

Esercizi

Shuttle

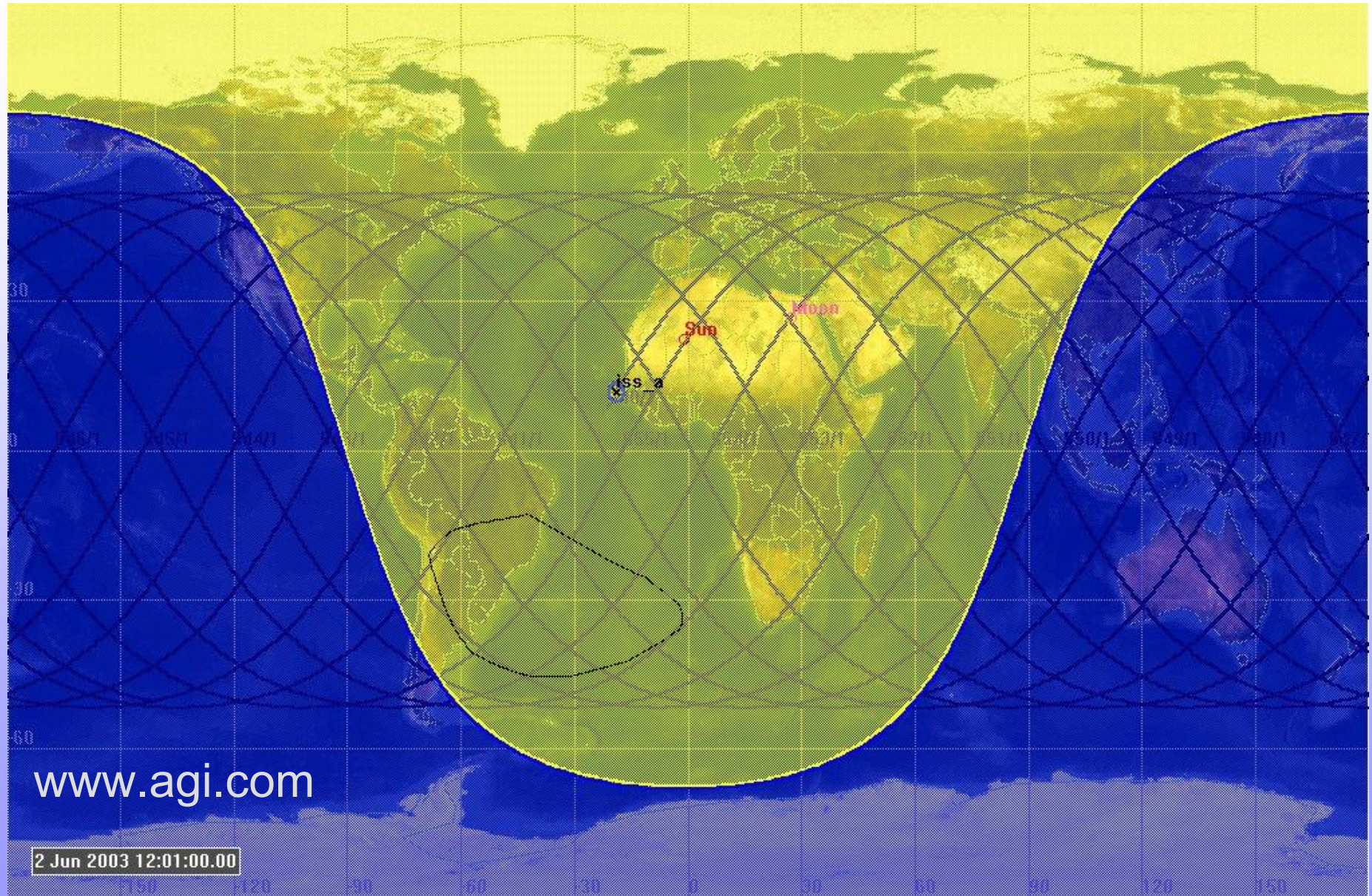
• LEO	$h=350 \text{ km},$	$i=0^\circ,$	$e=0$
	Sun-synchronous $h = h_p$	$i=28^\circ,$	$e=0$
		$e=0.1$	
		$i=96.85^\circ,$	$e=0$
• MEO	$h=10\,000 \text{ km},$	$i=28^\circ,$	$e=0$
	$h=20\,222 \text{ km},$	$i=60^\circ,$	$e=0$
• GEO	$h=35\,782 \text{ km},$	$i=0^\circ,$	$e=0$
		$i=23^\circ,$	$e=0$
		$i=60^\circ,$	$e=0$
• Molniya	$a=26\,600 \text{ km},$	$i=63.4^\circ,$	$e=0.75$

GPS

Esercizi

altezza (km)	raggio (km)	velocità (km/s)	velocità (km/ora)	circonf. (km)	periodo (s)	periodo (ore)
100	6478	7.84	28239	40703	5189	1.44
200	6578	7.78	28023	41332	5310	1.47
400						
600	6978	7.56	27208	43845	5801	1.61
800	7178	7.45	26827	45102	6052	1.68
1000						
2000	8378	6.90	24831	52641	7632	2.12
4000	10378	6.20	22311	65208	10522	2.92
6000	12378	5.67	20429	77774	13705	3.81
8000	14378	5.27	18955	90340	17158	4.77
10000						
20000	26378	3.89	13994	165739	42636	11.84
30000	36378	3.31	11917	228571	69051	19.18
35800	42178	3.07	11067	265013	86207	23.95
35900	42278	3.07	11054	265641	86514	24.03
36000						
40000	46378	2.93	10554	291402	99399	27.61
46000	52378	2.76	9931	329102	119299	33.14

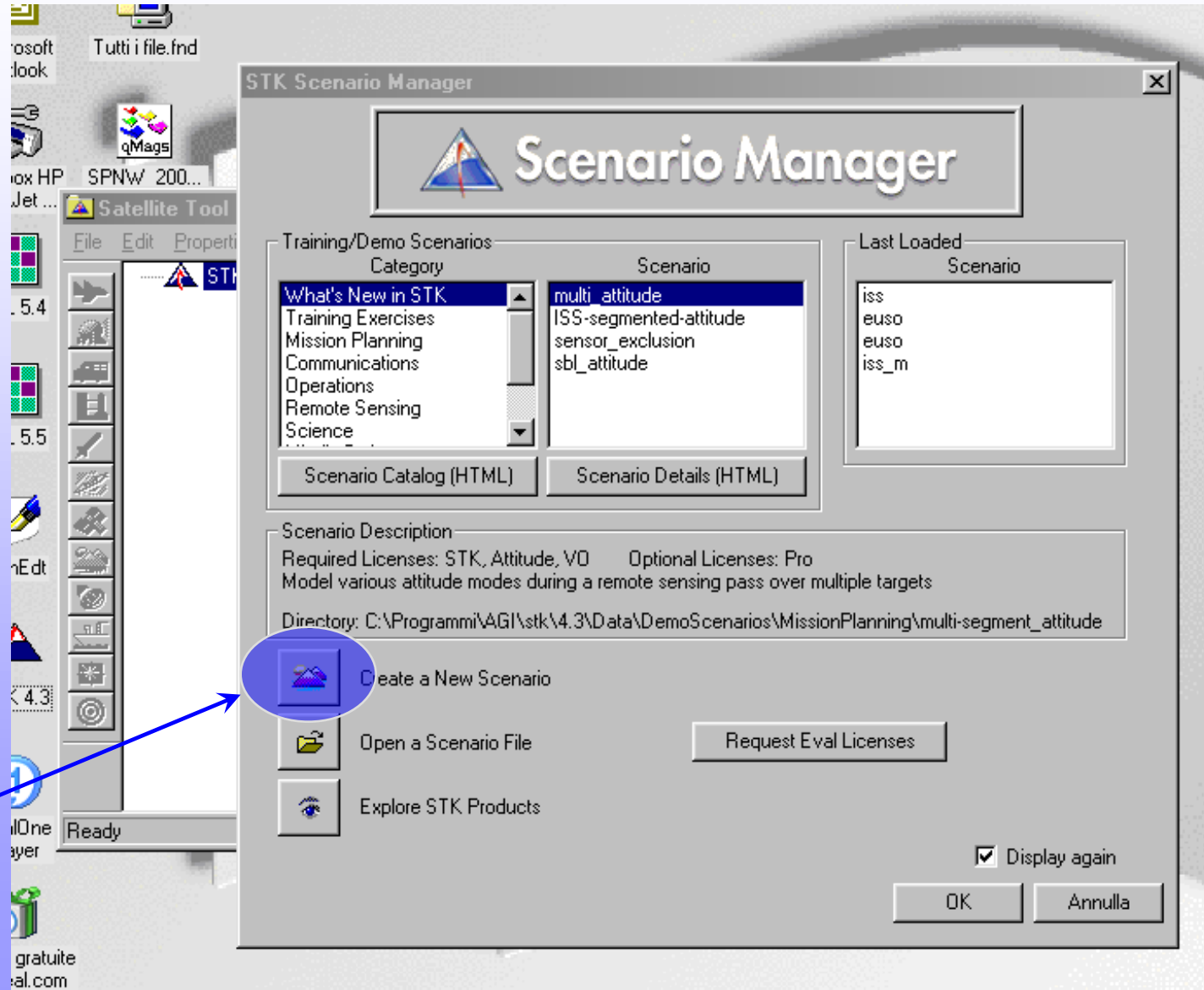
Orbita di un satellite: STK Satellite Tool Kit



STK 1/3

cd /usr/local/agi/STKv4.4/bin 4.4.0/

./stk



STK 2/3

ORBIT GENERATION

Ephemeris Interval

The Start and Stop times specify the temporal boundaries of the Satellite.

Orbit Start:

Orbit Stop:

The Time Step specifies the interval between calculated ephemeris steps.

Time Step:

< Indietro Fine Annulla

deg UTCG km kg sec

Lat: -50.588 Lon: 113.311 Very Low 65.697

STK 3/3

