81E-02	-2.77E-02	-1.30E-02	4.35E-04
(R220)	4.49E-02	7.04E-02	2.92E-02	2.31E-02	2.98E-02	1.18E-02
(R221)	-3.13E-04	-1.06E-04	-4.77E-05	-3.10E-05	6.59E-03	3.42E-03
(R222)	2.70E-01	4.77E-01	1.45E-01	6.84E-01	7.61E-01	1.07E-01
(R223)	2.78E-01	4.77E-01	1.42E-01	1.06E-01	1.07E-01	1.80E-02
(R224)	0.00E+00	0.00E+00	0.00E+00	2.24E-03	1.19E-02	-1.47E-03
(R225)	0.00E+00	0.00E+00	0.00E+00	-5.43E-04	6.20E-03	5.75E-02
(R226)	0.00E+00	0.00E+00	0.00E+00	2.93E-03	1.05E-02	7.90E-03
(R227)	0.00E+00	0.00E+00	0.00E+00	-1.05E-02	9.36E-03	3.55E-02
(R228)	0.00E+00	0.00E+00	0.00E+00	7.75E-04	9.95E-03	7.12E-03
(R229)	0.00E+00	0.00E+00	0.00E+00	-1.03E-02	1.30E-02	6.26E-02
(R230)	0.00E+00	0.00E+00	0.00E+00	-5.14E-02	-6.35E-02	-1.65E-03
(R231)	0.00E+00	0.00E+00	0.00E+00	-7.37E-02	-7.58E-02	-1.21E-03
(R232)	-5.70E-03	2.08E-02	4.75E-01	-1.23E-01	3.93E-02	3.64E-01
(R233)	0.00E+00	0.00E+00	0.00E+00	-6.05E-03	4.72E-03	-8.48E-03
(R234)	0.00E+00	0.00E+00	0.00E+00	-7.03E-02	1.07E-01	3.36E-01
(R235)	-5.47E-01	3.25E-01	6.97E-02	-1.85E-01	1.19E-01	3.82E-03
(R236)	-2.09E-04	-3.67E-04	-1.19E-04	1.07E-03	1.14E-03	1.48E-03
(R237)	-1.37E-02	-2.36E-02	-5.13E-03	-9.88E-03	-1.07E-02	1.50E-03
(R238)	-4.71E-03	-4.62E-03	-2.75E-04	-2.67E-03	-2.77E-03	-2.20E-03
(R239)	1.59E-02	3.95E-02	3.51E-03	9.99E-03	1.25E-02	-5.06E-03
(R240)	-1.21E-04	-8.16E-05	8.53E-05	-6.03E-04	-2.38E-03	1.79E-03
(R241)	-3.57E-03	-9.72E-03	2.55E-03	-3.85E-04	-9.96E-03	-4.14E-03
(R242)	-1.61E-03	-2.24E-03	-1.56E-04	2.20E-04	-1.07E-02	-4.43E-03
(R243)	-1.34E-03	1.60E-03	-9.68E-01	4.27E-04	-5.63E-03	-8.11E-01

Table S2. Complete listings of the values of the sensitivity coefficients belonging to the CB6r2 mechanism under two different emission conditions in the present study.

CB6r2	Weak Emission			Strong Emission			CB6r2	Weak Emission			Strong Emission		
	Ozone	NO _x	HCHO	Ozone	NO _x	HCHO		Ozone	NO _x	HCHO	Ozone	NO _x	HCHO
(R1)	2.63E-01	-4.21E-01	3.93E-02	4.46E-01	-4.95E-01	6.77E-02	(R51)	-4.82E-06	-5.81E-06	-2.28E-06	8.59E-04	1.19E-04	1.82E-03
(R2)	2.20E-04	-7.13E-05	8.53E-05	9.16E-04	-9.81E-03	-3.57E-03	(R52)	-1.60E-07	1.61E-05	1.94E-05	-6.91E-04	1.10E-04	-1.09E-04
(R3)	-1.59E-01	2.53E-01	-1.54E-02	-2.77E-01	3.09E-01	-3.28E-02	(R53)	5.29E-02	-3.33E-02	7.07E-03	9.82E-02	-4.08E-02	1.92E-03
(R4)	-9.65E-07	-2.16E-06	-2.20E-06	-2.58E-05	-8.22E-03	-1.98E-03	(R54)	1.49E-02	4.17E-02	1.13E-03	-6.56E-02	9.11E-03	1.28E-03
(R5)	-8.03E-06	1.99E-05	1.21E-05	1.72E-04	1.81E-03	3.56E-04	(R55)	-2.48E-02	-3.97E-02	-1.05E-04	6.05E-02	-9.94E-03	-4.54E-03
(R6)	-1.57E-05	-2.87E-05	-1.63E-05	-1.36E-03	7.81E-03	7.47E-03	(R56)	-4.05E-04	-7.16E-04	-1.60E-04	-1.24E-03	-1.01E-03	-1.14E-03
(R7)	-1.45E-05	-7.47E-06	-7.28E-07	1.20E-03	-6.02E-04	-3.41E-03	(R57)	-2.72E-04	-3.91E-03	-7.37E-03	1.08E-02	-6.05E-03	-1.21E-02
(R8)	-2.04E-04	4.47E-05	-8.45E-05	-1.64E-03	-1.04E-03	5.80E-04	(R58)	2.06E-03	-1.79E-03	1.10E-03	-4.97E-04	-2.11E-03	-1.90E-03
(R9)	-1.65E-01	-7.42E-02	-3.02E-02	-4.42E-02	-1.17E-02	1.07E-02	(R59)	-1.25E-02	-9.13E-03	1.15E-03	4.07E-03	1.33E-03	-4.25E-03
(R10)	1.32E-01	5.92E-02	2.39E-02	3.71E-02	1.35E-02	-9.55E-03	(R60)	-4.33E-03	-1.31E-03	1.21E-03	5.36E-04	1.83E-03	-2.96E-03
(R11)	-1.35E-01	-6.04E-02	-2.43E-02	-3.56E-02	-1.78E-02	6.79E-03	(R61)	1.22E-02	-4.12E-03	4.10E-03	3.48E-02	-4.11E-03	4.61E-03
(R12)	-1.74E-03	3.23E-03	1.21E-03	1.11E-03	1.90E-03	-3.21E-03	(R62)	1.90E-02	7.82E-03	7.57E-04	-6.94E-03	-3.56E-03	-1.24E-03
(R13)	-1.02E-01	1.10E-02	-4.71E-04	-8.60E-02	1.07E-02	2.18E-02	(R63)	-2.01E-02	-9.24E-03	-6.00E-04	8.68E-03	-6.59E-03	-4.42E-03
(R14)	1.46E-06	5.57E-06	7.80E-06	-6.84E-05	-8.55E-03	-4.59E-03	(R64)	-1.04E-04	-1.62E-04	-2.60E-05	9.93E-04	1.97E-03	1.87E-03
(R15)	-1.26E-05	-1.03E-05	-1.29E-05	8.15E-04	2.84E-03	1.43E-03	(R65)	-2.16E-03	-8.64E-04	-1.22E-03	1.90E-03	-1.21E-02	9.12E-04
(R16)	-1.52E-07	-8.54E-07	-5.06E-08	-5.34E-04	-5.66E-04	1.88E-03	(R66)	-1.82E-02	-1.26E-03	-4.15E-03	-2.31E-02	2.17E-02	2.61E-04
(R17)	-3.56E-06	-2.55E-06	2.63E-07	-5.97E-04	-8.65E-05	-4.93E-03	(R67)	-1.55E-03	2.80E-06	6.27E-04	6.53E-04	4.24E-03	-1.33E-04
(R18)	9.28E-04	2.25E-03	1.56E-04	-6.54E-05	-5.49E-03	-2.42E-03	(R68)	-8.91E-04	-4.49E-03	1.27E-03	-4.92E-03	4.71E-04	1.47E-03
(R19)	-9.46E-03	-6.98E-03	-1.18E-03	-4.67E-03	1.44E-02	6.21E-03	(R69)	2.59E-03	-4.79E-03	3.47E-03	-3.23E-03	-1.31E-02	7.03E-04
(R20)	-1.18E-02	-8.68E-03	-1.45E-03	-7.11E-03	8.14E-03	1.53E-02	(R70)	2.63E-03	-2.19E-03	6.30E-04	1.73E-03	-4.08E-03	3.44E-03
(R21)	-2.15E-02	-4.43E-02	-6.01E-03	-1.60E-02	-2.65E-02	8.67E-03	(R71)	3.35E-02	-1.87E-02	-7.07E-03	2.27E-02	-3.19E-02	1.54E-02
(R22)	6.53E-03	1.23E-02	1.46E-03	3.85E-03	1.65E-02	8.35E-04	(R72)	6.30E-04	2.77E-02	3.43E-02	-1.36E-02	2.39E-02	-2.31E-02
(R23)	8.83E-06	1.44E-05	9.94E-06	-6.33E-04	4.50E-04	-6.17E-04	(R73)	-3.26E-02	-1.10E-02	-1.60E-02	-1.54E-02	9.01E-03	1.43E-02
(R24)	-9.89E-07	2.20E-06	5.09E-06	5.75E-04	2.56E-03	-4.36E-04	(R74)	1.96E-03	4.96E-04	-1.14E-02	6.09E-03	-4.69E-03	-3.26E-03
(R25)	8.85E-02	-1.42E-01	9.72E-04	8.25E-02	-1.36E-01	6.79E-03	(R75)	3.90E-02	1.34E-02	8.81E-03	4.38E-02	-1.87E-02	6.97E-03
(R26)	-3.22E-01	-3.95E-01	-2.31E-02	-4.23E-01	-4.33E-01	-8.12E-02	(R76)	-3.46E-02	-2.18E-02	-1.01E-02	-3.95E-02	1.93E-02	2.95E-03
(R27)	3.48E-02	3.36E-02	4.69E-03	3.28E-02	1.71E-02	5.51E-03	(R77)	-1.16E-02	1.81E-03	-3.35E-04	-1.99E-02	1.61E-02	-4.66E-03
(R28)	3.68E-03	4.70E-03	7.96E-04	2.41E-03	-7.97E-03	-7.18E-03	(R78)	3.87E-03	2.16E-03	-2.46E-06	1.17E-02	-7.90E-03	3.99E-03
(R29)	6.17E-03	6.88E-03	-3.25E-04	1.56E-02	1.11E-02	-4.94E-04	(R79)	1.50E-02	5.06E-03	2.61E-03	1.30E-02	5.53E-03	-9.15E-04
(R30)	4.16E-05	2.66E-05	-2.32E-05	-7.33E-04	-3.20E-03	-5.89E-03	(R80)	-1.12E-02	-1.09E-02	-3.19E-03	-4.17E-03	-9.40E-03	-4.76E-03
(R31)	-7.44E-06	-8.16E-06	-3.23E-06	9.25E-04	-2.52E-04	8.07E-04	(R81)	-6.55E-03	3.16E-03	-1.69E-04	-9.50E-03	1.30E-02	3.98E-04
(R32)	5.54E-06	7.04E-06	2.99E-06	1.60E-03	1.22E-02	5.42E-03	(R82)	2.01E-03	1.22E-04	1.24E-04	5.51E-03	-2.19E-04	2.76E-03
(R33)	1.65E-03	1.67E-03	-4.27E-04	2.47E-03	3.81E-03	3.77E-03	(R83)	-7.06E-02	-1.05E-01	-3.29E-02	-3.80E-02	-4.14E-02	-1.25E-02
(R34)	7.93E-05	4.49E-05	-4.90E-05	1.54E-03	1.00E-03	-1.85E-04	(R84)	6.85E-02	1.04E-01	3.35E-02	3.67E-02	2.82E-02	6.18E-04
(R35)	-1.22E-06	3.04E-06	4.28E-06	1.17E-03	2.57E-03	4.21E-03	(R85)	7.64E-03	1.10E-02	2.78E-03	5.96E-03	6.94E-03	-2.23E-03
(R36)	-1.56E-04	-1.45E-04	1.20E-04	-5.36E-04	1.20E-02	6.11E-03	(R86)	3.40E-03	4.40E-03	1.34E-03	3.62E-04	2.60E-03	4.63E-03
(R37)	1.73E-04	1.71E-04	-1.21E-04	1.33E-03	-1.44E-03	-1.78E-04	(R87)	9.92E-03	2.66E-02	1.65E-02	4.55E-03	1.44E-02	2.29E-02
(R38)	-1.22E-06	-2.82E-06	4.73E-07	2.60E-04	-1.27E-03	-1.53E-03	(R88)	-4.34E-03	-3.03E-02	3.12E-03	1.12E-03	-8.89E-03	1.87E-02
(R39)	-1.72E-04	-1.43E-04	1.19E-04	3.34E-04	2.86E-04	-2.88E-03	(R89)	1.61E-03	1.24E-02	-3.58E-03	-1.85E-03	1.69E-02	-8.65E-03
(R40)	-5.17E-04	-7.24E-04	-4.15E-04	-1.64E-04	-2.29E-03	-5.94E-03	(R90)	-8.12E-03	-1.69E-02	9.60E-03	-7.94E-03	-2.86E-02	5.40E-03
(R41)	9.85E-06	9.87E-07	-6.77E-06	3.17E-04	2.70E-03	2.85E-03	(R91)	-4.55E-03	-7.65E-03	-3.31E-03	-1.85E-03	-2.95E-03	-4.56E-04
(R42)	5.47E-06	8.81E-06	4.92E-06	-6.13E-04	-5.53E-04	-3.06E-03	(R92)	2.02E-02	3.03E-02	1.10E-02	8.45E-03	2.00E-02	8.58E-03
(R43)	1.69E-03	2.21E-03	9.81E-04	7.37E-05	1.56E-03	4.94E-03	(R93)	4.89E-04	1.05E-03	-6.99E-05	-9.21E-04	-1.31E-03	1.48E-03
(R44)	-4.05E-06	-1.49E-05	-2.92E-05	-8.01E-04	-2.69E-04	-2.86E-04	(R94)	3.39E-03	3.62E-03	1.30E-02	2.59E-03	5.19E-04	-9.35E-04
(R45)	-4.82E-02	-6.10E-02	-1.35E-03	-2.52E-02	-1.42E-02	3.79E-04	(R95)	7.99E-03	7.69E-03	1.80E-02	1.80E-03	7.36E-03	8.47E-03
(R46)	1.11E-03	1.12E-03	-1.82E-05	1.10E-03	2.16E-03	-2.81E-03	(R96)	3.71E-03	5.07E-03	-3.48E-02	3.31E-03	1.27E-02	-3.35E-02
(R47)	3.27E-03	3.48E-03	3.11E-04	3.04E-03	-3.60E-04	-2.90E-03	(R97)	-1.30E-03	-7.56E-03	-1.13E-01	-1.80E-03	-1.57E-02	-9.51E-02
(R48)	-2.56E-04	4.76E-05	-5.54E-04	-1.97E-04	-2.68E-03	-4.59E-03	(R98)	4.45E-04	2.26E-03	-1.43E-01	-6.97E-04	-5.14E-03	-1.18E-01
(R49)	2.58E-04	-1.50E-04	6.48E-04	1.15E-03	-3.91E-03	3.45E-03	(R99)	-4.88E-06	9.29E-07	-4.06E-06	-7.24E-04	-9.13E-04	2.86E-03
(R50)	-2.01E-05	-1.74E-05	2.69E-06	7.06E-04	-7.23E-03	-4.32E-03	(R100)	-6.37E-05	-4.58E-05	7.88E-05	-4.48E-04	9.64E-03	5.09E-03

Table S2. (continued).

CB6r2	Weak Emission			Strong Emission			CB6r2	Weak Emission			Strong Emission		
	Ozone	NO _x	HCHO	Ozone	NO _x	HCHO		Ozone	NO _x	HCHO	Ozone	NO _x	HCHO
(R101)	-2.45E-06	-1.12E-05	-9.73E-06	1.14E-03	2.50E-03	3.37E-03	(R151)	-7.10E-03	-2.76E-02	2.81E-02	-6.63E-03	-1.23E-02	4.40E-03
(R102)	-6.28E-06	-8.01E-06	-2.61E-06	-2.45E-03	-6.85E-04	1.30E-03	(R152)	9.25E-03	3.26E-02	-2.69E-02	7.79E-03	1.51E-02	-1.03E-02
(R103)	2.87E-06	-3.92E-08	-7.39E-06	-2.19E-04	1.50E-04	-2.16E-03	(R153)	6.48E-04	1.13E-03	4.33E-03	-8.16E-04	1.37E-02	6.27E-03
(R104)	9.58E-07	-2.79E-06	-5.97E-07	-4.80E-04	-2.49E-03	-2.81E-03	(R154)	3.53E-04	1.36E-03	2.56E-03	4.41E-04	-3.01E-03	-2.57E-03
(R105)	-2.89E-05	-9.89E-06	-3.03E-05	-4.91E-04	-8.54E-05	3.89E-03	(R155)	-3.46E-03	-7.59E-03	-1.24E-02	-4.93E-04	-7.36E-03	-1.51E-03
(R106)	1.22E-03	-2.51E-02	-9.01E-02	1.56E-02	5.06E-02	4.35E-02	(R156)	-1.38E-02	7.51E-03	5.16E-02	-8.03E-03	4.26E-03	3.46E-02
(R107)	-1.29E-03	-1.60E-03	-1.55E-04	-4.02E-03	-1.20E-02	-3.58E-03	(R157)	-5.84E-03	2.87E-03	-1.13E-03	-3.26E-02	-1.46E-02	-1.70E-02
(R108)	-4.82E-03	-2.22E-02	-1.01E-02	9.79E-03	-1.73E-02	1.23E-02	(R158)	7.03E-03	-3.41E-03	-2.01E-02	7.02E-03	-1.39E-03	-1.65E-02
(R109)	-1.85E-05	-3.01E-06	-1.00E-05	7.55E-05	-2.46E-03	6.84E-05	(R159)	-1.51E-02	1.72E-03	9.01E-03	-1.91E-02	5.24E-03	1.06E-02
(R110)	-2.36E-03	-2.02E-02	-2.21E-02	5.32E-03	2.11E-02	1.37E-02	(R160)	-1.48E-04	-2.48E-04	2.43E-04	2.42E-04	-1.21E-03	1.20E-03
(R111)	-1.24E-03	-1.45E-03	1.28E-04	-2.42E-03	-1.75E-02	-3.28E-03	(R161)	8.27E-03	4.87E-04	1.65E-02	9.71E-03	-6.86E-03	5.00E-03
(R112)	-2.01E-03	-8.72E-03	5.03E-05	5.57E-03	-6.49E-03	5.05E-03	(R162)	5.20E-04	6.79E-05	2.33E-03	5.11E-04	9.65E-04	8.84E-04
(R113)	4.95E-03	7.73E-03	3.52E-03	2.38E-03	-4.87E-03	-3.98E-03	(R163)	-8.40E-06	-6.39E-04	5.18E-04	-7.34E-04	3.80E-04	5.99E-03
(R114)	-2.26E-03	-6.63E-03	3.35E-03	-1.86E-03	2.46E-03	9.48E-04	(R164)	-3.40E-05	-4.33E-05	1.36E-05	-9.96E-04	-2.54E-03	1.42E-03
(R115)	-1.90E-04	-3.20E-04	1.49E-05	-1.00E-03	-2.10E-03	1.97E-04	(R165)	2.78E-03	3.33E-04	1.29E-02	2.71E-03	5.18E-03	3.76E-03
(R116)	1.03E-03	6.79E-04	1.69E-04	2.68E-03	1.57E-03	2.09E-03	(R166)	-3.69E-03	-3.04E-03	1.67E-03	-2.82E-03	-1.43E-03	1.39E-03
(R117)	-7.72E-05	4.85E-05	-1.21E-04	3.65E-04	5.31E-03	2.82E-03	(R167)	4.05E-03	2.39E-03	-4.94E-04	1.79E-03	7.85E-03	6.80E-03
(R118)	-1.76E-04	-1.63E-04	1.78E-04	5.00E-04	6.29E-04	-7.01E-04	(R168)	-4.21E-04	3.35E-04	-9.51E-04	7.05E-05	-8.15E-03	-5.30E-03
(R119)	-1.28E-03	-3.11E-03	-4.66E-03	-1.85E-04	-1.12E-03	-4.11E-03	(R169)	4.37E-05	7.55E-05	6.43E-05	2.03E-03	1.99E-03	4.62E-03
(R120)	-2.61E-04	-2.23E-04	2.12E-04	3.40E-04	-1.63E-03	-6.51E-04	(R170)	-7.43E-03	1.74E-03	1.33E-03	3.02E-03	-6.62E-03	-8.59E-03
(R121)	1.56E-03	6.81E-04	-2.77E-04	9.47E-05	-7.71E-03	1.64E-03	(R171)	1.88E-06	5.82E-06	3.99E-06	3.36E-04	-1.17E-03	5.67E-03
(R122)	1.84E-03	3.59E-03	-1.57E-04	1.25E-03	2.26E-03	-3.71E-03	(R172)	-3.14E-06	1.14E-05	1.57E-05	5.70E-06	-1.24E-02	-5.47E-03
(R123)	2.90E-02	5.44E-02	-1.96E-04	1.59E-04	6.77E-03	-1.16E-03	(R173)	-5.99E-06	-4.52E-06	-1.09E-07	8.69E-04	9.73E-05	-4.36E-03
(R124)	1.25E-02	1.16E-02	4.76E-02	3.76E-04	-7.38E-04	-5.45E-04	(R174)	5.33E-06	1.52E-05	1.20E-05	1.71E-03	2.69E-03	1.29E-03
(R125)	-6.83E-06	-1.23E-05	-6.92E-06	2.53E-05	-1.45E-03	-2.83E-03	(R175)	-2.59E-06	1.59E-05	2.29E-05	-6.97E-04	1.53E-03	3.68E-04
(R126)	3.57E-04	7.86E-04	3.57E-03	-1.12E-03	9.35E-03	4.29E-03	(R176)	2.26E-06	1.67E-06	-3.10E-06	-1.20E-04	-1.24E-04	-7.93E-04
(R127)	-3.41E-06	-9.53E-06	-7.38E-06	8.03E-04	-9.82E-04	4.06E-03	(R177)	6.51E-06	1.48E-05	1.28E-05	7.10E-04	2.94E-03	1.27E-03
(R128)	1.37E-03	1.45E-03	8.85E-03	1.13E-04	-1.05E-02	-4.04E-03	(R178)	-3.68E-06	-1.12E-05	-9.32E-06	2.50E-04	1.45E-03	7.97E-04
(R129)	1.49E-03	1.41E-04	1.10E-02	-4.60E-05	-9.90E-05	7.52E-03	(R179)	-5.76E-06	3.58E-06	9.72E-06	-8.47E-05	-1.94E-03	-5.54E-04
(R130)	6.74E-04	8.77E-04	5.54E-03	-2.58E-04	1.76E-03	4.27E-03	(R180)	-5.70E-02	-4.85E-02	4.16E-02	-5.97E-02	-6.41E-02	-4.13E-03
(R131)	-7.46E-06	-1.24E-05	-4.77E-06	8.23E-04	-1.08E-03	-3.35E-03	(R181)	-1.27E-02	-2.19E-02	2.37E-03	-7.99E-03	-2.71E-03	-6.97E-03
(R132)	-1.09E-02	-3.67E-02	1.76E-02	-8.84E-03	4.67E-03	-4.48E-05	(R182)	4.55E-04	7.28E-04	2.93E-03	8.43E-04	3.15E-04	1.76E-03
(R133)	5.41E-03	6.31E-03	1.91E-02	4.63E-04	2.05E-03	8.35E-03	(R183)	7.73E-03	1.38E-02	-4.91E-03	6.49E-03	3.43E-03	-4.13E-03
(R134)	-5.78E-03	-6.67E-03	-2.10E-02	-2.61E-03	-4.70E-03	-5.67E-03	(R184)	5.19E-04	4.76E-04	9.99E-04	5.66E-04	1.31E-03	-1.23E-03
(R135)	1.71E-06	1.40E-06	4.33E-07	3.25E-04	1.54E-03	-1.93E-03	(R185)	5.32E-02	1.16E-01	5.86E-02	-2.19E-02	-1.59E-02	-4.07E-03
(R136)	-1.73E-06	-3.52E-06	-3.90E-06	2.02E-03	3.49E-04	1.36E-03	(R186)	-5.49E-03	-6.89E-03	8.05E-03	-7.57E-03	-6.51E-03	8.71E-03
(R137)	9.60E-07	6.90E-06	-5.08E-05	3.09E-04	1.87E-03	-1.95E-04	(R187)	3.17E-03	4.42E-03	-7.56E-03	5.54E-03	1.97E-04	-2.28E-03
(R138)	3.86E-03	-1.20E-02	-3.86E-02	8.95E-03	9.16E-04	2.56E-03	(R188)	1.88E-04	2.69E-05	1.90E-03	2.42E-03	-1.63E-04	1.20E-03
(R139)	-7.11E-03	-5.33E-04	-5.68E-02	-1.13E-02	4.50E-03	5.29E-03	(R189)	4.47E-04	2.49E-04	6.02E-04	-2.01E-04	-3.24E-03	-6.42E-03
(R140)	9.85E-05	1.19E-04	5.25E-06	1.41E-04	9.95E-04	-1.77E-04	(R190)	-5.01E-02	-5.68E-02	-3.26E-03	-2.98E-02	-3.02E-02	-3.32E-03
(R141)	-1.24E-06	-6.78E-06	-3.56E-05	-3.75E-04	-3.36E-04	-2.07E-03	(R191)	1.75E-02	3.07E-02	1.06E-02	-3.18E-03	-1.05E-03	-4.71E-03
(R142)	2.07E-03	-1.03E-02	6.55E-04	4.71E-02	-5.67E-03	1.77E-03	(R192)	-1.31E-02	-1.37E-02	-2.45E-03	-6.75E-03	-7.05E-03	7.05E-04
(R143)	-4.51E-03	3.87E-04	-7.88E-03	-4.06E-02	-4.71E-03	4.43E-03	(R193)	1.37E-02	1.44E-02	2.60E-03	4.76E-03	8.13E-03	-7.24E-04
(R144)	7.43E-04	1.01E-03	4.27E-04	1.31E-03	1.23E-02	9.05E-03	(R194)	-4.66E-03	-7.71E-03	-3.72E-03	2.03E-04	-3.43E-03	-2.31E-03
(R145)	4.67E-06	9.13E-07	1.40E-05	3.18E-05	3.42E-03	5.19E-03	(R195)	-4.20E-02	-6.55E-02	-1.95E-02	-2.36E-03	-6.93E-03	3.03E-03
(R146)	2.78E-03	-2.30E-03	4.37E-03	1.42E-03	-3.84E-04	-2.03E-03	(R196)	1.97E-02	3.49E-02	1.55E-02	2.82E-03	-8.24E-04	9.36E-04
(R147)	-3.67E-03	-4.95E-04	-9.87E-03	-2.02E-03	2.72E-04	1.97E-03	(R197)	-1.36E-03	-3.09E-04	-6.31E-03	1.27E-03	-1.28E-03	2.75E-04
(R148)	7.73E-04	1.20E-03	8.19E-04	1.05E-03	1.30E-03	3.66E-03	(R198)	9.81E-04	-6.88E-04	1.23E-03	1.36E-03	2.49E-03	4.41E-03
(R149)	2.05E-02	-7.73E-03	-4.77E-02	4.29E-02	8.89E-03	-3.21E-02	(R199)	1.73E-03	2.27E-03	3.21E-03	-1.41E-03	-3.63E-03	2.41E-04
(R150)	-1.10E-04	9.15E-05	3.16E-05	-5.98E-05	1.99E-03	2.25E-03	(R200)	-1.52E-03	-1.23E-03	9.35E-04	-2.02E-03	1.48E-03	3.21E-03

Table S2. (continued).

CB6r2	Weak Emission			Strong Emission		
	Ozone	NO _x	HCHO	Ozone	NO _x	HCHO
(R201)	1.82E-03	3.27E-03	1.18E-03	1.63E-03	-2.64E-03	-4.32E-03
(R202)	1.29E-03	1.19E-03	-1.56E-03	2.12E-03	2.74E-03	2.63E-03
(R203)	3.23E-04	1.42E-03	-1.65E-03	1.05E-03	3.46E-03	-3.62E-03
(R204)	-4.34E-03	-6.01E-03	1.89E-03	-5.56E-03	-7.05E-03	-3.88E-04
(R205)	1.72E-02	3.31E-02	7.49E-03	2.53E-03	-6.96E-03	-2.29E-03
(R206)	-2.01E-02	-2.45E-02	-5.46E-03	-3.51E-03	-1.28E-02	-7.97E-03
(R207)	2.69E-03	5.56E-04	-2.14E-03	3.10E-03	-1.26E-03	-1.62E-03
(R208)	-3.28E-03	-1.07E-02	-5.03E-03	-6.11E-03	-9.68E-03	1.36E-03
(R209)	3.00E-03	1.06E-02	5.35E-03	5.68E-03	-6.08E-04	-7.27E-03
(R210)	1.89E-03	1.88E-03	1.52E-03	3.24E-03	3.41E-03	3.28E-03
(R211)	-5.81E-04	6.79E-04	1.24E-03	6.50E-04	2.90E-04	3.93E-03
(R212)	-1.10E-03	5.81E-03	3.33E-03	-4.05E-04	8.12E-03	-2.57E-05
(R213)	-1.30E-02	-1.41E-02	-3.70E-03	-1.04E-02	-6.27E-03	-4.50E-03
(R214)	8.81E-05	2.77E-05	2.37E-04	9.14E-04	-8.72E-05	1.22E-03
(R215)	-2.94E-04	-9.79E-05	-4.34E-05	2.58E-04	-1.58E-03	2.90E-03
(R216)	2.75E-01	4.83E-01	1.47E-01	6.91E-01	7.85E-01	1.07E-01
(R217)	2.83E-01	4.83E-01	1.44E-01	1.07E-01	1.11E-01	1.73E-02
(R218)	0.00E+00	0.00E+00	0.00E+00	1.05E-03	1.07E-02	-3.43E-03
(R219)	0.00E+00	0.00E+00	0.00E+00	1.47E-03	1.06E-03	5.17E-02
(R220)	0.00E+00	0.00E+00	0.00E+00	2.49E-03	1.28E-02	1.03E-02
(R221)	0.00E+00	0.00E+00	0.00E+00	-1.45E-02	1.30E-02	3.77E-02
(R222)	0.00E+00	0.00E+00	0.00E+00	1.46E-03	-9.27E-04	1.50E-03
(R223)	0.00E+00	0.00E+00	0.00E+00	-9.11E-03	1.70E-02	5.62E-02
(R224)	0.00E+00	0.00E+00	0.00E+00	-5.25E-02	-6.58E-02	-1.14E-02
(R225)	0.00E+00	0.00E+00	0.00E+00	-7.78E-02	-8.99E-02	-7.78E-04
(R226)	-4.22E-03	9.91E-03	4.79E-01	-1.15E-01	3.73E-02	3.71E-01
(R227)	0.00E+00	0.00E+00	0.00E+00	-7.66E-03	2.10E-03	-2.82E-03
(R228)	0.00E+00	0.00E+00	0.00E+00	-7.47E-02	1.03E-01	3.35E-01
(R229)	-5.50E-01	3.11E-01	6.95E-02	-1.85E-01	1.34E-01	6.40E-03
(R230)	-2.16E-04	-3.79E-04	-1.32E-04	-1.01E-04	-1.20E-02	-4.64E-03
(R231)	-1.38E-02	-2.36E-02	-5.25E-03	-9.99E-03	-1.21E-02	-3.58E-03
(R232)	-4.80E-03	-4.73E-03	-3.18E-04	-3.85E-03	-2.40E-03	-2.89E-03
(R233)	1.56E-02	3.92E-02	2.68E-03	7.33E-03	1.68E-02	-1.62E-03
(R234)	-1.37E-04	-1.15E-04	9.00E-05	-1.06E-03	-1.50E-04	-1.89E-03
(R235)	-3.67E-03	-1.01E-02	2.83E-03	-4.76E-04	-9.57E-04	3.74E-03
(R236)	-1.72E-03	-2.36E-03	-2.24E-04	1.34E-04	-7.33E-04	4.53E-03
(R237)	-1.97E-03	2.29E-04	-9.72E-01	-9.68E-05	1.00E-02	-8.09E-01

Table S3. Complete listings of the values of the sensitivity coefficients belonging to the CB6r1 mechanism under two different emission conditions in the present study.

CB6r1	Weak Emission			Strong Emission			CB6r1	Weak Emission			Strong Emission		
	Ozone	NO _x	HCHO	Ozone	NO _x	HCHO		Ozone	NO _x	HCHO	Ozone	NO _x	HCHO
(R1)	1.72E-01	-5.21E-01	-3.85E-02	4.90E-01	-4.45E-01	5.79E-02	(R51)	1.20E-05	1.78E-05	2.09E-06	-1.92E-05	2.03E-04	2.01E-05
(R2)	1.37E-04	5.48E-05	1.34E-04	2.07E-03	1.21E-03	1.28E-04	(R52)	-7.05E-06	-3.84E-07	4.83E-06	-1.86E-03	-1.40E-03	8.47E-04
(R3)	-9.26E-02	3.44E-01	3.81E-02	-3.23E-01	2.94E-01	-4.14E-02	(R53)	5.58E-02	-6.61E-02	-1.11E-02	1.30E-01	-3.86E-02	5.55E-03
(R4)	-5.88E-07	-8.60E-06	-1.68E-06	-1.44E-03	-9.62E-04	3.82E-05	(R54)	6.06E-02	1.20E-01	5.22E-02	-1.27E-01	-2.92E-02	-7.29E-03
(R5)	-1.48E-05	4.59E-06	1.21E-06	5.48E-05	-3.58E-04	-8.66E-04	(R55)	-7.39E-02	-1.19E-01	-5.24E-02	1.21E-01	3.54E-02	5.27E-03
(R6)	-3.66E-06	-1.72E-05	-9.10E-07	7.24E-06	-3.31E-04	3.66E-04	(R56)	-2.65E-04	-6.50E-04	-1.36E-04	2.25E-04	-9.58E-04	-1.55E-03
(R7)	-1.69E-05	-6.06E-06	6.44E-06	-2.11E-03	5.84E-05	2.95E-03	(R57)	-3.47E-03	-6.13E-03	-6.47E-03	1.22E-02	-2.62E-03	-9.09E-03
(R8)	-1.33E-04	-4.87E-05	-1.07E-04	2.67E-04	3.01E-04	-4.61E-04	(R58)	-1.60E-03	-2.27E-04	1.08E-03	-4.67E-03	1.97E-03	2.64E-03
(R9)	-2.19E-01	-1.50E-01	-6.81E-02	-4.95E-02	-1.75E-02	9.44E-03	(R59)	-1.74E-02	-1.89E-02	-5.99E-03	8.05E-03	2.10E-03	2.84E-03
(R10)	1.75E-01	1.20E-01	5.46E-02	4.20E-02	1.56E-02	-6.45E-03	(R60)	-1.98E-02	-1.12E-02	-3.41E-03	-5.66E-04	1.03E-02	3.31E-03
(R11)	-1.79E-01	-1.23E-01	-5.57E-02	-4.21E-02	-1.23E-02	7.50E-03	(R61)	-4.25E-03	-2.87E-02	-8.38E-03	5.54E-02	2.36E-03	2.43E-03
(R12)	-1.38E-03	4.18E-03	1.43E-03	-1.94E-03	-8.27E-04	-2.38E-03	(R62)	8.09E-02	6.80E-02	2.60E-02	-4.85E-02	-4.22E-02	-3.05E-03
(R13)	-1.10E-01	-2.14E-02	-1.59E-02	-9.21E-02	4.66E-03	1.87E-02	(R63)	-8.39E-02	-7.33E-02	-2.90E-02	5.42E-02	4.39E-02	3.88E-03
(R14)	-7.85E-06	8.42E-06	2.66E-06	-2.01E-03	-6.38E-04	1.49E-03	(R64)	-2.35E-04	-3.17E-04	-4.97E-05	-6.11E-05	-2.99E-04	-7.42E-05
(R15)	-2.23E-05	-1.72E-05	-1.70E-06	-3.71E-03	-1.57E-03	8.06E-04	(R65)	-2.07E-02	-1.16E-02	-9.44E-03	4.16E-03	1.03E-02	3.29E-04
(R16)	-5.84E-07	-8.49E-06	-3.82E-06	-1.58E-03	-8.75E-04	-1.42E-04	(R66)	-1.64E-03	-4.47E-04	9.06E-04	-4.40E-04	2.39E-03	-1.91E-03
(R17)	-1.50E-06	1.88E-06	-6.91E-07	-3.89E-05	1.51E-04	2.09E-04	(R67)	-1.98E-02	-9.04E-03	-2.21E-03	-4.51E-03	1.09E-02	-5.37E-04
(R18)	1.58E-03	2.95E-03	7.61E-04	-1.58E-03	-8.31E-04	-6.90E-04	(R68)	1.37E-03	-2.94E-03	1.16E-03	2.15E-03	-1.15E-03	-1.26E-03
(R19)	-4.77E-03	-9.22E-04	2.32E-03	-6.47E-03	2.58E-03	6.95E-03	(R69)	-6.24E-04	-1.15E-03	1.67E-03	-1.46E-03	3.08E-03	-4.94E-04
(R20)	-5.93E-03	-1.12E-03	2.89E-03	-6.53E-03	1.42E-03	4.30E-03	(R70)	-2.00E-03	1.98E-04	1.09E-03	-4.43E-03	3.99E-03	-4.09E-04
(R21)	-2.57E-02	-4.08E-02	-1.20E-02	-9.39E-03	-2.49E-02	3.60E-03	(R71)	2.86E-02	-1.26E-02	-1.89E-02	2.35E-02	-2.62E-02	1.81E-02
(R22)	8.53E-03	1.38E-02	3.00E-03	2.92E-04	5.30E-03	-1.84E-03	(R72)	1.36E-02	3.63E-02	4.55E-02	-1.61E-02	1.82E-02	-2.36E-02
(R23)	-4.15E-07	-1.73E-06	-4.47E-06	-4.75E-04	1.05E-03	2.24E-03	(R73)	-4.37E-02	-2.47E-02	-1.93E-02	-9.86E-03	1.41E-02	1.15E-02
(R24)	-1.14E-06	-7.46E-07	4.25E-07	-7.95E-04	-1.25E-04	-3.60E-04	(R74)	4.27E-03	7.50E-04	-8.50E-03	4.47E-03	-5.37E-03	-4.49E-04
(R25)	6.75E-02	-1.41E-01	-1.56E-02	8.37E-02	-1.31E-01	5.44E-03	(R75)	4.49E-02	2.03E-02	9.73E-03	3.98E-02	-1.79E-02	-9.10E-04
(R26)	-3.06E-01	-3.58E-01	6.51E-03	-3.13E-01	-4.05E-01	-5.12E-02	(R76)	-3.21E-02	-1.86E-02	-4.06E-04	-4.20E-02	4.39E-03	4.84E-03
(R27)	3.15E-02	3.04E-02	-5.10E-04	3.31E-02	2.45E-02	7.06E-03	(R77)	-1.88E-02	-5.03E-03	-7.00E-03	-9.49E-03	1.58E-02	-4.69E-03
(R28)	2.10E-03	4.34E-03	8.87E-05	-2.32E-05	3.26E-03	1.37E-03	(R78)	4.77E-03	1.83E-03	-2.58E-04	6.02E-03	-7.77E-03	1.32E-03
(R29)	4.60E-03	6.46E-03	-2.05E-03	1.70E-02	1.63E-02	1.25E-03	(R79)	1.68E-02	9.08E-03	4.89E-03	1.33E-02	-1.11E-03	6.68E-04
(R30)	1.35E-04	1.21E-04	-1.85E-05	1.20E-04	-2.81E-04	-3.12E-04	(R80)	-1.19E-02	-1.12E-02	-2.58E-03	-1.08E-02	-4.84E-03	2.17E-03
(R31)	-2.02E-06	1.79E-05	4.83E-06	2.74E-04	7.72E-05	-2.30E-04	(R81)	-8.03E-03	1.18E-03	-1.73E-03	-7.14E-03	8.64E-03	-1.41E-03
(R32)	1.45E-05	1.37E-05	-1.64E-06	8.56E-07	5.40E-06	9.40E-09	(R82)	2.55E-03	-7.05E-04	-4.26E-04	2.64E-03	-4.60E-03	8.96E-04
(R33)	3.02E-03	3.32E-03	-4.82E-04	1.81E-03	4.12E-03	1.92E-03	(R83)	-8.84E-02	-1.29E-01	-3.56E-02	-4.57E-02	-4.61E-02	-7.36E-03
(R34)	2.73E-04	2.64E-04	-2.54E-05	5.90E-05	-6.03E-05	-1.71E-04	(R84)	8.20E-02	1.21E-01	3.46E-02	4.04E-02	4.11E-02	8.25E-03
(R35)	-4.73E-06	-2.13E-05	-4.56E-06	-3.60E-05	7.86E-05	4.53E-04	(R85)	1.19E-02	1.71E-02	3.99E-03	6.37E-03	6.04E-03	-8.47E-04
(R36)	-1.50E-03	-1.74E-03	-1.56E-04	-1.09E-03	-2.04E-03	-3.75E-04	(R86)	4.48E-03	5.86E-03	1.64E-03	2.15E-03	2.58E-03	1.54E-03
(R37)	1.70E-03	1.95E-03	1.59E-04	1.21E-03	1.97E-03	1.03E-03	(R87)	1.06E-02	2.20E-02	-4.42E-04	3.51E-03	9.80E-03	1.95E-02
(R38)	1.35E-06	3.64E-06	-9.33E-07	1.69E-03	5.53E-05	-1.36E-03	(R88)	-7.10E-03	-2.47E-02	-6.46E-03	4.11E-03	-1.28E-02	9.32E-03
(R39)	-1.29E-03	-1.36E-03	-7.60E-05	-4.67E-04	-2.19E-03	-2.12E-03	(R89)	3.59E-03	1.23E-02	5.18E-03	-3.39E-03	4.95E-03	-1.16E-02
(R40)	-6.25E-04	-8.91E-04	-2.99E-04	-8.73E-04	-2.78E-04	-4.33E-04	(R90)	-1.17E-02	-1.72E-02	1.96E-03	-5.38E-03	-1.73E-02	9.05E-03
(R41)	-1.82E-06	5.91E-06	2.20E-06	1.95E-03	-1.40E-04	-2.85E-03	(R91)	-2.44E-02	-5.02E-02	-2.03E-02	-4.92E-03	-4.99E-03	-1.15E-03
(R42)	1.96E-05	1.61E-05	-7.20E-06	4.24E-04	-1.11E-03	-1.97E-03	(R92)	1.35E-01	2.14E-01	7.11E-02	5.26E-02	5.46E-02	1.44E-02
(R43)	1.18E-03	1.40E-03	7.32E-04	-2.73E-03	-2.06E-03	-1.33E-03	(R93)	5.94E-04	1.06E-03	3.02E-05	3.42E-05	9.49E-04	1.42E-03
(R44)	1.21E-05	-2.10E-06	-1.70E-05	-1.31E-04	1.98E-04	1.47E-03	(R94)	5.04E-03	4.92E-03	1.56E-02	3.26E-03	2.88E-03	4.62E-03
(R45)	-1.08E-01	-1.36E-01	-2.20E-02	-3.79E-02	-3.48E-02	-5.99E-03	(R95)	1.33E-02	1.07E-02	1.48E-02	-1.73E-03	3.32E-03	1.14E-02
(R46)	1.68E-03	2.06E-03	4.42E-04	2.31E-03	1.81E-03	-6.67E-04	(R96)	8.79E-03	1.03E-02	-4.04E-02	3.74E-03	6.46E-03	-2.94E-02
(R47)	3.24E-03	4.14E-03	8.75E-04	1.43E-03	1.31E-03	1.48E-04	(R97)	-8.37E-03	-1.67E-02	-1.20E-01	3.34E-04	-1.28E-02	-9.69E-02
(R48)	2.56E-04	6.74E-04	-1.76E-04	-4.62E-04	9.10E-05	-3.29E-04	(R98)	1.04E-03	3.43E-03	-1.40E-01	-2.79E-04	2.26E-03	-1.19E-01
(R49)	-3.52E-04	-8.92E-04	2.19E-04	2.41E-03	7.80E-04	-4.20E-04	(R99)	-1.73E-05	-2.09E-05	-3.98E-06	1.92E-03	9.54E-04	-8.20E-04
(R50)	-6.04E-06	1.26E-05	7.39E-06	1.61E-03	1.30E-03	4.83E-05	(R100)	-6.58E-04	-6.68E-04	-6.14E-05	-3.40E-04	-2.05E-03	-2.37E-03

Table S3. (continued).

CB6r1	Weak Emission			Strong Emission		
	Ozone	NO _x	HCHO	Ozone	NO _x	HCHO
(R101)	1.16E-05	1.55E-06	-5.46E-06	3.24E-04	-7.53E-04	-1.24E-03
(R102)	-1.38E-05	-1.47E-05	2.86E-06	-4.46E-04	1.12E-03	2.07E-03
(R103)	8.02E-06	1.33E-06	-8.68E-06	-7.19E-05	-3.69E-04	5.22E-04
(R104)	1.66E-05	1.70E-05	1.08E-07	3.42E-05	-3.18E-04	3.15E-04
(R105)	-4.05E-05	-2.66E-05	-4.66E-05	1.57E-03	8.86E-04	-3.17E-04
(R106)	3.46E-02	-2.54E-03	-7.40E-02	1.14E-02	5.72E-02	4.22E-02
(R107)	-1.54E-02	-1.72E-02	-3.89E-03	-1.21E-02	-2.58E-02	-2.84E-03
(R108)	-1.02E-02	-2.77E-02	-1.76E-02	1.49E-02	-7.78E-03	1.33E-02
(R109)	-2.56E-05	-2.35E-05	-2.41E-05	1.36E-03	1.90E-03	2.21E-03
(R110)	3.34E-02	1.05E-02	-1.50E-02	1.81E-02	3.19E-02	3.89E-03
(R111)	-1.39E-02	-1.58E-02	-3.28E-03	-1.59E-02	-2.87E-02	-7.15E-04
(R112)	-1.91E-02	-2.59E-02	-1.73E-02	1.08E-02	3.89E-03	1.66E-02
(R113)	9.09E-03	1.23E-02	4.96E-03	3.20E-03	6.20E-03	1.80E-03
(R114)	-3.17E-03	-7.78E-03	-6.41E-04	-1.12E-04	-3.13E-03	2.77E-03
(R115)	-3.06E-03	-4.08E-03	-8.48E-04	-2.41E-03	-4.67E-03	-8.02E-05
(R116)	1.46E-03	1.23E-03	7.49E-04	6.03E-04	7.13E-04	-5.08E-04
(R117)	-4.49E-04	-3.33E-04	-5.68E-04	-2.19E-04	-9.84E-04	3.97E-04
(R118)	-7.34E-04	-7.48E-04	5.31E-06	1.45E-04	-5.52E-04	1.20E-04
(R119)	-2.70E-03	-5.27E-03	-6.98E-03	-7.36E-04	-7.13E-03	2.65E-03
(R120)	-2.13E-03	-2.19E-03	-5.89E-05	-1.54E-03	-2.41E-03	4.03E-04
(R121)	3.91E-03	3.22E-03	1.45E-03	4.49E-03	3.00E-03	-2.53E-04
(R122)	2.66E-03	4.48E-03	2.99E-04	1.90E-04	-1.02E-04	-3.36E-04
(R123)	4.18E-02	6.76E-02	7.00E-03	6.11E-03	1.29E-02	-5.68E-03
(R124)	1.75E-02	1.53E-02	5.19E-02	-2.66E-04	-1.33E-03	2.59E-04
(R125)	-1.14E-06	-5.15E-06	-4.14E-06	-3.46E-03	-2.36E-03	-9.83E-04
(R126)	4.93E-04	9.40E-04	3.84E-03	1.16E-04	5.35E-04	3.76E-04
(R127)	8.23E-06	4.13E-06	-2.45E-06	-1.65E-03	-7.67E-04	1.70E-03
(R128)	2.24E-03	2.06E-03	1.07E-02	1.31E-03	2.66E-04	1.29E-03
(R129)	3.88E-04	9.83E-05	2.49E-03	-3.59E-04	7.09E-04	2.95E-03
(R130)	2.41E-04	3.57E-04	1.58E-03	-4.18E-04	9.57E-04	2.78E-03
(R131)	-6.34E-06	-8.74E-06	-3.12E-06	1.51E-03	7.38E-04	-2.64E-04
(R132)	-6.91E-03	-4.84E-02	3.48E-02	-1.39E-02	-2.25E-02	-6.71E-03
(R133)	1.00E-02	1.17E-02	2.77E-02	-5.09E-04	-1.22E-03	6.59E-03
(R134)	-1.13E-02	-1.31E-02	-3.11E-02	2.04E-04	2.32E-03	-5.13E-03
(R135)	1.10E-05	1.77E-06	-2.50E-06	1.61E-03	-3.73E-04	-2.86E-03
(R136)	3.28E-07	3.38E-06	-2.85E-07	-1.80E-04	4.87E-04	1.64E-03
(R137)	-1.54E-05	-2.08E-06	-5.08E-05	-1.62E-04	3.17E-04	1.45E-03
(R138)	4.67E-03	-9.25E-03	-3.30E-02	1.14E-02	5.97E-04	2.56E-03
(R139)	-1.06E-02	-2.22E-03	-5.17E-02	-1.24E-02	1.17E-03	1.91E-03
(R140)	4.56E-05	1.20E-04	-7.28E-06	-6.86E-05	2.18E-06	6.57E-05
(R141)	-1.48E-05	-1.16E-05	-2.40E-05	-6.48E-05	1.71E-04	7.00E-05
(R142)	5.55E-03	-8.33E-03	4.30E-03	4.27E-02	-3.36E-03	1.24E-03
(R143)	-8.00E-03	-2.50E-03	-1.16E-02	-3.50E-02	5.43E-03	2.33E-03
(R144)	6.22E-04	1.14E-03	4.88E-04	-2.20E-03	-8.10E-04	-8.36E-04
(R145)	1.01E-05	-5.72E-06	1.78E-05	2.95E-04	-7.27E-04	-1.10E-03
(R146)	7.83E-03	1.72E-03	5.73E-03	2.20E-03	5.33E-04	5.65E-04
(R147)	-6.52E-03	-2.59E-03	-1.04E-02	5.43E-04	7.63E-04	-9.70E-04
(R148)	-3.86E-04	5.48E-05	4.91E-04	3.17E-04	-1.95E-04	-1.74E-03
(R149)	-1.35E-03	-1.05E-02	-3.10E-02	2.39E-02	-5.20E-03	-2.59E-02
(R150)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

CB6r1	Weak Emission			Strong Emission		
	Ozone	NO _x	HCHO	Ozone	NO _x	HCHO
(R151)	-2.04E-03	-2.06E-02	3.76E-02	-8.99E-03	-1.28E-02	1.46E-02
(R152)	4.00E-03	1.55E-02	-2.64E-02	8.74E-03	9.50E-03	-1.52E-02
(R153)	-2.66E-04	-4.21E-04	2.96E-04	3.33E-04	1.78E-03	6.21E-04
(R154)	1.34E-04	8.32E-04	1.86E-03	1.76E-03	1.22E-03	5.72E-04
(R155)	-1.77E-03	6.26E-03	-1.70E-02	3.57E-04	1.34E-03	-4.58E-03
(R156)	-3.00E-02	-2.88E-02	3.51E-02	-2.48E-02	-2.11E-02	2.38E-02
(R157)	3.53E-02	5.27E-02	1.35E-02	1.47E-02	4.01E-02	-1.36E-03
(R158)	7.29E-03	-3.62E-03	-7.41E-03	4.02E-03	-6.87E-03	-5.28E-03
(R159)	-1.22E-02	1.67E-03	-1.25E-02	-1.10E-02	9.00E-03	-5.62E-03
(R160)	-7.76E-04	-6.47E-04	4.04E-04	-4.45E-03	-4.68E-03	-1.07E-03
(R161)	7.61E-03	4.09E-03	2.39E-02	1.02E-02	-1.81E-03	1.03E-02
(R162)	2.25E-04	-1.10E-04	9.81E-04	9.65E-05	1.64E-04	1.57E-03
(R163)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(R164)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(R165)	1.72E-03	-5.24E-04	5.85E-03	1.08E-03	-3.74E-04	4.82E-03
(R166)	-2.99E-03	-2.21E-03	4.16E-04	3.38E-04	-1.13E-03	-1.62E-03
(R167)	3.47E-03	2.31E-03	6.50E-04	1.82E-03	1.03E-05	-3.56E-04
(R168)	-4.69E-04	-2.14E-04	-8.81E-04	-1.83E-03	-4.88E-04	3.43E-04
(R169)	4.81E-06	3.77E-05	4.17E-05	-3.76E-04	1.13E-03	2.15E-03
(R170)	-1.50E-02	-3.13E-02	-2.00E-02	6.26E-02	4.94E-02	1.14E-02
(R171)	1.62E-06	-5.32E-06	-4.13E-06	3.66E-04	-2.81E-05	-9.83E-04
(R172)	-1.19E-05	4.75E-07	5.82E-06	-1.83E-03	-1.15E-03	1.64E-04
(R173)	3.31E-07	1.13E-05	6.63E-06	5.50E-05	-1.24E-04	-7.58E-04
(R174)	-1.83E-06	2.18E-05	5.31E-06	1.56E-04	-3.09E-04	-1.49E-03
(R175)	-5.53E-07	2.64E-06	1.04E-06	-2.67E-05	7.46E-05	6.90E-04
(R176)	9.40E-06	2.69E-06	-3.55E-06	-2.15E-04	-1.65E-05	8.16E-05
(R177)	8.53E-06	-1.86E-06	-5.20E-06	-8.38E-04	-4.54E-04	3.60E-04
(R178)	1.03E-05	1.76E-05	-3.92E-06	-1.46E-04	4.34E-04	1.04E-03
(R179)	-8.34E-06	-8.11E-06	4.38E-06	-8.38E-04	-1.62E-03	-2.31E-03
(R180)	-1.23E-01	-6.23E-02	3.61E-02	-8.69E-02	-7.58E-02	-4.36E-03
(R181)	-1.27E-02	-2.22E-02	6.57E-03	-8.90E-03	-1.17E-02	1.72E-06
(R182)	-1.20E-04	-7.63E-04	2.09E-03	-9.28E-04	-1.02E-03	5.71E-04
(R183)	8.59E-03	1.57E-02	-6.82E-03	1.09E-02	1.14E-02	-1.22E-03
(R184)	2.27E-04	3.25E-05	7.66E-04	9.95E-04	-1.23E-04	-1.90E-04
(R185)	8.57E-02	1.64E-01	5.11E-02	-4.19E-02	-2.95E-02	2.00E-03
(R186)	-5.44E-03	-3.91E-03	9.32E-03	-1.21E-02	-1.41E-02	1.33E-03
(R187)	3.70E-03	2.84E-03	-7.54E-03	1.02E-02	1.04E-02	-4.31E-03
(R188)	-3.05E-04	-4.36E-04	1.04E-03	-4.44E-04	-1.45E-03	-1.03E-04
(R189)	3.40E-04	2.52E-04	4.49E-04	-1.94E-03	-1.78E-03	5.92E-04
(R190)	-6.76E-02	-5.54E-02	-1.69E-02	-2.00E-02	-1.26E-02	-3.08E-03
(R191)	1.81E-02	1.32E-02	7.74E-03	1.55E-03	5.07E-03	-6.59E-04
(R192)	-1.57E-02	-1.26E-02	-4.93E-03	-5.56E-03	-2.73E-03	-7.18E-04
(R193)	1.65E-02	1.33E-02	5.19E-03	5.02E-03	2.64E-03	1.75E-03
(R194)	1.84E-03	2.83E-03	7.44E-04	9.16E-04	-5.96E-04	-2.52E-03
(R195)	-1.05E-02	-9.80E-03	-2.26E-03	-5.18E-03	-2.48E-03	5.46E-04
(R196)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
(R197)	-2.46E-03	-1.40E-03	-5.96E-03	1.80E-03	4.42E-04	-2.23E-03
(R198)	2.31E-03	6.27E-06	2.32E-03	1.08E-03	1.77E-03	2.97E-03
(R199)	3.46E-03	2.64E-03	1.90E-03	1.49E-03	1.54E-03	9.25E-04
(R200)	-2.73E-03	-1.08E-03	9.10E-04	-7.73E-03	-4.27E-03	1.45E-03

Table S3. (continued).

CB6r1	Weak Emission			Strong Emission		
	Ozone	NO _x	HCHO	Ozone	NO _x	HCHO
(R201)	2.35E-02	3.33E-02	1.05E-02	1.34E-02	1.40E-02	4.73E-04
(R202)	4.89E-03	6.82E-03	2.58E-04	7.66E-04	9.57E-04	-1.62E-03
(R203)	3.87E-03	7.65E-03	-1.98E-03	3.09E-03	5.80E-03	1.52E-03
(R204)	-1.97E-02	-3.14E-02	-4.60E-03	-1.80E-02	-1.78E-02	-3.25E-03
(R205)	3.80E-02	4.88E-02	1.31E-02	1.99E-03	1.10E-03	-1.29E-03
(R206)	-3.82E-02	-3.84E-02	-1.02E-02	-9.29E-04	-6.78E-04	-4.57E-04
(R207)	2.50E-03	-1.72E-03	5.65E-04	2.72E-03	-2.51E-04	2.67E-03
(R208)	1.28E-02	1.14E-02	3.48E-03	-2.42E-03	-3.51E-03	-2.03E-03
(R209)	-1.36E-02	-1.20E-02	-3.72E-03	2.65E-03	2.99E-03	-1.16E-03
(R210)	-2.18E-03	-2.26E-03	-1.13E-03	9.14E-04	5.32E-05	9.05E-06
(R211)	-1.82E-03	-1.34E-03	9.96E-05	3.90E-04	1.26E-03	1.12E-03
(R212)	-8.78E-03	-4.60E-03	-2.09E-03	-1.44E-03	3.08E-03	-3.73E-04
(R213)	4.24E-03	-4.28E-02	-1.54E-02	4.68E-03	-1.12E-02	-1.12E-03
(R214)	-4.72E-03	4.71E-02	1.70E-02	-6.19E-03	1.10E-02	9.68E-04
(R215)	-1.25E-02	-7.20E-03	-1.19E-02	-1.17E-03	-1.30E-03	-1.41E-03
(R216)	1.17E-02	6.83E-03	1.17E-02	5.23E-06	4.90E-04	1.49E-03
(R217)	-1.17E-01	-7.28E-02	-2.82E-02	-1.61E-02	-7.09E-03	-3.08E-03
(R218)	1.34E-03	4.92E-03	1.76E-06	4.15E-05	6.14E-04	-6.24E-04
(R219)	-6.87E-03	-6.67E-03	1.15E-03	-3.89E-03	-5.66E-03	-4.56E-05
(R220)	7.10E-03	7.05E-03	-1.57E-04	2.87E-03	5.32E-03	-4.58E-05
(R221)	-2.41E-04	-3.48E-04	-6.39E-04	-9.06E-04	-2.02E-03	-2.20E-03
(R222)	9.98E-05	1.07E-04	-7.94E-05	-3.58E-04	1.16E-03	2.54E-03
(R223)	2.64E-01	4.69E-01	1.33E-01	7.60E-01	8.37E-01	1.27E-01
(R224)	2.71E-01	4.70E-01	1.32E-01	1.17E-01	1.26E-01	1.97E-02
(R225)	0.00E+00	0.00E+00	0.00E+00	2.31E-03	4.88E-03	9.73E-04
(R226)	0.00E+00	0.00E+00	0.00E+00	9.85E-05	-1.38E-04	4.85E-02
(R227)	0.00E+00	0.00E+00	0.00E+00	-3.63E-04	1.79E-03	9.26E-03
(R228)	0.00E+00	0.00E+00	0.00E+00	-1.94E-02	-8.10E-04	3.48E-02
(R229)	0.00E+00	0.00E+00	0.00E+00	4.80E-04	-2.09E-03	2.96E-03
(R230)	0.00E+00	0.00E+00	0.00E+00	-8.45E-03	7.95E-03	5.17E-02
(R231)	0.00E+00	0.00E+00	0.00E+00	-6.68E-02	-6.92E-02	-9.96E-03
(R232)	0.00E+00	0.00E+00	0.00E+00	-1.06E-01	-9.72E-02	-4.92E-03
(R233)	9.80E-02	1.10E-01	5.32E-01	-9.91E-02	3.97E-02	3.87E-01
(R234)	0.00E+00	0.00E+00	0.00E+00	-7.98E-03	-1.30E-02	-4.17E-03
(R235)	0.00E+00	0.00E+00	0.00E+00	-9.29E-02	1.94E-02	3.04E-01
(R236)	-5.67E-01	1.80E-01	2.09E-02	-2.15E-01	1.17E-01	9.01E-03
(R237)	-2.99E-04	-4.76E-04	-1.39E-04	-1.19E-04	2.69E-05	4.56E-04
(R238)	-2.54E-02	-3.95E-02	-9.15E-03	-1.33E-02	-1.54E-02	-3.84E-03
(R239)	-4.92E-03	-5.88E-03	-1.24E-03	-2.00E-03	-9.27E-04	7.40E-04
(R240)	1.49E-02	3.32E-02	5.00E-03	5.21E-03	1.43E-02	-4.05E-03
(R241)	-9.77E-04	-1.03E-03	-5.43E-05	-6.93E-04	-6.98E-04	4.56E-04
(R242)	-4.65E-03	-1.14E-02	2.05E-03	-5.02E-04	-1.43E-03	3.74E-04
(R243)	-2.06E-03	-2.36E-03	-7.58E-06	-3.06E-04	-5.63E-04	4.11E-04
(R244)	-1.09E-03	1.95E-03	-9.62E-01	-3.32E-03	1.27E-03	-8.12E-01

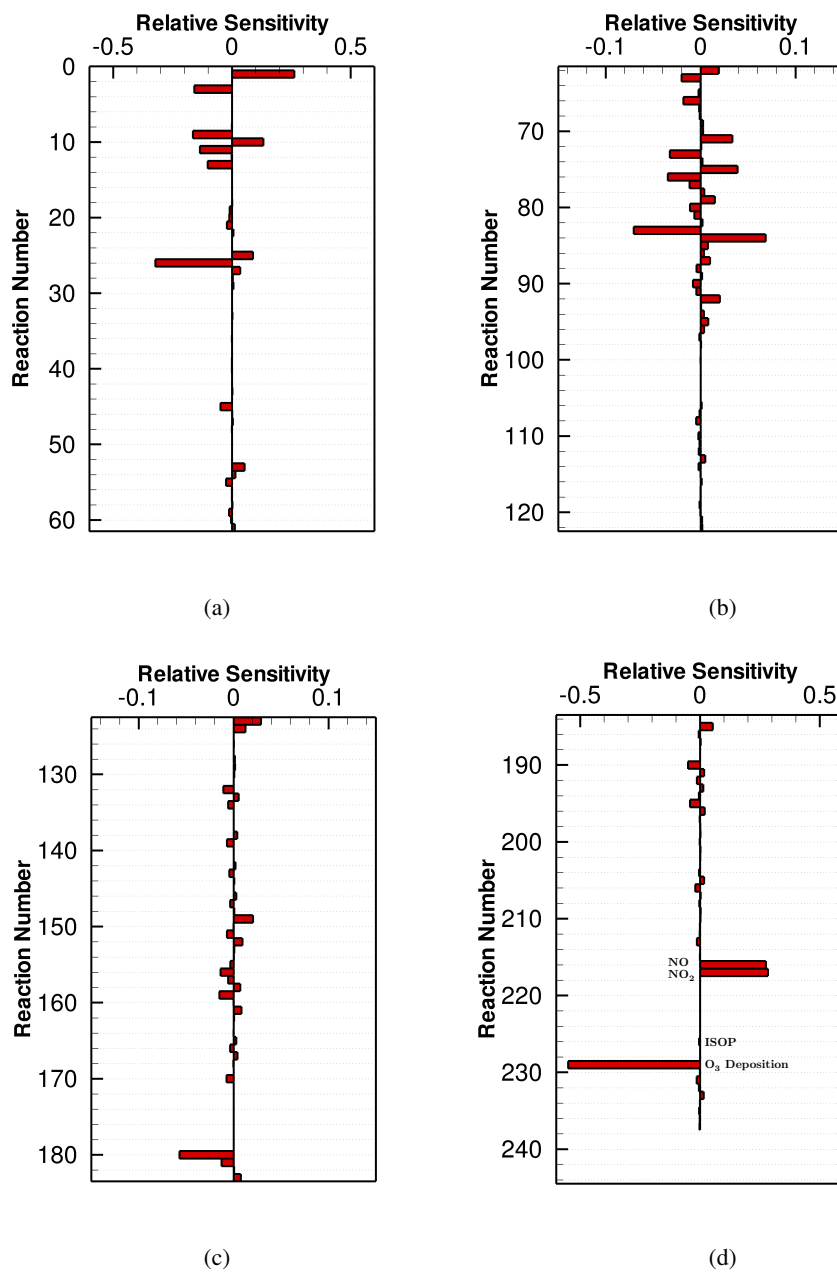


Fig. S1. Averaged ozone sensitivity to the CB6r2 mechanism over the 7-th day, when the surface emission is weak. All the values of the sensitivities shown in this figure can be found in Tab. S2 of the supplementary material.

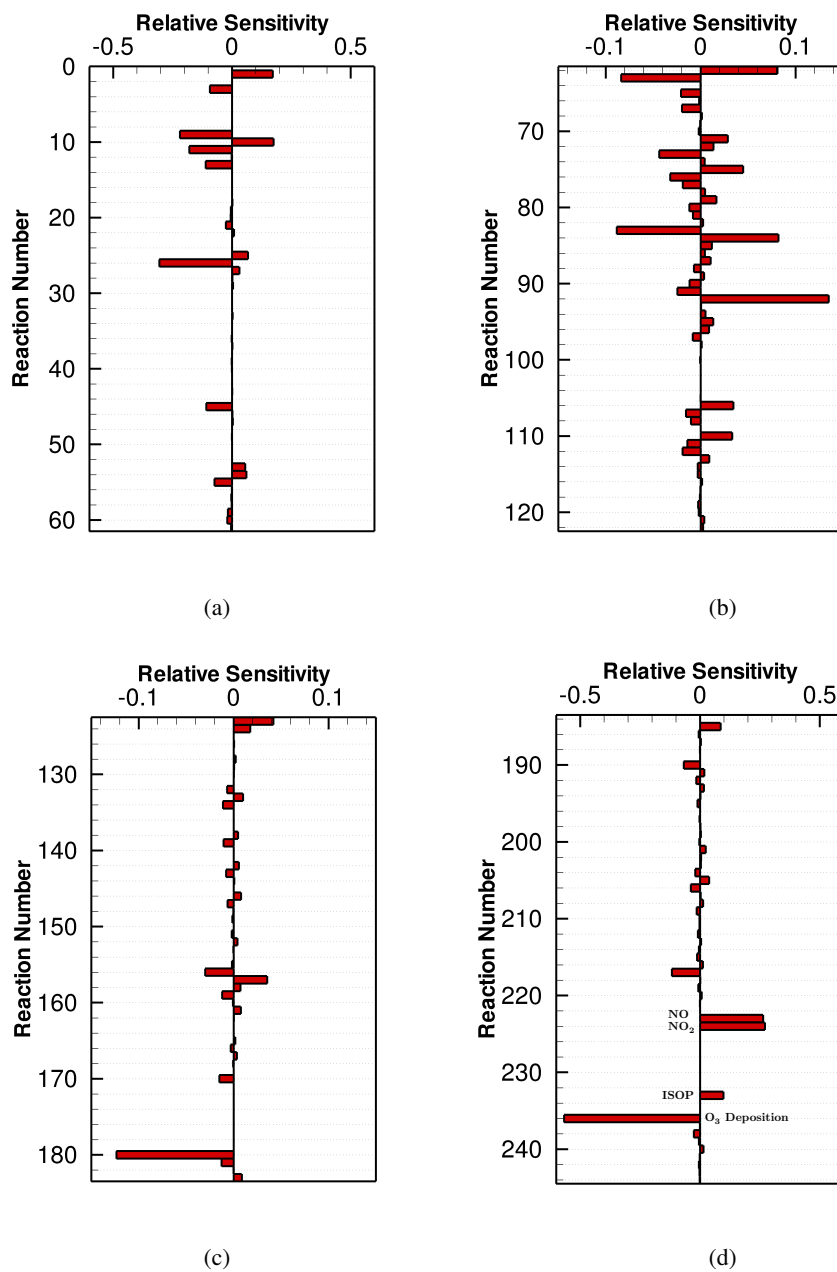


Fig. S2. Averaged ozone sensitivity to the CB6r1 mechanism over the 7-th day, when the surface emission is weak. All the values of the sensitivities shown in this figure can be found in Tab. S3 of the supplementary material.

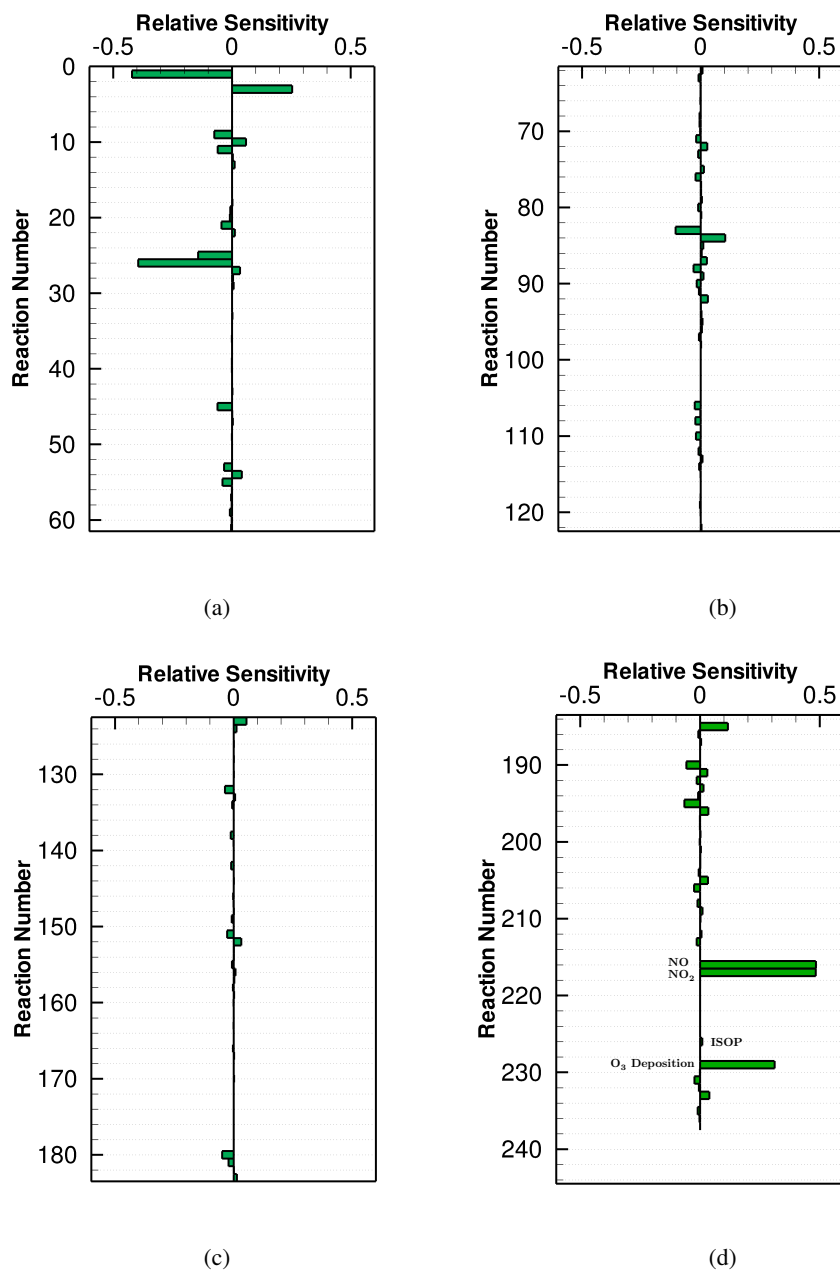


Fig. S3. Averaged NO_x sensitivity to the CB6r2 mechanism over the 7-th day, when the surface emission is weak. All the values of the sensitivities shown in this figure can be found in Tab. S2 of the supplementary material.

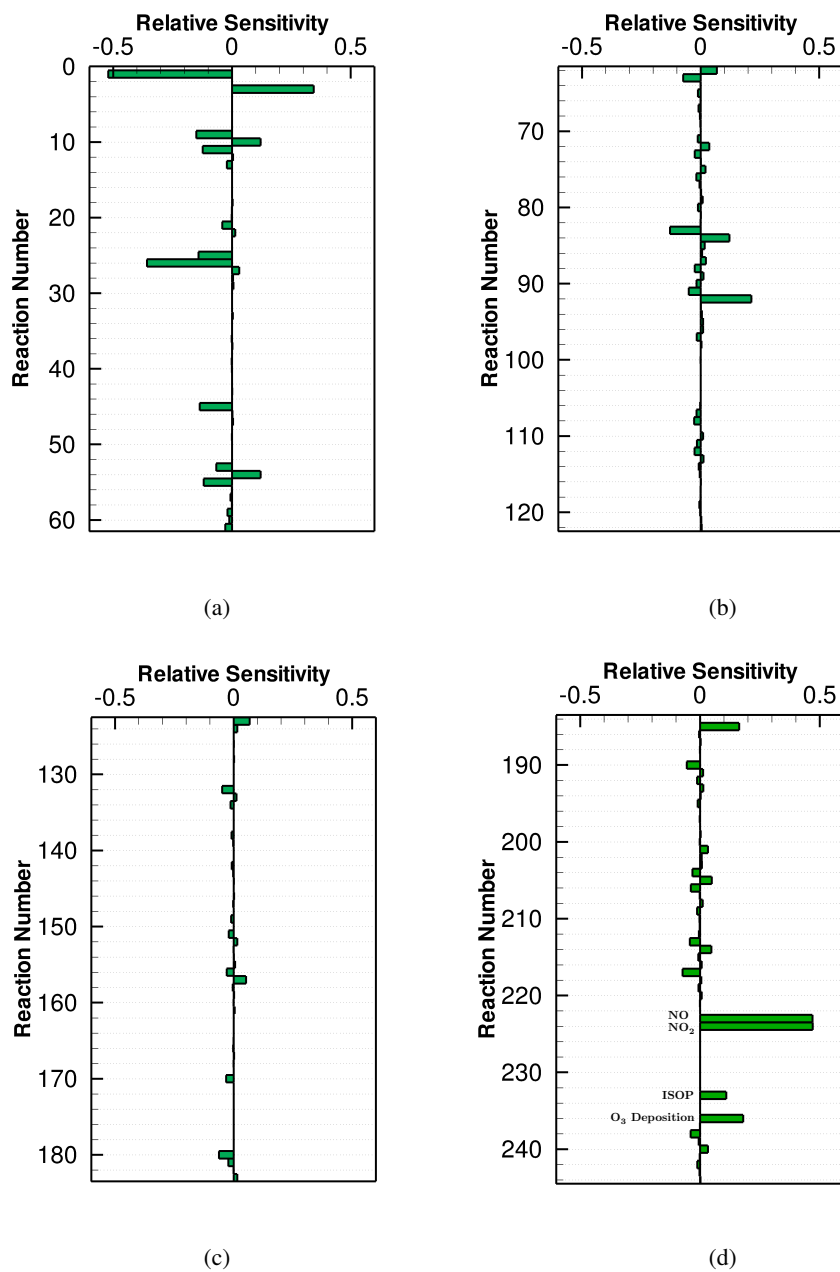


Fig. S4. Averaged NO_x sensitivity to the CB6r1 mechanism over the 7-th day, when the surface emission is weak. All the values of the sensitivities shown in this figure can be found in Tab. S3 of the supplementary material.

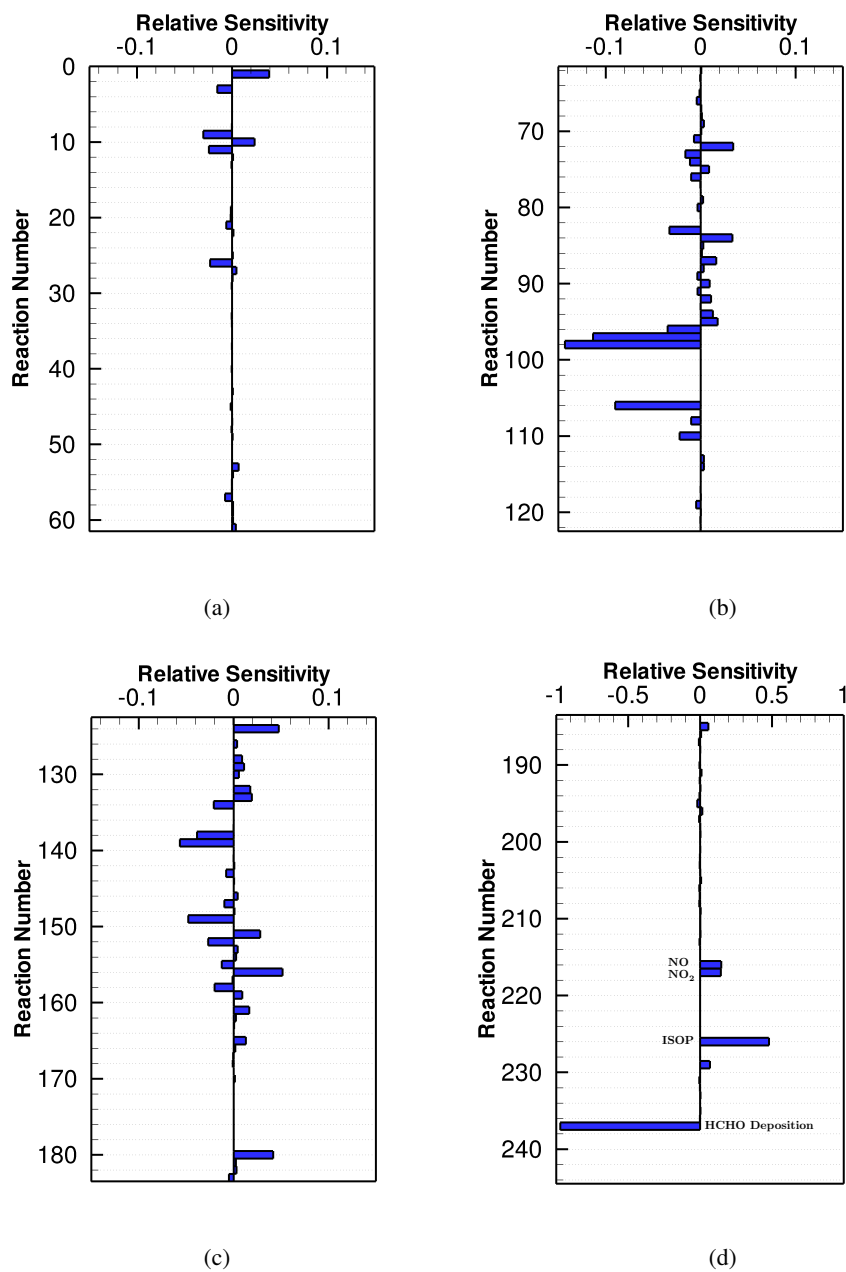


Fig. S5. Averaged HCHO sensitivity to the CB6r2 mechanism over the 7-th day, when the surface emission is weak. All the values of the sensitivities shown in this figure can be found in Tab. S2 of the supplementary material.

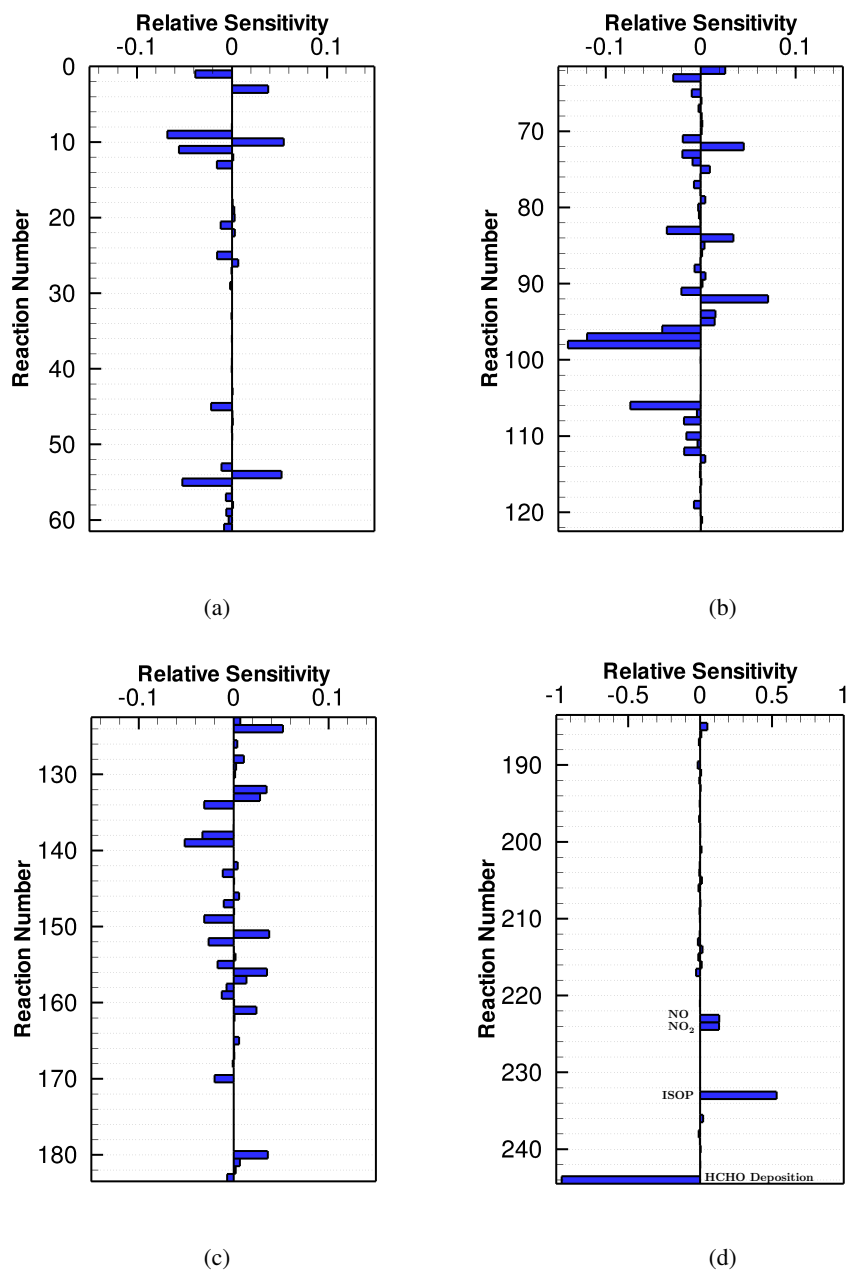


Fig. S6. Averaged HCHO sensitivity to the CB6r1 mechanism over the 7-th day, when the surface emission is weak. All the values of the sensitivities shown in this figure can be found in Tab. S3 of the supplementary material.

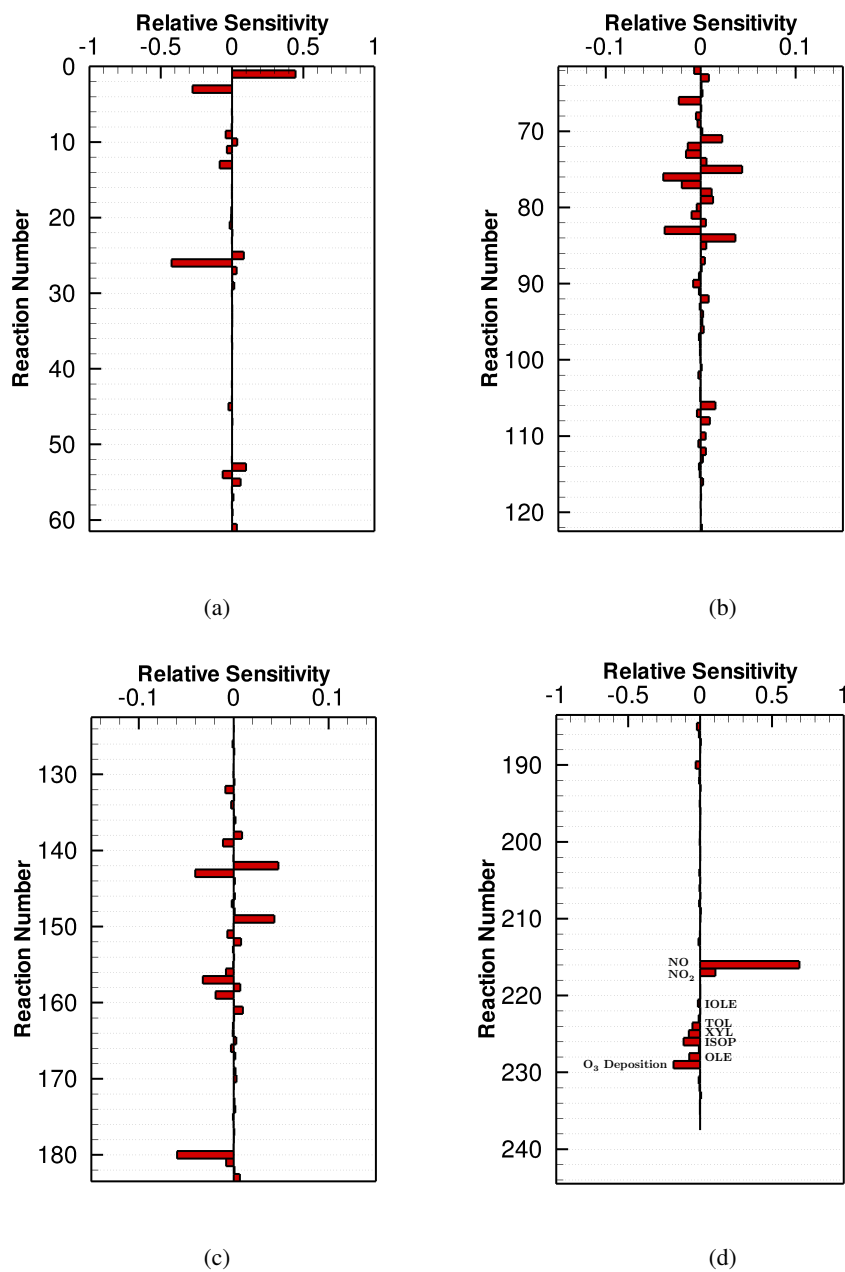


Fig. S7. Averaged ozone sensitivity to the CB6r2 mechanism over the 7-th day, when the surface emission is strong. All the values of the sensitivities shown in this figure can be found in Tab. S2 of the supplementary material.

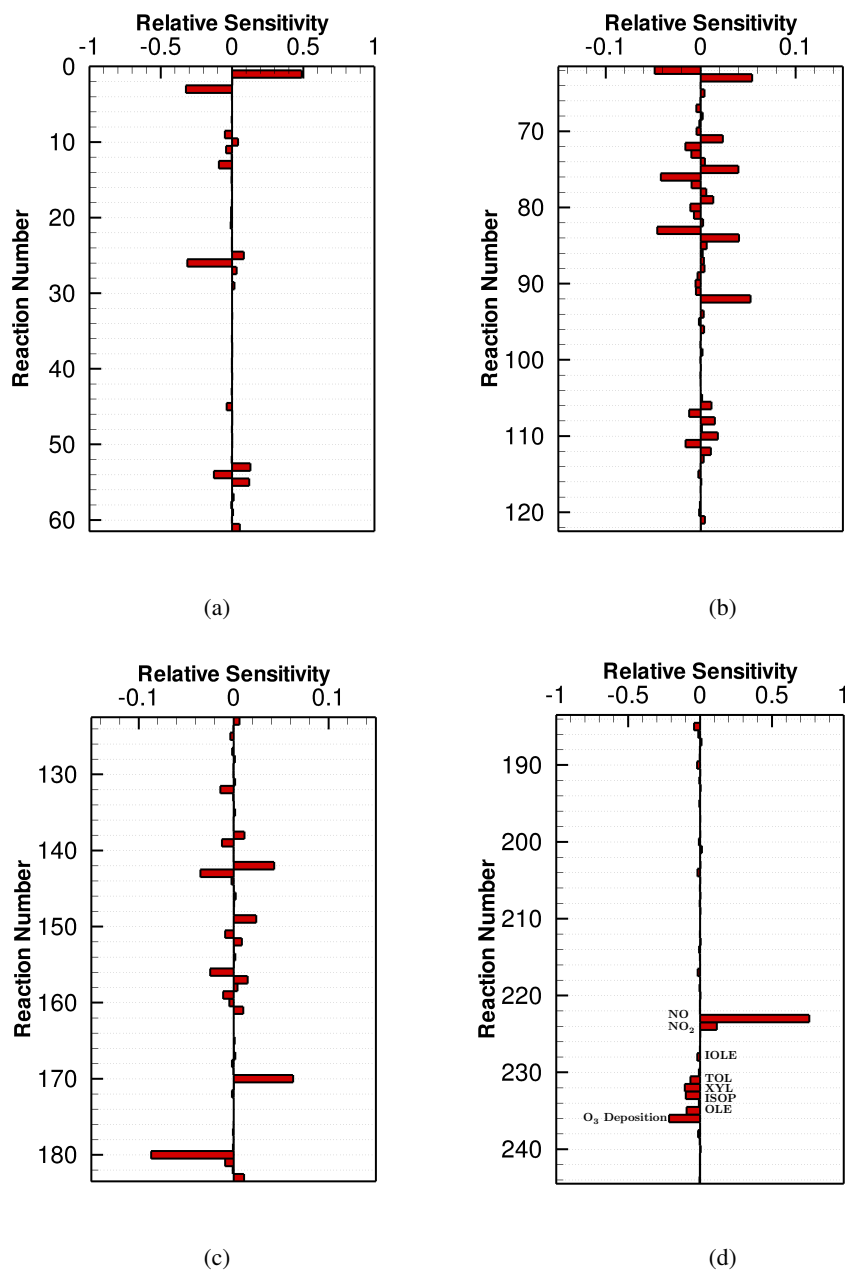


Fig. S8. Averaged ozone sensitivity to the CB6r1 mechanism over the 7-th day, when the surface emission is strong. All the values of the sensitivities shown in this figure can be found in Tab. S3 of the supplementary material.

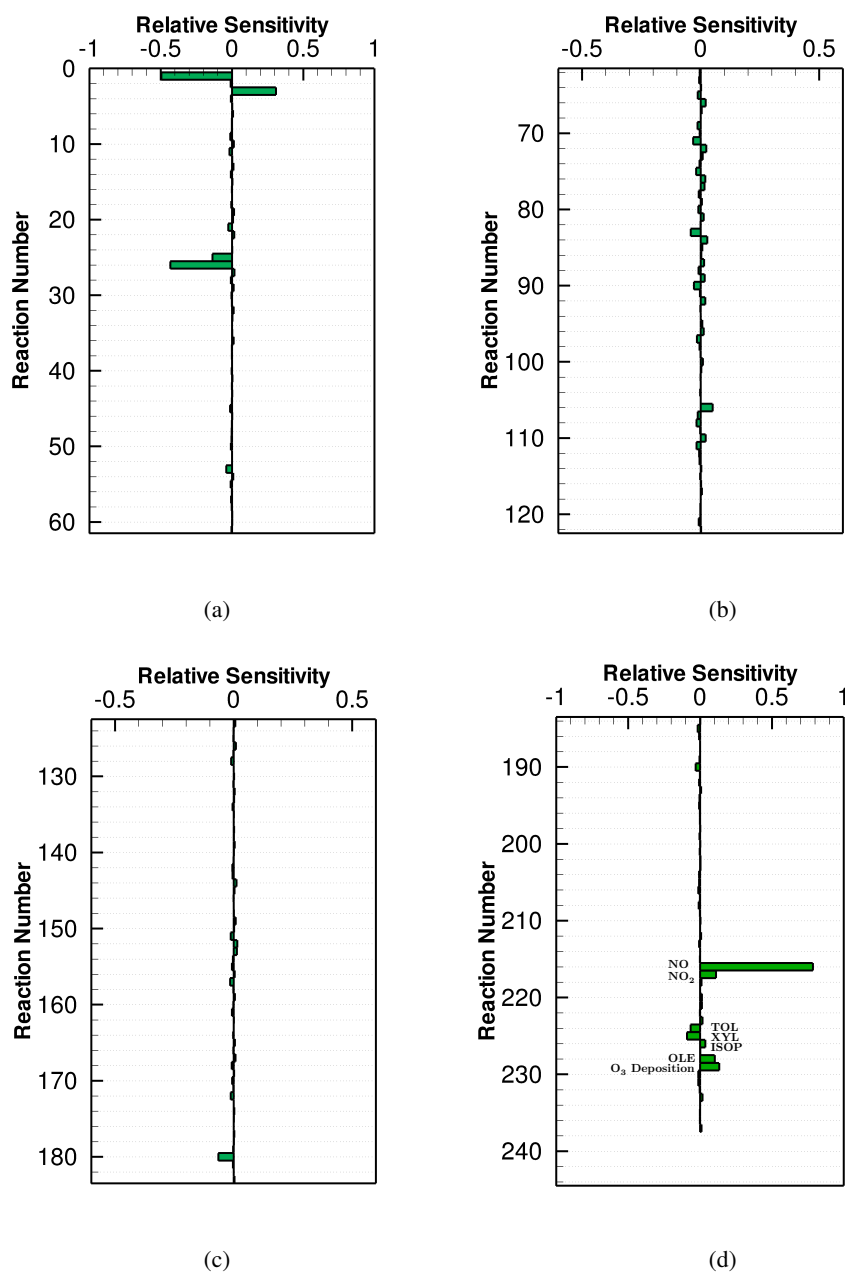


Fig. S9. Averaged NO_x sensitivity to the CB6r2 mechanism over the 7-th day, when the surface emission is strong. All the values of the sensitivities shown in this figure can be found in Tab. S2 of the supplementary material.

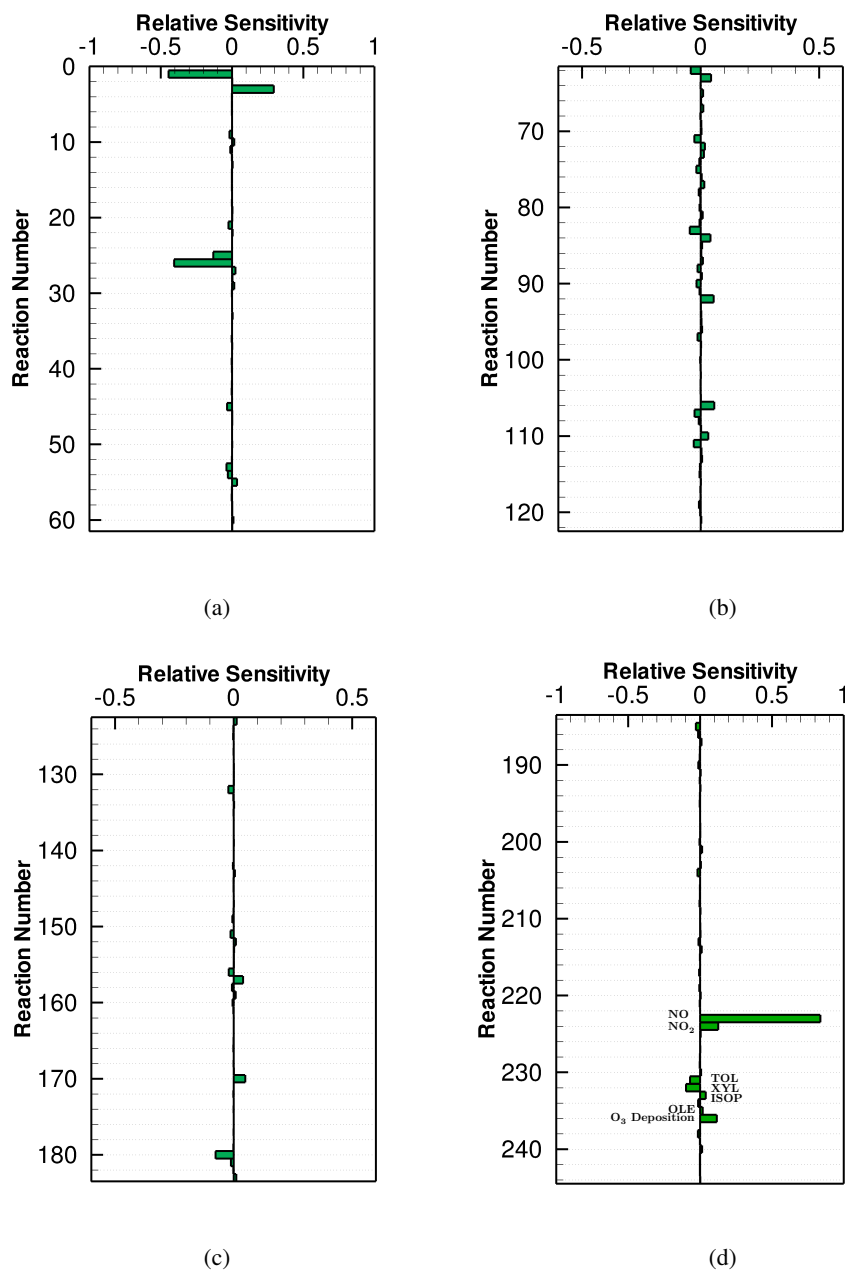


Fig. S10. Averaged NO_x sensitivity to the CB6r1 mechanism over the 7-th day, when the surface emission is strong. All the values of the sensitivities shown in this figure can be found in Tab. S3 of the supplementary material.

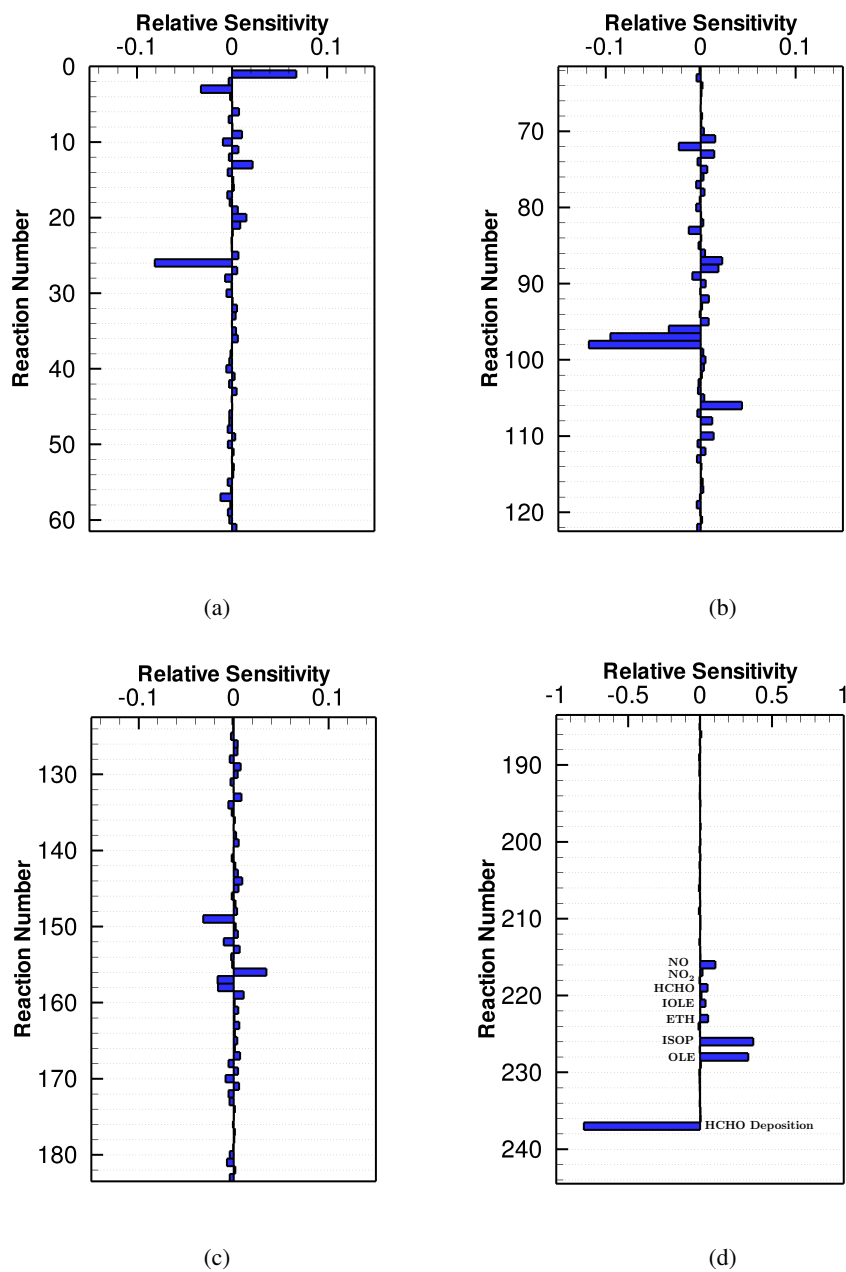


Fig. S11. Averaged HCHO sensitivity to the CB6r2 mechanism over the 7-th day, when the surface emission is strong. All the values of the sensitivities shown in this figure can be found in Tab. S2 of the supplementary material.

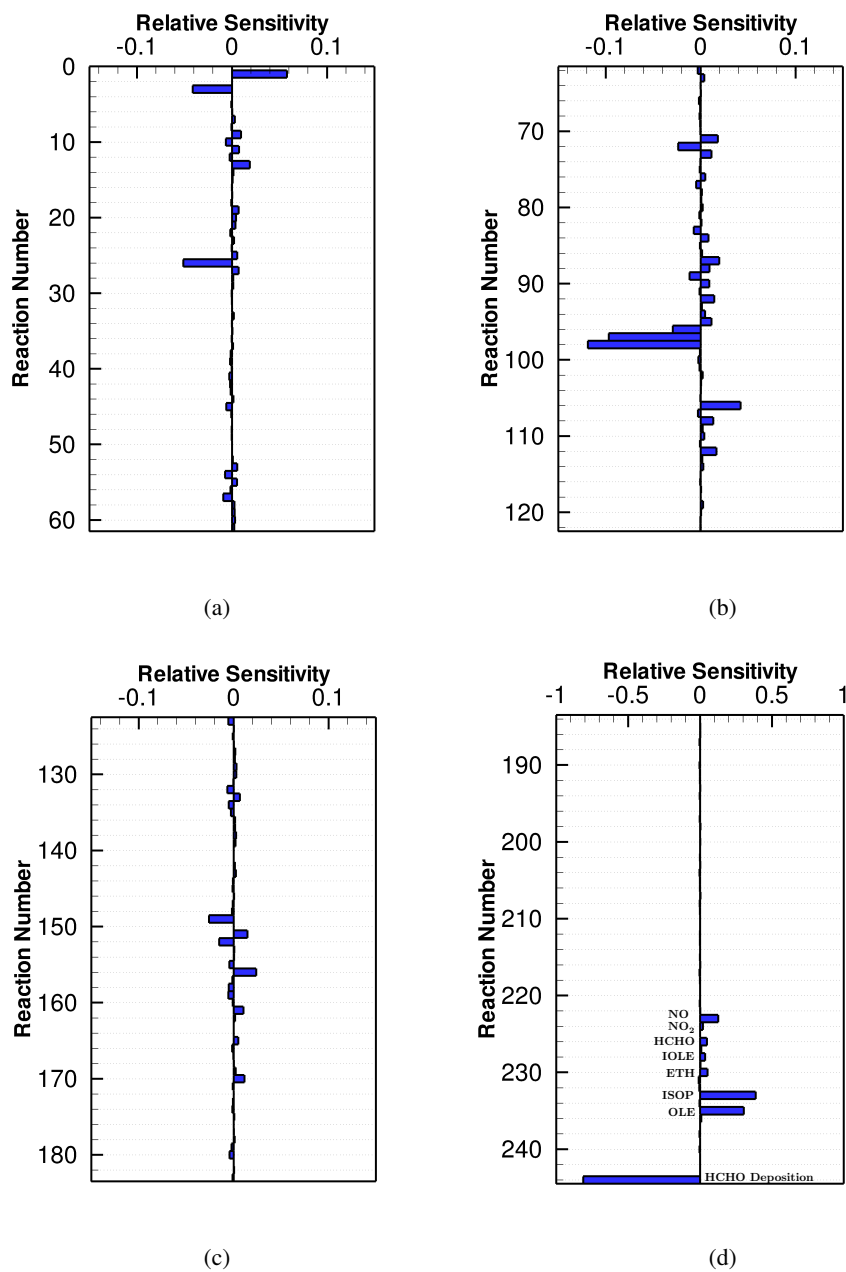


Fig. S12. Averaged HCHO sensitivity to the CB6r1 mechanism over the 7-th day, when the surface emission is strong. All the values of the sensitivities shown in this figure can be found in Tab. S3 of the supplementary material.