DATA

PROJECT 1

C_x	$[-]$	0.36	Aerodinamic drag coefficient
S	m^2	1.8	Cross sectional area
m	kg	900	Vehicle mass (standard A)
V_{cil}	cm^3	910	Engine size
τ_f	-	0.2672	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.2	Wheel base
a	m	1.0	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Momento of inertia of twheel and of the power train
pln_team1.txt			Engine map

Table 1: Team 1 data.

C_x	$[-]$	0.35	Aerodinamic drag coefficient
S	m^2	1.82	Cross sectional area
m	kg	970	Vehicle mass (standard A)
V_{cil}	cm^3	1040	Engine size
τ_f	-	0.281	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.3	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team2.txt			Engine map

Table 2: Team 2 data.

C_x	$[-]$	0.33	Aerodinamic drag coefficient
S	m^2	2.1	Cross sectional area
m	kg	1070	Vehicle mass (standard A)
V_{cil}	cm^3	1080	Engine size
τ_f	-	0.2915	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.45	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_g	s	1	Time required for shifting
J_e	kgm^2	0.085	Moment of inertia of the engine
J_w	kgm^2	2.5	Moment of inertia of the wheel and of the power train
pln_team3.txt			Engine map

Table 3: Team 3 data.

C_x	$[-]$	0.31	Aerodinamic drag coefficient
S	m^2	2.05	Cross sectional area
m	kg	1150	Vehicle mass (standard A)
V_{cil}	cm^3	1262	Engine size
τ_f	-	0.292	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.5	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.085	Moment of inertia of the engine
J_w	kgm^2	02.5	Moment of inertia of the wheel and of the power train
pln_team4.txt			Engine map

Table 4: Team 4 data.

C_x	$[-]$	0.32	Aerodinamic drag coefficient
S	m^2	2.1	Cross sectional area
m	kg	1240	Vehicle mass (standard A)
V_{cil}	cm^3	1372	Engine size
τ_f	-	0.298	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.54	Wheel base
a	m	1.20	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.12	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
$pln\_team5.txt$			Engine map

Table 5: Team 5 data.

C_x	$[-]$	0.31	Aerodinamic drag coefficient
S	m^2	2.2	Cross sectional area
m	kg	1240	Vehicle mass (standard A)
V_{cil}	cm^3	1.236	Engine size
τ_f	-	0.298	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.48	Wheel base
a	m	1.1	Distance center of gravity -front axle
h_G	m	0.48	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.12	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team6.txt			Engine map

Table 6: Team 6 data.

C_x	$[-]$	0.32	Aerodinamic drag coefficient
S	m^2	2.06	Cross sectional area
m	kg	1400	Vehicle mass (standard A)
V_{cil}	cm^3	1800	Engine size
τ_f	-	0.3	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.6	Wheel base
a	m	1.20	Distance center of gravity -front axle
h_G	m	0.45	Height of the center of gravity
$185/65R15$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.26	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
$pln\_team7.txt$			Engine map

Table 7: Team 7 data.

C_x	$[-]$	0.31	Aerodinamic drag coefficient
S	m^2	2.1	Cross sectional area
m	kg	1350	Vehicle mass (standard A)
V_{cil}	cm^3	1620	Engine size
τ_p	-	0.299	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.55	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.45	Height of the center of gravity
$185/65R15$	-		Tire characteristic
N	-	5	N° of gears
t_c	s	1	Time required for shifting
J_m	kgm^2	0.26	Moment of inertia of the engine
J_r	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team8.txt			Engine map

Table 8: Team 8 data.

C_x	$[-]$	0.3	Aerodinamic drag coefficient
S	m^2	2.3	Cross sectional area
m	kg	1700	Vehicle mass (standard A)
V_{cil}	cm^3	2800	Engine size
τ_f	-	0.2679	Final transmission ratio
$\omega_{\min}$	rpm	700	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.7	Wheel base
a	m	1.3	Distance center of gravity -front axle
h_G	m	0.45	Height of the center of gravity
$205/55R16$	-		Tire characteristic
N	-	6	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.35	Moment of inertia of the engine
J_w	kgm^2	3	Moment of inertia of the wheel and of the power train
pln_team9.txt			Engine map

Table 9: Team 9 data.

C_x	$[-]$	0.31	Aerodinamic drag coefficient
S	m^2	2.32	Cross sectional area
m	kg	1750	Vehicle mass (standard A)
V_{cil}	cm^3	2990	Engine size
τ_f	-	0.2672	Final transmission ratio
$\omega_{\min}$	rpm	700	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.72	Wheel base
a	m	1.32	Distance center of gravity -front axle
h_G	m	0.48	Height of the center of gravity
$205/55R16$	-		Tire characteristic
N	-	6	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.35	Moment of inertia of the engine
J_w	kgm^2	3	Moment of inertia of the wheel and of the power train
pln_team10.txt			Engine map

Table 10: Team 10 data.

C_x	$[-]$	0.36	Aerodinamic drag coefficient
S	m^2	1.8	Cross sectional area
m	kg	900	Vehicle mass (standard A)
V_{cil}	cm^3	910	Engine size
τ_p	-	0.2672	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.2	Wheel base
a	m	1.0	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_c	s	1	Time required for shifting
J_m	kgm^2	0.080	Moment of inertia of the engine
J_r	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team11.txt			Engine map

Table 11: Team 11 data.

C_x	$[-]$	0.35	Aerodinamic drag coefficient
S	m^2	1.82	Cross sectional area
m	kg	970	Vehicle mass (standard A)
V_{cil}	cm^3	1040	Engine size
τ_f	-	0.281	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.3	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team12.txt			Engine map

Table 12: Team 12 data.

C_x	$[-]$	0.36	Aerodinamic drag coefficient
S	m^2	1.8	Cross sectional area
m	kg	900	Vehicle mass (standard A)
V_{cil}	cm^3	910	Engine size
τ_f	-	0.2672	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.2	Wheel base
a	m	1.0	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team13.txt			Engine map

Table 13: Team 13 data.

C_x	$[-]$	0.35	Aerodinamic drag coefficient
S	m^2	1.82	Cross sectional area
m	kg	970	Vehicle mass (standard A)
V_{cil}	cm^3	1040	Engine size
τ_f	-	0.281	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.3	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team14.txt			Engine map

Table 14: Team 14 data.

C_x	$[-]$	0.35	Aerodinamic drag coefficient
S	m^2	1.82	Cross sectional area
m	kg	970	Vehicle mass (standard A)
V_{cil}	cm^3	1040	Engine size
τ_f	-	0.281	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.3	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team15.txt			Engine map

Table 15: Team 15 data.

C_x	$[-]$	0.32	Aerodinamic drag coefficient
S	m^2	2.06	Cross sectional area
m	kg	1400	Vehicle mass (standard A)
V_{cil}	cm^3	1800	Engine size
τ_f	-	0.3	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.6	Wheel base
a	m	1.20	Distance center of gravity -front axle
h_G	m	0.45	Height of the center of gravity
$185/65R15$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.26	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team16.txt			Engine map

Table 16: Team 16 data.

C_x	$[-]$	0.32	Aerodinamic drag coefficient
S	m^2	2.06	Cross sectional area
m	kg	1400	Vehicle mass (standard A)
V_{cil}	cm^3	1800	Engine size
τ_f	-	0.3	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.6	Wheel base
a	m	1.20	Distance center of gravity -front axle
h_G	m	0.45	Height of the center of gravity
$185/65R15$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.26	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team17.txt			Engine map

Table 17: Team 17 data.

C_x	$[-]$	0.36	Aerodinamic drag coefficient
S	m^2	1.8	Cross sectional area
m	kg	900	Vehicle mass (standard A)
V_{cil}	cm^3	910	Engine size
τ_f	-	0.2672	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.2	Wheel base
a	m	1.0	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team18.txt			Engine map

Table 18: Team 18 data.

C_x	$[-]$	0.35	Aerodinamic drag coefficient
S	m^2	1.82	Cross sectional area
m	kg	970	Vehicle mass (standard A)
V_{cil}	cm^3	1040	Engine size
τ_f	-	0.281	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.3	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team19.txt			Engine map

Table 19: Team 19 data.

C_x	$[-]$	0.33	Aerodinamic drag coefficient
S	m^2	2.1	Cross sectional area
m	kg	1070	Vehicle mass (standard A)
V_{cil}	cm^3	1080	Engine size
τ_f	-	0.2915	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.45	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_g	s	1	Time required for shifting
J_e	kgm^2	0.085	Moment of inertia of the engine
J_w	kgm^2	2.5	Moment of inertia of the wheel and of the power train
pln_team20.txt			Engine map

Table 20: Team 20 data.

C_x	$[-]$	0.31	Aerodinamic drag coefficient
S	m^2	2.05	Cross sectional area
m	kg	1150	Vehicle mass (standard A)
V_{cil}	cm^3	1262	Engine size
τ_f	-	0.292	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.5	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.085	Moment of inertia of the engine
J_w	kgm^2	02.5	Moment of inertia of the wheel and of the power train
pln_team21.txt			Engine map

Table 21: Team 21 data.

C_x	$[-]$	0.32	Aerodinamic drag coefficient
S	m^2	2.1	Cross sectional area
m	kg	1240	Vehicle mass (standard A)
V_{cil}	cm^3	1372	Engine size
τ_f	-	0.298	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.54	Wheel base
a	m	1.20	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.12	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team22.txt			Engine map

Table 22: Team 22 data.

C_x	$[-]$	0.31	Aerodinamic drag coefficient
S	m^2	2.2	Cross sectional area
m	kg	1240	Vehicle mass (standard A)
V_{cil}	cm^3	1.236	Engine size
τ_f	-	0.298	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.48	Wheel base
a	m	1.1	Distance center of gravity -front axle
h_G	m	0.48	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.12	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team23.txt			Engine map

Table 23: Team 23 data.

C_x	$[-]$	0.32	Aerodinamic drag coefficient
S	m^2	2.06	Cross sectional area
m	kg	1400	Vehicle mass (standard A)
V_{cil}	cm^3	1800	Engine size
τ_f	-	0.3	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.6	Wheel base
a	m	1.20	Distance center of gravity -front axle
h_G	m	0.45	Height of the center of gravity
$185/65R15$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.26	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team24.txt			Engine map

Table 24: Team 24 data.

C_x	$[-]$	0.31	Aerodinamic drag coefficient
S	m^2	2.1	Cross sectional area
m	kg	1350	Vehicle mass (standard A)
V_{cil}	cm^3	1620	Engine size
τ_p	-	0.299	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.55	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.45	Height of the center of gravity
$185/65R15$	-		Tire characteristic
N	-	5	N° of gears
t_c	s	1	Time required for shifting
J_m	kgm^2	0.26	Moment of inertia of the engine
J_r	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team25.txt			Engine map

Table 25: Team 25 data.

C_x	$[-]$	0.3	Aerodinamic drag coefficient
S	m^2	2.3	Cross sectional area
m	kg	1700	Vehicle mass (standard A)
V_{cil}	cm^3	2800	Engine size
τ_f	-	0.2679	Final transmission ratio
$\omega_{\min}$	rpm	700	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.7	Wheel base
a	m	1.3	Distance center of gravity -front axle
h_G	m	0.45	Height of the center of gravity
$205/55R16$	-		Tire characteristic
N	-	6	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.35	Moment of inertia of the engine
J_w	kgm^2	3	Moment of inertia of the wheel and of the power train
pln_team26.txt			Engine map

Table 26: Team 26 data.

C_x	$[-]$	0.31	Aerodinamic drag coefficient
S	m^2	2.32	Cross sectional area
m	kg	1750	Vehicle mass (standard A)
V_{cil}	cm^3	2990	Engine size
τ_f	-	0.2672	Final transmission ratio
$\omega_{\min}$	rpm	700	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.72	Wheel base
a	m	1.32	Distance center of gravity -front axle
h_G	m	0.48	Height of the center of gravity
$205/55R16$	-		Tire characteristic
N	-	6	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.35	Moment of inertia of the engine
J_w	kgm^2	3	Moment of inertia of the wheel and of the power train
pln_team27.txt			Engine map

Table 27: Team 27 data.

C_x	$[-]$	0.36	Aerodinamic drag coefficient
S	m^2	1.8	Cross sectional area
m	kg	900	Vehicle mass (standard A)
V_{cil}	cm^3	910	Engine size
τ_p	-	0.2672	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.2	Wheel base
a	m	1.0	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_c	s	1	Time required for shifting
J_m	kgm^2	0.080	Moment of inertia of the engine
J_r	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team28.txt			Engine map

Table 28: Team 28 data.

C_x	$[-]$	0.35	Aerodinamic drag coefficient
S	m^2	1.82	Cross sectional area
m	kg	970	Vehicle mass (standard A)
V_{cil}	cm^3	1040	Engine size
τ_f	-	0.281	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.3	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team29.txt			Engine map

Table 29: Team 29 data.

C_x	$[-]$	0.32	Aerodinamic drag coefficient
S	m^2	2.06	Cross sectional area
m	kg	1400	Vehicle mass (standard A)
V_{cil}	cm^3	1800	Engine size
τ_f	-	0.3	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.6	Wheel base
a	m	1.20	Distance center of gravity -front axle
h_G	m	0.45	Height of the center of gravity
$185/65R15$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.26	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team24.txt			Engine map

Table 30: Team 30 data.

C_x	$[-]$	0.32	Aerodinamic drag coefficient
S	m^2	2.06	Cross sectional area
m	kg	1400	Vehicle mass (standard A)
V_{cil}	cm^3	1800	Engine size
τ_f	-	0.3	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.6	Wheel base
a	m	1.20	Distance center of gravity -front axle
h_G	m	0.45	Height of the center of gravity
$185/65R15$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.26	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team30.txt			Engine map

Table 31: Team 31 data.

C_x	$[-]$	0.36	Aerodinamic drag coefficient
S	m^2	1.8	Cross sectional area
m	kg	900	Vehicle mass (standard A)
V_{cil}	cm^3	910	Engine size
τ_f	-	0.2672	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.2	Wheel base
a	m	1.0	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Momento of inertia of twheel and of the power train
pln_team31.txt			Engine map

Table 32: Team 32 data.

C_x	$[-]$	0.35	Aerodinamic drag coefficient
S	m^2	1.82	Cross sectional area
m	kg	970	Vehicle mass (standard A)
V_{cil}	cm^3	1040	Engine size
τ_f	-	0.281	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.3	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$155/65R13$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.080	Moment of inertia of the engine
J_w	kgm^2	1.6	Moment of inertia of the wheel and of the power train
pln_team32.txt			Engine map

Table 33: Team 33 data.

C_x	$[-]$	0.33	Aerodinamic drag coefficient
S	m^2	2.1	Cross sectional area
m	kg	1070	Vehicle mass (standard A)
V_{cil}	cm^3	1080	Engine size
τ_f	-	0.2915	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.45	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_g	s	1	Time required for shifting
J_e	kgm^2	0.085	Moment of inertia of the engine
J_w	kgm^2	2.5	Moment of inertia of the wheel and of the power train
pln_team33.txt			Engine map

Table 34: Team 34 data.

C_x	$[-]$	0.31	Aerodinamic drag coefficient
S	m^2	2.05	Cross sectional area
m	kg	1150	Vehicle mass (standard A)
V_{cil}	cm^3	1262	Engine size
τ_f	-	0.292	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.5	Wheel base
a	m	1.15	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.085	Moment of inertia of the engine
J_w	kgm^2	02.5	Moment of inertia of the wheel and of the power train
pln_team34.txt			Engine map

Table 35: Team 35 data.

C_x	$[-]$	0.32	Aerodinamic drag coefficient
S	m^2	2.1	Cross sectional area
m	kg	1240	Vehicle mass (standard A)
V_{cil}	cm^3	1372	Engine size
τ_f	-	0.298	Final transmission ratio
$\omega_{\min}$	rpm	850	Minimum rotational speed
η_t	-	0.9	Efficiency of the power train
l	m	2.54	Wheel base
a	m	1.20	Distance center of gravity -front axle
h_G	m	0.5	Height of the center of gravity
$185/60R14$	-		Tire characteristic
N	-	5	N° of gears
t_s	s	1	Time required for shifting
J_e	kgm^2	0.12	Moment of inertia of the engine
J_w	kgm^2	2.7	Moment of inertia of the wheel and of the power train
pln_team35.txt			Engine map

Table 36: Team 36 data.