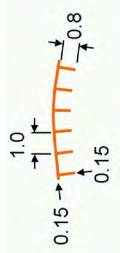
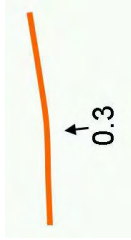
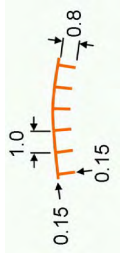
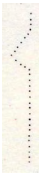
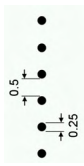
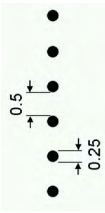
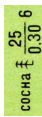
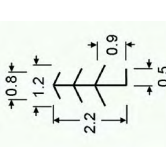
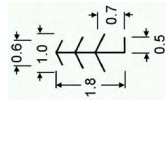
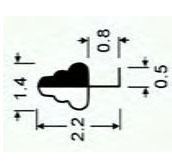
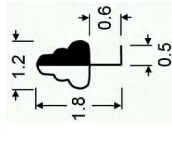
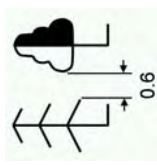
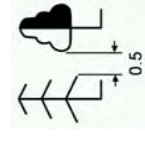


# The List of Map Symbols for Digitization (7) RELIEF 起伏

| RELIEF 起伏 |          |    |      |                                                                                       |                                                                                       |                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                            |      |
|-----------|----------|----|------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| F         | Code No. |    |      | 1/25,000                                                                              | 1/100,000                                                                             | Name                                                                                                                                                                                   | Specification                                                                                                                                                                                                                                                                                                                              | Type |
|           | L        | S  | Fig. |                                                                                       |                                                                                       |                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                            |      |
| 236       | 51       | 25 | 01   |    |    | Canyons and gullies<br>Овраги и промоины (118)<br>峡谷および雨裂                                                                                                                              | Acquire as line data with note that symbol generate in right side for forward.<br>Приобретается как данные линии с пометкой, что условный знак производится в правой стороне для направления.<br>記号が進行方向右側に派生すること意識して線で取得。                                                                                                                 | L    |
| 236       | 51       | 25 | 02   |    |    | The same as above<br>同上                                                                                                                                                                | Codes of both double and single line are identical.<br>Коды для двух двойной и простой линий идентичны.<br>二条、一条とも同一コード<br>Acquire correspond area as line data.<br>Приобретается соответствующая область как данные линии.<br>該当箇所を線で取得。                                                                                                  | L    |
| 237       | 51       | 26 | 01   |  |  | 1) Escarpments<br>1) Обрывы<br>1) 崖<br>2) Reinforced steps on the parts of terraced slopes<br>2) Укрепленные уступы полей на террасированных участках склонов<br>2) 階段化された斜面の地区で補強された段 | Identical codes are used for both 1) and 2).<br>Идентичные коды используются для 1) и 2).<br>1)、2)とも同一コードを使用<br>Acquire as line data with note that symbol generate in right side for forward.<br>Приобретается как данные линии с пометкой, что условный знак производится в правой стороне для направления.<br>記号が進行方向右側に派生すること意識して線で取得。 | L    |

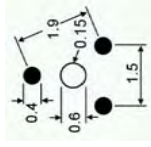
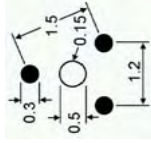
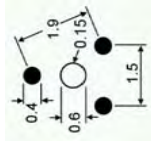
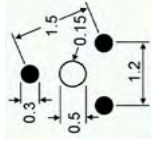
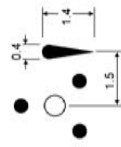
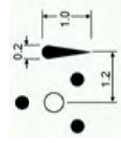
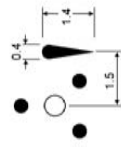
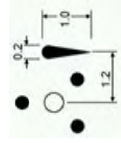
# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Vegetation Covers and Soils<br>植物被覆および土壌 |          |    |      |                                                                                                                 |                                                                                                                 |                                                                                                                        |                                                                                                            |  |                                                                                                                                                                                                                  | Type          |
|------------------------------------------|----------|----|------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| F                                        | Code No. |    |      | 1/25,000                                                                                                        |                                                                                                                 |                                                                                                                        | 1/100,000                                                                                                  |  | Name                                                                                                                                                                                                             | Specification |
|                                          | L        | S  | Fig. |                                                                                                                 |                                                                                                                 |                                                                                                                        |                                                                                                            |  |                                                                                                                                                                                                                  |               |
| 238                                      | 61       | 01 | 01   |                              |                              |                                      | Boundaries of vegetation covers and soils<br>Контуры растительного покрова и грунтов (121)<br>植物被覆および土壌の輪郭 |  | Acquire correspond part as line data.<br>Приобретается соответствующая часть как данные линии.<br>該当箇所をラインで取得。                                                                                                   | L             |
| 239                                      | 61       | 02 | 01   |                              |                              |                                      | On coloured map<br>На красочном оттиске<br>色刷り図上<br>1) Forests<br>1) Леса (122)<br>1) 森林                   |  | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used.<br>Границу другого объекта или линии необходимо использовать.<br>必ず、他の地物の線を利用すること。 | Pg            |
| 240                                      | 61       | 03 | 01   | <br>сосна 25 6<br>0.30       | <br>сосна 25 6<br>0.30       | <br>0.6<br>1.0<br>1.8<br>0.7<br>0.5 | Predominate species among trees in the forest<br>Преобладающие породы деревьев в лесу (122)<br>森林内の卓越樹種    |  | Allocate symbol at correspond place.<br>Размещение условного знака в соответствующем месте.<br>該当箇所に記号を配置。<br>Express without annotation.<br>Выражается без аннотации.<br>注記は併記しない。                              | Pt            |
| 240                                      | 61       | 03 | 02   | <br>клен 25 6<br>0.30      | <br>клен 25 6<br>0.30      | <br>1.2<br>1.8<br>0.6<br>0.5      | The same as above<br>同上                                                                                    |  | Allocate symbol at correspond place.<br>Размещение условного знака в соответствующем месте.<br>該当箇所に記号を配置。<br>Express without annotation.<br>Выражается без аннотации.<br>注記は併記しない。                              | Pt            |
| 240                                      | 61       | 03 | 03   | <br>ель 25 6<br>бер. 24 14 | <br>ель 25 6<br>бер. 18 10 | <br>0.6<br>0.5                    | The same as above<br>同上                                                                                    |  | Allocate symbol at correspond place.<br>Размещение условного знака в соответствующем месте.<br>該当箇所に記号を配置。<br>Express without annotation.<br>Выражается без аннотации.<br>注記は併記しない。                              | Pt            |

# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Vegetation Covers and Soils 植物被覆および土壌 |          |    |      |           |          |           |
|---------------------------------------|----------|----|------|-----------|----------|-----------|
| F                                     | Code No. |    |      | 1/100,000 | 1/25,000 | 1/100,000 |
|                                       | L        | S  | Fig. |           |          |           |
| 241                                   | 61       | 04 | 01   |           |          |           |
| 245                                   | 61       | 05 | 01   |           |          |           |
| 248                                   | 61       | 06 | 01   |           |          |           |
| 250                                   | 61       | 07 | 01   |           |          |           |

# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Vegetation Covers and Soils 植物被覆および土壌 |          |    |      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                            |                                                                                                                                                                                                                                                                                                   |    |
|---------------------------------------|----------|----|------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| F                                     | Code No. |    |      | 1/25,000                                                                              |                                                                                       |                                                                                       | 1/100,000                                                                             |                                                                            |                                                                                                                                                                                                                                                                                                   |    |
|                                       | L        | S  | Fig. |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                            |                                                                                                                                                                                                                                                                                                   |    |
| 253                                   | 61       | 08 | 01   |    |    |    |    | Shrubs<br>Кустарники<br>灌木                                                 | Acquire as point data.<br>Приобретается как данные точки.<br>ポイントで取得。                                                                                                                                                                                                                             | Pt |
| 253                                   | 61       | 08 | 02   |    |    |    |    | The same as above<br>同上<br>On colored map<br>На красочном оттиске<br>色刷り図上 | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol “810801”<br>Добавляется условный знак “810801”<br>面シンボル 810801 を配置する。 | Pg |
| 254                                   | 61       | 09 | 01   |    |  |    |  | Thorny bushes<br>Колочие кустарники: (126)<br>有刺灌木                         | Acquire as point data.<br>Приобретается как данные полигона.<br>ポイントで取得。                                                                                                                                                                                                                          | Pt |
| 254                                   | 61       | 09 | 02   |  |  |  |  | The same as above<br>同上                                                    | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol “810901”<br>Добавляется условный знак “810901”<br>面シンボル 810901 を配置する。 | Pg |

# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Code No. |    |    |      | Vegetation Covers and Soils 植物被覆および土壌 |           | Name                                                                                                    | Specification                                                                                                                                                                                                                                                                                     | Type |
|----------|----|----|------|---------------------------------------|-----------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| F        | L  | S  | Fig. | 1/25,000                              | 1/100,000 |                                                                                                         |                                                                                                                                                                                                                                                                                                   |      |
| 255      | 61 | 10 | 01   |                                       |           | Species of shrubs<br>Породы кустарников: (126)<br>灌木の樹種<br>1) Needle-leaf trees<br>1) Хвойные<br>1) 針葉樹 | Allocate symbol at correspond place.<br>Размещение условного знака в соответствующем месте.<br>該当箇所に記号を配置。<br>Express without annotation.<br>Выражается без аннотации.<br>注記は併記しない。                                                                                                               | Pt   |
| 255      | 61 | 10 | 02   |                                       |           | The same as above<br>同上<br>2) Broad leaf<br>2) Лиственные<br>2) 広葉樹                                     | Allocate symbol at correspond place.<br>Размещение условного знака в соответствующем месте.<br>該当箇所に記号を配置。<br>Express without annotation.<br>Выражается без аннотации.<br>注記は併記しない。                                                                                                               | Pt   |
| 256      | 61 | 11 | 01   |                                       |           | Narrow shrub belts and hedges<br>Узкие полосы кустарников и живые изгороди (123)<br>狭い灌木帯および生垣          | Acquire correspond part as line data.<br>Приобретается соответствующая часть как данные линии.<br>該当箇所をラインで取得。                                                                                                                                                                                    | L    |
| 258      | 61 | 12 | 01   |                                       |           | Creeping shrubs<br>Стланик (126)<br>匍匐性の灌木                                                              | Acquire as point data.<br>Приобретается как данные точки.<br>ポイントで取得。                                                                                                                                                                                                                             | Pt   |
| 258      | 61 | 12 | 02   |                                       |           | The same as above<br>同上                                                                                 | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol "811201"<br>Добавляется условный знак "811201"<br>面シンボル 811201 を配置する。 | Pg   |

# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

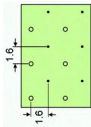
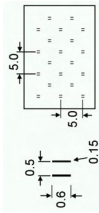
| Vegetation Covers and Soils 植物被覆および土壌 |          |    |      |          |           |                                                                       |                                                                                                                                                                                                                                                                                                   |      |
|---------------------------------------|----------|----|------|----------|-----------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| F                                     | Code No. |    |      | 1/25,000 | 1/100,000 | Name                                                                  | Specification                                                                                                                                                                                                                                                                                     | Type |
|                                       | L        | S  | Fig. |          |           |                                                                       |                                                                                                                                                                                                                                                                                                   |      |
| 261                                   | 61       | 13 | 01   |          |           | Fruits and citrus gardens<br>Фруктовые и цитрусовые сады<br>果樹園および柑橘園 | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol “811301”<br>Добавляется условный знак “811301”<br>面シンボル 811301 を配置する。 | Pg   |
|                                       |          |    |      |          |           |                                                                       |                                                                                                                                                                                                                                                                                                   |      |
| 262                                   | 61       | 14 | 01   |          |           | 1) Vineyards<br>1) Виноградники (128)<br>1) 葡萄園                       | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol “811401”<br>Добавляется условный знак “811401”<br>面シンボル 811401 を配置する。 | Pg   |
|                                       |          |    |      |          |           |                                                                       |                                                                                                                                                                                                                                                                                                   |      |

# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Vegetation Covers and Soils 植物被覆および土壌 |          |    |      |          |           |                                                                                                                                                                                                                                                                                                   |
|---------------------------------------|----------|----|------|----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| F                                     | Code No. |    |      | 1/25,000 | 1/100,000 | Type                                                                                                                                                                                                                                                                                              |
|                                       | L        | S  | Fig. |          |           |                                                                                                                                                                                                                                                                                                   |
| 262                                   | 61       | 14 | 02   |          |           | 2) Fruits and citrus gardens with vineyards<br>2) Фруктовые и цитрусовые сады с виноградарниками<br>2) 葡萄園を伴う果樹園および柑橘園                                                                                                                                                                            |
|                                       |          |    |      |          |           | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol "811402"<br>Добавляется условный знак "811402"<br>面シンボル 811402 を配置する。 |
| 263                                   | 61       | 15 | 01   |          |           | 1) Berry gardens (gooseberry, strawberry, etc.)<br>1) Ягодные сады (смородина, малина и др.) (128)<br>1) 漿果園 (すぐり、えぞいちご、その他)                                                                                                                                                                      |
|                                       |          |    |      |          |           | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol "811501"<br>Добавляется условный знак "811501"<br>面シンボル 811501 を配置する。 |



# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

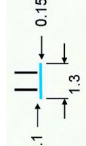
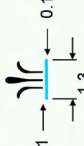
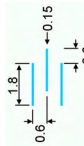
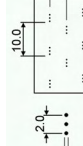
| Vegetation Covers and Soils 植物被覆および土壌 |          |    |      |                                                                                     |                                                                                     |                                                                        |                                                                                                                                                                                                                                                                                                   |    |
|---------------------------------------|----------|----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| F                                     | Code No. |    | Fig. | 1/100,000                                                                           |                                                                                     | Type                                                                   |                                                                                                                                                                                                                                                                                                   |    |
|                                       | L        | S  |      |                                                                                     |                                                                                     |                                                                        |                                                                                                                                                                                                                                                                                                   |    |
| 263                                   | 61       | 15 | 02   |  |  | 2) Fruits-berry gardens<br>2) Фруктово-ягодные сады (128)<br>2) 果樹一漿果園 | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol "811502"<br>Добавляется условный знак "811502"<br>面シンボル 811502 を配置する。 | Pg |
|                                       | 61       | 16 | 01   |  |   | Herbal plants<br>Травянистая растительность (130)<br>草本植生              | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol "811601"<br>Добавляется условный знак "811601"<br>面シンボル 811601 を配置する。 | Pg |



The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Vegetation Covers and Soils 植物被覆および土壌 |          |    |      |          |  |           |  |                                                                                         |                                                                                                                                                                                                                                                                                                   |      |
|---------------------------------------|----------|----|------|----------|--|-----------|--|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| F                                     | Code No. |    |      | 1/25,000 |  | 1/100,000 |  | Name                                                                                    | Specification                                                                                                                                                                                                                                                                                     | Type |
|                                       | L        | S  | Fig. |          |  |           |  |                                                                                         |                                                                                                                                                                                                                                                                                                   |      |
| 266                                   | 61       | 16 | 02   |          |  |           |  | The same as above<br>同上                                                                 | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol “811602”<br>Добавляется условный знак “811602”<br>面シンボル 811602 を配置する。 | Pg   |
| 266                                   | 61       | 16 | 03   |          |  |           |  | Herbal plants<br>Травянистая растительность (130)<br>草本植生                               | Acquire as point data.<br>Приобретается как данные точки.<br>ポイントで取得。                                                                                                                                                                                                                             | Pt   |
| 266                                   | 61       | 16 | 05   |          |  |           |  | Herbal plants<br>Травянистая растительность (130)<br>草本植生                               | Acquire as point data.<br>Приобретается как данные точки.<br>ポイントで取得。                                                                                                                                                                                                                             | Pt   |
| 267                                   | 61       | 17 | 01   |          |  |           |  | Reeds and other species bushes<br>Камышовые и тростниковые заросли (130)<br>だんちく叢およびあし叢 | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol “811701”<br>Добавляется условный знак “811701”<br>面シンボル 811701 を配置する。 | Pg   |

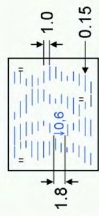
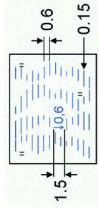
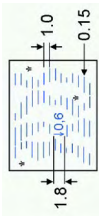
# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Vegetation Covers and Soils 植物被覆および土壌 |    |    |          |                                                                                      |                                                                                       |                                                                                       |                                                                                                                  |                                                                                                                                                                                                                                                                                                   |               |    |      |
|---------------------------------------|----|----|----------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|------|
| Code No.                              |    |    | 1/25,000 |                                                                                      | 1/100,000                                                                             |                                                                                       | Name                                                                                                             |                                                                                                                                                                                                                                                                                                   | Specification |    | Type |
| F                                     | L  | S  | Fig.     |                                                                                      |                                                                                       |                                                                                       |                                                                                                                  |                                                                                                                                                                                                                                                                                                   |               |    |      |
| 267                                   | 61 | 17 | 02       |   |                                                                                       |    | Reeds and other species bushes<br>Камышовые и тростниковые заросли (130)<br>だんちく叢およびあし叢                          | Acquire as point data.<br>Приобретается как данные точки.<br>ポイントで取得。                                                                                                                                                                                                                             | Pt            |    |      |
| 268                                   | 61 | 18 | 01       |   |                                                                                       |    | Marshes, not expressed in the map scale<br>Мочажинки, не выражающиеся в масштабе карты (130):<br>地図の縮尺で表示されない、湿地 | Allocate symbol at correspond place.<br>Размещение условного знака в соответствующем месте.<br>該当箇所に記号を配置。                                                                                                                                                                                        | Pt            |    |      |
| 268                                   | 61 | 18 | 02       |   |    |    | The same as above<br>同上                                                                                          | Allocate symbol at correspond place.<br>Размещение условного знака в соответствующем месте.<br>該当箇所に記号を配置。                                                                                                                                                                                        | Pt            |    |      |
| 268                                   | 61 | 18 | 03       |   |    |    | The same as above<br>同上                                                                                          | Allocate symbol at correspond place.<br>Размещение условного знака в соответствующем месте.<br>該当箇所に記号を配置。                                                                                                                                                                                        | Pt            |    |      |
|                                       |    |    |          |                                                                                      |                                                                                       |                                                                                       |                                                                                                                  | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol "811901"<br>Добавляется условный знак "811901"<br>面シンボル 811901 を配置する。 |               | Pg |      |
| 269                                   | 61 | 19 | 01       |  |  |  | 1) Steppe (herbal) plants<br>1) Степная (травянистая) растительность (130)<br>1) ステップ (草本) 植生                    |                                                                                                                                                                                                                                                                                                   |               |    |      |

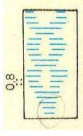
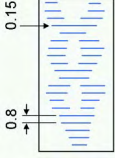
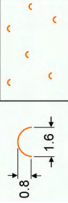
# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Code No. |    |    |      | Vegetation Covers and Soils<br>植物被覆および土壌 |           |                                                                                                                             | Type                                                                                                                                                                                                                                                                                              |    |
|----------|----|----|------|------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| F        | L  | S  | Fig. | 1/25,000                                 | 1/100,000 | Name                                                                                                                        |                                                                                                                                                                                                                                                                                                   |    |
| 269      | 61 | 19 | 02   |                                          |           | 2) Semi-shrubs (mugwort, wormwood and others)<br>2) Полукустарники (полынь, терескен и др.) (130)<br>2) 半灌木 (よもぎ、にがよもぎ、その他) | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol "811902"<br>Добавляется условный знак "811902"<br>面シンボル 811902 を配置する。 | Pg |
| 269      | 61 | 19 | 03   |                                          |           | 1) Steppe (herbal) plants<br>1) Степная (травянистая) растительность<br>1) ステップ (草本) 植生                                     | Allocate symbol at correspond place.<br>Размещение условного знака в соответствующем месте.<br>該当箇所に記号を配置。                                                                                                                                                                                        | Pt |
| 269      | 61 | 19 | 04   |                                          |           | 2) Semi-shrubs (mugwort, wormwood and others)<br>2) Полукустарники (полынь, терескен и др.)<br>2) 半灌木 (よもぎ、にがよもぎ、その他)       | Allocate symbol at correspond place.<br>Размещение условного знака в соответствующем месте.<br>該当箇所に記号を配置。                                                                                                                                                                                        | Pt |

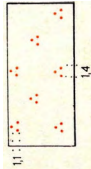
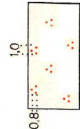
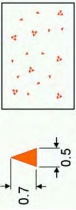
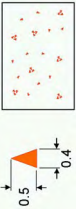
# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Vegetation Covers and Soils |          |    |      |                                                                                       | 植物被覆および土壌                                                                             |                                                                                      |                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                          |      |
|-----------------------------|----------|----|------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| F                           | Code No. |    |      | 1/100,000                                                                             | 1/25,000                                                                              | 1/100,000                                                                            | Name                                                                                                                                               | Specification                                                                                                                                                                                                                                                                                                                                                            | Type |
|                             | L        | S  | Fig. |                                                                                       |                                                                                       |                                                                                      |                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                          |      |
| 272                         | 61       | 20 | 01   |    |    |    | Passable swamps<br>Болота проходимые (131)<br>通過可能な沼沢地<br>(0.6 is depth of swamp in meters)<br>(0.6 – глубина болота в метрах)<br>(0.6 は沼の深さ、メートル) | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Down arrow is not needed.<br>Нижняя стрелка не нужна.<br>注記の下矢印は不要。<br>Add symbol “812001”<br>Добавляется условный знак “812001”<br>面シンボル 812001 を配置する。 | Pg   |
| 272                         | 61       | 20 | 02   |  |  |  | The same as above<br>同上                                                                                                                            | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Down arrow is not needed.<br>Нижняя стрелка не нужна.<br>注記の下矢印は不要。<br>Add symbol “812002”<br>Добавляется условный знак “812002”<br>面シンボル 812002 を配置する。 | Pg   |

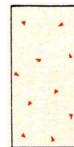
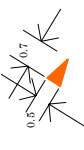
# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Vegetation Covers and Soils 植物被覆および土壌 |          |    |      |                                                                                     |                                                                                     |                                                                                                                                             |                                                                                                                                                                                                                                                                                                   |      |               |      |
|---------------------------------------|----------|----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------|------|
| F                                     | Code No. |    |      | 1/25,000                                                                            |                                                                                     | 1/100,000                                                                                                                                   |                                                                                                                                                                                                                                                                                                   | Name | Specification | Type |
|                                       | L        | S  | Fig. |                                                                                     |                                                                                     |                                                                                                                                             |                                                                                                                                                                                                                                                                                                   |      |               |      |
| 274                                   | 61       | 21 | 01   |  |  | Passable solonchak<br>Солончаки проходимые (131)<br>通過可能なソロンチャーク                                                                            | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol “812101”<br>Добавляется условный знак “812101”<br>面シンボル 812101 を配置する。 | Pg   |               |      |
|                                       |          |    |      |                                                                                     |                                                                                     |                                                                                                                                             |                                                                                                                                                                                                                                                                                                   |      |               |      |
| 277                                   | 61       | 22 | 01   |  |  | Surfaces with hills, not expressed in the map scale<br>Поверхности с буграми, не выражающиеся в масштабе карты (134)<br>地図の縮尺で表現されない、丘をもつ地表 | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol “812201”<br>Добавляется условный знак “812201”<br>面シンボル 812201 を配置する。 | Pg   |               |      |
|                                       |          |    |      |                                                                                     |                                                                                     |                                                                                                                                             |                                                                                                                                                                                                                                                                                                   |      |               |      |

# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Vegetation Covers and Soils 植物被覆および土壌 |          |    |      |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                    |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                   |
|---------------------------------------|----------|----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| F                                     | Code No. |    |      | 1/25,000                                                                            |                                                                                     | 1/100,000                                                                           |                                                                                     | Name                                                                               | Specification                                                                                                                                                                                                                                                                                     | Type                                                                                                                                                                                                                                                                                              |
|                                       | L        | S  | Fig. |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                    |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                   |
| 279                                   | 61       | 23 | 01   |  |  |  |   | Hilly surfaces<br>Кочковатые поверхности<br>小丘の多い地表                                | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol “812301”<br>Добавляется условный знак “812301”<br>面シンボル 812301 を配置する。 | Pg                                                                                                                                                                                                                                                                                                |
|                                       | 280      | 61 | 24   | 01                                                                                  |  |  |  |  | 1) Stony dispersions and angular stone surfaces<br>1) Каменистые россыпи и щебеночные поверхности (136)<br>1) 岩石の散積および角礫の地表                                                                                                                                                                       | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol “812401”<br>Добавляется условный знак “812401”<br>面シンボル 812401 を配置する。 |

# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

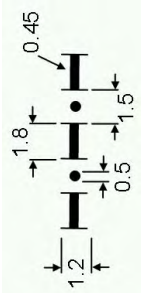
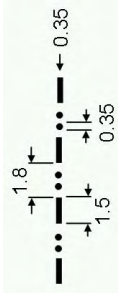
| Vegetation Covers and Soils 植物被覆および土壌 |          |    |      |                                                                                      |                                                                                      |                                                                                      |                                                                                                                                           |                                                                                                                                                                                                                                                                                                |      |
|---------------------------------------|----------|----|------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| F                                     | Code No. |    |      | 1/100,000                                                                            | 1/25,000                                                                             | 1/100,000                                                                            | Name                                                                                                                                      | Specification                                                                                                                                                                                                                                                                                  | Type |
|                                       | L        | S  | Fig. |                                                                                      |                                                                                      |                                                                                      |                                                                                                                                           |                                                                                                                                                                                                                                                                                                |      |
| 280                                   | 61       | 24 | 02   |   |   |   | 2) Stony surfaces (outcrops of monolithic strata)<br>2) Каменные поверхности (выходы монокристаллических пород) (137)<br>2) 岩石の地表（一枚岩の露頭） | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать. 必ず、他の地物の線を利用すること。<br>Add symbol “812402”<br>Добавляется условный знак “812402”<br>面シンボル 812402 を配置する。 | Pg   |
|                                       | 61       | 24 | 03   |   |   |   | The same as code 61-24-01<br>Каменные россыпи и щебеночные поверхности<br>岩石の散積および角礫の地表                                                   | Allocate rotate symbol at correspond place.<br>Размещение вращения условного знака в соответствующем месте. 該当箇所に回転記号を配置。                                                                                                                                                                      | Pt   |
| 280                                   | 61       | 24 | 04   |  |  |  | The same as code 61-24-02<br>Каменные поверхности (выходы монокристаллических пород)<br>岩石の地表（一枚岩の露頭）                                     | Allocate rotate symbol at correspond place.<br>Размещение вращения условного знака в соответствующем месте. 該当箇所に回転記号を配置。                                                                                                                                                                      | Pt   |



# The List of Map Symbols for Digitization (8) Vegetation Covers and Soils 植物被覆および土壌

| Vegetation Covers and Soils 植物被覆および土壌 |          |    |      |                                                                                       | Type                                                                                                                                                                                                                                                                                              |    |
|---------------------------------------|----------|----|------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| F                                     | Code No. |    |      | Name                                                                                  | Specification                                                                                                                                                                                                                                                                                     |    |
|                                       | L        | S  | Fig. |                                                                                       |                                                                                                                                                                                                                                                                                                   |    |
| 281                                   | 61       | 25 | 01   | Conglomerate and gravel surfaces<br>Гравеличные и гравийные поверхности<br>礫岩および砂利の地表 | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol "812501"<br>Добавляется условный знак "812501"<br>面シンボル 812501 を配置する。 | Pg |
|                                       |          |    |      |                                                                                       |                                                                                                                                                                                                                                                                                                   |    |
|                                       |          |    |      |                                                                                       |                                                                                                                                                                                                                                                                                                   |    |
|                                       |          |    |      |                                                                                       |                                                                                                                                                                                                                                                                                                   |    |
| 284                                   | 61       | 26 | 01   | Sandy flats<br>Пески ровные (138)<br>砂質平地                                             | Acquire as polygon data.<br>Приобретается как данные полигона.<br>ポリゴンで取得。<br>Other object boundary or line needs to be used<br>Границу другого объекта и линии необходимо использовать.<br>必ず、他の地物の線を利用すること。<br>Add symbol "812601"<br>Добавляется условный знак "812601"<br>面シンボル 812601 を配置する。 | Pg |
|                                       |          |    |      |                                                                                       |                                                                                                                                                                                                                                                                                                   |    |
|                                       |          |    |      |                                                                                       |                                                                                                                                                                                                                                                                                                   |    |
|                                       |          |    |      |                                                                                       |                                                                                                                                                                                                                                                                                                   |    |

# The List of Map Symbols for Digitization (9) Boundaries 境界

| Boundaries 境界 |          |    |      |                                                                                       |                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                    |      |
|---------------|----------|----|------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| F             | Code No. |    |      | 1/100,000                                                                             | Name                                                                                                                                                                                                                                                                                   | Specification                                                                                                                                                                                                                                                                      | Type |
|               | L        | S  | Fig. |                                                                                       |                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                    |      |
| 310           | 71       | 01 | 01   |    | National boundaries<br>Границы государственных (141, 142)<br>国境                                                                                                                                                                                                                        | Zone colour filling is not applied.<br>Зона заполнения цветом не используется.<br>帯状の色塗りは不採用。<br>Acquire correspond part as line data.<br>Приобретается соответствующая часть как данные линии.<br>該当箇所をラインで取得。                                                                    | L    |
| 310           | 71       | 01 | 02   |    |                                                                                                                                                                                                                                                                                        | Control points combined as part of national boundaries are expressed with code 11-02-01.<br>Контрольные точки объединенные как часть государственной границы выражаются кодом 11-02-01.<br>三角点の場合、三角点のシンボルを配置。<br>Others are not applied.<br>Другие не используются.<br>それ以外は、不採用。 |      |
| 310           | 71       | 01 | 03   |   |                                                                                                                                                                                                                                                                                        | Reject<br>Негодный.<br>不採用                                                                                                                                                                                                                                                         |      |
| 313           | 71       | 02 | 01   |  | Boundaries of Soviet Socialist Autonomous Republics, regions, oblast's and administrative units of the first order on foreign territory<br>Границы АССР, краев, областей и административных единиц 1-го порядка на иностранной территории (142)<br>自治ソビエト社会主義共和国、地方、州および外国の第一序列行政単位の境界 | Acquire correspond part as line data.<br>Приобретается соответствующая часть как данные линии.<br>該当箇所をラインで取得。                                                                                                                                                                     | L    |

The List of Map Symbols for Digitization (9) Boundaries 境界

| F   | Code No. |    |      | Boundaries 境界                                                                       |                                                                                     | Type                                                                                       |                                                                                                                   |   |
|-----|----------|----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---|
|     | L        | S  | Fig. | 1/100,000                                                                           | Name                                                                                |                                                                                            |                                                                                                                   |   |
| 315 | 71       | 03 | 01   |  |  | Boundaries of national preserves<br>Границы государственных заповедников (143)<br>国定禁猟区の境界 | Acquire correspond part as line data.<br>Приобретается соответствующая<br>часть как данные линии.<br>該当箇所をラインで取得。 | L |

#### **ПРИЛОЖЕНИЕ 4 ---- Отчет о маршрутах полетов**

**AP "KAZAVIASPAS"**  
**JICA**

**THE STUDY ON INTEGRATED  
DEVELOPMENT PLAN OF ISSYK – KUL  
ZONE IN THE KYRGYZ REPUBLIC**

**FLIGHT REPORT # 1**  
Project Designate – J

|                      |                          |                                   |                            |                       |
|----------------------|--------------------------|-----------------------------------|----------------------------|-----------------------|
| The date of exposure | Aircraft number<br>An-30 | Height above mean<br>sea level, m | Weather<br>condition, etc. | The number<br>of film |
| 7,10/07/2004         | 30 038                   | 5 600-7 000                       | Fine                       | 1                     |

| The serial number of<br>camera,<br>TAFa – 10 | # magazine | # lens | The calibrated<br>focal length,<br>mm | Lens aperture | Filter             | Shutter speed,<br>s | Type<br>of film |
|----------------------------------------------|------------|--------|---------------------------------------|---------------|--------------------|---------------------|-----------------|
| № 30591212                                   | 10/1       | 3011   | 100,674                               | 9,5           | JS - 18<br>(ЖС-18) | 1/250<br>1/300      | 42L<br>(T-42Л)  |

| Line # | The time of the first of<br>each run, UTC | Pict. # | The time last exposure of each<br>run, UTC | Pict. # | Remarks    |
|--------|-------------------------------------------|---------|--------------------------------------------|---------|------------|
| 16     | 5 <sup>h</sup> 25 <sup>m</sup>            | 1A      | 5 <sup>h</sup> 37 <sup>m</sup>             | 32A     | 07/07/2004 |
| 15     | 5 <sup>h</sup> 43 <sup>m</sup>            | 1A      | 5 <sup>h</sup> 47 <sup>m</sup>             | 16A     | ””         |
| 14     | 5 <sup>h</sup> 47 <sup>m</sup>            | 1A      | 5 <sup>h</sup> 50 <sup>m</sup>             | 19A     | ””         |
| 13     | 6 <sup>h</sup> 03 <sup>m</sup>            | 1A      | 6 <sup>h</sup> 11 <sup>m</sup>             | 16A     | ””         |
| 12     | 6 <sup>h</sup> 12 <sup>m</sup>            | 1A      | 6 <sup>h</sup> 17 <sup>m</sup>             | 13A     | ””         |
| 11     | 6 <sup>h</sup> 20 <sup>m</sup>            | 1A      | 6 <sup>h</sup> 28 <sup>m</sup>             | 29A     | ””         |
| 10     | 6 <sup>h</sup> 36 <sup>m</sup>            | 1A      | 6 <sup>h</sup> 47 <sup>m</sup>             | 38A     | ””         |
| 12     | 6 <sup>h</sup> 51 <sup>m</sup>            | 1B      | 7 <sup>h</sup> 00 <sup>m</sup>             | 21B     | ””         |
| 13     | 7 <sup>h</sup> 05 <sup>m</sup>            | 1B      | 7 <sup>h</sup> 07 <sup>m</sup>             | 15B     | ””         |
| 14     | 7 <sup>h</sup> 12 <sup>m</sup>            | 1B      | 7 <sup>h</sup> 15 <sup>m</sup>             | 13B     | ””         |
| 15     | 7 <sup>h</sup> 17 <sup>m</sup>            | 1B      | 7 <sup>h</sup> 25 <sup>m</sup>             | 12B     | ””         |
| 17     | 7 <sup>h</sup> 32 <sup>m</sup>            | 1A      | 7 <sup>h</sup> 37 <sup>m</sup>             | 25A     | ””         |
| 17     | 7 <sup>h</sup> 46 <sup>m</sup>            | 1B      | 7 <sup>h</sup> 55 <sup>m</sup>             | 19B     | ””         |
| 18     | 7 <sup>h</sup> 59 <sup>m</sup>            | 1B      | 8 <sup>h</sup> 07 <sup>m</sup>             | 32B     | 10/07/2004 |
| 19     | 8 <sup>h</sup> 14 <sup>m</sup>            | 1B      | 8 <sup>h</sup> 20 <sup>m</sup>             | 25B     | ””         |
| 20     | 8 <sup>h</sup> 28 <sup>m</sup>            | 1B      | 8 <sup>h</sup> 37 <sup>m</sup>             | 26B     | ””         |
| 21     | 8 <sup>h</sup> 41 <sup>m</sup>            | 1B      | 8 <sup>h</sup> 50 <sup>m</sup>             | 33B     | ””         |

**AP "KAZAVIASPAS"**  
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**FLIGHT REPORT # 2**

Project Designate – J

| The date of exposure | Aircraft number<br>An-30 | Height above mean sea level, m | Weather condition, etc. | The number of film |
|----------------------|--------------------------|--------------------------------|-------------------------|--------------------|
| 10/07/ 2004          | 30 038                   | 6 200-6 600                    | Fine                    | 3; 2               |

| The serial number of camera, TAFA – 10 | # magazine   | # lens | The calibrated focal length, mm | Lens aperture | Filter             | Shutter speed, s             | Type of film   |
|----------------------------------------|--------------|--------|---------------------------------|---------------|--------------------|------------------------------|----------------|
| № 30591212                             | 10/1<br>12/2 | 3011   | 100,674                         | 9,5           | JS - 18<br>(ЖС-18) | 1/260; 1/310<br>1/250; 1/280 | 42L<br>(T-42Л) |

| Line # | The time of the first of each run, UTC | Pict. # | The time last exposure of each run, UTC | Pict. # | Remarks  |
|--------|----------------------------------------|---------|-----------------------------------------|---------|----------|
| 9      | 4 <sup>h</sup> 15 <sup>m</sup>         | 1A      | 4 <sup>h</sup> 28 <sup>m</sup>          | 38A     | Film # 3 |
| 8      | 4 <sup>h</sup> 29 <sup>m</sup>         | 1A      | 4 <sup>h</sup> 38 <sup>m</sup>          | 21A     | “”       |
| 7      | 4 <sup>h</sup> 45 <sup>m</sup>         | 1A      | 4 <sup>h</sup> 53 <sup>m</sup>          | 29A     | “”       |
| 8      | 5 <sup>h</sup> 00 <sup>m</sup>         | 1B      | 5 <sup>h</sup> 08 <sup>m</sup>          | 31B     | “”       |
| 7      | 5 <sup>h</sup> 20 <sup>m</sup>         | 1B      | 5 <sup>h</sup> 35 <sup>m</sup>          | 47B     | “”       |
| 21     | 5 <sup>h</sup> 45 <sup>m</sup>         | 1C      | 5 <sup>h</sup> 54 <sup>m</sup>          | 39C     | “”       |
| 22     | 6 <sup>h</sup> 00 <sup>m</sup>         | 1C      | 6 <sup>h</sup> 12 <sup>m</sup>          | 39C     | “”       |
| 20     | 6 <sup>h</sup> 15 <sup>m</sup>         | 1C      | 6 <sup>h</sup> 23 <sup>m</sup>          | 29C     | “”       |
| 19     | 6 <sup>h</sup> 28 <sup>m</sup>         | 1C      | 6 <sup>h</sup> 38 <sup>m</sup>          | 29C     | Film #2  |
| 18     | 6 <sup>h</sup> 41 <sup>m</sup>         | 1C      | 6 <sup>h</sup> 57 <sup>m</sup>          | 31C     | “”       |
| 17     | 7 <sup>h</sup> 02 <sup>m</sup>         | 1C      | 7 <sup>h</sup> 11 <sup>m</sup>          | 30C     | “”       |
| 16     | 7 <sup>h</sup> 16 <sup>m</sup>         | 1C      | 7 <sup>h</sup> 22 <sup>m</sup>          | 24C     | “”       |
| 23     | 7 <sup>h</sup> 29 <sup>m</sup>         | 1B      | 7 <sup>h</sup> 44 <sup>m</sup>          | 77B     | “”       |

### FLIGHT REPORT # 3

Project Designate – J

| The date of exposure | Aircraft number<br>An-30 | Height above mean<br>sea level, m | Weather<br>condition, etc. | The number<br>of film |
|----------------------|--------------------------|-----------------------------------|----------------------------|-----------------------|
| 11/07/2004           | 30 038                   | 5 800-7 200                       | It is<br>Fine              | 4, 5                  |

| The serial number of<br>camera,<br>TAFA – 10 | # magazine | # lens | The calibrated<br>focal length,<br>mm | Lens aperture | Filter             | Shutter speed,<br>s            | Type<br>of film |
|----------------------------------------------|------------|--------|---------------------------------------|---------------|--------------------|--------------------------------|-----------------|
| № 30591212                                   | 12/1; 02/1 | 3011   | 100,674                               | 9,5           | JS - 18<br>(ЖС-18) | 1/220; 1/250;<br>1/310; 1/350; | 42L<br>(Т-42л)  |

| Line # | The time of the first of<br>each run, UTC | Pict.# | The time last exposure of each<br>run, UTC | Pict. # | Remarks  |
|--------|-------------------------------------------|--------|--------------------------------------------|---------|----------|
| 25     | 4 <sup>h</sup> 50 <sup>m</sup>            | 1A     | 5 <sup>h</sup> 02 <sup>m</sup>             | 43A     | Film # 4 |
| 26     | 5 <sup>h</sup> 07 <sup>m</sup>            | 1A     | 5 <sup>h</sup> 20 <sup>m</sup>             | 41A     | “”       |
| 27     | 5 <sup>h</sup> 25 <sup>m</sup>            | 1A     | 5 <sup>h</sup> 33 <sup>m</sup>             | 28A     | “”       |
| 24     | 5 <sup>h</sup> 39 <sup>m</sup>            | 1A     | 5 <sup>h</sup> 52 <sup>m</sup>             | 37A     | “”       |
| 23     | 5 <sup>h</sup> 55 <sup>m</sup>            | 1A     | 6 <sup>h</sup> 04 <sup>m</sup>             | 35A     | “”       |
| 22     | 6 <sup>h</sup> 10 <sup>m</sup>            | 1A     | 6 <sup>h</sup> 20 <sup>m</sup>             | 33A     | “”       |
| 21     | 6 <sup>h</sup> 21 <sup>m</sup>            | 1A     | 6 <sup>h</sup> 32 <sup>m</sup>             | 22A     | “”       |
| 20     | 6 <sup>h</sup> 42 <sup>m</sup>            | 1A     | 7 <sup>h</sup> 00 <sup>m</sup>             | 31A     | “”       |
| 19     | 7 <sup>h</sup> 05 <sup>m</sup>            | 1A     | 7 <sup>h</sup> 10 <sup>m</sup>             | 21A     | Film #5  |
| 18     | 7 <sup>h</sup> 15 <sup>m</sup>            | 1A     | 7 <sup>h</sup> 20 <sup>m</sup>             | 17A     | “”       |
| 6      | 7 <sup>h</sup> 35 <sup>m</sup>            | 1A     | 7 <sup>h</sup> 40 <sup>m</sup>             | 26A     | “”       |
| 22     | 7 <sup>h</sup> 55 <sup>m</sup>            | 1B     | 8 <sup>h</sup> 02 <sup>m</sup>             | 28B     | “”       |



# FLIGHT REPORT # 4

Project Designate – J

| The date of exposure | Aircraft number<br>An-30 | Height above mean<br>sea level, m | Weather<br>condition, etc. | The number<br>of film |
|----------------------|--------------------------|-----------------------------------|----------------------------|-----------------------|
| 12/07/2004           | 30 038                   | 5 800 –7 100                      | Fine                       | 5, 6, 7               |

| The serial number of<br>camera,<br>TAFA – 10 | # magazine          | # lens | The calibrated<br>focal length, mm | Lens aperture | Filter             | Shutter speed,<br>s                     | Type<br>of film |
|----------------------------------------------|---------------------|--------|------------------------------------|---------------|--------------------|-----------------------------------------|-----------------|
| № 30591212                                   | 12/12; 10/1<br>02/1 | 3011   | 100,674                            | 9,5           | JS - 18<br>(ЖС-18) | 1/230; 1/300;<br>1/250; 1/220;<br>1/310 | 42L<br>(T-42Л)  |

| Line # | The time of the first of<br>each run, UTC | Pict. # | The time last exposure of each<br>run, UTC | Pict. # | Remarks  |
|--------|-------------------------------------------|---------|--------------------------------------------|---------|----------|
| 28     | 4 <sup>h</sup> 08 <sup>m</sup>            | 1A      | 4 <sup>h</sup> 13 <sup>m</sup>             | 16A     | Film # 7 |
| 30     | 4 <sup>h</sup> 19 <sup>m</sup>            | 1A      | 4 <sup>h</sup> 22 <sup>m</sup>             | 12A     | “”       |
| 29     | 4 <sup>h</sup> 29 <sup>m</sup>            | 1A      | 4 <sup>h</sup> 47 <sup>m</sup>             | 32A     | “”       |
| 29     | 4 <sup>h</sup> 56 <sup>m</sup>            | 1B      | 5 <sup>h</sup> 02 <sup>m</sup>             | 18B     | “”       |
| 28     | 5 <sup>h</sup> 09 <sup>m</sup>            | 1B      | 5 <sup>h</sup> 20 <sup>m</sup>             | 51B     | “”       |
| 27     | 5 <sup>h</sup> 29 <sup>m</sup>            | 1B      | 5 <sup>h</sup> 43 <sup>m</sup>             | 43B     | “”       |
| 26     | 5 <sup>h</sup> 50 <sup>m</sup>            | 1B      | 6 <sup>h</sup> 07 <sup>m</sup>             | 46B     | “”       |
| 25     | 6 <sup>h</sup> 12 <sup>m</sup>            | 1B      | 6 <sup>h</sup> 35 <sup>m</sup>             | 57B     | Film # 5 |
| 23     | 6 <sup>h</sup> 37 <sup>m</sup>            | 1C      | 6 <sup>h</sup> 40 <sup>m</sup>             | 14C     | “”       |
| 20     | 6 <sup>h</sup> 45 <sup>m</sup>            | 1D      | 6 <sup>h</sup> 47 <sup>m</sup>             | 15D     | “”       |
| 19     | 6 <sup>h</sup> 53 <sup>m</sup>            | 1D      | 6 <sup>h</sup> 55 <sup>m</sup>             | 16D     | “”       |
| 24     | 7 <sup>h</sup> 05 <sup>m</sup>            | 1B      | 7 <sup>h</sup> 27 <sup>m</sup>             | 65B     | Film # 6 |

## FLIGHT REPORT #5

Project Designate – J

| The date of exposure | Aircraft number<br>An-30 | Height above mean sea<br>level, m | Weather<br>condition, etc. | The number<br>of film |
|----------------------|--------------------------|-----------------------------------|----------------------------|-----------------------|
| 13/07/2004           | 30 038                   | 6 200-6 900                       | It is<br>Fine              | 8,9                   |

| The serial number of<br>camera,<br>TAFA – 10 | # magazine | # lens | The calibrated<br>focal length, mm | Lens aperture | Filter             | Shutter speed                | Type<br>of film |
|----------------------------------------------|------------|--------|------------------------------------|---------------|--------------------|------------------------------|-----------------|
| № 30591212                                   | 12/2; 10/1 | 3011   | 100,674                            | 9,5           | JS - 18<br>(ЖС-18) | 1/250; 1/220<br>1/300; 1/290 | 42L<br>(T-42л)  |

| Line # | The time of the first of<br>each run, UTC | Pict. # | The time last exposure of each<br>run, UTC | Pict. # | Remarks  |
|--------|-------------------------------------------|---------|--------------------------------------------|---------|----------|
| 1      | 3 <sup>h</sup> 55 <sup>m</sup>            | 1B      | 4 <sup>h</sup> 00 <sup>m</sup>             | 33B     | Film # 8 |
| 2      | 4 <sup>h</sup> 05 <sup>m</sup>            | 1B      | 4 <sup>h</sup> 15 <sup>m</sup>             | 22B     | –,–      |
| 3      | 4 <sup>h</sup> 20 <sup>m</sup>            | 1B      | 4 <sup>h</sup> 27 <sup>m</sup>             | 20B     | –,–      |
| 6      | 4 <sup>h</sup> 38 <sup>m</sup>            | 1D      | 4 <sup>h</sup> 40 <sup>m</sup>             | 15D     | –,–      |
| 7      | 4 <sup>h</sup> 45 <sup>m</sup>            | 1D      | 4 <sup>h</sup> 50 <sup>m</sup>             | 20D     | –,–      |
| 12     | 4 <sup>h</sup> 55 <sup>m</sup>            | 1C      | 5 <sup>h</sup> 20 <sup>m</sup>             | 28C     | –,–      |
| 15     | 5 <sup>h</sup> 32 <sup>m</sup>            | 1C      | 5 <sup>h</sup> 42 <sup>m</sup>             | 31C     | –,–      |
| 9      | 5 <sup>h</sup> 48 <sup>m</sup>            | 1B      | 5 <sup>h</sup> 52 <sup>m</sup>             | 11B     | Film # 9 |
| 6      | 5 <sup>h</sup> 55 <sup>m</sup>            | 1B      | 6 <sup>h</sup> 00 <sup>m</sup>             | 50B     | –,–      |
| 5      | 6 <sup>h</sup> 15 <sup>m</sup>            | 1A      | 6 <sup>h</sup> 30 <sup>m</sup>             | 50A     | –,–      |

**FLIGHT REPORT # 6**  
Project Designation – J

| The date of exposure | Aircraft number<br>An-30 | Height above mean sea level, m | Weather condition, etc. | The number of film |
|----------------------|--------------------------|--------------------------------|-------------------------|--------------------|
| 27/07/2004           | 30 038                   | 4950-5700                      | Fine                    | 10                 |

| The serial number of camera, TAFA – 10 | # magazine | # lens | The calibrated focal length, mm | Lens aperture | Filter             | Shutter speed  | Type of film   |
|----------------------------------------|------------|--------|---------------------------------|---------------|--------------------|----------------|----------------|
| № 30591212                             | 10/1       | 3011   | 100,674                         | 6,3           | JS - 18<br>(ЖС-18) | 1/220<br>1/400 | 42L<br>(T-42п) |

| Line # | The time of the first of each run, UTC | Pict. # | The time last exposure of each run, UTC | Pict. # | Remarks   |
|--------|----------------------------------------|---------|-----------------------------------------|---------|-----------|
| 4      | 3 <sup>h</sup> 39 <sup>m</sup>         | 1A      | 3 <sup>h</sup> 50 <sup>m</sup>          | 38A     | Film # 10 |
| 7      | 4 <sup>h</sup> 04 <sup>m</sup>         | 1C      | 4 <sup>h</sup> 10 <sup>m</sup>          | 19C     | ””        |
| 8      | 4 <sup>h</sup> 15 <sup>m</sup>         | 1C      | 4 <sup>h</sup> 21 <sup>m</sup>          | 19C     | ””        |
| 23     | 4 <sup>h</sup> 47 <sup>m</sup>         | 1E      | 4 <sup>h</sup> 56 <sup>m</sup>          | 27E     | ””        |

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ZONE IN THE KYRGYZ REPUBLIC**

**FLIGHT REPORT #7**  
Project Designation – J

| The date of exposure | Aircraft number<br>An-30 | Height above<br>mean sea level,<br>m | Weather<br>condition, etc. | The number<br>of film |
|----------------------|--------------------------|--------------------------------------|----------------------------|-----------------------|
| 31/07/2004           | 30 038                   | 5 400-7 200                          | It is<br>Fine              | 11, 12                |

| The serial number of<br>camera, TAFA – 10 | # magazine   | # lens | The calibrated<br>focal length, mm | Lens aperture | Filter             | Shutter speed               | Type of film   |
|-------------------------------------------|--------------|--------|------------------------------------|---------------|--------------------|-----------------------------|----------------|
| № 30591212                                | 10/1<br>12/2 | 3011   | 100,674                            | 6,3<br>9,5    | JS - 18<br>(ЖС-18) | 1/300-1/200;<br>1/300-1/500 | 42L<br>(Т-42л) |

| Line # | The time of the first of<br>each run, UTC | Pict. # | The time last exposure of each<br>run, UTC | Pict. # | Remarks                                                       |
|--------|-------------------------------------------|---------|--------------------------------------------|---------|---------------------------------------------------------------|
| 1      | 3 <sup>h</sup> 58 <sup>m</sup>            | 1C      | 4 <sup>h</sup> 04 <sup>m</sup>             | 24C     | Film # 11 Line1 ## 1C-24C (insert, anew<br>pict. # # 22B-33B) |
| 2      | 4 <sup>h</sup> 10 <sup>m</sup>            | 15C     | 4 <sup>h</sup> 14 <sup>m</sup>             | 1C      | Line2 ## 1C-15C (insert, anew pict.<br>## 20B-22B)            |
| 3      | 4 <sup>h</sup> 19 <sup>m</sup>            | 1C      | 4 <sup>h</sup> 23 <sup>m</sup>             | 12C     | Line3 ## 1C-12C (insert, anew pict.<br>## 15B-17B)            |
| 6      | 4 <sup>h</sup> 25 <sup>m</sup>            | 1E      | 4 <sup>h</sup> 29 <sup>m</sup>             | 16E     | Line6 ## 1E-16E (insert, anew pict.<br>## 7D-15D)             |
| 7      | 4 <sup>h</sup> 35 <sup>m</sup>            | 14F     | 4 <sup>h</sup> 39 <sup>m</sup>             | 1F      | Line7 ## 1F-14F (insert, anew pict.<br>## 16D-20D)            |
| 11     | 4 <sup>h</sup> 45 <sup>m</sup>            | 1C      | 4 <sup>h</sup> 51 <sup>m</sup>             | 22C     |                                                               |
| 12     | 4 <sup>h</sup> 57 <sup>m</sup>            | 18D     | 5 <sup>h</sup> 01 <sup>m</sup>             | 1D      |                                                               |
| 14     | 5 <sup>h</sup> 22 <sup>m</sup>            | 28C     | 5 <sup>h</sup> 31 <sup>m</sup>             | 1C      | Film # 12                                                     |
| 13     | 5 <sup>h</sup> 36 <sup>m</sup>            | 1C      | 5 <sup>h</sup> 40 <sup>m</sup>             | 13C     |                                                               |

**FLIGHT REPORT # 8**  
Project Designation – J

| The date of exposure | Aircraft number<br>An-30 | Height above<br>mean sea level, m | Weather condition,<br>etc. | The number<br>of film |
|----------------------|--------------------------|-----------------------------------|----------------------------|-----------------------|
| 6/08/2004            | 30 038                   | 6 600                             | It is<br>Fine              | 12                    |

| The serial number of<br>camera, TAFA – 10 | # magazine | # lens | The calibrated<br>focal length, mm | Lens aperture | Filter             | Shutter speed, s | Type<br>of film |
|-------------------------------------------|------------|--------|------------------------------------|---------------|--------------------|------------------|-----------------|
| № 30591212                                | 12/2       | 3011   | 100,674                            | 6,3           | JS - 18<br>(ЖС-18) | 1/400            | 42L<br>(T-42л)  |

| Line # | The time of the first of<br>each run, UTC | Pict. # | The time last exposure of each<br>run, UTC | Pict. # | Remarks   |
|--------|-------------------------------------------|---------|--------------------------------------------|---------|-----------|
| 10     | 5 <sup>h</sup> 14 <sup>m</sup>            | 18B     | 5 <sup>h</sup> 21 <sup>m</sup>             | 1B      | Film # 12 |
| 11     | 5 <sup>h</sup> 28 <sup>m</sup>            | 1B      | 5 <sup>h</sup> 32 <sup>m</sup>             | 17B     | "--"      |

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JICA

**THE STUDY ON INTEGRATED  
DEVELOPMENT PLAN OF ISSYK – KUL  
ZONE IN THE KYRGYZ REPUBLIC**

**FLIGHT REPORT # 9**  
Project Designation – J

| The date of exposure | Aircraft number<br>An-30 | Height above<br>mean sea level,<br>m | Weather<br>condition, etc. | The number<br>of film |
|----------------------|--------------------------|--------------------------------------|----------------------------|-----------------------|
| 12/08/2004           | 30 038                   | 6 600-7 000                          | It is<br>Fine              | 12, 13                |

| The serial number of<br>camera,<br>TAFA – 10 | # magazine | # lens | The calibrated<br>focal length,<br>mm | Lens aperture | Filter             | Shutter speed,<br>s | Type<br>of film |
|----------------------------------------------|------------|--------|---------------------------------------|---------------|--------------------|---------------------|-----------------|
| № 30591212                                   | 02/1       | 3011   | 100,674                               | 9,5           | JS - 18<br>(ЖС-18) | 1/180<br>1/450      | 42L<br>(Т-42Л)  |

| Line # | The time of the first of<br>each run, UTC | Pict. # | The time last exposure of each<br>run, UTC | Pict. # | Remarks                                                       |
|--------|-------------------------------------------|---------|--------------------------------------------|---------|---------------------------------------------------------------|
| 12     | 4 <sup>h</sup> 01 <sup>m</sup>            | 1E      | 4 <sup>h</sup> 07 <sup>m</sup>             | 22E     | Film # 12Line12 ## 1E-22E (insert, anew pict. # #<br>17C-19C) |
| 13     | 4 <sup>h</sup> 15 <sup>m</sup>            | 25D     | 4 <sup>h</sup> 22 <sup>m</sup>             | 1D      | -,,-                                                          |
| 15     | 4 <sup>h</sup> 30 <sup>m</sup>            | 1D      | 4 <sup>h</sup> 36 <sup>m</sup>             | 23D     | Film # 13                                                     |
| 14     | 4 <sup>h</sup> 42 <sup>m</sup>            | 23D     | 4 <sup>h</sup> 47 <sup>m</sup>             | 23 D    | -,,-                                                          |

**Line11 ## 1D-AP "KAZAVIASPAS"**  
**JICA**

**FLIGHT REPORT # 10**  
Project Designation – J

**THE STUDY ON INTEGRATED  
DEVELOPMENT PLAN OF ISSYK – KUL  
ZONE IN THE KYRGYZ REPUBLIC**

| The date of exposure | Aircraft number<br>An-30 | Height above mean sea level, m | Weather condition, etc. | The number of film |
|----------------------|--------------------------|--------------------------------|-------------------------|--------------------|
| 13/08/ 2004          | 30 038                   | 6500-7200                      | It is Fine              | 13                 |

| The serial number of camera, TAFA – 10 | # magazine | # lens | The calibrated focal length, mm | Lens aperture | Filter             | Shutter speed, s             | Type of film   |
|----------------------------------------|------------|--------|---------------------------------|---------------|--------------------|------------------------------|----------------|
| № 30591212                             | 02/1       | 3011   | 100,674                         | 9,5           | JS - 18<br>(ЖС-18) | 1/260; 1/310<br>1/250; 1/280 | 42L<br>(Т-42л) |

| Line # | The time of the first of each run, UTC | Pict. # | The time last exposure of each run, UTC | Pict. # | Remarks                                            |
|--------|----------------------------------------|---------|-----------------------------------------|---------|----------------------------------------------------|
| 7      | 3 <sup>h</sup> 53 <sup>m</sup>         | 1E      | 4 <sup>h</sup> 00 <sup>m</sup>          | 13E     | Film # 13                                          |
| 8      | 4 <sup>h</sup> 05 <sup>m</sup>         | 26D     | 4 <sup>h</sup> 12 <sup>m</sup>          | 1D      | "-, -"                                             |
| 9      | 4 <sup>h</sup> 25 <sup>m</sup>         | 1C      | 4 <sup>h</sup> 30 <sup>m</sup>          | 24C     | "-, -"                                             |
| 4      | 4 <sup>h</sup> 37 <sup>m</sup>         | 18C     | 4 <sup>h</sup> 40 <sup>m</sup>          | 1C      | "-, -"                                             |
| 10     | 4 <sup>h</sup> 48 <sup>m</sup>         | 1C      | 4 <sup>h</sup> 55 <sup>m</sup>          | 24C     | "-, -"                                             |
| 11     | 5 <sup>h</sup> 00 <sup>m</sup>         | 21E     | 5 <sup>h</sup> 10 <sup>m</sup>          | 1E      | Line11 ## 1E-21E prolongation (продолжение) line B |
| 16     | 5 <sup>h</sup> 16 <sup>m</sup>         | 1D      | 5 <sup>h</sup> 23 <sup>m</sup>          | 23D     | "-, -"                                             |

**FLIGHT REPORT # 11**  
Project Designation – J

| The date of exposure | Aircraft number An-30 | Height above mean sea level, m | Weather condition, etc. | The number of film |
|----------------------|-----------------------|--------------------------------|-------------------------|--------------------|
| 14/08/ 2004          | 30 038                | 5 600-7 000                    | Fine                    | 3; 2               |

| The serial number of camera, TAFA – 10 | # magazine   | # lens | The calibrated focal length, mm | Lens aperture | Filter             | Shutter speed, s             | Type of film   |
|----------------------------------------|--------------|--------|---------------------------------|---------------|--------------------|------------------------------|----------------|
| № 30591212                             | 02/1<br>12/2 | 3011   | 100,674                         | 9,5           | JS - 18<br>(ЖС-18) | 1/260; 1/310<br>1/250; 1/280 | 42L<br>(T-42л) |

| Line # | The time of the first of each run, UTC | Pict. # | The time last exposure of each run, UTC | Pict. # | Remarks                                                   |
|--------|----------------------------------------|---------|-----------------------------------------|---------|-----------------------------------------------------------|
| 29     | 4 <sup>h</sup> 12 <sup>m</sup>         | 1C      | 4 <sup>h</sup> 18 <sup>m</sup>          | 23C     | Line29 ## 1C-23C (insert, anew pict. # # 15A-22A)         |
| 27     | 4 <sup>h</sup> 25 <sup>m</sup>         | 14C     | 4 <sup>h</sup> 30 <sup>m</sup>          | 1C      | -,,- Line27 ## 1C-14C (insert, anew pict. # # 19A-21A     |
| 1      | 4 <sup>h</sup> 49 <sup>m</sup>         | 1A      | 4 <sup>h</sup> 58 <sup>m</sup>          | 33A     | -,,-                                                      |
| 6      | 5 <sup>h</sup> 03 <sup>m</sup>         | 1C      | 5 <sup>h</sup> 09 <sup>m</sup>          | 24C     | -,,-                                                      |
| 5      | 5 <sup>h</sup> 15 <sup>m</sup>         | 17B     | 5 <sup>h</sup> 20 <sup>m</sup>          | 1B      | -,,-                                                      |
| 2      | 5 <sup>h</sup> 30 <sup>m</sup>         | 43A     | 5 <sup>h</sup> 44 <sup>m</sup>          | 1A      | -,,-                                                      |
| 3      | 5 <sup>h</sup> 48 <sup>m</sup>         | 1A      | 5 <sup>h</sup> 59 <sup>m</sup>          | 37A     | -,,-                                                      |
| 10     | 6 <sup>h</sup> 08 <sup>m</sup>         | 1D      | 6 <sup>h</sup> 15 <sup>m</sup>          | 18D     | -,,-                                                      |
| 11     | 6 <sup>h</sup> 20 <sup>m</sup>         | 13D     | 6 <sup>h</sup> 26 <sup>m</sup>          | 1D      | Film #2 Line11 ## 1D-13D (insert, anew pict. # # 10B-17B) |
| 17     | 6 <sup>h</sup> 36 <sup>m</sup>         | 1D      | 6 <sup>h</sup> 40 <sup>m</sup>          | 16D     | Film #14                                                  |
| 18     | 6 <sup>h</sup> 47 <sup>m</sup>         | 20D     | 6 <sup>h</sup> 52 <sup>m</sup>          | 1D      | -,,-                                                      |
| 13     | 6 <sup>h</sup> 57 <sup>m</sup>         | 22E     | 7 <sup>h</sup> 04 <sup>m</sup>          | 1E      | -,,- Line13 ## 1E-22E prolongation (продолжение) line B   |
| 4      | 7 <sup>h</sup> 09 <sup>m</sup>         | 25B     | 7 <sup>h</sup> 18 <sup>m</sup>          | 1B      | -,,-                                                      |



## **ПРИЛОЖЕНИЕ 5 ---- Контроль качества аэрофотосъемки**

# **QUALITY CONTROL SHEET**

No. 1-8

## **of Aerial Photography**

|                      |    |                    |                                     |             |                       |               |                 |        |                    |                  |        |      |         |
|----------------------|----|--------------------|-------------------------------------|-------------|-----------------------|---------------|-----------------|--------|--------------------|------------------|--------|------|---------|
| Project              |    | ISSYK-KUL ZONE K R |                                     | Aircraft    | An-30                 | No #30038     |                 |        |                    |                  |        |      |         |
| Designation          |    |                    |                                     | Camera      | TAF-A-10              | No. #30591212 | Length of Film  | 55,22  |                    |                  |        |      |         |
| Date of Flight       |    |                    |                                     | Lens        | 100,674               | No #3011      | GPS Diskett No. |        |                    |                  |        |      |         |
| Judgement            |    | Line               | Flight                              | Exposure No | Number of Photographs | O.L. %        |                 | S.L. % |                    | Quality of Films |        |      |         |
| OK                   | NG | No.                | Direction                           | 0000~0000   |                       | Max           | Min             | Max    | Min                | Clouds           | Smokes | Haze | Roll No |
| 7/12                 |    | 30                 | E-W                                 | 1A-12A      | 12                    |               | 65              |        | 50                 | small            |        |      | 7       |
| 7/12                 |    | 29A                | W-E                                 | 1A-32A      | 32                    |               | 60              |        | 40                 | small            |        |      | 7       |
| 7/12                 |    | 29B                | W-E                                 | 1B-18B      | 18                    |               | 60              |        | 50                 |                  |        |      | 7       |
| 7/12                 |    | 28A                | W-E                                 | 1A-16A      | 16                    |               | 60              |        | 30                 | small            |        |      | 7       |
| 7/12                 |    | 28B                | E-W                                 | 1B-51B      | 51                    |               | 60              |        | 45                 |                  |        |      | 7       |
| 7/11                 |    | 27A                | W-E                                 | 1A-28A      | 28                    |               | 60              |        | 40                 | small            |        |      | 4       |
| 7/12                 |    | 27B                | W-E                                 | 1B-43B      | 43                    |               | 60              |        | 40                 |                  |        |      | 7       |
| 7/11                 |    | 26A                | E-W                                 | 1A-41A      | 41                    |               | 60              |        | 40                 | small            |        |      | 4       |
| 7/12                 |    | 26B                | E-W                                 | 1B-46B      | 46                    |               | 60              |        | 30                 |                  |        |      | 7       |
| 7/11                 |    | 25A                | W-E                                 | 1A-43A      | 43                    |               | 60              |        | 40                 |                  |        |      | 4       |
| 7/12                 |    | 25B                | W-E                                 | 1B-57B      | 57                    |               | 60              |        | 25                 |                  |        |      | 5       |
| 7/11                 |    | 24A                | E-W                                 | 1A-37A      | 37                    |               | 60              |        | 35                 | small            |        |      | 4       |
| 7/12                 |    | 24B                | E-W                                 | 1B-65B      | 65                    |               | 60              |        | 40                 |                  |        |      | 6       |
| Remarks : Contractor |    |                    | Remarks : AERO ASAHI Representation |             |                       | Contractor    |                 |        | Company            | KAZAVIASPAS      |        |      |         |
|                      |    |                    |                                     |             |                       | Checked on    |                 |        |                    |                  |        |      |         |
|                      |    |                    |                                     |             |                       | Checked by    |                 |        |                    |                  |        |      |         |
|                      |    |                    |                                     |             |                       | Inspected on  |                 |        | 31.8.2004          |                  |        |      |         |
|                      |    |                    |                                     |             |                       | Inspected by  |                 |        | yasuhiko TSUKAMOTO |                  |        |      |         |

## QUALITY CONTROL SHEET

No 2-8.

|                      |    |                    |           |                                     |  |             |  |               |     |                    |                                     |                  |        |
|----------------------|----|--------------------|-----------|-------------------------------------|--|-------------|--|---------------|-----|--------------------|-------------------------------------|------------------|--------|
| Project              |    | ISSYK-KUL ZONE K R |           | Aircraft                            |  | An-30       |  | No #30038     |     |                    |                                     |                  |        |
| Designation          |    |                    |           | Camera                              |  | T AFA-10    |  | No. #30591212 |     | Length of Film     |                                     | 55,22            |        |
| Date of Flight       |    |                    |           | Lens                                |  | 100,674     |  | No #3011      |     | GPS Diskett No.    |                                     |                  |        |
| Judgement            |    | Line               |           | Flight                              |  | Exposure No |  | O.L. %        |     | S.L. %             |                                     | Quality of Films |        |
| OK                   | NG | No.                | Direction |                                     |  | 0000~0000   |  | Max           | Min | Max                | Min                                 | Clouds           | Smokes |
| 7/11                 |    | 23-A               | W-E       |                                     |  | 1A-35A      |  |               | 60  |                    | 30                                  | small 29A,30A    |        |
| 7/10                 |    | 23-B               | E-W       |                                     |  | 1B-77B      |  |               | 60  |                    | film accident 10B~25B, 7/27 RF L23E |                  |        |
| 7/12                 |    | 23-C               | E-W       |                                     |  | 1C-14C      |  |               | 63  |                    | 20                                  |                  |        |
| 7/11                 |    | 22-A               | E-W       |                                     |  | 1A-33A      |  |               | 58  |                    | 15                                  |                  |        |
| 7/11                 |    | 22-B               | W-E       |                                     |  | 1B-28B      |  |               | 60  |                    | 40                                  |                  |        |
| 7/10                 |    | 22-C               | E-W       |                                     |  | 1C-39C      |  |               | 63  |                    | 38                                  |                  |        |
| 7/11                 |    | 21-A               | W-E       |                                     |  | 1A-22A      |  |               | 63  |                    | 25                                  |                  |        |
| 7/10                 |    | 21-B               | W-E       |                                     |  | 1B-34B      |  |               | 63  |                    | 20                                  |                  |        |
| 7/10                 |    | 21-C               | W-E       |                                     |  | 1C-39C      |  |               | 63  |                    | 30                                  |                  |        |
| 7/11                 |    | 20-A               | E-W       |                                     |  | 1A-31A      |  |               | 60  |                    | 30                                  |                  |        |
| 7/10                 |    | 20-B               | E-W       |                                     |  | 1B-26B      |  |               | 63  |                    | 35                                  |                  |        |
| 7/10                 |    | 20-C               | W-E       |                                     |  | 1C-29C      |  |               | 63  |                    | 35                                  |                  |        |
| 7/12                 |    | 20-D               | W-E       |                                     |  | 1D-15D      |  |               | 60  |                    | 25                                  |                  |        |
| Remarks : Contractor |    |                    |           | Remarks : AERO ASAHI Representation |  |             |  | Contractor    |     | Company            |                                     | KAZAVIASPAS      |        |
|                      |    |                    |           |                                     |  |             |  | Checked on    |     |                    |                                     |                  |        |
|                      |    |                    |           |                                     |  |             |  | Checked by    |     |                    |                                     |                  |        |
|                      |    |                    |           |                                     |  |             |  | Inspected on  |     | 31.8.2004          |                                     |                  |        |
|                      |    |                    |           |                                     |  |             |  | Inspected by  |     | yasuhiko TSUKAMOTO |                                     |                  |        |

## QUALITY CONTROL SHEET

No 3--8:

|                      |    |                    |     |                                     |           |             |  |                       |     |                 |     |                    |         |
|----------------------|----|--------------------|-----|-------------------------------------|-----------|-------------|--|-----------------------|-----|-----------------|-----|--------------------|---------|
| Project              |    | ISSYK-KUL ZONE K R |     | Aircraft                            |           | An-30       |  | No #30038             |     |                 |     |                    |         |
| Designation          |    |                    |     | Camera                              |           | TAF A-10    |  | No. #30591212         |     | Length of Film  |     | 55;22              |         |
| Date of Flight       |    |                    |     | Lens                                |           | 100,674     |  | No #3011              |     | GPS Diskett No. |     |                    |         |
| Judgement            |    | Line               |     | Flight                              |           | Exposure No |  | O.L. %                |     | S.L. %          |     | Quality of Films   |         |
| OK                   | NG | No.                |     |                                     |           |             |  | Number of Photographs | Max | Min             | Max | Min                | Roll No |
| 7/11                 |    | 19A                | W-E |                                     | 0000~0000 |             |  | 21                    |     | 60              |     | 40                 | 5       |
| 7/10                 |    | 19B                | W-E |                                     |           |             |  | 25                    |     | 63              |     | 35                 | 2       |
| 7/10                 |    | 19C                | E-W |                                     |           |             |  | 29                    |     | 63              |     | 42                 | 2       |
| 7/12                 |    | 19D                | E-W |                                     |           |             |  | 16                    |     | 60              |     | 10                 | 5       |
| 7/11                 |    | 18A                | E-W |                                     |           |             |  | 17                    |     | 62              |     | 35                 | 5       |
| 7/10                 |    | 18B                | E-W |                                     |           |             |  | 32                    |     | 62              |     | 35                 | 2       |
| 7/10                 |    | 18C                | W-E |                                     |           |             |  | 31                    |     | 62              |     | 35                 | 2       |
| 7/14                 |    | 18D                | E-W |                                     |           |             |  | 20                    |     | 55              |     | 25                 | 14      |
| 7/7                  |    | 17A                | W-E |                                     |           |             |  | 25                    |     | 63              |     | 40                 | 1       |
| 7/7                  |    | 17B                | W-E |                                     |           |             |  | 19                    |     | 63              |     | 40                 | 1       |
| 7/10                 |    | 17C                | E-W |                                     |           |             |  | 30                    |     | 63              |     | 40                 | 2       |
| 8/14                 |    | 17D                | W-E |                                     |           |             |  | 16                    |     | 63              |     | 35                 | 14      |
| Remarks : Contractor |    |                    |     | Remarks : AERO ASAHI Representation |           |             |  | Contractor            |     | Company         |     | KAZAVIASPAS        |         |
|                      |    |                    |     |                                     |           |             |  | Checked on            |     |                 |     |                    |         |
|                      |    |                    |     |                                     |           |             |  | Checked by            |     |                 |     |                    |         |
|                      |    |                    |     |                                     |           |             |  | AERO ASAHI            |     | Inspected on    |     | 31.8.2004          |         |
|                      |    |                    |     |                                     |           |             |  | CORPORATION           |     | Inspected by    |     | yasuhiko TSUKAMOTO |         |

## QUALITY CONTROL SHEET

No 4-8.

|                      |    |                    |     |                                     |  |             |             |               |     |                    |       |             |        |                  |         |
|----------------------|----|--------------------|-----|-------------------------------------|--|-------------|-------------|---------------|-----|--------------------|-------|-------------|--------|------------------|---------|
| Project              |    | ISSYK-KUL ZONE K R |     | Aircraft                            |  | An-30       |             | No #30038     |     |                    |       |             |        |                  |         |
| Designation          |    |                    |     | Camera                              |  | TAF A-10    |             | No. #30591212 |     | Length of Film     |       | 55,22       |        |                  |         |
| Date of Flight       |    |                    |     | Lens                                |  | 100,674     |             | No #3011      |     | GPS Diskett No.    |       |             |        |                  |         |
| Judgement            |    | Line               |     | Flight                              |  | Exposure No |             | Number of     |     | O.L. %             |       | S.L. %      |        | Quality of Films |         |
| OK                   | NG | No.                | No. | Direction                           |  | 0000~0000   | Photographs | Max           | Min | Max                | Min   | Clouds      | Smokes | Haze             | Roll No |
| 7/7                  |    | 16A                |     | E-W                                 |  | 1A-32A      | 32          |               | 60  |                    | 40(5) | small       |        |                  | 1       |
| 7/10                 |    | 16C                |     | W-E                                 |  | 1C-24C      | 24          |               | 62  |                    | 28    |             |        |                  | 2       |
| 8/13                 |    | 16D                |     | W-E                                 |  | 1D-23D      | 23          |               | 63  |                    | 35    | small       |        |                  | 13      |
| 7/7                  |    | 15A                |     | W-E                                 |  | 1A-16A      | 16          |               | 62  |                    | 20    |             |        |                  | 1       |
| 7/7                  |    | 15B                |     | E-W                                 |  | 1B-12B      | 12          |               | 63  |                    | 35    |             |        |                  | 1       |
| 7/13                 |    | 15C                |     | E-W                                 |  | 1C-31C      | 31          |               | 60  |                    | 25    |             |        |                  | 8       |
| 8/12                 |    | 15D                |     | W-E                                 |  | 1D-23D      | 23          |               | 60  |                    | 30    | small       |        |                  | 13      |
| 7/7                  |    | 14A                |     | E-W                                 |  | 1A-19A      | 19          |               | 60  |                    | 30    |             |        |                  | 1       |
| 7/7                  |    | 14B                |     | W-E                                 |  | 1B13B       | 13          |               | 60  |                    | 20    |             |        |                  | 1       |
| 7/31                 |    | 14C                |     | E-W                                 |  | 1C-28C      | 28          |               | 60  |                    | 20    |             |        |                  | 12      |
| 8/12                 |    | 14D                |     | E-W                                 |  | 1D-23D      | 23          |               | 60  |                    | 20    |             |        |                  | 13      |
|                      |    |                    |     |                                     |  |             |             |               |     |                    |       |             |        |                  |         |
|                      |    |                    |     |                                     |  |             |             |               |     |                    |       |             |        |                  |         |
| Remarks : Contractor |    |                    |     | Remarks : AERO ASAHI Representation |  |             |             | Contractor    |     | Company            |       | KAZAVIASPAS |        |                  |         |
|                      |    |                    |     |                                     |  |             |             | Checked on    |     |                    |       |             |        |                  |         |
|                      |    |                    |     |                                     |  |             |             | Checked by    |     |                    |       |             |        |                  |         |
|                      |    |                    |     |                                     |  |             |             | Inspected on  |     | 31.8.2004          |       |             |        |                  |         |
|                      |    |                    |     |                                     |  |             |             | Inspected by  |     | yasuhiko TSUKAMOTO |       |             |        |                  |         |



# **QUALITY CONTROL SHEET**

No 6-8.

|                      |                    |      |           |                                     |  |                       |  |                        |     |              |     |                           |             |      |         |
|----------------------|--------------------|------|-----------|-------------------------------------|--|-----------------------|--|------------------------|-----|--------------|-----|---------------------------|-------------|------|---------|
| Project              | ISSYK-KUL ZONE K R |      | Aircraft  | An-30                               |  | No #30038             |  |                        |     |              |     |                           |             |      |         |
| Designation          |                    |      | Camera    | TAF A-10                            |  | No. #30591212         |  | Length of Film         |     |              |     | 55,22                     |             |      |         |
| Date of Flight       |                    |      | Lens      | 100,674                             |  | No #3011              |  | GPS Diskett No.        |     |              |     |                           |             |      |         |
| Judgement            |                    | Line | Flight    | Exposure No                         |  | Number of Photographs |  | O. L. %                |     | S. L. %      |     | Quality of Films          |             |      |         |
| OK                   | NG                 | No.  | Direction | 0000~0000                           |  | Photographs           |  | Max                    | Min | Max          | Min | Clouds                    | Smokes      | Haze | Roll No |
| 7/10                 |                    | 9A   | E-W       | 1A-38A                              |  | 38                    |  |                        | 60  |              | 40  |                           |             |      | 3       |
| 7/13                 |                    | 9B   | W-E       | 1B-11B                              |  | 11                    |  |                        | 60  |              | 45  |                           |             |      | 9       |
| 8/13                 |                    | 9C   | W-E       | 1C-24C                              |  | 24                    |  |                        | 62  |              | 40  |                           |             |      | 13      |
| 7/10                 |                    | 8A   | W-E       | 1A-21A                              |  | 21                    |  |                        | 60  |              | 30  |                           |             |      | 3       |
| 7/10                 |                    | 8B   | W-E       | 1B-31B                              |  | 31                    |  |                        | 63  |              | 40  | small (26B), 8/13 RF L8D  |             |      | 3       |
| 7/27                 |                    | 8C   | E-W       | 1C-19C                              |  | 19                    |  |                        | 60  |              | 40  |                           |             |      | 10      |
| 7/27                 |                    | 8D   | E-W       | 1D-26D                              |  | 26                    |  |                        | 60  |              | 40  |                           |             |      | 13      |
| 7/10                 |                    | 7A   | E-W       | 1A-29A                              |  | 29                    |  |                        | 63  |              | 25  |                           |             |      | 3       |
| 7/10                 |                    | 7B   | W-E       | 1B-47B                              |  | 47                    |  |                        | 63  |              | 44  |                           |             |      | 3       |
| 7/27                 |                    | 7C   | W-E       | 1C-19C                              |  | 19                    |  |                        | 60  |              | 20  | small                     | 8/13 RF L8E |      | 10      |
| 7/13                 |                    | 7D   | E-W       | 1D-20D                              |  | 20                    |  |                        | 60  |              | 45  | small(18~20), 7/31 RF L7F |             |      | 8       |
| 7/11                 |                    | 6A   | W-E       | 1A-26A                              |  | 26                    |  |                        | 60  |              | *   |                           |             |      | 5       |
| 7/13                 |                    | 6B   | E-W       | 1B-50B                              |  | 50                    |  |                        | 60  |              | 40  |                           |             |      | 9       |
| Remarks : Contractor |                    |      |           | Remarks : AERO ASAHI Representation |  |                       |  | Contractor             |     | Company      |     | KAZAVI/ASPAS              |             |      |         |
|                      |                    |      |           |                                     |  |                       |  | Checked on             |     |              |     |                           |             |      |         |
|                      |                    |      |           |                                     |  |                       |  | Checked by             |     |              |     |                           |             |      |         |
|                      |                    |      |           |                                     |  |                       |  | AERO ASAHI CORPORATION |     | Inspected on |     | 31.8.2004                 |             |      |         |
|                      |                    |      |           |                                     |  |                       |  |                        |     | Inspected by |     | yasuhiko TSUKAMOTO        |             |      |         |

# **QUALITY CONTROL SHEET**

No 7-8.

|                      |                    |                                     |             |                        |               |                 |        |                    |                             |
|----------------------|--------------------|-------------------------------------|-------------|------------------------|---------------|-----------------|--------|--------------------|-----------------------------|
| Project              | ISSYK-KUL ZONE K R |                                     | Aircraft    | An-30                  | No #30038     |                 |        |                    |                             |
| Designation          |                    |                                     | Camera      | TAF A-10               | No. #30591212 | Length of Film  |        | 55,22              |                             |
| Date of Flight       |                    |                                     | Lens        | 100,674                | No #3011      | GPS Diskett No. |        |                    |                             |
| Judgement            | Line               | Flight                              | Exposure No | Number of Photographs  | O.L. %        |                 | S.L. % |                    |                             |
| OK                   | NG                 | No.                                 | Direction   |                        | Max           | Min             | Max    | Min                | Clouds                      |
| 8/14                 |                    | 6C                                  | W-E         | 24                     |               | 60              |        | 40                 |                             |
| 7/31                 |                    | 6E                                  | W-E         | 16                     |               | 60              |        | *                  | L6D NG, L6E 1 E-16E( adopt) |
| 7/13                 |                    | 5A                                  | W-E         | 50                     |               | 60              |        | 20                 |                             |
| 8/14                 |                    | 5B                                  | E-W         | 17                     |               | 60              |        | 40                 |                             |
| 7/27                 |                    | 4A                                  | E-W         | 38                     |               | 60              |        | 47                 |                             |
| 8/14                 |                    | 4B                                  | E-W         | 25                     |               | 60              |        | 45                 |                             |
| 8/13                 |                    | 4C                                  | E-W         | 18                     |               | 60              |        | 40                 |                             |
| 8/14                 |                    | 3A                                  | W-E         | 37                     |               | 60              |        | 35                 |                             |
| 7/13                 |                    | 3B                                  | W-E         | 19                     |               | 60              |        | 45                 | 16B,17B, 3/31 RF L3 10-12C  |
| 8/14                 |                    | 2A                                  | E-W         | 43                     |               | 60              |        | 45                 |                             |
| 7/13                 |                    | 2B                                  | E-W         | 22                     |               | 60              |        | 45                 | 19B~22B, 7/31 RF L2C        |
| 8/14                 |                    | 1A                                  | W-E         | 33                     |               | 60              |        | *                  |                             |
| 7/13                 |                    | 1B                                  | W-E         | 33                     |               | 60              |        | *                  | 22B~33B, 7/31 RF L1C        |
| Remarks : Contractor |                    | Remarks : AERO ASAHI Representation |             | Contractor             |               | Company         |        | KAZAV/JASPAS       |                             |
|                      |                    |                                     |             | Checked on             |               | Checked by      |        |                    |                             |
|                      |                    |                                     |             | AERO ASAHI CORPORATION |               | Inspected on    |        | 31.8.2004          |                             |
|                      |                    |                                     |             |                        |               | Inspected by    |        | yasuhiko TSUKAMOTO |                             |





**ПРИЛОЖЕНИЕ 6 ---- Контроль качества съемок Глобальной Системы  
Навигации (GPS)**

## GCP-GPS Quality Control

### (Session 194)

| SESSION No | Closer      |        | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B)                   | Ave. - (B) | Remarks          |
|------------|-------------|--------|-----------------------------------|---------------------------------|------------|------------------|
|            |             | m      | m                                 |                                 | m          |                  |
|            | $\Delta X=$ | 0.010  | 0.077                             | <b>(1a -1)</b><br><br>30583.312 | 0.005      | <b>09-646500</b> |
|            | $\Delta Y=$ | -0.001 | 0.077                             |                                 |            |                  |
|            | $\Delta Z=$ | -0.021 | 0.077                             |                                 |            |                  |
| 194-11     | $\Delta S=$ | 0.023  |                                   |                                 |            |                  |
|            | $\Delta X=$ | 0.016  | 0.077                             | 30583.309                       | 0.008      | <b>04-646500</b> |
|            | $\Delta Y=$ | 0.014  | 0.077                             |                                 |            |                  |
|            | $\Delta Z=$ | -0.008 | 0.077                             |                                 |            |                  |
| 194-21     | $\Delta S=$ | 0.023  |                                   |                                 |            |                  |
|            | $\Delta X=$ | -0.014 | 0.077                             | 30583.330                       | -0.013     | <b>02-540000</b> |
|            | $\Delta Y=$ | 0.012  | 0.077                             |                                 |            |                  |
|            | $\Delta Z=$ | -0.018 | 0.077                             |                                 |            |                  |
| 194-31     | $\Delta S=$ | 0.026  |                                   |                                 |            |                  |
|            |             |        | <b>(1a -1) Ave</b>                | 30583.317                       |            |                  |

### (Session 195)

| SESSION No | Closer      |        | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B)                   | Ave. - (B) | Remarks                      |
|------------|-------------|--------|-----------------------------------|---------------------------------|------------|------------------------------|
|            |             | m      | m                                 | m                               | m          |                              |
|            | $\Delta X=$ | 0.017  | 0.077                             | <b>(1a -1)</b><br><br>30583.312 | 0.003      | <b>PTR3 (AIGYRDJAL)</b>      |
|            | $\Delta Y=$ | 0.019  | 0.077                             |                                 |            |                              |
|            | $\Delta Z=$ | 0.001  | 0.077                             |                                 |            |                              |
| 195-11     | $\Delta S=$ | 0.025  |                                   |                                 |            |                              |
|            | $\Delta X=$ | 0.027  | 0.077                             | 30583.304                       | 0.011      | <b>10-650000</b>             |
|            | $\Delta Y=$ | 0.006  | 0.077                             |                                 |            |                              |
|            | $\Delta Z=$ | -0.001 | 0.077                             |                                 |            |                              |
| 195-12     | $\Delta S=$ | 0.028  |                                   |                                 |            |                              |
|            | $\Delta X=$ | 0.013  | 0.077                             | 30583.316                       | -0.001     | <b>PTR12<br/>(KARAGAILY)</b> |
|            | $\Delta Y=$ | 0.013  | 0.077                             |                                 |            |                              |
|            | $\Delta Z=$ | 0.002  | 0.077                             |                                 |            |                              |
| 195-21     | $\Delta S=$ | 0.019  |                                   |                                 |            |                              |
|            | $\Delta X=$ | 0.013  | 0.077                             | 30583.316                       | -0.001     | <b>05-546400</b>             |
|            | $\Delta Y=$ | 0.013  | 0.077                             |                                 |            |                              |
|            | $\Delta Z=$ | 0.002  | 0.077                             |                                 |            |                              |
| 195-22     | $\Delta S=$ | 0.019  |                                   |                                 |            |                              |
|            | $\Delta X=$ | 0.001  | 0.077                             | 30583.329                       | -0.014     | <b>PTR2<br/>REPER 178</b>    |
|            | $\Delta Y=$ | 0.018  | 0.077                             |                                 |            |                              |
|            | $\Delta Z=$ | 0.011  | 0.077                             |                                 |            |                              |
| 195-31     | $\Delta S=$ | 0.021  |                                   |                                 |            |                              |
|            | $\Delta X=$ | 0.016  | 0.077                             | 30583.315                       | 0.000      | <b>03-540000</b>             |
|            | $\Delta Y=$ | 0.008  | 0.077                             |                                 |            |                              |
|            | $\Delta Z=$ | 0.003  | 0.077                             |                                 |            |                              |
| 195-32     | $\Delta S=$ | 0.018  |                                   |                                 |            |                              |
|            | $\Delta X=$ | 0.008  | 0.077                             | 30583.316                       | -0.001     | <b>35-540000</b>             |
|            | $\Delta Y=$ | -0.002 | 0.077                             |                                 |            |                              |
|            | $\Delta Z=$ | -0.015 | 0.077                             |                                 |            |                              |
| 195-33     | $\Delta S=$ | 0.017  |                                   |                                 |            |                              |
|            |             |        | <b>(1a -1) Ave.</b>               | 30583.315                       |            |                              |

## GCP-GPS Quality Control

### (Session 196)

| SESSION No | Closer      |        | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B)                   | Ave. - (B) | Remarks                     |
|------------|-------------|--------|-----------------------------------|---------------------------------|------------|-----------------------------|
| 196-11     | $\Delta X=$ | m      | m                                 | <b>(1a -1)</b><br><br>30583.318 | 0.002      | <b>11-657500</b>            |
|            | $\Delta Y=$ | 0.015  | 0.077                             |                                 |            |                             |
|            | $\Delta Z=$ | 0.029  | 0.077                             |                                 |            |                             |
|            | $\Delta S=$ | 0.017  | 0.077                             |                                 |            |                             |
| 196-21     | $\Delta X=$ | 0.037  |                                   | 30583.327                       | -0.007     | <b>06-546465</b>            |
|            | $\Delta Y=$ | 0.007  | 0.077                             |                                 |            |                             |
|            | $\Delta Z=$ | 0.033  | 0.077                             |                                 |            |                             |
|            | $\Delta S=$ | 0.024  | 0.077                             |                                 |            |                             |
| 196-22     | $\Delta X=$ | 0.041  |                                   | 30583.338                       | -0.018     | <b>BM 1 (8678 nrp)</b>      |
|            | $\Delta Y=$ | -0.006 | 0.077                             |                                 |            |                             |
|            | $\Delta Z=$ | 0.043  | 0.077                             |                                 |            |                             |
|            | $\Delta S=$ | 0.028  | 0.077                             |                                 |            |                             |
| 196-31     | $\Delta X=$ | 0.051  |                                   | 30583.296                       | 0.024      | <b>PTR 1<br/>(BURULDAY)</b> |
|            | $\Delta Y=$ | 0.041  | 0.077                             |                                 |            |                             |
|            | $\Delta Z=$ | 0.046  | 0.077                             |                                 |            |                             |
|            | $\Delta S=$ | 0.026  | 0.077                             |                                 |            |                             |
|            |             | 0.067  |                                   | 30583.320                       |            |                             |
|            |             |        | <b>(1a -1) Ave.</b>               |                                 |            |                             |

### (Session 197)

| SESSIONNo | Closer      |        | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B)                   | Ave. - (B) | Remarks                      |
|-----------|-------------|--------|-----------------------------------|---------------------------------|------------|------------------------------|
| 197-11    | $\Delta X=$ | m      | m                                 | <b>(1 -4)</b><br><br>110795.572 | 0.011      | <b>PTR 4<br/>(KARASALYK)</b> |
|           | $\Delta Y=$ | -0.010 | 0.077                             |                                 |            |                              |
|           | $\Delta Z=$ | -0.010 | 0.077                             |                                 |            |                              |
|           | $\Delta S=$ | -0.008 | 0.077                             |                                 |            |                              |
| 197-12    | $\Delta X=$ | 0.016  |                                   | 110795.612                      | -0.029     | <b>19-950000</b>             |
|           | $\Delta Y=$ | 0.030  | 0.077                             |                                 |            |                              |
|           | $\Delta Z=$ | -0.007 | 0.077                             |                                 |            |                              |
|           | $\Delta S=$ | 0.023  | 0.077                             |                                 |            |                              |
| 197-21    | $\Delta X=$ | 0.039  |                                   | 110795.563                      | 0.020      | <b>20-950500</b>             |
|           | $\Delta Y=$ | -0.010 | 0.077                             |                                 |            |                              |
|           | $\Delta Z=$ | 0.017  | 0.077                             |                                 |            |                              |
|           | $\Delta S=$ | -0.002 | 0.077                             |                                 |            |                              |
| 197-22    | $\Delta X=$ | 0.020  |                                   | 110795.554                      | 0.029      | <b>BM 2<br/>(5127 nrp)</b>   |
|           | $\Delta Y=$ | -0.015 | 0.077                             |                                 |            |                              |
|           | $\Delta Z=$ | 0.010  | 0.077                             |                                 |            |                              |
|           | $\Delta S=$ | -0.055 | 0.077                             |                                 |            |                              |
| 197-31    | $\Delta X=$ | 0.058  |                                   | 110795.598                      | -0.015     | <b>PTR 5<br/>(OROKKUR)</b>   |
|           | $\Delta Y=$ | 0.014  | 0.077                             |                                 |            |                              |
|           | $\Delta Z=$ | -0.024 | 0.077                             |                                 |            |                              |
|           | $\Delta S=$ | -0.013 | 0.077                             |                                 |            |                              |
| 197-32    | $\Delta X=$ | 0.031  |                                   | 110795.600                      | -0.017     | <b>16-759500</b>             |
|           | $\Delta Y=$ | 0.018  | 0.077                             |                                 |            |                              |
|           | $\Delta Z=$ | -0.016 | 0.077                             |                                 |            |                              |
|           | $\Delta S=$ | -0.002 | 0.077                             |                                 |            |                              |
|           |             | 0.024  |                                   | 110795.583                      |            |                              |
|           |             |        | <b>(1 -4) Ave.</b>                |                                 |            |                              |

**GCP-GPS Quality Control  
(Session 199)**

| SESSIONNo | Closer      |        | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B) | Ave. - (B) | Remarks                    |
|-----------|-------------|--------|-----------------------------------|---------------|------------|----------------------------|
|           |             | m      | m                                 |               |            |                            |
|           | $\Delta X=$ | 0.000  | 0.077                             | <b>(4 –3)</b> |            |                            |
|           | $\Delta Y=$ | -0.037 | 0.077                             |               |            |                            |
|           | $\Delta Z=$ | -0.012 | 0.077                             |               |            |                            |
| 199-11    | $\Delta S=$ | 0.039  |                                   | 76894.540     | 0.001      | <b>24-041415</b>           |
|           | $\Delta X=$ | 0.003  | 0.077                             |               |            |                            |
|           | $\Delta Y=$ | -0.025 | 0.077                             |               |            |                            |
|           | $\Delta Z=$ | -0.019 | 0.077                             |               |            |                            |
| 199-12    | $\Delta S=$ | 0.031  |                                   | 76894.548     | -0.007     | <b>BM 3<br/>(7903 nrp)</b> |
|           | $\Delta X=$ | -0.005 | 0.077                             |               |            |                            |
|           | $\Delta Y=$ | -0.025 | 0.077                             |               |            |                            |
|           | $\Delta Z=$ | -0.014 | 0.077                             |               |            |                            |
| 199-21    | $\Delta S=$ | 0.029  |                                   | 76894.538     | 0.003      | <b>26-040515</b>           |
|           | $\Delta X=$ | 0.000  | 0.077                             |               |            |                            |
|           | $\Delta Y=$ | -0.037 | 0.077                             |               |            |                            |
|           | $\Delta Z=$ | -0.012 | 0.077                             |               |            |                            |
| 199-22    | $\Delta S=$ | 0.039  |                                   | 76894.540     | 0.001      | <b>24-041500</b>           |
|           | $\Delta X=$ | -0.029 | 0.077                             |               |            |                            |
|           | $\Delta Y=$ | -0.020 | 0.077                             |               |            |                            |
|           | $\Delta Z=$ | 0.038  | 0.077                             |               |            |                            |
| 199-31    | $\Delta S=$ | -0.013 |                                   | 76894.533     | 0.008      | <b>33-140000</b>           |
|           | $\Delta X=$ | 0.000  | 0.077                             |               |            |                            |
|           | $\Delta Y=$ | -0.025 | 0.077                             |               |            |                            |
|           | $\Delta Z=$ | -0.024 | 0.077                             |               |            |                            |
| 199-32    | $\Delta S=$ | 0.035  |                                   | 76894.546     | -0.005     | <b>31-141500</b>           |
|           |             |        | <b>(4 –3) Ave.</b>                | 76894.541     |            |                            |

**(Session 200)**

| SESSIONNo |             | Closer | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B) | Ave. - (B) | Remarks                   |
|-----------|-------------|--------|-----------------------------------|---------------|------------|---------------------------|
|           |             | m      | m                                 |               |            |                           |
|           | $\Delta X=$ | -0.015 | 0.077                             | <b>(4 –3)</b> |            |                           |
|           | $\Delta Y=$ | 0.005  | 0.077                             |               |            |                           |
|           | $\Delta Z=$ | 0.006  | 0.077                             |               |            |                           |
| 200-11    | $\Delta S=$ | 0.017  |                                   | 76894.526     | 0.016      | <b>27-050000</b>          |
|           | $\Delta X=$ | -0.001 | 0.077                             |               |            |                           |
|           | $\Delta Y=$ | -0.012 | 0.077                             |               |            |                           |
|           | $\Delta Z=$ | -0.015 | 0.077                             |               |            |                           |
| 200-12    | $\Delta S=$ | 0.019  |                                   | 76894.545     | -0.003     | <b>PTR 6<br/>(DARHAN)</b> |
|           | $\Delta X=$ | 0.009  | 0.077                             |               |            |                           |
|           | $\Delta Y=$ | -0.017 | 0.077                             |               |            |                           |
|           | $\Delta Z=$ | -0.017 | 0.077                             |               |            |                           |
| 200-13    | $\Delta S=$ | 0.025  |                                   | 76894.553     | -0.011     | <b>23-040500</b>          |
|           | $\Delta X=$ | 0.010  | 0.077                             |               |            |                           |
|           | $\Delta Y=$ | -0.007 | 0.077                             |               |            |                           |
|           | $\Delta Z=$ | -0.003 | 0.077                             |               |            |                           |
| 200-21    | $\Delta S=$ | 0.013  |                                   | 76894.551     | -0.009     | <b>32-150000</b>          |
|           | $\Delta X=$ | -0.008 | 0.077                             |               |            |                           |
|           | $\Delta Y=$ | -0.005 | 0.077                             |               |            |                           |
|           | $\Delta Z=$ | -0.009 | 0.077                             |               |            |                           |
| 200-22    | $\Delta S=$ | 0.013  |                                   | 76894.537     | 0.005      | <b>29-141500</b>          |
|           |             |        | <b>(4 –3) Ave.</b>                | 76894.542     |            |                           |

## GCP-GPS Quality Control

### (Session 201)

| SESSIONNo | Closer      |        | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B) | Ave. - (B) | Remarks                  |
|-----------|-------------|--------|-----------------------------------|---------------|------------|--------------------------|
|           |             | m      | m                                 |               |            |                          |
|           | $\Delta X=$ | 0.019  | 0.077                             | <b>(2-3)</b>  |            |                          |
|           | $\Delta Y=$ | 0.042  | 0.077                             |               |            |                          |
|           | $\Delta Z=$ | 0.031  | 0.077                             |               |            |                          |
| 201-11    | $\Delta S=$ | 0.055  |                                   | 65664.415     | -0.028     | <b>18-939404</b>         |
|           | $\Delta X=$ | -0.066 | 0.077                             |               |            |                          |
|           | $\Delta Y=$ | 0.024  | 0.077                             |               |            |                          |
|           | $\Delta Z=$ | 0.012  | 0.077                             |               |            |                          |
| 201-12    | $\Delta S=$ | 0.071  |                                   | 65664.340     | 0.047      | <b>PTR 9<br/>(SHATY)</b> |
|           | $\Delta X=$ | 0.015  | 0.077                             |               |            |                          |
|           | $\Delta Y=$ | 0.045  | 0.077                             |               |            |                          |
|           | $\Delta Z=$ | 0.033  | 0.077                             |               |            |                          |
| 201-21    | $\Delta S=$ | 0.058  |                                   | 65664.411     | -0.024     | <b>30-140000</b>         |
|           |             |        | <b>(2-3) Ave.</b>                 | 65664.387     |            |                          |

### (Session 202)

| SESSIONNo | Closer      |       | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B) | Ave. - (B) | Remarks                    |
|-----------|-------------|-------|-----------------------------------|---------------|------------|----------------------------|
|           |             | m     | m                                 |               |            |                            |
|           | $\Delta X=$ | 0.005 | 0.077                             | <b>(2-3)</b>  |            |                            |
|           | $\Delta Y=$ | 0.026 | 0.077                             |               |            |                            |
|           | $\Delta Z=$ | 0.023 | 0.077                             |               |            |                            |
| 202-11    | $\Delta S=$ | 0.036 |                                   | 65664.407     | 0.000      | <b>22-030414</b>           |
|           | $\Delta X=$ | 0.010 | 0.077                             |               |            |                            |
|           | $\Delta Y=$ | 0.037 | 0.077                             |               |            |                            |
|           | $\Delta Z=$ | 0.026 | 0.077                             |               |            |                            |
| 202-21    | $\Delta S=$ | 0.046 |                                   | 65664.407     | 0.000      | <b>PTR 8<br/>(SANTASH)</b> |
|           |             |       | <b>(2-3) Ave.</b>                 | 65664.407     |            |                            |

### (Session 203)

| SESSIONNo | Closer      |        | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B) | Ave. - (B) | Remarks                     |
|-----------|-------------|--------|-----------------------------------|---------------|------------|-----------------------------|
|           |             | m      | m                                 |               |            |                             |
|           | $\Delta X=$ | 0.008  | 0.077                             | <b>(2-1a)</b> |            |                             |
|           | $\Delta Y=$ | 0.006  | 0.077                             |               |            |                             |
|           | $\Delta Z=$ | 0.008  | 0.077                             |               |            |                             |
| 203-11    | $\Delta S=$ | 0.013  |                                   | 86312.200     | -0.001     | <b>BM4<br/>(3862 nrp)</b>   |
|           | $\Delta X=$ | 0.018  | 0.077                             |               |            |                             |
|           | $\Delta Y=$ | 0.004  | 0.077                             |               |            |                             |
|           | $\Delta Z=$ | 0.011  | 0.077                             |               |            |                             |
| 203-21    | $\Delta S=$ | 0.022  |                                   | 86312.190     | 0.009      | <b>14-740000</b>            |
|           | $\Delta X=$ | -0.009 | 0.077                             |               |            |                             |
|           | $\Delta Y=$ | -0.018 | 0.077                             |               |            |                             |
|           | $\Delta Z=$ | -0.014 | 0.077                             |               |            |                             |
| 203-22    | $\Delta S=$ | 0.025  |                                   | 86312.212     | -0.013     | <b>PTR 10<br/>(DOLINKA)</b> |
|           | $\Delta X=$ | 0.014  | 0.077                             |               |            |                             |
|           | $\Delta Y=$ | 0.002  | 0.077                             |               |            |                             |
|           | $\Delta Z=$ | 0.017  | 0.077                             |               |            |                             |
| 203-31    | $\Delta S=$ | 0.022  |                                   | 86312.195     | 0.004      | <b>15-749400</b>            |
|           |             |        | <b>(2-1a) Ave.</b>                | 86312.199     |            |                             |

## GCP-GPS Quality Control

### (Session 204)

| SESSION No | Closer      |             | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B)                    | Ave. - (B) | Remarks (Points No)      |
|------------|-------------|-------------|-----------------------------------|----------------------------------|------------|--------------------------|
| 204-21     | $\Delta X=$ | m<br>0.005  | m<br>0.077                        | <b>(2 – 1a)</b><br><br>86312.192 | 0.010      | <b>PTR 11<br/>(DJAI)</b> |
|            | $\Delta Y=$ | -0.039      | 0.077                             |                                  |            |                          |
|            | $\Delta Z=$ | -0.041      | 0.077                             |                                  |            |                          |
|            | $\Delta S=$ | 0.057       |                                   |                                  |            |                          |
| 204-22     | $\Delta X=$ | -0.012      | 0.077                             | 86312.213                        | -0.011     | <b>07-647400</b>         |
|            | $\Delta Y=$ | -0.012      | 0.077                             |                                  |            |                          |
|            | $\Delta Z=$ | -0.029      | 0.077                             |                                  |            |                          |
|            | $\Delta S=$ | 0.034       |                                   |                                  |            |                          |
|            |             |             | <b>(2 – 1a) Ave.</b>              | 86312.202                        |            |                          |
| 204-21     | $\Delta X=$ | m<br>-0.002 | m<br>0.077                        | <b>(2 – 4)</b><br><br>54535.361  | -0.011     | <b>PTR 11<br/>(DJAI)</b> |
|            | $\Delta Y=$ | -0.048      | 0.077                             |                                  |            |                          |
|            | $\Delta Z=$ | -0.036      | 0.077                             |                                  |            |                          |
|            | $\Delta S=$ | 0.060       |                                   |                                  |            |                          |
| 204-22     | $\Delta X=$ | 0.023       | 0.077                             | 54535.339                        | 0.011      | <b>07-647400</b>         |
|            | $\Delta Y=$ | -0.019      | 0.077                             |                                  |            |                          |
|            | $\Delta Z=$ | -0.035      | 0.077                             |                                  |            |                          |
|            | $\Delta S=$ | 0.047       |                                   |                                  |            |                          |
|            |             |             | <b>(2 – 4) Ave.</b>               | 54535.350                        |            |                          |

### (Session 205)

| SESSION No | Closer      |             | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B)                    | Ave. - (B) | Remarks (Points No)           |
|------------|-------------|-------------|-----------------------------------|----------------------------------|------------|-------------------------------|
| 205-11     | $\Delta X=$ | m<br>0.004  | m<br>0.077                        | <b>(2 – 1a)</b><br><br>86312.210 | 0.000      | <b>PTR 7<br/>(KOKKIIANYN)</b> |
|            | $\Delta Y=$ | 0.036       | 0.077                             |                                  |            |                               |
|            | $\Delta Z=$ | 0.030       | 0.077                             |                                  |            |                               |
|            | $\Delta S=$ | 0.047       |                                   |                                  |            |                               |
| 205-21     | $\Delta X=$ | 0.006       | 0.077                             | 86312.209                        | 0.001      | <b>08-647475</b>              |
|            | $\Delta Y=$ | 0.041       | 0.077                             |                                  |            |                               |
|            | $\Delta Z=$ | 0.031       | 0.077                             |                                  |            |                               |
|            | $\Delta S=$ | 0.051       |                                   |                                  |            |                               |
|            |             |             | <b>(2 – 1a) Ave.</b>              | 86312.210                        |            |                               |
| 205-11     | $\Delta X=$ | m<br>-0.007 | m<br>0.077                        | <b>(2 – 4)</b><br><br>54535.371  | -0.009     | <b>PTR 7<br/>(KOKKIIANYN)</b> |
|            | $\Delta Y=$ | -0.037      | 0.077                             |                                  |            |                               |
|            | $\Delta Z=$ | -0.014      | 0.077                             |                                  |            |                               |
|            | $\Delta S=$ | 0.040       |                                   |                                  |            |                               |
| 205-21     | $\Delta X=$ | 0.011       | 0.077                             | 54535.353                        | 0.009      | <b>08-647475</b>              |
|            | $\Delta Y=$ | -0.010      | 0.077                             |                                  |            |                               |
|            | $\Delta Z=$ | -0.011      | 0.077                             |                                  |            |                               |
|            | $\Delta S=$ | 0.019       |                                   |                                  |            |                               |
|            |             |             | <b>(2 – 4) Ave.</b>               | 54535.362                        |            |                               |

**GCP-GPS Quality Control**  
**Checking Survey**  
**(Sessions 208,209)**

| SESSION No | Closer                                                   |                                         | Limit<br>(45mm $\times\sqrt{N}$ ) | Base Line (B)                    | Ave. - (B)     | Remarks (Points No)                       |
|------------|----------------------------------------------------------|-----------------------------------------|-----------------------------------|----------------------------------|----------------|-------------------------------------------|
| 208-11     | $\Delta X=$<br>$\Delta Y=$<br>$\Delta Z=$<br>$\Delta S=$ | m<br>0.000<br>0.003<br>0.003<br>0.004   | m<br>0.077<br>0.077<br>0.077      | <b>(2 – 2a)</b><br><br>24027.524 | <br><br>0.004  | <br><br><b>BM4</b><br><b>(3862 pp)</b>    |
| 208-21     | $\Delta X=$<br>$\Delta Y=$<br>$\Delta Z=$<br>$\Delta S=$ | 0.007<br>-0.003<br>-0.002<br>0.008      | 0.077<br>0.077<br>0.077           | <br><br>24027.531                | <br><br>-0.003 | <br><br><b>PTR 10</b><br><b>(DOLINKA)</b> |
|            |                                                          |                                         | <b>(2 – 2a) Ave.</b>              | 24027.528                        |                |                                           |
| 209-21     | $\Delta X=$<br>$\Delta Y=$<br>$\Delta Z=$<br>$\Delta S=$ | m<br>0.011<br>-0.017<br>-0.005<br>0.021 | m<br>0.077<br>0.077<br>0.077      | <b>(2 – 1)</b><br><br>114300.026 | <br><br>-0.001 | <br><br><b>BM 1</b><br><b>(8678 nrp)</b>  |
| 209-31     | $\Delta X=$<br>$\Delta Y=$<br>$\Delta Z=$<br>$\Delta S=$ | 0.012<br>-0.013<br>-0.007<br>0.019      | 0.077<br>0.077<br>0.077           | <br><br>114300.024               | <br><br>0.001  | <br><br><b>PTR 1</b><br><b>(BURULDAY)</b> |
|            |                                                          |                                         | <b>(2 – 1) Ave.</b>               | 114300.025                       |                |                                           |



# ACCURACY CONTROL TABLE

## GPS – I (Closure)

|              |                                                                                  |             |   |                |                |
|--------------|----------------------------------------------------------------------------------|-------------|---|----------------|----------------|
| PROJECT NAME | The Study on Integrated Development Plan of Issyk-kul Zon in THE KYRGYZ REPUBLIC |             |   |                |                |
| WORKING DATE | 12 July ~ 25 August 2004                                                         | TOTAL POINT | 5 | CHIEF OF PARTY | Mavlid Latypov |
|              |                                                                                  |             |   | CHECKED BY     | Masaji Koyama  |

## Closure Error (Averaged Lines)

| Loops/Sessions                                  | Loop number | Loop distance (m) | Number of point | DX(m)            | DY(m)            | DZ(m)            | Instrument number                                                                                                                      |
|-------------------------------------------------|-------------|-------------------|-----------------|------------------|------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------|
|                                                 |             |                   |                 | (Closure Limit)  | (Closure Limit)  | (Closure Limit)  |                                                                                                                                        |
| 2-4-1-2 (23,204,205 /22,197 /20,209)            | 1           | 279,630.959       | 3               | 0.008<br>(0.77)  | -0.017<br>(0.77) | 0.005<br>(0.77)  | Leica<br>① System500.No.667122<br>② System500.No.0035626<br>③ System500.No.0035635<br>④ System500.No.0035638<br>⑤ System500.No.0020436 |
|                                                 | 2           | 231,195.560       | 3               | -0.017<br>(0.77) | 0.010<br>(0.77)  | -0.009<br>(0.77) | Limit of Loop<br>ClosureXYZ:45mm√N (N: Line)<br><br>Remarks                                                                            |
| 4-2-1a-4<br>(23,204,205/20,203,204,305/204,205) | 3           | 234,206.395       | 3               | -0.010<br>(0.77) | 0.002<br>(0.77)  | 0.011<br>(0.77)  |                                                                                                                                        |
|                                                 | 4           | 354,755.577       | 3               | -0.021<br>(0.77) | -0.026<br>(0.77) | -0.024<br>(0.77) |                                                                                                                                        |
| 4-1-3-4 (22,197/24/22,199,200)                  | 5           | 362,481.249       | 3               | 0.014<br>(0.77)  | -0.005<br>(0.77) | 0.009<br>(0.77)  |                                                                                                                                        |
|                                                 |             |                   |                 |                  |                  |                  |                                                                                                                                        |