

NOTES ON BASE

This map is one in a series covering the entire surface of Mars at a nominal scale of 1:5,000,000. The series was originally compiled from Mariner 9 data (Bateson and others, 1979). The original shaded relief base was revised and augmented with image data from Viking Orbiter, but feature positions were not shifted to fit controls derived from Viking.

ADOPTED FIGURE

The figure of Mars used for the compilation of the map projection is an oblate spheroid (flattening of 1/193) with an equatorial radius of 3,393.4 km and a polar radius of 3,375.7 km.

PROJECTION

The Mercator, Lambert Conformal Conic, and Polar Stereographic projections are used for this map series. The scale of the series is 1:5,000,000 at the equator. The projections have common scales of 1:4,336,000 at lat +30° and 1:4,306,000 at lat +65°. Standard parallels for the Lambert Conformal Conic projection are at lat +35°S and +59°N. Longitude increases to the west in accordance with astronomical convention for Mars. Latitude is planetographic.

CONTROL

Planimetric control of the shaded relief is provided by photogrammetric triangulation using Mariner 9 images (Davies, 1973; Davies and Arthur, 1973) and the radio-tracked position of the Mariner 9 spacecraft. The first meridian passes through the center of a small crater, Aiy-D 04 51 09° S, long 0°, within the crater Aiy. Primary controls used in the network include the Viking Orbiter Secondary Experiment Data Record, radio-occlusion measurements from both Mariner 9 and Viking Missions (Lorenz and others, 1972; Klore and others, 1973; Lindal and others, 1979), Earth-based radar observations (Pettingill and others, 1971; Downs and others, 1973), and the Mars primary control network of the Rand Corporation (Davies and others, 1978).

MAPPING TECHNIQUE

Shaded relief was portrayed by photointerpretive methods described by Inge and Bridges (1976). Uniform sun illumination from the west was used throughout. The original condition of feature positions, sizes, and shapes was taken from a controlled base mosaic of Mariner 9 images. Various computer enhancements of many Mariner 9 and Viking Orbiter images besides those in the base mosaic were examined in an attempt to portray the surface as accurately as possible.

Initial shaded relief analysis and representation based on Viking Orbiter data were made by Patricia M. Bridges; revisions were made by Barbara J. Hall.

COLOR

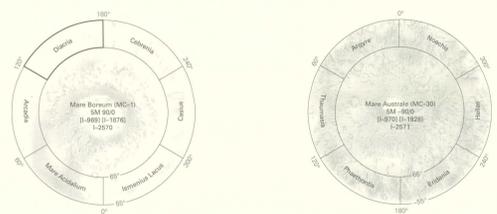
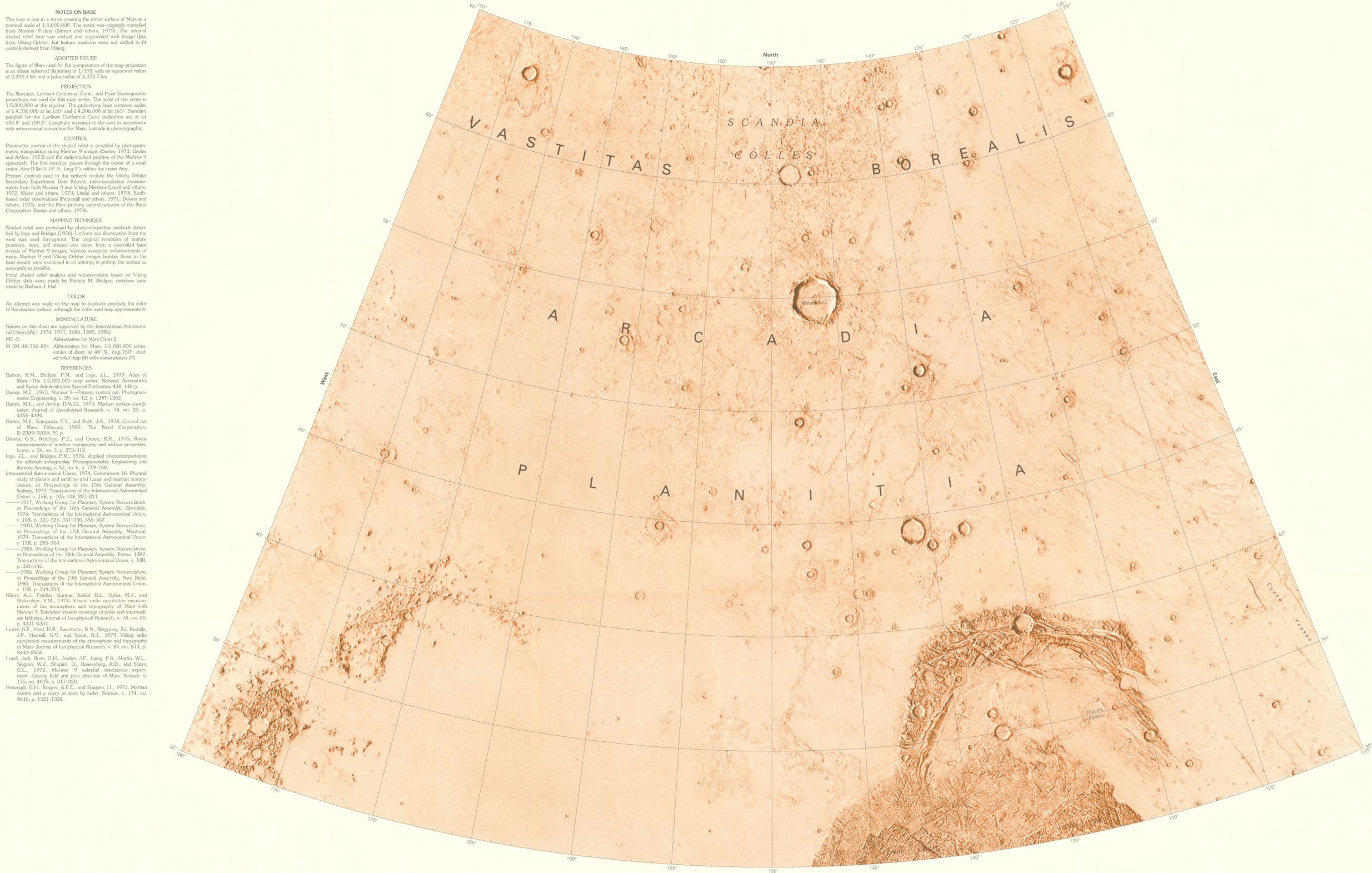
No attempt was made on the map to duplicate precisely the color of the martian surface, although the color used may approximate it.

NOMENCLATURE

Names on this sheet are approved by the International Astronomical Union (IAU), 1974, 1977, 1980, 1983, 1986.
MC-2: Abbreviation for Mars Chart 2.
M 5M 48/150 RN: Abbreviation for Mars, 1:5,000,000 series, center of sheet, lat 48° N, long 150° W, shaded relief map (R) with nomenclature (N).

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Quadrangle	SM														
Diacria (MC-2)	SM 48190	SM 48191	SM 48192	SM 48193	SM 48194	SM 48195	SM 48196	SM 48197	SM 48198	SM 48199	SM 48200	SM 48201	SM 48202	SM 48203	SM 48204
Acadia (MC-3)	SM 48205	SM 48206	SM 48207	SM 48208	SM 48209	SM 48210	SM 48211	SM 48212	SM 48213	SM 48214	SM 48215	SM 48216	SM 48217	SM 48218	SM 48219
Mars Acrotium (MC-4)	SM 48220	SM 48221	SM 48222	SM 48223	SM 48224	SM 48225	SM 48226	SM 48227	SM 48228	SM 48229	SM 48230	SM 48231	SM 48232	SM 48233	SM 48234
Imenius Lacus (MC-5)	SM 48235	SM 48236	SM 48237	SM 48238	SM 48239	SM 48240	SM 48241	SM 48242	SM 48243	SM 48244	SM 48245	SM 48246	SM 48247	SM 48248	SM 48249
Cassia (MC-6)	SM 48250	SM 48251	SM 48252	SM 48253	SM 48254	SM 48255	SM 48256	SM 48257	SM 48258	SM 48259	SM 48260	SM 48261	SM 48262	SM 48263	SM 48264
Cerberia (MC-7)	SM 48265	SM 48266	SM 48267	SM 48268	SM 48269	SM 48270	SM 48271	SM 48272	SM 48273	SM 48274	SM 48275	SM 48276	SM 48277	SM 48278	SM 48279
Ammonites (MC-8)	SM 48280	SM 48281	SM 48282	SM 48283	SM 48284	SM 48285	SM 48286	SM 48287	SM 48288	SM 48289	SM 48290	SM 48291	SM 48292	SM 48293	SM 48294
Tharsis (MC-9)	SM 48295	SM 48296	SM 48297	SM 48298	SM 48299	SM 48300	SM 48301	SM 48302	SM 48303	SM 48304	SM 48305	SM 48306	SM 48307	SM 48308	SM 48309
Phoenicia Lacus (MC-10)	SM 48310	SM 48311	SM 48312	SM 48313	SM 48314	SM 48315	SM 48316	SM 48317	SM 48318	SM 48319	SM 48320	SM 48321	SM 48322	SM 48323	SM 48324
Phoenicia Lacus (MC-11)	SM 48325	SM 48326	SM 48327	SM 48328	SM 48329	SM 48330	SM 48331	SM 48332	SM 48333	SM 48334	SM 48335	SM 48336	SM 48337	SM 48338	SM 48339
Phoenicia Lacus (MC-12)	SM 48340	SM 48341	SM 48342	SM 48343	SM 48344	SM 48345	SM 48346	SM 48347	SM 48348	SM 48349	SM 48350	SM 48351	SM 48352	SM 48353	SM 48354
Phoenicia Lacus (MC-13)	SM 48355	SM 48356	SM 48357	SM 48358	SM 48359	SM 48360	SM 48361	SM 48362	SM 48363	SM 48364	SM 48365	SM 48366	SM 48367	SM 48368	SM 48369
Phoenicia Lacus (MC-14)	SM 48370	SM 48371	SM 48372	SM 48373	SM 48374	SM 48375	SM 48376	SM 48377	SM 48378	SM 48379	SM 48380	SM 48381	SM 48382	SM 48383	SM 48384
Phoenicia Lacus (MC-15)	SM 48385	SM 48386	SM 48387	SM 48388	SM 48389	SM 48390	SM 48391	SM 48392	SM 48393	SM 48394	SM 48395	SM 48396	SM 48397	SM 48398	SM 48399
Phoenicia Lacus (MC-16)	SM 48400	SM 48401	SM 48402	SM 48403	SM 48404	SM 48405	SM 48406	SM 48407	SM 48408	SM 48409	SM 48410	SM 48411	SM 48412	SM 48413	SM 48414
Phoenicia Lacus (MC-17)	SM 48415	SM 48416	SM 48417	SM 48418	SM 48419	SM 48420	SM 48421	SM 48422	SM 48423	SM 48424	SM 48425	SM 48426	SM 48427	SM 48428	SM 48429
Phoenicia Lacus (MC-18)	SM 48430	SM 48431	SM 48432	SM 48433	SM 48434	SM 48435	SM 48436	SM 48437	SM 48438	SM 48439	SM 48440	SM 48441	SM 48442	SM 48443	SM 48444
Phoenicia Lacus (MC-19)	SM 48445	SM 48446	SM 48447	SM 48448	SM 48449	SM 48450	SM 48451	SM 48452	SM 48453	SM 48454	SM 48455	SM 48456	SM 48457	SM 48458	SM 48459
Phoenicia Lacus (MC-20)	SM 48460	SM 48461	SM 48462	SM 48463	SM 48464	SM 48465	SM 48466	SM 48467	SM 48468	SM 48469	SM 48470	SM 48471	SM 48472	SM 48473	SM 48474
Phoenicia Lacus (MC-21)	SM 48475	SM 48476	SM 48477	SM 48478	SM 48479	SM 48480	SM 48481	SM 48482	SM 48483	SM 48484	SM 48485	SM 48486	SM 48487	SM 48488	SM 48489
Phoenicia Lacus (MC-22)	SM 48490	SM 48491	SM 48492	SM 48493	SM 48494	SM 48495	SM 48496	SM 48497	SM 48498	SM 48499	SM 48500	SM 48501	SM 48502	SM 48503	SM 48504
Phoenicia Lacus (MC-23)	SM 48505	SM 48506	SM 48507	SM 48508	SM 48509	SM 48510	SM 48511	SM 48512	SM 48513	SM 48514	SM 48515	SM 48516	SM 48517	SM 48518	SM 48519
Phoenicia Lacus (MC-24)	SM 48520	SM 48521	SM 48522	SM 48523	SM 48524	SM 48525	SM 48526	SM 48527	SM 48528	SM 48529	SM 48530	SM 48531	SM 48532	SM 48533	SM 48534
Phoenicia Lacus (MC-25)	SM 48535	SM 48536	SM 48537	SM 48538	SM 48539	SM 48540	SM 48541	SM 48542	SM 48543	SM 48544	SM 48545	SM 48546	SM 48547	SM 48548	SM 48549
Phoenicia Lacus (MC-26)	SM 48550	SM 48551	SM 48552	SM 48553	SM 48554	SM 48555	SM 48556	SM 48557	SM 48558	SM 48559	SM 48560	SM 48561	SM 48562	SM 48563	SM 48564
Phoenicia Lacus (MC-27)	SM 48565	SM 48566	SM 48567	SM 48568	SM 48569	SM 48570	SM 48571	SM 48572	SM 48573	SM 48574	SM 48575	SM 48576	SM 48577	SM 48578	SM 48579
Phoenicia Lacus (MC-28)	SM 48580	SM 48581	SM 48582	SM 48583	SM 48584	SM 48585	SM 48586	SM 48587	SM 48588	SM 48589	SM 48590	SM 48591	SM 48592	SM 48593	SM 48594
Phoenicia Lacus (MC-29)	SM 48595	SM 48596	SM 48597	SM 48598	SM 48599	SM 48600	SM 48601	SM 48602	SM 48603	SM 48604	SM 48605	SM 48606	SM 48607	SM 48608	SM 48609
Phoenicia Lacus (MC-30)	SM 48610	SM 48611	SM 48612	SM 48613	SM 48614	SM 48615	SM 48616	SM 48617	SM 48618	SM 48619	SM 48620	SM 48621	SM 48622	SM 48623	SM 48624
Phoenicia Lacus (MC-31)	SM 48625	SM 48626	SM 48627	SM 48628	SM 48629	SM 48630	SM 48631	SM 48632	SM 48633	SM 48634	SM 48635	SM 48636	SM 48637	SM 48638	SM 48639
Phoenicia Lacus (MC-32)	SM 48640	SM 48641	SM 48642	SM 48643	SM 48644	SM 48645	SM 48646	SM 48647	SM 48648	SM 48649	SM 48650	SM 48651	SM 48652	SM 48653	SM 48654
Phoenicia Lacus (MC-33)	SM 48655	SM 48656	SM 48657	SM 48658	SM 48659	SM 48660	SM 48661	SM 48662	SM 48663	SM 48664	SM 48665	SM 48666	SM 48667	SM 48668	SM 48669
Phoenicia Lacus (MC-34)	SM 48670	SM 48671	SM 48672	SM 48673	SM 48674	SM 48675	SM 48676	SM 48677	SM 48678	SM 48679	SM 48680	SM 48681	SM 48682	SM 48683	SM 48684
Phoenicia Lacus (MC-35)	SM 48685	SM 48686	SM 48687	SM 48688	SM 48689	SM 48690	SM 48691	SM 48692	SM 48693	SM 48694	SM 48695	SM 48696	SM 48697	SM 48698	SM 48699
Phoenicia Lacus (MC-36)	SM 48700	SM 48701	SM 48702	SM 48703	SM 48704	SM 48705	SM 48706	SM 48707	SM 48708	SM 48709	SM 48710	SM 48711	SM 48712	SM 48713	SM 48714
Phoenicia Lacus (MC-37)	SM 48715	SM 48716	SM 48717	SM 48718	SM 48719	SM 48720	SM 48721	SM 48722	SM 48723	SM 48724	SM 48725	SM 48726	SM 48727	SM 48728	SM 48729
Phoenicia Lacus (MC-38)	SM 48730	SM 48731	SM 48732	SM 48733	SM 48734	SM 48735	SM 48736	SM 48737	SM 48738	SM 48739	SM 48740	SM 48741	SM 48742	SM 48743	SM 48744
Phoenicia Lacus (MC-39)	SM 48745	SM 48746	SM 48747	SM 48748	SM 48749	SM 48750	SM 48751	SM 48752	SM 48753	SM 48754	SM 48755	SM 48756	SM 48757	SM 48758	SM 48759
Phoenicia Lacus (MC-40)	SM 48760	SM 48761	SM 48762	SM 48763	SM 48764	SM 48765	SM 48766	SM 48767	SM 48768	SM 48769	SM 48770	SM 48771	SM 48772	SM 48773	SM 48774
Phoenicia Lacus (MC-41)	SM 48775	SM 48776	SM 48777	SM 48778	SM 48779	SM 48780	SM 48781	SM 48782	SM 48783	SM 48784	SM 48785	SM 48786	SM 48787	SM 48788	SM 48789
Phoenicia Lacus (MC-42)	SM 48790	SM 48791	SM 48792	SM 48793	SM 48794	SM 48795	SM 48796	SM 48797	SM 48798	SM 48799	SM 48800	SM 48801	SM 48802	SM 48803	SM 48804
Phoenicia Lacus (MC-43)	SM 48805	SM 48806	SM 48807	SM 48808	SM 48809	SM 48810	SM 48811	SM 48812	SM 48813	SM 48814	SM 48815	SM 48816	SM 48817	SM 48818	SM 48819
Phoenicia Lacus (MC-44)	SM 48820	SM 48821	SM 48822	SM 48823	SM 48824	SM 48825	SM 48826	SM 48827							