ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646[1]
Please fill all the sections A, B and C below.
(Please read Principles and Procedures Document for guidelines and details before filling this form.)
See http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html for latest *Form*.
See http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html for latest *Principles and Procedures* document.
See http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest roadmaps.

A. Administrative

1. **Title:**   **Proposal to encode ancient Greek mathematical characters in the UCS**

2. Requester's name: **Thesaurus Linguae Graecae Project (University of California, Irvine) and UTC**

3. Requester type (Member body/Liaison/Individual contribution):   **Expert Contribution**

4. Submission date: **2003-06-11**

5. Requester's reference (if applicable):

6. This is a complete proposal:

B. Technical - General

1. (Choose one of the following:)
        a. This proposal is for a new script (set of characters):   _____
                Proposed name of script:.
        b. The proposal is for addition of character(s) to an existing block: **Yes**
                Name of the existing block: **Miscellaneous Mathematical Symbols (27C0-27C1)**

2. Number of characters in proposal: **2**

3. Proposed category (see section II, Character Categories):   **Category C**

4. Proposed Level of Implementation (1, 2 or 3) (see clause 14, ISO/IEC 10646-1: 2000):   **Level 1**
        Is a rationale provided for the choice?   **No**
                If Yes, reference:

5. Is a repertoire including character names provided?   **Yes**
        a. If YES, are the names in accordance with the 'character naming guidelines
            in Annex L of ISO/IEC 10646-1: 2000?   **Yes**
        b. Are the character shapes attached in a legible form suitable for review?   **Yes**

6. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for
        publishing the standard?   **David Perry and TLG Project (True Type)**
        If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools
        used: **TLG Project, mcpantel@uci.edu**
        a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?   **Yes**
        b. Are published examples of use (such as samples from newspapers, magazines, or other sources)
                of proposed characters attached?   **Yes**

8. Special encoding issues:
        Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?   **No**

9. Additional Information: **The property of these characters is Sm**
Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also see http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

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[1] Form number: N2352-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09)

C. Technical - Justification

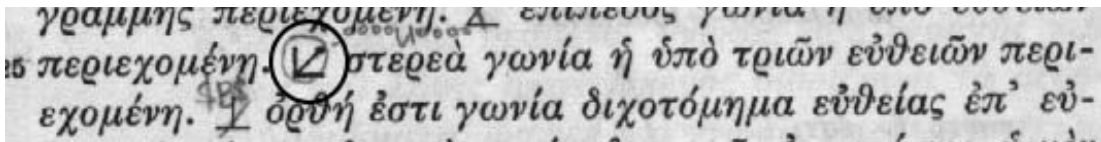|	
1. Has this proposal for addition of character(s) been submitted before?	**No**
If YES explain _____	
2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?	**Yes**
If YES, with whom?	**Members of the scholarly community**
If YES, available relevant documents: _____	
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?	**Scholars**
Reference: _____	
4. The context of use for the proposed characters (type of use; common or rare) :	
	Common in editions of Greek texts
Reference:	**See proposal**
5. Are the proposed characters in current use by the user community?	**Yes**
If YES, where?	
Characters are present in editions of Greek mathematical texts and used by scholars of Greek.	
Reference:	**See proposal**
6. After giving due considerations to the principles in *Principles and Procedures document* (a WG 2 standing document) must the proposed characters be entirely in the BMP?	**Yes**
If YES, is a rationale provided?	**Accordance with the Roadmap**
If YES, reference:	
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)? **Yes**	
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?	**No**
If YES, is a rationale for its inclusion provided?	_____
If YES, reference: _____	
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?	**No**
If YES, is a rationale for its inclusion provided?	_____
If YES, reference:	_____
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?	**No**
If YES, is a rationale for its inclusion provided?	_____
If YES, reference: _____	
11. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?	**No**
If YES, is a rationale for such use provided?	
If YES, reference: _____	
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	_____
If YES, reference: _____	
12. Does the proposal contain characters with any special properties such as control function or similar semantics?	**No**
If YES, describe in detail (include attachment if necessary)	_____
13. Does the proposal contain any Ideographic compatibility character(s)?	**No**
If YES, is the equivalent corresponding unified ideographic character(s) identified? _____	
If YES, reference: _____	

Proposal

The following two characters appear in texts of Euclid and ancient and modern works discussing the theories of Euclid.

The **Three Dimensional Angle** appears in discussion of the various types of angle. **The White Triangle Containing Small White Triangle** appears as a visual representation of a shape which is contained within another.
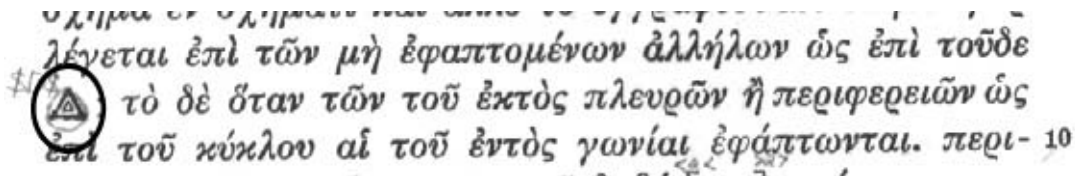
The property for these characters is "Sm".

Examples

THREE DIMENSIONAL ANGLE

Scholia in Euclid 1.3.5

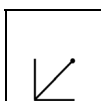WHITE TRIANGLE CONTAINING SMALL WHITE TRIANGLE

Scholia in Euclid 4.6.6

Reference

E.S. Stamatis (post J.L. Heiberg), *Euclidis opera omnia, vols. 5.1-5.2*, 2nd edn. (Leipzig, 1977)

MISCELLANEOUS MATHEMATICAL SYMBOLS

	27C0 THREE DIMENSIONAL ANGLE
	27C1 WHITE TRIANGLE CONTAINING SMALL WHITE TRIANGLE