MARS CORRECT:
CRITIQUE OF ALL NASA MARTIAN WEATHER DATA

By Barry S. Roffman,
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January 29, 2015

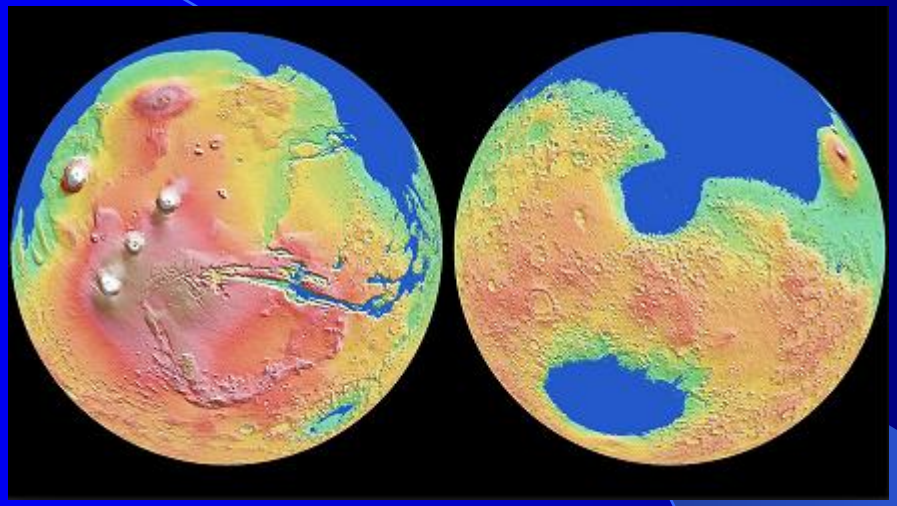
Why go to or care about Mars?

Many think life started on Mars, came here via meteorites

- An asteroid or comet probably wiped out dinosaurs here.
- The last asteroid near miss was January 26, 2015 (diameter 1,800 feet).
- We have all our survival “eggs” in 1 basket (Earth).
- Martian land area = Earth’s, + it has natural resources. We may need it for a future home.

Why go to or care about Mars?

- Mars once had an ocean, and likely life. It may still have life (lower forms likely, past higher forms possible).

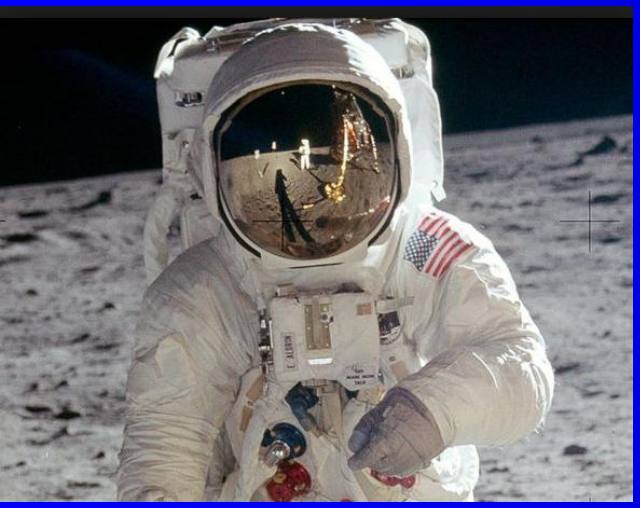


- The key to our place in the universe may be on Mars.
- Mars provides science/career goals to make the future exciting to today's youth.

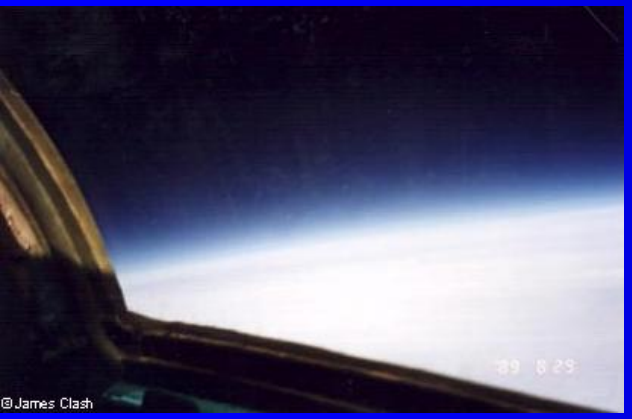
Air pressure is central to establishing a human presence there. Accepted average pressure 6.1 Mbar at Mars areoid

- **Areoid is Mars equivalent of Sea Level.**
- **Average Earth sea level pressure = 1,013.25 Mbar.**
- **6.1 Mbar is nearly a vacuum – no fun to experience.**

Martian Sky Color is an Issue.



In the Moon's vacuum the sky is black.



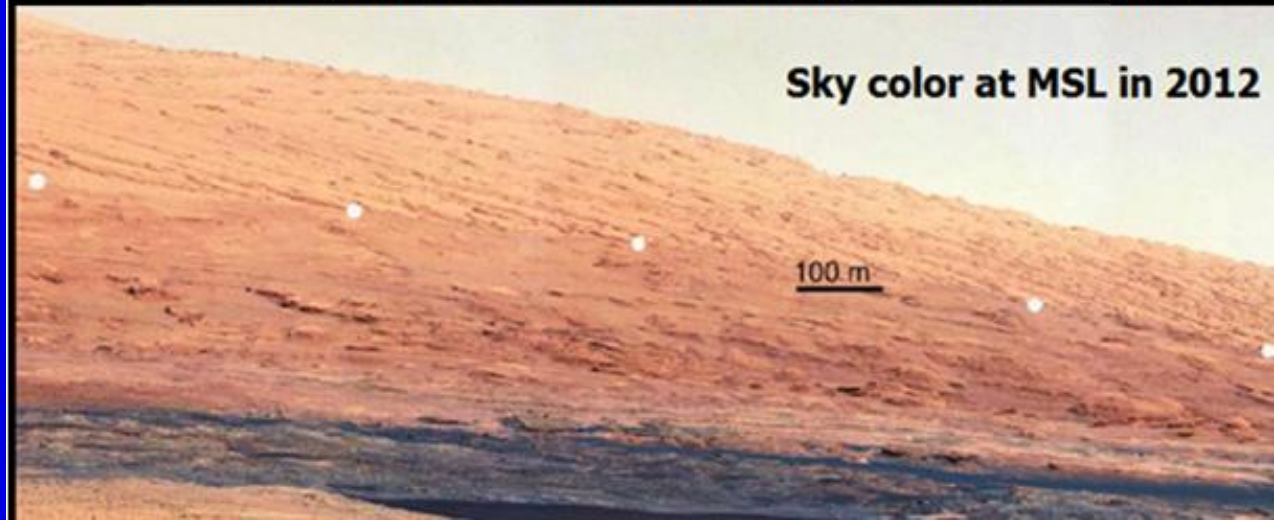
At high altitudes over Earth, like 83,600 feet , (with 11.3 mbar) our sky goes black.

Why is the Martian sky so bright with under 10 mbar pressure What color really is it anyway?

Original color seen.

Sky color after order to alter color monitors by NASA Administrator Dr. James Fletcher.

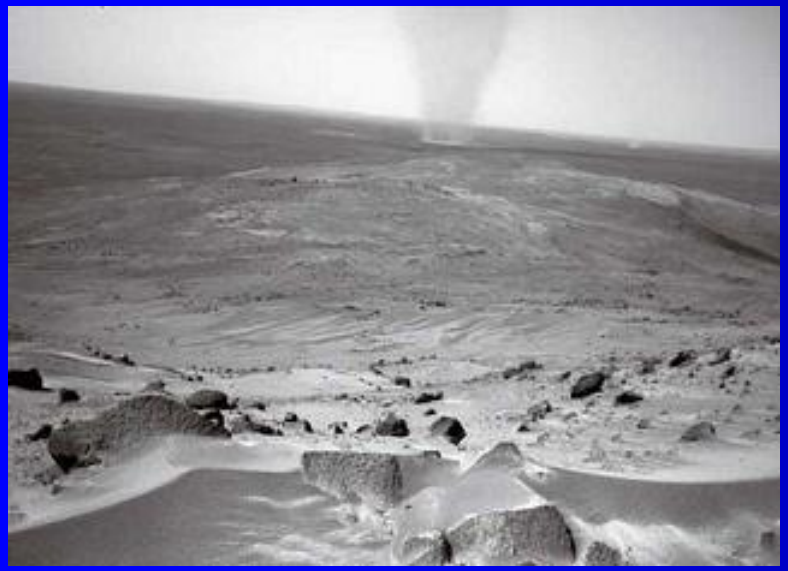
Sky color seen at Viking 1 in 1976 - before and after alteration



Initial Cause to Question Accepted Pressure

- **Dust devils on Mars and Earth are similar.**

  (seasons, electricity, core temperature rises, formation times and often size but they can be much bigger on Mars)

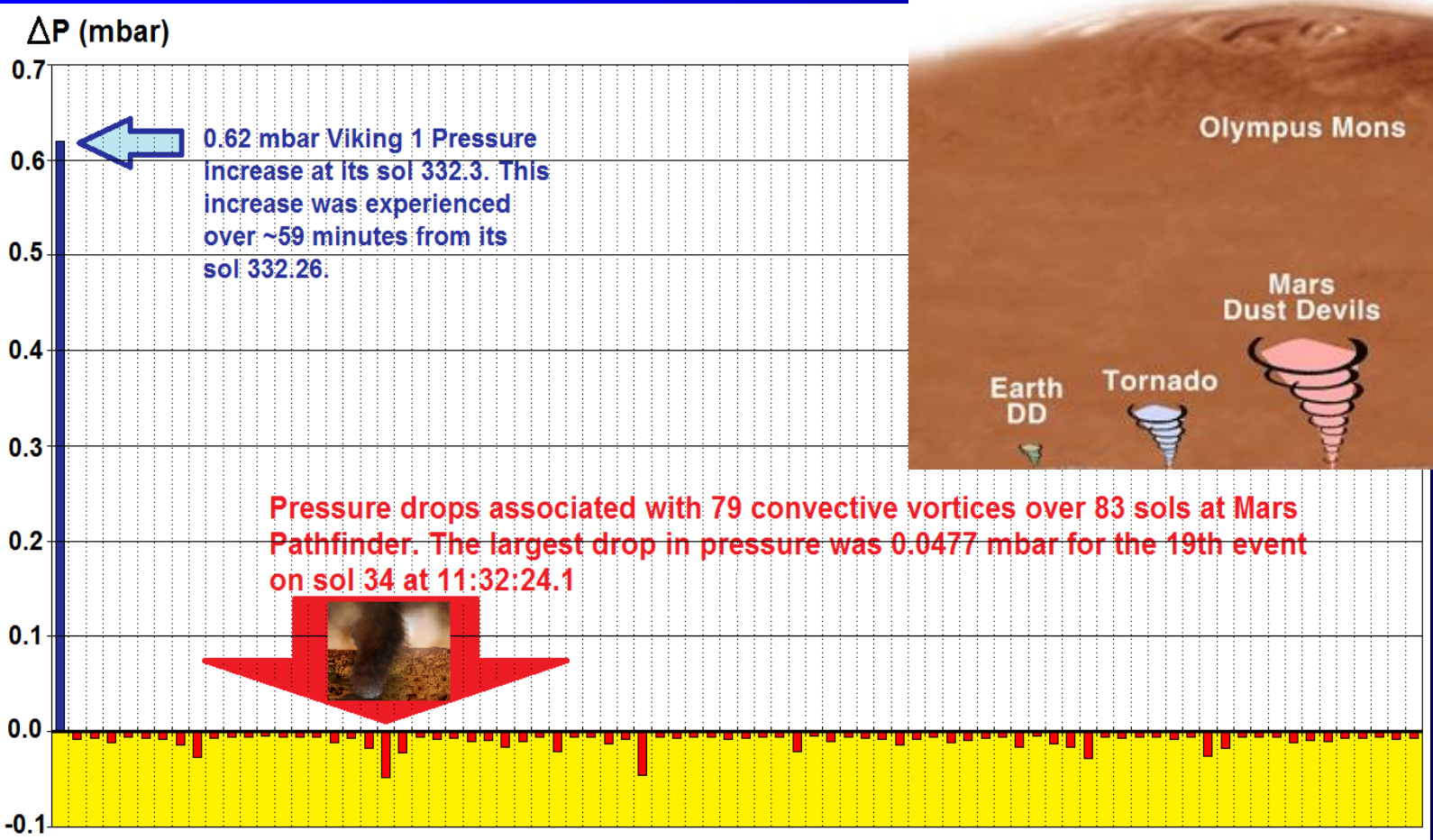


http://www.lpl.arizona.edu/~lemmon/mer_dd/dd_enhanced_587a.gif

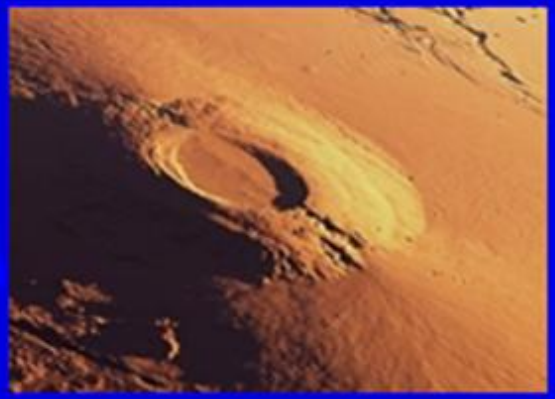
Similar dust particle size (a thousandth of a millimeter). But at 6.1 mbar pressure, an impossible 1,118 MPH wind is required to lift dust.

DUST DEVILS ARE THE MOST OBVIOUS WEATHER ANOMALY

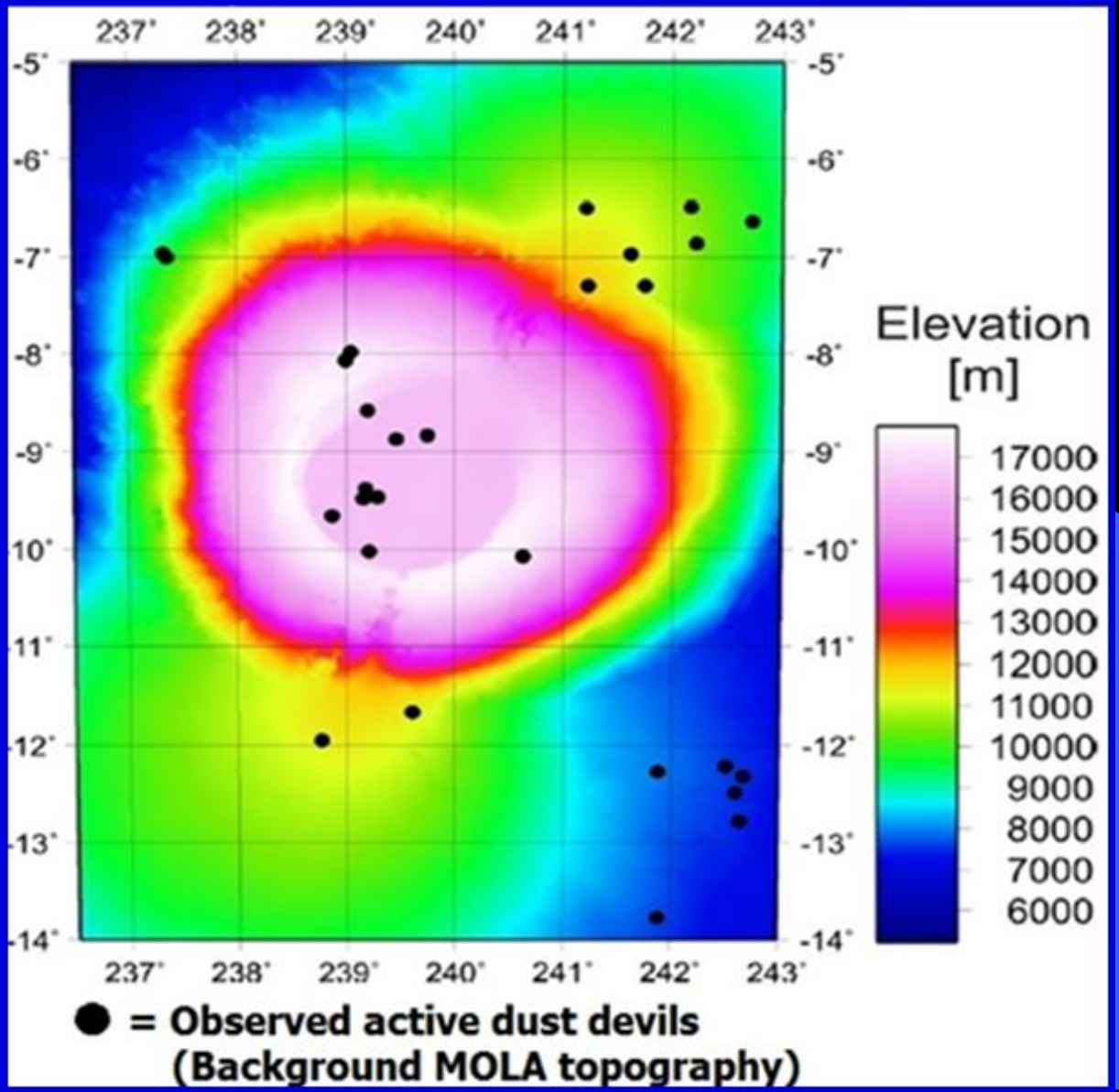
With so little air on Mars, how can there be enough change in pressure to form them at all?



Why Question Pressure?

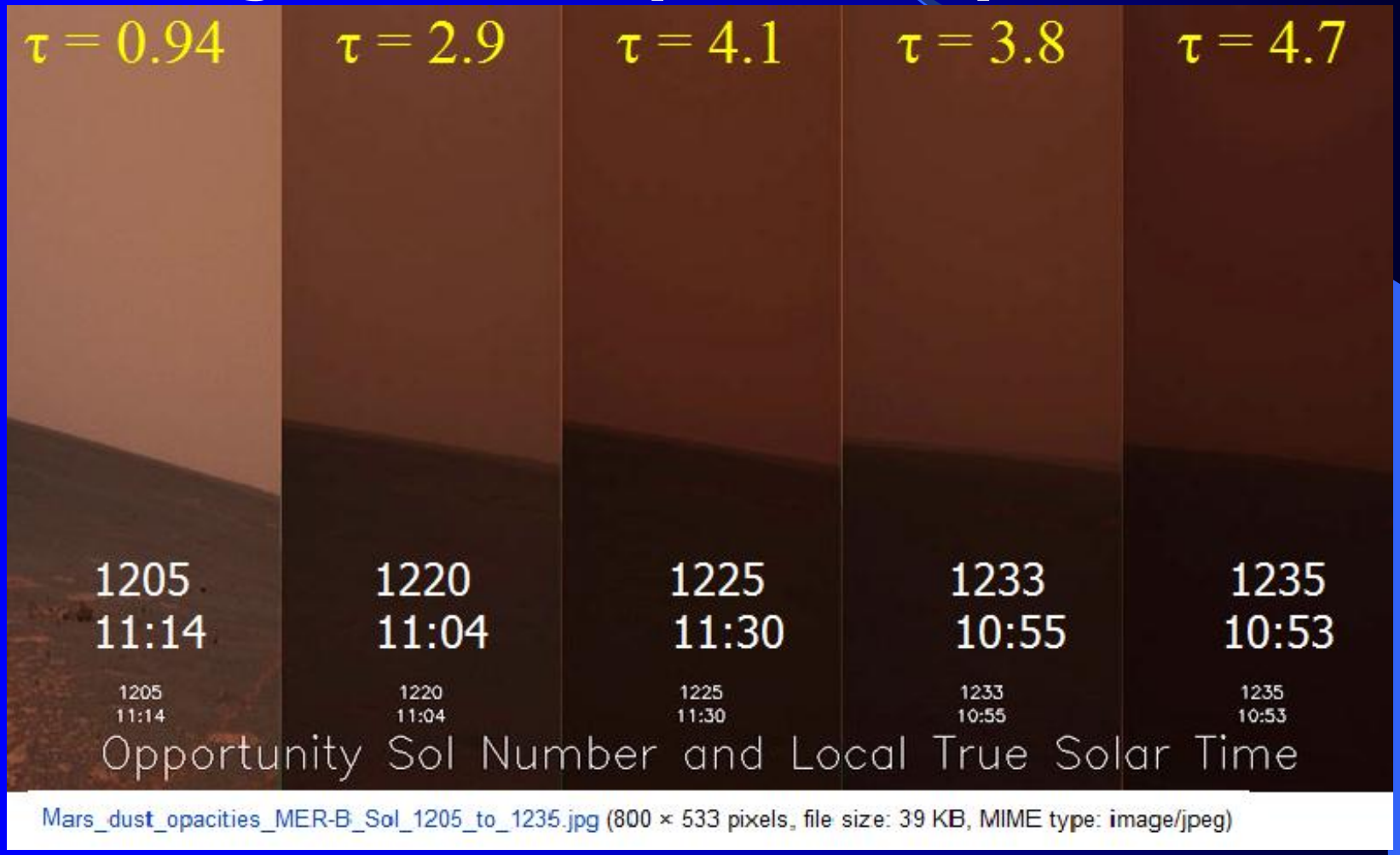


Dust devils even form at a height of 10.6 miles (17 km) on the Arsia Mons mountain where pressure should only be 1/1000 th of Earth's pressure.



Why Question Pressure?

Dust storms increase air pressure and can block 99% of light on Mars (and Earth).



Mars_dust_opacities_MER-B_Sol_1205_to_1235.jpg (800 × 533 pixels, file size: 39 KB, MIME type: image/jpeg)

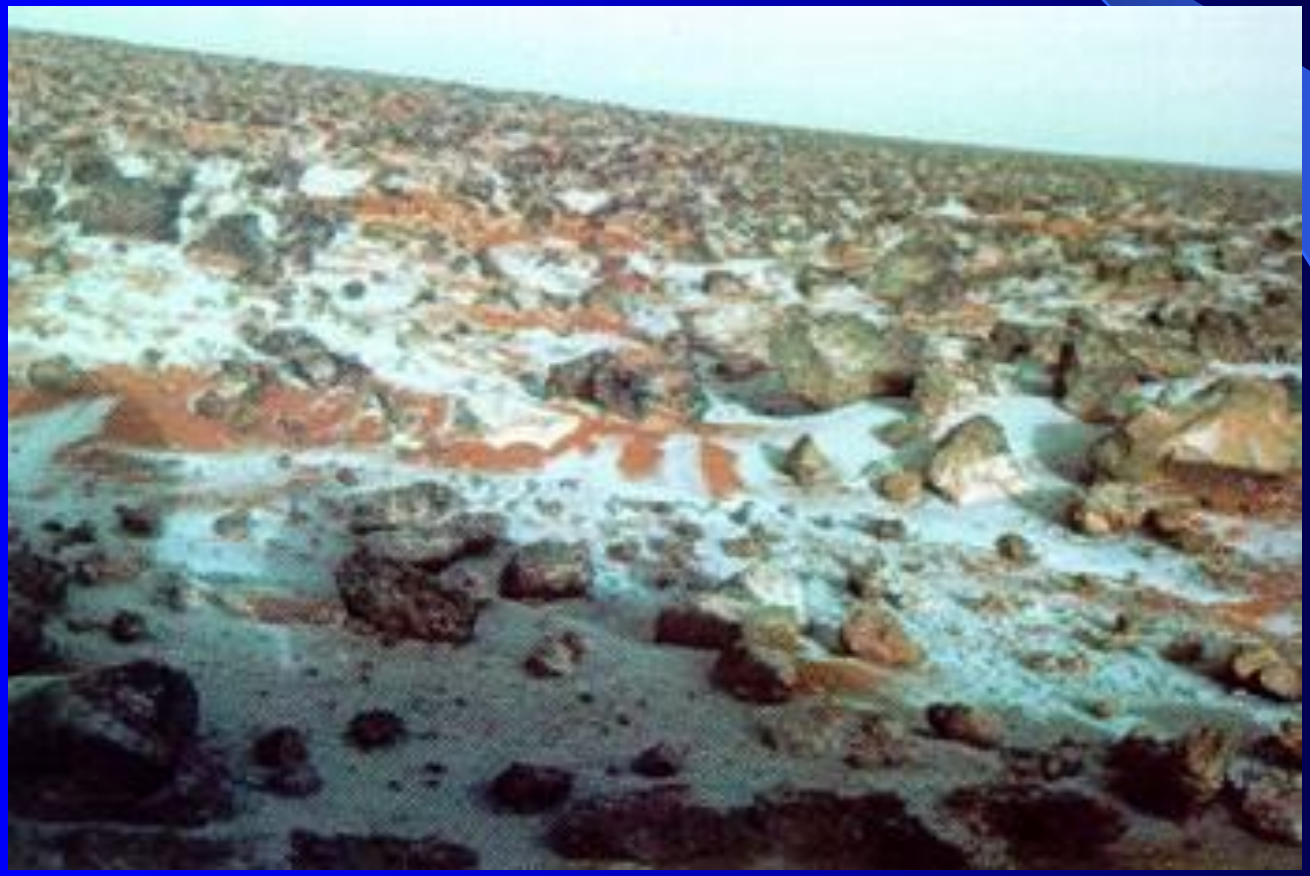
Phoenix, AZ Dust Storm of 5 July 2011

- **Pressure increased by 6.6 mbar – that's more than average 6.1 mbar pressure on Mars.**

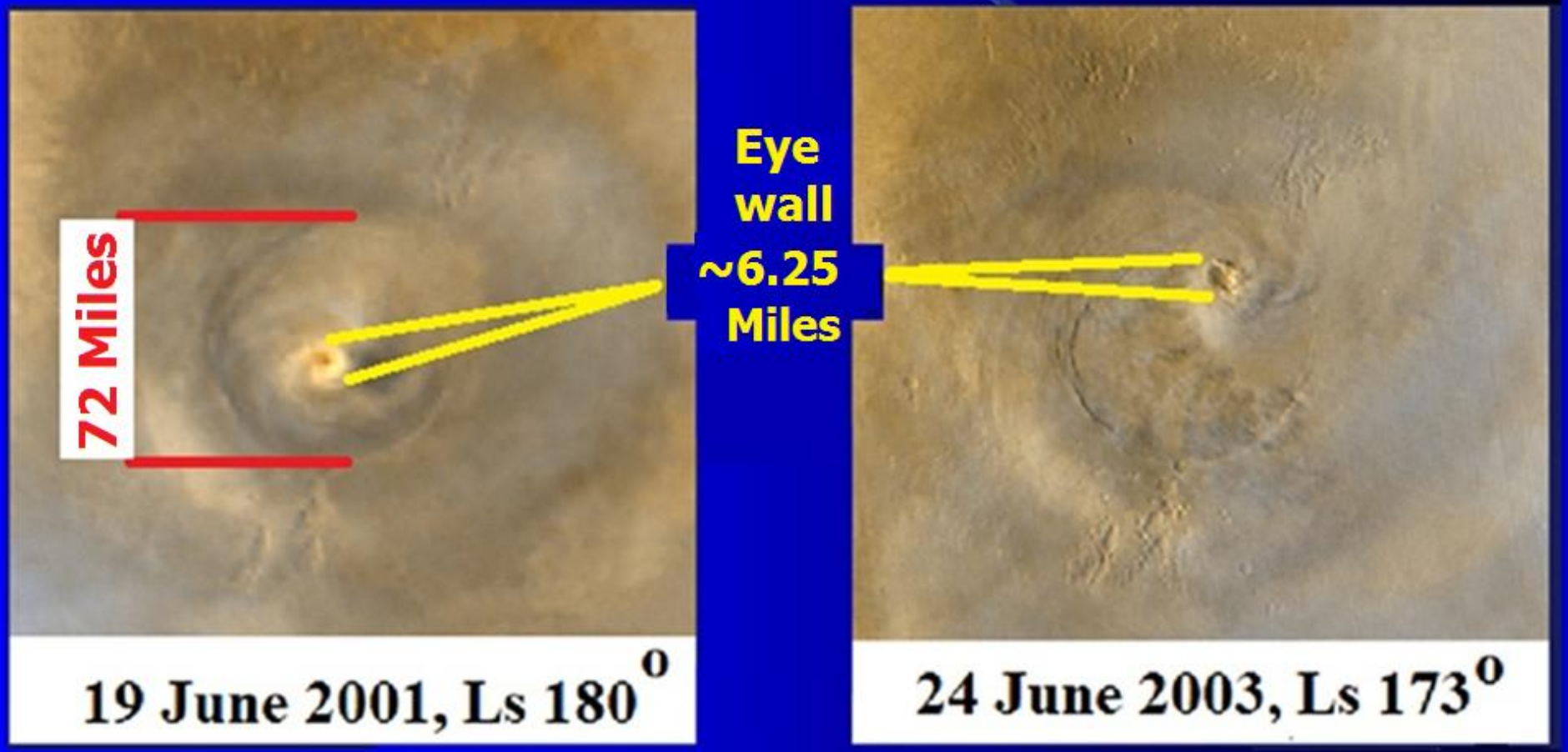
- **Pressure measured on MSL was at least 9.25 mbar. That + 6.6 mbar = 15.85 mbar. MSL can't even measure over 11.5 mbar.**

Why Question Pressure?

- Snow on Mars with ice particles in clouds ten times too small for accepted pressure.



Spiral Clouds on Arsia Mons look like Hurricane Eye Walls. 1 mbar NASA claim seems too low.



These clouds go up 18.75 miles above Arsia Mons. Believe NASA, and pressure there is only ~.07 Mbar – too low to support such weather.

STRATUS CLOUDS 16 KM ABOVE MARS SUGGEST A PRESSURE AT AREOID OF 511 MBAR AND AT HELLIS BASIN HIGHER THAN PRESSURES ON EARTH AT SEA LEVEL.

1. CIRROSTRATUS CLOUDS ARE FOUND ON EARTH UP TO 13,000 METERS HIGH.

3. STRATUS CLOUDS ON MARS AT ALTITUDE OF 16,000 METERS ABOVE MARS PATHFINDER.

PHOTO TAKEN 1 HOUR 40 MINUTES BEFORE SUNRISE ON 7/19/1997!

Meteorology Calculator Version 1.5.9			
Pressure Altitude Required Data Entry			
Station Pressure	163.33	in of Hg / mm of Hg / millibars (hPa)	

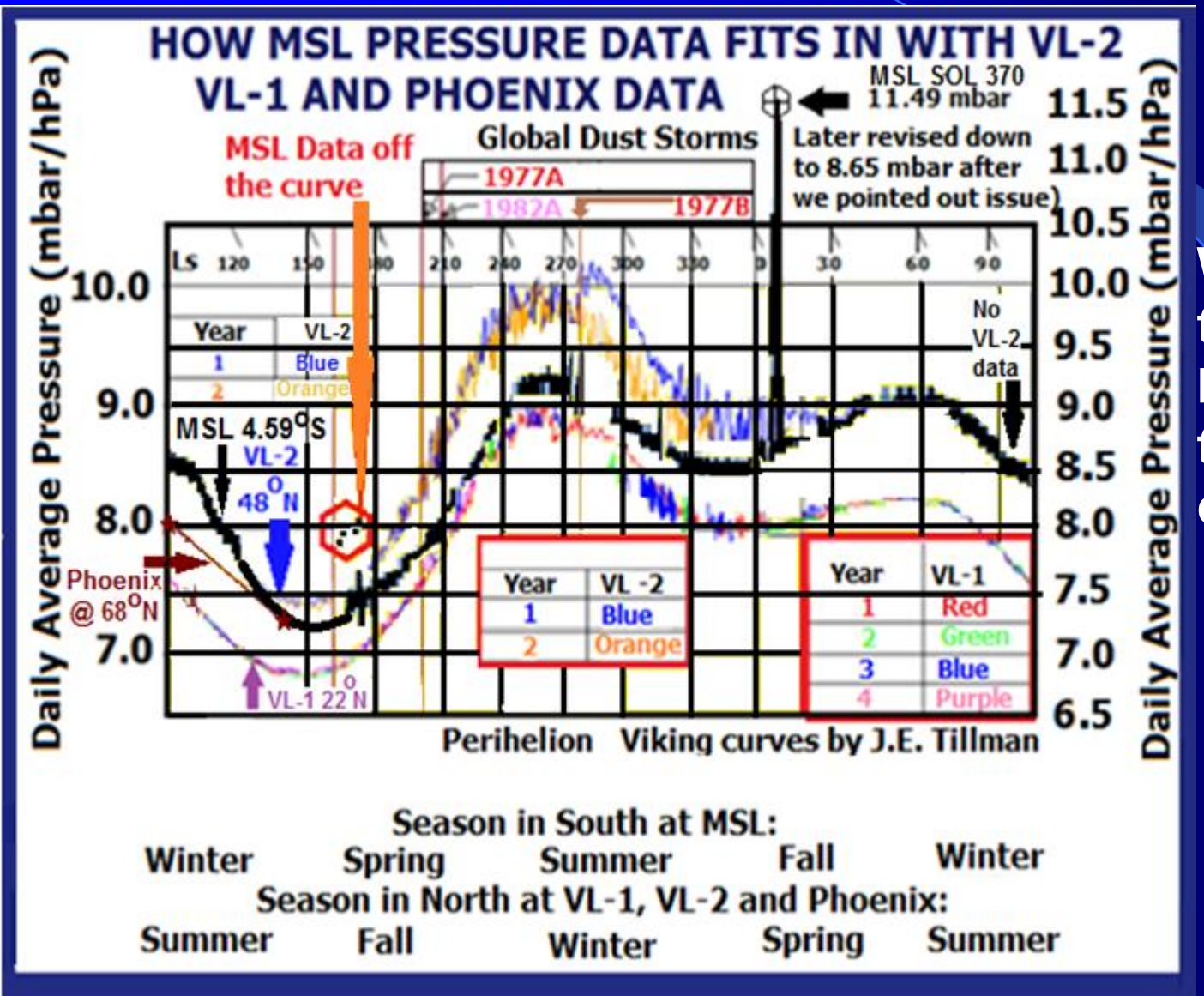
Calculated Results		
Pressure Altitude Calculation	42651.1	ft
Pressure Altitude Calculation	13000	m

2. PRESSURE AT 13,000 METERS IS ABOUT 163 MILLIBARS

4. Pathfinder was 3,682 m below areoid. 16,000 m above that is 12,318 m. Table assumes stratus clouds cannot form at pressures lower than on Earth (163 mbar).

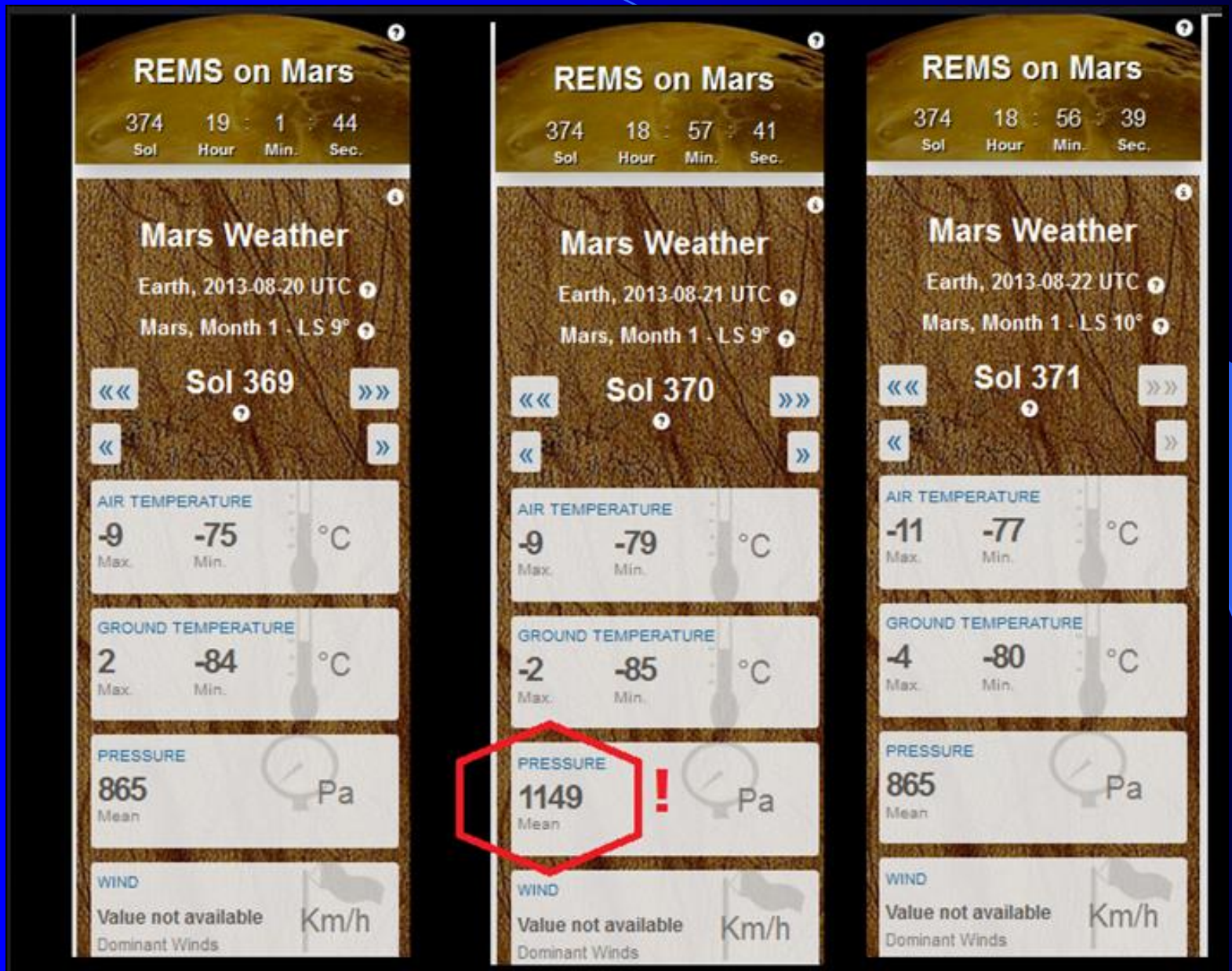
	A	B	C	D	E	F	G	H	I
1	CALCULATIONS BASED ON	ENTERING ARGUMENTS SCALE HEIGHT 10.8 KM AND 163.33 mbar at 12,318 meters							
2	MARS PATHFINDER	KILOMETERS	10.8km Scale	RATIO B/C	=-EXP(D VALUE)	1/E value	-F VALUE = PRESSURE	PERCENT OF	PRESSURE IN
3	VIEW OF STRATUS CLOUDS		Height (MARS)				MULTIPLE OF	PRESSURE AT	MILLIBARS
4							6.1 MBAR MEAN	MEAN AREOID	
5	CLOUDS 16 KM ABOVE MPF	12.318	10.8	1.140555556	-3.128505941	-0.319641394	0.319641394	31.96413939	163.3303595
6	MARS PATHFINDER (MPF)	-3.682	10.8	-0.340925926	-0.711111581	-1.40624907	1.40624907	140.624907	718.56515
7	MEAN AREOID	0	10.8	0	-1	-1	1	100	510.98
8	VALLES MARINERIS	-5.31	10.8	-0.491666667	-0.611606201	-1.635039015	1.635039015	163.5039015	835.4722361
9	HELLAS BASIN	-7.825	10.8	-0.724537037	-0.484548845	-2.063775427	2.063775427	206.3775427	1054.547968

Often in 2012 and 2013 MSL pressures were well above the expected curve.



When we pointed them out to NASA, NASA dropped them back to the curve.

Example: On Sol 369 pressure was 865 Pascals. The next day a record high of 1149 Pa was recorded - the most the sensor could measure. I called JPL about it. The next day it was back to 865 Pa.



REMS Team/ NASA/JPL Critical Data changes After Hearing from the Roffman Mars Correct Team.

REMS on Mars
374 Sol 18 Hour : 57 Min. : 41 Sec.

Mars Weather
Earth, 2013-08-21 UTC
Mars, Month 1 - LS 9°
Sol 370

AIR TEMPERATURE
-9 Max. -79 Min. °C

GROUND TEMPERATURE
-2 Max. -85 Min. °C

PRESSURE
1149 Mean ! Pa

WIND
Value not available
Dominant Winds Km/h

Pressure reported as 1149 Pa BEFORE we brought it to JPL's attention.

About 7 months after we brought the 1149 Pa pressure to JPL's attention, they changed it to 865 Pa!

REMS on Mars
577 Sol 7 Hour : 45 Min. : 42 Sec.

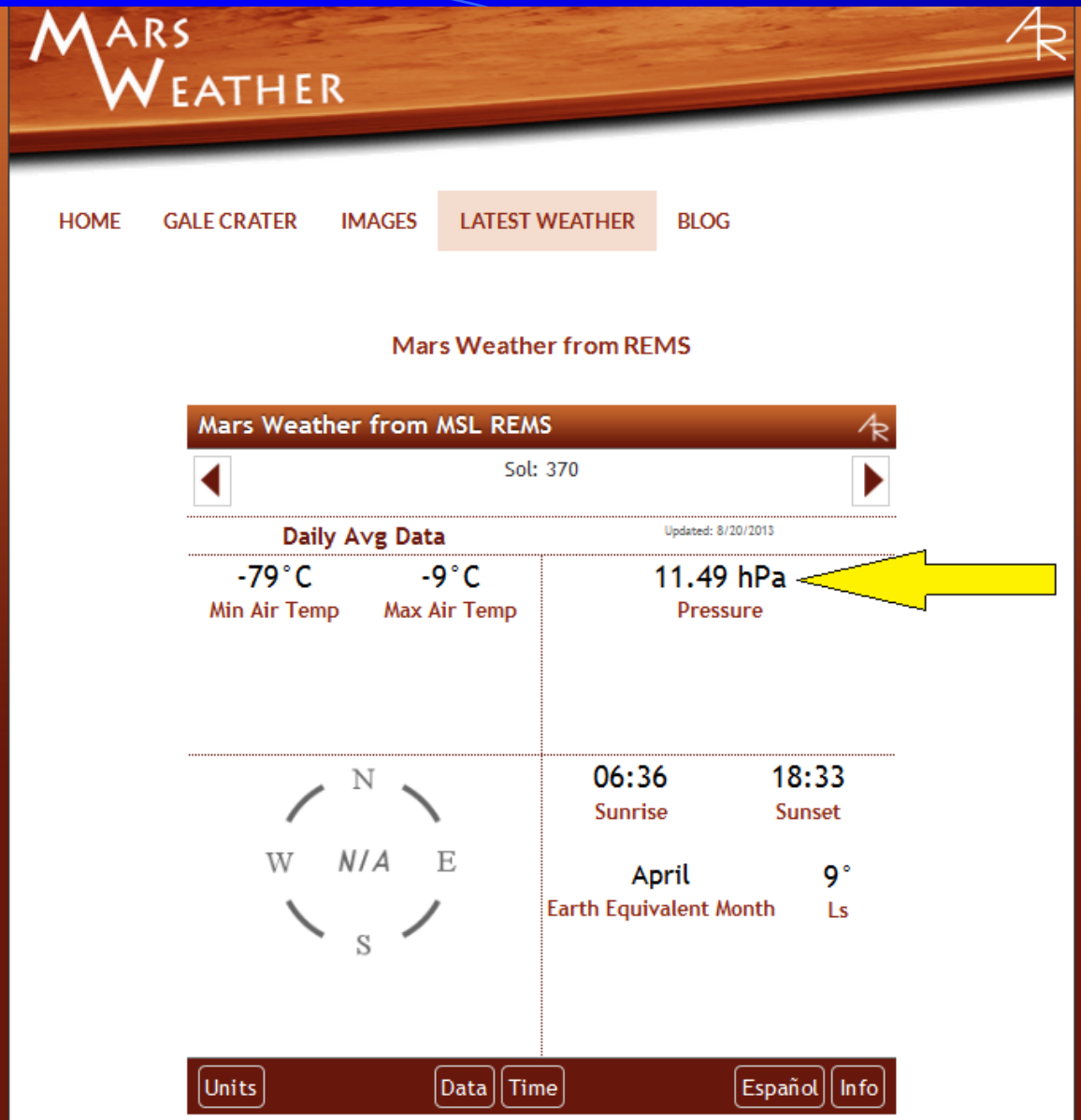
Mars Weather
Earth, 2013-08-21 UTC
Mars, Month 1 - LS 9°
Sol 370

AIR TEMPERATURE
-9 Max. -79 Min. °C

GROUND TEMPERATURE
-1 Max. -80 Min. °C

PRESSURE
865 Mean ! Pa

WIND
Value not available
Dominant Winds Km/h

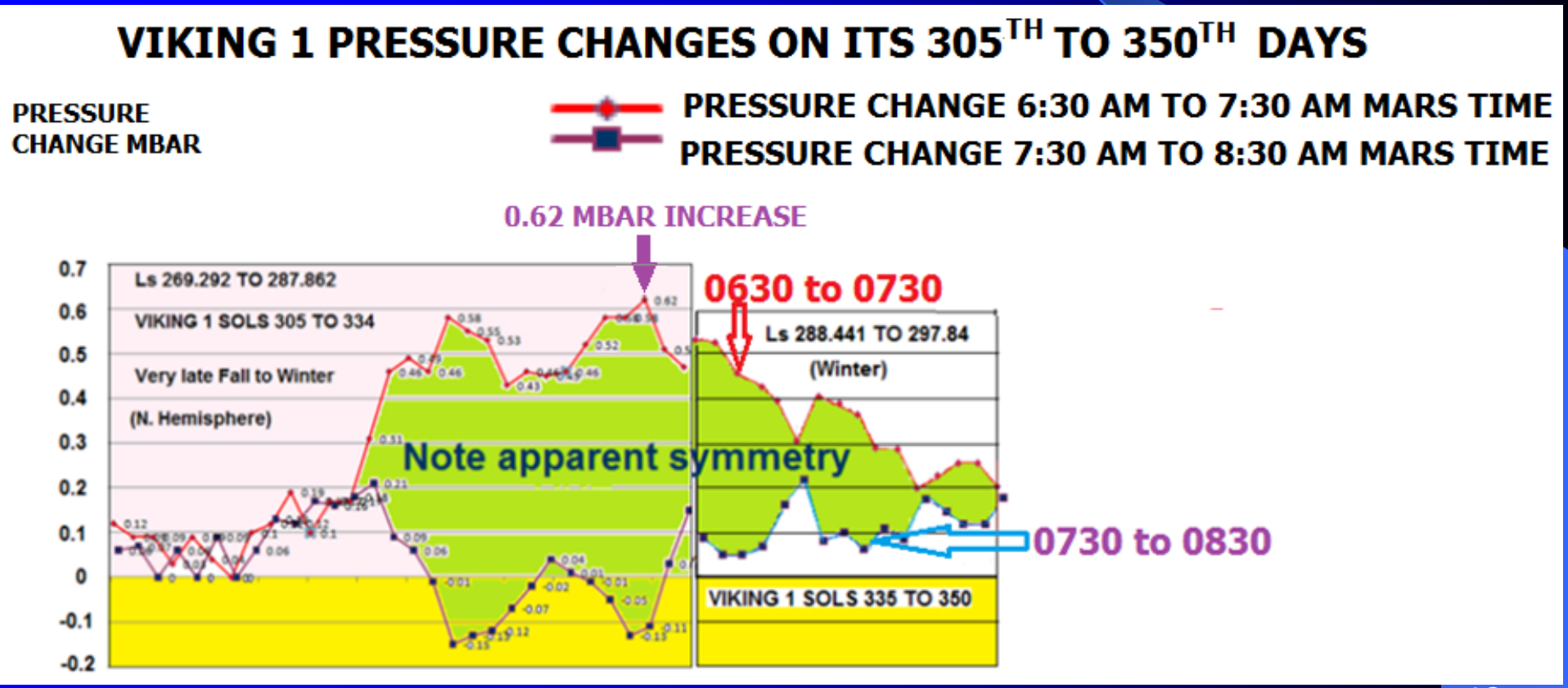


While the REMS Team/JPL changed 1149 Pa (11.49 hPa/mbar) to 865 Pa (8.65 hPa/mbar) to cover up the significant pegging out at maximum measurable pressure on Sol 370, as of 1/23/2015 Ashima Research still shows the original data.

Printscreen captured at 1:02 pm on 1/23/2015

1:02 PM
1/23/2015

Viking pressure spikes at 6:30 to 7:30 am were evidence for internal (not external) processes at work. This means they were not measuring outside air pressure!



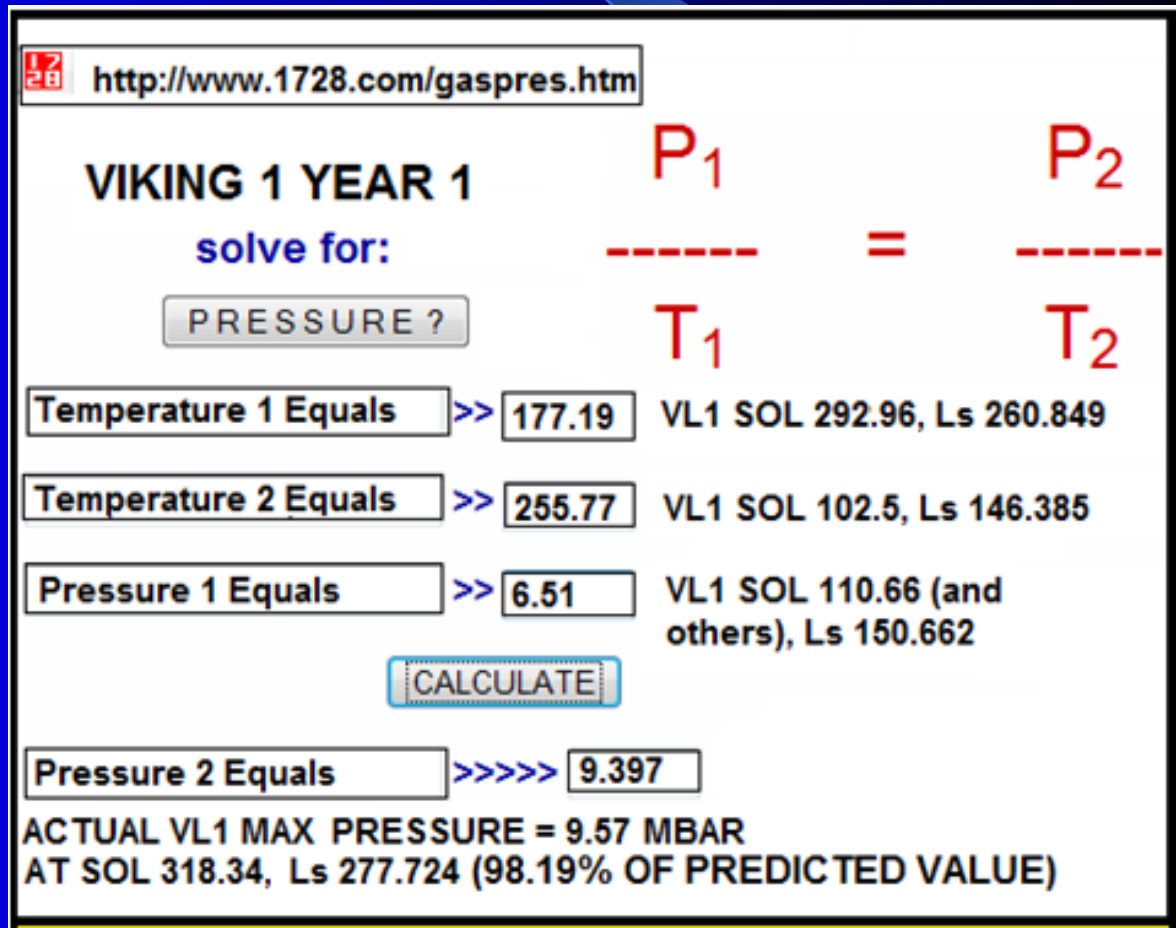
Occam's Razor

The simplest solution is usually correct.

This suggests repeatable pressure data should be believed. But, consistent pressures measured by all landers may only exist because they all had dust filters clog in similar fashion (or because, as was just shown, the data has been altered – as was Martian sky color for 36 years).

Viking Pressures & Outside Temperature

Pressure varied inversely with outside temperature. This suggests heating of the gas behind a dust clot that isolated the pressure sensor from Martian air.



Note: 177.19 K = -137.128° F
255.77 K = +0.716° F

TINY DUST FILTERS HAD NO CLEANING MECHANISM

Mars is very dusty. All dust filters likely clogged immediately on landing.

DIME SURFACE AREA = ~251.9 mm^2

TAVIS DUST FILTER FOR VIKING = ~40 mm^2

TAVIS DUST FILTER FOR PATHFINDER= ~ 3.14 mm^2

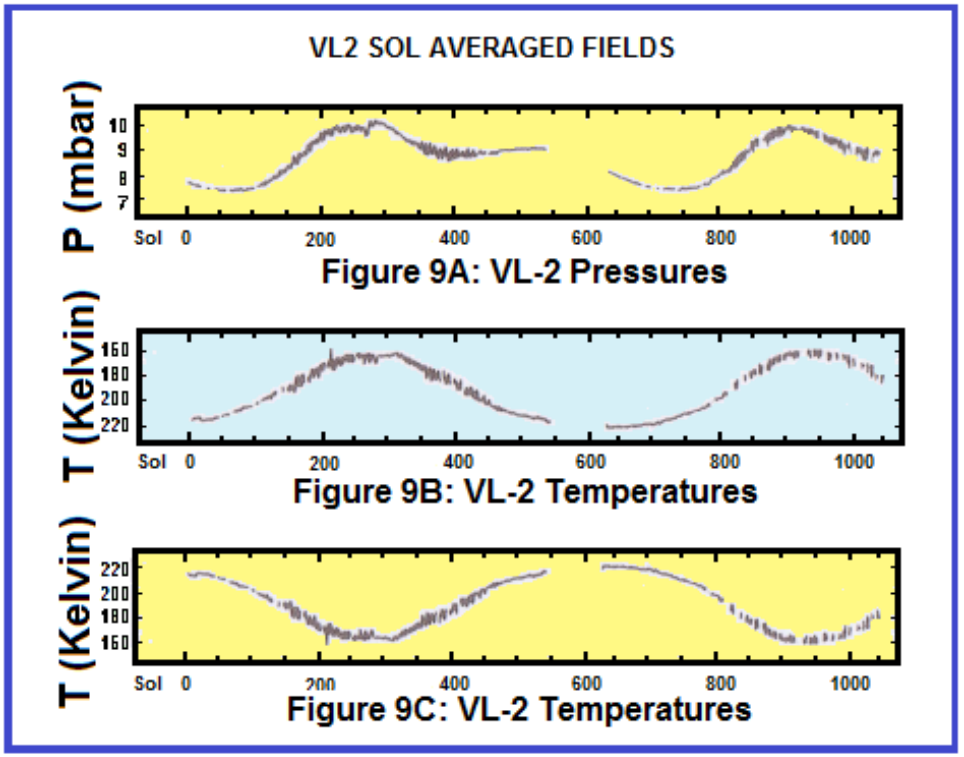
VAISALA DUST FILTER FOR PHOENIX OR MSL = ~10 mm^2

Evidence for the clogs: Viking-2 pressure data for over a Martian year

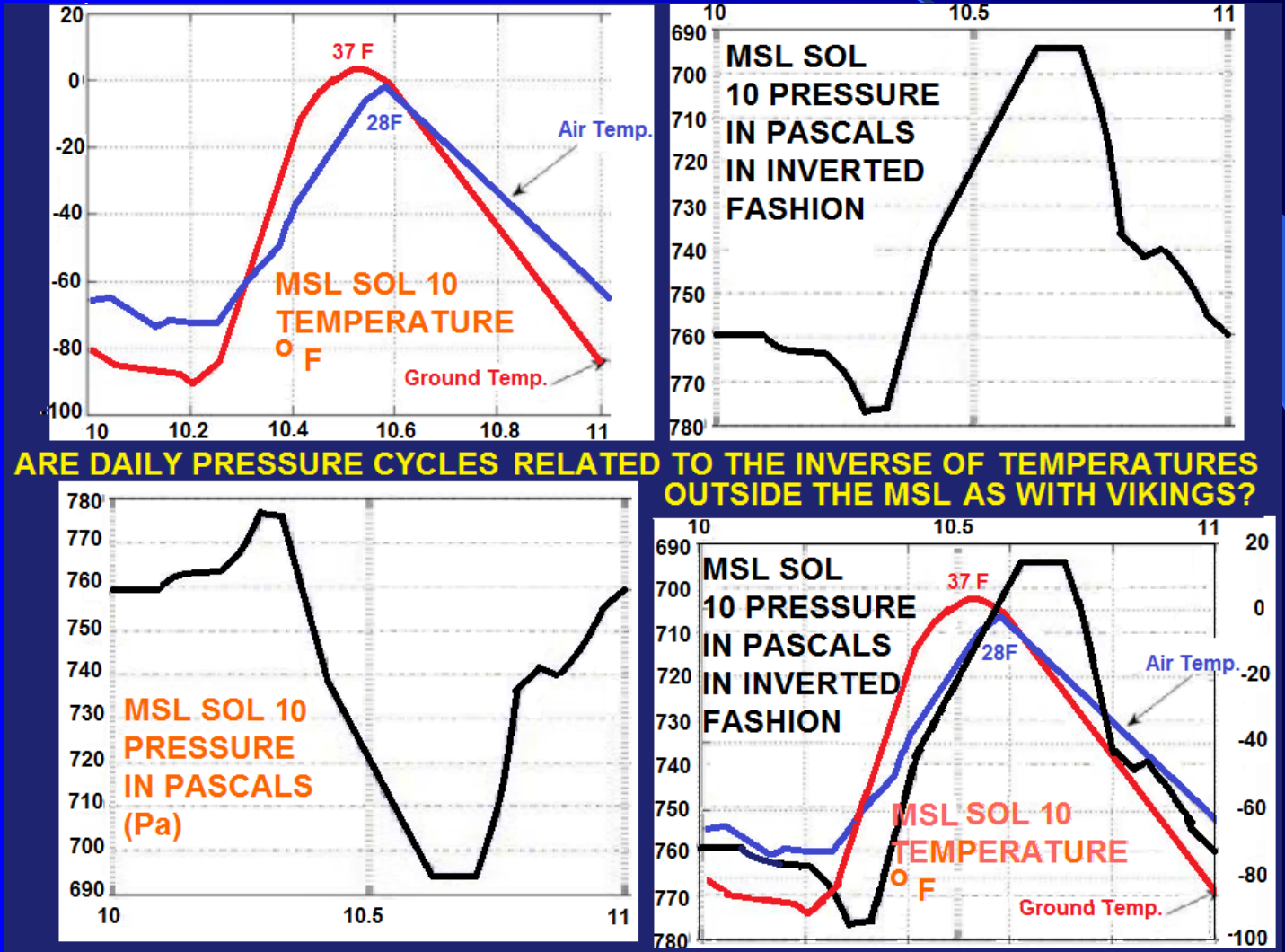
Figures 9A and 9C show that as temperature fell pressure recorded rose.

Figure 9B is 9C inverted to show quality of pressure and temperature link.

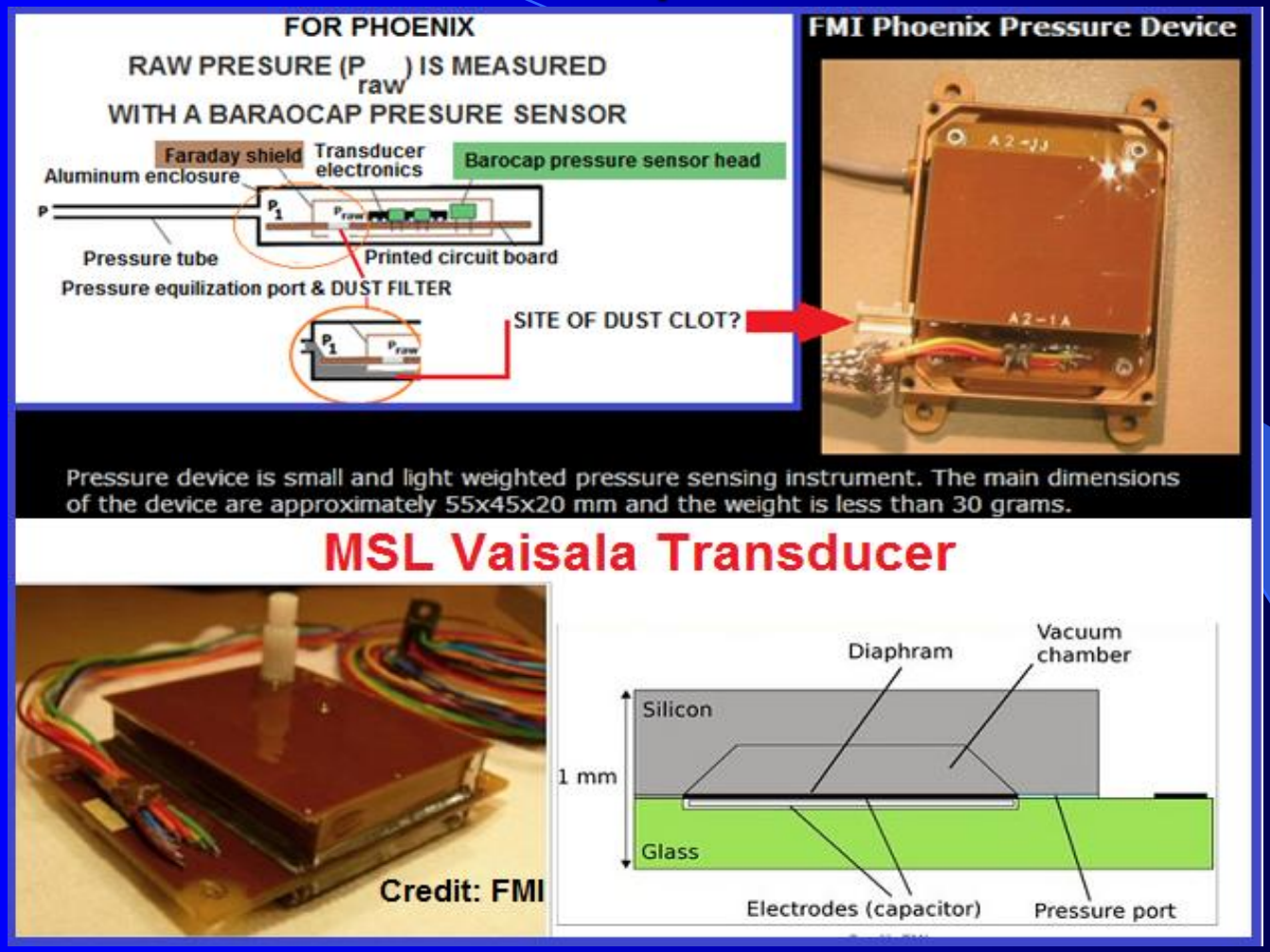
Hypothesis: Above annual trend will be matched at the hourly level when RTG heaters are on & increasing pressure behind a dust clot.



Initial MSL daily pressure also varied in inverse proportion to outside temperature. This reinforces the dust clot idea.



FMI knew it had a problem with Phoenix



In 2009 they wrote, *"We should find out how the pressure tube is mounted in the spacecraft and if there are additional filters etc."* FMI designed the sensor.

International Traffic in Arms Regulations (ITAR)

"That we at FMI did not know how our sensor was mounted in the spacecraft and how many filters there were shows that the exchange of information between NASA and the foreign subcontractors did not work optimally in this mission!"

(Kahanpää [FMI]
Personal communication,
December 15, 2009)

International Traffic in Arms Regulations (ITAR)

- *"After Phoenix landed… the actual thermal environment was worse than the expected worse case…* ***Information on re-location of the heat source had not been provided due to ITAR restrictions."*** (Taylor, P.A., et al, 2009)

Red boxes show pressures each day that were within 2% of our predictions based a formula that presumed dust clots. 0.3 = 6:30 am to 7:30 am

VL1 SOL	0.02	0.06	0.1	0.14	0.18	0.22	0.26	0.3	0.34	0.38	0.42	0.46	0.5	0.54	0.58	0.62	0.66	0.7	0.74	0.78	0.82	0.86	0.9	0.94	0.98	Vl1 SOL
228	198							194									215			204						228
229								196	199									215	210	204			200	199	202	229
230								192	197									209	204	201	198	196	198	199	198	230
231	196							192	196									210	206	202	200					231
232								193	199									209		203	200			197	199	232
233								193	199									211		203	200	198	198	200	198	233
234	197							193	199									211		304	201	200				234
235								195	201									211	205	203	201	198	196	197	198	235
236	195							191	197									213	207	203	200	197	197	195	198	236
237	198	197						192										212	207	204	201	198	198	200		237
238	195	193					193	192	192										206	203	200	197	197	196	194	238
239	195	196						192										213	205	203	200	197	195	196	196	239
240	197	193						190										209	205	202	198	195	194	194	193	240
241	195	195						189												203	200	197	195	195	197	241
242	196	194						191											206			197	196			242
243	194	191						190											206			197	195	197		243
244	197	197						191											206	203	200	197	197	196	195	244
245	196	196	195					192													199	197	194	192	191	245
246	190	189					186	189														195	193			246
247		193	189				187	189													198	196	194	192	190	247
248	192	194	192					189										208			199	196	195	194	192	248
249	193	194	191					189															193	192	191	249
250	190	189	187				185	187													197	194			194	250

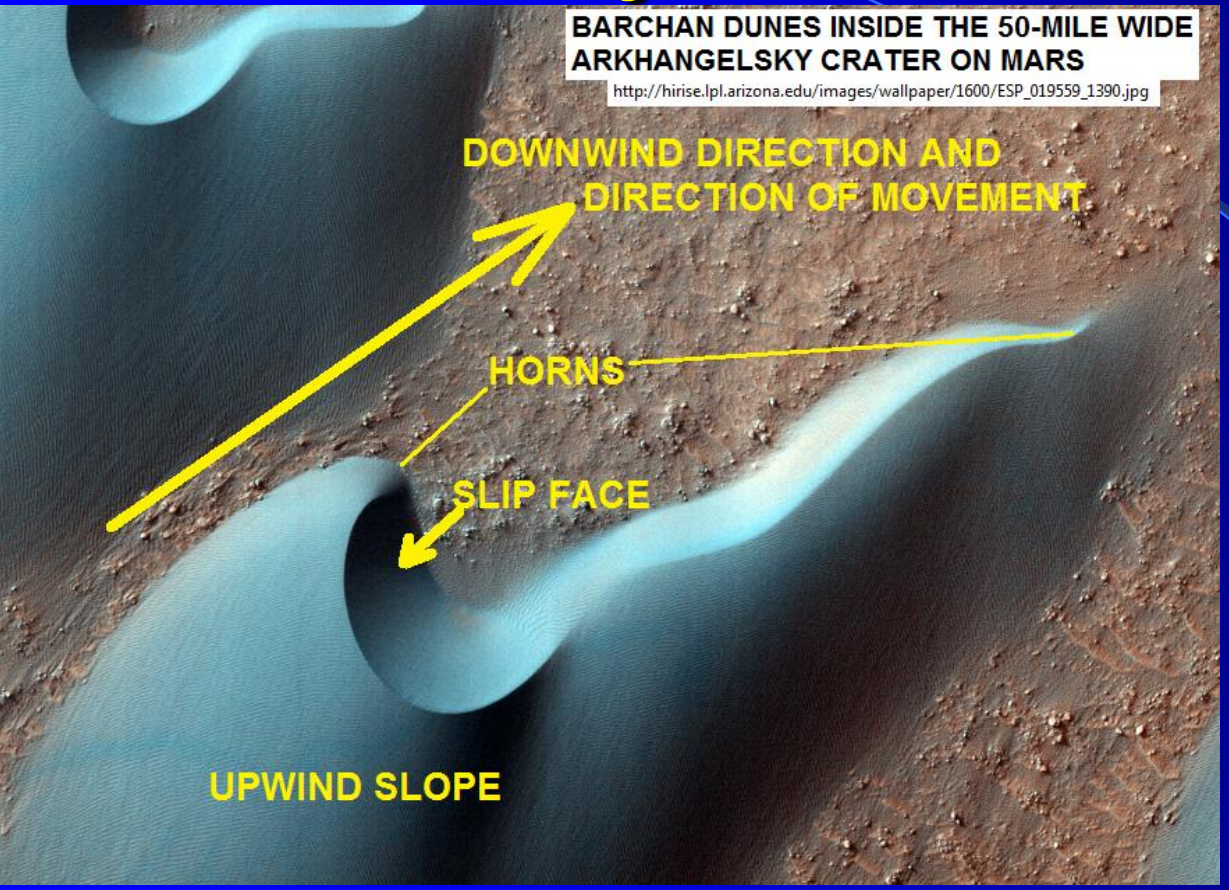
BLOCKS IN RED ARE WITHIN 2% OF PREDICTIONS BASED ON GAY-LUSSAC/AMONTON'S GAS LAWS.

FORMULA USED IS

$$P = \frac{6.51 \text{ mbar} * 255.17\text{K}}{T_K \text{ Measured in cell}}$$

28K Temperature range for accurate pressure predictions this page (185 to 213K)

Why Trash Occam?



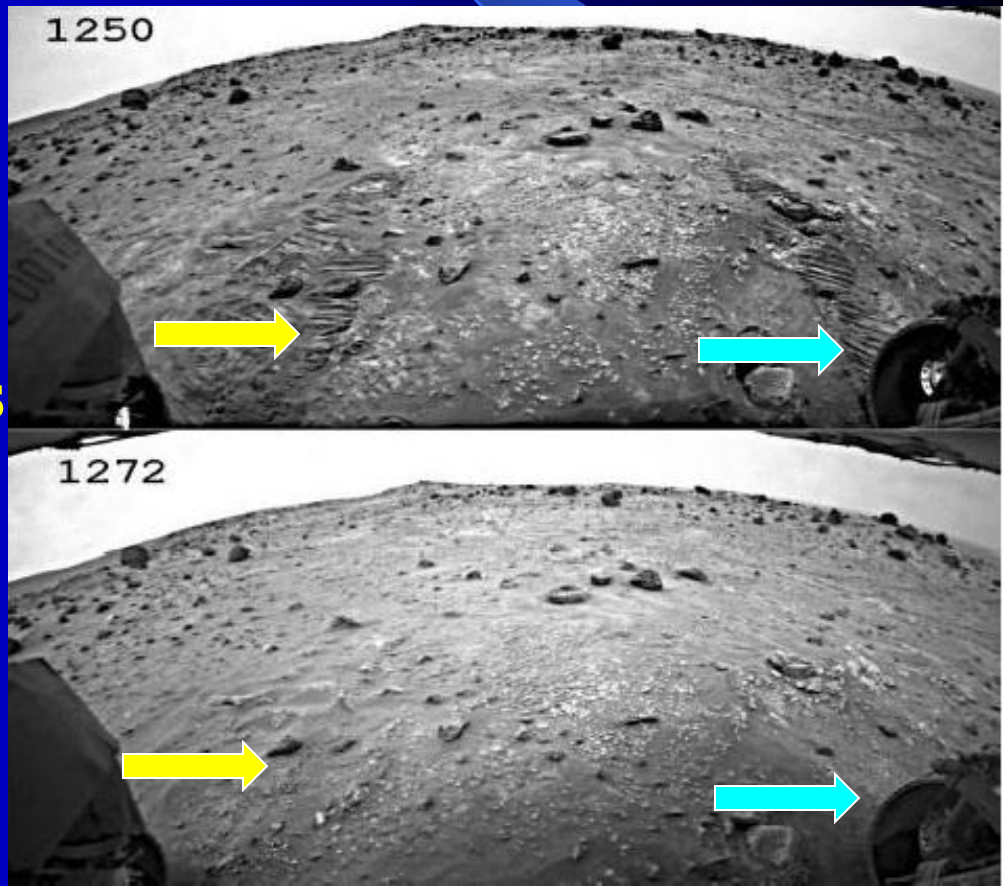
Hard to explain sand dune features, especially in Martian craters if pressure is as low as advertised.

Why Trash Occam?

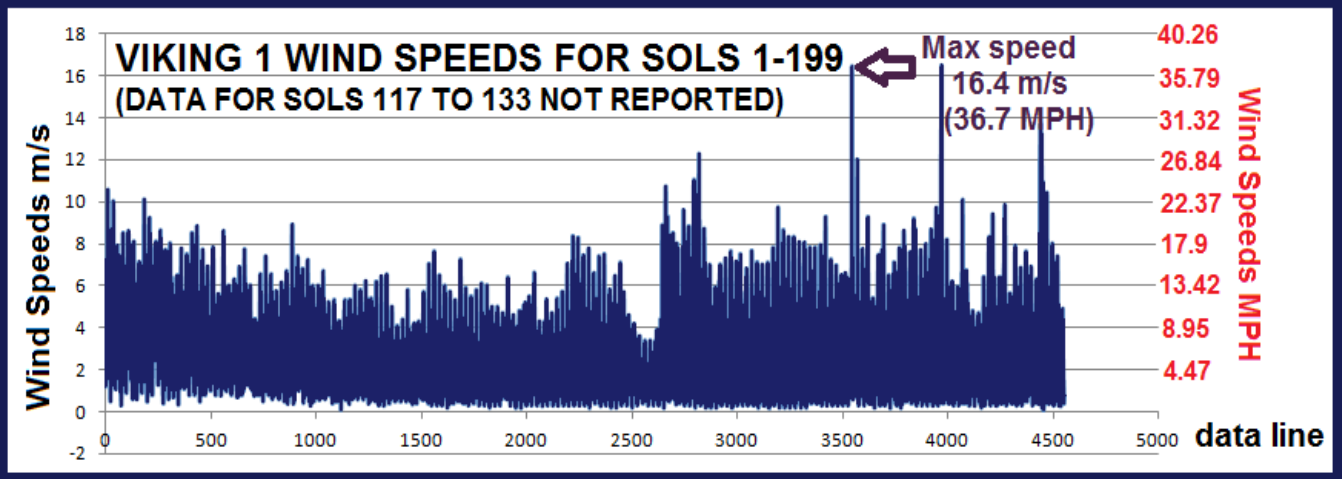
- **Wind-tunnel trials show a patch of sand would take wind 80 mph to move on Mars (vs. 10 mph on Earth). No lander ever saw wind so high on Mars.**

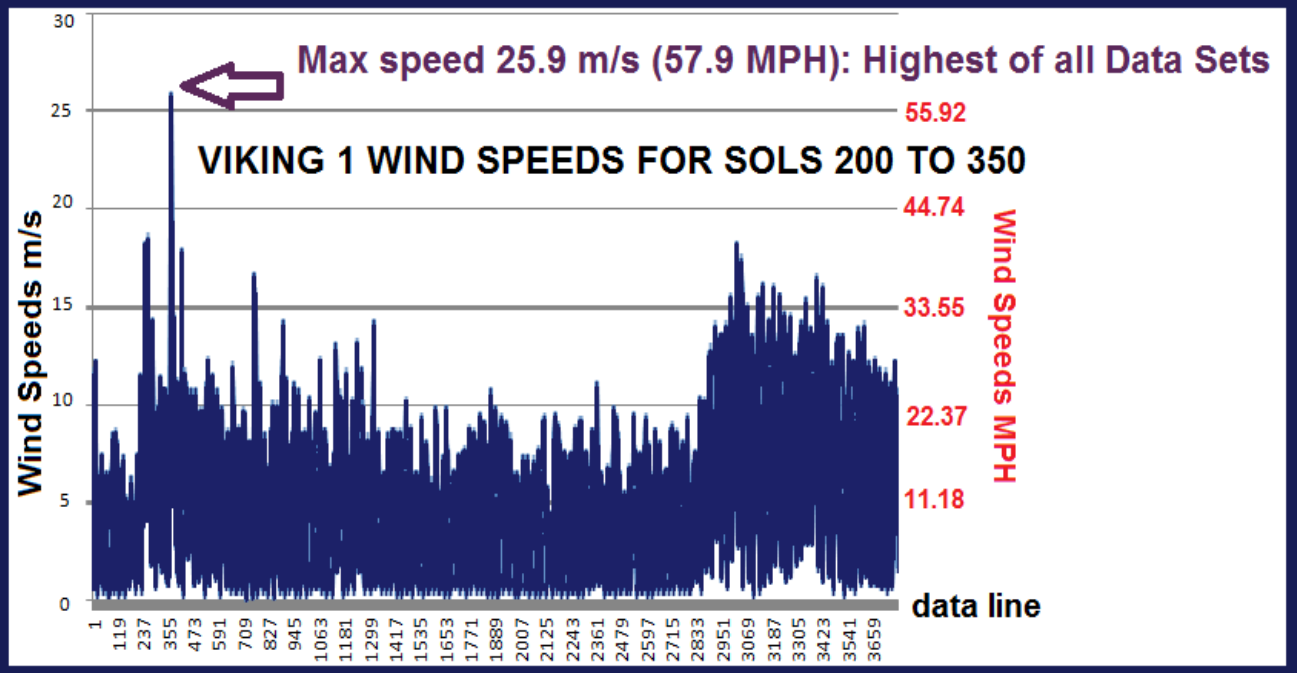
JPL: Spirit rover detected shifting sand in 2004.

- **Grains of sand dotting the rovers' solar panels**
- **Rovers' track marks filling in with sand.**

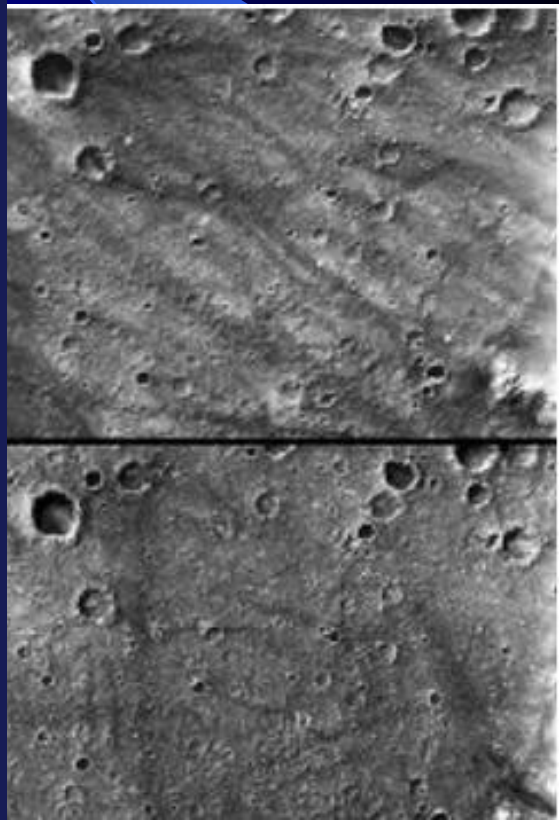


VL-1 WINDS NEVER REACHED 80 MPH NEEDED TO MOVE SAND. THE HIGHEST WIND EVER SEEN WAS 57.9 MPH.

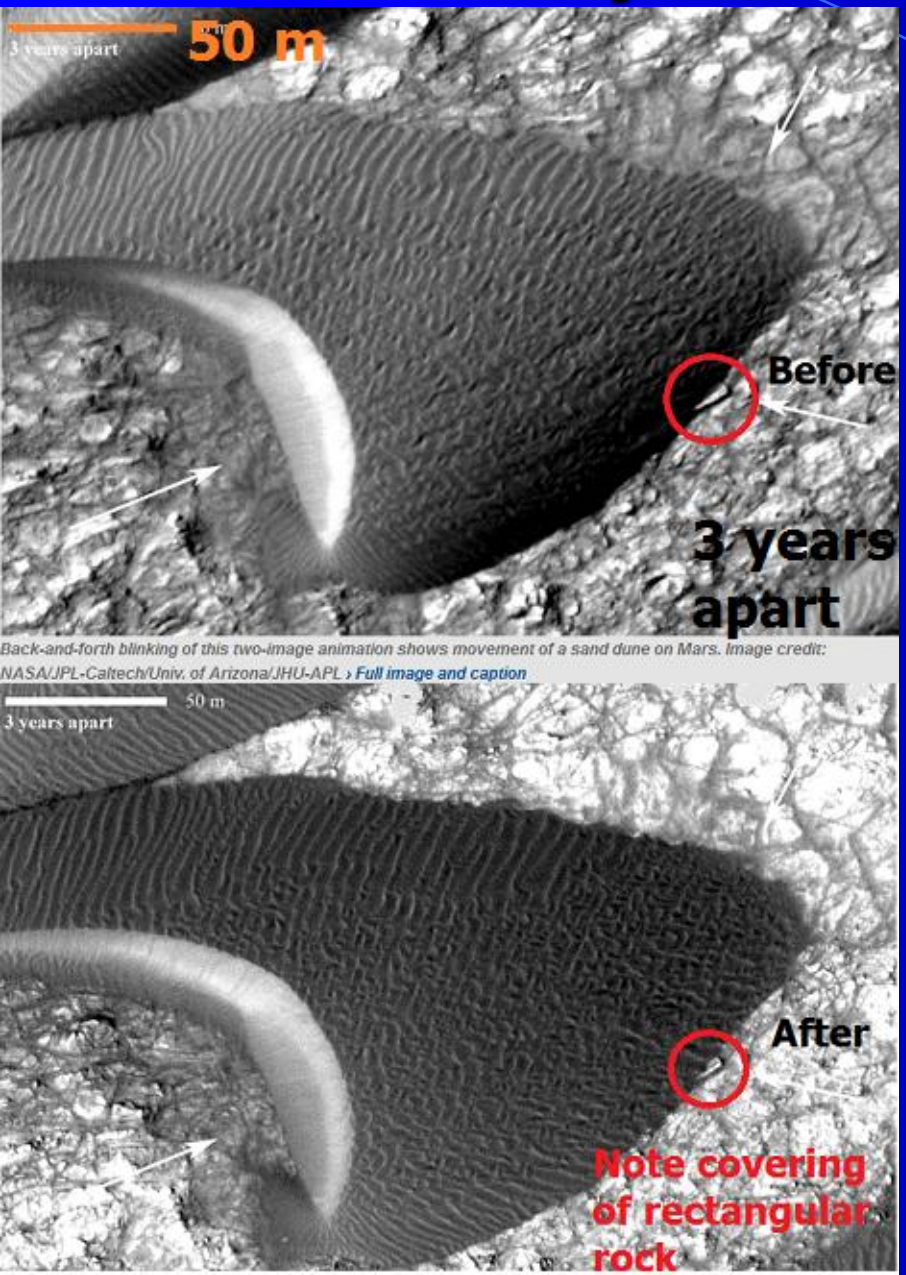




Erasure of earlier spirit Tracks



Why Trash Occam?



"Mars either has more gusts of wind than we knew about before, or the winds are capable of transporting more sand."

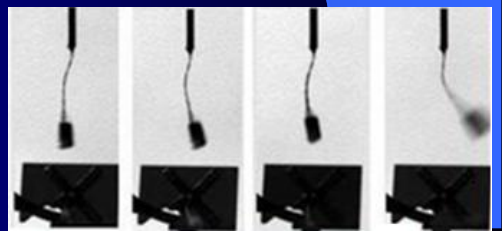
Nathan Bridges,
Planetary scientist, Johns Hopkins University's Applied Physics Laboratory

http://www.nasa.gov/mission_pages/MRO/multimedia/pia15295.html

Winds of Mars are sufficient to move the collapsed MSL parachute

Video for the MSL parachute flapping in the wind is found at http://photojournal.jpl.nasa.gov/figures/PIA16813_fig1_thumb.gif.

Also see a video for a telltale flapping in a Martian Breeze at http://www.nasa.gov/mission_pages/phoenix/images/press/16000-animated.html



Data Reporting Fiasco

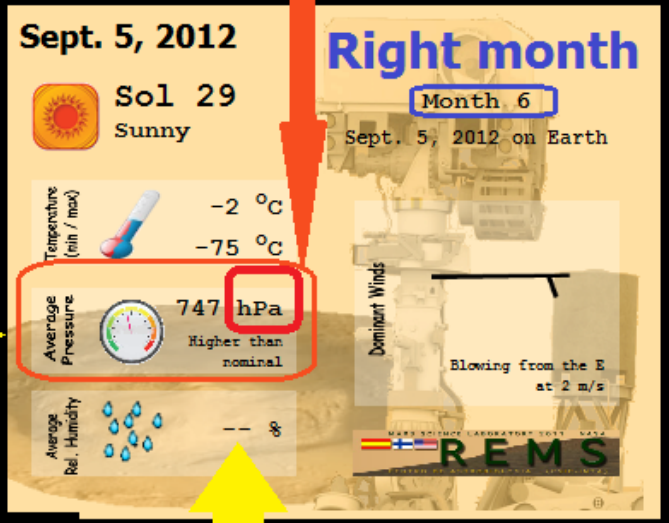
REMS Reported 6 Days of Earth-like Pressure

PRESSURE REPORTED INCREASED 100 FOLD

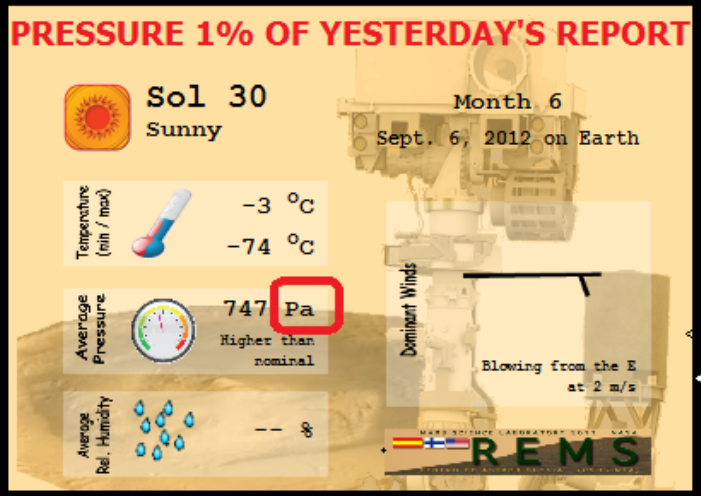
2012 Centro de Astrobiologia (CAB)

DID MSL LAND AT GALE ON MARS OR VAIL IN COLORADO?

Pressure like Earth at 8,192.6 feet above sea level.



100 Pa = 1 hPa = 1 Mbar.
Sol 29 was first given as 747 hPa, while Sol 30 was given as 747 Pa (7.47 hPa) after questions by us and others

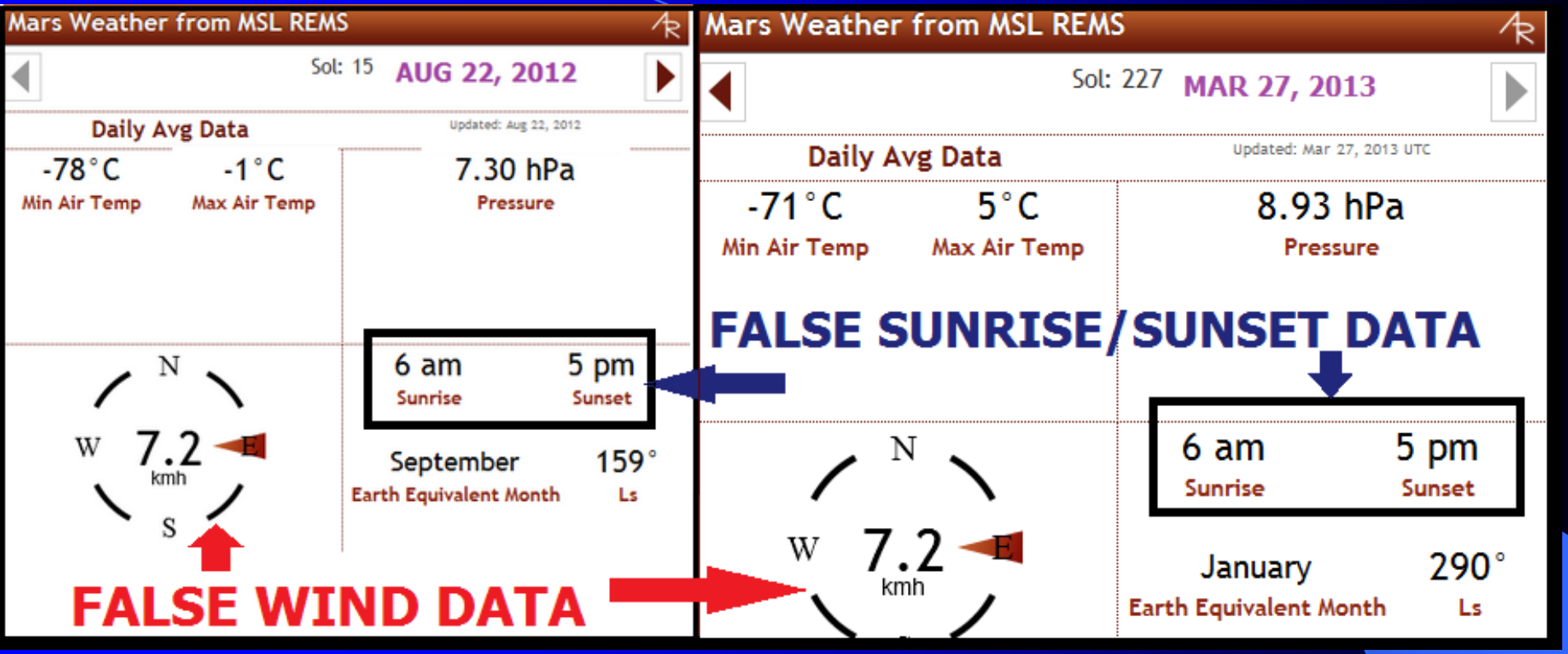


DAILY WEATHER NEVER INCLUDES RELATIVE HUMIDITY

ALL WINDS (2 M/S) REPORTED WRONG UNTIL MAY 2013

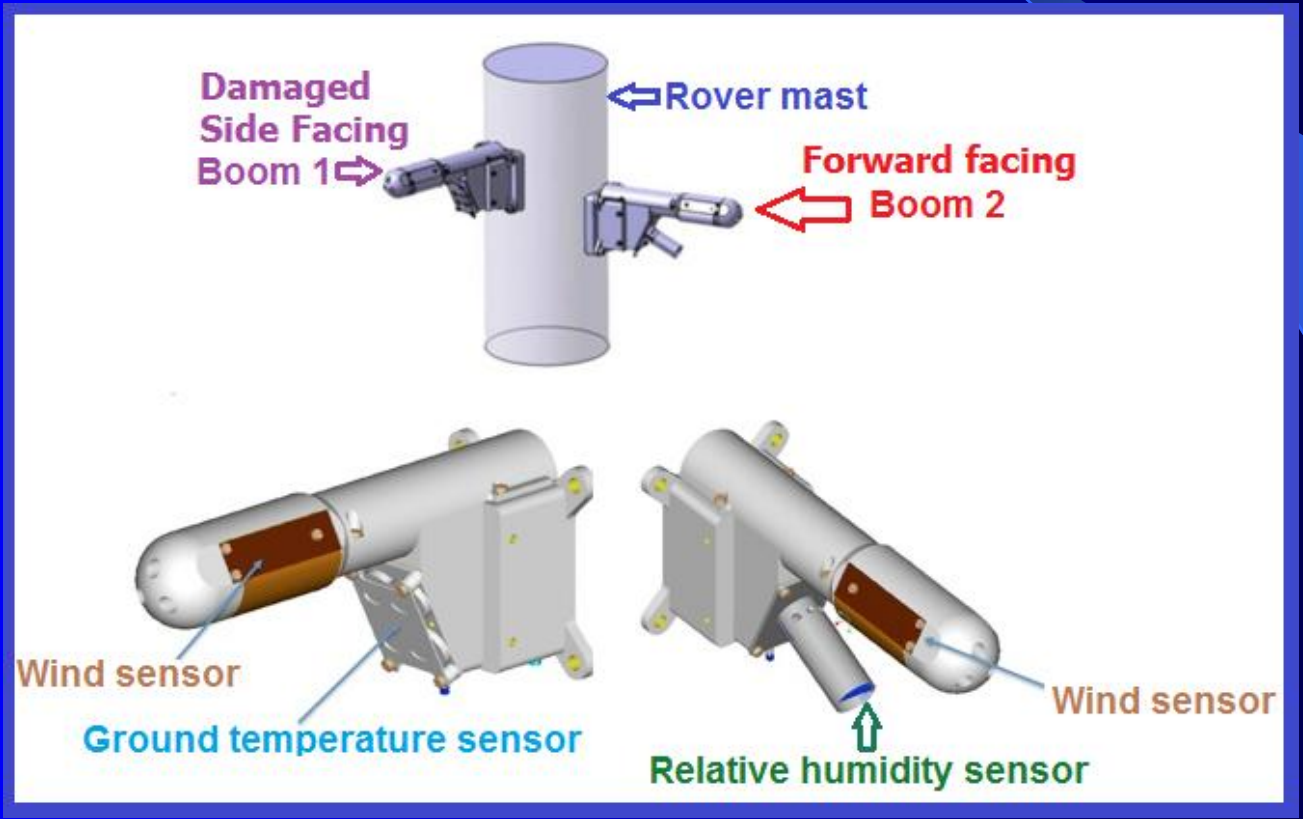
cab.inta-csic.es/rems/marsweather.html

Data Reporting Fiasco



From August 22, 2012 until April 2, 2013 ALL wind data published by REMS and Ashima Research was wrong. All sunset/sunset times were also wrong.

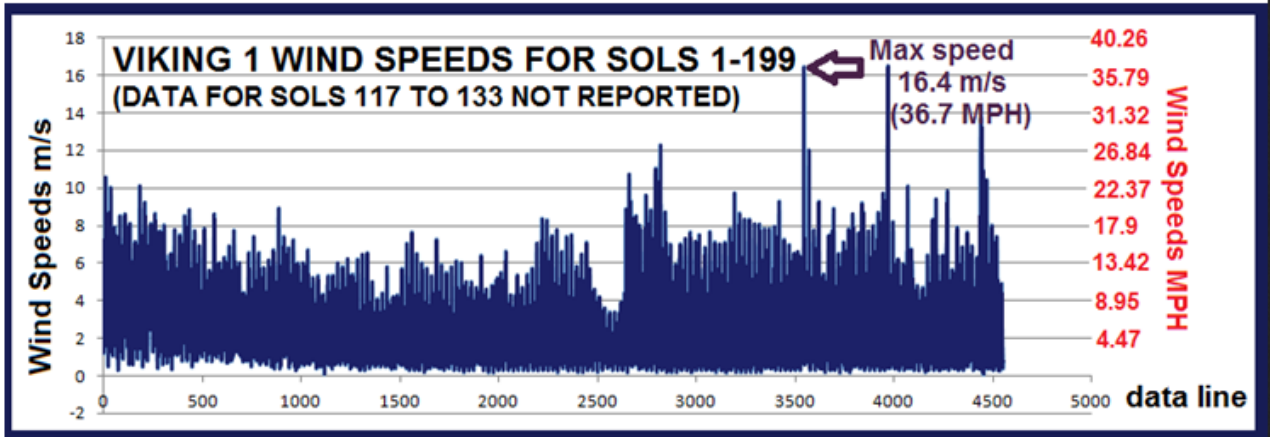
One of the REMS Booms broke on Landing. It would have been more honest to list winds as *Not Available*.

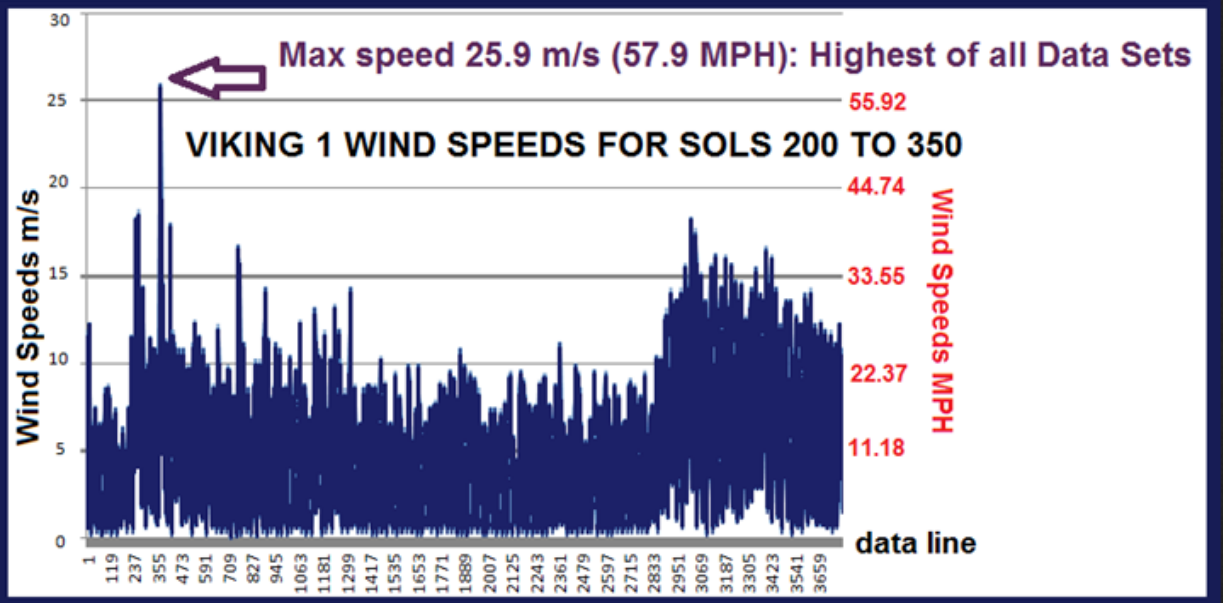


We know from the Vikings that there is an enormous amount of variation in winds.

VL-1 SOL	LS`	Wind direction	Wind Speed M/S	Wind Speed MPH
214.38	210.621	290	1.2	2.68
214.42	210.646	249	2.6	5.82
214.46	210.671	254	4.6	10.29
214.5	210.696	283	7.6	17.00
214.54	210.721	305	9.4	21.03
214.58	210.746	331	19.9	44.52
214.62	210.771	343	22.5	50.33
214.66	210.796	356	22.6	50.55
214.7	210.821	6	21.2	47.42
214.74	210.847	19	17.8	39.82
214.78	**210.872**	**19**	**25.9**	**57.94**
214.82	210.897	24	25.2	56.37
214.86	210.922	25	18.8	42.05
214.9	210.947	29	13.8	30.87
214.94	210.972	33	9.2	20.58
214.98	210.997	355	4.9	10.96

Profile of the windiest Viking day on Mars with the greatest wind gust recorded at VL-1 sol 214.78.





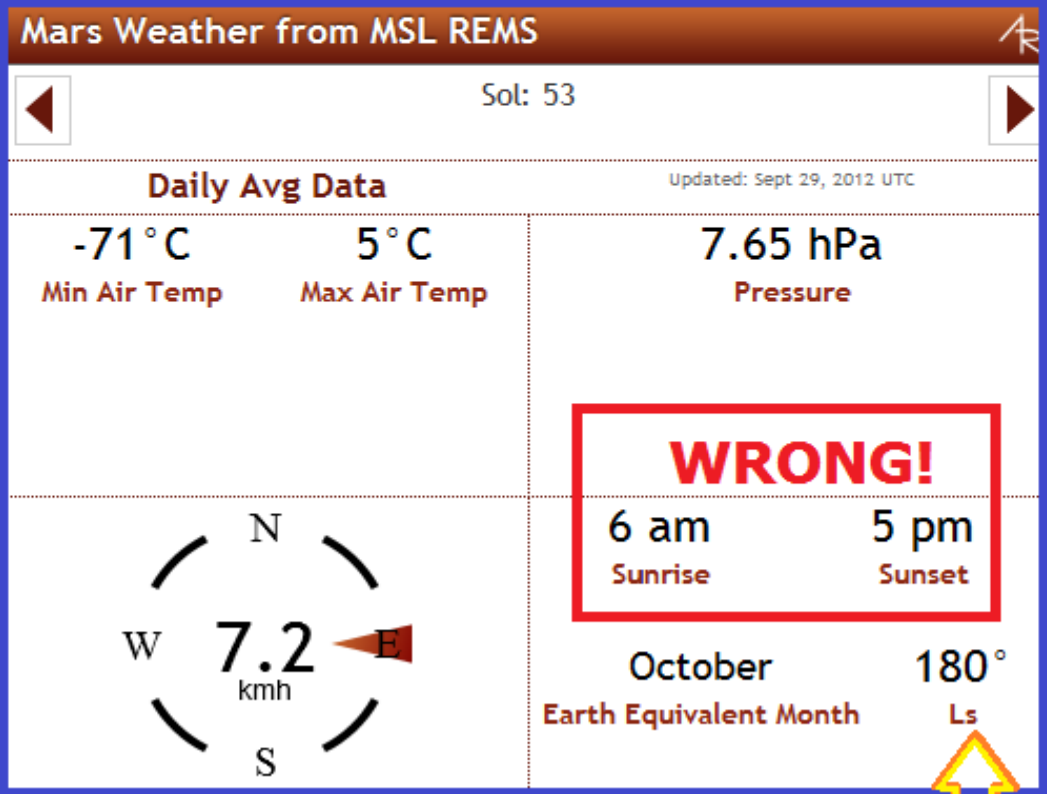
Mistakes were published that raised concerns about basic competence.

TILT OF EARTH'S AXIS = 23.44°

MARS CURIOSITY LATITUDE AT GALE CRATER
4.59° S

TILT OF MARTIAN AXIS = 25.19°

SUNRISE AND SUNSET TIMES FOR MARS TIMES SHOULD VARY IN A MANNER SIMILAR TO JAKARTA.



This is how sunrise and sunset time vary at cities with similar latitudes on Earth (12/26/2012)

JAKARTA, INDONESIA
LATITUDE: 6.1333 ° S

Date	Sunrise	Sunset	Length	Change
FEB 16, 2013	05:58	18:12	12:14	
+1 day	05:58	18:12	12:14	00:00 equal length
+1 week	05:58	18:10	12:12	00:02 shorter
+2 weeks	05:58	18:07	12:09	00:05 shorter
+1 month	05:56	17:59	12:03	00:11 shorter
+2 months	05:53	17:47	11:54	00:20 shorter
+3 months	05:56	17:44	11:48	00:26 shorter
+6 months	05:55	17:53	11:58	00:16 shorter

We notified JPL that there could not be only 11 hours of daylight at MSL. Finally David Roffman did the math. There is as much as 12 hours 19 minutes of daylight and little as 11 hours 43 minutes. NASA accepted the fix.

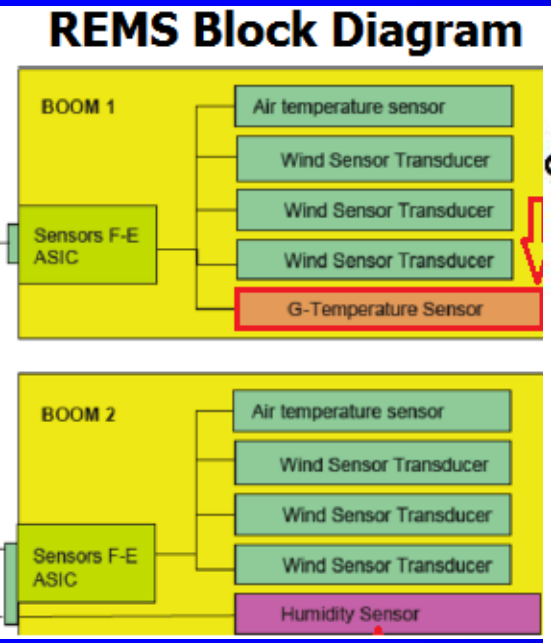
	A	B	C	D	E	F	G	H	I
1	λsun	Latitude			Day Length =	Daylight	Half Sol	difference	DAVID'S
2	(0 for spring	(phi)	δdegrees =	H = arccos((SIN(-.17) - SIN(lw)*SIN(δ))/(COS(lw)*COS(δ)))	2*1.027491*H/360	In Hours	in Hours	Half day -	Mars
3	in northern		arcsin((sin(25.19)*sin(λsun))			David's		Daylight	Daylight
4	hemisphere)					Calculation		(G-F)	Hours
5	(Ls)					(=E value * 24)			
6	0	-4.59	0	90.17054697	0.51471903	12.35325673	12.3299	0.0233617	12:01.4
7	150	-4.59	12.28711642	89.17267137	0.509022874	12.21654897	12.3299	-0.113346	11:53.2
8	180	-4.59	2.98768E-15	90.17054697	0.51471903	12.35325673	12.3299	0.0233617	12:01.4
9	210	-4.59	-12.28711642	91.17647243	0.520461138	12.49106731	12.3299	0.1611723	12:09.7
10	240	-4.59	-21.62923453	92.00779835	0.525206582	12.60495796	12.3299	0.275063	12:16.5
11	270	-4.59	-25.19	92.35267298	0.527175224	12.65220537	12.3299	0.3223104	12:19.3
12	300	-4.59	-21.62923453	92.00779835	0.525206582	12.60495796	12.3299	0.275063	12:16.5
13	330	-4.59	-12.28711642	91.17647243	0.520461138	12.49106731	12.3299	0.1611723	12:09.7
14	0	-4.59	0	90.17054697	0.51471903	12.35325673	12.3299	0.0233617	12:01.4
15	30	-4.59	12.28711642	89.17267137	0.509022874	12.21654897	12.3299	-0.113346	11:53.0
16	60	-4.59	21.62923453	88.35931782	0.504380021	12.10512051	12.3299	-0.2247745	11:46.5
17	90	-4.59	25.19	88.02453664	0.502468995	12.05925589	12.3299	-0.2706391	11:43.8
18	120	-4.59	21.62923453	88.35931782	0.504380021	12.10512051	12.3299	-0.2247745	11:46.5

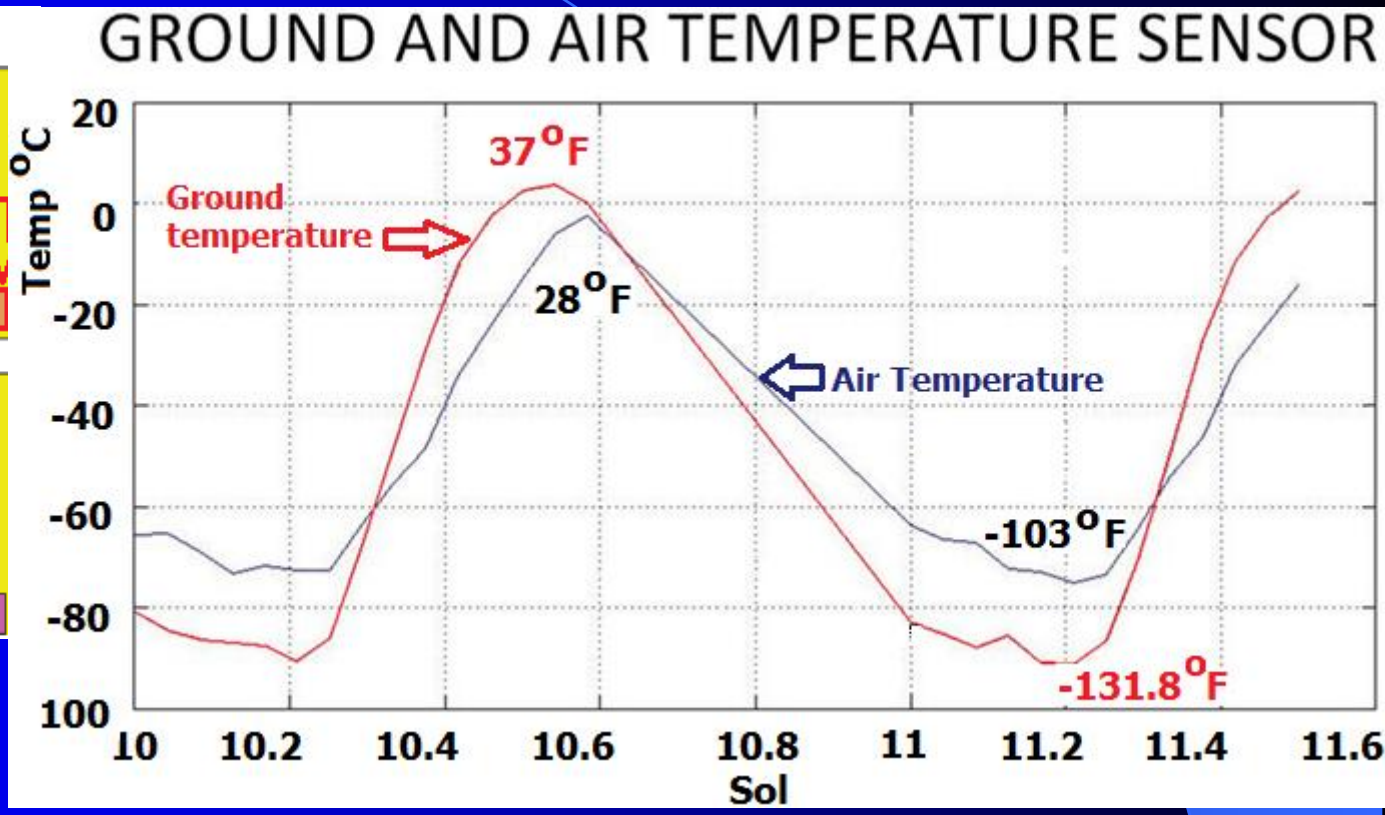
There is never a day at MSL with only 11 hours of daylight and with 13 hours of darkness.

Best estimate of the length of daylight at MSL (4.59 South on Mars)

BOGUS GROUND TEMPERATURES?

Boom 1 broke. It alone measures ground temperature but with accuracy of only 18 Fahrenheit.





Guy Webster (JPL) claims: "Damage on landing did not include the Infrared sensor that provides ground-temp information." But an accuracy of 18 degrees Fahrenheit is almost worthless.

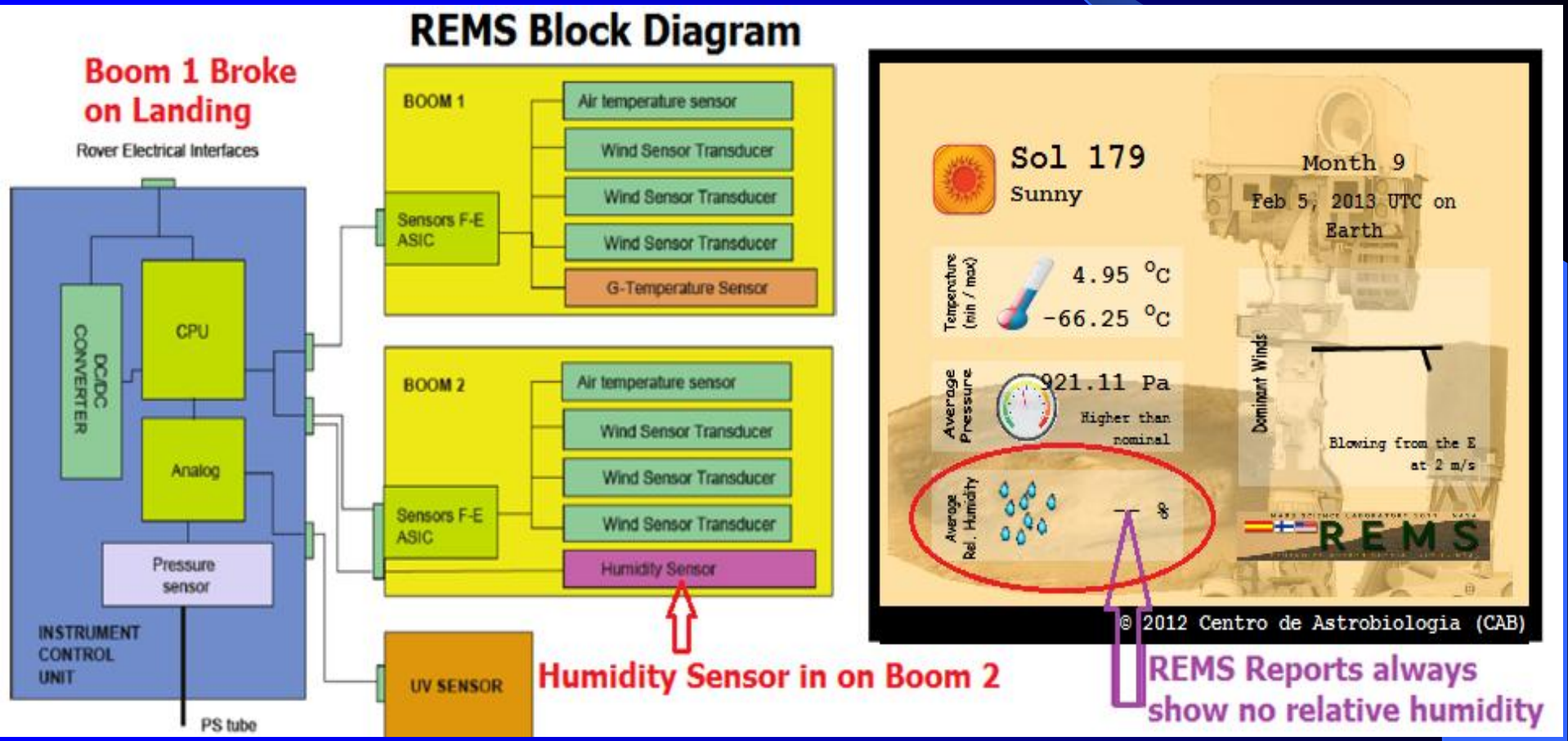
But the weak ground temperature answer did not address altered air temperatures. Who is killing warm days on Mars, and why?

A	B	C	D
SOL	ORIGINAL MAX AIR TEMP TEMP ≥ 0°C REDUCED TO TEMP ≤ 0°C	NEW MAX AIR TEMP °C	CHANGE °C
23	0	-16	16
26	2	-14	16
27	-1	-15	14
31	-3	-23	20
38	-3	-13	10
40	2	-12	14
41	2	-12	14
42	5	-7	12
43	3	-12	15
44	4	-10	14
45	3	-9	12
46	4	-12	16
47	6	-9	15

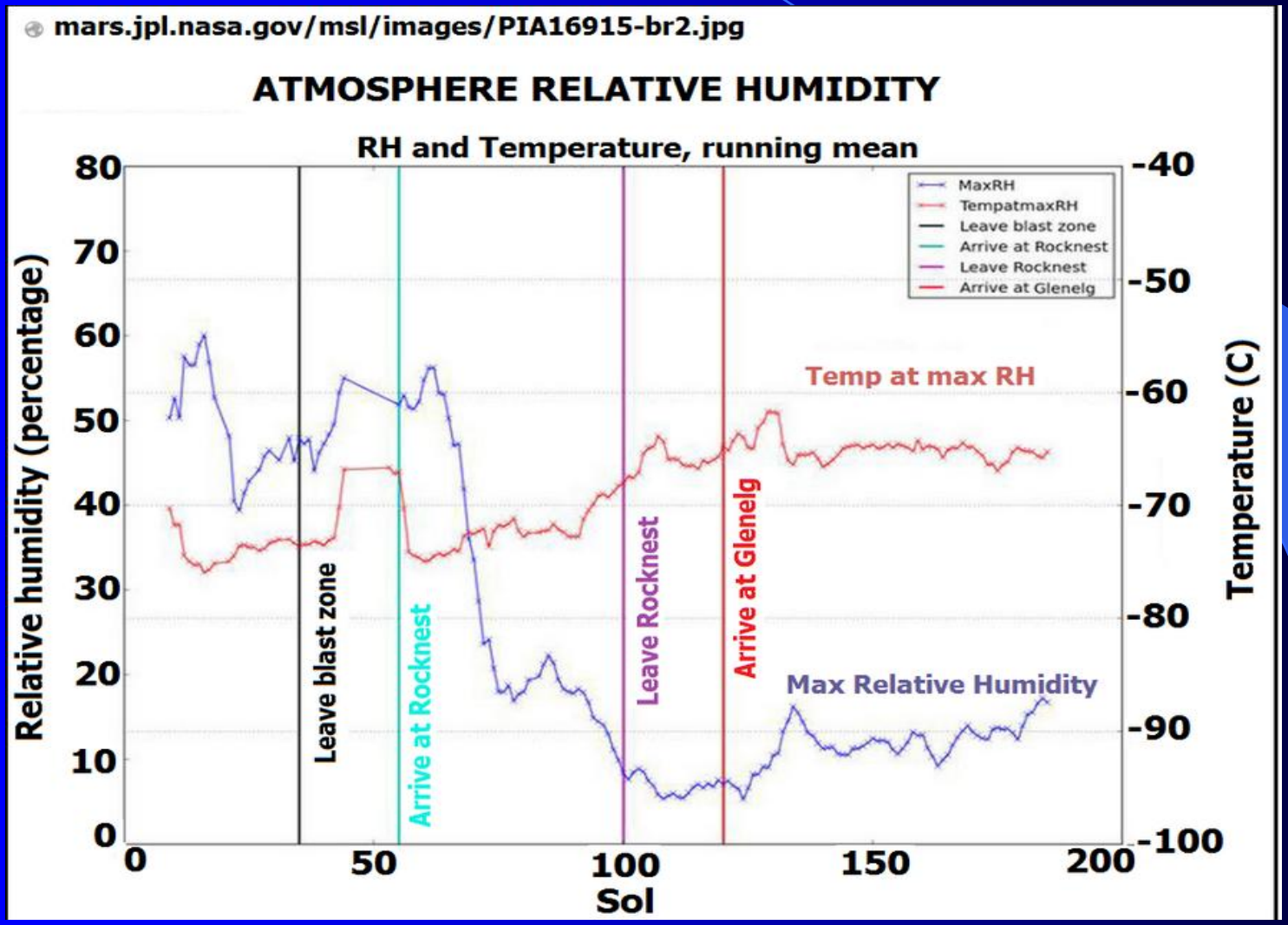
A	B	C	D
SOL	ORIGINAL MAX AIR TEMP TEMP ≥ 0°C REDUCED TO TEMP ≤ 0°C	NEW MAX AIR TEMP C	CHANGE °C
49	4	-10	14
50	0	-10	10
51	3	-7	10
52	7	-7	14
53	5	-5	10
54	5	-9	14
102	8	-3	11
112	5	-8	13
116	5	-6	11
118	4.53	-6	10.53
123	2.1	-10	12.1
124	5.4	-5	10.4
179	5	-7	12

REMS Relative Humidity Sensor

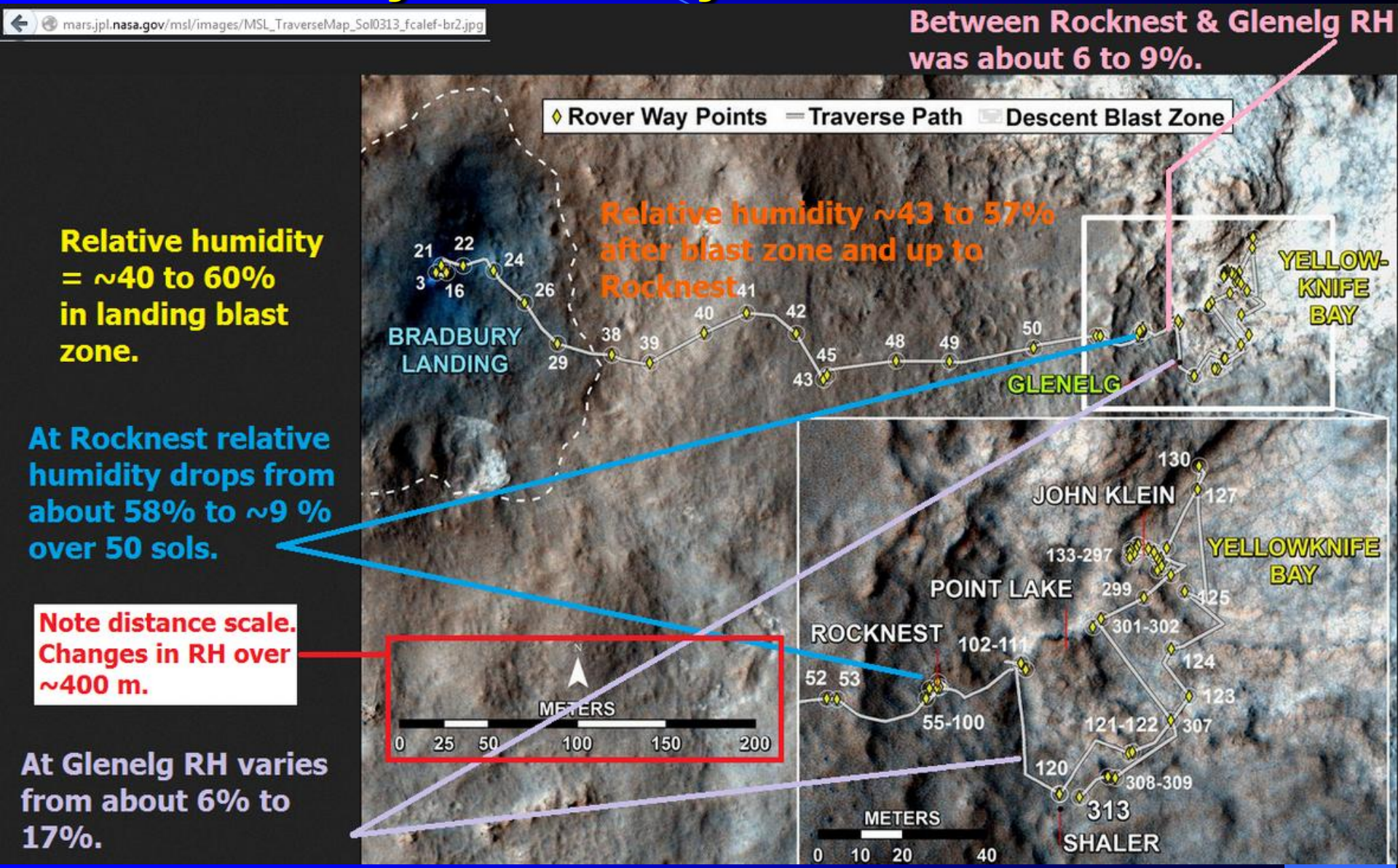
Only Boom 1 broke on Landing. Why do we see no relative humidity reported from Boom 2? Probably because of calibration problems with the Thermal and Electrical Conductivity Probe (TECP) G.M. Martinez et al., 2013



The REMS Team leaves Relative Humidity off daily reports, but published this on 6/27/2013:

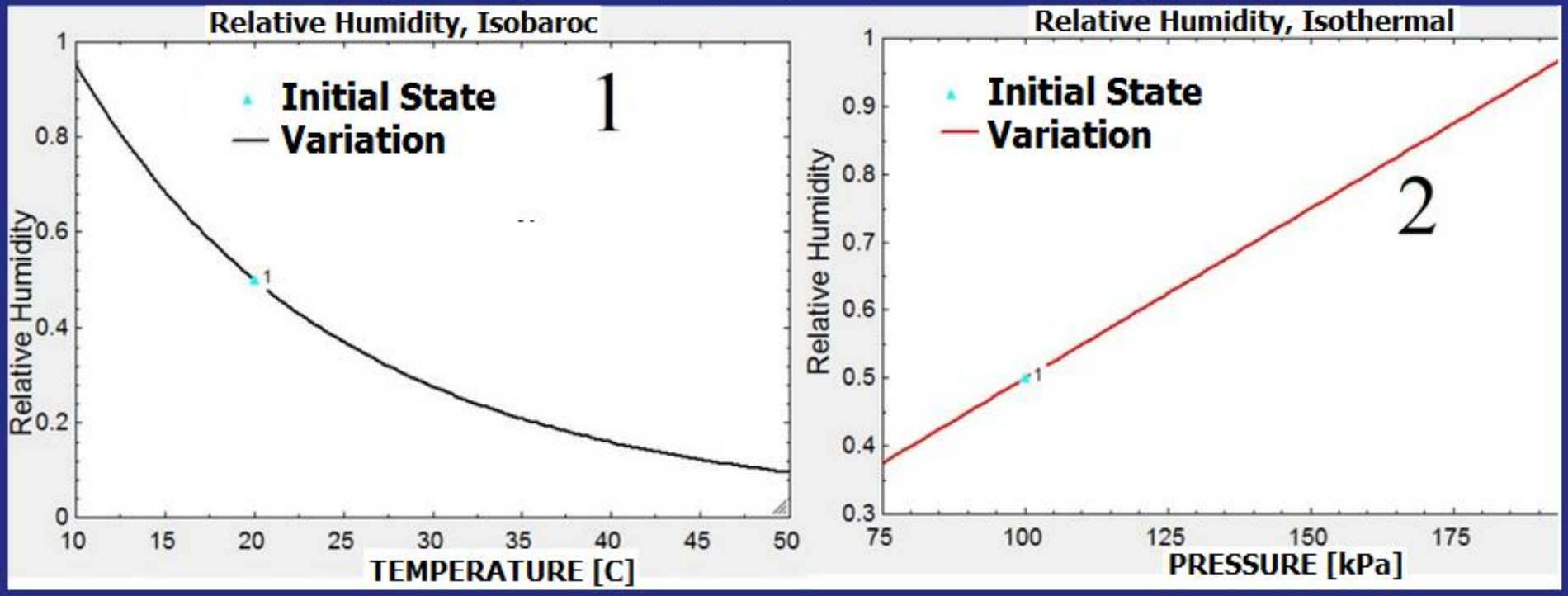


REMS Asserts Huge Changes in Relative Humidity Over Very Short Distances



If temperature measurements are wrong, as saw earlier, and pressure measurements are wrong, RELATIVE HUMIDITY READINGS WILL BE WRONG TOO.

img406.imageshack.us/img406/2350/relativehumidity.jpg



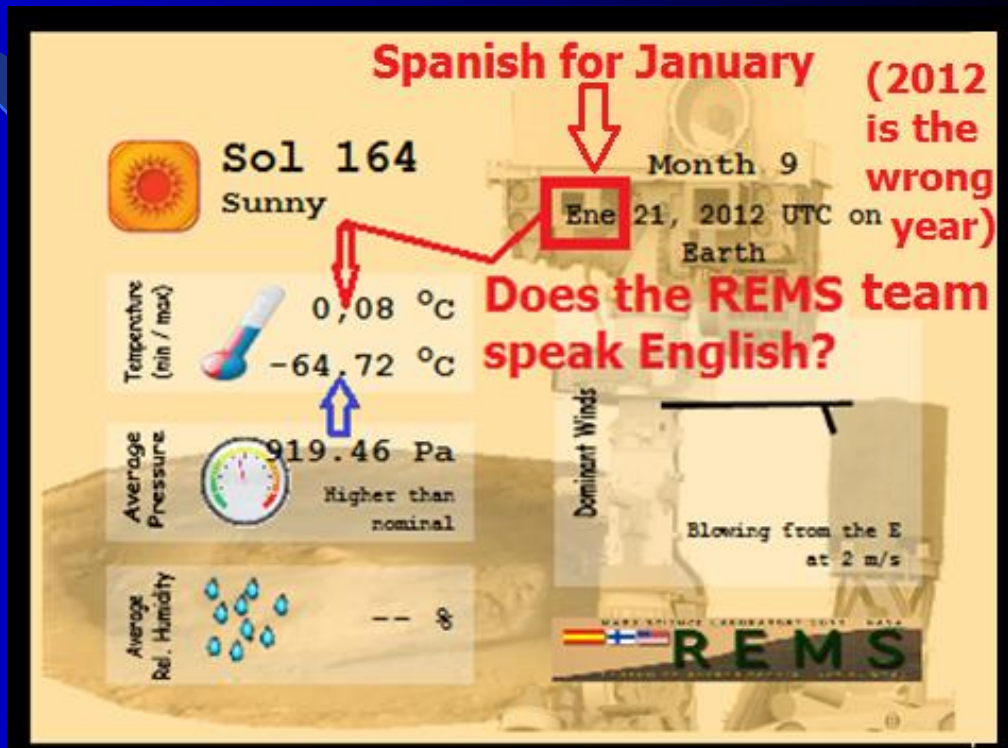
September 26, 2013:
JPL Announces Martian Soil is 2% Water.

- **There are 2 pints of water in every cubic foot of soil.**

- **If pressure was as low as NASA claims, water should have evaporated out of the soil, not absorbed it from the atmosphere.**

Attitudes at REMS

- Seemed oblivious to mistakes pointed out.
- May have a real problem understanding English or tracking time.
- Published 9 months of wrong wind data until we asked JPL to reprimand them in May, 2013.
  Then they stopped posting wind data.



What aspects of MSL Weather Reports are or were known to be flawed?

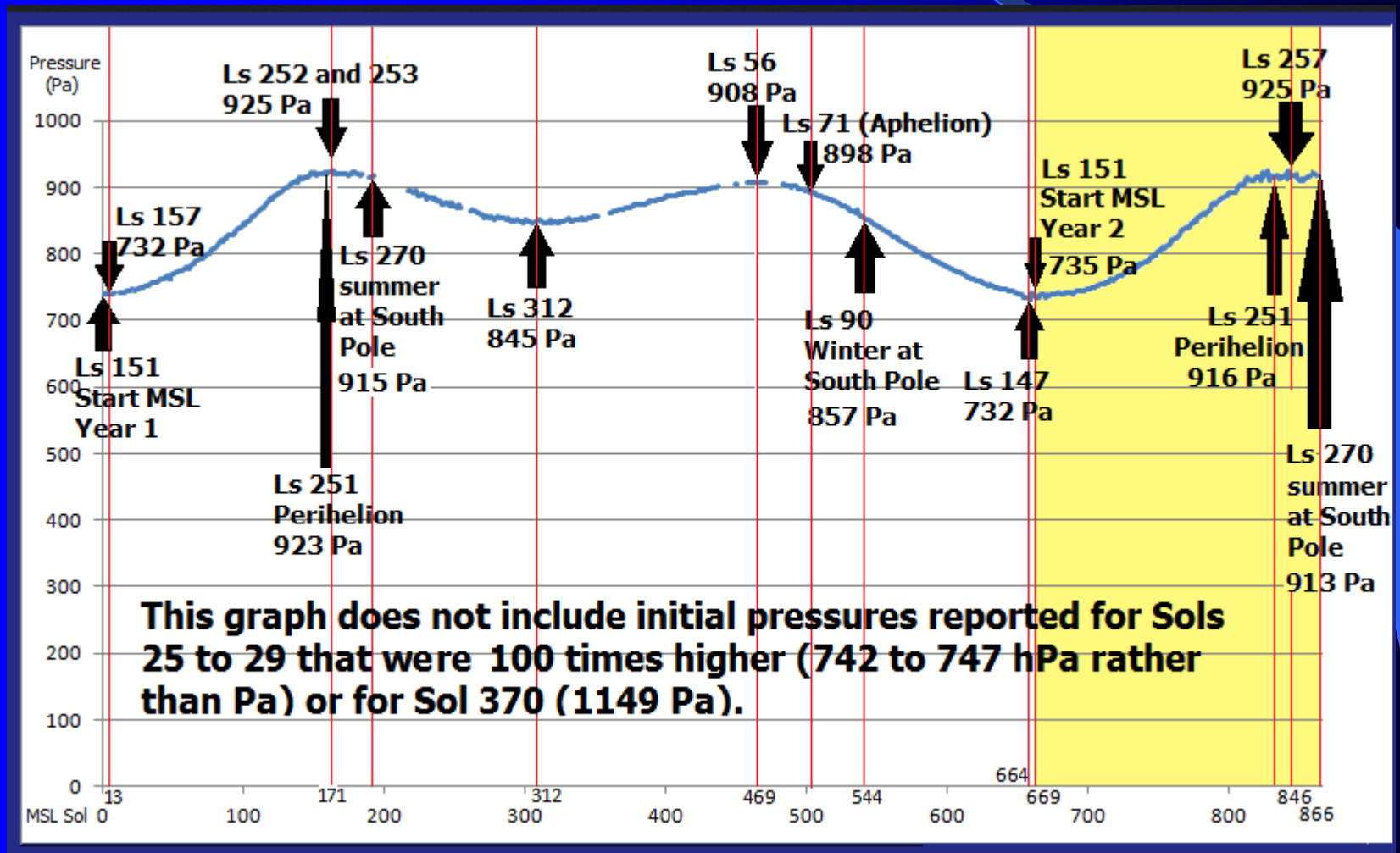
1. Sunrise/Sunset Times until May, 2013.
2. Constant winds.
3. Relative Humidity.
4. Sol numbering and air t
5. Early wrong month labe
   place in orbit & wrong
6. Exact ground temperat
   (18 F) was worthless.
7. Pressure units used Au
   (confusion by REMS b
   pressures off the curve

Why Trash Occam?

- **Weather doesn't match low pressure values**
  - **Dust Devils**
  - **Dust Storms**
  - **Eye walls on huge storms over Arsia Mons**
  - **Stratus clouds at 16 km.**
  - **Too much sand movement for low pressure**
  - **Light in the sky 1 hr 40 min before sunrise and after sunset. Just due to high dust, or a denser atmosphere?**

Why Trash Occam?

- **Viking data suspicious due to exact repeat over 4 yrs. Ditto for MSL shown on the graph below.**



WHY TRASH OCCUM?
MRO AEROBRAKING

"At some points in the atmosphere, we saw a difference in the atmospheric density ... 30% higher than the model, but ...

around the south pole

it was 350% off the model."

Han You,
Navigation Team Chief for
Mars Reconnaissance Orbiter (MRO).

Why Trash Occam?

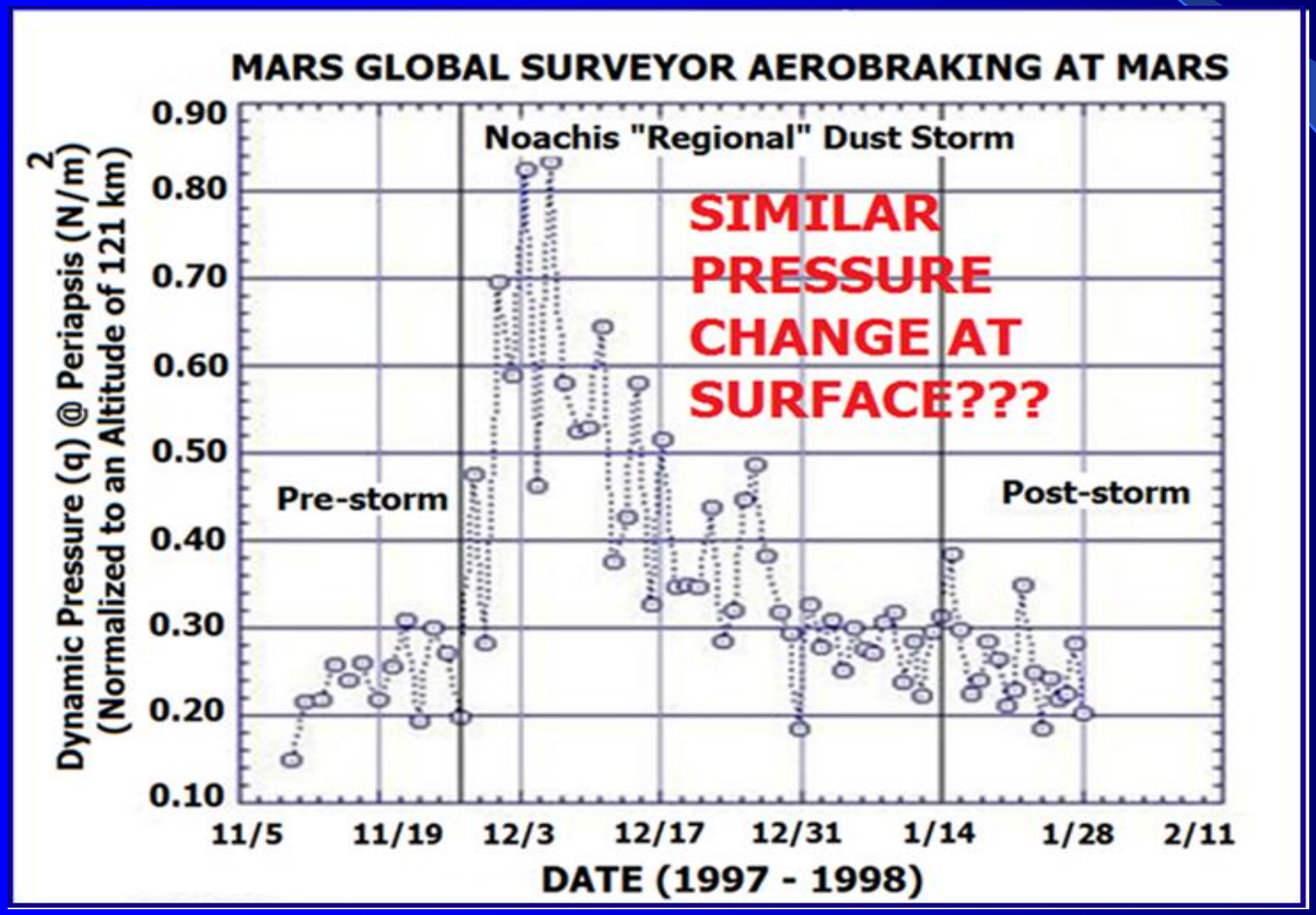
Transport of water vapour in the Martian atmosphere.
Credit: ESA/AOES Medialab

SPICAM spectrometer on ESA's Mars Express spacecraft reveal Mars air is supersaturated with water vapor (29 Sep 2011).

10 to 100 times more H_2O than expected at 20 to 50 km. Partial pressures imply denser air too.

- http://sci.esa.int/science-e-media/img/be/MEx_water_vapour_animation_400.gif

WHY TRASH OCCAM?
MGS Dynamic Pressure Spike @ 121 km (75 miles altitude) Due to Dust Storms.
Pressure Doubles in 48 Hours, Up 5.6 Fold in 4 Weeks.



Why Trash Occam?

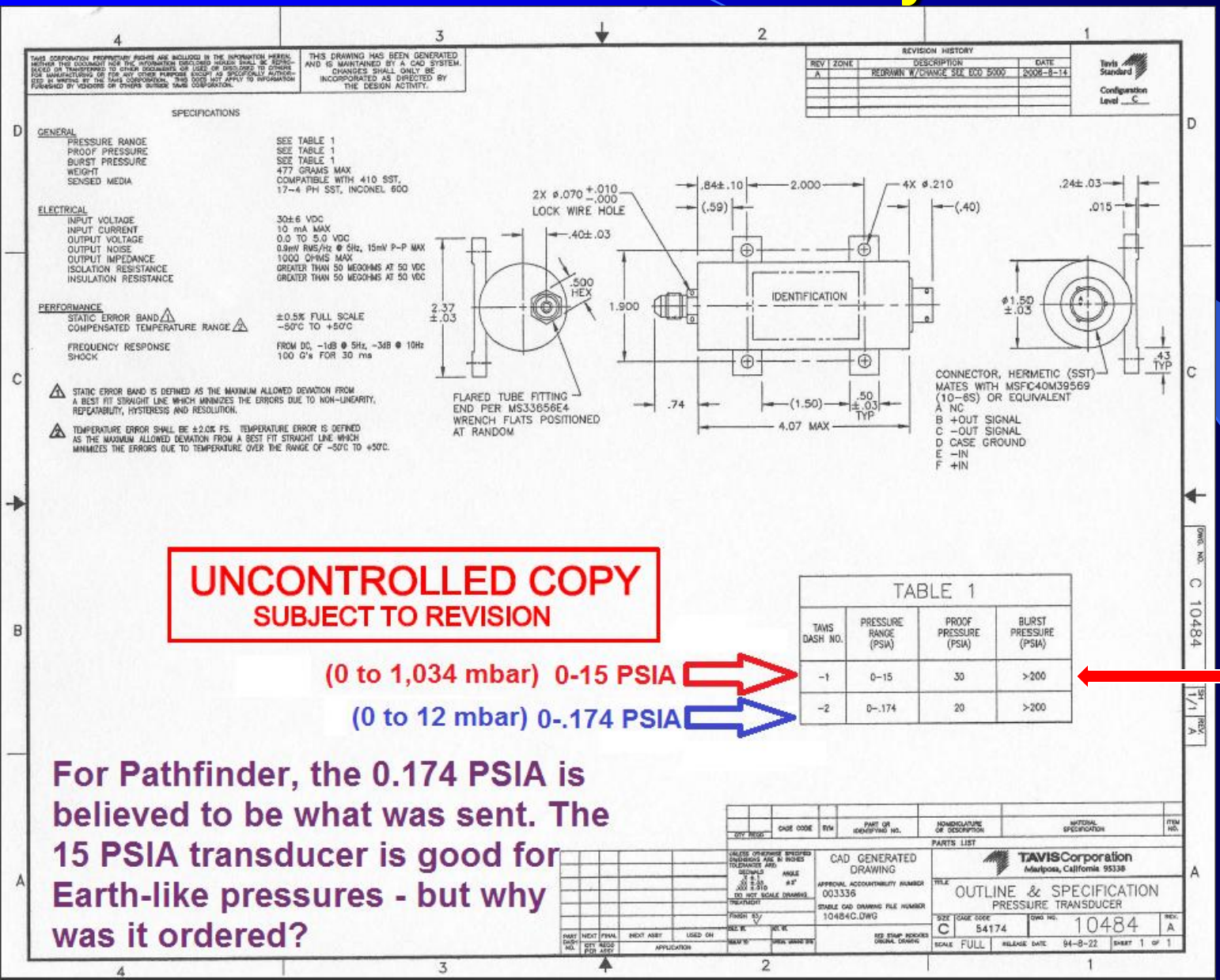
- **Pathfinder anemometers (wind sensors) went uncalibrated.**
  - **True again with MSL.**

- **Phoenix & MSL transducer design problems. FMI delivered the MSL pressure sensor to NASA in 2008 (before ITAR problems could be fixed)!**
  http://space.fmi.fi/solar.htm

- **No pressure sensors could measure > 18 mbar (two could only go up to 12 mbar, and MSL is limited to 11.5 mbar.)**

- **No way to change Viking, MPF, Phoenix & MSL dust filters that could clog.**

There is an issue with which Tavis Pressure Transducers were actually sent to Mars.



The sensor labeled Tavis Dash No. 1 could Measure Earth-like Pressure!

Are JPL errors mistakes, or deliberate? Do radioactive sites on Mars mandate disinformation?

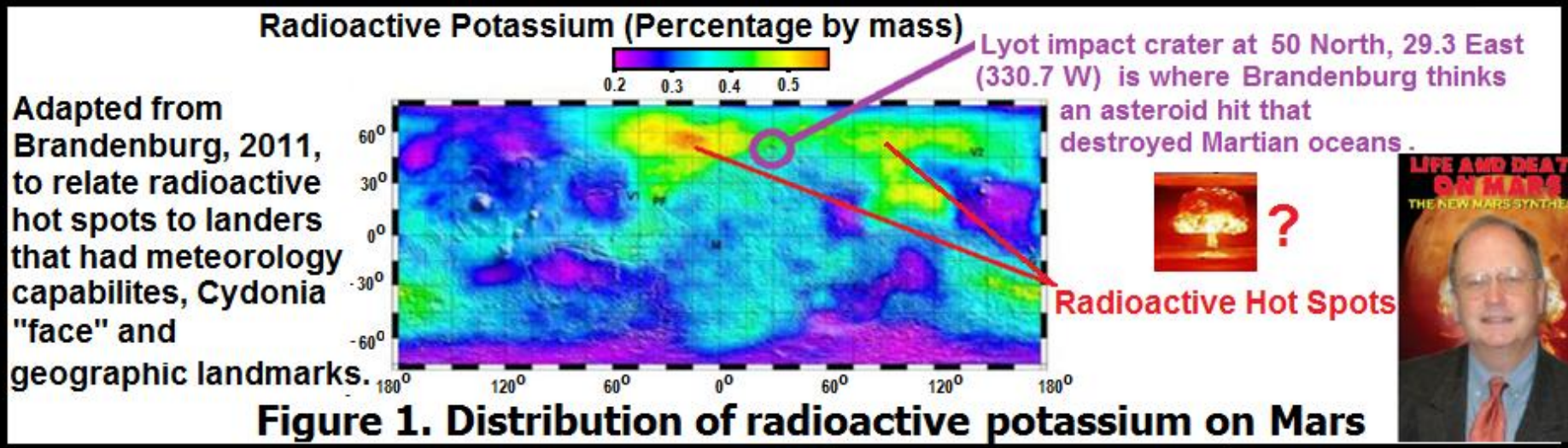


Figure 1. Distribution of radioactive potassium on Mars

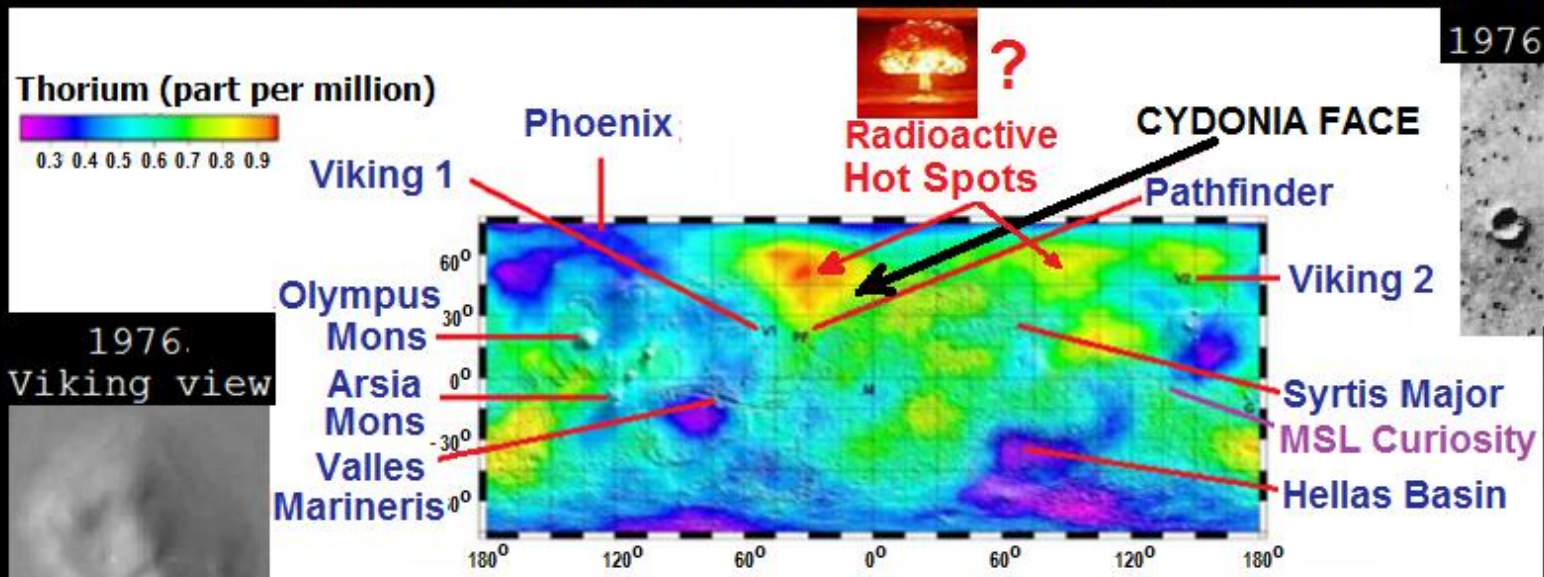


Figure 2. Distribution of Thorium on Mars

Brandenburg's Argument for a Nuclear Explosion on Mars

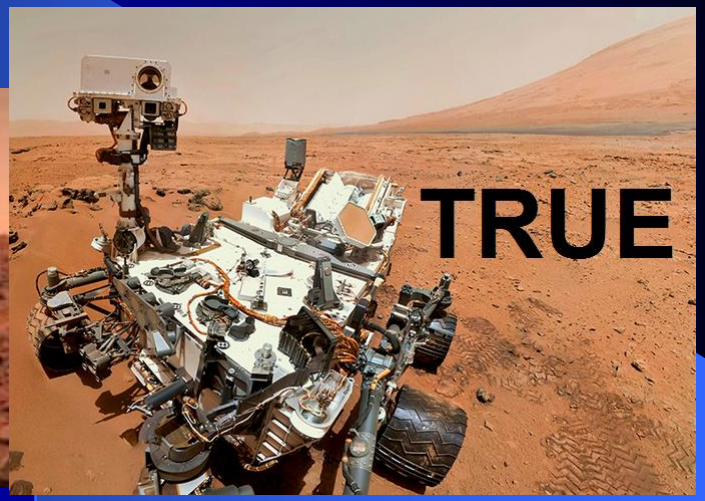
- High concentration of ^{129}Xenon.
- Evidence from ^{80}Krypton of intense neutron radiation
- Much Uranium and Thorium on Martian surface with concentrations similar to large (km) scale fossil reactors in Oklo, Africa.
  - * Reaction bred ^{233}U and ^{239}Pu. It went critical and blew up when water boiled out.
- The site at Mare Acidalium has no crater, only a scorch mark like what is seen after a nuclear airburst (which isn't a natural event).

Why did NASA Administrator James Fletcher order the alteration of Martian sky color in 1976?

* He was smart – BS from Columbia, PhD from Cal Tech, taught at Harvard and Princeton.

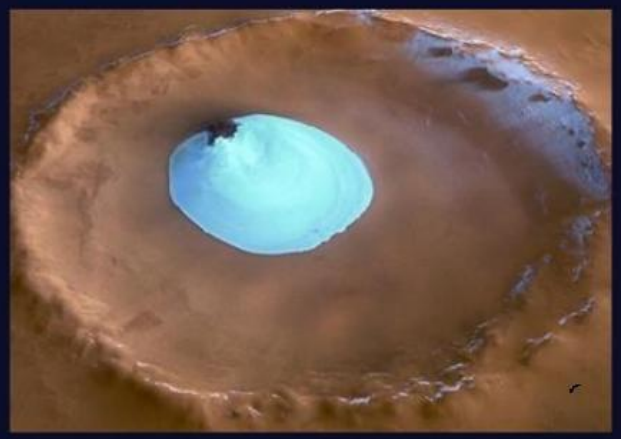
* But kept us in low Earth orbit until now and beyond.

*Every picture of Mars sky color was wrong for 36 years after his order until MSL in August 2012.



The face is an issue, the nuclear past is questionable, but evidence for higher than advertised pressure and sloppy handling of Mars weather data is irrefutable.

CRATER LAKE, OREGON
(Maximum diameter = 9.7 km, Maximum depth = 594 meters, average height of rim above lake = 305 meters



VASTITAS BOREALIS, MARS
(Maximum width = 35 km)
Imaged centered at 70.1° North latitude, 103.21° East longitude

Mars is more like Earth than we have been told.

Our latest Basic Report is at

http://marscorrect.com/16%20January%202015%20Mars%20Report.pdf