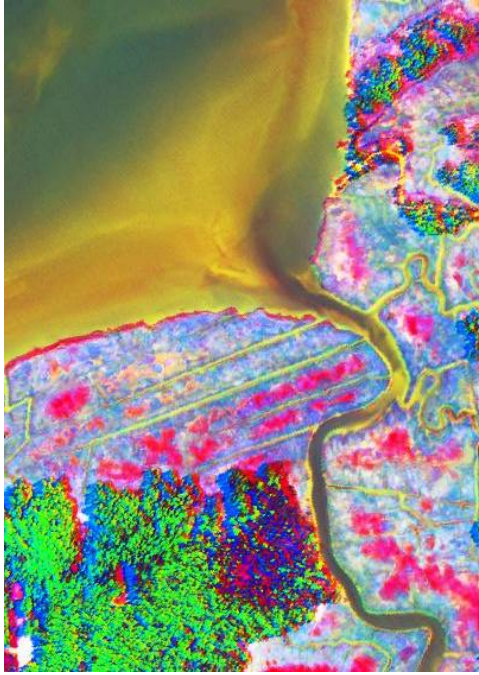
ProspecTIR-V (VNIR) Sensor

Sensor head	Typical specifications			
Spectrograph	High efficiency imaging spectrograph. Smile and keystone < 2 microns. F/2.4			
Spectral range	400 – 990 nm			
Spectral resolution	2.3 – 20 nm*			
Slit width	30 microns			
# of spectral bands	1 – 256*			
Operating modes	Hyperspectral and multispectral			
Spectral sampling : bands	2.3nm : 256	4.6nm : 128	9.2nm : 64	18.4nm : 32
Image rate	4 – 100 Hz*			
Spatial swath (pixels)	960 pixels			
Fore optics options				
Focal length	23 mm	18.5 mm	9 mm	
FOV	29.9 degrees	37.7 degrees	63 degrees	
IFOV	0.029 degrees	0.037 degrees	0.062 degrees	
Swath width	0.53 x altitude	0.68 x altitude	1.22 x altitude	
Ground resolution @ 1,000 m altitude	0.52 m	0.67 m	1.2 m	
Camera	Progressive scan CCD camera			
Output	12 bits digital			
Integration time	Selectable independent of image rate			
Shutter	Electromechanical shutter for dark background registration, user controllable by software.			

*User selectable on the fly



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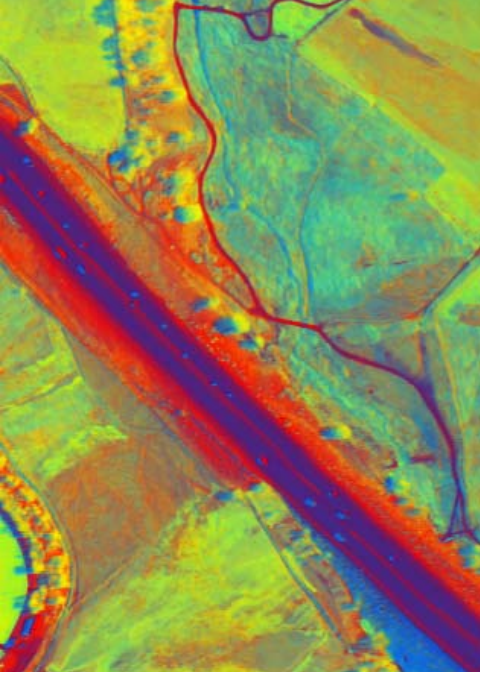
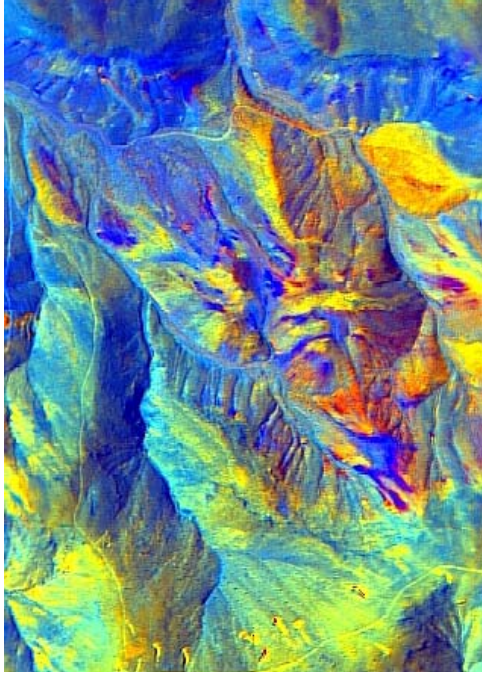
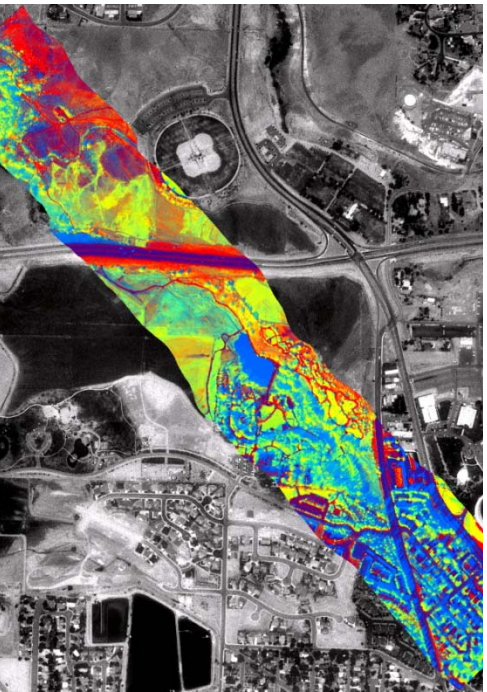
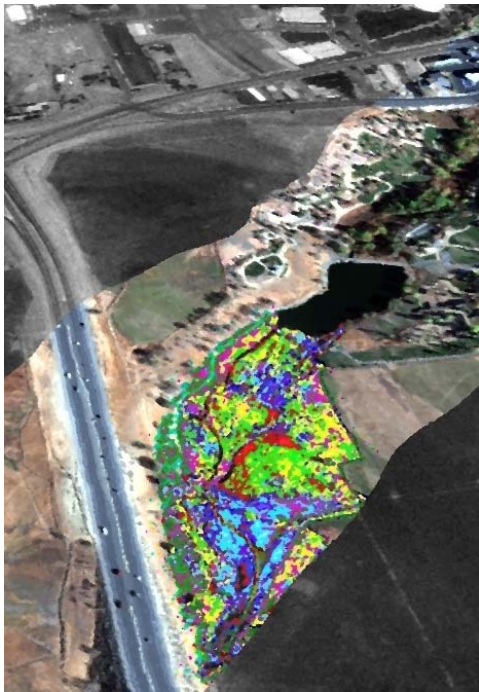


ProspecTIR-S (SWIR) Sensor

Sensor head	Typical specifications		
Spectrograph	High efficiency imaging spectrograph. Smile and keystone < 2 microns.		
Spectral range	970 – 2,450 nm		
Spectral resolution	8.5 nm (user selectable on the fly)		
# of spectral bands	1 – 254 (user selectable on the fly)		
Operating modes	Hyperspectral and multispectral		
Spectral sampling : bands	6.32nm : 246	12.64nm : 123	
Image rate	Up to 82 Hz (user selectable on the fly)		
Spatial swath (pixels)	315 pixels		
Focal length options	23 mm	18.5 mm	9 mm
FOV	24 degrees	29 degrees	56 degrees
Swath width	0.41 x altitude	0.51 x altitude	1.05 x altitude
Ground resolution @ 1,000 m altitude	1.31 m	1.62 m	3.34 m
Camera	Progressive scan MCT camera		
Output	14 bits digital		
Integration time	Selectable independent of image rate		
Shutter	Electromechanical shutter for dark background registration, user controllable by software.		







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SpecTIR Lotus™ Sensor

Sensor head	Typical specifications			
Spectrograph	High efficiency, low dispersion imaging spectrograph. Smile and keystone < 2 microns.			
Spectral range	400 – 960 nm			
Spectral resolution	2.3 – 20 nm*			
Slit width	30 microns			
# of spectral bands	1 – 64*			
Operating modes	Hyperspectral and multispectral, for high spatial resolution			
Spectral sampling : bands	8.8nm : 64	17.6nm : 32	35nm : 16	50nm : 11
Image rate	4 – 300+ Hz*			
Spatial swath (pixels)	1024 pixels			
Fore optics options				
Focal length	23 mm	18.5 mm	9 mm	
FOV	29.9 degrees	37.7 degrees	63 degrees	
IFOV	0.029 degrees	0.037 degrees	0.062 degrees	
Swath width	0.53 x altitude	0.68 x altitude	1.22 x altitude	
Ground resolution @ 1,000 m altitude	0.52 m	0.67 m	1.2 m	
Camera	High speed, high sensitivity CMOS camera			
Output	12 bits digital			
Integration time	Selectable independent of image rate			
Shutter	Electromechanical shutter for dark background registration, user controllable by software.			

*User configurable on the fly

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