

الكوكب الأحمر

أ. وسام الحسين*

لمحة تاريخية

لمحة عامة عن المريخ



249-207

) 6794

56

(

37

24

27+

687

140-

23.5

25.2

خواص كوكب المريخ



.(

) %15

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.%11

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³ / 3.93

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.%40-38

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2008/12/16

*

.%1 -

. 7 -

. / 35 - 3 : -

: -

.() %95.3 : •

.%2.7 : () •

.%6.1 : •

.%0.003 : •

.%0.011 : •

.%50 : -

.%20 : -

%14 : -

.%7.2 : -

أقمار المريخ

.1877



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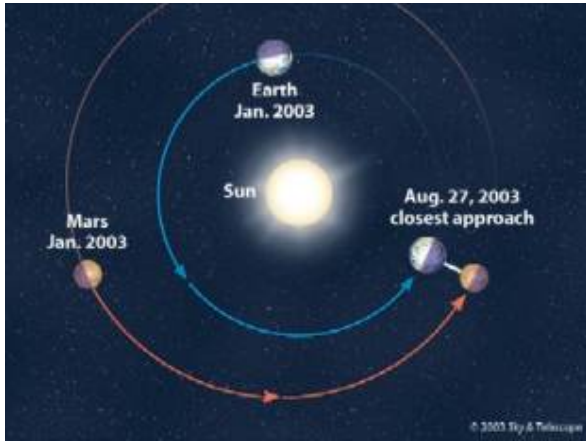
:(Phobos) -

9.000 22

:(Deimos) -

23.000 12

اقترابات المريخ



60

2003

18-15

60

استكشاف الكوكب

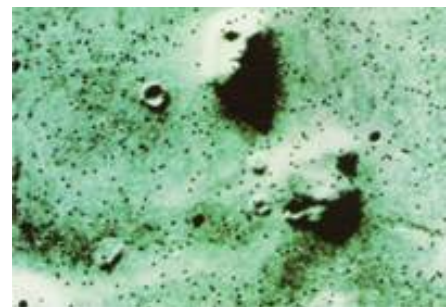
24

27+

الظواهر المكتشفة على سطح المريخ

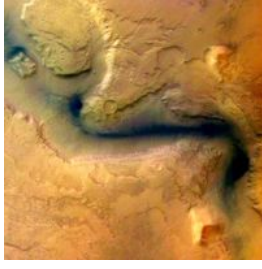
Sedonia

1976



1870

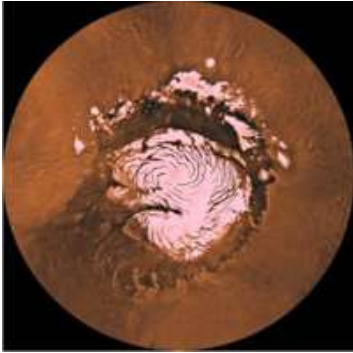
()



18-15

200-100

القطب المريخي الجليدي



3.7

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11



12

1976



()

رحلات استكشاف المريخ

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| | | | |
|--------|------------|-----|----|
| | 1960/10/10 | 1 | 1 |
| | 1960/10/14 | 2 | 2 |
| | 1962/10/24 | 22 | 3 |
| | 1962/11/1 | 1 | 4 |
| | 1962/11/4 | 24 | 5 |
| | 1964/11/5 | 3 | 6 |
| 21 | 1964/11/28 | 4 | 7 |
| | 1964/11/30 | 2 | 8 |
| 75 | 1969/2/24 | 6 | 9 |
| 126 | 1969/3/27 | 7 | 10 |
| | 1971/5/8 | 8 | 11 |
| | 1971/5/10 | 419 | 12 |
| | 1971/5/19 | 2 | 13 |
| 20 | 1971/5/28 | 3 | 14 |
| 7329 | 1971/5/30 | 9 | 15 |
| | 1973/7/21 | 4 | 16 |
| | 1973/7/25 | 5 | 17 |
| | 1973/8/5 | 6 | 18 |
| | 1973/8/9 | 7 | 19 |
| | 1975/8/20 | 1 | 20 |
| 50.000 | 1975/9/9 | 2 | 21 |
| | 1988/7/7 | 1 | 22 |
| | 1988/7/12 | 2 | 23 |
| | 1992/9/25 | | 24 |
| | 1996/11/7 | | 25 |
| | 1996/11/16 | 96 | 26 |
| | 1996/12/4 | | 27 |
| | 1998/7/4 | | 28 |
| | 1998/12/11 | | 29 |
| | 1999/1/3 | | 30 |
| | 2001/3/7 | | 31 |
| | 2003/6/2 | 2 | 32 |
| | 2003/6/10 | | 33 |
| | 2003/7/7 | | 34 |
| | 2005/8/10 | | 35 |
| | 2007/8/4 | | 36 |

2012 2009

200

2015

Rover 2015

450 150

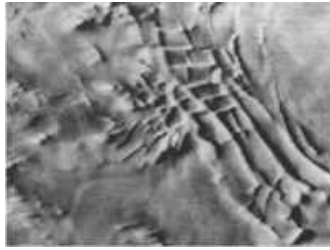
(Mariner-9) 9



.()
7329

9

(Viking)



(Mars Pathfinder)

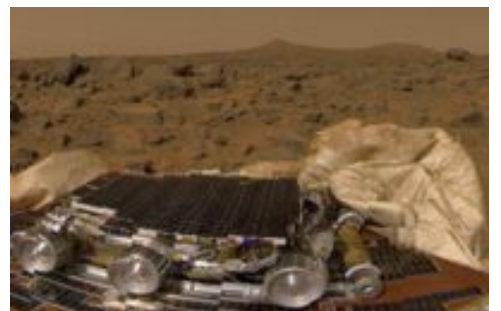
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(Exploration Rover Spirit)

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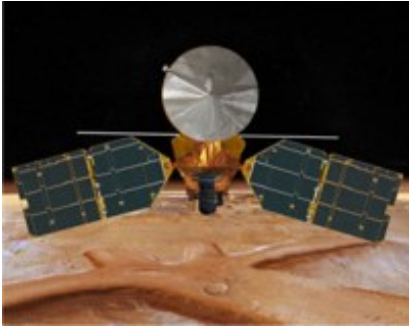
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(Mars Express)

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(Mars Reconnaissance)

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2006

2005

(Phoenix)



2007

70

2008

2.5

40-

30-

غزو واستيطان المريخ



2180-2170

%1

%20-15

