

## DME DME Assessment Results for CLASH1 path EVRLY\_EBBLR

### Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Bruce CTR Connolly
Project File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARS\DEN CLASH1\CLASH1 Master 10-18-17.tgs
Output File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARS\DEN CLASH1\KDEN [IFPA] CLASH1 20190716_1132 EDT\EVRLY_EBBLR\KDEN CLASH1 RNAV STAR EVRLY EBBLR 20190716_1132 EDT.pdf
Procedure Name:	CLASH1
Software: DmeDmePlugin:	5.6.0
Date/Time:	07/16/2019 11:32 EDT
Databases:	DTED LEVEL 0 MAX

### Failures

No Failures

### Warnings

No Warnings

### Notes For Flight Check

None

### Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
EVRLY	WP	N39° 26' 30.06", W103° 59' 35.67"	15000	VNAV	250	FLY_BY	TF
TWNSN_	WP	N39° 25' 45.21", W104° 20' 45.89"	12000	VNAV	210	FLY_BY	TF
PNBAL_	WP	N39° 25' 33.80", W104° 25' 56.05"	11000	VNAV	210	FLY_BY	TF
ROCCS	WP	N39° 25' 23.36", W104° 31' 06.25"	10000	VNAV	210	FLY_BY	TF
EBBLR	WP	N39° 25' 12.85", W104° 37' 23.62"	9000	VNAV	210	FLY_OVER	TF

### Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KDEN [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

## DME DME Assessment Results for CLASH1 path EVRLY\_EBBLR

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	DEN	N39° 48' 45.05", W104° 39' 38.66"	8.0 E	130	H	IFPA	NO	Enabled	51 %	54.9 %
2	AKO	N40° 09' 20.00", W103° 10' 46.97"	13.0 E	130	H	IFPA	NO	Enabled	53.9 %	58 %
3	DVV	N39° 53' 40.88", W104° 37' 27.61"	8.0 E	130	H	IFPA	NO	Enabled	39.5 %	42.4 %
4	FQF	N39° 41' 24.50", W104° 37' 15.50"	11.0 E	130	H	IFPA	NO	Enabled	53.9 %	58 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	AKO	FQF				
0.9	AKO	DEN	FQF			
4.6	AKO	DVV	DEN	FQF		
17.1						

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N39° 06' 55.94", W103° 20' 09.80"	N39° 14' 48.83", W103° 36' 53.02"	15.1709
2	N39° 25' 33.80", W104° 25' 56.05"	N39° 44' 05.49", W104° 29' 00.21"	18.6808
3	N39° 25' 23.36", W104° 31' 06.25"	N39° 26' 34.94", W104° 33' 13.40"	2.0257
4	N39° 25' 43.41", W104° 21' 35.34"	N38° 50' 59.03", W101° 47' 39.33"	124.3534
5	N39° 39' 41.30", W104° 27' 55.57"	N39° 39' 46.86", W104° 28' 10.06"	0.2078

Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
EVRLY	TWNSN_	AKO, DVV, FQF, DEN
TWNSN_	PNBAL_	AKO, DVV, FQF, DEN
PNBAL_	ROCCS	
ROCCS	EBBLR	

# DME DME Assessment Results for CLASH1 path EVRLY\_EBBLR

## User Data Files

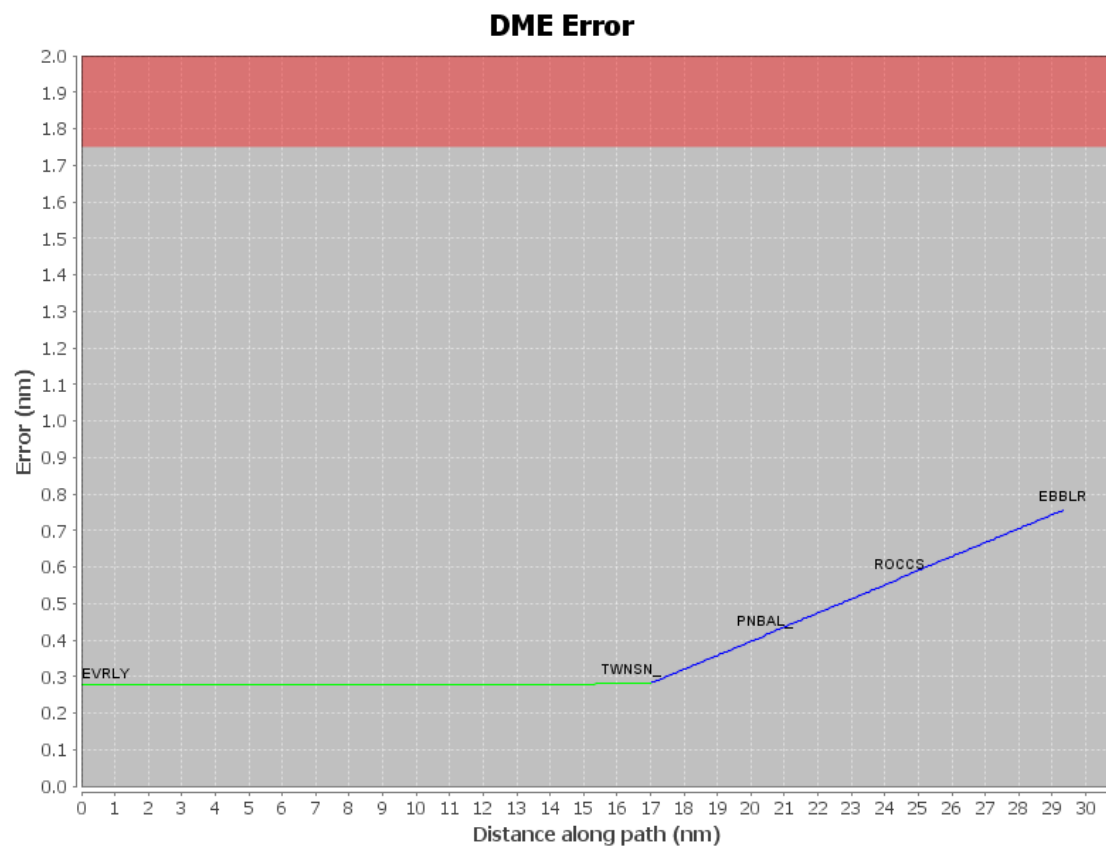
# File Name

None

## User DMEs

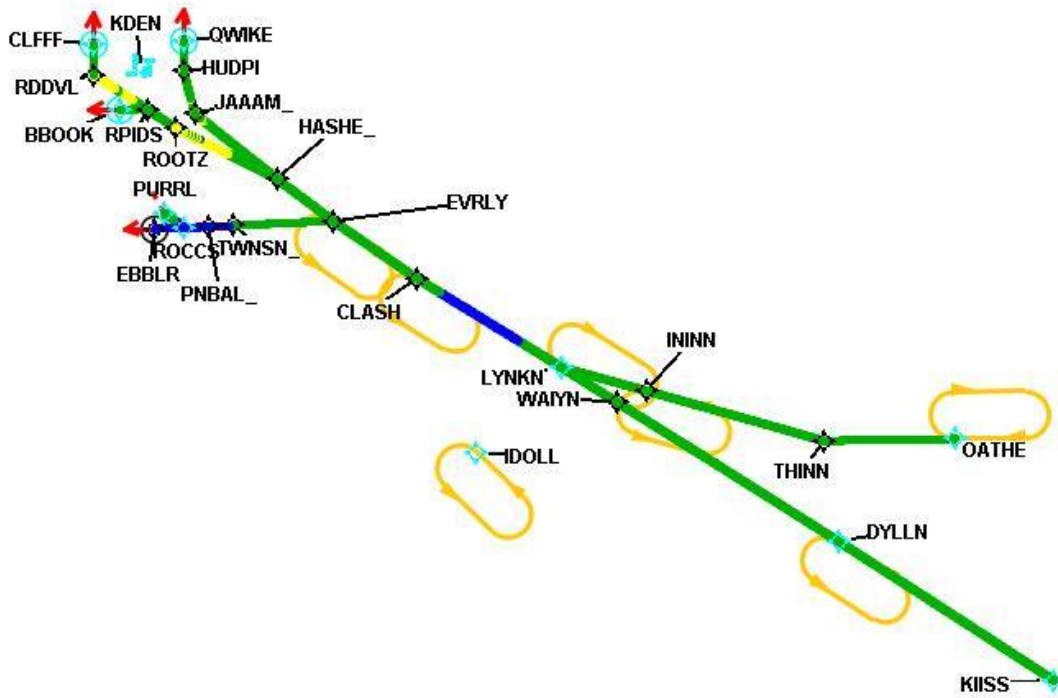
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	FQF FAA 910284-013 FQF [IFPA]	N39° 41' 24.50", W104° 37' 15.50"	11.0 E	130	5800.5	116.3	FQF FAA 910284-013	
ESV:		Bearing [True]: 112.0° to 126.0° Bearing [Mag]: 101.0° to 115.0°				Arc Distance: Out to 95.0 NM Altitude: 17000.0 to 22000.0 ft		
2	AKO User ESV AKO [IFPA]	N40° 09' 19.99", W103° 10' 46.96"	13.0 E	130	4626	114.4	AKO User ESV	
ESV:		Bearing [True]: 135.0° to 256.0° Bearing [Mag]: 122.0° to 243.0°				Arc Distance: Out to 81.0 NM Altitude: 11700.0 to 20000.0 ft		

## DME DME Assessment Results for CLASH1 path EVRLY\_EBBLR



## DME DME Assessment Results for CLASH1 path EVRLY\_EBBLR

Graphic Depiction 1



## DME DME Assessment Results for CLASH1 path HASHE\_\_QWIKE

### Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Bruce CTR Connolly
Project File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARS\DEN CLASH1\CLASH1 Master 10-18-17.tgs
Output File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARS\DEN CLASH1\KDEN [IFPA] CLASH1 20190716_1132 EDT\HASHE__QWIKE\KDEN CLASH1 RNAV STAR HASHE_QWIKE 20190716_1132 EDT.pdf
Procedure Name:	CLASH1
Software: DmeDmePlugin:	5.6.0
Date/Time:	07/16/2019 11:32 EDT
Databases:	DTED LEVEL 0 MAX

### Failures

No Failures

### Warnings

No Warnings

### Notes For Flight Check

None

### Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
HASHE__	WP	N39° 33' 19.78", W104° 11' 27.02"	15000	VNAV	250	FLY_BY	TF
JAAAM__	WP	N39° 43' 57.46", W104° 28' 57.43"	13000	VNAV	250	FLY_BY	TF
HUDPI	WP	N39° 50' 55.21", W104° 31' 22.20"	11000	VNAV	250	FLY_BY	TF
QWIKE	WP	N39° 55' 55.43", W104° 31' 18.56"	11000	VNAV	210	FLY_OVER	TF

### Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KDEN [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

## DME DME Assessment Results for CLASH1 path HASHE\_\_QWIK

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	DEN	N39° 48' 45.05", W104° 39' 38.66"	8.0 E	130	H	IFPA	NO	Enabled	82.1 %	82.1 %
2	GLL	N40° 30' 13.92", W104° 33' 10.85"	13.0 E	130	H	IFPA	NO	Enabled	17 %	17 %
3	BJC	N39° 54' 46.94", W105° 08' 20.35"	11.0 E	130	H	IFPA	NO	Enabled	56.4 %	56.4 %
4	AKO	N40° 09' 20.00", W103° 10' 46.97"	13.0 E	130	H	IFPA	NO	Enabled	49.1 %	49 %
5	DVV	N39° 53' 40.88", W104° 37' 27.61"	8.0 E	130	H	IFPA	NO	Enabled	70.7 %	70.7 %
6	FQF	N39° 41' 24.50", W104° 37' 15.50"	11.0 E	130	H	IFPA	NO	Enabled	96.7 %	96.7 %

# DME DME Assessment Results for CLASH1 path HASHE\_\_QWIKE

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	AKO	DVV	DEN	FQF		
7.7	AKO	DVV	DEN			
8.5	AKO	DVV	DEN	FQF		
10.3	AKO	DVV	DEN	BJC	FQF	
13.2	DVV	FQF				
13.4	AKO	DVV	DEN	FQF	BJC	
13.7	DVV	FQF				
14.0	AKO	DVV	DEN	FQF	BJC	
14.1	DVV	FQF				
14.3	AKO	DVV	FQF	DEN	BJC	
14.6	DVV	FQF	DEN			
14.9	AKO	DVV	FQF	DEN	BJC	
15.0	DVV	FQF	DEN			
15.3	AKO	DVV	FQF	DEN	BJC	
15.3	DVV	FQF	DEN	BJC		
15.5	AKO	DVV	FQF	DEN	BJC	
15.6	DVV	FQF	DEN			
15.7	DVV	FQF	DEN	BJC		
16.1	DVV	FQF	DEN			
16.4	DVV	FQF	DEN	BJC		
16.4	AKO	DVV	FQF	DEN	BJC	
16.6	DVV	FQF	DEN			
16.8	DVV	FQF	DEN	BJC		
17.1	AKO	DVV	FQF	DEN	BJC	
17.2	DVV	FQF	DEN			
17.3						
17.3	DVV	FQF	DEN	BJC		
18.0	DVV	FQF	AKO	DEN	BJC	
18.2	DVV	FQF	DEN	BJC		
18.4	DVV	FQF	AKO	DEN	BJC	
18.7	DVV	FQF	DEN	BJC		
19.1	DVV	FQF	AKO	DEN	BJC	
19.2	DVV	FQF	DEN	BJC		
21.0	BJC	FQF	DEN			
22.7	BJC	FQF				
24.5	BJC	GLL	DEN	FQF		
25.9	BJC	GLL	FQF			
28.3	BJC	GLL	FQF	DEN		

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N39° 06' 55.94", W103° 20' 09.80"	N39° 14' 48.83", W103° 36' 53.02"	15.1709
2	N39° 25' 33.80", W104° 25' 56.05"	N39° 44' 05.49", W104° 29' 00.21"	18.6808
3	N39° 25' 23.36", W104° 31' 06.25"	N39° 26' 34.94", W104° 33' 13.40"	2.0257
4	N39° 25' 43.41", W104° 21' 35.34"	N38° 50' 59.03", W101° 47' 39.33"	124.3534
5	N39° 39' 41.30", W104° 27' 55.57"	N39° 39' 46.86", W104° 28' 10.06"	0.2078

Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
HASHE__	JAAAM__	AKO, DVV, FQF, BJC, DEN
JAAAM__	HUDPI	DVV, AKO, BJC, FQF, DEN
HUDPI	QWIKE	GLL, BJC, FQF, DEN



# DME DME Assessment Results for CLASH1 path HASHE\_\_QWIKE

## User Data Files

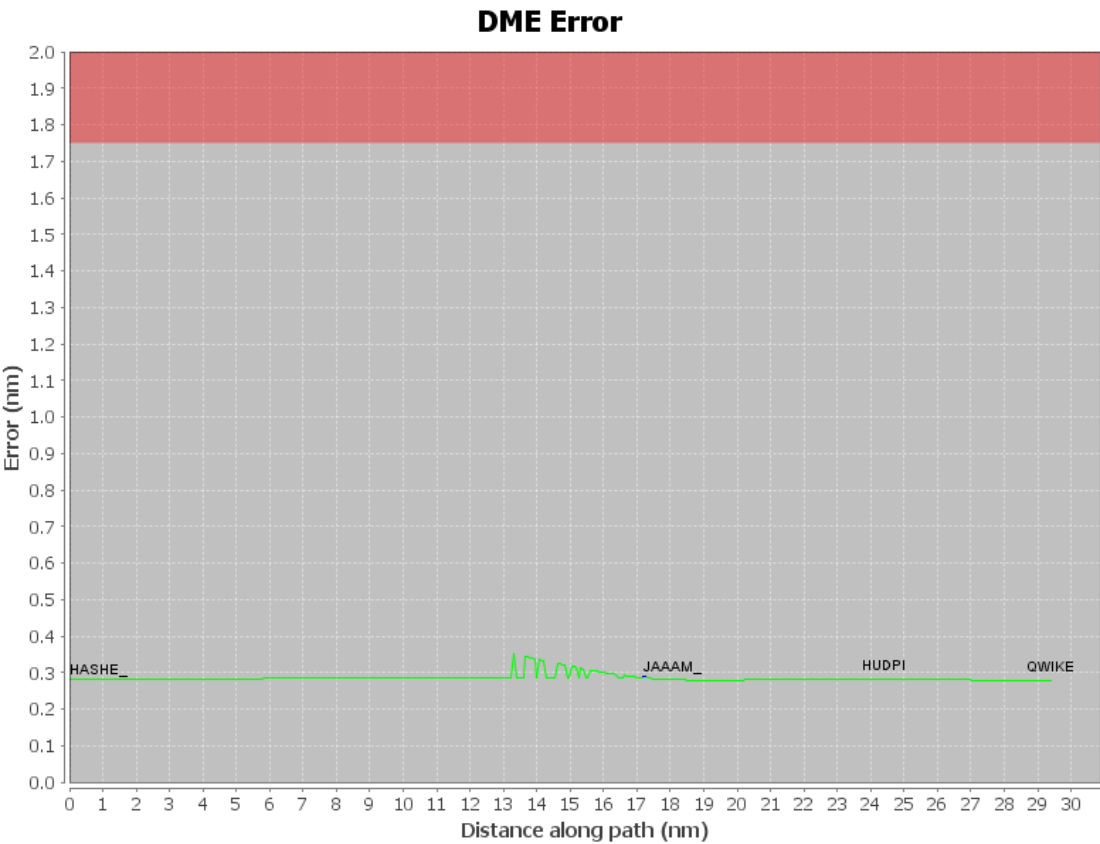
# File Name

None

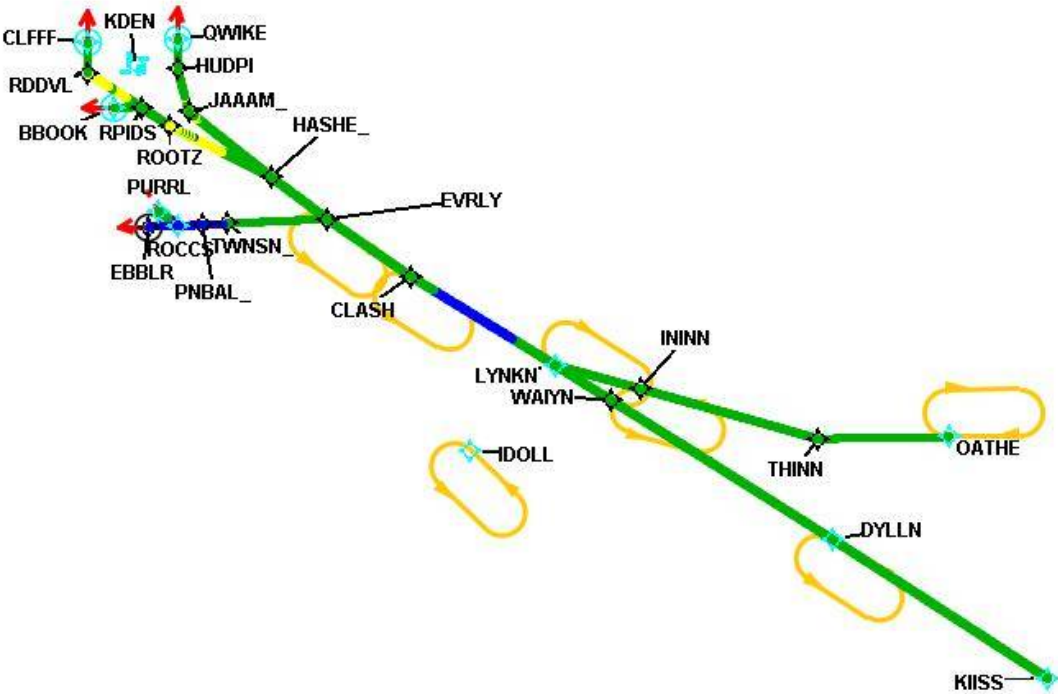
## User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	FQF FAA 910284-013 FQF [IFPA]	N39° 41' 24.50", W104° 37' 15.50"	11.0 E	130	5800.5	116.3	FQF FAA 910284-013	
ESV:		Bearing [True]: 112.0° to 126.0° Bearing [Mag]: 101.0° to 115.0°				Arc Distance: Out to 95.0 NM Altitude: 17000.0 to 22000.0 ft		
2	AKO User ESV AKO [IFPA]	N40° 09' 19.99", W103° 10' 46.96"	13.0 E	130	4626	114.4	AKO User ESV	
ESV:		Bearing [True]: 135.0° to 256.0° Bearing [Mag]: 122.0° to 243.0°				Arc Distance: Out to 81.0 NM Altitude: 11700.0 to 20000.0 ft		

DME DME Assessment Results for CLASH1 path HASHE\_\_QWIKE



Graphic Depiction 1



## DME DME Assessment Results for CLASH1 path KIISS\_CLFFF

### Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Bruce CTR Connolly
Project File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARS\DEN CLASH1\CLASH1 Master 10-18-17.tgs
Output File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARS\DEN CLASH1\KDEN [IFPA] CLASH1 20190716_1132 EDT\KIISS_CLFFF\KDEN CLASH1 RNAV STAR KIISS CLFFF 20190716_1132 EDT.pdf
Procedure Name:	CLASH1
Software: DmeDmePlugin:	5.6.0
Date/Time:	07/16/2019 11:32 EDT
Databases:	DTED LEVEL 0 MAX

### Failures

No Failures

### Warnings

No Warnings

### Notes For Flight Check

None

### Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
KIISS	WP	N38° 11' 36.34", W101° 26' 36.25"	20000	VNAV	250	FLY_BY	TF
DYLLN	WP	N38° 34' 16.08", W102° 12' 18.74"	20000	VNAV	250	FLY_BY	TF
WAIYN	WP	N38° 56' 58.72", W102° 59' 24.53"	20000	VNAV	250	FLY_BY	TF
LYNKN	WP	N39° 02' 40.14", W103° 11' 10.79"	20000	VNAV	250	FLY_BY	TF
CLASH	WP	N39° 17' 10.87", W103° 41' 56.10"	15000	VNAV	250	FLY_BY	TF
EVRLY	WP	N39° 26' 30.06", W103° 59' 35.67"	15000	VNAV	250	FLY_BY	TF
HASHE_	WP	N39° 33' 19.78", W104° 11' 27.02"	15000	VNAV	250	FLY_BY	TF
ROOTZ	WP	N39° 41' 38.07", W104° 32' 59.98"	13000	VNAV	250	FLY_BY	TF
RPIDS	WP	N39° 44' 34.57", W104° 38' 48.54"	11000	VNAV	250	FLY_BY	TF
RDDVL	WP	N39° 50' 19.88", W104° 50' 24.03"	11000	VNAV	250	FLY_BY	TF
CLFFF	WP	N39° 55' 20.10", W104° 50' 20.55"	11000	VNAV	210	FLY_OVER	TF

### Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KDEN [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

## DME DME Assessment Results for CLASH1 path KISS\_CLFFF

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	GLD	N39° 23' 16.33", W101° 41' 32.27"	12.0 E	130	H	IFPA	NO	Enabled	52.1 %	52.1 %
2	DEN	N39° 48' 45.05", W104° 39' 38.66"	8.0 E	130	H	IFPA	NO	Enabled	30 %	30 %
3	BJC	N39° 54' 46.94", W105° 08' 20.35"	11.0 E	130	H	IFPA	NO	Enabled	14.7 %	14.7 %
4	HLC	N39° 15' 31.49", W100° 13' 33.06"	8.0 E	130	H	IFPA	NO	Enabled	17.3 %	17.3 %
5	AKO	N40° 09' 20.00", W103° 10' 46.97"	13.0 E	130	H	IFPA	NO	Enabled	48.5 %	48.5 %
6	DVV	N39° 53' 40.88", W104° 37' 27.61"	8.0 E	130	H	IFPA	NO	Enabled	34.5 %	34.5 %
7	GCK	N37° 55' 08.41", W100° 43' 30.03"	11.0 E	130	H	IFPA	NO	Enabled	32.4 %	32.4 %
8	HGO	N38° 49' 03.00", W103° 37' 17.00"	7.0 E	130	H	IFPA	NO	Enabled	57.9 %	57.9 %
9	TXC	N39° 41' 53.94", W103° 12' 53.78"	12.0 E	40	L	IFPA	NO	Enabled	8.7 %	8.7 %
10	GLL	N40° 30' 13.92", W104° 33' 10.85"	13.0 E	130	H	IFPA	NO	Enabled	0.6 %	0.6 %
11	LAA	N38° 11' 49.53", W102° 41' 15.12"	12.0 E	130	H	IFPA	NO	Enabled	51.8 %	51.8 %
12	PUB	N38° 17' 39.32", W104° 25' 46.01"	8.0 E	130	H	IFPA	NO	Enabled	22.7 %	22.7 %
13	FQF	N39° 41' 24.50", W104° 37' 15.50"	11.0 E	130	H	IFPA	NO	Enabled	27.5 %	27.5 %
14	LBL	N37° 02' 39.82", W100° 58' 16.31"	11.0 E	130	H	IFPA	NO	Enabled	15.9 %	15.9 %

**DME DME Assessment Results for CLASH1 path KISS\_CLFFF**

<b>Flight Check DME Selection</b>						
<b>Distance [NM]</b>	<b>Selected DMEs</b>					<b>Alternate</b>
0.0	LAA	GLD	LBL	HLC	GCK	
30.6	GCK	GLD	HGO	LAA	HLC	
33.3	GCK	GLD	HGO	LAA		
51.8	HGO	LAA	GLD	GCK	AKO	
62.3	HGO	LAA	AKO	GLD	PUB	
98.0	HGO	LAA	GLD	AKO		
98.3	HGO	LAA	GLD	AKO	FQF	
99.7	AKO	GLD	FQF	HGO		
100.2	FQF	HGO	AKO			
102.4	FQF	HGO	TXC	AKO		
102.6	AKO	HGO	TXC			
104.0	AKO	HGO				
104.7						
119.9	HGO	TXC				
126.0	HGO	TXC	AKO			
134.3	HGO	TXC	FQF			
135.2	AKO	FQF	HGO			
136.8	AKO	FQF				
139.5	AKO	DEN	FQF			
141.6	AKO	DVV	DEN	FQF		
161.5	AKO	DVV	DEN	BJC	FQF	
166.2	DVV	FQF	BJC	DEN		
166.7						
166.9	DVV	FQF	BJC	DEN		
167.0	AKO	DVV	DEN	BJC		
167.2	DVV	FQF	BJC	DEN		
167.6	AKO	DVV	DEN	BJC		
167.8	DVV	FQF	BJC	DEN		
168.0	AKO	DVV	DEN	BJC		
168.4	DVV	FQF	BJC	DEN		
168.7	AKO	DVV	DEN	BJC		
169.0	DVV	FQF	BJC	DEN		
169.2	AKO	DVV	DEN	BJC		
169.6	DVV	FQF	DEN	BJC		
169.8	AKO	DVV	DEN	BJC		
170.0	DVV	FQF	DEN	BJC		
170.1	AKO	DVV	DEN	BJC		
170.2	DVV	FQF	DEN	BJC		
171.3	AKO	DVV	DEN	BJC	FQF	
171.4	DVV	FQF	DEN	BJC		
171.5	BJC	DVV				
172.5	AKO	DEN	DVV	BJC		
172.6	BJC	DVV				
176.0	BJC	DVV	FQF			
177.3	BJC	DVV				
179.6	BJC	DVV	DEN	FQF		
187.2	DVV	FQF	BJC			
187.9	DVV	FQF				
189.9	DVV	FQF	BJC			
190.8	DEN	GLL	BJC	DVV	FQF	
191.3	BJC	FQF	DVV			
191.4	DVV	GLL	DEN	BJC	FQF	

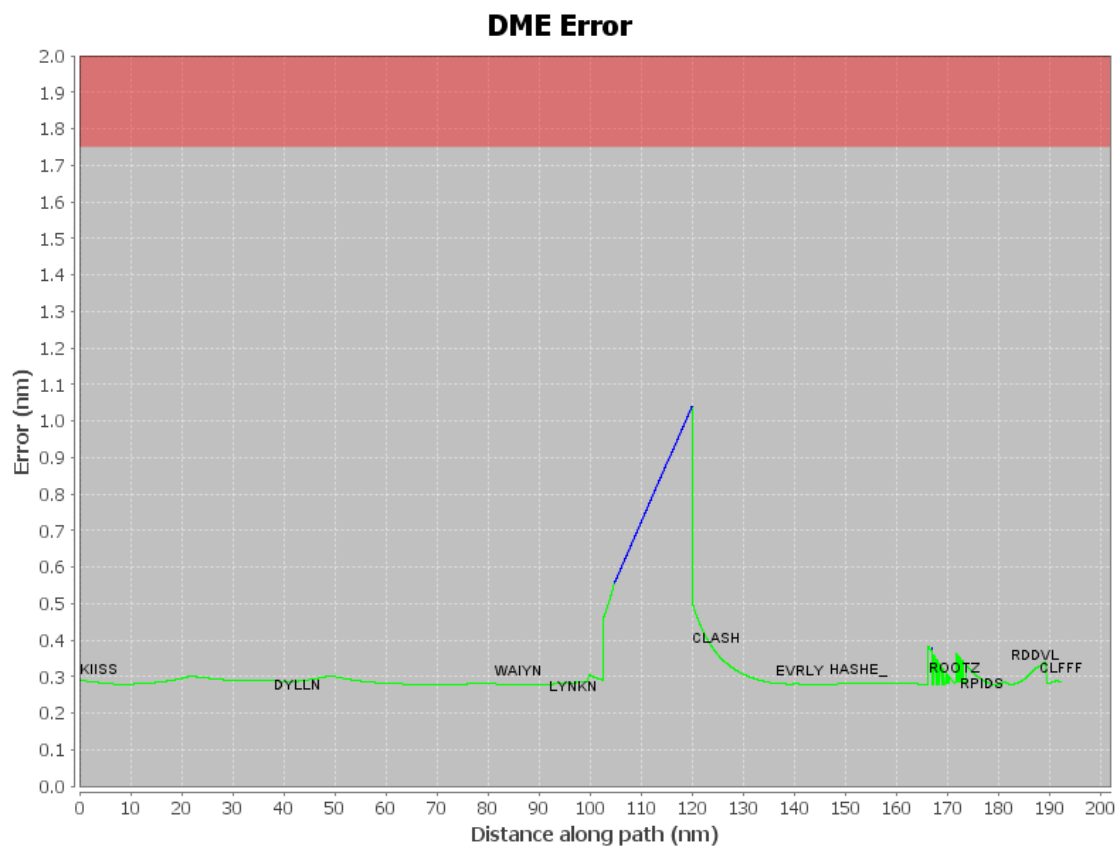
# DME DME Assessment Results for CLASH1 path KIISS\_CLFFF

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N39° 06' 55.94", W103° 20' 09.80"	N39° 14' 48.83", W103° 36' 53.02"	15.1709
2	N39° 25' 33.80", W104° 25' 56.05"	N39° 44' 05.49", W104° 29' 00.21"	18.6808
3	N39° 25' 23.36", W104° 31' 06.25"	N39° 26' 34.94", W104° 33' 13.40"	2.0257
4	N39° 25' 43.41", W104° 21' 35.34"	N38° 50' 59.03", W101° 47' 39.33"	124.3534
5	N39° 39' 41.30", W104° 27' 55.57"	N39° 39' 46.86", W104° 28' 10.06"	0.2078

Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
KIISS	DYLLN	HGO, LBL, LAA, HLC, GCK, GLD
DYLLN	WAIYN	HGO, AKO, DVV, PUB, DEN, LAA, GCK, GLD
WAIYN	LYNKN	HGO, AKO, DVV, PUB, DEN, LAA, GLD
LYNKN	CLASH	HGO, AKO, DVV, FQF, PUB, DEN, LAA, GLD, TXC
CLASH	EVRLY	HGO, AKO, FQF, DEN, TXC
EVRLY	HASHE	AKO, DVV, FQF, DEN
HASHE	ROOTZ	AKO, DVV, FQF, BJC, DEN
ROOTZ	RPIDS	DVV, AKO, BJC, FQF, DEN
RPIDS	RDDVL	DVV, BJC, FQF, DEN
RDDVL	CLFFF	DVV, GLL, BJC, FQF, DEN

User Data Files								
#	File Name							
None								
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	FQF FAA 910284-013 FQF [IFPA]	N39° 41' 24.50", W104° 37' 15.50"	11.0 E	130	5800.5	116.3	FQF FAA 910284-013	
ESV:		Bearing [True]: 112.0° to 126.0° Bearing [Mag]: 101.0° to 115.0°				Arc Distance: Out to 95.0 NM Altitude: 17000.0 to 22000.0 ft		
2	AKO User ESV AKO [IFPA]	N40° 09' 19.99", W103° 10' 46.96"	13.0 E	130	4626	114.4	AKO User ESV	
ESV:		Bearing [True]: 135.0° to 256.0° Bearing [Mag]: 122.0° to 243.0°				Arc Distance: Out to 81.0 NM Altitude: 11700.0 to 20000.0 ft		

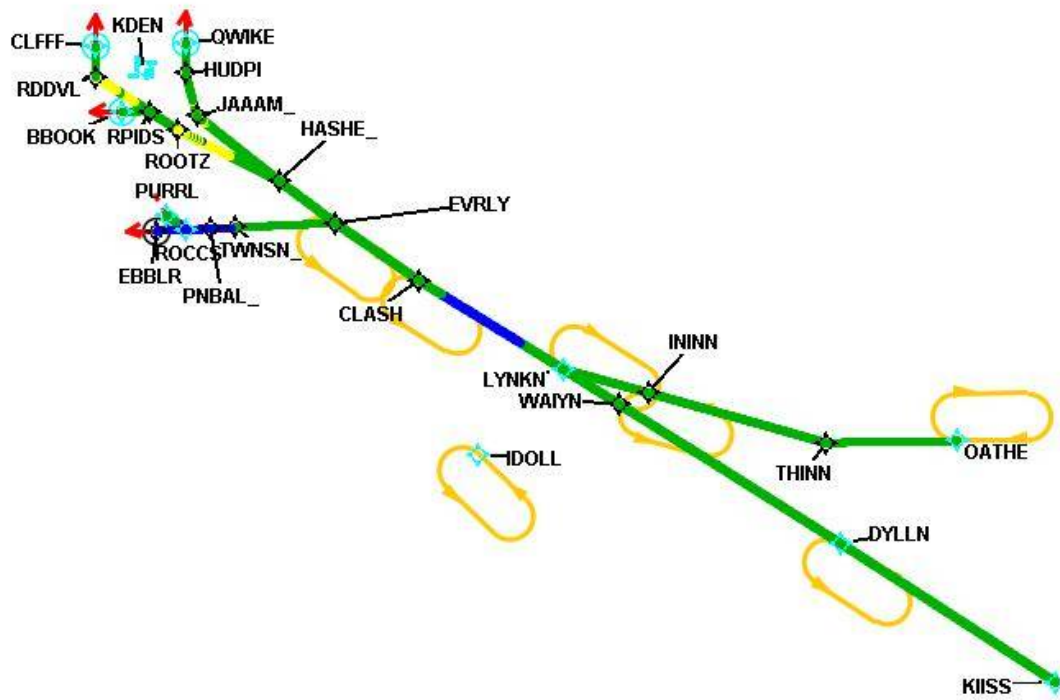
# DME DME Assessment Results for CLASH1 path KIISS\_CLFFF





# DME DME Assessment Results for CLASH1 path KISS\_CLFFF

Graphic Depiction 1



## DME DME Assessment Results for CLASH1 path OATHE\_LYNKN

### Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Bruce CTR Connolly
Project File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARS\DEN CLASH1\CLASH1 Master 10-18-17.tgs
Output File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARS\DEN CLASH1\KDEN [IFPA] CLASH1 20190716_1132 EDT\OATHE_LYNKN\KDEN CLASH1 RNAV STAR OATHE LYNKN 20190716_1132 EDT.pdf
Procedure Name:	CLASH1
Software: DmeDmePlugin:	5.6.0
Date/Time:	07/16/2019 11:32 EDT
Databases:	DTED LEVEL 0 MAX

### Failures

No Failures

### Warnings

No Warnings

### Notes For Flight Check

None

### Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
OATHE	WP	N38° 50' 59.03", W101° 47' 39.33"	20000	VNAV	250	FLY_BY	TF
THINN	WP	N38° 50' 39.68", W102° 15' 26.85"	20000	VNAV	250	FLY_BY	TF
ININN	WP	N38° 58' 48.87", W102° 53' 05.95"	20000	VNAV	250	FLY_BY	TF
LYNKN	WP	N39° 02' 40.14", W103° 11' 10.79"	20000	VNAV	250	FLY_BY	TF

### Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KDEN [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

## DME DME Assessment Results for CLASH1 path OATHE\_LYNKN

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	GCK	N37° 55' 08.41", W100° 43' 30.03"	11.0 E	130	H	IFPA	NO	Enabled	44.6 %	44.6 %
2	GLD	N39° 23' 16.33", W101° 41' 32.27"	12.0 E	130	H	IFPA	NO	Enabled	100 %	100 %
3	HGO	N38° 49' 03.00", W103° 37' 17.00"	7.0 E	130	H	IFPA	NO	Enabled	100 %	100 %
4	DEN	N39° 48' 45.05", W104° 39' 38.66"	8.0 E	130	H	IFPA	NO	Enabled	25.7 %	25.7 %
5	HLC	N39° 15' 31.49", W100° 13' 33.06"	8.0 E	130	H	IFPA	NO	Enabled	32.5 %	32.5 %
6	LAA	N38° 11' 49.53", W102° 41' 15.12"	12.0 E	130	H	IFPA	NO	Enabled	100 %	100 %
7	PUB	N38° 17' 39.32", W104° 25' 46.01"	8.0 E	130	H	IFPA	NO	Enabled	50 %	50 %
8	AKO	N40° 09' 20.00", W103° 10' 46.97"	13.0 E	130	H	IFPA	NO	Enabled	88.4 %	88.4 %
9	DVV	N39° 53' 40.88", W104° 37' 27.61"	8.0 E	130	H	IFPA	NO	Enabled	23.5 %	23.5 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	GCK	LAA	HGO	GLD	HLC	
21.8	GCK	GLD	HGO	LAA	AKO	
29.9	HGO	LAA	AKO	GLD		
33.4	HGO	LAA	AKO	GLD	PUB	

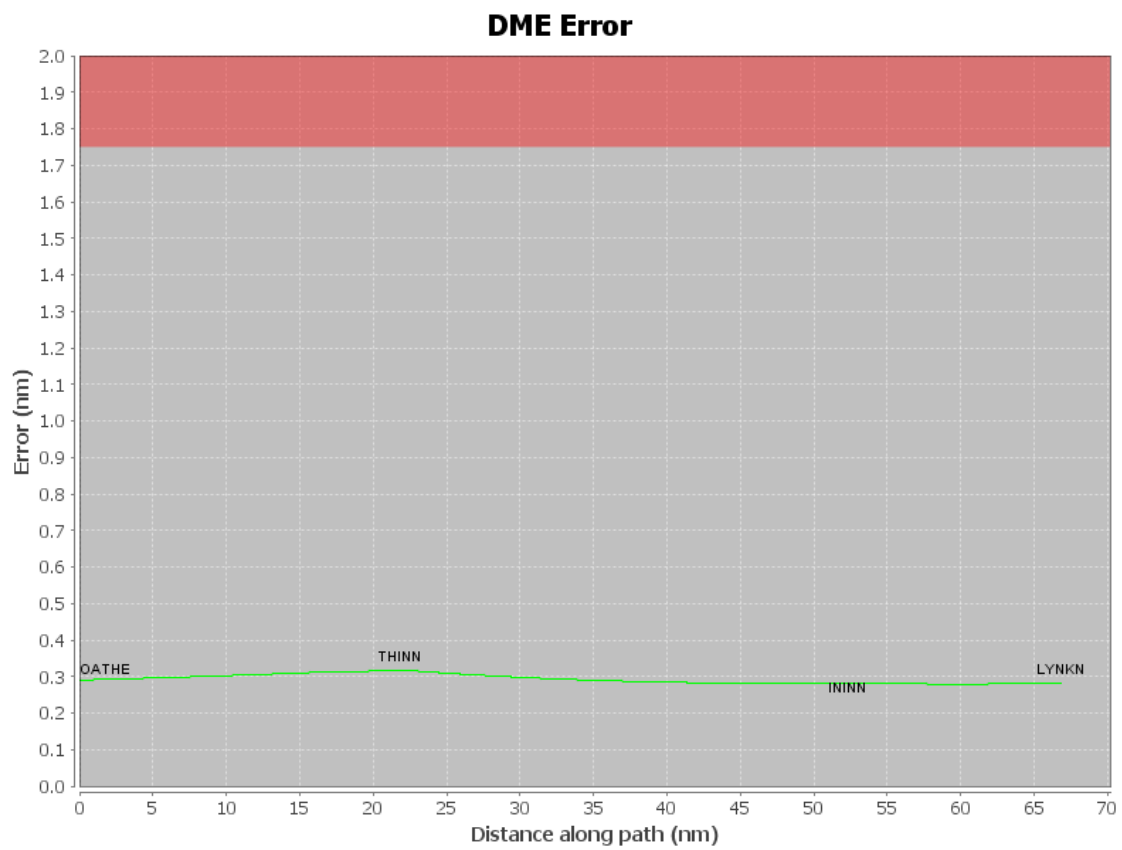
Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N39° 06' 55.94", W103° 20' 09.80"	N39° 14' 48.83", W103° 36' 53.02"	15.1709
2	N39° 25' 33.80", W104° 25' 56.05"	N39° 44' 05.49", W104° 29' 00.21"	18.6808
3	N39° 25' 23.36", W104° 31' 06.25"	N39° 26' 34.94", W104° 33' 13.40"	2.0257
4	N39° 25' 43.41", W104° 21' 35.34"	N38° 50' 59.03", W101° 47' 39.33"	124.3534
5	N39° 39' 41.30", W104° 27' 55.57"	N39° 39' 46.86", W104° 28' 10.06"	0.2078

## DME DME Assessment Results for CLASH1 path OATHE\_LYNKN

Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
OATHE	THINN	HGO, AKO, LAA, HLC, GCK, GLD
THINN	ININN	HGO, AKO, DVV, PUB, DEN, LAA, GLD, GCK
ININN	LYNKN	HGO, AKO, DVV, PUB, DEN, LAA, GLD

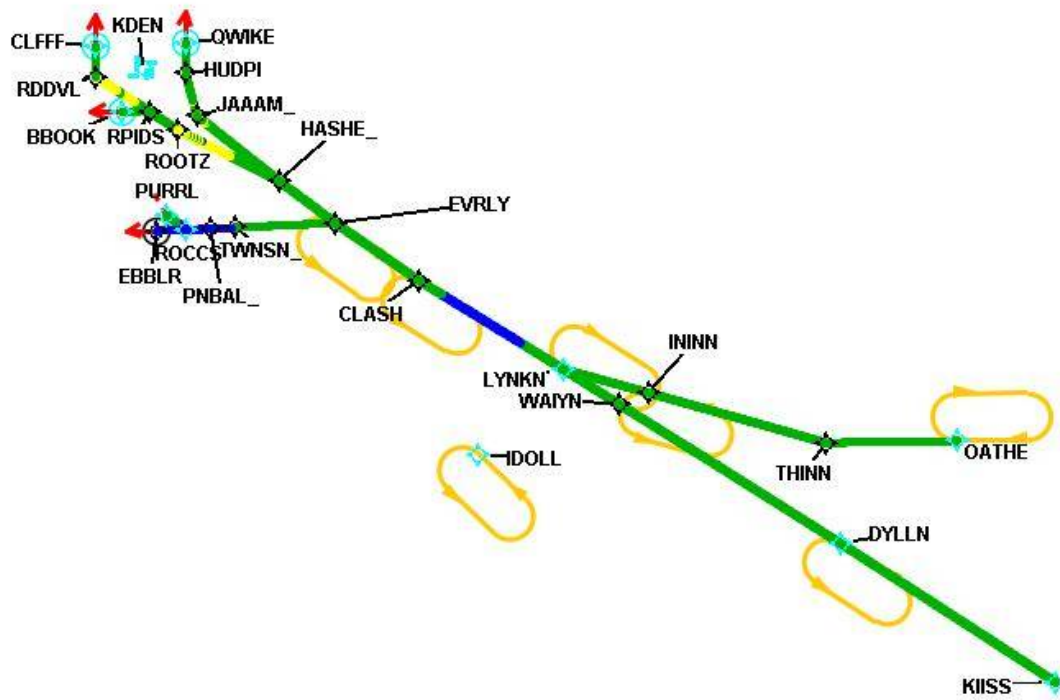
User Data Files								
#	File Name							
None								
User DMEs								
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	FQF FAA 910284-013 FQF [IFPA]	N39° 41' 24.50", W104° 37' 15.50"	11.0 E	130	5800.5	116.3	FQF FAA 910284-013	
ESV:		Bearing [True]: 112.0° to 126.0° Bearing [Mag]: 101.0° to 115.0°				Arc Distance: Out to 95.0 NM Altitude: 17000.0 to 22000.0 ft		
2	AKO User ESV AKO [IFPA]	N40° 09' 19.99", W103° 10' 46.96"	13.0 E	130	4626	114.4	AKO User ESV	
ESV:		Bearing [True]: 135.0° to 256.0° Bearing [Mag]: 122.0° to 243.0°				Arc Distance: Out to 81.0 NM Altitude: 11700.0 to 20000.0 ft		

# DME DME Assessment Results for CLASH1 path OATHE\_LYNKN



# DME DME Assessment Results for CLASH1 path OATHE\_LYNKN

Graphic Depiction 1



## DME DME Assessment Results for CLASH1 path ROCCS\_PURRL

### Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Bruce CTR Connolly
Project File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARS\DEN CLASH1\CLASH1 Master 10-18-17.tgs
Output File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARS\DEN CLASH1\KDEN [IFPA] CLASH1 20190716_1132 EDT\ROCCS_PURRL\KDEN CLASH1 RNAV STAR ROCCS PURRL 20190716_1132 EDT.pdf
Procedure Name:	CLASH1
Software: DmeDmePlugin:	5.6.0
Date/Time:	07/16/2019 11:32 EDT
Databases:	DTED LEVEL 0 MAX

### Failures

No Failures

### Warnings

No Warnings

### Notes For Flight Check

None

### Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
ROCCS	WP	N39° 25' 23.36", W104° 31' 06.25"	10000	VNAV	210	FLY_BY	TF
PURRL	WP	N39° 27' 44.44", W104° 35' 16.99"	9000	VNAV	210	FLY_BY	TF

### Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KDEN [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

## DME DME Assessment Results for CLASH1 path ROCCS\_PURRL

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	DEN	N39° 48' 45.05", W104° 39' 38.66"	8.0 E	130	H	IFPA	NO	Enabled	24.6 %	24.6 %
2	BJC	N39° 54' 46.94", W105° 08' 20.35"	11.0 E	130	H	IFPA	NO	Enabled	49.3 %	49.3 %
3	DVV	N39° 53' 40.88", W104° 37' 27.61"	8.0 E	130	H	IFPA	NO	Enabled	49.3 %	49.3 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0						
2.0	BJC	DVV				
3.0	BJC	DVV	DEN			

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N39° 06' 55.94", W103° 20' 09.80"	N39° 14' 48.83", W103° 36' 53.02"	15.1709
2	N39° 25' 33.80", W104° 25' 56.05"	N39° 44' 05.49", W104° 29' 00.21"	18.6808
3	N39° 25' 23.36", W104° 31' 06.25"	N39° 26' 34.94", W104° 33' 13.40"	2.0257
4	N39° 25' 43.41", W104° 21' 35.34"	N38° 50' 59.03", W101° 47' 39.33"	124.3534
5	N39° 39' 41.30", W104° 27' 55.57"	N39° 39' 46.86", W104° 28' 10.06"	0.2078

Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
ROCCS	PURRL	DVV, BJC, DEN



# DME DME Assessment Results for CLASH1 path ROCCS\_PURRL

## User Data Files

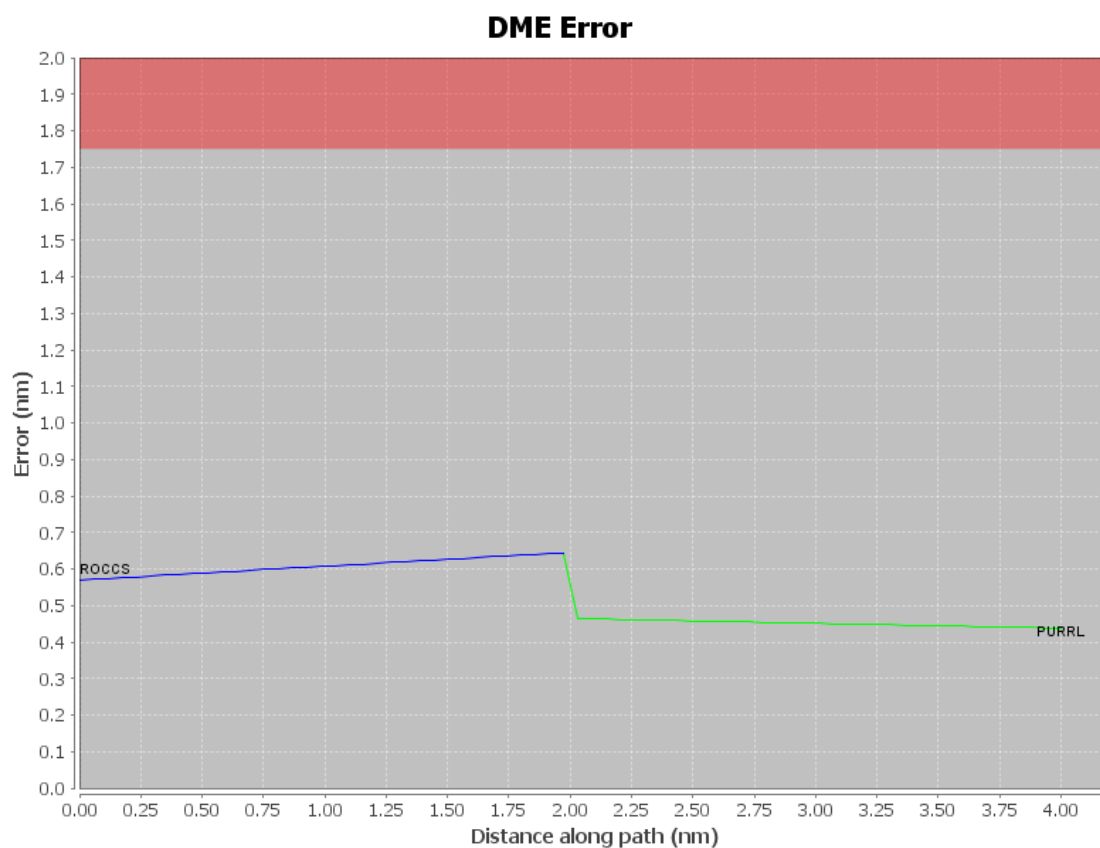
# File Name

None

## User DMEs

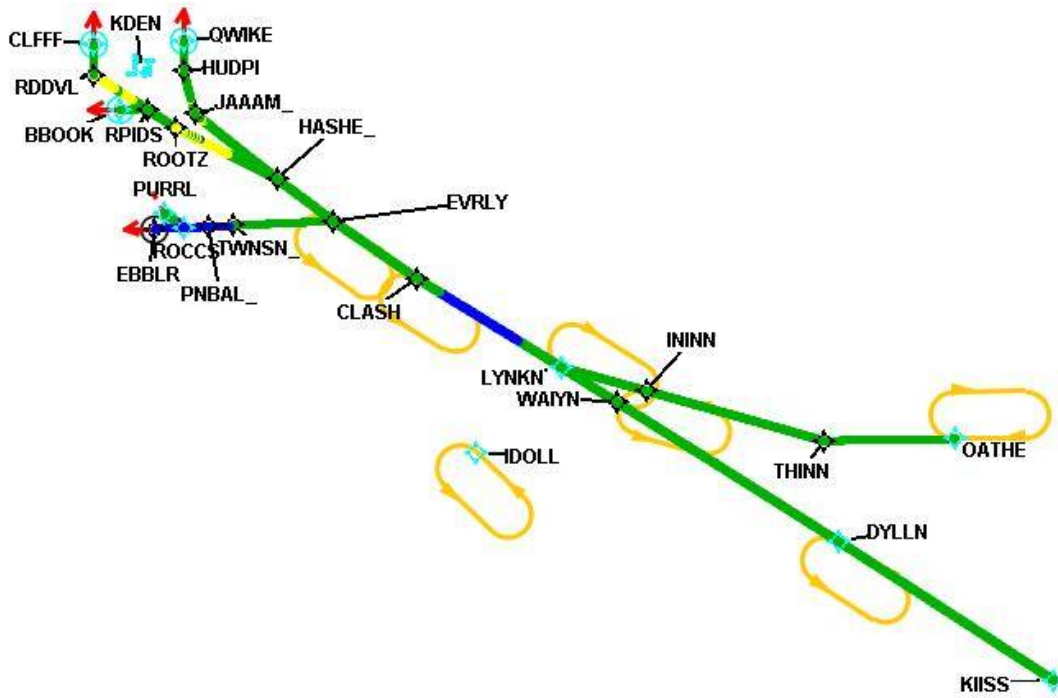
#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	FQF FAA 910284-013 FQF [IFPA]	N39° 41' 24.50", W104° 37' 15.50"	11.0 E	130	5800.5	116.3	FQF FAA 910284-013	
ESV:		Bearing [True]: 112.0° to 126.0° Bearing [Mag]: 101.0° to 115.0°				Arc Distance: Out to 95.0 NM Altitude: 17000.0 to 22000.0 ft		
2	AKO User ESV AKO [IFPA]	N40° 09' 19.99", W103° 10' 46.96"	13.0 E	130	4626	114.4	AKO User ESV	
ESV:		Bearing [True]: 135.0° to 256.0° Bearing [Mag]: 122.0° to 243.0°				Arc Distance: Out to 81.0 NM Altitude: 11700.0 to 20000.0 ft		

# DME DME Assessment Results for CLASH1 path ROCCS\_PURRL



## DME DME Assessment Results for CLASH1 path ROCCS\_PURRL

Graphic Depiction 1



## DME DME Assessment Results for CLASH1 path RPIDS\_BBOOK

### Results Summary

Flyability:	Completed
DME/DME:	Completed - No Critical DMEs
Name:	Bruce CTR Connolly
Project File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARs\DEN CLASH1\CLASH1 Master 10-18-17.tgs
Output File:	C:\Users\Bruce CTR Connolly\Desktop\Denver Metroplex working file\DEN STARs\DEN CLASH1\KDEN [IFPA] CLASH1 20190716_1132 EDT\RPIDS_BBOOK\KDEN CLASH1 RNAV STAR RPIDS BBOOK 20190716_1132 EDT.pdf
Procedure Name:	CLASH1
Software: DmeDmePlugin:	5.6.0
Date/Time:	07/16/2019 11:32 EDT
Databases:	DTED LEVEL 0 MAX

### Failures

No Failures

### Warnings

No Warnings

### Notes For Flight Check

None

### Flight Plan

Name	Type	Lat/Lon	Altitude (ft)	VNAV Mode	Ground Speed (kts)	Turn Type	Leg Type
RPIDS	WP	N39° 44' 34.57", W104° 38' 48.54"	11000	VNAV	250	FLY_BY	TF
BBOOK	WP	N39° 44' 39.67", W104° 44' 56.83"	11000	VNAV	210	FLY_OVER	TF

### Flyability

Flight Type:	RNAV_STAR
Selected Airport:	KDEN [IFPA]
Climb Gradient:	None assigned
Speeds:	200 Ground Speed to 11000 FT
	240 Ground Speed to 18000 FT
	260 Ground Speed to 24000 FT
	340 Ground Speed above 24000 FT
Descent During a Turn:	Allowed
VNAV Mode:	Flight Plan

## DME DME Assessment Results for CLASH1 path RPIDS\_BBOOK

DME/DME	
RNP:	RNP 2
Flight Mode:	Manual
Line of Sight (DTED Level 0 Max):	Evaluated
Inertial Drift:	Enabled
Initial Drift:	0.558 NM
INS Drift Rate:	8.0 NM/Hour
Range Mode:	OSV
RNP Edges:	Evaluated
Min DME Range:	3.0 NM
DME Types:	DME, VOR-DME, VORTAC
DME Include Angles:	30 to 150
Critical DMEs:	Allowed
DoD Facilities:	Not included
Foreign Facilities:	Not included
High DMEs:	Included
Low DMEs:	Included
Terminal DMEs:	Included
Flight Check DMEs:	Not selected
Higher Altitudes:	Not Evaluated
Near Maximum Altitude:	Not Evaluated
Automatic ESVs:	Not enabled
Disabled DMEs:	None

DME/DME (Continued)										
DMEs Used										
#	Name	Lat/Lon	MAGVAR	Range	Type	Source	Critical	Status	Time	Distance
1	DEN	N39° 48' 45.05", W104° 39' 38.66"	8.0 E	130	H	IFPA	NO	Enabled	27.5 %	27.5 %
2	BJC	N39° 54' 46.94", W105° 08' 20.35"	11.0 E	130	H	IFPA	NO	Enabled	100 %	100 %
3	DVV	N39° 53' 40.88", W104° 37' 27.61"	8.0 E	130	H	IFPA	NO	Enabled	100 %	100 %
4	FQF	N39° 41' 24.50", W104° 37' 15.50"	11.0 E	130	H	IFPA	NO	Enabled	65.2 %	65.2 %

Flight Check DME Selection						
Distance [NM]	Selected DMEs					Alternate
0.0	BJC	DVV				
1.6	BJC	DVV	DEN	FQF		
2.1	BJC	DVV	FQF			
3.8	BJC	DVV	DEN	FQF		

Inertial Drift Segments			
#	Start Location	End Location	Length [NM]
1	N39° 06' 55.94", W103° 20' 09.80"	N39° 14' 48.83", W103° 36' 53.02"	15.1709
2	N39° 25' 33.80", W104° 25' 56.05"	N39° 44' 05.49", W104° 29' 00.21"	18.6808
3	N39° 25' 23.36", W104° 31' 06.25"	N39° 26' 34.94", W104° 33' 13.40"	2.0257
4	N39° 25' 43.41", W104° 21' 35.34"	N38° 50' 59.03", W101° 47' 39.33"	124.3534
5	N39° 39' 41.30", W104° 27' 55.57"	N39° 39' 46.86", W104° 28' 10.06"	0.2078

Available DMEs by Waypoints		
Waypoint Before	Waypoint After	DME List
RPIDS	BBOOK	DVV, BJC, FQF, DEN

# DME DME Assessment Results for CLASH1 path RPIDS\_BBOOK

## User Data Files

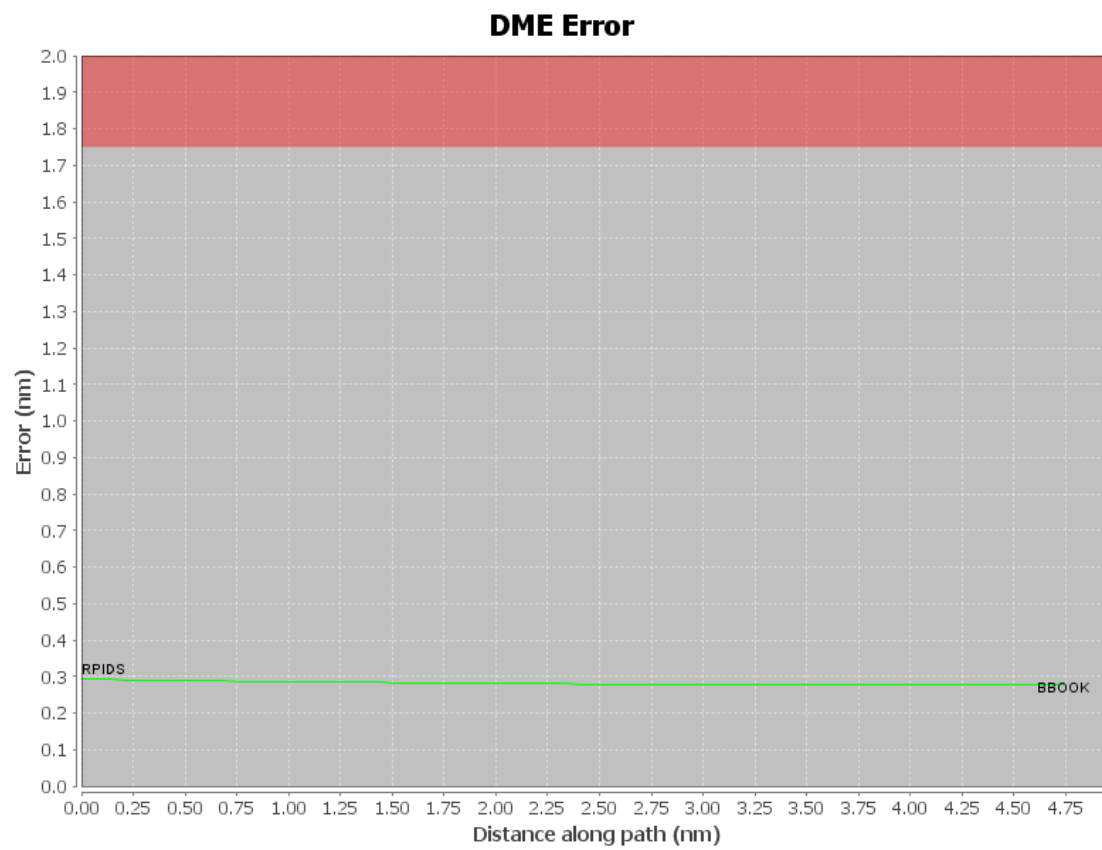
# File Name

None

## User DMEs

#	Name	Lat/Lon	MAGVAR	Range	Elevation [ft]	Frequency	Replaces	Status
1	FQF FAA 910284-013 FQF [IFPA]	N39° 41' 24.50", W104° 37' 15.50"	11.0 E	130	5800.5	116.3	FQF FAA 910284-013	
ESV:		Bearing [True]: 112.0° to 126.0° Bearing [Mag]: 101.0° to 115.0°				Arc Distance: Out to 95.0 NM Altitude: 17000.0 to 22000.0 ft		
2	AKO User ESV AKO [IFPA]	N40° 09' 19.99", W103° 10' 46.96"	13.0 E	130	4626	114.4	AKO User ESV	
ESV:		Bearing [True]: 135.0° to 256.0° Bearing [Mag]: 122.0° to 243.0°				Arc Distance: Out to 81.0 NM Altitude: 11700.0 to 20000.0 ft		

## DME DME Assessment Results for CLASH1 path RPIDS\_BBOOK



## DME DME Assessment Results for CLASH1 path RPIDS\_BBOOK

Graphic Depiction 1

