MODELOWANIE W *POWERSIM*

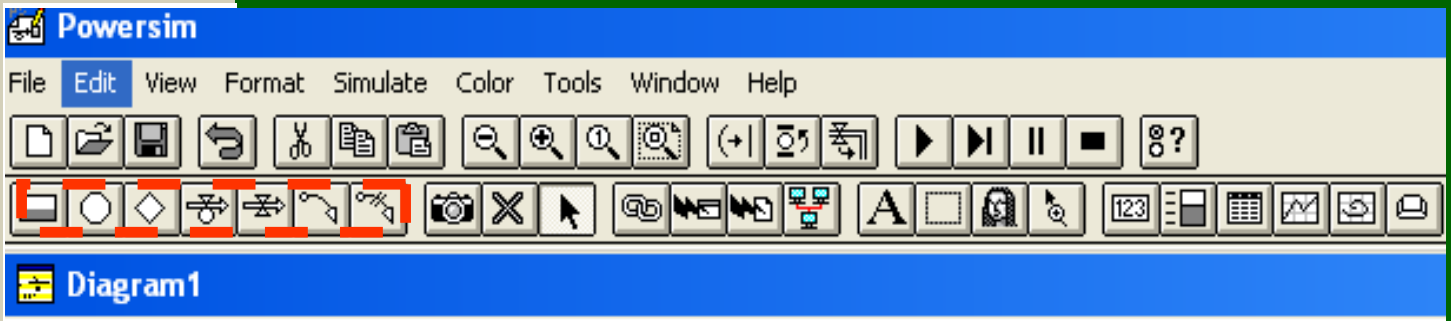
Wprowadzenie do projektowania modeli własnych

Plan

- Diagramy modeli
- Definiowanie zmiennych
- Wybór ustawień dla symulacji
- Wyniki symulacji – tabele
- Wyniki symulacji – wykresy
- Interaktywny proces symulacji
- Interaktywne zmiany parametrów

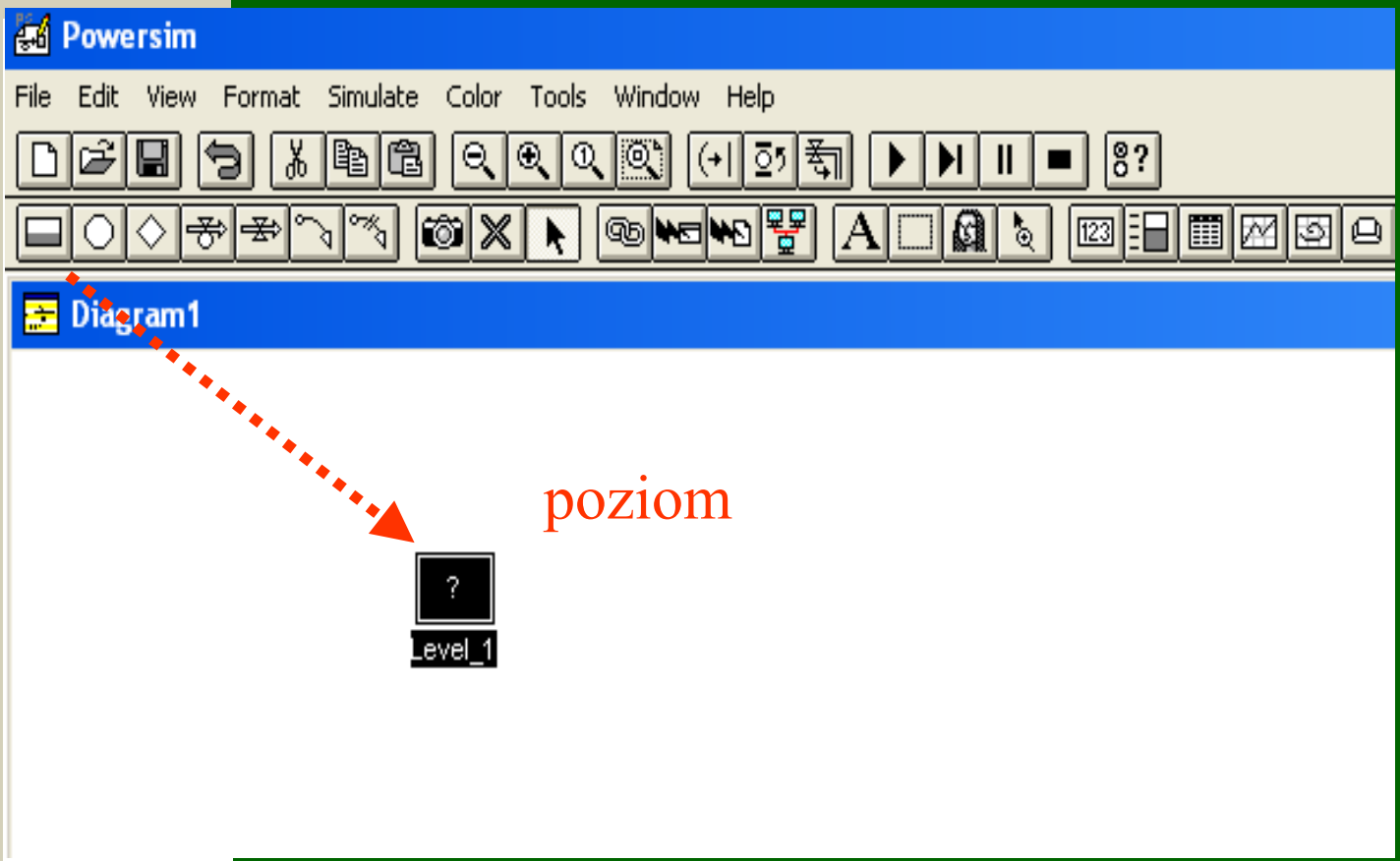
Budowanie diagramów modeli

Budowanie diagramów



Ekran projektowania

Budowanie diagramów



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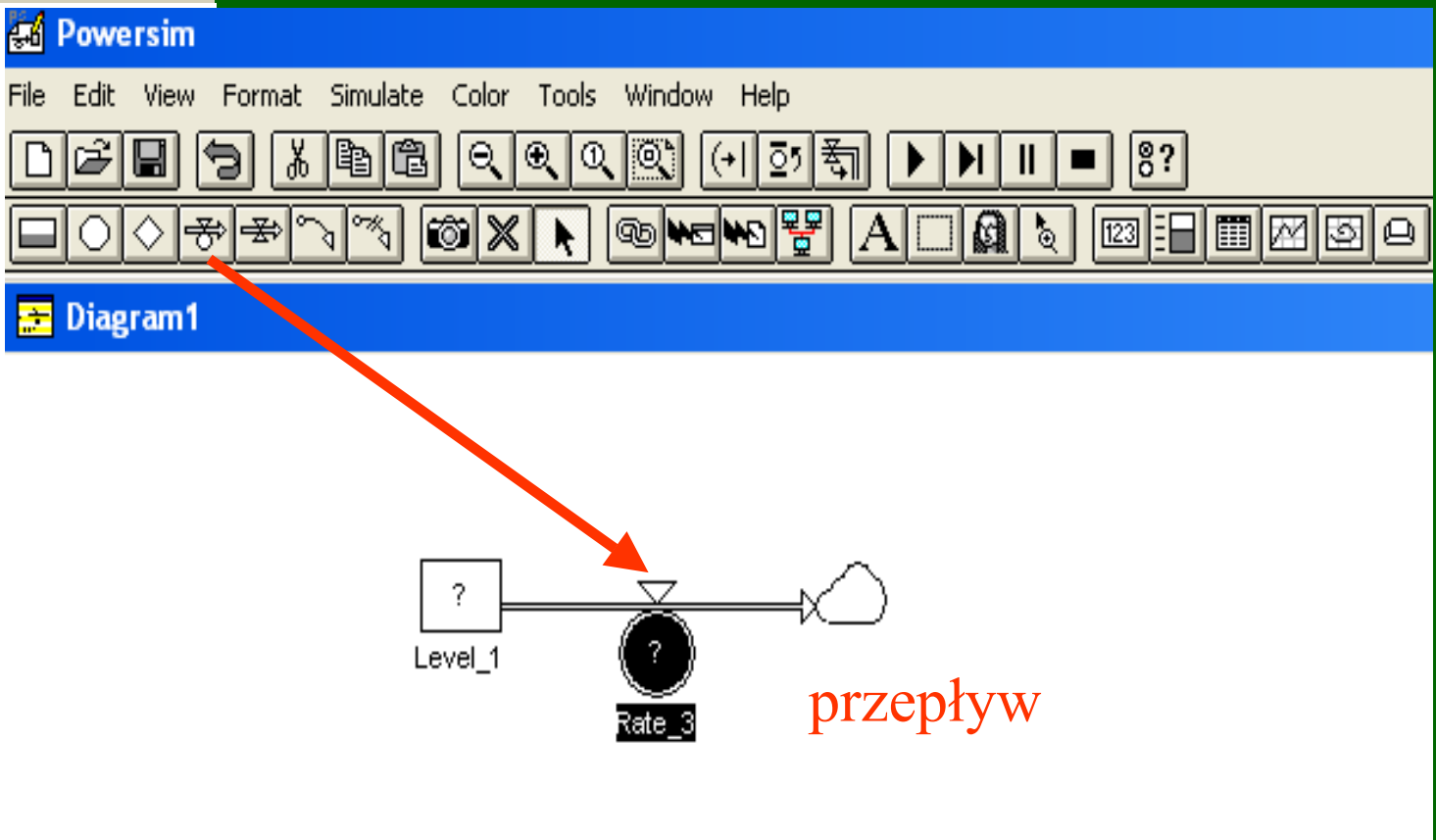

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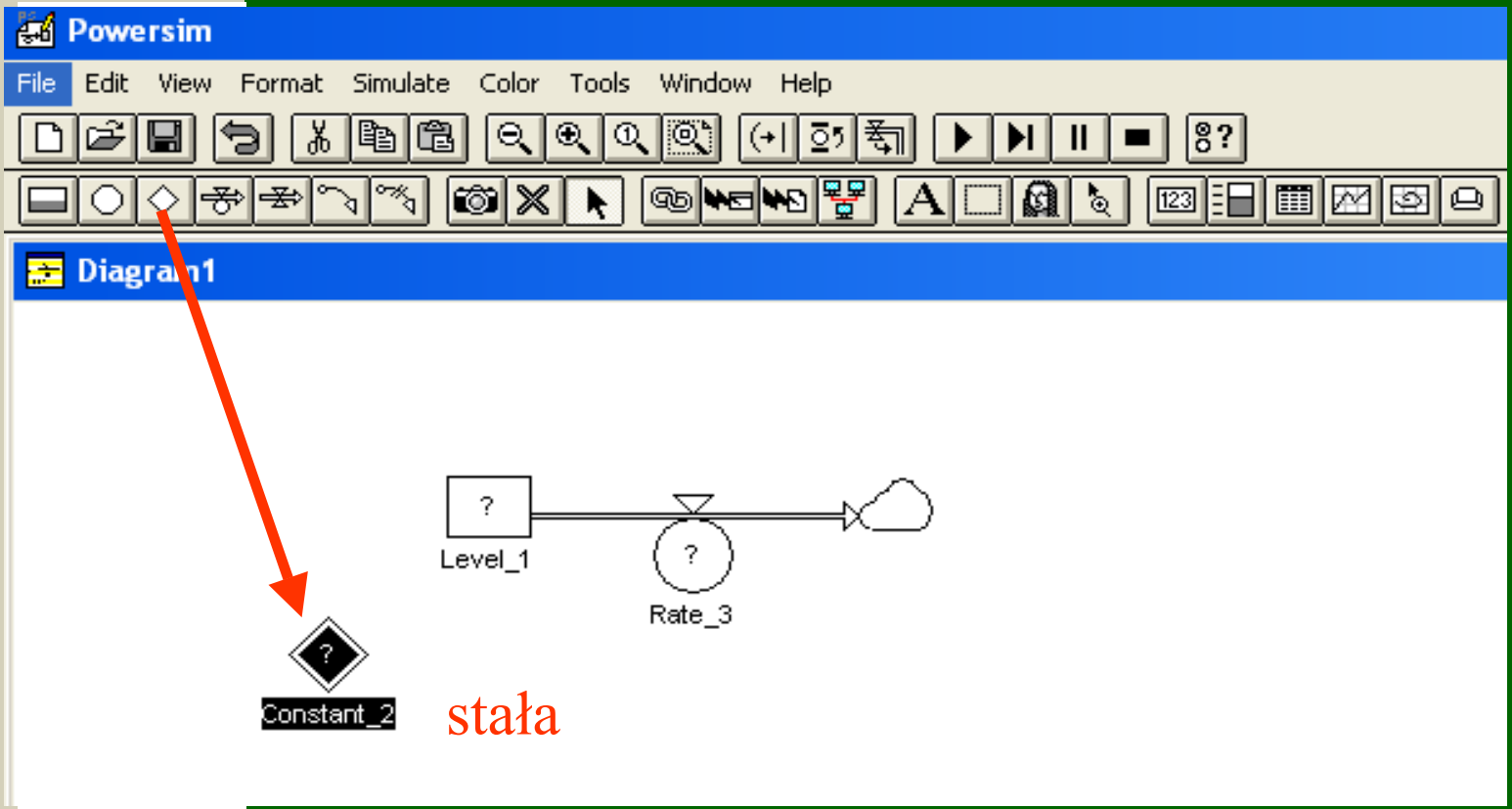

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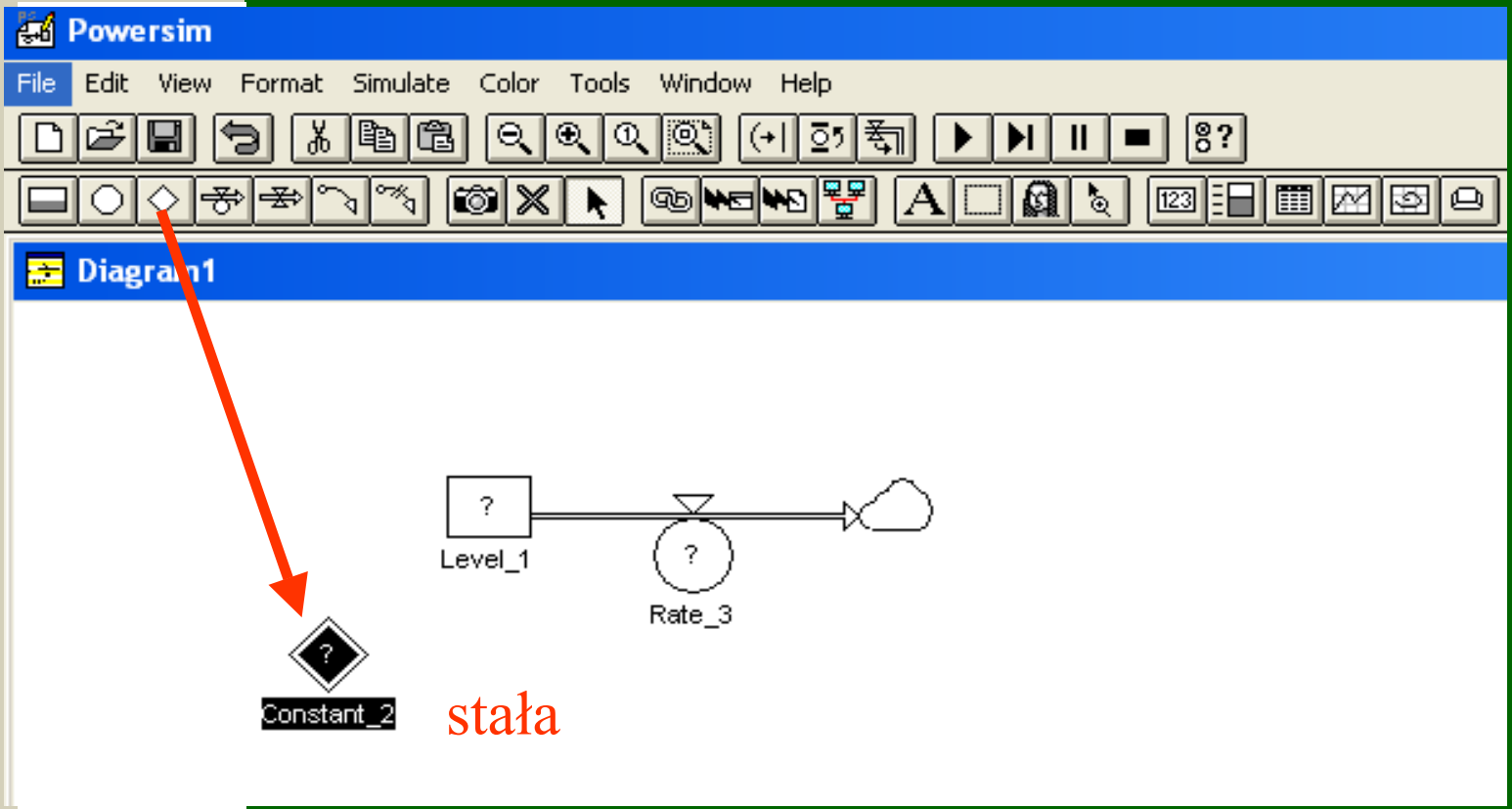

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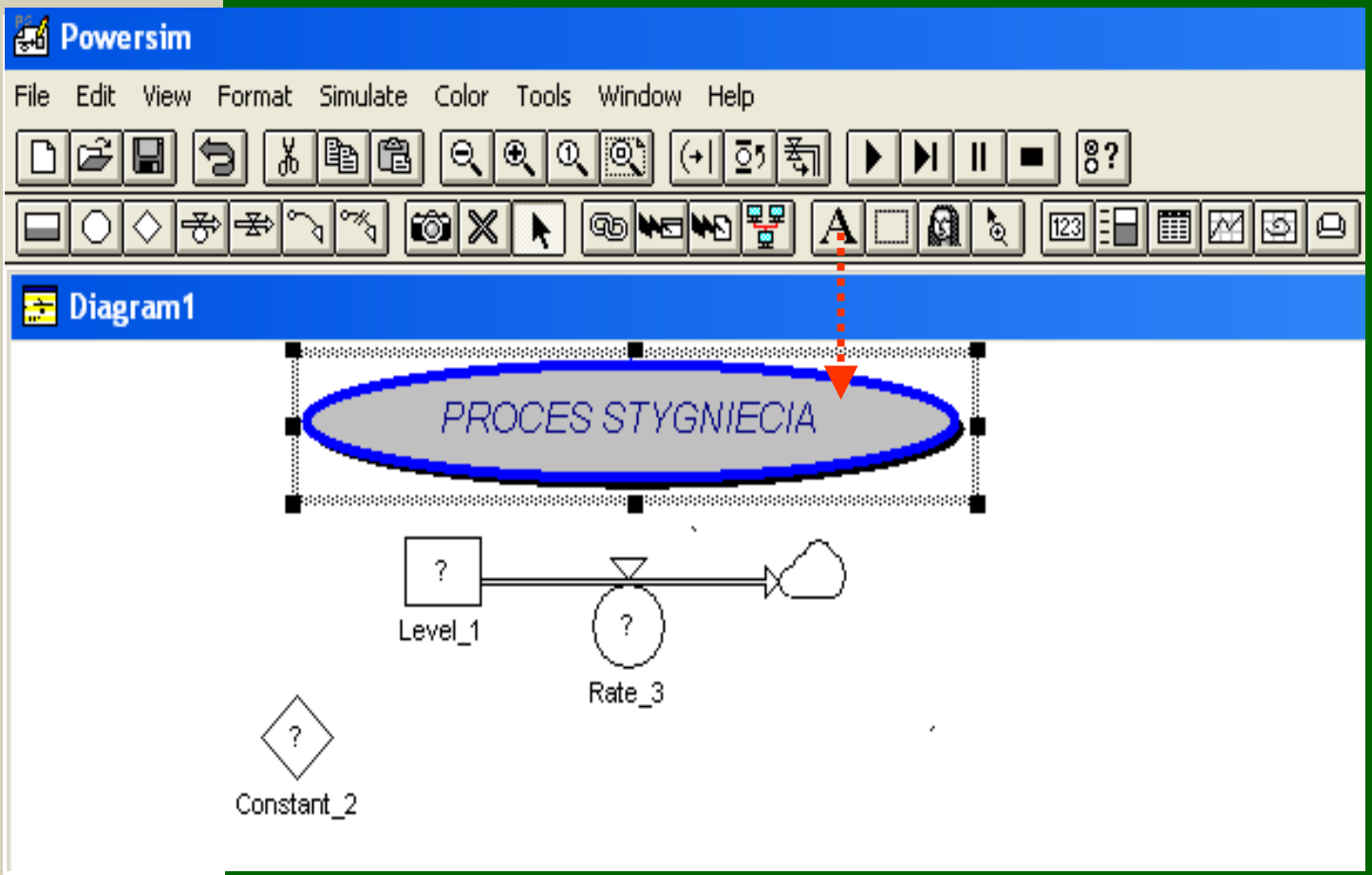

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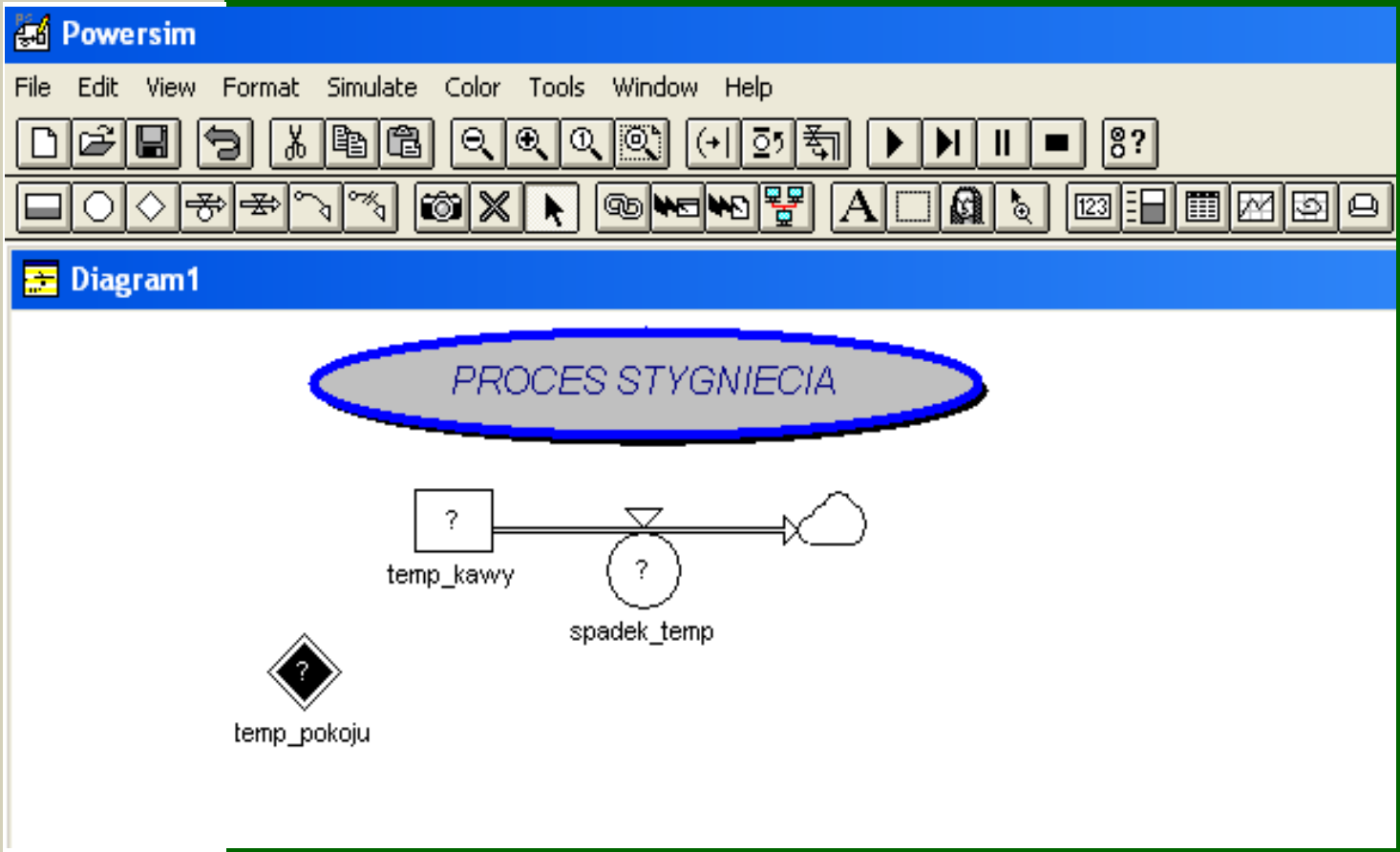

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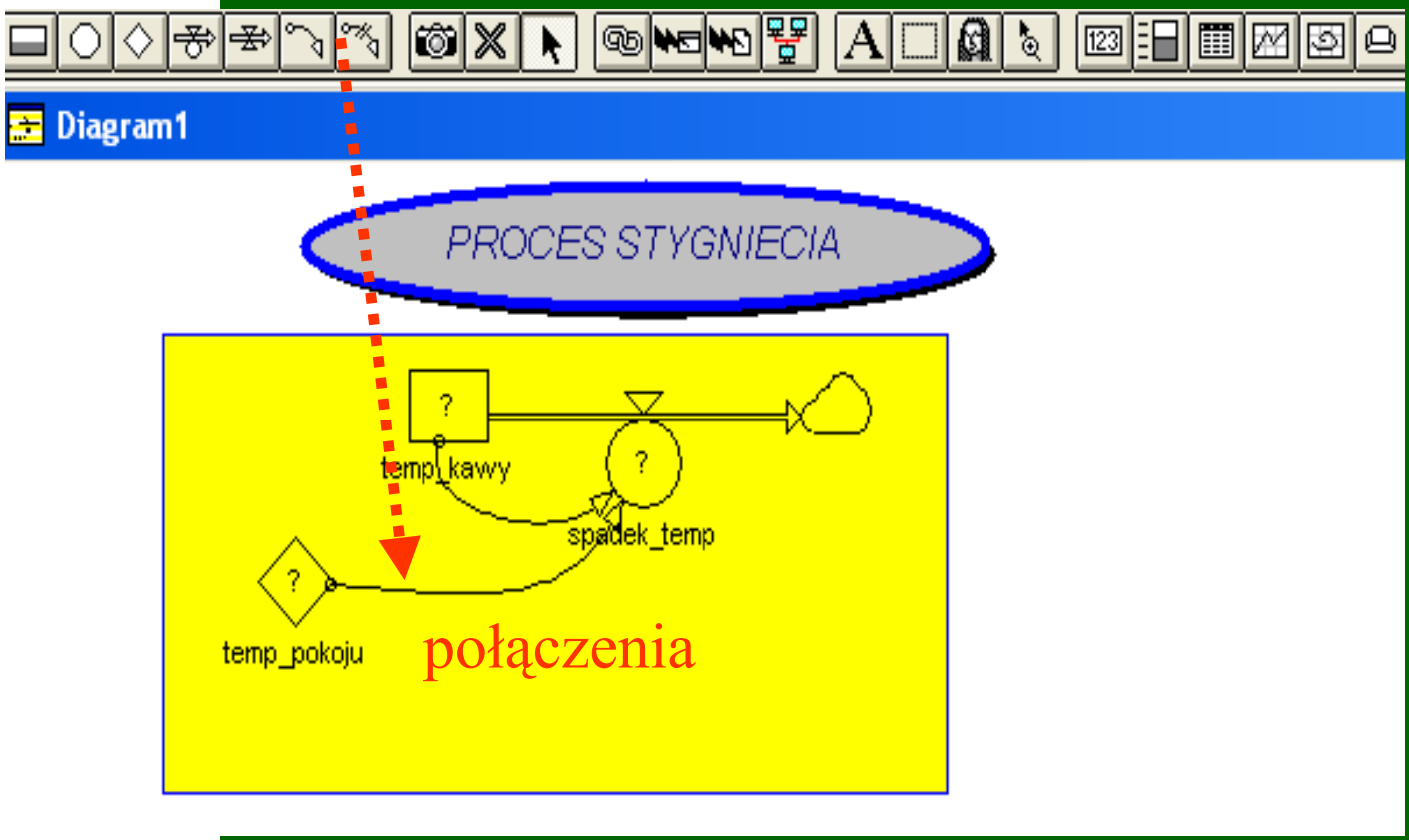
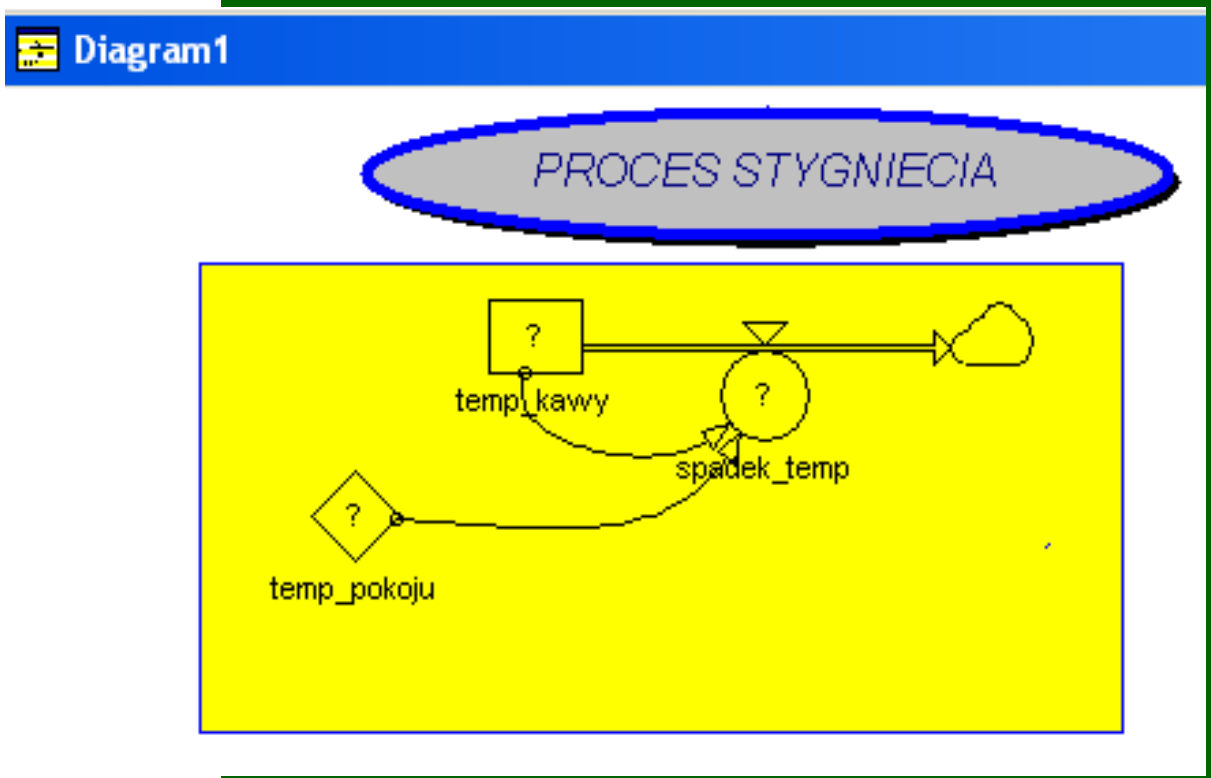


Budowanie diagramów



Definiowanie zmiennych

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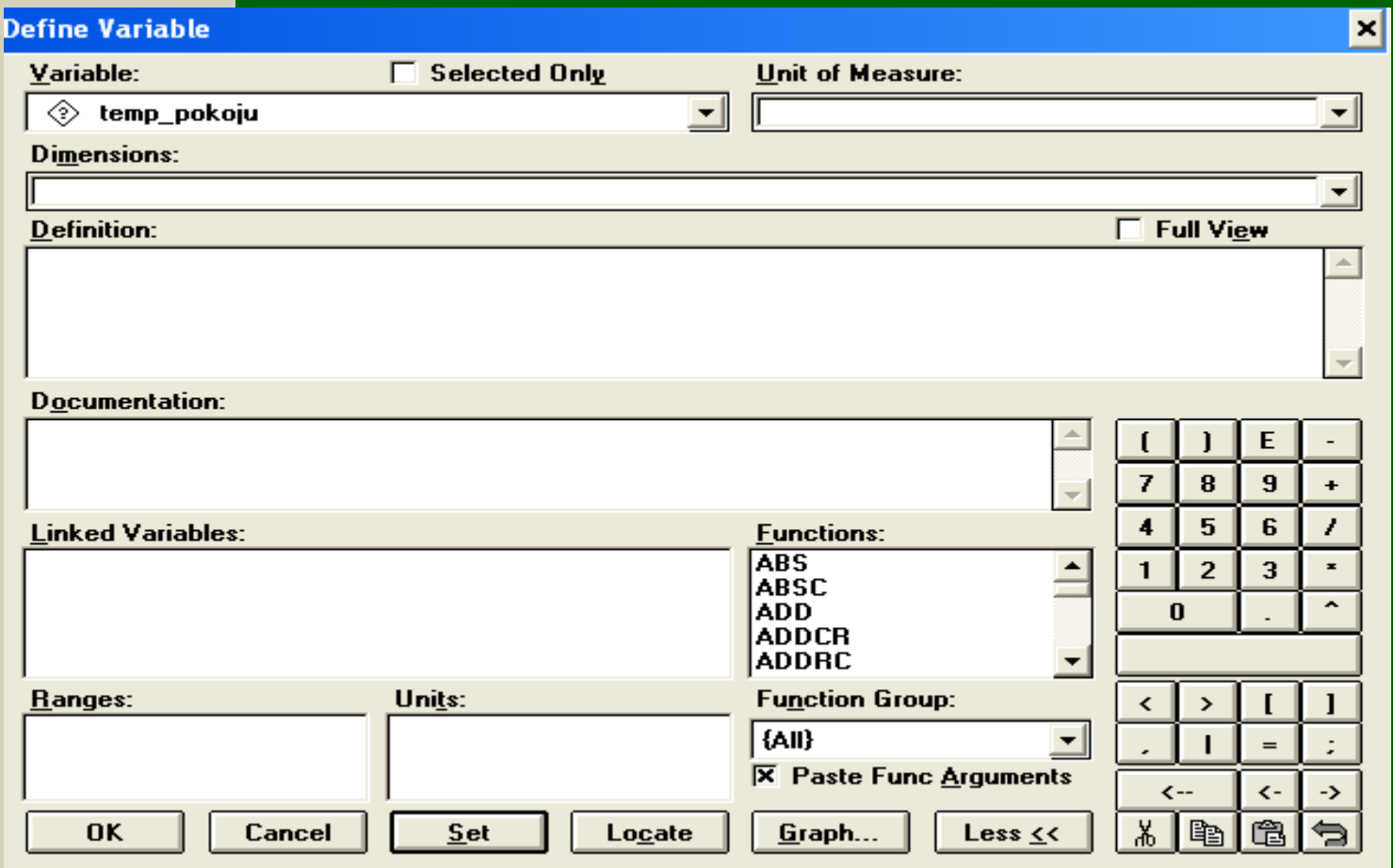

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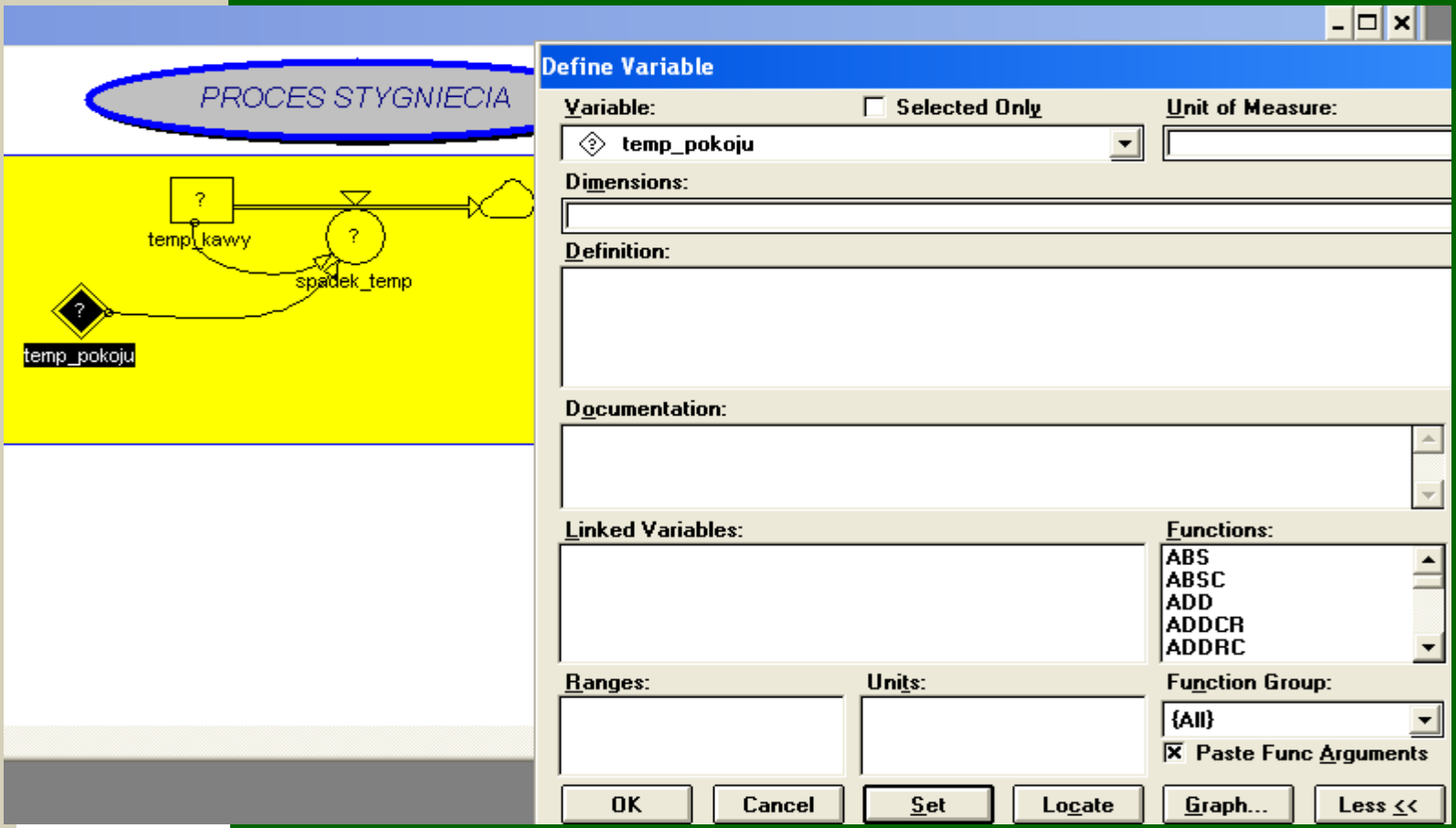

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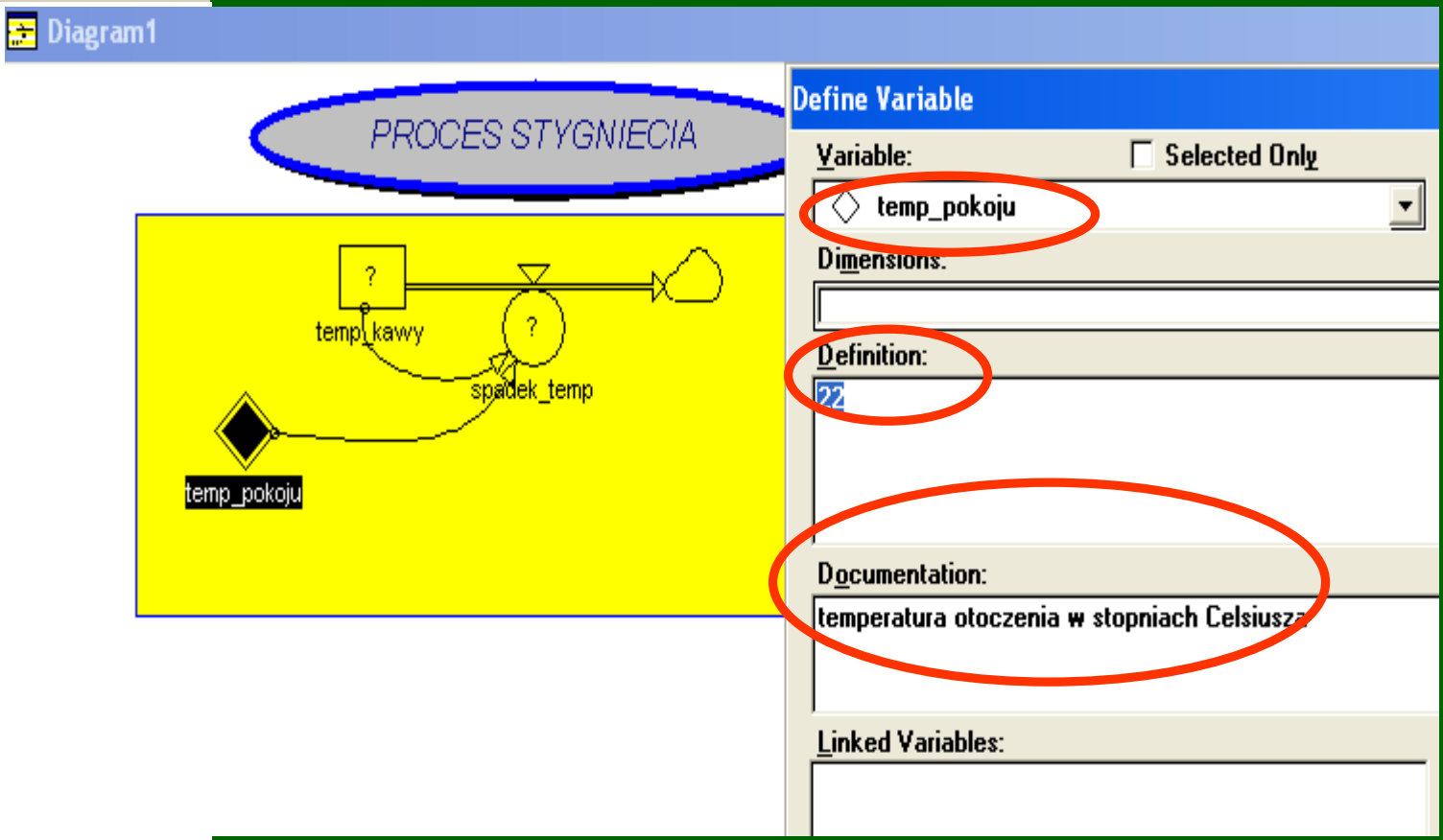

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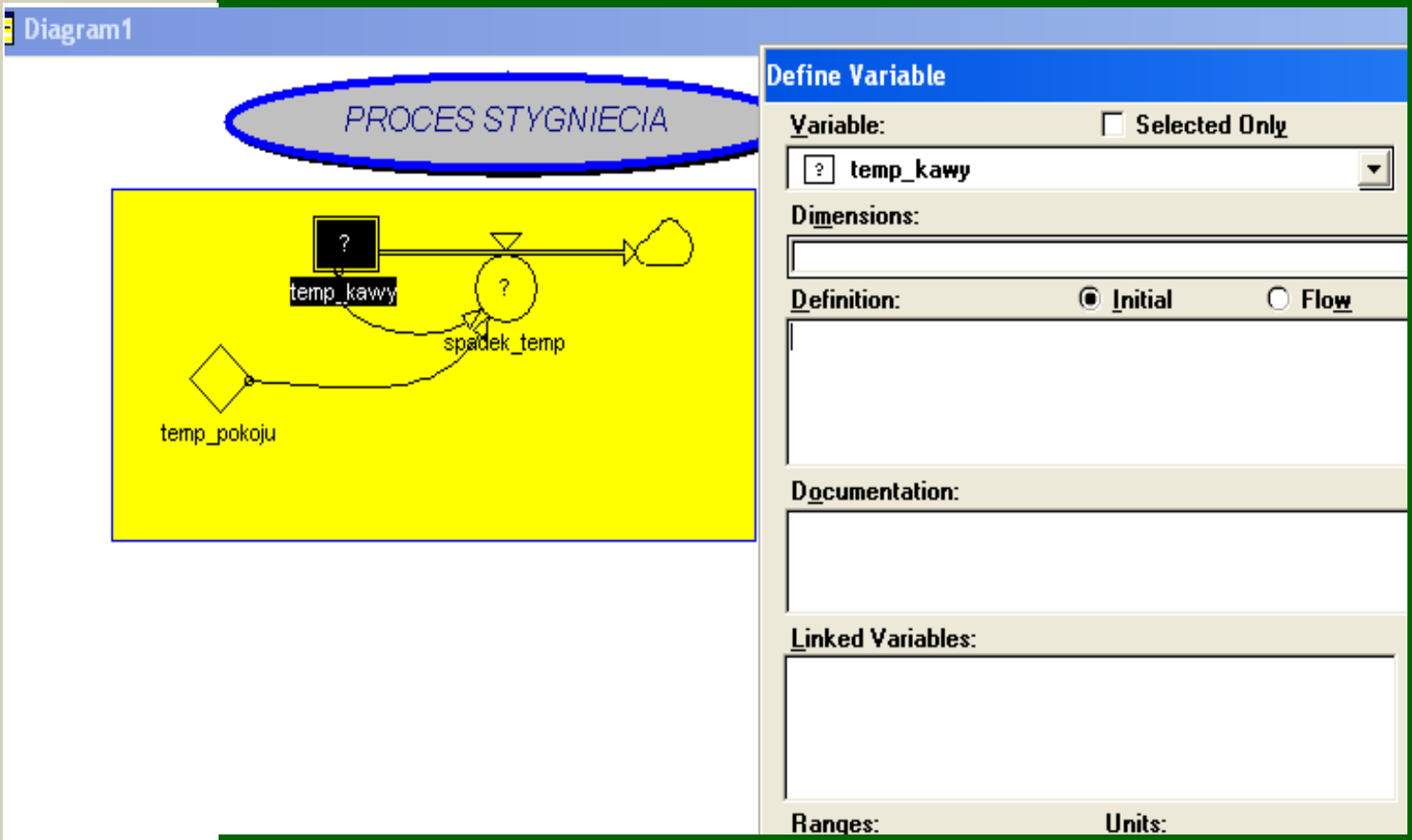

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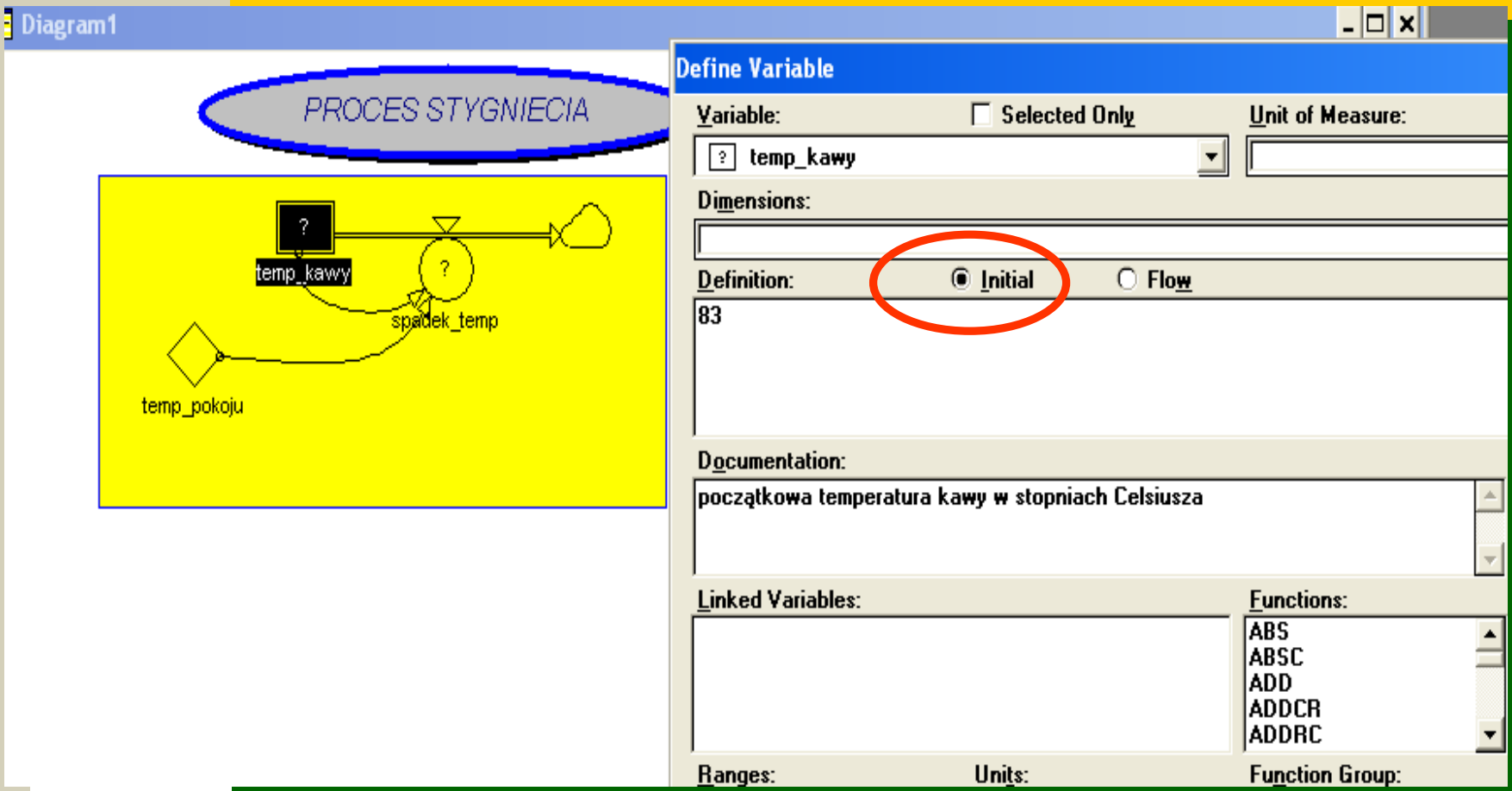

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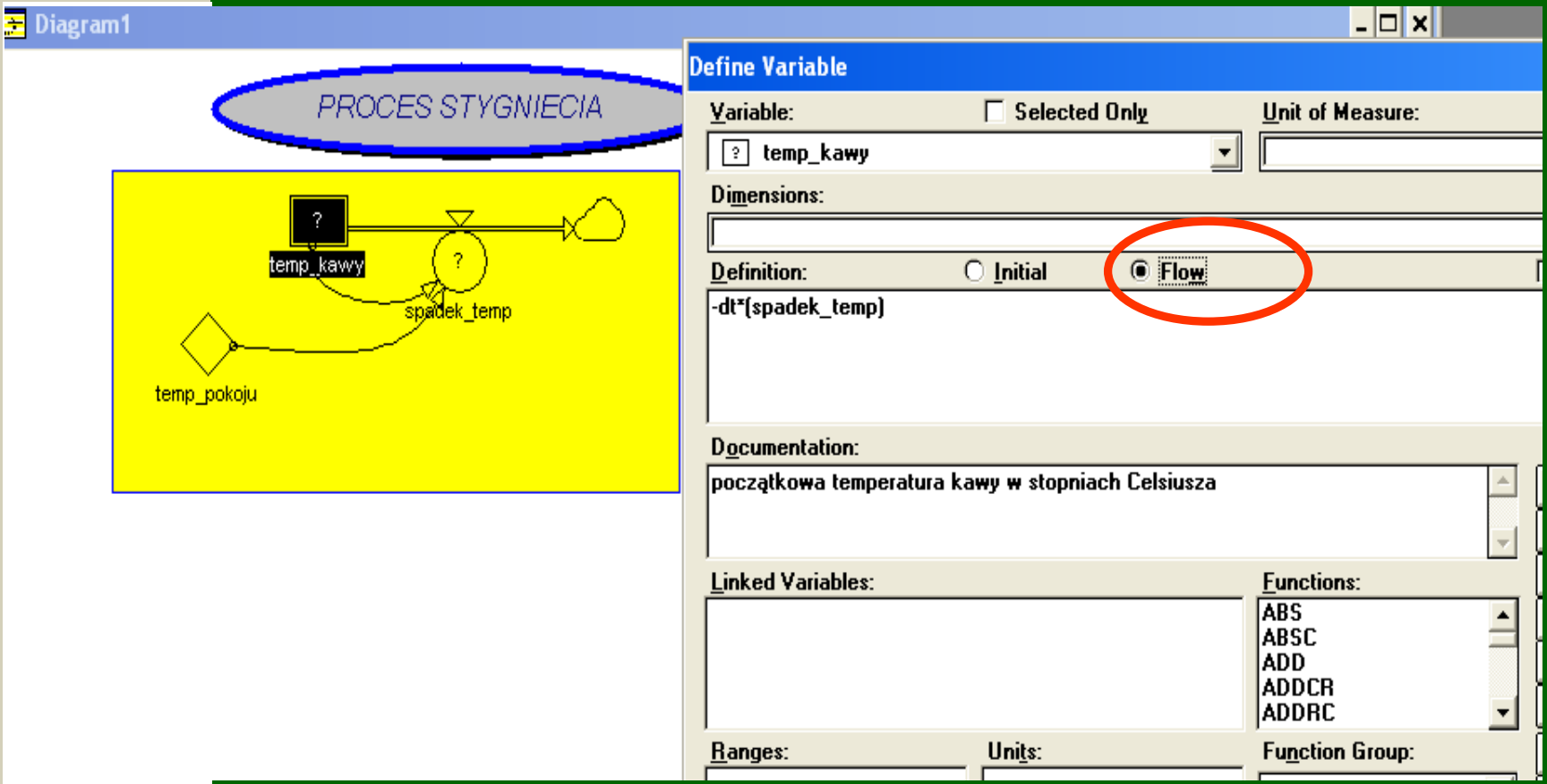

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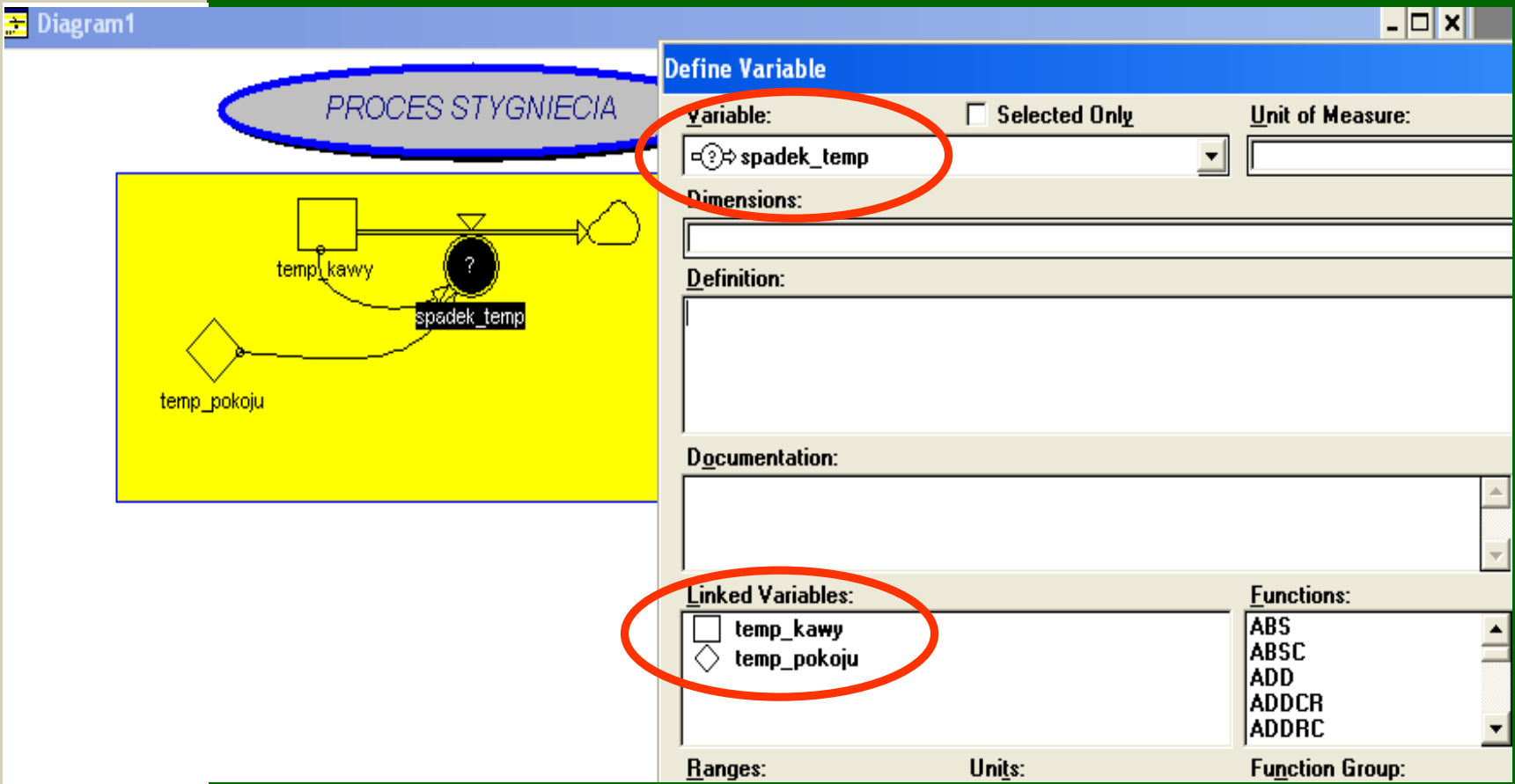

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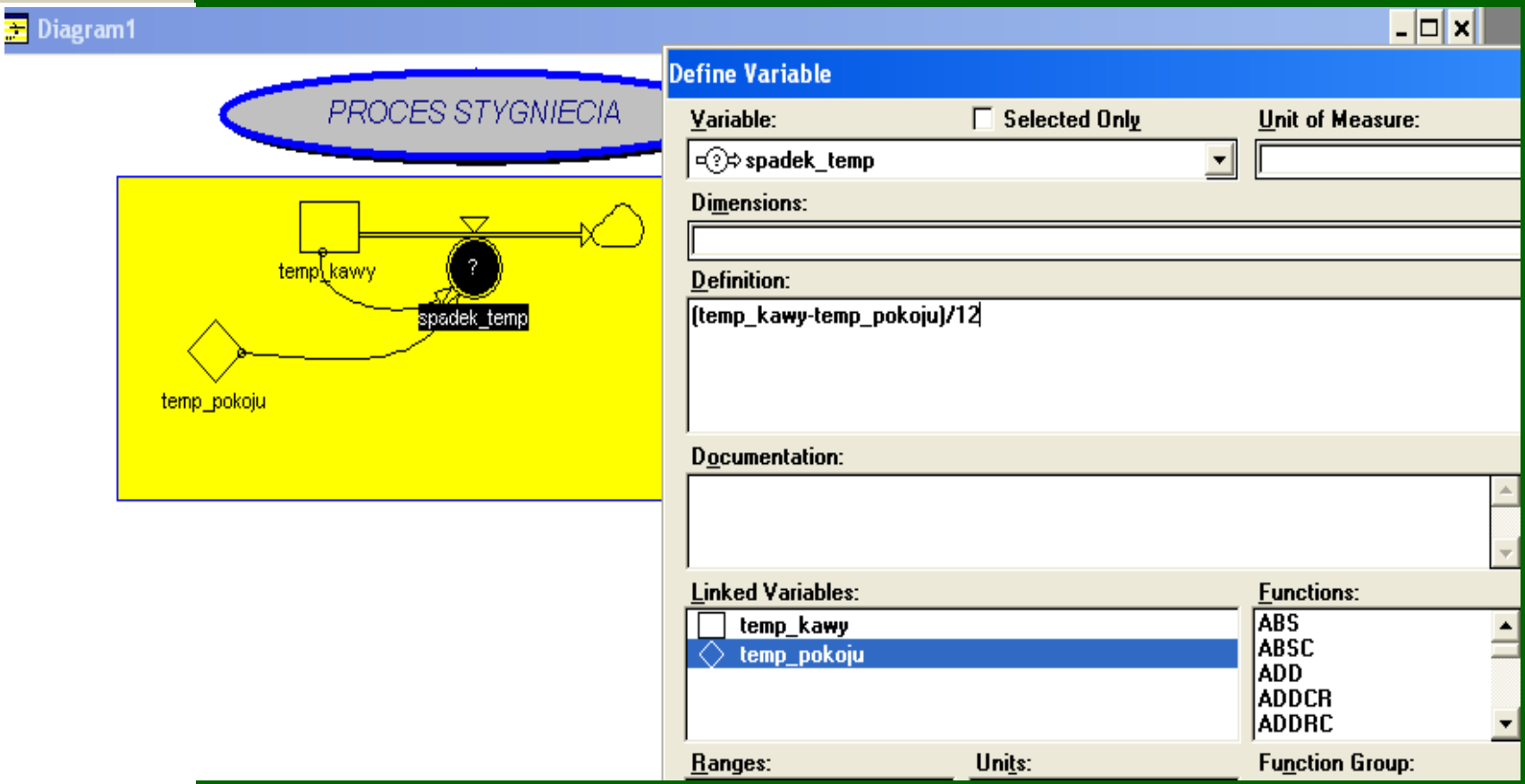
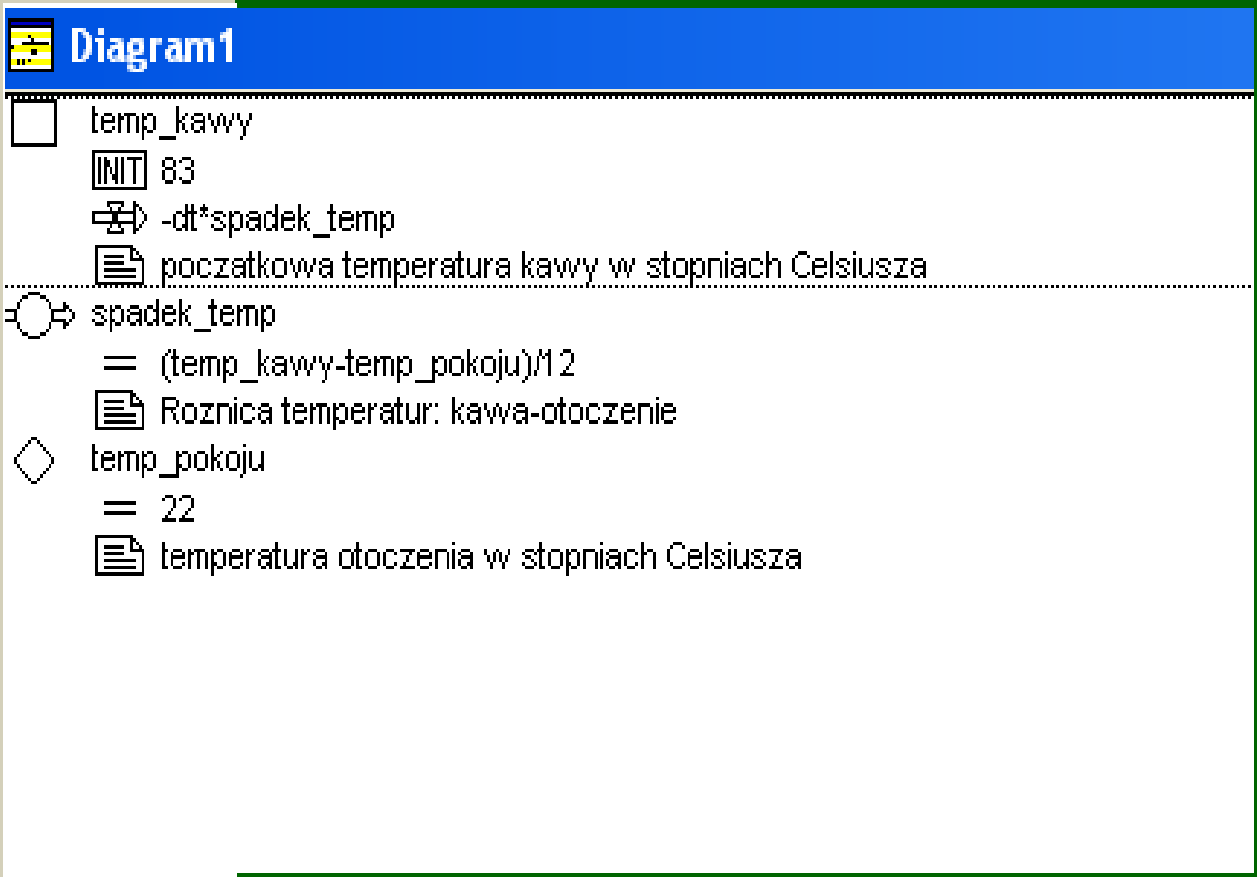


Równania w pseudokodzie



Wybór ustawień symulacji

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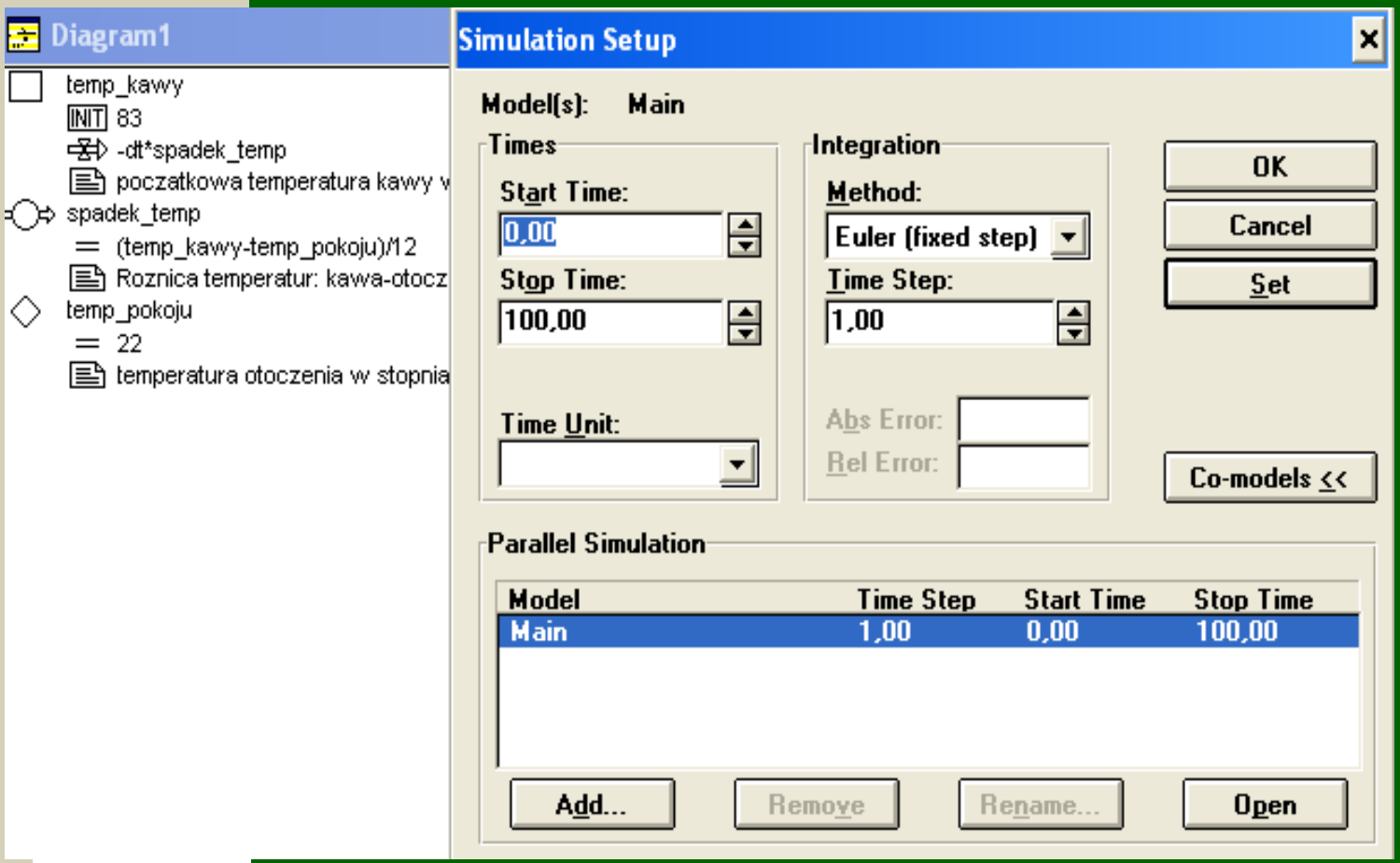
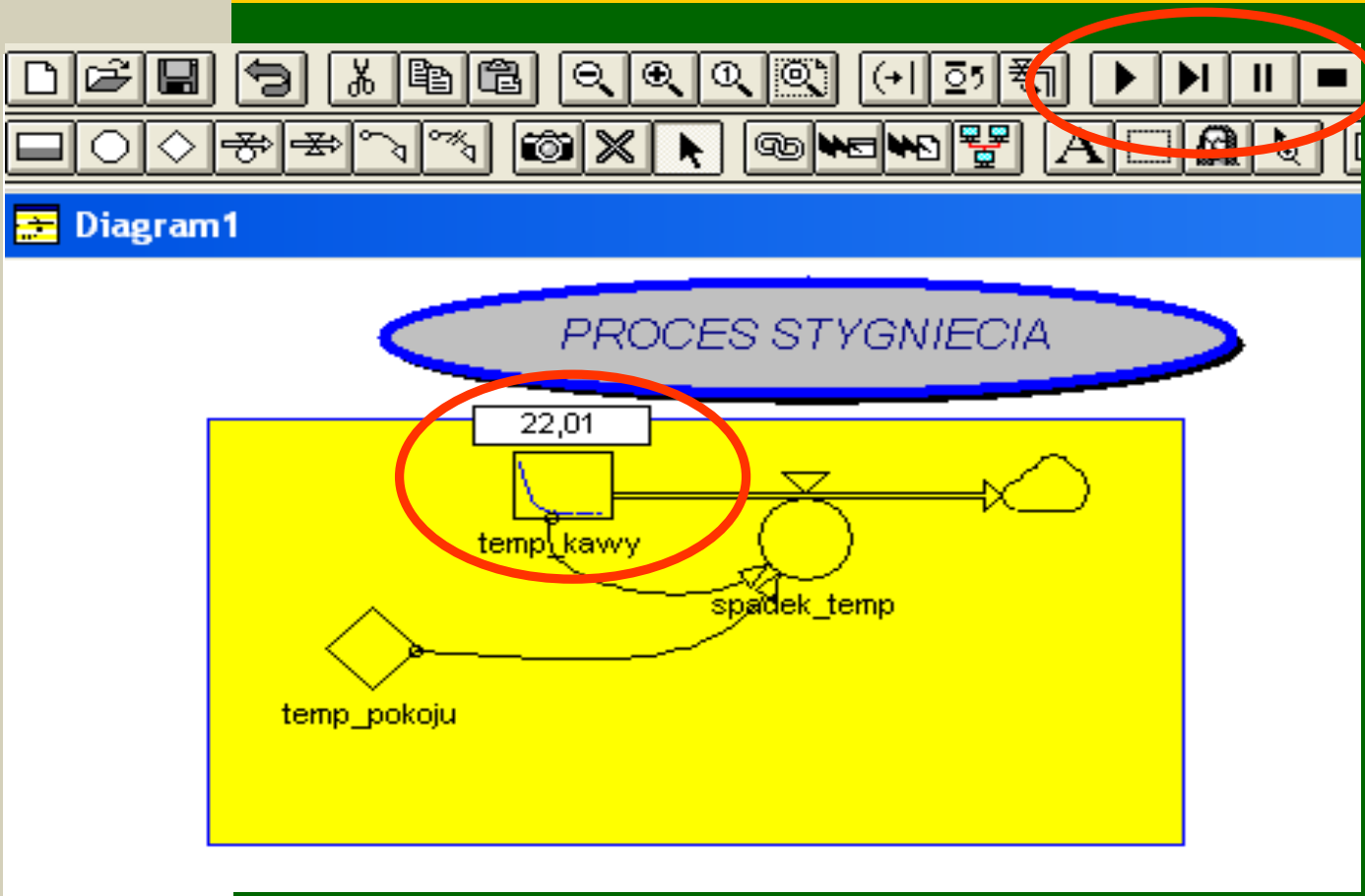
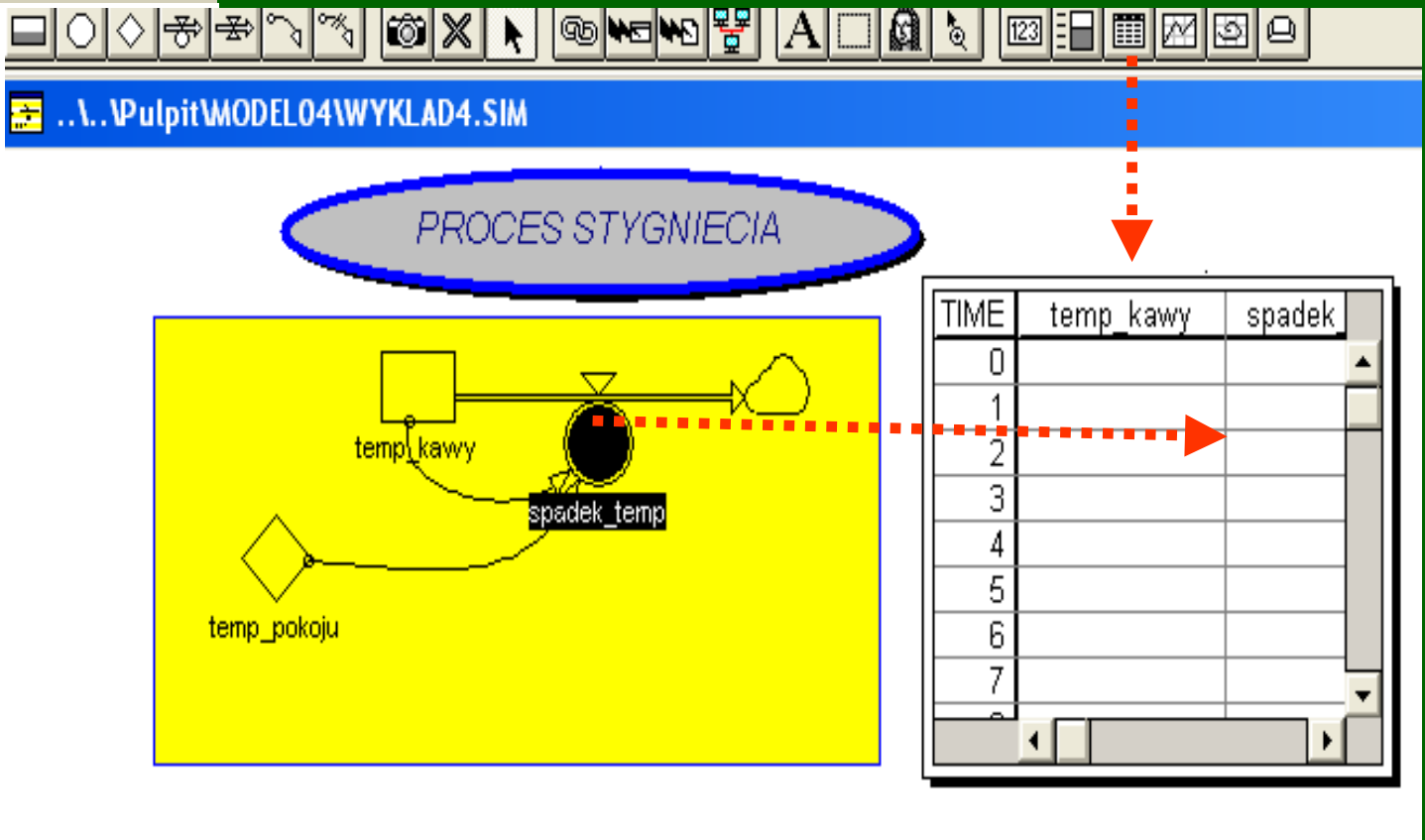


Uruchamianie symulacji



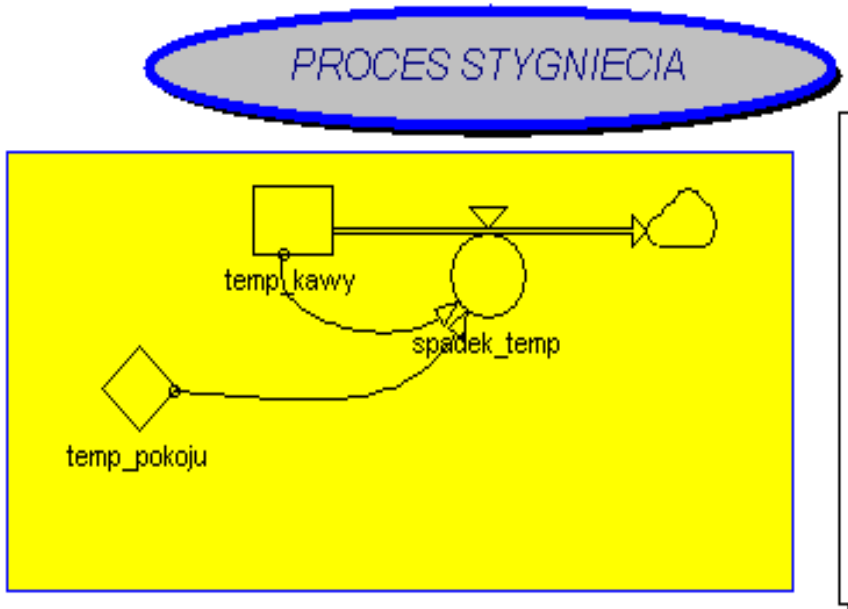
Wyniki symulacji – tabele

Generowanie tabel



Generowanie tabel

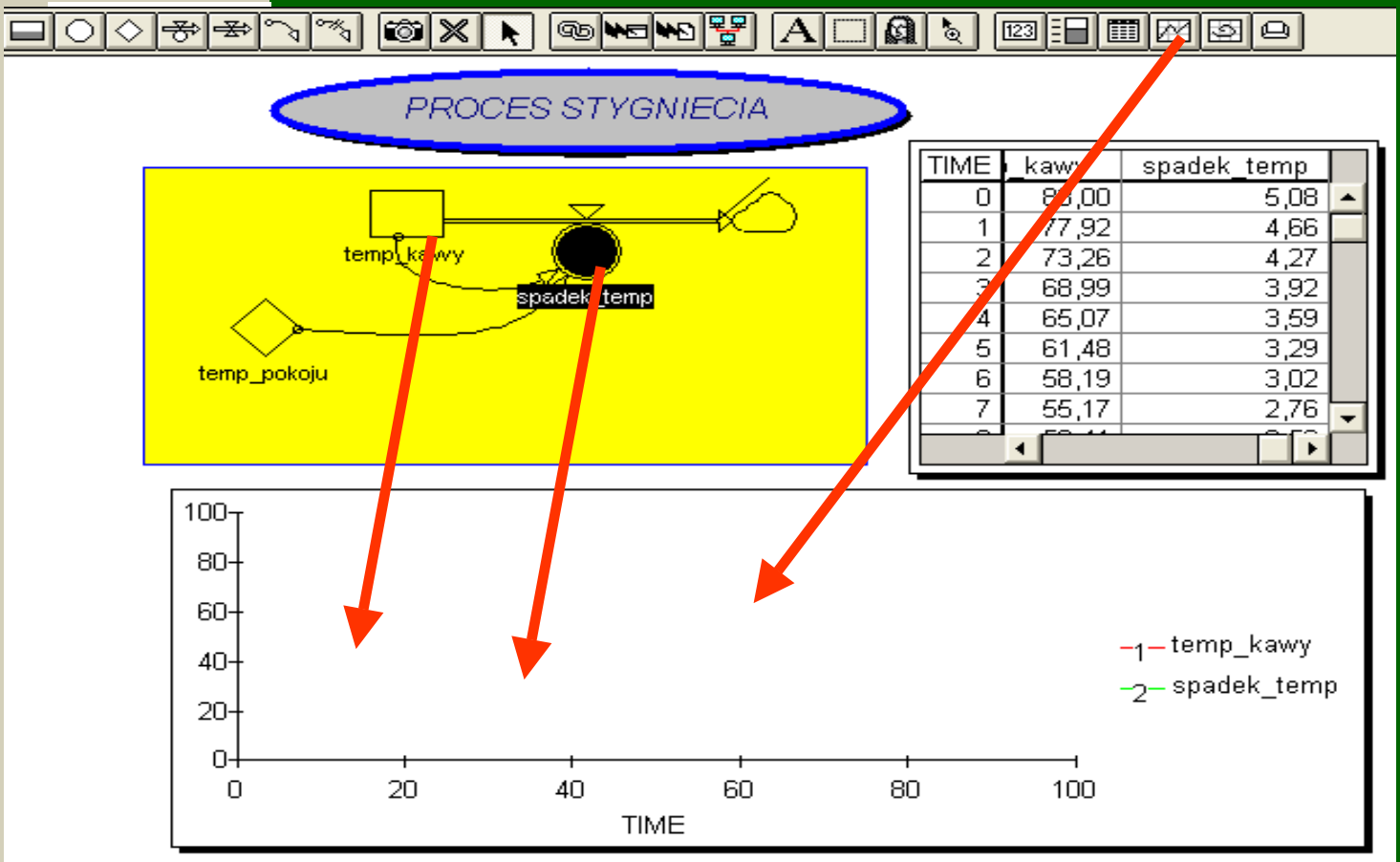
..\..\Pulpit\MODEL04\WYKLAD4.SIM



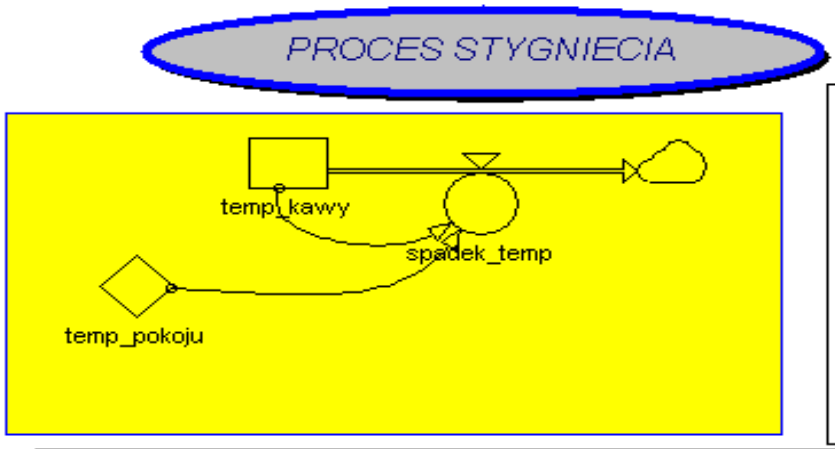
TIME	kawy	spadek_temp
0	83,00	5,08
1	77,92	4,66
2	73,26	4,27
3	68,99	3,92
4	65,07	3,59
5	61,48	3,29
6	58,19	3,02
7	55,17	2,76

Wyniki symulacji – wykresy

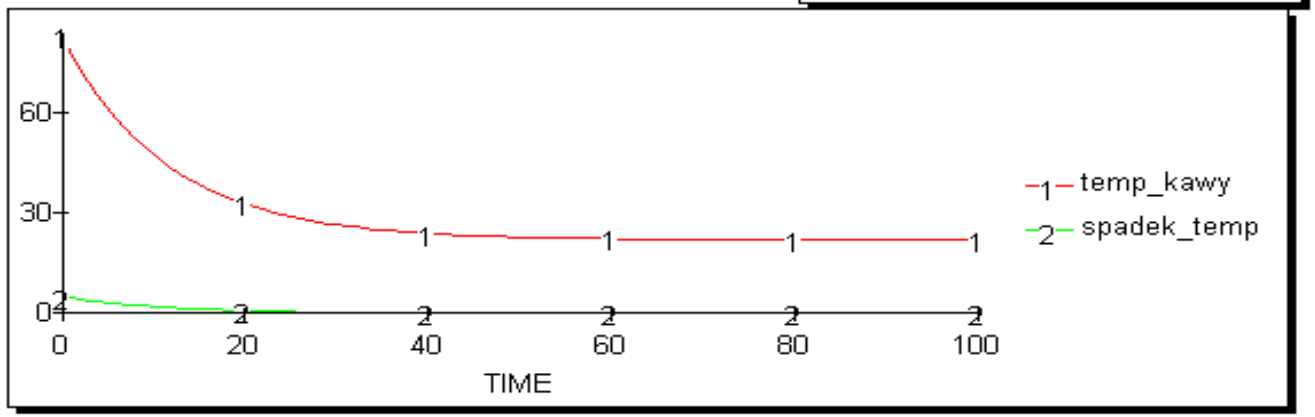
Generowanie wykresów



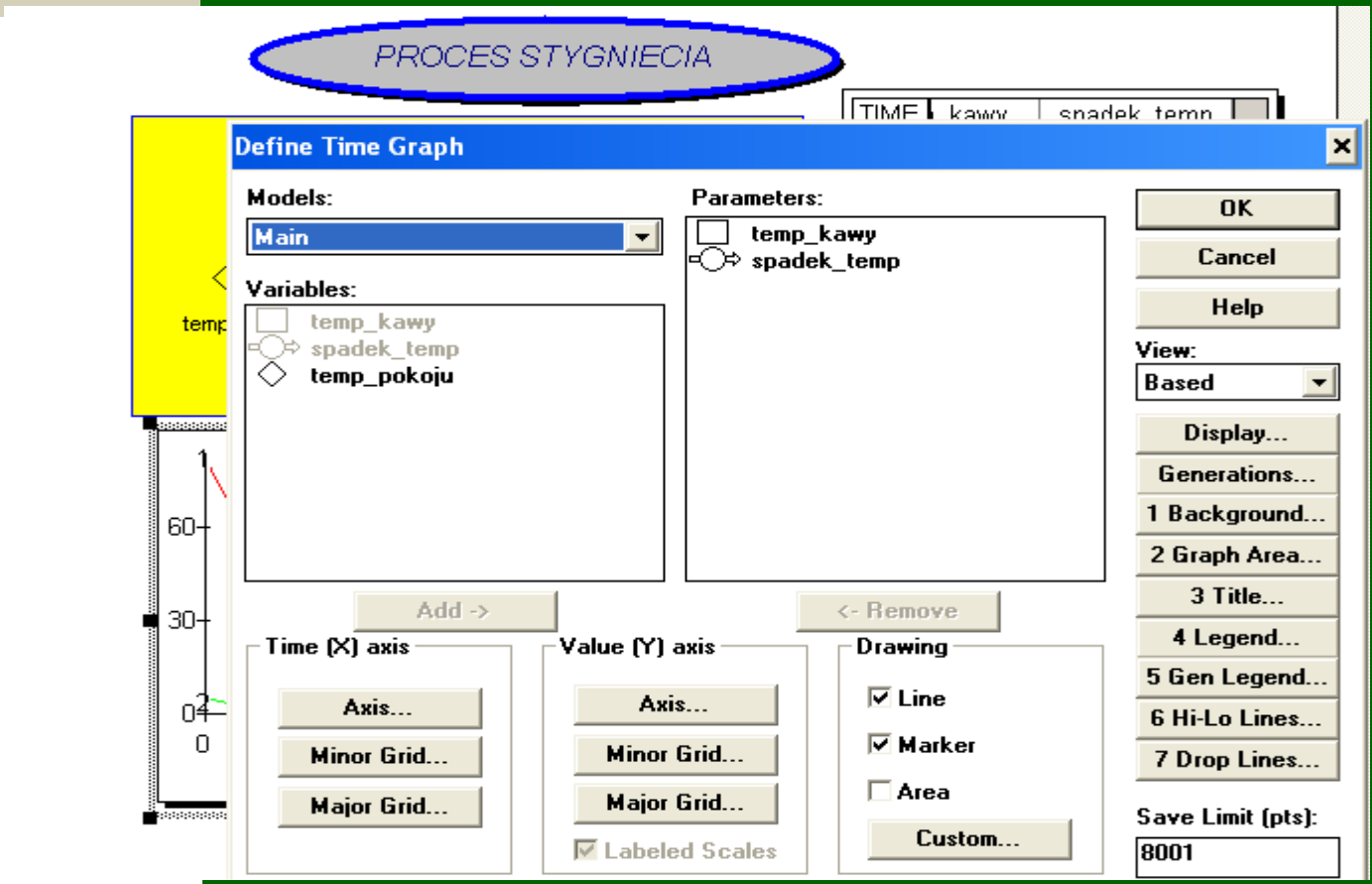
Generowanie wykresów



TIME	kawy	spadek_temp
43	23,45	0,121
44	23,33	0,111
45	23,22	0,101
46	23,11	0,0929
47	23,02	0,0851
48	22,94	0,078
49	22,86	0,0715
50	22,79	0,0656

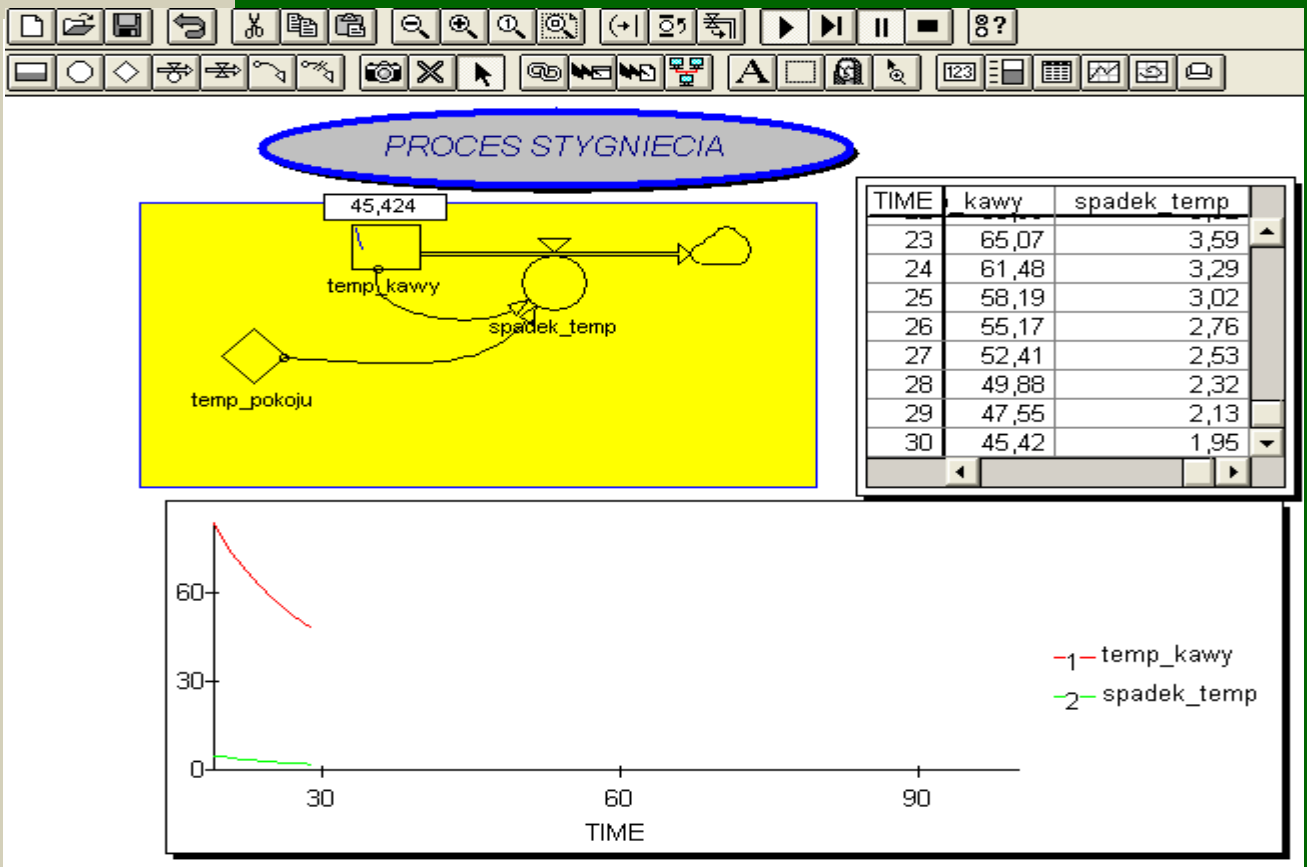


Generowanie wykresów



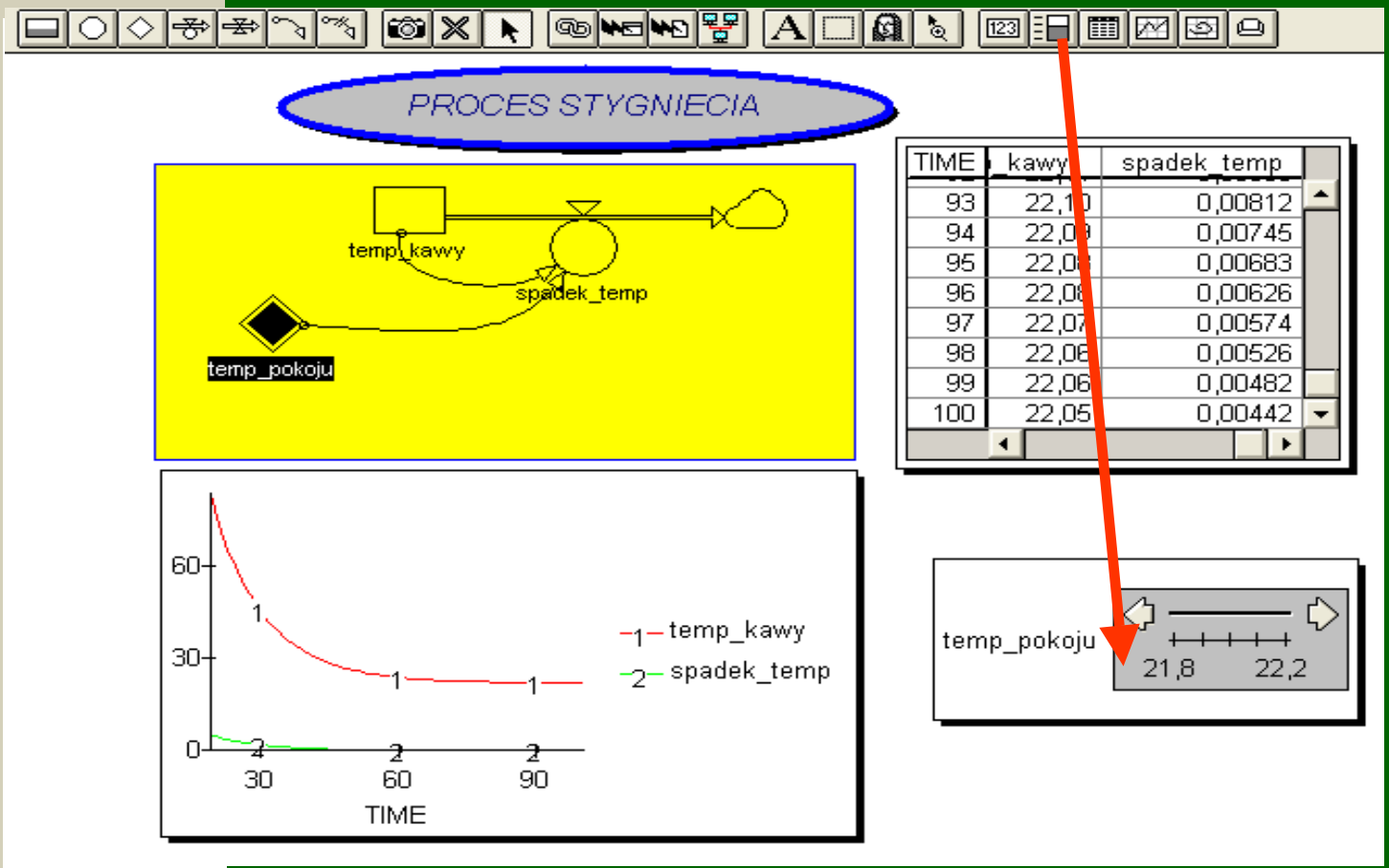
Interaktywne symulacje

Interaktywne symulacje

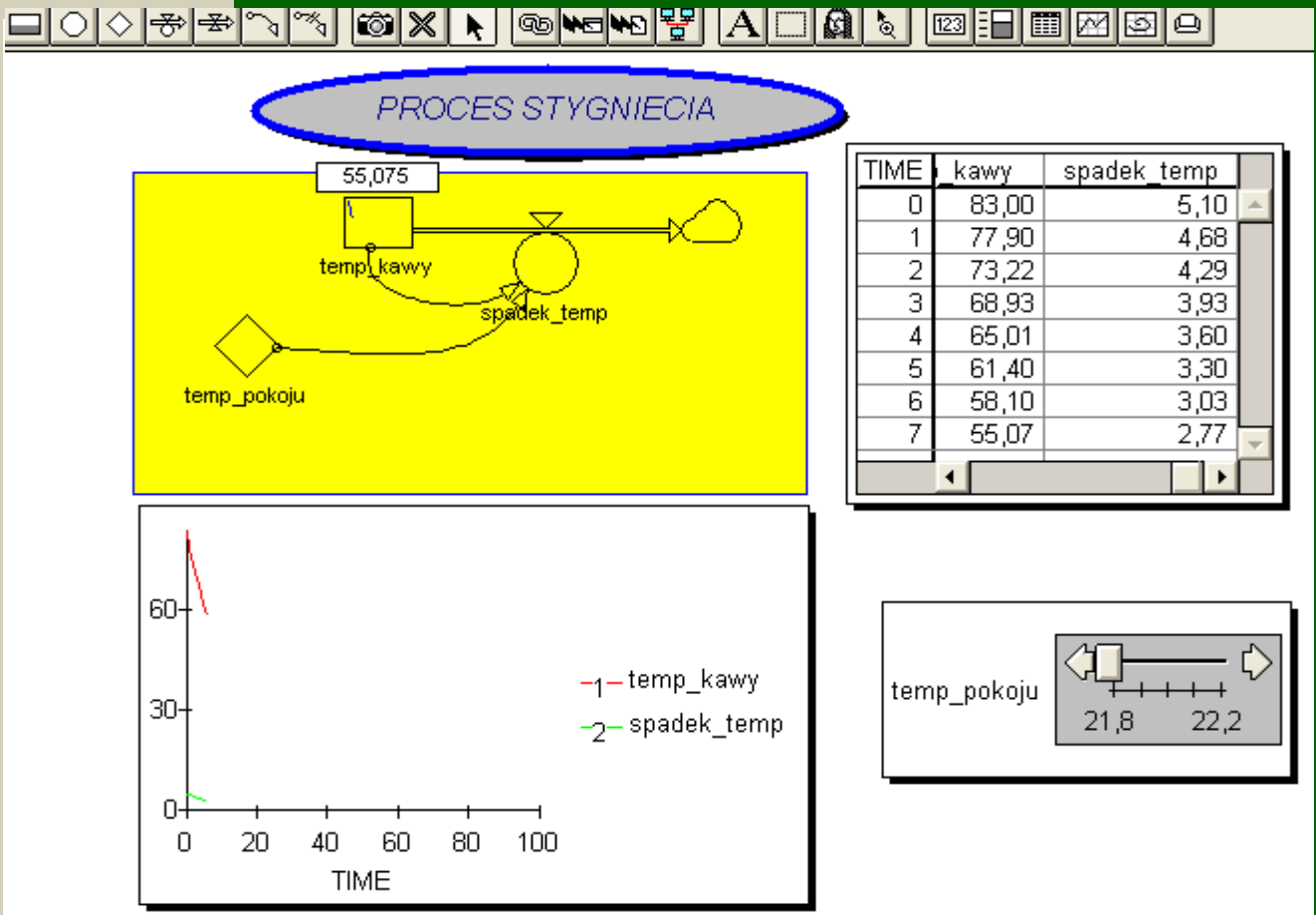


Interaktywne zmiany parametrów

Zmiany parametrów



Zmiany parametrów



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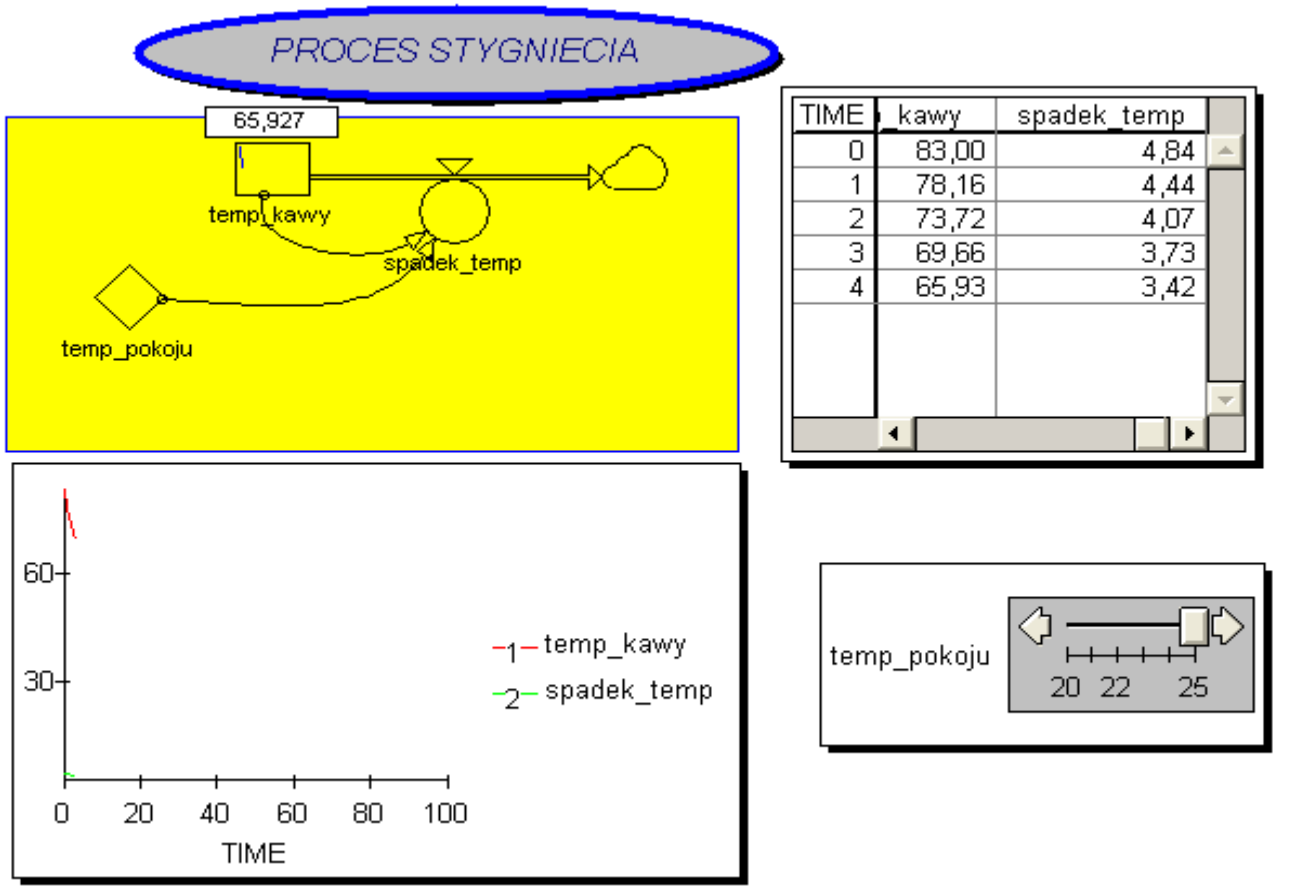
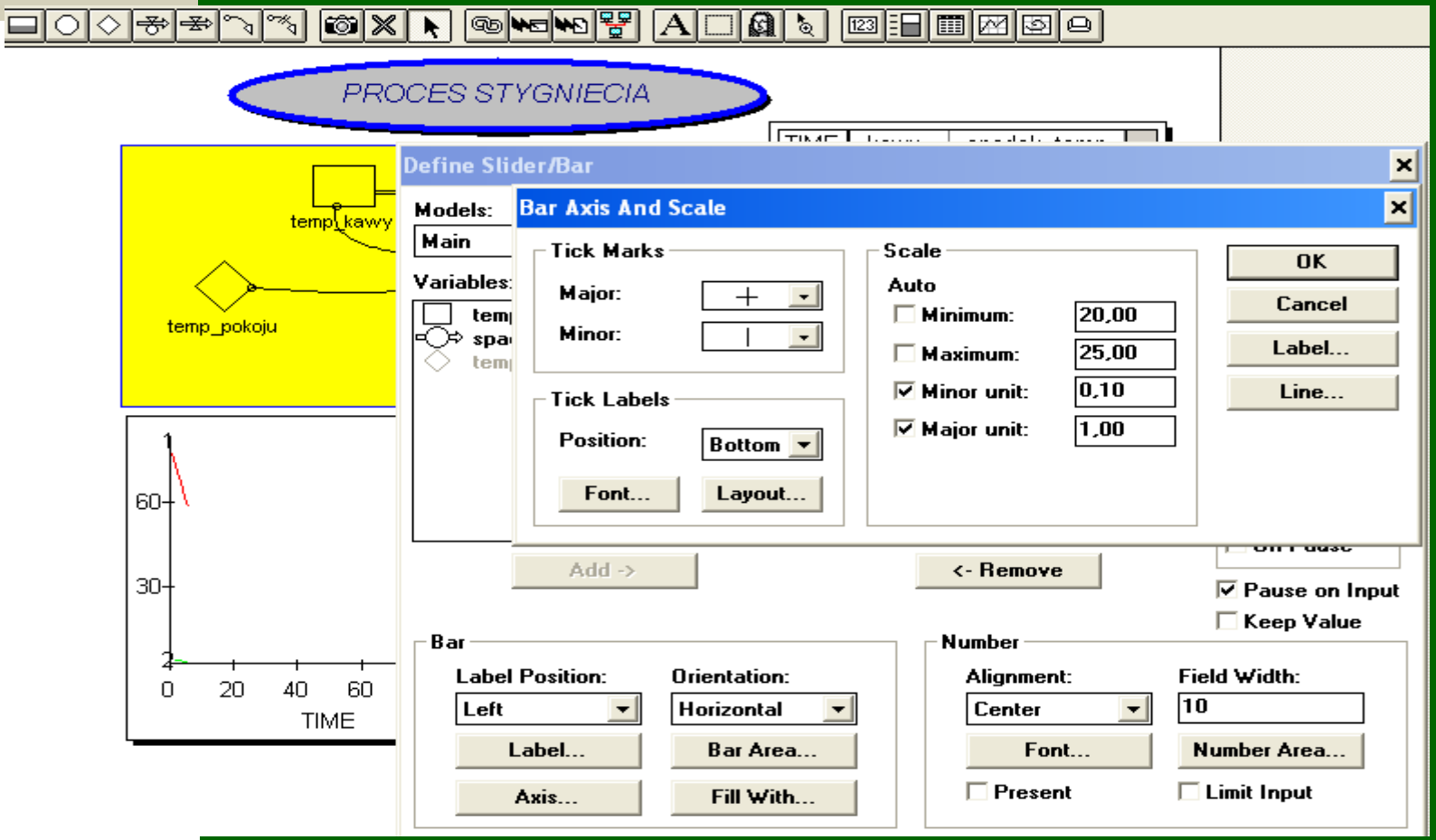
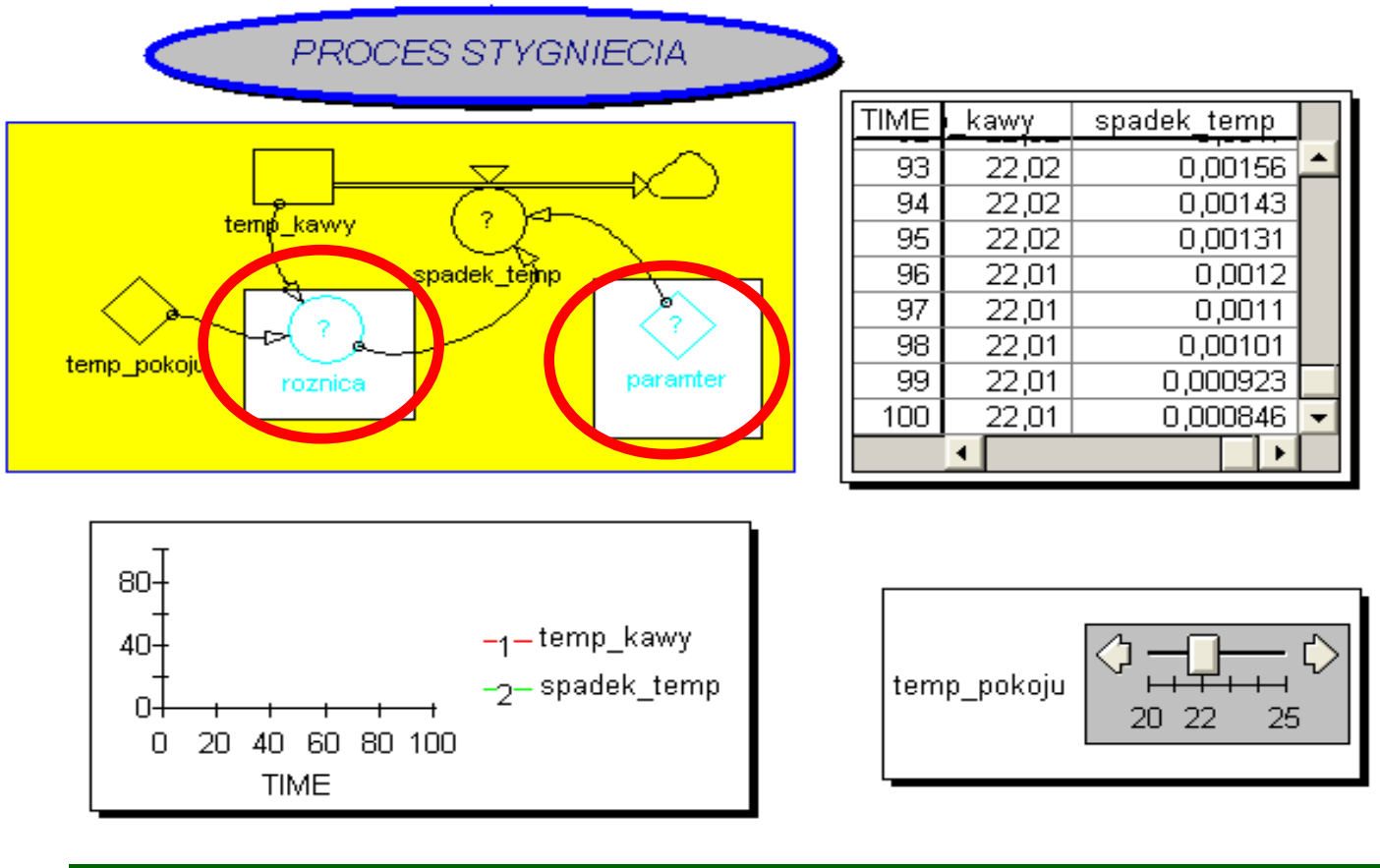


Zmiany parametrów

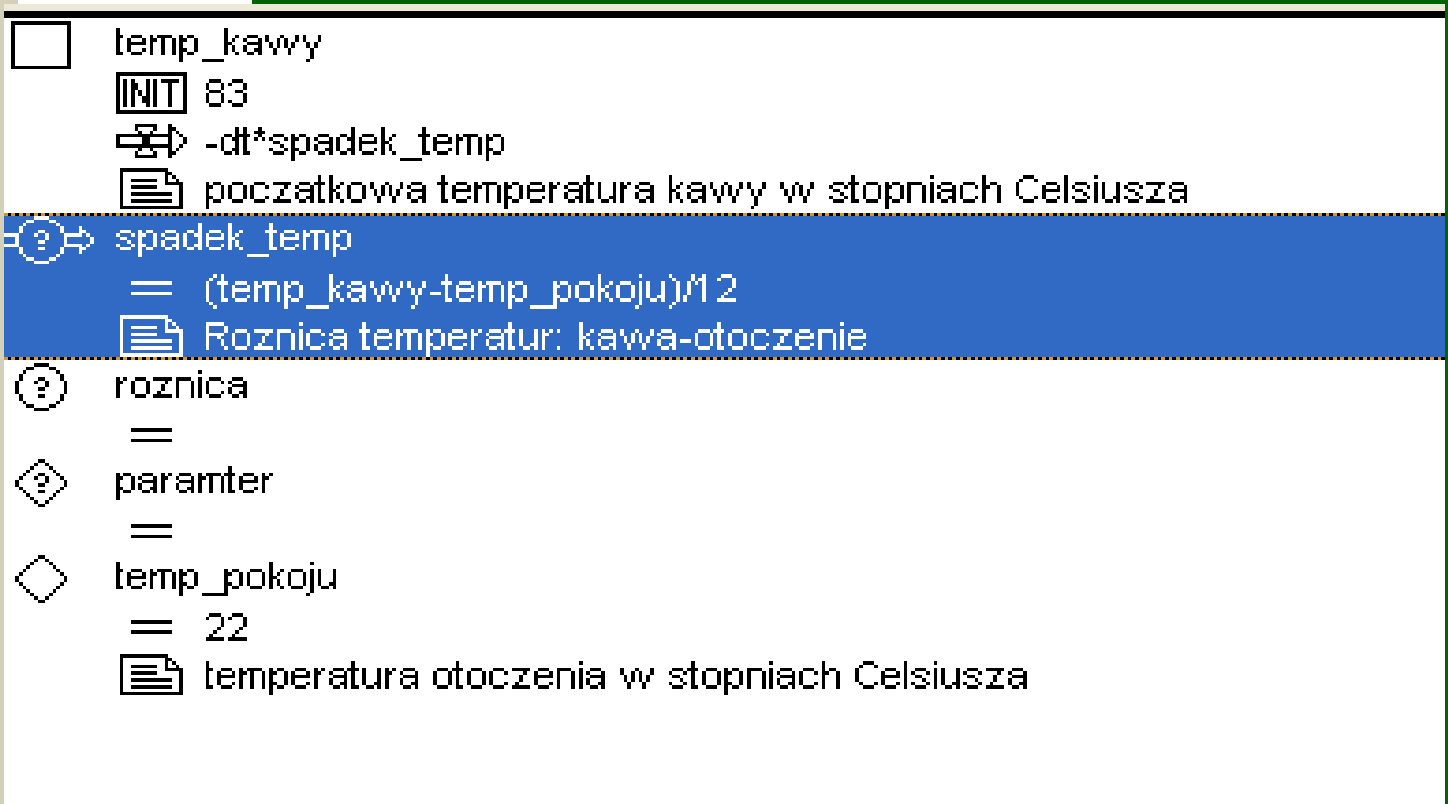


Modyfikacja modelu...?

Propozycje zmian...



Propozycje zmian...



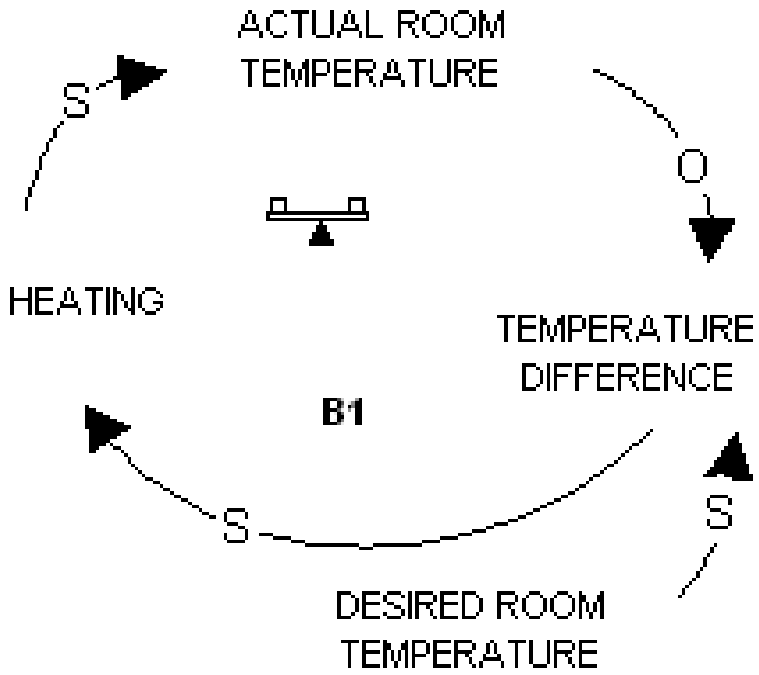
Propozycje zmian...

C. d. n.

...jako zadanie domowe...

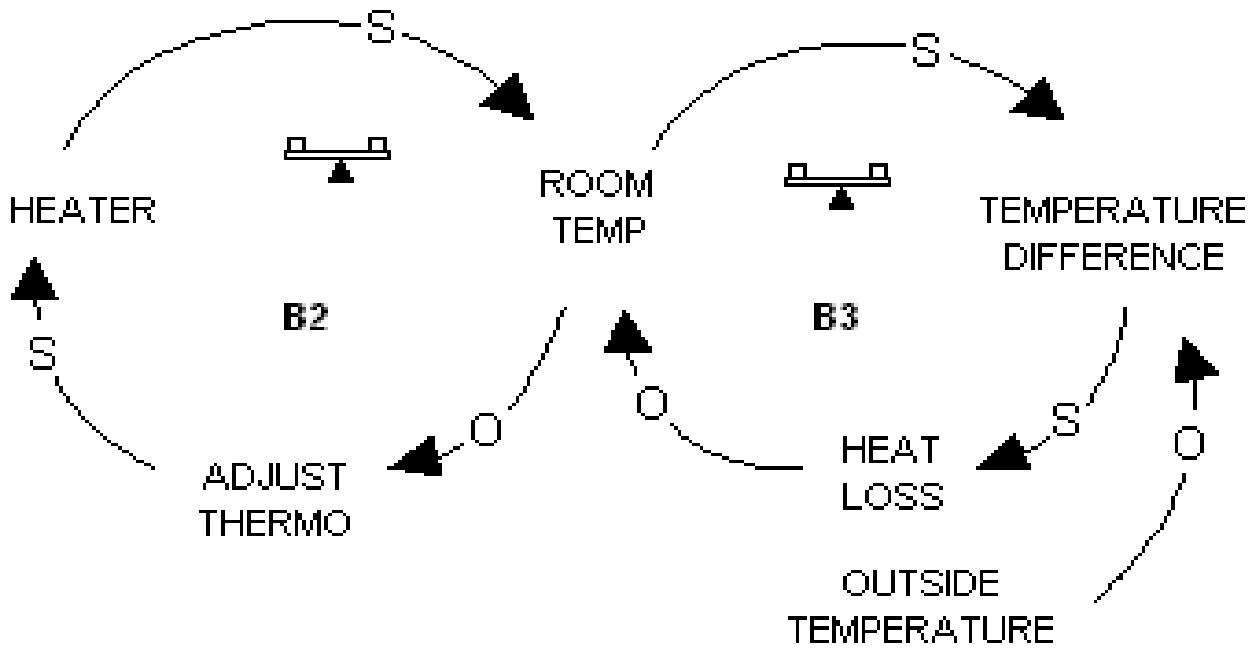
Modyfikacja - przykład rozszerzony: model z termoregulacją

Model z regulacją temperatury



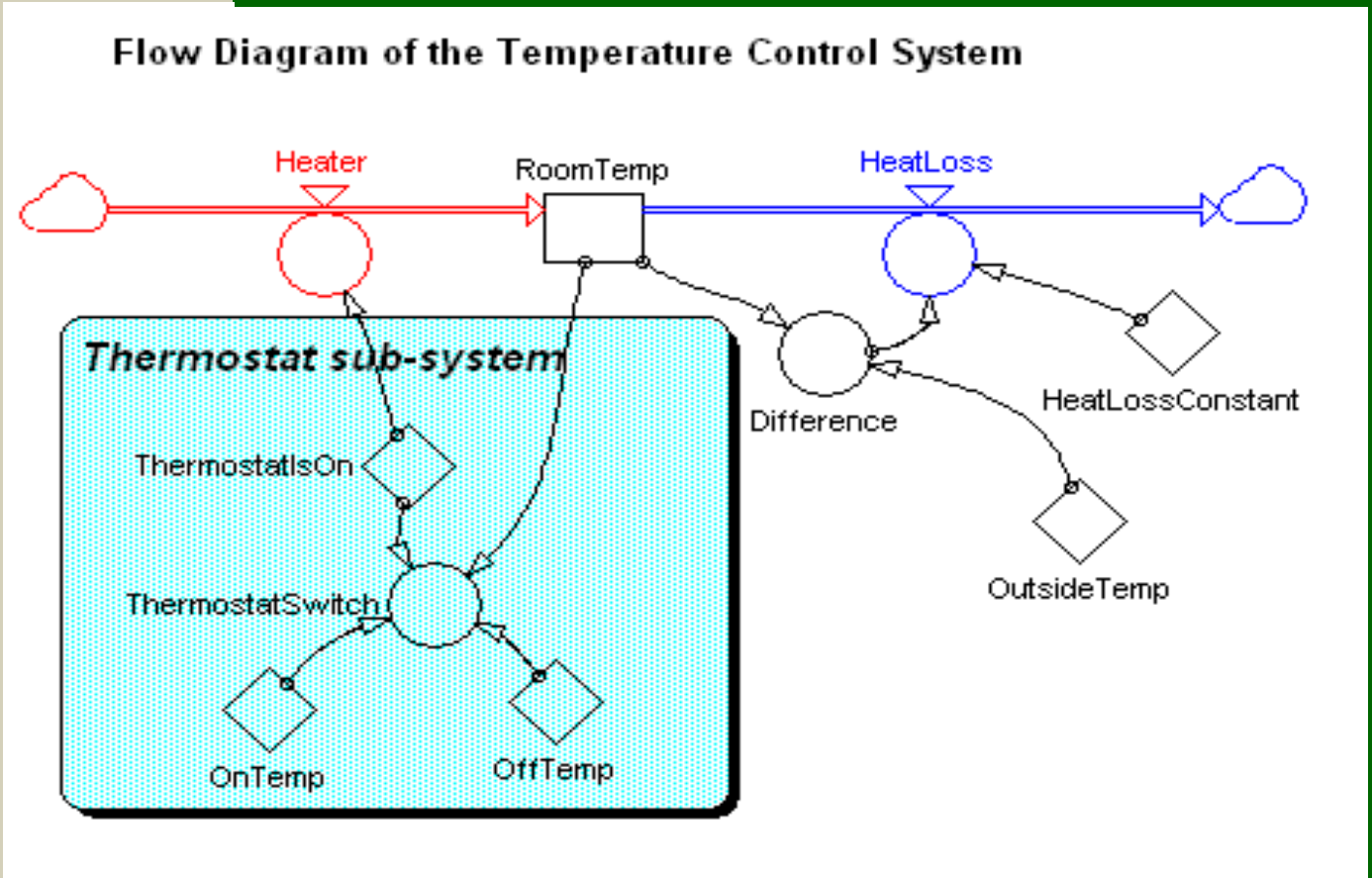
Pętla podstawowa

Model z regulacją temperatury

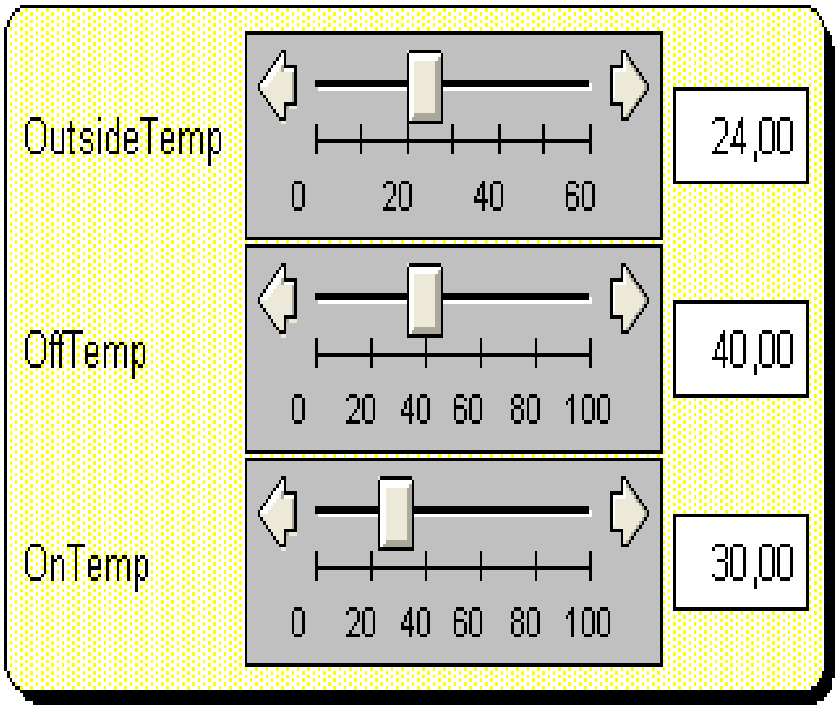


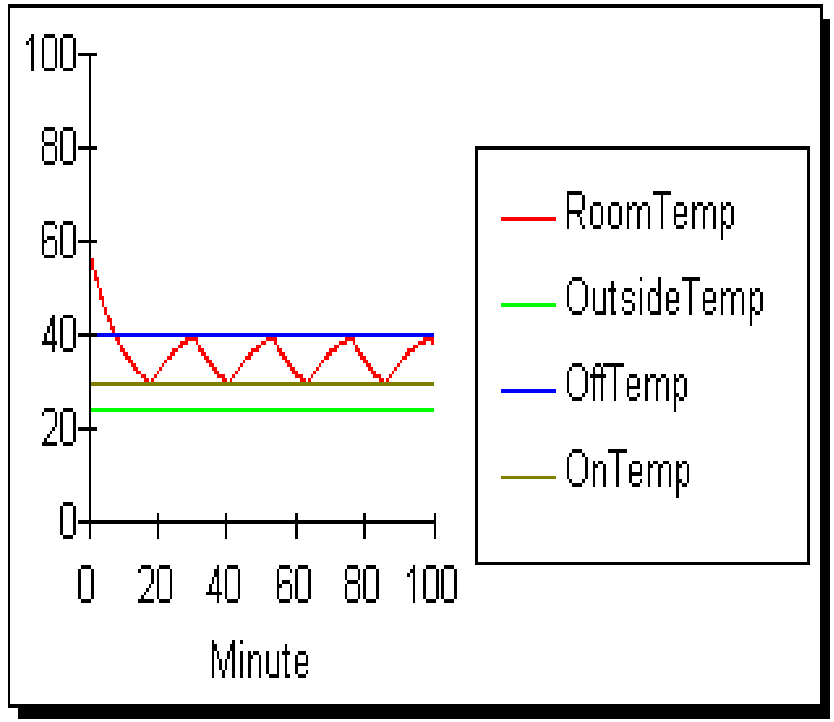
Pętla z termostatem

Model z regulacją temperatury



Model z regulacją temperatury





Model z regulacją temperatury