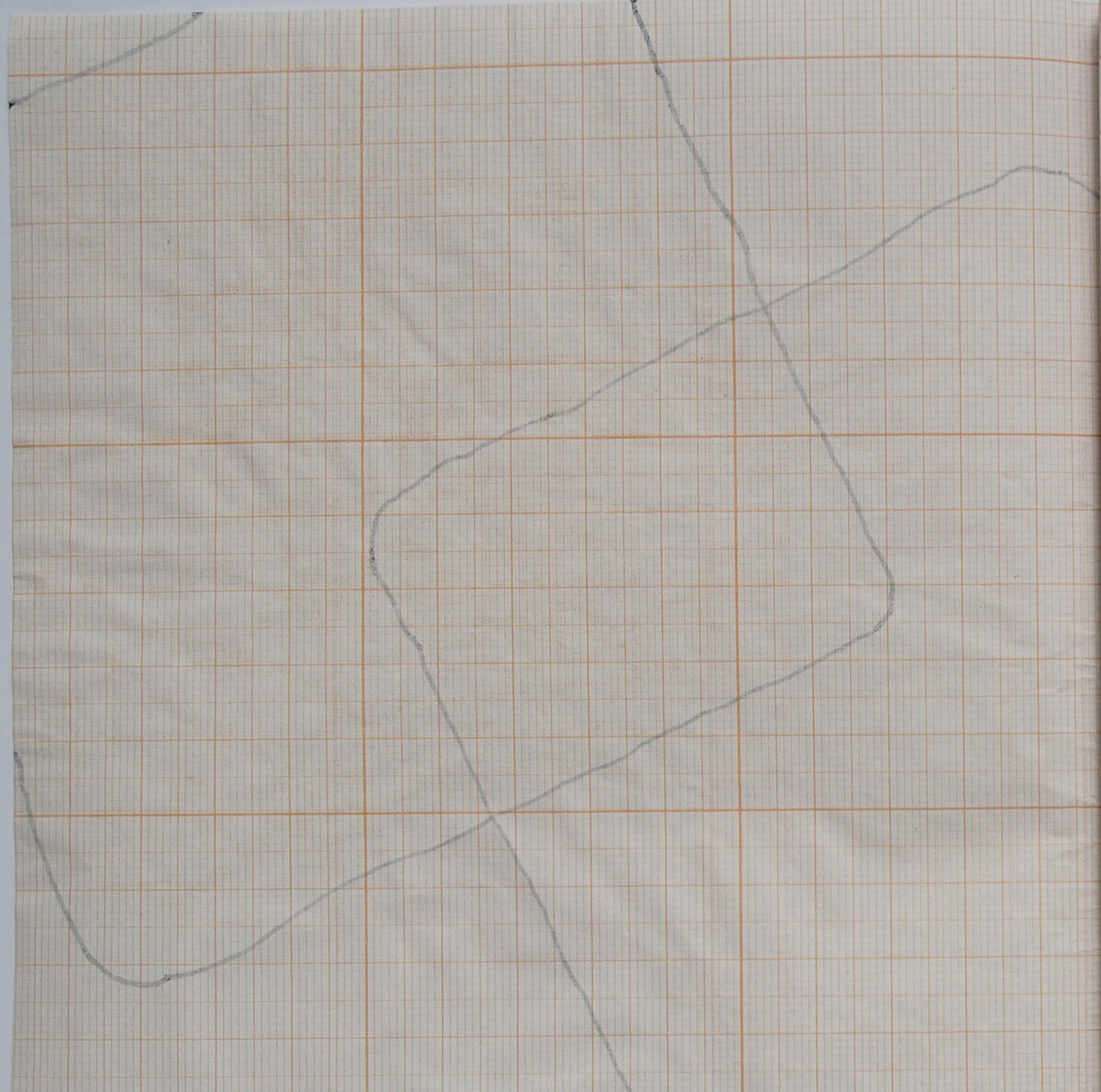
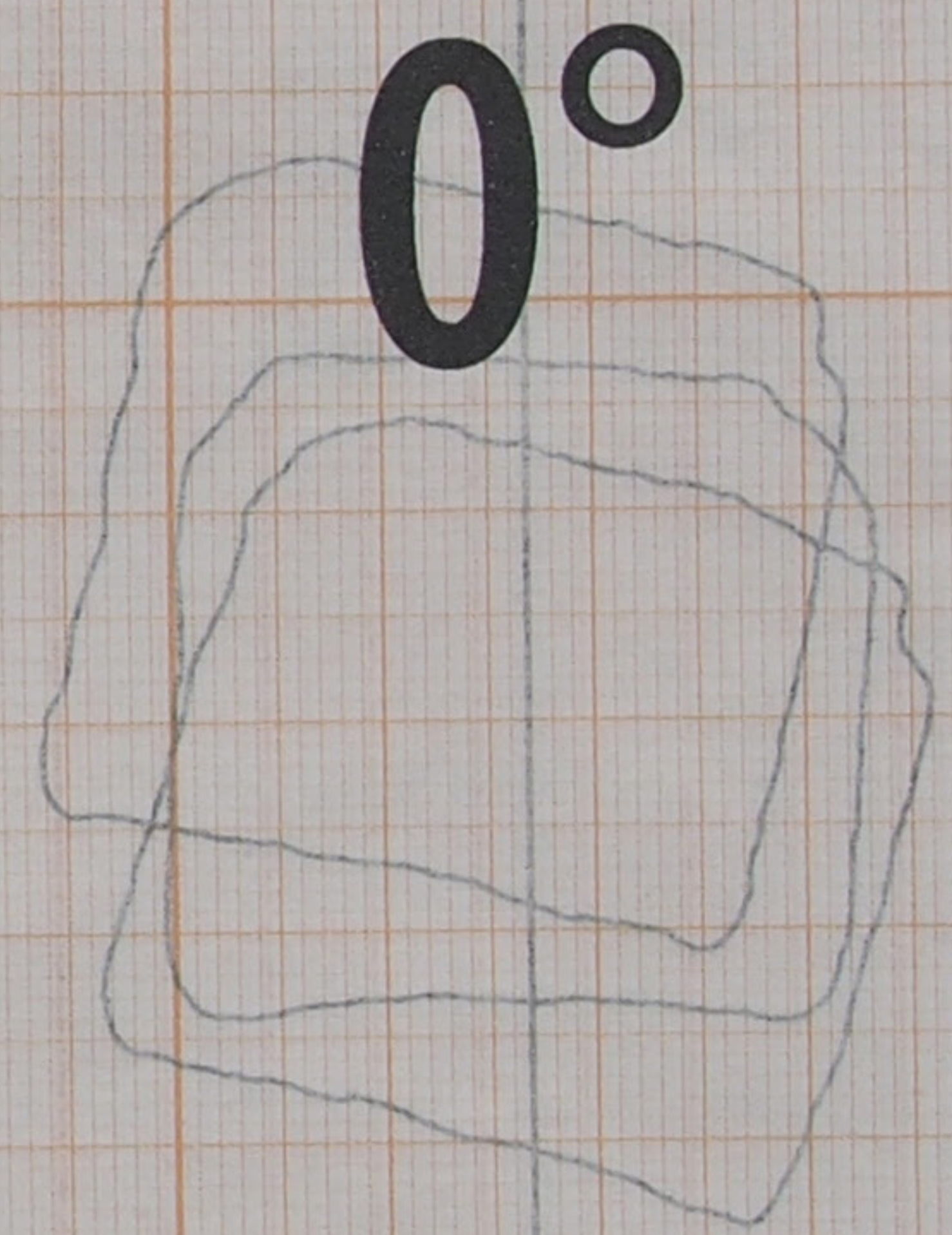
A piece of graph paper with a black scribble and printed text. The scribble is a complex, irregular shape that spans across the middle of the page. The text is located in the lower right quadrant of the page.

Mesurer la chute d'une tartine  
en fonction de l'orientation du  
grille pain



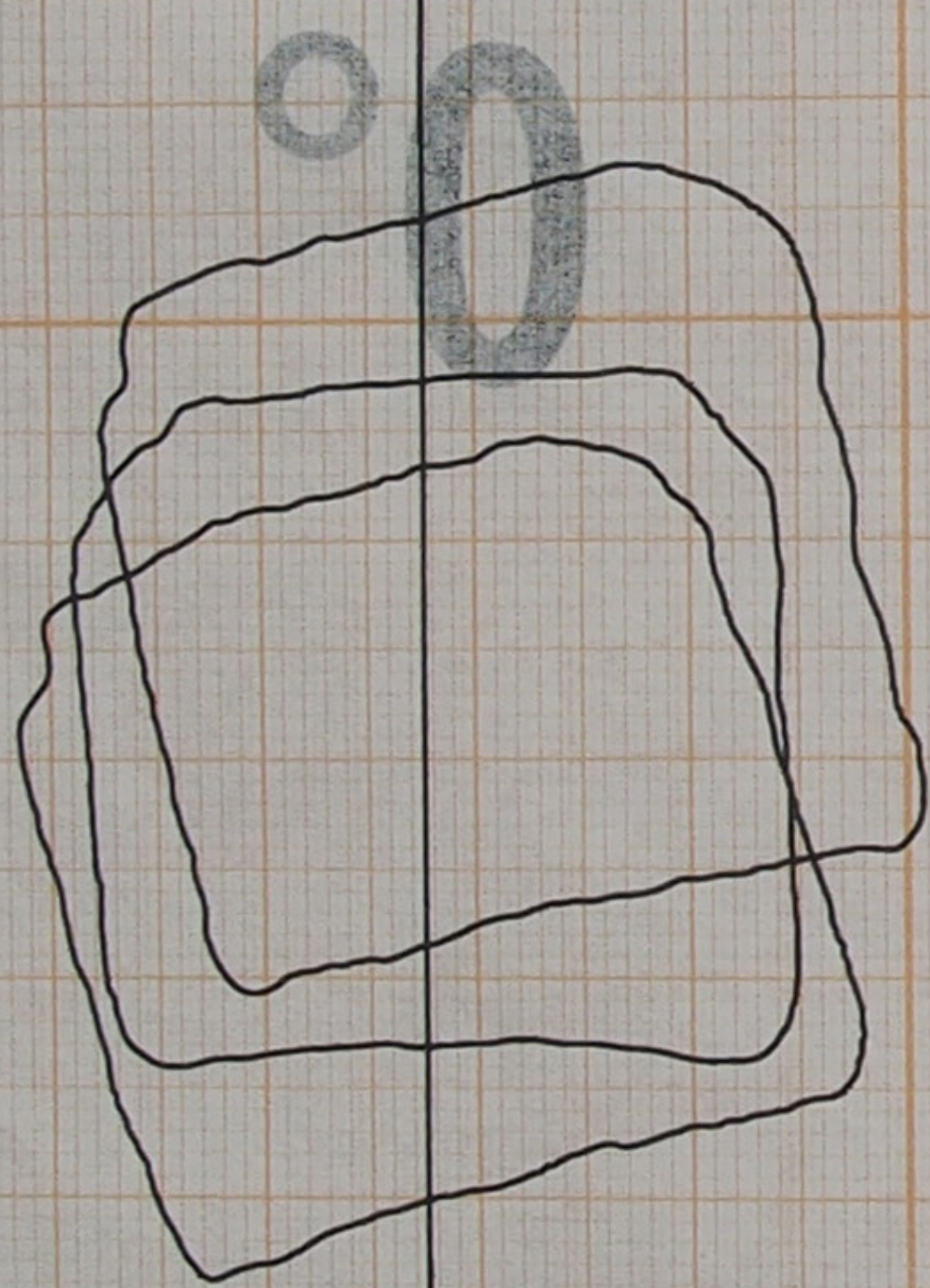


Mesurer la chute d'une tartine  
en fonction de l'orientation du  
grille pain



25 mai, 16h05, temps humide, 20°+<sub>2</sub> // Grille pain Russell Hobbs, pain complet monoprix





1.

$t=1$   
 $p(23,3; 0,4)$   
 $mi = 40$   
 $mf = 36$

2.

$t=1$   
 $p(21,1; 0,1)$   
 $mi = 41$   
 $mf = 39$

3.

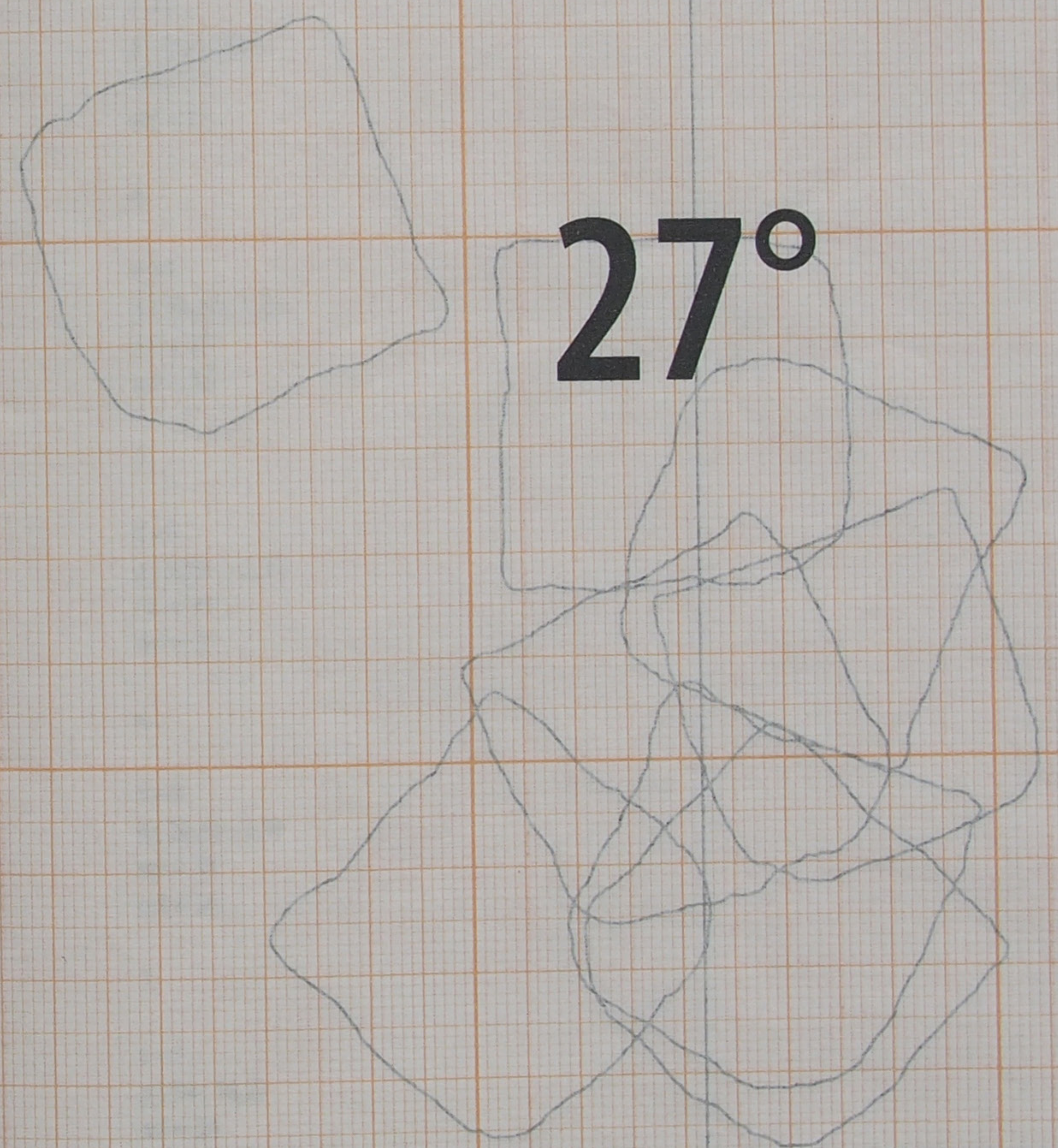
$t=1$   
 $p(25,7; 1,4)$   
 $mi = 40$   
 $mf = 37$



f  
t = 1  
p (53,3; 0,0)  
m = 40  
m = 38

f  
t = 1  
p (51,1; 0,0)  
m = 41  
m = 38

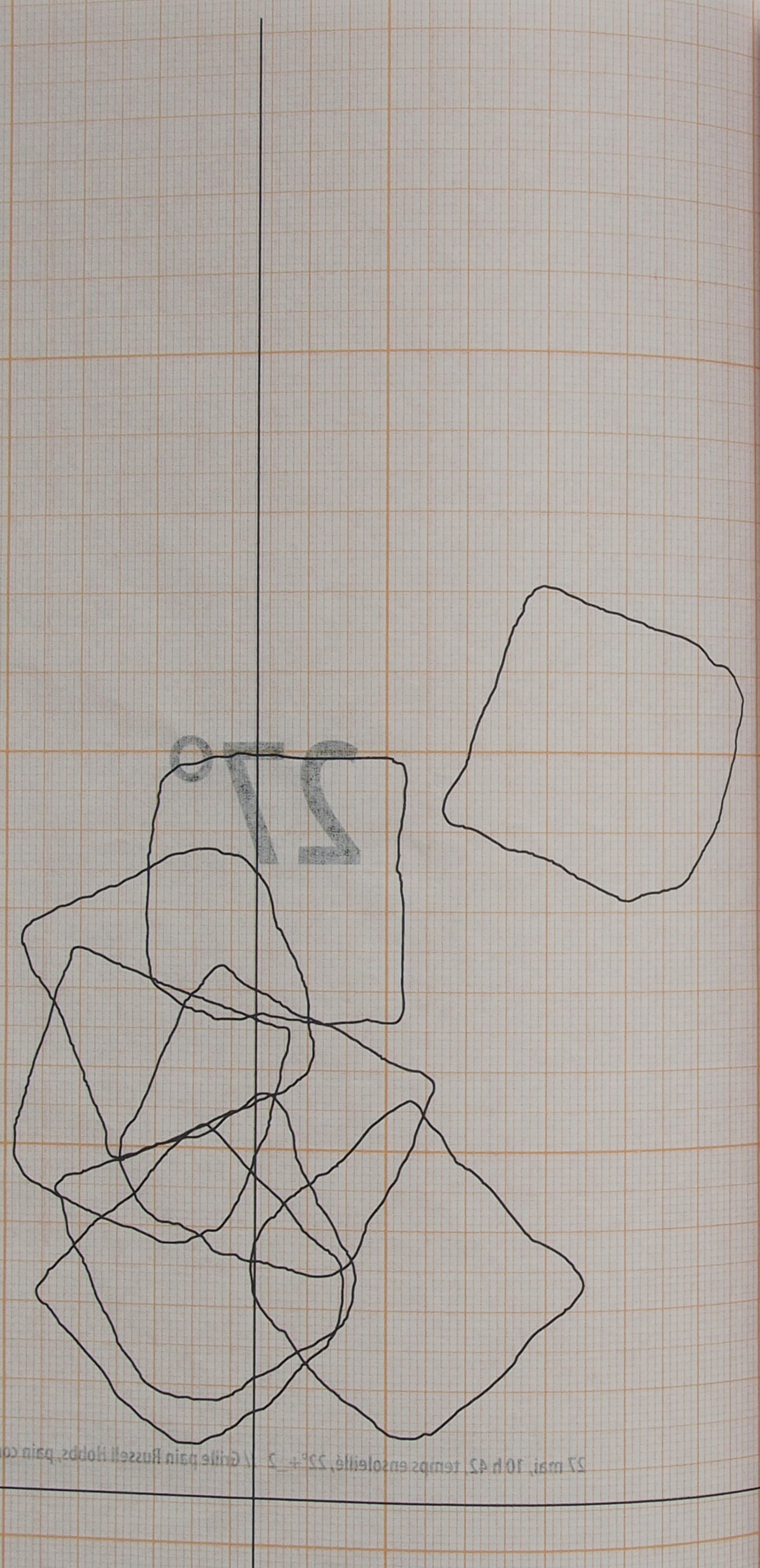
f  
t = 1  
p (52,7; 1,4)  
m = 40  
m = 37



27°

27 mai, 10 h 42, temps ensoleillé, 22° + 2 // Grille pain Russell Hobbs, pain complet





52 min, 10 h 42 tennis ensoleillé, 22° + 3° grille pain russell hobbs pain complet

1.

t=1  
 $p(11; -1,7)$   
 mi = 38  
 mf = 33

2.

t=1  
 $p(9,3; -2,25)$   
 mi = 38  
 mf = 35

3.

t=1  
 $p(16,5; 0,7)$   
 mi = 39  
 mf = 35

4.

t=1  
 $p(10,15; 7,2)$   
 mi = 39  
 mf = 36

5.

t=1  
 $p(22,8; -3,3)$   
 mi = 39  
 mf = 35

6.

t=1  
 $p(27,65; 1,1)$   
 mi = 39  
 mf = 36

7.

t=1  
 $p(34; 16,2)$   
 mi = 38  
 mf = 35

8.

t=1  
 $p(17,8; 8,17)$   
 $\sqrt{E} = 11m$   
 $\Delta E = 7m$



8.

t=1  
p(17,8;-4,9)  
mi=37  
mf=34

t=1  
p(17,8;-4,9)  
mi=37  
mf=34

t=1  
p(17,8;-4,9)  
mi=37  
mf=34

t=1  
p(17,8;-4,9)  
mi=37  
mf=34

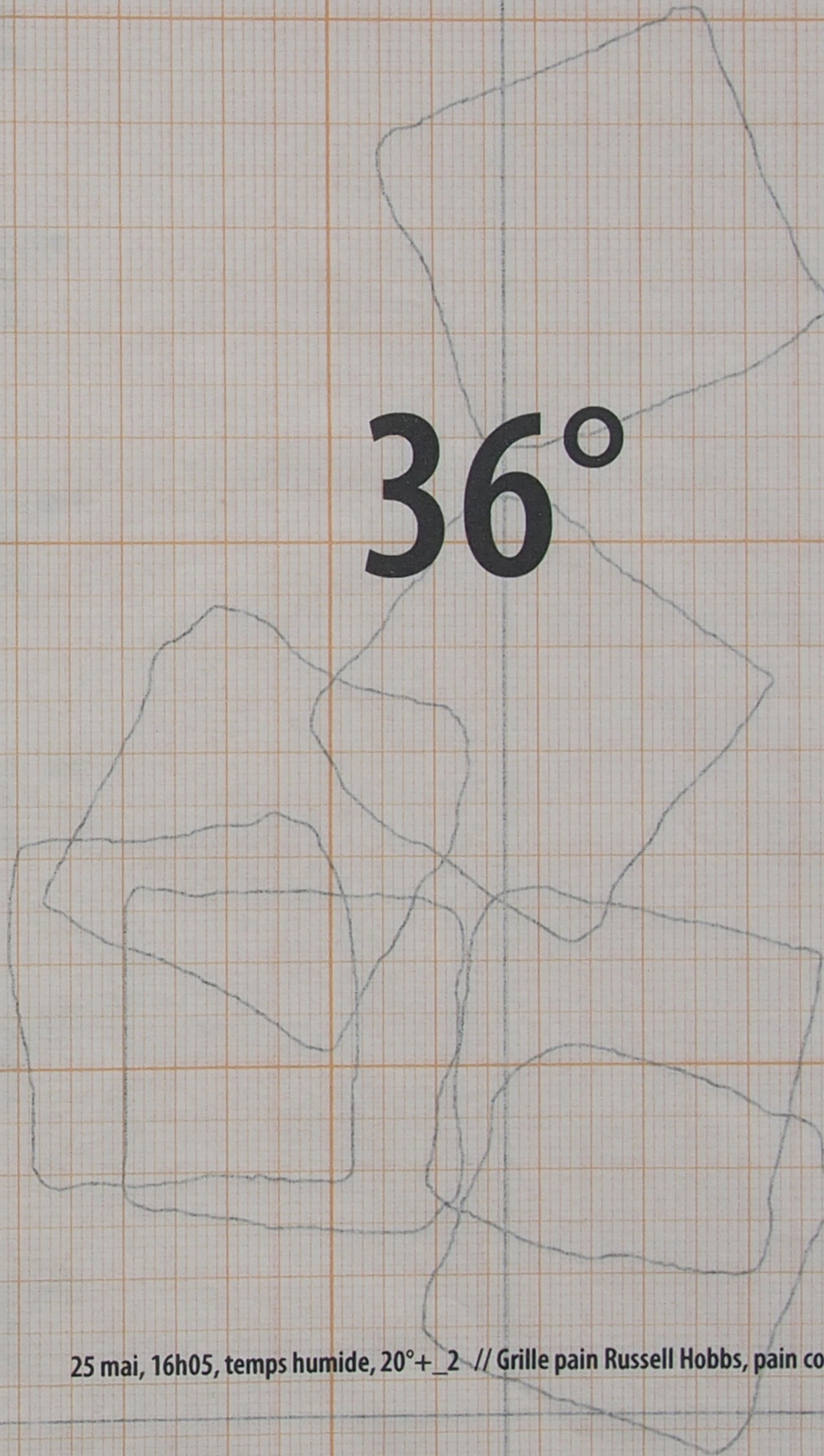
t=1  
p(17,8;-4,9)  
mi=37  
mf=34

t=1  
p(17,8;-4,9)  
mi=37  
mf=34

t=1  
p(17,8;-4,9)  
mi=37  
mf=34

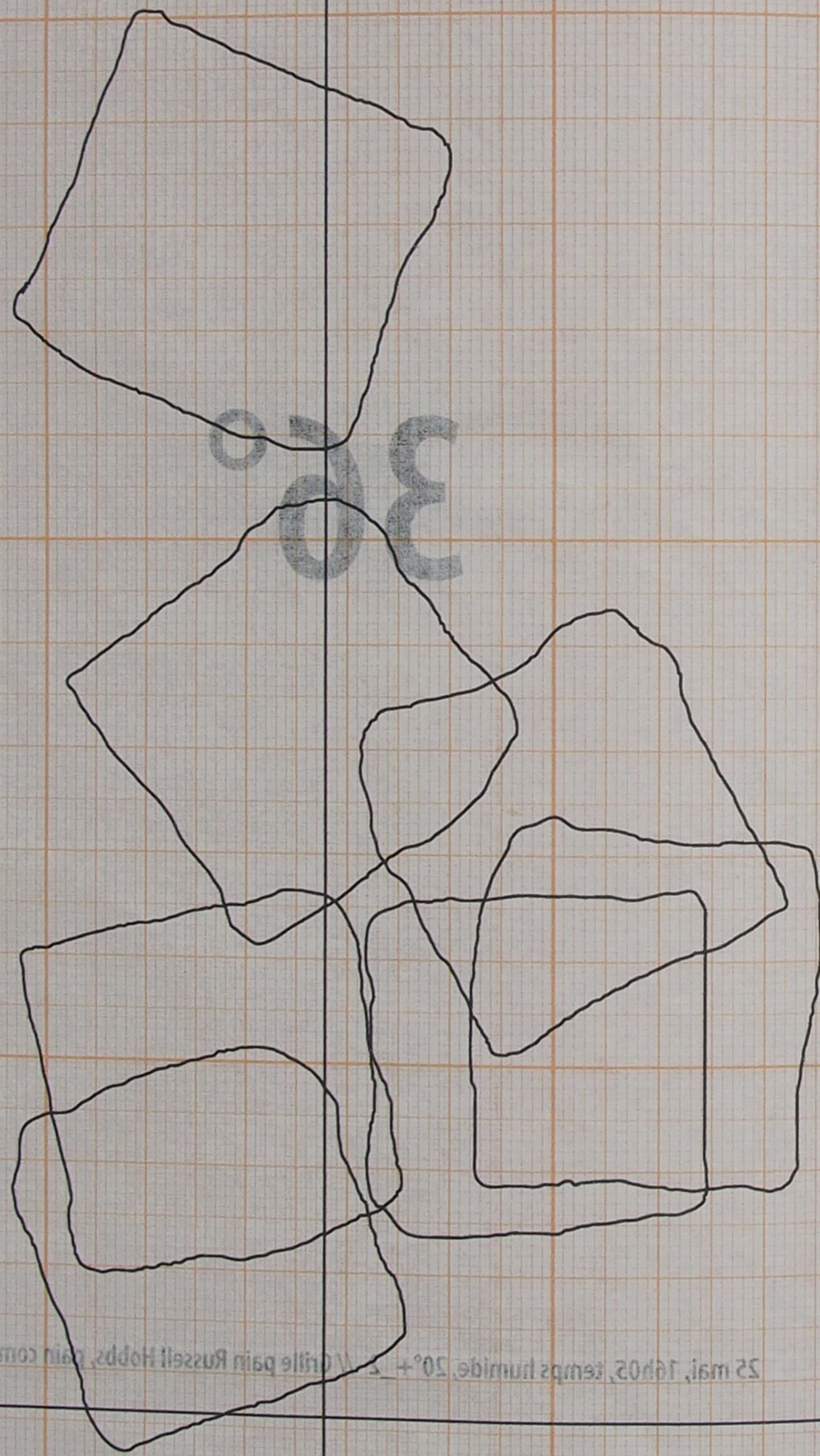
t=1  
p(17,8;-4,9)  
mi=37  
mf=34

36°



25 mai, 16h05, temps humide, 20°+2 // Grille pain Russell Hobbs, pain complet monoprix





1.

t=1  
 p (23,3 ; 0,4)  
 mi = 39  
 mf = 36

2.

t=1  
 p (40,8 ; -4,4)  
 mi = 38  
 mf = 36

3.

t=1  
 p (23,5 ; 10)  
 mi = 38  
 mf = 35

4.

t=1  
 p (32,2 ; 18,9)  
 mi = 40  
 mf = 38

5.

t=1  
 p (19,1 ; -5,2)  
 mi = 41  
 mf = 38

6.

t=1  
 p (28,5 ; -8,9)  
 mi = 39  
 mf = 36

7.

t=1  
 p (28,5 ; -8,9)  
 mi = 38  
 mf = 36

45°



f=1  
(0,0; 3,0) q  
m=30  
p=30

f=1  
(0,0; 3,0) q  
m=30  
p=30

f=1  
(0,0; 3,0) q  
m=30  
p=30

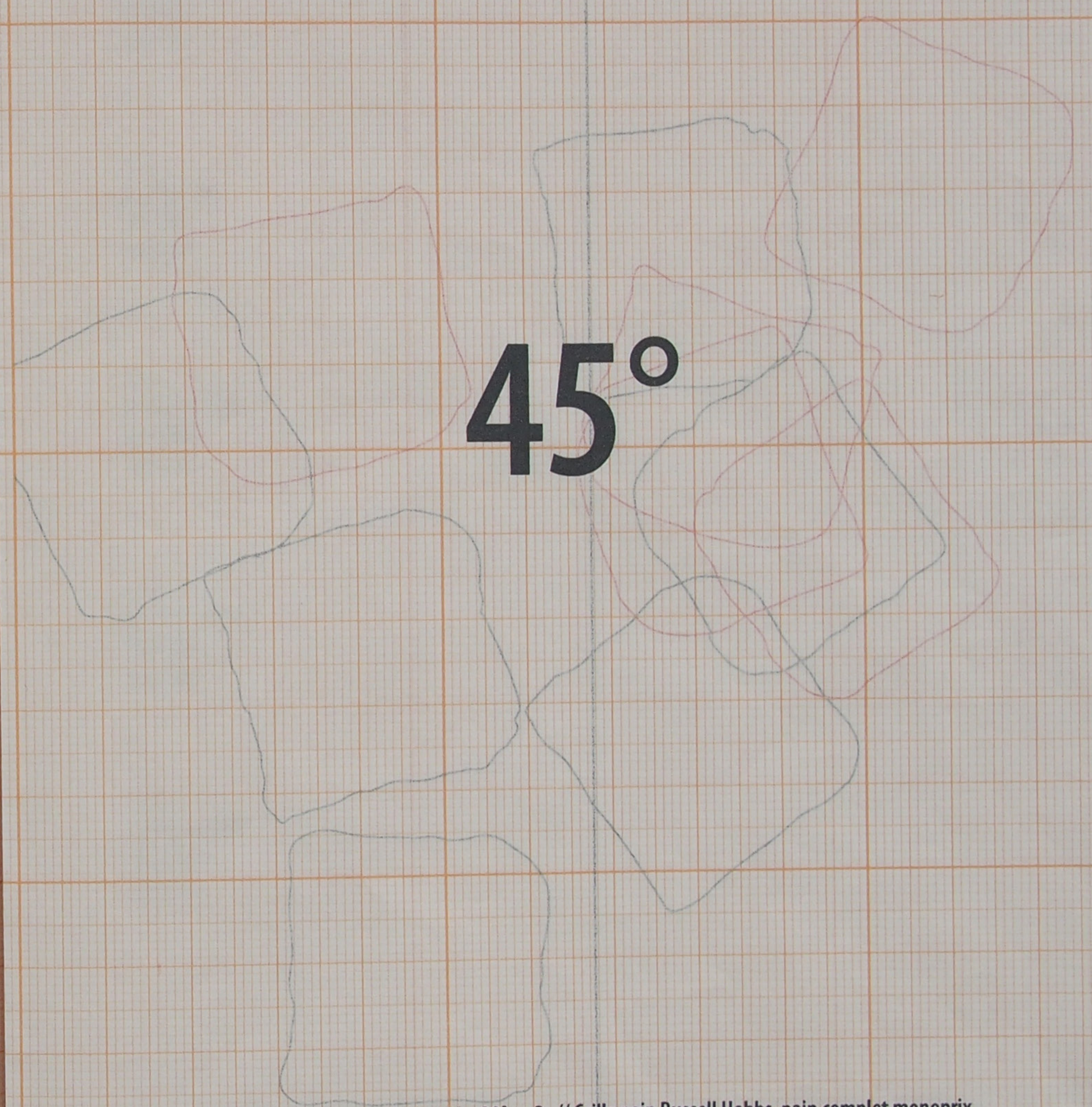
f=1  
(0,0; 3,0) q  
m=30  
p=30

f=1  
(0,0; 3,0) q  
m=30  
p=30

f=1  
(0,0; 3,0) q  
m=30  
p=30

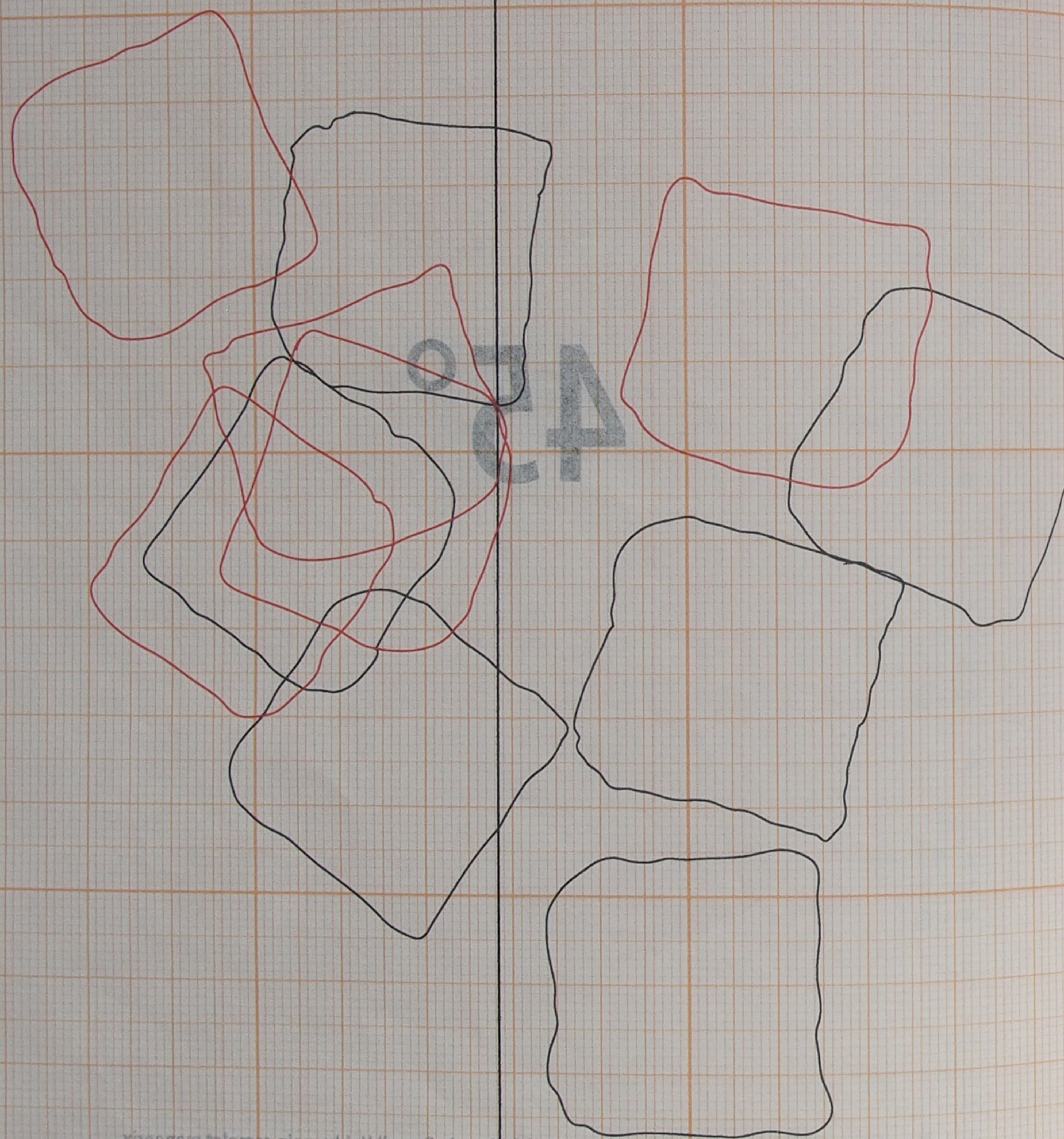
f=1  
(0,0; 3,0) q  
m=30  
p=30

45°



25 mai, 16h05, temps humide, 20°+ \_2 // Grille pain Russell Hobbs, pain complet monoprix





22 mai 19102 temps humide 20-2 // pluie bain Russell Hoppé bain complet monobûx

1.

t=1  
 p(8,9;7,5)  
 mi=40  
 mf=36

2.

t=1  
 p(40,8;-4,4)  
 mi=39  
 mf=36

3.

t=1  
 p(23,5;10)  
 mi=40  
 mf=37

4.

t=1  
 p(32,2;18,9)  
 mi=40  
 mf=36

5.

t=1  
 p(19,1;-5,2)  
 mi=43  
 mf=39

6.

t=1  
 p(28,5;-8,9)  
 mi=39  
 mf=36

1.  
 t=1  
 p(8,9;7,5)  
 mi=40  
 mf=36

2.  
 t=1  
 p(40,8;-4,4)  
 mi=39  
 mf=36

3.  
 t=1  
 p(23,5;10)  
 mi=40  
 mf=37

4.  
 t=1  
 p(32,2;18,9)  
 mi=40  
 mf=36

5.  
 t=1  
 p(19,1;-5,2)  
 mi=43  
 mf=39



7.

t=4  
p(27,7;-11,6)  
mi=38  
mf=33

8.

t=4  
p(33,6;-6,1)  
mi=39  
mf=33

9.

t=4  
p(33,6;-6)  
mi=38  
mf=33

10.

t=4  
p(44,2;-15,8)  
mi=42  
mf=35

11.

t=4  
p(36,8;11,8)  
mi=42  
mf=36

r  
f=7  
(2,7;0,8)q  
08=im  
28=7m

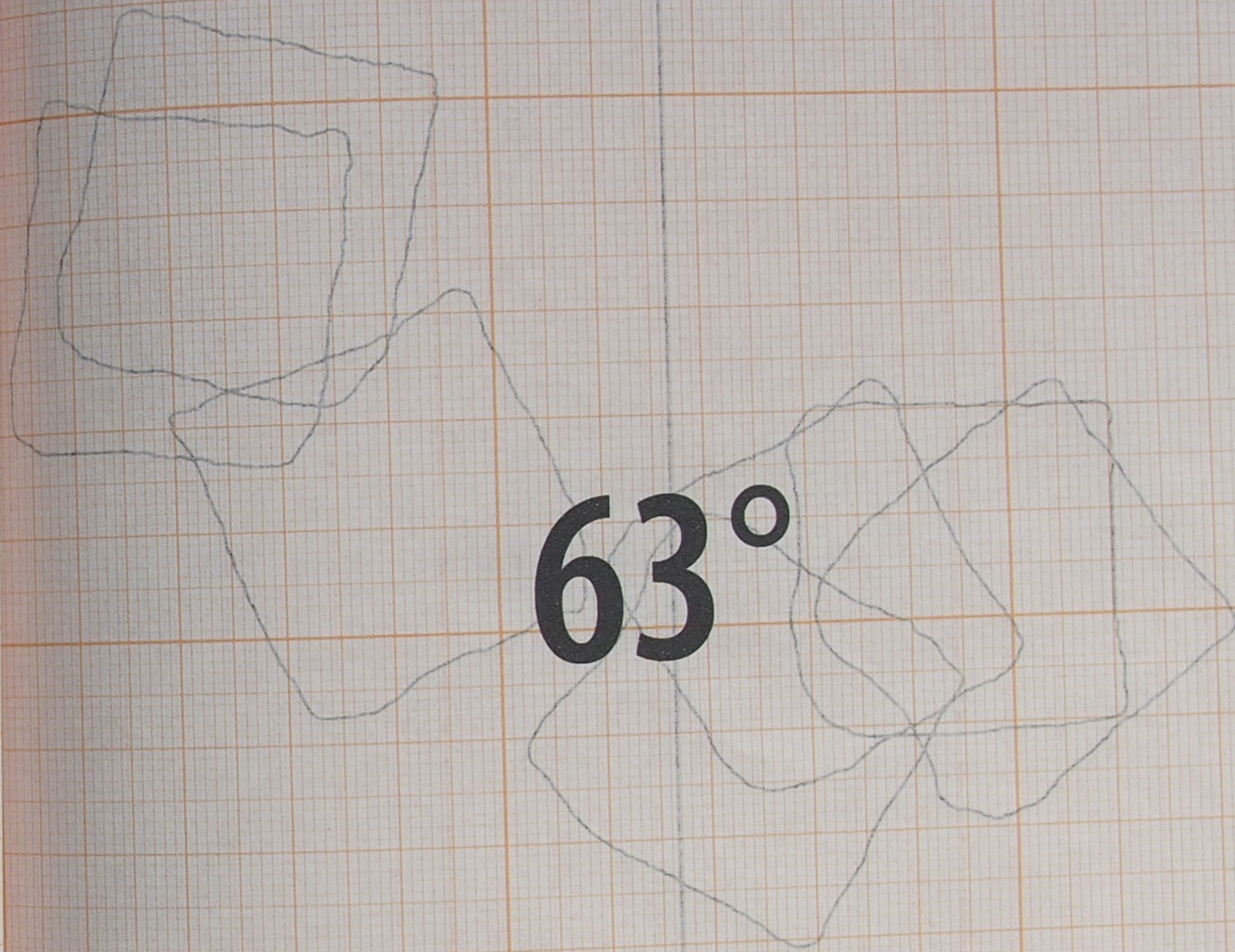
s  
f=7  
(4,2;8,0)q  
08=im  
28=7m

3  
f=7  
(0,7;2,8)q  
08=im  
28=7m

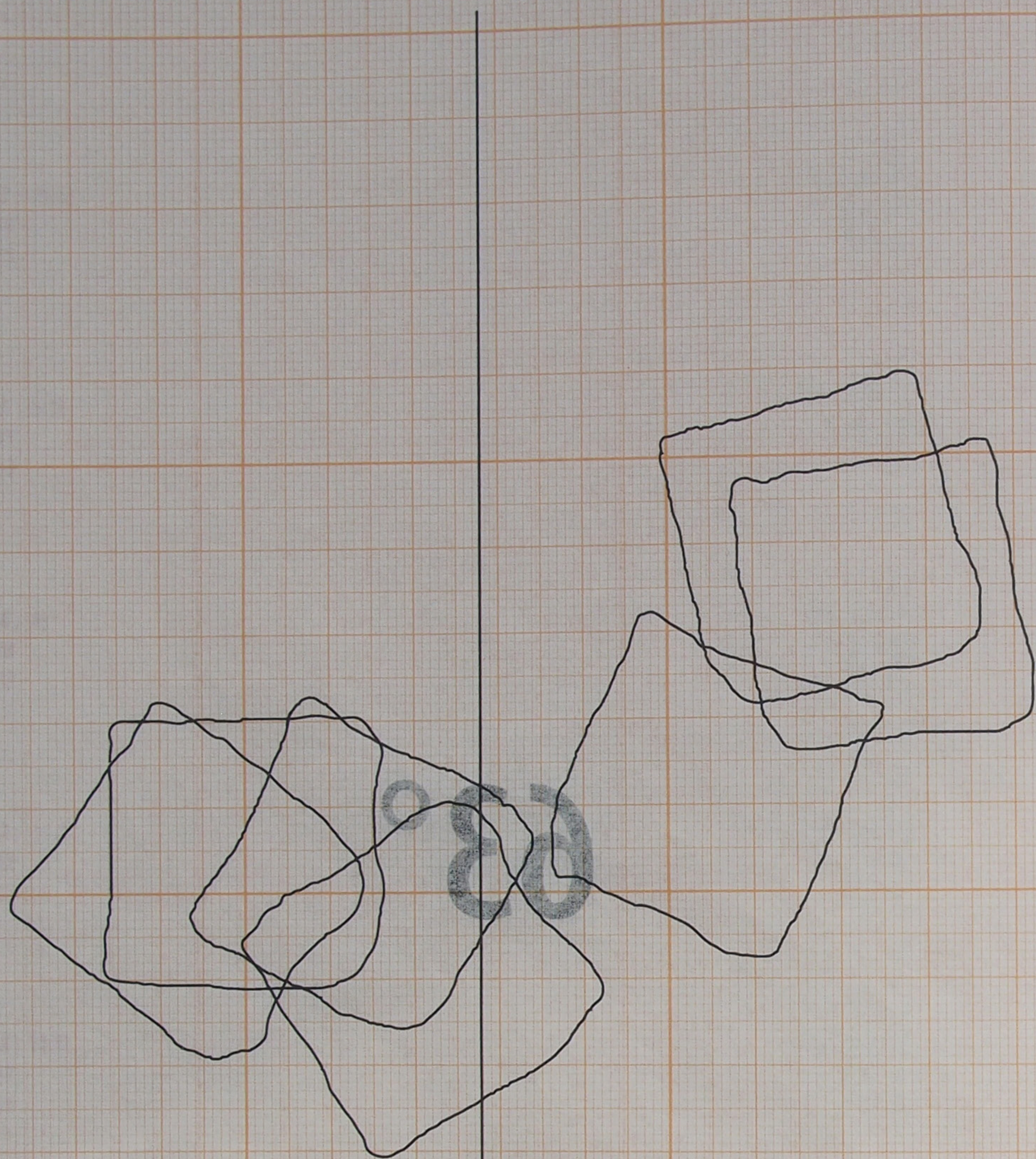
4  
f=7  
(0,8;3,5)q  
08=im  
28=7m

2  
f=7  
(3,2;-1,0)q  
08=im  
28=7m

0  
f=7  
(0,8;-2,8)q  
08=im  
28=7m







25 mai, forêt, temps humide, 50°+5. M. Gille pain Russell Hobbs, pain complet monoprix

1.

t=1  
 $p(23,3; 0,4)$   
 mi = 39  
 mf = 37

2.

t=1  
 $p(40,8; -4,4)$   
 mi = 39  
 mf = 36

3.

t=1  
 $p(23,5; 10)$   
 mi = 39  
 mf = 36

4.

t=1  
 $p(32,2; 18,9)$   
 mi = 40  
 mf = 36

5.

t=1  
 $p(19,1; -5,2)$   
 mi = 38  
 mf = 35

6.

t=1  
 $p(28,5; -8,9)$   
 mi = 38  
 mf = 36

7.

t=1  
 $p(28,5; -8,9)$   
 mi = 39  
 mf = 37

Position et orientation des lignes axes projection



position et orientation des tartines après projection

1  
 $t = 1$   
 $p(33,3; 0,4)$   
 $m_1 = 32$   
 $m_2 = 37$

2  
 $t = 1$   
 $p(40,8; -4,4)$   
 $m_1 = 32$   
 $m_2 = 36$

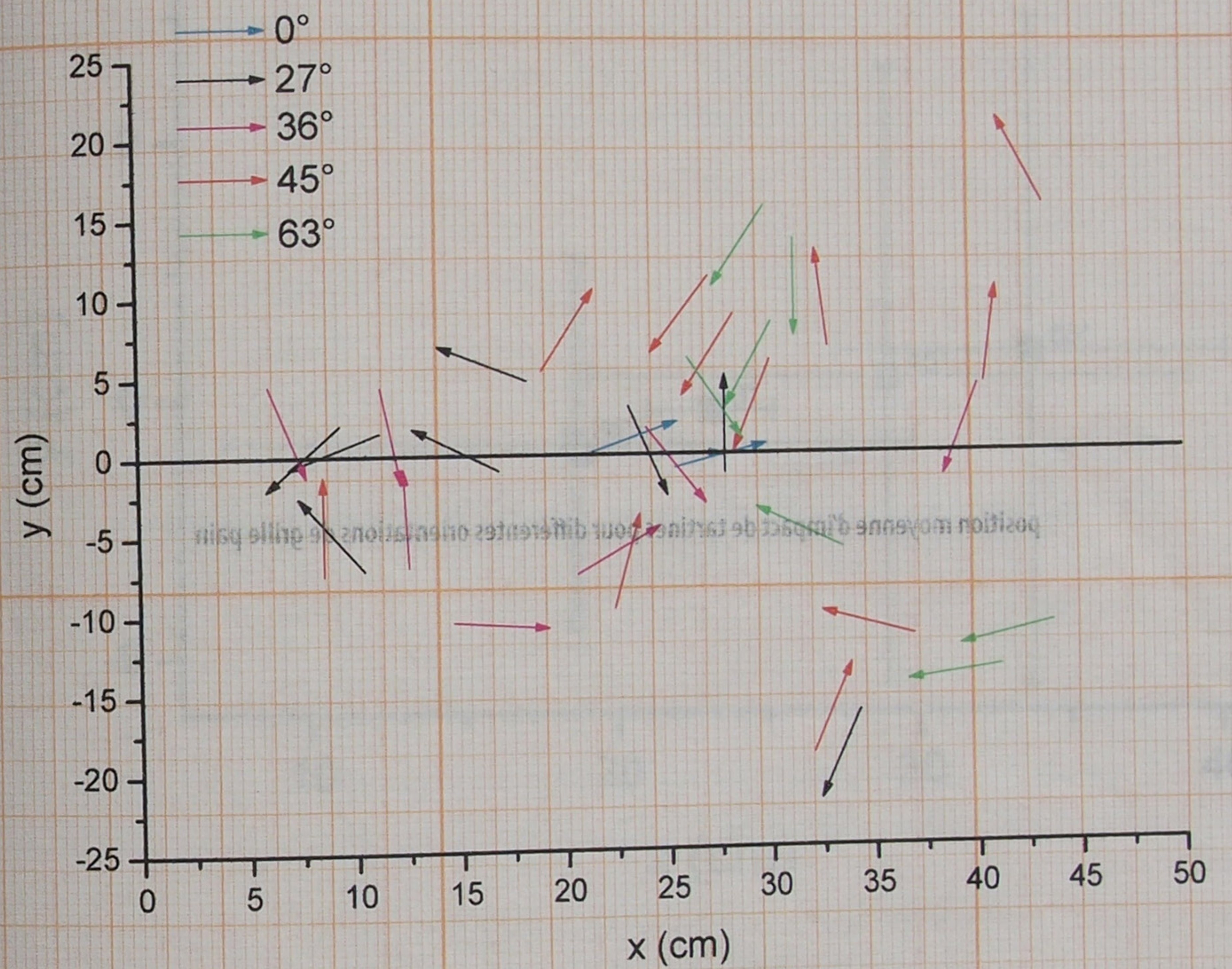
3  
 $t = 1$   
 $p(33,2; 10)$   
 $m_1 = 32$   
 $m_2 = 36$

4  
 $t = 1$   
 $p(32,5; 18,0)$   
 $m_1 = 40$   
 $m_2 = 36$

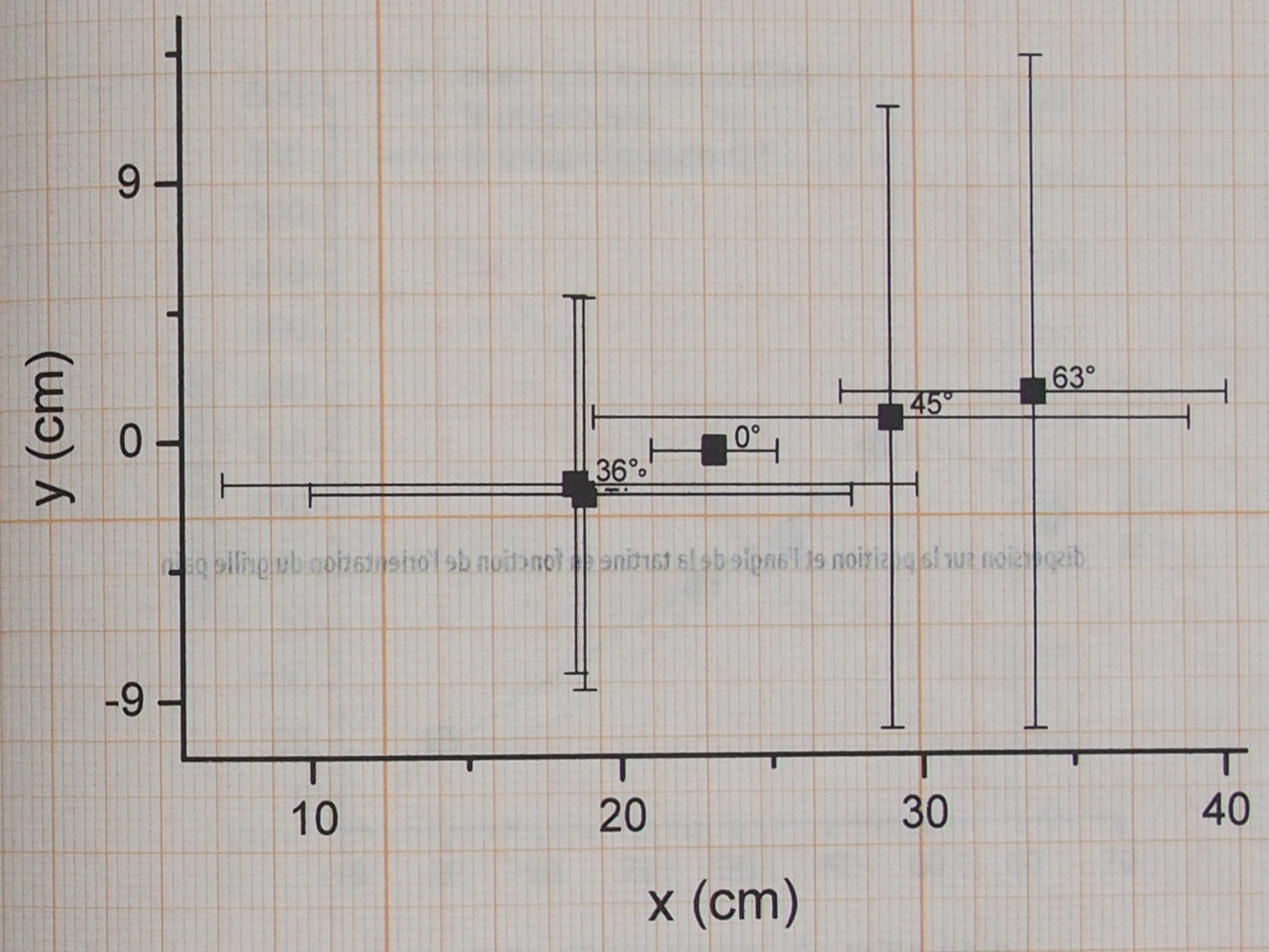
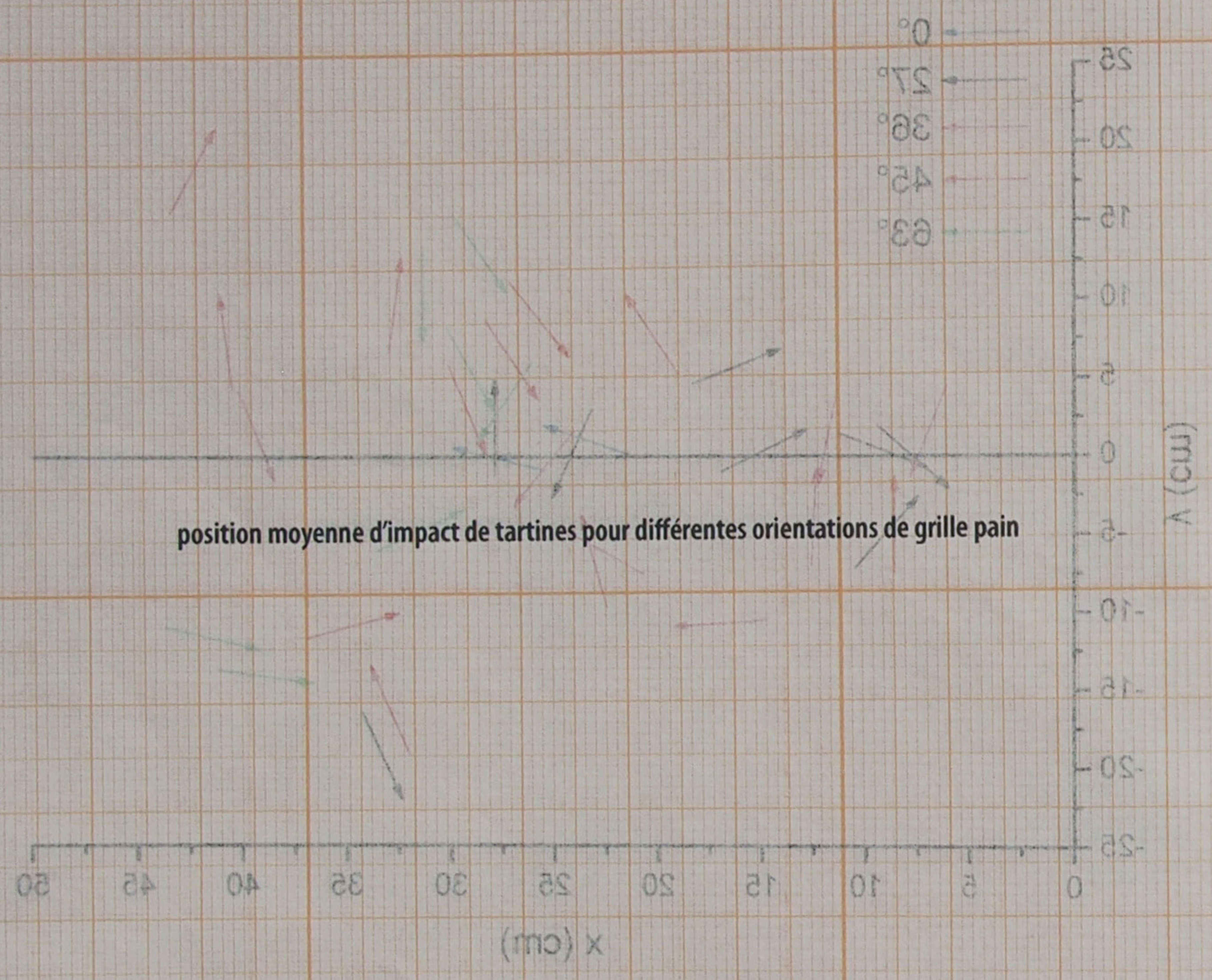
5  
 $t = 1$   
 $p(19,1; -2,5)$   
 $m_1 = 38$   
 $m_2 = 32$

6  
 $t = 1$   
 $p(58,2; -8,2)$   
 $m_1 = 38$   
 $m_2 = 36$

7  
 $t = 1$   
 $p(58,2; -8,2)$   
 $m_1 = 38$   
 $m_2 = 37$

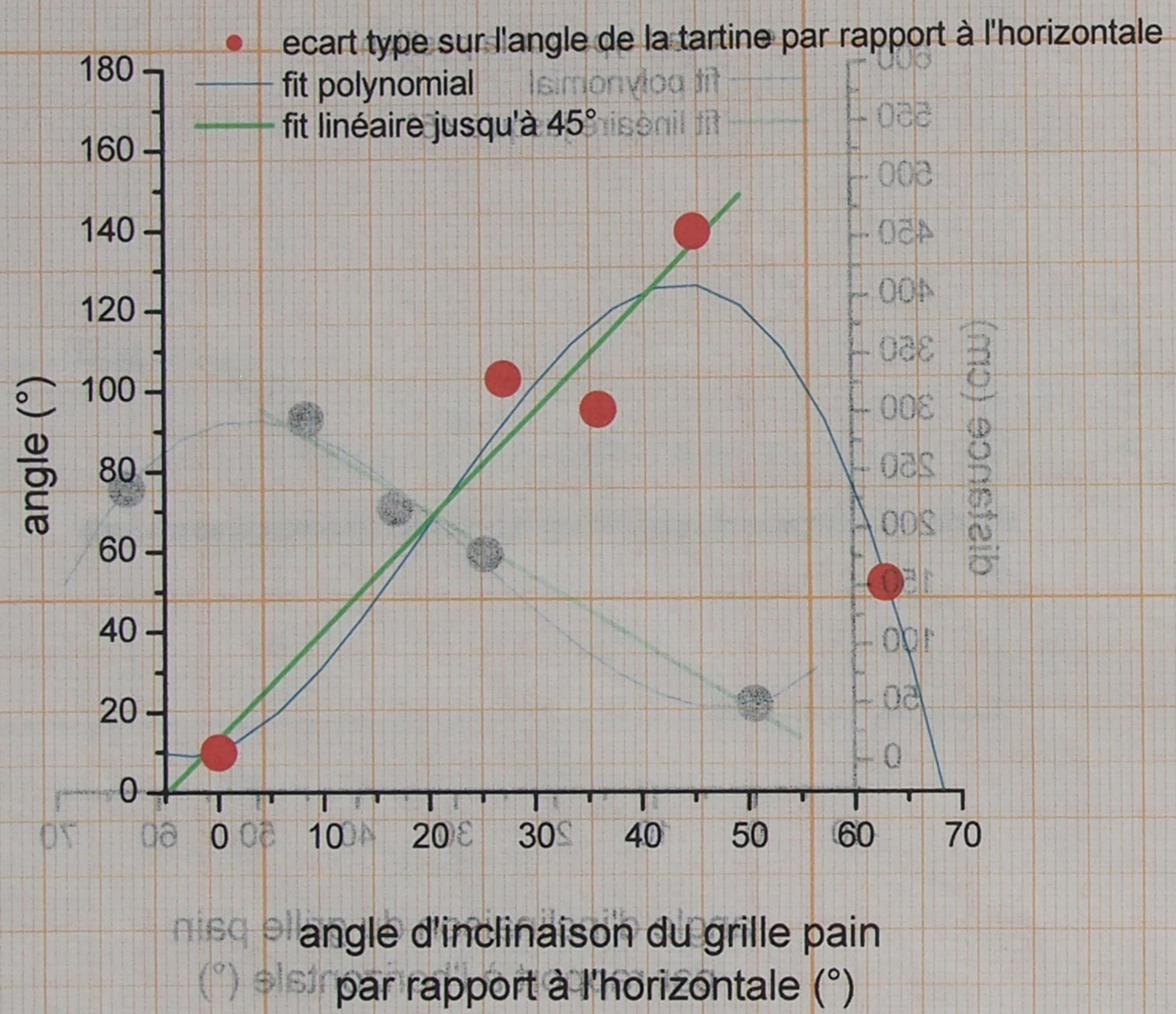






conclusion : la position moyenne de la tartine ne suit pas d'évolution systématique avec l'angle d'inclinaison du grille pain car la dispersion sur cette position est très dominante





Conclusions : jusqu'à un angle de l'ordre de 45°, plus le grille pain est incliné, plus la position et l'angle sont distribués.  
 Au delà de 45°, la dispersion sur la position et l'angle se réduisent.



