

NAD83 – Colorado South Zone

Given Information:

Stormy	ϕ	37-46-00.72252	$N(y)$	428,305.869
	λ	103-46-35.31953	$E(x)$	1,066,244.212
			$\gamma(\theta)$	+ 01-03-25.81476
			k	0.99994609
Packers Gap	$N(y)$	425,583.834	ϕ	37-44-25.31720
	$E(x)$	1,077,723.190	λ	103-38-48.58337
			$\gamma(\theta)$	+ 01-08-12.10048
			k	0.99994673
Packers Gap ← Stormy → Seven		120-16-15.0		
Stormy ← Seven → Packers Gap		12-35-13.3		
Seven ← Packers Gap → Stormy		47-08-35.8		

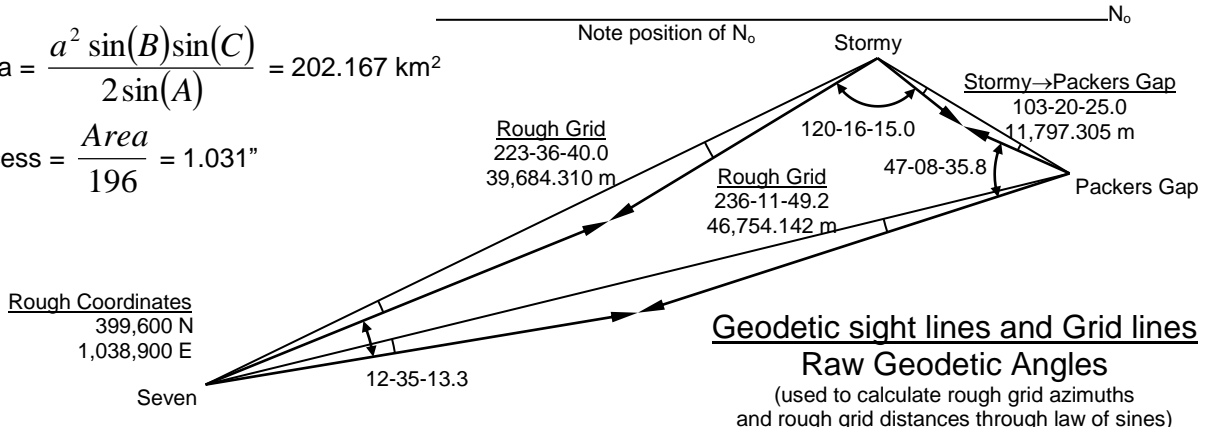
Find Point “Seven”

<u>Point “Seven”</u>	$N(y)$	399,572.126
	$E(x)$	1,038,870.738
	ϕ	37-30-43.69786
	λ	104-05-31.37935
	$\gamma(\theta)$	+ 00-51-48.98061
	k	0.99996111

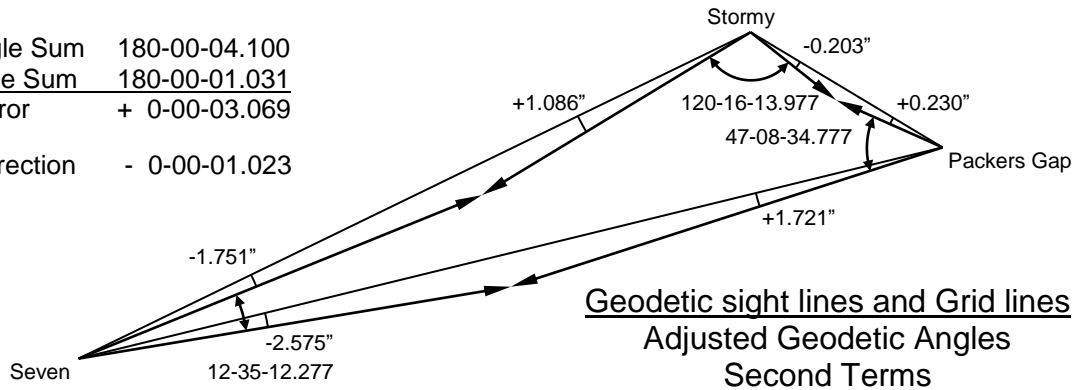
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$$\text{Area} = \frac{a^2 \sin(B)\sin(C)}{2 \sin(A)} = 202.167 \text{ km}^2$$

$$\text{Excess} = \frac{\text{Area}}{196} = 1.031''$$



Measured Angle Sum	180-00-04.100
Spherical Angle Sum	180-00-01.031
Total Angle Error	+ 0-00-03.069
Per Angle Correction	- 0-00-01.023



$$\text{Grid Angle} = \text{Geodetic angle} - \delta_{BS} + \delta_{FS}$$

