Supplementary Material for "Less is More: A Small-Scale Learning Particle Swarm Optimization for Large-Scale Optimization"

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TABLE S.I EXPERIMENTAL COMPARISON RESULTS OF SSLPSO WITH THE TOP ALGORITHMS OF THE CEC2010 AND CEC2012 COMPETITIONS

	SSLPSO	MA-SW-Chains	MOS	jDElsgo	CCGS
FUN	Mean±Std	Mean±Std	Mean±Std	Mean±Std	Mean±Std
f_1	$0.00E+00 \pm 0.00E+00$	2.10E-14 ± 1.99E-14 (+)	$0.00E+00 \pm 0.00E+00 (\approx)$	8.86E-20 ± 4.51E-20 (+)	1.83E-22 ± 3.68E-22 (+)
f_2	5.43E+02 ± 3.05E+01	8.10E+02 ± 5.88E+01 (+)	1.97E+02 ± 1.59E+01 (-)	1.25E-01 ± 3.45E-01 (-)	$4.44\text{E}-02 \pm 1.99\text{E}-01 \ (-)$
f_3	4.53E-14 ± 3.61E-15	$7.28E-13 \pm 3.40E-13 (+)$	$1.12E+00 \pm 1.00E+00 (+)$	3.81E-12 ± 5.02E-12 (+)	1.91E-01 ± 4.49E-01 (+)
f_4	4.01E+10 ± 1.10E+10	3.53E+11 ± 3.12E+10 (+)	1.91E+10 ± 8.08E+09 (-)	8.06E+10 ± 3.08E+10 (+)	1.79E+12 ± 7.62E+11 (+)
f_5	2.79E+08 ± 7.87E+06	1.68E+08 ± 1.04E+08 (-)	6.81E+08 ± 1.42E+08 (+)	9.72E+07 ± 1.44E+07 (-)	$1.97E+07 \pm 4.69E+06$ (-)
f_6	4.00E-09 ± 7.04E-15	8.14E+04 ± 2.84E+05 (+)	1.99E+07 ± 5.67E+04 (+)	1.70E-08 ± 4.03E-08 (+)	2.88E+06 ± 4.87E+05 (+)
f_7	2.90E-15 ± 1.32E-14	1.03E+02 ± 8.70E+01 (+)	$0.00E+00 \pm 0.00E+00$ (-)	1.31E-02 ± 6.82E-02 (+)	1.37E+02 ± 1.16E+02 (+)
f_8	$3.98E+02 \pm 5.76E+02$	$1.41E+07 \pm 3.68E+07 (+)$	1.12E+06 ± 1.79E+06 (+)	3.15E+06 ± 3.27E+06 (+)	2.81E+07 ± 3.14E+07 (+)
f_9	6.17E+06 ± 5.91E+05	1.41E+07 ± 1.15E+06 (+)	8.78E+06 ± 1.01E+06 (+)	3.11E+07 ± 5.00E+06 (+)	5.53E+07 ± 9.60E+06 (+)
f_{10}	6.69E+02 ± 4.43E+01	2.07E+03 ± 1.44E+02 (+)	$7.86E+03 \pm 2.43E+02 (+)$	2.64E+03 ± 3.19E+02 (+)	$4.74E+03 \pm 2.45E+03 (+)$
f_{11}	1.18E -13 \pm 2.95\text{E}-15	$3.80E+01 \pm 7.35E+00 (+)$	1.99E+02 ± 4.52E-01 (+)	$2.20E+01 \pm 1.53E+01 (+)$	2.99E+01 ± 3.98E+00 (+)
f_{12}	5.45E+02 ± 3.11E+02	$3.62E-06 \pm 5.92E-07$ (-)	$0.00E+00 \pm 0.00E+00$ (-)	$1.21E+04 \pm 2.04E+03 (+)$	$5.35E+03 \pm 4.39E+02 (+)$
f_{13}	$1.39E+02 \pm 4.72E+01$	$1.25E+03 \pm 5.72E+02 (+)$	$1.36E+03 \pm 9.37E+02 (+)$	7.11E+02 ± 1.37E+02 (+)	1.51E+03 ± 6.94E+02 (+)
f_{14}	1.90E+07 ± 1.14E+06	3.11E+07 ± 1.93E+06 (+)	$1.82\text{E} + 07 \pm 1.18\text{E} + 06 \text{ (-)}$	1.69E+08 ± 2.08E+07 (+)	1.35E+08 ± 9.05E+06 (+)
f_{15}	1.01E+04 ± 6.62E+01	2.74E+03 ± 1.22E+02 (-)	$1.54E+04 \pm 5.36E+02 (+)$	5.84E+03 ± 4.48E+02 (-)	$1.74E+03 \pm 8.94E+01$ (-)
f_{16}	1.60E-13 ± 3.26E-15	9.98E+01 ± 1.40E+01 (+)	3.97E+02 ± 2.10E-01 (+)	1.44E+02 ± 3.43E+01 (+)	3.11E+01 ± 5.22E+00 (+)
f_{17}	2.44E+04 ± 6.31E+03	$1.24\text{E}+00 \pm 1.25\text{E}-01$ (-)	$4.66\text{E}\text{-}05 \pm 6.24\text{E}\text{-}06 \text{ (-)}$	$1.02E+05 \pm 1.26E+04 (+)$	$1.48E+04 \pm 1.02E+03$ (-)
f_{18}	$5.84E+02 \pm 1.18E+02$	$1.30E+03 \pm 4.36E+02 (+)$	$3.91E+03 \pm 2.18E+03 (+)$	$1.85E+03 \pm 3.18E+02 (+)$	$3.13E+03 \pm 1.01E+03 (+)$
f_{19}	1.51E+07 ± 1.11E+06	2.85E+05 ± 1.78E+04 (-)	$3.41\text{E}+04 \pm 2.63\text{E}+03$ (-)	2.74E+05 ± 2.12E+04 (-)	$5.93E+05 \pm 4.21E+04$ (-)
f_{20}	8.43E+02 ± 6.31E+00	1.07E+03 ± 7.29E+01 (+)	$8.31\text{E}+02 \pm 3.76\text{E}+02$ (-)	1.53E+03 ± 1.32E+02 (+)	$1.31E+03 \pm 2.14E+02 (+)$
+(SSLI	PSO is significantly better)	15	11	16	15
-(SSLF	PSO is significantly worse)	5	8	4	5
	≈	0	1	0	0

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TABLE S.II Optimization Results on the 1000-D IEEE CEC2013 test suite with different setting of β

	β=0.6	β=0.2	β=0.4	β=0.8	β=1.0
FUN	,	'	'	'	,
	Mean±Std	Mean±Std	Mean±Std	Mean±Std	Mean±Std
F_1	$1.03E-29 \pm 5.55E-29$	$1.40\text{E}-28 \pm 6.48\text{E}-28 \ (\approx)$	$1.41\text{E}-29 \pm 7.58\text{E}-29 \ (\approx)$	$0.00E+00 \pm 0.00E+00 (\approx)$	$0.00E+00 \pm 0.00E+00 (\approx)$
F_2	6.55E+02 ± 4.43E+01	$9.27E+02 \pm 7.59E+01 (+)$	$7.17E+02 \pm 5.82E+01 (+)$	$5.95E+02 \pm 3.58E+01$ (-)	$5.73E+02 \pm 2.88E+01$ (-)
F_3	$2.16E+01 \pm 5.55E-03$	$2.16E+01 \pm 5.41E-03 (+)$	$2.16E+01 \pm 3.60E-03 (+)$	$2.16E+01 \pm 4.91E-03 (\approx)$	$2.16E+01 \pm 4.35E-03 (+)$
F_4	$3.01E+08 \pm 5.92E+07$	$2.83E+08 \pm 6.03E+07 (\approx)$	$2.65E+08 \pm 5.03E+07$ (-)	$3.18E+08 \pm 6.57E+07 (\approx)$	$3.30E+08 \pm 4.94E+07 (+)$
F_5	$3.70E+06 \pm 3.25E+06$	$2.48\text{E}+06 \pm 2.99\text{E}+06 \ (\approx)$	$3.20E+06 \pm 3.18E+06 (\approx)$	3.77E+06 ± 3.26E+06 (≈)	$3.83E+06 \pm 3.18E+06 (\approx)$
F_6	1.06E+06 ± 1.29E+03	$1.06\text{E} + 06 \pm 1.18\text{E} + 03 \ (\approx)$	1.06E+06 ± 1.52E+03 (≈)	$1.06E+06 \pm 9.83E+02 (+)$	1.06E+06 ± 8.94E+02 (+)
F_7	$2.93E+05 \pm 1.77E+05$	$2.11E+06 \pm 8.20E+05 (+)$	$7.28E+05 \pm 3.64E+05 (+)$	$1.38E+05 \pm 1.12E+05$ (-)	$8.75E+04 \pm 4.65E+04$ (-)
F_8	1.28E+13 ± 2.68E+12	$1.18E+13 \pm 3.75E+12 (\approx)$	$1.28E+13 \pm 2.45E+12 (\approx)$	$1.41E+13 \pm 3.14E+12 (+)$	1.46E+13 ± 3.54E+12 (+)
F_9	6.57E+07 ± 1.16E+08	$4.11E+07 \pm 7.12E+06 (+)$	5.03E+07 ± 7.53E+07 (≈)	$5.31E+07 \pm 9.08E+07 (\approx)$	8.31E+07 ± 1.46E+08 (≈)
F_{10}	9.40E+07 ± 2.23E+05	$9.40\text{E}+07 \pm 2.21\text{E}+05 \ (\approx)$	9.40E+07 ± 2.66E+05 (≈)	9.41E+07 ± 1.81E+05 (≈)	9.40E+07 ± 2.22E+05 (≈)
F_{11}	6.61E+06 ± 5.18E+06	$9.80E+06 \pm 5.33E+06 (+)$	7.28E+06 ± 4.39E+06 (≈)	5.82E+06 ± 1.84E+06 (≈)	8.01E+06 ± 4.61E+06 (+)
F_{12}	8.99E+02 ± 1.88E+01	$8.95\text{E}+02 \pm 2.16\text{E}+01 \ (\approx)$	8.99E+02 ± 1.76E+01 (≈)	9.05E+02 ± 2.13E+01 (≈)	9.05E+02 ± 1.19E+01 (+)
F_{13}	$4.60E+06 \pm 2.03E+06$	$1.54E+07 \pm 1.18E+07 (+)$	$7.18E+06 \pm 4.99E+06 (+)$	5.10E+06 ± 2.17E+06 (≈)	6.07E+06 ± 3.38E+06 (≈)
F_{14}	8.54E+06 ± 1.42E+06	$1.90E+07 \pm 1.12E+07 (+)$	$1.04E+07 \pm 1.90E+06 (+)$	8.74E+06 ± 1.27E+06 (≈)	$8.70E+06 \pm 1.32E+06 (\approx)$
F_{15}	9.68E+06 ± 1.22E+07	$4.92\text{E}+06 \pm 5.52\text{E}+05$ (-)	5.60E+06 ± 1.05E+06 (-)	$2.04E+07 \pm 3.22E+07 (+)$	$1.26E+08 \pm 4.95E+07 (+)$
+(β=0	0.6 is significantly better)	7	5	3	7
-(β = 0	.6 is significantly worse)	1	2	2	2
	≈	7	8	10	6

	SSLPSO	RCI-PSO	HCLPSO	SDLSO	AGLDPSO	SLPSO-ARS
FUN	Mean±Std	Mean±Std	Mean±Std	Mean±Std	Mean±Std	Mean±Std
f_1	6.26E-23 ± 2.14E-23	9.05E-21 ± 6.87E-22 (+)	1.24E-18 ± 2.27E-19 (+)	1.72E-16 ± 2.17E-17 (+)	3.38E-20 ± 1.80E-21 (+)	1.47E-17 ± 8.28E-19 (+)
f_2	1.14E+03 ± 4.08E+01	1.83E+03 ± 4.89E+01 (+)	1.52E+03 ± 5.23E+01 (+)	1.05E+03 ± 3.45E+01 (-)	6.13E+03 ± 3.02E+02 (+)	6.92E+03 ± 1.12E+03 (+)
f_3	7.96E-14 ± 4.01E-15	5.79E-14 ± 3.49E-15 (-)	1.56E-12 ± 1.75E-13 (+)	2.84E-11 ± 1.46E-12 (+)	4.41E+00 ± 3.72E-01 (+)	1.57E-12 ± 1.47E-14 (+)
f_4	1.20E+11 ± 1.33E+10	1.55E+11 ± 1.91E+10 (+)	1.08E+12 ± 1.77E+11 (+)	5.95E+11 ± 6.83E+10 (+)	3.06E+11 ± 7.24E+10 (+)	1.06E+12 ± 1.49E+11 (+)
f_5	6.98E+08 ± 1.45E+07	1.86E+07 ± 3.25E+06 (-)	1.39E+07 ± 2.83E+06 (-)	9.72E+06 ± 2.35E+06 (-)	1.44E+08 ± 2.19E+08 (-)	1.55E+07 ± 3.07E+06 (-)
f_6	7.99E-09 ± 1.26E-14	7.99E-09 ± 3.02E-14 (+)	2.66E-08 ± 2.66E-09 (+)	2.42E-08 ± 2.36E-09 (+)	3.98E+01 ± 2.27E-02 (+)	6.71E-07 ± 2.38E-08 (+)
f_7	8.13E-03 ± 4.34E-02	1.42E+03 ± 4.89E+03 (+)	1.31E+04 ± 4.76E+03 (+)	8.76E+04 ± 1.22E+04 (+)	2.20E+06 ± 4.27E+05 (+)	4.03E+05 ± 7.39E+04 (+)
f ₈	3.73E+03 ± 1.99E+03	1.92E+04 ± 4.15E+03 (+)	7.21E+07 ± 1.49E+05 (+)	5.53E+07 ± 2.33E+05 (+)	3.75E+05 ± 9.91E+05 (+)	6.50E+07 ± 1.72E+05 (+)
f_9	1.97E+07 ± 1.39E+06	2.39E+07 ± 8.82E+05 (+)	1.21E+08 ± 6.93E+06 (+)	8.76E+07 ± 4.21E+06 (+)	6.23E+07 ± 4.62E+06 (+)	1.77E+08 ± 9.50E+06 (+)
f_{10}	1.38E+03 ± 4.66E+01	1.83E+03 ± 4.85E+01 (+)	1.54E+03 ± 4.84E+01 (+)	1.72E+04 ± 4.80E+02 (+)	6.59E+03 ± 3.65E+02 (+)	6.67E+03 ± 9.26E+02 (+)
f_{11}	2.87E-13 ± 8.00E-15	4.71E-13 ± 1.62E-14 (+)	4.13E-11 ± 7.74E-12 (+)	3.92E-10 ± 3.80E-11 (+)	5.77E+01 ± 1.30E+01 (+)	1.48E-11 ± 3.48E-13 (+)
f_{12}	5.36E+03 ± 6.37E+02	$2.43E+03 \pm 1.89E+02$ (-)	1.60E+05 ± 5.77E+03 (+)	2.94E+05 ± 1.36E+04 (+)	1.15E+04 ± 1.05E+03 (+)	2.55E+05 ± 8.36E+03 (+)
f_{13}	4.87E+02 ± 3.82E+01	7.65E+02 ± 8.88E+01 (+)	1.19E+03 ± 1.80E+02 (+)	1.05E+03 ± 1.28E+02 (+)	1.39E+03 ± 1.90E+02 (+)	1.25E+03 ± 3.49E+02 (+)
f_{14}	6.54E+07 ± 3.37E+06	7.09E+07 ± 2.41E+06 (+)	3.62E+08 ± 1.83E+07 (+)	2.97E+08 ± 9.94E+06 (+)	1.72E+08 ± 8.88E+06 (+)	9.22E+08 ± 4.00E+07 (+)
-	2.10E+04 ± 9.58E+01	1.83E+03 ± 6.02E+01 (-)	1.69E+03 ± 6.14E+01 (-)	2.16E+04 ± 4.67E+02 (+)	7.13E+03 ± 3.05E+02 (-)	6.54E+03 ± 9.45E+02 (-)
f_{15}	4.82E-13 ± 7.66E-15	9.48E-02 ± 3.55E-01 (+)	1.03E+00 ± 1.31E+00 (+)	3.42E-02 ± 1.84E-01 (+)	1.93E+02 ± 3.69E+01 (+)	2.51E-11 ± 5.10E-13 (+)
f ₁₆						
f_{17}	9.46E+04 ± 1.03E+04	5.31E+04 ± 2.35E+03 (-)	8.80E+05 ± 3.06E+04 (+)	2.16E+06 ± 1.13E+05 (+)	1.17E+05 ± 6.88E+03 (+)	1.04E+06 ± 3.77E+04 (+)
f_{18}	1.49E+03 ± 1.35E+02	2.11E+03 ± 2.43E+02 (+)	4.16E+03 ± 9.63E+02 (+)	2.74E+03 ± 5.40E+02 (+)	3.81E+03 ± 4.92E+02 (+)	3.38E+03 ± 1.02E+03 (+)
f_{19}	5.72E+07 ± 3.70E+06	4.25E+06 ± 1.56E+05 (-)	1.21E+07 ± 6.89E+05 (-)	1.42E+08 ± 1.37E+08 (+)	3.27E+06 ± 1.33E+05 (-)	5.66E+06 ± 3.85E+05 (-)
f_{20}	1.79E+03 ± 2.10E+01	2.00E+03 ± 8.04E+01 (+)	2.94E+03 ± 2.48E+02 (+)	2.06E+03 ± 9.34E+01 (+)	3.49E+03 ± 2.15E+02 (+)	2.04E+03 ± 1.77E+02 (+)
	LPSO is significantly better)	14	17	18	17	17
-(SSL	PSO is significantly worse)	6	3	2	3	3
	≈	0	0	0	0	0
FUN	TPLSO	DLLSO	SPLSO	CCPSO2	DDG	EADG
	Mean±Std	Mean±Std	Mean±Std	Mean±Std	Mean±Std	Mean±Std
f_1						
	3.16E-17 ± 9.82E-18 (+)	1.66E-20 ± 7.10E-22 (+)	5.42E-08 ± 1.27E-08 (+)	3.54E+04 ± 2.71E+03 (+)	4.26E+07 ± 3.38E+07 (+)	5.77E+07 ± 6.54E+07 (+)
f_2	2.30E+03 ± 2.08E+02 (+)	1.40E+03 ± 4.29E+01 (+)	1.01E+04 ± 1.39E+03 (+)	5.10E-02 ± 1.43E-02 (-)	1.26E+04 ± 5.50E+02 (+)	1.28E+04 ± 7.40E+02 (+)
f_3	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-)	1.01E+04 ± 1.39E+03 (+) 3.94E-07 ± 5.82E-08 (+)	5.10E-02 ± 1.43E-02 (-) 2.94E+01 ± 1.24E+01 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+)
f_3 f_4	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+)	1.01E+04 ± 1.39E+03 (+) 3.94E-07 ± 5.82E-08 (+) 1.40E+12 ± 1.77E+11 (+)	5.10E-02 ± 1.43E-02 (-) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-)
f_3 f_4 f_5	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-)	1.01E+04 ± 1.39E+03 (+) 3.94E-07 ± 5.82E-08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈)	5.10E-02 ± 1.43E-02 (-) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-)
f ₃ f ₄ f ₅ f ₆	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+)	1.01E+04 ± 1.39E+03 (+) 3.94E-07 ± 5.82E-08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈) 1.62E-06 ± 1.74E-07 (+)	5.10E-02 ± 1.43E-02 (-) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+)
f ₃ f ₄ f ₅ f ₆ f ₇	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+)	$\begin{array}{c} 1.40\text{E+}03 \pm 4.29\text{E+}01 \ (+) \\ 5.83\text{E-}14 \pm 1.32\text{E-}15 \ (-) \\ 1.42\text{E+}12 \pm 2.55\text{E+}11 \ (+) \\ 1.44\text{E+}07 \pm 3.56\text{E+}06 \ (-) \\ 8.30\text{E-}09 \pm 7.95\text{E-}11 \ (+) \\ 8.51\text{E+}04 \pm 2.34\text{E+}04 \ (+) \end{array}$	$\begin{array}{c} 1.01E+04 \pm 1.39E+03 \ (+) \\ 3.94E+07 \pm 5.82E+08 \ (+) \\ 1.40E+12 \pm 1.77E+11 \ (+) \\ 6.96E+08 \pm 1.35E+07 \ (\approx) \\ 1.62E+06 \pm 1.74E+07 \ (+) \\ 8.01E+05 \pm 1.08E+05 \ (+) \end{array}$	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+)
f_3 f_4 f_5 f_6 f_7 f_8	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+)	1.01E+04 ± 1.39E+03 (+) 3.94E+07 ± 5.82E+08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈) 1.62E+06 ± 1.74E+07 (+) 8.01E+05 ± 1.08E+05 (+) 7.97E+07 ± 9.26E+04 (+)	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+) 1.63E+08 ± 5.36E+07 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+)
f_3 f_4 f_5 f_6 f_7 f_8 f_9	$\begin{array}{c} 2.30E+03 \pm 2.08E+02 \ (+) \\ 3.20E+00 \pm 2.62E-01 \ (+) \\ 8.06E+11 \pm 1.79E+11 \ (+) \\ 5.00E+07 \pm 1.17E+08 \ (-) \\ 3.52E+00 \pm 9.77E-01 \ (+) \\ 1.48E+05 \pm 6.95E+04 \ (+) \\ 5.31E+07 \pm 1.35E+07 \ (+) \\ 1.07E+08 \pm 7.92E+06 \ (+) \end{array}$	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+)	$\begin{array}{c} 1.01E+04\pm1.39E+03\ (+)\\ 3.94E+07\pm5.82E+08\ (+)\\ 1.40E+12\pm1.77E+11\ (+)\\ 6.96E+08\pm1.35E+07\ (\approx)\\ 1.62E+06\pm1.74E+07\ (+)\\ 8.01E+05\pm1.08E+05\ (+)\\ 7.97E+07\pm9.26E+04\ (+)\\ 2.09E+08\pm1.21E+07\ (+) \end{array}$	5.10E-02 ± 1.43E-02 (-) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 6.46E+08 ± 2.65E+08 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+) 1.63E+08 ± 5.36E+07 (+) 5.28E+08 ± 1.48E+08 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 3.62E+08 ± 9.57E+07 (+)
f_3 f_4 f_5 f_6 f_7 f_8 f_9 f_{10}	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.17E+04 ± 7.56E+03 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-)	1.01E+04 ± 1.39E+03 (+) 3.94E-07 ± 5.82E-08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈) 1.62E-06 ± 1.74E-07 (+) 8.01E+05 ± 1.08E+05 (+) 7.97E+07 ± 9.26E+04 (+) 2.09E+08 ± 1.21E+07 (+) 2.00E+04 ± 1.81E+02 (+)	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 1.13E+04 ± 1.70E+03 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+) 1.63E+08 ± 5.36E+07 (+) 2.28E+08 ± 1.48E+08 (+) 1.95E+04 ± 2.62E+03 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 7.93E+03 ± 2.81E+02 (+)
f_3 f_4 f_5 f_6 f_7 f_8 f_9 f_{10}	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.17E+04 ± 7.56E+03 (+) 6.56E+00 ± 1.97E+00 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+)	$\begin{array}{c} 1.01E+04\pm1.39E+03\ (+)\\ 3.94E+07\pm5.82E+08\ (+)\\ 1.40E+12\pm1.77E+11\ (+)\\ 6.96E+08\pm1.35E+07\ (\approx)\\ 1.62E+06\pm1.74E+07\ (+)\\ 8.01E+05\pm1.08E+05\ (+)\\ 7.97E+07\pm9.26E+04\ (+)\\ 2.09E+08\pm1.21E+07\ (+)\\ 2.00E+04\pm1.81E+02\ (+)\\ 5.22E+06\pm5.16E+07\ (+)\\ \end{array}$	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 6.46E+08 ± 2.65E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+) 1.63E+08 ± 5.36E+07 (+) 5.28E+08 ± 1.48E+08 (+) 1.95E+04 ± 2.62E+03 (+) 4.12E+02 ± 1.14E+01 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 3.62E+08 ± 9.57E+07 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+)
f_3 f_4 f_5 f_6 f_7 f_8 f_9 f_{10} f_{11}	$\begin{array}{c} 2.30\text{E}{+}03 \pm 2.08\text{E}{+}02 \ (+) \\ 3.20\text{E}{+}00 \pm 2.62\text{E}{-}01 \ (+) \\ 8.06\text{E}{+}11 \pm 1.79\text{E}{+}11 \ (+) \\ 5.00\text{E}{+}07 \pm 1.17\text{E}{+}08 \ (-) \\ 3.52\text{E}{+}00 \pm 9.77\text{E}{-}01 \ (+) \\ 1.48\text{E}{+}05 \pm 6.95\text{E}{+}04 \ (+) \\ 5.31\text{E}{+}07 \pm 1.35\text{E}{+}07 \ (+) \\ 1.07\text{E}{+}08 \pm 7.92\text{E}{+}06 \ (+) \\ 1.17\text{E}{+}04 \pm 7.56\text{E}{+}03 \ (+) \\ 6.56\text{E}{+}00 \pm 1.97\text{E}{+}00 \ (+) \\ 7.63\text{E}{+}04 \pm 4.73\text{E}{+}03 \ (+) \end{array}$	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+03 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+)	1.01E+04 ± 1.39E+03 (+) 3.94E-07 ± 5.82E-08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈) 1.62E-06 ± 1.74E-07 (+) 8.01E+05 ± 1.08E+05 (+) 7.97E+07 ± 9.26E+04 (+) 2.09E+08 ± 1.21E+07 (+) 2.00E+04 ± 1.81E+02 (+) 5.22E-06 ± 5.16E-07 (+) 1.15E+06 ± 1.60E+05 (+)	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 6.46E+08 ± 2.65E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+) 1.63E+08 ± 5.36E+07 (+) 5.28E+08 ± 1.48E+08 (+) 1.95E+04 ± 2.62E+03 (+) 4.12E+02 ± 1.14E+01 (+) 3.44E+05 ± 3.36E+04 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 1.32E+08 ± 1.64E+07 (-) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 3.62E+08 ± 9.57E+07 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+)
$\begin{array}{c} f_3 \\ f_4 \\ f_5 \\ f_6 \\ f_7 \\ f_8 \\ f_9 \\ f_{10} \\ f_{11} \\ f_{12} \\ f_{13} \\ \end{array}$	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.17E+04 ± 7.56E+03 (+) 6.56E+00 ± 1.97E+00 (+) 7.63E+04 ± 4.73E+03 (+) 1.84E+03 ± 2.93E+02 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+) 1.03E+05 ± 4.82E+03 (+) 1.12E+03 ± 2.05E+02 (+)	1.01E+04 ± 1.39E+03 (+) 3.94E-07 ± 5.82E-08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈) 1.62E-06 ± 1.74E-07 (+) 8.01E+05 ± 1.08E+05 (+) 7.97E+07 ± 9.26E+04 (+) 2.09E+08 ± 1.21E+07 (+) 2.00E+04 ± 1.81E+02 (+) 5.22E-06 ± 5.16E-07 (+) 1.15E+06 ± 1.00E+05 (+) 1.15E+06 ± 1.00E+05 (+) 1.21E+03 ± 3.43E+02 (+)	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 6.46E+08 ± 2.65E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 (+) 1.24E+04 ± 6.20E+03 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+) 1.63E+08 ± 5.36E+07 (+) 5.28E+08 ± 1.48E+08 (+) 1.95E+04 ± 2.62E+03 (+) 4.12E+02 ± 1.14E+01 (+) 3.44E+05 ± 3.36E+04 (+) 1.74E+07 ± 3.66E+07 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 3.62E+08 ± 9.57E+07 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+) 1.85E+05 ± 3.12E+04 (+)
$\begin{array}{c} f_3 \\ f_4 \\ f_5 \\ f_6 \\ f_7 \\ f_8 \\ f_9 \\ f_{10} \\ f_{11} \\ f_{12} \\ f_{13} \\ f_{14} \end{array}$	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.17E+04 ± 7.56E+03 (+) 6.56E+00 ± 1.97E+00 (+) 7.63E+04 ± 4.73E+03 (+) 1.84E+03 ± 2.93E+02 (+) 2.98E+08 ± 1.46E+07 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+) 1.21E+03 ± 2.05E+02 (+) 2.82E+08 ± 1.14E+07 (+)	1.01E+04 ± 1.39E+03 (+) 3.94E-07 ± 5.82E-08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈) 1.62E-06 ± 1.74E-07 (+) 8.01E+05 ± 1.08E+05 (+) 7.97E+07 ± 9.26E+04 (+) 2.09E+08 ± 1.21E+07 (+) 2.00E+04 ± 1.81E+02 (+) 5.22E-06 ± 5.16E+07 (+) 1.15E+06 ± 1.60E+05 (+) 1.21E+03 ± 3.43E+02 (+) 7.56E+08 ± 3.02E+07 (+)	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 (+) 1.24E+04 ± 6.20E+03 (+) 1.24E+04 ± 6.20E+03 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+) 1.63E+08 ± 5.36E+07 (+) 1.95E+04 ± 2.62E+03 (+) 4.12E+02 ± 1.14E+01 (+) 3.44E+05 ± 3.36E+04 (+) 1.74E+07 ± 3.66E+07 (+) 1.18E+09 ± 7.46E+07 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+) 4.36E+07 ± 2.61E+06 (-)
f_3 f_4 f_5 f_6 f_7 f_8 f_9 f_{10} f_{11} f_{12} f_{13} f_{14}	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 8.06E+11 ± 1.79E+11 (+) 1.50E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.17E+04 ± 7.56E+03 (+) 6.56E+00 ± 1.97E+00 (+) 7.63E+04 ± 4.73E+03 (+) 1.84E+03 ± 2.93E+02 (+) 2.98E+08 ± 1.46E+07 (+) 2.11E+04 ± 7.93E+01 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+) 1.21E+03 ± 2.05E+02 (+) 2.82E+08 ± 1.14E+07 (+) 2.06E+04 ± 7.47E+01 (-)	$\begin{array}{c} 1.01E+04\pm1.39E+03\ (+)\\ 3.94E+07\pm5.82E+08\ (+)\\ 1.40E+12\pm1.77E+11\ (+)\\ 6.96E+08\pm1.35E+07\ (\approx)\\ 1.62E+06\pm1.74E+07\ (+)\\ 8.01E+05\pm1.08E+05\ (+)\\ 7.97E+07\pm9.26E+04\ (+)\\ 2.09E+08\pm1.21E+07\ (+)\\ 2.00E+04\pm1.81E+02\ (+)\\ 5.22E+06\pm5.16E+07\ (+)\\ 1.15E+06\pm1.60E+05\ (+)\\ 1.21E+03\pm3.43E+02\ (+)\\ 2.10E+04\pm8.30E+07\ (+)\\ 2.10E+04\pm8.30E+07\ (+)\\ \end{array}$	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 6.46E+08 ± 2.65E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 (+) 1.24E+04 ± 6.20E+03 (+) 1.74E+09 ± 8.40E+08 (+) 2.38E+04 ± 1.72E+03 (+)	$\begin{array}{c} 1.26\text{E}+04\pm5.50\text{E}+02\ (+)\\ 2.68\text{E}+01\pm6.39\text{E}-01\ (+)\\ 1.56\text{E}+12\pm3.45\text{E}+11\ (+)\\ 1.56\text{E}+12\pm3.45\text{E}+11\ (+)\\ 1.62\text{E}+08\pm3.05\text{E}+07\ (-)\\ 2.38\text{E}+06\pm1.09\text{E}+06\ (+)\\ 5.62\text{E}+06\pm6.18\text{E}+05\ (+)\\ 1.63\text{E}+08\pm1.36\text{E}+07\ (+)\\ 5.28\text{E}+08\pm1.48\text{E}+08\ (+)\\ 1.95\text{E}+04\pm2.62\text{E}+03\ (+)\\ 4.12\text{E}+02\pm1.14\text{E}+01\ (+)\\ 3.44\text{E}+05\pm3.36\text{E}+04\ (+)\\ 1.74\text{E}+07\pm3.66\text{E}+07\ (+)\\ 1.18\text{E}+09\pm7.46\text{E}+07\ (+)\\ 1.80\text{E}+04\pm3.40\text{E}+03\ (\approx) \end{array}$	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 3.02E+08 ± 9.57E+07 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+) 1.85E+05 ± 3.12E+04 (+) 4.36E+07 ± 2.61E+06 (-) 6.53E+03 ± 2.01E+02 (-)
$\begin{array}{c} f_3 \\ f_4 \\ f_5 \\ f_6 \\ f_7 \\ f_8 \\ f_9 \\ f_{10} \\ f_{11} \\ f_{12} \\ f_{13} \\ f_{14} \\ f_{15} \\ f_{16} \\ \end{array}$	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+400 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.17E+04 ± 7.56E+03 (+) 6.56E+00 ± 1.97E+00 (+) 7.63E+04 ± 4.73E+03 (+) 1.84E+03 ± 2.93E+02 (+) 2.98E+08 ± 1.46E+07 (+) 4.27E+01 ± 1.10E+01 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+) 1.21E+03 ± 2.05E+02 (+) 2.82E+08 ± 1.14E+07 (+) 2.06E+04 ± 7.47E+01 (-) 1.00E+00 ± 1.14E+00 (+)	$\begin{array}{c} 1.01E+04\pm1.39E+03\ (+)\\ 3.94E+07\pm5.82E+08\ (+)\\ 1.40E+12\pm1.77E+11\ (+)\\ 1.40E+12\pm1.77E+11\ (+)\\ 6.96E+08\pm1.35E+07\ (\approx)\\ 1.62E+06\pm1.74E+07\ (+)\\ 8.01E+05\pm1.08E+05\ (+)\\ 7.97E+07\pm9.26E+04\ (+)\\ 2.09E+08\pm1.21E+07\ (+)\\ 2.09E+04\pm1.81E+02\ (+)\\ 5.22E+06\pm5.16E+07\ (+)\\ 1.15E+06\pm1.60E+05\ (+)\\ 1.21E+03\pm3.43E+02\ (+)\\ 7.56E+08\pm3.02E+07\ (+)\\ 9.08E+06\pm9.92E+07\ (+)\\ \end{array}$	5.10E-02 ± 1.43E-02 (-) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 6.46E+08 ± 2.65E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 (+) 1.24E+04 ± 6.20E+03 (+) 1.74E+09 ± 8.40E+08 (+) 2.38E+04 ± 1.72E+03 (+) 8.01E+02 ± 6.36E+00 (+)	$\begin{array}{c} 1.26\text{E}+04\pm5.50\text{E}+02\ (+)\\ 2.68\text{E}+01\pm6.39\text{E}-01\ (+)\\ 1.56\text{E}+12\pm3.45\text{E}+11\ (+)\\ 1.82\text{E}+08\pm3.05\text{E}+07\ (+)\\ 2.38\text{E}+06\pm1.09\text{E}+06\ (+)\\ 5.62\text{E}+06\pm6.18\text{E}+05\ (+)\\ 1.63\text{E}+08\pm5.36\text{E}+07\ (+)\\ 5.28\text{E}+08\pm1.48\text{E}+08\ (+)\\ 1.95\text{E}+04\pm2.62\text{E}+03\ (+)\\ 4.12\text{E}+02\pm1.14\text{E}+01\ (+)\\ 3.44\text{E}+05\pm3.36\text{E}+04\ (+)\\ 1.74\text{E}+07\pm3.66\text{E}+07\ (+)\\ 1.18\text{E}+09\pm7.46\text{E}+07\ (+)\\ 1.80\text{E}+04\pm3.40\text{E}+03\ (\approx)\\ 8.20\text{E}+02\pm2.15\text{E}+00\ (+)\\ \end{array}$	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 3.62E+08 ± 9.57E+07 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+) 1.85E+05 ± 3.12E+04 (+) 4.36E+07 ± 2.61E+06 (-) 6.53E+03 ± 2.01E+02 (-) 2.20E-01 ± 5.10E-01 (+)
f ₃ f ₄ f ₅ f ₆ f ₇ f ₈ f ₉ f ₁₀ f ₁₁ f ₁₂ f ₁₃ f ₁₄ f ₁₅ f ₁₆ f ₁₇	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 8.06E+11 ± 1.79E+11 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.17E+04 ± 7.56E+03 (+) 6.56E+00 ± 1.97E+00 (+) 7.63E+04 ± 4.73E+03 (+) 1.84E+03 ± 2.93E+02 (+) 2.98E+08 ± 1.46E+07 (+) 2.11E+04 ± 7.93E+01 (+) 4.27E+01 ± 1.10E+01 (+) 4.27E+01 ± 1.10E+01 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+) 1.21E+03 ± 2.05E+02 (+) 2.82E+08 ± 1.14E+07 (+) 2.06E+04 ± 7.47E+01 (-) 1.00E+00 ± 1.14E+04 (+) 5.89E+05 ± 1.75E+04 (+)	1.01E+04 ± 1.39E+03 (+) 3.94E+07 ± 5.82E+08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈) 1.62E+06 ± 1.74E+07 (+) 8.01E+05 ± 1.08E+05 (+) 7.97E+07 ± 9.26E+04 (+) 2.09E+08 ± 1.21E+07 (+) 2.00E+04 ± 1.81E+02 (+) 5.22E+06 ± 5.16E+07 (+) 1.15E+06 ± 1.60E+05 (+) 1.21E+03 ± 3.43E+02 (+) 7.56E+08 ± 3.02E+07 (+) 2.10E+04 ± 8.30E+01 (+) 9.08E+06 ± 9.92E+07 (+) 3.12E+06 ± 1.60E+05 (+)	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 4.82E+08 ± 4.92E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 ± 2.21E+05 ± 2.21E+05 (+) 1.24E+04 ± 6.20E+03 (+) 1.74E+09 ± 8.40E+08 (+) 2.38E+04 ± 1.72E+03 (+) 8.01E+02 ± 6.36E+00 (+) 1.31E+06 ± 5.34E+05 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+) 1.63E+08 ± 5.36E+07 (+) 2.38E+04 ± 2.62E+03 (+) 4.12E+02 ± 1.14E+01 (+) 3.44E+05 ± 3.36E+04 (+) 1.74E+07 ± 3.66E+07 (+) 1.18E+09 ± 7.46E+07 (+) 1.80E+04 ± 3.40E+03 (≈) 8.20E+02 ± 2.15E+00 (+) 8.20E+02 ± 2.15E+00 (+) 8.03E+05 ± 6.12E+04 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 3.62E+08 ± 9.57E+07 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+) 4.36E+07 ± 2.61E+06 (-) 6.53E+03 ± 2.01E+02 (-) 2.20E+01 ± 5.10E+01 (+) 3.24E+01 ± 3.66E+01 (-)
f ₃ f ₄ f ₅ f ₆ f ₇ f ₈ f ₉ f ₁₀ f ₁₁ f ₁₂ f ₁₃ f ₁₄ f ₁₅ f ₁₆ f ₁₇ f ₁₈	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.17E+04 ± 7.56E+03 (+) 6.56E+00 ± 1.97E+00 (+) 7.63E+04 ± 4.73E+03 (+) 1.84E+03 ± 2.93E+02 (+) 2.98E+08 ± 1.46E+07 (+) 2.11E+04 ± 7.93E+01 (+) 4.07E+05 ± 1.89E+04 (+) 6.19E+03 ± 1.15E+04 (+) 6.19E+03 ± 1.15E+04 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+) 1.21E+03 ± 2.05E+02 (+) 2.82E+08 ± 1.14E+07 (+) 2.06E+04 ± 7.47E+01 (-) 1.00E+00 ± 1.15E+04 (+) 4.47E+03 ± 1.12E+03 (+)	1.01E+04 ± 1.39E+03 (+) 3.94E-07 ± 5.82E-08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈) 1.62E-06 ± 1.74E-07 (+) 8.01E+05 ± 1.08E+05 (+) 7.97E+07 ± 9.26E+04 (+) 2.09E+08 ± 1.21E+07 (+) 2.00E+04 ± 1.81E+02 (+) 5.22E-06 ± 5.16E+07 (+) 1.15E+06 ± 1.60E+05 (+) 1.21E+03 ± 3.43E+02 (+) 7.56E+08 ± 3.02E+07 (+) 2.10E+04 ± 8.30E+01 (+) 9.08E-06 ± 9.92E-07 (+) 3.12E+06 ± 1.60E+05 (+) 5.09E+03 ± 3.02E+03 (+)	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 4.82E+08 ± 4.92E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 (+) 1.24E+04 ± 6.20E+03 (+) 1.74E+09 ± 8.40E+08 (+) 2.38E+04 ± 1.72E+03 (+) 8.01E+02 ± 6.36E+00 (+) 4.31E+06 ± 5.34E+05 (+) 4.43E+04 ± 4.45E+04 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+) 1.63E+08 ± 5.36E+07 (+) 2.52BE+08 ± 1.48E+08 (+) 1.95E+04 ± 2.62E+03 (+) 4.12E+02 ± 1.14E+01 (+) 3.44E+05 ± 3.36E+04 (+) 1.74E+07 ± 3.66E+07 (+) 1.18E+09 ± 7.46E+07 (+) 1.80E+04 ± 3.40E+03 (≈) 8.20E+02 ± 2.15E+00 (+) 8.03E+05 ± 6.12E+04 (+) 5.24E+09 ± 5.64E+09 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+) 4.36E+07 ± 2.61E+06 (-) 6.53E+03 ± 2.01E+02 (-) 2.20E-01 ± 5.10E-01 (+) 1.97E+03 ± 1.92E+02 (+)
$\begin{array}{c} f_3 \\ f_4 \\ f_5 \\ f_6 \\ f_7 \\ f_8 \\ f_9 \\ f_{10} \\ f_{11} \\ f_{12} \\ f_{13} \\ f_{14} \\ f_{15} \\ f_{16} \\ f_{17} \\ f_{18} \\ f_{19} \\ \end{array}$	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.17E+04 ± 7.36E+03 (+) 6.56E+00 ± 1.97E+00 (+) 7.63E+04 ± 4.73E+03 (+) 1.84E+03 ± 2.93E+02 (+) 2.98E+08 ± 1.46E+07 (+) 2.11E+04 ± 7.93E+01 (+) 4.27E+01 ± 1.10E+01 (+) 4.07E+05 ± 1.89E+04 (+) 6.19E+03 ± 1.15E+03 (+) 1.08E+07 ± 5.36E+05 (-)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.33E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+) 1.21E+03 ± 2.05E+02 (+) 2.82E+08 ± 1.14E+07 (+) 2.06E+04 ± 7.47E+01 (-) 1.00E+00 ± 1.14E+00 (+) 5.89E+05 ± 1.75E+04 (+) 4.47E+03 ± 1.12E+03 (+) 2.55E+07 ± 1.31E+06 (-)	1.01E+04 ± 1.39E+03 (+) 3.94E+07 ± 5.82E+08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈) 1.62E-06 ± 1.74E-07 (+) 8.01E+05 ± 1.08E+05 (+) 7.97E+07 ± 9.26E+04 (+) 2.09E+08 ± 1.21E+07 (+) 5.22E-06 ± 5.16E-07 (+) 1.15E+06 ± 1.60E+05 (+) 7.56E+08 ± 3.02E+07 (+) 2.10E+04 ± 8.30E+01 (+) 9.08E-06 ± 9.92E+07 (+) 3.12E+06 ± 1.60E+05 (+) 3.12E+06 ± 1.60E+05 (+) 4.18E+07 ± 2.06E+06 (-)	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 6.46E+08 ± 2.65E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 (+) 1.24E+04 ± 6.20E+03 (+) 1.74E+09 ± 8.40E+08 (+) 2.38E+04 ± 1.72E+03 (+) 8.01E+02 ± 6.36E+00 (+) 1.31E+06 ± 5.34E+05 (+) 4.33E+04 ± 4.45E+04 (+) 8.96E+06 ± 1.40E+06 (-)	$\begin{array}{c} 1.26\text{E}+04\pm5.50\text{E}+02\ (+)\\ 2.68\text{E}+01\pm6.39\text{E}-01\ (+)\\ 1.56\text{E}+12\pm3.45\text{E}+11\ (+)\\ 1.56\text{E}+12\pm3.45\text{E}+11\ (+)\\ 1.82\text{E}+08\pm3.05\text{E}+07\ (-)\\ 2.38\text{E}+06\pm1.09\text{E}+06\ (+)\\ 5.62\text{E}+06\pm6.18\text{E}+05\ (+)\\ 1.63\text{E}+08\pm1.36\text{E}+07\ (+)\\ 5.28\text{E}+08\pm1.48\text{E}+08\ (+)\\ 1.95\text{E}+04\pm2.62\text{E}+03\ (+)\\ 4.12\text{E}+02\pm1.14\text{E}+01\ (+)\\ 3.44\text{E}+05\pm3.36\text{E}+04\ (+)\\ 1.74\text{E}+07\pm3.66\text{E}+07\ (+)\\ 1.18\text{E}+09\pm7.46\text{E}+07\ (+)\\ 1.80\text{E}+04\pm3.40\text{E}+03\ (\approx)\\ 8.20\text{E}+02\pm2.15\text{E}+00\ (+)\\ 8.03\text{E}+05\pm6.12\text{E}+04\ (+)\\ 2.96\text{E}+06\pm1.80\text{E}+05\ (-)\\ \end{array}$	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.88E+04 (+) 3.00E+06 ± 2.35E+06 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+) 1.85E+05 ± 3.12E+04 (+) 4.36E+07 ± 2.61E+06 (-) 6.53E+03 ± 2.01E+02 (-) 2.20E-01 ± 5.10E-01 (+) 3.24E+01 ± 3.66E+01 (-) 1.97E+03 ± 1.92E+02 (+) 1.94E+06 ± 1.05E+05 (-)
$\begin{array}{c} f_3 \\ f_4 \\ f_5 \\ f_6 \\ f_7 \\ f_8 \\ f_9 \\ f_{10} \\ f_{11} \\ f_{12} \\ f_{13} \\ f_{14} \\ f_{15} \\ f_{16} \\ f_{17} \\ f_{18} \\ f_{19} \\ f_{20} \\ \end{array}$	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.07E+08 ± 7.92E+06 (+) 7.63E+04 ± 4.73E+03 (+) 1.84E+03 ± 2.93E+02 (+) 2.98E+08 ± 1.46E+07 (+) 2.11E+04 ± 7.93E+01 (+) 4.27E+01 ± 1.10E+01 (+) 4.07E+05 ± 1.89E+04 (+) 6.19E+03 ± 1.15E+03 (+) 1.08E+07 ± 5.36E+05 (-) 4.43E+03 ± 2.56E+02 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.03E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+) 1.21E+03 ± 2.05E+02 (+) 2.82E+08 ± 1.14E+07 (+) 2.06E+04 ± 7.47E+01 (-) 1.00E+00 ± 1.14E+00 (+) 5.89E+05 ± 1.75E+04 (+) 4.47E+03 ± 1.12E+03 (+) 2.55E+07 ± 1.31E+06 (-) 2.56E+03 ± 3.64E+02 (+)	$\begin{array}{c} 1.01E+04\pm1.39E+03\ (+)\\ 3.94E+07\pm5.82E+08\ (+)\\ 1.40E+12\pm1.77E+11\ (+)\\ 1.40E+12\pm1.77E+11\ (+)\\ 6.96E+08\pm1.35E+07\ (\approx)\\ 1.62E+06\pm1.74E+07\ (+)\\ 8.01E+05\pm1.08E+05\ (+)\\ 7.97E+07\pm9.26E+04\ (+)\\ 2.09E+08\pm1.21E+07\ (+)\\ 2.09E+08\pm1.21E+07\ (+)\\ 5.22E+06\pm5.16E+07\ (+)\\ 1.15E+06\pm1.60E+05\ (+)\\ 1.21E+03\pm3.43E+02\ (+)\\ 7.56E+08\pm3.02E+07\ (+)\\ 2.10E+04\pm8.30E+01\ (+)\\ 9.08E+06\pm9.92E+07\ (+)\\ 3.12E+06\pm1.60E+05\ (+)\\ 5.09E+03\pm3.02E+03\ (+)\\ 4.18E+07\pm2.06E+06\ (-)\\ 2.22E+03\pm3.51E+02\ (+)\\ \end{array}$	5.10E-02 ± 1.43E-02 (-) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 6.46E+08 ± 2.65E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 (+) 1.24E+04 ± 6.20E+03 (+) 1.74E+09 ± 8.40E+08 (+) 2.38E+04 ± 1.72E+03 (+) 8.01E+02 ± 6.36E+00 (+) 1.31E+06 ± 5.34E+05 (+) 4.43E+04 ± 4.45E+04 (+) 4.95E+06 ± 1.40E+06 (-) 2.56E+04 ± 2.71E+04 (+)	$\begin{array}{c} 1.26\text{E}+04\pm5.50\text{E}+02\ (+)\\ 2.68\text{E}+01\pm6.39\text{E}-01\ (+)\\ 1.56\text{E}+12\pm3.45\text{E}+11\ (+)\\ 1.56\text{E}+12\pm3.45\text{E}+11\ (+)\\ 1.82\text{E}+08\pm3.05\text{E}+07\ (-)\\ 2.38\text{E}+08\pm3.05\text{E}+07\ (-)\\ 5.28\text{E}+06\pm6.18\text{E}+05\ (+)\\ 1.63\text{E}+08\pm5.36\text{E}+07\ (+)\\ 5.28\text{E}+08\pm1.48\text{E}+08\ (+)\\ 1.95\text{E}+04\pm2.62\text{E}+03\ (+)\\ 4.12\text{E}+02\pm1.14\text{E}+01\ (+)\\ 3.44\text{E}+05\pm3.36\text{E}+04\ (+)\\ 1.74\text{E}+07\pm3.66\text{E}+07\ (+)\\ 1.88\text{E}+09\pm7.46\text{E}+07\ (+)\\ 1.80\text{E}+04\pm3.40\text{E}+03\ (\approx)\\ 8.20\text{E}+02\pm2.15\text{E}+00\ (+)\\ 8.03\text{E}+05\pm6.12\text{E}+04\ (+)\\ 5.24\text{E}+09\pm5.64\text{E}+09\ (+)\\ 5.296\text{E}+06\pm1.80\text{E}+05\ (-)\\ 5.46\text{E}+09\pm4.35\text{E}+09\ (+)\\ \end{array}$	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 3.62E+08 ± 9.57E+07 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+) 1.85E+05 ± 3.12E+04 (+) 4.36E+07 ± 2.61E+06 (-) 6.53E+03 ± 2.01E+02 (-) 2.20E-01 ± 5.10E-01 (+) 3.24E+01 ± 3.66E+01 (-) 1.97E+03 ± 1.92E+02 (-) 1.94E+06 ± 1.05E+05 (-)
f3 f4 f5 f6 f7 f8 f9 f10 f11 f12 f13 f14 f15 f16 f17 f18 f19 f20 +	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 8.06E+11 ± 1.79E+11 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.17E+04 ± 7.56E+03 (+) 6.56E+00 ± 1.97E+00 (+) 7.63E+04 ± 4.73E+03 (+) 1.84E+03 ± 2.93E+02 (+) 2.98E+08 ± 1.46E+07 (+) 2.11E+04 ± 7.93E+01 (+) 4.27E+01 ± 1.10E+01 (+) 4.07E+05 ± 1.89E+04 (+) 6.19E+03 ± 1.15E+03 (+) 1.08E+07 ± 5.36E+05 (-) 4.43E+03 ± 2.56E+02 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.17E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+) 1.21E+03 ± 2.05E+02 (+) 2.82E+08 ± 1.14E+07 (+) 2.06E+04 ± 7.47E+01 (-) 1.00E+00 ± 1.14E+00 (+) 5.89E+05 ± 1.75E+04 (+) 4.47E+03 ± 1.12E+03 (+) 2.55E+07 ± 1.31E+06 (-) 2.86E+03 ± 3.64E+02 (+)	1.01E+04 ± 1.39E+03 (+) 3.94E+07 ± 5.82E+08 (+) 1.40E+12 ± 1.77E+11 (+) 6.96E+08 ± 1.35E+07 (≈) 1.62E+06 ± 1.74E+07 (+) 8.01E+05 ± 1.08E+05 (+) 7.97E+07 ± 9.26E+04 (+) 2.09E+08 ± 1.21E+07 (+) 2.00E+04 ± 1.81E+02 (+) 5.22E+06 ± 5.16E+07 (+) 1.15E+06 ± 1.60E+05 (+) 1.21E+03 ± 3.43E+02 (+) 7.56E+08 ± 3.02E+07 (+) 2.10E+04 ± 8.30E+01 (+) 9.08E+06 ± 9.92E+07 (+) 3.12E+06 ± 1.60E+05 (+) 5.09E+03 ± 3.02E+03 (+) 4.18E+07 ± 2.06E+06 (-) 2.22E+03 ± 3.51E+02 (+)	5.10E-02 ± 1.43E-02 (·) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 4.82E+08 ± 4.92E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 (+) 1.24E+04 ± 6.20E+03 (+) 1.74E+09 ± 8.40E+08 (+) 2.38E+04 ± 1.72E+03 (+) 1.31E+06 ± 5.34E+00 (+) 1.31E+06 ± 5.34E+00 (+) 1.31E+06 ± 5.34E+00 (+) 4.43E+04 ± 4.45E+04 (+) 8.96E+06 ± 1.40E+06 (-) 2.56E+04 ± 2.71E+04 (+)	1.26E+04 ± 5.50E+02 (+) 2.68E+01 ± 6.39E-01 (+) 1.56E+12 ± 3.45E+11 (+) 1.82E+08 ± 3.05E+07 (-) 2.38E+06 ± 1.09E+06 (+) 5.62E+06 ± 6.18E+05 (+) 1.63E+08 ± 5.36E+07 (+) 2.52BE+08 ± 1.48E+08 (+) 1.95E+04 ± 2.62E+03 (+) 4.12E+02 ± 1.14E+01 (+) 3.44E+05 ± 3.36E+04 (+) 1.74E+07 ± 3.66E+07 (+) 1.18E+09 ± 7.46E+07 (+) 1.80E+04 ± 3.40E+03 (≈) 8.20E+02 ± 2.15E+04 (+) 8.03E+05 ± 6.12E+04 (+) 5.24E+09 ± 5.64E+09 (+) 2.96E+06 ± 1.80E+05 (-) 5.46E+09 ± 4.35E+09 (+)	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 1.32E+08 ± 1.64E+07 (-) 5.86E+04 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.00E+06 ± 2.35E+06 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+) 4.36E+07 ± 2.61E+06 (-) 6.53E+03 ± 2.01E+02 (-) 2.20E+01 ± 5.10E+01 (-) 3.24E+01 ± 3.66E+01 (-) 1.97E+03 ± 1.92E+02 (+) 1.94E+06 ± 1.05E+05 (-)
$\begin{array}{c} f_3 \\ f_4 \\ f_5 \\ f_6 \\ f_7 \\ f_8 \\ f_9 \\ f_{10} \\ f_{11} \\ f_{12} \\ f_{13} \\ f_{14} \\ f_{15} \\ f_{16} \\ f_{17} \\ f_{18} \\ f_{19} \\ f_{20} \\ \end{array}$	2.30E+03 ± 2.08E+02 (+) 3.20E+00 ± 2.62E-01 (+) 8.06E+11 ± 1.79E+11 (+) 5.00E+07 ± 1.17E+08 (-) 3.52E+00 ± 9.77E-01 (+) 1.48E+05 ± 6.95E+04 (+) 5.31E+07 ± 1.35E+07 (+) 1.07E+08 ± 7.92E+06 (+) 1.07E+08 ± 7.92E+06 (+) 7.63E+04 ± 4.73E+03 (+) 1.84E+03 ± 2.93E+02 (+) 2.98E+08 ± 1.46E+07 (+) 2.11E+04 ± 7.93E+01 (+) 4.27E+01 ± 1.10E+01 (+) 4.07E+05 ± 1.89E+04 (+) 6.19E+03 ± 1.15E+03 (+) 1.08E+07 ± 5.36E+05 (-) 4.43E+03 ± 2.56E+02 (+)	1.40E+03 ± 4.29E+01 (+) 5.83E-14 ± 1.32E-15 (-) 1.42E+12 ± 2.55E+11 (+) 1.44E+07 ± 3.56E+06 (-) 8.30E-09 ± 7.95E-11 (+) 8.51E+04 ± 2.34E+04 (+) 6.99E+07 ± 1.20E+05 (+) 1.03E+08 ± 4.85E+06 (+) 1.03E+03 ± 2.44E+01 (-) 5.60E-13 ± 1.97E-14 (+) 1.03E+05 ± 4.82E+03 (+) 1.21E+03 ± 2.05E+02 (+) 2.82E+08 ± 1.14E+07 (+) 2.06E+04 ± 7.47E+01 (-) 1.00E+00 ± 1.14E+00 (+) 5.89E+05 ± 1.75E+04 (+) 4.47E+03 ± 1.12E+03 (+) 2.55E+07 ± 1.31E+06 (-) 2.56E+03 ± 3.64E+02 (+)	$\begin{array}{c} 1.01E+04\pm1.39E+03\ (+)\\ 3.94E+07\pm5.82E+08\ (+)\\ 1.40E+12\pm1.77E+11\ (+)\\ 1.40E+12\pm1.77E+11\ (+)\\ 6.96E+08\pm1.35E+07\ (\approx)\\ 1.62E+06\pm1.74E+07\ (+)\\ 8.01E+05\pm1.08E+05\ (+)\\ 7.97E+07\pm9.26E+04\ (+)\\ 2.09E+08\pm1.21E+07\ (+)\\ 2.09E+08\pm1.21E+07\ (+)\\ 5.22E+06\pm5.16E+07\ (+)\\ 1.15E+06\pm1.60E+05\ (+)\\ 1.21E+03\pm3.43E+02\ (+)\\ 7.56E+08\pm3.02E+07\ (+)\\ 2.10E+04\pm8.30E+01\ (+)\\ 9.08E+06\pm9.92E+07\ (+)\\ 3.12E+06\pm1.60E+05\ (+)\\ 5.09E+03\pm3.02E+03\ (+)\\ 4.18E+07\pm2.06E+06\ (-)\\ 2.22E+03\pm3.51E+02\ (+)\\ \end{array}$	5.10E-02 ± 1.43E-02 (-) 2.94E+01 ± 1.24E+01 (+) 1.96E+13 ± 1.20E+13 (+) 1.05E+09 ± 1.68E+08 (+) 3.91E+07 ± 2.56E+06 (+) 7.75E+09 ± 7.88E+09 (+) 4.82E+08 ± 4.92E+08 (+) 6.46E+08 ± 2.65E+08 (+) 1.13E+04 ± 1.70E+03 (+) 4.35E+02 ± 9.67E+00 (+) 5.45E+05 ± 2.21E+05 (+) 1.24E+04 ± 6.20E+03 (+) 1.74E+09 ± 8.40E+08 (+) 2.38E+04 ± 1.72E+03 (+) 8.01E+02 ± 6.36E+00 (+) 1.31E+06 ± 5.34E+05 (+) 4.43E+04 ± 4.45E+04 (+) 4.95E+06 ± 1.40E+06 (-) 2.56E+04 ± 2.71E+04 (+)	$\begin{array}{c} 1.26\text{E}+04\pm5.50\text{E}+02\ (+)\\ 2.68\text{E}+01\pm6.39\text{E}-01\ (+)\\ 1.56\text{E}+12\pm3.45\text{E}+11\ (+)\\ 1.56\text{E}+12\pm3.45\text{E}+11\ (+)\\ 1.82\text{E}+08\pm3.05\text{E}+07\ (-)\\ 2.38\text{E}+08\pm3.05\text{E}+07\ (-)\\ 5.28\text{E}+06\pm6.18\text{E}+05\ (+)\\ 1.63\text{E}+08\pm5.36\text{E}+07\ (+)\\ 5.28\text{E}+08\pm1.48\text{E}+08\ (+)\\ 1.95\text{E}+04\pm2.62\text{E}+03\ (+)\\ 4.12\text{E}+02\pm1.14\text{E}+01\ (+)\\ 3.44\text{E}+05\pm3.36\text{E}+04\ (+)\\ 1.74\text{E}+07\pm3.66\text{E}+07\ (+)\\ 1.88\text{E}+09\pm7.46\text{E}+07\ (+)\\ 1.80\text{E}+04\pm3.40\text{E}+03\ (\approx)\\ 8.20\text{E}+02\pm2.15\text{E}+00\ (+)\\ 8.03\text{E}+05\pm6.12\text{E}+04\ (+)\\ 5.24\text{E}+09\pm5.64\text{E}+09\ (+)\\ 5.296\text{E}+06\pm1.80\text{E}+05\ (-)\\ 5.46\text{E}+09\pm4.35\text{E}+09\ (+)\\ \end{array}$	1.28E+04 ± 7.40E+02 (+) 2.10E+01 ± 1.52E+00 (+) 4.80E+10 ± 2.99E+10 (-) 4.80E+10 ± 2.99E+10 (-) 5.86E+08 ± 1.64E+07 (-) 5.86E+08 ± 2.19E+05 (+) 2.01E+05 ± 3.58E+04 (+) 3.02E+08 ± 9.57E+07 (+) 3.62E+08 ± 9.57E+07 (+) 7.93E+03 ± 2.81E+02 (+) 2.31E+01 ± 2.04E+00 (+) 1.91E+05 ± 2.66E+04 (+) 1.85E+05 ± 3.12E+04 (+) 4.36E+07 ± 2.61E+06 (-) 6.53E+03 ± 2.01E+02 (-) 2.20E-01 ± 5.10E-01 (+) 3.24E+01 ± 3.66E+01 (-) 1.97E+03 ± 1.92E+02 (-) 1.94E+06 ± 1.05E+05 (-) 1.30E+08 ± 1.68E+08 (+)

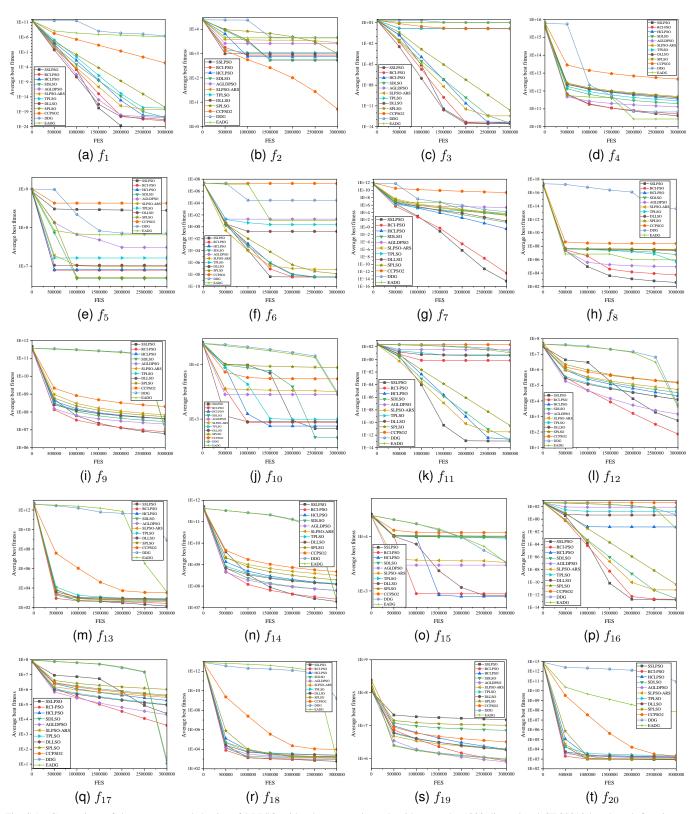


Fig. S.1. Comparison of the convergence behavior of BLPSO with other comparison algorithms on the 1000-dimensional CEC2010 benchmark functions.

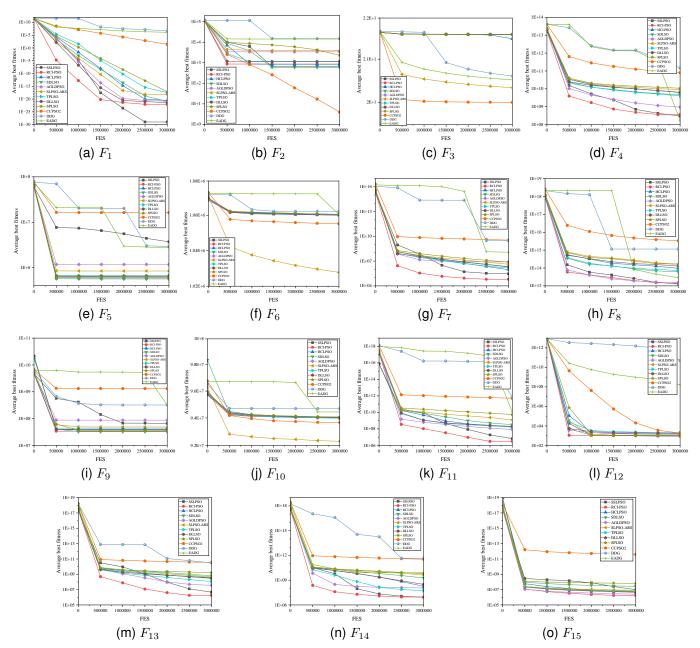


Fig. S.2. Comparison of the convergence behavior of BLPSO with other comparison algorithms on the 1000-dimensional CEC2013 benchmark functions.