

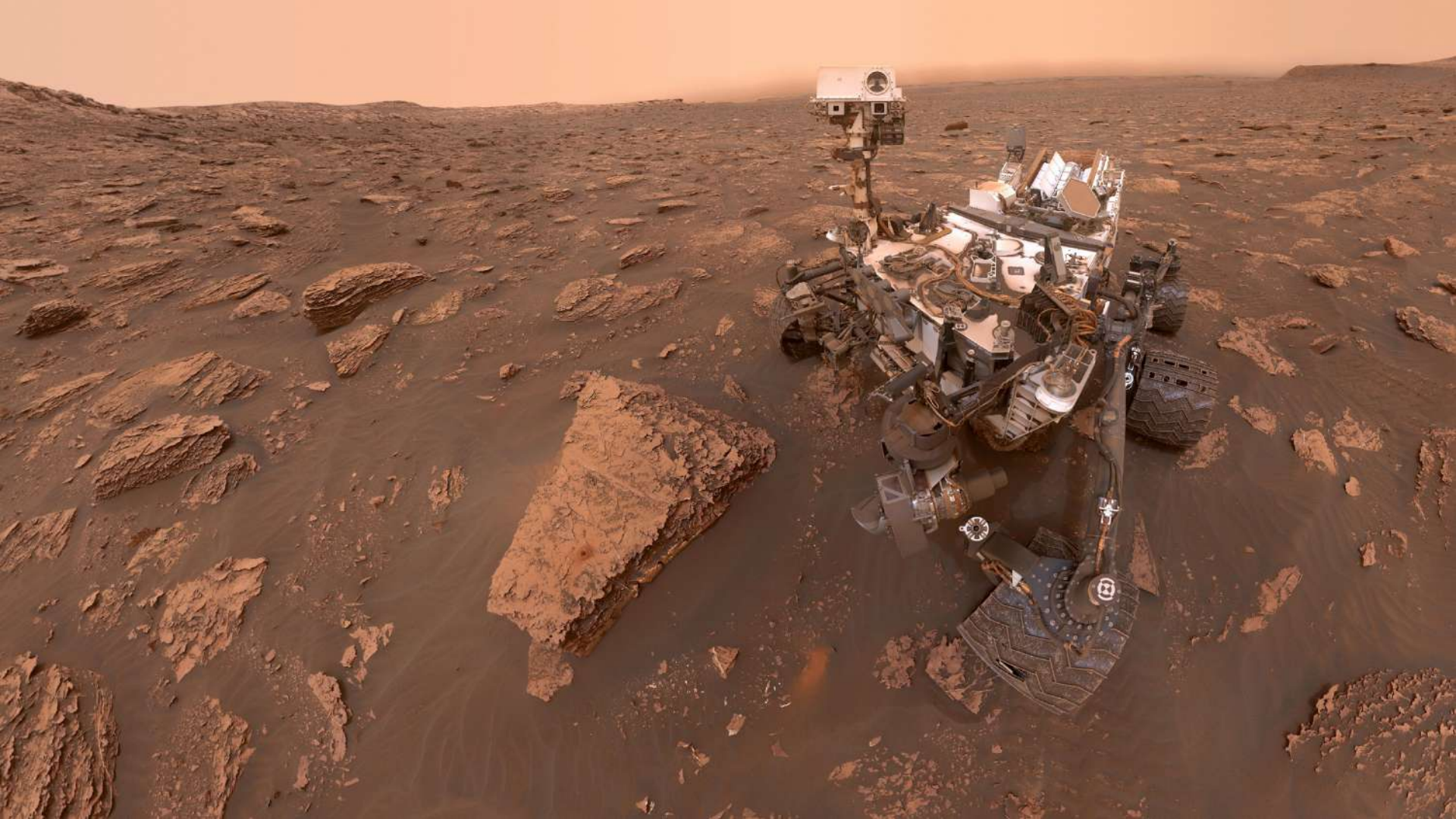
***MARS HABITAT*** AR122 1:1 INTERACTIVE ARCHITECTURE PROTOTYPES

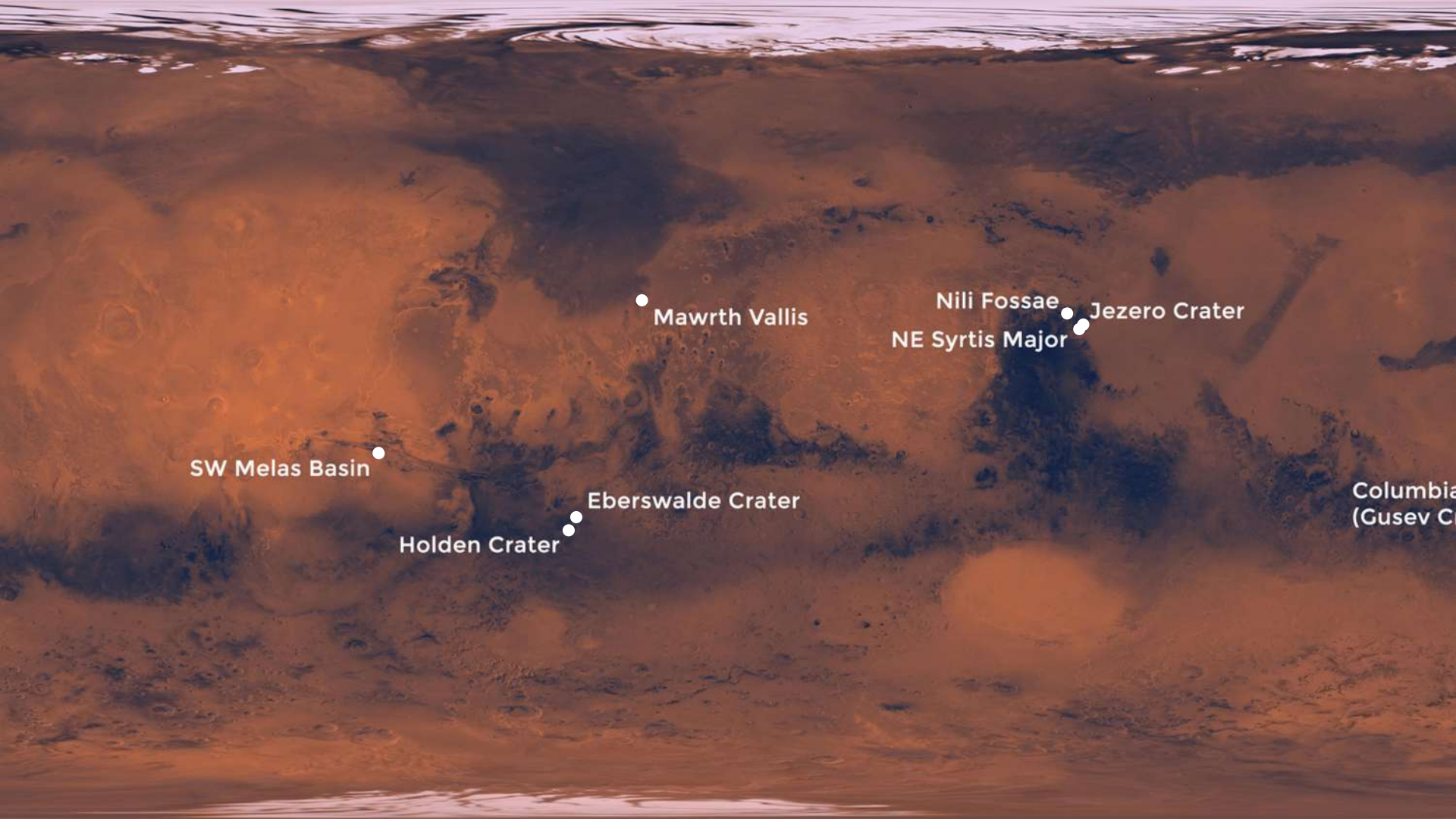
Arno Decorte  
Augusta Fiseryte  
Tom Punte



Distance from Sun: 227.9 million km  
Orbital period: 687 days  
Gravity: 3.721 m/s<sup>2</sup>  
Radius: 3,389.5 km  
Surface area: 144.8 million km<sup>2</sup>  
Length of day: 1d 0h 37m

Mars is the fourth planet from the Sun – a dusty, cold, desert world with a very thin atmosphere. Mars is also a dynamic planet with seasons, polar ice caps, canyons, extinct volcanoes, and evidence that it was even more active in the past.





SW Melas Basin

Holden Crater

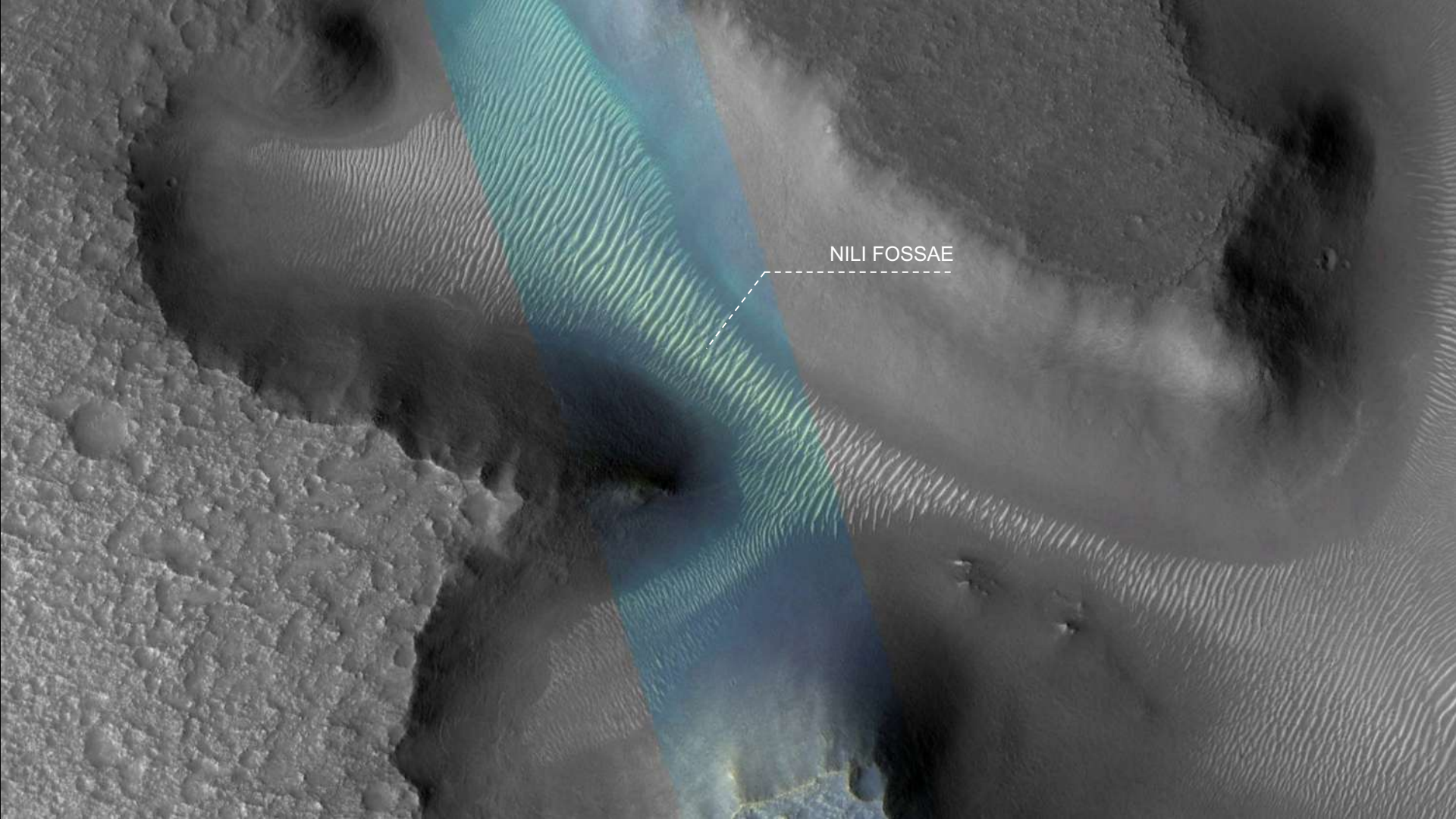
Eberswalde Crater

Mawrth Vallis

Nili Fossae  
NE Syrtis Major

Jezero Crater

Columbia  
(Gusev Crater)



NILI FOSSAE

***WATER RESEARCH STATIONS*** FOR SCIENTIST WHO ARE  
ANALYSING WATER ON MARS

PROGRAM  
WATER RESEARCH  
STATION

LIVING SPACES:

15M2 Sleeping quarters (3-4 people), with sleeping pods  
(with beds, work desk and enclosure)  
5M2 Sanitation space  
20M2 Living quarters and kitchen  
10M2 Workout/recreation space

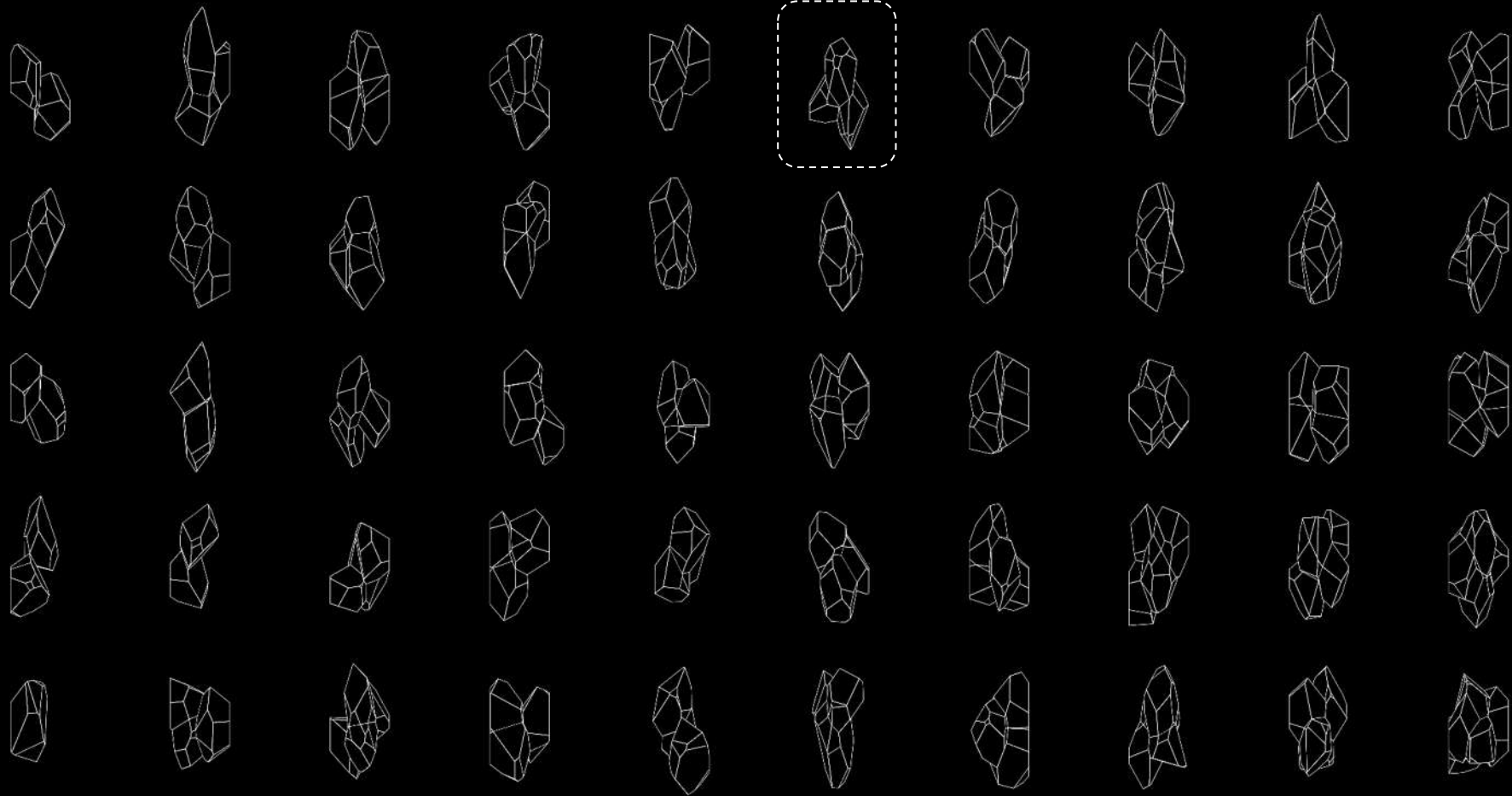
WORKSPACES:

20-30M2 Laboratory

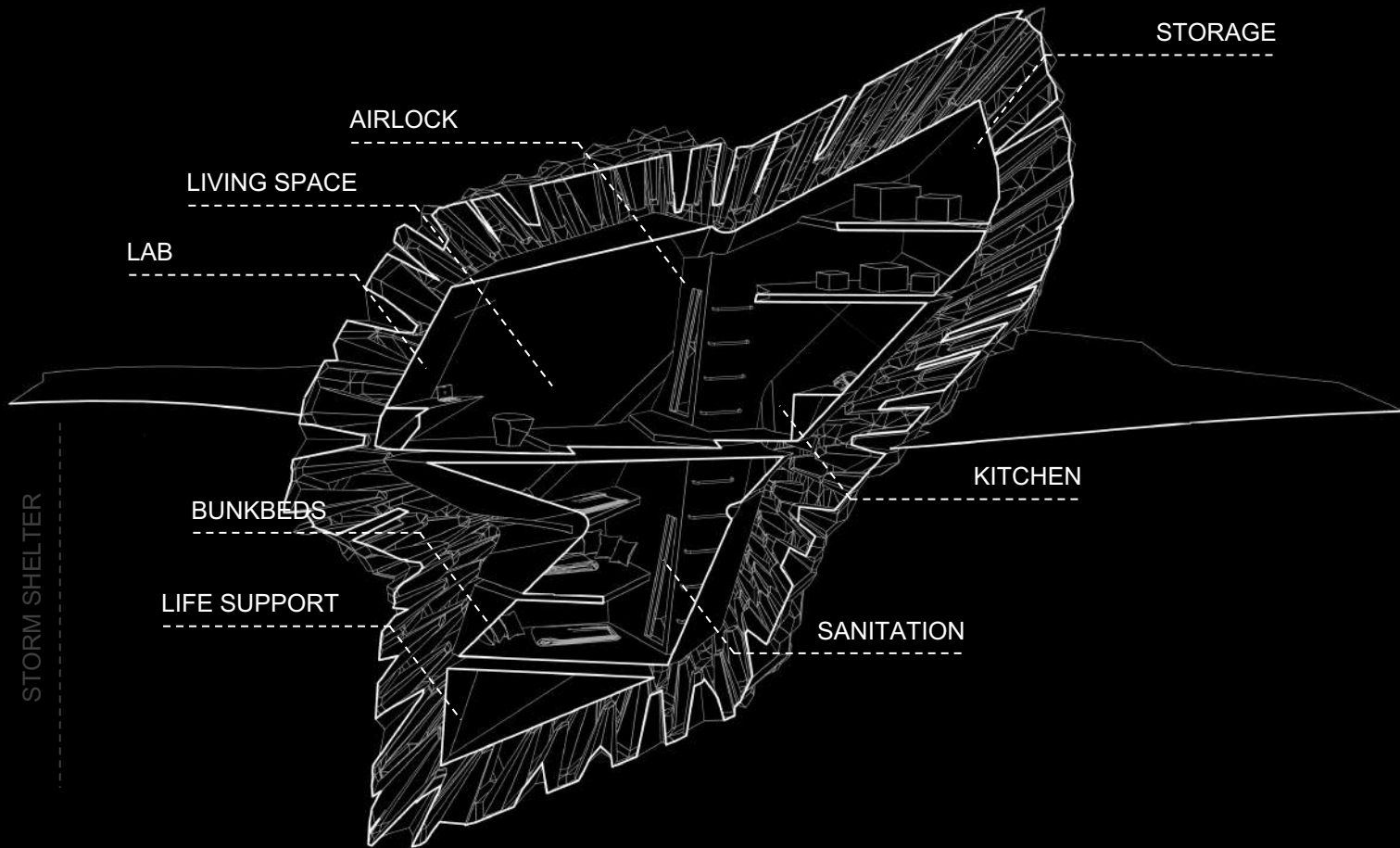
OTHER:

10M2 Storage space  
5M2 Life-support systems  
Solar storm shelter, combine with living spaces

Entrance and exit  
Garden



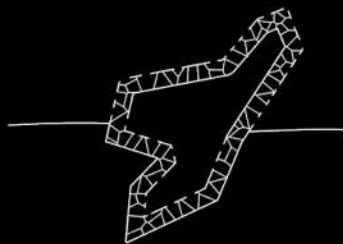




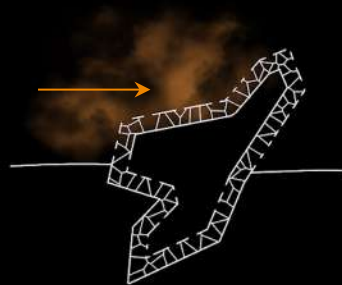




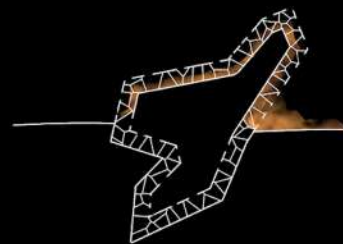
ASSEMBLY  
UNGROUND PART



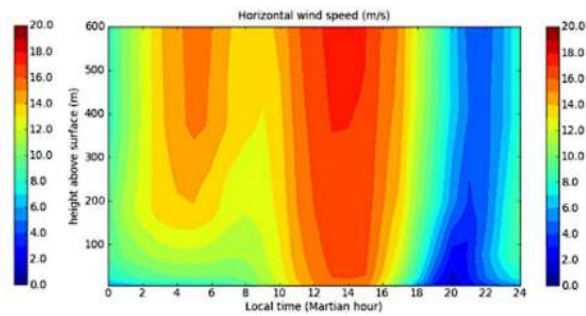
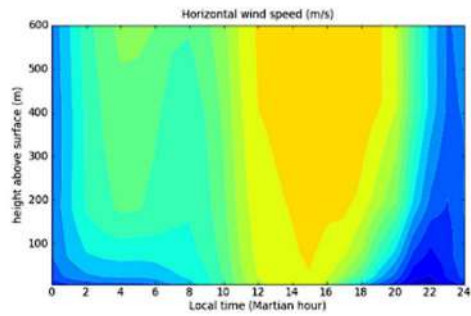
ASSEMBLY ABOVE  
PART



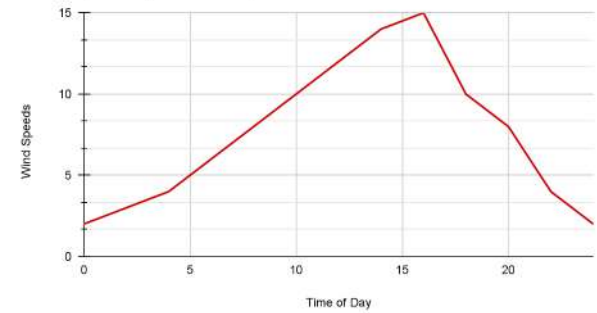
SAND STORMS  
APPEAR

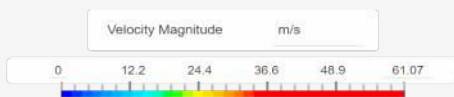
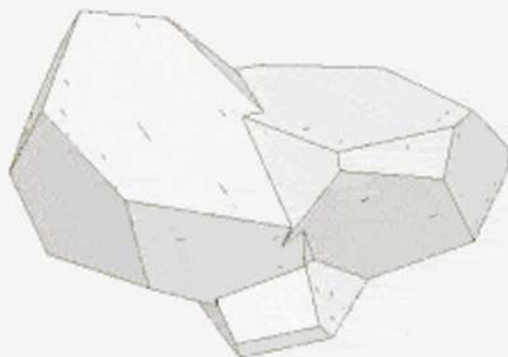


CAVERN STRUCTURE  
FILLS UP WITH SAND



Wind Speeds (Nili Fossae)

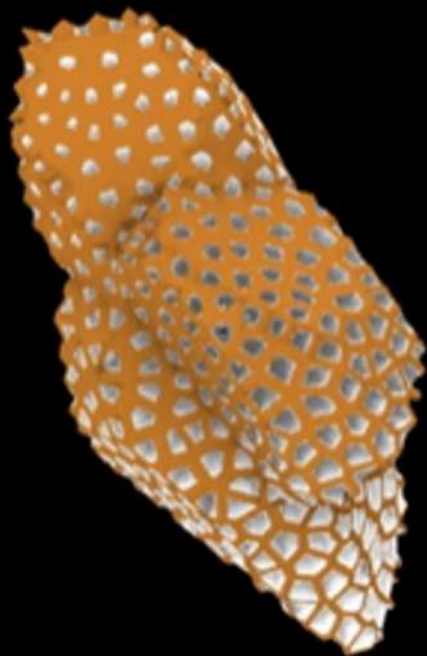


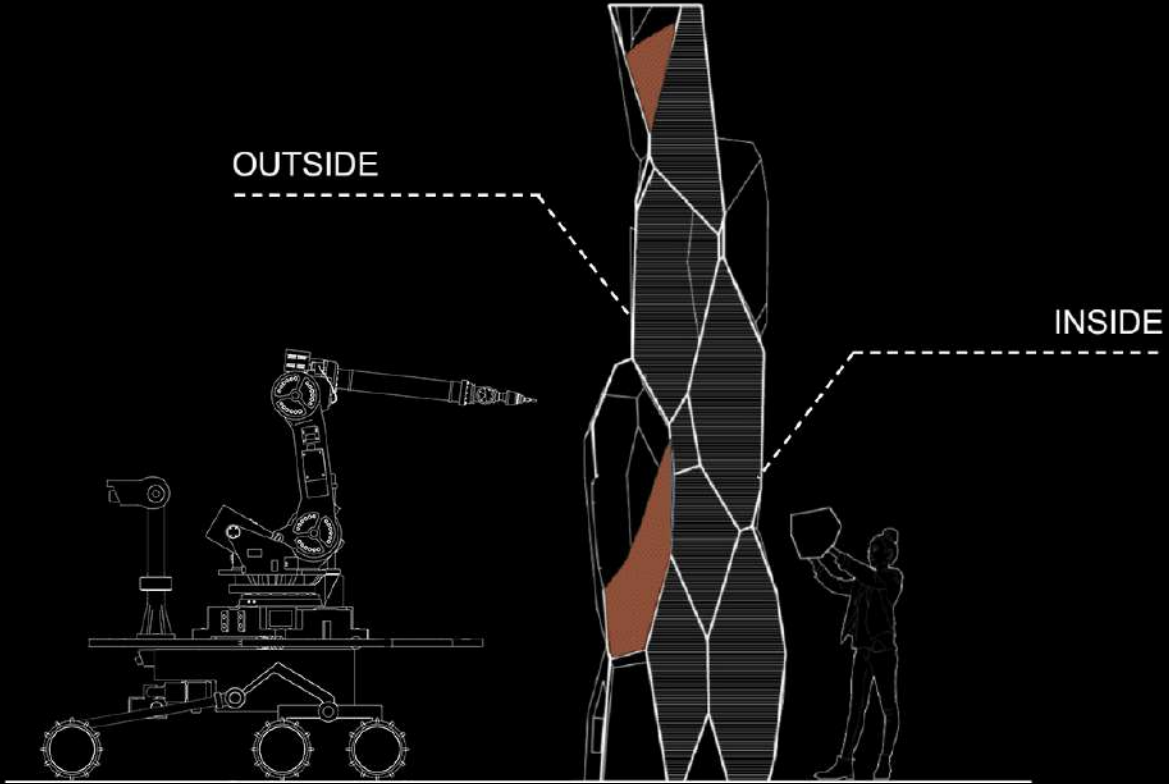


Low Velocity Zone  
=  
Smaller Openings

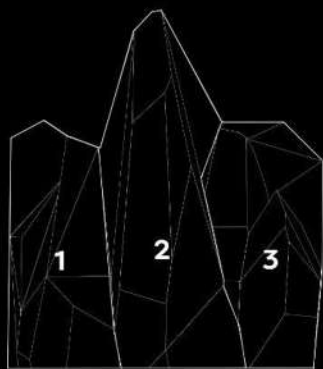
High Velocity Zone  
=  
Larger Openings



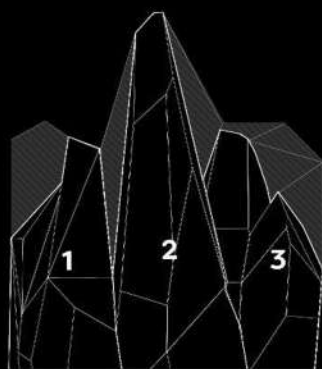




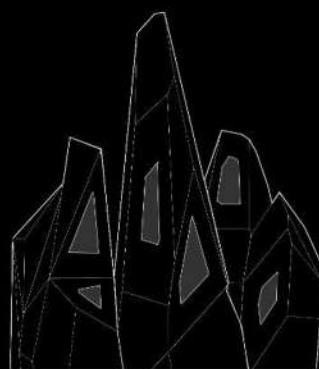




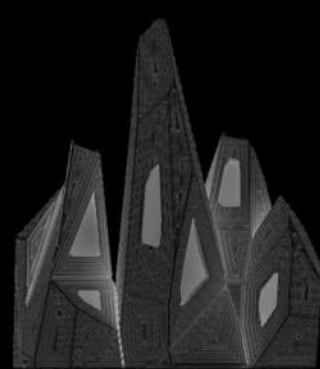
**Carved Out Fragments**



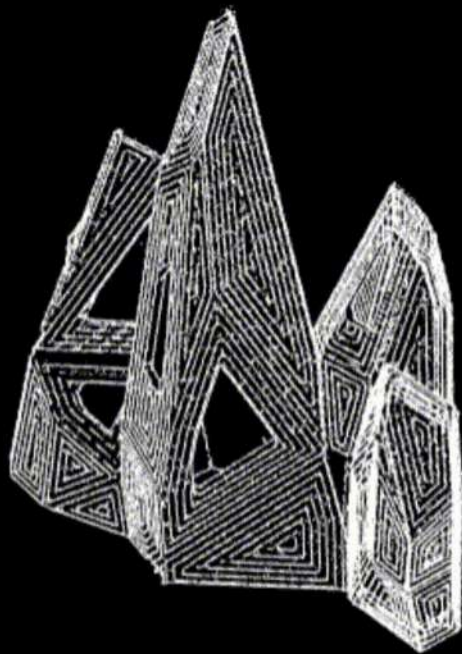
**Shaping of Fragments**



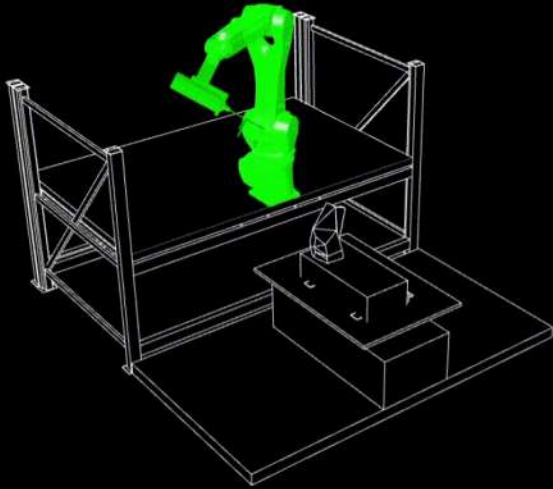
**Insertion of Handles**



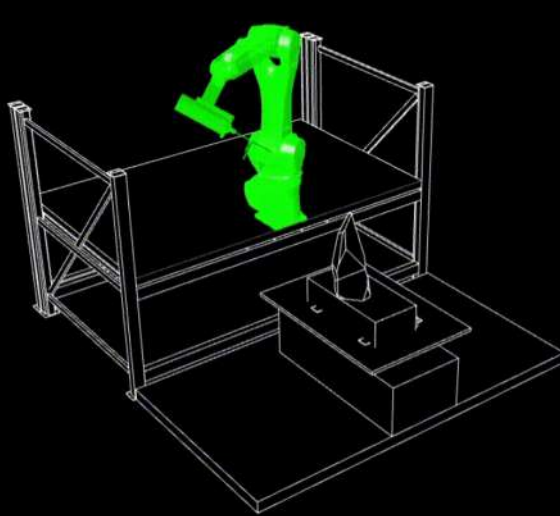
**Final Preview**



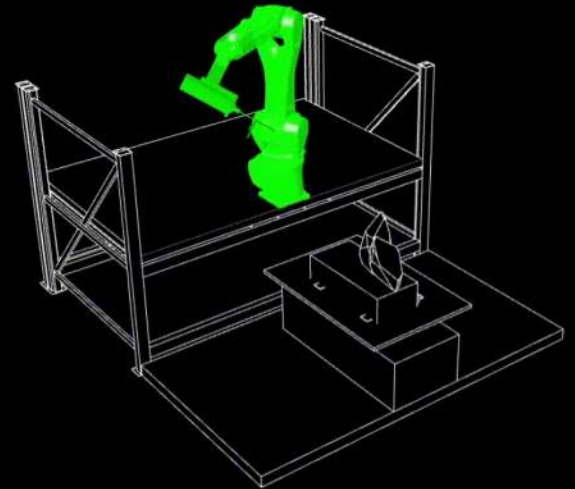
# Simulating Production



FRAGMENT A



FRAGMENT B



FRAGMENT C

