

NASA SPACE APPS

Remix the golden record challenge

HACKING THE HUMAN CORE

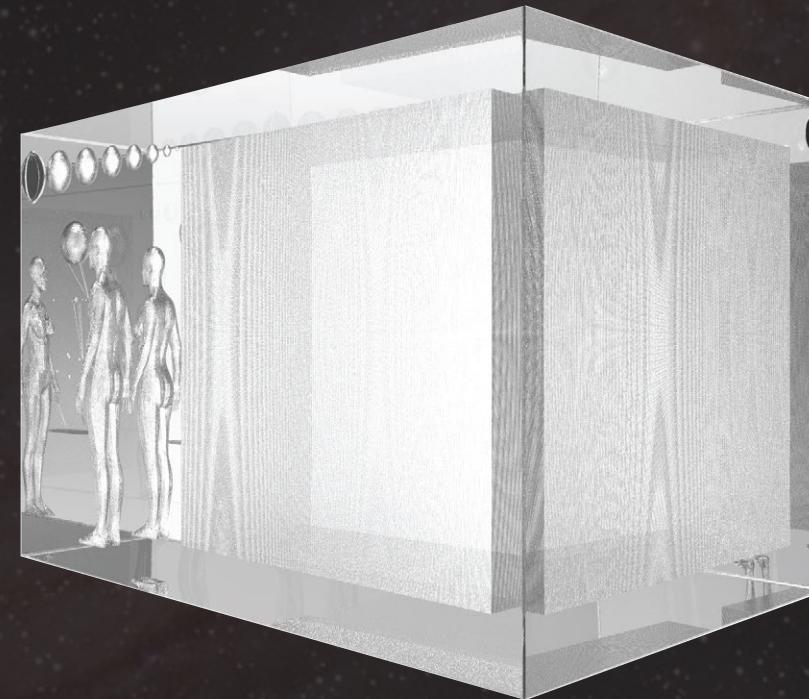
Messengers is formed by:
Ata, NAZ
Cla Gayarre, NORA
Panagiotopoulou, LOUKIA
Putz, ANDREAS





Human Core

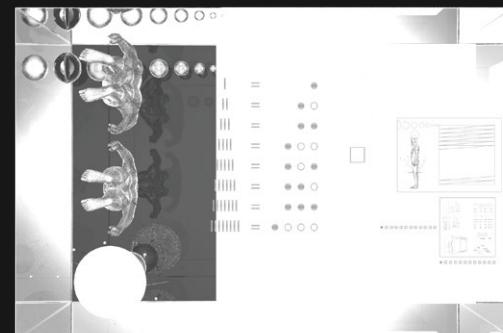
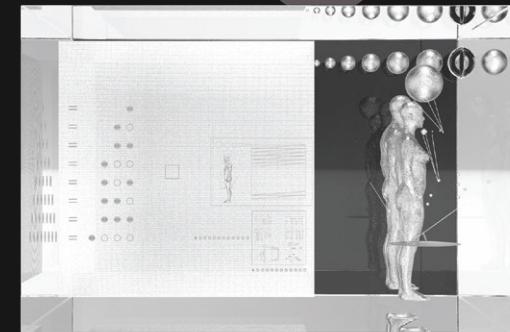
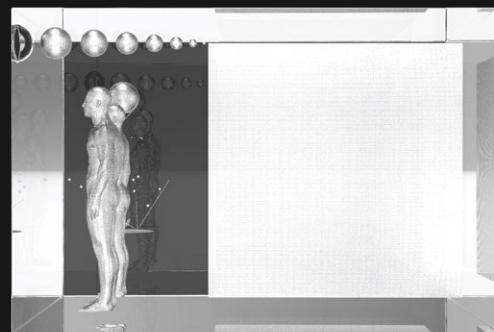
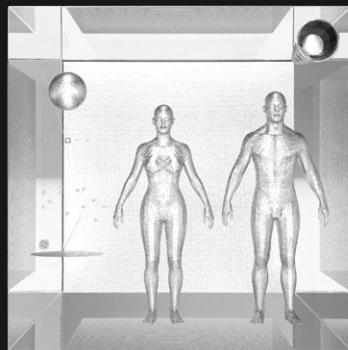
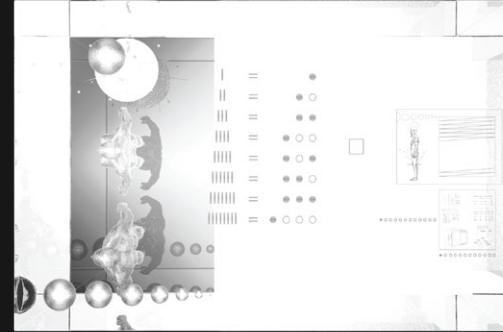
**8 Gb
capacity**



**Subsurface
laser cutting**

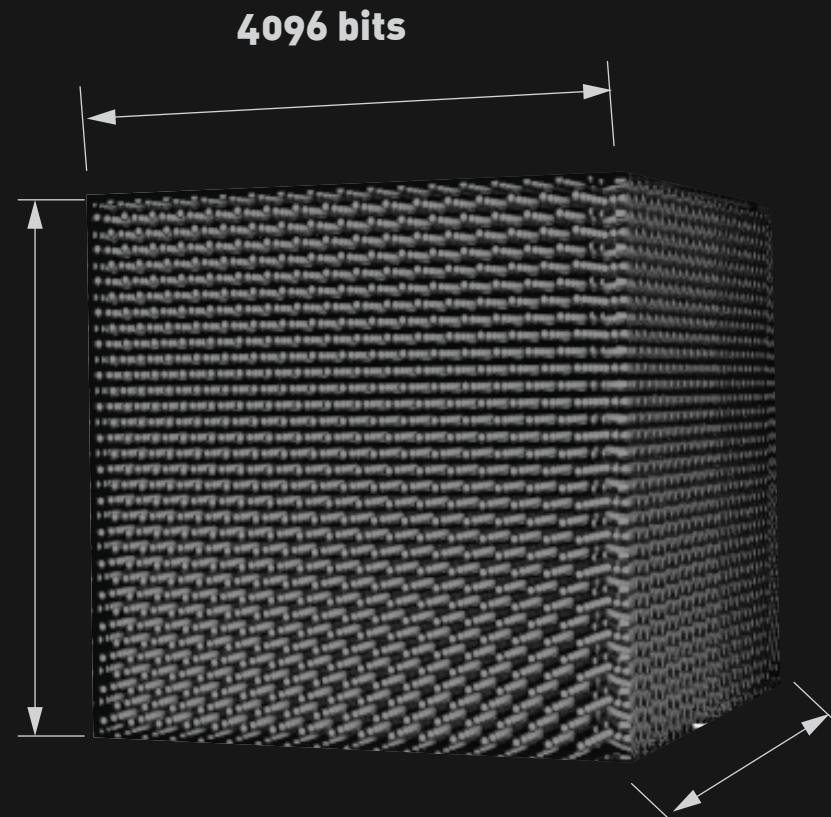
**Zirconia
bio-ceramic**

Human Core



Data Cube

**80*80*80
mm
data matrix**

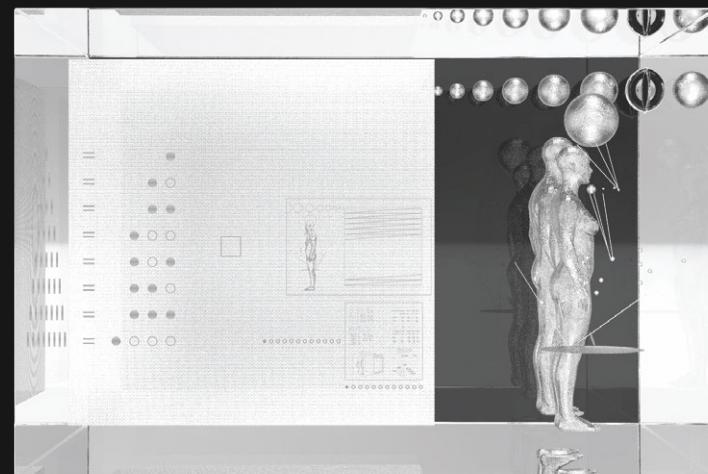
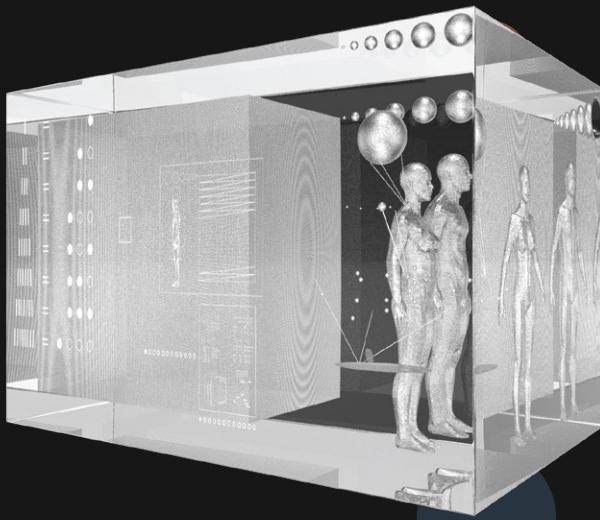
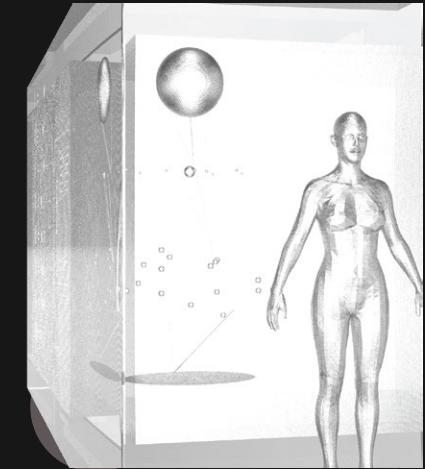
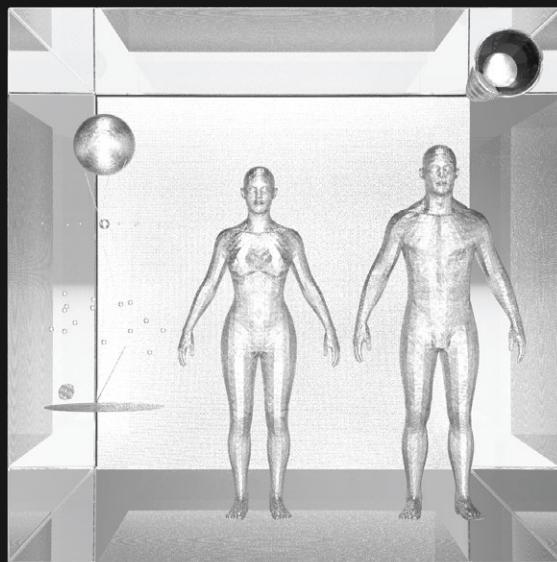


**2700 grayscale
images
1536x2048
8 bits**

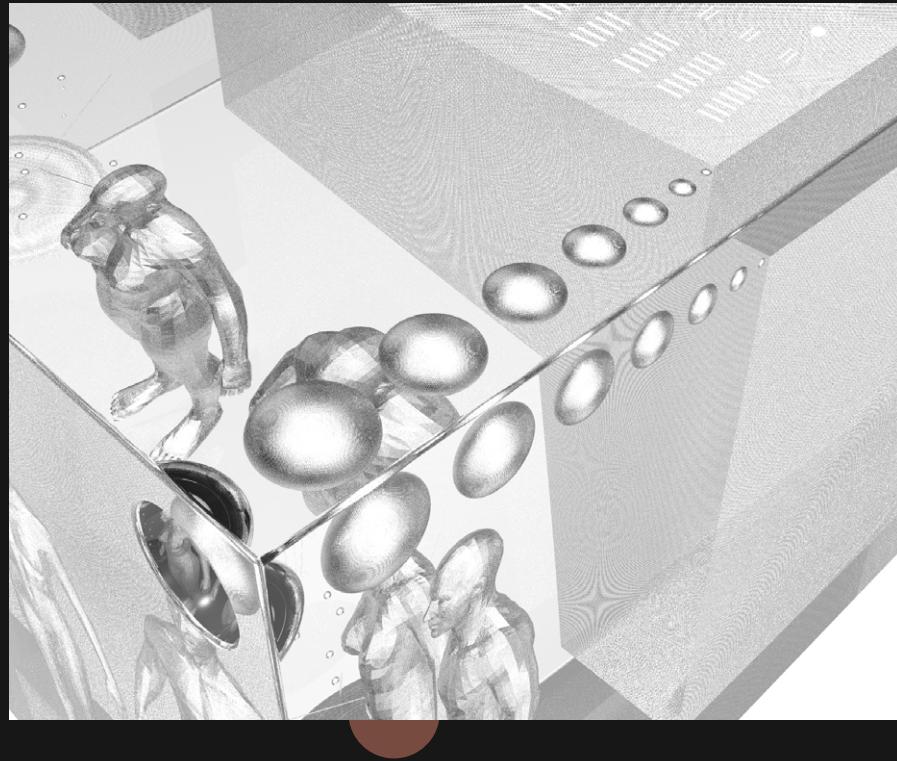
**910 color images
3 channels,
8bit/chanel
1536*2048**

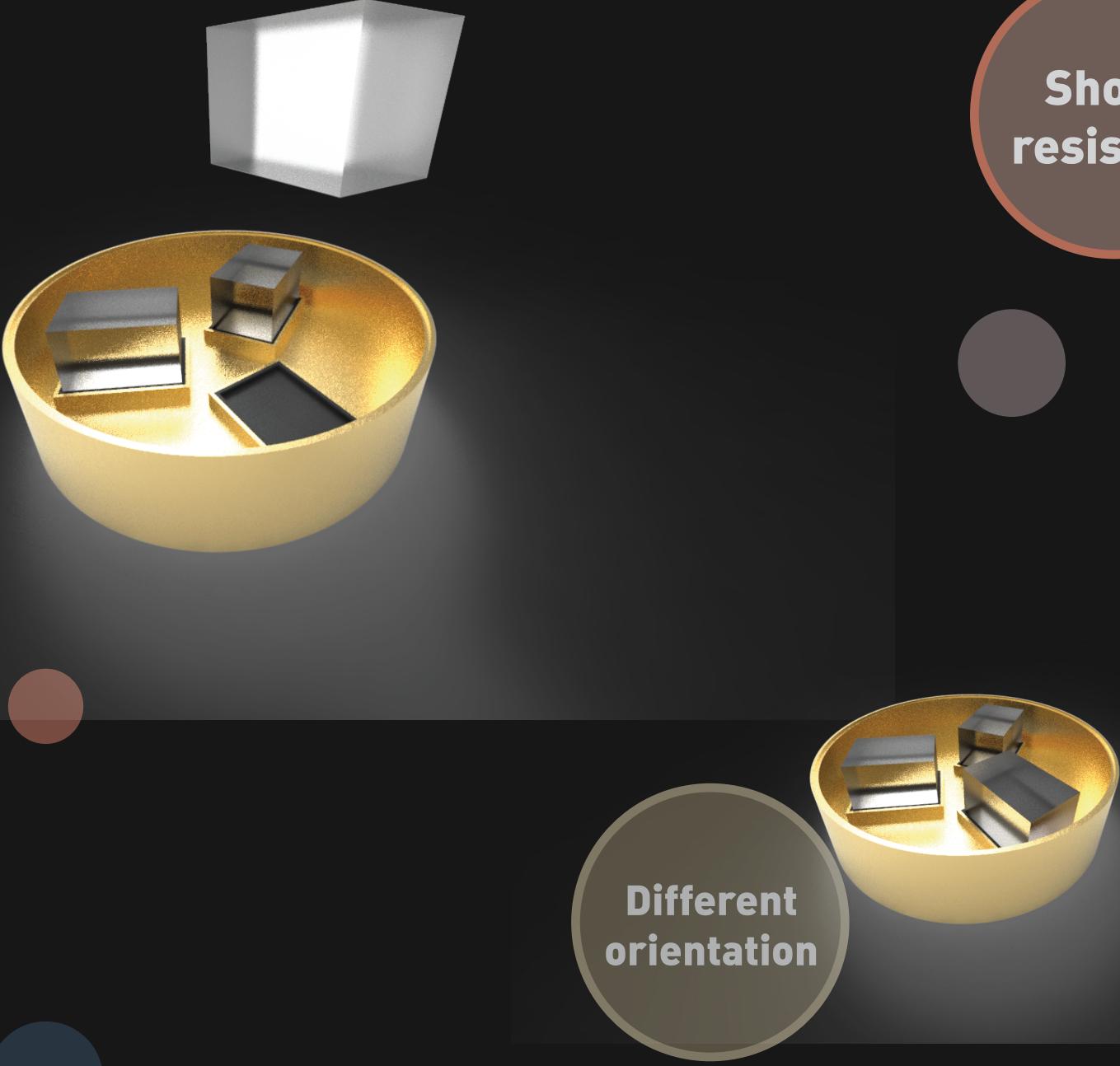
**16.5h sounds
records
48kHz, 24 limit
depth**

Data Cube



Visual and haptic cues

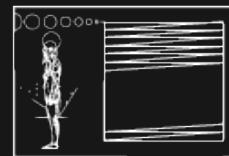




**Shock
resistant**

**Different
orientation**

I = ●
II = ●○
III = ●●
IV = ●○○
V = ●○●
VI = ●●○
VII = ●●●
VIII = ●○○○

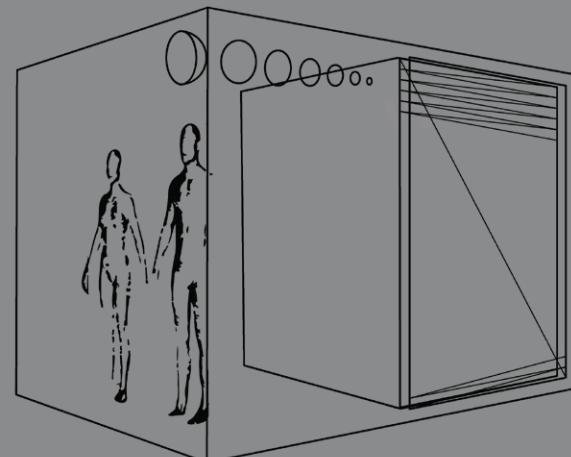


.....



.		1	--	12
..		2	--	24
...		3	--	100 10^2
....	--	4	---	1000 10^3
.....	--	5	2+3	5
.....	-	6	8+17 25	$5+\frac{2}{3} 5\frac{2}{3}$
		7	$\frac{1}{2}+\frac{1}{3}$ $\frac{5}{6}$	2×3 6
		8		
		9	$\frac{1}{3}+\frac{1}{5}$ $\frac{8}{15}$	13×28 364
	--	10		

$1M$  
 $1 \frac{42}{100} \times 10^9$ $1s$ $\frac{1}{21} L$ $1cm$
 $86400s$ $1d$ $1L$ $21 \times 10^8 d$
 $365d$ $1y$ $10^2 cm = 1m$
 $6 \times 10^{23} M$ $1g$ $1000m$ $1km$
 $1000g$ $1kg$
 $6 \times 10^{27} g$ $1e$



()	o	o	o	•	o
139×10^4 km	4840 km	12400	12760	6800		
	58×10^6 km	108	150	228		
333000 e	$\frac{1}{19} e$	$\frac{62}{100}$	1	$\frac{11}{100}$		
$25d$	$57d$	243	1	$1 \frac{3}{100}$		

()	○	○	○	•	
142×10^3 km	121×10^3	47600	44600	14000		
778×10^6 km	1428	2872	4498	591		
318 e	95	$14 \frac{6}{10}$	$17 \frac{2}{10}$	$\frac{9}{10}$		
$\frac{41}{100} d$	$\frac{43}{100}$	$\frac{45}{100}$	$\frac{65}{100}$	$\frac{7}{10}$		

+++++

25165824

1536

2048

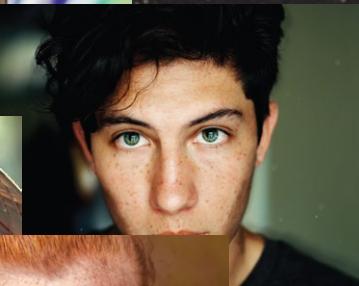
2048

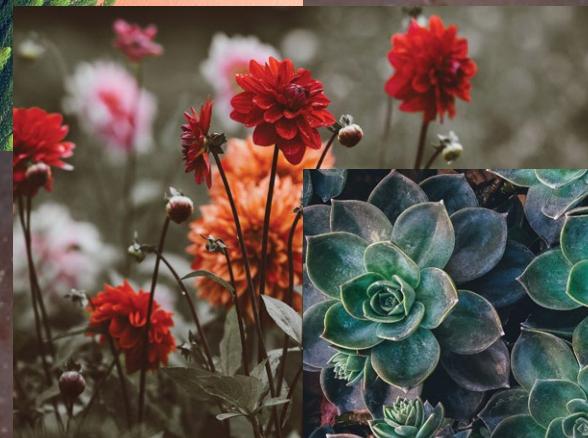
1536

~ 700 nm

~ 525 nm

~ 450 nm







Thank you!

CREDITS

**Photographer Theofanis Mastopoulos
Photos from ESA/Hubble & NASA**