Figure 7

## K1SIX Summer Transatlantic Es Time Correlations

CALCULATED	CHARTED	FIXED	Average	Average
% DIURNAL	REFERENCE	<b>WESTERN LOCAL</b>	MIDPOINT LST*	EASTERN LOCAL
PROBABILITY	UTC	for LOC: FN43ad	for LOC: HO22kc	for LOC: JN27le
0.00%	5:30	1:30	3:09	7:30
0.01%	6:30	2:30	4:09	8:30
0.02%	7:30	3:30	5:09	9:30
0.35%	8:30	4:30	6:09	10:30
1.76%	9:30	5:30	7:09	11:30
4.22%	10:30	6:30	8:09	12:30
7.26%	11:30	7:30	9:09	13:30
10.58%	12:30	8:30	10:09	14:30
9.82%	13:30	9:30	11:09	15:30
8.90%	14:30	10:30	12:09	16:30
7.07%	15:30	11:30	13:09	17:30
5.64%	16:30	12:30	14:09	18:30
4.89%	17:30	13:30	15:09	19:30
4.34%	18:30	14:30	16:09	20:30
5.88%	19:30	15:30	17:09	21:30
9.17%	20:30	16:30	18:09	22:30
10.49%	21:30	17:30	19:09	23:30
6.65%	22:30	18:30	20:09	0:30
2.32%	23:30	19:30	21:09	1:30
0.48%	0:30	20:30	22:09	2:30
0.13%	1:30	21:30	23:09	3:30
0.02%	2:30	22:30	0:09	4:30
0.00%	3:30	23:30	1:09	5:30
0.00%	4:30	0:30	2:09	6:30

<sup>\*</sup> True LST is 4 minutes ▲ for every degree of longitude ▲.

The timing for the best <u>Multihop Es</u> probability for the paths<sup>2</sup> under scrutiny is:

SUNRISE	Path Midpoint Sunrise Diurnal Contribution is:	33.64%	
Hi Solar El.	Path Midpoint High Solar 'Elevation Represents:	26.50%	
SUNSET	Path Midpoint Sunset Diurnal Contribution is:	38.85%	
Total contribution for all highlighted Solar Elevation correlations is:		98.98%	

## Statistical Foundation<sup>1</sup>

<u>Glatiotical i Gariagion</u>						
30,194	Total contributing "qualifying data points" for diurnal assessment					
1,104	Total contributing qualifying Es days. Last updated:	31-Aug-23				
41	Total years of screened "qualifiving data" collection contribution					

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<sup>&</sup>lt;sup>1</sup> Data collection methodology is "casual", <u>not 24/7</u> but focused with significant dedication.

<sup>&</sup>lt;sup>2</sup> It is likely that Mixed Zonal Es propagation had an influence on the results. There are 4 Es types within the Temperate and the Polar (Auroral) zones and 2 in the Equatorial zone known.