

COMPUTATION OF DATUM-TO-DATUM COORDINATE TRANSFORMATION (PROGRAM 15-GAUSS-KRUGER [GK]) (BUCS)

(For use of this form, see FM 6-2; the proponent agency is TRADOC.)

COMPUTER:	NOTEBOOK REFERENCE:	DATE:
CHECKER:	AREA:	SHEET ___ OF ___ SHEETS

NOTES:

1. IF PRINTER IS NOT CONNECTED, SKIP STEPS 5 AND 6.
2. DATUM CODES FOR STEPS 8 AND 9 ARE ON BACK OF FORM.
3. AFTER STEP 9, GO TO STEP 13 IF FUNCTION CODE IS 2 OR 4.

WARNING FOR SOUTHERN HEMISPHERE:

STEP 14A - MANUALLY SUBTRACT 4,000 FROM UTM NORTHING BEFORE ENTERING.
STEP 21A - MANUALLY ADD 4,000 TO COMPUTER GK NORTHING.

INSTRUCTIONS			DATA RECORD	
STEP	PROMPT	PROCEDURE	STATION:	STATION:
1		RUN DDCT		
2	DDCT REV .#0 90/06/25			
3	MODULE DESIRED: 0	CALL PROGRAM 15		
4	GAUSS-KRUGER			
5	PRINT FORM (Y/N):	ENTER Y OR N (SEE NOTE 1)		
6	DATUM LIST (Y/N):	ENTER Y OR N (SEE NOTE 1)		
7	FROM DATUM: 0 1 = KRASSOVSKY TO UTM 2 = UTM TO KRASSOVSKY 3 = BESSEL TO UTM 4 = UTM TO BESSEL	ENTER FUNCTION CODE	FUNCTION CODE: [] = KRASSOVSKY TO UTM [] = UTM TO KRASSOVSKY [] = BESSEL TO UTM [] = UTM TO BESSEL	FUNCTION CODE: [] = KRASSOVSKY TO UTM [] = UTM TO KRASSOVSKY [] = BESSEL TO UTM [] = UTM TO BESSEL
8	FROM DATUM: 00	ENTER DATUM CODE (SEE REVERSE)	FROM DATUM:	FROM DATUM:
9	TO DATUM: 00	ENTER DATUM CODE (IF FUNCTION = 2 OR 4, GO TO STEP 13)	TO DATUM:	TO DATUM:
10	EAST: 000000.00	ENTER GK EASTING	GK EASTING:	GK EASTING:
11	NORTH: 0000000.00	ENTER GK NORTHING	GK NORTHING:	GK NORTHING:
12	GRID ZONE (-:S): 00	ENTER GK GRID ZONE (GO TO STEP 20)	GK GRID ZONE:	GK GRID ZONE:
13	EAST: 000000.00	ENTER UTM EASTING	UTM EASTING:	UTM EASTING:
14	NORTH: 0000000.00	ENTER UTM NORTHING (SEE WARNING)	UTM NORTHING:	UTM NORTHING:
14A	SEE WARNING FOR SOUTHERN HEMISPHERE	SOUTHERN HEMISPHERE ONLY MANUALLY SUBTRACT 4,000 BEFORE ENTERING	SOUTHERN HEMISPHERE ONLY -4,000.00	SOUTHERN HEMISPHERE ONLY -4,000.00
15	GRID ZONE (-:S): 00	RECORD UTM GRID ZONE	UTM GRID ZONE:	UTM GRID ZONE:
16	EAST: 000000.00	RECORD GK EASTING	GK EASTING:	GK EASTING:
17	NORTH: 0000000.00	RECORD GK NORTHING	GK NORTHING:	GK NORTHING:
18	GRID ZONE (-:S): 00	RECORD GK GRID ZONE	GK GRID ZONE:	GK GRID ZONE:
19	ELPS:	RECORD ELLIPSOID (GO TO STEP 24)	ELLIPSOID:	ELLIPSOID:
20	EAST: 000000.00	RECORD UTM EASTING	UTM EASTING:	UTM EASTING:
21	NORTH: 0000000.00	RECORD UTM NORTHING (SEE WARNING)	UTM NORTHING:	UTM NORTHING:
21A	SEE WARNING FOR SOUTHERN HEMISPHERE	SOUTHERN HEMISPHERE ONLY MANUALLY ADD 4,000 TO COMPUTED GK NORTHING	SOUTHERN HEMISPHERE ONLY +4,000.00	SOUTHERN HEMISPHERE ONLY +4,000.00
22	GRID ZONE (-:S): 00	RECORD UTM GRID ZONE	UTM GRID ZONE:	UTM GRID ZONE:
23	ELPS:	RECORD ELLIPSOID	ELLIPSOID:	ELLIPSOID:
24	END OF MSN (Y/N): :	ENTER Y OR N		

REMARKS:

USE THE FOLLOWING DATUM CODES FOR STEPS 8 AND 18.

DATUM NAME	CODE	DISPLAYED NAME	DATUM NAME	CODE	DISPLAYED NAME
Adindan ¹	1	ADINDAN	Minna	54	MINNA
Atgooya	2	AFG	Nahrwan 1 (Masirah Island [Oman])	55	NAHRWAN 1 (Oman)
Ain el Abd 1970	3	AIN EL ABD 1970	Nahrwan 2		
Anna 1 Astro 1965	4	ANNA 1 ASTRO 1965	(United Arab Emirates)	56	NAHRWAN 2 (UAE)
Arc 1950	5	ARC 1950	Nahrwan 3 (Saudi Arabia)	57	NAHRWAN 3 (Saudi)
Arc 1960	6	ARC 1960	Schwarzech (Namibia)	58	NAMIBIA
Ascension Island 1958	7	ASCENSION ISLAND 58	Naparima, BWI	59	NAPARIMA BWI
Astro Beacon E	8	ASTRO BEACON "E"	North American 1927		
Astro Tern Island (FRIG) 1961 ²	9	ASTRO B4 SOR. ATOLL	(Continental United States)	60	NAD'27 (CONUS)
Astro DOS ²	10	ASTRO POS 71/4	North American 1927 (Alaska)	61	NAD'27 (Alaska)
Astronomic Station 1952	11	ASTRONOMIC STA 52	North American 1927 (Bahamas,		
Australian Geodetic 1966	12	AUSTRALIAN GEO 1966	excluding San Salvador Island)	62	NAD'27 (Bahamas)
Australian Geodetic 1984	13	AUSTRALIAN GEO 1984	North American 1927		
Bellevue (IGN)	14	BELLEVUE (IGN)	(San Salvador Island)	63	NAD'27 (Salvador)
Bermuda 1957	15	BERMUDA 1957	North American 1927 (Canada)	64	NAD'27 (Canada)
Bogota Observatory	16	BOGOTA OBSERVATORY	North American 1927 (Canal Zone)	65	NAD'27 Canal Zone)
Campo Inchauspe	17	CAMPO INCHAUSPE	North American 1927 (Caribbean)	66	NAD'27 (Caribbean)
Canton Astro 1966 ²	18	CANTON ISLAND 1966	North American 1927		
Cape	19	CAPE	(Central America)	67	NAD'27 (Cent.Amer.)
Cape Canaveral	20	CAPE CANAVERAL	North American 1927 (Cuba)	68	NAD'27 (Cuba)
Carthage	21	CARTHAGE	North American 1927 (Greenland)	69	NAD'27(Greenland)
Chatham 1971	22	CHATHAM 1971	North American 1927 (Mexico)	70	NAD'27(Mexico)
Chua Astro	23	CHUA ASTRO	North American 1983	71	NORTH AMERICAN 1983
Corrego Alegre	24	CORREGO ALEGRE	Meteorologico 1939 ²	72	OBSERVATORIO 1966
Djakarta (Batavia)	25	DJAKARTA (BATAVIA)	Old Egyptian 1907 ²	73	OLD EGYPTIAN 1930
DOS 1968	26	DOS 1968	Old Hawaiian	74	OLD HAWAIIAN
Easter Island 1967	27	EASTER ISLAND 1967	Oman	75	OMAN
European 1950	28	EUROPEAN 1950	Ordnance Survey of		
European 1979	29	EUROPEAN 1979	Great Britain 1936	76	ORD.SURV.GR.BRIT '36
Gandajika Base	30	GANDAJIKA BASE	Pico de Las Nieves	77	PICO DE LAS NIEVES
Geodetic Datum 1949	31	GEODETIC DATUM 1949	Pitcairn Astro 1967	78	PITCAIRN ASTRO 1967
Guam 1963	32	GUAM 1963	Provisional South Chilean 1963		
Gux 1 Astro	33	GUX 1 ASTRO	or Hito XVIII 1963 ²	79	PROV. SO.CHILEAN'63
Hjorsey 1955	34	HJORSEY 1955	Provisional South American 1956	80	PROV. S.AMERICAN'56
Hong Kong 1963	35	HONG KONG 1963	Puerto Rico	81	PUERTO RICO
Indian 1 (Thailand, Vietnam)	36	INDIAN 1 (Thai/Viet)	Qatar National	82	QATAR NATIONAL
Indian 2 (Bangladesh, India, Nepal) ..	37	INDIAN 2	Qornoq	83	QORNOQ
Ireland 1965	38	IRELAND 1965	Rome 1940	84	ROME 1940
ISTS 073 Astro 1969	39	ISTS 073 ASTRO 1969	São Braz ²	85	SANTA BRAZ
Johnston Island 1961	40	JOHNSTON ISLAND 61	Santa (DOS)	86	SANTA (DOS)
Kandawala	41	KANDAWALA	Sapper Hill 1943	87	SAPPER HILL 1943
Kerguelen Island	42	KERGUELEN ISLAND	South American 1969	88	SO. AMERICAN 1969
Kertau 1948	43	KERTAU 1948	South Asia	89	SOUTH ASIA
Reunion ²	44	LA REUNION	Porto Santo 1936 ²	90	SOUTHEAST BASE
L.C. 5 ASTRO	45	L.C. 5 ASTRO	Graciosa Base SW End 1948 ²	91	SOUTHWEST BASE
Liberia 1964	46	LIBERIA 1964	Timbalai 1948	92	TIMBALAI 1948
Luzon 1 (Philippines)	47	LUZON 1 (Philippine)	Tokyo	93	TOKYO
Luzon 2 (Mindanao Island)	48	LUZON 2 (Mindanao)	Tristan Astro 1968	94	TRISTAN ASTRO 1968
Mahe 1971	49	MAHE 1971	Viti Levu 1916	95	VITI LEVU 1916
Selvagem Grande 1938 ²	50	MARCO ASTRO	Wake-Eniwetok 1960	96	WAKE-ENIWETOK 1960
Massawa	51	MASSAWA	World Geodetic System 1972	97	WGS 1972
Merchich	52	MERCHICH	World Geodetic System 1984	98	WGS 1984
Midway Astro 1961	53	MIDWAY ASTRO 1961	Zanderij	99	ZANDERIJ

¹ The transformation parameters for the Adindan datum have been updated by the Defense Mapping Agency. Use Program 16 (user-defined) with the following transformation parameters:

Semimajor Axis	Flattening	X-Shift	Y-Shift	Z-Shift
6378249.145	293.465	-166	-15	204

² Datum names were incorrect in DMA Technical Report (TR) 8350.2, 1 Dec 87, but are correct above. The BUCS-displayed names for these datums differ from the correct name.