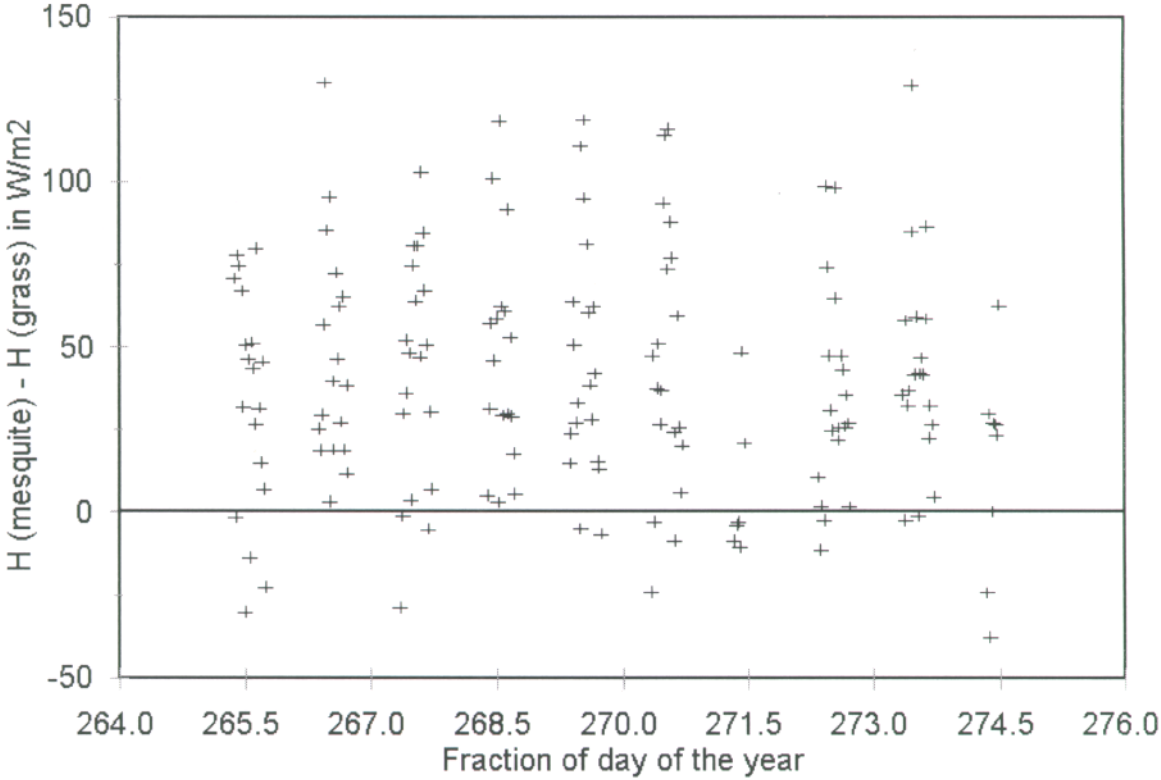
150
100
50
0
-50
H (mesquite) - H (grass) in W/m2
264.0
265.5
267.0
268.5
270.0
271.5
273.0
274.5
276.0
Fraction of day of the year

Figure 1

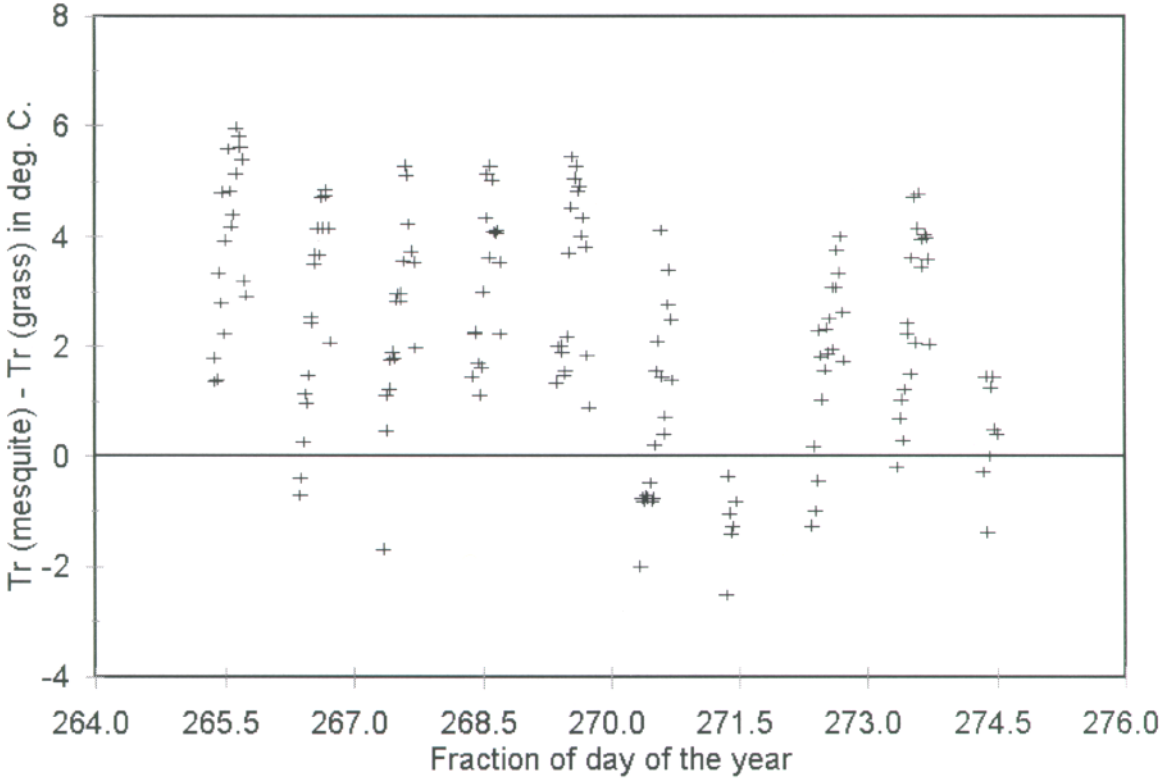
8
6
4
2
0
-2
-4
Tr (mesquite) - Tr (grass) in deg. C.
264.0
265.5
267.0
268.5
270.0
271.5
273.0
274.5
276.0
Fraction of day of the year

Figure 2

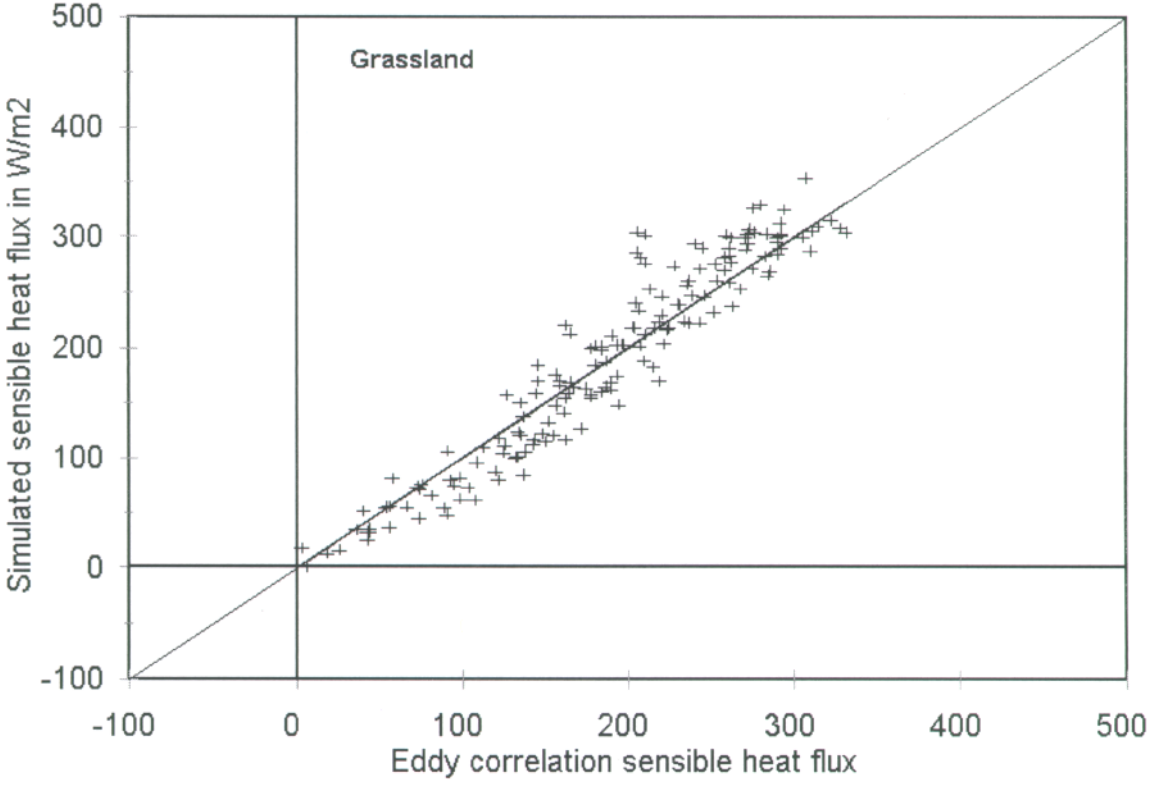
Grassland
Simulated sensible heat flux in W/m2
Eddy correlation sensible heat flux
500
400
300
200
100
0
-100
-100
0
100
200
300
400
500

Figure 3

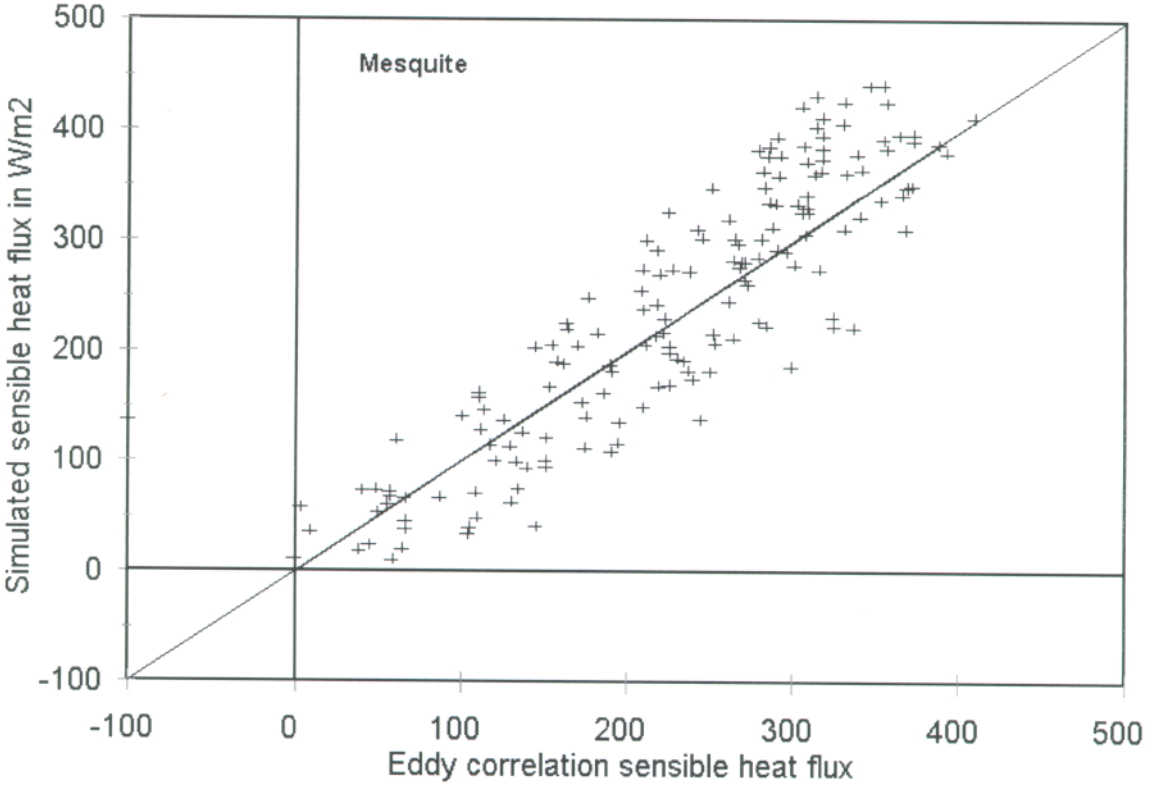
Mesquite
Simulated sensible heat flux in W/m2
Eddy correlation sensible heat flux
500
400
300
200
100
0
-100
-100
0
100
200
300
400
500

Figure 4

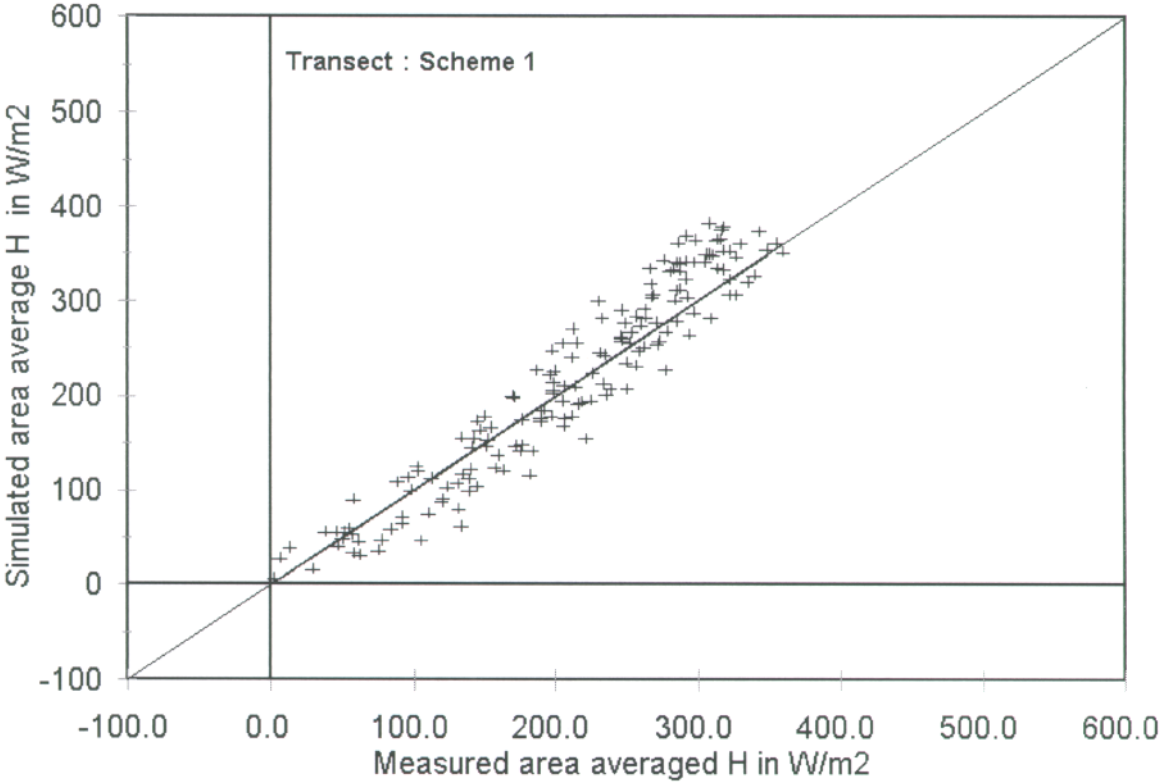
Transect : Scheme 1
Simulated area average H in W/m2
600
500
400
300
200
100
0
-100
-100.0
0.0
100.0
200.0
300.0
400.0
500.0
600.0
Measured area averaged H in W/m2

Figure 5

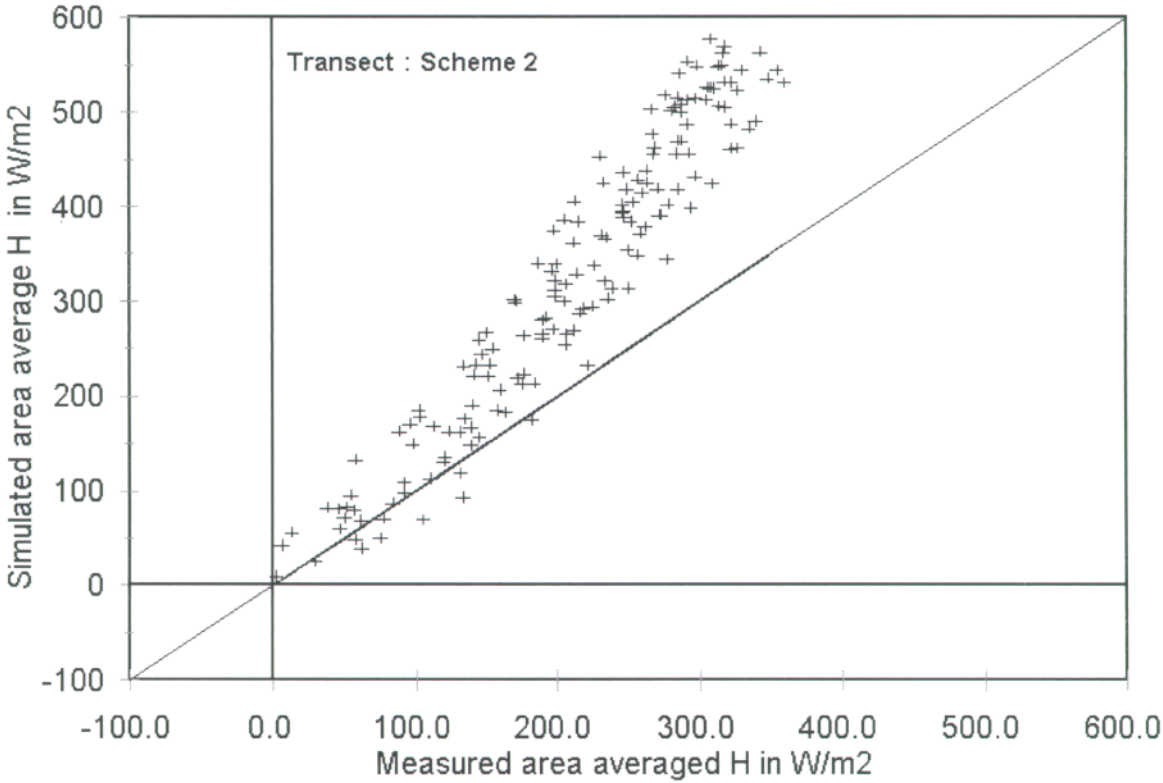
Transect : Scheme 2
Simulated area average H in W/m2
Measured area averaged H in W/m2
600
500
400
300
200
100
0
-100
-100.0
0.0
100.0
200.0
300.0
400.0
500.0
600.0

Figure 6

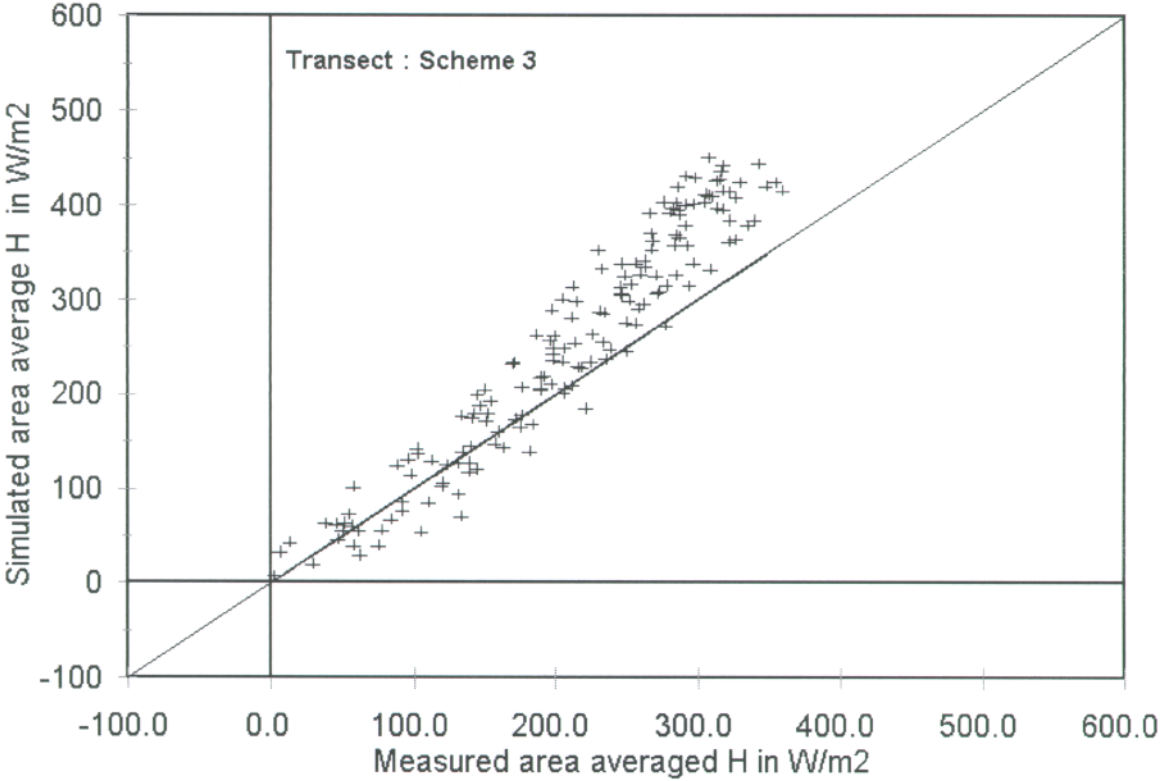
Transect : Scheme 3
Simulated area average H in W/m2
Measured area averaged H in W/m2
600
500
400
300
200
100
0
-100
-100.0
0.0
100.0
200.0
300.0
400.0
500.0
600.0

Figure 7

Table 1: Time average of the ratio between effective values of aerodynamic resistance and β coefficient and effective radiative surface temperature simulated by each aggregation schemes.

Scheme number	$\langle r_a \rangle / \langle \beta \rangle$	$\langle T_r \rangle$
Scheme 1	91.19	41.34
Scheme 2	59.35	41.24
Scheme 3	76.14	41.24