# NO. 30. THE SYSTEM OF LUNAR CRATERS, QUADRANT I

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ABSTRACT

The designation, diameter, position, central peak information, and state of completeness for each discernible crater in the first lunar quadrant with a diameter exceeding 3.5 km are listed. The catalog contains about 2,000 items and is illustrated by a map in 11 sections.

## 1. *Introduction*

About 30 years have elapsed since Mary Blagg and Karl Müller completed their work on the nomenclature of the lunar surface features, and more than 20 years since James Young made his relatively limited survey of the diameters of the lunar craters. In the meantime there have been considerable changes in the status and tempo of lunar studies, with better photographs and more support available for work of the type performed by Blagg, Müller and Young.

This catalog lists all the discernible craters with diameters greater than 3.5 km, giving their horizontal dimensions and positions. Smaller craters are also listed, but only when they have specific designations. Many craters which were formerly anonymous have been designated in the present catalog and the diameters of all listed craters have been determined with fair accuracy. Thus in every way the present catalog is a successor to the catalogs of Young and of Blagg and Müller. It is more complete than that of Young, which was limited to craters greater than 10 miles (16 km) across, and is more detailed and accurate than that of Blagg and Müller. Whereas the latter specified the diameters of craters to one thousandth of the lunar radius and was sometimes 20% in error, the diameters in the present catalog are given to one hundredth of this amount. Again, while the Blagg and Müller positions are often merely estimates, the positions of the present catalog are interpolated from orthographic grids and are almost precise enough for large-scale cartography. Other details, such as central-peak data and background, are listed for each crater.

The catalog is divided into four parts, each part corresponding to a quadrant of the visible lunar hemisphere. It has been thought advisable to limit the catalog to the earthward hemisphere even though the nomenclature studies have been extended into the libratory zones. Therefore, in the main body of the catalog, formations beyond the mean lunar limb are omitted.

The craters are arranged in order of their references which are derived from their rectangular coordinates truncated to two places. The same arrangement was followed in the *Consolidated Catalog of Selenographic Positions (Comm. L.P.L., No. 11).*

## 2. *The Materials*

Lunar crater diameters are used for identification, for cartography, and for statistical investigations. None of these warrant extreme accuracy and initial experiments showed that the diameters could be determined with sufficient accuracy (about 0.25 km for the smaller craters) by simple scaling on the sheets of the *Photographic Lunar Atlas*. Occasionally these sheets failed to provide clear images of certain craters and the measures were then made on original negatives or on enlargements from these.

The sheets of the *Orthographic Atlas of the Moon* were used to estimate the selenographic positions. When these failed in certain limb regions, unpublished gridded photographs were used instead.

A small proportion of the craters was found to be elliptical. The ellipticity is not always obvious on ordinary lunar photographs, but is readily detected by reference to rectified lunar photographs which show each lunar district as seen from vertically above. For the elliptical craters the catalog gives the major and minor diameters.

These rectified photographs form part of a collection compiled under the direction of Dr. G. P. Kuiper, which will be published as the *Rectified Lunar Atlas*. The existence of this collection was extremely fortunate since with its aid we solved many problems which otherwise might have proved troublesome.

### 3. *The Crater Diameter Measures*

The nominal scale of the sheets of the *Photographic Lunar Atlas* is 50 inches to the moon's radius, that is, 1000 divisions of a surveyor's scale with 20 divisions per inch. Thus it was found convenient to scale directly on the phototypes with these "twenty" scales. The diameters so obtained are nominally in units of one thousandths of the lunar radius (about 1.08 miles). The subsequent application of a factor approximating to unity removes this nominal status. The appropriate factor was computed for each sheet and entered in the corner. Thus the measurer applied the factor directly and recorded the corrected diameter on the sheet alongside the measured crater. The recorded values are in thousandths of the lunar radius but are still affected by random errors and the effect of finite distance.

Despite obvious accuracy limitations, measures on paper sheets have certain advantages. Clearly it is much easier to organize these measures than those made optically on glass plates. Furthermore, in the case of ruined craters with fragmentary walls, for which the observer must mentally supply those parts of the ellipse which are missing, it was usually fairly easy to sketch in the rim with a colored pencil. The observer then measured the pencilled ellipse.

Elliptical craters required rather more elaborate treatment. The best method of measurement depended on the identification of the ellipse of the rim on a sheet of the *Orthographic Atlas*. The ends of the major and minor axes were then taken from a rectified photograph and identified as points on this ellipse in the gridded picture. The orthographic coordinates $\xi$ and $\eta$ were interpolated to 4 places from the grid and their linear separations computed from the differences of $\xi$, $\eta$, and $\zeta$. Diameters obtained in this way do not require correction for finite distance.

Small elliptical craters were often treated in a simpler way; the method that we used depended on the assumption that the foreshortening in the radial direction could be computed with sufficient accuracy from the foreshortening of nearby circular craters.

To bring all measures for one crater together, the entries on the sheets were transferred to cards, one card per crater. Each card shows the diameter measures, estimated position, reference, designation, and all other relevant data for the crater.

### 4. *Scales of the Sheets*

As mentioned above, the nominal values of the diameters were converted to true values by the application of conversion factors. The appropriate factor for each sheet was computed by scaling between two well-separated standard points. As an example, the figures for sheet *D2a* of the *Photographic Lunar Atlas* are given.

For this sheet the approximate librations are $l = +3°.2$ and $b = +2°.4$. Combining the sines and cosines of these, as explained in the introduction to the *Orthographic Atlas*, the transformation from standard to instantaneous direction-cosines is:

$$\begin{aligned} x &= +.9984\,\xi \qquad\qquad\quad - .0558\,\zeta, \\ y &= -.0023\,\xi + .9991\,\eta - .0418\,\zeta, \\ z &= +.0557\,\xi + .0419\,\eta + .9975\,\zeta. \end{aligned}$$

The two selected standard points with their standard direction-cosines are:

| *Ref.* | $\xi$ | $\eta$ | $\zeta$ |
|---|---|---|---|
| 22681 | −.2859 | +.6143 | +.7355, |
| 10646 | +.0492 | +.6602 | +.7495. |

The instantaneous values are:

| *Ref.* | $x$ | $y$ | $z$ |
|---|---|---|---|
| 22681 | −.3265 | +.5837 | +.7435, |
| 10646 | +.0081 | +.6282 | +.7780. |

Adding $xz \sin s'$ to $x$ and $yz \sin s'$ to $y$, to obtain coordinates in the conical picture, these latter are:

| *Ref.* | $X$ | $Y$ |
|---|---|---|
| 22681 | −.3276 | +.5856, |
| 10646 | +.0081 | +.6304. |

These now correspond to the photographic image except for scale, differential refraction, and paper shrinkage. The coordinate differences in $X$ and $Y$ are:

$$.3357 \text{ and } .0448.$$

Hence in units of $0.001r$, the plane distance between the images of the standard points is:

Theoretical length = 338.7.

The measured distance on the sheet is:

Measured length = 331.6 scale units,

and the required factor for this sheet is

$$1 \text{ scale unit} = \frac{\text{theoretical length}}{\text{measured length}} = \frac{338.7}{331.6} = 1.02141.$$

This computation was entered in tabular form on the reverse side of each sheet.

Two points should be noted. Firstly, the two selected points were taken as far apart as possible and always in such an alignment that their join was parallel to the general direction of the major diameters of the projected ellipses of the crater rims. This arrangement minimized the results of errors in the measures and of the differential refraction and paper shrinkage. Secondly, the computation was often approximated, as in the example quoted above, by using the geocentric librations when the topocentric values were not immediately available. In the same circumstances the sine of the lunar semidiameter $\sin s'$ was often approximated to 0.0045. These approximations have little effect on the final results.

### 5. *The Crater Diameter Reductions*

In a rigorous treatment each diameter measure $D$ should be independently corrected for finite distance by applying the correction $-zD \sin s'$ where $z$ is the third instantaneous direction-cosine and is in fact the distance of the crater from the mean limb in units of the radius. This form of the correction is very inconvenient and is unnecessarily precise. The reduction was approximated as follows. The individual measures were averaged and the correction $-.0045\,\zeta D$ was applied to the mean value $D$. As usual, $\zeta$ is the third standard direction-cosine, which was computed from $\xi$ and $\eta$ very rapidly by using a nomogram. The errors of this procedure are small, except perhaps for the largest craters near the center of the disk.

These reductions were performed on the cards mentioned above.

The diameters in this catalog are straight line distances from rim to rim and are not distances along a mean lunar sphere, as they might be. Furthermore, since our knowledge of absolute lunar altitudes is quite defective, no attempt has been made to correct the diameters to a common datum. Reductions to 'sea-level' are usual for terrestrial horizontal dimensions, but this degree of refinement is not yet possible for the moon.

The diameters are given to two places in units of one thousandth of the lunar radius and to the same accuracy in kilometers. The first decimal place is not always significant and the second is meaningless. Nevertheless these decimals were retained so that the diameters may be transformed to other units without loss of accuracy. The real precision of the measures is discussed below.

### 6. *The Selenographic Positions*

The catalog lists the selenographic positions of the craters both as standard direction-cosine sets ($\xi$, $\eta$, $\zeta$) and as longitudes ($\lambda$) and latitudes ($\beta$). This redundancy is provided so that the reader can perform counts by areas with simple sorting equipment. For example, equal areas are defined by meridians uniformly spaced in $\lambda$, by parallels uniformly spaced in $\eta$, and by small circles uniformly spaced in $\zeta$.

The coordinates were derived by interpolation of $\xi$ and $\eta$ from the gridded sheets of the *Orthographic Atlas* or from unpublished gridded sheets. Where the craters are standard points listed in the *Consolidated Catalog of Selenographic Positions (Comm. No. 11)* the published standard values were used instead. The remaining coordinates were obtained by high-speed computation. This procedure introduced certain complications. Frequently for features very close to the limb the values rounded to three places violated the inequality

$$\xi^2 + \eta^2 \leq 1,$$

and to simplify the programming in these cases $\zeta$ was set to zero and $\lambda$ to $\pm 90°$. This has very little real effect on the selenographic positions although the changes may appear to be quite large when expressed in terms of $\lambda$ and $\beta$. However, the matter is mentioned as an explanation of the positional differences between this and the position catalog.

The rectangular coordinates are given to three places and the longitude and latitude to one tenth of a degree. In general the errors of the former will not exceed 0.002, but no simple statement of accuracy is possible for the latitudes and longitudes.

### 7. *The Nomenclature*

Contemporary lunar nomenclature descends from the maps of Riccioli and Mädler. Riccioli innovated the convention of naming the more prominent lunar craters after famous philosophers, scientists, and explorers, while Beer and Mädler amplified this to a scheme in which the smaller craters are lettered and associated with nearby named objects. Thus, *Plato A* would be a crater not far from the crater *Plato*.

For compactness on medium- and small-scale lunar maps, only the letter is entered on the map and the prefixing name is understood. Thus, in the example mentioned, only the letter *A* is shown and the prefix *Plato* is understood. Clearly some further convention is necessary to distinguish between objects with the same letter but different prefixes. This convention also was laid down by Beer and Mädler, but is either not well understood, or ignored by some contemporary lunar cartographers. It may be useful to restate it here, since its neglect causes confusion. When a lettered formation is associated with a named formation, the letter is placed against that side of the formation which is nearest to the named formation. Thus, for *Plato A*, the *A* is placed against the side of the crater which is nearest to *Plato*.

The scheme of Beer and Mädler was not long left in peace. Neison, Schmidt, and a succession of British selenographers published maps in which new names were introduced and the original conventions were either disregarded or mutilated. Unfortunately, there was no uniformity in the additions and alterations so that in time many craters accumulated several different designations. This chaotic situation should have been brought to an end with the publication in 1935 of Blagg and Müller's *Named Lunar Formations,* consisting of a catalog and map. The work was performed at the request of Commission 16 of the International Astronomical Union and the resulting publications were given due authority by the IAU in 1932.

Unfortunately, the Blagg and Müller scheme did not achieve wide usage or acceptance among those who were then active in selenography. This may have been due to the rather limited distribution of the publications, but also may have resulted from the rather illegible nature of the outer sheets of the map. Indeed, for the limb regions, the Blagg and Müller scheme is frequently defective and erroneous, since their map does not correspond to what can be seen on modern lunar photographs. In fact, it was based in part on photographic materials which would now be regarded as inadequate.

Even if the defects of the Blagg and Müller scheme are ignored, there are other factors present which make a revised scheme an urgent necessity. All the major maps of the past were drawn on the orthographic projection in which the limb regions are strongly compressed by foreshortening. Today new maps are being published in conformal (isomorphic) or near-conformal projections in which there is no foreshortening, each object being shown in horizontal plan. Furthermore, these new maps are the results of intense and careful surveys of a type never achieved before. Thus the new maps show numerous small features well, which were drawn with doubt and generalization on the older maps.

The changes in the new maps (namely, new projections, increased density of detail, and larger scales) all have important implications for the nomenclature. Associations which were valid for the orthographic projection break down in the new maps, since craters which formerly appeared reasonably close together may actually be widely separated. Thus it is often no longer appropriate to letter craters as has been done. The conformal projections also frequently create wide lacunae in the network of names in the limb regions.

In addition to all this, Blagg and Müller's scheme contains craters which do not exist, craters with two designations, craters with identical designations, illogical situations in which objects are associated with named craters which lie beyond other named craters, and other similar defects.

It would be relatively easy to start afresh and create a new nomenclature which would be logical, consistent, and unambiguous. However, the demands of tradition and continuity cannot be ignored. A completely new scheme would render almost useless much of the selenographic literature of the past. Therefore, the nomenclature of this catalog is merely an augmented and amended form of that of Blagg and Müller. The emphasis is on addition rather than alteration and the catalog contains designations for numerous objects which were formerly anonymous.

Changes have been made, but only of necessity. In particular, the number of new names has been kept to a minimum. These are limited to the limb regions in which the removal of foreshortening in the new maps creates illogical situations in the existing scheme. The new names for Quadrant I are:

| | |
|---|---|
| Banachiewicz, T. | Polish astronomer; |
| Dubiago, D. I. | Russian astronomer; |
| Belkovich, I. V. | Russian selenodetist; |
| Hayn, F. | German selenodetist; |
| Nansen, F. | Norwegian polar explorer. |

The first four of these were astronomers closely connected with the development of selenodesy, perhaps the most demanding and difficult of the lunar sciences; the fifth was a polar explorer of considerable fame whose name is thus appropriate for an object not far from the lunar north pole.

The task of clarifying, correcting, and amplifying the nomenclature has not been a light one. Often the intentions of Blagg and Müller are so obscure that to arrive at a decision it has been found necessary to refer to the works of Mädler, Lohrmann, Schmidt, and others. In some cases in the limb regions Blagg and Müller misidentified the crater named by one of these authorities, but occasionally they appear to have made a better choice. In such cases we have retained their identifications even though they are incorrect historically.

Errors and defects of the Blagg and Müller scheme necessitate certain alterations in the designations. Frequently we have been obliged to change the designation of craters, by changing either the letter or the name prefix. It seemed best to retain the letter whenever possible and in almost all cases we have been able to do this.

The emphasis in this catalog and the accompanying map is on the craters. Nevertheless, attention has been given to the 1961 resolutions of the International Astronomical Union. The principal recommendations are the latinization of some generic terms, e.g.,

*rima* for rille;
*rupes* for fault or wall;
*vallis* for valley;
*mons* for mount;
*montes* for mountains.

The latinization of some of the proper names introduces problems for which there are no entirely satisfactory solutions. If the rules are applied strictly, the resultant designations are often so unfamiliar as to cause confusion and to court rejection. Hence some names have not been correctly latinized while others have been left in their original form. Generally speaking, *Montes* is used for all mountain chains and is followed by a Latin noun in the nominative case. A few exceptions are allowed even in this in order to follow tradition when this is strong and consistent. *Mons* is used for single mountain masses which are individually named. There is one conspicuous exception to this; *Mont Blanc* is a well known terrestrial peak with a lunar counterpart. The latinized form of this name is *Mons Candidus* which is so unfamiliar as to be unsuitable. Nor is the hybrid form *Mons Blanc* any better. In this one case we have retained the original form as there is a strong terrestrial association which should not be destroyed. Similar difficulties arise with other names of northern European origin. In general we have used hybrid forms for these.

Following Blagg and Müller, craters are indicated by Roman upper-case letters while Greek lower-case characters are used for elevations. The maps of this catalog show two changes. In the first place we have added considerably to the number of designated craters and freely used double letters, such as AB, AC, BF, etc. Secondly, we have considerably reduced the use of Greek letters. Blagg and Müller followed Mädler and Schmidt in applying designations to elevations even when these were merely the east and west walls of craters. There seems to be no real need for this and we have restricted the use of Greek letters to isolated peaks and masses which appear to be useful as landmarks. In areas which are relatively empty except for isolated peaks, we have added some Greek letters in order to provide additional landmarks.

Certain conventions have been followed in order to simplify matters for the users of the maps. Firstly, a designation is always taken to apply to a specific object and never to a group. In cases such as Anaximander, where the designation formerly applied to a group of confluent craters, one crater has been selected to retain the original name while the remaining objects receive fresh designations.

Secondly, we have avoided placing a named object within another, since this must lead to confusion in the lettered objects. However, there are at least three such cases where frequent past usage justifies their retention: Horrocks within Hipparchus, Hell within Deslandres, and Fabricius within Janssen.

Thirdly, the convention has been laid down that the straight line joining a named object to the lettered objects associated with it should never cross the corresponding lines for another named feature. This convention was violated in places by Blagg and Müller and the result is extremely confusing to the user of their map.

### 8. *Classification of the Craters. (C)*

To provide the reader with some idea of the nature of the listed objects, the craters are classified under the heading *C* according to the sharpness and completeness of their rims on a scale of 1 to 5. The craters with complete and sharply-defined rims are classed as 1, while craters whose rims are either blurred or broken are classed as 2 and 3. Objects which are usually described as ruins are classed as 4, while class 5 covers objects which are so battered or fragmentary that they are not easily recognized as former craters.

Readers should not expect complete accuracy or consistency in this classification. It is not easy in practice to force such a complex array of crater-forms such as are found on the moon into such a brief scale of classes, and the classification was made by several persons.

In some cases a lower case *f* is added to the class number, indicating a flooded interior. This is intended only to suggest that a correction is required to the central peak statistics and should not be used for any other purpose. Indeed it is omitted when a central peak is present.

### 9. *The Crater Backgrounds (B)*

The surfaces on which the craters are situated are regarded as mare (*M*) or upland (*C*). These indications are given in the column headed by the symbol *B*. Craters which overlap both mare and upland surfaces are indicated by the symbol *MC*. In addition we have attempted to classify the craters as pre-mare and post-mare according to their appearances. The prefix *a* (*ante*) indicates that the crater is pre-mare while the prefix *p* (*post*) indicates that the crater is post-mare. Naturally this classification is restricted to the *M* and *MC* craters. Once again the reader is warned against attaching too much significance to these indications. Lunar photographs show numerous dark areas which are not generally regarded as maria, but which are undoubtedly of a similar nature. We have assumed these to be contemporary with the principal maria. Again, for Mare Imbrium at least, there appear to have been two events, the cataclysmic creation of the mare boundaries and the subsequent flooding of the interior by dark material. The time separation between these may have been considerable, even on a geological time scale. The crater may have been created during this interval and hence there must be certain difficulties in classing it as pre-mare or post-mare. In general we have followed the rule that the covering by the dark material marks the time in which the mare was born.

### 10. *Central Peak Information (C.E.)*

The column headed *C.E.* gives central peak information for each crater. This is coded as follows:

*O* = no central object;
*P* = single conspicuous central peak;
*p* = weak central peak;
*PP* = multiple central peak;
*pp* = several weak central elevations;
*K* = central crater;
*F* = central fissure;
*R* = central ridge;
*?* = no information as to central object.

The last of these indicates either that the object is too near the limb to permit examination of its interior, or that the photographs are not good enough to justify a definite opinion.

### 11. *The Map*

The contents of the catalog for the first quadrant are plotted on a map in 11 sheets. These have the same arrangement as the fields of the *Photographic Lunar Atlas* and are numbered in the same way. The map is in orthographic projection with south at the top. As can be seen from an examination of the sheets, it is of the simplest character and is merely intended to illustrate the nomenclature for the craters. However, rilles, isolated peaks, and mountain chains are also indicated, the approximate boundaries of the last being shown by bands of dots.

The determination of the correct designation of a crater is aided by certain conventions. In crowded areas or in places where confusion might arise, the center of each named formation is indicated by a cross, while the centers of lettered craters are indicated by dots. The typography also follows certain conventions. Upright lettering is used for craters and maria, while sloping lettering indicates an elevation. Arrows are used freely to eliminate any doubt as to which named formation is associated with a lettered crater.

The map may be regarded as a substitute for that of Blagg and Müller, and should be considerably easier to use because of its simpler nature.

### 12. *The Accuracy of the Diameters*

The heterogeneous nature of the materials used for the measures makes it impossible to state the precisions in a complete and simple manner. The accuracy varies from area to area and indeed from object to object. Beyond the errors of the measures there is another source of variance due to the departure of the craters from the regular circular form. For these reasons the user is warned that the estimates of the accuracies given here are nothing more than generalizations and should be used with some caution.

Examination of the repeated measures showed, rather surprisingly, that the dispersions are relatively insensitive to class, but are a function of size. The following table gives the standard error $\sigma$ of a single measure and the corresponding value $\mu$ for the mean diameter. The units of the table are thousandths of the lunar radius.

| D | <5 | 5-10 | 10-15 | 15-20 | 20-30 | 30-40 | 40-50 | 50-60 |
|---|---|---|---|---|---|---|---|---|
| $\sigma$ | .16 | .29 | .36 | .42 | .65 | .71 | .71 | .60 |
| $\mu$ | .10 | .19 | .23 | .25 | .41 | .44 | .49 | .35 |

The above figures show that the average number of observations per crater is quite small. This resulted from the policy of restricting the measures to the best photographs. There seemed to be no point in mingling measures on poor photographs with the more precise measures on good photographs. Indeed, more than 500 craters were measured once only because each was shown well on only a single photograph. Usually these were small objects near the limb.

### 13. *Punched-Card Operations*

The entire contents of the catalog were transferred to punched cards and high-speed calculations employed to compute $\lambda$ and $\beta$ from the standard direction-cosines $\xi$ and $\eta$. The same means were used to derive the diameters in kilometers. The logical facilities of the computers were then used to detect errors in the catalog, that is, double entries for the same object and similar mistakes. The card deck will also be used for statistical investigations which will be the subject of further papers.

Copies of this deck will be made available to interested users upon application to the Lunar and Planetary Laboratory.

### 14. *Contemporary Literature*

The only other works of importance relating to lunar nomenclature are the lunar charts of the Aeronautical Chart and Information Center of the U.S. Air Force and the *Rectified Lunar Atlas* now being prepared for publication under the direction of Dr. G. P. Kuiper.

The A.C.I.C. charts at 1:1,000,000 are probably the most complete and detailed lunar maps ever published. These are the result of both telescopic and photographic interpretation by full-time specialists. As a result of the close cooperation between A.C.I.C. and LPL, the nomenclature of this catalog is identical with that of the A.C.I.C. charts. The nomenclature overlays for their charts are prepared in manuscript at LPL so that there is little possibility of discrepancies between the publications of the two organizations or of a recurrence of the chaotic situations which have plagued the subject in the past.

However, there are minor differences which should be noted. Up to the present the A.C.I.C. maps do not carry any indications of the designations of the elevations; that is, no Greek letters are shown. Furthermore, in places the A.C.I.C. maps may indicate double-lettered craters by the combinations *Ab, Ac, Ga,* whereas we would indicate them by *AB, AC, GA*. This difference is trivial and cannot confuse.

The *Rectified Lunar Atlas* places special emphasis on the libratory zones. These contain numerous large craters which it would not be appropriate to designate by mere letters when useful photographs are obtained from extra-terrestrial stations. Unfortunately the work on the present catalog was already well advanced before the nomenclature scheme for libratory zones came under consideration. Hence certain craters which are designated by letters in this catalog have received names in the *Rectified Lunar Atlas*. These two sets of designations may for the present be regarded as alternatives, the one suitable for orthographic maps in mean libration, the other more suitable for the maps which will undoubtedly be produced in the future. For the first lunar quadrant the alternatives are:

Gioja A = Byrd;
Gioja B = Peary;
Alhazen F = Cannon;
Plutarch A = Hubble;
Euctemon J = de Sitter.

Ambiguities of this type will not arise in the remaining three quadrants. It remains to say that these new names are tentative and are being submitted to Commission 16 of the International Astronomical Union for approval.

### 15. *Catalog, Appendices, and Maps*

The catalog, consisting of 46 pages, follows, with the headings largely self explanatory. *B & M* stands for the number assigned in the Blagg and Müller IAU Catalog. The symbols *C, B* and *C.E.* are explained in Sections 8–10.

The Catalog is followed by four appendices: I gives, alphabetically, named and lettered craters in the Catalog and their reference numbers; II gives the map locations of each named crater; III contains special remarks, such as changes in IAU nomenclature; and IV lists for the first Quadrant, corrigenda to *Communications, No. 11*.

The maps, 11 in number and preceded by an index sheet, conclude this publication. In the text attention has been called to the proposed nomenclature revisions here included.

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# The Catalog

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10002 | 857 | Bruce | + .007 | + .020 | + 1.000 | + 0.4 | + 1.1 | 3.85 | 6.69 | 1 | pM | 0 |
| 10007 | | Murchison T | .002 | .077 | .997 | 0.1 | 4.4 | 1.91 | 3.32 | 2 | pMC | 0 |
| 10016 | 865 | Chladni | .020 | .070 | .997 | 1.1 | 4.0 | 7.83 | 13.61 | 1 | pM | 0 |
| 10022 | 855 | Blagg | .026 | .021 | .999 | 1.4 | 1.2 | 3.11 | 5.41 | 1 | pM | 0 |
| 10045 | | Triesnecker J | .043 | .057 | .997 | 2.4 | 3.2 | 1.65 | 2.87 | 1 | pM | 0 |
| 10045A | | Triesnecker H | .048 | .058 | .997 | 2.7 | 3.3 | 1.46 | 2.54 | 1 | pM | 0 |
| 10049 | 852A | Triesnecker E | .044 | .097 | .994 | 2.5 | 5.5 | 2.77 | 4.81 | 1 | pM | 0 |
| 10060 | | Rhaeticus L | .062 | .002 | .998 | 3.5 | 0.1 | 8.10 | 14.08 | 4 | aMC | 0 |
| 10061 | | Rhaeticus M | .067 | .018 | .998 | 3.8 | 1.0 | 4.65 | 8.08 | 4 | aMC | 0 |
| 10067 | 846 | Triesnecker | .063 | .073 | .995 | 3.6 | 4.1 | 14.93 | 25.95 | 1 | pM | pp |
| 10072 | | Rhaeticus N | .074 | .021 | .997 | 4.2 | 1.2 | 7.06 | 12.27 | 4f | aMC | 0 |
| 10080 | 833 | Rhaeticus | .086 | .000 | .996 | 4.9 | 0.0 | 28.05<br>24.51 | 48.76<br>42.60 | 4 | C | Rpp |
| 10081 | | | .087 | .012 | .996 | 4.9 | 0.6 | 2.51 | 4.36 | 2 | C | 0 |
| 10081A | | | .086 | .014 | .996 | 4.9 | 0.8 | 5.82 | 10.12 | 4 | C | 0 |
| 10087 | 852B | Triesnecker F | .084 | .072 | .994 | 4.8 | 4.1 | 2.02 | 3.51 | 1 | pM | 0 |
| 10091 | | | .098 | .010 | .995 | 5.6 | 0.5 | 2.09<br>3.68 | 3.63<br>6.40 | 4 | C | 0 |
| 10093 | 834 | Rhaeticus A | .091 | .030 | .995 | 5.2 | 1.7 | 6.50 | 11.30 | 1 | pM | 0 |
| 10096 | | Triesnecker G | .091 | .064 | .994 | 5.2 | 3.6 | 2.29<br>1.69 | 3.98<br>2.94 | 2 | pM | 0 |
| 10102 | 1229 | Pallas N | .009 | .122 | .992 | 0.5 | 7.0 | 3.30 | 5.74 | 1 | C | 0 |
| 10102A | | | .000 | .121 | .993 | 0.0 | 6.9 | 3.03<br>1.59 | 5.27<br>2.76 | 3 | C | 0 |
| 10105 | 882 | Ukert E | .007 | .156 | .988 | 0.4 | 8.9 | 2.95 | 5.13 | 1 | C | 0 |
| 10107 | | Ukert Y | .004 | .175 | .985 | 0.2 | 10.0 | 2.07 | 3.60 | 1 | C | 0 |
| 10114 | | Ukert R | .012 | .142 | .990 | 0.6 | 8.1 | 10.05 | 17.47 | 5f | C | 0 |
| 10123 | 879 | Ukert | .024 | .134 | .991 | 1.3 | 7.7 | 13.95 | 24.25 | 1 | C | R |
| 10124 | 881 | Ukert B | .023 | .145 | .989 | 1.3 | 8.3 | 11.87 | 20.63 | 4f | C | 0 |
| 10125 | 880 | Ukert A | .024 | .152 | .988 | 1.3 | 8.7 | 5.72 | 9.94 | 2 | C | 0 |
| 10133 | | Ukert N | .035 | .132 | .991 | 2.0 | 7.5 | 9.48 | 16.48 | 4f | C | 0 |
| 10133A | | Ukert M | .039 | .138 | .990 | 2.2 | 7.9 | 14.82<br>12.12 | 25.76<br>21.07 | 4f | C | 0 |
| 10136 | | Ukert X | .032 | .160 | .987 | 1.8 | 9.2 | 1.80 | 3.13 | 1 | C | 0 |
| 10142 | | | .044 | .122 | .992 | 2.5 | 7.0 | 10.17 | 17.68 | 4f | aMC | 0 |
| 10146 | | Ukert W | .040 | .165 | .985 | 2.3 | 9.4 | 1.78 | 3.09 | 1 | C | 0 |
| 10153 | | Ukert P | .051 | .135 | .990 | 2.9 | 7.7 | 2.81 | 4.88 | 1 | C | 0 |
| 10155 | | Ukert V | .056 | .152 | .987 | 3.2 | 8.7 | 1.66 | 2.89 | 2 | C | 0 |
| 10161 | | Ukert K | .066 | .112 | .992 | 3.8 | 6.4 | 2.17 | 3.77 | 1 | pM | 0 |
| 10179 | 871 | Hyginus D | .074 | .198 | .977 | 4.3 | 11.4 | 2.68 | 4.66 | 1 | pM | 0 |
| 10183 | 869 | Hyginus B | .088 | .132 | .987 | 5.0 | 7.5 | 3.35 | 5.82 | 1 | pM | 0 |
| 10191 | 867 | Hyginus A | .098 | .110 | .989 | 5.6 | 6.3 | 4.71 | 8.19 | 1 | pM | 0 |
| 10248 | | | .044 | .288 | .957 | 2.6 | 16.7 | 2.20 | 3.82 | 2 | pM | 0 |
| 10248A | | | .049 | .288 | .956 | 2.9 | 16.7 | 2.07 | 3.60 | 2 | pM | 0 |
| 10249 | | | .043 | .290 | .956 | 2.5 | 16.8 | 2.25 | 3.91 | 2 | pM | 0 |
| 10279 | 800 | Manilius F | .079 | .292 | .953 | 4.7 | 16.9 | 4.91 | 8.53 | 2 | pMC | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10299 | | | + .099 | + .292 | + .951 | + 5.9 | + 16.9 | 2.66 | 4.62 | 2 | C | 0 |
| 10300 | | Marco Polo S | .000 | .306 | .952 | 0.0 | 17.8 | 12.07 | 20.98 | 5 | C | 0 |
| 10300A | | | .000 | .302 | .953 | 0.0 | 17.5 | 2.23 | 3.88 | 2 | C | 0 |
| 10328 | | Conon Y | .030 | .380 | .924 | 1.8 | 22.3 | 2.44 | 4.24 | 1 | C | 0 |
| 10333 | | Conon Z | .037 | .332 | .943 | 2.2 | 19.3 | 3.65 | 6.34 | 2 | C | 0 |
| 10336 | 891 | Conon | .032 | .369 | .929 | 1.9 | 21.6 | 12.41 | 21.57 | 1 | C | 0 |
| 10338 | | | .037 | .385 | .922 | 2.2 | 22.6 | 2.62 | 4.55 | 1 | C | 0 |
| 10352 | | Conon W | .051 | .321 | .946 | 3.0 | 18.7 | 2.44 | 4.24 | 1 | C | 0 |
| 10373 | 892 | Conon A | .072 | .336 | .939 | 4.3 | 19.6 | 3.72 | 6.47 | 1 | C | 0 |
| 10387 | 896 | Aratus A | .081 | .374 | .924 | 5.0 | 21.9 | 5.76 | 10.01 | 2 | C | 0 |
| 10390 | | | .095 | .307 | .947 | 5.7 | 17.8 | 3.08 | 5.35 | 1 | C | 0 |
| 10390A | | | .096 | .302 | .948 | 5.7 | 17.5 | 2.04 | 3.55 | 2 | C | 0 |
| 10395 | | Sulp. Gall. H | .093 | .352 | .931 | 5.7 | 20.6 | 3.02 | 5.25 | 2 | C | 0 |
| 10442 | | Hadley C | .044 | .430 | .902 | 2.7 | 25.4 | 3.35 | 5.82 | 1 | pM | 0 |
| 10446 | | | .041 | .463 | .885 | 2.6 | 27.5 | 2.01 | 3.49 | 1 | pMC | 0 |
| 10470 | 895 | Aratus | .072 | .400 | .914 | 4.5 | 23.5 | 6.10 | 10.60 | 1 | C | 0 |
| 10476 | 897A | Hadley B | .073 | .466 | .882 | 4.7 | 27.7 | 5.01 | 8.71 | 1 | C | 0 |
| 10480 | | Aratus B | .087 | .410 | .908 | 5.4 | 24.2 | 3.97 | 6.90 | 2 | C | 0 |
| 10480A | | | .086 | .407 | .909 | 5.4 | 24.0 | 2.78 | 4.83 | 2 | C | 0 |
| 10491 | | | .093 | .417 | .904 | 5.8 | 24.6 | 2.64 | 4.59 | 2 | C | 0 |
| 10515 | 917 | Aristillus | .018 | .557 | .830 | 1.2 | 33.8 | 31.84 | 55.34 | 1 | pM | PP |
| 10518 | | | .012 | .584 | .812 | 0.8 | 35.7 | 18.27 | 31.76 | 5f | aM | 0 |
| 10521 | 909 | Autolycus | .022 | .510 | .860 | 1.4 | 30.6 | 22.53 | 39.16 | 1 | pM | pp |
| 10531 | 909A | Autolycus A | .033 | .514 | .857 | 2.2 | 30.9 | 2.13 | 3.70 | 1 | pM | 0 |
| 10565 | 917A | Aristillus A | .066 | .553 | .831 | 4.5 | 33.5 | 2.59 | 4.50 | 1 | pM | 0 |
| 10581 | | Autolycus K | .081 | .518 | .852 | 5.4 | 31.1 | 1.72 | 2.99 | 1 | pM | 0 |
| 10626 | | Cassini Y | .028 | .668 | .744 | 2.1 | 41.9 | 2.34 | 4.07 | 1 | pM | 0 |
| 10628 | | Cassini Z | .029 | .687 | .726 | 2.2 | 43.3 | 2.29 | 3.98 | 1 | C | 0 |
| 10646 | 936 | Cassini M | .049 | .660 | .750 | 3.7 | 41.2 | 4.98 | 8.66 | 1 | pM | 0 |
| 10654 | 931 | Cassini B | .052 | .642 | .765 | 3.8 | 39.9 | 5.51 | 9.58 | 1 | pM | 0 |
| 10657 | | Cassini W | .055 | .673 | .738 | 4.2 | 42.2 | 3.18 | 5.53 | 1 | pM | 0 |
| 10658 | | | .050 | .680 | .732 | 3.9 | 42.8 | 29.62 | 51.48 | 5f | aMC | 0 |
| 10659 | 935A | Cassini L | .055 | .694 | .718 | 4.3 | 43.9 | 3.62 | 6.29 | 2 | C | 0 |
| 10664 | 930 | Cassini A | .063 | .649 | .758 | 4.7 | 40.4 | 9.80 | 17.03 | 1 | pM | 0 |
| 10664A | 929 | Cassini | .061 | .646 | .761 | 4.5 | 40.2 | 32.52 | 56.52 | 3f | aM | 0 |
| 10667 | 936A | Cassini N | .066 | .678 | .732 | 5.1 | 42.6 | 2.76 | 4.80 | 3 | C | 0 |
| 10680 | 923 | Theaetetus | .084 | .602 | .794 | 6.0 | 37.0 | 14.28 | 24.82 | 1 | pM | 0 |
| 10695 | 934 | Cassini F | .096 | .654 | .750 | 7.2 | 40.8 | 4.10 | 7.13 | 1 | pM | 0 |
| 10698 | 933 | Cassini E | .093 | .681 | .726 | 7.2 | 42.9 | 6.34 | 11.02 | 1 | C | 0 |
| 10703 | | Trouvelot G | .006 | .736 | .677 | 0.5 | 47.3 | 3.10 | 5.39 | 3 | C | 0 |
| 10706 | 985B | Protagoras E | .006 | .760 | .650 | 0.5 | 49.4 | 3.55 | 6.17 | 1 | C | 0 |
| 10715 | 984 | Trouvelot D | .012 | .751 | .660 | 1.0 | 48.6 | 9.18 | 15.96 | 4 | C | 0 |
| 10720 | | Cassini P | .023 | .704 | .710 | 1.8 | 44.7 | 2.40 | 4.17 | 1 | C | 0 |
| 10736 | | | .037 | .766 | .642 | 3.2 | 49.9 | 2.22 | 3.86 | 2 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10737 | | | + .032 | + .771 | + .636 | + 2.8 | + 50.4 | 2.71 | 4.71 | 2 | C | 0 |
| 10746 | | | .041 | .765 | .643 | 3.6 | 49.9 | 2.94 | 5.11 | 1 | C | 0 |
| 10750 | 936B | Cassini K | .050 | .708 | .704 | 4.0 | 45.0 | 1.81 | 3.15 | 2 | C | 0 |
| 10756 | 968D | Trouvelot H | .051 | .764 | .643 | 4.5 | 49.8 | 2.83 | 4.92 | 1 | C | 0 |
| 10757 | | | .057 | .773 | .632 | 5.1 | 50.6 | 2.05 | 3.56 | 1 | C | 0 |
| 10758 | | | .055 | .783 | .620 | 5.0 | 51.5 | 2.01 | 3.49 | 1 | C | 0 |
| 10759 | | | .056 | .792 | .608 | 5.2 | 52.3 | 2.11 | 3.67 | 2 | C | 0 |
| 10760 | 935 | Cassini G | .068 | .703 | .708 | 5.4 | 44.6 | 2.89 | 5.02 | 1 | C | 0 |
| 10765 | 968 | Trouvelot | .066 | .758 | .649 | 5.8 | 49.2 | 5.20 | 9.04 | 1 | C | 0 |
| 10778 | 968A | Egede G | .074 | .787 | .612 | 6.8 | 51.9 | 3.83 | 6.66 | 2 | pMC | 0 |
| 10797 | 966 | Egede B | .098 | .771 | .629 | 8.8 | 50.4 | 4.33 | 7.53 | 1 | pM | 0 |
| 10797A | | | .091 | .777 | .623 | 8.3 | 50.9 | 2.01 | 3.49 | 1 | pM | 0 |
| 10802 | (1080) | Archytas G | .005 | .825 | .565 | 0.5 | 55.5 | 3.92 | 6.81 | 1 | pM | 0 |
| 10802A | | | .004 | .823 | .568 | 0.4 | 55.3 | 2.56 | 4.45 | 1 | pM | 0 |
| 10803 | | Archytas L | .009 | .830 | .558 | 0.9 | 56.0 | 2.53 | 4.40 | 1 | pM | 0 |
| 10827 | 971A | Archytas B | .026 | .877 | .480 | 3.1 | 61.2 | 21.22 | 36.88 | 4f | aMC | 0 |
| 10829 | 987B | W. Bond D | .025 | .895 | .445 | 3.2 | 63.5 | 3.72 | 6.47 | 1 | C | 0 |
| 10839 | | | .038 | .891 | .452 | 4.8 | 62.9 | 20.61 | 35.82 | 4f | C | 0 |
| 10840 | | | .045 | .800 | .598 | 4.3 | 53.1 | 2.36 | 4.10 | 1 | pM | 0 |
| 10841 | | | .040 | .816 | .577 | 3.9 | 54.6 | 2.16 | 3.75 | 1 | pM | 0 |
| 10845 | 971 | Archytas | .045 | .855 | .517 | 4.9 | 58.7 | 18.22 | 31.67 | 2 | pMC | p |
| 10847 | | Archytas W | .043 | .876 | .480 | 5.1 | 61.1 | 3.49 | 6.07 | 1 | pMC | 0 |
| 10853 | 985A | Protagoras B | .055 | .832 | .552 | 5.6 | 56.3 | 2.60 | 4.52 | 1 | pM | 0 |
| 10859 | | W. Bond G | .054 | .891 | .451 | 6.8 | 62.9 | 2.30 | 4.00 | 1 | C | 0 |
| 10868 | | Archytas K | .061 | .888 | .456 | 7.6 | 62.6 | 8.44 | 14.67 | 4 | C | 0 |
| 10869 | | W. Bond E | .069 | .897 | .437 | 8.9 | 63.7 | 14.87 | 25.85 | 4f | C | 0 |
| 10872 | 985 | Protagoras | .071 | .828 | .556 | 7.2 | 55.8 | 12.46 | 21.66 | 1 | pM | p |
| 10878 | | Archytas U | .073 | .889 | .452 | 9.1 | 62.7 | 4.47 | 7.77 | 1 | C | 0 |
| 10878A | | | .079 | .880 | .468 | 9.5 | 61.6 | 2.47 | 4.29 | 1 | C | 0 |
| 10881 | | | .085 | .818 | .569 | 8.4 | 54.8 | 2.80 | 4.87 | 2 | pM | 0 |
| 10881A | | | .082 | .813 | .576 | 8.0 | 54.3 | 2.31 | 4.02 | 1 | pM | 0 |
| 10881B | | | .087 | .812 | .577 | 8.5 | 54.2 | 2.77 | 4.81 | 2 | pM | 0 |
| 10899 | 983 | Archytas D | .092 | .896 | .434 | 11.9 | 63.6 | 24.62 | 42.79 | 4 | C | 0 |
| 10902 | 1042 | Epigenes D | .000 | .929 | .370 | 0.0 | 68.2 | 5.38 | 9.35 | 2 | pM | 0 |
| 10903 | | | .005 | .935 | .355 | 0.8 | 69.2 | 2.94 | 5.11 | 2 | C | 0 |
| 10904 | | Barrow G | .001 | .940 | .341 | 0.1 | 70.0 | 17.44 | 30.31 | 3 | C | 0 |
| 10907 | | | .003 | .976 | .218 | 0.7 | 77.4 | 5.67 | 9.86 | 4 | C | 0 |
| 10907A | 1015A | Challis A | .008 | .976 | .218 | 2.1 | 77.4 | 18.19 | 31.62 | 4f | C | 0 |
| 10909 | 1018 | Gioja | .004 | .993 | .118 | 1.9 | 83.2 | 23.99 | 41.70 | 3f | C | 0 |
| 10909A | | | .005 | .998 | .063 | 4.5 | 86.3 | 5.89 | 10.24 | 1 | C | 0 |
| 10913 | | Barrow F | .011 | .934 | .357 | 1.7 | 69.0 | 10.67 | 18.55 | 3 | C | 0 |
| 10917 | | Scoresby K | .012 | .972 | .235 | 2.9 | 76.4 | 13.03 | 22.65 | 2 | C | 0 |
| 10918 | | | .015 | .989 | .147 | 5.8 | 81.4 | 5.44 | 9.46 | 2 | C | 0 |
| 10919 | 1018A | Gioja A | .014 | .997 | .076 | 10.4 | 85.5 | 47.87 | 83.21 | 3f | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10919A | 1018B | Gioja B | + .011 | + .999 | + .043 | + 14.2 | + 87.4 | 48.51 | 84.32 | 3f | C | 0 |
| 10920 | 986 | W. Bond | .026 | .909 | .416 | 3.5 | 65.3 | 90.61 | 157.49 | 4 | C | 0 |
| 10923 | | Barrow E | .021 | .933 | .359 | 3.3 | 68.9 | 9.62 | 16.72 | 3 | C | 0 |
| 10924 | 1006 | Barrow A | .022 | .943 | .332 | 3.7 | 70.5 | 15.42 | 26.80 | 1 | C | 0 |
| 10928 | 1016 | Main | .028 | .988 | .152 | 10.4 | 81.1 | 29.52 | 51.31 | 3f | C | 0 |
| 10928A | 1015 | Challis | .029 | .984 | .176 | 9.3 | 79.7 | 31.98 | 55.59 | 3f | C | 0 |
| 10933 | | Barrow H | .037 | .936 | .350 | 6.0 | 69.3 | 3.06 | 5.32 | 1 | C | 0 |
| 10936 | | Scoresby M | .034 | .968 | .249 | 7.7 | 75.4 | 30.83 | 53.59 | 4f | C | 0 |
| 10937 | | Scoresby Q | .033 | .976 | .215 | 8.7 | 77.4 | 23.15 | 40.24 | 4 | C | 0 |
| 10938 | | | .036 | .980 | .196 | 10.4 | 78.5 | 2.95<br>6.43 | 5.13<br>11.18 | 3 | C | 0 |
| 10944 | 1005 | Barrow | .043 | .947 | .318 | 7.6 | 71.2 | 53.42 | 92.85 | 3f | C | 0 |
| 10944A | | | .046 | .947 | .318 | 8.2 | 71.2 | 2.03 | 3.53 | 1 | pMC | 0 |
| 10948 | | | .042 | .987 | .155 | 15.1 | 80.7 | 3.95 | 6.87 | 2 | C | 0 |
| 10949 | | Gioja C | .047 | .996 | .076 | 31.7 | 84.8 | 18.38 | 31.95 | 4 | C | 0 |
| 10949A | | Gioja D | .044 | .997 | .064 | 34.6 | 85.5 | 14.45 | 25.12 | 4 | C | 0 |
| 10950 | 987 | W. Bond B | .055 | .906 | .420 | 7.4 | 64.9 | 8.87 | 15.42 | 1 | C | 0 |
| 10951 | 987A | W. Bond C | .059 | .911 | .408 | 8.2 | 65.6 | 4.08 | 7.09 | 1 | C | 0 |
| 10951A | | | .055 | .918 | .393 | 7.9 | 66.6 | 2.02 | 3.51 | 1 | C | 0 |
| 10952 | | Barrow N | .052 | .927 | .371 | 7.9 | 67.9 | 3.62 | 6.29 | 2 | C | 0 |
| 10955 | 1009 | Barrow C | .056 | .956 | .288 | 11.0 | 72.9 | 16.73 | 29.08 | 4f | C | 0 |
| 10956 | | Scoresby W | .052 | .963 | .264 | 11.1 | 74.3 | 5.71 | 9.92 | 3 | C | 0 |
| 10956A | | | .050 | .966 | .254 | 11.1 | 75.0 | 5.83 | 10.13 | 2 | C | 0 |
| 10956B | | | .056 | .964 | .260 | 12.1 | 74.5 | 6.18 | 10.74 | 4 | C | 0 |
| 10957 | 1013 | Scoresby | .052 | .978 | .202 | 14.4 | 77.9 | 32.12 | 55.83 | 1 | C | pp |
| 10957A | | Scoresby P | .054 | .970 | .237 | 12.8 | 75.9 | 13.82 | 24.02 | 3 | C | 0 |
| 10957B | | | .052 | .978 | .202 | 14.4 | 77.9 | 3.80 | 6.60 | 1 | C | 0 |
| 10958A | 1014A | Scoresby L | .057 | .988 | .144 | 21.6 | 81.1 | 7.20 | 12.51 | 1 | C | 0 |
| 10959 | 1014C | Scoresby N | .050 | .991 | .124 | 21.9 | 82.3 | 5.79 | 10.06 | 2 | C | 0 |
| 10962 | | Barrow M | .060 | .924 | .378 | 9.0 | 67.5 | 3.96 | 6.88 | 2 | C | 0 |
| 10964 | 1007 | Barrow B | .062 | .940 | .335 | 10.4 | 70.0 | 9.44 | 16.41 | 4f | C | 0 |
| 10966 | | Meton E | .067 | .966 | .250 | 15.0 | 75.0 | 24.39 | 42.39 | 4f | C | 0 |
| 10968 | | Scoresby AA | .065 | .985 | .160 | 22.1 | 80.0 | 3.28 | 5.70 | 1 | C | 0 |
| 10970 | | W. Bond F | .071 | .901 | .428 | 9.4 | 64.2 | 4.90 | 8.52 | 2 | C | 0 |
| 10973 | | Barrow K | .070 | .935 | .348 | 11.3 | 69.2 | 30.20 | 52.49 | 4f | C | 0 |
| 10974 | | Barrow KB | .075 | .940 | .333 | 12.6 | 70.0 | 2.68 | 4.66 | 1 | C | 0 |
| 10975 | | Meton F | .076 | .951 | .300 | 14.2 | 71.9 | 29.07 | 50.53 | 4f | C | 0 |
| 10978 | 1014 | Scoresby A | .076 | .986 | .148 | 27.1 | 80.4 | 20.92 | 36.36 | 2 | C | ? |
| 10979 | | Nansen F | .077 | .996 | .045 | 59.5 | 84.8 | 35.90 | 62.40 | 3 | C | ? |
| 10983 | | Barrow KA | .080 | .939 | .334 | 13.4 | 69.8 | 3.03 | 5.27 | 2 | C | 0 |
| 10988 | | | .089 | .989 | .118 | 36.9 | 81.4 | 3.41 | 5.93 | 1 | C | 0 |
| 10988A | | | .089 | .983 | .161 | 28.9 | 79.4 | 2.79 | 4.85 | 1 | C | 0 |
| 10992 | | | .092 | .921 | .379 | 13.6 | 67.0 | 13.92 | 24.20 | 4 | C | 0 |
| 10996 | 988 | Meton | .092 | .960 | .264 | 19.1 | 73.7 | 69.91 | 121.51 | 5f | C | 0 |
| 10997 | | | .097 | .977 | .190 | 27.0 | 77.6 | 3.30 | 5.74 | 2 | C | 0 |
| 10998 | | Euctemon M | .094 | .987 | .130 | 35.7 | 80.7 | 46.39 | 80.63 | 4 | C | 0 |
| 10999 | | Nansen B | .098 | .991 | .091 | 47.0 | 82.3 | 11.15 | 19.38 | 3 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10999A | | Nansen C | + .094 | + .994 | + .056 | + 59.2 | + 83.7 | 18.67 | 32.45 | 3 | C | ? |
| 10999B | | Nansen D | .099 | .994 | .047 | 64.8 | 83.7 | 9.84 | 17.10 | 3 | C | 0 |
| 11000 | | | .103 | .009 | .995 | 5.9 | 0.5 | 2.27 | 3.95 | 2 | C | 0 |
| 11001 | 835A | Rhaeticus D | .108 | .015 | .994 | 6.2 | 0.8 | 4.15 | 7.21 | 2 | C | 0 |
| 11001A | | Rhaeticus DA | .105 | .011 | .994 | 6.0 | 0.6 | 2.35 | 4.08 | 2 | C | 0 |
| 11001B | | | .102 | .011 | .995 | 5.8 | 0.6 | 3.61 | 6.27 | 2 | C | 0 |
| 11004 | | Dembowski B | .109 | .044 | .993 | 6.2 | 2.5 | 4.61 | 8.01 | 2 | C | 0 |
| 11006 | 856 | Triesnecker D | .104 | .061 | .993 | 5.9 | 3.4 | 3.48 | 6.05 | 1 | C | 0 |
| 11006A | | Agrippa G | .107 | .068 | .992 | 6.1 | 3.8 | 7.64 | 13.28 | 4f | aMC | 0 |
| 11011 | | Rhaeticus G | .112 | .017 | .994 | 6.4 | 0.9 | 3.42 | 5.94 | 2 | C | 0 |
| 11011A | | | .116 | .018 | .993 | 6.6 | 1.0 | 2.39 | 4.15 | 2 | C | 0 |
| 11012 | 835 | Rhaeticus B | .119 | .028 | .992 | 6.8 | 1.6 | 3.35 | 5.82 | 1 | C | 0 |
| 11015 | 825A | Dembowski A | .113 | .053 | .992 | 6.4 | 3.0 | 3.14 | 5.46 | 1 | C | 0 |
| 11016 | 827 | Agrippa D | .116 | .066 | .991 | 6.6 | 3.7 | 13.16 | 22.87 | 4 | aMC | 0 |
| 11021 | | | .128 | .015 | .992 | 7.3 | 0.8 | 2.10 | 3.65 | 2 | C | 0 |
| 11022 | | | .122 | .022 | .992 | 7.0 | 1.2 | 2.26 | 3.93 | 1 | C | 0 |
| 11023 | | Dembowski C | .128 | .036 | .991 | 7.3 | 2.0 | 9.01 | 15.66 | 4f | C | 0 |
| 11025 | 825 | Dembowski | .127 | .050 | .991 | 7.3 | 2.8 | 16.85 | 29.29 | 4f | C | 0 |
| 11030 | | | .136 | .005 | .991 | 7.8 | 0.2 | 9.35 | 16.25 | 4 | C | 0 |
| 11031 | | | .134 | .019 | .991 | 7.7 | 1.0 | 4.90 | 8.52 | 3 | C | 0 |
| 11040 | | | .144 | .006 | .990 | 8.2 | 0.3 | 5.17 | 8.99 | 3 | C | 0 |
| 11041 | 831A | Godin D | .144 | .017 | .989 | 8.2 | 0.9 | 3.05 | 5.30 | 1 | C | 0 |
| 11042 | 831 | Godin C | .146 | .027 | .989 | 8.3 | 1.5 | 2.51 | 4.36 | 1 | C | 0 |
| 11048 | 827B | Agrippa E | .147 | .090 | .985 | 8.4 | 5.1 | 2.82 | 4.90 | 1 | C | 0 |
| 11050 | | Lade W | .150 | .004 | .989 | 8.6 | 0.2 | 2.15 | 3.74 | 1 | C | 0 |
| 11050A | | | .153 | .000 | .988 | 8.8 | 0.0 | 4.46 | 7.75 | 3f | C | 0 |
| 11050B | | Lade C | .158 | .000 | .987 | 9.0 | 0.0 | 13.35 | 23.20 | 4 | C | 0 |
| 11051 | | | .153 | .018 | .988 | 8.8 | 1.0 | 2.21 | 3.84 | 1 | C | 0 |
| 11057 | | | .154 | .078 | .985 | 8.8 | 4.4 | 2.00 | 3.48 | 1 | C | 0 |
| 11058 | | | .150 | .085 | .985 | 8.6 | 4.8 | 2.55 | 4.43 | 2 | C | 0 |
| 11059 | 827A | Agrippa S | .154 | .092 | .984 | 8.8 | 5.2 | 18.52 | 32.19 | 4f | C | 0 |
| 11060 | | | .168 | .007 | .986 | 9.6 | 0.4 | 2.29 | 3.98 | 2 | C | 0 |
| 11064 | 829 | Godin A | .168 | .047 | .985 | 9.6 | 2.6 | 5.38 | 9.35 | 1 | C | 0 |
| 11070 | | Lade B | .171 | .001 | .985 | 9.8 | 0.0 | 14.03 | 24.39 | 4 | C | 0 |
| 11071 | 830 | Godin B | .171 | .013 | .985 | 9.8 | 0.7 | 6.88 | 11.96 | 1 | C | 0 |
| 11073 | 828 | Godin | .177 | .032 | .984 | 10.2 | 1.8 | 20.00 | 34.76 | 2 | C | P |
| 11087 | 821 | Agrippa | .182 | .072 | .981 | 10.5 | 4.1 | 26.49 | 46.04 | 2 | C | P |
| 11088 | | Agrippa H | .185 | .083 | .979 | 10.6 | 4.7 | 3.56 | 6.19 | 2 | C | 0 |
| 11091 | | | .195 | .014 | .981 | 11.2 | 0.8 | 11.19 | 19.45 | 4 | C | 0 |
| 11093 | | Godin G | .190 | .034 | .981 | 10.9 | 1.9 | 3.88 | 6.74 | 2 | C | 0 |
| 11097 | 827C | Agrippa F | .197 | .076 | .977 | 11.3 | 4.3 | 3.70 | 6.43 | 2 | C | 0 |
| 11103 | 866 | Hyginus | .109 | .135 | .985 | 6.3 | 7.7 | 6.13 | 10.65 | 3f | pM | 0 |
| 11109 | 870B | Hyginus G | .102 | .190 | .976 | 5.9 | 10.9 | 2.19 | 3.81 | 1 | pMC | 0 |
| 11113 | | | .110 | .138 | .984 | 6.3 | 7.9 | 3.80<br>2.10 | 6.60<br>3.65 | 3 | pM | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11120 | 870C | Hyginus H | + .122 | + .104 | + .987 | + 7.0 | + 5.9 | 2.00 | 3.48 | 1 | pM | 0 |
| 11128 | | Hyginus N | .127 | .183 | .975 | 7.4 | 10.5 | 6.23 | 10.83 | 3 | aMC | 0 |
| 11131 | 875A | Hyginus S | .138 | .112 | .984 | 7.9 | 6.4 | 16.45 | 28.59 | 4 | aMC | pp |
| 11136 | | Hyginus W | .132 | .168 | .977 | 7.6 | 9.6 | 13.43 | 23.34 | 5f | aM | 0 |
| 11138 | | Hyginus NA | .130 | .182 | .975 | 7.5 | 10.4 | 2.94 | 5.11 | 2 | aMC | 0 |
| 11143 | 870 | Hyginus C | .144 | .134 | .980 | 8.3 | 7.7 | 2.80 | 4.87 | 1 | pM | 0 |
| 11143A | 870A | Hyginus F | .148 | .139 | .979 | 8.5 | 7.9 | 2.55 | 4.43 | 1 | pM | 0 |
| 11145 | 868 | Hyginus E | .147 | .152 | .977 | 8.5 | 8.7 | 2.05 | 3.56 | 2 | pMC | 0 |
| 11157 | 810B | Boscovich B | .158 | .170 | .973 | 9.2 | 9.7 | 2.75 | 4.78 | 1 | pMC | 0 |
| 11160 | 826 | Agrippa B | .164 | .108 | .981 | 9.4 | 6.2 | 2.10 | 3.65 | 2 | pMC | 0 |
| 11164 | 875 | Hyginus Z | .161 | .140 | .977 | 9.3 | 8.0 | 14.53<br>9.41 | 25.26<br>16.36 | 5f | aMC | 0 |
| 11179 | 812A | Boscovich P | .175 | .199 | .964 | 10.2 | 11.4 | 38.59<br>9.60 | 67.08<br>16.69 | 4 | aMC | 0 |
| 11193 | 820 | Silberschlag D | .193 | .131 | .972 | 11.2 | 7.5 | 2.00 | 3.48 | 1 | C | 0 |
| 11197 | 810 | Boscovich | .190 | .171 | .967 | 11.1 | 9.8 | 26.49 | 46.04 | 4f | C | 0 |
| 11198 | | Boscovich F | .194 | .184 | .964 | 11.3 | 10.6 | 2.96 | 5.14 | 2 | C | 0 |
| 11200 | | Manilius DB | .102 | .209 | .973 | 5.9 | 12.0 | 1.48 | 2.57 | 1 | pM | 0 |
| 11208 | | Manilius FA | .106 | .287 | .952 | 6.3 | 16.6 | 2.09 | 3.63 | 1 | C | 0 |
| 11212 | 798 | Manilius D | .119 | .229 | .966 | 7.0 | 13.2 | 3.04 | 5.28 | 1 | pM | 0 |
| 11220 | | Manilius DA | .121 | .207 | .971 | 7.1 | 11.9 | 1.89 | 3.29 | 1 | C | 0 |
| 11228 | 796 | Manilius B | .122 | .286 | .950 | 7.3 | 16.6 | 3.25 | 5.65 | 1 | C | 0 |
| 11254 | 794 | Manilius | .153 | .250 | .956 | 9.0 | 14.4 | 22.21 | 38.60 | 1 | pMC | PP |
| 11266 | 801A | Manilius G | .164 | .267 | .950 | 9.7 | 15.4 | 3.04 | 5.28 | 1 | pMC | 0 |
| 11266A | | Manilius GA | .162 | .261 | .952 | 9.6 | 15.1 | 1.71 | 2.97 | 2 | C | 0 |
| 11270 | 797 | Manilius C | .176 | .209 | .962 | 10.3 | 12.0 | 4.10 | 7.13 | 1 | C | 0 |
| 11273 | | Manilius T | .179 | .231 | .956 | 10.6 | 13.3 | 2.08 | 3.62 | 2 | C | 0 |
| 11280 | 801C | Manilius K | .190 | .207 | .960 | 11.1 | 11.9 | 1.90 | 3.30 | 1 | C | 0 |
| 11283 | | Manilius U | .182 | .238 | .954 | 10.8 | 13.7 | 2.05 | 3.56 | 1 | C | 0 |
| 11287 | | | .185 | .272 | .944 | 11.0 | 15.7 | 2.15 | 3.74 | 1 | C | 0 |
| 11295 | 801 | Manilius N | .193 | .254 | .948 | 11.5 | 14.7 | 29.05 | 50.49 | 4f | aMC | 0 |
| 11298 | | Manilius Z | .195 | .282 | .939 | 11.7 | 16.3 | 1.83 | 3.18 | 1 | pM | 0 |
| 11301 | 799 | Manilius E | .106 | .314 | .943 | 6.4 | 18.3 | 21.25<br>33.34 | 36.94<br>57.95 | 5f | aMC | 0 |
| 11302 | | Manilius EA | .105 | .329 | .938 | 6.3 | 19.2 | 2.58 | 4.48 | 1 | C | 0 |
| 11303 | | Sulp. Gall. G | .104 | .339 | .935 | 6.3 | 19.8 | 3.42 | 5.94 | 1 | C | 0 |
| 11310 | | | .116 | .307 | .945 | 7.0 | 17.8 | 2.03 | 3.53 | 1 | C | 0 |
| 11311 | | | .119 | .310 | .943 | 7.1 | 18.0 | 2.10 | 3.65 | 1 | C | 0 |
| 11326 | | | .127 | .365 | .922 | 7.8 | 21.4 | 2.00 | 3.48 | 1 | C | 0 |
| 11340 | 801B | Manilius H | .143 | .306 | .941 | 8.6 | 17.8 | 1.88 | 3.27 | 1 | pM | 0 |
| 11344 | 607 | Sulp. Gall. M | .142 | .348 | .927 | 8.7 | 20.3 | 2.71 | 4.71 | 1 | C | 0 |
| 11347 | 606A | Sulp. Gall. A | .144 | .375 | .916 | 8.9 | 22.0 | 2.39 | 4.15 | 2 | C | 0 |
| 11350 | 795 | Manilius A | .151 | .303 | .941 | 9.1 | 17.6 | 5.21 | 9.06 | 2 | pMC | 0 |
| 11363 | | | .170 | .339 | .925 | 10.4 | 19.8 | 3.20 | 5.56 | 1 | pMC | 0 |
| 11393 | 606 | Sulpicius Gallus | .191 | .336 | .922 | 11.7 | 19.6 | 7.00 | 12.17 | 1 | pM | 0 |
| 11402 | 897 | Hadley A | .104 | .423 | .900 | 6.5 | 25.0 | 3.30 | 5.74 | 1 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11403 | | | + .103 | + .439 | + .893 | + 6.5 | + 26.0 | 2.85 | 4.95 | 1 | C | 0 |
| 11431 | | Aratus D | .136 | .412 | .901 | 8.5 | 24.3 | 2.21 | 3.84 | 1 | pM | 0 |
| 11450 | 899 | Aratus C | .150 | .407 | .901 | 9.4 | 24.0 | 2.24 | 3.89 | 1 | pM | 0 |
| 11471 | | | .176 | .415 | .893 | 11.1 | 24.5 | 2.54 | 4.41 | 2 | pM | 0 |
| 11486 | 629 | Linné | .181 | .465 | .867 | 11.7 | 27.7 | 1.21 | 2.10 | 1 | pM | 0 |
| 11548 | 750 | Calippus B | .142 | .588 | .796 | 10.1 | 36.0 | 4.28 | 7.44 | 1 | C | 0 |
| 11559 | 750A | Calippus D | .158 | .592 | .790 | 11.3 | 36.2 | 2.10 | 3.65 | 1 | pM | 0 |
| 11588 | 635B | Linné G | .186 | .585 | .789 | 13.2 | 35.8 | 2.60 | 4.52 | 1 | pM | 0 |
| 11595 | 635A | Linné H | .198 | .555 | .808 | 13.7 | 33.7 | 1.82 | 3.16 | 1 | pM | 0 |
| 11600 | 749 | Calippus A | .110 | .602 | .791 | 7.9 | 37.0 | 9.05 | 15.73 | 1 | C | P |
| 11606 | 932 | Cassini C | .101 | .665 | .740 | 7.7 | 41.6 | 7.88 | 13.70 | 1 | pMC | 0 |
| 11609 | | Cassini X | .100 | .694 | .713 | 7.9 | 43.9 | 2.49 | 4.33 | 1 | C | 0 |
| 11618 | | | .111 | .686 | .719 | 8.7 | 43.3 | 2.01 | 3.49 | 1 | C | 0 |
| 11620 | | | .126 | .602 | .788 | 9.0 | 37.0 | 2.31 | 4.02 | 2 | C | 0 |
| 11623 | | Calippus C | .122 | .636 | .762 | 9.0 | 39.4 | 13.20<br>21.40 | 22.94<br>37.20 | 4 | C | 0 |
| 11627 | | | .126 | .673 | .729 | 9.8 | 42.2 | 2.00 | 3.48 | 1 | pM | 0 |
| 11635 | | Calippus F | .131 | .651 | .748 | 9.9 | 40.6 | 3.90 | 6.78 | 1 | C | 0 |
| 11642 | 748 | Calippus | .145 | .629 | .764 | 10.7 | 38.9 | 17.63 | 30.64 | 2 | C | 0 |
| 11656 | | Calippus G | .150 | .660 | .736 | 11.5 | 41.2 | 2.41 | 4.19 | 1 | C | 0 |
| 11662 | | Calippus E | .160 | .628 | .762 | 11.8 | 38.9 | 3.02 | 5.25 | 1 | C | 0 |
| 11667 | 729 | Lamèch | .167 | .679 | .715 | 13.1 | 42.7 | 7.56 | 13.14 | 1 | C | 0 |
| 11668 | 730 | Eudoxus D | .166 | .686 | .708 | 13.1 | 43.3 | 5.51 | 9.58 | 2 | C | 0 |
| 11674 | 746 | Alexander | .178 | .646 | .742 | 13.4 | 40.2 | 46.93 | 81.57 | 4 | C | 0 |
| 11688 | | | .181 | .682 | .709 | 14.3 | 43.0 | 2.01 | 3.49 | 2 | C | 0 |
| 11694 | 746B | Alexander B | .199 | .646 | .737 | 15.1 | 40.2 | 2.27 | 3.95 | 1 | C | 0 |
| 11695 | 746A | Alexander A | .195 | .652 | .733 | 14.9 | 40.6 | 2.41 | 4.19 | 1 | C | 0 |
| 11695A | | | .197 | .658 | .727 | 15.1 | 41.1 | 2.31 | 4.02 | 1 | C | 0 |
| 11697 | | | .192 | .672 | .715 | 15.0 | 42.2 | 2.01 | 3.49 | 2 | C | 0 |
| 11707 | | | .103 | .770 | .630 | 9.2 | 50.3 | 2.21 | 3.84 | 1 | pM | 0 |
| 11707A | | | .107 | .771 | .628 | 9.6 | 50.4 | 2.11 | 3.67 | 1 | pM | 0 |
| 11714 | | | .119 | .744 | .657 | 10.2 | 48.0 | 2.61 | 4.54 | 2 | C | 0 |
| 11716 | 968B | Egede E | .117 | .762 | .637 | 10.4 | 49.6 | 2.19 | 3.81 | 1 | pM | 0 |
| 11717 | | | .118 | .776 | .620 | 10.7 | 50.8 | 2.29 | 3.98 | 1 | pM | 0 |
| 11718 | 965 | Egede A | .113 | .782 | .613 | 10.4 | 51.4 | 7.22 | 12.55 | 1 | pM | 0 |
| 11718A | | | .117 | .786 | .607 | 10.9 | 51.8 | 2.11 | 3.67 | 2 | pM | 0 |
| 11724 | | Egede P | .122 | .740 | .661 | 10.4 | 47.7 | 2.23 | 3.88 | 1 | C | 0 |
| 11725 | 964 | Egede | .122 | .751 | .649 | 10.6 | 48.6 | 21.35 | 37.11 | 3f | aMC | 0 |
| 11726 | | Egede N | .124 | .762 | .636 | 11.0 | 49.6 | 2.15 | 3.74 | 1 | pM | 0 |
| 11727 | | | .130 | .775 | .618 | 11.8 | 50.8 | 2.12 | 3.68 | 1 | pM | 0 |
| 11736 | | Egede M | .139 | .761 | .634 | 12.3 | 49.5 | 2.55 | 4.43 | 1 | pMC | 0 |
| 11738 | 968C | Egede F | .134 | .787 | .602 | 12.5 | 51.9 | 2.31 | 4.02 | 1 | pMC | 0 |
| 11742 | | | .142 | .726 | .673 | 11.9 | 46.5 | 2.21 | 3.84 | 1 | C | 0 |
| 11746 | 967 | Egede C | .144 | .767 | .625 | 12.9 | 50.0 | 3.09 | 5.37 | 1 | pMC | 0 |
| 11750 | | | .153 | .700 | .698 | 12.3 | 44.4 | 2.00 | 3.48 | 1 | pM | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11759 | | | + .150 | + .796 | + .586 | + 14.3 | + 52.7 | 2.52 | 4.38 | 2 | pMC | 0 |
| 11759A | | | .155 | .797 | .584 | 14.8 | 52.8 | 2.62 | 4.55 | 2 | pMC | 0 |
| 11763 | | | .165 | .738 | .654 | 14.1 | 47.5 | 2.31 | 4.02 | 1 | C | 0 |
| 11773 | 724A | Aristoteles D | .172 | .736 | .655 | 14.7 | 47.3 | 3.45 | 6.00 | 1 | C | 0 |
| 11783 | | | .181 | .731 | .658 | 15.3 | 46.9 | 2.20 | 3.82 | 2 | C | 0 |
| 11796 | 710 | Aristoteles | .191 | .768 | .611 | 17.3 | 50.1 | 50.20 | 87.26 | 2 | pM | pp |
| 11809 | | Archytas DA | .103 | .898 | .428 | 13.5 | 63.8 | 4.87 | 8.46 | 1 | C | 0 |
| 11810 | | | .115 | .807 | .579 | 11.2 | 53.8 | 2.01 | 3.49 | 1 | pM | 0 |
| 11811 | | | .118 | .811 | .573 | 11.6 | 54.1 | 20.99 | 36.48 | 5f | aM | 0 |
| 11816 | | | .116 | .864 | .490 | 13.3 | 59.7 | 17.82 | 30.97 | 4f | aM | 0 |
| 11829 | | | .123 | .894 | .431 | 15.9 | 63.3 | 3.09 | 5.37 | 1 | C | 0 |
| 11836 | 699 | C. Mayer B | .132 | .867 | .481 | 15.3 | 60.1 | 20.93 | 36.38 | 3 | C | p |
| 11837 | 697A | C. Mayer E | .134 | .876 | .463 | 16.1 | 61.1 | 6.81 | 11.84 | 1 | C | 0 |
| 11839 | 697 | C. Mayer | .134 | .893 | .430 | 17.3 | 63.2 | 21.85 | 37.98 | 2 | C | P |
| 11845 | 698 | Sheepshanks | .150 | .859 | .490 | 17.0 | 59.2 | 14.13 | 24.56 | 1 | pM | p? |
| 11847 | | | .148 | .878 | .455 | 18.0 | 61.4 | 6.70 | 11.65 | 4f | aMC | 0 |
| 11848 | 699A | C. Mayer D | .149 | .884 | .443 | 18.5 | 62.1 | 37.71 | 65.55 | 4f | aMC | 0 |
| 11850 | | | .159 | .802 | .576 | 15.4 | 53.3 | 2.72 | 4.73 | 2 | pM | 0 |
| 11858 | 699B | C. Mayer F | .157 | .883 | .442 | 19.5 | 62.0 | 3.81 | 6.62 | 1 | pMC | 0 |
| 11861 | | | .161 | .819 | .551 | 16.2 | 54.9 | 2.23 | 3.88 | 1 | pM | 0 |
| 11863 | 700 | Sheepshanks C | .169 | .838 | .519 | 18.0 | 56.9 | 6.02 | 10.46 | 1 | pM | 0 |
| 11866 | 698A | Sheepshanks A | .162 | .865 | .475 | 18.8 | 59.8 | 3.85 | 6.69 | 1 | pM | 0 |
| 11869 | | | .168 | .892 | .420 | 21.8 | 63.1 | 18.29 | 31.79 | 4f | aMC | 0 |
| 11872 | 725B | Galle B | .170 | .824 | .540 | 17.4 | 55.4 | 4.24 | 7.37 | 1 | pM | 0 |
| 11872A | | | .172 | .821 | .544 | 17.5 | 55.1 | 3.38 | 5.87 | 1 | pM | 0 |
| 11876 | 698B | Sheepshanks B | .178 | .868 | .464 | 21.0 | 60.2 | 2.79 | 4.85 | 1 | pM | 0 |
| 11877 | | | .170 | .879 | .445 | 20.8 | 61.5 | 11.59 | 20.15 | 4f | aMC | 0 |
| 11880B | | | .182 | .802 | .569 | 17.7 | 53.3 | 2.09 | 3.63 | 2 | pM | 0 |
| 11885 | | | .184 | .857 | .481 | 20.9 | 58.9 | 2.01 | 3.49 | 1 | pM | 0 |
| 11896 | 696A | Kane F | .199 | .862 | .466 | 23.1 | 59.5 | 4.11 | 7.14 | 1 | pM | 0 |
| 11899 | 696 | Kane | .198 | .891 | .409 | 25.8 | 62.9 | 31.45 | 54.66 | 3f | aMC | 0 |
| 11904 | 991 | Meton B | .100 | .947 | .305 | 18.1 | 71.2 | 3.65 | 6.34 | 1 | pMC | 0 |
| 11904A | | Meton C | .108 | .942 | .318 | 18.7 | 70.3 | 44.48 | 77.31 | 4f | C | 0 |
| 11907 | 999F | Euctemon H | .106 | .971 | .214 | 26.3 | 76.1 | 9.03 | 15.70 | 3 | C | 0 |
| 11907A | | | .102 | .976 | .192 | 27.9 | 77.4 | 7.32 | 12.72 | 4 | C | 0 |
| 11908 | | Euctemon L | .110 | .981 | .160 | 34.5 | 78.8 | 39.72 | 69.04 | 3 | C | 0 |
| 11909 | | Nansen E | .105 | .994 | .031 | 73.7 | 83.7 | 6.81 | 11.84 | 2 | C | 0 |
| 11910 | | C. Mayer H | .111 | .900 | .422 | 14.7 | 64.1 | 24.78 | 43.07 | 4 f | C | 0 |
| 11910A | | | .117 | .905 | .409 | 15.9 | 64.8 | 3.52 | 6.12 | 2 | C | 0 |
| 11912 | | Meton W | .115 | .923 | .367 | 17.3 | 67.3 | 4.22 | 7.33 | 1 | C | 0 |
| 11916 | | Euctemon K | .116 | .970 | .214 | 28.5 | 75.9 | 4.00 | 6.95 | 1 | pMC | 0 |
| 11918 | 999C | Euctemon J | .110 | .984 | .140 | 38.1 | 79.7 | 37.16 | 64.59 | 2 | C | p |
| 11919 | | Nansen A | .114 | .992 | .054 | 64.5 | 82.7 | 26.40 | 45.89 | 2 | C | ? |
| 11925 | | Meton D | .128 | .952 | .278 | 24.7 | 72.1 | 44.85 | 77.96 | 4f | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11927 | 997 | Euctemon | + .122 | + .972 | + .201 | + 31.2 | + 76.4 | 35.74 | 62.12 | 3f | C | 0 |
| 11928 | | | .126 | .980 | .154 | 39.2 | 78.5 | 6.50 | 11.30 | 3 | C | 0 |
| 11935 | | | .132 | .959 | .251 | 27.7 | 73.5 | 11.55 | 20.08 | 5 | C | 0 |
| 11935A | | | .136 | .957 | .256 | 27.9 | 73.1 | 6.18 | 10.74 | 3 | C | 0 |
| 11936 | | Euctemon N | .137 | .968 | .210 | 33.0 | 75.4 | 4.32 | 7.51 | 1 | C | 0 |
| 11937 | | | .130 | .974 | .186 | 35.0 | 76.9 | 4.44 | 7.72 | 2 | C | 0 |
| 11938 | 999E | Euctemon G | .130 | .981 | .144 | 42.0 | 78.8 | 5.26 | 9.14 | 1 | C | 0 |
| 11938A | 999D | Euctemon F | .132 | .984 | .120 | 47.8 | 79.7 | 12.61 | 21.92 | 1 | C | ? |
| 11938B | | Euctemon X | .139 | .985 | .102 | 53.6 | 80.0 | 5.37 | 9.33 | 2 | C | 0 |
| 11942 | | Neison D | .144 | .927 | .346 | 22.5 | 67.9 | 3.18 | 5.53 | 2 | C | 0 |
| 11944 | | | .149 | .942 | .301 | 26.3 | 70.3 | 4.30 | 7.47 | 3 | C | 0 |
| 11945 | 989 | Meton A | .149 | .958 | .245 | 31.3 | 73.3 | 8.15 | 14.17 | 3 | C | 0 |
| 11945A | | Meton G | .140 | .955 | .261 | 28.1 | 72.7 | 5.67 | 9.86 | 1 | C | 0 |
| 11947 | 999B | Euctemon D | .141 | .974 | .177 | 38.4 | 76.9 | 11.45 | 19.90 | 1 | C | 0 |
| 11947A | 998A | Euctemon C | .150 | .970 | .191 | 38.0 | 75.9 | 11.46 | 19.92 | 2 | C | 0 |
| 11947B | | | .147 | .979 | .141 | 46.1 | 78.2 | 2.61 | 4.54 | 1 | C | 0 |
| 11948 | | | .140 | .986 | .091 | 57.0 | 80.4 | 8.74 | 15.19 | 2 | C | 0 |
| 11948A | | Euctemon W | .149 | .982 | .116 | 52.0 | 79.1 | 22.82 | 39.66 | 3f | C | 0 |
| 11948B | | | .142 | .988 | .061 | 66.8 | 81.1 | 15.38 | 26.73 | 3 | C | 0 |
| 11951 | | Neison C | .154 | .920 | .360 | 23.1 | 66.9 | 5.17 | 8.99 | 3 | C | 0 |
| 11952 | 990 | Neison | .157 | .929 | .335 | 25.1 | 68.2 | 30.50 | 53.01 | 3f | C | 0 |
| 11953 | | | .154 | .934 | .322 | 25.5 | 69.0 | 3.38 | 5.87 | 2 | C | 0 |
| 11954 | | | .157 | .949 | .273 | 29.8 | 71.6 | 2.15 | 3.74 | 2 | C | 0 |
| 11956 | 999A | Baillaud E | .158 | .962 | .223 | 35.3 | 74.1 | 8.20 | 14.25 | 1 | pMC | 0 |
| 11957 | | Euctemon U | .153 | .977 | .149 | 45.8 | 77.6 | 21.46 | 37.30 | 3f | C | 0 |
| 11957A | | | .152 | .975 | .162 | 43.1 | 77.1 | 4.03 | 7.00 | 2 | C | 0 |
| 11958 | | Nansen | .155 | .988 | .000 | 90.0 | 81.0 | 63.29 | 110.01 | 2 | C | ? |
| 11958A | | Nansen V | .158 | .982 | .103 | 56.7 | 79.1 | 9.87 | 17.16 | 2 | C | 0 |
| 11958B | | | .155 | .988 | .024 | 81.9 | 81.0 | 9.05 | 15.73 | 2 | C | 0 |
| 11958C | | | .159 | .985 | .067 | 67.1 | 80.0 | 16.40 | 28.51 | 3 | C | 0 |
| 11962 | | Neison B | .168 | .923 | .346 | 35.8 | 67.3 | 4.69 | 8.15 | 2 | C | 0 |
| 11963 | | | .167 | .937 | .307 | 28.5 | 69.5 | 20.40 | 35.46 | 5f | C | 0 |
| 11964 | | | .167 | .946 | .278 | 31.0 | 71.0 | 33.07 | 57.48 | 5f | C | 0 |
| 11965 | 999 | Baillaud B | .160 | .956 | .246 | 33.0 | 72.9 | 10.00 | 17.38 | 2 | C | 0 |
| 11966 | 998 | Baillaud | .162 | .964 | .211 | 37.5 | 74.5 | 51.49 | 89.50 | 3f | C | 0 |
| 11971 | | | .170 | .914 | .368 | 24.7 | 66.0 | 2.10 | 3.65 | 1 | C | 0 |
| 11972 | | Neison A | .173 | .923 | .344 | 26.7 | 67.3 | 5.12 | 8.90 | 1 | C | 0 |
| 11977 | | | .174 | .972 | .158 | 47.7 | 76.4 | 6.09 | 10.59 | 2 | C | 0 |
| 11978 | | | .179 | .980 | .087 | 64.0 | 78.5 | 18.05 | 31.37 | 4 | C | 0 |
| 11980 | | Moigno B | .189 | .903 | .386 | 26.0 | 64.5 | 14.98 | 26.04 | 3f | C | 0 |
| 11982 | 695 | Peters | .184 | .928 | .324 | 29.5 | 68.1 | 8.77 | 15.24 | 3 | C | 0 |
| 11986 | | Baillaud A | .186 | .968 | .168 | 47.8 | 75.4 | 32.29 | 56.12 | 4f | C | 0 |
| 11986A | | | .188 | .964 | .188 | 44.9 | 74.5 | 19.71 | 34.26 | 3f | C | 0 |
| 11990 | | Moigno D | .195 | .908 | .371 | 27.7 | 65.2 | 13.13 | 22.82 | 3f | C | 0 |
| 11991 | 683 | Moigno | .194 | .916 | .351 | 28.9 | 66.3 | 21.00 | 36.50 | 3f | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11991A | 685 | Moigno C | + .198 | + .913 | + .357 | + 29.0 | + 65.9 | 5.33 | 9.26 | 1 | pMC | 0 |
| 11994 | 689 | Arnold E | .196 | .948 | .251 | 38.0 | 71.4 | 18.82 | 32.71 | 3f | C | 0 |
| 11995 | | | .197 | .957 | .213 | 42.7 | 73.1 | 4.41 | 7.67 | 2 | C | 0 |
| 11996 | | Baillaud F | .199 | .969 | .146 | 53.6 | 75.6 | 11.37 | 19.76 | 1 | C | 0 |
| 11997 | | | .192 | .971 | .142 | 53.4 | 76.1 | 10.35 | 17.99 | 3 | C | 0 |
| 11997A | | | .190 | .972 | .138 | 53.9 | 76.4 | 3.41 | 5.93 | 1 | C | 0 |
| 12002 | | | .200 | .026 | .979 | 11.5 | 1.4 | 11.54 | 20.06 | 4f | C | 0 |
| 12004 | | | .205 | .044 | .978 | 11.8 | 2.5 | 2.20 | 3.82 | 1 | C | 0 |
| 12004A | | | .208 | .049 | .977 | 12.0 | 2.8 | 7.97 | 13.85 | 3 | C | 0 |
| 12006 | 824A | Tempel | .206 | .068 | .976 | 11.9 | 3.8 | 27.70 | 48.15 | 3 | C | 0 |
| 12012 | 831B | Godin E | .214 | .029 | .976 | 12.3 | 1.6 | 2.34 | 4.07 | 1 | C | 0 |
| 12019 | 820A | Silberschlag E | .220 | .091 | .971 | 12.7 | 5.2 | 2.05 | 3.56 | 1 | C | 0 |
| 12022 | | | .221 | .024 | .975 | 12.7 | 1.3 | 2.12 | 3.68 | 1 | C | 0 |
| 12030 | | | .239 | .008 | .971 | 13.8 | 0.4 | 2.25 | 3.91 | 1 | C | 0 |
| 12031 | 562B | d'Arrest B | .236 | .017 | .972 | 13.6 | 0.9 | 2.92 | 5.08 | 1 | C | 0 |
| 12032 | | | .236 | .022 | .972 | 13.6 | 1.2 | 2.61 | 4.54 | 1 | C | 0 |
| 12033 | 562A | d'Arrest A | .236 | .034 | .971 | 13.6 | 1.9 | 2.45 | 4.26 | 1 | C | 0 |
| 12033A | | d'Arrest M | .236 | .033 | .971 | 13.6 | 1.8 | 13.33<br>9.95 | 23.17<br>17.29 | 4 | C | 0 |
| 12037 | 560 | Whewell | .237 | .073 | .969 | 13.7 | 4.1 | 7.83 | 13.61 | 2 | C | 0 |
| 12040 | 3650 | Theon Senior B | .244 | .003 | .970 | 14.1 | 0.1 | 3.26 | 5.67 | 1 | C | 0 |
| 12048 | 560A | Whewell A | .244 | .082 | .966 | 14.1 | 4.7 | 1.99 | 3.46 | 1 | C | 0 |
| 12048A | 560B | Whewell B | .249 | .087 | .965 | 14.4 | 4.9 | 1.86 | 3.23 | 1 | C | 0 |
| 12054 | 562 | d'Arrest | .253 | .040 | .967 | 14.6 | 2.2 | 17.29 | 30.05 | 3 | C | 0 |
| 12055 | 559 | de Morgan | .257 | .058 | .965 | 14.9 | 3.3 | 5.87 | 10.20 | 2 | C | 0 |
| 12056 | | | .252 | .060 | .966 | 14.6 | 3.4 | 4.38<br>3.83 | 7.61<br>6.66 | 4 | C | 0 |
| 12058 | 565 | Ariadaeus B | .259 | .085 | .962 | 15.0 | 4.8 | 4.99 | 8.67 | 2 | C | 0 |
| 12060 | | d'Arrest R | .269 | .009 | .963 | 15.6 | 0.5 | 10.80 | 18.77 | 3 | C | 0 |
| 12065 | | | .267 | .051 | .962 | 15.5 | 2.9 | 5.04 | 8.76 | 4 | C | 0 |
| 12066 | 561 | Cayley | .260 | .069 | .963 | 15.1 | 3.9 | 8.24 | 14.32 | 1 | C | 0 |
| 12068 | | Ariadaeus BA | .267 | .086 | .960 | 15.5 | 4.9 | 1.80 | 3.13 | 1 | C | 0 |
| 12070 | | | .276 | .001 | .961 | 16.0 | 0.0 | 6.43 | 11.18 | 4 | C | 0 |
| 12075 | | Dionysius B | .272 | .051 | .961 | 15.8 | 2.9 | 2.08 | 3.62 | 1 | C | 0 |
| 12080 | | | .280 | .004 | .960 | 16.2 | 0.2 | 5.39 | 9.37 | 4 | C | 0 |
| 12088 | | Ariadaeus DA | .286 | .083 | .955 | 16.6 | 4.7 | 1.83 | 3.18 | 1 | C | 0 |
| 12094 | 553 | Dionysius | .297 | .049 | .954 | 17.2 | 2.8 | 10.15 | 17.64 | 1 | C | 0 |
| 12097 | 563 | Ariadaeus | .296 | .080 | .952 | 17.2 | 4.5 | 6.42 | 11.16 | 2 | pMC | 0 |
| 12098 | 565A | Ariadaeus D | .292 | .085 | .953 | 17.0 | 4.8 | 2.26 | 3.93 | 1 | C | 0 |
| 12099 | | | .294 | .094 | .951 | 17.1 | 5.3 | 2.49 | 4.33 | 3 | C | 0 |
| 12102 | 813A | Silberschlag P | .206 | .120 | .971 | 11.9 | 6.8 | 22.58<br>14.98 | 39.25<br>26.04 | 4 | C | 0 |
| 12103 | 813B | Silberschlag S | .208 | .139 | .968 | 12.1 | 7.9 | 19.78<br>11.94 | 34.38<br>20.75 | 5 | C | PP |
| 12103A | | | .202 | .134 | .970 | 11.7 | 7.7 | 2.09 | 3.63 | 2 | C | 0 |
| 12104 | | Boscovich C | .205 | .147 | .968 | 11.9 | 8.4 | 1.68 | 2.92 | 1 | C | 0 |

| Ref. | B & M | Designation | ξ | η | ζ | λ | β | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12105 | | Boscovich D | + .208 | + .156 | + .966 | + 12.1 | + 8.9 | 2.61 | 4.54 | 1 | C | 0 |
| 12110 | 816 | Silberschlag | .216 | .108 | .970 | 12.5 | 6.2 | 7.72 | 13.42 | 1 | C | 0 |
| 12115 | | Boscovich E | .218 | .157 | .963 | 12.7 | 9.0 | 11.31 | 19.66 | 4 | C | 0 |
| 12116 | 810A | Boscovich A | .216 | .164 | .963 | 12.6 | 9.4 | 3.72 | 6.47 | 1 | C | 0 |
| 12122 | 819 | Silberschlag A | .227 | .121 | .966 | 13.2 | 6.9 | 3.96 | 6.88 | 1 | C | 0 |
| 12127 | | | .229 | .170 | .958 | 13.4 | 9.7 | 7.86<br>5.87 | 13.66<br>10.20 | 3 | C | 0 |
| 12130 | | Silberschlag G | .238 | .100 | .966 | 13.8 | 5.7 | 1.85 | 3.22 | 1 | C | 0 |
| 12135 | | Julius Caesar H | .232 | .153 | .961 | 13.5 | 8.8 | 1.91 | 3.32 | 1 | C | 0 |
| 12136 | 579A | Julius Caesar B | .238 | .170 | .956 | 13.9 | 9.7 | 3.87 | 6.73 | 1 | C | 0 |
| 12136A | | Julius Caesar J | .235 | .160 | .959 | 13.7 | 9.2 | 1.76 | 3.06 | 1 | C | 0 |
| 12136B | | - | .238 | .164 | .957 | 13.9 | 9.4 | 2.28 | 3.96 | 1 | C | 0 |
| 12143 | | Julius Caesar A | .248 | .133 | .960 | 14.4 | 7.6 | 8.81<br>7.20 | 15.31<br>12.51 | 4 | C | 0 |
| 12149 | 584B | Julius Caesar P | .241 | .194 | .951 | 14.2 | 11.1 | 21.23 | 36.90 | 4f | C | 0 |
| 12149A | | Julius Caesar PA | .244 | .193 | .950 | 14.3 | 11.1 | 1.81 | 3.15 | 2 | pMC | 0 |
| 12162 | 579B | Julius Caesar C | .263 | .127 | .956 | 15.3 | 7.2 | 3.03 | 5.27 | 1 | C | 0 |
| 12165 | 579 | Julius Caesar | .262 | .157 | .952 | 15.3 | 9.0 | 52.23 | 90.78 | 4f | C | 0 |
| 12167 | | Julius Caesar G | .267 | .177 | .947 | 15.7 | 10.1 | 12.48 | 21.69 | 4f | C | 0 |
| 12170 | | | .279 | .109 | .954 | 16.3 | 6.2 | 9.07 | 15.77 | 5 | C | 0 |
| 12171 | | | .274 | .119 | .954 | 16.0 | 6.8 | 13.58 | 23.60 | 4 | C | P |
| 12182 | 579C | Julius Caesar D | .282 | .125 | .951 | 16.5 | 7.1 | 2.81 | 4.88 | 1 | C | 0 |
| 12183 | | | .282 | .139 | .949 | 16.5 | 7.9 | 2.29 | 3.98 | 2 | C | 0 |
| 12194 | 573A | Sosigenes B | .293 | .145 | .945 | 17.2 | 8.3 | 2.03 | 3.53 | 2 | aMC | 0 |
| 12195 | 572 | Sosigenes | .299 | .151 | .942 | 17.6 | 8.6 | 10.21 | 17.75 | 1f | aMC | 0 |
| 12210 | | Julius Caesar F | .219 | .200 | .955 | 12.9 | 11.5 | 11.14 | 19.36 | 4f | C | 0 |
| 12213 | | Manilius W | .217 | .232 | .948 | 12.8 | 13.4 | 2.56 | 4.45 | 1 | C | 0 |
| 12224 | | Manilius X | .224 | .249 | .942 | 13.3 | 14.4 | 1.86 | 3.23 | 1 | C | 0 |
| 12229 | 604 | Menelaus A | .222 | .293 | .930 | 13.4 | 17.0 | 3.94 | 6.85 | 1 | pMC | 0 |
| 12232 | | Julius Caesar Q | .236 | .224 | .946 | 14.0 | 12.9 | 18.10<br>16.19 | 31.46<br>28.14 | 4f | C | 0 |
| 12235 | | Menelaus R | .233 | .258 | .938 | 13.9 | 14.9 | 25.95 | 45.10 | 5f | aMC | 0 |
| 12245 | 595A | Menelaus C | .242 | .256 | .936 | 14.4 | 14.8 | 2.30 | 4.00 | 1 | pMC | 0 |
| 12247 | 595 | Menelaus S | .246 | .271 | .931 | 14.8 | 15.7 | 8.04 | 13.97 | 3f | aMC | P |
| 12261 | | | .269 | .215 | .939 | 15.9 | 12.4 | 2.09 | 3.63 | 1 | pMC | 0 |
| 12263 | | Menelaus E | .266 | .235 | .935 | 15.8 | 13.5 | 1.90 | 3.30 | 1 | C | 0 |
| 12268 | 591 | Menelaus | .264 | .280 | .923 | 15.9 | 16.2 | 15.48 | 26.91 | 1 | pMC | PP |
| 12272 | 595B | Menelaus D | .273 | .229 | .934 | 16.2 | 13.2 | 2.47 | 4.29 | 2 | C | 0 |
| 12277 | | | .277 | .275 | .921 | 16.7 | 15.9 | 7.69<br>5.48 | 13.37<br>9.53 | 4 | C | 0 |
| 12286 | 594 | Auwers | .285 | .260 | .923 | 17.1 | 15.0 | 11.75 | 20.42 | 3f | C | 0 |
| 12310 | 605 | Sulp. Gall. B | .214 | .309 | .927 | 13.0 | 17.9 | 4.15 | 7.21 | 2 | C | 0 |
| 12320 | | | .226 | .309 | .924 | 13.7 | 17.9 | 2.03 | 3.53 | 1 | pM | 0 |
| 12353 | 627 | Bessel E | .251 | .336 | .908 | 15.4 | 19.6 | 3.74 | 6.50 | 1 | pM | 0 |
| 12387 | 619 | Bessel | .286 | .370 | .884 | 17.9 | 21.7 | 9.08 | 15.78 | 1 | pM | 0 |
| 12418 | 631 | Linné A | .217 | .484 | .848 | 14.3 | 28.9 | 2.39 | 4.15 | 1 | pM | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12454 | 628 | Linné E | + .253 | + .447 | + .858 | + 16.4 | + 26.5 | 3.29 | 5.72 | 1 | pM | 0 |
| 12458 | 634 | Linné D | .258 | .480 | .838 | 17.1 | 28.6 | 2.77 | 4.81 | 1 | pM | 0 |
| 12503 | 635 | Linné F | .203 | .534 | .821 | 13.8 | 32.2 | 2.87 | 4.99 | 1 | pM | 0 |
| 12510 | 632 | Linné B | .211 | .508 | .835 | 14.1 | 30.5 | 2.94 | 5.11 | 1 | pM | 0 |
| 12590 | 485 | Posidonius E | .290 | .508 | .811 | 19.6 | 30.5 | 1.89 | 3.29 | 1 | pM | 0 |
| 12592 | | Posidonius W | .293 | .524 | .800 | 20.1 | 31.6 | 1.92 | 3.34 | 1 | pM | 0 |
| 12602 | | Alexander C | .201 | .622 | .757 | 14.8 | 38.4 | 2.69 | 4.68 | 1 | C | 0 |
| 12609 | 726 | Eudoxus | .201 | .698 | .687 | 16.3 | 44.2 | 38.63 | 67.14 | 1 | C | pp |
| 12622 | | | .220 | .627 | .747 | 16.4 | 38.8 | 2.31 | 4.02 | 2 | C | 0 |
| 12629 | | Eudoxus W | .220 | .690 | .690 | 17.6 | 43.6 | 2.89 | 5.02 | 2 | C | 0 |
| 12631 | | | .237 | .610 | .756 | 17.4 | 37.5 | 2.82 | 4.90 | 4 | C | 0 |
| 12631A | | | .231 | .613 | .756 | 17.0 | 37.8 | 7.25 | 12.60 | 4 | C | 0 |
| 12634 | | | .238 | .644 | .727 | 18.1 | 40.0 | 2.00 | 3.48 | 1 | C | 0 |
| 12637 | | | .239 | .670 | .703 | 18.7 | 42.0 | 2.23 | 3.88 | 2 | C | 0 |
| 12638 | | Eudoxus V | .236 | .683 | .691 | 18.8 | 43.0 | 2.54 | 4.41 | 1 | C | 0 |
| 12644 | | | .241 | .643 | .727 | 18.3 | 40.0 | 2.17 | 3.77 | 1 | C | 0 |
| 12647 | | | .246 | .677 | .694 | 19.5 | 42.6 | 4.13 | 7.18 | 3 | C | 0 |
| 12648 | | | .240 | .684 | .689 | 19.2 | 43.1 | 2.02 | 3.51 | 2 | C | 0 |
| 12654 | | Alexander K | .252 | .649 | .718 | 19.3 | 40.4 | 2.29 | 3.98 | 1 | C | 0 |
| 12659 | 730A | Eudoxus E | .258 | .699 | .667 | 21.1 | 44.3 | 3.05 | 5.30 | 1 | C | 0 |
| 12659A | | Eudoxus U | .250 | .693 | .676 | 20.2 | 43.8 | 2.07 | 3.60 | 1 | C | 0 |
| 12665A | | Eudoxus J | .262 | .653 | .711 | 20.2 | 40.7 | 2.91 | 5.06 | 1 | C | 0 |
| 12697 | 649 | Bürg B | .293 | .678 | .674 | 23.4 | 42.6 | 3.72 | 6.47 | 1 | C | 0 |
| 12701 | 728 | Eudoxus B | .208 | .715 | .667 | 17.3 | 45.6 | 4.59 | 7.98 | 1 | C | 0 |
| 12714 | 721B | Mitchell B | .220 | .748 | .626 | 19.3 | 48.4 | 3.20 | 5.56 | 2 | C | 0 |
| 12714A | | | .216 | .748 | .628 | 18.9 | 48.4 | 2.31 | 4.02 | 1 | C | 0 |
| 12715 | 721A | Mitchell A | .214 | .753 | .622 | 18.9 | 48.8 | 3.20 | 5.56 | 2 | C | 0 |
| 12721 | 732 | Eudoxus G | .226 | .712 | .665 | 18.7 | 45.3 | 4.06 | 7.06 | 1 | C | 0 |
| 12726 | 721 | Mitchell | .223 | .763 | .607 | 20.1 | 49.7 | 17.30 | 30.07 | 3 | C | pp |
| 12727 | | | .223 | .773 | .594 | 20.5 | 50.6 | 2.32 | 4.03 | 1 | C | 0 |
| 12727A | | | .228 | .777 | .587 | 21.2 | 50.9 | 2.14 | 3.72 | 2 | C | 0 |
| 12731 | 727 | Eudoxus A | .239 | .717 | .655 | 20.0 | 45.8 | 8.12 | 14.11 | 1 | C | 0 |
| 12742 | | | .241 | .727 | .643 | 20.5 | 46.6 | 2.18 | 3.79 | 2 | C | 0 |
| 12742A | | | .245 | .730 | .638 | 21.0 | 46.8 | 3.15 | 5.48 | 2 | C | 0 |
| 12743 | 723 | Mitchell E | .249 | .739 | .626 | 21.6 | 47.6 | 4.77 | 8.29 | 1 | C | 0 |
| 12746 | | | .245 | .767 | .593 | 22.4 | 50.0 | 4.21 | 7.32 | 3 | pMC | 0 |
| 12747 | | | .248 | .774 | .583 | 23.0 | 50.7 | 2.11 | 3.67 | 2 | pM | 0 |
| 12748 | | | .248 | .784 | .569 | 23.5 | 51.6 | 2.23 | 3.88 | 2 | pM | 0 |
| 12748A | | | .241 | .786 | .569 | 22.9 | 51.8 | 2.37 | 4.12 | 3 | pM | 0 |
| 12764 | | | .261 | .744 | .615 | 22.9 | 48.0 | 2.31 | 4.02 | 1 | C | 0 |
| 12779 | 723A | Aristoteles N | .272 | .797 | .539 | 26.7 | 52.8 | 3.02 | 5.25 | 1 | pM | 0 |
| 12806 | | | .203 | .865 | .459 | 23.8 | 59.8 | 3.39 | 5.89 | 2 | pM | 0 |
| 12810 | | | .210 | .808 | .550 | 20.8 | 53.9 | 2.59 | 4.50 | 2 | pM | 0 |
| 12812 | 725 | Galle | .213 | .827 | .520 | 22.2 | 55.7 | 12.06 | 20.96 | 2 | pM | 0 |
| 12814 | | | .210 | .847 | .488 | 23.2 | 57.8 | 2.27 | 3.95 | 1 | pM | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12815 | (679) | Kane G | + .219 | + .859 | + .463 | + 25.3 | + 59.2 | 5.94 | 10.32 | 1 | pM | 0 |
| 12817 | 696B | Kane A | .219 | .876 | .430 | 27.0 | 61.1 | 2.93 | 5.09 | 1 | pM | 0 |
| 12819 | | | .218 | .890 | .400 | 28.5 | 62.8 | 11.31 | 19.66 | 3f | C | 0 |
| 12820 | 725A | Galle A | .223 | .808 | .545 | 22.2 | 53.9 | 3.15 | 5.48 | 1 | pM | 0 |
| 12824 | 722 | Galle C | .221 | .845 | .487 | 24.4 | 57.6 | 6.53 | 11.35 | 1 | pM | 0 |
| 12836 | 678 | Democritus B | .239 | .866 | .439 | 28.5 | 59.9 | 7.00 | 12.17 | 1 | pM | 0 |
| 12836A | | | .234 | .867 | .440 | 28.0 | 60.1 | 4.15 | 7.21 | 2 | pM | 0 |
| 12839 | 679A | Democritus D | .236 | .890 | .390 | 31.1 | 62.8 | 4.34 | 7.54 | 1 | C | 0 |
| 12840 | | | .240 | .803 | .546 | 23.7 | 53.4 | 2.03 | 3.53 | 1 | pM | 0 |
| 12847 | | | .242 | .875 | .419 | 29.9 | 61.0 | 45.85 | 79.69 | 5f | aMC | 0 |
| 12857 | 677 | Democritus A | .255 | .879 | .403 | 32.3 | 61.5 | 6.02 | 10.46 | 1 | pMC | 0 |
| 12859 | | Democritus N | .250 | .896 | .367 | 34.2 | 63.6 | 9.38 | 16.30 | 4f | C | 0 |
| 12866A | 672 | Gärtner C | .262 | .861 | .436 | 31.0 | 59.4 | 4.72 | 8.20 | 3 | C | 0 |
| 12868 | 676 | Democritus | .267 | .886 | .379 | 35.1 | 62.3 | 22.48 | 39.07 | 2 | C | P |
| 12869 | | Democritus M | .268 | .896 | .354 | 37.1 | 63.6 | 3.12 | 5.42 | 1 | C | 0 |
| 12870 | 724 | Aristoteles M | .272 | .803 | .530 | 27.1 | 53.4 | 4.02 | 6.99 | 1 | pM | 0 |
| 12874 | 672B | Gärtner F | .271 | .843 | .465 | 30.2 | 57.4 | 8.07 | 14.03 | 2f | aM | 0 |
| 12878 | | | .270 | .888 | .372 | 35.9 | 62.6 | 30.09 | 52.30 | 5f | C | 0 |
| 12884 | | | .281 | .846 | .453 | 31.8 | 57.7 | 2.68 | 4.66 | 1 | pM | 0 |
| 12889 | | Democritus L | .286 | .894 | .345 | 39.6 | 63.3 | 10.58 | 18.39 | 3f | C | 0 |
| 12895A | 669 | Gärtner | .292 | .858 | .423 | 34.6 | 59.0 | 58.65 | 101.94 | 4f | aMC | 0 |
| 12895 | 672A | Gärtner D | .292 | .852 | .435 | 33.8 | 58.4 | 4.46 | 7.75 | 1 | pM | 0 |
| 12897 | 670 | Gärtner A | .300 | .872 | .387 | 37.7 | 60.6 | 8.15 | 14.17 | 2f | C | 0 |
| 12897A | | | .296 | .877 | .378 | 38.0 | 61.2 | 7.22 | 12.55 | 4 | C | 0 |
| 12899 | | Democritus K | .295 | .892 | .343 | 40.7 | 63.1 | 3.91 | 6.80 | 1 | C | 0 |
| 12900 | | | .208 | .908 | .364 | 29.7 | 65.2 | 12.45 | 21.64 | 4f | C | 0 |
| 12902 | 689A | Arnold G | .201 | .923 | .328 | 31.4 | 67.3 | 6.14 | 10.67 | 1 | C | 0 |
| 12904 | | Arnold L | .200 | .940 | .276 | 35.8 | 70.0 | 18.67 | 32.45 | 4f | C | 0 |
| 12905 | | | .204 | .952 | .228 | 41.7 | 72.1 | 3.32 | 5.77 | 3 | C | 0 |
| 12906 | | Baillaud C | .202 | .965 | .167 | 50.3 | 74.7 | 5.47 | 9.51 | 2 | C | 0 |
| 12907 | 694D | Petermann D | .204 | .974 | .099 | 64.2 | 76.9 | 18.01 | 31.30 | 2 | C | 0 |
| 12910 | 685A | Moigno A | .211 | .905 | .369 | 29.7 | 64.8 | 9.20 | 15.99 | 1 | C | 0 |
| 12910A | | | .219 | .906 | .362 | 31.1 | 64.9 | 9.88 | 17.17 | 3f | C | 0 |
| 12910B | | | .216 | .900 | .379 | 29.7 | 64.1 | 38.34 | 66.64 | 5 | C | 0 |
| 12912 | 689B | Arnold F | .220 | .923 | .316 | 34.8 | 67.3 | 5.95 | 10.34 | 1 | pMC | 0 |
| 12913 | | | .214 | .938 | .273 | 38.1 | 69.7 | 8.14 | 14.15 | 4 | C | 0 |
| 12914 | | Arnold K | .219 | .945 | .243 | 42.0 | 70.9 | 10.01 | 17.40 | 3f | C | 0 |
| 12915 | 689F | Arnold H | .212 | .954 | .212 | 45.0 | 72.5 | 7.29 | 12.67 | 1 | C | 0 |
| 12915A | 689E | Arnold D | .216 | .959 | .183 | 49.6 | 73.5 | 9.26 | 16.10 | 3 | C | 0 |
| 12915B | | | .212 | .958 | .193 | 47.6 | 73.3 | 4.85 | 8.43 | 3 | C | 0 |
| 12921 | 689D | Arnold J | .227 | .912 | .342 | 33.6 | 65.7 | 3.59 | 6.24 | 1 | C | 0 |
| 12924 | | Arnold N | .226 | .941 | .252 | 41.9 | 70.2 | 10.45 | 18.16 | 2f | C | 0 |
| 12924A | | | .229 | .946 | .229 | 44.9 | 71.0 | 17.63 | 30.64 | 4 | C | 0 |
| 12924B | | | .222 | .947 | .232 | 43.7 | 71.2 | 3.03 | 5.27 | 1 | C | 0 |
| 12925 | | | .228 | .953 | .200 | 48.8 | 72.3 | 3.16 | 5.49 | 1 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12926 | | Petermann S | + .225 | + .967 | + .120 | + 62.0 | + 75.2 | 4.85 | 8.43 | 1 | C | 0 |
| 12926A | | Petermann R | .223 | .962 | .158 | 54.7 | 74.1 | 66.02 | 114.75 | 5 | C | 0 |
| 12927 | | Petermann W | .223 | .973 | .060 | 75.0 | 76.6 | 4.13 | 7.18 | 1 | C | 0 |
| 12931 | 686 | Arnold | .231 | .919 | .319 | 35.8 | 66.7 | 54.58 | 94.87 | 3f | C | 0 |
| 12933 | 687 | Arnold A | .232 | .932 | .278 | 39.7 | 68.7 | 32.99 | 57.34 | 3f | C | 0 |
| 12936 | | Petermann T | .232 | .967 | .105 | 65.5 | 75.2 | 3.31 | 5.75 | 1 | C | 0 |
| 12945 | 694E | Petermann E | .242 | .953 | .182 | 53.0 | 72.3 | 7.62 | 13.24 | 1 | C | 0 |
| 12946 | | Petermann Y | .246 | .969 | .023 | 84.6 | 75.6 | 7.12 | 12.38 | 3 | C | 0 |
| 12946A | | Petermann X | .246 | .968 | .050 | 78.6 | 75.4 | 6.81 | 11.84 | 3 | C | 0 |
| 12952 | | Arnold M | .255 | .929 | .268 | 43.5 | 68.2 | 4.84 | 8.41 | 2 | C | 0 |
| 12955 | | | .256 | .956 | .143 | 60.7 | 72.9 | 5.88 | 10.22 | 2 | C | 0 |
| 12956 | 694 | Petermann | .250 | .962 | .110 | 66.2 | 74.1 | 42.11 | 73.19 | 3f | C | 0 |
| 12956A | 694A | Petermann A | .260 | .966 | .000 | 90.0 | 74.9 | 9.05 | 15.73 | 1 | C | 0 |
| 12956B | | | .256 | .964 | .072 | 74.3 | 74.5 | 5.32 | 9.25 | 2 | C | 0 |
| 12964 | 694C | Petermann C | .267 | .948 | .173 | 57.0 | 71.4 | 7.67 | 13.33 | 1 | C | 0 |
| 12964A | | | .265 | .945 | .192 | 54.1 | 70.9 | 6.04 | 10.50 | 3 | C | 0 |
| 12965 | 694B | Petermann B | .266 | .955 | .131 | 63.7 | 72.7 | 6.14 | 10.67 | 1 | C | 0 |
| 12965A | | | .268 | .952 | .148 | 61.1 | 72.1 | 3.41 | 5.93 | 3 | C | 0 |
| 12965B | | | .260 | .953 | .156 | 59.1 | 72.3 | 4.65 | 8.08 | 2 | C | 0 |
| 12970 | 681 | Schwabe G | .278 | .910 | .308 | 42.1 | 65.5 | 8.48 | 14.74 | 1 | C | 0 |
| 12972 | | Schwabe C | .276 | .926 | .258 | 46.9 | 67.8 | 16.57 | 28.80 | 4 | C | 0 |
| 12973 | | Schwabe W | .276 | .937 | .214 | 52.1 | 69.5 | 5.26 | 9.14 | 1 | C | 0 |
| 12974 | | | .278 | .945 | .172 | 58.2 | 70.9 | 6.50 | 11.30 | 2 | C | 0 |
| 12975 | | | .272 | .956 | .110 | 67.9 | 72.9 | 2.71 | 4.71 | 2 | C | 0 |
| 12982 | | Schwabe K | .288 | .924 | .252 | 48.8 | 67.5 | 5.05 | 8.78 | 2 | C | 0 |
| 12983 | | | .281 | .937 | .208 | 53.5 | 69.5 | 5.07 | 8.81 | 2 | C | 0 |
| 12983A | | | .288 | .937 | .198 | 55.5 | 69.5 | 4.23 | 7.35 | 2 | C | 0 |
| 12983B | | Schwabe N | .283 | .931 | .231 | 50.8 | 68.5 | 34.34 | 59.69 | 4f | C | 0 |
| 12993 | | | .291 | .930 | .225 | 52.3 | 68.4 | 3.20 | 5.56 | 1 | C | 0 |
| 12993A | | | .292 | .932 | .215 | 53.6 | 68.7 | 10.62 | 18.46 | 4 | C | 0 |
| 12994 | | Cusanus C | .293 | .942 | .164 | 60.8 | 70.3 | 14.22 | 24.72 | 2 | C | 0 |
| 12994A | 675A | Cusanus A | .299 | .943 | .146 | 63.9 | 70.5 | 9.29 | 16.15 | 1 | C | 0 |
| 12995 | 675 | Cusanus | .292 | .951 | .102 | 70.8 | 71.9 | 36.30 | 63.09 | 3f | C | 0 |
| 12995A | | Cusanus D | .295 | .951 | .093 | 72.5 | 71.9 | 5.13 | 8.92 | 2 | C | 0 |
| 13002 | 553A | Dionysius A | .303 | .029 | .953 | 17.6 | 1.6 | 1.93 | 3.35 | 1 | C | 0 |
| 13007 | 565C | Ariadaeus F | .308 | .076 | .948 | 17.9 | 4.3 | 1.93 | 3.35 | 2 | pM | 0 |
| 13008 | 564 | Ariadaeus A | .300 | .081 | .950 | 17.5 | 4.6 | 4.83 | 8.40 | 1 | pMC | 0 |
| 13009 | 565B | Ariadaeus E | .302 | .093 | .949 | 17.6 | 5.3 | 13.24 | 23.01 | 4f | aMC | 0 |
| 13021 | 552 | Schmidt | .322 | .017 | .947 | 18.7 | 0.9 | 6.56 | 11.40 | 1 | pM | 0 |
| 13023 | 542 | Ritter | .329 | .035 | .944 | 19.2 | 2.0 | 17.77 | 30.89 | 2 | aM | 0 |
| 13024 | 544 | Ritter C | .323 | .048 | .945 | 18.8 | 2.7 | 7.91 | 13.75 | 2 | pM | p |
| 13025 | 543 | Ritter B | .324 | .057 | .944 | 18.9 | 3.2 | 8.01 | 13.92 | 2 | pM | 0 |
| 13026 | 545 | Ritter D | .321 | .064 | .945 | 18.7 | 3.6 | 4.11 | 7.14 | 1 | pM | 0 |
| 13028 | 537A | Manners A | .326 | .081 | .942 | 19.0 | 4.6 | 1.88 | 3.27 | 1 | pM | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13032 | 540A | Sabine A | + .333 | + .022 | + .943 | + 19.4 | + 1.2 | 2.10 | 3.65 | 2 | pM | 0 |
| 13042 | 540 | Sabine | .343 | .024 | .939 | 20.0 | 1.3 | 17.41 | 30.26 | 2 | aM | 0 |
| 13047 | 537 | Manners | .341 | .080 | .937 | 20.0 | 4.5 | 8.71 | 15.14 | 1f | pM | 0 |
| 13056 | 536A | Arago B | .355 | .060 | .933 | 20.8 | 3.4 | 3.77 | 6.55 | 1 | pM | 0 |
| 13066 | 536B | Arago C | .366 | .068 | .928 | 21.5 | 3.8 | 1.93 | 3.35 | 1 | pM | 0 |
| 13072 | 540B | Sabine B | .376 | .025 | .926 | 22.0 | 1.4 | 1.96 | 3.41 | 2 | pM | 0 |
| 13081 | 540C | Sabine C | .390 | .018 | .921 | 22.9 | 1.0 | 1.90 | 3.30 | 2 | pM | 0 |
| 13098 | 539 | Lamont | .394 | .089 | .915 | 23.3 | 5.1 | 50.47<br>33.97 | 87.72<br>59.04 | 5f | aM | 0 |
| 13109 | 535A | Maclear A | .303 | .196 | .933 | 17.9 | 11.3 | 2.70 | 4.69 | 1 | pM | 0 |
| 13110 | | | .317 | .109 | .942 | 18.5 | 6.2 | 2.14 | 3.72 | 2 | pM | 0 |
| 13113 | 573 | Sosigenes A | .314 | .135 | .940 | 18.4 | 7.7 | 6.83 | 11.87 | 1 | pM | 0 |
| 13114 | | | .319 | .146 | .936 | 18.8 | 8.3 | 2.66 | 4.62 | 2 | pM | 0 |
| 13122 | 573B | Sosigenes C | .323 | .126 | .938 | 19.0 | 7.2 | 1.91 | 3.32 | 1 | pM | 0 |
| 13124 | | | .323 | .145 | .935 | 19.0 | 8.3 | 4.18<br>1.93 | 7.27<br>3.35 | 3 | pM | 0 |
| 13138 | 535 | Maclear | .338 | .183 | .923 | 20.1 | 10.5 | 11.67 | 20.28 | 3f | aM | 0 |
| 13139 | 533 | Ross B | .338 | .197 | .920 | 20.1 | 11.3 | 3.46 | 6.01 | 1 | pM | 0 |
| 13160 | 536 | Arago | .363 | .107 | .926 | 21.4 | 6.1 | 14.98 | 26.04 | 2 | pM | R |
| 13167 | 534E | Ross H | .366 | .178 | .913 | 21.8 | 10.2 | 2.80 | 4.87 | 1 | pM | 0 |
| 13172 | 536C | Arago D | .378 | .120 | .918 | 22.3 | 6.8 | 2.62 | 4.55 | 1 | pM | 0 |
| 13184 | 536D | Arago E | .382 | .148 | .912 | 22.7 | 8.5 | 2.58 | 4.48 | 1 | pM | 0 |
| 13189 | 534B | Ross E | .390 | .192 | .901 | 23.4 | 11.0 | 2.54 | 4.41 | 1 | pM | 0 |
| 13190 | | | .391 | .103 | .915 | 23.1 | 5.9 | 2.03 | 3.53 | 2 | pM | 0 |
| 13203 | 594A | Auwers A | .305 | .238 | .922 | 18.3 | 13.7 | 4.33 | 7.53 | 1 | C | 0 |
| 13205 | | | .307 | .256 | .917 | 18.5 | 14.8 | 2.34 | 4.07 | 1 | C | 0 |
| 13210 | 534 | Ross C | .318 | .201 | .927 | 18.9 | 11.5 | 2.81 | 4.88 | 1 | pM | 0 |
| 13218 | 587 | Tacquet | .315 | .286 | .905 | 19.1 | 16.6 | 3.97 | 6.90 | 1 | pM | 0 |
| 13227 | 593 | Tacquet B | .329 | .273 | .904 | 19.9 | 15.8 | 5.91<br>8.26 | 10.27<br>14.36 | 3 | C | 0 |
| 13227A | | Tacquet BA | .326 | .276 | .904 | 19.8 | 16.0 | 3.24 | 5.63 | 2 | pMC | 0 |
| 13234 | 592 | Tacquet A | .336 | .248 | .909 | 20.2 | 14.3 | 7.25 | 12.60 | 1f | aM | 0 |
| 13243 | 593A | Tacquet C | .350 | .233 | .907 | 21.0 | 13.4 | 3.21 | 5.58 | 1 | pM | 0 |
| 13256 | | | .359 | .268 | .894 | 21.8 | 15.5 | 2.13 | 3.70 | 1 | pM | 0 |
| 13260 | 531 | Ross | .363 | .202 | .910 | 21.7 | 11.6 | 15.14 | 26.32 | 2 | pM | P |
| 13264 | | | .363 | .242 | .900 | 21.9 | 14.0 | 2.02 | 3.51 | 1 | pM | 0 |
| 13281 | 534A | Ross D | .386 | .218 | .896 | 23.2 | 12.5 | 5.22 | 9.07 | 1 | pM | 0 |
| 13286 | 520 | Plinius | .387 | .265 | .883 | 23.6 | 15.3 | 24.85 | 43.19 | 1 | pM | P |
| 13292 | 520A | Plinius A | .399 | .224 | .889 | 24.1 | 12.9 | 2.34 | 4.07 | 1 | pM | 0 |
| 13326 | 623 | Deseilligny | .328 | .360 | .873 | 20.5 | 21.1 | 3.77 | 6.55 | 1 | pM | 0 |
| 13403 | 627C | Bessel H | .308 | .433 | .847 | 19.9 | 25.6 | 2.03 | 3.53 | 1 | pM | 0 |
| 13405 | 625 | Bessel D | .302 | .459 | .836 | 19.8 | 27.3 | 3.30 | 5.74 | 1 | pM | 0 |
| 13419 | 488 | Posidonius N | .312 | .495 | .811 | 21.0 | 29.6 | 4.19 | 7.28 | 1 | pM | 0 |
| 13421 | 622 | Bessel A | .325 | .418 | .848 | 20.9 | 24.7 | 4.35 | 7.56 | 1 | pM | 0 |
| 13443 | | | .344 | .434 | .833 | 22.4 | 25.7 | 2.01 | 3.49 | 1 | pM | 0 |
| 13483 | 509B | Le Monnier B | .386 | .432 | .815 | 25.3 | 25.5 | 2.92 | 5.08 | 1 | pM | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13499 | | | + .391 | + .491 | + .778 | + 26.6 | + 29.4 | 65.84 | 114.44 | 5f | aM | 0 |
| 13518 | (490C) | Luther H | .313 | .588 | .746 | 22.7 | 36.0 | 4.06 | 7.06 | 1 | C | 0 |
| 13539 | | Luther X | .333 | .590 | .736 | 24.3 | 36.1 | 2.25 | 3.91 | 2 | pM | 0 |
| 13544 | 491 | Luther | .342 | .547 | .764 | 24.1 | 33.1 | 5.48 | 9.53 | 1 | pM | 0 |
| 13577 | 490B | Posidonius G | .376 | .570 | .731 | 27.2 | 34.7 | 2.62 | 4.55 | 1 | pM | 0 |
| 13584 | 490A | Posidonius F | .383 | .541 | .749 | 27.0 | 32.7 | 3.45 | 6.00 | 1 | pM | 0 |
| 13585 | 490 | Posidonius P | .385 | .553 | .739 | 27.5 | 33.5 | 8.69 | 15.10 | 1 | pM | 0 |
| 13603 | | Plana G | .302 | .630 | .715 | 22.8 | 39.0 | 5.35 | 9.30 | 1 | pM | 0 |
| 13604 | 645B | Plana E | .304 | .650 | .696 | 23.5 | 40.5 | 3.65 | 6.34 | 1 | pM | 0 |
| 13610 | | Luther K | .314 | .608 | .729 | 23.2 | 37.4 | 2.01 | 3.49 | 1 | pM | 0 |
| 13610A | | | .312 | .609 | .729 | 23.1 | 37.5 | 2.01 | 3.49 | 1 | pM | 0 |
| 13614 | 645C | Plana F | .312 | .640 | .702 | 23.9 | 39.7 | 2.69 | 4.68 | 1 | pM | 0 |
| 13621 | | Luther Y | .325 | .617 | .717 | 24.3 | 38.0 | 2.06 | 3.58 | 1 | pM | 0 |
| 13626 | 645A | Plana D | .329 | .666 | .669 | 26.1 | 41.7 | 4.19 | 7.28 | 1 | pM | 0 |
| 13637 | 645 | Plana C | .335 | .679 | .653 | 27.1 | 42.7 | 7.91 | 13.75 | 1 | pM | 0 |
| 13640 | 467 | Daniell D | .348 | .602 | .719 | 25.8 | 37.0 | 3.64 | 6.33 | 1 | pM | 0 |
| 13640A | | | .345 | .604 | .718 | 25.6 | 37.1 | 2.02 | 3.51 | 2 | pM | 0 |
| 13657 | 644 | Plana | .350 | .672 | .653 | 28.2 | 42.2 | 25.46 | 44.25 | 3 | aMC | P |
| 13666 | 639A | Mason B | .369 | .667 | .647 | 29.6 | 41.8 | 6.27 | 10.90 | 1 | C | 0 |
| 13668 | 639 | Mason A | .368 | .680 | .634 | 30.1 | 42.8 | 2.83 | 4.92 | 1 | pMC | 0 |
| 13676 | | | .374 | .666 | .645 | 30.0 | 41.7 | 2.76 | 4.80 | 1 | C | 0 |
| 13677 | 638 | Mason | .373 | .678 | .633 | 30.4 | 42.6 | 18.72<br>24.80 | 32.54<br>43.11 | 3f | C | 0 |
| 13693 | | | .391 | .633 | .668 | 30.3 | 39.2 | 2.46 | 4.28 | 1 | pM | 0 |
| 13710 | | Lacus Mortis | .319 | .708 | .630 | 26.8 | 45.0 | 93.42 | 162.38 | 4f | aMC | 0 |
| 13716 | | | .314 | .763 | .565 | 29.0 | 49.7 | 5.44 | 9.46 | 2 | C | 0 |
| 13718 | | Baily K | .316 | .782 | .537 | 30.4 | 51.4 | 1.95 | 3.39 | 1 | pM | 0 |
| 13723 | | | .320 | .733 | .600 | 28.0 | 47.1 | 2.01 | 3.49 | 1 | pM | 0 |
| 13726 | 659 | Baily | .327 | .763 | .558 | 30.3 | 49.7 | 15.40 | 26.77 | 4f | aMC | 0 |
| 13730 | 647 | Bürg | .334 | .708 | .622 | 28.2 | 45.0 | 22.76 | 39.56 | 1 | pM | P |
| 13745 | 660 | Baily A | .344 | .751 | .564 | 31.3 | 48.6 | 9.95 | 17.29 | 1 | pM | 0 |
| 13766 | | | .360 | .769 | .528 | 34.2 | 50.2 | 2.75 | 4.78 | 2 | pM | 0 |
| 13766A | | | .363 | .762 | .536 | 34.0 | 49.6 | 2.86 | 4.97 | 1 | pM | 0 |
| 13766B | | | .368 | .763 | .531 | 34.7 | 49.7 | 3.18 | 5.53 | 2 | pMC | 0 |
| 13767 | 661 | Baily B | .362 | .776 | .517 | 35.0 | 50.8 | 4.21 | 7.32 | 1 | pM | 0 |
| 13772 | 648 | Bürg A | .373 | .729 | .574 | 33.0 | 46.8 | 7.13 | 12.39 | 1 | pM | 0 |
| 13773 | | | .378 | .730 | .569 | 33.5 | 46.8 | 2.91 | 5.06 | 2 | pM | 0 |
| 13775 | | | .370 | .758 | .537 | 34.5 | 49.2 | 2.90 | 5.04 | 2 | pMC | 0 |
| 13776 | | | .379 | .765 | .521 | 36.0 | 49.9 | 19.83 | 34.47 | 4f | aMC | 0 |
| 13808 | | | .307 | .881 | .360 | 40.4 | 61.7 | 6.88 | 11.96 | 3 | C | 0 |
| 13809 | | Schwabe E | .301 | .899 | .318 | 43.4 | 64.0 | 10.95 | 19.03 | 3 | C | 0 |
| 13817 | | | .319 | .877 | .359 | 41.5 | 61.2 | 6.44 | 11.19 | 2 | C | 0 |
| 13818 | | | .313 | .881 | .355 | 41.4 | 61.7 | 6.23 | 10.83 | 2 | C | 0 |
| 13818A | | | .313 | .882 | .352 | 41.6 | 61.8 | 3.44 | 5.98 | 2 | C | 0 |
| 13826 | | Gärtner G | .325 | .863 | .387 | 40.0 | 59.6 | 12.77<br>18.91 | 22.20<br>32.87 | 4f | aMC | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13827 | 672C | Gärtner E | + .330 | + .879 | + .344 | + 43.7 | + 61.5 | 4.01 | 6.97 | 2 | pMC | 0 |
| 13835 | 432F | Thales W | .334 | .853 | .401 | 39.7 | 58.5 | 3.48 | 6.05 | 1 | pM | 0 |
| 13837 | | | .330 | .879 | .344 | 43.7 | 61.5 | 32.07 | 55.74 | 4f | C | 0 |
| 13838 | 432A | Thales G | .338 | .880 | .334 | 45.3 | 61.6 | 6.62 | 11.51 | 1 | C | 0 |
| 13842 | (432E) | Gärtner M | .341 | .824 | .452 | 37.0 | 55.4 | 4.95 | 8.60 | 1 | pM | 0 |
| 13845 | 429 | Thales A | .342 | .852 | .396 | 40.7 | 58.4 | 7.09 | 12.32 | 1 | pMC | 0 |
| 13846 | 432 | Thales F | .341 | .860 | .380 | 41.9 | 59.3 | 21.28 | 36.99 | 3f | aMC | 0 |
| 13855 | | | .358 | .851 | .384 | 42.9 | 58.3 | 14.68 | 25.52 | 4f | C | 0 |
| 13857 | | | .357 | .874 | .330 | 47.2 | 60.9 | 6.59 | 11.45 | 4 | C | 0 |
| 13857A | | | .359 | .871 | .335 | 46.9 | 60.5 | 16.42 | 28.54 | 4 | C | 0 |
| 13866 | 432B | Thales H | .368 | .869 | .331 | 48.0 | 60.3 | 5.96 | 10.36 | 1 | C | 0 |
| 13866A | | | .367 | .865 | .342 | 47.0 | 59.8 | 15.41 | 26.78 | 4 | C | 0 |
| 13868 | 427 | Thales | .364 | .881 | .302 | 50.2 | 61.7 | 18.18 | 31.60 | 1 | C | 0 |
| 13873 | | | .370 | .837 | .403 | 42.5 | 56.8 | 3.88 | 6.74 | 2 | pMC | 0 |
| 13874 | 431 | Thales E | .370 | .841 | .395 | 43.1 | 57.2 | 16.56 | 28.78 | 4f | C | 0 |
| 13875 | | | .373 | .852 | .367 | 45.4 | 58.4 | 3.14 | 5.46 | 1 | C | 0 |
| 13877 | | | .376 | .878 | .296 | 51.7 | 61.4 | 11.96 | 20.79 | 3 | C | 0 |
| 13881 | | | .386 | .818 | .426 | 42.1 | 54.8 | 11.14 | 19.36 | 5f | aM | 0 |
| 13886 | | | .389 | .868 | .309 | 51.5 | 60.2 | 12.17 | 21.15 | 5f | aMC | 0 |
| 13886A | | | .383 | .861 | .335 | 48.8 | 59.4 | 3.33 | 5.79 | 1 | C | 0 |
| 13888 | 421 | Strabo | .383 | .882 | .275 | 54.3 | 61.8 | 31.70 | 55.10 | 2f | C | 0 |
| 13888A | | | .388 | .888 | .247 | 57.5 | 62.6 | 3.25 | 5.65 | 2 | C | 0 |
| 13892 | | | .397 | .825 | .402 | 44.6 | 55.5 | 33.64 | 58.47 | 4f | aMC | 0 |
| 13893 | 424 | de la Rue D | .396 | .838 | .375 | 46.5 | 56.9 | 9.32 | 16.20 | 3 | C | 0 |
| 13893A | | | .396 | .833 | .386 | 45.7 | 56.4 | 5.60 | 9.73 | 2 | C | 0 |
| 13893B | | | .395 | .836 | .381 | 46.0 | 56.7 | 3.02 | 5.25 | 2 | C | 0 |
| 13895 | | | .395 | .854 | .339 | 49.3 | 58.6 | 3.69 | 6.41 | 1 | pMC | 0 |
| 13898 | | | .397 | .882 | .254 | 57.3 | 61.8 | 4.06 | 7.06 | 2 | C | 0 |
| 13898A | | | .392 | .885 | .251 | 57.3 | 62.2 | 5.71 | 9.92 | 1 | C | 0 |
| 13900 | 674 | Schwabe | .301 | .907 | .295 | 45.6 | 65.0 | 14.60 | 25.38 | 3f | C | 0 |
| 13900A | | Schwabe D | .302 | .903 | .306 | 44.6 | 64.5 | 9.97 | 17.33 | 3f | C | 0 |
| 13901 | 680 | Schwabe F | .307 | .916 | .258 | 49.9 | 66.3 | 11.23 | 19.52 | 1 | C | 0 |
| 13902 | | Schwabe X | .309 | .929 | .204 | 56.6 | 68.2 | 4.44 | 7.72 | 1 | C | 0 |
| 13902A | | | .309 | .927 | .213 | 55.4 | 67.9 | 7.16 | 12.45 | 2 | C | 0 |
| 13903 | | Cusanus H | .303 | .936 | .179 | 59.4 | 69.3 | 4.50 | 7.82 | 2 | C | 0 |
| 13903A | | | .304 | .931 | .202 | 56.3 | 68.5 | 2.99 | 5.20 | 2 | C | 0 |
| 13904 | 675B | Cusanus B | .308 | .940 | .147 | 64.5 | 70.0 | 12.31 | 21.40 | 2 | C | 0 |
| 13905 | | Cusanus E | .300 | .950 | .087 | 73.8 | 71.8 | 5.73 | 9.96 | 2 | C | 0 |
| 13914 | | Cusanus F | .319 | .943 | .095 | 73.4 | 70.5 | 6.20 | 10.78 | 2 | C | 0 |
| 13923 | | | .327 | .932 | .156 | 64.4 | 68.7 | 3.07 | 5.34 | 1 | C | 0 |
| 13930 | | | .337 | .909 | .245 | 53.9 | 65.3 | 4.09 | 7.11 | 3 | C | 0 |
| 13931 | | Schwabe U | .335 | .917 | .217 | 57.1 | 66.4 | 9.49 | 16.50 | 3 | C | 0 |
| 13932 | 424A | Strabo C | .335 | .921 | .199 | 59.3 | 67.0 | 9.83 | 17.09 | 2 | C | 0 |
| 13933 | | Cusanus G | .335 | .939 | .078 | 76.9 | 69.8 | 6.40 | 11.12 | 1 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13940 | (432C) | Strabo L | + .350 | + .900 | + .260 | + 53.4 | + 64.1 | 14.97 | 26.02 | 1 | C | 0 |
| 13941 | | | .342 | .917 | .205 | 59.0 | 66.4 | 5.53 | 9.61 | 1 | C | 0 |
| 13942 | | Hayn S | .343 | .927 | .152 | 66.1 | 67.9 | 5.71 | 9.92 | 1 | C | 0 |
| 13950 | (432D) | Strabo N | .360 | .905 | .227 | 57.8 | 64.8 | 14.41 | 25.05 | 1 | C | 0 |
| 13950A | (430) | Strabo B | .354 | .903 | .243 | 55.4 | 64.5 | 13.14 | 22.84 | 2 | C | 0 |
| 13951 | (424C) | Hayn J | .351 | .919 | .180 | 62.9 | 66.7 | 22.28 | 38.73 | 3 | C | 0 |
| 13952 | (424B) | Hayn E | .357 | .921 | .156 | 66.4 | 67.0 | 23.87 | 41.49 | 2 | C | p? |
| 13953 | | Hayn T | .354 | .930 | .099 | 74.3 | 68.4 | 4.12 | 7.16 | 3 | C | 0 |
| 13960 | | Hayn D | .366 | .910 | .195 | 61.9 | 65.5 | 11.33 | 19.69 | 4 | C | 0 |
| 13960A | | | .368 | .906 | .209 | 60.3 | 64.9 | 3.41 | 5.93 | 1 | C | 0 |
| 13960B | | | .367 | .900 | .235 | 57.3 | 64.1 | 3.49 | 6.07 | 1 | C | 0 |
| 13970 | (423) | Hayn B | .377 | .908 | .183 | 64.1 | 65.2 | 14.28 | 24.82 | 2 | C | 0 |
| 13971 | | | .376 | .915 | .146 | 68.7 | 66.2 | 27.38 | 47.59 | 4 | C | 0 |
| 13972 | (424D) | Hayn F | .373 | .927 | .039 | 83.9 | 67.9 | 33.98 | 59.06 | 2 | C | ? |
| 13990 | | Hayn L | .400 | .902 | .162 | 67.8 | 64.4 | 15.32 | 26.63 | 3 | C | 0 |
| 13991 | | | .392 | .920 | .000 | 90.0 | 66.9 | 9.55 | 16.60 | 1 | C | 0 |
| 14002 | 540D | Sabine D | .402 | .023 | .915 | 23.7 | 1.3 | 1.40 | 2.43 | 2 | pM | 0 |
| 14022 | 540E | Sabine E | .422 | .024 | .906 | 24.9 | 1.3 | 2.63 | 4.57 | 1 | pM | 0 |
| 14044 | 248A | Maskelyne G | .449 | .040 | .893 | 26.7 | 2.2 | 3.71 | 6.45 | 1 | pM | 0 |
| 14052 | | | .456 | .021 | .890 | 27.1 | 1.2 | 3.23<br>1.95 | 5.61<br>3.39 | 3 | pM | 0 |
| 14062 | | Maskelyne X | .460 | .023 | .888 | 27.3 | 1.3 | 2.42 | 4.21 | 1 | pM | 0 |
| 14073 | | Maskelyne Y | .472 | .030 | .881 | 28.1 | 1.7 | 2.31 | 4.02 | 1 | pM | 0 |
| 14081 | | Maskelyne W | .488 | .015 | .873 | 29.2 | 0.8 | 2.33 | 4.05 | 1 | pM | 0 |
| 14083 | 244A | Maskelyne B | .484 | .035 | .874 | 28.9 | 2.0 | 5.29 | 9.19 | 1 | pM | 0 |
| 14094 | | | .499 | .048 | .865 | 29.9 | 2.7 | 2.47 | 4.29 | 2 | pM | 0 |
| 14095 | 248C | Maskelyne K | .494 | .057 | .868 | 29.6 | 3.2 | 3.04 | 5.28 | 1 | pM | 0 |
| 14097 | | | .494 | .071 | .867 | 29.6 | 4.0 | 2.50<br>1.98 | 4.35<br>3.44 | 3 | pM | 0 |
| 14108 | 534C | Ross F | .403 | .189 | .895 | 24.2 | 10.8 | 2.87 | 4.99 | 1 | pM | 0 |
| 14118 | 534D | Ross G | .413 | .185 | .892 | 24.8 | 10.6 | 2.87 | 4.99 | 1 | pM | 0 |
| 14120 | | | .422 | .101 | .901 | 25.0 | 5.7 | 34.61<br>28.18 | 60.16<br>48.98 | 5f | aM | 0 |
| 14136 | 259A | Jansen G | .433 | .162 | .887 | 26.0 | 9.3 | 3.40 | 5.91 | 1 | pM | 0 |
| 14148 | 259 | Jansen B | .441 | .185 | .878 | 26.6 | 10.6 | 9.05 | 15.73 | 2 | pM | 0 |
| 14159 | | | .459 | .194 | .867 | 27.8 | 11.1 | 32.00 | 55.62 | 5f | aM | 0 |
| 14163 | 249 | Maskelyne M | .463 | .136 | .876 | 27.8 | 7.8 | 4.39 | 7.63 | 1 | pM | 0 |
| 14169 | 259B | Jansen H | .466 | .197 | .863 | 28.3 | 11.3 | 3.96 | 6.88 | 3f | aM | 0 |
| 14187 | | Jansen W | .484 | .177 | .857 | 29.4 | 10.1 | 1.82 | 3.16 | 2 | pM | 0 |
| 14189 | 259C | Jansen K | .485 | .200 | .851 | 29.6 | 11.5 | 3.19 | 5.54 | 1 | pM | 0 |
| 14224 | 520B | Plinius B | .429 | .243 | .870 | 26.2 | 14.0 | 3.12 | 5.42 | 3f | aM | 0 |
| 14229 | 519 | Dawes | .424 | .296 | .856 | 26.3 | 17.2 | 10.34 | 17.97 | 1 | pM | 0 |
| 14235 | | Jansen EB | .439 | .256 | .861 | 27.0 | 14.8 | 2.42 | 4.21 | 2 | pM | 0 |
| 14243 | | Jansen EA | .443 | .239 | .864 | 27.1 | 13.8 | 2.20 | 3.82 | 2 | pM | 0 |
| 14254 | 255B | Jansen E | .452 | .250 | .856 | 27.8 | 14.4 | 4.08 | 7.09 | 1 | pM | 0 |
| 14257 | 255C | Jansen D | .458 | .271 | .847 | 28.4 | 15.7 | 4.19 | 7.28 | 1 | pM | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14263 | 255 | Jansen | + .466 | + .234 | + .853 | + 28.6 | + 13.5 | 13.04 | 22.67 | 2f | aM | 0 |
| 14263A | | Jansen Y | .465 | .232 | .854 | 28.5 | 13.4 | 2.07 | 3.60 | 2 | pM | 0 |
| 14266 | . | Jansen R | .465 | .262 | .846 | 28.8 | 15.1 | 12.70 | 22.07 | 4f | aM | 0 |
| 14267 | 271 | Jansen C | .468 | .279 | .839 | 29.1 | 16.2 | 4.86 | 8.45 | 1 | pM | 0 |
| 14271 | | | .474 | .217 | .853 | 29.0 | 12.5 | 3.50 | 6.08 | 2 | pM | 0 |
| 14275 | | | .473 | .255 | .843 | 29.2 | 14.7 | 4.42 | 7.68 | 3f | aM | 0 |
| 14283 | | | .482 | .237 | .844 | 29.7 | 13.7 | 2.20 | 3.82 | 2 | pM | 0 |
| 14285 | 259D | Jansen L | .485 | .254 | .837 | 30.0 | 14.7 | 4.13 | 7.18 | 1 | pM | 0 |
| 14293 | | | .494 | .234 | .837 | 30.5 | 13.5 | 24.33 | 42.29 | 4f | aM | R |
| 14299 | | | .497 | .294 | .816 | 31.3 | 17.0 | 2.36 | 4.10 | 1 | pM | 0 |
| 14318 | 509C | Le Monnier C | .411 | .380 | .829 | 26.3 | 22.3 | 2.71 | 4.71 | 1 | pM | 0 |
| 14325 | | | .424 | .356 | .833 | 26.9 | 20.8 | 18.56 | 32.26 | 5f | aM | 0 |
| 14357 | | | .456 | .378 | .806 | 29.5 | 22.2 | 2.24 | 3.89 | 1 | pM | 0 |
| 14361 | 270A | Vitruvius E | .463 | .320 | .827 | 29.2 | 18.6 | 6.38 | 11.09 | 1 | pMC | 0 |
| 14364 | | | .469 | .342 | .814 | 29.9 | 19.9 | 2.19 | 3.81 | 3 | pM | 0 |
| 14366 | 280 | Littrow B | .462 | .369 | .806 | 29.8 | 21.6 | 4.26 | 7.40 | 1 | pM | 0 |
| 14376 | | | .476 | .361 | .802 | 30.6 | 21.1 | 2.44 | 4.24 | 1 | C | 0 |
| 14379 | | | .478 | .391 | .787 | 31.2 | 23.0 | 2.09 | 3.63 | 2 | pMC | 0 |
| 14382 | | Vitruvius L | .483 | .324 | .813 | 30.6 | 18.9 | 4.83 | 8.40 | 2 | C | 0 |
| 14382A | | | .487 | .321 | .812 | 30.9 | 18.7 | 2.04 | 3.55 | 1 | pM | 0 |
| 14386 | 279 | Littrow | .485 | .367 | .794 | 31.4 | 21.5 | 17.66 | 30.70 | 3f | C | 0 |
| 14386A | | | .489 | .360 | .795 | 31.6 | 21.1 | 3.88 | 6.74 | 2 | C | 0 |
| 14390 | 266 | Vitruvius | .495 | .303 | .814 | 31.2 | 17.6 | 16.33 | 28.38 | 2f | aMC | 0 |
| 14397 | 280A | Littrow A | .493 | .378 | .784 | 32.1 | 22.2 | 11.95 | 20.77 | 4f | C | 0 |
| 14399 | 280B | Littrow P | .499 | .393 | .772 | 32.8 | 23.1 | 20.72 | 36.01 | 4f | C | 0 |
| 14442 | | Le Monnier H | .448 | .422 | .788 | 29.6 | 24.9 | 3.30 | 5.74 | 1 | pM | 0 |
| 14446 | | Le Monnier K | .446 | .465 | .765 | 30.2 | 27.7 | 2.53 | 4.40 | 1 | C | 0 |
| 14450 | | | .457 | .407 | .791 | 30.0 | 24.0 | 2.22 | 3.86 | 1 | C | 0 |
| 14454 | 508 | Le Monnier | .455 | .447 | .770 | 30.5 | 26.5 | 35.01 | 60.85 | 4f | aMC | 0 |
| 14456 | | | .458 | .462 | .759 | 31.0 | 27.5 | 2.00 | 3.48 | 2 | C | 0 |
| 14459 | 505 | Chacornac A | .454 | .497 | .740 | 31.5 | 29.8 | 2.99 | 5.20 | 1 | C | 0 |
| 14459A | 503 | Chacornac | .456 | .498 | .738 | 31.7 | 29.8 | 29.32 | 50.96 | 3 | C | 0 |
| 14468 | 504 | Chacornac B | .462 | .484 | .743 | 31.8 | 28.9 | 3.19 | 5.54 | 2 | C | 0 |
| 14471 | | | .476 | .410 | .778 | 31.4 | 24.2 | 2.15 | 3.74 | 2 | C | 0 |
| 14472 | | Le Monnier T | .473 | .424 | .772 | 31.4 | 25.0 | 10.06 | 17.49 | 4f | C | 0 |
| 14475 | 509 | Le Monnier A | .479 | .452 | .752 | 32.4 | 26.8 | 12.26 | 21.31 | 3f | C | 0 |
| 14475A | | | .473 | .456 | .754 | 32.1 | 27.1 | 2.19 | 3.81 | 1 | C | 0 |
| 14475B | | | .474 | .459 | .751 | 32.2 | 27.3 | 13.83 | 24.04 | 4 | C | 0 |
| 14478 | | Chacornac F | .475 | .489 | .732 | 32.9 | 29.2 | 12.36 | 21.48 | 4 | C | 0 |
| 14483 | | | .483 | .437 | .759 | 32.4 | 25.9 | 2.19 | 3.81 | 1 | C | 0 |
| 14483A | | | .487 | .434 | .758 | 32.7 | 25.7 | 2.19 | 3.81 | 1 | C | 0 |
| 14484 | | | .481 | .441 | .758 | 32.4 | 26.1 | 15.41 | 26.78 | 4f | C | 0 |
| 14485 | | | .486 | .459 | .744 | 33.1 | 27.3 | 2.04 | 3.55 | 1 | C | 0 |
| 14486 | | | .484 | .468 | .739 | 33.2 | 27.9 | 2.49 | 4.33 | 1 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14488 | | | + .484 | + .485 | + .728 | + 33.6 | + 29.0 | 2.79 | 4.85 | 2 | C | 0 |
| 14488A | | | .487 | .481 | .729 | 33.7 | 28.7 | 11.83 | 20.56 | 3 | C | 0 |
| 14489 | | | .488 | .499 | .716 | 34.2 | 29.9 | 2.59 | 4.50 | 2 | C | 0 |
| 14489A | | Chacornac E | .484 | .492 | .724 | 33.7 | 29.4 | 12.36 | 21.48 | 4 | C | 0 |
| 14490 | 281 | Littrow D | .496 | .402 | .770 | 32.7 | 23.7 | 4.57 | 7.94 | 1 | C | 0 |
| 14494 | | Le Monnier U | .495 | .440 | .749 | 33.4 | 26.1 | 14.46 | 25.13 | 4 | C | 0 |
| 14494A | | | .490 | .442 | .751 | 33.1 | 26.2 | 2.59 | 4.50 | 1 | C | 0 |
| 14495 | 509A | Le Monnier S | .497 | .451 | .741 | 33.8 | 26.8 | 22.95 | 39.89 | 4 | C | 0 |
| | | | | | | | | 13.01 | 22.61 | | | |
| 14496 | | | .499 | .463 | .733 | 34.2 | 27.5 | 2.39 | 4.15 | 1 | C | 0 |
| 14499 | 495 | G. Bond B | .493 | .498 | .713 | 34.6 | 29.8 | 18.76 | 32.61 | 3 | C | 0 |
| 14499A | | | .494 | .492 | .717 | 34.5 | 29.4 | 2.64 | 4.59 | 2 | C | 0 |
| 14512 | 482 | Posidonius A | .419 | .525 | .741 | 29.4 | 31.6 | 6.46 | 11.23 | 1 | C | 0 |
| 14515 | 489 | Posidonius O | .410 | .553 | .725 | 29.4 | 33.5 | 7.39 | 12.84 | 3 | C | 0 |
| 14516 | 487 | Posidonius M | .413 | .564 | .715 | 30.0 | 34.3 | 5.90 | 10.26 | 1 | pM | 0 |
| 14521 | 481 | Posidonius C | .423 | .516 | .745 | 29.5 | 31.0 | 1.94 | 3.37 | 2 | C | 0 |
| 14522 | 468 | Posidonius | .424 | .528 | .736 | 29.9 | 31.8 | 57.84 | 100.53 | 3 | aMC | pp |
| 14525 | 486 | Posidonius J | .425 | .556 | .714 | 30.7 | 33.7 | 11.88 | 20.65 | 1 | pMC | 0 |
| 14527 | 466 | Daniell | .422 | .579 | .698 | 31.1 | 35.3 | 17.06 | 29.65 | 1 | pM | 0 |
| | | | | | | | | 13.14 | 22.84 | | | |
| 14528 | | Daniell W | .424 | .586 | .691 | 31.5 | 35.8 | 1.98 | 3.44 | 2 | pM | 0 |
| 14529 | | Daniell X | .423 | .596 | .683 | 31.7 | 36.5 | 2.95 | 5.13 | 1 | pM | 0 |
| 14534 | 483 | Posidonius B | .432 | .547 | .717 | 31.0 | 33.1 | 8.69 | 15.10 | 1 | C | 0 |
| 14544 | 484 | Posidonius D | .441 | .540 | .717 | 31.5 | 32.6 | 7.24 | 12.58 | 3 | C | 0 |
| | | | | | | | | 5.65 | 9.82 | | | |
| 14554 | | | .450 | .542 | .710 | 32.3 | 32.8 | 8.62 | 14.98 | 4f | aMC | 0 |
| 14558 | (498) | Hall K | .458 | .581 | .673 | 34.2 | 35.5 | 4.64 | 8.07 | 1 | pM | 0 |
| 14560 | | | .468 | .501 | .728 | 32.7 | 30.0 | 5.98 | 10.39 | 3 | C | 0 |
| 14561 | | Chacornac C | .462 | .512 | .724 | 32.5 | 30.7 | 2.54 | 4.41 | 1 | C | 0 |
| 14570 | | Chacornac D | .476 | .509 | .717 | 33.5 | 30.5 | 14.66 | 25.48 | 4f | C | 0 |
| 14572 | | | .472 | .528 | .706 | 33.7 | 31.8 | 14.25 | 24.77 | 5f | aMC | 0 |
| 14574 | | G. Bond J | .475 | .542 | .693 | 34.4 | 32.8 | 3.48 | 6.05 | 1 | pMC | 0 |
| 14583 | | | .488 | .532 | .692 | 35.1 | 32.1 | 2.39 | 4.15 | 1 | C | 0 |
| 14584 | | | .482 | .543 | .688 | 35.0 | 32.8 | 2.54 | 4.41 | 1 | C | 0 |
| 14586 | 497A | Hall C | .482 | .569 | .666 | 35.8 | 34.6 | 3.56 | 6.19 | 1 | pM | 0 |
| 14586A | | | .487 | .560 | .670 | 36.0 | 34.0 | 3.92 | 6.81 | 2f | aM | 0 |
| 14588 | 497 | Hall J | .489 | .580 | .652 | 36.8 | 35.4 | 4.91 | 8.53 | 1 | pM | 0 |
| 14589 | | Hall Y | .484 | .593 | .644 | 36.9 | 36.3 | 2.42 | 4.21 | 1 | pM | 0 |
| 14590 | | G. Bond BA | .493 | .506 | .708 | 34.8 | 30.3 | 3.87 | 6.73 | 2 | C | 0 |
| 14590A | | | .498 | .504 | .706 | 35.2 | 30.2 | 2.49 | 4.33 | 2 | C | 0 |
| 14592 | | | .498 | .523 | .692 | 35.7 | 31.5 | 15.33 | 26.65 | 4f | aMC | 0 |
| 14595 | | | .490 | .558 | .670 | 36.1 | 33.9 | 4.54 | 7.89 | 2 | pM | 0 |
| 14597 | | | .499 | .570 | .653 | 37.3 | 34.7 | 7.45 | 12.95 | 4f | aM | 0 |
| 14598 | | Hall X | .498 | .583 | .642 | 37.8 | 35.6 | 2.51 | 4.36 | 1 | pM | 0 |
| 14608 | 640 | Mason C | .408 | .680 | .609 | 33.8 | 42.8 | 7.14 | 12.41 | 1 | C | 0 |
| 14610 | | Grove Y | .417 | .608 | .676 | 31.6 | 37.4 | 1.96 | 3.41 | 3 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14614 | 463 | Grove | + .415 | + .647 | + .640 | + 32.9 | + 40.3 | 15.40 | 26.77 | 1 | pM | p |
| 14625 | | | .424 | .657 | .623 | 34.2 | 41.0 | 7.17 | 12.46 | 4f | aMC | 0 |
| 14627 | 456 | Hercules C | .425 | .678 | .600 | 35.3 | 42.6 | 5.39 | 9.37 | 1 | pMC | 0 |
| 14629 | 454B | Hercules J | .426 | .696 | .578 | 36.3 | 44.1 | 4.63 | 8.05 | 1 | pM | 0 |
| 14632 | | | .436 | .625 | .648 | 33.9 | 38.6 | 2.83 | 4.92 | 1 | pM | 0 |
| 14639 | 454C | Hercules K | .430 | .697 | .574 | 36.8 | 44.1 | 4.16 | 7.23 | 1 | pMC | 0 |
| 14647 | | Williams N | .440 | .670 | .598 | 36.3 | 42.0 | 2.85 | 4.95 | 1 | C | 0 |
| 14648 | 460A | Williams F | .448 | .689 | .570 | 38.1 | 43.5 | 3.73 | 6.48 | 1 | C | 0 |
| 14656 | 460B | Williams | .450 | .669 | .592 | 37.2 | 41.9 | 20.78 | 36.12 | 3 | C | 0 |
| 14657 | | Williams R | .457 | .675 | .579 | 38.2 | 42.4 | 2.07 | 3.60 | 1 | C | 0 |
| 14663 | | Maury U | .466 | .633 | .618 | 37.0 | 39.2 | 2.75 | 4.78 | 1 | pMC | 0 |
| 14665 | | | .464 | .652 | .600 | 37.7 | 40.6 | 25.42 | 44.18 | 4f | aMC | 0 |
| 14674 | | Maury P | .472 | .642 | .604 | 37.9 | 39.9 | 6.85 | 11.91 | 2f | aMC | 0 |
| 14675 | | Williams M | .471 | .659 | .586 | 38.7 | 41.2 | 3.08 | 5.35 | 1 | pMC | 0 |
| 14681 | 385A | Maury D | .481 | .619 | .621 | 37.7 | 38.2 | 4.38 | 7.61 | 1 | pM | 0 |
| 14684 | | | .480 | .648 | .591 | 39.0 | 40.3 | 7.28 | 12.65 | 3f | aMC | 0 |
| 14690 | | Maury C | .499 | .602 | .623 | 38.6 | 37.0 | 16.25 | 28.24 | 3f | aMC | 0 |
| 14700 | | | .407 | .708 | .577 | 35.1 | 45.0 | 2.05 | 3.56 | 2 | C | 0 |
| 14704 | 454 | Hercules B | .401 | .741 | .539 | 36.6 | 47.8 | 5.08 | 8.83 | 1 | C | 0 |
| 14710 | | | .412 | .709 | .572 | 35.7 | 45.1 | 2.27 | 3.95 | 2 | C | 0 |
| 14718 | 454A | Hercules H | .410 | .780 | .473 | 40.9 | 51.2 | 3.73 | 6.48 | 1 | C | 0 |
| 14718A | | | .415 | .784 | .462 | 41.9 | 51.6 | 2.78 | 4.83 | 1 | C | 0 |
| 14726 | 460 | Hercules F | .426 | .769 | .477 | 41.7 | 50.2 | 8.94 | 15.54 | 2 | C | 0 |
| 14731 | 459 | Hercules E | .436 | .717 | .544 | 38.7 | 45.8 | 5.50 | 9.56 | 1 | C | 0 |
| 14732 | 452 | Hercules | .434 | .728 | .531 | 39.2 | 46.7 | 38.57 | 67.04 | 2 | C | pp |
| 14732A | 458 | Hercules G | .435 | .724 | .535 | 39.0 | 46.3 | 8.83 | 15.35 | 1 | pM | 0 |
| 14737 | 453 | Hercules A | .432 | .779 | .454 | 43.5 | 51.1 | 18.81 | 32.69 | 1 | C | 0 |
| 14739 | | | .430 | .790 | .437 | 44.5 | 52.1 | 4.16 | 7.23 | 3f | C | 0 |
| 14739A | | | .432 | .792 | .431 | 45.0 | 52.3 | 3.03 | 5.27 | 1 | C | 0 |
| 14739B | | | .439 | .799 | .411 | 46.8 | 53.0 | 2.27 | 3.95 | 1 | C | 0 |
| 14745 | 449 | Atlas E | .447 | .750 | .488 | 42.5 | 48.5 | 33.37 | 58.00 | 4 | C | p |
| 14748 | | | .448 | .783 | .432 | 46.0 | 51.5 | 9.57 | 16.63 | 4 | C | 0 |
| 14750 | 457 | Hercules D | .454 | .704 | .546 | 39.7 | 44.7 | 4.86 | 8.45 | 1 | pMC | 0 |
| 14753 | | | .454 | .731 | .509 | 41.7 | 46.9 | 6.66 | 11.58 | 3 | C | 0 |
| 14755 | | | .455 | .750 | .480 | 43.4 | 48.5 | 3.69 | 6.41 | 2 | C | 0 |
| 14757 | | Atlas G | .459 | .774 | .436 | 46.4 | 50.7 | 13.04 | 22.67 | 4 | C | 0 |
| 14768 | | Atlas L | .468 | .781 | .414 | 48.5 | 51.3 | 3.14 | 5.46 | 2 | C | 0 |
| 14769 | | Endymion X | .462 | .798 | .387 | 50.0 | 52.9 | 3.24 | 5.63 | 2 | C | 0 |
| 14773 | | | .470 | .735 | .489 | 43.8 | 47.3 | 2.73 | 4.75 | 1 | C | 0 |
| 14775 | | | .475 | .751 | .459 | 46.0 | 48.6 | 2.30 | 4.00 | 1 | C | 0 |
| 14776 | | | .475 | .767 | .431 | 47.7 | 50.0 | 2.79 | 4.85 | 1 | C | 0 |
| 14781 | | | .481 | .712 | .512 | 43.2 | 45.3 | 2.17 | 3.77 | 2 | C | 0 |
| 14782 | 437 | Atlas | .481 | .727 | .490 | 44.4 | 46.6 | 50.29 | 87.41 | 2 | C | Ppp |
| 14786 | 441 | Atlas D | .486 | .770 | .413 | 49.6 | 50.3 | 16.67 | 28.97 | 3f | aMC | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14789 | | | + .482 | + .794 | + .370 | + 52.4 | + 52.5 | 4.75 | 8.26 | 2 | C | 0 |
| 14789A | | | .480 | .793 | .375 | 51.9 | 52.4 | 4.15 | 7.21 | 2 | C | 0 |
| 14790 | | Atlas X | .499 | .709 | .498 | 45.0 | 45.1 | 2.80 | 4.87 | 1 | C | 0 |
| 14790A | | Atlas W | .498 | .700 | .512 | 44.2 | 44.4 | 2.07 | 3.60 | 2 | C | 0 |
| 14795 | | | .496 | .752 | .434 | 48.8 | 48.7 | 2.44 | 4.24 | 2 | C | 0 |
| 14797 | | Endymion K | .495 | .780 | .383 | 52.2 | 51.2 | 3.93 | 6.83 | 1 | pMC | 0 |
| 14803 | | | .401 | .833 | .381 | 46.4 | 56.4 | 15.40 | 26.77 | 3 | C | 0 |
| 14806 | | | .405 | .863 | .302 | 53.2 | 59.6 | 4.76 | 8.27 | 2 | C | 0 |
| 14806A | | | .404 | .864 | .300 | 53.3 | 59.7 | 4.76 | 8.27 | 3 | C | 0 |
| 14807 | | | .406 | .873 | .270 | 56.3 | 60.8 | 3.65 | 6.34 | 2 | C | 0 |
| 14808 | | de la Rue R | .409 | .884 | .226 | 61.0 | 62.1 | 5.37 | 9.33 | 2 | pMC | 0 |
| 14809 | | de la Rue S | .401 | .890 | .217 | 61.5 | 62.8 | 7.02 | 12.20 | 2 | pMC | 0 |
| 14811 | | | .413 | .817 | .402 | 45.7 | 54.7 | 5.05 | 8.78 | 2 | C | 0 |
| 14812 | | de la Rue W | .412 | .826 | .385 | 46.9 | 55.6 | 10.13 | 17.61 | 3 | C | 0 |
| 14813 | | de la Rue E | .417 | .837 | .354 | 49.6 | 56.8 | 18.44 | 32.05 | 4f | C | 0 |
| 14814 | | de la Rue EA | .410 | .842 | .351 | 49.4 | 57.3 | 5.57 | 9.68 | 2 | C | 0 |
| 14814A | | | .415 | .848 | .330 | 51.5 | 57.9 | 2.84 | 4.94 | 2 | C | 0 |
| 14815 | 417A | de la Rue J | .411 | .857 | .311 | 52.8 | 58.9 | 8.31 | 14.44 | 1 | C | 0 |
| 14815A | 416 | de la Rue | .410 | .858 | .309 | 52.9 | 59.0 | 78.15 | 135.84 | 4f | C | 0 |
| 14816 | | | .419 | .862 | .285 | 55.7 | 59.5 | 3.04 | 5.28 | 1 | C | 0 |
| 14817 | | de la Rue Q | .415 | .879 | .235 | 60.4 | 61.5 | 5.83 | 10.13 | 1 | C | 0 |
| 14817A | | | .413 | .872 | .263 | 57.5 | 60.6 | 13.88 | 24.13 | 3 | C | 0 |
| 14818 | | Hayn M | .418 | .890 | .182 | 66.4 | 62.8 | 3.96 | 6.88 | 1 | pMC | 0 |
| 14819 | | Hayn H | .417 | .894 | .164 | 68.5 | 63.3 | 8.03 | 13.96 | 2 | C | 0 |
| 14821 | | | .426 | .817 | .389 | 47.6 | 54.7 | 15.48 | 26.91 | 4f | C | 0 |
| 14823 | | | .428 | .830 | .358 | 50.1 | 56.0 | 4.05 | 7.04 | 2 | C | 0 |
| 14824 | | | .429 | .847 | .314 | 53.8 | 57.8 | 13.21 | 22.96 | 4f | aMC | 0 |
| 14827 | | | .426 | .876 | .226 | 62.0 | 61.1 | 7.01 | 12.18 | 2 | C | 0 |
| 14828 | | | .421 | .883 | .208 | 63.7 | 62.0 | 25.98 | 45.16 | 5f | aMC | 0 |
| 14833 | | | .435 | .839 | .327 | 53.0 | 57.0 | 16.52 | 28.71 | 3f | C | 0 |
| 14836 | | de la Rue P | .433 | .870 | .236 | 61.4 | 60.4 | 6.06 | 10.53 | 1 | C | 0 |
| 14839 | (422) | Hayn A | .430 | .890 | .152 | 70.5 | 62.8 | 31.22 | 54.27 | 3 | C | p |
| 14842 | | | .440 | .830 | .343 | 52.0 | 56.0 | 3.95 | 6.87 | 1 | C | 0 |
| 14842A | | | .442 | .824 | .354 | 51.2 | 55.4 | 6.69 | 11.63 | 4 | C | 0 |
| 14844 | | | .442 | .840 | .315 | 54.5 | 57.1 | 9.83 | 17.09 | 3 | C | 0 |
| 14849 | | Belkovich K | .443 | .896 | .031 | 86.0 | 63.6 | 27.53 | 47.85 | 2 | C | 0 |
| 14850 | | Endymion J | .457 | .805 | .378 | 50.3 | 53.6 | 29.74 | 51.69 | 4 | C | p |
| 14851 | | | .458 | .819 | .346 | 52.9 | 54.9 | 12.31 | 21.40 | 3 | C | 0 |
| 14852 | | | .450 | .824 | .344 | 52.5 | 55.4 | 4.25 | 7.39 | 2 | C | 0 |
| 14853 | 409 | Endymion G | .456 | .833 | .313 | 55.5 | 56.4 | 8.36 | 14.53 | 1 | pMC | 0 |
| 14854 | | | .457 | .845 | .278 | 58.7 | 57.6 | 4.06 | 7.06 | 1 | pMC | 0 |
| 14855 | 406 | Endymion C | .457 | .852 | .255 | 60.7 | 58.4 | 18.66 | 32.43 | 3f | C | 0 |
| 14862 | | | .460 | .821 | .338 | 53.6 | 55.1 | 4.96 | 8.62 | 2 | C | 0 |
| 14864 | | Endymion CB | .469 | .845 | .257 | 61.2 | 57.6 | 14.28 | 24.82 | 4 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14864A | | Endymion CA | + .463 | + .845 | + .268 | + 59.9 | + 57.6 | 17.42 | 30.28 | 3 | pMC | 0 |
| 14865 | | Endymion BB | .464 | .856 | .228 | 63.8 | 58.8 | 4.26 | 7.40 | 1 | pMC | 0 |
| 14866 | 405 | Endymion B | .464 | .864 | .195 | 67.1 | 59.7 | 33.73 | 58.63 | 3f | aMC | 0 |
| 14872 | | Endymion Y | .477 | .827 | .298 | 58.0 | 55.7 | 4.56 | 7.93 | 1 | C | 0 |
| 14873 | | | .474 | .830 | .294 | 58.1 | 56.0 | 87.66 | 152.37 | 5 | C | 0 |
| 14877 | | Belkovich | .479 | .877 | .038 | 85.4 | 61.2 | 113.69 | 197.61 | 4 | aMC | pp |
| 14877A | | | .470 | .877 | .100 | 78.0 | 61.2 | 6.04 | 10.50 | 2 | pM | 0 |
| 14877B | | | .476 | .876 | .078 | 80.7 | 61.1 | 6.31 | 10.97 | 2 | pM | 0 |
| 14885 | | Endymion BA | .485 | .854 | .188 | 68.7 | 58.6 | 4.10 | 7.13 | 2 | C | 0 |
| 14890 | 403 | Endymion | .495 | .805 | .327 | 56.5 | 53.6 | 71.98 | 125.11 | 2f | C | 0 |
| 14892 | | | .496 | .825 | .271 | 61.3 | 55.5 | 4.46 | 7.75 | 1 | C | 0 |
| 14893 | 408 | Endymion F | .495 | .834 | .244 | 63.7 | 56.5 | 7.74 | 13.45 | 3 | C | 0 |
| 14893A | | | .495 | .838 | .230 | 65.1 | 56.9 | 5.06 | 8.80 | 3 | C | 0 |
| 14893B | | | .496 | .836 | .235 | 64.6 | 56.7 | 6.12 | 10.64 | 3 | C | 0 |
| 14920 | (424E) | Hayn | .426 | .904 | .036 | 85.1 | 64.6 | 50.09 | 87.06 | 2 | C | pp |
| 14920A | (424F) | Hayn C | .423 | .906 | .015 | 87.9 | 64.9 | 7.35 | 12.78 | 1 | C | 0 |
| 15003 | 242 | Maskelyne | .500 | .038 | .865 | 30.0 | 2.1 | 13.67 | 23.76 | 2 | pM | p |
| 15007 | | | .500 | .072 | .863 | 30.0 | 4.1 | 2.30<br>1.86 | 4.00<br>3.23 | 2 | pM | 0 |
| 15009 | | Maskelyne N | .503 | .093 | .859 | 30.3 | 5.3 | 3.07 | 5.34 | 1 | pM | 0 |
| 15015 | | Maskelyne R | .519 | .053 | .853 | 31.3 | 3.0 | 7.74 | 13.45 | 4f | aM | 0 |
| 15030 | | | .535 | .005 | .845 | 32.3 | 0.2 | 2.76 | 4.80 | 1 | pMC | 0 |
| 15030A | | | .533 | .000 | .846 | 32.2 | 0.0 | 7.46 | 12.97 | 4f | aMC | 0 |
| 15033 | | | .538 | .032 | .842 | 32.5 | 1.8 | 2.87 | 4.99 | 2 | C | 0 |
| 15034 | 246 | Maskelyne D | .536 | .043 | .843 | 32.4 | 2.4 | 19.01 | 33.04 | 5f | aMC | 0 |
| 15035 | | Maskelyne J | .539 | .055 | .841 | 32.6 | 3.1 | 2.41 | 4.19 | 1 | pM | 0 |
| 15038 | 248B | Maskelyne H | .532 | .086 | .842 | 32.2 | 4.9 | 3.73 | 6.48 | 1 | pM | 0 |
| 15041 | | | .545 | .018 | .838 | 33.0 | 1.0 | 4.99 | 8.67 | 3 | C | 0 |
| 15042 | 245 | Maskelyne C | .540 | .020 | .841 | 32.6 | 1.1 | 5.41 | 9.40 | 3 | C | 0 |
| 15042A | | | .543 | .023 | .839 | 32.8 | 1.3 | 3.01 | 5.23 | 3 | C | 0 |
| 15045 | | | .541 | .051 | .839 | 32.7 | 2.9 | 6.58 | 11.44 | 4f | aMC | 0 |
| 15060 | 243 | Maskelyne A | .560 | .001 | .828 | 34.0 | 0.0 | 16.94 | 29.44 | 3 | C | p |
| 15060A | | Maskelyne P | .560 | .009 | .828 | 34.0 | 0.5 | 7.00 | 12.17 | 3 | C | 0 |
| 15070 | | | .573 | .002 | .820 | 34.9 | 0.1 | 3.98 | 6.92 | 3 | C | 0 |
| 15072 | | | .573 | .028 | .819 | 34.9 | 1.6 | 2.00 | 3.48 | 2 | C | 0 |
| 15077 | 248 | Maskelyne F | .577 | .073 | .813 | 35.3 | 4.1 | 11.36 | 19.75 | 4f | aM | 0 |
| 15081 | | | .581 | .010 | .814 | 35.5 | 0.5 | 17.54 | 30.49 | 4f | aMC | 0 |
| 15090 | | | .599 | .003 | .801 | 36.7 | 0.1 | 7.46 | 12.97 | 3f | aMC | 0 |
| 15106 | 261 | Sinas E | .508 | .168 | .845 | 31.0 | 9.6 | 5.27 | 9.16 | 1 | pM | 0 |
| 15115 | 260 | Sinas | .518 | .154 | .841 | 31.6 | 8.8 | 7.15 | 12.43 | 1 | pM | 0 |
| 15133 | 260A | Sinas A | .534 | .136 | .834 | 32.6 | 7.8 | 3.31 | 5.75 | 1 | pM | 0 |
| 15141 | | Sinas K | .542 | .119 | .832 | 33.0 | 6.8 | 2.75 | 4.78 | 1 | pM | 0 |
| 15147 | | Sinas H | .545 | .174 | .820 | 33.6 | 10.0 | 3.20 | 5.56 | 1 | pM | 0 |
| 15147A | | Sinas J | .547 | .180 | .818 | 33.7 | 10.3 | 3.19 | 5.54 | 1 | pM | 0 |
| 15149 | | Jansen T | .541 | .197 | .818 | 33.4 | 11.3 | 2.75 | 4.78 | 1 | pM | 0 |
| 15156 | | Sinas G | .556 | .167 | .814 | 34.3 | 9.6 | 2.80 | 4.87 | 1 | pM | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15163 | | Cauchy M | + .570 | + .133 | + .811 | + 35.1 | + 7.6 | 2.71 | 4.71 | 1 | pM | 0 |
| 15170 | 247 | Maskelyne E | .572 | .108 | .813 | 35.1 | 6.2 | 12.77 | 22.20 | 5f | aM | 0 |
| 15176 | | Cauchy B | .577 | .170 | .799 | 35.8 | 9.7 | 3.30 | 5.74 | 1 | pM | 0 |
| 15186 | | | .587 | .164 | .793 | 36.5 | 9.4 | 2.00 | 3.48 | 2 | pM | 0 |
| 15190 | | | .597 | .101 | .796 | 36.8 | 5.7 | 11.85 | 20.60 | 5f | aM | 0 |
| 15196 | | Cauchy F | .591 | .167 | .789 | 36.8 | 9.6 | 2.11 | 3.67 | 1 | pM | 0 |
| 15196A | | | .598 | .166 | .784 | 37.3 | 9.5 | 2.00 | 3.48 | 2 | pM | 0 |
| 15201 | 255A | Jansen F | .504 | .218 | .836 | 31.0 | 12.5 | 5.47 | 9.51 | 1 | pM | 0 |
| 15201A | | | .502 | .213 | .838 | 30.9 | 12.2 | 3.20 | 5.56 | 2 | pM | 0 |
| 15207 | | Vitruvius M | .502 | .278 | .819 | 31.5 | 16.1 | 2.72 | 4.73 | 1 | pM | 0 |
| 15207A | | | .500 | .277 | .821 | 31.3 | 16.0 | 18.60 | 32.33 | 5f | aM | 0 |
| 15216 | | | .512 | .260 | .819 | 32.0 | 15.0 | 7.65 | 13.30 | 5f | aM | 0 |
| 15218 | | | .517 | .280 | .809 | 32.5 | 16.2 | 3.00 | 5.21 | 2 | C | 0 |
| 15220 | | Jansen U | .523 | .207 | .827 | 32.3 | 11.9 | 2.50 | 4.35 | 1 | pM | 0 |
| 15220A | | | .525 | .206 | .826 | 32.4 | 11.8 | 2.20 | 3.82 | 2 | pM | 0 |
| 15228 | | Vitruvius K | .529 | .282 | .800 | 33.4 | 16.3 | 3.02<br>4.73 | 5.25<br>8.22 | 2 | C | 0 |
| 15228A | 268 | Vitruvius B | .522 | .282 | .805 | 32.9 | 16.3 | 11.08 | 19.26 | 4 | C | 0 |
| 15229 | | Vitruvius T | .524 | .294 | .799 | 33.2 | 17.0 | 9.64 | 16.76 | 4 | C | 0 |
| 15236 | 269 | Vitruvius C | .538 | .264 | .801 | 33.9 | 15.3 | 5.80 | 10.08 | 5f | aMC | 0 |
| 15238 | | Vitruvius H | .535 | .282 | .796 | 33.8 | 16.3 | 12.65 | 21.99 | 5 | C | 0 |
| 15247 | | | .545 | .274 | .792 | 34.5 | 15.9 | 3.71 | 6.45 | 3 | C | 0 |
| 15254 | | Vitruvius G | .552 | .241 | .798 | 34.6 | 13.9 | 3.36 | 5.84 | 1 | pM | 0 |
| 15267 | | | .567 | .276 | .776 | 36.1 | 16.0 | 2.10 | 3.65 | 2 | pM | 0 |
| 15268 | 270 | Maraldi D | .565 | .286 | .774 | 36.1 | 16.6 | 34.52 | 60.00 | 4f | aM | 0 |
| 15272 | | Maraldi W | .574 | .228 | .786 | 36.1 | 13.1 | 2.70 | 4.69 | 2 | pM | 0 |
| 15284 | 275A | Maraldi B | .580 | .248 | .776 | 36.7 | 14.3 | 4.27 | 7.42 | 1 | pM | 0 |
| 15301 | | | .503 | .318 | .804 | 32.0 | 18.5 | 5.57 | 9.68 | 3 | C | 0 |
| 15302 | | | .506 | .324 | .799 | 32.3 | 18.9 | 8.37 | 14.55 | 4 | C | 0 |
| 15305 | | | .502 | .350 | .791 | 32.4 | 20.4 | 7.37 | 12.81 | 3 | C | 0 |
| 15306 | | | .505 | .363 | .783 | 32.8 | 21.2 | 21.13 | 36.73 | 5f | C | 0 |
| 15307 | | | .505 | .377 | .776 | 33.0 | 22.1 | 20.97 | 36.45 | 5 | C | 0 |
| 15307A | | | .506 | .372 | .778 | 33.0 | 21.8 | 2.59 | 4.50 | 2 | C | 0 |
| 15314 | | Maraldi R | .513 | .347 | .785 | 33.1 | 20.3 | 2.64 | 4.59 | 1 | C | 0 |
| 15316 | | | .518 | .363 | .775 | 33.7 | 21.2 | 14.60 | 25.38 | 4f | C | 0 |
| 15324 | | | .524 | .342 | .780 | 33.8 | 19.9 | 2.09 | 3.63 | 1 | pMC | 0 |
| 15327 | | Littrow F | .520 | .374 | .768 | 34.1 | 21.9 | 5.92 | 10.29 | 2 | C | 0 |
| 15329 | 309 | Römer L | .523 | .395 | .755 | 34.7 | 23.2 | 6.13 | 10.65 | 1 | pMC | 0 |
| 15330 | 267 | Vitruvius A | .530 | .305 | .791 | 33.8 | 17.7 | 10.61 | 18.44 | 1 | C | 0 |
| 15331 | | | .533 | .316 | .785 | 34.1 | 18.4 | 2.19 | 3.81 | 1 | C | 0 |
| 15333 | 272 | Maraldi | .539 | .332 | .774 | 34.8 | 19.3 | 22.95 | 39.89 | 3f | C | 0 |
| 15338 | 308 | Römer K | .537 | .384 | .751 | 35.5 | 22.5 | 6.97 | 12.11 | 1 | pM | 0 |
| 15338A | | Römer KA | .537 | .389 | .749 | 35.6 | 22.8 | 4.19 | 7.28 | 1 | pM | 0 |
| 15338B | | | .539 | .387 | .748 | 35.7 | 22.7 | 2.22 | 3.86 | 2 | pM | 0 |
| 15339 | | Römer TA | .532 | .399 | .747 | 35.4 | 23.5 | 4.83 | 8.40 | 1 | pM | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15342 | | | + .548 | + .320 | + .773 | + 35.3 | + 18.6 | 13.35 | 23.20 | 5f | aMC | 0 |
| 15349 | | | .541 | .395 | .742 | 36.0 | 23.2 | 2.59 | 4.50 | 2 | C | 0 |
| 15350 | | Maraldi E | .557 | .305 | .772 | 35.7 | 17.7 | 18.08 | 31.43 | 4f | aMC | 0 |
| 15352 | | Maraldi F | .553 | .328 | .766 | 35.8 | 19.1 | 10.40 | 18.08 | 3f | aMC | 0 |
| 15354 | 273A | Maraldi A | .556 | .342 | .758 | 36.2 | 19.9 | 4.38 | 7.61 | 2 | pM | 0 |
| 15361 | 275 | Maraldi N | .569 | .315 | .760 | 36.8 | 18.3 | 3.04 | 5.28 | 2 | pM | 0 |
| 15362 | | | .562 | .327 | .760 | 36.4 | 19.0 | 13.20 | 22.94 | 4f | aMC | 0 |
| 15368 | 307 | Römer J | .569 | .380 | .729 | 37.9 | 22.3 | 5.29 | 9.19 | 1 | pMC | 0 |
| 15379 | | | .573 | .392 | .720 | 38.5 | 23.0 | 2.25 | 3.91 | 2 | C | 0 |
| 15380 | | | .581 | .306 | .754 | 37.6 | 17.8 | 2.29 | 3.98 | 1 | pM | 0 |
| 15382 | | | .586 | .328 | .741 | 38.3 | 19.1 | 22.21 | 38.60 | 5f | aM | 0 |
| 15385 | | | .582 | .352 | .733 | 38.4 | 20.6 | 2.04 | 3.55 | 2 | pM | 0 |
| 15389 | | Macrobius P | .586 | .390 | .710 | 39.5 | 22.9 | 10.51 | 18.27 | 3 | C | 0 |
| 15395 | | | .596 | .359 | .718 | 39.6 | 21.0 | 2.44 | 4.24 | 1 | pM | 0 |
| 15396 | | | .591 | .368 | .718 | 39.4 | 21.5 | 2.25 | 3.91 | 1 | pM | 0 |
| 15396A | | | .599 | .369 | .711 | 40.1 | 21.6 | 2.78 | 4.83 | 2 | C | 0 |
| 15397 | | | .597 | .377 | .708 | 40.1 | 22.1 | 2.87 | 4.99 | 2 | C | 0 |
| 15398 | | | .595 | .389 | .703 | 40.2 | 22.8 | 2.22 | 3.86 | 2 | C | 0 |
| 15402 | | | .507 | .420 | .753 | 33.9 | 24.8 | 2.64 | 4.59 | 1 | C | 0 |
| 15403 | | Le Monnier V | .507 | .439 | .742 | 34.3 | 26.0 | 14.81 | 25.74 | 3 | C | 0 |
| 15403A | | | .502 | .434 | .748 | 33.8 | 25.7 | 3.09 | 5.37 | 2 | C | 0 |
| 15404 | | | .508 | .440 | .740 | 34.4 | 26.1 | 2.14 | 3.72 | 1 | pMC | 0 |
| 15407 | 505A | G. Bond C | .503 | .472 | .724 | 34.7 | 28.1 | 26.25 | 45.63 | 4 | C | 0 |
| 15407A | | | .501 | .475 | .723 | 34.7 | 28.3 | 2.24 | 3.89 | 2 | C | 0 |
| 15409 | | | .507 | .498 | .704 | 35.7 | 29.8 | 2.09 | 3.63 | 1 | C | 0 |
| 15411 | 309A | Römer R | .518 | .410 | .751 | 34.6 | 24.2 | 19.77 | 34.36 | 4f | C | 0 |
| 15412 | | Römer M | .513 | .428 | .744 | 34.5 | 25.3 | 5.16 | 8.97 | 1 | C | 0 |
| 15414 | | | .517 | .443 | .732 | 35.2 | 26.2 | 3.58 | 6.22 | 2 | C | 0 |
| 15419 | | | .515 | .497 | .698 | 36.4 | 29.8 | 29.89 | 51.95 | 4f | C | 0 |
| 15419A | | | .510 | .494 | .704 | 35.9 | 29.6 | 2.19 | 3.81 | 2 | C | 0 |
| 15423 | | Römer H | .525 | .437 | .730 | 35.7 | 25.9 | 5.13 | 8.92 | 3 | C | 0 |
| 15425 | | Römer G | .527 | .450 | .721 | 36.1 | 26.7 | 10.04 | 17.45 | 5 | C | 0 |
| 15431 | 309B | Römer D | .532 | .414 | .739 | 35.7 | 24.4 | 6.19 | 10.76 | 1 | C | 0 |
| 15432 | 291 | Römer | .537 | .429 | .726 | 36.4 | 25.4 | 22.76 | 39.56 | 1 | C | P |
| 15433 | | Römer Y | .533 | .434 | .726 | 36.2 | 25.7 | 3.81 | 6.62 | 1 | C | 0 |
| 15434 | | | .531 | .444 | .722 | 36.3 | 26.3 | 2.29 | 3.98 | 2 | C | 0 |
| 15435 | | | .531 | .450 | .718 | 36.4 | 26.7 | 2.89 | 5.02 | 3 | C | 0 |
| 15436 | 303A | Römer C | .533 | .464 | .708 | 36.9 | 27.6 | 4.85 | 8.43 | 1 | pMC | 0 |
| 15436A | | | .539 | .460 | .706 | 37.3 | 27.3 | 2.21 | 3.84 | 2 | pMC | 0 |
| 15437 | 302 | Römer A | .532 | .471 | .704 | 37.0 | 28.0 | 19.93 | 34.64 | 2f | C | 0 |
| 15437A | | | .533 | .476 | .700 | 37.3 | 28.4 | 3.38 | 5.87 | 1 | pMC | 0 |
| 15438 | | | .531 | .489 | .692 | 37.4 | 29.2 | 3.48 | 6.05 | 2 | C | 0 |
| 15438A | | | .534 | .480 | .696 | 37.4 | 28.6 | 3.01 | 5.23 | 2 | C | 0 |
| 15438B | | | .534 | .482 | .695 | 37.5 | 28.8 | 3.22 | 5.60 | 2 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15440A | | Römer T | + .540 | + .400 | + .741 | + 36.0 | + 23.5 | 26.97 | 46.88 | 4f | aMC | 0 |
| 15440 | | Römer Z | .549 | .409 | .729 | 36.9 | 24.1 | 6.05 | 10.52 | 3 | C | 0 |
| 15442 | | Römer S | .544 | .420 | .726 | 36.8 | 24.8 | 19.92 | 34.62 | 4 | C | 0 |
| 15445 | | Römer F | .540 | .454 | .709 | 37.3 | 27.0 | 12.86 | 22.35 | 4f | C | 0 |
| 15447 | 303 | Römer B | .543 | .479 | .690 | 38.2 | 28.6 | 11.51 | 20.01 | 5 | C | 0 |
| 15452 | | Römer N | .556 | .427 | .713 | 37.9 | 25.2 | 14.64 | 25.45 | 3 | C | 0 |
| 15455 | | Römer PC | .559 | .458 | .691 | 38.9 | 27.2 | 4.75 | 8.26 | 2 | C | 0 |
| 15457 | | Römer E | .556 | .477 | .681 | 39.2 | 28.4 | 18.04 | 31.36 | 4f | C | 0 |
| 15461 | | Römer V | .568 | .414 | .711 | 38.6 | 24.4 | 15.99 | 27.79 | 4f | C | 0 |
| 15465 | | Römer PA | .566 | .456 | .687 | 39.4 | 27.1 | 6.89<br>5.72 | 11.98<br>9.94 | 2 | C | 0 |
| 15466 | | Römer PB | .566 | .462 | .683 | 39.6 | 27.5 | 3.12 | 5.42 | 1 | C | 0 |
| 15469 | | Kirchhoff G | .561 | .497 | .662 | 40.2 | 29.8 | 12.90 | 22.42 | 3 | C | 0 |
| 15469A | | | .561 | .491 | .666 | 40.0 | 29.4 | 4.69 | 8.15 | 3 | C | 0 |
| 15470 | | | .572 | .400 | .716 | 38.6 | 23.5 | 3.06 | 5.32 | 2 | C | 0 |
| 15471 | | Römer U | .577 | .411 | .706 | 39.2 | 24.2 | 15.99 | 27.79 | 4f | C | 0 |
| 15472 | | | .572 | .427 | .700 | 39.2 | 25.2 | 3.22 | 5.60 | 2 | C | 0 |
| 15474 | 295A | Römer P | .570 | .446 | .690 | 39.5 | 26.4 | 34.94 | 60.73 | 4 | C | 0 |
| 15477 | | | .577 | .474 | .665 | 40.9 | 28.2 | 3.18 | 5.53 | 2 | C | 0 |
| 15480 | | Römer X | .588 | .409 | .698 | 40.1 | 24.1 | 12.65 | 21.99 | 3 | C | 0 |
| 15484 | | Römer PD | .580 | .445 | .682 | 40.3 | 26.4 | 3.93 | 6.83 | 1 | C | 0 |
| 15488 | | | .584 | .489 | .648 | 42.0 | 29.2 | 8.65 | 15.03 | 3 | C | 0 |
| 15492 | 188 | Macrobius M | .595 | .422 | .684 | 41.0 | 24.9 | 24.00 | 41.72 | 4 | C | 0 |
| 15498 | 314 | Newcomb H | .592 | .485 | .644 | 42.6 | 29.0 | 7.56 | 13.14 | 2 | C | 0 |
| 15498A | | | .599 | .486 | .636 | 43.2 | 29.0 | 14.29 | 24.84 | 4 | C | 0 |
| 15501 | | | .501 | .510 | .699 | 35.6 | 30.6 | 2.29 | 3.98 | 2 | C | 0 |
| 15503 | 492 | G. Bond | .500 | .536 | .680 | 36.3 | 32.4 | 11.51 | 20.01 | 1 | C | P |
| 15504 | 499A | G. Bond G | .509 | .540 | .670 | 37.2 | 32.6 | 14.44 | 25.10 | 4f | aMC | 0 |
| 15505 | 494A | Hall | .500 | .556 | .664 | 36.9 | 33.7 | 22.62 | 39.32 | 4f | aM | 0 |
| 15505A | | | .506 | .557 | .659 | 37.5 | 33.8 | 7.98 | 13.87 | 3f | aM | 0 |
| 15506 | | | .505 | .569 | .649 | 37.8 | 34.6 | 5.99 | 10.41 | 4f | aM | 0 |
| 15509 | | | .500 | .598 | .626 | 38.5 | 36.7 | 2.03 | 3.53 | 2 | pM | 0 |
| 15512 | 495A | G. Bond A | .511 | .524 | .681 | 36.8 | 31.6 | 5.37 | 9.33 | 1 | C | 0 |
| 15519 | | | .514 | .595 | .618 | 39.7 | 36.5 | 12.54 | 21.80 | 3f | C | 0 |
| 15521 | | | .525 | .514 | .678 | 37.7 | 30.9 | 7.82 | 13.59 | 4 | C | 0 |
| 15522 | | | .522 | .522 | .675 | 37.7 | 31.4 | 7.87 | 13.68 | 3 | C | 0 |
| 15523 | | G. Bond K | .525 | .532 | .664 | 38.3 | 32.1 | 7.87 | 13.68 | 4 | C | 0 |
| 15530 | | | .538 | .503 | .676 | 38.4 | 30.1 | 2.89 | 5.02 | 2 | C | 0 |
| 15535 | | | .539 | .554 | .634 | 40.3 | 33.6 | 7.85 | 13.64 | 4f | aMC | 0 |
| 15535A | | | .530 | .550 | .645 | 39.3 | 33.3 | 9.05 | 15.73 | 4f | aMC | 0 |
| 15539 | | | .537 | .597 | .596 | 42.0 | 36.6 | 12.93 | 22.47 | 4f | aMC | 0 |
| 15540 | 310 | Kirchhoff | .542 | .506 | .671 | 38.9 | 30.3 | 14.13 | 24.56 | 2 | C | 0 |
| 15542 | | | .543 | .521 | .659 | 39.5 | 31.3 | 21.28 | 36.99 | 4 | C | 0 |
| 15544 | | | .541 | .540 | .645 | 39.9 | 32.6 | 8.45 | 14.69 | 4f | C | 0 |
| 15547 | 384 | Maury B | .548 | .576 | .607 | 42.0 | 35.1 | 5.25 | 9.13 | 1 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15548 | 383 | Maury A | + .541 | + .588 | + .601 | + 41.9 | + 36.0 | 12.08 | 21.00 | 2f | pMC | 0 |
| 15550 | 304 | Kirchhoff C | .553 | .505 | .663 | 39.8 | 30.3 | 12.97 | 22.54 | 2f | C | 0 |
| 15550A | | | .558 | .507 | .657 | 40.3 | 30.4 | 2.64 | 4.59 | 1 | C | 0 |
| 15551 | 305 | Kirchhoff E | .557 | .510 | .655 | 40.3 | 30.6 | 13.84 | 24.06 | 4 | C | 0 |
| 15552 | 306 | Kirchhoff F | .559 | .522 | .644 | 40.9 | 31.4 | 12.73 | 22.13 | 3 | C | 0 |
| 15558 | | Maury AA | .553 | .585 | .593 | 42.9 | 35.8 | 3.02 | 5.25 | 2 | C | 0 |
| 15563 | | | .560 | .535 | .633 | 41.5 | 32.3 | 9.85 | 17.12 | 4 | C | 0 |
| 15564 | | | .569 | .542 | .618 | 42.6 | 32.8 | 3.47 | 6.03 | 3 | C | 0 |
| 15566 | | | .561 | .568 | .602 | 42.9 | 34.6 | 10.72 | 18.63 | 3 | C | 0 |
| 15566A | | | .569 | .563 | .599 | 43.5 | 34.2 | 5.07 | 8.81 | 3 | C | 0 |
| 15568 | 378 | Franklin C | .567 | .583 | .582 | 44.2 | 35.6 | 8.87 | 15.42 | 2 | C | 0 |
| 15570 | | | .573 | .506 | .645 | 41.6 | 30.3 | 8.82 | 15.33 | 4 | C | 0 |
| 15572 | 317 | Newcomb F | .578 | .522 | .627 | 42.6 | 31.4 | 15.06 | 26.18 | 4f | C | 0 |
| 15573 | 366 | Berzelius B | .577 | .539 | .614 | 43.2 | 32.6 | 12.59 | 21.88 | 4f | C | 0 |
| 15573A | | | .574 | .531 | .623 | 42.6 | 32.0 | 9.40 | 16.34 | 4f | C | 0 |
| 15576 | | | .575 | .566 | .591 | 44.2 | 34.4 | 2.96 | 5.14 | 2 | C | 0 |
| 15577 | | | .571 | .572 | .589 | 44.1 | 34.8 | 8.48 | 14.74 | 2 | C | 0 |
| 15577A | | | .577 | .577 | .578 | 44.9 | 35.2 | 5.49 | 9.54 | 3 | C | 0 |
| 15577B | | | .578 | .579 | .575 | 45.1 | 35.3 | 12.95 | 22.51 | 3 | C | 0 |
| 15578 | | | .572 | .580 | .580 | 44.6 | 35.4 | 3.65 | 6.34 | 2 | C | 0 |
| 15580 | | Newcomb Q | .588 | .506 | .631 | 42.9 | 30.3 | 8.66 | 15.05 | 3 | C | 0 |
| 15591 | | | .590 | .514 | .623 | 43.4 | 30.9 | 8.98 | 15.61 | 4f | C | 0 |
| 15592 | | | .593 | .528 | .608 | 44.2 | 31.8 | 26.10 | 45.37 | 4f | C | 0 |
| 15595 | | Berzelius FB | .594 | .554 | .583 | 45.5 | 33.6 | 17.55 | 30.50 | 4 | C | 0 |
| 15595A | | Berzelius FA | .595 | .552 | .584 | 45.5 | 33.5 | 2.42 | 4.21 | 1 | C | 0 |
| 15598 | | Berzelius K | .595 | .581 | .555 | 46.9 | 35.5 | 3.83 | 6.66 | 1 | C | 0 |
| 15598A | | | .596 | .584 | .551 | 47.2 | 35.7 | 7.10 | 12.34 | 2 | C | 0 |
| 15599 | | Berzelius T | .599 | .591 | .540 | 47.9 | 36.2 | 5.10 | 8.86 | 1 | C | 0 |
| 15601 | | | .500 | .615 | .610 | 39.3 | 37.9 | 15.65 | 27.20 | 4f | aMC | 0 |
| 15602 | | | .502 | .624 | .599 | 39.9 | 38.6 | 16.21 | 28.18 | 4 | C | 0 |
| 15603 | | Maury J | .500 | .630 | .594 | 40.0 | 39.0 | 3.58 | 6.22 | 1 | C | 0 |
| 15603A | | Maury K | .507 | .636 | .582 | 41.0 | 39.4 | 2.86 | 4.97 | 1 | C | 0 |
| 15604 | | Maury N | .508 | .648 | .567 | 41.8 | 40.3 | 9.47 | 16.46 | 3 | C | 0 |
| 15604A | | | .502 | .647 | .574 | 41.1 | 40.3 | 2.41 | 4.19 | 2 | C | 0 |
| 15608 | | | .504 | .683 | .529 | 43.6 | 43.0 | 3.25 | 5.65 | 3 | C | 0 |
| 15610 | 385 | Maury | .510 | .603 | .613 | 39.7 | 37.0 | 10.14 | 17.62 | 1 | C | 0 |
| 15613 | | | .511 | .636 | .578 | 41.4 | 39.4 | 2.35 | 4.08 | 1 | C | 0 |
| 15614 | | Maury L | .515 | .647 | .562 | 42.4 | 40.3 | 2.54 | 4.41 | 1 | C | 0 |
| 15615 | | Maury M | .512 | .654 | .557 | 42.5 | 40.8 | 5.15 | 8.95 | 3 | C | 0 |
| 15617 | | Oersted U | .519 | .674 | .526 | 44.6 | 42.3 | 2.69 | 4.68 | 1 | C | 0 |
| 15620 | | | .522 | .608 | .598 | 41.1 | 37.4 | 2.83 | 4.92 | 1 | C | 0 |
| 15621 | | Maury E | .520 | .610 | .598 | 41.0 | 37.5 | 5.59 | 9.72 | 3 | C | 0 |
| 15624 | | Maury T | .525 | .643 | .558 | 43.2 | 40.0 | 3.26 | 5.67 | 2 | C | 0 |
| 15628 | 394A | Oersted P | .520 | .690 | .503 | 45.9 | 43.6 | 12.15 | 21.12 | 3 | C | 0 |
| 15630 | | | .535 | .609 | .586 | 42.4 | 37.5 | 4.63 | 8.05 | 3 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15638 | | Oersted A | + .533 | + .687 | + .494 | + 47.1 | + 43.3 | 4.12 | 7.16 | 1 | C | 0 |
| 15638A | 394 | Oersted | .536 | .683 | .496 | 47.2 | 43.0 | 24.30 | 42.24 | 3f | C | 0 |
| 15641 | | Franklin W | .546 | .613 | .571 | 43.7 | 37.8 | 3.68 | 6.40 | 1 | C | 0 |
| 15641A | | | .542 | .611 | .577 | 43.2 | 37.6 | 11.46 | 19.92 | 4f | C | 0 |
| 15645 | 390 | Cepheus | .543 | .653 | .528 | 45.8 | 40.7 | 22.92 | 39.84 | 2 | C | PP |
| 15645A | 391 | Cepheus A | .547 | .656 | .520 | 46.4 | 40.9 | 7.25 | 12.60 | 1 | C | 0 |
| 15647 | | | .549 | .678 | .489 | 48.3 | 42.6 | 2.15 | 3.74 | 2 | C | 0 |
| 15650 | | Franklin H | .551 | .603 | .577 | 43.6 | 37.0 | 3.33 | 5.79 | 1 | C | 0 |
| 15653 | | | .558 | .631 | .539 | 45.9 | 39.1 | 15.89 | 27.62 | 4 | C | 0 |
| 15656 | | | .555 | .665 | .500 | 47.9 | 41.6 | 28.59 | 49.69 | 5 | C | 0 |
| 15657 | | | .551 | .671 | .496 | 47.9 | 42.1 | 14.35 | 24.94 | 5 | C | 0 |
| 15664 | | Franklin G | .569 | .644 | .511 | 48.0 | 40.0 | 3.98 | 6.92 | 1 | C | 0 |
| 15666 | | | .564 | .666 | .488 | 49.1 | 41.7 | 2.39 | 4.15 | 2 | C | 0 |
| 15668 | | Chevallier K | .563 | .688 | .458 | 50.8 | 43.4 | 3.32 | 5.77 | 1 | C | 0 |
| 15670 | | | .573 | .603 | .555 | 45.9 | 37.0 | 27.15 | 47.19 | 5 | C | 0 |
| 15672 | 374 | Franklin | .576 | .627 | .524 | 47.6 | 38.8 | 32.38 | 56.28 | 2 | C | P |
| 15678 | 363B | Shuckburgh C | .577 | .689 | .439 | 52.7 | 43.5 | 7.12 | 12.38 | 1 | C | 0 |
| 15680 | 381 | Franklin F | .587 | .609 | .533 | 47.7 | 37.5 | 21.61 | 37.56 | 4 | C | 0 |
| 15687 | 363 | Shuckburgh | .586 | .677 | .445 | 52.7 | 42.6 | 22.16 | 38.52 | 3 | C | 0 |
| 15692 | | Franklin N | .595 | .623 | .508 | 49.5 | 38.5 | 8.01<br>10.20 | 13.92<br>17.73 | 4 | C | 0 |
| 15704 | | | .501 | .749 | .434 | 49.1 | 48.5 | 2.21 | 3.84 | 1 | C | 0 |
| 15716 | | Atlas P | .516 | .761 | .393 | 52.6 | 49.5 | 15.55 | 27.03 | 4f | C | 0 |
| 15721 | | Atlas AA | .525 | .712 | .466 | 48.3 | 45.3 | 4.04 | 7.02 | 1 | C | 0 |
| 15727 | 409B | Endymion H | .523 | .778 | .348 | 56.3 | 51.0 | 4.75 | 8.26 | 2 | C | 0 |
| 15731 | 446 | Atlas A | .535 | .711 | .456 | 49.5 | 45.3 | 12.87 | 22.37 | 1 | C | P |
| 15732 | | | .532 | .726 | .436 | 50.6 | 46.5 | 2.47 | 4.29 | 2 | C | 0 |
| 15732A | | | .536 | .720 | .441 | 50.5 | 46.0 | 9.52 | 16.55 | 4 | C | 0 |
| 15742 | | Chevallier M | .541 | .720 | .435 | 51.2 | 46.0 | 9.22 | 16.03 | 3f | C | 0 |
| 15742A | | | .549 | .722 | .421 | 52.5 | 46.2 | 2.85 | 4.95 | 2 | C | 0 |
| 15742B | | | .542 | .723 | .428 | 51.6 | 46.3 | 2.80 | 4.87 | 2 | C | 0 |
| 15749 | 407 | Endymion D | .541 | .792 | .283 | 62.3 | 52.3 | 11.69 | 20.32 | 2 | C | 0 |
| 15750 | 451 | Chevallier B | .555 | .709 | .435 | 51.9 | 45.1 | 7.17 | 12.46 | 1 | C | 0 |
| 15750A | 450 | Chevallier | .552 | .706 | .444 | 51.2 | 44.9 | 30.10 | 52.32 | 4f | C | 0 |
| 15752 | | | .556 | .722 | .412 | 53.4 | 46.2 | 7.89 | 13.71 | 3f | aMC | 0 |
| 15754 | | | .550 | .740 | .387 | 54.8 | 47.7 | 60.88 | 105.82 | 4f | aMC | 0 |
| 15755 | | | .559 | .750 | .354 | 57.6 | 48.5 | 2.98 | 5.18 | 2 | C | 0 |
| 15763 | | | .569 | .731 | .377 | 56.4 | 46.9 | 3.28 | 5.70 | 1 | pM | 0 |
| 15769 | | Humboldtianum W | .566 | .796 | .215 | 69.2 | 52.7 | 5.94 | 10.32 | 1 | C | 0 |
| 15772 | 451A | Chevallier F | .578 | .721 | .382 | 56.5 | 46.1 | 5.16 | 8.97 | 1 | pM | 0 |
| 15779 | 402E | Humboldtianum E | .572 | .792 | .213 | 69.5 | 52.3 | 4.06 | 7.06 | 1 | C | 0 |
| 15779A | 402D | Humboldtianum D | .573 | .795 | .199 | 70.8 | 52.6 | 4.87 | 8.46 | 1 | C | 0 |
| 15783 | 397I | Mercurius J | .583 | .733 | .350 | 58.9 | 47.1 | 5.33 | 9.26 | 2 | C | 0 |
| 15783A | 397 | Mercurius C | .582 | .737 | .344 | 59.4 | 47.4 | 15.15 | 26.33 | 3f | C | 0 |
| 15785 | 397F | Mercurius H | .585 | .757 | .291 | 63.5 | 49.2 | 5.64 | 9.80 | 1 | C | 0 |
| 15792 | | Mercurius CA | .591 | .728 | .347 | 59.5 | 46.7 | 15.04 | 26.14 | 3f | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15799 | 402C | Humboldtianum C | + .596 | + .790 | + .144 | + 76.4 | + 52.1 | 12.06 | 20.96 | 1 | C | 0 |
| 15811 | 404 | Endymion A | .514 | .816 | .264 | 62.7 | 54.6 | 17.35 | 30.16 | 2 | C | 0 |
| 15815 | | Belkovich A | .519 | .854 | .036 | 85.9 | 58.6 | 33.29 | 57.86 | 3f | aM | 0 |
| 15815A | | Belkovich B | .515 | .856 | .045 | 84.9 | 58.8 | 7.34 | 12.76 | 2 | aM | 0 |
| 15820 | | | .527 | .800 | .287 | 61.4 | 53.1 | 7.44 | 12.93 | 3 | C | 0 |
| 15822 | | | .526 | .821 | .222 | 67.1 | 55.1 | 3.55 | 6.17 | 1 | C | 0 |
| 15830 | | | .532 | .801 | .275 | 62.7 | 53.2 | 5.14 | 8.93 | 2 | C | 0 |
| 15832 | 402G | Humboldtianum G | .537 | .823 | .185 | 70.9 | 55.3 | 5.18 | 9.00 | 1 | C | 0 |
| 15840 | 409A | Endymion E | .543 | .805 | .239 | 66.2 | 53.6 | 10.38 | 18.04 | 2 | C | 0 |
| 15881 | | Humboldtianum F | .580 | .814 | .032 | 86.8 | 54.4 | 7.82 | 13.59 | 1 | pMC | 0 |
| 16006 | | | .600 | .060 | .798 | 36.9 | 3.4 | 2.06 | 3.58 | 1 | pM | 0 |
| 16032 | | | .637 | .029 | .770 | 39.5 | 1.6 | 2.20 | 3.82 | 2 | pM | 0 |
| 16032A | | | .633 | .026 | .774 | 39.2 | 1.4 | 27.92 | 48.52 | 5f | aM | 0 |
| 16040 | | | .643 | .009 | .766 | 40.0 | 0.5 | 14.56 | 25.31 | 5f | aMC | 0 |
| 16042 | | | .642 | .023 | .766 | 39.9 | 1.3 | 2.20 | 3.82 | 2 | C | 0 |
| 16046 | 221 | Taruntius F | .648 | .069 | .759 | 40.5 | 3.9 | 6.18 | 10.74 | 1 | pM | 0 |
| 16049 | 219 | Taruntius E | .643 | .096 | .760 | 40.2 | 5.5 | 6.49 | 11.28 | 1 | pM | 0 |
| 16050 | | Lubbock S | .659 | .008 | .752 | 41.2 | 0.4 | 13.98 | 24.30 | 4f | aMC | 0 |
| 16052 | | | .650 | .025 | .760 | 40.5 | 1.4 | 16.33 | 28.38 | 4f | aMC | 0 |
| 16054 | | | .656 | .045 | .753 | 41.0 | 2.5 | 5.10 | 8.86 | 3 | aMC | 0 |
| 16059 | | Taruntius EB | .656 | .092 | .749 | 41.2 | 5.2 | 2.70 | 4.69 | 1 | pM | 0 |
| 16062 | | | .661 | .020 | .750 | 41.3 | 1.1 | 2.60 | 4.52 | 2 | C | 0 |
| 16063 | | | .669 | .032 | .743 | 42.0 | 1.8 | 8.02 | 13.94 | 3f | aMC | 0 |
| 16065 | 237A | Secchi A | .661 | .057 | .748 | 41.4 | 3.2 | 2.90 | 5.04 | 1 | pM | 0 |
| 16065A | | | .669 | .055 | .741 | 42.0 | 3.1 | 2.59 | 4.50 | 2 | pM | 0 |
| 16066 | 237B | Secchi B | .661 | .064 | .748 | 41.4 | 3.6 | 3.02 | 5.25 | 1 | pM | 0 |
| 16071 | | Secchi U | .672 | .019 | .740 | 42.2 | 1.0 | 3.29 | 5.72 | 1 | pM | 0 |
| 16071A | | | .672 | .011 | .740 | 42.2 | 0.6 | 3.71 | 6.45 | 1 | pMC | 0 |
| 16078 | | Taruntius EA | .671 | .086 | .736 | 42.3 | 4.9 | 2.85 | 4.95 | 1 | pM | 0 |
| 16083 | | | .682 | .037 | .730 | 43.0 | 2.1 | 9.30 | 16.16 | 3 | C | 0 |
| 16084 | 237 | Secchi | .688 | .042 | .724 | 43.5 | 2.4 | 14.07 | 24.46 | 2 | C | 0 |
| 16096 | | | .690 | .066 | .721 | 43.7 | 3.7 | 2.66 | 4.62 | 2 | C | 0 |
| 16097 | | | .694 | .076 | .716 | 44.1 | 4.3 | 2.30 | 4.00 | 1 | C | 0 |
| 16097A | | | .695 | .078 | .715 | 44.1 | 4.4 | 2.60 | 4.52 | 1 | C | 0 |
| 16099 | 223 | Taruntius L | .697 | .095 | .711 | 44.4 | 5.4 | 7.16 | 12.45 | 2 | C | 0 |
| 16115 | | Cauchy E | .616 | .154 | .773 | 38.5 | 8.8 | 2.06 | 3.58 | 1 | pM | 0 |
| 16116 | 262 | Cauchy | .616 | .167 | .770 | 38.6 | 9.6 | 7.11 | 12.36 | 1 | pM | 0 |
| 16124 | | Cauchy C | .621 | .143 | .771 | 38.8 | 8.2 | 2.40 | 4.17 | 2 | pM | 0 |
| 16132 | | | .639 | .124 | .759 | 40.0 | 7.1 | 18.94 | 32.92 | 4f | aMC | 0 |
| 16137 | 263 | Cauchy D | .637 | .174 | .751 | 40.3 | 10.0 | 5.42 | 9.42 | 1 | pM | 0 |
| 16149 | | | .642 | .192 | .742 | 40.8 | 11.0 | 17.63 | 30.64 | 5f | aM | 0 |
| 16155 | | Cauchy V | .654 | .156 | .740 | 41.4 | 8.9 | 2.80 | 4.87 | 1 | pM | 0 |
| 16158 | | Cauchy W | .653 | .184 | .735 | 41.6 | 10.6 | 2.26 | 3.93 | 1 | pM | 0 |
| 16165 | | Cauchy U | .665 | .153 | .731 | 42.2 | 8.8 | 2.60 | 4.52 | 1 | C | 0 |
| 16172 | 236 | Taruntius M | .679 | .128 | .723 | 43.2 | 7.3 | 13.78 | 23.95 | 3 | aMC | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16173 | | Taruntius MB | + .675 | + .133 | + .726 | + 42.9 | + 7.6 | 2.85 | 4.95 | 1 | C | 0 |
| 16174 | | | .677 | .145 | .722 | 43.1 | 8.3 | 2.20 | 3.82 | 1 | C | 0 |
| 16175 | 222 | Taruntius J | .675 | .155 | .721 | 43.0 | 8.9 | 5.40 | 9.39 | 3 | C | 0 |
| 16182 | | Taruntius MA | .686 | .120 | .718 | 43.7 | 6.8 | 2.89 | 5.02 | 2 | pM | 0 |
| 16186 | | da Vinci A | .687 | .168 | .707 | 44.1 | 9.6 | 10.30 | 17.90 | 2 | C | 0 |
| 16189 | | | .683 | .196 | .704 | 44.1 | 11.3 | 2.79 | 4.85 | 1 | pMC | 0 |
| 16190 | | | .695 | .109 | .711 | 44.3 | 6.2 | 33.40 | 58.05 | 5 | C | 0 |
| 16196 | 236A | da Vinci | .698 | .160 | .698 | 45.0 | 9.2 | 18.03 | 31.34 | 3 | C | P |
| 16199 | | | .697 | .195 | .690 | 45.2 | 11.2 | 3.87 | 6.73 | 3 | pMC | 0 |
| 16201 | 262A | Cauchy A | .600 | .210 | .772 | 37.8 | 12.1 | 5.40 | 9.39 | 2 | pM | 0 |
| 16204 | | Lyell B | .602 | .248 | .759 | 38.4 | 14.3 | 3.09 | 5.37 | 1 | pM | 0 |
| 16214 | 201A | Lyell A | .618 | .248 | .746 | 39.6 | 14.3 | 4.50 | 7.82 | 2 | pM | 0 |
| 16216 | | Lyell C | .612 | .262 | .746 | 39.3 | 15.1 | 2.71 | 4.71 | 1 | pM | 0 |
| 16227 | | | .629 | .270 | .729 | 40.7 | 15.6 | 8.56 | 14.88 | 3 | C | 0 |
| 16228 | 214A | Franz | .620 | .285 | .731 | 40.3 | 16.5 | 14.65 | 25.46 | 4f | aMC | 0 |
| 16228A | 205 | Proclus E | .628 | .286 | .724 | 40.9 | 16.6 | 7.00 | 12.17 | 3 | C | 0 |
| 16229 | 204 | Proclus D | .626 | .300 | .720 | 41.0 | 17.4 | 7.38 | 12.83 | 1 | pMC | 0 |
| 16233 | 201 | Lyell | .633 | .236 | .737 | 40.6 | 13.6 | 18.52 | 32.19 | 3f | aMC | 0 |
| 16234 | | | .636 | .240 | .733 | 40.9 | 13.8 | 2.70 | 4.69 | 1 | C | 0 |
| 16236 | | Lyell K | .631 | .264 | .729 | 40.8 | 15.3 | 3.08 | 5.35 | 1 | C | 0 |
| 16238 | | | .637 | .287 | .715 | 41.6 | 16.6 | 10.91 | 18.96 | 4 | C | 0 |
| 16238A | | | .630 | .282 | .724 | 41.0 | 16.3 | 4.86 | 8.45 | 2 | C | 0 |
| 16245 | | Lyell D | .640 | .256 | .724 | 41.4 | 14.8 | 9.21 | 16.01 | 3 | C | 0 |
| 16246 | | | .645 | .267 | .716 | 42.0 | 15.4 | 2.79 | 4.85 | 2 | C | 0 |
| 16248 | | | .645 | .285 | .709 | 42.2 | 16.5 | 3.69 | 6.41 | 2 | C | 0 |
| 16249 | | | .645 | .292 | .706 | 42.4 | 16.9 | 3.69 | 6.41 | 4 | C | 0 |
| 16252 | | | .658 | .222 | .720 | 42.4 | 12.8 | 3.34 | 5.81 | 1 | C | 0 |
| 16252A | | | .655 | .223 | .722 | 42.2 | 12.8 | 2.82 | 4.90 | 1 | C | 0 |
| 16253 | 199 | Proclus A | .654 | .231 | .720 | 42.2 | 13.3 | 8.48 | 14.74 | 1 | C | 0 |
| 16258 | | | .650 | .285 | .704 | 42.6 | 16.5 | 3.32 | 5.77 | 2 | C | 0 |
| 16258A | | | .654 | .282 | .702 | 42.9 | 16.3 | 3.74 | 6.50 | 2 | C | 0 |
| 16262 | 211A | Proclus G | .661 | .220 | .717 | 42.6 | 12.7 | 17.11 | 29.74 | 4 | C | 0 |
| 16262A | | Proclus GA | .664 | .221 | .714 | 42.9 | 12.7 | 13.12<br>8.40 | 22.80<br>14.60 | 3 | C | 0 |
| 16269 | | Proclus J | .664 | .294 | .688 | 44.0 | 17.0 | 3.19 | 5.54 | 1 | C | 0 |
| 16272 | 203 | Proclus C | .672 | .224 | .706 | 43.5 | 12.9 | 5.62 | 9.77 | 1 | C | 0 |
| 16279 | | Proclus Y | .673 | .300 | .676 | 44.8 | 17.4 | 3.59 | 6.24 | 2 | C | 0 |
| 16280 | | | .685 | .205 | .699 | 44.4 | 11.8 | 2.64 | 4.59 | 1 | C | 0 |
| 16283 | | | .689 | .238 | .685 | 45.1 | 13.7 | 9.43 | 16.39 | 4 | C | P |
| 16287 | | Proclus R | .686 | .273 | .674 | 45.4 | 15.8 | 15.96 | 27.74 | 4 | C | 0 |
| 16288 | | Proclus M | .680 | .283 | .676 | 45.1 | 16.4 | 4.86 | 8.45 | 2 | C | 0 |
| 16294 | 206 | Proclus F | .697 | .246 | .674 | 45.9 | 14.2 | 5.27 | 9.16 | 1 | C | 0 |
| 16298 | | Proclus K | .692 | .284 | .664 | 46.1 | 16.4 | 9.32 | 16.20 | 3 | C | 0 |
| 16299 | | Proclus L | .692 | .294 | .659 | 46.3 | 17.0 | 5.42 | 9.42 | 3 | C | 0 |
| 16300 | 274 | Maraldi M | .602 | .300 | .740 | 39.1 | 17.4 | 5.04 | 8.76 | 1 | pM | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16302 | | | + .609 | + .328 | + .722 | + 40.1 | + 19.1 | 2.99 | 5.20 | 1 | pMC | 0 |
| 16305 | | | .603 | .357 | .713 | 40.2 | 20.9 | 2.43 | 4.22 | 1 | pM | 0 |
| 16306 | | Macrobius K | .601 | .366 | .711 | 40.2 | 21.4 | 7.57 | 13.16 | 2f | aMC | 0 |
| 16308 | | Macrobius N | .603 | .387 | .698 | 40.8 | 22.7 | 3.44 | 5.98 | 1 | C | 0 |
| 16309 | | | .608 | .399 | .686 | 41.5 | 23.5 | 14.75<br>9.57 | 25.64<br>16.63 | 3 | C | 0 |
| 16313 | 182 | Macrobius A | .610 | .334 | .719 | 40.3 | 19.5 | 11.54 | 20.06 | 1 | pMC | 0 |
| 16315 | 183 | Macrobius B | .611 | .357 | .707 | 40.8 | 20.9 | 9.33 | 16.22 | 1 | pMC | 0 |
| 16319 | | Macrobius X | .619 | .390 | .682 | 42.2 | 22.9 | 2.49 | 4.33 | 2 | C | 0 |
| 16319A | | | .615 | .392 | .684 | 41.9 | 23.0 | 2.39 | 4.15 | 2 | C | 0 |
| 16326 | | Macrobius L | .624 | .366 | .690 | 42.1 | 21.4 | 9.01 | 15.66 | 3f | aMC | 0 |
| 16326A | | | .622 | .363 | .694 | 41.8 | 21.2 | 33.83 | 58.80 | 4f | aMC | 0 |
| 16327 | | | .621 | .377 | .687 | 42.1 | 22.1 | 2.22 | 3.86 | 1 | pMC | 0 |
| 16327A | | | .620 | .371 | .691 | 41.8 | 21.7 | 3.37 | 5.86 | 3 | aMC | 0 |
| 16333 | | Macrobius AA | .633 | .337 | .697 | 42.2 | 19.6 | 3.88 | 6.74 | 1 | C | 0 |
| 16333A | | | .631 | .338 | .698 | 42.1 | 19.7 | 3.05 | 5.30 | 2 | C | 0 |
| 16334 | | | .635 | .344 | .692 | 42.5 | 20.1 | 3.29 | 5.72 | 2 | C | 0 |
| 16334A | | | .630 | .342 | .697 | 42.1 | 19.9 | 3.72 | 6.47 | 3 | C | 0 |
| 16344 | | | .643 | .342 | .685 | 43.1 | 19.9 | 3.57 | 6.21 | 2 | aMC | 0 |
| 16355 | | | .656 | .356 | .666 | 44.5 | 20.8 | 3.14 | 5.46 | 3 | C | 0 |
| 16360 | | Proclus Z | .670 | .308 | .675 | 44.7 | 17.9 | 3.40 | 5.91 | 1 | C | 0 |
| 16365 | 181 | Macrobius C | .661 | .356 | .661 | 45.0 | 20.8 | 5.56 | 9.66 | 1 | C | 0 |
| 16370 | | Proclus X | .675 | .304 | .672 | 45.1 | 17.6 | 3.48 | 6.05 | 1 | C | 0 |
| 16376 | 180 | Macrobius | .671 | .363 | .647 | 46.0 | 21.2 | 36.84 | 64.03 | 2 | C | P |
| 16377 | | | .678 | .376 | .632 | 47.0 | 22.0 | 2.08 | 3.62 | 1 | C | 0 |
| 16380 | | Proclus W | .688 | .301 | .660 | 46.1 | 17.5 | 4.22 | 7.33 | 1 | C | 0 |
| 16381 | 185 | Macrobius D | .689 | .315 | .653 | 46.5 | 18.3 | 8.45 | 14.69 | 2 | C | 0 |
| 16391 | | | .695 | .311 | .648 | 46.9 | 18.1 | 23.65 | 41.11 | 4 | C | 0 |
| 16392 | 186 | Macrobius E | .691 | .321 | .648 | 46.8 | 18.7 | 5.81 | 10.10 | 2 | C | 0 |
| 16394 | | Macrobius Q | .692 | .349 | .632 | 47.5 | 20.4 | 4.87 | 8.46 | 2 | C | 0 |
| 16396 | 184 | Tisserand | .694 | .365 | .621 | 48.1 | 21.4 | 21.02 | 36.53 | 3 | C | 0 |
| 16397 | | | .696 | .374 | .613 | 48.6 | 21.9 | 6.27 | 10.90 | 4 | C | 0 |
| 16398 | 187 | Macrobius F | .692 | .382 | .613 | 48.4 | 22.4 | 6.58 | 11.44 | 1 | C | 0 |
| 16398A | | | .699 | .388 | .601 | 49.3 | 22.8 | 6.98 | 12.13 | 3 | aMC | 0 |
| 16399 | | Macrobius S | .699 | .395 | .596 | 49.5 | 23.2 | 15.04 | 26.14 | 3f | aMC | 0 |
| 16399A | | | .699 | .390 | .599 | 49.3 | 22.9 | 2.78 | 4.83 | 1 | pMC | 0 |
| 16409 | 311 | Newcomb | .600 | .498 | .626 | 43.7 | 29.8 | 22.69 | 39.44 | 2 | C | P |
| 16409 A | | Newcomb A | .602 | .490 | .630 | 43.6 | 29.3 | 10.84 | 18.84 | 4 | C | 0 |
| 16410 | | Macrobius Y | .616 | .400 | .679 | 42.2 | 23.5 | 2.88 | 5.01 | 1 | C | 0 |
| 16410A | | | .614 | .408 | .676 | 42.2 | 24.0 | 2.17 | 3.77 | 1 | C | 0 |
| 16411 | | Macrobius Z | .617 | .412 | .670 | 42.6 | 24.3 | 3.10 | 5.39 | 1 | C | 0 |
| 16411A | | | .618 | .414 | .668 | 42.7 | 24.4 | 3.19 | 5.54 | 1 | C | 0 |
| 16412 | | Macrobius V | .619 | .429 | .658 | 43.2 | 25.4 | 2.78 | 4.83 | 1 | pM | 0 |
| 16412A | | Macrobius U | .616 | .422 | .665 | 42.8 | 24.9 | 3.58 | 6.22 | 2 | pMC | 0 |
| 16417 | 313 | Newcomb G | .619 | .471 | .628 | 44.5 | 28.0 | 11.11 | 19.31 | 2 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16418 | 315 | Newcomb J | + .612 | + .481 | + .628 | + 44.2 | + 28.7 | 13.13 | 22.82 | 2 | C | P |
| 16427 | | | .621 | .474 | .624 | 44.8 | 28.2 | 2.48 | 4.31 | 1 | C | 0 |
| 16427A | | Newcomb B | .629 | .475 | .615 | 45.6 | 28.3 | 12.99 | 22.58 | 4 | C | 0 |
| 16428 | | Newcomb C | .621 | .487 | .614 | 45.3 | 29.1 | 16.87 | 29.32 | 4f | aMC | 0 |
| 16431 | | Macrobius W | .638 | .418 | .647 | 44.6 | 24.7 | 11.33 | 19.69 | 4f | aMC | 0 |
| 16446 | 177 | Tralles A | .650 | .461 | .604 | 47.0 | 27.4 | 10.48 | 18.22 | 1 | C | 0 |
| 16449 | 315A | Newcomb P | .643 | .491 | .588 | 47.5 | 29.4 | 37.50<br>50.19 | 65.18<br>87.24 | 4f | aMC | 0 |
| 16457 | | | .653 | .470 | .594 | 47.7 | 28.0 | 4.16 | 7.23 | 2 | C | 0 |
| 16470 | | | .673 | .401 | .622 | 47.2 | 23.6 | 2.14 | 3.72 | 1 | C | 0 |
| 16470A | | | .670 | .407 | .621 | 47.1 | 24.0 | 3.02 | 5.25 | 3 | C | 0 |
| 16476 | 178A | Tralles C | .672 | .467 | .575 | 49.4 | 27.8 | 4.21 | 7.32 | 1 | C | 0 |
| 16478 | | Debes B | .676 | .485 | .555 | 50.6 | 29.0 | 10.85 | 18.86 | 3 | C | 0 |
| 16480 | | Macrobius T | .686 | .404 | .605 | 48.5 | 23.8 | 16.52 | 28.71 | 4f | aMC | 0 |
| 16485 | 178 | Tralles B | .688 | .458 | .563 | 50.7 | 27.2 | 6.37 | 11.07 | 1 | C | 0 |
| 16488 | | Debes A | .686 | .481 | .546 | 51.4 | 28.7 | 19.15 | 33.29 | 3 | C | 0 |
| 16489 | 179 | Debes | .683 | .493 | .539 | 51.7 | 29.5 | 17.70 | 30.77 | 3 | C | 0 |
| 16490 | | | .697 | .402 | .594 | 49.5 | 23.7 | 4.99 | 8.67 | 3 | pMC | 0 |
| 16501 | | | .607 | .515 | .605 | 45.0 | 30.9 | 10.23 | 17.78 | 4f | C | 0 |
| 16502 | | | .609 | .522 | .597 | 45.5 | 31.4 | 10.39 | 18.06 | 4f | C | 0 |
| 16504 | 312 | Berzelius F | .605 | .542 | .583 | 46.0 | 32.8 | 7.00 | 12.17 | 1 | C | 0 |
| 16504A | | | .604 | .546 | .581 | 46.1 | 33.0 | 19.07 | 33.15 | 4 | C | 0 |
| 16506 | | Geminus W | .608 | .563 | .560 | 47.3 | 34.2 | 3.55 | 6.17 | 1 | C | 0 |
| 16506A | | | .602 | .567 | .562 | 46.9 | 34.5 | 15.80 | 27.46 | 4f | C | 0 |
| 16509 | 365 | Berzelius A | .603 | .599 | .527 | 48.8 | 36.7 | 3.85 | 6.69 | 1 | C | 0 |
| 16509A | | | .604 | .591 | .535 | 48.4 | 36.2 | 12.00 | 20.86 | 3 | C | 0 |
| 16509B | | | .606 | .597 | .526 | 49.0 | 36.6 | 9.54 | 16.58 | 4 | C | 0 |
| 16517 | | | .619 | .579 | .531 | 49.3 | 35.3 | 6.15 | 10.69 | 4 | C | 0 |
| 16518 | | | .617 | .583 | .529 | 49.4 | 35.6 | 3.89 | 6.76 | 1 | C | 0 |
| 16521 | 327 | Geminus Z | .625 | .511 | .590 | 46.6 | 30.7 | 15.10 | 26.25 | 4 | C | 0 |
| 16524 | | Geminus EB | .624 | .548 | .557 | 48.2 | 33.2 | 4.21 | 7.32 | 1 | C | 0 |
| 16525 | 326 | Geminus E | .624 | .552 | .553 | 48.4 | 33.5 | 38.38 | 66.71 | 5 | C | 0 |
| 16526 | | | .627 | .560 | .542 | 49.1 | 34.0 | 16.20 | 28.16 | 4f | C | 0 |
| 16527 | | | .621 | .572 | .536 | 49.2 | 34.8 | 9.06 | 15.75 | 4f | C | 0 |
| 16529 | 364 | Berzelius | .623 | .596 | .507 | 50.8 | 36.5 | 29.26 | 50.86 | 3 | C | 0 |
| 16530 | 325 | Geminus D | .633 | .509 | .583 | 47.3 | 30.5 | 9.06 | 15.75 | 1 | C | 0 |
| 16531 | | | .638 | .511 | .576 | 47.9 | 30.7 | 2.55 | 4.43 | 1 | C | 0 |
| 16532 | 328 | Geminus N | .631 | .521 | .575 | 47.6 | 31.3 | 13.67 | 23.76 | 4 | C | 0 |
| 16532A | | Geminus M | .636 | .529 | .562 | 48.5 | 31.9 | 6.24 | 10.85 | 2 | C | 0 |
| 16537 | | | .637 | .575 | .513 | 51.1 | 35.0 | 37.85 | 65.79 | 4 | C | 0 |
| 16541 | 325A | Geminus G | .644 | .513 | .568 | 48.6 | 30.8 | 7.89 | 13.71 | 1 | pMC | 0 |
| 16542 | 324A | Geminus H | .642 | .524 | .560 | 48.9 | 31.6 | 8.33 | 14.48 | 2 | pMC | 0 |
| 16543 | | Geminus EA | .640 | .538 | .549 | 49.3 | 32.5 | 21.14<br>28.18 | 36.74<br>48.98 | 4 | C | 0 |
| 16545 | | | .649 | .557 | .518 | 51.3 | 33.8 | 12.09 | 21.01 | 3 | C | 0 |
| 16549 | 333 | Messala A | .648 | .596 | .474 | 53.8 | 36.5 | 15.02 | 26.11 | 2 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16553 | 322 | Geminus F | + .659 | + .532 | + .532 | + 51.1 | + 32.1 | 12.57 | 21.85 | 3 | C | 0 |
| 16553A | | | .653 | .539 | .532 | 50.8 | 32.6 | 7.16 | 12.45 | 2 | C | 0 |
| 16554 | | | .650 | .540 | .535 | 50.5 | 32.6 | 4.75 | 8.26 | 3 | C | 0 |
| 16556 | 323 | Geminus B | .654 | .562 | .506 | 52.2 | 34.1 | 5.68 | 9.87 | 2 | C | 0 |
| 16558 | | | .651 | .581 | .489 | 53.1 | 35.5 | 5.81 | 10.10 | 3 | C | 0 |
| 16563 | | | .661 | .531 | .530 | 51.2 | 32.0 | 4.99 | 8.67 | 2 | C | 0 |
| 16563A | | Geminus FA | .663 | .533 | .526 | 51.5 | 32.2 | 5.18 | 9.00 | 2 | C | 0 |
| 16567 | | | .662 | .570 | .487 | 53.6 | 34.7 | 25.67 | 44.62 | 5 | C | 0 |
| 16572 | 321 | Geminus A | .670 | .523 | .527 | 51.8 | 31.5 | 8.87 | 15.42 | 2 | C | 0 |
| 16574 | | | .679 | .541 | .496 | 53.8 | 32.7 | 12.90 | 22.42 | 4 | C | 0 |
| 16586 | 320 | Geminus | .689 | .566 | .453 | 56.6 | 34.4 | 49.18 | 85.48 | 1 | C | P |
| 16600 | | | .606 | .600 | .522 | 49.2 | 36.8 | 9.52 | 16.55 | 3 | C | 0 |
| 16603 | | Franklin K | .607 | .630 | .484 | 51.4 | 39.0 | 11.54 | 20.06 | 3 | C | 0 |
| 16603A | | | .604 | .638 | .478 | 51.6 | 39.6 | 9.05 | 15.73 | 4f | C | 0 |
| 16604 | | | .602 | .644 | .472 | 51.8 | 40.0 | 9.06<br>12.63 | 15.75<br>21.95 | 5f | aMC | 0 |
| 16608 | 363A | Shuckburgh A | .602 | .683 | .414 | 55.5 | 43.0 | 10.68 | 18.56 | 2 | C | R |
| 16609 | 363C | Shuckburgh E | .602 | .695 | .393 | 56.8 | 44.0 | 5.26 | 9.14 | 1 | C | 0 |
| 16609A | | | .608 | .694 | .386 | 57.6 | 43.9 | 3.06 | 5.32 | 1 | C | 0 |
| 16611 | | | .618 | .616 | .488 | 51.6 | 38.0 | 10.59 | 18.41 | 4 | C | 0 |
| 16615 | 360 | Hooke | .616 | .658 | .433 | 54.8 | 41.1 | 21.17 | 36.80 | 3f | C | 0 |
| 16621 | | Berzelius W | .628 | .618 | .473 | 53.0 | 38.1 | 3.63 | 6.31 | 1 | C | 0 |
| 16621A | | | .625 | .619 | .476 | 52.7 | 38.2 | 2.26 | 3.93 | 2 | C | 0 |
| 16624 | | | .623 | .647 | .440 | 54.7 | 40.3 | 4.58 | 7.96 | 3 | C | 0 |
| 16625 | 362 | Hooke D | .627 | .652 | .426 | 55.7 | 40.6 | 11.10 | 19.29 | 1 | C | 0 |
| 16626 | | | .623 | .665 | .412 | 56.5 | 41.6 | 10.78 | 18.74 | 4 | C | 0 |
| 16627 | | | .629 | .679 | .379 | 58.9 | 42.7 | 2.82 | 4.90 | 1 | pM | 0 |
| 16637 | 355A | Schumacher B | .638 | .671 | .378 | 59.3 | 42.1 | 13.84 | 24.06 | 3f | aMC | 0 |
| 16639 | 359 | Carrington | .636 | .694 | .337 | 62.0 | 43.9 | 17.04 | 29.62 | 2 | C | 0 |
| 16645 | 339B | Messala K | .643 | .657 | .394 | 58.5 | 41.0 | 5.01 | 8.71 | 4 | C | 0 |
| 16645A | | | .646 | .654 | .394 | 58.6 | 40.8 | 10.19 | 17.71 | 3 | C | 0 |
| 16647 | 355 | Schumacher | .644 | .674 | .362 | 60.6 | 42.3 | 34.85 | 60.57 | 3f | aMC | 0 |
| 16653 | | | .655 | .639 | .403 | 58.3 | 39.7 | 15.55 | 27.03 | 3f | aMC | 0 |
| 16656 | | | .654 | .664 | .362 | 61.0 | 41.6 | 5.95 | 10.34 | 3 | C | 0 |
| 16661 | | | .664 | .619 | .419 | 57.7 | 38.2 | 5.25 | 9.13 | 2 | C | 0 |
| 16665 | 339A | Messala J | .660 | .658 | .363 | 61.2 | 41.1 | 8.57 | 14.90 | 2 | C | 0 |
| 16668 | | Zeno P | .664 | .687 | .295 | 66.0 | 43.3 | 6.51 | 11.32 | 1 | pMC | 0 |
| 16669 | | | .663 | .699 | .268 | 67.9 | 44.3 | 16.32 | 28.37 | 5 | C | 0 |
| 16672 | | | .675 | .627 | .389 | 60.0 | 38.8 | 6.78 | 11.78 | 3 | C | 0 |
| 16672A | | | .679 | .625 | .385 | 60.4 | 38.6 | 5.04 | 8.76 | 3 | C | 0 |
| 16673 | 332 | Messala | .670 | .632 | .389 | 59.8 | 39.1 | 71.41 | 124.12 | 3 | C | 0 |
| 16673A | | | .677 | .630 | .380 | 60.6 | 39.0 | 6.09 | 10.59 | 3 | C | 0 |
| 16677 | | | .671 | .679 | .298 | 66.0 | 42.7 | 8.39 | 14.58 | 3f | aMC | 0 |
| 16678 | 353A | Zeno K | .673 | .680 | .291 | 66.6 | 42.8 | 10.07 | 17.50 | 2 | pMC | 0 |
| 16678A | | Zeno W | .673 | .686 | .277 | 67.6 | 43.3 | 5.47 | 9.51 | 1 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16680 | 334 | Messala B | + .687 | + .607 | + .399 | + 59.8 | + 37.3 | 10.36 | 18.01 | 1 | C | 0 |
| 16683 | | | .688 | .638 | .346 | 63.3 | 39.6 | 13.34 | 23.19 | 3 | C | 0 |
| 16685 | 335 | Messala C | .688 | .656 | .310 | 65.7 | 40.9 | 6.65 | 11.56 | 1 | C | 0 |
| 16687 | | Zeno U | .688 | .675 | .267 | 68.8 | 42.4 | 9.36 | 16.27 | 3 | C | 0 |
| 16688 | | Zeno V | .682 | .684 | .259 | 69.2 | 43.1 | 12.71 | 22.09 | 3 | C | 0 |
| 16689 | 351 | Zeno B | .680 | .695 | .234 | 71.0 | 44.0 | 21.25 | 36.94 | 3 | C | 0 |
| 16689A | 354A | Zeno G | .689 | .694 | .209 | 73.1 | 43.9 | 6.15 | 10.69 | 1 | C | 0 |
| 16694 | 337 | Messala E | .694 | .643 | .324 | 64.9 | 40.0 | 23.08 | 40.12 | 3f | C | 0 |
| 16694A | | | .697 | .647 | .309 | 66.0 | 40.3 | 3.85 | 6.69 | 2 | C | 0 |
| 16694B | | | .699 | .647 | .305 | 66.4 | 40.3 | 3.62 | 6.29 | 2 | C | 0 |
| 16699 | 354B | Zeno J | .697 | .697 | .168 | 76.4 | 44.1 | 7.46 | 12.97 | 1 | C | 0 |
| 16699A | | | .693 | .691 | .206 | 73.4 | 43.7 | 6.02 | 10.46 | 2 | C | 0 |
| 16706 | | | .604 | .764 | .227 | 69.4 | 49.8 | 9.98<br>17.01 | 17.35<br>29.57 | 4 | C | 0 |
| 16707 | | Mercurius M | .606 | .776 | .175 | 73.9 | 50.8 | 22.96 | 39.91 | 2 | C | 0 |
| 16707A | | | .606 | .773 | .188 | 72.7 | 50.6 | 3.33 | 5.79 | 2 | C | 0 |
| 16708 | 402B | Humboldtianum B | .600 | .788 | .138 | 77.0 | 51.9 | 7.01 | 12.18 | 2 | C | 0 |
| 16709 | 402A | Humboldtianum A | .603 | .791 | .103 | 80.2 | 52.2 | 15.39 | 26.75 | 3 | C | 0 |
| 16711 | | | .617 | .711 | .337 | 61.3 | 45.3 | 2.69 | 4.68 | 2 | C | 0 |
| 16716 | 397C | Mercurius E | .619 | .763 | .186 | 73.2 | 49.7 | 16.69 | 29.01 | 2 | C | 0 |
| 16718 | | | .611 | .789 | .064 | 83.9 | 52.0 | 8.65 | 15.03 | 3 | C | 0 |
| 16721 | 397D | Mercurius F | .627 | .710 | .321 | 62.9 | 45.2 | 9.72 | 16.89 | 3 | C | 0 |
| 16721A | 397H | Mercurius L | .627 | .718 | .302 | 64.2 | 45.8 | 6.81 | 11.84 | 1 | C | 0 |
| 16721B | | | .621 | .713 | .326 | 62.3 | 45.4 | 6.25 | 10.86 | 2 | C | 0 |
| 16722 | 396 | Mercurius | .629 | .726 | .278 | 66.1 | 46.5 | 38.89 | 67.60 | 2 | C | P |
| 16727 | | Humboldtianum L | .625 | .776 | .085 | 82.2 | 50.8 | 23.04 | 40.05 | 2 | C | 0 |
| 16727A | | | .626 | .772 | .110 | 80.0 | 50.5 | 10.71 | 18.62 | 3 | C | 0 |
| 16730 | 397E | Mercurius G | .636 | .709 | .305 | 64.4 | 45.1 | 7.64 | 13.28 | 2 | C | 0 |
| 16733 | 396A | Mercurius B | .636 | .736 | .232 | 69.9 | 47.3 | 7.49 | 13.02 | 1 | C | 0 |
| 16736 | | Humboldtianum K | .639 | .762 | .105 | 80.6 | 49.6 | 11.12 | 19.33 | 1 | C | 0 |
| 16741 | | | .644 | .719 | .261 | 67.9 | 45.9 | 15.97 | 27.76 | 5 | C | 0 |
| 16741A | | Mercurius DA | .649 | .712 | .268 | 67.5 | 45.3 | 5.84 | 10.15 | 2 | C | 0 |
| 16742 | 397B | Mercurius D | .645 | .721 | .253 | 68.5 | 46.1 | 28.84 | 50.13 | 5 | C | 0 |
| 16743 | 397G | Mercurius K | .648 | .736 | .196 | 73.1 | 47.3 | 12.01 | 20.88 | 2 | C | 0 |
| 16744 | 397A | Mercurius A | .642 | .743 | .189 | 73.5 | 47.9 | 11.22 | 19.50 | 2 | C | 0 |
| 16744A | | | .646 | .744 | .171 | 75.1 | 48.0 | 4.85 | 8.43 | 1 | C | 0 |
| 16751 | | | .658 | .718 | .227 | 70.9 | 45.8 | 6.93 | 12.05 | 3 | C | 0 |
| 16752 | | | .651 | .726 | .222 | 71.1 | 46.5 | 7.83 | 13.61 | 3 | C | 0 |
| 16752A | | | .655 | .721 | .226 | 70.9 | 46.1 | 7.52 | 13.07 | 3 | C | 0 |
| 16760 | 350 | Zeno A | .671 | .700 | .244 | 69.9 | 44.4 | 25.21 | 43.82 | 3 | C | 0 |
| 16760A | 351A | Zeno D | .670 | .707 | .226 | 71.3 | 44.9 | 8.96 | 15.57 | 3 | C | 0 |
| 16761 | | | .664 | .711 | .231 | 70.7 | 45.3 | 9.97 | 17.33 | 3 | C | 0 |
| 16762 | | | .664 | .720 | .202 | 73.0 | 46.0 | 8.05 | 13.99 | 1 | C | 0 |
| 16770 | 354 | Zeno | .674 | .709 | .207 | 72.8 | 45.1 | 37.50 | 65.18 | 3 | C | 0 |
| 16773 | | | .679 | .733 | .041 | 86.5 | 47.1 | 10.96 | 19.05 | 2 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16781 | | | + .685 | + .712 | + .154 | + 77.2 | + 45.3 | 35.36 | 61.46 | 4f | C | 0 |
| 16791 | | | .696 | .711 | .100 | 81.7 | 45.3 | 7.24 | 12.58 | 1 | C | 0 |
| 16792 | | | .690 | .721 | .064 | 84.7 | 46.1 | 8.53 | 14.83 | 2 | C | 0 |
| 17006 | | Secchi G | .700 | .069 | .711 | 44.5 | 3.9 | 3.51 | 6.10 | 2 | pMC | 0 |
| 17009 | | | .701 | .091 | .707 | 44.7 | 5.2 | 3.53 | 6.14 | 3 | C | 0 |
| 17025 | | Taruntius B | .725 | .058 | .686 | 46.5 | 3.3 | 4.02 | 6.99 | 1 | pM | 0 |
| 17026 | | Taruntius TA | .726 | .069 | .684 | 46.6 | 3.9 | 10.56 | 18.35 | 3f | aMC | 0 |
| 17029 | 215 | Taruntius | .722 | .098 | .685 | 46.5 | 5.6 | 32.19 | 55.95 | 2 | pMC | P |
| 17036 | | Taruntius T | .735 | .060 | .675 | 47.4 | 3.4 | 5.70 | 9.91 | 4f | aM | 0 |
| 17053 | 224 | Taruntius G | .759 | .033 | .650 | 49.4 | 1.8 | 5.71 | 9.92 | 1 | pM | 0 |
| 17059 | | Taruntius W | .752 | .094 | .652 | 49.0 | 5.3 | 11.36 | 19.75 | 4f | aMC | 0 |
| 17060 | 225 | Taruntius H | .764 | .006 | .645 | 49.8 | 0.3 | 4.86 | 8.45 | 1 | pM | 0 |
| 17060A | | | .768 | .002 | .640 | 50.1 | 0.1 | 2.03 | 3.53 | 2 | pM | 0 |
| 17067 | | Taruntius V | .761 | .077 | .644 | 49.7 | 4.4 | 11.31 | 19.66 | 4f | aM | 0 |
| 17069 | | Taruntius U | .763 | .097 | .639 | 50.0 | 5.5 | 4.91 | 8.53 | 2f | aM | 0 |
| 17080 | 223A | Taruntius P | .783 | .002 | .622 | 51.5 | 0.1 | 4.16 | 7.23 | 1 | pM | 0 |
| 17081 | 226 | Taruntius K | .783 | .011 | .622 | 51.5 | 0.6 | 3.01 | 5.23 | 1 | pM | 0 |
| 17098 | | | .798 | .087 | .596 | 53.2 | 4.9 | 2.99 | 5.20 | 3 | C | 0 |
| 17100 | | Taruntius CA | .707 | .105 | .699 | 45.3 | 6.0 | 2.88 | 5.01 | 2 | C | 0 |
| 17100A | | Taruntius CB | .701 | .104 | .706 | 44.8 | 5.9 | 2.03 | 3.53 | 2 | C | 0 |
| 17103 | 234 | Taruntius Z | .701 | .132 | .701 | 45.0 | 7.5 | 9.82 | 17.07 | 4 | aMC | 0 |
| 17110 | 220 | Taruntius C | .714 | .108 | .692 | 45.9 | 6.2 | 6.22 | 10.81 | 1 | pMC | 0 |
| 17115 | 218 | Taruntius D | .714 | .154 | .683 | 46.2 | 8.8 | 8.72 | 15.16 | 4f | aMC | 0 |
| 17130 | | Taruntius R | .737 | .107 | .667 | 47.8 | 6.1 | 3.03 | 5.27 | 2 | pMC | 0 |
| 17135 | | | .733 | .151 | .663 | 47.8 | 8.6 | 2.53 | 4.40 | 2 | pMC | 0 |
| 17136 | | Lick N | .731 | .168 | .661 | 47.8 | 9.6 | 12.93 | 22.47 | 4 | C | 0 |
| 17141 | | Taruntius Q | .740 | .117 | .662 | 48.1 | 6.7 | 5.92 | 10.29 | 3f | aM | 0 |
| 17145 | | Lick L | .746 | .152 | .648 | 49.0 | 8.7 | 3.01 | 5.23 | 1 | C | 0 |
| 17152 | 216 | Taruntius A | .758 | .126 | .640 | 49.8 | 7.2 | 7.02 | 12.20 | 1 | pMC | 0 |
| 17156 | | Lick H | .755 | .167 | .634 | 49.9 | 9.6 | 5.77 | 10.03 | 3 | C | 0 |
| 17157 | | Lick F | .756 | .175 | .631 | 50.1 | 10.0 | 12.63 | 21.95 | 4f | C | 0 |
| 17159 | | | .756 | .197 | .624 | 50.4 | 11.3 | 11.76 | 20.44 | 4 | C | 0 |
| 17159A | | Glaisher V | .751 | .192 | .632 | 49.9 | 11.0 | 7.15 | 12.43 | 3 | C | 0 |
| 17167 | | Lick G | .764 | .176 | .621 | 50.9 | 10.1 | 3.09 | 5.37 | 1 | C | 0 |
| 17168 | | Lick E | .760 | .184 | .623 | 50.6 | 10.6 | 4.71 | 8.19 | 1 | C | 0 |
| 17169 | | Lick B | .767 | .194 | .612 | 51.4 | 11.1 | 13.52 | 23.50 | 4f | C | 0 |
| 17171 | | | .773 | .114 | .624 | 51.0 | 6.5 | 2.09 | 3.63 | 2 | C | 0 |
| 17174 | | | .779 | .149 | .609 | 51.9 | 8.5 | 2.69 | 4.68 | 2 | C | 0 |
| 17175 | | | .771 | .154 | .618 | 51.2 | 8.8 | 2.33 | 4.05 | 1 | C | 0 |
| 17178 | | Lick BA | .773 | .189 | .606 | 51.9 | 10.8 | 8.00 | 13.91 | 4 | C | 0 |
| 17179 | | Lick C | .772 | .199 | .604 | 51.9 | 11.4 | 5.35 | 9.30 | 2 | C | 0 |
| 17182 | 217 | Taruntius Y | .787 | .127 | .604 | 52.5 | 7.2 | 6.21 | 10.79 | 3 | C | 0 |
| 17182A | | Taruntius YA | .789 | .128 | .601 | 52.7 | 7.3 | 4.94 | 8.59 | 2 | C | 0 |
| 17184 | | | .786 | .141 | .602 | 52.5 | 8.1 | 3.85 | 6.69 | 1 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17185 | | | + .781 | + .154 | + .605 | + 52.2 | + 8.8 | 3.31 | 5.75 | 1 | C | 0 |
| 17187 | | Lick K | .784 | .177 | .595 | 52.8 | 10.1 | 3.36 | 5.84 | 1 | C | 0 |
| 17189A | | Lick A | .781 | .199 | .592 | 52.8 | 11.4 | 12.94 | 22.49 | 4f | aMC | 0 |
| 17192 | | Taruntius XA | .797 | .125 | .591 | 53.4 | 7.1 | 5.81 | 10.10 | 1 | C | 0 |
| 17193 | 235 | Taruntius X | .792 | .134 | .596 | 53.0 | 7.7 | 13.03 | 22.65 | 4f | C | 0 |
| 17195 | | Picard P | .796 | .154 | .585 | 53.6 | 8.8 | 3.99 | 6.94 | 2 | C | 0 |
| 17196 | 110 | Picard G | .794 | .166 | .585 | 53.6 | 9.5 | 18.36 | 31.91 | 4f | C | 0 |
| 17196A | | Picard GA | .793 | .160 | .588 | 53.4 | 9.2 | 2.39 | 4.15 | 1 | aMC | 0 |
| 17197 | | Picard M | .796 | .176 | .579 | 53.9 | 10.1 | 5.11 | 8.88 | 2 | C | 0 |
| 17197A | | Picard L | .799 | .179 | .574 | 54.3 | 10.3 | 4.46 | 7.75 | 1 | C | 0 |
| 17197B | | Picard GB | .798 | .171 | .578 | 54.0 | 9.8 | 4.03 | 7.00 | 1 | pMC | 0 |
| 17198 | | Picard N | .791 | .183 | .584 | 53.5 | 10.5 | 11.37 | 19.76 | 4 | aMC | 0 |
| 17203 | | | .708 | .235 | .666 | 46.7 | 13.5 | 4.02 | 6.99 | 2 | C | 0 |
| 17206 | | Proclus T | .702 | .266 | .661 | 46.7 | 15.4 | 12.19 | 21.19 | 4 | C | 0 |
| 17207 | 198 | Proclus | .702 | .278 | .656 | 46.9 | 16.1 | 16.13 | 28.04 | 1 | C | 0 |
| 17212 | | Glaisher N | .718 | .227 | .658 | 47.4 | 13.1 | 3.82 | 6.64 | 1 | C | 0 |
| 17213 | | | .711 | .230 | .665 | 46.9 | 13.2 | 12.30 | 21.38 | 4 | C | 0 |
| 17216 | | Proclus U | .717 | .262 | .646 | 47.9 | 15.1 | 10.37 | 18.02 | 4f | aMC | 0 |
| 17217 | 213A | Proclus S | .715 | .270 | .645 | 47.9 | 15.6 | 10.06 | 17.49 | 3f | aMC | 0 |
| 17221 | | Glaisher W | .721 | .215 | .659 | 47.5 | 12.4 | 20.78<br>26.36 | 36.12<br>45.82 | 5 | C | 0 |
| 17225 | | Proclus V | .722 | .255 | .643 | 48.3 | 14.7 | 10.84 | 18.84 | 4f | aMC | 0 |
| 17226 | (104A) | Proclus P | .724 | .264 | .637 | 48.6 | 15.3 | 17.14 | 29.79 | 3f | aMC | 0 |
| 17227 | | | .724 | .272 | .634 | 48.7 | 15.7 | 3.11 | 5.41 | 1 | C | 0 |
| 17231 | | Glaisher E | .738 | .219 | .638 | 49.1 | 12.6 | 12.14 | 21.10 | 3 | C | 0 |
| 17232 | 200 | Glaisher | .740 | .228 | .633 | 49.4 | 13.1 | 9.16 | 15.92 | 1 | C | 0 |
| 17232A | | Glaisher EA | .736 | .222 | .640 | 49.0 | 12.8 | 2.33 | 4.05 | 1 | C | 0 |
| 17232B | | Glaisher M | .731 | .227 | .644 | 48.6 | 13.1 | 3.03 | 5.27 | 1 | C | 0 |
| 17233 | | Glaisher H | .739 | .238 | .630 | 49.5 | 13.7 | 2.90 | 5.04 | 1 | C | 0 |
| 17233A | | Glaisher L | .732 | .232 | .641 | 48.8 | 13.4 | 3.98 | 6.92 | 1 | C | 0 |
| 17235A | | Glaisher X | .732 | .250 | .634 | 49.1 | 14.4 | 15.60 | 27.12 | 5f | aMC | 0 |
| 17235 | | Proclus PB | .733 | .258 | .629 | 49.3 | 14.9 | 4.54 | 7.89 | 3 | pMC | 0 |
| 17236 | | Proclus PA | .731 | .264 | .629 | 49.2 | 15.3 | 3.43 | 5.96 | 2 | pMC | 0 |
| 17241 | | Glaisher G | .743 | .214 | .634 | 49.5 | 12.3 | 11.55 | 20.08 | 4 | C | 0 |
| 17241A | | Glaisher B | .749 | .218 | .626 | 50.1 | 12.5 | 10.17 | 17.68 | 3 | C | 0 |
| 17243 | | Glaisher F | .744 | .236 | .625 | 49.9 | 13.6 | 3.73 | 6.48 | 1 | C | 0 |
| 17243A | | | .741 | .233 | .630 | 49.6 | 13.4 | 6.82 | 11.85 | 3 | C | 0 |
| 17247 | (96) | Yerkes E | .743 | .274 | .611 | 50.5 | 15.9 | 5.70 | 9.91 | 1 | pMC | 0 |
| 17250 | | Glaisher C | .753 | .209 | .624 | 50.3 | 12.0 | 14.81 | 25.74 | 4 | C | 0 |
| 17252 | | Glaisher A | .755 | .223 | .617 | 50.7 | 12.8 | 10.67 | 18.55 | 2 | C | 0 |
| 17255 | 114 | Yerkes | .759 | .252 | .600 | 51.6 | 14.5 | 20.79 | 36.14 | 4f | aMC | 0 |
| 17260 | | Glaisher T | .762 | .204 | .615 | 51.1 | 11.7 | 4.11 | 7.14 | 2 | C | 0 |
| 17261 | | Glaisher Q | .765 | .211 | .608 | 51.5 | 12.1 | 5.36 | 9.32 | 3 | C | 0 |
| 17261A | | Glaisher D | .761 | .211 | .613 | 51.1 | 12.1 | 3.82 | 6.64 | 2 | C | 0 |
| 17271 | 111 | Lick | .777 | .214 | .592 | 52.6 | 12.3 | 18.05 | 31.37 | 4f | aMC | 0 |
| 17272 | 112 | Lick D | .775 | .228 | .589 | 52.7 | 13.1 | 7.91 | 13.75 | 1 | pMC | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17285 | 106 | Picard | + .789 | + .251 | + .561 | + 54.5 | + 14.5 | 12.98 | 22.56 | 1 | pMC | 0 |
| 17301 | | | .707 | .314 | .634 | 48.1 | 18.3 | 10.33 | 17.96 | 3 | C | 0 |
| 17307 | | Tisserand D | .705 | .370 | .605 | 49.3 | 21.7 | 3.79 | 6.59 | 1 | C | 0 |
| 17307A | | | .703 | .374 | .605 | 49.2 | 21.9 | 8.76 | 15.23 | 3f | C | 0 |
| 17314 | | Tisserand A | .712 | .348 | .610 | 49.4 | 20.3 | 13.97 | 24.28 | 3 | C | 0 |
| 17319 | | | .712 | .393 | .582 | 50.7 | 23.1 | 7.77 | 13.51 | 4f | aMC | 0 |
| 17319A | | | .715 | .398 | .575 | 51.2 | 23.4 | 6.58 | 11.44 | 5f | aMC | 0 |
| 17322 | 105 | Peirce C | .724 | .322 | .610 | 49.8 | 18.7 | 10.62 | 18.46 | 4f | C | 0 |
| 17323 | | Tisserand K | .725 | .338 | .600 | 50.3 | 19.7 | 6.19 | 10.76 | 2 | C | 0 |
| 17335 | | Tisserand B | .730 | .353 | .585 | 51.2 | 20.6 | 4.64 | 8.07 | 1 | C | 0 |
| 17353 | 116 | Peirce B | .757 | .331 | .563 | 53.3 | 19.3 | 6.03 | 10.48 | 1 | pM | 0 |
| 17361 | 115 | Peirce | .761 | .313 | .568 | 53.2 | 18.2 | 10.63 | 18.48 | 2 | pM | 0 |
| 17378 | 126 | Cleomedes F | .774 | .384 | .503 | 56.9 | 22.5 | 6.70 | 11.65 | 1 | pM | 0 |
| 17378A | | Cleomedes FA | .780 | .381 | .496 | 57.5 | 22.3 | 3.38 | 5.87 | 1 | pM | 0 |
| 17407 | 176 | Tralles | .700 | .476 | .532 | 52.7 | 28.4 | 24.83 | 43.16 | 2 | C | pp |
| 17408 | | | .702 | .484 | .522 | 53.3 | 28.9 | 4.11 | 7.14 | 1 | C | 0 |
| 17411 | | Cleomedes M | .715 | .410 | .566 | 51.6 | 24.2 | 3.53 | 6.14 | 1 | C | 0 |
| 17417 | | Cleomedes E | .714 | .479 | .511 | 54.4 | 28.6 | 12.11 | 21.05 | 2f | pMC | 0 |
| 17418 | 121 | Cleomedes A | .717 | .483 | .503 | 54.9 | 28.8 | 6.83 | 11.87 | 1 | pMC | 0 |
| 17421 | | Cleomedes N | .720 | .419 | .553 | 52.4 | 24.7 | 3.42 | 5.94 | 1 | pMC | 0 |
| 17433 | 123 | Cleomedes C | .737 | .434 | .518 | 54.8 | 25.7 | 8.21 | 14.27 | 2 | pMC | 0 |
| 17435 | 122 | Cleomedes B | .736 | .456 | .500 | 55.7 | 27.1 | 6.17 | 10.72 | 1 | pMC | 0 |
| 17436 | 119 | Cleomedes | .730 | .465 | .501 | 55.5 | 27.7 | 72.53 | 126.07 | 3 | C | P |
| 17440 | | Cleomedes L | .744 | .404 | .532 | 54.4 | 23.8 | 3.97 | 6.90 | 1 | C | 0 |
| 17445 | 127 | Cleomedes J | .747 | .452 | .488 | 56.8 | 26.8 | 5.51 | 9.58 | 2f | pMC | 0 |
| 17449 | | Cleomedes S | .746 | .492 | .449 | 58.9 | 29.4 | 4.37 | 7.60 | 1 | C | 0 |
| 17451 | | Cleomedes P | .756 | .419 | .503 | 56.3 | 24.7 | 5.15 | 8.95 | 1 | C | 0 |
| 17459 | 169 | Burckhardt B | .751 | .499 | .432 | 60.0 | 29.9 | 6.44 | 11.19 | 1 | C | 0 |
| 17459A | | Cleomedes R | .755 | .493 | .432 | 60.2 | 29.5 | 8.69 | 15.10 | 2 | C | 0 |
| 17460 | 128A | Cleomedes G | .768 | .407 | .494 | 57.2 | 24.0 | 11.25 | 19.55 | 2f | C | 0 |
| 17461 | | | .763 | .414 | .496 | 56.9 | 24.4 | 2.37 | 4.12 | 1 | C | 0 |
| 17462 | | Cleomedes Q | .760 | .421 | .495 | 56.9 | 24.8 | 2.54 | 4.41 | 2 | C | 0 |
| 17463 | | Cleomedes T | .761 | .435 | .481 | 57.6 | 25.7 | 6.49 | 11.28 | 2f | aMC | 0 |
| 17468 | | | .764 | .484 | .427 | 60.8 | 28.9 | 2.23 | 3.88 | 2 | C | 0 |
| 17469 | 120 | Cleomedes D | .769 | .490 | .411 | 61.9 | 29.3 | 14.31 | 24.87 | 3f | aMC | 0 |
| 17470 | | | .775 | .404 | .486 | 57.9 | 23.8 | 3.60 | 6.26 | 1 | C | 0 |
| 17475 | 125 | Delmotte | .772 | .456 | .443 | 60.1 | 27.1 | 18.89 | 32.83 | 2 | C | 0 |
| 17478 | | | .774 | .482 | .411 | 62.0 | 28.8 | 7.40 | 12.86 | 2 | aMC | 0 |
| 17478A | | | .778 | .485 | .399 | 62.8 | 29.0 | 3.91 | 6.80 | 2 | C | 0 |
| 17478B | | | .772 | .488 | .407 | 62.1 | 29.2 | 6.36 | 11.05 | 2 | C | 0 |
| 17486 | | | .783 | .460 | .419 | 61.8 | 27.3 | 4.13 | 7.18 | 1 | C | 0 |
| 17489 | | | .782 | .498 | .375 | 64.3 | 29.8 | 9.59 | 16.67 | 2f | aMC | 0 |
| 17498 | | | .799 | .481 | .361 | 65.6 | 28.7 | 7.37 | 12.81 | 3 | C | 0 |
| 17505 | 324 | Geminus C | .709 | .558 | .431 | 58.6 | 33.9 | 9.20 | 15.99 | 1 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17509 | 162 | Bernouilli A | + .703 | + .594 | + .391 | + 60.9 | + 36.4 | 12.35 | 21.47 | 1 | C | 0 |
| 17510 | | Burckhardt E | .711 | .509 | .485 | 55.6 | 30.5 | 22.47 | 39.06 | 3 | C | 0 |
| 17511 | 167 | Burckhardt | .714 | .517 | .472 | 56.5 | 31.1 | 32.75 | 56.92 | 2 | C | P |
| 17512 | | Burckhardt F | .718 | .521 | .462 | 57.2 | 31.3 | 24.64 | 42.83 | 3 | C | 0 |
| 17513 | | Burckhardt G | .715 | .531 | .455 | 57.5 | 32.0 | 3.90 | 6.78 | 1 | C | 0 |
| 17517 | 161 | Bernouilli | .714 | .574 | .401 | 60.6 | 35.0 | 27.20 | 47.28 | 2 | C | P |
| 17519 | | Bernouilli K | .712 | .598 | .368 | 62.6 | 36.7 | 11.40 | 19.81 | 3 | C | 0 |
| 17519A | | | .716 | .597 | .362 | 63.1 | 36.6 | 9.17 | 15.94 | 4 | C | 0 |
| 17521 | | | .725 | .513 | .460 | 57.6 | 30.8 | 2.97 | 5.16 | 1 | C | 0 |
| 17527 | | Bernouilli E | .727 | .578 | .371 | 62.9 | 35.3 | 14.99 | 26.05 | 4f | C | 0 |
| 17530 | 168 | Burckhardt A | .735 | .506 | .451 | 58.4 | 30.3 | 16.18 | 28.12 | 3 | C | 0 |
| 17532 | | Burckhardt C | .730 | .524 | .439 | 58.9 | 31.6 | 3.34 | 5.81 | 1 | C | 0 |
| 17541 | | | .747 | .518 | .417 | 60.8 | 31.1 | 9.45 | 16.43 | 3 | C | 0 |
| 17542 | | | .742 | .526 | .416 | 60.7 | 31.7 | 7.67 | 13.33 | 4 | C | 0 |
| 17548 | 165 | Bernouilli D | .744 | .585 | .323 | 66.5 | 35.8 | 6.94 | 12.06 | 1 | C | 0 |
| 17557 | 164 | Bernouilli C | .752 | .579 | .315 | 67.2 | 35.3 | 10.64 | 18.49 | 2 | C | 0 |
| 17560 | | | .765 | .506 | .398 | 62.4 | 30.3 | 7.92 | 13.77 | 2 | C | 0 |
| 17564 | | | .763 | .546 | .346 | 65.6 | 33.0 | 13.54 | 23.53 | 5f | C | 0 |
| 17565 | | Berosus F | .760 | .559 | .332 | 66.4 | 33.9 | 12.38 | 21.52 | 3 | C | 0 |
| 17565A | | | .767 | .556 | .320 | 67.3 | 33.7 | 4.84 | 8.41 | 2 | C | 0 |
| 17565B | | | .769 | .554 | .319 | 67.4 | 33.6 | 12.23 | 21.26 | 3 | C | 0 |
| 17569 | | | .763 | .591 | .262 | 71.0 | 36.2 | 2.50 | 4.35 | 2 | C | 0 |
| 17570 | | | .777 | .505 | .376 | 64.1 | 30.3 | 4.80 | 8.34 | 3 | C | 0 |
| 17571 | | | .770 | .511 | .382 | 63.6 | 30.7 | 3.61 | 6.27 | 1 | C | 0 |
| 17574 | 145A | Berosus A | .777 | .547 | .312 | 68.1 | 33.1 | 6.93 | 12.05 | 1 | C | 0 |
| 17574A | | | .775 | .544 | .322 | 67.4 | 32.9 | 16.67 | 28.97 | 3 | C | 0 |
| 17576 | | | .770 | .569 | .289 | 69.4 | 34.6 | 7.35 | 12.78 | 2 | C | 0 |
| 17579 | | | .774 | .590 | .230 | 73.4 | 36.1 | 4.34 | 7.54 | 1 | C | 0 |
| 17584 | | | .782 | .542 | .308 | 68.5 | 32.8 | 5.49 | 9.54 | 2 | C | 0 |
| 17585 | 145 | Berosus | .783 | .552 | .287 | 69.8 | 33.5 | 42.70 | 74.22 | 2f | C | 0 |
| 17592 | | | .799 | .526 | .291 | 69.9 | 31.7 | 6.32 | 10.99 | 4 | C | 0 |
| 17597 | 149C | Gauss E | .797 | .578 | .175 | 77.5 | 35.3 | 4.75 | 8.26 | 1 | C | 0 |
| 17597A | | | .790 | .576 | .210 | 75.1 | 35.1 | 6.96 | 12.10 | 1 | C | 0 |
| 17598 | 148 | Gauss | .795 | .587 | .153 | 79.1 | 35.9 | 101.76 | 176.87 | 3 | C | 0 |
| 17599 | 149D | Gauss A | .797 | .595 | .104 | 82.5 | 36.5 | 10.17 | 17.68 | 1 | C | pp |
| 17602 | 338 | Messala F | .702 | .628 | .336 | 64.4 | 38.9 | 18.51 | 32.17 | 2 | C | 0 |
| 17603 | | | .704 | .633 | .322 | 65.4 | 39.2 | 3.57 | 6.21 | 1 | C | 0 |
| 17603A | | | .707 | .630 | .321 | 65.5 | 39.0 | 4.91 | 8.53 | 2 | C | 0 |
| 17604 | 336 | Messala D | .704 | .650 | .286 | 67.8 | 40.5 | 16.14 | 28.05 | 2 | C | 0 |
| 17606 | 352 | Zeno E | .705 | .665 | .246 | 70.7 | 41.6 | 10.46 | 18.18 | 2 | C | 0 |
| 17607 | | | .703 | .671 | .236 | 71.4 | 42.1 | 23.28 | 40.46 | 3 | C | 0 |
| 17609 | | Zeno X | .705 | .690 | .164 | 76.9 | 43.6 | 9.82 | 17.07 | 2 | C | 0 |
| 17616 | | | .719 | .668 | .192 | 75.0 | 41.9 | 14.71 | 25.57 | 3 | C | 0 |
| 17618 | | | .713 | .683 | .159 | 77.4 | 43.0 | 7.73 | 13.44 | 2 | C | 0 |
| 17618A | | | .719 | .680 | .144 | 78.7 | 42.8 | 5.46 | 9.49 | 2 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17619 | | | + .710 | + .690 | + .141 | + 78.7 | + 43.6 | 5.98 | 10.39 | 2 | C | 0 |
| 17620 | 163 | Bernouilli B | .728 | .601 | .330 | 65.6 | 36.9 | 12.66 | 22.00 | 3 | C | 0 |
| 17621 | | | .720 | .617 | .318 | 66.1 | 38.0 | 5.53 | 9.61 | 3 | C | 0 |
| 17621A | | | .722 | .619 | .309 | 66.8 | 38.2 | 3.31 | 5.75 | 2 | C | 0 |
| 17621B | | | .723 | .615 | .315 | 66.4 | 37.9 | 3.19 | 5.54 | 3 | C | 0 |
| 17623 | 339 | Messala G | .723 | .630 | .283 | 68.5 | 39.0 | 16.90 | 29.37 | 3f | C | 0 |
| 17624 | | | .729 | .647 | .223 | 72.9 | 40.3 | 6.03 | 10.48 | 2 | C | 0 |
| 17624A | | | .725 | .647 | .236 | 71.9 | 40.3 | 12.82 | 22.28 | 3 | C | 0 |
| 17625 | | | .724 | .651 | .228 | 72.5 | 40.6 | 7.83 | 13.61 | 1 | C | 0 |
| 17626 | | | .722 | .662 | .201 | 74.4 | 41.4 | 9.49 | 16.50 | 3 | C | 0 |
| 17627A | (353) | Zeno F | .726 | .676 | .126 | 80.1 | 42.5 | 6.89 | 11.97 | 2 | C | 0 |
| 17627B | | | .720 | .677 | .153 | 78.0 | 42.6 | 6.35 | 11.04 | 1 | C | 0 |
| 17628 | | | .720 | .685 | .111 | 81.2 | 43.2 | 7.91 | 13.75 | 2 | C | 0 |
| 17628A | | | .721 | .689 | .074 | 84.1 | 43.5 | 24.27 | 42.18 | 2 | C | 0 |
| 17632 | | | .732 | .621 | .280 | 69.0 | 38.3 | 4.94 | 8.59 | 2 | C | 0 |
| 17633 | 149A | Gauss C | .732 | .640 | .234 | 72.2 | 39.7 | 16.83 | 29.25 | 1 | C | 0 |
| 17633A | | | .731 | .639 | .239 | 71.8 | 39.7 | 4.62 | 8.03 | 1 | C | 0 |
| 17635 | | | .739 | .657 | .149 | 78.5 | 41.0 | 23.02 | 40.01 | 3f | C | 0 |
| 17636 | | | .730 | .660 | .177 | 76.3 | 41.2 | 13.38 | 23.26 | 3 | C | 0 |
| 17637 | (353) | | .730 | .672 | .125 | 80.3 | 42.2 | 7.49 | 13.02 | 1 | C | 0 |
| 17643 | 149B | Gauss D | .743 | .635 | .211 | 74.1 | 39.4 | 13.89 | 24.14 | 1 | C | 0 |
| 17643A | | | .747 | .634 | .200 | 75.0 | 39.3 | 18.51 | 32.17 | 4 | C | 0 |
| 17643B | | | .748 | .637 | .186 | 76.0 | 39.5 | 15.62 | 27.15 | 4 | C | 0 |
| 17654 | | | .759 | .640 | .120 | 81.0 | 39.7 | 3.97 | 6.90 | 1 | C | 0 |
| 17654A | | | .753 | .640 | .153 | 78.5 | 39.7 | 18.04 | 31.36 | 4f | C | 0 |
| 17655 | | | .758 | .650 | .054 | 85.9 | 40.5 | 7.12 | 12.38 | 2 | C | 0 |
| 17690 | | | .795 | .606 | .027 | 88.0 | 37.3 | 27.40 | 47.63 | 1 | C | 0 |
| 17700 | | | .702 | .706 | .094 | 82.4 | 44.9 | 16.27 | 28.28 | 4 | C | 0 |
| 18004 | 227 | Taruntius N | .804 | .042 | .593 | 53.5 | 2.4 | 3.21 | 5.58 | 1 | pM | 0 |
| 18007 | | | .808 | .070 | .585 | 54.0 | 4.0 | 2.09 | 3.63 | 2 | C | 0 |
| 18013 | 226A | Taruntius O | .810 | .039 | .585 | 54.1 | 2.2 | 2.91 | 5.06 | 1 | pM | 0 |
| 18015 | | | .819 | .058 | .571 | 55.1 | 3.3 | 2.51 | 4.36 | 2 | pMC | 0 |
| 18019 | 78 | Apollonius K | .813 | .097 | .574 | 54.7 | 5.5 | 6.01 | 10.45 | 1 | C | 0 |
| 18029 | | Apollonius T | .828 | .092 | .553 | 56.2 | 5.2 | 5.91 | 10.27 | 1 | C | 0 |
| 18029A | | | .820 | .095 | .564 | 55.4 | 5.4 | 4.04 | 7.02 | 3 | C | 0 |
| 18033 | | Webb U | .830 | .032 | .557 | 56.1 | 1.8 | 3.65 | 6.34 | 1 | pMC | 0 |
| 18035 | 69 | Apollonius C | .838 | .058 | .543 | 57.0 | 3.3 | 4.99 | 8.67 | 1 | C | 0 |
| 18038 | 67 | Apollonius A | .834 | .084 | .545 | 56.8 | 4.8 | 14.00 | 24.33 | 3 | C | 0 |
| 18044 | | Webb P | .846 | .041 | .532 | 57.8 | 2.3 | 18.87 | 32.80 | 4f | aMC | 0 |
| 18045 | | Webb W | .848 | .052 | .527 | 58.1 | 2.9 | 3.67 | 6.38 | 2 | C | 0 |
| 18045A | | Webb X | .849 | .056 | .525 | 58.2 | 3.2 | 4.19 | 7.28 | 3 | C | 0 |
| 18046 | | | .847 | .069 | .527 | 58.1 | 3.9 | 6.31 | 10.97 | 4 | C | 0 |
| 18046A | | | .849 | .066 | .524 | 58.3 | 3.7 | 2.93 | 5.09 | 3 | C | 0 |
| 18047 | | Apollonius V | .848 | .076 | .525 | 58.2 | 4.3 | 8.98 | 15.61 | 1 | C | 0 |
| 18047A | | | .843 | .075 | .533 | 57.7 | 4.3 | 7.11 | 12.35 | 3 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18048 | 79 | Apollonius J | + .841 | + .081 | + .535 | + 57.5 | + 4.6 | 6.95 | 12.08 | 3 | C | 0 |
| 18048A | | | .840 | .087 | .536 | 57.4 | 4.9 | 6.92 | 12.03 | 4 | C | 0 |
| 18048B | | | .848 | .084 | .523 | 58.3 | 4.8 | 3.62 | 6.29 | 2 | C | 0 |
| 18056 | | | .853 | .066 | .518 | 58.7 | 3.7 | 4.12 | 7.16 | 3 | C | 0 |
| 18056A | | | .859 | .067 | .508 | 59.4 | 3.8 | 5.98 | 10.39 | 3 | C | 0 |
| 18057 | 70 | Apollonius D | .858 | .074 | .508 | 59.3 | 4.2 | 10.03 | 17.43 | 2 | C | 0 |
| 18058 | | | .850 | .081 | .521 | 58.5 | 4.6 | 2.33 | 4.05 | 2 | C | 0 |
| 18065 | 71 | Apollonius H | .860 | .059 | .507 | 59.4 | 3.3 | 11.88 | 20.65 | 2 | C | 0 |
| 18065A | | Apollonius HA | .862 | .052 | .504 | 59.6 | 2.9 | 4.76 | 8.27 | 1 | C | 0 |
| 18068 | | Apollonius U | .862 | .085 | .500 | 59.8 | 4.8 | 4.07 | 7.07 | 1 | C | 0 |
| 18069 | 76 | Apollonius F | .862 | .098 | .497 | 60.0 | 5.6 | 9.19 | 15.97 | 2 | C | 0 |
| 18071 | | Webb E | .875 | .017 | .484 | 61.0 | 0.9 | 3.22 | 5.60 | 2 | pMC | 0 |
| 18072 | | Webb G | .876 | .029 | .481 | 61.2 | 1.6 | 4.94 | 8.59 | 1 | pMC | 0 |
| 18072A | | Webb F | .875 | .026 | .483 | 61.0 | 1.4 | 4.09 | 7.11 | 2 | pMC | 0 |
| 18073 | | Webb R | .870 | .032 | .492 | 60.5 | 1.8 | 16.16 | 28.09 | 4f | aMC | 0 |
| 18076 | | | .870 | .061 | .489 | 60.6 | 3.4 | 4.05 | 7.04 | 2 | C | 0 |
| 18076A | | | .871 | .063 | .487 | 60.7 | 3.6 | 3.07 | 5.34 | 2 | C | 0 |
| 18077 | 66 | Apollonius | .872 | .078 | .483 | 61.0 | 4.4 | 29.81 | 51.81 | 3f | C | 0 |
| 18078 | 73 | Apollonius M | .879 | .083 | .470 | 61.8 | 4.7 | 5.86 | 10.19 | 2 | pMC | 0 |
| 18080 | | Webb L | .888 | .003 | .460 | 62.6 | 0.1 | 3.27 | 5.68 | 3 | aMC | 0 |
| 18082 | 79A | Apollonius S | .887 | .022 | .461 | 62.5 | 1.2 | 9.30 | 16.16 | 2f | aMC | 0 |
| 18087 | 72 | Apollonius E | .880 | .076 | .469 | 61.9 | 4.3 | 8.26 | 14.36 | 2 | pMC | 0 |
| 18088 | | Apollonius Y | .885 | .085 | .458 | 62.6 | 4.8 | 5.93 | 10.31 | 2 | C | 0 |
| 18088A | | | .888 | .085 | .452 | 63.0 | 4.8 | 4.50 | 7.82 | 3 | C | 0 |
| 18090 | 4658C | Webb C | .896 | .007 | .444 | 63.6 | 0.4 | 19.56 | 34.00 | 5f | aMC | 0 |
| 18092 | | | .890 | .026 | .455 | 62.9 | 1.4 | 2.96 | 5.14 | 2 | pMC | 0 |
| 18094A | | | .890 | .048 | .453 | 63.0 | 2.7 | 3.06 | 5.32 | 2 | C | 0 |
| 18096 | 77 | Apollonius G | .891 | .060 | .450 | 63.2 | 3.4 | 9.74 | 16.93 | 2 | C | 0 |
| 18096A | | | .890 | .067 | .451 | 63.1 | 3.8 | 2.12 | 3.68 | 3 | C | 0 |
| 18097 | | | .899 | .072 | .432 | 64.3 | 4.1 | 2.60 | 4.52 | 2 | C | 0 |
| 18098 | 68 | Apollonius N | .896 | .083 | .436 | 64.0 | 4.7 | 5.43 | 9.44 | 2 | C | 0 |
| 18102 | | | .800 | .120 | .588 | 53.6 | 6.8 | 2.99 | 5.20 | 1 | C | 0 |
| 18106 | | Picard K | .803 | .169 | .572 | 54.5 | 9.7 | 4.56 | 7.93 | 1 | C | 0 |
| 18111 | 81A | Apollonius L | .810 | .113 | .575 | 54.6 | 6.4 | 5.02 | 8.73 | 1 | C | 0 |
| 18111A | | | .811 | .110 | .575 | 54.6 | 6.3 | 3.89 | 6.76 | 1 | C | 0 |
| 18120 | | | .829 | .102 | .550 | 56.4 | 5.8 | 2.68 | 4.66 | 2 | C | 0 |
| 18121 | | Apollonius LA | .821 | .114 | .559 | 55.7 | 6.5 | 3.87 | 6.73 | 1 | C | 0 |
| 18121A | | | .826 | .115 | .552 | 56.2 | 6.6 | 2.56 | 4.45 | 2 | C | 0 |
| 18126 | 110A | Picard H | .826 | .164 | .539 | 56.8 | 9.4 | 13.24 | 23.01 | 3f | aMC | 0 |
| 18137 | | Picard J | .831 | .179 | .527 | 57.6 | 10.3 | 31.21 | 54.25 | 4f | aMC | 0 |
| 18140 | 75 | Apollonius B | .840 | .102 | .533 | 57.6 | 5.8 | 22.34<br>16.12 | 38.83<br>28.02 | 4 | C | 0 |
| 18141 | | Apollonius X | .843 | .119 | .525 | 58.1 | 6.8 | 17.77 | 30.89 | 4 | C | 0 |
| 18143 | | Auzout P | .846 | .139 | .515 | 58.6 | 7.9 | 2.74 | 4.76 | 1 | C | 0 |
| 18144 | | Auzout Q | .844 | .145 | .516 | 58.5 | 8.3 | 3.38 | 5.87 | 3 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18150 | 81B | Apollonius P | + .858 | + .100 | + .504 | + 59.5 | + 5.7 | 9.93 | 17.26 | 1 | C | 0 |
| 18154 | | | .859 | .142 | .492 | 60.2 | 8.1 | 3.45 | 6.00 | 3 | C | 0 |
| 18154A | | | .855 | .142 | .499 | 59.7 | 8.1 | 3.75 | 6.52 | 3 | C | 0 |
| 18155 | | Auzout T | .858 | .157 | .489 | 60.3 | 9.0 | 9.88 | 17.17 | 5 | C | 0 |
| 18155A | | Auzout R | .857 | .152 | .492 | 60.1 | 8.7 | 3.66 | 6.36 | 2 | C | 0 |
| 18156 | | Auzout F | .854 | .165 | .493 | 59.9 | 9.4 | 11.13 | 19.35 | 3 | C | 0 |
| 18156A | | Auzout E | .859 | .166 | .484 | 60.5 | 9.5 | 9.66 | 16.79 | 2 | C | 0 |
| 18157 | | Auzout GA | .856 | .172 | .488 | 60.3 | 9.9 | 5.06 | 8.80 | 2 | pMC | 0 |
| 18158 | | Auzout G | .851 | .186 | .491 | 60.0 | 10.7 | 28.65 | 49.80 | 4f | aMC | 0 |
| 18163 | | Firmicus H | .861 | .130 | .492 | 60.2 | 7.4 | 3.95 | 6.87 | 1 | C | 0 |
| 18164 | | Auzout L | .868 | .145 | .475 | 61.3 | 8.3 | 4.91 | 8.53 | 3 | C | 0 |
| 18165 | | Auzout S | .860 | .153 | .487 | 60.4 | 8.8 | 3.23 | 5.61 | 2 | C | 0 |
| 18166 | | Auzout U | .863 | .163 | .478 | 61.0 | 9.3 | 4.55 | 7.91 | 1 | C | 0 |
| 18166A | | Auzout V | .866 | .162 | .473 | 61.3 | 9.3 | 4.12 | 7.16 | 2 | C | 0 |
| 18171 | | Firmicus F | .876 | .114 | .469 | 61.8 | 6.5 | 5.14 | 8.93 | 1 | C | 0 |
| 18171A | | | .872 | .117 | .475 | 61.4 | 6.7 | 4.30 | 7.47 | 2 | C | 0 |
| 18172 | | Firmicus G | .876 | .121 | .467 | 61.9 | 6.9 | 5.11 | 8.88 | 1 | C | 0 |
| 18176 | | Auzout D | .874 | .162 | .458 | 62.3 | 9.3 | 5.96 | 10.36 | 4 | C | 0 |
| 18182 | 56 | Firmicus | .887 | .127 | .444 | 63.4 | 7.2 | 32.42 | 56.35 | 3f | C | 0 |
| 18184 | | Firmicus E | .887 | .140 | .440 | 63.6 | 8.0 | 4.97 | 8.64 | 2 | C | 0 |
| 18186 | 48 | Auzout A | .889 | .163 | .428 | 64.2 | 9.3 | 12.35 | 21.47 | 2 | C | 0 |
| 18187 | 47 | Auzout | .885 | .178 | .430 | 64.0 | 10.2 | 18.76 | 32.61 | 2 | C | 0 |
| 18190 | 56A | Firmicus D | .897 | .103 | .430 | 64.3 | 5.9 | 6.07 | 10.55 | 2f | C | 0 |
| 18194 | | | .898 | .142 | .416 | 65.1 | 8.1 | 2.96 | 5.14 | 2 | C | 0 |
| 18195 | 50 | Auzout C | .898 | .153 | .413 | 65.3 | 8.8 | 9.45 | 16.43 | 2 | C | 0 |
| 18196 | 49 | Auzout B | .899 | .164 | .406 | 65.6 | 9.4 | 11.19 | 19.45 | 2 | C | 0 |
| 18196A | | Auzout AB | .892 | .164 | .421 | 64.7 | 9.4 | 5.87 | 10.20 | 2 | C | 0 |
| 18252A | (40) | Picard X | .856 | .228 | .464 | 61.5 | 13.1 | 3.55 | 6.17 | 1 | pM | 0 |
| 18281 | | Condorcet H | .885 | .215 | .413 | 64.9 | 12.4 | 13.37 | 23.24 | 4f | aMC | 0 |
| 18282 | | Condorcet J | .883 | .226 | .411 | 65.0 | 13.0 | 8.92 | 15.50 | 3f | aMC | 0 |
| 18290 | | Condorcet T | .892 | .204 | .403 | 65.6 | 11.7 | 8.68 | 15.09 | 1 | C | 0 |
| 18290A | | | .897 | .200 | .394 | 66.2 | 11.5 | 6.62 | 11.51 | 3 | C | 0 |
| 18291 | | Condorcet TA | .891 | .211 | .402 | 65.7 | 12.1 | 8.03 | 13.96 | 1 | C | 0 |
| 18294 | | Condorcet W | .893 | .240 | .381 | 66.9 | 13.8 | 10.97<br>19.17 | 19.07<br>33.32 | 4 | aMC | 0 |
| 18309 | | | .807 | .393 | .441 | 61.3 | 23.1 | 3.32 | 5.77 | 2 | pM | 0 |
| 18318 | 36 | Eimmart C | .810 | .381 | .446 | 61.1 | 22.3 | 13.75 | 23.90 | 3f | aM | 0 |
| 18319 | | Eimmart F | .810 | .396 | .433 | 61.8 | 23.3 | 4.70 | 8.17 | 1 | pM | 0 |
| 18329 | | | .824 | .394 | .407 | 63.7 | 23.2 | 7.42 | 12.90 | 3f | aMC | 0 |
| 18337 | | Eimmart H | .835 | .377 | .401 | 64.3 | 22.1 | 9.17 | 15.94 | 1 | C | 0 |
| 18339 | | | .836 | .396 | .380 | 65.5 | 23.3 | 2.80 | 4.87 | 2 | C | 0 |
| 18356 | (43B) | Eimmart B | .854 | .365 | .371 | 66.5 | 21.4 | 6.38 | 11.09 | 1 | C | 0 |
| 18359 | | Eimmart D | .859 | .392 | .329 | 69.0 | 23.0 | 6.15 | 10.69 | 3 | pMC | 0 |
| 18364 | | Eimmart K | .868 | .345 | .357 | 67.6 | 20.1 | 7.57 | 13.16 | 2 | C | 0 |
| 18369 | (30A) | Plutarch C | .869 | .394 | .299 | 70.9 | 23.2 | 6.49 | 11.28 | 1 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18375 | | | + .879 | + .355 | + .318 | + 70.0 | + 20.7 | 3.32 | 5.77 | 1 | C | 0 |
| 18377 | | | .870 | .372 | .324 | 69.5 | 21.8 | 6.00 | 10.43 | 2 | C | 0 |
| 18399 | | Plutarch G | .890 | .391 | .235 | 75.2 | 23.0 | 6.24 | 10.85 | 2 | C | 0 |
| 18404 | | | .803 | .448 | .393 | 63.9 | 26.6 | 5.57 | 9.68 | 1 | pM | 0 |
| 18408 | | | .807 | .488 | .333 | 67.6 | 29.2 | 2.77 | 4.81 | 1 | C | 0 |
| 18413 | | Eimmart G | .816 | .432 | .384 | 64.7 | 25.5 | 8.23 | 14.30 | 1 | pMC | 0 |
| 18413A | (43C) | Eimmart T | .819 | .437 | .372 | 65.5 | 25.9 | 6.32<br>11.73 | 10.99<br>20.39 | 3 | pMC | 0 |
| 18416 | | | .813 | .460 | .357 | 66.2 | 27.3 | 5.92 | 10.29 | 1 | C | 0 |
| 18419 | 142 | Hahn A | .815 | .495 | .301 | 69.7 | 29.6 | 9.98 | 17.35 | 1 | C | 0 |
| 18420 | 34 | Eimmart | .826 | .406 | .391 | 64.6 | 23.9 | 26.59 | 46.22 | 2 | pMC | 0 |
| 18424 | | | .829 | .446 | .337 | 67.8 | 26.4 | 10.79 | 18.75 | 3 | C | 0 |
| 18426 | 124 | Hahn D | .826 | .461 | .324 | 68.5 | 27.4 | 8.79 | 15.28 | 2 | C | 0 |
| 18428 | | | .822 | .482 | .303 | 69.7 | 28.8 | 3.18 | 5.53 | 1 | C | 0 |
| 18428A | | | .826 | .482 | .292 | 70.5 | 28.8 | 2.85 | 4.95 | 1 | C | 0 |
| 18429 | | | .823 | .494 | .280 | 71.1 | 29.6 | 3.18 | 5.53 | 1 | C | 0 |
| 18430 | 38A | Eimmart A | .830 | .409 | .379 | 65.4 | 24.1 | 4.07 | 7.07 | 1 | pMC | 0 |
| 18433 | | | .831 | .433 | .349 | 67.2 | 25.6 | 4.45 | 7.73 | 2 | pMC | 0 |
| 18436 | | Hahn E | .833 | .464 | .301 | 70.1 | 27.6 | 8.59 | 14.93 | 1 | C | 0 |
| 18444 | | | .840 | .447 | .308 | 69.8 | 26.5 | 6.52 | 11.33 | 2 | C | 0 |
| 18453 | | Plutarch L | .853 | .437 | .285 | 71.5 | 25.9 | 4.48 | 7.79 | 1 | C | 0 |
| 18459 | | | .858 | .490 | .154 | 79.8 | 29.3 | 9.90 | 17.21 | 1 | C | 0 |
| 18462 | | Plutarch K | .865 | .424 | .268 | 72.7 | 25.0 | 6.40 | 11.12 | 3 | C | 0 |
| 18464 | (29) | Seneca A | .868 | .444 | .222 | 75.6 | 26.3 | 9.71 | 16.88 | 1 | C | 0 |
| 18464A | | Seneca C | .866 | .444 | .230 | 75.1 | 26.3 | 12.73 | 22.13 | 2 | C | 0 |
| 18465 | 138 | Seneca B | .868 | .457 | .194 | 77.3 | 27.1 | 16.17 | 28.11 | 3 | C | 0 |
| 18468 | | | .868 | .482 | .119 | 82.1 | 28.8 | 7.58 | 13.18 | 2 | pMC | 0 |
| 18469 | | | .864 | .493 | .102 | 83.2 | 29.5 | 10.02 | 17.42 | 2 | pMC | 0 |
| 18469A | | | .860 | .496 | .120 | 82.0 | 29.7 | 8.61 | 14.97 | 1 | pMC | 0 |
| 18471 | | Plutarch H | .872 | .413 | .263 | 73.2 | 24.3 | 6.21 | 10.79 | 1 | C | 0 |
| 18472 | | Plutarch J | .871 | .425 | .246 | 74.2 | 25.1 | 6.25 | 10.86 | 2 | C | 0 |
| 18475 | 137 | Seneca | .878 | .454 | .152 | 80.2 | 27.0 | 36.41 | 63.29 | 3 | C | P |
| 18475A | | | .876 | .450 | .174 | 78.7 | 26.7 | 6.18 | 10.74 | 2 | C | 0 |
| 18478 | | | .870 | .480 | .113 | 82.6 | 28.6 | 5.19 | 9.02 | 3 | C | 0 |
| 18478A | | | .871 | .481 | .100 | 83.4 | 28.7 | 6.18 | 10.74 | 3 | C | 0 |
| 18480 | | Plutarch F | .880 | .400 | .256 | 73.7 | 23.5 | 6.72 | 11.68 | 2 | C | 0 |
| 18481 | (33) | Plutarch D | .883 | .414 | .221 | 75.9 | 24.4 | 8.35 | 14.51 | 2 | C | 0 |
| 18484 | | Seneca D | .884 | .449 | .130 | 81.6 | 26.6 | 10.52 | 18.29 | 1 | C | 0 |
| 18485 | | | .887 | .457 | .066 | 85.7 | 27.1 | 11.25 | 19.55 | 2 | C | 0 |
| 18490 | 26 | Plutarch | .897 | .408 | .170 | 79.2 | 24.0 | 39.20 | 68.14 | 2 | C | P |
| 18490A | | Plutarch M | .894 | .404 | .194 | 77.7 | 23.8 | 6.36 | 11.05 | 1 | C | 0 |
| 18490B | | Plutarch N | .892 | .403 | .205 | 77.0 | 23.7 | 6.84 | 11.89 | 2 | C | 0 |
| 18493 | | | .894 | .434 | .111 | 82.8 | 25.7 | 7.50 | 13.04 | 1 | C | 0 |
| 18494 | | | .892 | .448 | .060 | 86.1 | 26.6 | 7.84 | 13.63 | 2 | C | 0 |
| 18501 | | | .805 | .513 | .298 | 69.6 | 30.8 | 8.73<br>6.59 | 15.17<br>11.45 | 3 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.R. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18503 | | Berosus K | + .800 | + .533 | + .276 | + 70.9 | + 32.2 | 3.53 | 6.14 | 1 | C | 0 |
| 18503A | | | .809 | .533 | .248 | 72.9 | 32.2 | 13.26 | 23.05 | 1 | C | 0 |
| 18507 | | Gauss F | .804 | .570 | .169 | 78.1 | 34.7 | 11.31 | 19.66 | 3 | C | 0 |
| 18508 | | Gauss B | .800 | .587 | .124 | 81.1 | 35.9 | 21.53 | 37.42 | 3 | C | 0 |
| 18514 | | Gauss H | .816 | .547 | .187 | 77.0 | 33.1 | 6.09 | 10.59 | 2 | C | 0 |
| 18516 | 149 | Gauss W | .811 | .567 | .144 | 79.9 | 34.5 | 10.28 | 17.87 | 2 | C | 0 |
| 18516A | | Gauss G | .811 | .562 | .163 | 78.6 | 34.1 | 10.05 | 17.47 | 3 | C | 0 |
| 18517 | | | .814 | .579 | .047 | 86.7 | 35.3 | 13.53 | 23.52 | 2 | C | 0 |
| 18521 | 141 | Hahn | .820 | .519 | .241 | 73.6 | 31.2 | 48.43 | 84.18 | 2 | C | P |
| 18526 | | | .826 | .560 | .064 | 85.5 | 34.0 | 5.32 | 9.25 | 1 | C | 0 |
| 18532 | 142A | Hahn B | .831 | .522 | .192 | 76.9 | 31.4 | 8.72 | 15.16 | 1 | C | 0 |
| 18534 | | | .832 | .549 | .080 | 84.5 | 33.2 | 7.83 | 13.61 | 2 | C | 0 |
| 18534A | | | .837 | .545 | .049 | 86.6 | 33.0 | 7.91 | 13.75 | 2 | C | 0 |
| 18542 | | | .844 | .521 | .127 | 81.4 | 31.3 | 14.86 | 25.83 | 2 | C | 0 |
| 18543 | | | .842 | .537 | .052 | 86.4 | 32.4 | 8.06 | 14.01 | 1 | C | 0 |
| 18543A | | | .842 | .532 | .090 | 83.9 | 32.1 | 7.05 | 12.25 | 2 | C | 0 |
| 18551 | | | .854 | .516 | .067 | 85.5 | 31.0 | 11.03 | 19.17 | 1 | C | 0 |
| 18551A | | | .853 | .515 | .085 | 84.3 | 30.9 | 10.37 | 18.02 | 3 | C | 0 |
| 18552 | 142B | Hahn C | .850 | .523 | .063 | 85.7 | 31.5 | 10.18 | 17.69 | 1 | C | 0 |
| 18552A | | | .850 | .526 | .029 | 88.0 | 31.7 | 16.05 | 27.90 | 2 | C | 0 |
| 19013 | (65C) | Dubiago Q | .920 | .039 | .390 | 67.0 | 2.2 | 7.69 | 13.37 | 1f | aMC | 0 |
| 19014 | | Dubiago R | .915 | .044 | .401 | 66.3 | 2.5 | 4.66 | 8.10 | 2f | aMC | 0 |
| 19017 | 65 | Firmicus M | .914 | .074 | .399 | 66.4 | 4.2 | 23.82 | 41.40 | 5f | aMC | 0 |
| 19021 | (65B) | Dubiago P | .920 | .014 | .392 | 66.9 | 0.8 | 13.44 | 23.36 | 3f | aMC | 0 |
| 19021A | | Maclaurin W | .929 | .011 | .370 | 68.2 | 0.6 | 14.53 | 25.26 | 4f | aMC | 0 |
| 19022 | | Dubiago N | .920 | .025 | .391 | 66.9 | 1.4 | 3.81 | 6.62 | 1 | pMC | 0 |
| 19022A | | Dubiago K | .929 | .025 | .369 | 68.3 | 1.4 | 5.93 | 10.31 | 2 | pMC | 0 |
| 19023 | | Dubiago L | .928 | .033 | .371 | 68.2 | 1.8 | 2.55 | 4.43 | 2 | pMC | 0 |
| 19024 | | Dubiago M | .928 | .040 | .370 | 68.2 | 2.2 | 4.87 | 8.46 | 3 | pMC | 0 |
| 19027 | | Dubiago Y | .927 | .073 | .368 | 68.3 | 4.1 | 4.01 | 6.97 | 1 | C | 0 |
| 19030 | | Maclaurin X | .932 | .000 | .362 | 68.7 | 0.0 | 9.22 | 16.03 | 4 | aMC | 0 |
| 19032 | | Dubiago E | .933 | .024 | .359 | 68.9 | 1.3 | 7.41 | 12.88 | 1 | C | 0 |
| 19033 | | Dubiago F | .937 | .032 | .348 | 69.6 | 1.8 | 5.08 | 8.83 | 2 | C | 0 |
| 19033A | | Dubiago G | .933 | .031 | .359 | 68.9 | 1.7 | 4.02 | 6.99 | 2 | C | 0 |
| 19034 | | Dubiago H | .934 | .040 | .355 | 69.1 | 2.2 | 3.39 | 5.89 | 1 | C | 0 |
| 19034A | | | .933 | .046 | .357 | 69.0 | 2.6 | 3.39 | 5.89 | 2 | C | 0 |
| 19034B | | | .935 | .046 | .352 | 69.3 | 2.6 | 3.60 | 6.26 | 2 | C | 0 |
| 19035 | | Dubiago J | .936 | .050 | .348 | 69.5 | 2.8 | 6.57 | 11.42 | 1 | C | 0 |
| 19037 | (7) | Dubiago | .937 | .078 | .341 | 70.0 | 4.4 | 26.27 | 45.66 | 2f | aMC | 0 |
| 19042 | | Dubiago D | .946 | .026 | .323 | 71.1 | 1.4 | 10.18 | 17.69 | 1 | C | 0 |
| 19042A | | | .949 | .024 | .314 | 71.6 | 1.3 | 3.43 | 5.96 | 1 | C | 0 |
| 19044 | | Dubiago C | .949 | .049 | .311 | 71.8 | 2.8 | 11.56 | 20.09 | 1 | C | 0 |
| 19045 | | Dubiago B | .940 | .052 | .337 | 70.2 | 2.9 | 19.51 | 33.91 | 4f | aMC | 0 |
| 19046 | | Dubiago Z | .943 | .067 | .326 | 70.9 | 3.8 | 4.67 | 8.12 | 1 | C | 0 |
| 19046A | | | .948 | .067 | .311 | 71.8 | 3.8 | 15.03 | 26.12 | 3f | aMC | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19048 | | Dubiago T | + .949 | + .085 | + .304 | + 72.2 | + 4.8 | 5.23 | 9.09 | 1 | C | 0 |
| 19049 | | Dubiago U | .949 | .096 | .300 | 72.4 | 5.5 | 5.75 | 9.99 | 1 | C | 0 |
| 19053 | 4A | Schubert N | .954 | .032 | .298 | 72.6 | 1.8 | 32.75 | 56.92 | 4f | C | 0 |
| 19054 | | Dubiago S | .959 | .047 | .279 | 73.7 | 2.6 | 9.17 | 15.94 | 1 | C | 0 |
| 19055 | | | .952 | .059 | .300 | 72.4 | 3.3 | 2.97 | 5.16 | 1 | C | 0 |
| 19057 | | | .958 | .074 | .277 | 73.8 | 4.2 | 4.87 | 8.46 | 2 | C | 0 |
| 19057A | | | .955 | .078 | .286 | 73.3 | 4.4 | 7.21 | 12.53 | 2 | C | 0 |
| 19058 | | | .958 | .089 | .273 | 74.1 | 5.1 | 4.22 | 7.33 | 2 | C | 0 |
| 19060 | | | .967 | .003 | .255 | 75.2 | 0.1 | 6.59 | 11.45 | 3 | C | 0 |
| 19060A | | | .960 | .008 | .280 | 73.7 | 0.4 | 8.05 | 13.99 | 4 | C | 0 |
| 19065 | | | .969 | .050 | .242 | 75.9 | 2.8 | 4.74 | 8.24 | 2 | C | 0 |
| 19067 | | Schubert G | .964 | .073 | .256 | 75.1 | 4.1 | 29.41 | 51.12 | 3 | C | 0 |
| 19070 | 4B | Schubert Y | .970 | .003 | .243 | 75.9 | 0.1 | 22.12 | 38.45 | 2f | C | 0 |
| 19070A | | Schubert X | .975 | .005 | .222 | 77.1 | 0.2 | 26.83 | 46.63 | 3f | C | 0 |
| 19072 | | Schubert H | .971 | .028 | .237 | 76.2 | 1.6 | 13.46 | 23.40 | 3 | C | 0 |
| 19074 | | Schubert K | .970 | .040 | .240 | 76.1 | 2.2 | 15.60 | 27.12 | 3 | C | 0 |
| 19075 | | Schubert F | .977 | .057 | .205 | 78.1 | 3.2 | 16.91 | 29.39 | 3f | C | 0 |
| 19075A | | | .971 | .058 | .232 | 76.5 | 3.3 | 8.48 | 14.74 | 2 | C | 0 |
| 19077 | 4 | Schubert E | .978 | .070 | .197 | 78.6 | 4.0 | 15.72 | 27.32 | 2 | C | 0 |
| 19079 | (8) | Banachiewicz B | .976 | .094 | .196 | 78.6 | 5.3 | 13.49 | 23.45 | 1 | C | 0 |
| 19080 | 4C | Schubert Z | .980 | .006 | .199 | 78.5 | 0.3 | 21.82 | 37.93 | 2 | C | 0 |
| 19082 | 3 | Schubert B | .987 | .022 | .159 | 80.8 | 1.2 | 20.28 | 35.25 | 1 | C | ? |
| 19084 | 1 | Schubert | .987 | .047 | .154 | 81.1 | 2.6 | 31.04 | 53.95 | 1 | C | pp |
| 19089 | | Banachiewicz | .981 | .091 | .171 | 80.0 | 5.2 | 52.93 | 92.00 | 3 | C | 0 |
| 19089A | | Banachiewicz F | .981 | .093 | .170 | 80.1 | 5.3 | 7.11 | 12.36 | 1 | C | 0 |
| 19091 | | | .994 | .016 | .108 | 83.7 | 0.9 | 21.77 | 37.84 | 4f | aM | 0 |
| 19093 | | | .993 | .034 | .113 | 83.5 | 1.9 | 11.87 | 20.63 | 3 | pM | P |
| 19099 | | Neper K | .994 | .090 | .062 | 86.4 | 5.1 | 22.48 | 39.07 | 3 | C | ? |
| 19101 | 57 | Firmicus A | .901 | .112 | .419 | 65.0 | 6.4 | 4.36 | 7.58 | 2 | C | 0 |
| 19102 | 58 | Firmicus B | .905 | .127 | .406 | 65.8 | 7.2 | 8.16 | 14.18 | 2 | pMC | 0 |
| 19103 | 59 | Firmicus C | .909 | .134 | .395 | 66.5 | 7.7 | 7.59 | 13.19 | 1 | pMC | 0 |
| 19109 | 46A | Condorcet A | .903 | .199 | .381 | 67.1 | 11.4 | 7.80 | 13.56 | 1 | C | 0 |
| 19113 | | | .917 | .135 | .375 | 67.7 | 7.7 | 2.12 | 3.68 | 2 | pM | 0 |
| 19114 | | | .917 | .141 | .373 | 67.8 | 8.1 | 7.85 | 13.64 | 3f | aM | 0 |
| 19117 | | Condorcet D | .917 | .170 | .361 | 68.5 | 9.7 | 12.70 | 22.07 | 2 | C | 0 |
| 19118 | | Condorcet G | .912 | .184 | .367 | 68.1 | 10.6 | 4.22 | 7.33 | 1 | C | 0 |
| 19118A | | | .913 | .188 | .362 | 68.3 | 10.8 | 4.77 | 8.29 | 3 | C | 0 |
| 19119 | | Condorcet E | .910 | .197 | .365 | 68.1 | 11.3 | 3.63 | 6.31 | 1 | C | 0 |
| 19125 | | | .923 | .158 | .351 | 69.1 | 9.0 | 2.55 | 4.43 | 2 | pM | 0 |
| 19126 | | | .922 | .162 | .352 | 69.1 | 9.3 | 3.81 | 6.62 | 1 | pM | 0 |
| 19126A | | | .923 | .166 | .347 | 69.3 | 9.5 | 3.60 | 6.26 | 2 | C | 0 |
| 19127 | | Condorcet X | .926 | .175 | .335 | 70.1 | 10.0 | 4.35 | 7.56 | 1 | C | 0 |
| 19130 | | Dubiago V | .935 | .102 | .340 | 70.0 | 5.8 | 6.72 | 11.68 | 3f | aMC | 0 |
| 19131 | | Dubiago W | .933 | .113 | .342 | 69.8 | 6.4 | 5.04 | 8.76 | 2 | pMC | 0 |
| 19134 | | Condorcet PA | .933 | .142 | .331 | 70.4 | 8.1 | 6.35 | 11.04 | 1 | pMC | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19134A | | Condorcet PB | + .936 | + .145 | + .321 | + 71.0 | + 8.3 | 7.59 | 13.19 | 1 | pMC | 0 |
| 19135 | 46 | Condorcet P | .931 | .152 | .332 | 70.3 | 8.7 | 26.28 | 45.68 | 2f | aMC | 0 |
| 19139 | | Condorcet Q | .939 | .197 | .282 | 73.2 | 11.3 | 17.80 | 30.94 | 4f | C | 0 |
| 19144 | 45 | Condorcet F | .948 | .145 | .283 | 73.3 | 8.3 | 21.22 | 36.88 | 2f | aMC | 0 |
| 19145 | | Condorcet M | .946 | .157 | .284 | 73.3 | 9.0 | 5.27 | 9.16 | 1 | C | 0 |
| 19145A | | Condorcet N | .944 | .156 | .291 | 72.8 | 8.9 | 2.55 | 4.43 | 2 | C | 0 |
| 19147 | | Condorcet L | .945 | .176 | .276 | 73.7 | 10.1 | 6.60 | 11.47 | 1 | C | 0 |
| 19151 | | Dubiago X | .951 | .112 | .288 | 73.1 | 6.4 | 4.34 | 7.54 | 1 | pMC | 0 |
| 19153 | (10) | Banachiewicz E | .957 | .131 | .259 | 74.8 | 7.5 | 4.02 | 6.99 | 1 | C | 0 |
| 19155 | | Condorcet K | .958 | .157 | .240 | 75.9 | 9.0 | 6.50 | 11.30 | 1 | C | 0 |
| 19155A | | | .950 | .152 | .273 | 73.9 | 8.7 | 3.12 | 5.42 | 2 | C | 0 |
| 19156 | | | .955 | .160 | .250 | 75.3 | 9.2 | 3.61 | 6.27 | 1 | C | 0 |
| 19157 | | Condorcet U | .953 | .174 | .248 | 75.4 | 10.0 | 5.01 | 8.71 | 3 | C | 0 |
| 19158 | | Condorcet S | .952 | .184 | .245 | 75.5 | 10.6 | 5.43 | 9.44 | 1 | C | 0 |
| 19158A | | | .955 | .189 | .229 | 76.5 | 10.8 | 3.40 | 5.91 | 2 | C | 0 |
| 19159 | | | .955 | .193 | .225 | 76.7 | 11.1 | 4.25 | 7.39 | 1 | C | 0 |
| 19162 | (9) | Banachiewicz C | .961 | .122 | .248 | 75.5 | 7.0 | 11.14 | 19.36 | 1 | C | 0 |
| 19166 | | | .966 | .169 | .196 | 78.5 | 9.7 | 16.20 | 28.16 | 4 | C | 0 |
| 19167 | | | .967 | .179 | .181 | 79.3 | 10.3 | 22.07 | 38.36 | 4 | C | 0 |
| 19168A | | | .962 | .182 | .204 | 78.0 | 10.4 | 22.37 | 38.88 | 4 | C | 0 |
| 19168 | | Neper H | .963 | .180 | .201 | 78.2 | 10.3 | 5.35 | 9.30 | 1 | C | 0 |
| 19175 | | Neper D | .976 | .158 | .150 | 81.2 | 9.0 | 22.92 | 39.84 | 2 | C | 0 |
| 19176 | | Neper G | .979 | .169 | .114 | 83.3 | 9.7 | 9.64 | 16.76 | 1 | pMC | 0 |
| 19177 | | | .972 | .179 | .152 | 81.0 | 10.3 | 15.70 | 27.29 | 4 | C | 0 |
| 19184 | | Neper Q | .983 | .140 | .119 | 83.1 | 8.0 | 7.01 | 12.18 | 1 | pMC | 0 |
| 19185 | 6 | Neper | .983 | .155 | .098 | 84.2 | 8.9 | 81.63 | 141.89 | 2 | pMC | P |
| 19202 | | Condorcet Y | .909 | .222 | .353 | 68.7 | 12.8 | 7.27 | 12.64 | 2 | pMC | 0 |
| 19211 | 44 | Condorcet | .917 | .211 | .339 | 69.7 | 12.1 | 42.76 | 74.32 | 2f | C | 0 |
| 19217 | 14 | Alhazen | .914 | .274 | .299 | 71.8 | 15.9 | 18.86 | 32.78 | 1 | C | 0 |
| 19224 | 11 | Hansen | .926 | .242 | .290 | 72.6 | 14.0 | 22.77 | 39.58 | 1 | C | P |
| 19227 | 16 | Alhazen A | .926 | .279 | .254 | 74.6 | 16.2 | 8.23 | 14.30 | 1 | pMC | 0 |
| 19233 | 12 | Hansen A | .939 | .232 | .254 | 74.8 | 13.4 | 7.33 | 12.74 | 1 | C | 0 |
| 19234 | | | .933 | .241 | .267 | 74.0 | 13.9 | 5.02 | 8.73 | 2 | C | 0 |
| 19238 | | | .932 | .284 | .225 | 76.4 | 16.4 | 8.01 | 13.92 | 2f | aMC | 0 |
| 19240 | | Condorcet R | .945 | .203 | .256 | 74.8 | 11.7 | 8.85 | 15.38 | 3f | aMC | 0 |
| 19241 | | | .946 | .215 | .243 | 75.6 | 12.4 | 3.77 | 6.55 | 2 | C | 0 |
| 19248 | | | .944 | .287 | .163 | 80.2 | 16.6 | 8.75 | 15.21 | 1 | C | 0 |
| 19254 | 13 | Hansen B | .954 | .247 | .170 | 79.9 | 14.3 | 42.06<br>27.17 | 73.11<br>47.23 | 4f | aMC | 0 |
| 19259 | | | .953 | .291 | .084 | 84.9 | 16.9 | 26.58 | 46.20 | 4f | aMC | 0 |
| 19307 | | | .906 | .371 | .204 | 77.3 | 21.7 | 15.23 | 26.47 | 3 | C | 0 |
| 19308 | | | .908 | .388 | .158 | 80.1 | 22.8 | 8.41 | 14.62 | 1 | C | 0 |
| 19313 | | | .910 | .338 | .240 | 75.2 | 19.7 | 11.77 | 20.46 | 1 | C | 0 |
| 19315 | | | .913 | .350 | .210 | 77.0 | 20.4 | 12.40 | 21.55 | 2 | C | 0 |
| 19316 | | | .910 | .363 | .200 | 77.5 | 21.2 | 13.50 | 23.47 | 3 | C | 0 |

| Ref. | B & M | Designation | $\xi$ | $\eta$ | $\zeta$ | $\lambda$ | $\beta$ | D | K | C | B | C.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19316A | | | + .919 | + .366 | + .147 | + 80.9 | + 21.4 | 7.66 | 13.31 | 2 | C | 0 |
| 19318 | | | .917 | .383 | .111 | 83.0 | 22.5 | 9.04 | 15.71 | 1 | C | 0 |
| 19322 | 23 | Alhazen E | .927 | .329 | .180 | 79.0 | 19.2 | 12.52 | 21.76 | 2 | C | 0 |
| 19323 | | | .927 | .334 | .171 | 79.5 | 19.5 | 8.59 | 14.93 | 1 | C | 0 |
| 19324 | 25 | Alhazen F | .929 | .341 | .144 | 81.2 | 19.9 | 32.56 | 56.59 | 3f | C | 0 |
| 19325 | | | .920 | .350 | .176 | 79.1 | 20.4 | 5.87 | 10.20 | 1 | C | 0 |
| 19326 | | | .924 | .365 | .114 | 82.9 | 21.4 | 6.09 | 10.59 | 3 | C | 0 |
| 19327 | 26A | Plutarch A | .924 | .378 | .058 | 86.4 | 22.2 | 47.18 | 82.01 | 2 | C | P? |
| 19327B | | | .920 | .371 | .126 | 82.1 | 21.7 | 4.54 | 7.89 | 1 | C | 0 |
| 19330 | 17 | Alhazen B | .939 | .301 | .166 | 79.9 | 17.5 | 17.72 | 30.80 | 2 | C | 0 |
| 19331 | | | .937 | .312 | .157 | 80.4 | 18.1 | 9.97 | 17.33 | 3 | C | 0 |
| 19333 | 18 | Alhazen C | .939 | .335 | .078 | 85.2 | 19.5 | 28.68 | 49.85 | 3 | C | 0 |
| 19334 | | | .932 | .349 | .098 | 84.0 | 20.4 | 10.53 | 18.30 | 2 | C | 0 |
| 19335 | | | .930 | .359 | .079 | 85.1 | 21.0 | 26.25 | 45.63 | 4 | C | 0 |
| 19401 | | | .905 | .419 | .074 | 85.3 | 24.7 | 12.79 | 22.23 | 3 | C | 0 |
| 19410 | | | .914 | .400 | .068 | 85.7 | 23.5 | 27.57 | 47.92 | 3 | C | 0 |

# Appendix I. Alphabetic Index

| Designation | | Reference |
|---|---|---|
| Agrippa | | 11087 |
| " | B | 11160 |
| " | D | 11016 |
| " | E | 11048 |
| " | F | 11097 |
| " | G | 11006A |
| " | H | 11088 |
| " | S | 11059 |
| Alexander | | 11674 |
| " | A | 11695 |
| " | B | 11694 |
| " | C | 12602 |
| " | K | 12654 |
| Alhazen | | 19217 |
| " | A | 19227 |
| " | B | 19330 |
| " | C | 19333 |
| " | E | 19322 |
| " | F | 19324 |
| Apollonius | | 18077 |
| " | A | 18038 |
| " | B | 18140 |
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| Aristoteles | | 11796 |
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| Barrow | | 10944 |
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| Bernouilli | | 17517 |
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| G. Bond | | 15503 |
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| Cepheus | | 15645 |
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| Chacornac | | 14459A |
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| Cleomedes | | 17436 |
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| d'Arrest | | 12054 |
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| da Vinci | | 16196 |
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| Delmotte | | 17475 |
| Dembowski | | 11025 |
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| de Morgan | | 12055 |
| Deseilligny | | 13326 |
| Dionysius | | 12094 |
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| Dubiago | | 19037 |
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| Endymion | | 14890 |
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| Eudoxus | | 12609 |
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| Firmicus | | 18182 |
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| Franklin | | 15672 |
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| Franz | | 16228 |
| Galle | | 12812 |
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| Gärtner | | 12895A |
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| Gauss | | 17598 |
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| Geminus | | 16586 |
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| Gioja | | 10909 |
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| Glaisher | | 17232 |
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| Grove | | 14614 |
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| Hadley | A | 11402 |
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| Hahn | | 18521 |
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| Hall | | 15505 |
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| Hansen | | 19224 |
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| Hayn | | 14920 |
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| Hercules | | 14732 |

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| Hooke | | 16615 |
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| Humboldtianum | A | 16709 |
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| Hyginus | | 11103 |
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| Jansen | | 14263 |
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| Julius Caesar | | 12165 |
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| Kane | | 11899 |
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| Kirchhoff | | 15540 |
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| " | E | 15551 |
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| " | G | 15469 |
| Lacus Mortis | | 13710 |
| Lade | B | 11070 |
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| Lamèch | | 11667 |
| Lamont | | 13098 |
| Le Monnier | | 14454 |
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| Littrow | | 14386 |
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| Lubbock | S | 16050 |
| Luther | | 13544 |
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| Lyell | | 16233 |
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| Maclaurin | W | 19021A |
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| Maclear | | 13138 |

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| Macrobius | | 16376 |
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| Manilius | | 11254 |
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| Manners | | 13047 |
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| Maraldi | | 15333 |
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| Marco Polo | S | 10300 |
| Maskelyne | | 15003 |
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| " | U | 14663 |
| C. Mayer | | 11839 |
| " | B | 11836 |
| " | D | 11848 |
| " | E | 11837 |
| " | F | 11858 |
| " | H | 11910 |
| Menelaus | | 12268 |
| " | A | 12229 |
| " | C | 12245 |
| " | D | 12272 |
| " | E | 12263 |
| " | R | 12235 |
| " | S | 12247 |
| Mercurius | | 16722 |
| " | A | 16744 |
| " | B | 16733 |
| " | C | 15783A |
| " | CA | 15792 |
| " | D | 16742 |
| " | DA | 16741A |
| " | E | 16716 |
| " | F | 16721 |
| " | G | 16730 |
| " | H | 15785 |
| " | J | 15783 |
| " | K | 16743 |
| " | L | 16721A |
| " | M | 16707 |
| Messala | | 16673 |
| " | A | 16549 |
| " | B | 16680 |
| " | C | 16685 |
| " | D | 17604 |
| " | E | 16694 |
| " | F | 17602 |
| " | G | 17623 |
| " | J | 16665 |

| Designation | | Reference |
|---|---|---|
| Messala | K | 16645 |
| Meton | | 10996 |
| " | A | 11945 |
| " | B | 11904 |
| " | C | 11904A |
| " | D | 11925 |
| " | E | 10966 |
| " | F | 10975 |
| " | G | 11945A |
| " | W | 11912 |
| Mitchell | | 12726 |
| " | A | 12715 |
| " | B | 12714 |
| " | E | 12743 |
| Moigno | | 11991 |
| " | A | 12910 |
| " | B | 11980 |
| " | C | 11991A |
| " | D | 11990 |
| Murchison | T | 10007 |
| Nansen | | 11958 |
| " | A | 11919 |
| " | B | 10999 |
| " | C | 10999A |
| " | D | 10999B |
| " | E | 11909 |
| " | F | 10979 |
| " | V | 11958A |
| Neison | | 11952 |
| " | A | 11972 |
| " | B | 11962 |
| " | C | 11951 |
| " | D | 11942 |
| Neper | | 19185 |
| " | D | 19175 |
| " | G | 19176 |
| " | H | 19168 |
| " | K | 19099 |
| " | Q | 19184 |
| Newcomb | | 16409 |
| " | A | 16409A |
| " | B | 16427A |
| " | C | 16428 |
| " | F | 15572 |

| Designation | | Reference |
|---|---|---|
| Newcomb | G | 16417 |
| " | H | 15498 |
| " | J | 16418 |
| " | P | 16449 |
| " | Q | 15580 |
| Oersted | | 15638A |
| " | A | 15638 |
| " | P | 15628 |
| " | U | 15617 |
| Pallas | N | 10102 |
| Peirce | | 17361 |
| " | B | 17353 |
| " | C | 17322 |
| Petermann | | 12956 |
| " | A | 12956A |
| " | B | 12965 |
| " | C | 12964 |
| " | D | 12907 |
| " | E | 12945 |
| " | R | 12926A |
| " | S | 12926 |
| " | T | 12936 |
| " | W | 12927 |
| " | X | 12946A |
| " | Y | 12946 |
| Peters | | 11982 |
| Picard | | 17285 |
| " | G | 17196 |
| " | GA | 17196A |
| " | GB | 17197B |
| " | H | 18126 |
| " | J | 18137 |
| " | K | 18106 |
| " | L | 17197A |
| " | M | 17197 |
| " | N | 17198 |
| " | P | 17195 |
| " | X | 18252A |
| Plana | | 13657 |
| " | C | 13637 |
| " | D | 13626 |
| " | E | 13604 |
| " | F | 13614 |
| " | G | 13603 |

| Designation | | Reference |
|---|---|---|
| Plinius | | 13286 |
| " | A | 13292 |
| " | B | 14224 |
| Plutarch | | 18490 |
| " | A | 19327 |
| " | C | 18369 |
| " | D | 18481 |
| " | F | 18480 |
| " | G | 18399 |
| " | H | 18471 |
| " | J | 18472 |
| " | K | 18462 |
| " | L | 18453 |
| " | M | 18490A |
| " | N | 18490B |
| Posidonius | | 14522 |
| " | A | 14512 |
| " | B | 14534 |
| " | C | 14521 |
| " | D | 14544 |
| " | E | 12590 |
| " | F | 13584 |
| " | G | 13577 |
| " | J | 14525 |
| " | M | 14516 |
| " | N | 13419 |
| " | O | 14515 |
| " | P | 13585 |
| " | W | 12592 |
| Proclus | | 17207 |
| " | A | 16253 |
| " | C | 16272 |
| " | D | 16229 |
| " | E | 16228A |
| " | F | 16294 |
| " | G | 16262 |
| " | GA | 16262A |
| " | J | 16269 |
| " | K | 16298 |
| " | L | 16299 |
| " | M | 16288 |
| " | P | 17226 |
| " | PA | 17236 |
| " | PB | 17235 |

| Designation | | Reference |
|---|---|---|
| Proclus | R | 16287 |
| " | S | 17217 |
| " | T | 17206 |
| " | U | 17216 |
| " | V | 17225 |
| " | W | 16380 |
| " | X | 16370 |
| " | Y | 16279 |
| " | Z | 16360 |
| Protagoras | | 10872 |
| " | B | 10853 |
| " | E | 10706 |
| Rhaeticus | | 10080 |
| " | A | 10093 |
| " | B | 11012 |
| " | D | 11001 |
| " | DA | 11001A |
| " | G | 11011 |
| " | L | 10060 |
| " | M | 10061 |
| " | N | 10072 |
| Ritter | | 13023 |
| " | B | 13025 |
| " | C | 13024 |
| " | D | 13026 |
| Römer | | 15432 |
| " | A | 15437 |
| " | B | 15447 |
| " | C | 15436 |
| " | D | 15431 |
| " | E | 15457 |
| " | F | 15445 |
| " | G | 15425 |
| " | H | 15423 |
| " | J | 15368 |
| " | K | 15338 |
| " | KA | 15338A |
| " | L | 15329 |
| " | M | 15412 |
| " | N | 15452 |
| " | P | 15474 |
| " | PA | 15465 |
| " | PB | 15466 |
| " | PC | 15455 |

| Designation | | Reference |
|---|---|---|
| Römer | PD | 15484 |
| " | R | 15411 |
| " | S | 15442 |
| " | T | 15440A |
| " | TA | 15339 |
| " | U | 15471 |
| " | V | 15461 |
| " | X | 15480 |
| " | Y | 15433 |
| " | Z | 15440 |
| Ross | | 13260 |
| " | B | 13139 |
| " | C | 13210 |
| " | D | 13281 |
| " | E | 13189 |
| " | F | 14108 |
| " | G | 14118 |
| " | H | 13167 |
| Sabine | | 13042 |
| " | A | 13032 |
| " | B | 13072 |
| " | C | 13081 |
| " | D | 14002 |
| " | E | 14022 |
| Schmidt | | 13021 |
| Schubert | | 19084 |
| " | B | 19082 |
| " | E | 19077 |
| " | F | 19075 |
| " | G | 19067 |
| " | H | 19072 |
| " | K | 19074 |
| " | N | 19053 |
| " | X | 19070A |
| " | Y | 19070 |
| " | Z | 19080 |
| Schumacher | | 16647 |
| " | B | 16637 |
| Schwabe | | 13900 |
| " | C | 12972 |
| " | D | 13900A |
| " | E | 13809 |
| " | F | 13901 |
| " | G | 12970 |

| Designation | | Reference |
|---|---|---|
| Schwabe | K | 12982 |
| " | N | 12983B |
| " | U | 13931 |
| " | W | 12973 |
| " | X | 13902 |
| Scoresby | | 10957 |
| " | A | 10978 |
| " | AA | 10968 |
| " | K | 10917 |
| " | L | 10958A |
| " | M | 10936 |
| " | N | 10959 |
| " | P | 10957A |
| " | Q | 10937 |
| " | W | 10956 |
| Secchi | | 16084 |
| " | A | 16065 |
| " | B | 16066 |
| " | G | 17006 |
| " | U | 16071 |
| Seneca | | 18475 |
| " | A | 18464 |
| " | B | 18465 |
| " | C | 18464A |
| " | D | 18484 |
| Sheepshanks | | 11845 |
| " | A | 11866 |
| " | B | 11876 |
| " | C | 11863 |
| Shuckburgh | | 15687 |
| " | A | 16608 |
| " | C | 15678 |
| " | E | 16609 |
| Silberschlag | | 12110 |
| " | A | 12122 |
| " | D | 11193 |
| " | E | 12019 |
| " | G | 12130 |
| " | P | 12102 |
| " | S | 12103 |
| Sinas | | 15115 |
| " | A | 15133 |
| " | E | 15106 |
| " | G | 15156 |

| Designation | | Reference |
|---|---|---|
| Sinas | H | 15147 |
| " | J | 15147A |
| " | K | 15141 |
| Sosigenes | | 12195 |
| " | A | 13113 |
| " | B | 12194 |
| " | C | 13122 |
| Strabo | | 13888 |
| " | B | 13950A |
| " | C | 13932 |
| " | L | 13940 |
| " | N | 13950 |
| Sulpicius Gallus | | 11393 |
| " | A | 11347 |
| " | B | 12310 |
| " | G | 11303 |
| " | H | 10395 |
| " | M | 11344 |
| Tacquet | | 13218 |
| " | A | 13234 |
| " | B | 13227 |
| " | BA | 13227A |
| " | C | 13243 |
| Taruntius | | 17029 |
| " | A | 17152 |
| " | B | 17025 |
| " | C | 17110 |
| " | CA | 17100 |
| " | CB | 17100A |
| " | D | 17115 |
| " | E | 16049 |
| " | EA | 16078 |
| " | EB | 16059 |
| " | F | 16046 |
| " | G | 17053 |
| " | H | 17060 |
| " | J | 16175 |
| " | K | 17081 |
| " | L | 16099 |
| " | M | 16172 |
| " | MA | 16182 |
| " | MB | 16173 |
| " | N | 18004 |
| " | O | 18013 |

| Designation | | Reference |
|---|---|---|
| Taruntius | P | 17080 |
| " | Q | 17141 |
| " | R | 17130 |
| " | T | 17036 |
| " | TA | 17026 |
| " | U | 17069 |
| " | V | 17067 |
| " | W | 17059 |
| " | X | 17193 |
| " | XA | 17192 |
| " | Y | 17182 |
| " | YA | 17182A |
| " | Z | 17103 |
| Tempel | | 12006 |
| Thales | | 13868 |
| " | A | 13845 |
| " | E | 13874 |
| " | F | 13846 |
| " | G | 13838 |
| " | H | 13866 |
| " | W | 13835 |
| Theaetetus | | 10680 |
| Theon Senior | B | 12040 |
| Tisserand | | 16396 |
| " | A | 17314 |
| " | B | 17335 |
| " | D | 17307 |
| " | K | 17323 |
| Tralles | | 17407 |
| " | A | 16446 |
| " | B | 16485 |
| " | C | 16476 |
| Triesnecker | | 10067 |
| " | D | 11006 |
| " | E | 10049 |
| " | F | 10087 |
| " | G | 10096 |
| " | H | 10045A |
| " | J | 10045 |
| Trouvelot | | 10765 |
| " | D | 10715 |
| " | G | 10703 |
| " | H | 10756 |
| Ukert | | 10123 |

| Designation | | Reference |
|---|---|---|
| Ukert | A | 10125 |
| " | B | 10124 |
| " | E | 10105 |
| " | K | 10161 |
| " | M | 10133A |
| " | N | 10133 |
| " | P | 10153 |
| " | R | 10114 |
| " | V | 10155 |
| " | W | 10146 |
| " | X | 10136 |
| " | Y | 10107 |
| Vitruvius | | 14390 |
| " | A | 15330 |
| " | B | 15228A |
| " | C | 15236 |
| " | E | 14361 |
| " | G | 15254 |
| " | H | 15238 |
| " | K | 15228 |
| " | L | 14382 |
| " | M | 15207 |
| " | T | 15229 |
| Webb | C | 18090 |
| " | E | 18071 |
| " | F | 18072A |
| " | G | 18072 |
| " | L | 18080 |
| " | P | 18044 |
| " | R | 18073 |
| " | U | 18033 |
| " | W | 18045 |
| " | X | 18045A |
| Whewell | | 12037 |
| " | A | 12048 |
| " | B | 12048A |
| Williams | | 14656 |
| " | F | 14648 |
| " | M | 14675 |
| " | N | 14647 |
| " | R | 14657 |
| Yerkes | | 17255 |
| " | E | 17247 |
| Zeno | | 16770 |

| Designation | | Reference |
|---|---|---|
| Zeno | A | 16760 |
| " | B | 16689 |
| " | D | 16760A |
| " | E | 17606 |
| " | F | 17627A |
| " | G | 16689A |
| " | J | 16699 |
| " | K | 16678 |
| " | P | 16668 |
| " | U | 16687 |
| " | V | 16688 |
| " | W | 16678A |
| " | X | 17609 |

# Appendix II. Map Locations of Named Craters

| DESIGNATION | MAP |
|---|---|
| Agrippa | C4 |
| Alexander | C2 |
| Alhazen | A3, A4 |
| Apollonius | A4 |
| Arago | B4 |
| Aratus | C3 |
| Archytas | C1 |
| Ariadaeus | C4, B4 |
| Aristillus | C1, C2 |
| Aristotles | C2, C1 |
| Arnold | C1 |
| Atlas | B1, B2 |
| Autolycus | C3, C2 |
| Auwers | C4, C3, B4, B3 |
| Auzout | A4 |
| Baillaud | C1 |
| Baily | C1, B1, C2, B2 |
| Banachiewicz | A4 |
| Barrow | C1 |
| Belkovich | B1 |
| Bernouilli | A2 |
| Berosus | A2 |
| Berzelius | B2, A2 |
| Bessel | C3, B3 |
| Blagg | C4 |
| G. Bond | C1 |
| W. Bond | C1 |
| Boscovich | C4 |
| Bruce | C4 |
| Burckhardt | A3, A2 |
| Bürg | C2, B2 |
| Calippus | C2 |
| Carrington | B2, A2 |
| Cassini | C2 |
| Cauchy | B4, A4 |
| Cayley | C4 |
| Cepheus | B3 |
| Chacornac | B3, B2 |
| Challis | C1 |
| Chevallier | B2 |
| Chladni | C4 |
| Cleomedes | A3, A2 |
| Condorcet | A3, A4 |

| DESIGNATION | MAP |
|---|---|
| Conon | C3 |
| Cusanus | C1, B1 |
| Daniell | B2 |
| d'Arrest | C4 |
| da Vinci | A4 |
| Dawes | B3 |
| Debes | A3, A2 |
| de la Rue | B1 |
| Delmotte | A3 |
| Dembowski | C4 |
| Democritus | C1, B1 |
| de Morgan | C4 |
| Deseilligny | C3, B3 |
| Dionysius | C4, B4 |
| Dubiago | A4 |
| Egede | C1, C2 |
| Eimmart | A3 |
| Endymion | B1 |
| Euctemon | C1 |
| Eudoxus | C2 |
| Firmicus | A4 |
| Franklin | B2 |
| Franz | A3, B3 |
| Galle | C1 |
| Gärtner | C1, B1 |
| Gauss | A2 |
| Geminus | A2 |
| Gioja | C1 |
| Glaisher | A3, A4 |
| Godin | C4 |
| Grove | B2 |
| Hahn | A3, A2 |
| Hall | B2 |
| Hansen | A3, A4 |
| Hayn | B1 |
| Hercules | B1, B2 |
| Hooke | B2, A2 |
| Hyginus | C4 |
| Jansen | B4, B3 |
| Julius Caesar | C4, B4 |
| Kane | C1 |
| Kirchhoff | B3, B2 |
| Lacus Mortis | C1, B1, C2, B2 |

| DESIGNATION | MAP |
|---|---|
| Lade B | C4 |
| Lamèch | C2 |
| Lamont | B4 |
| le Monnier | B3 |
| Lick | A4 |
| Linné | C3 |
| Littrow | B3 |
| Luther | B2 |
| Lyell | B4, A3, B3, A4 |
| Maclear | B4 |
| Macrobius | A3, B3 |
| Main | C1 |
| Manilius | C4, C3 |
| Manners | B4 |
| Maraldi | B3 |
| Maskelyne | B4 |
| Mason | B2 |
| Maury | B2 |
| C. Mayer | C1 |
| Menelaus | C4, C3 |
| Mercurius | B1, B2, A2 |
| Messala | B2, A2 |
| Meton | C1 |
| Mitchell | C1, C2 |
| Moigno | C1 |
| Nansen | C1 |
| Neison | C1 |
| Neper | A4 |
| Newcomb | A3, B3, B2, A2 |
| Oersted | B2 |
| Peirce | A3 |
| Petermann | C1 |
| Peters | C1 |
| Picard | A3, A4 |
| Plana | B2 |
| Plinius | B4, B3 |
| Plutarch | A3 |
| Posidonius | B3, B2 |

| DESIGNATION | MAP |
|---|---|
| Proclus | A3, A4 |
| Protagoras | C1 |
| Rhaeticus | C4 |
| Ritter | C4, B4 |
| Römer | B3 |
| Ross | B4 |
| Sabine | B4 |
| Schmidt | C4, B4 |
| Schubert | A4 |
| Schumacher | B2, A2 |
| Schwabe | C1, B1 |
| Scoresby | C1 |
| Secchi | A4 |
| Seneca | A3 |
| Sheepshanks | C1 |
| Shuckburgh | B2 |
| Silberschlag | C4 |
| Sinas | B4 |
| Sosigenes | C4, B4 |
| Strabo | B1 |
| Sulpicius Gallus | C3 |
| Tacquet | C3, B3 |
| Taruntius | A4 |
| Tempel | C4 |
| Thales | B1 |
| Theaetetus | C2 |
| Theon Senior | C4 |
| Tisserand | A3 |
| Tralles | A3, A2 |
| Triesnecker | C4 |
| Trouvelot | C1, C2 |
| Ukert | C4 |
| Vitruvius | B3 |
| Webb | A4 |
| Whewell | C4 |
| Williams | B2 |
| Yerkes | A3, A4 |
| Zeno | A2 |

# APPENDIX III. NOTES

| Ref. | Remarks |
|---|---|
| 10802 | This was B & M's Plato β. |
| 10936 | This is not B & M's Scoresby M. |
| 11906 | Position approximate. |
| 12104A | Designation shifted to more definite feature. |
| 12697 | Designation shifted to more definite feature. |
| 12746 | May be compound. |
| 12815 | Formerly Democritus C. |
| 12946 | May be elliptical. |
| 12946A | May be elliptical. |
| 12956A | May be beyond mean limb. |
| 13227 | May be compound. |
| 13499 | Ghost ring. |
| 13518 | Formerly Posidonius H. |
| 13842 | Formerly Thales M. |
| 13940 | Formerly Thales L. |
| 13950 | Formerly Thales N. |
| 13950A | Formerly Thales B. |
| 13951 | Formerly Strabo J. |
| 13952 | Formerly Strabo E. |
| 13970 | Formerly Strabo B. |
| 13972 | Formerly Strabo F. |
| 14094 | May be double. |
| 14495 | Designation now restricted to part of formation formerly designated Le Monnier S. |
| 14558 | Formerly G. Bond K. |
| 14665 | May be compound. |
| 14828 | Ghost ring. |
| 14839 | Formerly Strabo A. |
| 14844 | May be double. |
| 14920 | Formerly Strabo G. |
| 14920A | Formerly Strabo K. |
| 15060A | May be double. |
| 15268 | Formerly Vitruvius D. |
| 15551 | May be double. |

| Ref. | Remarks |
|---|---|
| 15577 | May be double. |
| 15727 | Not as measured by Franz, who included also area between crater and bright ridge to south. |
| 15881 | Designation shifted to more suitable object. This is not B & M's 402f. |
| 16228 | Designation restricted to northern component. Southern component is EA. |
| 16280 | Designation restricted to northern component. |
| 16449 | May be compound. |
| 16480 | May be compound. |
| 16489 | Designation restricted to northern component. |
| 16535 | B & M's Geminus E now divided into E and EA. |
| 16707 | Formerly Mercurius E. |
| 16718 | Coordinates approximate. |
| 16721 | May be double. |
| 16727 | Coordinates approximate. |
| 17226 | Formerly M. Crisium P. |
| 17247 | Formerly M. Crisium E. |
| 17598 | Coordinates of Franz rejected in favor of orthographic grid values. |
| 18252 | Formerly Agarum N. |
| 18356 | Formerly M. Anguis A. |
| 18369 | Formerly Oriani C. |
| 18413A | Formerly M. Anguis T. |
| 18464 | Formerly Oriani A. |
| 18475 | Not Fr. 504. |
| 18481 | Formerly Oriani E. |
| 18501 | May be doublet. |
| 18508 | Not B & M's crater with same designation. |
| 19013 | Formerly M. Spumans Q. |
| 19021 | Formerly M. Spumans P. |
| 19037 | Formerly Neper A. |
| 19079 | Formerly Neper B. |
| 19153 | Formerly Neper E. |
| 19162 | Formerly Neper C. |
| 19175 | May be double. |

The former designations referred to above are those of Blagg and Müller's Named Formations, Vol. 1, and the "Consolidated Catalog of Selenographic Positions" (Comm. L.P.L., No. 11).

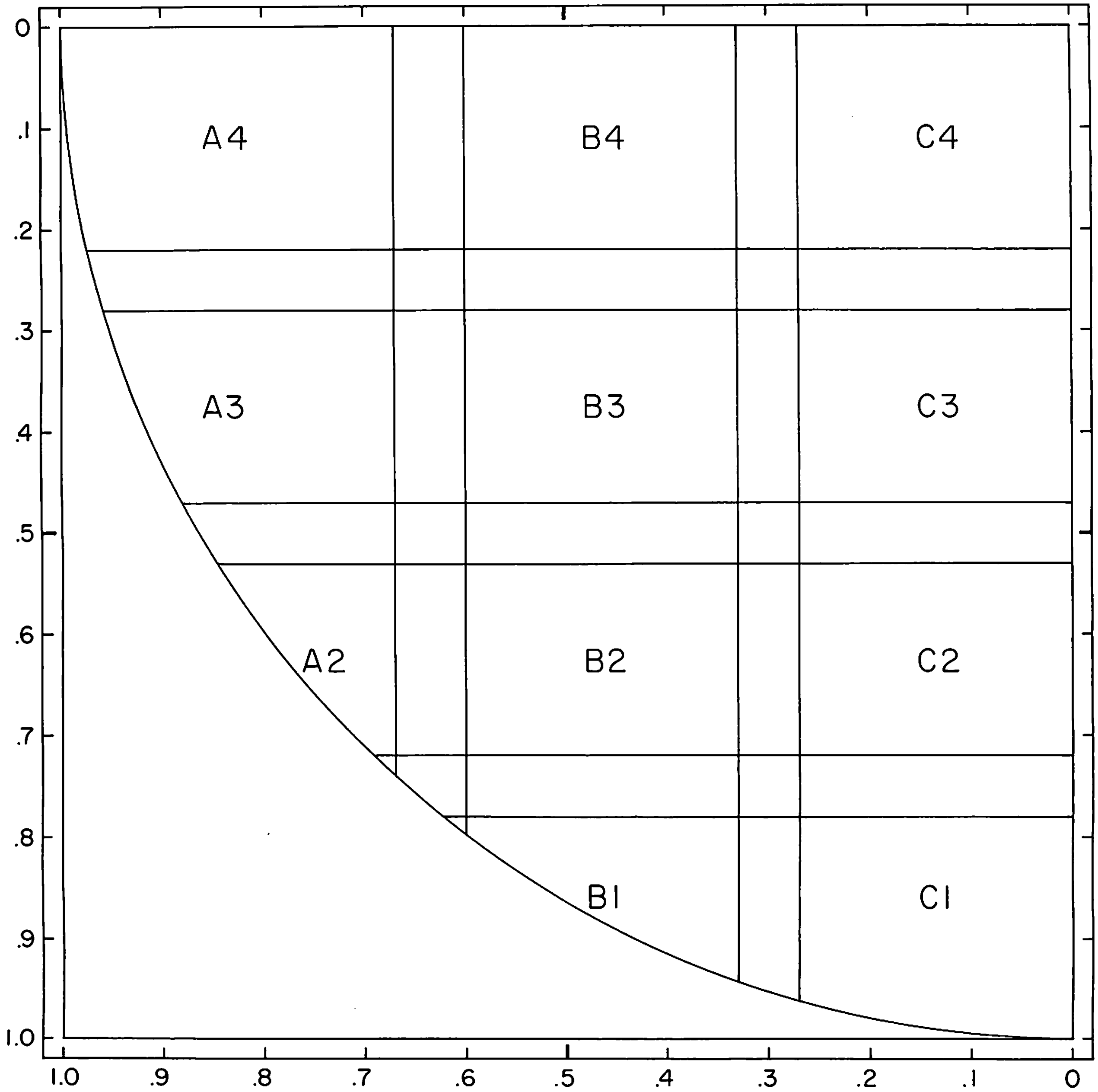
# APPENDIX IV. CORRIGENDA

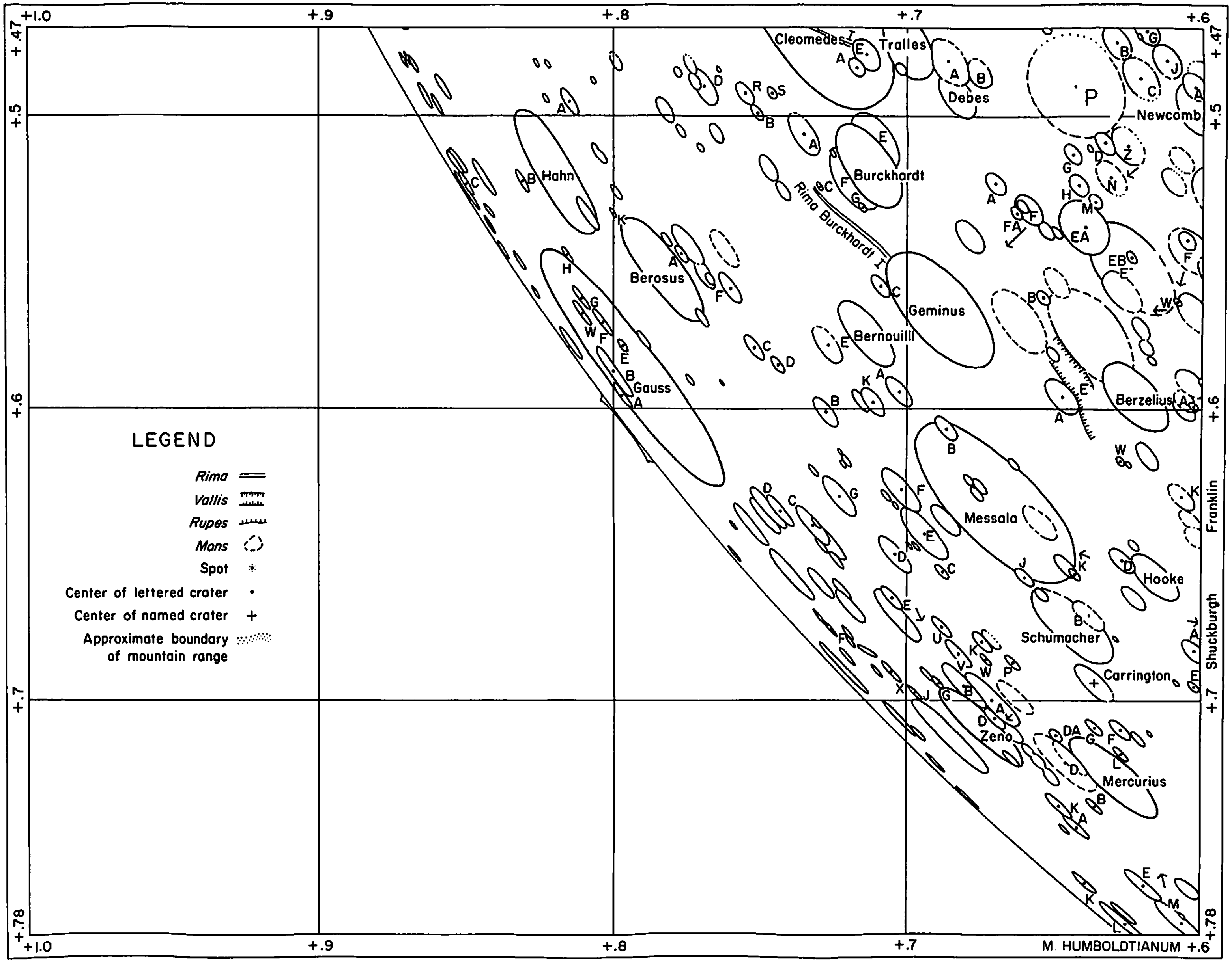
Quadrant I of "Consolidated Catalog of Selenographic Positions"

The following corrections should be applied to the first quadrant of the "Consolidated Catalog of Selenographic Positions" (*Comm. L.P.L.*, No. 11).

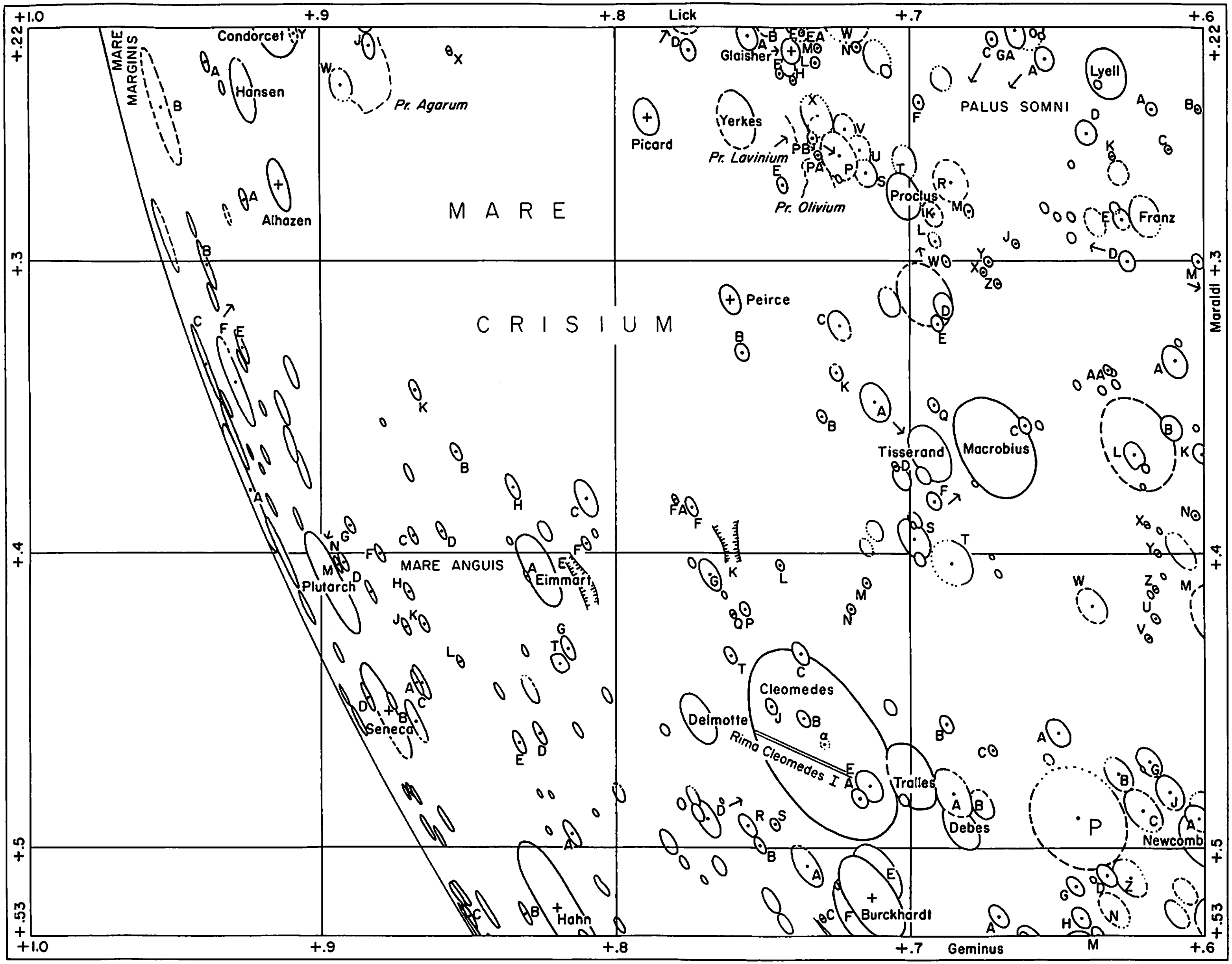
| Ref. | Corrections |
|---|---|
| 10907 | Diameter should read 5.7. |
| 10928 | Diameter should read 29.5. |
| 10958 | Cancel entry. |
| 11908 | Cancel entry. Incorrectly bisected. |
| 14893 | Diameter should read 7.7. |
| 15727 | Cancel entry. Incorrectly bisected. |
| 15851 | Designation shifted to more suitable object. |
| 16299 | Diameter should read 5.4. |
| 16344 | Diameter should read 3.6. |
| 16365 | Diameter should read 5.6. |
| 16689A | Diameter should read 6.2. |
| 16760A | Diameter should read 9.0. |
| 18419 | Diameter should read 10.0. |
| 18490 | Diameter should read 39.2. |
| 19254 | Diameter should read 42.1 x 27.2. |

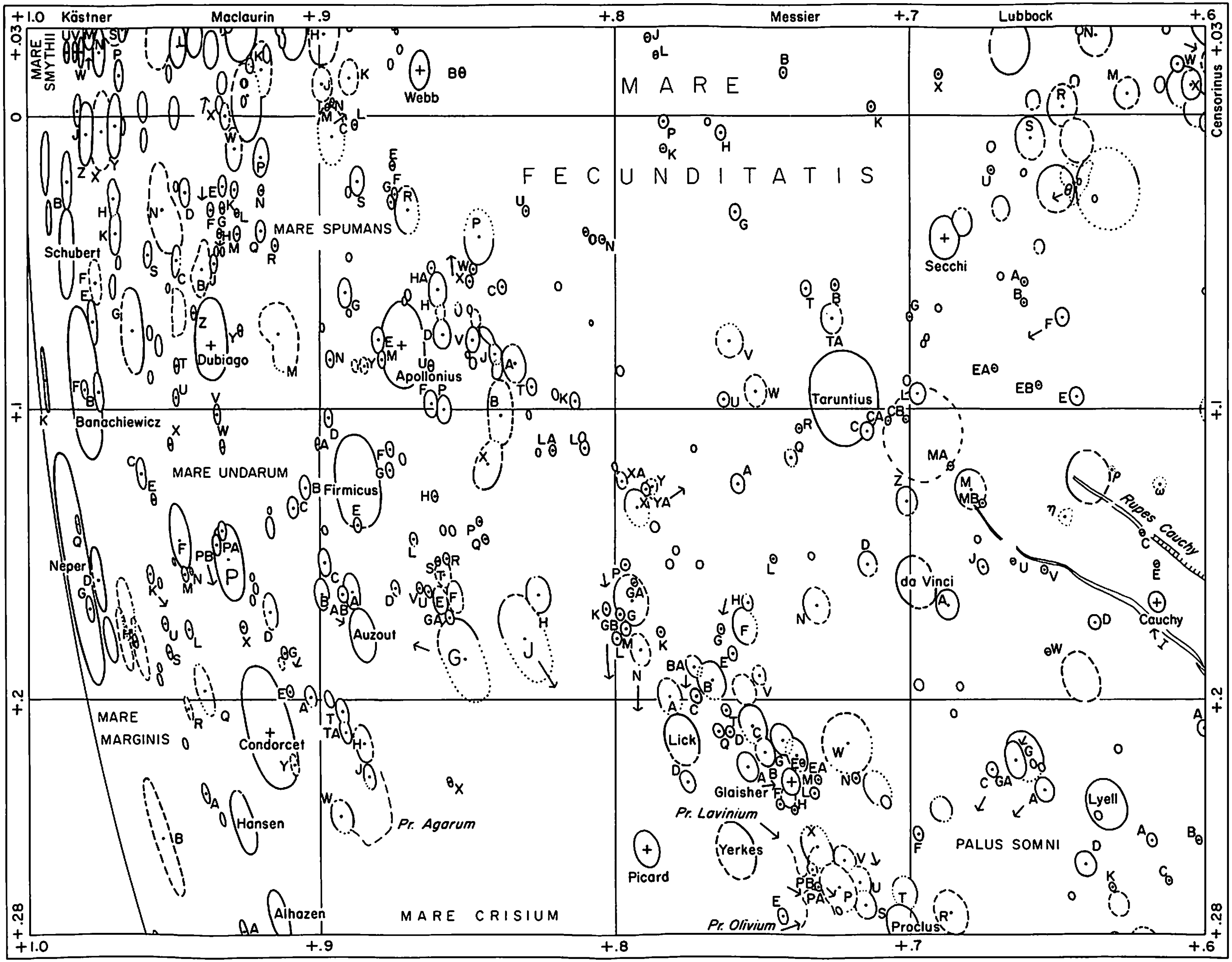
# MAP INDEX

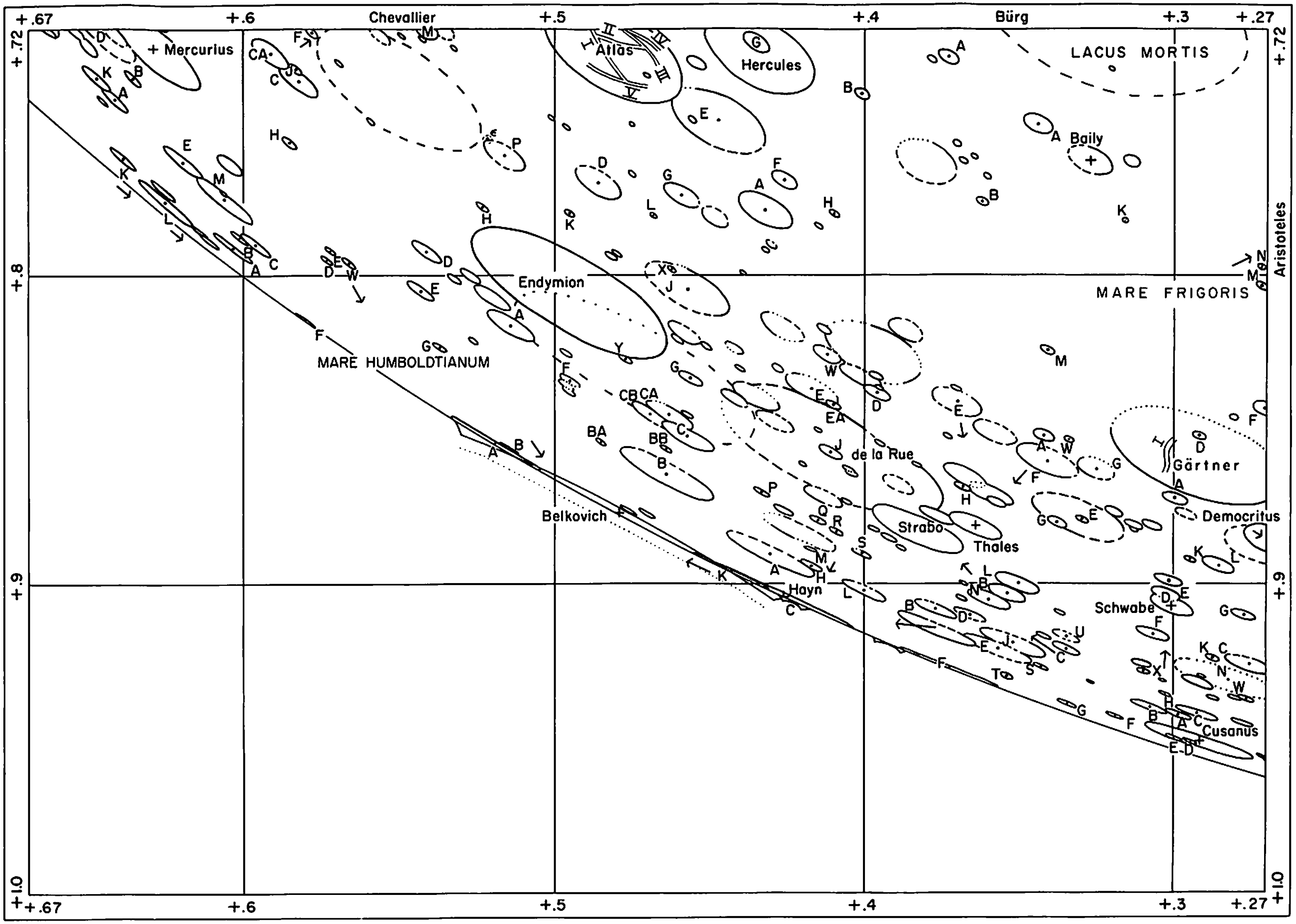





LUNAR NOMENCLATURE

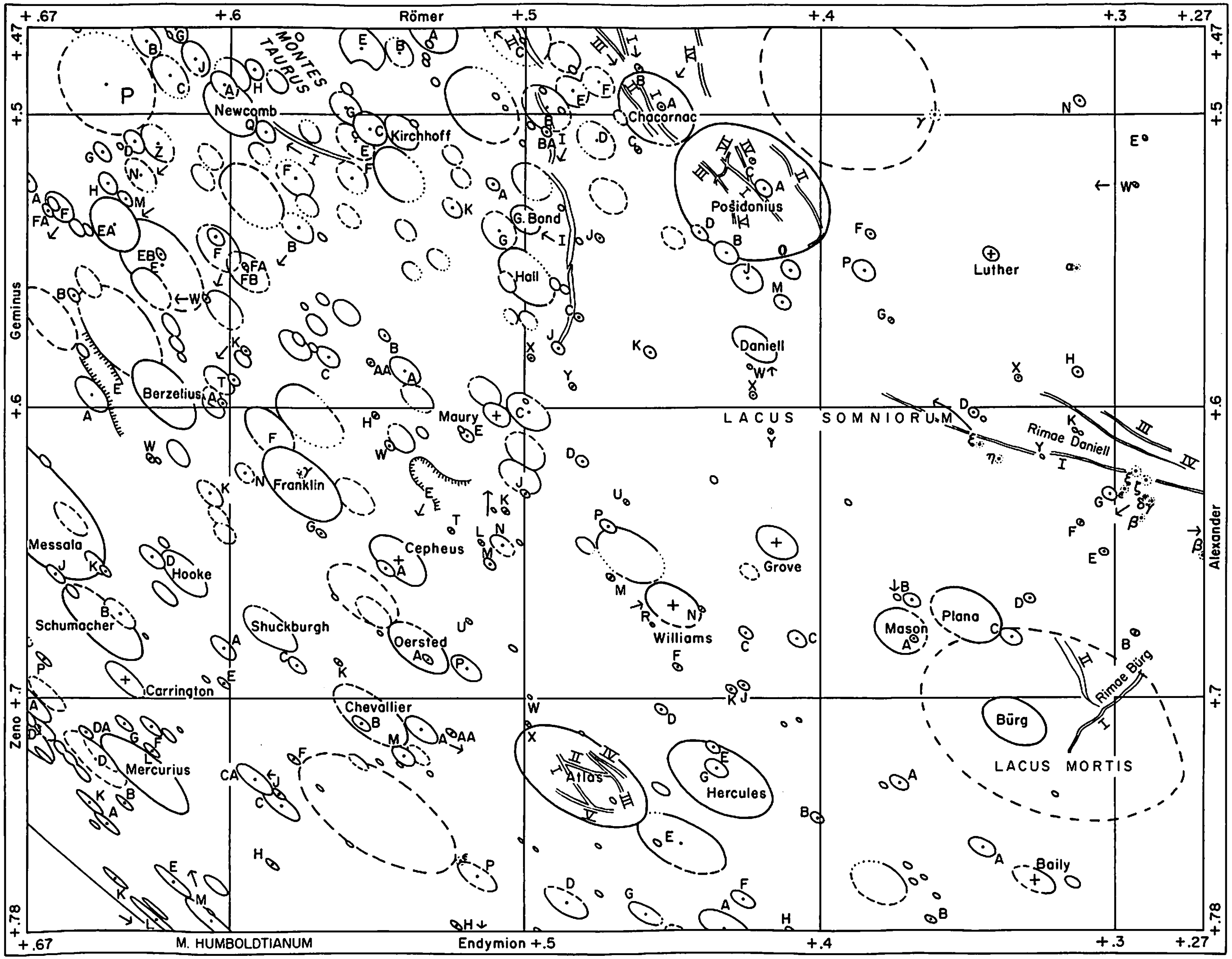

MARE CRISIUM
MARE MARGINIS
MARE ANGUIS
PALUS SOMNI
Pr. Agarum
Pr. Lavinium
Pr. Olivium
Rima Cleomedes I
Condorcet
Hansen
Alhazen
Picard
Yerkes
Glaisher
Lick
Lyell
Proclus
Franz
Peirce
Maraldi
Tisserand
Macrobius
Plutarch
Eimmart
Seneca
Hahn
Cleomedes
Delmotte
Tralles
Debes
Newcomb
Burckhardt
Geminus
+1.0
+.9
+.8
+.7
+.6
+.22
+.3
+.4
+.5
+.53

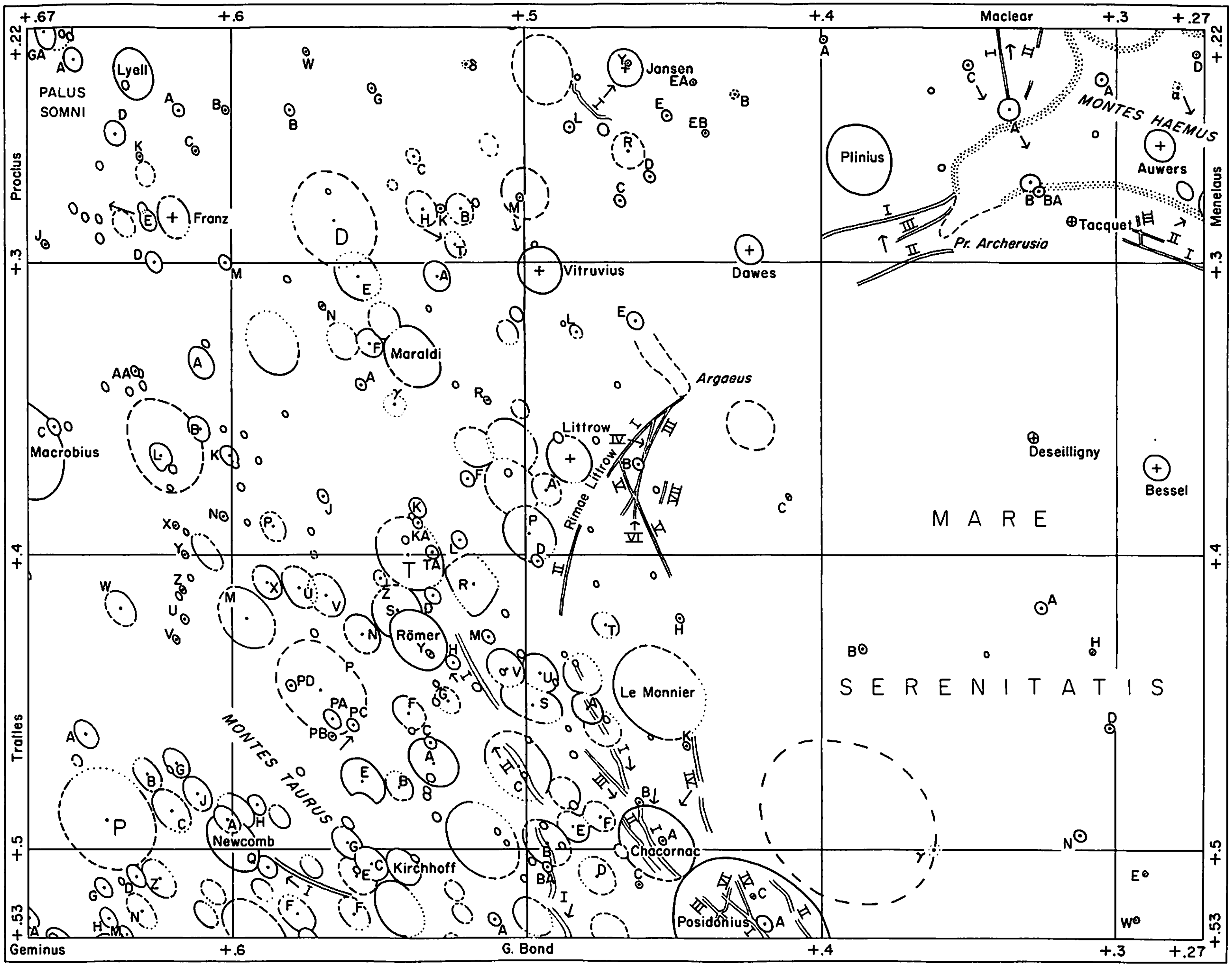

Kästner
Maclaurin
Messier
Lubbock
Censorinus
MARE SMYTHII
MARE FECUNDITATIS
MARE SPUMANS
MARE UNDARUM
MARE MARGINIS
MARE CRISIUM
PALUS SOMNI
Schubert
Banachiewicz
Neper
Dubiago
Webb
Apollonius
Firmicus
Auzout
Condorcet
Hansen
Alhazen
Pr. Agarum
Taruntius
Secchi
da Vinci
Cauchy
Rupes Cauchy
Lick
Glaisher
Pr. Lavinium
Yerkes
Picard
Pr. Olivium
Proclus
Lyell




LUNAR NOMENCLATURE

B1


+.67
+.6
Römer
+.5
+.4
+.3
+.27
+.47
MONTES TAURUS
P
Newcomb
Kirchhoff
Chacornac
Posidonius
G. Bond
Hall
Luther
Geminus
Berzelius
Daniell
LACUS SOMNIORUM
Rimae Daniell
Maury
Franklin
Cepheus
Messala
Hooke
Schumacher
Shuckburgh
Oersted
Grove
Williams
Mason
Plana
Carrington
Chevallier
Rimae Bürg
Bürg
LACUS MORTIS
Alexander
Zeno
Mercurius
Atlas
Hercules
Baily
+.7
+.6
+.5
+.78
M. HUMBOLDTIANUM
Endymion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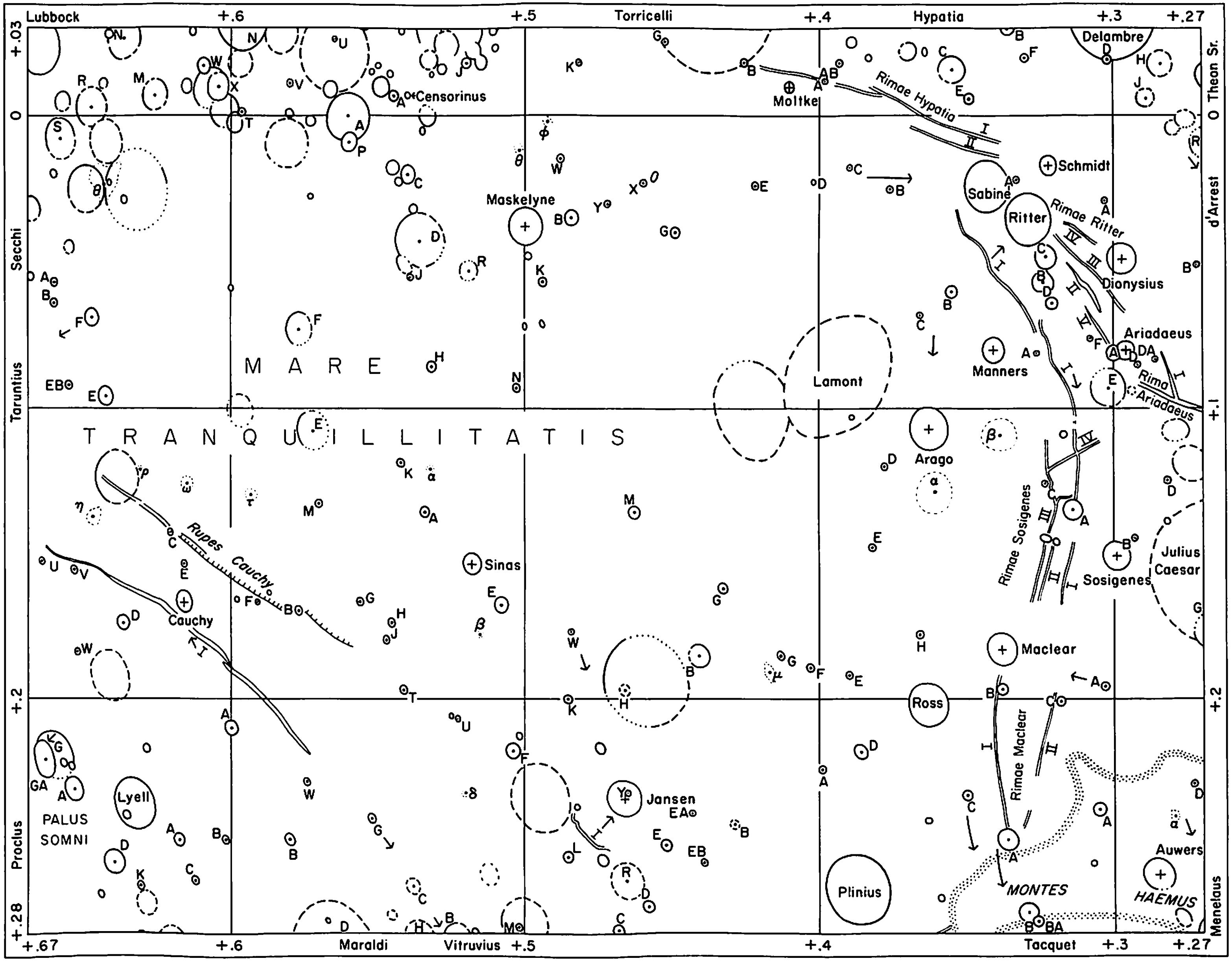
Lyell
PALUS
SOMNI
Jansen
Proclus
Franz
Plinius
MONTES HAEMUS
Auwers
Menelaus
Tacquet
Pr. Archerusia
Vitruvius
Dawes
Maraldi
Argaeus
Macrobius
Littrow
Rimae Littrow
Deseilligny
Bessel
MARE
SERENITATIS
Römer
Le Monnier
Tralles
MONTES TAURUS
Newcomb
Kirchhoff
Chacornac
Posidonius
Geminus
G. Bond

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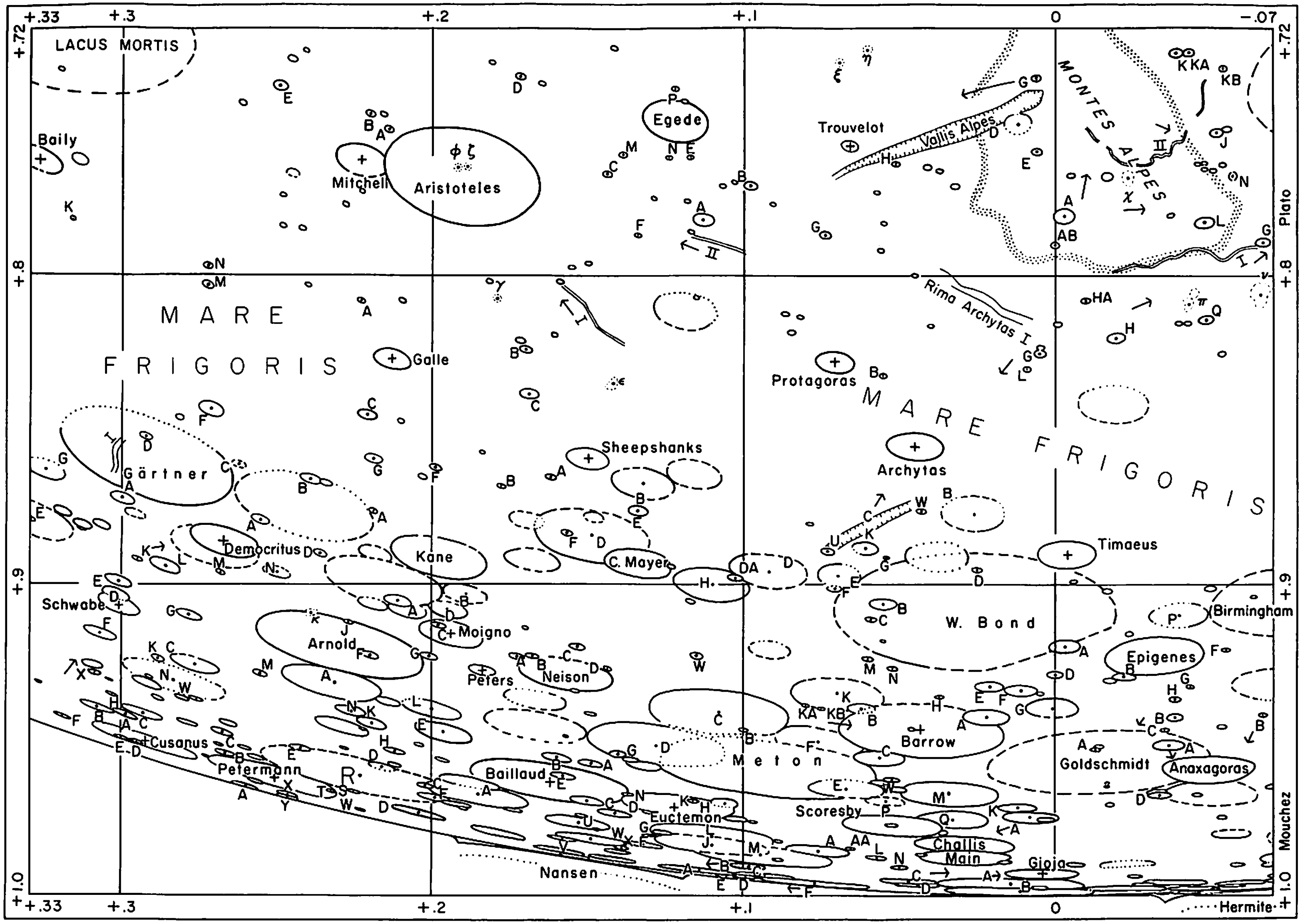
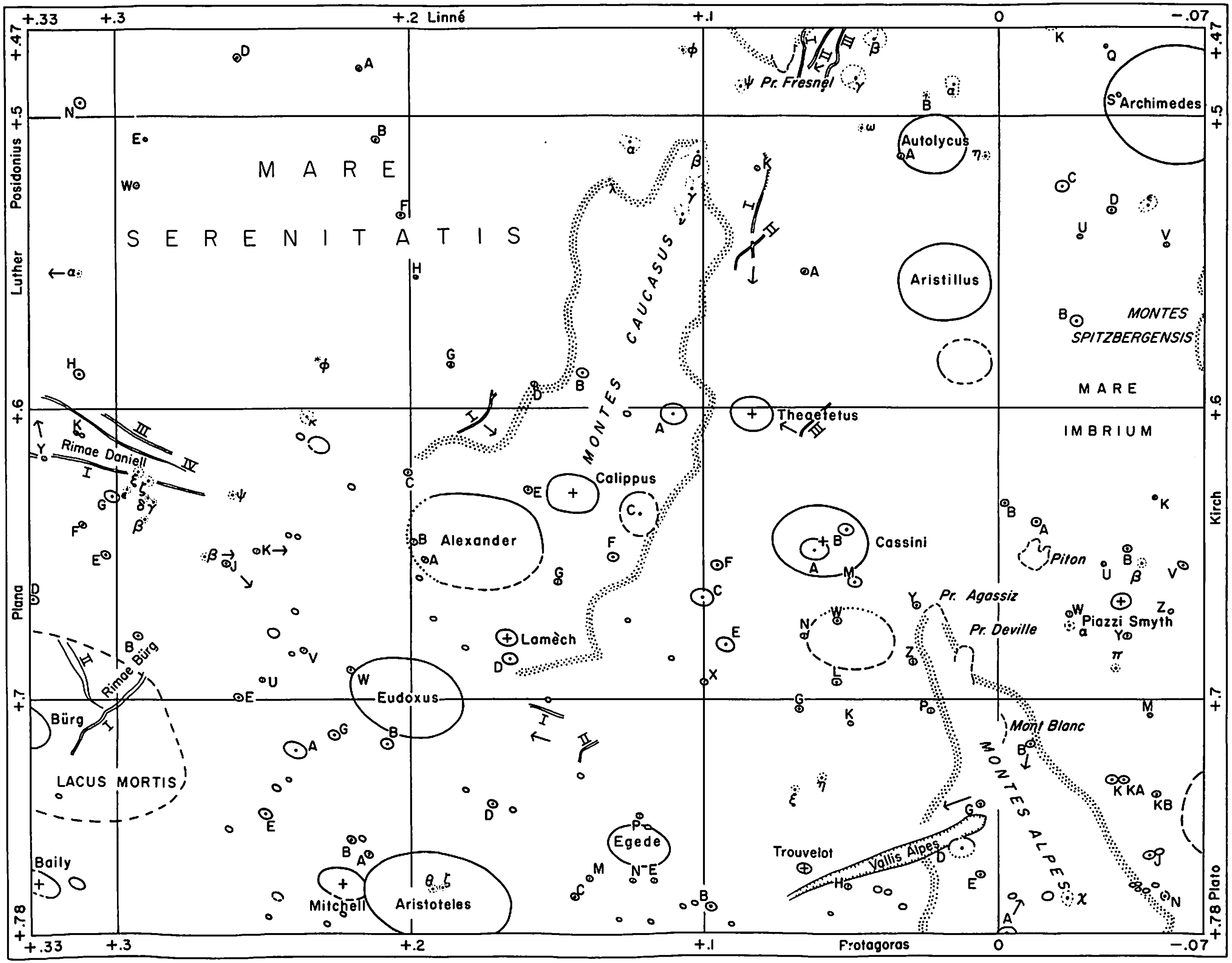
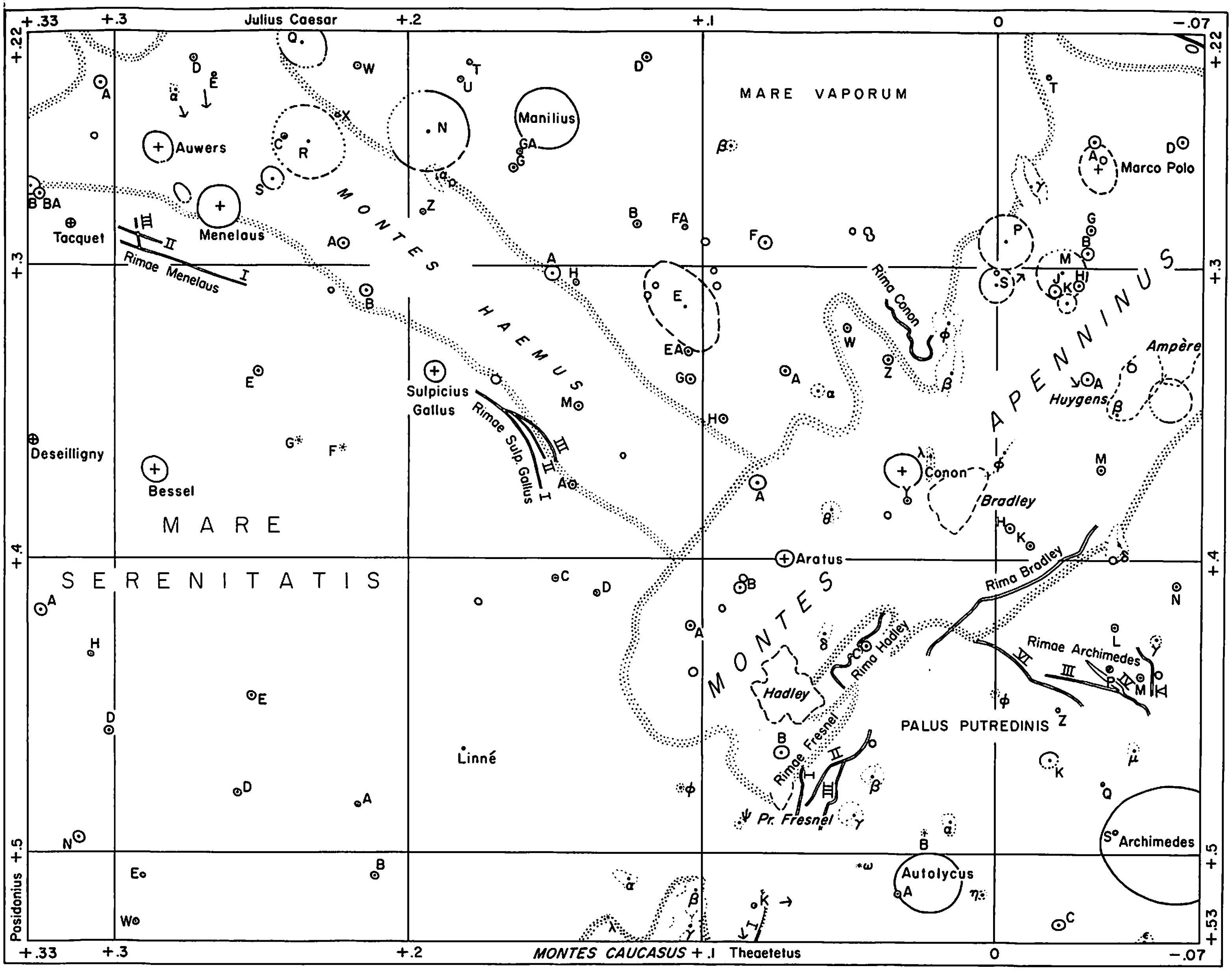



LUNAR NOMENCLATURE C I


+.2 Linné
Posidonius +.5
Luther
Plana
Kirch
+.78 Plato
Protagoras
MARE SERENITATIS
MARE IMBRIUM
MONTES CAUCASUS
MONTES SPITZBERGENSIS
MONTES ALPES
Archimedes
Autolycus
Aristillus
Pr. Fresnel
Theaetetus
Calippus
Cassini
Alexander
Piton
Pr. Agassiz
Pr. Deville
Piazzi Smyth
Lamèch
Eudoxus
Rimae Daniell
Rimae Bürg
Bürg
LACUS MORTIS
Baily
Mitchell
Aristoteles
Egede
Trouvelot
Vallis Alpes
Mont Blanc

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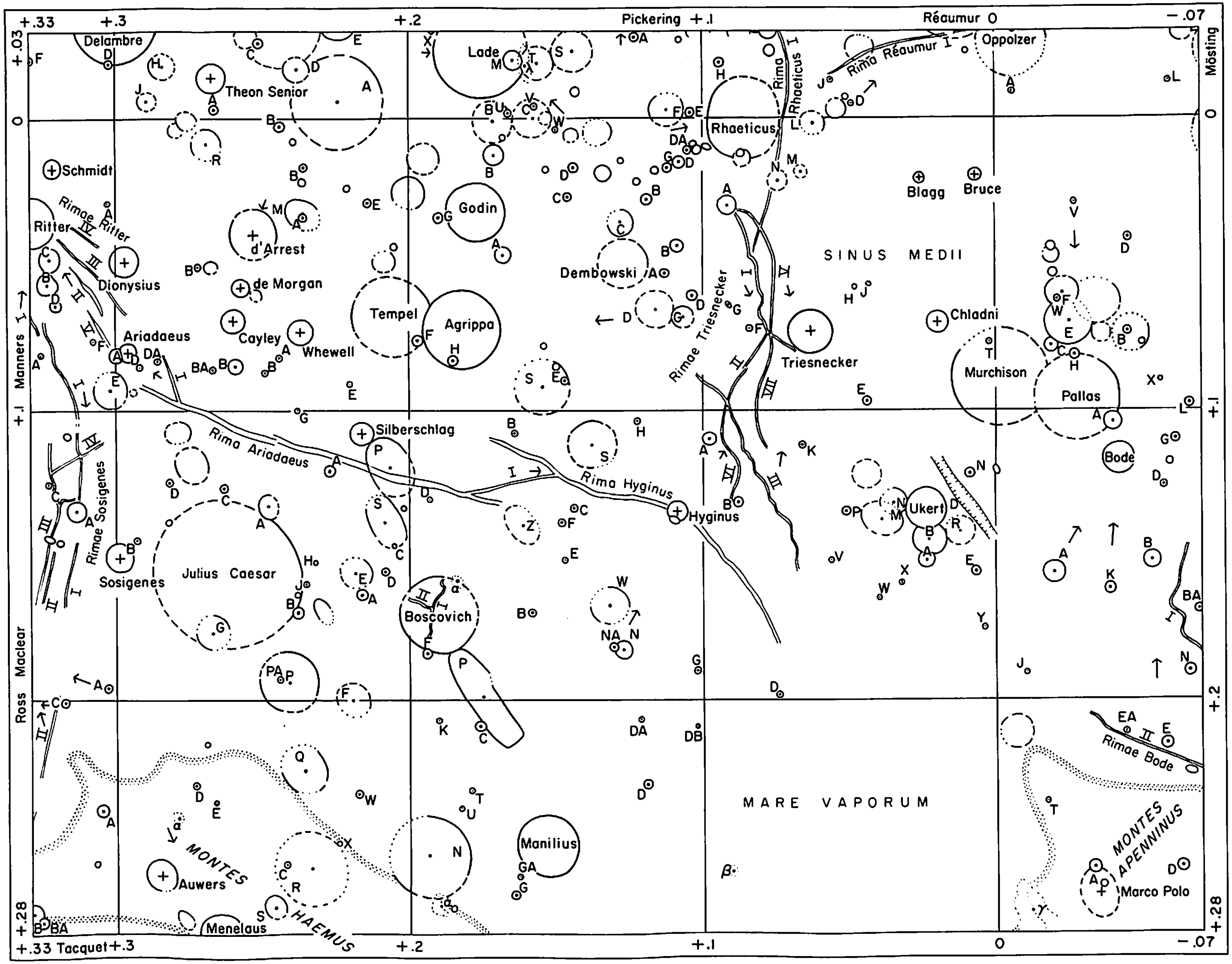
C 3




LUNAR NOMENCLATURE

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