

Linux'da Oyunlar



Onur Küçük <onur@delipenguen.net>

Oyun ?

- Herkes oyun oynar
- Bilgisayar alırken oyun için fazla para verilir
- Çocukların bilgisayarla oyun aracılığıyla tanışı



Tarihçe

- 1995 – Klasik X oyunları
- 1997 – Kaliteli oyunlar için çalışmalar
- 1999 – Ticari destek (Quake serisi, Unreal)
- 2004 – UT2004, Neverwinter Nights, Cube



Neler Gerekli

- Amaca hitap eden donanım
- Ayarları yapılmış kaliteli bir işletim sistemi
- Gerekli yazılımlar
- Oyun



Donanım Desteği (Ekran Kartı)

- Nvidia
- ATI
- Matrox
- Intel
- DRI (<http://dri.sourceforge.net>)



Donanım Desteği (Ses)

- OSS
- ALSA
- AC97
- Creative, Yamaha, ESS ...



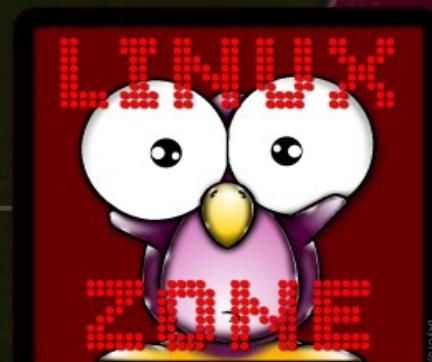
Donanım Desteği (Joystick/Gamepad)

- Çekirdek tarafından desteklenen herhangi bir Jostick/Gamepad
- Creative Labs Blaster Cobra
- MS Sidewinder (forcefeedback desteği ile)
- Logitech Wingman Warrior
- Multisystem Sega, NES, PS



Performans

- Hangi dağıtım ?
- Eksik/yanlış sürüm kütüphaneler
- Gereksiz yükleri azaltmak (Masaüstü ortamı, ses sunucusu, sistem servisleri)
- Doğru arabirim (Xmame/GLmame, wine/winex)



Oyun Seçerken

- Linux sürümü
- Linux çalıştırılabilir dosya + Başka OS CD'si
- Emulator + Başka OS/mimari CD'si



Neden Linux'da Oyun ?

- Kararlılık
- Performans
- Çok kullanıcılı sistem
- Çoklu platform desteği
- DirectX vs. OpenGL



Neden Açık Kod Oyunlar

- Hızlı güncelleme, hata düzeltme
- Multiplatform
- Sorun oluşursa çabuk müdahale
- Lisans ücreti



Örnek Test (tomshardware)

- AMD Athlon 1800+ (1.53 Ghz)
- 256MB DDR SD-RAM
- GeForce3 Ti 200
- 9GB SCSI 10000 RPM Seagate HDD
- MDK 8.2 vs. W2K
- Quake 3 v1.11
- Yüksek Kalite grafik ayarı
- demo001



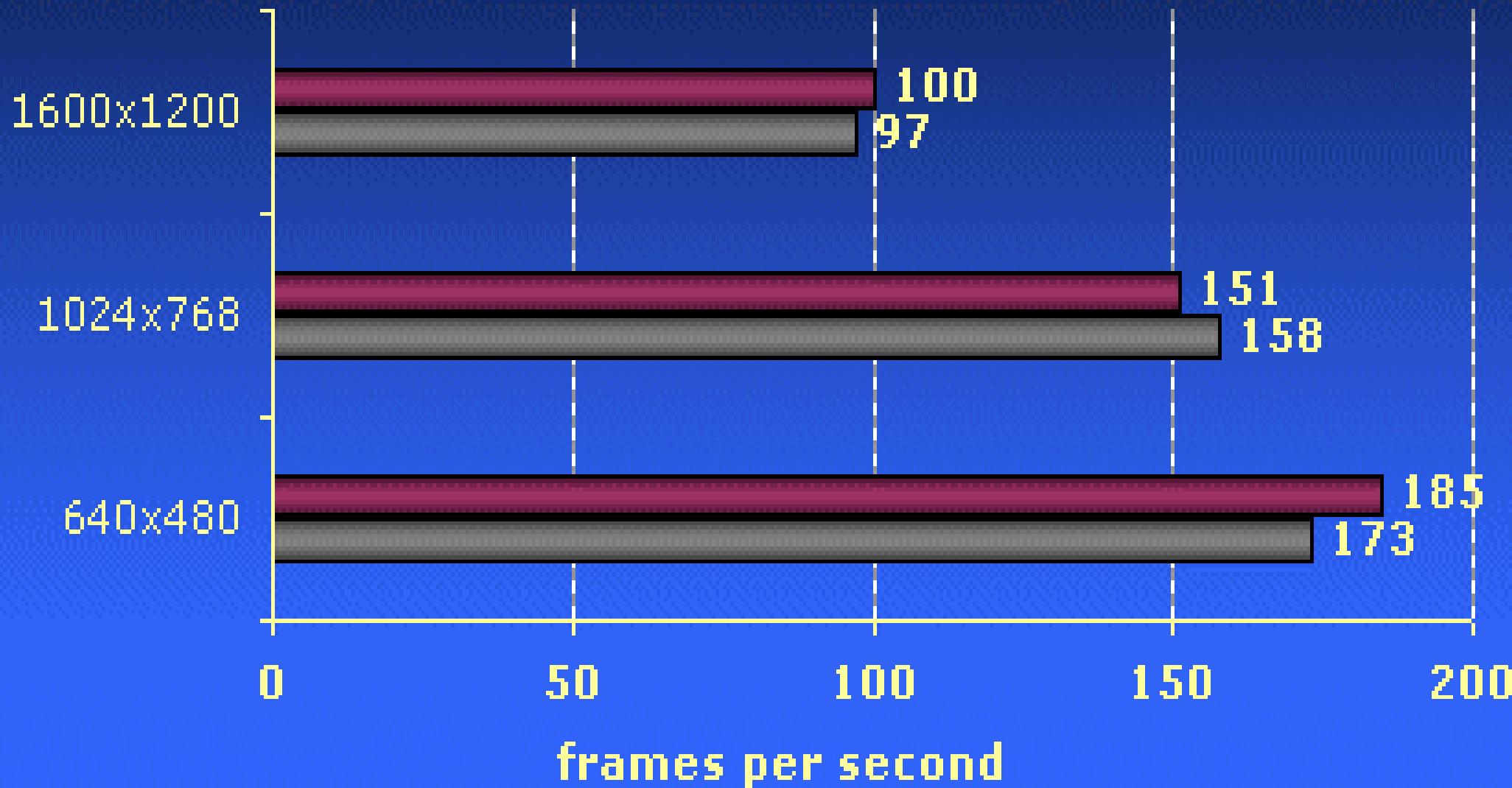


Quake III Arena

Linux vs Windows 2000

32 Bit Color

■ Windows 2000 ■ Linux

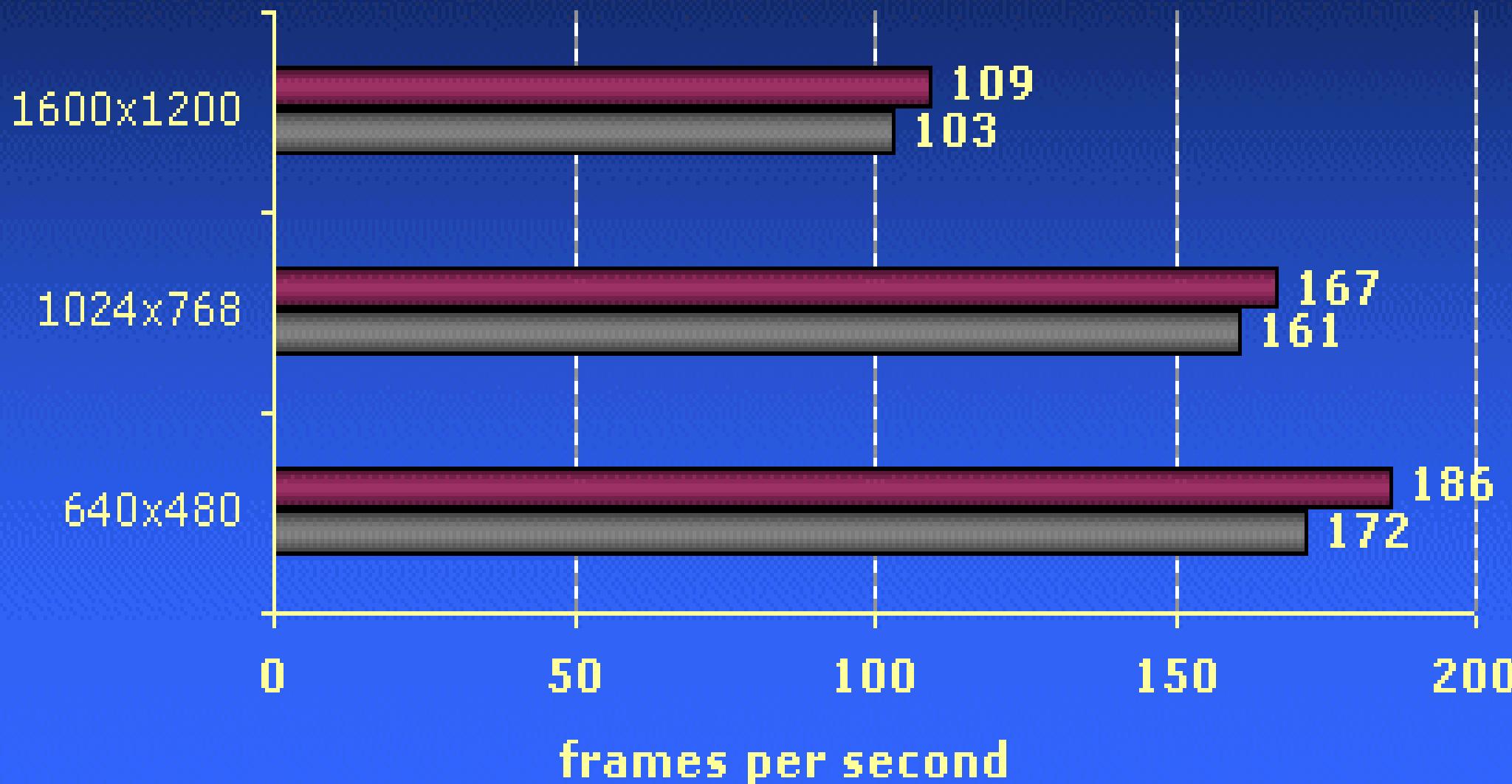


Quake III Arena

Linux vs Windows 2000

16 Bit Color

■ Windows 2000 ■ Linux



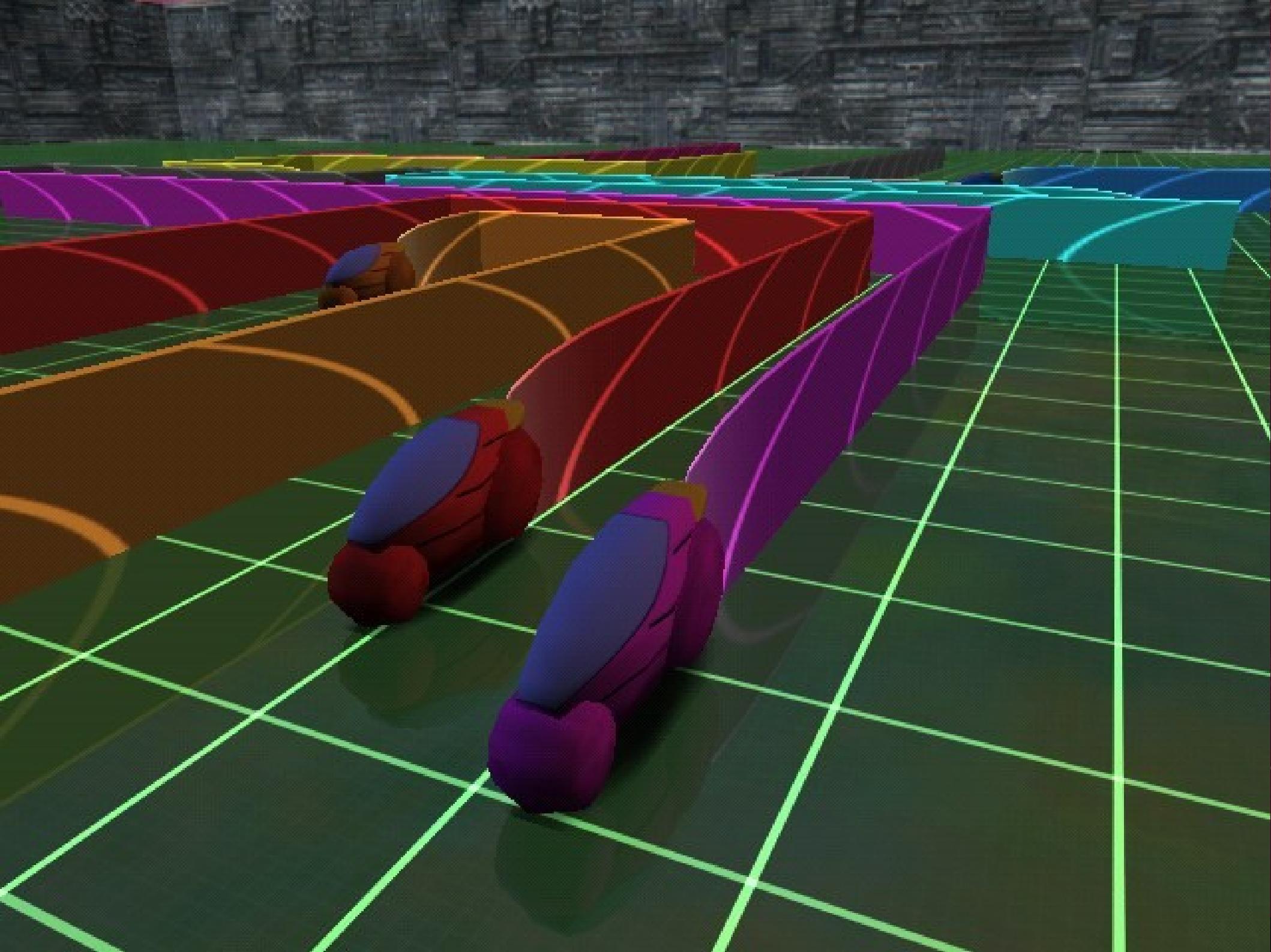
Açık Kaynak Kodlu Oyunlar ?

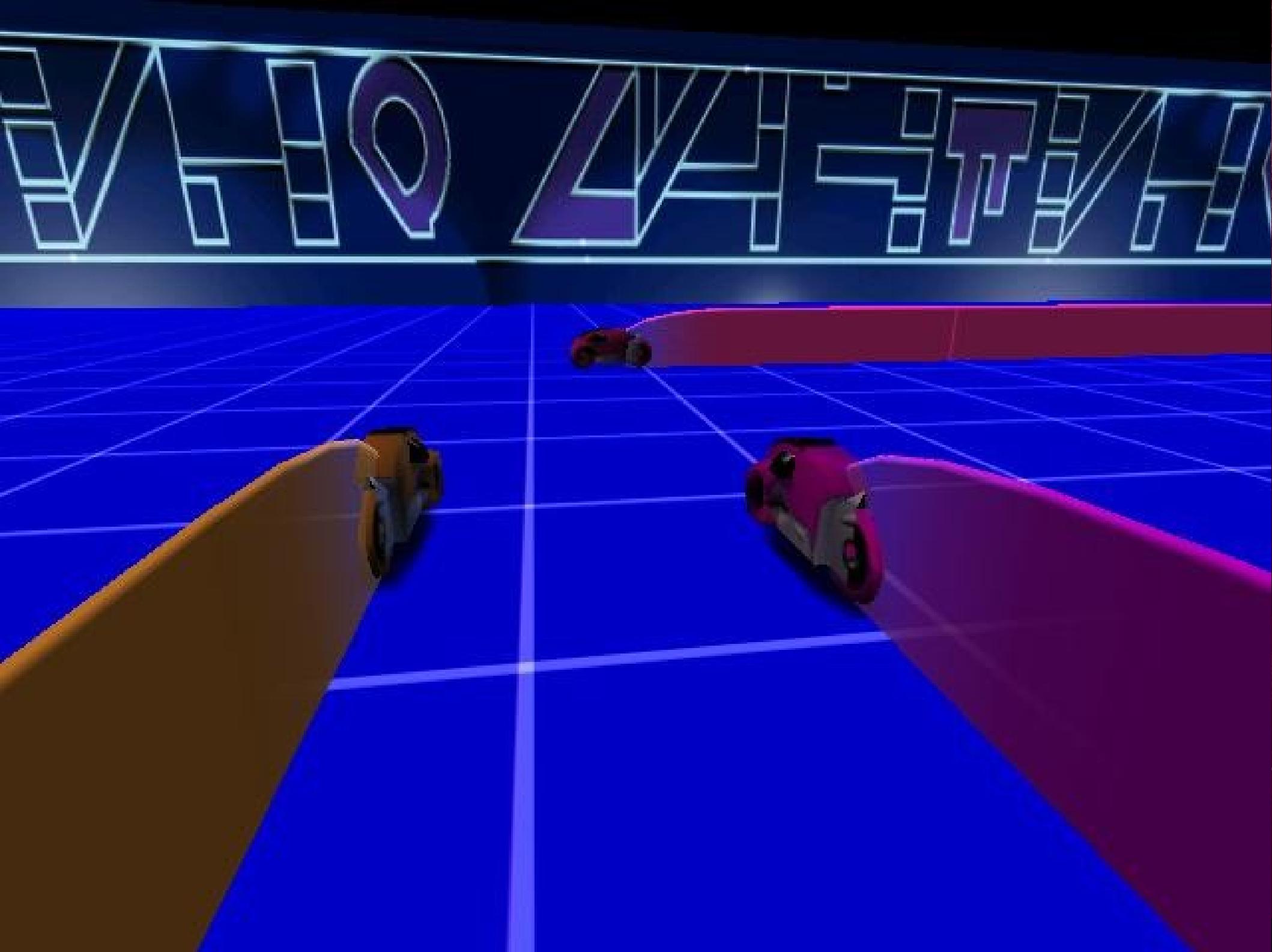




Armagetron





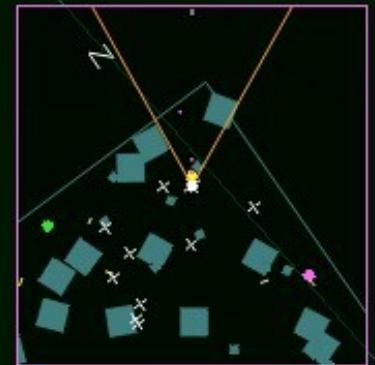




BZ Flag



Driving with jdoe



RozBoz (Green Team): got wrecked by jdoe's blast
Chris (Red Team): grabbed Laser flag
Kid Icuras (Purple Team): got wrecked by hate me!'s blast
jdoe (Purple Team): got wrecked by Blaster's blast
Blaster (Rogue): grabbed Machine Gun flag
Blaster (Rogue): dropped Machine Gun flag
mwa (Green Team): grabbed Steamroller flag
Chris (Red Team): dropped Laser flag
Chris (Red Team): was destroyed by Jack's guided missile
jdoe (Purple Team): grabbed Tiny flag
Kid Icuras (Purple Team): got wrecked by [dmp]'s blast
mwa (Green Team): dropped Steamroller flag
mwa (Green Team): was destroyed by Jack's guided missile
[dmp] (Rogue): got wrecked by RozBoz's blast
RozBoz (Green Team): got wrecked by jdoe's blast

Driving with Chris



hate me! (Rogue): grabbed Super Bullet flag
hate me! (Rogue): dropped Super Bullet flag
hate me! (Rogue): got wrecked by Blaster's blast
Chris (Red Team): dropped Genocide flag
Chris (Red Team): got wrecked by [dmp]’s blast
Jack (Blue Team): dropped Genocide flag
Jack (Blue Team): got wrecked by jdoe’s blast
[dmp] (Rogue): blew myself up

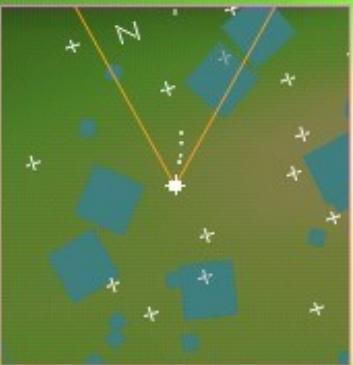
jdoe (Purple Team): grabbed Genocide flag
Chris (Red Team): got wrecked by Blaster's blast
Kid Icuras (Purple Team): grabbed Genocide flag
Jack (Blue Team): grabbed High Speed flag
[dmp] (Rogue): got wrecked by Blaster's blast
hate me! (Rogue): grabbed Identify flag



C: -2

Reloaded in 2.8 Locked on Slug (Red Team)

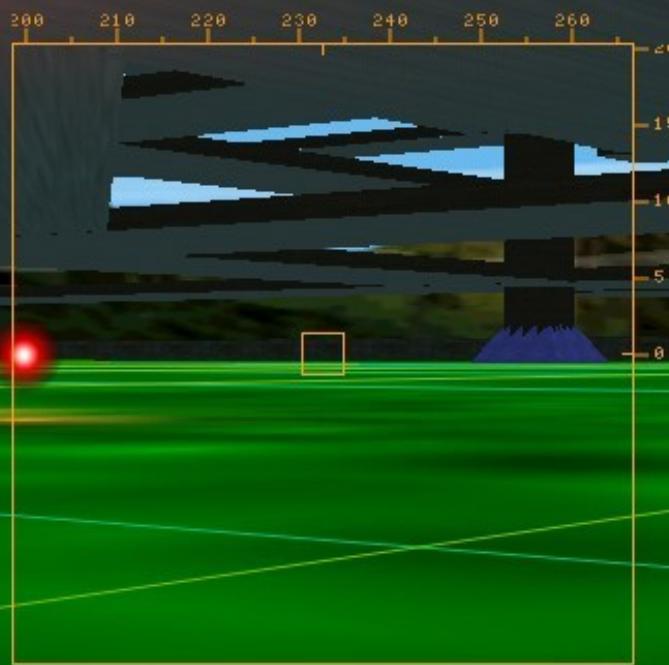
Guided Missile



C (Purple Team): grabbed Guided Missile flag
Slug (Red Team): grabbed Rapid Fire flag
terebi ga yakikorosu (Green Team): dropped Tiny flag
Locked on terebi ga yakikorosu (Green Team)
terebi ga yakikorosu (Green Team): got wrecked by Aquitaine's blast
Slug (Red Team): dropped Rapid Fire flag
Slug (Red Team): got wrecked by teammate's blast
Aquitaine (Purple Team): was destroyed by teammate C's guided missile
Locked on Slug (Red Team)
terebi ga yakikorosu (Green Team): grabbed Machine Gun flag
Dragon (Red Team): got wrecked by teammate's blast
teammate (Blue Team): dropped Stealth flag
teammate (Blue Team): got wrecked by mofo's blast
tommy ramone (Blue Team): dropped Shock Wave flag
tommy ramone (Blue Team): destroyed by mofo

C: 0

Ready

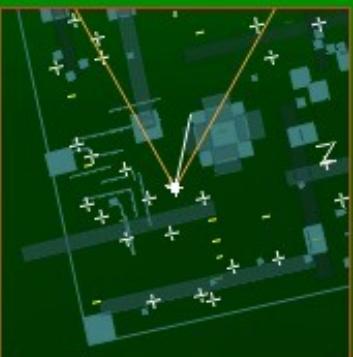
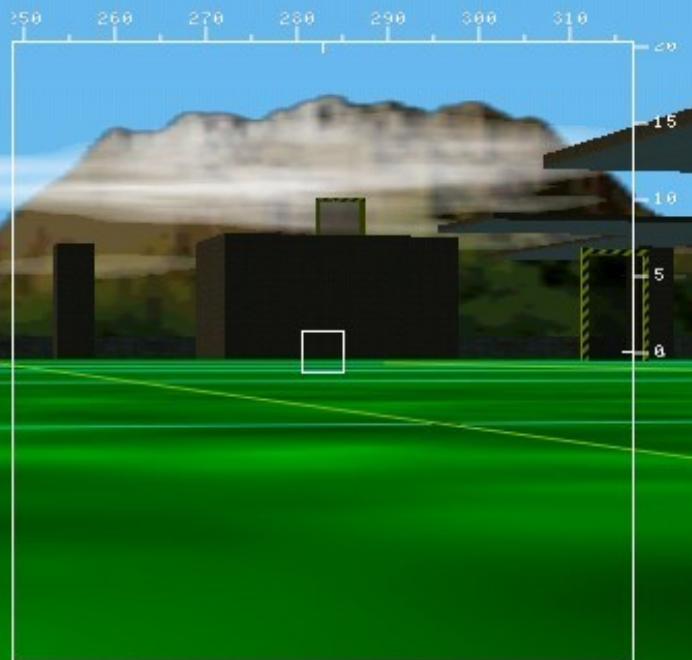


```
C (Red Team): dropped Wide Angle flag
C (Red Team): grabbed Ricochet flag
C (Red Team): dropped Ricochet flag
C (Red Team): grabbed Laser flag
Pauley zistis red team (Green Team): joining as a tank
Pauley zistis red team (Green Team): signing off
C (Red Team): dropped Laser flag
Server version: 'BZFS107e'
Using multicast relay
Network: Created local UDP downlink port 17200
[Team] (UNKNOWN): BZFlag server 1.7e7, http://BZFlag.org/
Server sent downlink endpoint information, port 5155
Server did send endpoint information, UDP connection up
More Info: [205.201.58.40:5155:5]
wag (Purple Team): got wrecked by Rick O'Shea's blast
```

C: 0

Reloaded in 0.0

Laser



```
Server did send endpoint' information, UDP connection up
More Info: [129.186.23.125:5155:5]
C (Red Team): grabbed Shield flag
C (Red Team): dropped Shield flag
C (Red Team): grabbed Shock Wave flag
C (Red Team): dropped Shock Wave flag
C (Red Team): grabbed Shield flag
C (Red Team): dropped Shield flag
C (Red Team): grabbed Wide Angle flag
C (Red Team): dropped Wide Angle flag
C (Red Team): grabbed Ricochet flag
C (Red Team): dropped Ricochet flag
C (Red Team): grabbed Laser flag
Pauley zistis red team (Green Team): joining as a tank
Pauley zistis red team (Green Team): signing off
```

Chromium B.S.U.



50.0

0016250





Egoboo



Get away from me!
White Beard killed a Lumpkin!

Twugg

\$ 0



2,0

White

\$ 0



8



CROG

025 FPS

Plaggy

\$ 14



Flambi

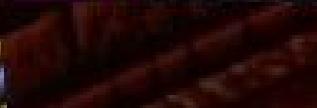
\$ 58



029 FPS

Zambi

\$ 106



018 FPS

Plaggy
\$ 14





FooBilliard



FOOBILLARD - HELP

<BUTTON1> ... ANGULAR MOVE
<BUTTON2> ... RADIAL MOVE
<SHIFT>+<BUTTON1> ... PLACE CUE BALL
<SHIFT>+<BUTTON2> ... SET CUE OFFSET
<CTRL>+<BUTTON2> ... SET FOV [ZOOM]
<CTRL>+<BUTTON1> ... DIRECT MOUSE-CUE-SHOT
<SPACE> OR <ENTER> OR <BUTTON3> ... SHOOT
<UP>,<DOWN> OR <PG-UP><PG-DOWN> ... STRENGTH ADJ.
<LEFT> OR <RIGHT> ... ROTATE
<C> ... TOGGLE CUE/EXTERNAL VIEW
<F> ... TOGGLE FREE MOVE MODE IN EXT VIEW
<O> ... SUGGEST AI-SHOT
<A> ... TOGGLE ACTUAL PLAYER AI/HUMAN
<N> ... START A NEW GAME
 ... A LITTLE FPS BENCHMARK
<V> ... TOGGLE THE VERTICAL LINE





Frozen Bubble



1 UP

2 UP



TOTAL

0 3

NEXT



NEXT



Flight Gear







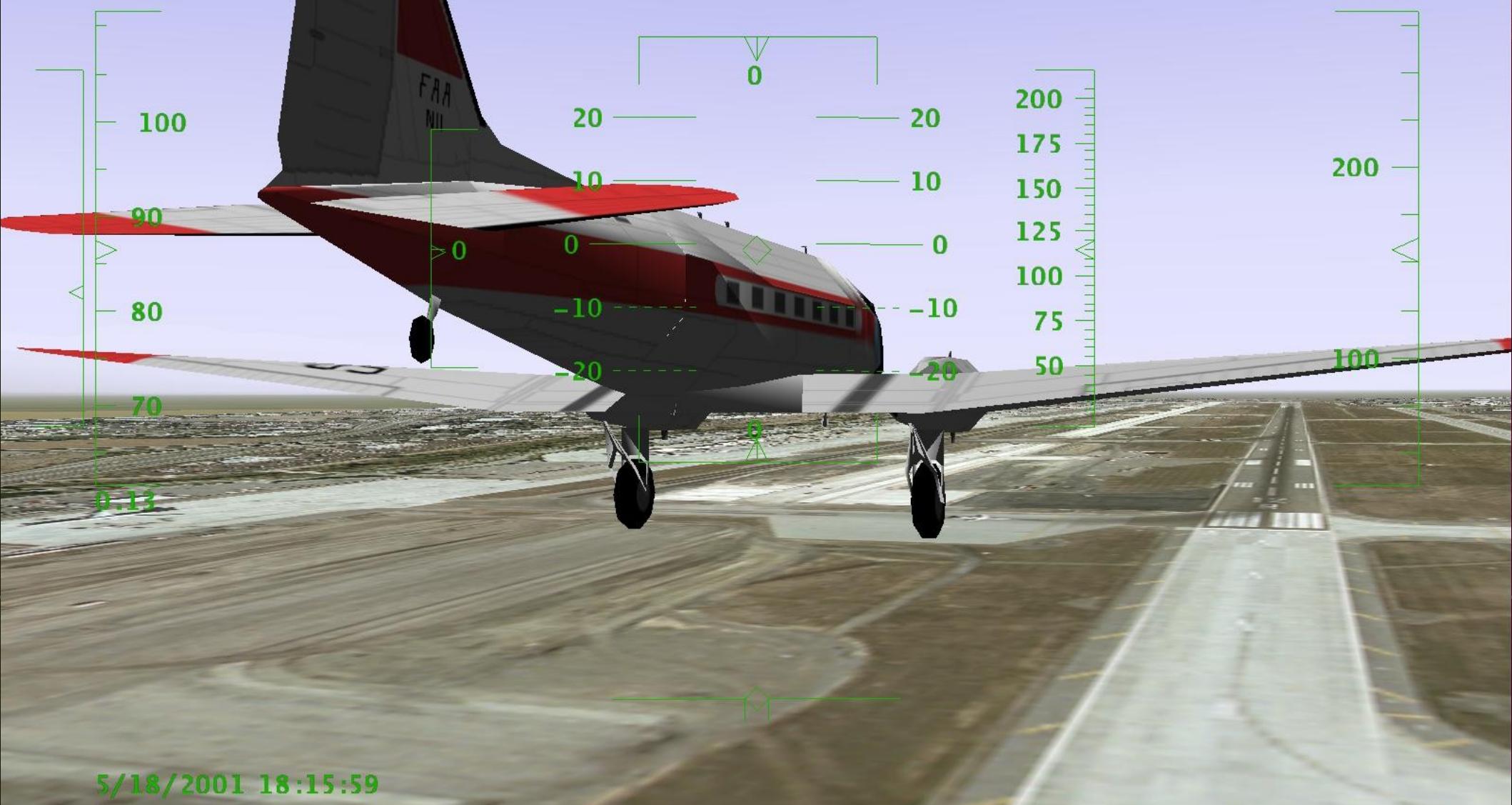


37°22.351N



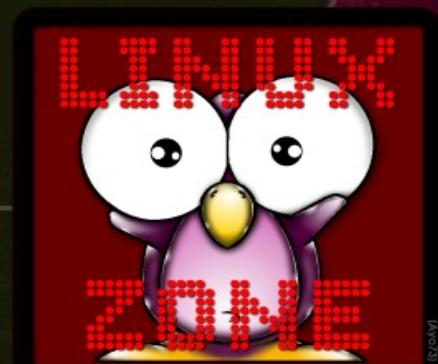
-121°56.436W

APHeading 138.8
APAAltitude 2000





Reaper



Reaper



HULL:

100



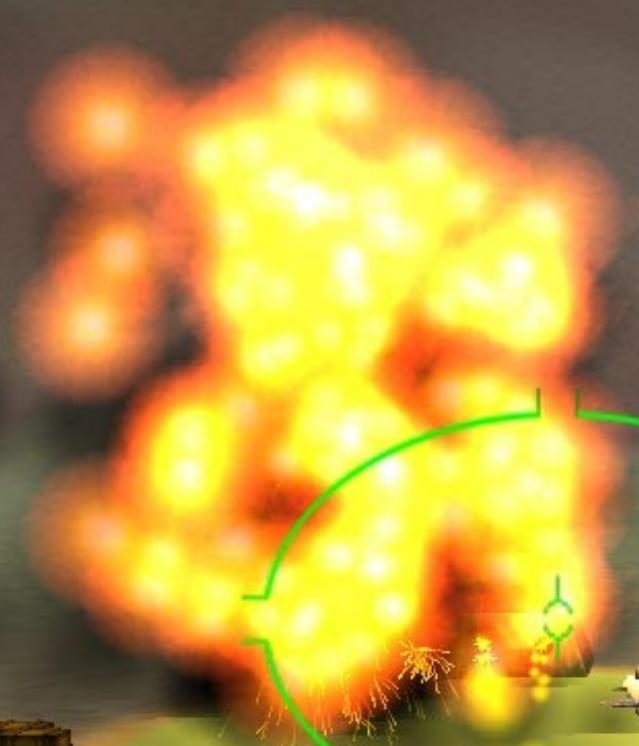
SHIELD:

66



BOOST:

100



137 KPH





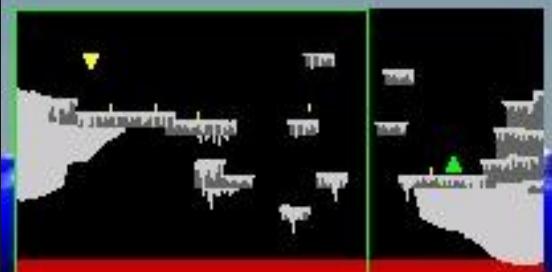


Pingus



Released: 7/25 Out: 5 Saved: 2/5

00



Released: 10/10

Out: 7

Saved: 3/5

2:56





Terminus



Target Chase View

Targeting nearest object
activation

BeltMarsGate

5.4K
17.7H

-5.1K
28.5K

1000
Proton Particle Bolt

SPEED: 5.4K
HULL: 100% THRUST: 100%



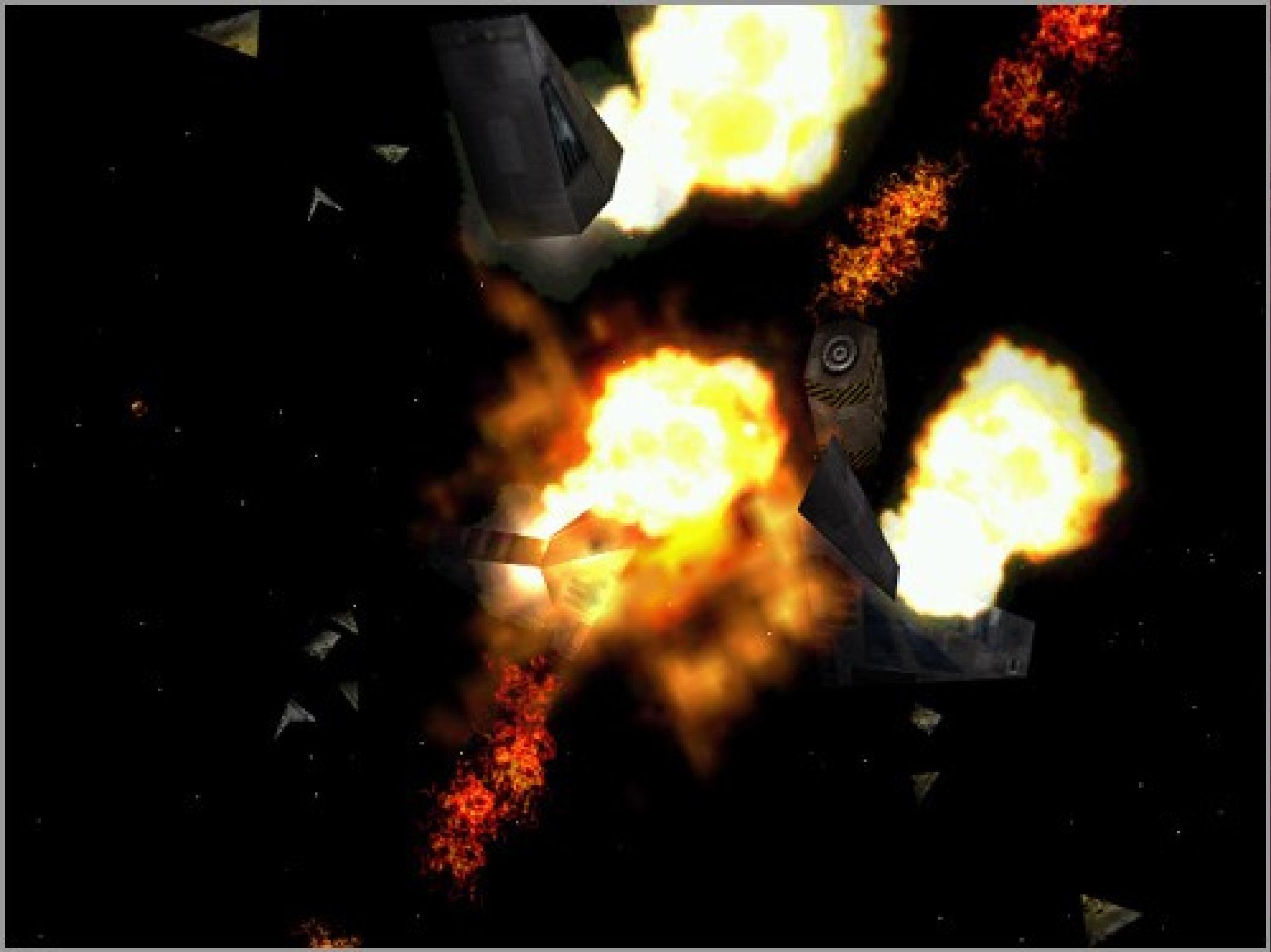
HEAT
PRESS

2023K

RAD
OXYGEN

BeltMarsGate

CLOS: -5.1K
DIST: 28.5K
ETD: 0:00:00



Target Chase View



Capturing screen shot



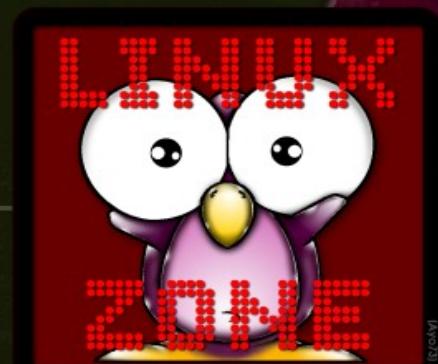
Incoming Torpedo
Incoming Torpedo

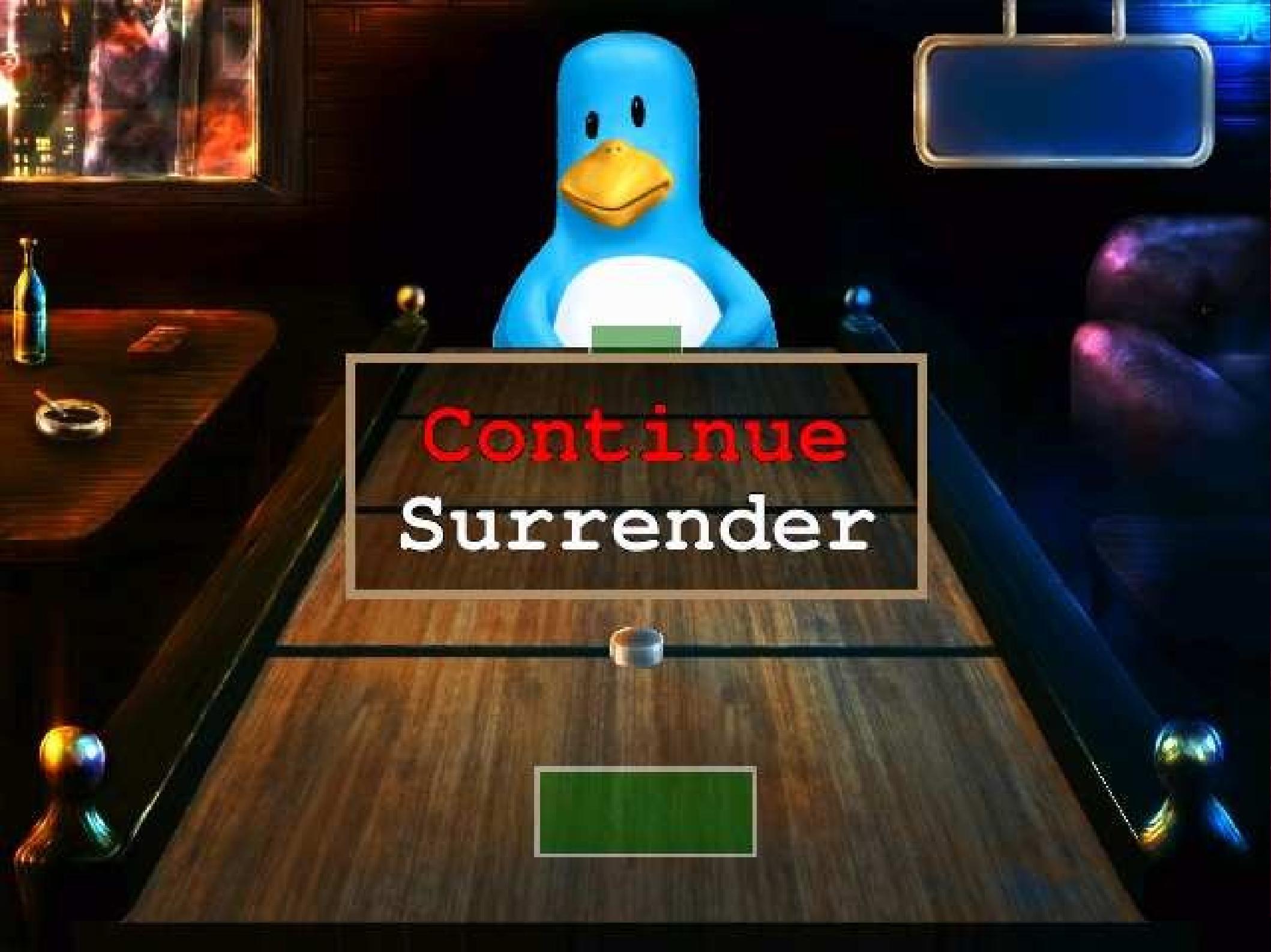






Tuxpuck





Continue
Surrender



OpenMortal



14 fps

28





Vegastrike



Fitchburg:Fitchburg:unknown: 1.14
0.00 Welcome to VegaStrike

50

Fitchburg:Fitchburg:unknown: 1.14
0.00 Welcome to VegaStrike

50



G: Laser,Laser



0

0

Fitchburg



Dis 48119.6328



G: Particle,Particle,Ion
M: FriendOrFoe(1),Swarm(40),Swarm(40)



0

0

Fitchburg



Dis 48113.6719



gemini_sector/war:gemini_sector/war:unknown:25.40
8.55 hispidus: I hate you
15.00 nova: You are nice.
20.26 [Outgoing]: All is Fine
21.15 Ship destroyed: confed:firefly:Halo-0
21.15 Flightgroup Halo destroyed
24.43 firefly: *hit*
24.43 firefly: *hit*
24.44 firefly: *hit*

33



blue-0:nova:default:25.40
8.55 hispidus: I hate you
15.00 nova: You are nice.
20.26 [Outgoing]: All is Fine
21.15 Ship destroyed: confed:firefly:Halo-0
21.15 Flightgroup Halo destroyed
24.43 firefly: *hit*
24.43 firefly: *hit*
24.44 firefly: *hit*

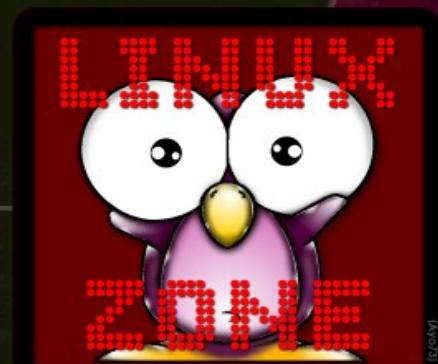
33







Virtual Jay



7.81 / 24.00

0



R1P +50



X Ship Wars



Seeker 2(#0P)

Shield Freq: 180.20 kHz

Weapon Freq: 160.00 kHz

Com Channel: 310.00 kHz



0.000 au/s

AM: 1999.88
HD: 199.74°
Sect: 0 1 0
X: 44.97
Y: 28.59

Eng:
(on)

WL: Defiant(#6P)
Stream Phaser: 100%
Photon Torp: 42(42)

Stream Phaser



Int: 300 ms FPS: 4 SX: 471 RX: 3864 Lapse: 321

(Nebula)

0.1319au(1.20au)

Defiant(#6P)



0.013 au

Pulse Phaser 2: 100%
Photon Torp: 55(55)
Quantum Torp: 35(35)
Stream Phaser: 100%

AM: 2299.91
HD: 231.30°
Sect: 0 1 0
X: 44.92
Y: 28.44

	total	intimgs	isrefs	objs	ocsns
Mem:	5056952	906665	4137111	9792	1056
Ent:	223	123	182	19	22
Hail sent on channel 310.00					

USS Stalion(#OP)

Shield Freq: 180.20 kHz

Weapon Freq: 160.00 kHz

Com Channel: 310.00 kHz



Stream Phaser



0.000 au/s

AM: 3999.67
HD: 19.23'
Sect: 0 0 0
X: 11.66
Y: -6.03

Eng:
(on)

WL: StarBase 902(#2H)
Stream Phaser: 100%
Photon Torp: 40(40)



AM: 1000.00
HD: 0.00'
Sect: 0 0 0
X: 11.91
Y: -5.80

Int: 300 ms FPS: 10 SX: 241 RX: 1593 Lapse: 121

	total	intimsg	isrefs	objs	ocsns
Mem:	8274688	906665	7325311	14196	1056
Ent:	232	123	182	28	22

Hail sent on channel 310.00



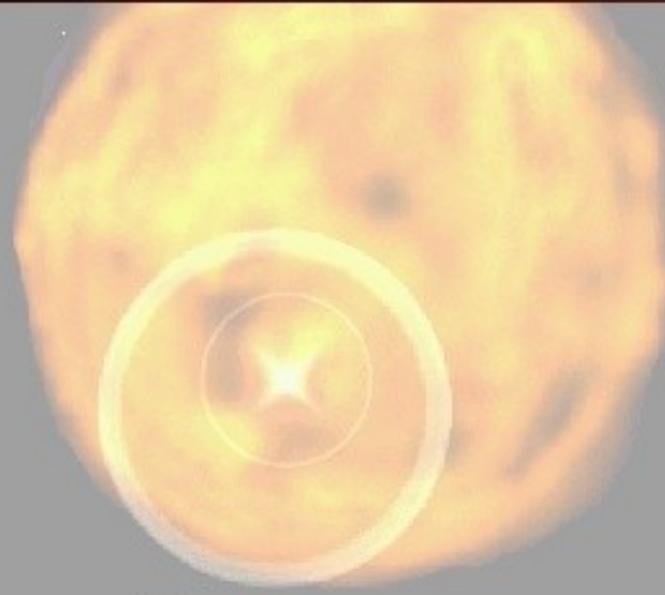
Cutting Beam: 100%
Pri Energy Weapon: 100%
Bolt Plasma: 100%

AM: 30000.00
HD: 61.13
Sect: 0 0 0
X: 5.22
Y: 37.56

IKS Dark Vixen(#0P)
Shield Freq: 180,20 kHz
Weapon Freq: 160,00 kHz
Com Channel: 310,00 kHz



Pulse Disruptor 2



- AM: 999,80
HD: 71,76°
Sect: 0 0 0
X: -6,42
Y: -1,00
Eng: (on)

WL: Earth(#3H)
Pulse Disruptor 2: 100%
Photon Torp: 30(30)
Stream Disruptor: 100%



Int: 550 ms FPS: 7 SX: 239 RX: 2257 Lapse: 150

AM: 800,00
HD: 0,00°
Sect: 0 0 0
X: 12,16
Y: -4,51

External Lumination: Off
External Lumination: On
External Lumination: Off
Hail sent on channel 310,00

Guest 1(#1P)

Shield Freq: 900.00 kHz

Weapon Freq: 382.30 kHz

Com Channel: 310.00 kHz



Stream Phaser



(UFP) Guest 1(#1P)



0.000 au/s

AM: 1999.77
HD: 297.07°
Sect: 0 0 0
X: 160.16
Y: 29.67

Engt:
(on)

WL: Roata Comet(#3H)
Pulse Phaser 2: 100%
Photon Torp: 55(55)
Quantom Torp: 35(35)
Stream Phaser: 100%

0.1040au(10.40au)

Roata Comet (#3H)

0.029 au

(IND)

AM: 0.00
HD: 113.39°
Sect: 0 0 0
X: 160.00
Y: 30.00

Int: 350 ms FPS: 6 SX: 358 RX: 1353 Lapse: 150

Events export log: /home/xsw/swserv/public_html/generic.events 420 bytes

Client RX	SX	Foreign Address	State	Player
std 468662	85536	207.168.6.251	ESTABLISHED	Guest 1(#1P)

Usage: 'netstat [player] [-l] [-c]'

knight9000(#1379P)
Shield Freq: 180,20 kHz
Weapon Freq: 160,00 kHz
Com Channel: 270,89 kHz



Quantum Torp: 35

(TGI) knight9000(#1379P)



0,748 au/s

AM: 999,70
HD: 137,61°
Sect: 0 0 0
X: -9,93
Y: -161,74

Engt:
(on)

WL: Nerolinus StarBase(1
Yld: 100%
Pulse Phaser 2: 100%
Photon Torp: 55(55)
Quantum Torp: 35(35)
Stream Phaser: 100%



Int: 3300 ms FPS: 10 SX: 136 RX: 11102 Lapse: 90



Cutting Beam: 100%
Quantum Torp: 136(200)
Polaron Pulse 2: 100%

AM: 1000,00
HD: 0,00°
Sect: 0 0 0
X: -49,00
Y: -119,00

Pulse Phaser 2: Power Yield: 20,00 Power Consumption: 6,00
Photon Torp: Power Yield: 20,00 Stock: 55(55)
Quantum Torp: Power Yield: 30,00 Stock: 35(35)
Stream Phaser: Unit Power Yield: 10,00 Unit Power Consumption: 2,50



Parsec



Hawker

sid



MAVERICK

MAVERICK

DISTANCE: 630



<http://www.patreon.org>



SID IRVINGHAM

76

MAVERICK



<http://www.parsec.org>



SID IRVINGHAM

INSTANCE: 195

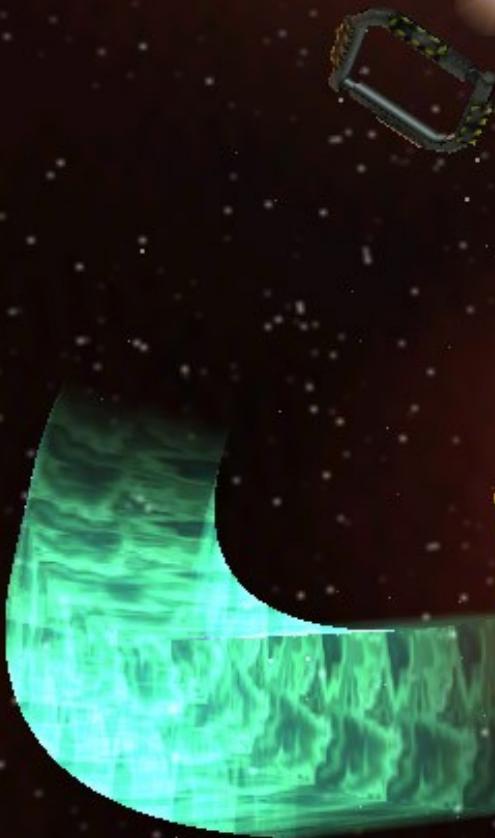


OM-KOLTHOUW 02:07

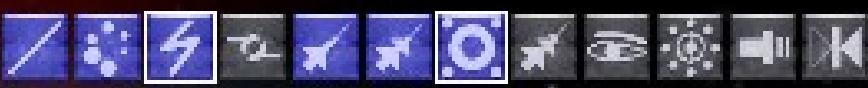
01

<http://www.parsec.org>

CBK



sid



SHIP STRUCK DOWN BY LIGHTNING



<http://www.parsec.org>



GRAMMA QUADRANT

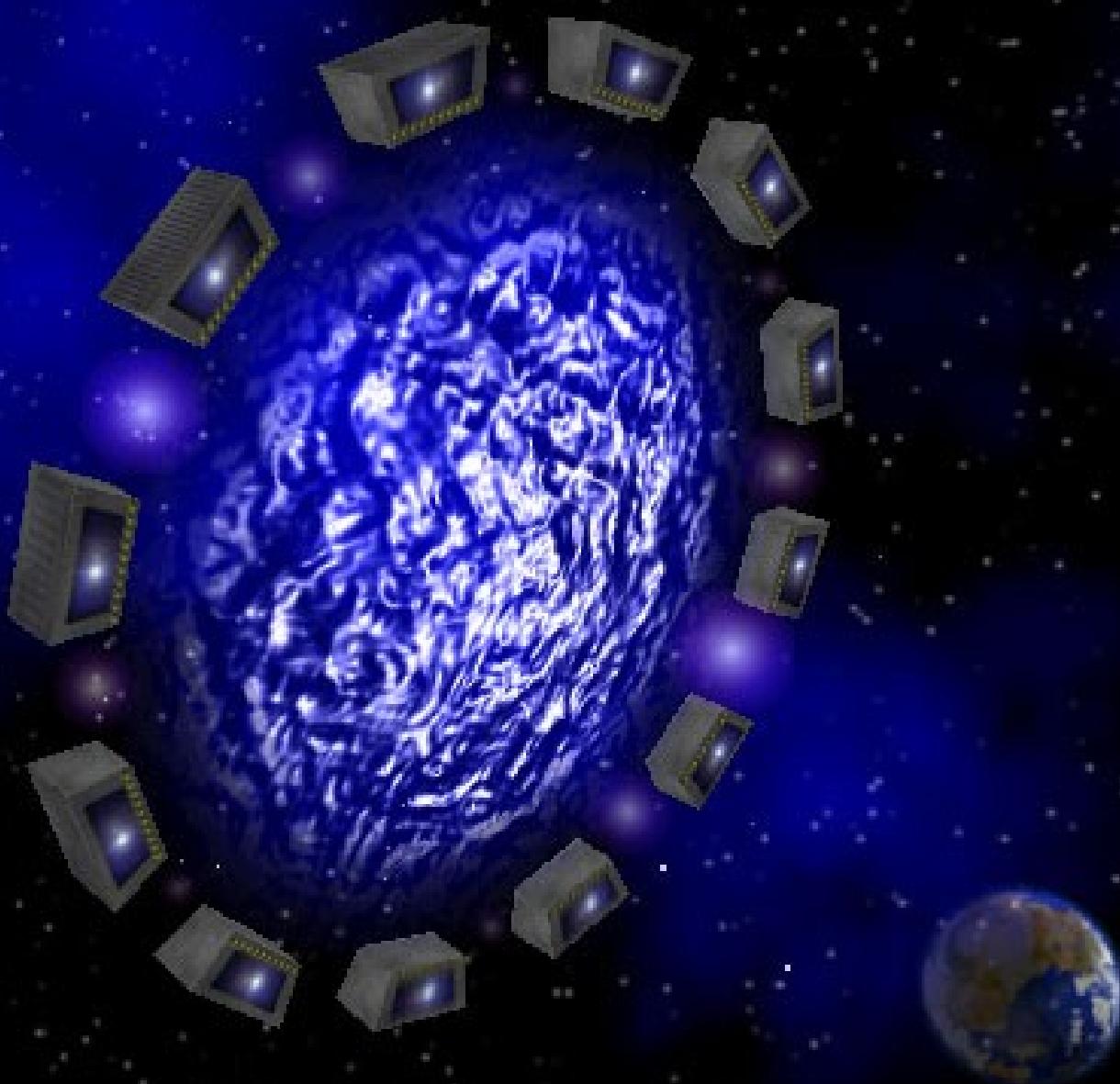
PING: 5MS

UNIMATRIX ZERO

PING: 29MS

<http://www.parsec.org>

<http://www.parsec.org>





Cube



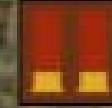
quad damage is over



94

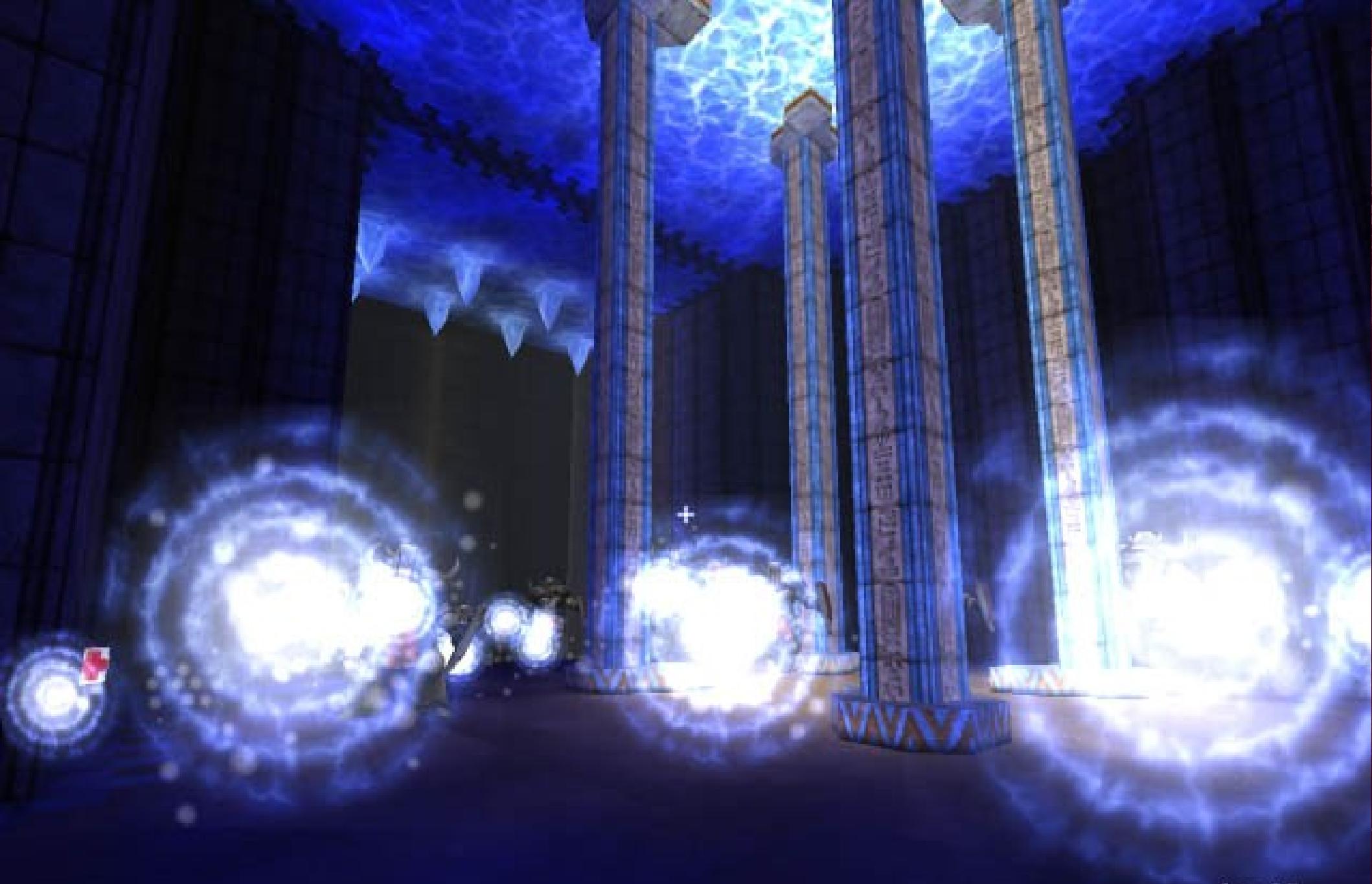


76



1

fps 87
lod 250
wqd 3192
wvt 10786
evt 13993



+

92

E

36

■■■

5

fps 95
lod 250
wqd 3745
wvt 10998
evt 16378



100



50



5

fps 109
lod 250
wqd 3850
wvt 13068
evt 1750



Torcs



3/10 - InfHist 4

Fuel: 7.7 l
Laps: 1 / 3
Best: 00:00 +00:00
Time: 01:12:87
<- InfHist 2 +00:00
>- InfHist 3 +00:00

FPS: 51.6



1: InfHist 1 00:00
2: InfHist 2 ---
3: InfHist 4 ---
4: InfHist 3 ---
5: InfHist 9 ---
6: InfHist 10 ---
7: InfHist 7 ---
8: InfHist 6 ---
9: InfHist 5 ---
10: InfHist 8 out





Neverball

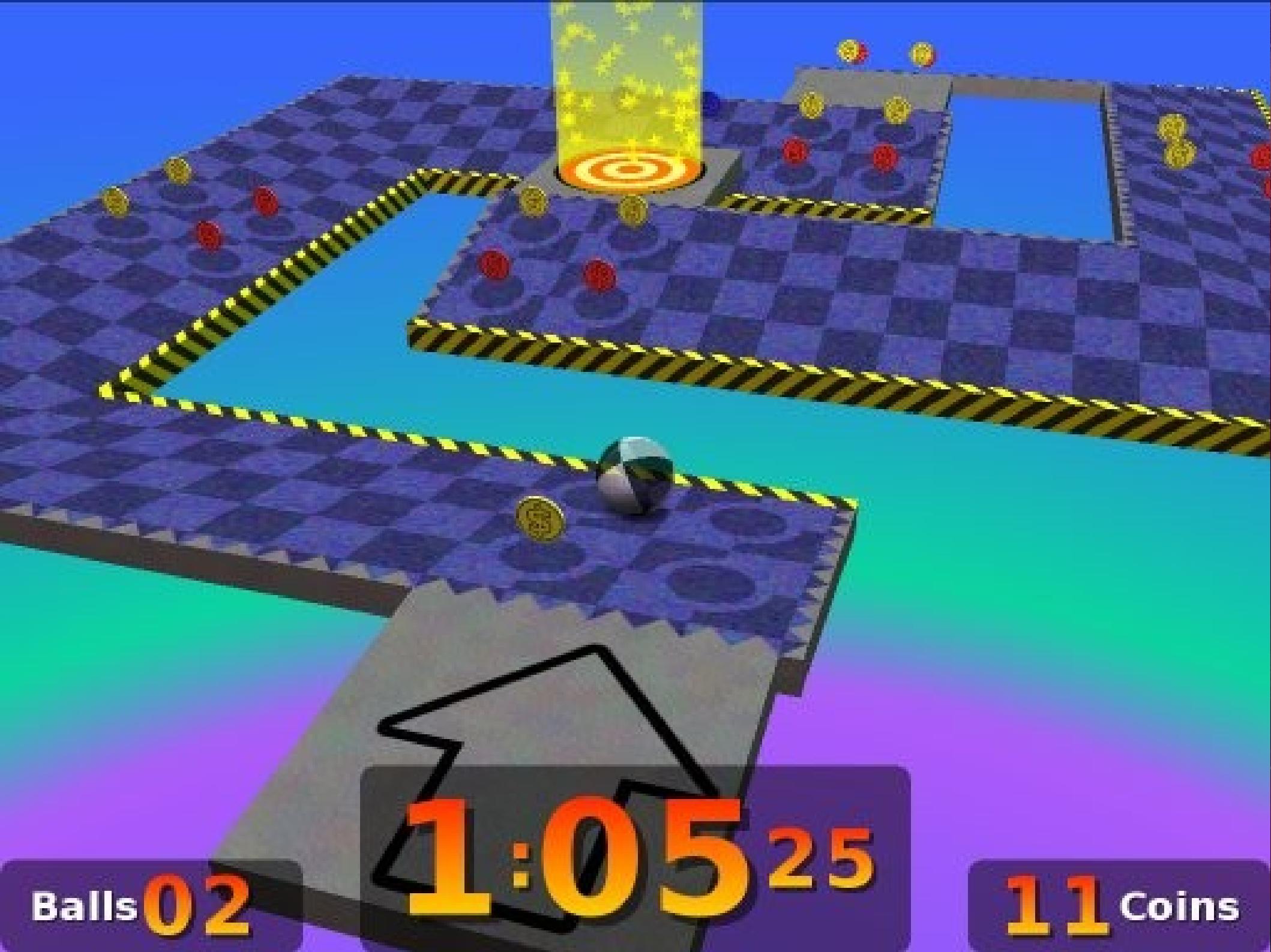




Balls **02**

0:59.60

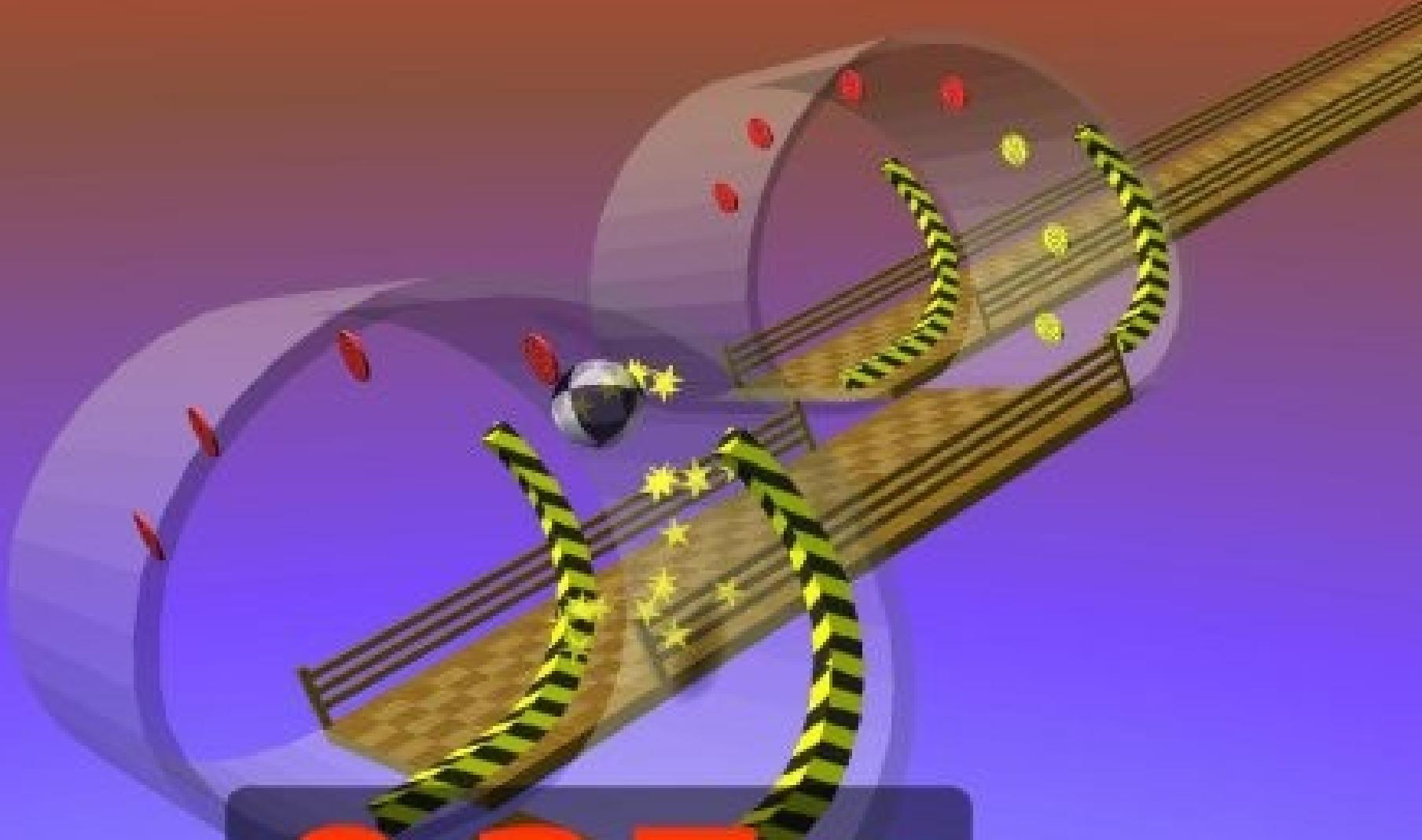
19 Coins



Balls 02

1:05 25

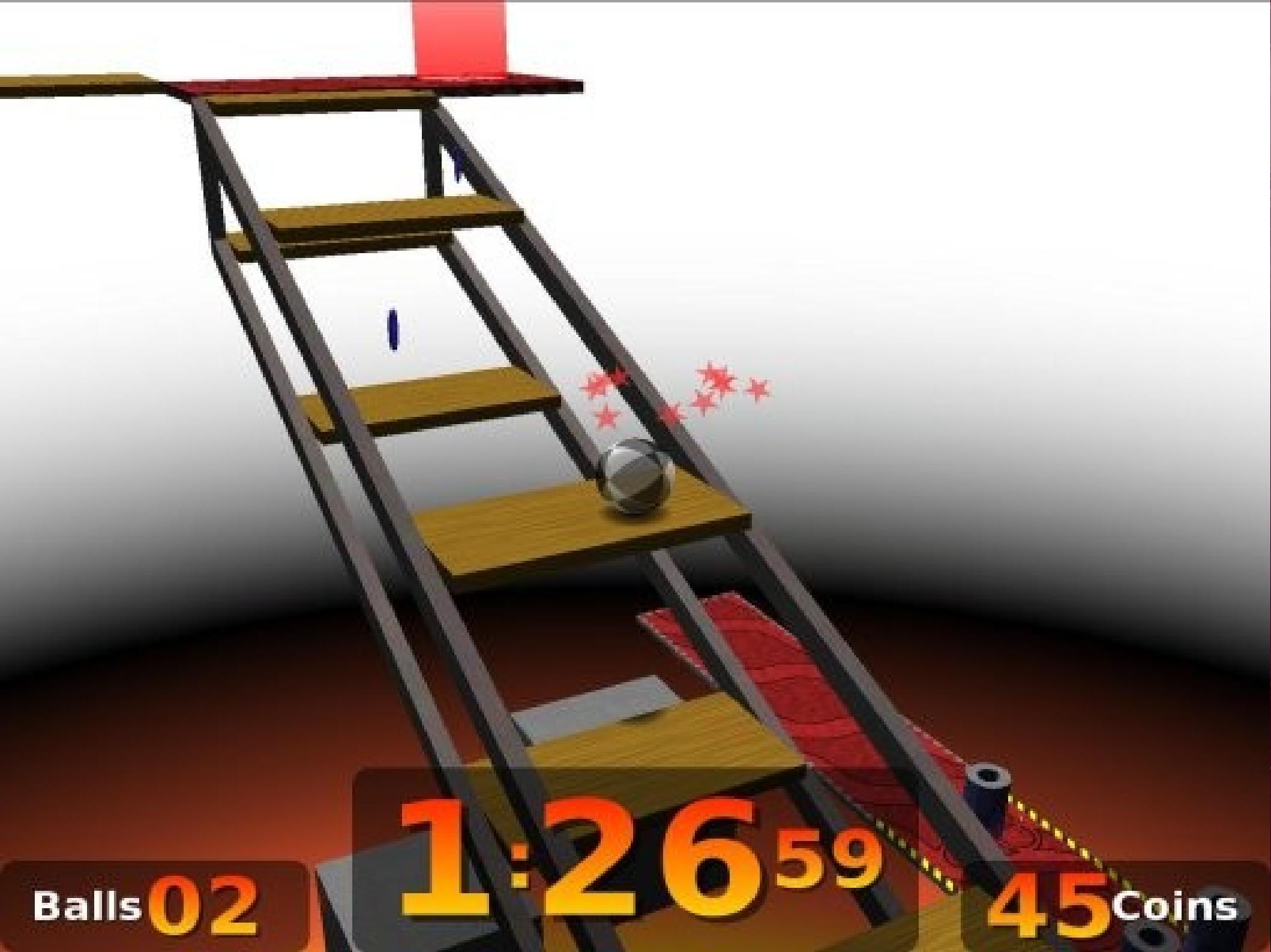
11 Coins



Balls 02

0:27 08

03 Coins



Balls 02

1:26.59

45 Coins



Tuxracer



Time

01:25'98

x 000



Time

01:32⁶⁷

 **x 023**

FINISH



**36
km/h**

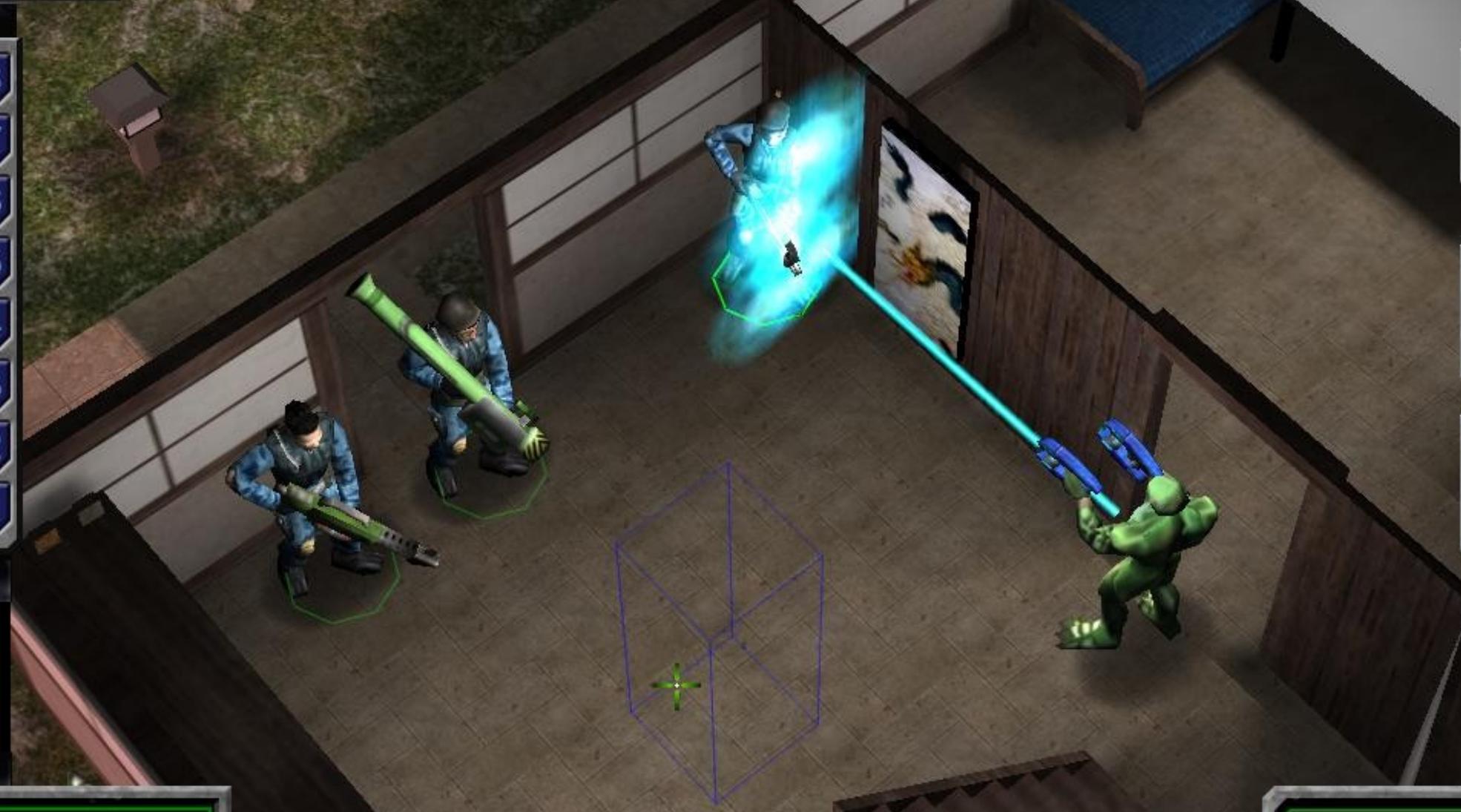
UFO: Alien Invasion



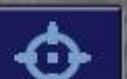


OLIVIA GUADALUPE

1 2 3 4 5 6 7 8

8
7
6
5
4
3
2
1

0



1

HEALTH
MOVE17
5

0



MAURO GUADALUPE

1 2 3 4 5 6 7 8



8
7
6
5
4
3
2
1



0



3

HEALTH
MOVE

103
19



0

1 KYOKO TANAKA
2 MAEMI TANAKA
3 JAN NELSON
4 SUN DONG
5
6
7
8

KYOKO TANAKA
MAEMI TANAKA
JAN NELSON

SUN DONG

Primary
Secondary
Misc
Armor

SUN DONG

RIGHT HAND



BELT



BACKPACK



LEFT HAND



HOLSTER



SHOTGUN



PRIMARY:
SECONDARY:
DAMAGE:
TIME UNITS:
RANGE:
SPREAD:
AMMO:

SINGLE SHOT
DOUBLE SHOT
40 / 80
8 / 12
9.4 / 9.4
5.8 / 9.0
8





OLIVIA GUADALUPE

1 2 3 4 5 6 7 8



8
7
6
5
4
3
2
1



18



23

SUBMACHINE GUN
FULL AUTO (18)

22



18

Linux Oyunları (devam...)

- Quake serisi
- Simcity 3000
- Heavy Gear 2
- Heretic serisi
- Soldier of Fortune serisi
- Descent 3
- Deus Ex serisi
- Rune



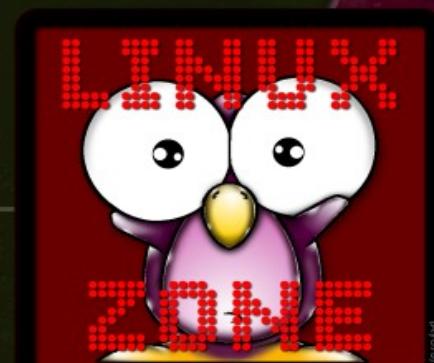
Linux Oyunları (devam...)

- FAKK2
- Alpha Centauri
- Tribes 2
- Mind Rover
- Jagged Alliance 2
- Lgames (Lbreakout2, Ltris ...)
- Baldur's Gate
- KDE/GNOME games



Linux Oyunları (devam...)

- Unreal
- Unreal Tournament serisi (2004, 2003 ...)
- RTCW
- RTCW – ET
- ...



Farklı Platformlar İçin

- MAME (Xmame, Glmame, Advanced-mame)
- Amiga (UAE)
- Commodore (VICE)
- Sega Mastersystem/Genesis (Dega, Dgen)
- Nintendo/Nintendo64 (True Reality, gsnes9x)
- Playstation (pcsx)
- Gameboy (cingb, gnuboy)
- Atari2600 (Stella)



Wine/WineX

- Wine Is Not an Emulator
- Wine != WineX
- WineX özellikle DirectX uyumluluğuna odaklanmıştır (Direct3D, DirectInput ...)
- WineX Transgaming firmasının açık kaynak kodlu ve ticari bir ürünüdür



WineX ile Çalışan Birkaç Oyun

- Sims serisi
- Diablo serisi
- Max Payne serisi
- Half-Life ve modları
- SWAT 3
- Total Annihilation
- Dune 2000
- Nerf Arena



WineX ile Çalışan Birkaç Oyun

- Warcraft serisi
- Grim Fandango
- Hitman serisi
- Starcraft ve eklentileri
- Black & White
- 3D Mark 2000
- Mortal Kombat serisi
- Gunman Chronicles



WineX ile Çalışan Birkaç Oyun

- Carmageddon 3
- Daytona USA Deluxe
- Resident Evil serisi
- Red Alert serisi
- ...



Oyun Yazmak İstersem

- Programlama Dili (C, C++, Python, Java ...)
- Widget -> QT, GTK+
- 3D -> Mesa/OpenGL
- Ses -> Alsilib, OpenAL
- SDL (UT2004) image,net,ttf,sprite...
- Plib (Torcs, Flight Gear)
- Clanlib (Pingus, Clanbomber)
- PyGame (NeHe demoları)



Oyun Yazmak İstersem

- Linux Game development Center
(lgdc.sunsite.dk)
- Çeşitli belgeler (Howto vs.)
- Açık Kaynak Kodlu oyunların kodu



Bazı Linux Oyun Firmaları

- idsoftware.com
- bioware.com
- epicgames.com
- hyperion-entertainment.com
- vvisions.com
- linuxgamepublishing.com
- transgaming.com



Faydalı Linkler

- happypenguin.org
- tuxgames.com
- linuxgames.com
- linuxgames.co.uk
- freshmeat.net
- sourceforge.net
- 3dgamer.com
- bluesnews.com





<http://www.linux.org.tr>

<http://www.lkd.org.tr>

<http://seminer.linux.org.tr>

<http://liste.linux.org.tr>

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