Αγγελίτση Σωτηρία
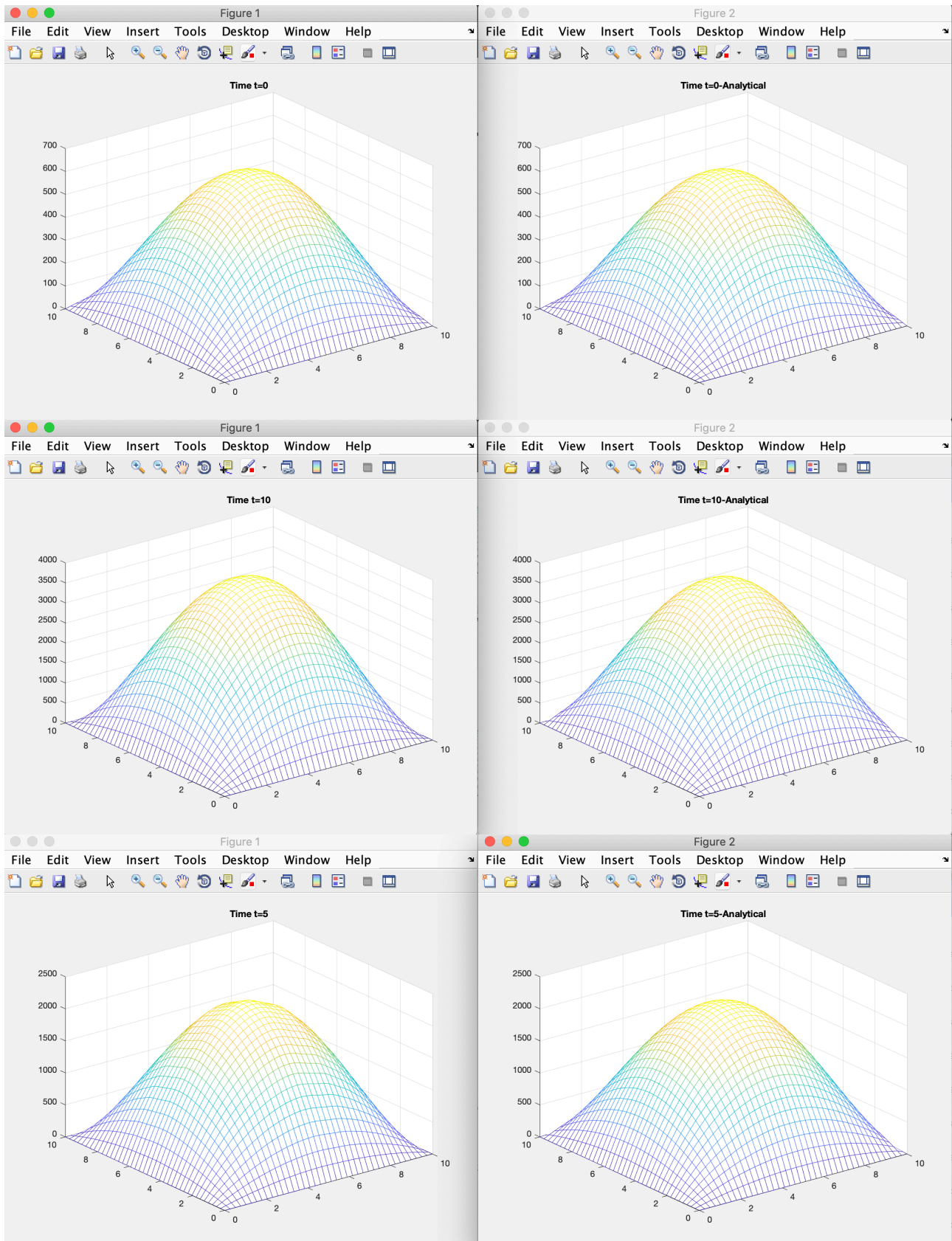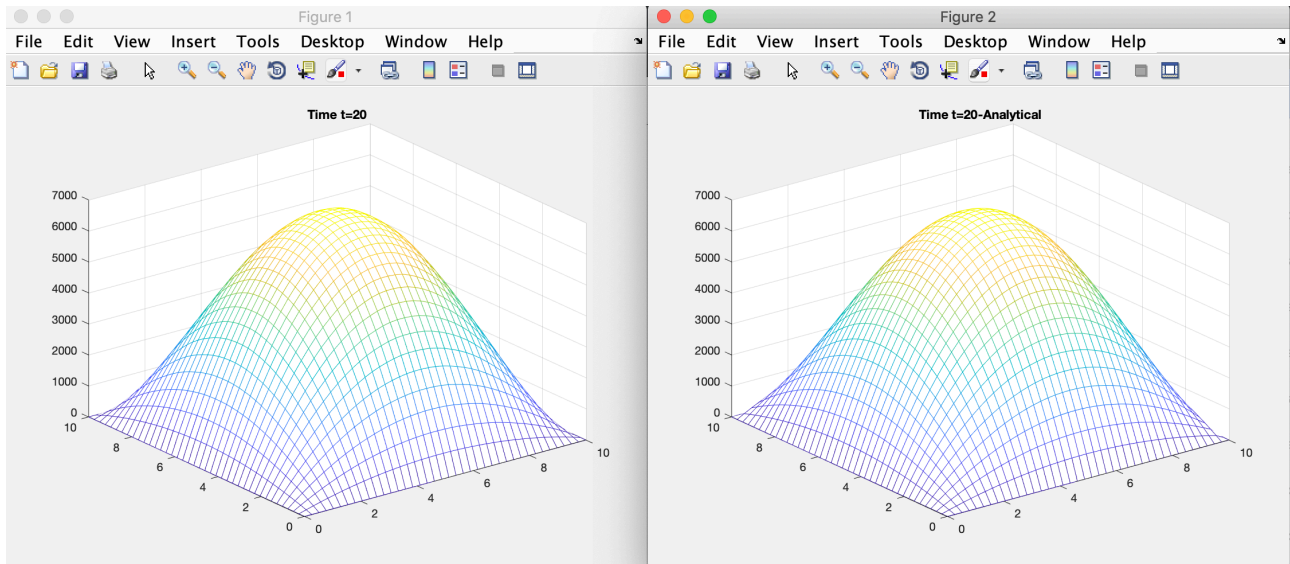
OpenMP-Project 2020

ΣΕΙΡΙΑΚΟΣ ΚΩΔΙΚΑΣ

Αγγελίτση Σωτηρία

OPENMP

Threads	Χρόνοι Εκτέλεσης (sec)	t (sec)	$U(N_x/2, N_y/2)$
1	0.02195299999584676698	0	624.178442
2	0.02256499999930383638	5	2173.339271
4	0.02265099999931408092	10	3743.018786
8	0.02549700000236043707	20	6861.859129

$$parallel \quad speedup_1 = 0.02195299999584676698$$

$$parallel \quad speedup_{1\to2} = \frac{0.02195299999584676698}{0.02256499999930383638} = 0.972878351275162840$$

$$parallel \quad speedup_{1\to3} = \frac{0.02195299999584676698}{0.02265099999931408092} = 0.969184583308090114$$

$$parallel \quad speedup_{1\to4} = \frac{0.02195299999584676698}{0.02549700000236043707} = 0.861003255042335294$$

$$parallel \quad efficiency_1 = 100\,\%$$

$$parallel \quad efficiency_2 = \frac{parallel \quad speedup_{1\to2}}{2} = \frac{0.972878351275162840}{2} \cdot 100\,\% = 48.6439\,\%$$

$$parallel \quad efficiency_3 = \frac{parallel \quad speedup_{1\to3}}{4} = \frac{0.969184583308090114}{4} \cdot 100\,\% = 24.2296\,\%$$

$$parallel \quad efficiency_4 = \frac{parallel \quad speedup_{1\to4}}{8} = \frac{0.861003255042335294}{8} \cdot 100\,\% = 10.7625\,\%$$

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