Interferometer Constants Predicted from the Survey Data

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Table I gives the baseline data computed from the survey by Fagerlin, Smith, and Bream (August 1964). It is assumed that the local oscillator frequency is 2694.995 Mhz, corresponding to a wavelength of 11.12398 cm.

Table I

Baseline	d	h + 12^h	B_1	B_2	D/λ
1	+22°11'06"	$4^h50^m01^s.00$	4073.73	9989.89	10788.58
2	22°07'51"	$4^h49^m44^s.06$	5080.10	12491.49	13484.34
3	22°06'40"	$4^h49^m37^s.53$	6091.01	14992.00	16182.10
4	22°08'15"	$4^h49^m44^s.80$	7114.30	17487.65	18879.40
5	22°05'40"	$4^h49^m32^s.53$	8115.24	19990.98	21575.36
6	22°04'38"	$4^h49^m26^s.93$	9123.45	22493.91	24273.70

S. C. Smith (January 1964) has tabulated the geographic coordinates of the interferometer stations. The corresponding baseline center coordinates are listed in Table II. The table also lists the displacement from the meridian for which NRAO sidereal times are calculated (79°50'00" W = $+5^h19^m20^s.00$).

Table II

Baseline	Latitude	Longitude	Deviation from 79°50' W
1	38° 25' 59".88 N	79° 50' 04".07 W	$+0^s.271$
2	57".60	09".42	$0^s.628$
3	55".30	14".76	$0^s.984$
4	53".01	20".11	$1^s.341$
5	50".72	25".46	$1^s.696$
6	48".42	30".81	$2^s.052$

Table III gives the difference in elevation between the six 85-2 stations and 85-1. The elevation of the feed of 85-1 at the zenith is 2824 feet (= 861 m) above sea level.

Table III

Baseline	Elevation Difference	
	Feet	Meters
1	- 64	- 19.5
2	- 73	- 22.5
3	- 85	- 25.9
4	- 103	- 31.4
5	- 111	- 33.8
6	- 121	- 36.9