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C          VALUES FOR GIVEN TEMPERATURE.
C          1st DIMENSION: ENERGY LEVEL INDEX
C          2nd DIMENSION: ENERGY LEVEL INDEX
C          (NOTE: DIAGONAL ELEMENTS REPRESENT THE
C          NEGATIVE SUM OF THEIR RESPECTIVE
C          COLUMNS.)
C INPUT : (R*8) CRCP(,) = PROTON IMPACT TRANSITIONS:
C          EXCIT'N/DE-EXCIT'N RATE COEFFT MATRIX
C          COVERING ALL TRANSITIONS (cm**3/s).
C          VALUES FOR GIVEN TEMPERATURE.
C          1st DIMENSION: ENERGY LEVEL INDEX
C          2nd DIMENSION: ENERGY LEVEL INDEX
C          (NOTE: DIAGONAL ELEMENTS REPRESENT THE
C          NEGATIVE SUM OF THEIR RESPECTIVE
C          COLUMNS.)
C INPUT : (R*8) CIE() = IONISATION RATE COEFFICIENT VECTOR FOR
C          FIXED TEMPERATURE.
C          DIMENSION: ENERGY LEVEL INDEX
C
C OUTPUT: (R*8) CC(,) = RATE MATRIX COVERING ALL TRANSITIONS
C          (UNITS: SEC-1)
C          VALUES FOR GIVEN TEMPERATURE AND DENSITY.
C          1st DIMENSION: ENERGY LEVEL INDEX
C          2nd DIMENSION: ENERGY LEVEL INDEX
C
C          (I*4) IS1 = ENERGY LEVEL ARRAY INDEX
C          (I*4) IS2 = ENERGY LEVEL ARRAY INDEX
C
C ROUTINES: NONE
C
C AUTHOR: WILLIAM J. DICKSON (MOSTLY COPIED FROM BXMCCA)
C          K1/1/36
C          JET EXT. 5057
C
C DATE: 06/01/92
C
C UNIX-IDL PORT:
C
C DATE: UNKNOWN
C
C AUTHOR: DAVID H BROOKS, UNIVERSITY OF STRATHCLYDE
C
C*****
C PUT UNDER SCCS CONTROL:
C
C VERSION: 1.1 DATE: 10/05/96
C MODIFIED: WILLIAM OSBORN (TESSELLA SUPPORT SERVICES PLC)
C - FIRST PUT UNDER SCCS
C
C-----
C

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C

INTEGER	IL,	NDLEV	
LOGICAL	LISEL,	LPDATA,	LPSEL
REAL*8	CC (NDLEV, NDLEV) ,		CIE (NDLEV)
REAL*8	CRA (NDLEV, NDLEV) ,		CRCE (NDLEV, NDLEV)
REAL*8	CRCP (NDLEV, NDLEV) ,		DENE, DENP
REAL*8	PCC (NDLEV, NDLEV)		