PHOTOPLATES 1 - 4

- 1. Photograph showing the well forested northern and north-eastern flank of the E-Fan, Cingöz Formation. The apex is located to the right (north). In the foreground shelfal carbonates (Karaisali Formation) are exposed, followed by silty slope deposits (Kaplankaya Formation) which are largely eroded. The sandy E-Fan deposits are cliff-building (background). The cliffs reach approximately 200 m in hight in the north.
- 2. The main feeder channel (1) represents a mixed erosional-depositional system of mainly conglomeratic infill. The picture shows channel-fill facies from near the base of feeder channel (1) where R1-3 conglomerates (Lowe 1982) eroded into underlying R1-2 conglomerates (scale: 1m). Photograph courtesy of N. Satur).
- 3. Overlying feeder channel (1) deposits to the north (left) are thin-bedded, predominantly medium sand sized channel-mouth and levee deposits (a) gradually coarsening- and thickening-upward into thick-bedded, very coarse-grained sandstones to pebbly conglomerates of the lower channel-lobe transition zone (b).
- 4. View of the northern proximal lobe zone where thick-bedded, laterally extensive coarse-grained sandstones and pebbly sandstones are exposed along the east-facing side of the Karadönme Valley. This area was sourced from the NW-W (feeder channels 3 and 4) and downcurrent transport directions point to the SE-E (north to the right; scale: 140 m from track at base to top of hill).
- 5. The lobe package in the central section are composed of medium to thick-bedded, coarse to medium-grained sandstone beds (S_{1-3} of Lowe 1982). They are characterised by a high sand : shale ratio (7:1). Small-scale post-depositional deformation is rife throught the sandy basin-fill of the E-Fan (hammer for scale).
- 6. The associated interlobe deposits of the central section are typically composed of 1 15 cm thick, fine- to medium-grained sandstone beds (T_{b-d,e} of Bouma 19962). The sand : shale ratio is low (2:1). These interlobe deposits are seen to be onlapping a shale-rich debrite containing large floating clasts and deformed sandstone beds (arrow; hammer for scale).
- 7. Thick debris flow deposits are occasionally interbedded with the turbiditic fan sedimentation suggesting sporadic tectonic activity. Previously interpreted as mid-fan channel and levee deposits at Kuscusofolu Village (Gürbüz 1993) are reinterpreted to represent an 80 m thick debrite. A squeezed-out, chaotic shale-rich layer (a) containing deformed sandstone beds is overlain by an unroofing sequence of chaotic Cingöz channel-fill material (b), deformed, discontinuous package of sandstone beds (c) topped by a 35 m thick shale-dominated layer containing well-rounded floating clasts and shallow water fossils (d) typical of the Kaplankaya slope Formation. The debris flow is onlapped by lobe fringe deposits (e) which gradually thicken-upward into distinct lobe packages.



- 1. Detail of debris flow deposit at Kuscusofolu Village (plate 1.7) showing well-rounded clasts and shallow-water fossils embedded in chaotic silt matrix reminiscent of Kaplankaya slope deposits (hammer for scale).
- 2. The northwestern marginal E-Fan (W1) is dominated by coarse-grained turbiditic fan sediments (S_{1-3} of Lowe 1982) sporadically interbedded with shelf/slope-derived debrites. These debrites mainly contain (shelfal-) limestones, deformed clasts of Kaplankaya slope material and a few well-rounded, mostly ophiolitic cobbles in a chaotic, shale-dominated matrix with a high shallow-water fossil content. Finer-grained lobe fringe deposits (T_{b-d} of Bouma 1962) onlap debrite (hammer for scale).
- 3. Thick successions of thin-bedded, medium to fine-grained turbidite sandstones ($T_{(a)-d,e}$ of Bouma 1962) representing fan fringe sedimentation of the E-Fan dominate the western section (hammer for scale).
- 4. An approximately 10 m thick prominent, shale-rich debris flow marked by a chaotic matrix, few well-rounded floating clasts (arrow), fragments of deformed sandstone beds (arrow) and a high shallow-water fossil content indicating sporadic slope collapse following overloading and/or seismic activity is interbedded with fan fringe sedimentation (W2). A previous interpretation suggested these deposits to represent overbank/levee sedimentation (Gürbüz 1993).
- 5. Up to 4 m thick, massive very coarse to granule sandstones and small pebbly gravelstones (R_{2-3} , S_{1-3} of Lowe 1982) dominate the highly amalgamated sandstone package representing prograding western fan sand tongues *sensu* Satur (1999) into an area otherwise receiving fan fringe sedimentation at Cingöz Village (person for scale). These W-Fan deposits are characterised by a very high sand:shale ratio (30:1) and the coarseness of its deposits.
- 6. Groove casts and other solemarks are commonly observed at the bases of the individual beds of the sand tongues, eroding into the thin shales separating sandstone beds (compass for scale).
- 7. Associated with the coarse-grained W-Fan sand tongues are up to 15 m thick successions of very finely laminated shales (T_{d,e} of Bouma 1962; T₃ of Stow & Shanmugam 1980). These shales are distinctly finer-grained and contain a much lower net sand content then the recorded W-Fan fringe sedimentation (W3). Person for scale.
- 8. Along the Seyhan River in the east of the E-Fan, distal lobe deposits (a), lobe fringe (b) and interlobe deposits (c) are well exposed, forming laterally extensive sediment bodies at outcrop scale (person for scale). A gradual thinning- and fining upward from the lower lobe deposits towards the interlobe deposits is present, the latter are sharply overlain by the abrupt onset of renewed lobe sedimentation.



- 1. Fan turbidites (a) along the northwestern margin of the E-Fan onlap (arrow) the irregular topography of the laterally confining, approximately 8° angled slope (b) [Location Log C of fig. 2.13].
- 2. Abrupt pinch-out of fan sediments against the irregular slope topography is commonly observed along the northwestern margin. Shallow "slope pockets" are infilled by fan sediments resulting in a stepped contact. The underlying slope morphology appears to be a direct result of synsedimentary sliding and slumping of slope deposits triggered bei oversteepeing and/or seismic activity leaving an irregular topography behind. Debrites are occasional intercalated (arrow pointing at floating pebble) [Location Log B of fig. 2.13].
- 3. Syn- to postsedimentary movement along the fan-slope contact aggravates the infill-termination against the steep slope (hammer for scale).
- 4. a) Along the northeastern margin, close to Capikare Village, up to 12 m thick slumped fan sediments overlie the slope. The presence of slumps indicates a certain amount of upslope transport and deposition above the active fan surfaces allowing for semi-lithified deposits to subsequently slump down onto the fan. The outcrops is located in a fault-displaced slab of Cingöz fan deposits north of the main fan [Location 2b of fig. 2.10).

b) Line drawing emphasising the irregular slope topography (dashed line) and the bedding disorder within the Kaplankaya slope formation (b). Fan deposits overlying the slumped package (a) display irregular thickness distribution suggesting compensation of the underlying relief. Telephone posts for scale: hight approximately 4 m.

- 5. The photograph shows a thick montone Kaplankaya slope succession (1) at the bottom, succeeded by a lenticular debrites (2) and mixed calci-clastic turbidites (3) infilling a shallow slope gully geometry, just before the onset of clastic fan turbidite sedimentation (4). The basal fan turbidites display dramatic thickness decrease towards their pinch-out, possibly as a result of the underlying topography [Location Log A of fig. 2.13].
- 6. Detail of the slope gully infill showing at least 2 debrites separated by lensing mixed calci-clastic turbidites of shelf/slope origin. The basal debris flow showing large floating clasts (arrow) in a chaotic shaley matrix (hammer for scale).



- 1. Picture showing the lower, well exposed part of the channel-lobe transition zone. Extensive, highly amalgamated sandstones and pebbly sandstones of lobe A deposits dominate the lower part of the section while the conglomeratic channeling component with its abundant cut- and fill structures and pinching out geometries are cliff-building. A laterally extensive, low angle unconformity lies at the base of the cliff. Throughout, the net sand content is very high, shales are only preserved as clasts within conglomerates. Lines 1 to 4 indicate position of logs of fig. 2.18.
- 2. Multiple infill of a small, shallow cut- and fill structure within the channelig component (scale: 1 m showing at least 3 erosional-depositional stages (arrows) represented by 1) pebbly conglomerate (R_1 of Lowe 1982), 2) coarse-grained sandstone and a fining-upward of a pebbly cobbly conglomerate (R_1) into a coarse-grained sandstone ($R_1S_{1,2}$).
- 3. a) A basal cut- and fill structure showing a near symmetrical 3-stage gravelly-sandstone couplets (a,b) and gravelly sandstone infill (c) *sensu* Ghibaudo (1992) which is cut by a laterally extensive low angle unconformity (d) located in the lower channel-lobe transition zone. The unconformity can be traced over 40 m and is believed to result from mega-scale scouring typical of channel-lobe transition zones (Mutti & Normark 1987). The unconformity is overlain by R₁₋₃ conglomeratic channelig deposits, exhibiting massive bases and crudely stratified topses can be classed as deposits (Lowe 1982), exhibiting massive bases and crudely stratified tops.

b) Line drawing depicting the erosional surfaces (a-d).

- 4. The bulk of the channel-lobe transition zone is made up of laterally extensive, thick, parallel-bedded sandstones (S₁₋₃ of Lowe 1982) which form up to 30 m thick lobe A deposits (scale: 1 m). The sediments are highly amalgamated, shale partings and or/shale beds are rarely observed. Bedding irregularities result from basal scouring. The irregular bed thickness results from basal scouring (arrows).
- 5. Amalgamation and traction carpets are abundant within the lobe A deposits (hammer for scale). The amalgamation planes almost never contain shale partings. Inclined traction structures as seen in the picture may be delineated by small pebbles (arrows).
- 6. Within the lobe A deposits, sandstones beds very rarely fine upward to fine-sand size (pencil for scale). Small clay chips are present and coalified material and plant debris delineate fine lamination at the very top of the bed (S₁₋₃, T_d of Lowe 1982 and Bouma 1962).
- 7. The oblique plan view of a scour reveals shallow scouring and a pebbly to cobbly, matrix-supported conglomeratic infill (R₁ of Lowe 1982; hammer for scale). The maximum clast size present is 12 cm. Scours in plan view are commonly observed on the bed surfaces within the channeling component, however, pervasive coating by lichens and weathering (foreground) are frequent.

