

C.I.P.S.

MODELE MATHEMATIQUE  
POLLUTION EN MER DU NORD.

TECHNICAL REPORT.  
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## PRODUCTIVITE PRIMAIRE.

par

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De l'examen des résultats de la croisière 3, il ressort que la situation de septembre est fort semblable à celle du mois d'août et même celle du mois de juin.

Productivité potentielle ( $\text{mg C/m}^3/\text{h}$ ) : 1.Elle est plus grande près de la côte et a le même ordre de grandeur qu'en août et juin-juillet.

2.Le rapport micro-plancton-nannoplancton se maintient semblable au large : part peu importante du microplancton dans la productivité. Plus près de la côte, le rapport s'inverse.

Productivité intégrée ( $\text{mg C/m}^2/\text{j}$ ) : 1.Il y a atténuation sensible du gradient côte-large mais dans une moindre mesure qu'en hiver, la turbidité de l'eau au voisinage des côtes n'atteignant pas les maxima d'hiver.

2.Le rapport micro-nanno se maintient et est plus représentatif que dans le cas de la productivité potentielle, puisqu'il y a pondération (intégration) des différentes valeurs de profondeur. A ce point de vue, la situation particulière de l'embouchure de l'Escaut se dégage fort bien (tant à la croisière 3 qu'à la croisière 1 et même 0): productivité/m<sup>2</sup> faible, à cause de la faible transparence de l'eau) et rapport inversé : beaucoup plus de nannoplancton que de microplancton.

Ici encore, il semble qu'on puisse utiliser ces rapports comme traceurs de masses d'eau.

3.A la station 70 on a remarqué le phénomène suivant : la productivité est plus élevée dans l'échantillon préfiltré (40  $\mu\text{m}$ ) que dans l'échantillon total (cf station 9, croisière 1) : on a soustrait le phytoplancton préfiltré à un effet de grazing considérable (probablement par la population importante de Rotifères signalée en ce point). Il est possible que cet effet se produit dans tous les cas mais que le phénomène ne soit sensible que s'il n'y a pas de réserve de microplancton suffisante (en principe moins broutée que le nannoplancton).

Productivité potentielle : la valeur de productivité potentielle est indépendante des variables transparence et durée du jour, puisque l'incubation se fait in vitro en conditions d'éclairage standard. Cette valeur est directement proportionnelle au pouvoir de production (et donc de métabolisation) d'un volume d'eau et peut donc être directement confrontée avec des résultats similaires obtenus en d'autres points ou lors d'autres croisières de même qu'avec des teneurs en nutriments.

On ne peut définir de situation anormale par rapport à une valeur de référence dans le cas de la productivité et probablement dans le cas de bon nombre de paramètres biologiques : en effet, les valeurs varient

a. au cours de l'année en passant par un ou deux maxima et sans qu'on puisse lier avec précision cette évolution à la variable temporelle.

b. elles varient également selon la distance à la côte.

Les distributions de fréquence pour l'ensemble de nos résultats de 1971 illustrent bien ces deux aspects : a) dispersion croissante des valeurs de productivité de l'hiver vers l'été.

b) valeurs modales pour des productivités faibles, puisque la majorité des échantillons sont pris plutôt au large que près de la côte.

Une situation anormale ne pourra donc se définir qu'à partir d'une comparaison prudente avec des résultats obtenus pour des échantillons pris à la même époque et dans des situations similaires. Une pollution se déduira probablement mieux par une chute du rapport productivité/chlorophylle.

Pour choisir une valeur de référence tout à fait centrale, nous avons calculé les médianes de chaque distribution : croisière 0 : classe 0 à 5 mg C/m<sup>3</sup>/h

1 : 5 10

2 : 10 15

3 : 10 15

Nous proposons la valeur 10 mg C/m<sup>3</sup>/h comme valeur pivot. Il suffit donc de diviser tous les résultats de nos rapports par 10.

Productivité intégrée : Un calcul similaire est utilisé dans le cas de la prod. intégrée.

croisière 0 : médiane = 100

1 : 1000

2 : 2000

3 : 1600

La valeur pivot est arbitrairement fixée à 1000 mg C/m<sup>2</sup>/jour. Il suffit donc de diviser tous les résultats de nos rapports par 1000.

Rem. : la valeur pivot 10 était déjà utilisée dans le programme POT.PR pour le calcul du rayon du cercle dont l'aire est proportionnelle à la productivité potentielle (DIAGRAM CONSTRUCTION (NO MAX AREA)) de sorte que cette aire ne variait que dans des limites acceptables (avec R=4 pour productivité = 10). C'est ce mode de représentation que nous utilisons pour nos graphiques.

CRUISE 0

CRUISE 1

CRUISE 2

CRUISE 3

0-5 5-10 10-15 15-20 20-25 25-30

0-5 5-10 10-15 15-20 20-25

30-35 35-40

45-50 50-55

55-60

0-5 5-10 10-15 15-20 20-25 25-30 30-35 35-40

55-60

Potential productivity:  
Frequency distributions

CRUISE ZERO

POT-PR 12:07 TS-BRU 30/09/71

PRIMARY PRODUCTIVITY EKOLOGIE EN SYSTEMATIEK V.U.B.

MECHELEN 1 M01 23 0171 1400

|    |                 |     |      |     |
|----|-----------------|-----|------|-----|
| 0m | PPR TOTAL PHYTO | 100 | 3.97 | 100 |
|    | PPR NANNOPLANKT | 100 | 2.4  | 60  |
| 1m | PPR TOTAL PHYTO | 10  | 3.24 | 100 |
|    | PPR NANNOPLANKT | 10  | 2.33 | 71  |
| 2m | PPR TOTAL PHYTO | 1   | 3.74 | 100 |
|    | PPR NANNOPLANKT | 1   | 2.43 | 64  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 3 A= 142  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 2.52

MECHELEN 2 M02 28 0171 1430

|    |                 |     |      |     |
|----|-----------------|-----|------|-----|
| 0m | PPR TOTAL PHYTO | 100 | 2.6  | 100 |
|    | PPR NANNOPLANKT | 100 | 2.61 | 100 |
| 1m | PPR TOTAL PHYTO | 1   | 3.71 | 100 |
|    | PPR NANNOPLANKT | 1   | 3.06 | 82  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 2.43 A= 0  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 2.03

MECHELEN 3 M03 30 0171 1400

|    |                 |     |      |     |
|----|-----------------|-----|------|-----|
| 0m | PPR TOTAL PHYTO | 100 | 3.62 | 100 |
|    | PPR NANNOPLANKT | 100 | 2.02 | 55  |
| 2m | PPR TOTAL PHYTO | 10  | 3.64 | 100 |
|    | PPR NANNOPLANKT | 10  | 2.49 | 68  |
| 4m | PPR TOTAL PHYTO | 1   | 3.55 | 100 |
|    | PPR NANNOPLANKT | 1   | 2.31 | 65  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 2.86 A= 159  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 2.4

MECHELEN 4 M04 310171 1015

2.

|     |                 |     |      |     |
|-----|-----------------|-----|------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 1.07 | 100 |
|     | PPR NANNOPLANKT | 100 | 1.23 | 62  |
| 7m  | PPR TOTAL PHYTO | 10  | 2.04 | 100 |
|     | PPR NANNOPLANKT | 10  | 1.08 | 52  |
| 14m | PPR TOTAL PHYTO | 1   | 1.93 | 100 |
|     | PPR NANNOPLANKT | 1   | 1    | 51  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 2.11 A= 135  
 DIAGRAM CONSTRUCTION (NO MAX AREA) : R= 1.77

MECHELEN 5 M05 020271 1330

|    |                 |     |      |     |
|----|-----------------|-----|------|-----|
| 0m | PPR TOTAL PHYTO | 100 | 2.35 | 100 |
|    | PPR NANNOPLANKT | 100 | 1.24 | 52  |
| 3m | PPR TOTAL PHYTO | 10  | 2.47 | 100 |
|    | PPR NANNOPLANKT | 10  | 1.2  | 48  |
| 6m | PPR TOTAL PHYTO | 1   | 1.88 | 100 |
|    | PPR NANNOPLANKT | 1   | 1.25 | 66  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 2.31 A= 170  
 DIAGRAM CONSTRUCTION (NO MAX AREA) : R= 1.93

MECHELEN 6 M06 040271 1200

|     |                 |     |      |     |
|-----|-----------------|-----|------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 3.56 | 100 |
|     | PPR NANNOPLANKT | 100 | 1.04 | 29  |
| 5m  | PPR TOTAL PHYTO | 10  | 3.45 | 100 |
|     | PPR NANNOPLANKT | 10  | 1.07 | 31  |
| 10m | PPR TOTAL PHYTO | 1   | 3.9  | 100 |
|     | PPR NANNOPLANKT | 1   | 1.24 | 31  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 2.84 A= 254  
 DIAGRAM CONSTRUCTION (NO MAX AREA) : R= 2.38

MECHELEN 7 M07 050271 0930

|    |                 |     |      |     |
|----|-----------------|-----|------|-----|
| 0m | PPR TOTAL PHYTO | 100 | 4.62 | 100 |
|    | PPR NANNOPLANKT | 100 | 3.56 | 77  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 3.24 A= 82  
 DIAGRAM CONSTRUCTION (NO MAX AREA) : R= 2.71

MECHELEN 8 M08 020271 0930

*non prise dans réseau . Station à 1km  
 au large d'Ostende*

|    |                 |     |      |     |
|----|-----------------|-----|------|-----|
| 0m | PPR TOTAL PHYTO | 100 | 7.03 | 100 |
|    | PPR NANNOPLANKT | 100 | 7.18 | 102 |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 3.99 A= 0  
 DIAGRAM CONSTRUCTION (NO MAX AREA) : R= 3.35

MECHELEN 8 M08020271 0930

|                         |    |     |
|-------------------------|----|-----|
| TOTAL PROD. MG C/M2/DAY | 91 | 100 |
| NANNO PROD. MG C/M2/DAY | 93 | 102 |

DIAGRAM CONSTRUCTION: R= .85 A=-8

INT.PR

15:26

TS-BRU 30/09/71

PRIMARY PRODUCTIVITY EKOLOGIE EN SYSTEMATIEK V.U.B.

MECHELEN 1 M01 230171 1400

|                         |    |     |
|-------------------------|----|-----|
| TOTAL PROD. MG C/M2/DAY | 62 | 100 |
| NANNO PROD. MG C/M2/DAY | 41 | 66  |

DIAGRAM CONSTRUCTION: R= .7 A= 121

MECHELEN 2 M02 280171 1430

|                         |    |     |
|-------------------------|----|-----|
| TOTAL PROD. MG C/M2/DAY | 26 | 100 |
| NANNO PROD. MG C/M2/DAY | 24 | 92  |

DIAGRAM CONSTRUCTION: R= .45 A= 27

MECHELEN 3 M03 300171 1400

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 125 | 100 |
| NANNO PROD. MG C/M2/DAY | 78  | 62  |

DIAGRAM CONSTRUCTION: R= .99 A= 135

MECHELEN 4 M04 310171 1015

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 112 | 100 |
| NANNO PROD. MG C/M2/DAY | 63  | 56  |

DIAGRAM CONSTRUCTION: R= .94 A= 157

MECHELEN 5 M05 020271 1330

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 120 | 100 |
| NANNO PROD. MG C/M2/DAY | 64  | 53  |

DIAGRAM CONSTRUCTION: R= .97 A= 168

MECHELEN 6 M06 040271 1200

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 311 | 100 |
| NANNO PROD. MG C/M2/DAY | 95  | 30  |

DIAGRAM CONSTRUCTION: R= 1.57 A= 250

MECHELEN 7 M07 050271 0930

|                         |    |     |
|-------------------------|----|-----|
| TOTAL PROD. MG C/M2/DAY | 80 | 100 |
| NANNO PROD. MG C/M2/DAY | 61 | 76  |

DIAGRAM CONSTRUCTION: R= .79 A= 85

POT.PR

12:20

TS-BRU 30/09/71

PRIMARY PRODUCTIVITY EKOLOGIE EN SYSTEMATIEK V.U.B.

MECHELEN 1

M06 230671

1205

|                      |     |       |     |
|----------------------|-----|-------|-----|
| 0m PPR TOTAL PHYTO   | 100 | 21.82 | 100 |
| PPR NANNOPLANKT      | 100 | 18.12 | 83  |
| 2.5m PPR TOTAL PHYTO | 1   | 27.94 | 100 |
| PPR NANNOPLANKT      | 1   | 19.4  | 69  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 3.99 A = 61  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 5.9

MECHELEN 2

M09 240671

1215

|                     |     |      |     |
|---------------------|-----|------|-----|
| 0m PPR TOTAL PHYTO  | 100 | 3.62 | 100 |
| PPR NANNOPLANKT     | 100 | 5.47 | 151 |
| 13m PPR TOTAL PHYTO | 10  | 3.83 | 100 |
| PPR NANNOPLANKT     | 10  | 3.92 | 102 |
| 27m PPR TOTAL PHYTO | 1   | 3.5  | 100 |
| PPR NANNOPLANKT     | 1   | 6.53 | 186 |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.62 A = 0  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 2.4

MECHELEN 3

M07 250671

0945

|                     |     |       |     |
|---------------------|-----|-------|-----|
| 0m PPR TOTAL PHYTO  | 100 | 12.66 | 100 |
| PPR NANNOPLANKT     | 100 | 2.93  | 23  |
| 8m PPR TOTAL PHYTO  | 10  | 12.91 | 100 |
| PPR NANNOPLANKT     | 10  | 2.92  | 22  |
| 16m PPR TOTAL PHYTO | 1   | 13.25 | 100 |
| PPR NANNOPLANKT     | 1   | 3.53  | 26  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 3.04 A = 276  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 4.5

MECHELEN 4

M01 280671

1230

|                    |     |       |     |
|--------------------|-----|-------|-----|
| 0m PPR TOTAL PHYTO | 100 | 20.99 | 100 |
| PPR NANNOPLANKT    | 100 | 16.74 | 79  |
| 1m PPR TOTAL PHYTO | 10  | 26.97 | 100 |
| PPR NANNOPLANKT    | 10  | 15.56 | 57  |
| 3m PPR TOTAL PHYTO | 1   | 24.8  | 100 |
| PPR NANNOPLANKT    | 1   | 16.8  | 67  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 3.92 A = 72  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 5.79

## MECHELEN 5

M04290671

1240

6.

|     |                 |     |      |     |
|-----|-----------------|-----|------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 3.05 | 100 |
|     | PPR NANNOPLANKT | 100 | 2.48 | 81  |
| 12m | PPR TOTAL PHYTO | 10  | 3.93 | 100 |
|     | PPR NANNOPLANKT | 10  | 3.86 | 98  |
| 24m | PPR TOTAL PHYTO | 1   | 3.63 | 100 |
|     | PPR NANNOPLANKT | 1   | 3.98 | 109 |

DIAGRAM CONSTRUCTION(WITH MAX AREA, R=4 CM):R= 1.49 A = 67  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) :R= 2.2

## MECHELEN 6

M02300671

1230

|       |                 |     |      |     |
|-------|-----------------|-----|------|-----|
| 0m    | PPR TOTAL PHYTO | 100 | 5.91 | 100 |
|       | PPR NANNOPLANKT | 100 | 3.3  | 55  |
| 7m    | PPR TOTAL PHYTO | 10  | 3.6  | 100 |
|       | PPR NANNOPLANKT | 10  | 3.3  | 91  |
| 13.5m | PPR TOTAL PHYTO | 1   | 3.49 | 100 |
|       | PPR NANNOPLANKT | 1   | 3.21 | 91  |

DIAGRAM CONSTRUCTION(WITH MAX AREA, R=4 CM):R= 2.08 A = 158  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) :R= 3.07

## MECHELEN 7

M03010771

1215

|      |                 |     |      |     |
|------|-----------------|-----|------|-----|
| 0m   | PPR TOTAL PHYTO | 100 | 3.81 | 100 |
|      | PPR NANNOPLANKT | 100 | 3.74 | 98  |
| 9.5m | PPR TOTAL PHYTO | 10  | 4.98 | 100 |
|      | PPR NANNOPLANKT | 10  | 4.46 | 89  |
| 15m  | PPR TOTAL PHYTO | 1   | 5.06 | 100 |
|      | PPR NANNOPLANKT | 1   | 4.18 | 82  |

DIAGRAM CONSTRUCTION(WITH MAX AREA, R=4 CM):R= 1.67 A = 6  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) :R= 2.46

## MECHELEN 8

M05020771

0930

|      |                 |     |       |     |
|------|-----------------|-----|-------|-----|
| 0m   | PPR TOTAL PHYTO | 100 | 17.07 | 100 |
|      | PPR NANNOPLANKT | 100 | 13.95 | 81  |
| 3.5m | PPR TOTAL PHYTO | 1   | 20.75 | 100 |
|      | PPR NANNOPLANKT | 1   | 9.2   | 44  |

DIAGRAM CONSTRUCTION(WITH MAX AREA, R=4 CM):R= 3.53 A = 65  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) :R= 5.22

MECHELEN 9

M108050771

1230

7.

|     |                 |     |      |     |
|-----|-----------------|-----|------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 3.49 | 100 |
|     | PPR NANNOPLANKT | 100 | 1.76 | 50  |
| 11m | PPR TOTAL PHYTO | 10  | 6.18 | 100 |
|     | PPR NANNOPLANKT | 10  | 2.43 | 39  |
| 22m | PPR TOTAL PHYTO | 1   | 3.7  | 100 |
|     | PPR NANNOPLANKT | 1   | 1.62 | 43  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.59  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 2.36

A = 178

MECHELEN 10

M11070771

1500

|       |                 |     |      |     |
|-------|-----------------|-----|------|-----|
| 0m    | PPR TOTAL PHYTO | 100 | 2.63 | 100 |
|       | PPR NANNOPLANKT | 100 | .95  | 36  |
| 7m    | PPR TOTAL PHYTO | 10  | 3.86 | 100 |
|       | PPR NANNOPLANKT | 10  | 1.95 | 50  |
| 13.5m | PPR TOTAL PHYTO | 1   | 8.26 | 100 |
|       | PPR NANNOPLANKT | 1   | 1.99 | 24  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.38  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 2.05

A = 299

MECHELEN 11

M12080771

1215

|     |                 |     |      |     |
|-----|-----------------|-----|------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 3.43 | 100 |
|     | PPR NANNOPLANKT | 100 | 2.21 | 64  |
| 11m | PPR TOTAL PHYTO | 10  | 3.94 | 100 |
|     | PPR NANNOPLANKT | 10  | 3.72 | 94  |
| 22m | PPR TOTAL PHYTO | 1   | 3.28 | 100 |
|     | PPR NANNOPLANKT | 1   | 3    | 91  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.58  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 2.34

A = 128

MECHELEN 12

M13080771

1500

|       |                 |     |      |     |
|-------|-----------------|-----|------|-----|
| 0m    | PPR TOTAL PHYTO | 100 | 2.82 | 100 |
|       | PPR NANNOPLANKT | 100 | 1.74 | 61  |
| 13.5m | PPR TOTAL PHYTO | 10  | 4.34 | 100 |
|       | PPR NANNOPLANKT | 10  | 1.74 | 40  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.43  
 DIAGRAM CONSTRUCTION (NO MAX AREA ) : R= 2.12

A = 137

MECHELEN 13 M14 090771 1225

|     |                 |    |      |     |
|-----|-----------------|----|------|-----|
| 15m | PPR TOTAL PHYTO | 10 | 5.04 | 100 |
|     | PPR NANNOPLANKT | 10 | 2.89 | 57  |
| 30m | PPR TOTAL PHYTO | 1  | 5    | 100 |
|     | PPR NANNOPLANKT | 1  | 2.93 | 58  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 1.91 A=151  
DIAGRAM CONSTRUCTION (NO MAX AREA ) :R= 2.83

MECHELEN 14 M 15 090771 1500

|     |                 |     |      |     |
|-----|-----------------|-----|------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 1.71 | 100 |
|     | PPR NANNOPLANKT | 100 | 1.65 | 96  |
| 16m | PPR TOTAL PHYTO | 10  | 3.3  | 100 |
|     | PPR NANNOPLANKT | 10  | 3.19 | 96  |
| 32m | PPR TOTAL PHYTO | 1   | 3.01 | 100 |
|     | PPR NANNOPLANKT | 1   | 2.25 | 74  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 1.11 A=12  
DIAGRAM CONSTRUCTION (NO MAX AREA ) :R= 1.65

INT.PR

15:34 TS-BRU 30/09/71

PRIMARY PRODUCTIVITY EKOLOGIE EN SYSTEMATIEK V.U.B.

MECHELEN 1 M06 230671 1205

TOTAL PROD. MG C/M2/DAY 793 100

NANNO PROD. MG C/M2/DAY 612 77

DIAGRAM CONSTRUCTION: R= 2.51 A= 82

MECHELEN 2 M09 240671 1215

TOTAL PROD. MG C/M2/DAY 1205 100

NANNO PROD. MG C/M2/DAY 1656 137

DIAGRAM CONSTRUCTION: R= 3.1 A=-135

MECHELEN 3 M07 250671 0945

TOTAL PROD. MG C/M2/DAY 2526 100

NANNO PROD. MG C/M2/DAY 599 23

DIAGRAM CONSTRUCTION: R= 4.49 A= 274

MECHELEN 4 M01 280671 1230

TOTAL PROD. MG C/M2/DAY 789 100

NANNO PROD. MG C/M2/DAY 532 67

DIAGRAM CONSTRUCTION: R= 2.51 A= 117

MECHELEN 5 M04 290671 1240

TOTAL PROD. MG C/M2/DAY 1036 100

NANNO PROD. MG C/M2/DAY 982 94

DIAGRAM CONSTRUCTION: R= 2.87 A= 18

MECHELEN 6 M02 300671 1230

TOTAL PROD. MG C/M2/DAY 737 100

NANNO PROD. MG C/M2/DAY 537 72

DIAGRAM CONSTRUCTION: R= 2.42 A= 97

MECHELEN 7 M03 010771 1215

TOTAL PROD. MG C/M2/DAY 1037 100

NANNO PROD. MG C/M2/DAY 943 90

DIAGRAM CONSTRUCTION: R= 2.88 A= 32

MECHELEN 8 M05 020771 0930

10.

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 856 | 100 |
| NANNO PROD. MG C/M2/DAY | 556 | 64  |

DIAGRAM CONSTRUCTION: R= 2.61 A= 126

MECHELEN 9 M08 050771 1230

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1136 | 100 |
| NANNO PROD. MG C/M2/DAY | 493  | 43  |

DIAGRAM CONSTRUCTION: R= 3.01 A= 203

MECHELEN 10 M11 070771 1500

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 655 | 100 |
| NANNO PROD. MG C/M2/DAY | 240 | 36  |

DIAGRAM CONSTRUCTION: R= 2.28 A= 228

MECHELEN 11 M12 080771 1215

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 889 | 100 |
| NANNO PROD. MG C/M2/DAY | 734 | 82  |

DIAGRAM CONSTRUCTION: R= 2.66 A= 62

MECHELEN 12 M13 080771 1500

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1160 | 100 |
| NANNO PROD. MG C/M2/DAY | 565  | 48  |

DIAGRAM CONSTRUCTION: R= 3.04 A= 184

MECHELEN 13 M14 090771 1225

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1704 | 100 |
| NANNO PROD. MG C/M2/DAY | 987  | 57  |

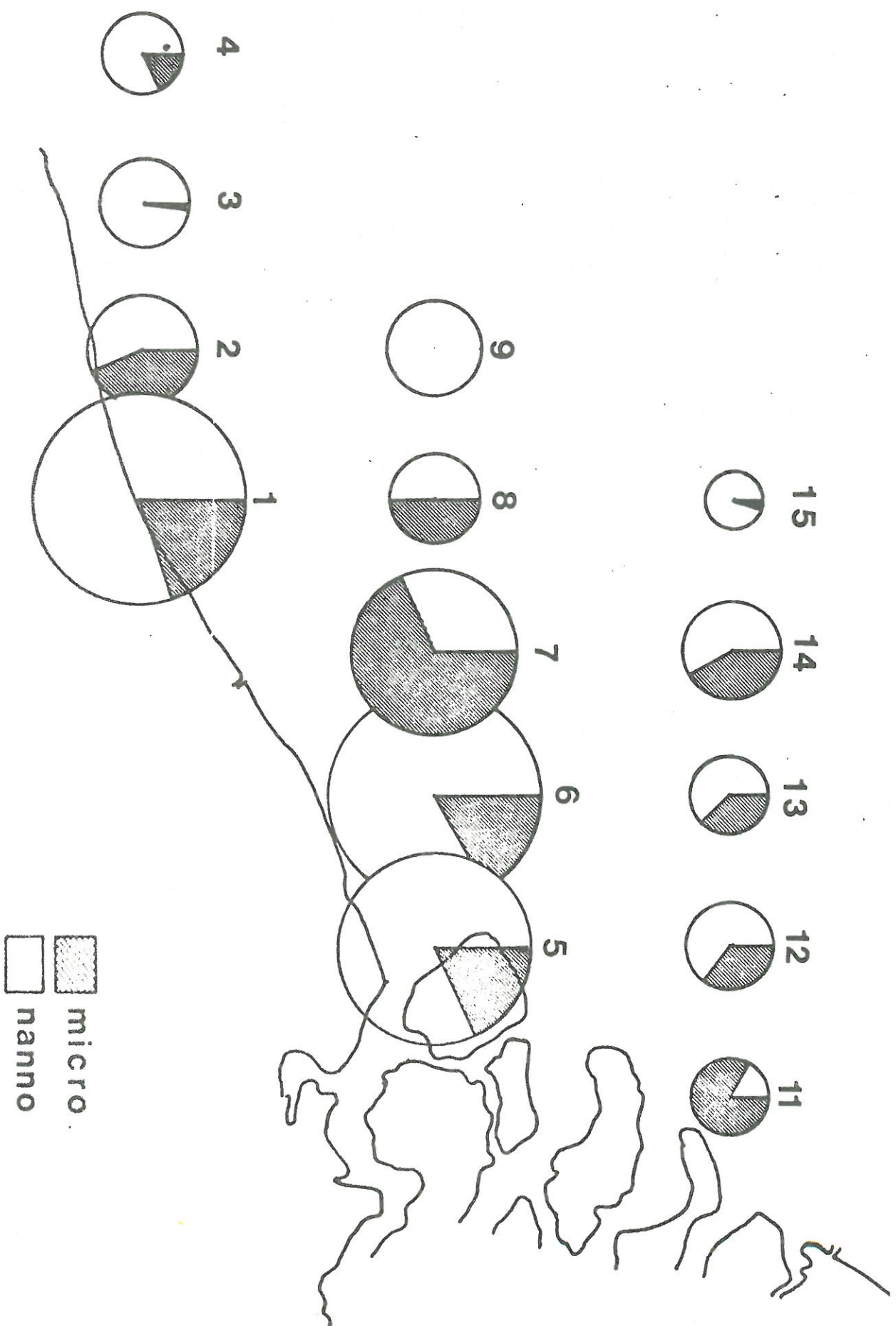
DIAGRAM CONSTRUCTION: R= 3.69 A= 151

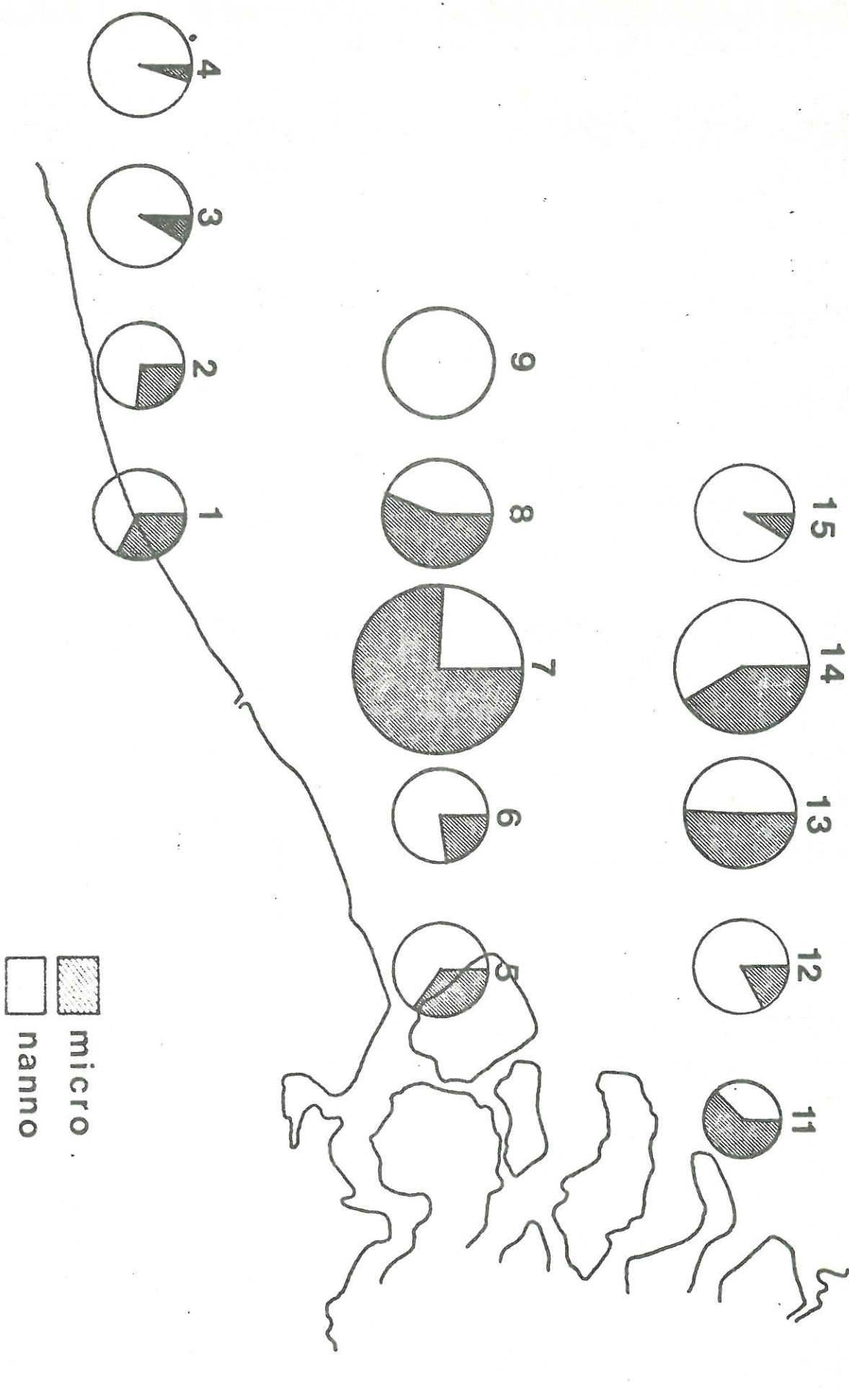
MECHELEN 14 M15 090771 1500

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 966 | 100 |
| NANNO PROD. MG C/M2/DAY | 884 | 91  |

DIAGRAM CONSTRUCTION: R= 2.77 A= 30

# POT. PR CRUISE 1





INT. PR CRUISE 1

## PRIMARY PRODUCTIVITY EKOLOGIE EN SYSTEMATIEK V.U.B.

MECHELEN 1 M16 170871 1115

|       |                 |     |       |     |
|-------|-----------------|-----|-------|-----|
| 0m    | PPR TOTAL PHYTO | 100 | 16.69 | 100 |
|       | PPR NANNOPLANKT | 100 | 2.17  | 13  |
| 6m    | PPR TOTAL PHYTO | 10  | 45.04 | 100 |
|       | PPR NANNOPLANKT | 10  | 3.32  | 7   |
| 11.5m | PPR TOTAL PHYTO | 1   | 36.25 | 100 |
|       | PPR NANNOPLANKT | 1   | 6     | 16  |

DIAGRAM CONSTRUCTION(WITH MAX AREA, R=4 CM):R= 2.8 A= 313

DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 5.16 A= 313

MECHELEN 2 M17 170871 1245

|       |                 |     |       |     |
|-------|-----------------|-----|-------|-----|
| 0m    | PPR TOTAL PHYTO | 100 | 13.85 | 100 |
|       | PPR NANNOPLANKT | 100 | .75   | 5   |
| 6.5m  | PPR TOTAL PHYTO | 10  | 15.57 | 100 |
|       | PPR NANNOPLANKT | 10  | 2.15  | 13  |
| 14.5m | PPR TOTAL PHYTO | 1   | 15.24 | 100 |
|       | PPR NANNOPLANKT | 1   | 1.35  | 8   |

DIAGRAM CONSTRUCTION(WITH MAX AREA, R=4 CM):R= 2.55 A= 340

DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 4.7 A= 340

MECHELEN 3 M18 180871 1115

|     |                 |     |       |     |
|-----|-----------------|-----|-------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 23.23 | 100 |
|     | PPR NANNOPLANKT | 100 | 4.08  | 17  |
| 7m  | PPR TOTAL PHYTO | 10  | 45.28 | 100 |
|     | PPR NANNOPLANKT | 10  | 3.38  | 7   |
| 16m | PPR TOTAL PHYTO | 1   | 34.19 | 100 |
|     | PPR NANNOPLANKT | 1   | 3.4   | 9   |

DIAGRAM CONSTRUCTION(WITH MAX AREA, R=4 CM):R= 3.3 A= 296

DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 6.09 A= 296

MECHELEN 4 M19 180871 1315

|      |                 |     |      |     |
|------|-----------------|-----|------|-----|
| 0m   | PPR TOTAL PHYTO | 100 | 4.59 | 100 |
|      | PPR NANNOPLANKT | 100 | 3.67 | 79  |
| 9.5m | PPR TOTAL PHYTO | 10  | 7.09 | 100 |
|      | PPR NANNOPLANKT | 10  | 4.51 | 63  |
| 19m  | PPR TOTAL PHYTO | 1   | 6.6  | 100 |
|      | PPR NANNOPLANKT | 1   | 3.97 | 60  |

DIAGRAM CONSTRUCTION(WITH MAX AREA, R=4 CM):R= 1.47 A= 72

DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 2.7 A= 72

MECHELEN 5 M 20190871 1245

|     |                 |     |      |     |
|-----|-----------------|-----|------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 5.53 | 100 |
|     | PPR NANNOPLANKT | 100 | 4.19 | 75  |
| 12m | PPR TOTAL PHYTO | 10  | 7.12 | 100 |
|     | PPR NANNOPLANKT | 10  | 5.44 | 76  |
| 26m | PPR TOTAL PHYTO | 1   | 6.44 | 100 |
|     | PPR NANNOPLANKT | 1   | 5.51 | 85  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 1.61 A= 87  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 2.97 A= 87

MECHELEN 6 M25 240871 1120

|     |                 |     |      |     |
|-----|-----------------|-----|------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 2.64 | 100 |
|     | PPR NANNOPLANKT | 100 | .95  | 35  |
| 15m | PPR TOTAL PHYTO | 10  | 3.42 | 100 |
|     | PPR NANNOPLANKT | 10  | 1.14 | 33  |
| 30m | PPR TOTAL PHYTO | 1   | 3.94 | 100 |
|     | PPR NANNOPLANKT | 1   | 2.49 | 63  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 1.11 A= 230  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 2.05 A= 230

MECHELEN 7 M24 240871 1330

|       |                 |     |      |     |
|-------|-----------------|-----|------|-----|
| 0m    | PPR TOTAL PHYTO | 100 | 2.63 | 100 |
|       | PPR NANNOPLANKT | 100 | .95  | 36  |
| 5.2m  | PPR TOTAL PHYTO | 50  | 1.8  | 100 |
|       | PPR NANNOPLANKT | 50  | .92  | 51  |
| 17.5m | PPR TOTAL PHYTO | 10  | 1.72 | 100 |
|       | PPR NANNOPLANKT | 10  | 2.41 | 140 |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 1.11 A= 229  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 2.05 A= 229

MECHELEN 8 M23 250871 1110

|     |                 |     |      |     |
|-----|-----------------|-----|------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 4.3  | 100 |
|     | PPR NANNOPLANKT | 100 | 2.96 | 68  |
| 10m | PPR TOTAL PHYTO | 10  | 7.03 | 100 |
|     | PPR NANNOPLANKT | 10  | 3.89 | 55  |
| 20m | PPR TOTAL PHYTO | 1   | 10   | 100 |
|     | PPR NANNOPLANKT | 1   | 4.2  | 41  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 1.42 A= 112  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 2.62 A= 112

MECHELEN 9 M22 250871 1345

|     |                 |     |       |     |
|-----|-----------------|-----|-------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 15.72 | 100 |
|     | PPR NANNOPLANKT | 100 | 2.54  | 16  |
| 65m | PPR TOTAL PHYTO | 10  | 16.13 | 100 |
|     | PPR NANNOPLANKT | 10  | 2.34  | 14  |
| 45m | PPR TOTAL PHYTO | 1   | 18.36 | 100 |
|     | PPR NANNOPLANKT | 1   | 3.31  | 18  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 2.72 A= 301  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 5.01 A= 301

MECHELEN 10 M21 260871 1120

|     |                 |     |       |     |
|-----|-----------------|-----|-------|-----|
| 0m  | PPR TOTAL PHYTO | 100 | 33.95 | 100 |
|     | PPR NANNOPLANKT | 100 | 8.93  | 26  |
| 75m | PPR TOTAL PHYTO | 10  | 51.34 | 100 |
|     | PPR NANNOPLANKT | 10  | 11.11 | 21  |
| 43m | PPR TOTAL PHYTO | 1   | 72.39 | 100 |
|     | PPR NANNOPLANKT | 1   | 15.87 | 21  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 3.99 A= 265  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 7.37 A= 265

INT.PR

15:42 TS-BRU 30/09/71

PRIMARY PRODUCTIVITY EKOLOGIE EN SYSTEMATIEK V.U.B.

MECHELEN 1 M16 170871 1115

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 3224 | 100 |
| NANNO PROD. MG C/M2/DAY | 343  | 10  |

DIAGRAM CONSTRUCTION: R= 5.07 A= 321

MECHELEN 2 M17 170871 1245

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 3305 | 100 |
| NANNO PROD. MG C/M2/DAY | 320  | 9   |

DIAGRAM CONSTRUCTION: R= 5.14 A= 325

MECHELEN 3 M18 180871 1115

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 4150 | 100 |
| NANNO PROD. MG C/M2/DAY | 444  | 10  |

DIAGRAM CONSTRUCTION: R= 5.76 A= 321

MECHELEN 4 M19 180871 1315

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1130 | 100 |
| NANNO PROD. MG C/M2/DAY | 768  | 67  |

DIAGRAM CONSTRUCTION: R= 3 A= 115

MECHELEN 5 M20 190871 1245

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1711 | 100 |
| NANNO PROD. MG C/M2/DAY | 1336 | 78  |

DIAGRAM CONSTRUCTION: R= 3.69 A= 78

MECHELEN 6 M25 240871 1120

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 953 | 100 |
| NANNO PROD. MG C/M2/DAY | 397 | 41  |

DIAGRAM CONSTRUCTION: R= 2.76 A= 210

MECHELEN 7 M24 24 0871 1330

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 743 | 100 |
| NANNO PROD. MG C/M2/DAY | 433 | 58  |

DIAGRAM CONSTRUCTION: R= 2.43 A= 150

MECHELEN 8 M23 25 0871 1110

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1232 | 100 |
| NANNO PROD. MG C/M2/DAY | 676  | 54  |

DIAGRAM CONSTRUCTION: R= 3.13 A= 162

MECHELEN 9 M22 25 0871 1345

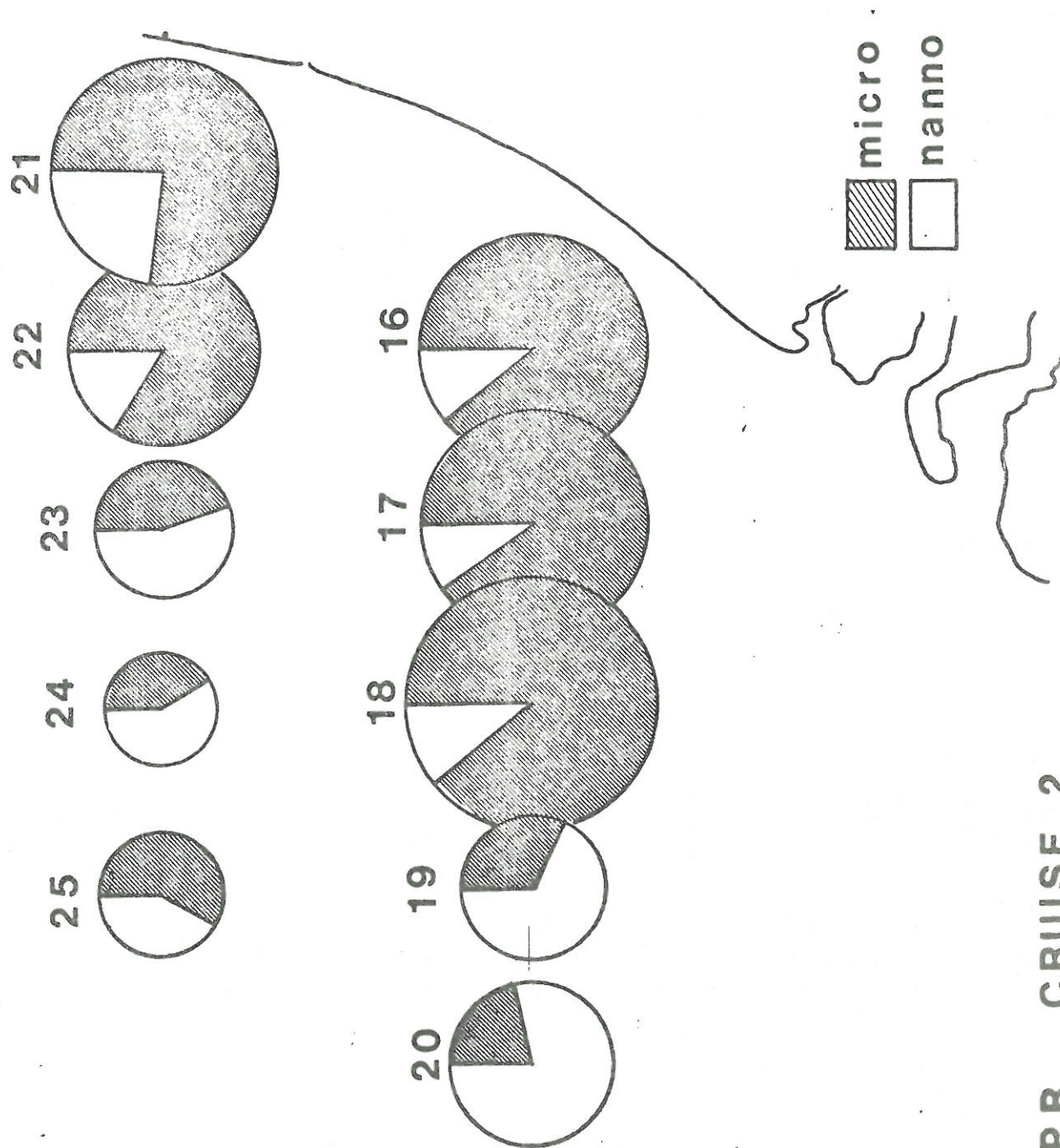
|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 2210 | 100 |
| NANNO PROD. MG C/M2/DAY | 353  | 15  |

DIAGRAM CONSTRUCTION: R= 4.2 A= 302

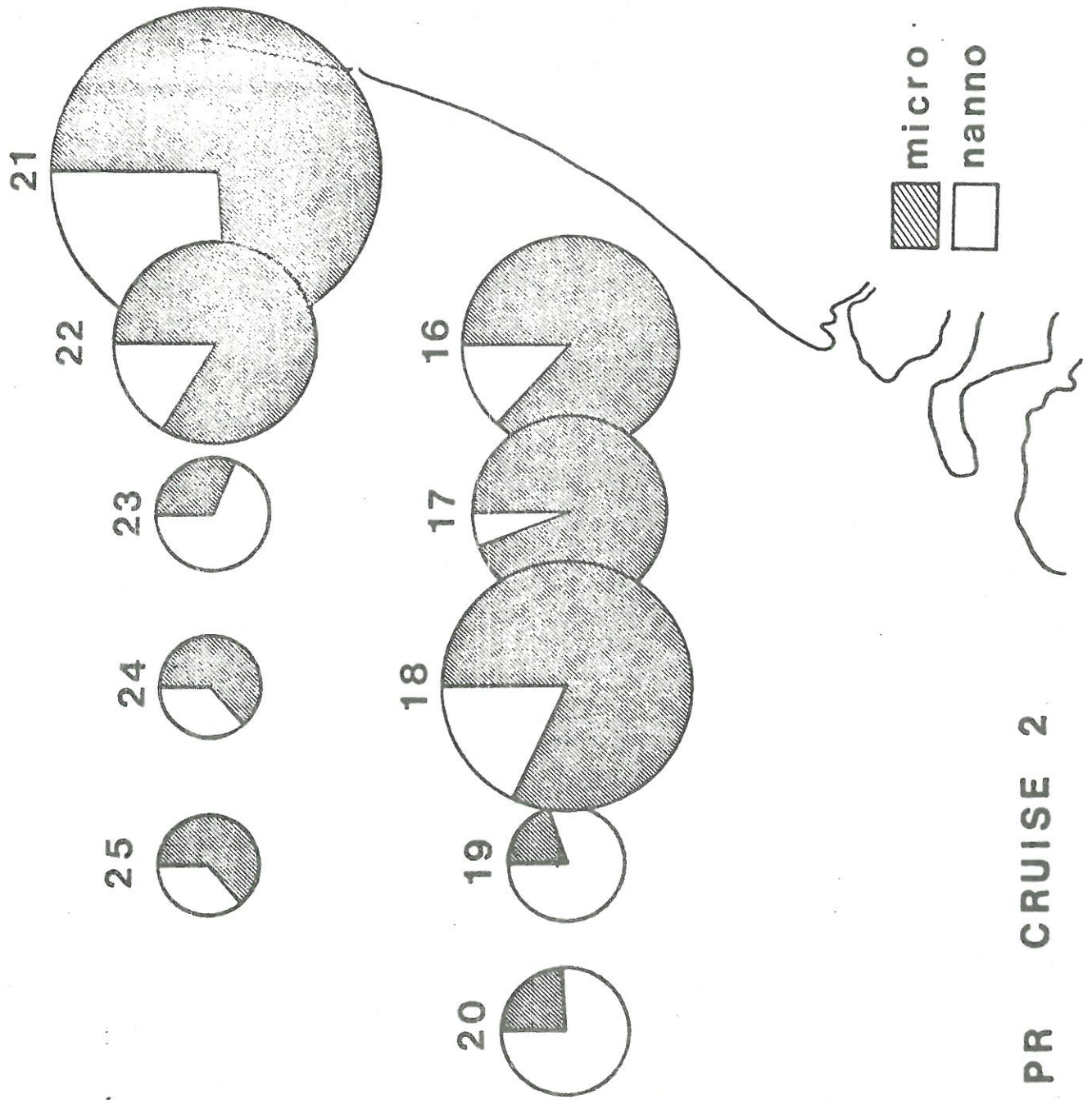
MECHELEN 10 M21 26 0871 1120

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 3271 | 100 |
| NANNO PROD. MG C/M2/DAY | 753  | 23  |

DIAGRAM CONSTRUCTION: R= 5.11 A= 277



INT. PR CRUISE 2



POT. PR CRUISE 2

PRIMARY PRODUCTIVITY EKOLOGIE EN SYSTEMATIEK V.U.B.

MECHELEN 1 M 01 070971 1245

|       |                     |       | %   |
|-------|---------------------|-------|-----|
| 0 m   | PPR TOTAL PHYTO 100 | 18.87 | 100 |
|       | PPR NANNOPLANKT 100 | 5.75  | 30  |
| 2,5 m | PPR TOTAL PHYTO 10  | 22.03 | 100 |
|       | PPR NANNOPLANKT 10  | 5.06  | 22  |
| 4,5 m | PPR TOTAL PHYTO 1   | 35.79 | 100 |
|       | PPR NANNOPLANKT 1   | 6.72  | 18  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 2.75 A= 250  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ): R= 5.49 A= 250

MECHELEN 2 M 53 080971 1300

|       |                     |      |     |
|-------|---------------------|------|-----|
| 0 m   | PPR TOTAL PHYTO 100 | 6.5  | 100 |
|       | PPR NANNOPLANKT 100 | 5.45 | 83  |
| 7,5 m | PPR TOTAL PHYTO 10  | 8.06 | 100 |
|       | PPR NANNOPLANKT 10  | 6.44 | 79  |
| 17 m  | PPR TOTAL PHYTO 1   | 7.33 | 100 |
|       | PPR NANNOPLANKT 1   | 5.99 | 81  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.61 A= 58  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ): R= 3.22 A= 58

MECHELEN 3 M 58 090971 1345

|       |                     |      |     |
|-------|---------------------|------|-----|
| 0 m   | PPR TOTAL PHYTO 100 | 3.55 | 100 |
|       | PPR NANNOPLANKT 100 | 2.69 | 75  |
| 9,5 m | PPR TOTAL PHYTO 10  | 3.67 | 100 |
|       | PPR NANNOPLANKT 10  | 2.75 | 74  |
| 19 m  | PPR TOTAL PHYTO 1   | 3.34 | 100 |
|       | PPR NANNOPLANKT 1   | 3.2  | 95  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.19 A= 87  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ): R= 2.38 A= 87

MECHELEN 4 M 62 100971 1145

|        |                     |      |     |
|--------|---------------------|------|-----|
| 0 m    | PPR TOTAL PHYTO 100 | 4.08 | 100 |
|        | PPR NANNOPLANKT 100 | 3.7  | 90  |
| 13,5 m | PPR TOTAL PHYTO 10  | 3.73 | 100 |
|        | PPR NANNOPLANKT 10  | 3.04 | 81  |
| 17 m   | PPR TOTAL PHYTO 1   | 4.02 | 100 |
|        | PPR NANNOPLANKT 1   | 2.73 | 69  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.27 A= 33  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ): R= 2.55 A= 33

## MECHELEN 5 M55130971 1315

|       |                 |     |       |     |
|-------|-----------------|-----|-------|-----|
| 0 m   | PPR TOTAL PHYTO | 100 | 31.31 | 100 |
|       | PPR NANNOPLANKT | 100 | 7.69  | 35  |
| 3.5 m | PPR TOTAL PHYTO | 10  | 31.51 | 100 |
|       | PPR NANNOPLANKT | 10  | 9.99  | 31  |
| 8 m   | PPR TOTAL PHYTO | 1   | 24.64 | 100 |
|       | PPR NANNOPLANKT | 1   | 3.36  | 33  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 2.92 A= 231

DIAGRAM CONSTRUCTION ( NO MAX AREA ): R= 5.83 A= 231

## MECHELEN 6 M67140971 1145

|        |                 |     |      |     |
|--------|-----------------|-----|------|-----|
| 0 m    | PPR TOTAL PHYTO | 100 | 6.65 | 100 |
|        | PPR NANNOPLANKT | 100 | 3.23 | 49  |
| 13.5 m | PPR TOTAL PHYTO | 10  | 4.83 | 100 |
|        | PPR NANNOPLANKT | 10  | 2.39 | 59  |
| 27 m   | PPR TOTAL PHYTO | 1   | 6.28 | 100 |
|        | PPR NANNOPLANKT | 1   | 3.72 | 59  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.63 A= 122

DIAGRAM CONSTRUCTION ( NO MAX AREA ): R= 3.26 A= 132

## MECHELEN 7 M66140971 1345

|      |                 |     |      |     |
|------|-----------------|-----|------|-----|
| 0 m  | PPR TOTAL PHYTO | 100 | 7.02 | 100 |
|      | PPR NANNOPLANKT | 100 | 5.63 | 89  |
| 10 m | PPR TOTAL PHYTO | 10  | 6    | 100 |
|      | PPR NANNOPLANKT | 10  | 5.76 | 95  |
| 20 m | PPR TOTAL PHYTO | 1   | 6.14 | 100 |
|      | PPR NANNOPLANKT | 1   | 5.39 | 87  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.67 A= 71

DIAGRAM CONSTRUCTION ( NO MAX AREA ): R= 3.35 A= 71

## MECHELEN 8 M72150971 1300

|        |                 |     |      |     |
|--------|-----------------|-----|------|-----|
| 0 m    | PPR TOTAL PHYTO | 100 | 2.87 | 100 |
|        | PPR NANNOPLANKT | 100 | 1.99 | 69  |
| 16 m   | PPR TOTAL PHYTO | 10  | 3    | 100 |
|        | PPR NANNOPLANKT | 10  | 2.63 | 37  |
| 32.5 m | PPR TOTAL PHYTO | 1   | 4.03 | 100 |
|        | PPR NANNOPLANKT | 1   | 2.67 | 66  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.07 A= 110

DIAGRAM CONSTRUCTION ( NO MAX AREA ): R= 2.14 A= 110

## MECHELEN 9 M60 160971 1300

|       |                 |     |       |     |
|-------|-----------------|-----|-------|-----|
| 0 m   | PPR TOTAL PHYTO | 100 | 11.82 | 100 |
|       | PPR NANNOPLANKT | 100 | 3.37  | 28  |
| 9.5 m | PPR TOTAL PHYTO | 10  | 18.3  | 100 |
|       | PPR NANNOPLANKT | 10  | 4.15  | 22  |
| 19 m  | PPR TOTAL PHYTO | 1   | 18.99 | 100 |
|       | PPR NANNOPLANKT | 1   | 5.46  | 28  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 2.17 A= 257  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 4.34 A= 257  
 1.4

## MECHELEN 10 M54 200971 1330

|       |                 |     |       |     |
|-------|-----------------|-----|-------|-----|
| 0 m   | PPR TOTAL PHYTO | 100 | 14.86 | 100 |
|       | PPR NANNOPLANKT | 100 | 7.49  | 50  |
| 1.5 m | PPR TOTAL PHYTO | 10  | 17.72 | 100 |
|       | PPR NANNOPLANKT | 10  | 14.56 | 32  |
| 3 m   | PPR TOTAL PHYTO | 1   | 24.5  | 100 |
|       | PPR NANNOPLANKT | 1   | 15.95 | 65  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 2.44 A= 178  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 4.87 A= 178  
 1.6

## MECHELEN 11 M59 210971 1315

|     |                 |     |       |     |
|-----|-----------------|-----|-------|-----|
| 0 m | PPR TOTAL PHYTO | 100 | 31.38 | 100 |
|     | PPR NANNOPLANKT | 100 | 9.67  | 30  |
| 4 m | PPR TOTAL PHYTO | 10  | 22.35 | 100 |
|     | PPR NANNOPLANKT | 10  | 9.5   | 42  |
| 9 m | PPR TOTAL PHYTO | 1   | 33.79 | 100 |
|     | PPR NANNOPLANKT | 1   | 14.74 | 43  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 3.54 A= 249  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 7.08 A= 249  
 2.3

## MECHELEN 12 M63 220971 1330

|       |                 |     |       |     |
|-------|-----------------|-----|-------|-----|
| 0 m   | PPR TOTAL PHYTO | 100 | 26.72 | 100 |
|       | PPR NANNOPLANKT | 100 | 15.25 | 57  |
| 4.5 m | PPR TOTAL PHYTO | 10  | 28.06 | 100 |
|       | PPR NANNOPLANKT | 10  | 13.16 | 46  |
| 10 m  | PPR TOTAL PHYTO | 1   | 26.35 | 100 |
|       | PPR NANNOPLANKT | 1   | 15.1  | 57  |

DIAGRAM CONSTRUCTION(WITH MAX AREA,R=4 CM):R= 3.27 A= 154  
 DIAGRAM CONSTRUCTION ( NO MAX AREA ):R= 6.53 A= 154  
 2.1

MECHELEN 13

M 68 230971

1115

|       |                 |     |       |     |
|-------|-----------------|-----|-------|-----|
| 0 m   | PPR TOTAL PHYTO | 100 | 39.85 | 100 |
|       | PPR NANNOPLANKT | 100 | 13.04 | 32  |
| 3 m   | PPR TOTAL PHYTO | 10  | 32.81 | 100 |
|       | PPR NANNOPLANKT | 10  | 16.59 | 50  |
| 6.5 m | PPR TOTAL PHYTO | 1   | 57.84 | 100 |
|       | PPR NANNOPLANKT | 1   | 21.03 | 36  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 3.99 A= 242

DIAGRAM CONSTRUCTION ( NO MAX AREA ): R= 7.98 A= 242

1.6

MECHELEN 14

M 70 230971

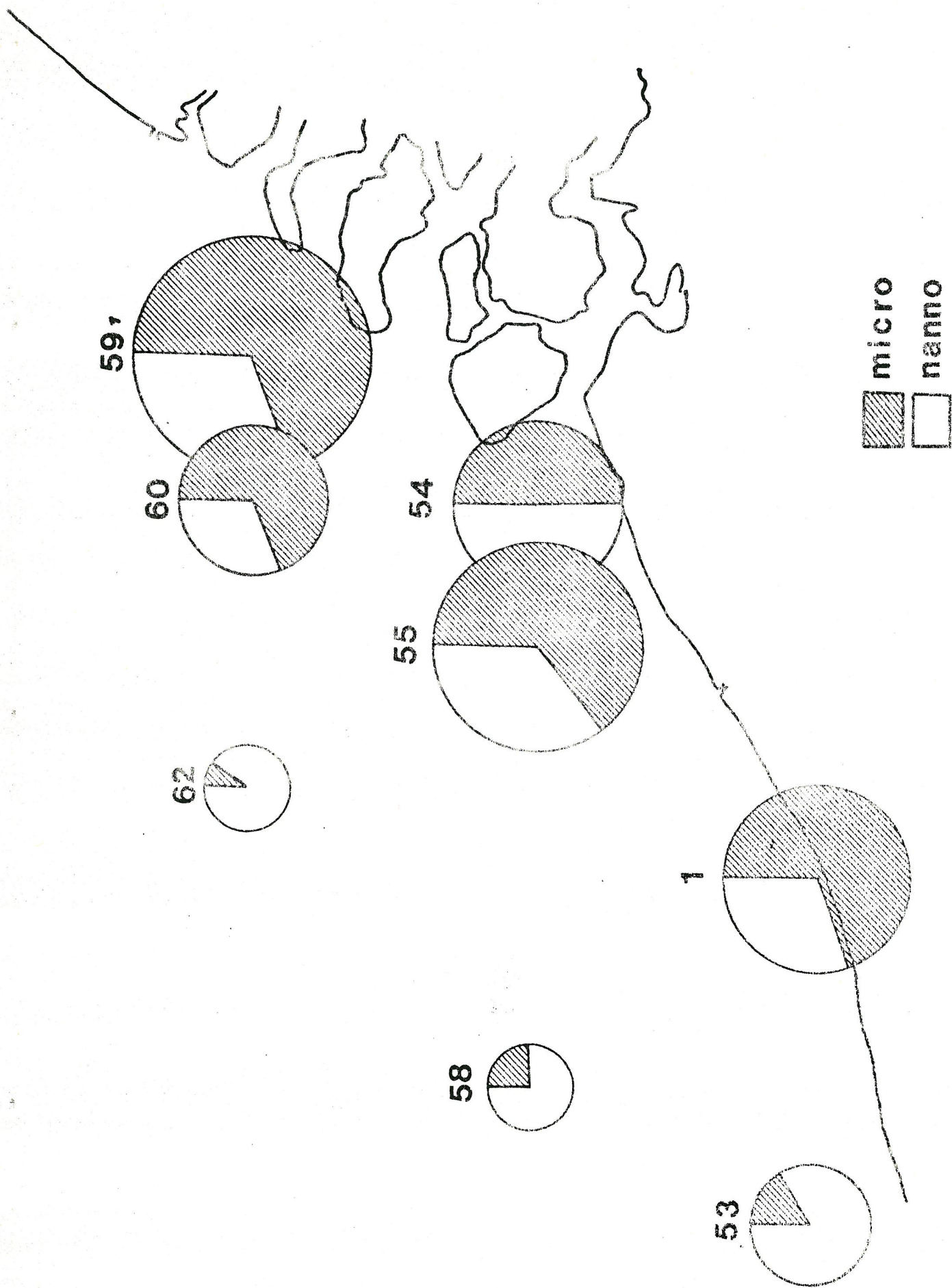
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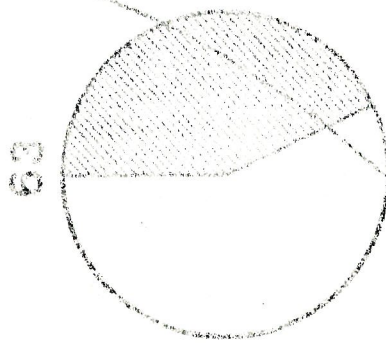
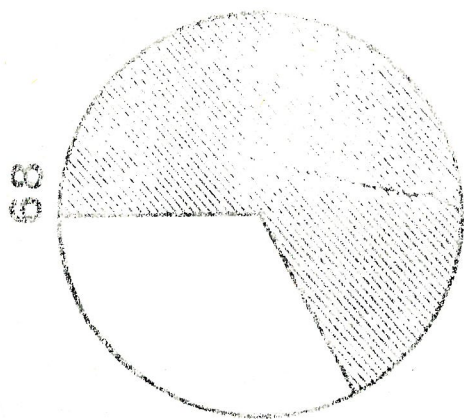
|        |                 |     |      |     |
|--------|-----------------|-----|------|-----|
| 0 m    | PPR TOTAL PHYTO | 100 | 4.72 | 100 |
|        | PPR NANNOPLANKT | 100 | 9.67 | 204 |
| 11.5 m | PPR TOTAL PHYTO | 10  | 4.83 | 100 |
|        | PPR NANNOPLANKT | 10  | 9.54 | 197 |
| 17 m   | PPR TOTAL PHYTO | 1   | 4.62 | 100 |
|        | PPR NANNOPLANKT | 1   | 2.67 | 57  |

DIAGRAM CONSTRUCTION (WITH MAX AREA, R=4 CM): R= 1.37 A=-378

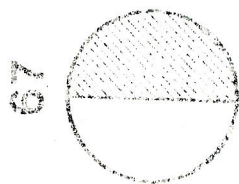
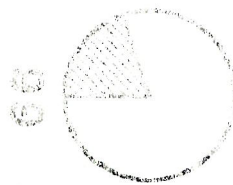
DIAGRAM CONSTRUCTION ( NO MAX AREA ): R= 2.74 A=-378

0.9





micro  
macro



68 69 70 72 65 67

# CRUISE 3 INT. PROD (mg C/m<sup>2</sup>/day) p.10

PRIMARY PRODUCTIVITY EKOLOGIE EN SYSTEMATIEK V.U.B.

MECHELEN 1 M01 070971 1245

%

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1324 | 100 |
| NANNO PROD. MG C/M2/DAY | 319  | 24  |

DIAGRAM CONSTRUCTION: R= 3.25 A= 273  
1.1

MECHELEN 2 M53 080971 1300

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1550 | 100 |
| NANNO PROD. MG C/M2/DAY | 1266 | 81  |

DIAGRAM CONSTRUCTION: R= 3.52 A= 65  
4.1

MECHELEN 3 M58 090971 1345

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 845 | 100 |
| NANNO PROD. MG C/M2/DAY | 670 | 79  |

DIAGRAM CONSTRUCTION: R= 2.59 A= 74  
0.8

MECHELEN 4 M62 100971 1145

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1328 | 100 |
| NANNO PROD. MG C/M2/DAY | 1100 | 82  |

DIAGRAM CONSTRUCTION: R= 3.25 A= 61  
1.1

MECHELEN 5 M55 130971 1315

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 2605 | 100 |
| NANNO PROD. MG C/M2/DAY | 872  | 33  |

DIAGRAM CONSTRUCTION: R= 4.56 A= 239  
1.9

MECHELEN 6 M67 140971 1145

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1976 | 100 |
| NANNO PROD. MG C/M2/DAY | 1087 | 55  |

DIAGRAM CONSTRUCTION: R= 3.97 A= 161  
4.3

MECHELEN 7 M66 140971 1345

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1610 | 100 |
| NANNO PROD. MG C/M2/DAY | 1410 | 87  |

DIAGRAM CONSTRUCTION: R= 3.58 A= 44  
1.2

MECHELEN 8 M72150971 1300

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 1186 | 100 |
| NANNO PROD. MG C/M2/DAY | 896  | 75  |

DIAGRAM CONSTRUCTION: R= 3.08 A= 88  
4.

MECHELEN 9 M60160971 1300

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 3520 | 100 |
| NANNO PROD. MG C/M2/DAY | 900  | 25  |

DIAGRAM CONSTRUCTION: R= 5.3 A= 267  
4.7

MECHELEN 10 M54200971 1330

|                         |     |     |
|-------------------------|-----|-----|
| TOTAL PROD. MG C/M2/DAY | 621 | 100 |
| NANNO PROD. MG C/M2/DAY | 416 | 66  |

DIAGRAM CONSTRUCTION: R= 2.22 A= 118  
6.7

MECHELEN 11 M59210971 1315

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 2935 | 100 |
| NANNO PROD. MG C/M2/DAY | 1103 | 37  |

DIAGRAM CONSTRUCTION: R= 4.84 A= 224  
4.6

MECHELEN 12 M63220971 1330

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 3137 | 100 |
| NANNO PROD. MG C/M2/DAY | 1661 | 52  |

DIAGRAM CONSTRUCTION: R= 5 A= 169  
4.4

MECHELEN 13 M68230971 1115

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 3048 | 100 |
| NANNO PROD. MG C/M2/DAY | 1205 | 39  |

DIAGRAM CONSTRUCTION: R= 4.23 A= 217  
4.7

MECHELEN 14 M70230971 1400

|                         |      |     |
|-------------------------|------|-----|
| TOTAL PROD. MG C/M2/DAY | 338  | 100 |
| NANNO PROD. MG C/M2/DAY | 1614 | 173 |

DIAGRAM CONSTRUCTION: R= 2.73 A= 260  
4.7

