CLAIMS

[Claim 1] An analysis device comprising

a first acquisition unit that acquires a first data set indicating ports that are visited by a ship during a voyage and a second data set indicating a period during which the ship stays at each of the ports,

a second acquisition unit that acquires a third data set indicating one or more periods during which one or more events occur at any one of the ports indicated by the first data set,

a calculation unit that calculates, if one or more of the periods indicated by the second data set and the one or more periods indicated by the third data set contain one or more periods in common, effect on the one or more periods indicated by the second data set caused by one or more events that occur during the one or more common periods, and

an output unit that outputs a data set indicating a result of the calculation carried out by the calculation unit.

[Claim 2] The analysis device according to claim 1, wherein

the first acquisition unit acquires the first data set with regard to each of the ports that are visited by ships that sail on a certain sailing route,

the first acquisition unit acquires the second data set with regard to each of the ships that sail on the certain sailing route and with regard to each of the ports, and

the calculation unit calculates, with regard to each of the ships, if the one or more of the periods indicated by the second data set and the one or more periods indicated by the third data set contain one or more common periods with regard to one or more common ports indicated by the first data set, effect on the periods indicated by the second data set caused by one or more events that occur during the one or more common periods.

[Claim 3] The analysis device according to claim 1, wherein

the calculation unit calculates fuel consumption required for the ship to sail from a departure port to a destination port under a condition that one or more of the periods indicated by the second data set are changed on the basis of the calculated effect, and

the output unit outputs a data set indicating the fuel consumption calculated by the calculation unit.

[Claim 4] The analysis device according to claim 3, wherein

the calculation unit calculates, when a period indicated by the

second data set with regard to a first port and a period indicated by the third data set with regard to the first port is common, a time required for the ship to sail from the first port to a second port that is a port visited by the ship subsequent to the first port,

the calculation unit generates, if the ship cannot arrive at the second port on an arrival date indicated by the second data set with regard to the second port when the period indicated by the second data set with regard to the first port is changed based on the calculated effect and the ship sails in the calculated time from the first port to the second port, a data set indicating information on delay of arrival at the second port, and

the output unit outputs the data set indicating information on delay of arrival.

[Claim 5] An analysis method comprising

a first acquisition step for a device to acquire a first data set indicating ports that are visited by a ship during a voyage and a second data set indicating a period during which the ship stays at each of the ports,

a second acquisition step for the device to acquire a third data set indicating one or more periods during which one or more events occur at any one of the ports indicated by the first data set,

a calculation step for the device to calculate, if one or more of the periods indicated by the second data set and the one or more periods indicated by the third data set contain one or more common periods, effect on the one or more periods indicated by the second data set caused by one or more events that occur during the one or more periods in common, and

an output step for the device to output a data set indicating a result of the calculation carried out in the calculation step.

[Claim 6] A program for causing a computer to function as

a first acquisition unit that acquires a first data set indicating ports that are visited by a ship during a voyage and a second data set indicating a period during which the ship stays at each of the ports,

a second acquisition unit that acquires a third data set indicating one or more periods during which one or more events occur at any one of the ports indicated by the first data set,

a calculation unit that calculates, if one or more of the periods indicated by the second data set and the one or more periods indicated by the third data set contain one or more periods in common, effect on the one or more periods indicated by the second

data set caused by one or more events that occur during the one or more common periods, and

an output unit that outputs a data set indicating a result of the calculation carried out by the calculation unit.

[Claim 7] A computer-readable recording medium storing the program according to claim 6.

CLAIMS

[Claim 1] An analysis device comprising

a first acquisition unit that acquires a first data set indicating ports that are visited by a ship during a voyage, a schedule of the voyage being prepared by a user, and a second data set indicating a period during which the ship stays at each of the ports,

a second acquisition unit that acquires a third data set indicating one or more periods during which one or more events occur at any one of the ports indicated by the first data set,

a calculation unit that calculates, if one or more of the periods indicated by the second data set and the one or more periods indicated by the third data set contain one or more periods in common, effect on the one or more periods indicated by the second data set caused by one or more events that occur during the one or more common periods, and

an output unit that outputs to a display unit a data set indicating a result of the calculation carried out by the calculation unit.

[Claim 2] The analysis device according to claim 1, wherein

the first acquisition unit acquires the first data set with regard to each of the ports that are visited by ships that sail on a certain sailing route,

the first acquisition unit acquires the second data set with regard to each of the ships that sail on the certain sailing route and with regard to each of the ports, and

the calculation unit calculates, with regard to each of the ships, if the one or more of the periods indicated by the second data set and the one or more periods indicated by the third data set contain one or more common periods with regard to one or more common ports indicated by the first data set, effect on the periods indicated by the second data set caused by one or more events that occur during the one or more common periods.

[Claim 3] The analysis device according to claim 1, wherein

the calculation unit calculates fuel consumption required for the ship to sail from a departure port to a destination port under a condition that one or more of the periods indicated by the second data set are changed on the basis of the calculated effect, and

the output unit outputs to the display unit a data set indicating the fuel consumption calculated by the calculation unit.

[Claim 4] The analysis device according to claim 3, wherein

the calculation unit calculates, when a period indicated by the second data set with regard to a first port and a period indicated by the third data set with regard to the first port is common, a time required for the ship to sail from the first port to a second port that is a port visited by the ship subsequent to the first port,

the calculation unit generates, if the ship cannot arrive at the second port on an arrival date indicated by the second data set with regard to the second port when the period indicated by the second data set with regard to the first port is changed based on the calculated effect and the ship sails in the calculated time from the first port to the second port, a data set indicating information on delay of arrival at the second port, and

the output unit outputs to the display unit the data set indicating information on delay of arrival.

[Claim 5] An analysis method comprising

a first acquisition step for a device to acquire a first data set indicating ports that are visited by a ship during a voyage, a schedule of the voyage being prepared by a user, and a second data set indicating a period during which the ship stays at each of the ports,

a second acquisition step for the device to acquire a third data set indicating one or more periods during which one or more events occur at any one of the ports indicated by the first data set,

a calculation step for the device to calculate, if one or more of the periods indicated by the second data set and the one or more periods indicated by the third data set contain one or more common periods, effect on the one or more periods indicated by the second data set

caused by one or more events that occur during the one or more periods in common, and

an output step for the device to output to a display unit a data set indicating a result of the calculation carried out in the calculation step.

[Claim 6] A program for causing a computer to function as

a first acquisition unit that acquires a first data set indicating ports that are visited by a ship during a voyage, a schedule of the voyage being prepared by a user, and a second data set indicating a period during which the ship stays at each of the ports,

a second acquisition unit that acquires a third data set indicating one or more periods during which one or more events occur at any one of the ports indicated by the first data set,

a calculation unit that calculates, if one or more of the periods indicated by the second data set and the one or more periods indicated by the third data set contain one or more periods in common, effect on the one or more periods indicated by the second data set caused by one or more events that occur during the one or more common periods, and

an output unit that outputs to a display unit a data set indicating a result of the calculation carried out by the calculation unit.

[Claim 7] A computer-readable recording medium storing the program according to claim 6.