

General notes:

SPSS files are provided for each item. In each of these files, the first four variables are the 3 letter country code, the 6 digit National Centre Code, the 7-digit school id, and the 5 digit student id. These fields can be used together to merge with the main database.

The fifth variable gives the id for the test form that the data come from.

The sixth variable is the type of event. This may be either system generated (start item, end item) or student generated (e.g. ACER_EVENT, Click, Dblclick). The seventh variable is the event time, given in seconds from the beginning of the assessment. Note that in a small number of cases, the event times for a student's interactions are not sequential. This is an accurate representation of the sequence in which the events were written by the TAO system. The eighth variable is an event sequence number. Any remaining variables are event specific and they are described below.

Note that for a variety of reasons (for example if a student sat the assessment, but there were issues with their log files) a small number of student records have been set to "invalid".

Item specific notes: Problem solving items

CP007

For all items in this unit, all click and double click events are included. Where the click event involves selecting or de-selecting a segment of the map, this is recorded in two rows, which have the same event time. In the first of the pair of rows, the state of the entire map is given, where a 1 in the sequence means that the segment was selected, and a 0, that it was not. The order of the map segments is shown through the example below. In this example, only the segment "nowhereSakharov" is selected.

Example:

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Diamondnowhere":0,"DiamondSilver":0,"EmeraldLincoln":0,"EmeraldUnity":0,"LeeMandela":0,"LincolnSato":0,"MandelaEinstein":0,"MarketLee":0,"MarketPark":0,"NobelLee":0,"nowhereEinstein":0,"nowhereEmerald":0,"nowhereSakharov":1,"nowhereUnity":0,"ParkMandela":0,"Parknowhere":0,"SakharovMarket":0,"SakharovNobel":0,"Satonowhere":0,"SilverMarket":0,"Silvernowhere":0,"UnityPark":0,"UnitySato":0
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The second row in the set of two rows that records an event involving highlighting, or un-highlighting a map segment represents the same click event, and is in the form "hit_segment name".

All other "click" and "doubleclick" events represent the student performing a click that is not on a map segment. A student clicking on a multiple choice answer option, as in CP007Q01, is recorded in the form "CP007q1x". In CP007Q03, a selection from the drop-down menu is denoted with the event "Q3 select".

CP002

For all items in this unit, all click and double click events are included. Clicking on the start/ reset is denoted by an event value of "Start-Reset". In CP002Q06, clicking in the text box to write a response

is denoted by an event value of " robq3text". In CP002 Q07 and CP002Q08, the response to the multiple-choice question is given in the form "robq1XoX". All other "click" and doubleclick" events represent the student performing a click elsewhere on the screen.

CP025

For CP02501, five event types are included. 1) start item, 2) end item, 3) click apply, 4) click reset, and 5) draw a line between two variables in the item space. In "apply" events, the variables "top_setting, central_setting, bottom_setting, temp_value and humid_value" collectively describe the state of the system after apply was clicked. It follows then, that the these variables all return to their initial setting after "reset" is clicked. The event of drawing a line between two variables in the item space is recorded through the event type "diagram". For these events, the variable "diag_state" shows the state of the diagram, in the form value of <S0_R0>, value of <S0_R1>, value of <S1_R0>, value of <S1_R1>, value of <S2_R0>, value of <S2_R1>.

Note that the interactions with the diagram in the item space are recorded as two clicks - the first, to begin drawing the line from a variable on the left, the second, to join the line to a variable on the right. For this reason the first "diagram" event for every student always represents the diagram with no lines drawn - 000000. If the student is unsuccessful in drawing the line, then the state of the diagram will not change in between the two clicks. Sometimes, a student will click once on the left, but then never complete the action by clicking again - in such cases there would be an odd number of "diagram" events.

In CP025Q02 the first three event types are included, as outlined above.

CP038

In CP038, three kinds of events are included: 1) start item, 2) end item, 3) interactions with the ticket machine. Interactions with the ticket machine are denoted by "ACER event" in the event column. The variable "event_value" shows which button was pressed. The variables network, fare_type, ticket_type and number_trips collectively give the state of the machine after the interaction.

Additional information for CP038Q03 is as above, except that an additional event value, clicking "ok" is possible for this item.

Item specific notes: Digital Reading items

An SPSS file is provided for each of the items in the digital reading assessment. All files have a common structure. Variable 6 gives the event type, which will be one of the following: start item, end item, click, doubleclick or change. Change events show the selection of an option in a multiple-choice question. Other variables give further detail about the event (for example, what was clicked).

Item specific notes: Computer-based mathematics items

CM015

In CM015Q01, four kinds of events are included: 1) start item, 2) end item, 3) keyup events, and 4) click events. Events recorded as "keyup" in "event_type" show the entry of values in the box "number of copies" in "event_value". Each keystroke is one "keyup" event, so that entering the number "500" is recorded in the files as three separate keyup events, (one for each of "5", "50" and "500). When the event value for a keyup event is "noID", this means that the key used was neither a number nor a letter (e.g caps lock etc). For click events involving the selection of a radio button in response to the multiple-choice question, the event detail will be "on", and "event_value" will detail the multiple-choice option chosen . All other click events represent the student performing a click elsewhere on the screen.

For CM015Q02, three kinds of events are included: 1) start item, 2) end item and 3) keyup events. "Keyup" events record i) the entry of values in the box "number of copies (as for Q01) and the entry of values for "P" and "n" in the item space. For "number of copies", the event value is q1NoCopy. For the values of "P" and "n", the event values are CM015q2P and CM015q2N respectively. As for the entry of "number of copies", the entry of values for "P" and "n" shows each keystroke recorded as one "keyup" event. When the event value for a keyup event is "noID", this means that the key used was neither a number nor a letter (e.g caps lock etc). Where q1Nocopy =null, it means the box was blank.

For CM015Q03 entry of a value in the "number of copies" box in the stimulus space is recorded in the same way as for CM015Q01 and CM015Q02. Entry of a value for "number of copies" in the item space is signified by an event value of "q3AnsBoxII". As for the entry of "number of copies" in the stimulus space, the entry of values shows each keystroke recorded as one "keyup" event.

CM020

For CM020Q01, four kinds of events are included: 1) start item, 2) end item, 3) events that signify the placing of a point within Shape 3 or Shape 4, and 4) clicking on either the reset button or the line button. Where a point is placed within a shape, the event type is "ACER_event". The variables "Shape 3" and "Shape 4" give the position of the point taken from the top left corner of the box containing the shapes. Where no point, or more than one point, has been placed in the shape, the message "Number of points on Shape X is not equal to 1" appears.

For CM020Q02, four kinds of events are included: 1) start item, 2) end item, 3) events that signify the placing of a point within Shape 3 or Shape 4, and 4) click events. The placing of points within a shape is recorded in the same way as for CM020Q01. For click events, the variable "event value" identifies whether the line button, reset button, or a multiple choice option was clicked on.

Recording of events for CM020Q03 is similar to the other items in the unit, except that the position of points placed on the plan are described collectively by the variables "Point1A", "Point1B", "Point2A" and "Point2B". If two points have not been drawn, the value of "Event_detail" is "Number of Points not TWO!".

Recording of events for CM020Q04 is similar to the other items in the unit.

CM038

For CM038Q03, three kinds of events are included: 1) start events, 2) end events, and 3) click events.

Click events with the event value girl_radio_high, girl_radio_med , girl_radio_low, boy_radio_high, boy_radio_med or boy_radio-low represent clicking on the buttons to hide (or show) one of the six graphs in the stimulus space. The click events with event values bmiQ3_37, bmiQ3_38, bmiQ3_39 or bmiQ3_40 represent choosing true for option A, false for option A, true for option B and false for option B respectively. All other click events represent the student performing a click elsewhere on the screen. For CM038Q05 and CM038Q06 only start item and end item events are recorded.