

class of sensor	Aerial photography			Hyperspect	High Res. Sat.		Fine resolution optical satellite					Coarse res. optical satellite			Radar satellites					
	240 mm camera			Airborne	IKONOS/QuickBird		IRS		SPOT		Landsat	OrbView-1	NOAA	RADARSAT	ERS	JERS-1	ENVISAT	RADARSAT	ALOS	
	spectral mode				Pan	MS	Pan	MS	Pan	MS	reflective	reflective	reflective	MERIS	SAR	SAR	SAR	ASAR	SAR	PALSAR
sensor imaging characteristics																				
swath width (km)	1-10	1-10	1-10	1-10	60	60	60	60	60	60	185	2800	3000	575	50-500	100	75	50-500	50-500	70-360
spatial resolution (m)	0.1-1.0	0.1-1.0	0.1-1.0	1-10	1	4	10	20	10	20	30	1100	1100	300	10-100	25	18	6-100	6-100	10-100
image repeat with pointing (days)	1	1	1	1	5	5	5	5	5	5	N/A	1	1	3	3	31	N/A	3	3	3
image repeat with identical geometry (days)	1	1	1	1	N/A	N/A	24,25	24,25	26	26	16	16	N/A	35,16	24	31	44	35	24	46

Application	Drawbacks for each application																			
Base Mapping																				
Creation of base map information	ROW	ROAW	ROCW	PROCAW	WC	WC								DS	DS	DS	D	D	D	D
Inventory																				
Boundary and area	ROW	CROAW	CROAW	PWROCA	WC	WC								DS	DS	DS	D	D	D	P
Geomorphic setting	ROW	ROW	ROW	PWROCA	WC	WC								DS	DS	DS				
Land cover - Vegetation type	DROW	ROCAW	DROCAW	PROCA	C	C	D		D					DS	DS	DS	D	D	D	P
Vegetation condition	DROW	ROCAW	ROCAW	PROCA	C	C	D		D					DS	DS	DS	D	D	D	P
Land use	ROW	ROCAW	ROCAW	PROCA	C	C	D		D					DS	DS	DS	D	D	D	P
Water level	DROW	ROCAW	DROCAW	PROCA	C	C	D	D	D	D				DS	DS	DS	C			C
Chlorophyll and suspended sediment concentration, turbidity	DROW	ROCAW	ROCAW	AROC	DC	DC	D	D	D	D			S	DS	DS	S	D	D	D	D
Geog. context for mgmt. planning	RW	ROAW	ROAW	PAWROC	WC	WC								DS	DS	DS	D	D	D	P
Identification of current or potential problems	DRW	DRCA	RCA	WROCA	C	C							S	DS	DS	DS	D	D	D	P
National, regional, continental, and global inventories of wetlands	ROCW	ROCAW	ROCAW	PWROCA	WC	WC	W	W	W	W				DS	DS	DS	D	D	D	P
Assessment and Monitoring																				
Changes in area	RW	RCAW	RCAW	PAROC	AC	AC	A	A						DS	DS	DS	D	D	D	P
Change in land cover	DRW	RCAW	RCAW	AROC	AC	AC	DA	A	D			S	DS	DS	DS	DS	D	D	D	PA
Change in land use	RW	RAW	RAW	AROC	AC	AC	DA	A	D			S	DS	DS	DS	DS	D	D	D	PA
Change in water level	DRW	RCAW	RCAW	AROC	AC	AC	D	D	D	D				D	DS	DS	DS			
Changes chlorophyll, suspended sediment, turbidity	DRW	RW	DRAW	RCP	DC	DC	D	D	D	D		S	S	DS	S	D	D	D	D	D
Regional climatic change	DRCW	DRCAW	DRCW	ROC	AC	AC	A	A					A	D	A	D	D	D	D	P
impact assessment	DRW	RCAW	RCW	RCOP	AC	AC	D	S	D	S	S	DS	DS	DS	DS	D	D	D	D	P
Identify wetlands needing restoration	DRW	RCAW	RCAW	ROC	AC	AC	D	S	D	S	S	DS	DS	DS	DS	D	D	D	D	PA
Routine provision of condition for monitoring & mgmt	DRW	RCAW	RCAW	ROC	CW	CW	D		D			S	DS	DS	DS	D	D	D	D	P
Rapid reaction condition assessments	DRW	RW	RDW	ROC	CW	CW	D		D			S	DS	DS	DS	D	D	D	D	P
Change in biological, and physical condition	DRW	RAW	ROAW	PROC	CW	CW	DA	A	D			S	DS	DS	DS	D	D	D	D	PA
Cost effectiveness of restoration	RW	RAW	RAW	AROC	AC	AC	DA	A	D			S	DS	DS	DS	D	D	D	D	PA
Characterization of New Sites																				
Identification of potential new Ramsar sites	DRW	RAW	RAW	ROC	CW	CW	D		D					DS	DS	DS	D	D	D	P
Provision of case studies of new sites	DRW	RAW	RAW	ROC	C	C	D		D					DS	DS	DS	D	D	D	P
Public Information, Training and Characterization																				
Information for training to inventory, monitor, and manage wetlands	RW	RAW	RAW	ROC	C	C	D		D					DS	DS	DS	D	D	D	P
Case studies to build awareness in the community	RW	RCAW	RCAW	ROC	C	C	D		D					DS	DS	DS	D	D	D	P

Drawbacks (codes)

poor Discrimination of desired features; high Cost per km2; complex Processing for this application; no or limited Archive available; Require permission to obtain data (all airborne); data difficult or costly to Obtain; small Width of coverage