



Crew Earth Observations, An Early Science Project on the International Space Station

Sites for Increments 1-5

Earth Science and Image Analysis Laboratory, Johnson Space Center

Topic	Deltas	Coral Reefs	Urban Areas	Smog	El Niño Cycles, Rainfall	Glaciers and Ice Pack	Tectonic Processes	Moon/Mars Analogues	Water Diversions	Dynamic Events
Specific Sites	<ul style="list-style-type: none"> • Yellow River Delta, China • Yangtze River Delta, China • Irrawaddy Delta, Myanmar • Mekong Delta, Vietnam • Ganges Delta, India & Bangladesh • Nile Delta, Egypt • Mississippi-Atchafalaya Deltas, USA • Volga Delta, Russia 	<ul style="list-style-type: none"> • Tuamotu-Austral, French Polynesia • Tuamotu Archipelago, French Polynesia • American Samoa • Central Malaysia • Philippines 	<ul style="list-style-type: none"> • Bombay (Mumbai), India • Calcutta, India • Dhaka, Bangladesh • Hyderabad, India • Lahore, Pakistan • Shanghai, China • Houston-Galveston, TX 	<ul style="list-style-type: none"> • Northeastern U.S. • China • SubSaharan Africa • Europe 	<ul style="list-style-type: none"> • Lake Poopó, Bolivia • Lake Eyre, Australia • Central California • Nile-Lake Nasser, Egypt • Paraná River, Argentina • Somalia Coast • Tigris-Euphrates, Turkey 	<ul style="list-style-type: none"> • South Sandwich Islands Pack Ice Limits • Gulf of St. Lawrence Ice Accumulation and Icebergs • Canadian Rocky Mountain Glaciers • Chilean Glacier Field • Kilimanjaro tropical glacier • New Guinea Glaciers • High Central Andes Glaciers 	<ul style="list-style-type: none"> • Rukwa TransformTanzania • Mt. Kilimanjaro, Kenya • Rift Triple Junction, Ethiopia 	<ul style="list-style-type: none"> • Etosha Pan, Namibia • Lop Nur, China • Bosumtwi Crater, Ghana • Chiyli Crater, Kazakhstan • Presq'ile Crater, Quebec • Sudbury Crater, Ontario • Steinheim Crater, Germany • Vargeao Dome, Brazil • Pretoria Salt Pan, S. Africa • Jiddat al Harasis, Oman 	<ul style="list-style-type: none"> • Lake Nasser, Egypt • Three Gorges Dam, China • Tigris-Euphrates Reservoirs, Turkey 	<ul style="list-style-type: none"> • Volcanic eruptions • Hurricanes • Dust storms • Plankton blooms • Floods • Fires
Site objective	Map coastal changes	Reef maps	Map built-up areas in megacities	Presence or absence of pollution	Water levels, vegetation	Document snow, ice levels	Map faults; lava flows	Map and compare imagery	Map changes	Document dynamic process
Lens	110 mm broad view, 250 mm map strip	≥ 250 mm	250 mm	40 or 50 mm	110 mm regional, 250 mm detail	110 mm for context, 250 mm for detail	110mm context, 250 mm stereo mapping strips	250 mm and higher	110 mm context, 250 mm and higher	110mm for context, ≥250 mm for detail
Viewing Angle	Nadir	Nadir	Nadir	High oblique (include limb)	Nadir	Near nadir	Nadir	Nadir	Nadir	Nadir and oblique
Season(s)	Mar/Apr & Oct/Nov	Any	Any	Varies by site	All	All	Varies by site	Any	All	All
Maximum clouds	30%	20%	20%	50%	30%	50%	20%	20%	20%	N/A
Frequency	Once/season	Checklist	One low cloud image/ city	Once/ month during season	Once/ season	Once/ season	Once/ month during season	Checklist	Once/ season	As observed